MasterFormat® Numbers & Titles

April 2012

MasterFormat is the specifications-writing standard for most commercial building design and construction projects in North America. It lists titles and section numbers for organizing data about construction requirements, products, and activities. By standardizing such information, MasterFormat facilitates communication among architects, specifiers, contractors and suppliers, which helps them meet building owners' requirements, timelines and budgets.

The numbers and titles presented here are identical to the numbers and titles contained in the MasterFormat® 2012 publication available for purchase from the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC).

Contents reflect MasterFormat titles and numbers as of April 2012. Consult http://www.masterformat.com/revisions/index for the most current additions and changes to MasterFormat.

MasterFormat numbers and titles are intentionally structured for anticipated growth and expansion in the future. CSI and CSC encourage all interested parties to provide input using the "Propose a Revision" link on http://www.masterformat.com/revisions/index so that as the built environment evolves so can MasterFormat. Updates to MasterFormat are made annually.

To learn more about MasterFormat training, certification and local chapter information from CSI go to http://www.csinet.org/ or from CSC go to http://www.csc-dcc.ca/. For information about licensing use of MasterFormat for commercial or educational purposes, contact CSI at http://www.csinet.org/, csi@csinet.org or by calling 800-689-2900.





00	00	00	Procurement and Contracting
			Requirements
	00 01	1 01	Project Title Page
	00 01		Certifications Page
	00 01	1 07	Seals Page
	00 01		Table of Contents
	00 01		List of Drawing Sheets
00	00 01		List of Schedules
UU	10 (UU	Solicitation
00 1	11 00)	Advertisements and Invitations
	00 11		Advertisement for Bids
	00 11		Invitation to Bid
	00 11 00 11	_	Request for Proposal
00			Request for Qualifications
	20 (Instructions for Procurement
00 2	21 00		Instructions
	00 21		Instructions to Bidders
00 1	00 21		Instructions to Proposers
UU 2	22 00		Supplementary Instructions
	00 22 00 22		Supplementary Instructions to Bidders Supplementary Instructions to Proposers
00.3	23 00		Procurement Definitions
	24 0 0		
UU 2	00 24 00 24		Procurement Scopes Scopes of Bids
		13.13	Scopes of Bids (Multiple Contracts)
		13.16	Scopes of Bids (Multiple-Prime Contract)
	00 24		Scopes of Proposals
		16.13	Scopes of Proposals (Multiple Contracts)
00.3	25 00 25 00	16.16	Scopes of Proposals (Multiple-Prime Contract)
00 2	23 00 25 00		Procurement Meetings Pre-Bid Meetings
	00 25		Pre-Proposal Meetings
00 2	26 00		Procurement Substitution Procedures
	30 (Available Information
00 3	31 00)	Available Project Information
	00 31		Preliminary Schedules
		13.13	Preliminary Project Schedule
		13.16	Preliminary Construction Schedule
		13.23 13.26	Preliminary Project Phases Preliminary Project Sequencing
		13.33	Preliminary Project Sequencing Preliminary Project Milestones
	00 31		Project Budget Information
	00 31		Existing Condition Information
		19.13	Movement and Vibration Information
		19.16 19.19	Acoustic Information Traffic Information

00 31 19.23 00 31 21 00 31 21.13	Existing Structural Information Survey Information Site Survey Information
00 31 21.16 00 31 21.19	Measured Drawing Information Photographic Information
00 31 24	Environmental Assessment Information
00 31 24.13	Soil Contamination Report
00 31 24.23 00 31 24.26	Environmental Impact Study Report Environmental Impact Report Evaluation
00 31 24.29	Record of Environmental Impact Decision
00 31 24.33	Environmental Impact Mitigation Report
00 31 25 00 31 25.16	Existing Material Information Existing Concrete Information
00 31 25.10	Existing Masonry Information
00 31 25.23	Existing Metals Information
00 31 25.26	Existing Wood, Plastics, and Composites Information
00 31 25.29 00 31 26	Existing Thermal and Moisture Protection Information Existing Hazardous Material Information
00 31 26.23	Existing Asbestos Information
00 31 26.26	Existing Lead Information
00 31 26.29 00 31 26.33	Existing Polychlorinate Biphenyl Information Existing Mold Information
00 31 26.36	Existing Mold Information Existing Hazardous Waste Drum Information
00 31 31	Geophysical Data
00 31 31.13	Seismic Investigations Information
00 31 31.16 00 31 31.19	Gravity Investigations Information Magnetic Investigations Information
00 31 31.23	Electromagnetic Investigations Information
00 31 31.26	Electrical Resistivity Investigations Information
00 31 31.29 00 31 32	Magnetotelluric Investigations Information Geotechnical Data
00 31 32.13	Subsurface Drilling and Sampling Information
00 31 32.16	Material Testing Information
00 31 32.19	Exploratory Excavation Information
00 31 32.23 00 31 43	Geotechnical Monitoring Information Permit Application
00 31 46	Permits
00 40 00	Procurement Forms and Supplements
00 41 00	Bid Forms
00 41 13	Bid Form – Stipulated Sum (Single-Prime Contract)
00 41 16	Bid Form – Stipulated Sum (Multiple-Prime Contract)
00 41 23	Bid Form – Construction Management (Single-Prime Contract)
00 41 26	Bid Form – Construction Management (Multiple-Prime Contract)
00 41 33	Bid Form – Cost-Plus-Fee (Single-Prime Contract)
00 41 36 00 41 43	Bid Form – Cost-Plus-Fee (Multiple-Prime Contract) Bid Form – Unit Price (Single-Prime Contract)
00 41 45	Bid Form – Unit Price (Single-Prime Contract) Bid Form – Unit Price (Multiple-Prime Contract)
00 41 53	Bid Form – Design/Build (Single-Prime Contract)
00 41 56	Bid Form – Design/Build (Multiple-Prime Contract)
00 41 63	Bid Form – Purchase Contract
00 42 00	Proposal Forms
00 42 13	Proposal Form – Stipulated Sum (Single-Prime Contract)

00 42 16	Proposal Form – Stipulated Sum (Multiple-Prime Contract)
00 42 23	Proposal Form – Construction Management (Single-Prime Contract)
00 42 26	Proposal Form – Construction Management (Multiple-Prime Contract)
00 42 33	Proposal Form – Cost-Plus-Fee (Single-Prime Contract)
00 42 36	Proposal Form – Cost-Plus-Fee (Multiple-Prime Contract)
00 42 43	Proposal Form – Unit Price (Single-Prime Contract)
00 42 46	Proposal Form – Unit Price (Multiple-Prime Contract)
00 42 53	Proposal Form – Design/Build (Single-Prime Contract)
00 42 56	Proposal Form – Design/Build (Multiple-Prime Contract)
00 42 63	Proposal Form – Purchase Contract
00 42 73	Proposal Form – Performance Contract
00 43 00	Procurement Form Supplements
00 43 13	Bid Security Form
00 43 21	Allowance Form
00 43 22	Unit Prices Form
00 43 23	Alternates Form
00 43 25	Substitution Request Form (During Procurement)
00 43 26	Estimated Quantities Form
00 43 27	Separate Prices Break-Out Form
00 43 28	Tax Rebate Form
00 43 33	Proposed Products Form
00 43 36	Proposed Subcontractors Form
00 43 39	Minority Business Enterprise Statement of Intent Form
00 43 43	Wage Rates Form
00 43 73	Proposed Schedule of Values Form
00 43 83	Proposed Construction Schedule Form
00 43 86	Proposed Work Plan Schedule Form
00 43 93	Bid Submittal Checklist
00 45 00	Representations and Certifications
00 45 13	Bidder's Qualifications
00 45 16	Proposer's Qualifications
00 45 19	Non-Collusion Affidavit
00 45 23	Statement of Disposal Facility
00 45 26	Workers Compensation Certificate Schedule
00 45 33	Non-Segregated Facilities Affidavit
00 45 36	Equal Employment Opportunity Affidavit
00 45 39	Minority Business Enterprise Affidavit
00 45 43	Corporate Resolutions
00 45 46	Governmental Certifications
00 50 00	Contracting Forms and Supplements
00 51 00	Notice of Award
00 52 00	Agreement Forms
00 52 13	Agreement Form – Stipulated Sum (Single-Prime Contract)
00 52 16	Agreement Form – Stipulated Sum (Multiple-Prime Contract)
00 52 23	Agreement Form – Construction Management (Single-Prime Contract)
00 52 26	Agreement Form – Construction Management (Multiple-Prime Contract)
00 52 33	Agreement Form – Cost Plus-Fee (Single-Prime Contract)
00 52 36	Agreement Form – Cost-Plus-Fee (Multiple-Prime Contract)
00 52 43	Agreement Form – Unit Price (Single-Prime Contract)

00	52 46	Agreement Form – Unit Price (Multiple-Prime Contract)
00	52 53	Agreement Form – Design/Build (Single-Prime Contract)
	52 56	Agreement Form – Design/Build (Multiple-Prime Contract)
	52 63	Agreement Form – Purchase
	52 73	Agreement Form – Performance Contract
00	52 95	Agreement Form – Integrated Project Delivery
00 54	00	Agreement Form Supplements
00	54 13	Supplementary Scope Statement
00	54 21	Allowances Schedule
00	54 22	Unit Prices Schedule
00	54 33	Digital/Electronic Data Protocol Exhibit
00	54 36	Building Information Modeling Exhibit
00 55	00	Notice to Proceed
00 60	00 (Project Forms
		•
00 61		Bond Forms
	61 13 61 13.13	Performance and Payment Bond Form
	61 13.16	Performance Bond Form Payment Bond Form
	61 16	Lien Bond Form
	61 19	Maintenance Bond Form
	61 23	Retainage Bond Form
	61 26	Special Bond Form
00 62		Certificates and Other Forms
	62 11	Submittal Transmittal Form
	62 16	Certificate of Insurance Form
	62 19	Infection Control Form
	62 23	Construction Waste Diversion Form
	62 33	Products Form
	62 34	Recycled Content of Materials Form
	62 39	Minority Business Enterprise Certification Form
	62 73	Schedule of Values Form
	62 76	Application for Payment Form
	62 76.13	Sales Tax Form
	62 76.16	Consent of Surety to Reduction of Retainage Form
	62 79	Stored Material Form
	62 83	Construction Schedule Form
	62 86	Work Plan Schedule Form
	62 89	Construction Equipment Form
00 63	00	Clarification and Modification Forms
	63 13	Request for Interpretation Form
	63 19	Clarification Form
	63 25	Substitution Request Form (During Construction)
	63 33	Supplemental Instruction Form
	63 36	Field Order Form
	63 43	Written Amendment Form
	63 46	Construction Change Directive Form
	63 49	Work Change Directive Form
	63 53	Request for Proposal Form
00	63 54	Proposal Worksheet Summary Form

00 63 55	Proposal Worksheet Detail Form
00 63 57	Change Order Request Form
00 63 63	Change Order Form
00 65 00	Closeout Forms
00 65 13	Certificate of Compliance Form
00 65 16	Certificate of Substantial Completion Form
00 65 19	Certificate of Completion Form
00 65 19.13	Affidavit of Payment of Debts and Claims Form
00 65 19.16	Affidavit of Release of Liens Form
00 65 19.19 00 65 19.23	Consent of Surety to Final Payment Form Acceptance Certificate Form
00 65 19.26	Final Settlement Certificate Form
00 65 36	Warranty Form
00 65 73	Statutory Declaration Form
00 70 00	Conditions of the Contract
00 71 00	Contracting Definitions
00 72 00	General Conditions
00 72 00	
00 72 13	General Conditions – Stipulated Sum (Single-Prime Contract) General Conditions – Stipulated Sum (Multiple-Prime Contract)
00 72 10	General Conditions – Supulated Sum (Multiple-Filme Contract) General Conditions – Construction Management (Single-Prime Contract)
00 72 26	General Conditions – Construction Management (Multiple-Prime Contract)
00 72 33	General Conditions – Cost Plus-Fee (Single-Prime Contract)
00 72 36	General Conditions – Cost-Plus-Fee (Multiple-Prime Contract)
00 72 43	General Conditions – Unit Price (Single-Prime Contract)
00 72 46	General Conditions – Unit Price (Multiple-Prime Contract)
00 72 53	General Conditions – Design/Build (Single-Prime Contract)
00 72 56	General Conditions – Design/Build (Multiple-Prime Contract)
00 72 73	General Conditions – Performance Contract
00 72 95	General Conditions – Integrated Project Delivery
00 73 00	Supplementary Conditions
00 73 16	Insurance Requirements
00 73 19	Health and Safety Requirements
00 73 23	Purchase Contracts
00 73 26	Assigned Contracts
00 73 33	Non-Segregated Facilities Requirements
00 73 36	Equal Employment Opportunity Requirements
00 73 39	Minority Business Enterprise Requirements
00 73 43	Wage Rate Requirements
00 73 46 00 73 49	Wage Determination Schedule
00 73 49	Labor Stabilization Agreement Anti-Pollution Measures
00 73 63	Security Requirements
00 73 73	Statutory Requirements
00 73 83	Dispute Resolution
00 90 00	Revisions, Clarifications, and
	Modifications
00 04 00	
00 91 00	Precontract Revisions
00 91 13	Addenda

00 91 16	Bid Revisions
00 91 19	Proposal Revisions
00 93 00	Record Clarifications and Proposals
00 93 13	Record Requests for Interpretation
00 93 19	Record Clarification Notices
00 93 53	Record Proposal Requests
00 93 54	Record Proposal Worksheet Summaries
00 93 57	Record Change Order Requests
00 94 00	Record Modifications
00 94 00 00 94 33	·
	Record Modifications
00 94 33	Record Modifications Record Minor Changes in the Work
00 94 33 00 94 36	Record Modifications Record Minor Changes in the Work Record Supplemental Instructions
00 94 33 00 94 36 00 94 39	Record Modifications Record Minor Changes in the Work Record Supplemental Instructions Record Field Orders
00 94 33 00 94 36 00 94 39 00 94 43	Record Modifications Record Minor Changes in the Work Record Supplemental Instructions Record Field Orders Record Amendments

01 00 00	General Requirements
01 10 00	Summary
01 11 00	Summary of Work
01 11 13	Work Covered by Contract Documents
01 11 16	Work by Owner
01 11 19	Purchase Contracts
01 12 00	Multiple Contract Summary
01 12 13	Summary of Contracts
01 12 16 01 12 19	Work Sequence Contract Interface
01 14 00	Work Restrictions
01 14 13	Access to Site
01 14 16	Coordination with Occupants
01 14 19	Use of Site
01 18 00	Project Utility Sources
01 18 13	Utility Service Connections
01 20 00	Price and Payment Procedures
01 21 00	Allowances
01 21 13	Cash Allowances
01 21 16	Contingency Allowances
01 21 19 01 21 23	Testing and Inspecting Allowances Installation Allowances
01 21 26	Product Allowances
01 21 29	Quantity Allowances
01 21 43	Time Allowances
01 22 00	Unit Prices
01 22 13	Unit Price Measurement
01 22 16	Unit Price Payment
01 23 00	Alternates
01 24 00	Value Analysis
01 24 13	Value Engineering
01 25 00	Substitution Procedures
01 25 13	Product Substitution Procedures
01 25 16	Execution Substitution Procedures
01 26 00	Contract Modification Procedures
01 26 13 01 26 19	Requests for Interpretation Clarification Notices
01 26 33	Minor Changes in the Work
01 26 36	Supplemental Instructions
01 26 39	Field Orders
01 26 43	Amendments
01 26 46	Construction Change Directives
01 26 49 01 26 53	Work Change Directives Proposal Requests
01 26 53	Proposal Worksheet Summaries
01 26 57	Change Order Requests
	-

	01 26 63	Change Orders
01	29 00	Payment Procedures
	01 29 73	Schedule of Values
	01 29 76	Progress Payment Procedures
	01 29 83	Payment Procedures for Testing Laboratory Services
01	30 00	Administrative Requirements
	31 00	Project Management and Coordination
0.	01 31 13	Project Coordination
	01 31 14	Facility Services Coordination
	01 31 16	Multiple Contract Coordination
	01 31 19	Project Meetings
	01 31 19.13	Preconstruction Meetings
	01 31 19.16	Site Mobilization Meetings
	01 31 19.23	Progress Meetings
	01 31 19.33	Preinstallation Meetings
	01 31 23 01 31 26	Project Web Site Electronic Communication Protocols
04		_
UI	32 00	Construction Progress Documentation
	01 32 13 01 32 16	Scheduling of Work
	01 32 16 01 32 16.13	Construction Progress Schedule Network Analysis Schedules
	01 32 19	Submittals Schedule
	01 32 23	Survey and Layout Data
	01 32 26	Construction Progress Reporting
	01 32 29	Periodic Work Observation
	01 32 33	Photographic Documentation
	01 32 36	Video Monitoring and Documentation
	01 32 43	Purchase Order Tracking
01	33 00	Submittal Procedures
	01 33 13	Certificates
	01 33 16	Design Data
	01 33 19	Field Test Reporting
	01 33 23	Shop Drawings, Product Data, and Samples
	01 33 26	Source Quality Control Reporting
	01 33 29 01 33 29.01	Sustainable Design Reporting Material Cost Summary Form
	01 33 29.01	Wood-Containing Product List
	01 33 29.03	Metal-Containing Product List
	01 33 29.04	Material Content Form
	01 33 29.05	New Product Source Form
	01 33 29.06	Reused Product Form
04	01 33 29.07	Prohibited Content Installer Certification
UI	35 00	Special Procedures
	01 35 13 01 35 13.13	Special Project Procedures Special Project Procedures for Airport Facilities
	01 35 13.16	Special Project Procedures for Detention Facilities
	01 35 13.19	Special Project Procedures for Healthcare Facilities
	01 35 13.26	Special Project Procedures for Clean Rooms
	01 35 13.43	Special Project Procedures for Contaminated Sites
	01 35 16	Alteration Project Procedures

	01 35 23	Owner Safety Requirements
	01 35 26	Governmental Safety Requirements
	01 35 29	Health, Safety, and Emergency Response Procedures
	01 35 29.13	Health, Safety, and Emergency Response Procedures for Contaminated Sites
	01 35 33	Infection Control Procedures
	01 35 43	Environmental Procedures
	01 35 43.13	Environmental Procedures for Hazardous Materials
	01 35 43.16	Environmental Procedures for Toxic Materials
	01 35 46	Indoor Air Quality Procedures
	01 35 53	Security Procedures
	01 35 63	Sustainability Certification Project Requirements
	01 35 66	Sustainability Certification Project Procedures
	01 35 91	Historic Treatment Procedures
01	40 00	Quality Requirements
01	41 00	Regulatory Requirements
	01 41 13	Codes
	01 41 16	Laws
	01 41 19	Rules
	01 41 23	Fees
	01 41 26	Permit Requirements
01	42 00	References
_	01 42 13	Abbreviations and Acronyms
	01 42 16	Definitions
	01 42 19	Reference Standards
01	43 00	Quality Assurance
0 1	01 43 13	Manufacturer Qualifications
	01 43 13	Supplier Qualifications
	01 43 10	Fabricator Qualifications
	01 43 19	Installer Qualifications
	01 43 26	Testing and Inspecting Agency Qualifications
	01 43 29	Code-Required Special Inspector Qualifications
	01 43 23	Manufacturer's Field Services
	01 43 36	Field Samples
	01 43 39	Mockups
Λ1	45 00	Quality Control
UI		
	01 45 13	Source Quality Control Procedures
	01 45 16	Field Quality Control Procedures
	01 45 16.13 01 45 23	Contractor Quality Control
	01 45 25	Testing and Inspecting Services Plant Inspection Procedures
	01 45 20	Testing Laboratory Services
	01 45 29	Code-Required Special Inspections and Procedures
Λ1		·
	50 00	Temporary Facilities and Controls
UΊ	51 00	Temporary Utilities
	01 51 13	Temporary Electricity
	01 51 16	Temporary Fire Protection
	01 51 19	Temporary Fuel Oil
	01 51 23	Temporary Heating, Cooling, and Ventilating

	01 51 26	Temporary Lighting
	01 51 29	Temporary Natural-Gas
	01 51 33	Temporary Telecommunications
	01 51 36	Temporary Water
01	52 00	Construction Facilities
	01 52 13	Field Offices and Sheds
	01 52 16	First Aid Facilities
	01 52 19	Sanitary Facilities
01	53 00	Temporary Construction
_	01 53 13	Temporary Bridges
	01 53 16	Temporary Decking
	01 53 19	Temporary Overpasses
	01 53 23	Temporary Ramps
	01 53 26	Temporary Runarounds
01	54 00	Construction Aids
٠.	01 54 13	Temporary Elevators
	01 54 16	Temporary Hoists
	01 54 19	Temporary Cranes
	01 54 23	Temporary Scaffolding and Platforms
	01 54 26	Temporary Swing Staging
Ω1	55 00	Vehicular Access and Parking
U I	01 55 13	Temporary Access Roads
	01 55 16	Haul Routes
	01 55 10	
	01 55 19	Temporary Poads
	01 55 26	Temporary Roads Traffic Control
	01 55 29	Staging Areas
Ω1	56 00	
UI		Temporary Barriers and Enclosures
	01 56 13	Temporary Air Barriers
	01 56 16	Temporary Naise Parriers
	01 56 19	Temporary Posticados
	01 56 23	Temporary Foncing
	01 56 26 01 56 29	Temporary Protective Walkways
	01 56 33	Temporary Protective Walkways Temporary Security Barriers
	01 56 36	Temporary Security Enclosures
	01 56 39	Temporary Tree and Plant Protection
Ω1	57 00	
UI		Temporary Controls
	01 57 13 01 57 16	Temporary Post Control
	01 57 16	Temporary Pest Control
	01 57 19	Temporary Storm Water Pollution Control
	01 57 26	Temporary Storm Water Pollution Control Site Watering for Dust Control
04		
UΙ	58 00	Project Identification
	01 58 13	Temporary Project Signage
	01 58 16	Temporary Interior Signage
01	60 00	Product Requirements
01	61 00	Common Product Requirements

01 61	13 Software Lic	censing Requirements
01 62 00	Product (Options
01 64 00		urnished Products
01 65 00		Delivery Requirements
01 66 00		Storage and Handling Requirements
01 66		rage and Handling Requirements for Hazardous Materials
01 66		rage and Handling Requirements for Toxic Materials
01 70 0	_	ion and Closeout Requirements
01 71 00	Examina	tion and Preparation
01 71		•
01 71	16 Acceptance	of Conditions
01 71 2	•	
01 71 2 01 71 2		
01 71 2		f Adjacent Construction
01 71 3		ctive Concrete Examination
01 73 00	Executio	n
01 73		
01 73		
01 73		
01 73 2	•	
01 73 2	0	
01 73 2	5	
01 74 00 01 74		and Waste Management
01 74	9	•
01 74		n Waste Management and Disposal
01 74 2		·
01 75 00	Starting a	and Adjusting
01 75	13 Checkout Pi	rocedures
01 75		
01 76 00	Protectin	g Installed Construction
01 77 00	Closeout	: Procedures
01 77		Closeout Reviews
01 77		
01 77		•
01 78 00		: Submittals
01 78 ° 01 78 °	•	and Correction List
01 78 2		nd Maintenance Data
01 78 2	•	
01 78 2		
01 78 2		Maintenance Instructions
01 78 2 01 78 3		лvey
01 78 3		
01 78 3		ord Documents
01 78		

	01 78 46	Extra Stock Materials
Ω1	01 78 53 79 00	Sustainable Design Closeout Documentation
_		Demonstration and Training
U'	1 80 00	Performance Requirements
01	81 00	Facility Performance Requirements
	01 81 13	Sustainable Design Requirements
	01 81 16	Facility Environmental Requirements
	01 81 19	Indoor Air Quality Requirements
U 1	82 00	Facility Substructure Performance Requirements
	01 82 13	Foundation Performance Requirements
	01 82 16	Basement Construction Performance Requirements
01	83 00	Facility Shell Performance Requirements
	01 83 13	Superstructure Performance Requirements
	01 83 16	Exterior Enclosure Performance Requirements
04	01 83 19	Roofing Performance Requirements
UI	84 00	Interiors Performance Requirements
	01 84 13	Interior Construction Performance Requirements
	01 84 16 01 84 19	Stairways Performance Requirements Interior Finishes Performance Requirements
Ω4		· ·
	85 00	Conveying Equipment Performance Requirements
U 1	86 00	Facility Services Performance Requirements
	01 86 13	Fire Suppression Performance Requirements
	01 86 16	Plumbing Performance Requirements
	01 86 19 01 86 23	HVAC Performance Requirements Integrated Automation Performance Requirements
	01 86 26	Electrical Performance Requirements
	01 86 29	Communications Performance Requirements
	01 86 33	Electronic Safety and Security Performance Requirements
01	87 00	Equipment and Furnishings Performance
_		Requirements
	01 87 13	Equipment Performance Requirements
	01 87 16	Furnishings Performance Requirements
01	88 00	Other Facility Construction Performance Requirements
-	01 88 13	Special Construction Performance Requirements
	01 88 16	Selective Construction Performance Requirements
01	89 00	Site Construction Performance Requirements
	01 89 13	Site Preparation Performance Requirements
	01 89 16	Site Improvements Performance Requirements
	01 89 19	Site Plumbing Utilities Performance Requirements
	01 89 23	Site HVAC Utilities Performance Requirements
	01 89 26	Site Electrical Utilities Performance Requirements
_	01 89 29	Other Site Construction Performance Requirements
0	1 90 00	Life Cycle Activities
01	91 00	Commissioning
	01 91 13	General Commissioning Requirements
	01 91 16	Facility Substructure Commissioning

01 91 16.13	Foundation Commissioning
01 91 16.53	Basement Construction Commissioning
01 91 19	Facility Shell Commissioning
01 91 19.13	Superstructure Commissioning
01 91 19.43	Exterior Enclosure Commissioning
01 91 19.73	Roofing Commissioning
01 91 23	Interiors Commissioning
01 91 23.13	Interior Construction Commissioning
01 91 23.43	Stairways Commissioning
01 91 23.73	Interior Finishes Commissioning
01 92 00	Facility Operation
01 92 13	Facility Operation Procedures
01 93 00	Facility Maintenance
01 93 13	Facility Maintenance Procedures
01 93 16	Recycling Programs
01 94 00	Facility Decommissioning
01 94 13	Facility Decommissioning Procedures

02 00 00	Existing Conditions
02 01 00	Maintenance of Existing Conditions
02 01 50	Maintenance of Site Remediation
02 01 65	Maintenance of Underground Storage Tank Removal
02 01 80	Maintenance of Facility Remediation
02 01 86	Maintenance of Hazardous Waste Drum Handling
02 05 00	Common Work Results for Existing Conditions
02 05 19	Geosynthetics for Existing Conditions
02 05 19.13	Geotextiles for Existing Conditions
02 05 19.16 02 05 19.19	Geomembranes for Existing Conditions Geogrids for Existing Conditions
02 06 00	Schedules for Existing Conditions
02 06 30	Schedules for Subsurface Investigations
02 06 30.13	Boring or Test Pit Log Schedule
02 06 50	Schedules for Site Remediation
02 06 65	Schedules for Underground Storage Tank Removal
02 06 80	Schedules for Facility Remediation
02 06 86	Schedules for Hazardous Waste Drum Handling
02 08 00	Commissioning of Existing Conditions
02 20 00	Assessment
02 21 00	Surveys
02 21 13	Site Surveys
02 21 13.13	Boundary and Survey Markers
02 21 13.23 02 21 16	Archeological and Historic Surveys Measured Drawings
02 22 00	Existing Conditions Assessment
02 22 13	Movement and Vibration Assessment
02 22 16	Acoustic Assessment
02 22 19	Traffic Assessment
02 22 23	Accessibility Assessment
02 24 00	Environmental Assessment
02 24 13	Natural Environment Assessment
02 24 13.13	Air Assessment
02 24 13.43 02 24 13.73	Water Assessment
02 24 13.73	Land Assessment Chemical Sampling and Analysis of Soils
02 24 23	Transboundary and Global Environmental Aspects Assessment
02 25 00	Existing Material Assessment
02 25 16	Existing Concrete Assessment
02 25 16.13	Concrete Assessment Drilling
02 25 19	Existing Masonry Assessment
02 25 19.13	Masonry Assessment Drilling
02 25 23	Existing Metals Assessment
02 25 23.13 02 25 26	Welding Investigations Existing Wood, Plastics, and Composites Assessment
02 25 20	Existing Thermal and Moisture Protection Assessment
02 25 29.13	Waterproofing Investigations
02 25 29.23	

02 26 00	Hazardous Material Assessment
02 26 23	Asbestos Assessment
02 26 26	Lead Assessment
02 26 29	Polychlorinate Biphenyl Assessment
02 26 33	Biological Assessment
02 26 33.13	Mold Assessment
02 26 36	Hazardous Waste Drum Assessment
02 30 00	Subsurface Investigation
02 31 00	Geophysical Investigations
02 31 13	Seismic Investigations
02 31 16	Gravity Investigations
02 31 19	Magnetic Investigations
02 31 23	Electromagnetic Investigations
02 31 26	Electrical Resistivity Investigations
02 31 29	Magnetotelluric Investigations
02 32 00	Geotechnical Investigations
02 32 13	Subsurface Drilling and Sampling
02 32 16	Material Testing
02 32 19	Exploratory Excavations
02 32 23 02 32 23.13	Geotechnical Monitoring Before Construction Groundwater Monitoring Before Construction
02 40 00	Demolition and Structure Moving
02 41 00	Demolition
02 41 13	Selective Site Demolition
02 41 13.13	•
02 41 13.23 02 41 13.33	Utility Line Removal Railtrack Removal
02 41 16	Structure Demolition
02 41 16.13	
02 41 16.23	Tower Demolition
02 41 16.33	
02 41 16.43	
02 41 19 02 41 19.13	Selective Demolition
02 41 19.16	Selective Building Demolition Selective Interior Demolition
02 41 19.19	Selective Facility Services Demolition
02 41 19.33	Selective Bridge Demolition
02 41 91	Selective Historic Demolition
02 42 00	Removal and Salvage of Construction Materials
02 42 13	Deconstruction of Structures
02 42 13.13	Deconstruction of Buildings
02 42 91	Removal and Salvage of Historic Construction Materials
02 43 00	Structure Moving
02 43 13	Structure Relocation
02 43 13.13	Building Relocation
02 43 16 02 43 16.13	Structure Raising
	Building Raising
02 50 00	Site Remediation

02	51 00	Physical Decontamination
	02 51 13	Coagulation and Flocculation Decontamination
	02 51 16	Reverse-Osmosis Decontamination
	02 51 19	Solidification and Stabilization Decontamination
	02 51 23	Mechanical Filtration Decontamination
	02 51 26	Radioactive Decontamination
	02 51 29	Surface Cleaning Decontamination
	02 51 29.13	High-Pressure Water Cleaning Decontamination
	02 51 29.16	Vacuum Sweeping Cleaning Decontamination
	02 51 33	Surface Removal Decontamination
	02 51 33.13	Surface Removal Decontamination by Grinding
	02 51 33.16 02 51 33.19	Surface Removal Decontamination by Sand Blasting Surface Removal Decontamination by Ultrasound
02		·
UZ :	52 00	Chemical Decontamination
	02 52 13	Chemical Precipitation Decontamination
	02 52 16	Ion Change Decontamination
00	02 52 19	Neutralization Decontamination
02	53 00	Thermal Decontamination
	02 53 13	Incineration Decontamination
	02 53 13.13	Remediation of Contaminated Soils and Sludges by Incineration
	02 53 16	Thermal Desorption Decontamination
	02 53 16.13 02 53 19	Remediation of Contaminated Soils by Thermal Desorption Vitrification Decontamination
00		
UZ :	54 00	Biological Decontamination
	02 54 13	Aerobic Processes Decontamination
	02 54 16	Anaerobic Processes Decontamination
	02 54 19	Bioremediation Decontamination
	02 54 19.13 02 54 19.16	Bioremediation Using Landfarming Bioremediation of Soils Using Windrow Composting
	02 54 19.10	Bioremediation Using Bacteria Injection
	02 54 23	Soil Washing through Separation/Solubilization
	02 54 26	Organic Decontamination
02	55 00	Remediation Soil Stabilization
_	56 00	Site Containment
UZ .		Waste Containment
	02 56 13 02 56 13.13	Geomembrane Waste Containment
	02 56 19	Gas Containment
	02 56 19.13	Fluid-Applied Gas Barrier
02	57 00	Sinkhole Remediation
U Z .	02 57 13	Sinkhole Remediation by Grouting
	02 57 13.13	Sinkhole Remediation by Compaction Grouting
	02 57 13.16	Sinkhole Remediation by Cap Grouting
	02 57 16	Sinkhole Remediation by Backfilling
02	58 00	Snow Control
-	02 58 13	Snow Fencing
	02 58 16	Snow Avalanche Control
02		
	60 00	Contaminated Site Material Removal
02	61 00	Removal and Disposal of Contaminated Soils
	02 61 13	Excavation and Handling of Contaminated Material

02 61 23	Removal and Disposal of Polychlorinate Biphenyl Contaminated Soils
02 61 26	Removal and Disposal of Asbestos Contaminated Soils
02 61 29	Removal and Disposal of Organically Contaminated Soils
02 62 00	Hazardous Waste Recovery Processes
02 62 13	Air and Steam Stripping
02 62 16	Soil Vapor Extraction
02 62 19	Soil Washing and Flushing
02 65 00	Underground Storage Tank Removal
02 66 00	Landfill Construction and Storage
02 70 00	Water Remediation
02 71 00	Groundwater Treatment
02 72 00	Water Decontamination
02 72 13	Chemical Water Decontamination
02 72 16	Biological Water Decontamination
02 72 19	Electrolysis Water Decontamination
02 80 00	Facility Remediation
02 81 00	Transportation and Disposal of Hazardous Materials
02 82 00	Asbestos Remediation
02 82 13	Asbestos Abatement
02 82 13.13	Glovebag Asbestos Abatement
02 82 13.16	Precautions for Asbestos Abatement
02 82 13.19	Asbestos Floor Tile and Mastic Abatement
02 82 16 02 82 33	Engineering Control of Asbestos Containing Materials Removal and Disposal of Asbestos Containing Materials
02 83 00	Lead Remediation
02 83 13	Lead Hazard Control Activities
02 83 19	Lead-Based Paint Remediation
02 83 19.13	Lead-Based Paint Abatement
02 83 33	Removal and Disposal of Material Containing Lead
02 83 33.13	Lead-Based Paint Removal and Disposal
02 84 00	Polychlorinate Biphenyl Remediation
02 84 16	Handling of Lighting Ballasts and Lamps Containing PCBs and Mercury
02 84 33	Removal and Disposal of Polychlorinate Biphenyls
02 85 00	Mold Remediation
02 85 13	Precautions for Mold Remediation
02 85 16	Mold Remediation Preparation and Containment
02 85 19	Mold Remediation Clearance Air Sampling
02 85 33	Removal and Disposal of Materials with Mold
02 86 00	Hazardous Waste Drum Handling

Concrete

03 00 00

03 01 00 Maintenance of Concrete 03 01 10 Maintenance of Concrete Forming and Accessories 03 01 20 Maintenance of Concrete Reinforcing 03 01 23 Maintenance of Stressing Tendons 03 01 30 Maintenance of Cast-in-Place Concrete Cleaning of Cast-in-Place Concrete 03 01 30.51 Resurfacing of Cast-in-Place Concrete 03 01 30.61 03 01 30.71 Rehabilitation of Cast-in-Place Concrete 03 01 30.72 Strengthening of Cast-in-Place Concrete 03 01 40 Maintenance of Precast Concrete Cleaning of Precast Concrete 03 01 40.51 03 01 40.61 Resurfacing of Precast Concrete Rehabilitation of Precast Concrete 03 01 40.71 Strengthening of Precast Concrete 03 01 40.72 Maintenance of Cast Decks and Underlayment 03 01 50 03 01 50.51 Cleaning Cast Decks and Underlayment 03 01 50.61 Resurfacing of Cast Decks and Underlayment 03 01 50.71 Rehabilitation of Cast Decks and Underlayment 03 01 50.72 Strengthening of Cast Decks and Underlayment Maintenance of Grouting 03 01 60 03 01 70 Maintenance of Mass Concrete 03 01 80 Maintenance of Concrete Cutting and Boring 03 05 00 Common Work Results for Concrete 03 06 00 Schedules for Concrete 03 06 10 Schedules for Concrete Forming and Accessories 03 06 20 Schedules for Concrete Reinforcing 03 06 20.13 Concrete Beam Reinforcing Schedule Concrete Slab Reinforcing Schedule 03 06 20.16 03 06 30 Schedules for Cast-in-Place Concrete Concrete Footing Schedule 03 06 30.13 Concrete Column Schedule 03 06 30.16 Concrete Slab Schedule 03 06 30.19 03 06 30.23 Concrete Shaft Schedule 03 06 30.26 Concrete Beam Schedule 03 06 40 Schedules for Precast Concrete 03 06 40.13 Precast Concrete Panel Schedule 03 06 50 Schedules for Cast Decks and Underlayment Schedules for Grouting 03 06 60 03 06 70 Schedules for Mass Concrete 03 06 80 Schedules for Concrete Cutting and Boring 03 08 00 Commissioning of Concrete **Concrete Forming and Accessories** 03 10 00 03 11 00 Concrete Forming Structural Cast-in-Place Concrete Forming 03 11 13 Concrete Slip Forming 03 11 13.13 03 11 13.16 Concrete Shoring 03 11 13.19 Falsework Architectural Cast-in Place Concrete Forming 03 11 16 03 11 16.13 Concrete Form Liners

03 11 19 03 11 23	Insulating Concrete Forming Permanent Stair Forming
03 15 00	Concrete Accessories
03 15 13	Waterstops
03 15 13.13	Non-Expanding Waterstops
03 15 13.16	Expanding Waterstops
03 15 13.19	Combination Expanding and Injection Hose Waterstops
03 15 13.21 03 15 16	Injection Hose Waterstops Concrete Construction Joints
03 15 10	Cast-In Concrete Anchors
03 20 00	Concrete Reinforcing
03 21 00	Reinforcement Bars
03 21 11 03 21 13	Plain Steel Reinforcement Bars Galvanized Reinforcement Steel Bars
03 21 13	Epoxy-Coated Reinforcement Steel Bars
03 21 10	Stainless Steel Reinforcement Bars
03 21 13	Composite Reinforcement Bars
03 21 21.11	Glass Fiber-Reinforced Polymer Reinforcement Bars
03 21 21.13	Organic Fiber-Reinforced Polymer Reinforcement Bars
03 21 21.16	Carbon Fiber-Reinforced Polymer Reinforcement Bars
03 22 00	Fabric and Grid Reinforcing
03 22 13	Galvanized Welded Wire Fabric Reinforcing
03 22 16	Epoxy-Coated Welded Wire Fabric Reinforcing
03 22 19	Composite Grid Reinforcing
03 23 00	Stressed Tendon Reinforcing
03 24 00	Fibrous Reinforcing
03 25 00	Composite Reinforcing
03 25 13	Glass Fiber-Reinforced Polymer Reinforcing
03 25 16	Organic Fiber-Reinforced Polymer Reinforcing
03 25 19	Carbon Fiber-Reinforced Polymer Reinforcing
03 30 00	Cast-in-Place Concrete
03 30 53	Miscellaneous Cast-in-Place Concrete
03 31 00	Structural Concrete
03 31 13	Heavyweight Structural Concrete
03 31 16	Lightweight Structural Concrete
03 31 19	Shrinkage-Compensating Structural Concrete
03 31 23	High-Performance Structural Concrete
03 31 24	Ultra High-Performance Structural Concrete
03 31 26	Self-Compacting Concrete
03 33 00	Architectural Concrete
03 33 13	Heavyweight Architectural Concrete
03 33 16	Lightweight Architectural Concrete
	, ,
03 33 16	Lightweight Architectural Concrete
03 33 16 03 34 00	Lightweight Architectural Concrete Low Density Concrete
03 33 16 03 34 00 03 35 00	Lightweight Architectural Concrete Low Density Concrete Concrete Finishing

03 35 23	Exposed Aggregate Concrete Finishing
03 35 26	Grooved Concrete Surface Finishing
03 35 29	Tooled Concrete Finishing
03 35 33	Stamped Concrete Finishing
03 35 43	Polished Concrete Finishing
03 37 00	Specialty Placed Concrete
03 37 13	Shotcrete
03 37 16	Pumped Concrete
03 37 19	Pneumatically Placed Concrete
03 37 23	Roller-Compacted Concrete
03 37 26	Underwater Placed Concrete
03 38 00	Post-Tensioned Concrete
03 38 13	Post-Tensioned Concrete Preparation
03 38 16	Unbonded Post-Tensioned Concrete
03 38 19	Bonded Post-Tensioned Concrete
03 39 00	Concrete Curing
03 39 13	Water Concrete Curing
03 39 16	Sand Concrete Curing
03 39 23	Membrane Concrete Curing
03 39 23.13	Chemical Compound Membrane Concrete Curing
03 39 23.23	Sheet Membrane Concrete Curing
03 40 00	Precast Concrete
03 41 00	Precast Structural Concrete
03 41 13	Precast Concrete Hollow Core Planks
03 41 16	Precast Concrete Slabs
03 41 23	Precast Concrete Stairs
03 41 33	Precast Structural Pretensioned Concrete
03 41 36	Precast Structural Post-Tensioned Concrete
03 45 00	Precast Architectural Concrete
03 45 13	Faced Architectural Precast Concrete
03 45 33	Precast Architectural Pretensioned Concrete
03 45 36	Precast Architectural Post-Tensioned Concrete
03 47 00	Site-Cast Concrete
03 47 13	Tilt-Up Concrete
03 47 16	Lift-Slab Concrete
03 48 00	Precast Concrete Specialties
03 48 13	Precast Concrete Bollards
03 48 16	Precast Concrete Splash Blocks
03 48 19	Precast Concrete Stair Treads
03 48 33	Precast Pre-Framed Concrete Panels
03 48 43	Precast Concrete Trim
03 49 00	Glass-Fiber-Reinforced Concrete
03 49 13	Glass-Fiber-Reinforced Concrete Column Covers
03 49 16	Glass-Fiber-Reinforced Concrete Spandrels
03 49 43	Glass-Fiber-Reinforced Concrete Trim
03 50 00	Cast Decks and Underlayment
03 51 00	Cast Roof Decks

Cementitious Wood Fiber Decks Gypsum Concrete Roof Decks
Lightweight Concrete Roof Insulation Composite Concrete Roof Insulation
Lightweight Insulating Concrete
Lightweight Cellular Insulating Concrete
Lightweight Aggregate Insulating Concrete
Concrete Topping
Emery-Aggregate Concrete Topping
Iron-Aggregate Concrete Topping
Cast Underlayment
Gypsum Cement Underlayment
Hydraulic Cement Underlayment
Grouting
Cementitious Grouting
Dry-Pack Grouting
Non-Shrink Grouting
Non-Metallic Non-Shrink Grouting
Metallic Non-Shrink Grouting
Epoxy Grouting
Injection Grouting
Epoxy Injection Grouting
Mass Concrete
Mass Concrete for Raft Foundations
Mass Concrete for Dams
Concrete Cutting and Boring
Concrete Cutting
Flat Concrete Sawing
Track Mounted Concrete Wall Sawing
Wire Concrete Wall Sawing Hand Concrete Wall Sawing
Chain Concrete Wall Sawing
Concrete Boring
Concrete Core Drilling

04 00 00	Masonry
04 01 00	Maintenance of Masonry
04 01 20	Maintenance of Unit Masonry
04 01 20.41	Unit Masonry Stabilization
04 01 20.51	Unit Masonry Maintenance
04 01 20.52	Unit Masonry Cleaning
04 01 20.91	Unit Masonry Restoration
04 01 20.93	Testing and Sampling Brick Units for Restoration
04 01 40	Maintenance of Stone Assemblies
04 01 40.51	Stone Maintenance
04 01 40.52 04 01 40.91	Stone Cleaning
04 01 50	Stone Restoration Maintenance of Refractory Maconry
04 01 60	Maintenance of Refractory Masonry Maintenance of Corrosion-Resistant Masonry
04 01 70	•
04 05 00	Maintenance of Manufactured Masonry Common Work Results for Masonry
04 05 13	Masonry Mortaring
04 05 13.16	Chemical-Resistant Masonry Mortaring
04 05 13.19	Epoxy Masonry Mortaring
04 05 13.23	Surface Bonding Masonry Mortaring
04 05 13.26	Engineered Masonry Mortaring
04 05 13.29	Refractory Masonry Mortaring
04 05 13.91	Masonry Restoration Mortaring
04 05 16	Masonry Grouting
04 05 16.16	Chemical-Resistant Masonry Grouting
04 05 16.26	Engineered Masonry Grouting
04 05 19	Masonry Anchorage and Reinforcing
04 05 19.13	Continuous Joint Reinforcing
04 05 19.16	Masonry Pointering Para
04 05 19.26 04 05 19.29	Masonry Reinforcing Bars Stone Anchors
04 05 21	Masonry Strengthening
04 05 23	Masonry Accessories
04 05 23.13	Masonry Control and Expansion Joints
04 05 23.16	Masonry Embedded Flashing
04 05 23.19	Masonry Cavity Drainage, Weepholes, and Vents
04 06 00	Schedules for Masonry
04 06 20	Schedules for Unit Masonry
04 06 20.13	Masonry Unit Schedule
04 06 40	Schedules for Stone Assemblies
04 06 50	Schedules for Refractory Masonry
04 06 60	Schedules for Corrosion-Resistant Masonry
04 06 70	Schedules for Manufactured Masonry
04 08 00	Commissioning of Masonry
04 20 00	Unit Masonry
04 21 00	Clay Unit Masonry
04 21 13	Brick Masonry
04 21 13	Brick Veneer Masonry
04 21 13.13	Surface-Bonded Brick Masonry
04 21 16	Ceramic Glazed Clay Masonry
3.21.10	John Jacob Glay Madoliny

	04 21 19	Clay Tile Masonry
	04 21 23	Structural Clay Tile Masonry
	04 21 26 04 21 29	Glazed Structural Clay Tile Masonry Terra Cotta Masonry
04	22 00	Concrete Unit Masonry
_	22 00.13	Concrete Unit Veneer Masonry
_	22 00.16	Surface-Bonded Concrete Unit Masonry
U4	04 22 19	Insulated Concrete Unit Masonry
	04 22 19	Architectural Concrete Unit Masonry
	04 22 23.13	Exposed Aggregate Concrete Unit Masonry
	04 22 23.16	Fluted Concrete Unit Masonry
	04 22 23.19	Molded-Face Concrete Unit Masonry
	04 22 23.23	Prefaced Concrete Unit Masonry
	04 22 23.26 04 22 23.29	Sound-Absorbing Concrete Unit Masonry Split-Face Concrete Unit Masonry
	04 22 26	Autoclaved Aerated Concrete Unit Masonry
	04 22 33	Interlocking Concrete Unit Masonry
04	23 00	Glass Unit Masonry
-	04 23 13	Vertical Glass Unit Masonry
	04 23 16	Glass Unit Masonry Floors
	04 23 19	Glass Unit Masonry Skylights
04	24 00	Adobe Unit Masonry
	04 24 13	Site-Cast Adobe Unit Masonry
	04 24 16	Manufactured Adobe Unit Masonry
04	25 00	Unit Masonry Panels
	04 25 13	Metal-Supported Unit Masonry Panels
04	26 00	Single-Wythe Unit Masonry
	04 26 13	Masonry Veneer
04	27 00	Multiple-Wythe Unit Masonry
	04 27 13	Composite Unit Masonry
	04 27 23	Cavity Wall Unit Masonry
04	28 00	Concrete Form Masonry Units
	04 28 13	Dry-Stacked, Concrete-Filled Masonry Units
	04 28 23	Mortar-Set, Concrete-Filled Masonry Units
04	29 00	Engineered Unit Masonry
04	40 00	Stone Assemblies
04	41 00	Dry-Placed Stone
04	42 00	Exterior Stone Cladding
	04 42 13	Masonry-Supported Stone Cladding
	04 42 16	Steel-Stud-Supported Stone Cladding
	04 42 19	Strongback-Frame-Supported Stone Cladding
	04 42 23	Truss-Supported Stone Cladding
	04 42 26	Grid-System-Supported Stone Cladding
Λ4	04 42 43	Stone Panels for Curtain Walls
υ4	43 00	Stone Masonry
	04 43 13 04 43 13.13	Stone Masonry Veneer Anchored Stone Masonry Veneer
	0 1 10 10 10	, wildrighted Ctorio Middolli V V OHOO!

04 43 13.16	Adhered Stone Masonry Veneer
04 50 00	Refractory Masonry
04 51 00	Flue Liner Masonry
04 52 00	Combustion Chamber Masonry
04 53 00	Castable Refractory Masonry
04 54 00	Refractory Brick Masonry
04 57 00	Masonry Fireplaces
04 57 33	Modular Masonry Fireplaces
04 60 00	Corrosion-Resistant Masonry
04 61 00	Chemical-Resistant Brick Masonry
04 62 00	Vitrified Clay Liner Plate
04 70 00	Manufactured Masonry
04 71 00	Manufactured Brick Masonry
04 71 13	Calcium Silicate Manufactured Brick Masonry
04 72 00	Cast Stone Masonry
04 73 00	Manufactured Stone Masonry
04 73 13	Calcium Silicate Manufactured Stone Masonry

05 00 00	Matala
05 00 00	
05 01 00	Maintenance of Metals
05 01 10 05 01 20	Maintenance of Structural Metal Framing Maintenance of Metal Joists
05 01 20	Maintenance of Metal Decking
05 01 40	Maintenance of Cold-Formed Metal Framing
05 01 50	Maintenance of Metal Fabrications
05 01 70	Maintenance of Decorative Metal
05 01 70.91	Historic Treatment of Decorative Metal
05 05 00	Common Work Results for Metals
05 05 13	Shop-Applied Coatings for Metal Post-Installed Concrete Anchors
05 05 19 05 05 23	Metal Fastenings
05 05 23	Security Metal Fastenings
05 06 00	Schedules for Metals
05 06 10	Schedules for Structural Metal Framing
05 06 10.13	Steel Column Schedule
05 06 10.16	Steel Beam Schedule
05 06 20 05 06 20.13	Schedules for Metal Joists Steel Joist Schedule
05 06 30	Schedules for Metal Decking
05 06 40	Schedules for Cold-Formed Metal Framing
05 06 50	Schedules for Metal Fabrications
05 06 70	Schedules for Decorative Metal
NE NO NN	Commissioning of Motals
05 08 00	Commissioning of Metals
05 06 00	Structural Metal Framing
05 10 00	Structural Metal Framing
05 10 00 05 12 00 05 12 13 05 12 16	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 00 05 15 13	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 00 05 15 13 05 15 16	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 13 05 15 00 05 15 13 05 15 16 05 15 19	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies Stainless-Steel Wire Rope Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 13 05 15 00 05 15 13 05 15 13 05 15 19 05 16 33	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies Stainless-Steel Wire Rope Assemblies Structural Cabling Cable Bow Truss Assemblies Bridge Cabling
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 10 05 15 13 05 15 16 05 15 19 05 16 00 05 16 13	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies Stainless-Steel Wire Rope Assemblies Structural Cabling Cable Bow Truss Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 13 05 15 00 05 15 13 05 15 16 05 15 19 05 16 33 05 17 00 05 19 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies Stainless-Steel Wire Rope Assemblies Structural Cabling Cable Bow Truss Assemblies Bridge Cabling Structural Rod Assemblies Tension Rod and Cable Truss Assemblies
05 10 00 05 12 00 05 12 13 05 12 16 05 12 19 05 12 23 05 12 33 05 13 00 05 14 00 05 14 13 05 15 00 05 15 13 05 15 16 05 15 19 05 16 00 05 16 13 05 16 33 05 17 00	Structural Metal Framing Structural Steel Framing Architecturally-Exposed Structural Steel Framing Fabricated Fireproofed Steel Columns Buckling Restrained Braces Structural Steel for Buildings Structural Steel for Bridges Structural Stainless-Steel Framing Structural Aluminum Framing Architecturally-Exposed Structural Aluminum Framing Wire Rope Assemblies Aluminum Wire Rope Assemblies Steel Wire Rope Assemblies Stainless-Steel Wire Rope Assemblies Structural Cabling Cable Bow Truss Assemblies Bridge Cabling Structural Rod Assemblies

05 20 00	Metal Joists
05 21 00	Steel Joist Framing
05 21 13	Deep Longspan Steel Joist Framing
05 21 16 05 21 19	Longspan Steel Joist Framing Open Web Steel Joist Framing
05 21 23	Steel Joist Girder Framing
05 25 00	Aluminum Joist Framing
05 30 00	Metal Decking
05 31 00	Steel Decking
05 31 13	Steel Floor Decking
05 31 23 05 31 33	Steel Roof Decking
05 33 00	Steel Form Decking Aluminum Decking
05 33 13	Aluminum Floor Decking
05 33 23	Aluminum Roof Decking
05 34 00	Acoustical Metal Decking
05 35 00	Raceway Decking Assemblies
05 36 00	Composite Metal Decking
05 36 13	Composite Steel Plate and Elastomer Decking
05 40 00	Cold-Formed Metal Framing
05 41 00	Structural Metal Stud Framing
05 42 00	Cold-Formed Metal Joist Framing
05 42 13	Cold-Formed Metal Floor Joist Framing
05 42 23 05 43 00	Cold-Formed Metal Roof Joist Framing
05 44 00	Slotted Channel Framing Cold-Formed Metal Trusses
05 44 13	Cold-Formed Metal Roof Trusses
05 45 00	Metal Support Assemblies
05 45 13	Mechanical Metal Supports
05 45 16	Electrical Metal Supports
05 45 19 05 45 23	Communications Metal Supports Healthcare Metal Supports
05 50 00	Metal Fabrications
05 51 00 05 51 13	Metal Stairs Metal Pan Stairs
05 51 13	Metal Floor Plate Stairs
05 51 19	Metal Grating Stairs
05 51 23	Metal Fire Escapes
05 51 33 05 51 33.13	Metal Ladders Vertical Metal Ladders
05 51 33.16	Inclined Metal Ladders
05 51 33.23	Alternating Tread Ladders
05 51 36 05 51 36.13	Metal Walkways Metal Catwalks
05 51 36.16	Metal Ramps

gs
gs

Wood, Plastics, and Composites 06 00 00 Maintenance of Wood, Plastics, and Composites 06 01 00 Maintenance of Rough Carpentry 06 01 10 06 01 10.71 Rough Carpentry Rehabilitation 06 01 10.91 Rough Carpentry Restoration 06 01 10.92 Rough Carpentry Preservation 06 01 20 Maintenance of Finish Carpentry Finish Carpentry Rehabilitation 06 01 20.71 Finish Carpentry Restoration 06 01 20.91 Finish Carpentry Preservation 06 01 20.92 Maintenance of Architectural Woodwork 06 01 40 06 01 40.51 Architectural Woodwork Cleaning 06 01 40.61 Architectural Woodwork Refinishing Architectural Woodwork Restoration 06 01 40.91 06 01 50 Maintenance of Structural Plastics Maintenance of Plastic Fabrications 06 01 60 06 01 60.51 Plastic Cleaning Plastic Rehabilitation 06 01 60.71 06 01 60.91 Plastic Restoration 06 01 60.92 Plastic Preservation 06 01 70 Maintenance of Structural Composites 06 01 80 Maintenance of Composite Assemblies 06 01 80.51 Composite Cleaning 06 01 80.71 Composite Rehabilitation 06 01 80.91 Composite Restoration 06 01 80.92 Composite Preservation 06 05 00 Common Work Results for Wood, Plastics, and Composites 06 05 23 Wood, Plastic, and Composite Fastenings 06 05 73 Wood Treatment Fire-Retardant Wood Treatment 06 05 73.13 06 05 73.33 Preservative Wood Treatment 06 05 73.91 Long-Term Wood Treatment 06 05 73.93 Eradication of Insects in Wood 06 05 73.96 Antiseptic Treatment of Wood 06 05 83 Shop-Applied Wood Coatings 06 06 00 Schedules for Wood, Plastics, and Composites 06 06 10 Schedules for Rough Carpentry Nailing Schedule 06 06 10.13 06 06 10.16 Wood Beam Schedule 06 06 10.19 Plywood Shear Wall Schedule 06 06 10.23 Plywood Web Joist Schedule 06 06 10.26 Wood Truss Schedule 06 06 20 Schedules for Finish Carpentry 06 06 40 Schedules for Architectural Woodwork 06 06 50 Schedules for Structural Plastics 06 06 60 Schedules for Plastic Fabrications 06 06 70 Schedules for Structural Composites 06 06 80 Schedules for Composite Assemblies 06 08 00 Commissioning of Wood, Plastics, and Composites

06 10 00	Rough Carpentry
06 10 53	Miscellaneous Rough Carpentry
06 10 63	Exterior Rough Carpentry
06 11 00	Wood Framing
06 11 13	Engineered Wood Products
06 11 16	Mechanically Graded Lumber
06 12 00	Structural Panels
06 12 13	Cementitious Reinforced Panels
06 12 16	Stressed Skin Panels
06 13 00	Heavy Timber Construction
06 13 13	Log Construction
06 13 13.91 06 13 16	Period Horizontal Log Work Pole Construction
06 13 10	Heavy Timber Framing
06 13 26	Heavy Timber Trusses
06 13 33	Heavy Timber Pier Construction
06 14 00	Treated Wood Foundations
06 15 00	Wood Decking
06 15 13	Wood Floor Decking
06 15 13.91	3
06 15 16	Wood Roof Decking
06 15 19	Timber Decking
06 15 23 06 15 33	Laminated Wood Decking
06 16 00	Wood Patio Decking
06 16 13	Sheathing Insulating Sheathing
06 16 23	Subflooring
06 16 26	Underlayment
06 16 33	Wood Board Sheathing
06 16 36	Wood Panel Product Sheathing
06 16 43	Gypsum Sheathing
06 16 53	Moisture-Resistant Sheathing Board
06 16 63	Cementitious Sheathing
06 17 00	Shop-Fabricated Structural Wood
06 17 13 06 17 23	Laminated Veneer Lumber Parallel Strand Lumber
06 17 23	Wood I-Joists
06 17 36	Metal-Web Wood Joists
06 17 43	Rim Boards
06 17 53	Shop-Fabricated Wood Trusses
06 18 00	Glued-Laminated Construction
06 18 13	Glued-Laminated Beams
06 18 16	Glued-Laminated Columns
06 20 00	Finish Carpentry
06 20 13	Exterior Finish Carpentry
06 20 23	Interior Finish Carpentry
06 22 00	Millwork

06 22 13	Standard Pattern Wood Trim
06 25 00	Prefinished Paneling
06 25 13	Prefinished Hardboard Paneling
06 25 16	Prefinished Plywood Paneling
06 26 00	Board Paneling
06 26 13	Profile Board Paneling
06 40 00	Architectural Woodwork
06 40 13	Exterior Architectural Woodwork
06 40 23	Interior Architectural Woodwork
06 41 00	Architectural Wood Casework
06 41 13	Wood-Veneer-Faced Architectural Cabinets
06 41 16	Plastic-Laminate-Clad Architectural Cabinets
06 41 93	Cabinet and Drawer Hardware
06 42 00	Wood Paneling
06 42 13	Wood Board Paneling
06 42 14	Stile and Rail Wood Paneling
06 42 16	Flush Wood Paneling
06 42 19	Plastic-Laminate-Faced Wood Paneling
06 43 00	Wood Stairs and Railings
06 43 13	Wood Stairs
06 43 16	Wood Railings
06 44 00	Ornamental Woodwork
06 44 13	Wood Turnings
06 44 16	Wood Pilasters
06 44 19	Wood Grilles
06 44 23	Wood Corbels
06 44 26	Wood Cupolas
06 44 29	Wood Finials
06 44 33	Wood Mantels
06 44 36	Wood Pediment Heads
06 44 39	Wood Posts and Columns
06 46 00	Wood Trim
06 46 13	Wood Door and Window Casings
06 46 16	Wood Aprons
06 46 19	Wood Base and Shoe Moldings
06 46 23	Wood Chair Rails
06 46 26	Wood Cornices
06 46 29	Wood Fasciae and Soffits
06 46 33	Wood Stops, Stools, and Sills
06 46 91	Splicing of Wooden Components
06 48 00	Wood Frames
06 48 13	Exterior Wood Door Frames
06 48 16	Interior Wood Door Frames
06 48 19	Ornamental Wood Frames
06 48 23	Stick-Built Wood Windows
06 48 26	Wood-Veneer Frames
06 49 00	Wood Screens and Exterior Wood Shutters
06 49 13	Wood Screens

06 49 16 06 49 19	Exterior Wood Blinds Exterior Wood Shutters
06 50 00	Structural Plastics
06 51 00	
06 51 13	Structural Plastic Shapes and Plates Plastic Lumber
06 52 00	Plastic Structural Assemblies
06 53 00	Plastic Decking
06 53 13	Solid Plastic Decking
06 60 00	Plastic Fabrications
06 61 00	Simulated Stone Fabrications
06 61 13	Cultured Marble Fabrications
06 61 16	Solid Surfacing Fabrications
06 61 19	Quartz Surfacing Fabrications
06 63 00	Plastic Railings
06 64 00 06 64 13	Plastic Paneling
06 65 00	Plastic Lattice Paneling Plastic Simulated Wood Trim
06 66 00	Custom Ornamental Simulated Woodwork
1743 4343 4747	Custom Cinamental Simulated Woodwork
	Ctrustural Commonitor
06 70 00	Structural Composites
06 70 00 06 71 00	Structural Composite Shapes and Plates
06 70 00 06 71 00 06 71 13	Structural Composite Shapes and Plates Composite Lumber
06 70 00 06 71 00 06 71 13 06 72 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings Composite Fabrications
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00 06 81 00	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings Composite Fabrications Composite Railings Glass-Fiber-Reinforced Plastic Railings Composite Paneling
06 70 00 06 71 00 06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00 06 81 00 06 81 13	Structural Composite Shapes and Plates Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings Composite Fabrications Composite Railings Glass-Fiber-Reinforced Plastic Railings

07 00 00	Thermal and Moisture Protection
07 01 00	Operation and Maintenance of Thermal and Moisture
	Protection
07 01 10	Maintenance of Dampproofing and Waterproofing
07 01 10.81	Waterproofing Replacement
07 01 20	Maintenance of Thermal Protection
07 01 30	Maintenance of Steep Slope Roofing
07 01 40 07 01 50	Maintenance of Roofing and Siding Panels Maintenance of Membrane Roofing
07 01 50.13	Roof Moisture Survey
07 01 50.16	Roof Maintenance Program
07 01 50.19	Preparation for Re-Roofing
07 01 50.23	Roof Removal
07 01 50.61	Roof Re-Coating
07 01 50.81 07 01 50.91	Roof Replacement Roofing Restoration
07 01 60	Maintenance of Flashing and Sheet Metal
07 01 60.71	Flashing and Sheet Metal Rehabilitation
07 01 60.91	Flashing and Sheet Metal Restoration
07 01 60.92	Flashing and Sheet Metal Preservation
07 01 70	Operation and Maintenance of Roof Specialties and Accessories
07 01 80 07 01 90	Maintenance of Fire and Smoke Protection Maintenance of Joint Protection
07 01 90	Joint Sealant Rehabilitation
07 01 90.81	Joint Sealant Replacement
07 05 00	Common Work Results for Thermal and Moisture
	Protection
07 05 53	Fire and Smoke Assembly Identification
07 06 00	Schedules for Thermal and Moisture Protection
07 06 10	Schedules for Dampproofing and Waterproofing
07 06 20	Schedules for Thermal Protection
07 06 30	Schedules for Steep Slope Roofing
07 06 40	Schedules for Roofing and Siding Panels
07 06 50	Schedules for Membrane Roofing
07 06 60	Schedules for Flashing and Sheet Metal
07 06 70	Schedules for Roof Specialties and Accessories
07 06 80	Schedules for Fire and Smoke Protection
07 06 80.13 07 06 80.16	Fireproofing Schedule Firestopping Schedule
07 06 90	Schedules for Joint Protection
07 06 90.13	Joint Sealant Schedule
07 08 00	Commissioning of Thermal and Moisture Protection
07 10 00	Dampproofing and Waterproofing
07 11 00	Dampproofing
07 11 00	Bituminous Dampproofing
07 11 15	Cementitious Dampproofing
07 11 19	Sheet Dampproofing
07 12 00	Built-Up Bituminous Waterproofing
07 12 13	Built-Up Asphalt Waterproofing

07 12 16	Built-Up Coal Tar Waterproofing
07 13 00	Sheet Waterproofing
07 13 13	Bituminous Sheet Waterproofing
07 13 26	Self-Adhering Sheet Waterproofing
07 13 52	Modified Bituminous Sheet Waterproofing
07 13 53	Elastomeric Sheet Waterproofing
07 13 54	Thermoplastic Sheet Waterproofing
07 14 00	Fluid-Applied Waterproofing
07 14 13	Hot Fluid-Applied Rubberized Asphalt Waterproofing
07 14 14	Hot Fluid-Applied Polyurea Waterproofing
07 14 16	Cold Fluid-Applied Waterproofing
07 15 00	Sheet Metal Waterproofing
07 15 13	Sheet Lead Waterproofing
07 16 00	Cementitious and Reactive Waterproofing
07 16 13	Polymer Modified Cement Waterproofing
07 16 16	Crystalline Waterproofing
07 16 19	Metal Oxide Waterproofing
07 17 00	Bentonite Waterproofing
07 17 13	Bentonite Panel Waterproofing
07 17 16	Bentonite Composite Sheet Waterproofing
07 18 00	Traffic Coatings
07 18 13	Pedestrian Traffic Coatings
07 18 16	Vehicular Traffic Coatings
07 19 00	Water Repellents
07 19 13	Acrylic Water Repellents
07 19 16	Silane Water Repellents
07 19 19	Silicone Water Repellents
07 19 23	Siloxane Water Repellents
07 19 26	Stearate Water Repellents
07 20 00	Thermal Protection
07 21 00	Thermal Insulation
07 21 13	Board Insulation
07 21 13.13	Foam Board Insulation
07 21 13.16	Fibrous Board Insulation
07 21 13.19	Mineral Board Insulation
07 21 16	Blanket Insulation
07 21 19 07 21 23	Foamed-In-Place Insulation Loose-Fill Insulation
07 21 23	Blown Insulation
07 21 20	Sprayed Insulation
07 21 53	Reflective Insulation
07 22 00	Roof and Deck Insulation
07 22 13	Asphaltic Perlite Concrete Deck
07 22 16	Roof Board Insulation
07 24 00	Exterior Insulation and Finish Systems
07 24 13	Polymer-Based Exterior Insulation and Finish System
07 24 16	Polymer-Modified Exterior Insulation and Finish System
07 24 19	Water-Drainage Exterior Insulation and Finish System
	-

07 24 23	Direct-Applied Finish Systems
07 25 00	Weather Barriers
07 26 00	Vapor Retarders
07 26 13	Above-Grade Vapor Retarders
07 26 16	Below-Grade Vapor Retarders
07 26 23	Below-Grade Gas Retarders
07 27 00	Air Barriers
07 27 13	Modified Bituminous Sheet Air Barriers
07 27 16	Sheet Metal Membrane Air Barriers
07 27 19	Plastic Sheet Air Barriers
07 27 23	Board Product Air Barriers
07 27 26 07 27 36	Fluid-Applied Membrane Air Barriers Sprayed Foam Air Barrier
07 30 00	<u> </u>
07 30 00	Steep Slope Roofing Canvas Roofing
07 31 00	Shingles and Shakes
07 31 13	Asphalt Shingles
07 31 13.13	Fiberglass-Reinforced Asphalt Shingles
07 31 16	Metal Shingles
07 31 19	Mineral-Fiber Cement Shingles
07 31 23	Porcelain Enamel Shingles
07 31 26	Slate Shingles
07 31 29 07 31 29.13	Wood Shingles and Shakes Wood Shingles
07 31 29.16	Wood Shakes
07 31 33	Composite Rubber Shingles
07 31 53	Plastic Shakes
07 32 00	Roof Tiles
07 32 13	Clay Roof Tiles
07 32 14	Ceramic and Porcelain Roof Tiles
07 32 16	Concrete Roof Tiles
07 32 19 07 32 23	Metal Roof Tiles Mineral-Fiber Cement Roof Tiles
07 32 25	Plastic Roof Tiles
07 32 29	Rubber Tiles/Panels
07 33 00	Natural Roof Coverings
07 33 13	Sod Roofing
07 33 16	Thatched Roofing
07 33 63	Vegetated Roofing
07 40 00	Roofing and Siding Panels
07 41 00	Roof Panels
07 41 13	Metal Roof Panels
07 41 23	Wood Roof Panels
07 41 33	Plastic Roof Panels
07 41 43	Composite Roof Panel Assemblies
07 41 63	Fabricated Roof Panel Assemblies
07 42 00	Wall Panels

07 :	53 00	Elastomeric Membrane Roofing
	07 52 16.14	Mechanically Fastened Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
	07 52 16.13	Torch-Applied Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
	07 52 16.12	Hot-Mopped Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
	07 52 16.11	Cold Adhesive Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
	07 52 16	Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
	07 02 10.14	Roofing
	07 52 13.13	Mechanically Fastened Atactic-Polypropylene-Modified Bituminous Membrane
	07 52 13.13	Roofing Torch-Applied Atactic-Polypropylene-Modified Bituminous Membrane Roofing
	07 52 13.11	Cold Adhesive Applied Atactic-Polypropylene-Modified Bituminous Membrane
	07 52 13	Atactic-Polypropylene-Modified Bituminous Membrane Roofing
U/	52 00	Modified Bituminous Membrane Roofing
07		·
	07 51 16	Glass-Fiber-Reinforced Asphalt Emulsion Roofing
	07 51 13.13	Built-Up Coal Tar Roofing
	07 51 13	Cold-Applied Built-Up Asphalt Roofing
<i>01</i> ,	07 51 13	Built-Up Asphalt Roofing
	51 00	Built-Up Bituminous Roofing
07	50 00	Membrane Roofing
	07 46 63	Fabricated Panel Assemblies with Siding
	07 46 46	Fiber-Cement Siding
	07 46 43	Composition Siding
	07 46 33	Plastic Siding
	07 46 29	Plywood Siding
	07 46 26	Hardboard Siding
	07 46 23	Wood Siding
	07 46 19	Steel Siding
	07 46 16	Aluminum Siding
U/		Siding Aluminum Siding
07	46 00	
	07 44 63	Fabricated Faced Panel Assemblies
	07 44 56	Mineral-Fiber-Reinforced Cementitious Panels
	07 44 53	Glass-Fiber-Reinforced Cementitious Panels
	07 44 33	Metal Faced Panels
	07 44 23	Ceramic-Tile-Faced Panels
	07 44 19	Tile-Faced Panels
	07 44 16	Porcelain Enameled Faced Panels
	07 44 13	Aggregate Coated Panels
07	44 00	Faced Panels
	07 42 93	Soffit Panels
	07 42 63	Fabricated Wall Panel Assemblies
	07 42 43	Composite Wall Panel Assemblies
	07 42 33	Plastic Wall Panels
	07 42 29	Terracotta Wall Panels
	07 42 23	Wood Wall Panels
	07 42 13.23	Metal Composite Material Wall Panels
	07 42 13.19	Insulated Metal Wall Panels
	07 42 13.16	Metal Plate Wall Panels
	07 42 13.13	Formed Metal Wall Panels
	07 42 13	Metal Wall Panels

	07 53 13	Chlorinated-Polyethylene Roofing
	07 53 16	Chlorosulfonate-Polyethylene Roofing
	07 53 23	Ethylene-Propylene-Diene-Monomer Roofing
	07 53 29	Polyisobutylene Roofing
07 5	4 00	Thermoplastic Membrane Roofing
	07 54 13	Copolymer-Alloy Roofing
	07 54 16	Ethylene-Interpolymer Roofing
	07 54 19	Polyvinyl-Chloride Roofing
	07 54 23	Thermoplastic-Polyolefin Roofing
	07 54 26	Nitrile-Butadiene-Polymer Roofing
07 5	5 00	Protected Membrane Roofing
	07 55 51	Built-Up Bituminous Protected Membrane Roofing
	07 55 52	Modified Bituminous Protected Membrane Roofing
	07 55 53	Elastomeric Protected Membrane Roofing
	07 55 54	Thermoplastic Protected Membrane Roofing
	07 55 56	Fluid-Applied Protected Membrane Roofing
	07 55 56.13	Hot-Applied Rubberized Asphalt Protected Membrane Roofing
	07 55 63	Vegetated Protected Membrane Roofing
	6 00	Fluid-Applied Roofing
07 5	7 00	Coated Foamed Roofing
	07 57 13	Sprayed Polyurethane Foam Roofing
07 5	8 00	Roll Roofing
07	60 00	Flashing and Sheet Metal
07 6	1 00	Sheet Metal Roofing
	07 61 13	Standing Seam Sheet Metal Roofing
	07 61 16	Batten Seam Sheet Metal Roofing
	07 61 19	Flat Seam Sheet Metal Roofing
076	2 00	Sheet Metal Flashing and Trim
07 6	3 00	Sheet Metal Roofing Specialties
	4 00	Sheet Metal Wall Cladding
01 0	07 64 13	Standing Seam Sheet Metal Wall Cladding
	07 64 16	Batten Seam Sheet Metal Wall Cladding
	07 64 19	Flat Seam Sheet Metal Wall Cladding
07 6	5 00	Flexible Flashing
01 0	07 65 13	Laminated Sheet Flashing
	07 65 16	Modified Bituminous Sheet Flashing
	07 65 19	Plastic Sheet Flashing
	07 65 23	Rubber Sheet Flashing
		3
	07 65 26	Self-Adhering Sheet Flashing
07	07 65 26 70 00	Roof and Wall Specialties and Accessories
	70 00	Roof and Wall Specialties and Accessories
		Roof and Wall Specialties and Accessories Roof Specialties
07 7	70 00 1 00	Roof and Wall Specialties and Accessories Roof Specialties Manufactured Copings
07 7	70 00 1 00 07 71 13	Roof and Wall Specialties and Accessories Roof Specialties
07 7	70 00 1 00 07 71 13 07 71 16	Roof and Wall Specialties and Accessories Roof Specialties Manufactured Copings Manufactured Counterflashing Systems
07 7	70 00 1 00 07 71 13 07 71 16 07 71 19	Roof and Wall Specialties and Accessories Roof Specialties Manufactured Copings Manufactured Counterflashing Systems Manufactured Gravel Stops and Fasciae

07 71 29	Manufactured Roof Expansion Joints
07 71 33	Manufactured Scuppers
07 72 00	Roof Accessories
07 72 13	Manufactured Curbs
07 72 23 07 72 26	Relief Vents
07 72 28	Ridge Vents Roof Hatches
07 72 36	Smoke Vents
07 72 43	Roof Walk Boards
07 72 46	Roof Walkways
07 72 53	Snow Guards
07 72 63	Waste Containment Assemblies
07 76 00	Roof Pavers
07 76 13 07 76 16	Roof Ballast Pavers Roof Decking Pavers
07 77 00	Wall Specialties
07 80 00	Fire and Smoke Protection
07 81 00 07 81 13	Applied Fireproofing Cement Aggregate Fireproofing
07 81 16	Cementitious Fireproofing
07 81 19	Foamed Magnesium-Oxychloride Fireproofing
07 81 23	Intumescent Fireproofing
07 81 26	Magnesium Cement Fireproofing
07 81 29	Mineral-Fiber Cementitious Fireproofing
07 81 33	Mineral-Fiber Fireproofing
07 82 00	Board Fireproofing
07 82 13 07 82 16	Calcium-Silicate Board Fireproofing Slag-Fiber Board Fireproofing
07 84 00	Firestopping
07 84 13	Penetration Firestopping
07 84 13.13	Penetration Firestopping Mortars
07 84 13.16	Penetration Firestopping Devices
07 84 43 07 84 53	Joint Firestopping
07 86 00	Building Perimeter Firestopping Smoke Seals
07 87 00	Smoke Containment Barriers
07 90 00	Joint Protection
07 90 00 07 91 00	Preformed Joint Seals
07 91 00	Compression Seals
07 91 16	Joint Gaskets
07 91 23	Backer Rods
07 91 26	Joint Fillers
07 92 00	Joint Sealants
07 92 13	Elastomeric Joint Sealants
07 92 16	Rigid Joint Sealants
07 92 19	Acoustical Joint Sealants
07 95 00	Expansion Control

07 95 13	Expansion Joint Cover Assemblies
07 95 53	Joint Slide Bearings
07 95 63	Bridge Expansion Joint Cover Assemblies

08 00 00 Openings

00 00 00	Openings
08 01 00	Operation and Maintenance of Openings
08 01 10	Operation and Maintenance of Doors and Frames
08 01 11	Operation and Maintenance of Metal Doors and Frames
08 01 14	Operation and Maintenance of Wood Doors
08 01 15	Operation and Maintenance of Plastic Doors
08 01 16	Operation and Maintenance of Composite Doors
08 01 17	Operation and Maintenance of Integrated Door Opening Assemblies
08 01 30	Operation and Maintenance of Specialty Doors and Frames
08 01 32	Operation and Maintenance of Sliding Glass Doors
08 01 32	Operation and Maintenance of Coiling Doors and Grilles
08 01 34	Operation and Maintenance of Special Function Doors
08 01 35	Operation and Maintenance of Folding Doors and Grilles
08 01 36	Operation and Maintenance of Panel Doors
08 01 39	Operation and Maintenance of Traffic Doors
08 01 40	Operation and Maintenance of Entrances, Storefronts, and Curtain Walls
08 01 40	Operation and Maintenance of Entrances
08 01 41	Operation and Maintenance of Storefronts
	Operation and Maintenance of Curtain Walls
08 01 44 08 01 50	•
	Operation and Maintenance of Windows
08 01 51	Operation and Maintenance of Metal Windows
08 01 52 08 01 52.61	Operation and Maintenance of Wood Windows Wood Window Repairs
08 01 52.71	Wood Window Repairs Wood Window Rehabilitation
08 01 52.71	Wood Window Replacement
08 01 52.91	Wood Window Restoration
08 01 52.93	Historic Treatment of Wood Windows
08 01 53	Operation and Maintenance of Plastic Windows
08 01 54	Operation and Maintenance of Composite Windows
08 01 56	Operation and Maintenance of Special Function Windows
08 01 60	Operation and Maintenance of Skylights and Roof Windows
08 01 61	Operation and Maintenance of Roof Windows
08 01 62	Operation and Maintenance of Unit Skylights
08 01 63	Operation and Maintenance of Metal-Framed Skylights
08 01 64	Operation and Maintenance of Plastic-Framed Skylights
08 01 70	Operation and Maintenance of Hardware
08 01 71	Operation and Maintenance of Door Hardware
08 01 74	Operation and Maintenance of Access Control Hardware
08 01 75	Operation and Maintenance of Window Hardware
08 01 80	Maintenance of Glazing
08 01 81	Maintenance of Glass Glazing
08 01 84	Maintenance of Plastic Glazing
08 01 88	Maintenance of Special Function Glazing
08 01 90	Operation and Maintenance of Louvers and Vents
08 01 91	Operation and Maintenance of Louvers
08 01 92	Operation and Maintenance of Louvered Equipment Enclosures
08 01 95	Operation and Maintenance of Vents
08 05 00	Common Work Results for Openings
08 06 00	Schedules for Openings
08 06 10	Door Schedule
00 00 10	Duoi Juliedule

08 06 10.13 08 06 10.16 08 06 40 08 06 41 08 06 42 08 06 50 08 06 60 08 06 70 08 06 71 08 06 80 08 06 90	Door Type Schedule Frame Type Schedule Schedules for Entrances, Storefronts, and Curtain Walls Entrance Schedule Storefront Schedule Window Schedule Skylight Schedule Hardware Schedule Door Hardware Schedule Glazing Schedule Louver and Vent Schedule Commissioning of Openings
08 10 00	Doors and Frames
08 11 00	Metal Doors and Frames
08 11 13	Hollow Metal Doors and Frames
08 11 13.13	Standard Hollow Metal Doors and Frames
08 11 13.16	Custom Hollow Metal Doors and Frames
08 11 16	Aluminum Doors and Frames
08 11 19	Stainless-Steel Doors and Frames
08 11 23	Bronze Doors and Frames
08 11 63	Metal Screen and Storm Doors and Frames
08 11 63.13 08 11 63.23	Steel Screen and Storm Doors and Frames Aluminum Screen and Storm Doors and Frames
08 11 65.25	Metal Screen Doors and Frames
08 11 66.13	Steel Screen Doors and Frames
08 11 66.23	Aluminum Screen Doors and Frames
08 11 69	Metal Storm Doors and Frames
08 11 69.13	Steel Storm Doors and Frames
08 11 69.23	Aluminum Storm Doors and Frames
08 11 73	Sliding Metal Fire Doors
08 11 74	Sliding Metal Grilles
08 12 00	Metal Frames
08 12 13	Hollow Metal Frames
08 12 13.13	Standard Hollow Metal Frames
08 12 13.53 08 12 16	Custom Hollow Metal Frames Aluminum Frames
08 12 10	Stainless-Steel Frames
08 12 23	Bronze Frames
08 13 00	Metal Doors
08 13 13	Hollow Metal Doors
08 13 13.13	Standard Hollow Metal Doors
08 13 13.53	Custom Hollow Metal Doors
08 13 16	Aluminum Doors
08 13 19	Stainless-Steel Doors
08 13 23	Bronze Doors
08 13 73	Sliding Metal Doors
08 13 76	Bifolding Metal Doors
08 14 00	Wood Doors
08 14 13	Carved Wood Doors
08 14 16	Flush Wood Doors

	08 14 23	Clad Wood Doors
	08 14 23.13	Metal-Faced Wood Doors
	08 14 23.16	Plastic-Laminate-Faced Wood Doors
	08 14 23.19	Molded-Hardboard-Faced Wood Doors
	08 14 29	Prefinished Wood Doors
	08 14 33	Stile and Rail Wood Doors
	08 14 66	Wood Screen Doors
	08 14 69	Wood Storm Doors
	08 14 73	Sliding Wood Doors
	08 14 76	Bifolding Wood Doors
80	15 00	Plastic Doors
	08 15 13	Laminated Plastic Doors
	08 15 16	Solid Plastic Doors
	08 15 66	Plastic Screen Doors
	08 15 69	Plastic Storm Doors
	08 15 73	Sliding Plastic Doors
	08 15 76	Bifolding Plastic Doors
nα	16 00	Composite Doors
UU	08 16 13	Fiberglass Doors
	08 16 73	Sliding Composite Doors
	08 16 75	• .
00		Bifolding Composite Doors
UO	17 00	Integrated Door Opening Assemblies
	08 17 13	Integrated Metal Door Opening Assemblies
	08 17 23	Integrated Wood Door Opening Assemblies
	08 17 33	Integrated Plastic Door Opening Assemblies
	08 17 43	Integrated Composite Door Opening Assemblies
80	30 00	Specialty Doors and Frames
80	31 00	Access Doors and Panels
	08 31 13	Access Doors and Frames
	08 31 13.53	Security Access Doors and Frames
	08 31 16	Access Panels and Frames
08	32 00	Sliding Glass Doors
•	08 32 13	Sliding Aluminum-Framed Glass Doors
	08 32 16	Sliding Plastic-Framed Glass Doors
	08 32 19	Sliding Wood-Framed Glass Doors
Λo		
UO	33 00	Coiling Doors and Grilles
	08 33 13	Coiling Counter Doors
	08 33 16	Coiling Counter Grilles
	08 33 23	Overhead Coiling Doors
	08 33 23.13	Overhead Rapid Coiling Doors
	08 33 26 08 33 33	Overhead Coiling Grilles
	112 33 33	Side Coiling Doors
		Cida Cailing Cuillag
	08 33 36	Side Coiling Grilles
	08 33 36 08 33 43	Overhead Coiling Smoke Curtains
00	08 33 36 08 33 43 08 33 44	Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains
08	08 33 36 08 33 43 08 33 44 34 00	Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Special Function Doors
08	08 33 36 08 33 43 08 33 44 34 00 08 34 13	Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Special Function Doors Cold Storage Doors
80	08 33 36 08 33 43 08 33 44 34 00	Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Special Function Doors

	08 34 33	Lightproof Doors
	08 34 36	Darkroom Doors
	08 34 46	Radio-Frequency-Interference Shielding Doors
	08 34 49	Radiation Shielding Doors and Frames
	08 34 49.13	Neutron Shielding Doors and Frames
	08 34 53	Security Doors and Frames
	08 34 56	Security Gates
	08 34 58	File Room Doors and Frames
	08 34 59	Vault Doors and Day Gates Detention Doors and Frames
	08 34 63 08 34 63.13	Steel Detention Doors and Frames
	08 34 63.16	Steel Plate Detention Doors and Frames
	08 34 63.33	Detention Door Frame Protection
	08 34 73	Sound Control Door Assemblies
80	35 00	Folding Doors and Grilles
	08 35 13	Folding Doors
	08 35 13.13	Accordion Folding Doors
	08 35 13.23	Accordion Folding Fire Doors
	08 35 13.33	Panel Folding Doors
	08 35 16 08 35 16.13	Folding Grilles Accordion Folding Grilles
ΛQ	36 00	Panel Doors
00	08 36 13	Sectional Doors
	08 36 16	Single-Panel Doors
	08 36 19	Multi-Leaf Vertical Lift Doors
	08 36 23	Telescoping Vertical Lift Doors
08	38 00	Traffic Doors
	08 38 13	Flexible Strip Doors
	08 38 16	Flexible Traffic Doors
	08 38 19	Rigid Traffic Doors
08	39 00	Pressure-Resistant Doors
	08 39 13	Airtight Doors
	08 39 19	Watertight Doors
	08 39 53	Blast-Resistant Doors
08	40 00	Entrances, Storefronts, and Curtain Walls
08	41 00	Entrances and Storefronts
	08 41 13	Aluminum-Framed Entrances and Storefronts
	08 41 13.13	Fire-Rated Aluminum-Framed Entrances and Storefronts
	08 41 16	Bronze-Framed Entrances and Storefronts
	08 41 19	Stainless-Steel-Framed Entrances and Storefronts
	08 41 23	Steel-Framed Entrances and Storefronts
00	08 41 26	All-Glass Entrances and Storefronts
U8	42 00	Entrances
	08 42 26	All-Glass Entrances
	08 42 29	Automatic Entrances
	08 42 29.13 08 42 29.23	Folding Automatic Entrances Sliding Automatic Entrances
	08 42 29.33	Swinging Automatic Entrances
	08 42 33	Revolving Door Entrances
	00 42 33	Revolving Door Entrances
	08 42 33.13	Security Revolving Door Entrances

	08 42 36	Balanced Door Entrances
	08 42 39	Pressure-Resistant Entrances
	08 42 43	Intensive Care Unit/Critical Care Unit Entrances
80	43 00	Storefronts
	08 43 11	Timber-Framed Storefronts
	08 43 13	Aluminum-Framed Storefronts
	08 43 13.13	Fire-Rated Aluminum Storefronts
	08 43 16	Bronze-Framed Storefronts
	08 43 19	Stainless-Steel-Framed Storefronts
	08 43 23	Steel-Framed Storefronts
	08 43 26	All-Glass Storefronts
	08 43 27	Channel Glass Storefronts
	08 43 29	Sliding Storefronts
ΛO	44 00	Curtain Wall and Glazed Assemblies
UO		
	08 44 11	Glazed Timber Curtain Walls
	08 44 12	Glazed Composite Curtain Wall
	08 44 12.13	Glazed Fiberglass Curtain Wall
	08 44 13	Glazed Aluminum Curtain Walls
	08 44 16	Glazed Bronze Curtain Walls
	08 44 18	Glazed Steel Curtain Walls
	08 44 19	Glazed Stainless-Steel Curtain Walls
	08 44 23	Structural Sealant Glazed Curtain Walls
	08 44 26	Structural Glass Curtain Walls
	08 44 26.19	Point Supported Structural Glass
	08 44 33	Sloped Glazing Assemblies
	4 = 4 = 4	
80	45 00	Translucent Wall and Roof Assemblies
80	08 45 13	Structured-Polycarbonate-Panel Assemblies
80		
	08 45 13 08 45 23	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies
08	08 45 13 08 45 23 50 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows
08	08 45 13 08 45 23 50 00 51 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows
08	08 45 13 08 45 23 5 50 00 5 1 00 08 51 13	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows
08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows
08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows
08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows
08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens
08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Window Screens
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 66 08 52 69	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Window Screens Wood Storm Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 66 08 52 69 53 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Plastic Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 16 08 52 66 08 52 69 53 00 08 53 13	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Plastic Windows Vinyl Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 66 08 52 69 53 00 08 53 13 08 53 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Vinyl Windows Vinyl Windows Screens
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 16 08 52 66 08 52 69 53 00 08 53 13 08 53 66 08 53 69	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Vinyl Windows Vinyl Windows Vinyl Windows Vinyl Storm Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 16 08 52 66 08 52 69 53 00 08 53 13 08 53 66 08 53 69 54 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Vinyl Windows Vinyl Windows Vinyl Windows Vinyl Windows Vinyl Storm Windows Composite Windows
08 08	08 45 13 08 45 23 50 00 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 52 00 08 52 13 08 52 16 08 52 16 08 52 66 08 52 69 53 00 08 53 13 08 53 66 08 53 69	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Vinyl Windows Vinyl Windows Vinyl Windows Vinyl Storm Windows

08 54 69	Fiberglass Storm Windows
08 55 00	Pressure-Resistant Windows
08 56 00	Special Function Windows
08 56 19	Pass Windows
08 56 46	Radio-Frequency-Interference Shielding Windows
08 56 49	Radiation Shielding Windows
08 56 53	Security Windows
08 56 56 08 56 59	Security Window Screens Service and Teller Window Units
08 56 63	Detention Windows
08 56 66	Detention Windows Detention Windows Screens
08 56 73	Sound Control Windows
08 56 88	Interior Insulating Windows
08 60 00	Roof Windows and Skylights
08 61 00	Roof Windows
08 61 13	Metal Roof Windows
08 61 16	Wood Roof Windows
08 62 00	Unit Skylights
08 62 13	Domed Unit Skylights
08 62 16	Pyramidal Unit Skylights
08 62 19	Vaulted Unit Skylights
08 62 23	Tubular Skylights
08 63 00	Metal-Framed Skylights
08 63 13	Domed Metal-Framed Skylights
08 63 16	Pyramidal Metal-Framed Skylights
08 63 19	Vaulted Metal-Framed Skylights
08 63 23 08 63 53	Ridge Metal-Framed Skylights
08 64 00	Motorized Metal-Framed Skylights
08 67 00	Plastic-Framed Skylights Skylight Protection and Screens
08 70 00	Hardware
08 71 00	Door Hardware
08 71 13	Automatic Door Operators
08 71 53	Security Door Hardware
08 71 63	Detention Door Hardware
08 74 00	Access Control Hardware
08 74 13	Card Key Access Control Hardware
08 74 16	Keypad Access Control Hardware
08 74 19	Biometric Identity Access Control Hardware
08 75 00	Window Hardware
08 75 13 08 75 16	Automatic Window Equipment Window Operators
08 78 00	Window Operators Special Function Hardware
08 79 00	Special Function Hardware Hardware Accessories
08 79 00	
	Key Storage Equipment
08 80 00	Glazing

08 81 00	Glass Glazing
08 81 13	Decorative Glass Glazing
08 83 00	Mirrors
08 83 13	Mirrored Glass Glazing
08 83 16	Mirrored Plastic Glazing
08 84 00	Plastic Glazing
08 84 13	Decorative Plastic Glazing
08 85 00	Glazing Accessories
08 87 00	Glazing Surface Films
08 87 13	Solar Control Films
08 87 23	Safety and Security Films
08 87 23.13	Safety Films
08 87 23.16	Security Films
08 87 33	Decorative Films
08 88 80	Special Function Glazing
08 88 13	Fire-Resistant Glazing
08 88 19	Hurricane-Resistant Glazing
08 88 23	Cable Suspended Glazing
08 88 33	Transparent Mirrored Glazing
08 88 36	Switchable Glass
08 88 36.16	Electronically Controlled Switchable Glass
08 88 39	Pressure-Resistant Glazing
08 88 49	Radiation-Resistant Glazing
08 88 53	Security Glazing
08 88 56	Ballistics-Resistant Glazing
08 90 00	Louvers and Vents
08 91 00	Louvers
08 91 13	Motorized Wall Louvers
08 91 16	Operable Wall Louvers
08 91 19	Fixed Louvers
08 91 26	Door Louvers
08 92 00	Louvered Equipment Enclosures
08 95 00	Vents
08 95 13	Soffit Vents
08 95 16	Wall Vents
08 95 33	Explosion Vents
08 95 43	Flood Vents

Finishes 09 00 00 09 01 00 Maintenance of Finishes 09 01 20 Maintenance of Plaster and Gypsum Board 09 01 20.91 Plaster Restoration 09 01 30 Maintenance of Tiling 09 01 30.91 Tile Restoration 09 01 50 Maintenance of Ceilings 09 01 50.91 Ceiling Restoration Maintenance of Flooring 09 01 60 09 01 60.91 Flooring Restoration 09 01 70 Maintenance of Wall Finishes Wall Finish Restoration 09 01 70.91 Maintenance of Acoustic Treatment 09 01 80 09 01 90 Maintenance of Painting and Coating 09 01 90.51 Paint Cleaning 09 01 90.52 Maintenance Repainting Maintenance Coatings 09 01 90.53 09 01 90.61 Repainting 09 01 90.91 Paint Restoration Coating Restoration 09 01 90.92 09 01 90.93 Paint Preservation 09 05 00 Common Work Results for Finishes 09 05 13 Common Finishes Common Work Results for Flooring Preparation 09 05 61 09 06 00 Schedules for Finishes 09 06 00.13 Room Finish Schedule 09 06 20 Schedules for Plaster and Gypsum Board 09 06 30 Schedules for Tiling 09 06 50 Schedules for Ceilings 09 06 60 Schedules for Flooring Schedules for Wall Finishes 09 06 70 09 06 80 Schedules for Acoustical Treatment 09 06 90 Schedules for Painting and Coating 09 06 90.13 Paint Schedule 09 08 00 Commissioning of Finishes 09 20 00 Plaster and Gypsum Board 09 21 00 **Plaster and Gypsum Board Assemblies** Plaster Assemblies 09 21 13 09 21 16 Gypsum Board Assemblies Gypsum Board Shaft Wall Assemblies 09 21 16.23 Gypsum Board Area Separation Wall Assemblies 09 21 16.33 Supports for Plaster and Gypsum Board 09 22 00 Metal Furring 09 22 13 Metal Channel Furring 09 22 13.13 09 22 13.23 Resilient Channel Furring Non-Structural Metal Framing 09 22 16 09 22 16.13 Non-Structural Metal Stud Framing 09 22 26 Suspension Systems Metal Suspension Systems 09 22 26.23

09 22 26.33	Plastic Suspension Systems
09 22 36	Lath
09 22 36.13 09 22 36.23	Gypsum Lath Metal Lath
09 22 39	Veneer Plaster Base
09 23 00	Gypsum Plastering
09 23 13	Acoustical Gypsum Plastering
09 23 82	Fireproof Gypsum Plastering
09 24 00	Cement Plastering
09 24 13	Adobe Finish
09 24 23	Cement Stucco
09 24 33	Cement Parging
09 25 00	Other Plastering
09 25 13	Acrylic Plastering
09 25 13.13	Acrylic Plaster Finish
09 25 23	Lime Based Plastering
09 25 26	Natural Clay Plastering
09 26 00	Veneer Plastering
09 26 13	Gypsum Veneer Plastering
09 27 00	Plaster Fabrications
09 27 13	Glass-Fiber-Reinforced Plaster Fabrications
09 27 23	Simulated Plaster Fabrications
09 28 00	Backing Boards and Underlayments
09 28 13	Cementitious Backing Boards
09 28 16	Glass-Mat Faced Gypsum Backing Boards
09 28 19	Fibered Gypsum Backing Boards
09 29 00	Gypsum Board
09 29 00 09 29 82	Gypsum Board Gypsum Board Fireproofing
09 29 00 09 29 82 09 30 00	Gypsum Board Gypsum Board Fireproofing Tiling
09 29 00 09 29 82 09 30 00 09 30 13	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 26 09 30 33 09 30 36 09 30 39 09 31 13 09 31 16	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Quarry Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 09 31 13 09 31 13 09 31 16 09 31 19	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Paver Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 36 09 30 39 09 31 13 09 31 16 09 31 19 09 31 23	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Stone Tiling Brick Tiling Thin-Set Tiling Thin-Set Quarry Tiling Thin-Set Quarry Tiling Thin-Set Glass Mosaic Tiling Thin-Set Glass Mosaic Tiling
09 29 00	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Quarry Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26 09 31 29	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26 09 31 29 09 31 33	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling Thin-Set Stone Tiling
09 29 00 09 29 82 09 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26 09 31 29	Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling

	09 32 13	Mortar-Bed Ceramic Tiling
	09 32 16	Mortar-Bed Quarry Tiling
	09 32 19	Mortar-Bed Paver Tiling
	09 32 23	Mortar-Bed Glass Mosaic Tiling
	09 32 26	Mortar-Bed Plastic Tiling
	09 32 29	Mortar-Bed Metal Tiling
	09 32 33	Mortar-Bed Stone Tiling
	09 32 36	Mortar-Bed Concrete Tiling
09	33 00	Conductive Tiling
	09 33 13	Conductive Ceramic Tiling
	09 33 16	Conductive Quarry Tiling
	09 33 19	Conductive Paver Tiling
	09 33 23	Conductive Glass Mosaic Tiling
	09 33 26 09 33 29	Conductive Plastic Tiling
	09 33 29	Conductive Metal Tiling Conductive Stone Tiling
	09 33 36	Conductive Storie Tilling Conductive Concrete Tilling
na	34 00	Waterproofing-Membrane Tiling
U9	09 34 13	Waterproofing-Membrane Ceramic Tiling
	09 34 13	Waterproofing-Membrane Quarry Tiling
	09 34 19	Waterproofing-Membrane Paver Tiling
	09 34 23	Waterproofing-Membrane Glass Mosaic Tiling
	09 34 26	Waterproofing-Membrane Plastic Tiling
	09 34 29	Waterproofing-Membrane Metal Tiling
	09 34 33	Waterproofing-Membrane Stone Tiling
	09 34 36	Waterproofing-Membrane Concrete Tiling
09	35 00	Chemical-Resistant Tiling
	09 35 13	Chemical-Resistant Ceramic Tiling
	09 35 16	Chemical-Resistant Quarry Tiling
	09 35 19	Chemical-Resistant Paver Tiling
	09 35 23	Chemical-Resistant Glass Mosaic Tiling
	09 35 26	Chemical-Resistant Plastic Tiling
	09 35 29	Chemical-Resistant Metal Tiling
	09 35 33	Chemical-Resistant Stone Tiling
	09 35 36	Chemical-Resistant Concrete Tiling
09	50 00	Ceilings
09	51 00	Acoustical Ceilings
••	09 51 13	Acoustical Panel Ceilings
	09 51 14	Acoustical Fabric-Faced Panel Ceilings
	09 51 23	Acoustical Tile Ceilings
	09 51 26	Acoustical Wood Ceilings
	09 51 33	Acoustical Metal Pan Ceilings
	09 51 33.13	Acoustical Snap-in Metal Pan Ceilings
	09 51 53	Direct-Applied Acoustical Ceilings
09	53 00	Acoustical Ceiling Suspension Assemblies
	09 53 13	Curved Profile Ceiling Suspension Assemblies
	09 53 23	Metal Acoustical Ceiling Suspension Assemblies
	09 53 33	Plastic Acoustical Ceiling Suspension Assemblies
09	54 00	Specialty Ceilings

09 54 13 09 54 16 09 54 19 09 54 23 09 54 26	Open Metal Mesh Ceilings Luminous Ceilings Mirror Panel Ceilings Linear Metal Ceilings Suspended Wood Ceilings
09 54 33 09 54 36	Decorative Panel Ceilings
09 54 43	Suspended Decorative Grids Stretched-Fabric Ceiling Systems
09 54 46	Fabric-Wrapped Ceiling Panels
09 54 53	Fiberglass Reinforced Panel Ceilings
09 56 00	Textured Ceilings
09 56 13	Gypsum-Panel Textured Ceilings
09 56 16	Metal-Panel Textured Ceilings
09 57 00	Special Function Ceilings
09 57 53	Security Ceiling Assemblies
09 58 00	Integrated Ceiling Assemblies
09 60 00	Flooring
09 60 13	Acoustic Underlayment
09 61 00	Flooring Treatment
09 61 13	Slip-Resistant Flooring Treatment
09 61 19	Concrete Staining
09 61 36	Static-Resistant Flooring Treatment
09 62 00	Specialty Flooring
09 62 13	Asphaltic Plank Flooring
09 62 19	Laminate Flooring
09 62 23	Bamboo Flooring
09 62 26	Leather Flooring
09 62 29	Cork Flooring
09 62 35 09 62 48	Acid-Resistant Flooring Acoustic Flooring
09 62 53	Synthetic Turf Flooring
09 62 63	Metal Flooring
09 62 63.13	Aluminum Flooring
09 62 63.16	Stainless Steel Flooring
09 62 83	Structural Glass Flooring
09 63 00	Masonry Flooring
09 63 13	Brick Flooring
09 63 13.35 09 63 40	Chemical-Resistant Brick Flooring Stone Flooring
09 63 43	Composition Stone Flooring
09 64 00	Wood Flooring
09 64 16	Wood Block Flooring
09 64 19	Wood Composition Flooring
09 64 23	Wood Parquet Flooring
09 64 23.13	Acrylic-Impregnated Wood Parquet Flooring
09 64 29	Wood Strip and Plank Flooring
09 64 33	Laminated Wood Flooring
09 64 53	Resilient Wood Flooring Assemblies
09 64 66	Wood Athletic Flooring

09	65 00	Resilient Flooring
	09 65 13	Resilient Base and Accessories
	09 65 13.13	Resilient Base
	09 65 13.23	Resilient Stair Treads and Risers
	09 65 13.26	Resilient Stair Nosings
	09 65 13.33	Resilient Accessories
	09 65 13.36 09 65 16	Resilient Carpet Transitions
	09 65 16.23	Resilient Sheet Flooring Vinyl Sheet Flooring
	09 65 16.33	Rubber Sheet Flooring
	09 65 16.43	PVC-Free Sheet Flooring
	09 65 19	Resilient Tile Flooring
	09 65 33	Conductive Resilient Flooring
	09 65 36	Static-Control Resilient Flooring
	09 65 36.13	Static-Dissipative Resilient Flooring
	09 65 36.16	Static-Resistant Resilient Flooring
	09 65 43	Linoleum Flooring
	09 65 66	Resilient Athletic Flooring
09	66 00	Terrazzo Flooring
	09 66 13	Portland Cement Terrazzo Flooring
	09 66 13.13	Sand Cushion Terrazzo Flooring
	09 66 13.16	Monolithic Terrazzo Flooring
	09 66 13.19	Bonded Terrazzo Flooring
	09 66 13.23 09 66 13.26	Palladina Terrazzo Flooring Rustic Terrazzo Flooring
	09 66 13.33	Structural Terrazzo Flooring
	09 66 16	Terrazzo Floor Tile
	09 66 16.13	Portland Cement Terrazzo Floor Tile
	09 66 16.16	Plastic-Matrix Terrazzo Floor Tile
	09 66 23	Resinous Matrix Terrazzo Flooring
	09 66 23.13	Polyacrylate Modified Cementitious Terrazzo Flooring
	09 66 23.16	Epoxy-Resin Terrazzo Flooring
	09 66 23.19	Polyester-Resin Terrazzo Flooring
	09 66 33	Conductive Terrazzo Flooring
	09 66 33.13 09 66 33.16	Conductive Epoxy-Resin Terrazzo Conductive Polyester-Resin Terrazzo Flooring
	09 66 33.19	Conductive Plastic-Matrix Terrazzo Flooring
N9	67 00	Fluid-Applied Flooring
03	09 67 13	Elastomeric Liquid Flooring
	09 67 13.33	Conductive Elastomeric Liquid Flooring
	09 67 16	Epoxy-Marble Chip Flooring
	09 67 19	Magnesium-Oxychloride Flooring
	09 67 23	Resinous Flooring
	09 67 26	Quartz Flooring
	09 67 66	Fluid-Applied Athletic Flooring
09	68 00	Carpeting
	09 68 13	Tile Carpeting
	09 68 16	Sheet Carpeting
nα	69 00	Access Flooring
UJ	09 69 13	Rigid-Grid Access Flooring
	09 69 16	Snap-on Stringer Access Flooring
	09 69 18	Stringerless Access Flooring
	00 00 10	ouring cricos Access Flooring

09 69 33 09 69 53	Low-Profile Fixed Height Access Flooring Access Flooring Accessories
09 69 56	Access Flooring Stairs and Stringers
09 70 00	Wall Finishes
09 72 00	Wall Coverings
09 72 13	Cork Wall Coverings
09 72 16	Vinyl-Coated Fabric Wall Coverings
09 72 16.13	Flexible Vinyl Wall Coverings
09 72 16.16 09 72 19	Rigid-Sheet Vinyl Wall Coverings
09 72 19	Textile Wall Coverings Wallpapering
09 73 00	Wall Carpeting
09 74 00	Flexible Wood Sheets
09 74 13	Wood Wall Coverings
09 74 16	Flexible Wood Veneers
09 75 00	Stone Facing
09 75 13	Stone Wall Facing
09 75 19	Stone Trim
09 76 00	Plastic Blocks
09 77 00	Special Wall Surfacing
09 77 13	Stretched-Fabric Wall Systems
09 77 23	Fabric-Wrapped Panels
09 77 53	Vegetated Wall Systems
^^ 7^ ^^	Intonion Mall Donalina
09 78 00	Interior Wall Paneling
09 78 13	Metal Interior Wall Paneling
09 78 13	Metal Interior Wall Paneling
09 78 13 09 80 00	Metal Interior Wall Paneling Acoustic Treatment
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00	Metal Interior Wall Paneling ACOUSTIC Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22	Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00	Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22	Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13	Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23	Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 26	Acoustic Insulation Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 13 09 84 16 09 84 23 09 84 26 09 84 33	Acoustic Insulation Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 26 09 84 33 09 84 36	Acoustic Insulation Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36 09 90 00	Acoustic Insulation Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Painting and Coating
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 26 09 84 33 09 84 36 09 90 00 09 91 00	Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Acoustic Finishes Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Painting and Coating Painting
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36 09 90 00	Acoustic Insulation Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Painting and Coating

09 93 00	Staining and Transparent Finishing
09 93 13	Exterior Staining and Finishing
09 93 13.13	Exterior Staining
09 93 13.53	Exterior Finishing
09 93 23	Interior Staining and Finishing
09 93 23.13	Interior Staining
09 93 23.53	Interior Finishing
09 94 00	Decorative Finishing
09 94 13	Textured Finishing
09 94 16	Faux Finishing
09 94 19	Multicolor Interior Finishing
09 96 00	High-Performance Coatings
09 96 13	Abrasion-Resistant Coatings
09 96 23	Graffiti-Resistant Coatings
09 96 26	Marine Coatings
09 96 33	High-Temperature-Resistant Coatings
09 96 35	Chemical-Resistant Coatings
09 96 43	Fire-Retardant Coatings
09 96 46	Intumescent Painting
09 96 53	Elastomeric Coatings
09 96 56	Epoxy Coatings
09 96 59	High-Build Glazed Coatings
09 96 63	Textured Plastic Coatings
09 96 66	Aggregate Wall Coatings
09 97 00	Special Coatings
09 97 13	Steel Coatings
09 97 13.13	Interior Steel Coatings
09 97 13.23	Exterior Steel Coatings
09 97 23	Concrete and Masonry Coatings
09 97 26	Cementitious Coatings
09 97 26.13	<u> </u>
09 97 26.23	Exterior Cementitious Coatings

10 00 00	Specialties
10 00 00	•
10 01 00	Operation and Maintenance of Specialties Operation and Maintenance of Information Specialties
10 01 10	Operation and Maintenance of Interior Specialties
10 01 30	Operation and Maintenance of Fireplaces and Stoves
10 01 40	Operation and Maintenance of Safety Specialties
10 01 50	Operation and Maintenance of Storage Specialties
10 01 70	Operation and Maintenance of Exterior Specialties
10 01 80	Operation and Maintenance of Other Specialties
10 05 00	Common Work Results for Specialties
10 06 00	Schedules for Specialties
10 06 10	Schedules for Information Specialties
10 06 10.13 10 06 10.16	Exterior Signage Schedule Interior Signage Schedule
10 06 20	Schedules for Interior Specialties
10 06 20.13	Toilet, Bath, and Laundry Accessory Schedule
10 06 30	Schedules for Fireplaces and Stoves
10 06 40	Schedules for Safety Specialties
10 06 50	Schedules for Storage Specialties
10 06 70 10 06 80	Schedules for Exterior Specialties Schedules for Other Specialties
10 08 00	•
	Commissioning of Specialties
10 10 00	Information Specialties
10 11 00	Visual Display Units
10 11 13	Chalkboards
10 11 13.13	Fixed Chalkboards
10 11 13.23 10 11 13.33	Modular-Support-Mounted Chalkboards Rail-Mounted Chalkboards
10 11 13.43	Portable Chalkboards
10 11 16	Markerboards
10 11 16.13	Fixed Markerboards
10 11 16.23	Modular-Support-Mounted Markerboards Rail-Mounted Markerboards
10 11 16.33 10 11 16.43	Portable Markerboards
10 11 16.53	Electronic Markerboards
10 11 23	Tackboards
10 11 23.13	Fixed Tackboards
10 11 23.23 10 11 23.33	Modular-Support-Mounted Tackboards Rail-Mounted Tackboards
10 11 23.43	Portable Tackboards
10 11 33	Sliding Visual Display Units
10 11 33.13	Horizontal-Sliding Visual Display Units
10 11 33.23	Vertical-Sliding Visual Display Units
10 11 36 10 11 39	Visual Display Conference Units Visual Display Rails
10 11 39	Visual Display Wall Panels
10 11 46	Visual Display Fabrics
10 12 00	Display Cases
10 13 00	Directories
10 10 00	

10 13 13 10 13 23 10 14 00 10 14 16 10 14 19 10 14 23 10 14 23.13 10 14 26 10 14 33 10 14 43 10 14 53.13 10 14 63 10 14 64 10 14 66 10 14 67	Electronic Directories Illuminated Directories Signage Plaques Dimensional Letter Signage Panel Signage Engraved Panel Signage Post and Panel/Pylon Signage Illuminated Panel Signage Photoluminescent Signage Traffic Signage Transportation Reference Markers Electronic Message Signage Audible Signage Floating Signage Tactile Signage
10 17 00	Telephone Specialties
10 17 13 10 17 16 10 17 16.13 10 17 16.16 10 17 19	Telephone Directory Units Telephone Enclosures Telephone Stalls Telephone Alcoves Telephone Shelving
10 18 00	Informational Kiosks
10 20 00	Interior Specialties
10 21 00	Compartments and Cubicles
10 21 13 10 21 13.13 10 21 13.16 10 21 13.19 10 21 13.23 10 21 13.40 10 21 16.13 10 21 16.16 10 21 16.19 10 21 16.23 10 21 16.40 10 21 23 10 21 23.13 10 21 23.16 10 22 00	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions
10 21 13.13 10 21 13.16 10 21 13.19 10 21 13.23 10 21 13.40 10 21 16 10 21 16.13 10 21 16.16 10 21 16.23 10 21 16.40 10 21 23 10 21 23.13 10 21 23.16	Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware

10 22 23.13 10 22 23.23 10 22 33 10 22 36 10 22 39 10 22 43	Wall Screens Movable Panel Systems Accordion Folding Partitions Coiling Partitions Folding Panel Partitions Sliding Partitions
10 25 00	Service Walls
10 25 13	Patient Bed Service Walls
10 25 16	Modular Service Walls
10 26 00	Wall and Door Protection
10 26 13	Corner Guards
10 26 16	Bumper Guards
10 26 16.13	Bumper Rails
10 26 16.16 10 26 23	Protective Corridor Handrails Protective Wall Covering
10 26 23.13	Impact Resistant Wall Protection
10 26 23.16	Fiberglass Reinforced Protective Wall Covering
10 26 33	Door and Frame Protection
10 26 41	Bullet Resistant Panels
10 28 00	Toilet, Bath, and Laundry Accessories
10 28 13	Toilet Accessories
10 28 13.13 10 28 13.19	Commercial Toilet Accessories Healthcare Toilet Accessories
10 28 13.53	Security Toilet Accessories
10 28 13.63	Detention Toilet Accessories
10 28 16	Bath Accessories
10 28 16.13 10 28 19	Residential Bath Accessories Tub and Shower Doors
10 28 19.16	Shower Doors
10 28 19.19	Tub Doors
10 28 23	Laundry Accessories
10 28 23.13 10 28 23.16	Built-In Ironing Boards
	Clothes Drying Racks
10 30 00	Fireplaces and Stoves
10 31 00	Manufactured Fireplaces
10 31 13	Manufactured Fireplace Chimneys
10 31 16	Manufactured Fireplace Forms
10 32 00	Fireplace Specialties
10 32 13	Fireplace Dampers
10 32 16 10 32 19	Fireplace Inserts Fireplace Screens
10 32 13	Fireplace Doors
10 32 26	Fireplace Water Heaters
10 35 00	Stoves
10 35 13	Heating Stoves
10 35 23	Cooking Stoves
10 40 00	Safety Specialties
10 41 00	Emergency Access and Information Cabinets
10 41 13	Fire Department Plan Cabinets
-	•

10 41 16 10 43 00 10 43 13 10 43 16 10 43 21 10 43 31 10 43 33	Emergency Key Cabinets Emergency Aid Specialties Defibrillator Cabinets First Aid Cabinets Accessibility Evacuation Chairs Respiration Equipment Breathing Air Replenishment Systems Fire Protection Specialties
10 44 00	Fire Protection Cabinets
10 44 13.53	Security Fire Extinguisher Cabinets
10 44 16 10 44 16.13	Fire Extinguishers Portable Fire Extinguishers
10 44 16.16	Wheeled Fire Extinguisher Units
10 44 19 10 44 43	Fire Blankets Fire Extinguisher Accessories
10 50 00	Storage Specialties
10 51 00	Lockers
10 51 00	Metal Lockers
10 51 16	Wood Lockers
10 51 23	Plastic-Laminate-Clad Lockers
10 51 26 10 51 26.13	Plastic Lockers Recycled Plastic Lockers
10 51 29	Phenolic Lockers
10 51 33	Glass Lockers
10 51 43	Wire Mesh Storage Lockers
10 51 53 10 55 00	Locker Room Benches Postal Specialties
10 55 00	Postal Specialties Central Mail Delivery Boxes
10 55 13.13	Cluster Box Units
10 55 16	Mail Collection Boxes
10 55 19	Receiving Boxes
10 55 23 10 55 23.13	Mail Boxes Apartment Mail Boxes
10 55 23.16	Mail Box Directories
10 55 23.19	Mail Box Key Keepers
10 55 26 10 55 33	Parcel Lockers Data Distribution Boxes
10 55 36	Package Depositories
10 55 91	Mail Chutes
10 56 00	Storage Assemblies
10 56 13	Metal Storage Shelving
10 56 13.13 10 56 13.16	End-Panel-Support Metal Storage Shelving Post-and-Shelf Metal Storage Shelving
10 56 13.19	Post-and-Beam Metal Storage Shelving
10 56 13.23	Cantilever Metal Storage Shelving
10 56 16 10 56 17	Fabricated Wood Storage Shelving Wall-Mounted Standards and Shelving
10 56 19	Plastic Storage Shelving
10 56 19.13	Recycled Plastic Storage Shelving
10 56 23	Wire Storage Shelving

	10 56 26	Mobile Storage Shelving
	10 56 26.13 10 56 26.23	Manual Mobile Storage Shelving Motorized Mobile Storage Shelving
	10 56 20.23	Storage Racks
	10 56 29.13	Flow Storage Racks
	10 56 29.16	Pallet Storage Racks
	10 56 29.19	Movable-Shelf Storage Racks
	10 56 29.23	Stacker Storage Racks
	10 56 29.26	Cantilever Storage Racks
	10 56 29.29	Drive-In Storage Racks
	10 56 29.33	Drive-Through Storage Racks
	10 56 29.43 10 56 33	Wine Storage Racks
40		Mercantile Storage Assemblies
10	57 00	Wardrobe and Closet Specialties
	10 57 13	Hat and Coat Racks
	10 57 16	Boot Racks
	10 57 23	Closet and Utility Shelving
	10 57 23.13 10 57 23.16	Wire Closet and Utility Shelving Plastic-Laminate-Clad Closet and Utility Shelving
	10 57 23.10	Wood Closet and Utility Shelving
	10 57 33	Closet and Utility Shelving Hardware
4 0		•
	70 00	Exterior Specialties
10	71 00	Exterior Protection
	10 71 13	Exterior Sun Control Devices
	10 71 13.13	Exterior Shutters
	10 71 13.19	Rolling Exterior Shutters
	10 71 13.23	Coiling Exterior Shutters Decorative Exterior Shutters
	10 71 13.26 10 71 13.29	Side-Hinged Exterior Shutters
	10 71 13.23	Fixed Sun Screens
	10 71 13.53	Exterior Daylighting Devices
	10 71 16	Storm Panels
	10 71 16.13	Demountable Storm Panels
	10 71 16.16	Movable Storm Panels
	10 71 19	Flood Barriers
	10 71 19.16	Removable Flood Barriers
10	73 00	Protective Covers
	10 73 13	Awnings
	10 73 16	Canopies
	10 73 23	Car Shelters
	10 73 26	Walkway Coverings
	10 73 33	Marquees
40.	10 73 43	Transportation Stop Shelters
10	74 00	Manufactured Exterior Specialties
	10 74 13	Exterior Clocks
	10 74 23	Cupolas
	10 74 26	Spires
	10 74 29	Steeples
	10 74 33	Weathervanes
	10 74 43	Below-Grade Egress Assemblies
	10 74 46	Window Wells

10 75 00	Flagpoles
10 75 13	Automatic Flagpoles
10 75 16	Ground-Set Flagpoles
10 75 19	Nautical Flagpoles
10 75 23	Wall-Mounted Flagpoles
10 80 00	Other Specialties
10 81 00	Pest Control Devices
10 81 13	Bird Control Devices
10 81 16	Insect Control Devices
10 81 19	Rodent Control Devices
10 82 00	Grilles and Screens
10 82 13	Exterior Grilles and Screens
10 82 19	Exterior Sound Screens
10 82 23	Interior Grilles and Screens
10 83 00	Flags and Banners
10 83 13	Flags
10 83 16	Banners
10 84 00	Gas Lighting
10 84 13	Exterior Gas Lighting
10 84 16	Interior Gas Lighting
10 86 00	Security Mirrors and Domes
10 88 00	Scales

Equipment 11 00 00 **Operation and Maintenance of Equipment** 11 01 00 Operation and Maintenance of Vehicle and Pedestrian Equipment 11 01 10 Operation and Maintenance of Security, Bank, and Detention Equipment 11 01 15 11 01 20 Operation and Maintenance of Commercial Equipment Operation and Maintenance of Residential Equipment 11 01 30 11 01 40 Operation and Maintenance of Foodservice Equipment 11 01 50 Operation and Maintenance of Educational and Scientific Equipment 11 01 56 Operation and Maintenance of Observatory Equipment 11 01 60 Operation and Maintenance of Entertainment Equipment Operation and Maintenance of Athletic and Recreational Equipment 11 01 65 11 01 70 Operation and Maintenance of Healthcare Equipment 11 01 80 Operation and Maintenance of Collection and Disposal Equipment Operation and Maintenance of Other Equipment 11 01 90 11 05 00 Common Work Results for Equipment 11 05 13 Common Motor Requirements for Equipment 11 06 00 Schedules for Equipment Schedules for Vehicle and Pedestrian Equipment 11 06 10 Schedules for Security, Bank, and Detention Equipment 11 06 15 Teller and Service Equipment Schedule 11 06 15.13 Schedules for Commercial Equipment 11 06 20 11 06 30 Schedules for Residential Equipment Schedules for Foodservice Equipment 11 06 40 Foodservice Equipment Schedule 11 06 40.13 11 06 50 Schedules for Educational and Scientific Equipment 11 06 60 Schedules for Entertainment Equipment 11 06 65 Schedules for Athletic and Recreational Equipment 11 06 70 Schedules for Healthcare Equipment 11 06 70.13 Healthcare Equipment Schedule Schedules for Collection and Disposal Equipment 11 06 80 11 06 90 Schedules for Other Equipment 11 08 00 **Commissioning of Equipment** Vehicle and Pedestrian Equipment 11 10 00 11 11 00 Vehicle Service Equipment Compressed-Air Vehicle Service Equipment 11 11 13 11 11 19 Vehicle Lubrication Equipment 11 11 23 Tire-Changing Equipment 11 11 26 Vehicle-Washing Equipment 11 12 00 Parking Control Equipment Parking Key and Card Control Units 11 12 13 Parking Ticket Dispensers 11 12 16 11 12 23 Parking Meters 11 12 26 Parking Fee Collection Equipment 11 12 26.13 Parking Fee Coin Collection Equipment 11 12 33 Parking Gates 11 12 33.13 Lift Arm Parking Gates 11 12 33.16 Sliding Parking Gates 11 12 33.19 Swinging Parking Gates

11	13 00	Loading Dock Equipment
	11 13 13	Loading Dock Bumpers
	11 13 16	Loading Dock Seals and Shelters
	11 13 16.13	Loading Dock Seals
	11 13 16.23	Loading Dock Shelters
	11 13 16.33	Loading Dock Rail Shelters
	11 13 19	Stationary Loading Dock Equipment
	11 13 19.13	Loading Dock Levelers
	11 13 19.23	Stationary Loading Dock Lifts Loading Dock Truck Lifts
	11 13 19.26 11 13 19.33	Loading Dock Truck Lins Loading Dock Truck Restraints
	11 13 23	Portable Dock Equipment
	11 13 23.13	Portable Dock Lifts
	11 13 23.16	Portable Dock Ramps
	11 13 23.19	
	11 13 23.23	Portable Dock Platforms
	11 13 26	Loading Dock Lights
11	14 00	Pedestrian Control Equipment
	11 14 13	Pedestrian Gates
	11 14 13.13	Portable Posts and Railings
	11 14 13.16	•
	11 14 13.19	Turnstiles
	11 14 16	Money-Changing Equipment
	11 14 16.19	Money-Changing Machines
	11 14 26	Pedestrian Fare Collection Equipment
	11 14 26.13	Pedestrian Coin Fare Collection Equipment
	11 14 43 11 14 43.13	Pedestrian Detection Equipment Electronic Detection and Counting Systems
	11 14 43.13	Pedestrian Security Equipment
4 4		
11	15 00	Security, Detention, and Banking
		Equipment
11	16 00	Vault Equipment
	11 16 13	Safe Deposit Boxes
	11 16 16	Safes
	11 16 23	Vault Ventilators
	11 16 33	Time Capsules
11	17 00	Teller and Service Equipment
	11 17 13	Teller Equipment Systems
	11 17 16	Automatic Banking Systems
	11 17 23	Money Handling Equipment
	11 17 26	Money Depositories
	11 17 33	Money Cart Pass-Through
	11 17 36	Package Transfer Units
11	18 00	Security Equipment
• •	11 18 13	Deal Drawers
	11 18 16	Gun Ports
	11 18 23	Valuable Material Storage
11	19 00	
1 1		Detention Equipment
	11 19 13	Detention Pass-Through Doors

11 19 16	Detention Gun Lockers
11 20 00	Commercial Equipment
11 21 00	Mercantile and Service Equipment
11 21 13	Cash Registers and Checking Equipment
11 21 23	Vending Equipment
11 21 23.13	Vending Machines
11 21 33	Checkroom Equipment
11 21 43	Weighing and Wrapping Equipment
11 21 53	Barber and Beauty Shop Equipment
11 22 00	Refrigerated Display Equipment
11 23 00	Commercial Laundry and Dry Cleaning Equipment
11 23 13	Dry Cleaning Equipment
11 23 16	Drying and Conditioning Equipment
11 23 19	Finishing Equipment_
11 23 23	Commercial Ironing Equipment
11 23 26	Commercial Washers and Extractors
11 23 33 11 23 43	Coin-Operated Laundry Equipment
	Hanging Garment Conveyors
11 24 00	Maintenance Equipment
11 24 13 11 24 16	Floor and Wall Cleaning Equipment
11 24 10	Housekeeping Carts Vacuum Cleaning Systems
11 24 23	Façade Access Equipment
11 24 23.13	Window Washing Systems
11 24 29	Facility Fall Protection
11 25 00	Hospitality Equipment
11 25 13	Registration Equipment
11 26 00	Unit Kitchens
11 26 13	Metal Unit Kitchens
11 26 16	Wood Unit Kitchens
11 26 19	Plastic-Laminate-Clad Unit Kitchens
11 27 00	Photographic Processing Equipment
11 27 13	Darkroom Processing Equipment
11 27 16	Film Transfer Cabinets
11 28 00	Office Equipment
11 28 13	Computers
11 28 16	Printers
11 28 19	Self-Contained Facsimile Machines
11 28 23	Copiers
11 29 00	Postal, Packaging, and Shipping Equipment
11 29 23	Packaging Equipment
11 29 33	Shipping Equipment
11 29 55	Postal Equipment
11 30 00	Residential Equipment
11 31 00	Residential Appliances
11 31 13	Residential Kitchen Appliances
11 31 23	Residential Laundry Appliances

11 33 00	Retractable Stairs
11 34 00	Residential Ceiling Fans
11 40 00	Foodservice Equipment
11 41 00	Foodservice Storage Equipment
11 41 13	Refrigerated Food Storage Cases
11 41 23	Walk-In Coolers
11 41 26	Walk-In Freezers
11 41 33	Foodservice Shelving
11 42 00	Food Preparation Equipment
11 42 13	Food Preparation Appliances
11 42 16	Food Preparation Surfaces
11 43 00	Food Delivery Carts and Conveyors
11 43 13	Food Delivery Carts
11 43 16	Food Delivery Conveyors
11 44 00	Food Cooking Equipment
11 44 13	Commercial Ranges
11 44 16	Commercial Ovens
11 46 00	Food Dispensing Equipment
11 46 13	Bar Equipment
11 46 16	Service Line Equipment
11 46 19	Soda Fountain Equipment
11 46 23	Coffee and Espresso Equipment
11 47 00	Ice Machines
11 48 00	Cleaning and Disposal Equipment
11 48 13	Commercial Dishwashers
11 50 00	Educational and Scientific Equipment
11 51 00	Library Equipment
11 51 13	Automated Book Storage and Retrieval Systems
11 51 16	Book Depositories
11 51 19	Book Theft Protection Equipment
11 51 23	Library Stack Systems
11 51 23.13	Metal Library Shelving
11 52 00	Audio-Visual Equipment
11 52 13 11 52 13.13	Projection Screens Fixed Projection Screens
11 52 13.16	Portable Projection Screens
11 52 13.19	Rear Projection Screens
11 52 16	Projectors
11 52 16.13	Movie Projectors
11 52 16.16	Slide Projectors
11 52 16.19 11 52 16.23	Overhead Projectors Opaque Projectors
11 52 16.26	Video Projectors
11 52 19	Players and Recorders
11 52 23	Audio-Visual Equipment Supports
11 53 00	Laboratory Equipment
11 53 13	Laboratory Fume Hoods

	11 53 13.13	Recirculating Laboratory Fume Hoods
	11 53 16	Laboratory Incubators
	11 53 17	Laboratory Equipment Washers
	11 53 19	Laboratory Sterilizers
	11 53 23	Laboratory Refrigerators
	11 53 26	Laboratory Freezers
	11 53 29	Laboratory Controlled-Environment Cabinets
	11 53 33	Emergency Safety Appliances
	11 53 43	Service Fittings and Accessories
	11 53 53	Biological Safety Cabinets
11	55 00	Planetarium Equipment
	11 55 13	Planetarium Projectors
	11 55 16	Planetarium Pendulums
11	56 00	Observatory Equipment
	11 56 13	Telescopes
	11 56 16	Telescope Mounts
	11 56 19	Telescope Drive Mechanisms
	11 56 23	Telescope Domes
11	57 00	Vocational Shop Equipment
11	59 00	Exhibit Equipment
11	60 00	Entertainment Equipment
11	61 00	Broadcast, Theater, and Stage Equipment
	11 61 13	Acoustical Shells
	11 61 23	Folding and Portable Stages
	11 61 33	Rigging Systems and Controls
	11 61 33.11	Lighting Rigging Systems
	11 61 33.16	Scenery Rigging Systems
	11 61 33.19	Curtain Systems
	11 61 43	Stage Curtains
11	62 00	Musical Equipment
	11 62 13	Bells
	11 62 16	Carillons
	11 62 19	Organs
11	65 00	Athletic and Recreational Equipment
11	66 00	Athletic Equipment
• •	11 66 13	Exercise Equipment
	11 66 23	Gymnasium Equipment
	11 66 23.13	Basketball Equipment
	11 66 23.23	Volleyball Equipment
	11 66 23.33	Interior Tennis Equipment
	11 66 23.43	Interior Track and Field Equipment
	11 66 23.53	Wall Padding
	11 66 23.56	Mat Storage
	11 66 43	Interior Scoreboards
	11 66 53	Gymnasium Dividers
	11 66 53.13	Batting/Golf Cages
11	67 00	Recreational Equipment
	11 67 13	Bowling Alley Equipment

	11 67 23	Shooting Range Equipment
	11 67 33 11 67 43	Climbing Walls Table Games Equipment
	11 67 43.13	Pool Tables
	11 67 43.23	Ping-Pong Tables
	11 67 53	Game Room Equipment
	11 67 53.13	Video Games
	11 67 53.23	Pinball Machines
11	68 00	Play Field Equipment and Structures
	11 68 13	Playground Equipment
	11 68 16	Play Structures
	11 68 23	Exterior Court Athletic Equipment
	11 68 23.13	Exterior Basketball Equipment
	11 68 23.23 11 68 23.33	Exterior Volleyball Equipment Tennis Equipment
	11 68 33	Athletic Field Equipment
	11 68 33.13	Football Field Equipment
	11 68 33.23	Soccer and Field Hockey Equipment
	11 68 33.33	Baseball Field Equipment
	11 68 33.43	Track and Field Equipment
4.4	11 68 43	Exterior Scoreboards
11	70 00	Healthcare Equipment
11	71 00	Medical Sterilizing Equipment
11	72 00	Examination and Treatment Equipment
	11 72 13	Examination Equipment
	11 72 53	Treatment Equipment
11	73 00	Patient Care Equipment
11	74 00	Dental Equipment
11	75 00	Optical Equipment
11	76 00	Operating Room Equipment
11	77 00	Radiology Equipment
11	78 00	Mortuary Equipment
	11 78 13	Mortuary Refrigerators
	11 78 16	Crematorium Equipment
	11 78 19	Mortuary Lifts
11	79 00	Therapy Equipment
11	80 00	Collection and Disposal Equipment
11	82 00	Solid Waste Handling Equipment
	11 82 13	Solid Waste Bins
	11 82 19	Packaged Incinerators
	11 82 23	Recycling Equipment
	11 82 26	Facility Waste Compactors
	11 82 29	Composting Equipment
	11 82 33	Facility Waste Shredders
4 4	11 82 36	Facility Waste Balers
11	90 00	Other Equipment
11	91 00	Religious Equipment

11 91 13	Baptisteries
11 92 00	Agricultural Equipment
11 92 13	Milkers
11 92 16	Stock Feeders
11 92 19	Stock Waterers
11 92 23	Agricultural Waste Clean-Up Equipment
11 93 00	Horticultural Equipment
11 93 13	Hydroponic Growing Systems
11 93 16	Seeders
11 93 19	Transplanters
11 93 23	Potting Machines
11 93 26	Flat Fillers
11 93 29	Baggers
11 93 33	Soil Mixers
11 95 00	Arts and Crafts Equipment
11 95 13	Kilns

12 00 00	Furnishings
12 01 00	Operation and Maintenance of Furnishings
12 01 10	Operation and Maintenance of Art
12 01 20	Operation and Maintenance of Window Treatments
12 01 30	Operation and Maintenance of Casework
12 01 40	Operation and Maintenance of Furnishings and Accessories
12 01 50	Operation and Maintenance of Furniture
12 01 60	Operation and Maintenance of Multiple Seating
12 01 90	Operation and Maintenance of Other Furnishings
12 05 00	Common Work Results for Furnishings
12 05 13	Fabrics
12 06 00	Schedules for Furnishings
12 06 10	Schedules for Art
12 06 20	Schedules for Window Treatments
12 06 20.13	Window Treatment Schedule Schedules for Casework
12 06 30 12 06 30.13	Manufactured Casework Schedule
12 06 40	Schedules for Furnishings and Accessories
12 06 40.13	Furnishings Schedule
12 06 50	Schedules for Furniture
12 06 60	Schedules for Multiple Seating
12 06 90	Schedules for Other Furnishings
12 08 00	Commissioning of Furnishings
12 10 00	Art
12 11 00	Murals
12 11 13	Photo Murals
12 11 16	Sculptured Brick Panels
12 11 23	Brick Murals
12 11 26	Ceramic Tile Murals
12 11 33	Trompe l'oeil
12 12 00	Wall Decorations
12 12 13	Commissioned Paintings
12 12 16	Framed Paintings
12 12 19 12 12 23	Framed Prints
12 12 23	Tapestries Wall Hangings
12 14 00	
	Sculptures
12 14 13 12 14 16	Carved Sculpture Cast Sculpture
12 14 10	Constructed Sculpture
12 14 13	Relief Art
12 17 00	Art Glass
12 17 00	Etched Glass
12 17 16	Stained Glass
12 19 00	Religious Art
12 20 00	Window Treatments
	~~

12 21 00	Window Blinds
12 21 13	Horizontal Louver Blinds
12 21 13.13	Metal Horizontal Louver Blinds
12 21 13.23	Wood Horizontal Louver Blinds
12 21 13.33 12 21 16	Plastic Horizontal Louver Blinds Vertical Louver Blinds
12 21 16.13	Metal Vertical Louver Blinds
12 21 16.23	Wood Vertical Louver Blinds
12 21 16.33	Plastic Vertical Louver Blinds
12 21 23	Roll-Down Blinds
12 21 26	Black-Out Blinds
12 22 00	Curtains and Drapes
12 22 13 12 22 16	Draperies Property Track and Accessories
12 23 00	Drapery Track and Accessories Interior Shutters
12 23 00	Wood Interior Shutters
12 24 00	Window Shades
12 24 13 12 24 16	Roller Window Shades Pleated Window Shades
12 24 16	Z-Pleated Window Shades
12 24 16.16	Cellular Shades
12 24 16.19	Roman Shades
12 25 00	Window Treatment Operating Hardware
12 25 09	Window Treatment Control System
12 25 13	Motorized Drapery Rods
42 26 AA	Interior Daylighting Dayloos
12 26 00	Interior Daylighting Devices
12 30 00	Casework
12 30 00	Casework
12 30 00 12 31 00	Casework Manufactured Metal Casework
12 30 00 12 31 00 12 31 16	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework
12 30 00 12 31 00 12 31 16 12 32 00	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Utility Room Casework Mailroom Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36 12 35 39	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 16 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36 12 35 39 12 35 50	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36 12 35 39 12 35 50 12 35 50.13	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework Educational Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36 12 35 39 12 35 50.13 12 35 50.13 12 35 50.13	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework Educational Casework Library Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25 12 35 30 12 35 30.13 12 35 30.23 12 35 30.43 12 35 33 12 35 36 12 35 39 12 35 50 12 35 50.13	Casework Manufactured Metal Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework Educational Casework

	12 35 53.13	Metal Laboratory Casework
	12 35 53.16	Plastic-Laminate-Clad Laboratory Casework
	12 35 53.19	Wood Laboratory Casework
	12 35 53.23	Solid-Plastic Laboratory Casework
	12 35 59	Display Casework
	12 35 70	Healthcare Casework
	12 35 70.13	Hospital Casework
	12 35 70.16	Nurse Station Casework
	12 35 70.19	Exam Room Casework
	12 35 70.74	Dental Casework
	12 35 83	Performing Arts Casework
	12 35 91	Religious Casework
12	36 00	Countertops
	12 36 13	Concrete Countertops
	12 36 16	Metal Countertops
	12 36 19	Wood Countertops
	12 36 23	Plastic Countertops
	12 36 23.13	Plastic-Laminate-Clad Countertops
	12 36 40	Stone Countertops
	12 36 53	Laboratory Countertops
	12 36 61	Simulated Stone Countertops
	12 36 61.13	Cultured Marble Countertops
	12 36 61.16	Solid Surfacing Countertops
	12 36 61.19	Quartz Agglomerate Countertops
12	40 00	Furnishings and Accessories
		_
17	41 00	Office Acceptains
1 4	41 00	Office Accessories
12	12 41 13	Desk Accessories
	12 41 13 42 00	Desk Accessories Table Accessories
	12 41 13 42 00 12 42 13	Desk Accessories Table Accessories Ceramics
	12 41 13 42 00 12 42 13 12 42 16	Desk Accessories Table Accessories Ceramics Flatware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13	Desk Accessories Table Accessories Ceramics Flatware Silverware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16	Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Table Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19	Table Accessories Ceramics Clatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19 44 00	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Mats
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16	Table Accessories Ceramics Clatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Mats Bath Towels
12 12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16 12 44 16	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Bath Furnishings Bath Jinens Bath Towels Shower Curtains
12 12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16 12 44 16 45 00	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Jinens Bath Mats Bath Towels Shower Curtains Bedroom Furnishings
12 12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16 12 44 16 45 00 12 45 13	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Mats Bath Towels Shower Curtains Bedroom Furnishings Bed Linens
12 12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.13 12 44 13.13 12 44 13.16 12 44 16 45 00 12 45 13 12 45 13.13	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Towels Shower Curtains Bedroom Furnishings Bed Linens Blankets
12 12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16 12 44 16 45 00 12 45 13	Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Mats Bath Towels Shower Curtains Bedroom Furnishings Bed Linens

Furnishing Accessories
Furnishing Accessories Ash Receptacles
Bowls
Clocks
Decorative Crafts
Decorative Screens
Vases
Waste Receptacles
Rugs and Mats
Entrance Floor Mats and Frames
Entrance Floor Mats
Entrance Floor Mat Frames
Entrance Floor Grilles
Entrance Floor Gratings
Entrance Floor Grids
Entrance Tile
Floor Mats Chair Mats
Anti-Fatigue Floor Mats
Fall-Cushioning Floor Mats
Rugs
Runners
Oriental Rugs
Furniture
Office Furniture
Case Goods
Metal Case Goods
Wood Case Goods
Plastic-Laminate-Clad Case Goods
Filing Cabinets Lateral Filing Cabinets
Vertical Filing Cabinets
Vertical Filing Cabinets Office Tables
Office Tables
Office Tables Custom Office Furniture
Office Tables Custom Office Furniture Seating
Office Tables Custom Office Furniture Seating Chairs
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating
Office Tables Custom Office Furniture Seating Chairs
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture Hotel and Motel Furniture
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture Hotel and Motel Furniture Restaurant Furniture
Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture Hotel and Motel Furniture Restaurant Furniture Custom Hospitality Furniture

12 55 23	12 55 19	Detention Stools
12 55 83		
12 55 86	12 55 26	Detention Safety Clothes Hooks
12 56 00		
12 56 23		
12 56 33. 13 Fixed Classroom Furniture 12 56 33.13 Fixed Classroom Tables 12 56 33.23 Classroom Computer Furniture 12 56 39 Lecterns 12 56 43 Dormitory Furniture 12 56 51.13 Book Shelves 12 56 51.19 Index Card File Cabinets 12 56 55. 19 Index Card File Cabinets 12 56 55. 19 Laboratory Furniture 12 56 53 Laboratory Furniture 12 56 83 Custom Institutional Furniture 12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 10 Welding Benches 12 57 11 Welding Screens 12 57 12 Laser Containment Screens 12 57 13 Custom Industrial Furniture 12 57 14 Welding Screens 12 57 15 Custom Industrial Furniture 12 57 80 Custom Industrial Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16.13 Reclining Chairs 12 58 16.13 Reclining Chairs 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 59 10 System Furniture 12 59 10 Panel-Hung Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 30 Multiple Seating 12 61 00 Fixed Audience Seating		
12 56 33.13		
12 56 33.23		
12 56 39 12 56 43 12 56 51 12 56 51.13 12 56 51.13 12 56 51.14 12 56 51.19 12 56 51.19 12 56 52 12 56 53 12 56 53 12 56 53 12 56 53 12 56 53 12 56 53 12 56 53 12 56 53 12 56 70 12 56 83 12 56 86 12 57 00 12 57 13 12 57 16 12 57 19 12 57 19 12 57 19 12 57 19 12 57 83 12 57 80 12 58 13 12 58 16 12 58 20 12 58 20 12 58 20 12 58 29 12 58 29 12 58 29 12 58 29 12 58 33 12 58 33.13 12 58 33 12 58 33.13 12 58 36 12 58 38 12 59 90 12 59 90 25 90 25 90 3ystems Furniture 12 59 19 3eam System Furniture 12 59 23 26 Desk System Furniture 12 59 38 12 59 83 Multiple Seating Fixed Audience Seating		
12 56 51 Library Furniture 12 56 51.13 Book Shelves 12 56 51.19 Index Card File Cabinets 12 56 52 Audio-Visual Furniture 12 56 53 Laboratory Furniture 12 56 83 Custom Institutional Furniture 12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 19 Laser Containment Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13 Futons 12 58 16.13 Reclining Chairs 12 58 16.13 Reclining Chairs 12 58 29 Coffee Tables 12 58 29 Coffee Tables 12 58 29 Seds 12 58 33 Dressers 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 59 00 Systems Furniture 12 59 19 Panel-Hung Component System Furniture 12 59 19 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Multiple Seating 12 60 00 Fixed Muleince Seating		
12 56 51.13 Book Śhelves 12 56 51.16 Study Carrels 12 56 51.19 Index Card File Cabinets 12 56 52 Audio-Visual Furniture 12 56 53 Laboratory Furniture 12 56 70 Healthcare Furniture 12 56 83 Custom Institutional Furniture 12 56 86 Institutional Control Room Furniture 12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 19 Laser Containment Screens 12 57 80 Industrial Furniture 12 58 10 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16 Recilining Chairs 12 58 19 Dining Tables and Chairs 12 58 29 Beds 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Custom Residential Furniture 12 58 36 Custom Residential Furniture 12 58 37 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 10 Free-Standing Component System Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 15 Panel-Hung Component System Furniture 12 59 17 Desk System Furniture 12 59 18 Custom System Furniture 12 59 19 Free-Standing Component System Furniture 12 59 18 Custom System Furniture 12 59 19 Desk System Furniture 12 59 10 Multiple Seating 12 61 00 Fixed Audience Seating	12 56 43	Dormitory Furniture
12 56 51.16 12 56 51.19 12 56 52 Audio-Visual Furniture 12 56 53 Laboratory Furniture 12 56 83 Laboratory Furniture 12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Laboratorial Furniture 12 57 86 Industrial Control Room Furniture 12 58 10 Residential Furniture 12 58 13 Laboratorial Furniture 12 58 13 Laboratorial Furniture 12 58 13 Laboratorial Furniture 12 58 14 Residential Chairs 12 58 16 Laboratorial Furniture 12 58 29 Laboratorial Furniture 12 58 29 Laboratorial Furniture 12 58 29 Laboratorial Furniture 12 58 33 Laboratorial Furniture 12 58 33 Laboratorial Furniture 12 58 33 Laboratorial Furniture 12 58 34 Laboratorial Furniture 12 58 35 Laboratorial Furniture 12 58 36 Laboratorial Furniture 12 58 37 Laboratorial Furniture 12 58 38 Laboratorial Furniture 12 58 39 Laboratorial Furniture 12 58 30 Laboratori		
12 56 51.19 Index Card File Cabinets 12 56 52 Audio-Visual Furniture 12 56 53 Laboratory Furniture 12 56 70 Healthcare Furniture 12 56 83 Custom Institutional Furniture 12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 58 10 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13 Futons 12 58 16 Residential Chairs 12 58 16.13 Reclining Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29.13 Daybeds 12 58 29.13 Daybeds 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 36 Nightstands 12 59 10 Systems Furniture 12 59 11 Panel-Hung Component System Furniture 12 59 12 Panel-Hung Component System Furniture 12 59 13 Pesser Sustem Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Furniture 12 59 83 Furniture 12 59 83 Furniture 12 59 83 Furniture 12 59 85 Furniture 12 59 85 Furniture 12 59 87 Furniture 12 59 88 Furniture 12 59 89 Furniture		
12 56 52 Audio-Visual Furniture 12 56 53 Laboratory Furniture 12 56 70 Healthcare Furniture 12 56 83 Custom Institutional Furniture 12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 58 10 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16 Residential Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29 Beds 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom System Furniture 12 59 83 Custom System Furniture 12 59 85 Custom System Furniture 12 59 86 ON Multiple Seating Fixed Audience Seating		
12 56 53 Laboratory Furniture 12 56 70 Healthcare Furniture 12 56 83 Custom Institutional Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 57 86 Industrial Control Room Furniture 12 58 10 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13 Futons 12 58 16 Residential Chairs 12 58 16 Residential Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29 Entertainment Centers 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 59 10 Systems Furniture 12 59 11 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom System Furniture 12 59 84 Multiple Seating 12 60 00 Fixed Audience Seating		
12 56 86 Institutional Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13 Reclining Chairs 12 58 16 Residential Chairs 12 58 19 Dining Tables and Chairs 12 58 29 Beds 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 58 18 Panel-Hung Component System Furniture 12 59 10 Multiple Seating 12 60 00 Multiple Seating 12 61 00 Fixed Medical Chairs		Laboratory Furniture
12 56 86 Institutional Control Room Furniture 12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16.13 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 58 36 Custom Residential Furniture 12 59 00 Systems Furniture 12 59 10 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 20 Beds System Furniture 12 59 30 Custom Systems Furniture 12 59 40 Multiple Seating 12 60 00 Fixed Audience Seating		
12 57 00 Industrial Furniture 12 57 13 Welding Benches 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13 Futons 12 58 16 Residential Chairs 12 58 16 Residential Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 58 36 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 10 Gree-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 20 Beds System Furniture 12 59 30 Systems Furniture 12 59 10 Desk System Furniture 12 59 30 Multiple Seating 12 61 00 Fixed Audience Seating		
12 57 13 Welding Benches 12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 36 Nightstands 12 58 36 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 11 Panel-Hung Component System Furniture 12 59 12 Desk System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Fixed Audience Seating		
12 57 16 Welding Screens 12 57 19 Laser Containment Screens 12 57 83 Custom Industrial Furniture 12 57 86 Industrial Control Room Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16.13 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29.13 Daybeds 12 58 29.13 Daybeds 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 36 Nightstands 12 58 36 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 11 Panel-Hung Component System Furniture 12 59 12 Desk System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom Systems Furniture 12 59 83 Fixed Audience Seating		
12 57 19		
12 57 83 Custom Industrial Furniture 12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 29 Beds 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 36 Nightstands 12 58 37 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 10 Free-Standing Component System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating Fixed Audience Seating		
12 58 00 Residential Furniture 12 58 13 Couches and Loveseats Furniture 12 58 13 Futons Residential Chairs Residential Chairs Reclining Chairs Dining Tables and Chairs Coffee Tables Loss 29 Entertainment Centers Loss 29 Reds Loss 29 Reds Loss 33 Remoires Loss 33 Remoires Residential Chairs Reclining Chairs Coffee Tables Loss 29 Reds Residential Furniture Remoires Residential Furniture Remoires Residential Furniture Remoires Residential Furniture Remoires Residential Furniture Residential Fur		
12 58 00 Residential Furniture 12 58 13 Couches and Loveseats 12 58 13.13 Futons 12 58 16 Residential Chairs 12 58 16.13 Reclining Chairs 12 58 23 Coffee Tables 12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29 Beds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 10 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom Systems Furniture 12 59 19 Beam System Furniture 12 59 19 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 58 13	12 58 00	Residential Furniture
12 58 16 Residential Chairs 12 58 16.13 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Dressers 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 11 Panel-Hung Component System Furniture 12 59 12 Beam System Furniture 12 59 13 Desk System Furniture 12 59 14 Beam System Furniture 12 59 15 Desk System Furniture 12 59 23 Custom Systems Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 58 16.13 Reclining Chairs 12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Armoires 12 58 36 Nightstands 12 58 38 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom Systems Furniture 12 59 83 Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		_
12 58 19 Dining Tables and Chairs 12 58 23 Coffee Tables 12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33 Armoires 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 58 23 Coffee Tables 12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Custom System Furniture 12 59 83 Custom System Furniture 12 59 83 Free-Standing Component System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 58 26 Entertainment Centers 12 58 29 Beds 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 10 Systems Furniture 12 59 11 Panel-Hung Component System Furniture 12 59 12 Panel-Hung Component System Furniture 12 59 13 Peam System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		•
12 58 29 12 58 29.13 Daybeds 12 58 33 Dressers 12 58 33.13 Armoires Nightstands 12 58 83 Custom Residential Furniture 12 59 00 Systems Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 59 83 Fixed Audience Seating 12 61 00 Fixed Audience Seating		
12 58 33 Dressers 12 58 33.13 Armoires 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 00 Systems Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 58 33.13 Armoires 12 58 36 Nightstands 12 58 83 Custom Residential Furniture 12 59 00 Systems Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		Daybeds
12 58 36		
12 58 83 Custom Residential Furniture 12 59 00 Systems Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom System Furniture 12 59 19 Desk System Furniture 12 59 83 Custom System Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 59 00 Systems Furniture 12 59 13 Panel-Hung Component System Furniture 12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
Panel-Hung Component System Furniture Free-Standing Component System Furniture Beam System Furniture Desk System Furniture Custom Systems Furniture 12 60 00 Multiple Seating Fixed Audience Seating		
12 59 16 Free-Standing Component System Furniture 12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		-
12 59 19 Beam System Furniture 12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		
12 59 23 Desk System Furniture 12 59 83 Custom Systems Furniture 12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		- · · · · · · · · · · · · · · · · · · ·
12 60 00 Multiple Seating 12 61 00 Fixed Audience Seating		Desk System Furniture
12 61 00 Fixed Audience Seating		
12 61 00 Fixed Audience Seating	12 60 00	Multiple Seating
	12 61 00	-
12 61 13 Upholstered Audience Seating	12 61 13	Upholstered Audience Seating

12 61 16	Molded-Plastic Audience Seating
12 62 00	Portable Audience Seating
12 62 13	Folding Chairs
12 62 16	Interlocking Chairs
12 62 19	Stacking Chairs
12 63 00	Stadium and Arena Seating
12 63 13	Stadium and Arena Bench Seating
12 63 23	Stadium and Arena Seats
12 64 00	Booths and Tables
12 65 00	Multiple-Use Fixed Seating
12 66 00	Telescoping Stands
12 66 13	Telescoping Bleachers
12 66 23	Telescoping Chair Platforms
12 67 00	Pews and Benches
12 67 13	Pews
12 67 23	Benches
12 68 00	Seat and Table Assemblies
12 68 13	Pedestal Tablet Arm Chairs
12 90 00	Other Furnishings
12 92 00	Interior Planters and Artificial Plants
12 92 13	Interior Artificial Plants
12 92 33	Interior Planters
12 92 43	Interior Landscaping Accessories
12 93 00	Site Furnishings
12 93 13	Bicycle Racks
12 93 14	Bicycle Lockers
12 93 23	Trash and Litter Receptacles
12 93 33	Manufactured Planters
12 93 43	Site Seating and Tables
12 93 43.13	Site Seating
12 93 43.53	Site Tables

13 00 00	Special Construction
13 01 00	Operation and Maintenance of Special Construction
13 01 10	Operation and Maintenance of Special Facility Components
13 01 11	Operation and Maintenance of Swimming Pools
13 01 12	Operation and Maintenance of Fountains
13 01 13	Operation and Maintenance of Aquariums
13 01 14	Operation and Maintenance of Amusement Park Structures and Equipment
13 01 18 13 01 20	Operation and Maintenance of Ice Rinks Operation and Maintenance of Special Purpose Rooms
13 01 20	Operation and Maintenance of Controlled Environment Rooms
13 01 23	Operation and Maintenance of Planetariums
13 01 30	Operation and Maintenance of Special Structures
13 01 40	Operation and Maintenance of Integrated Construction
13 01 49	Operation and Maintenance of Radiation Protection
13 01 50	Operation and Maintenance of Special Instrumentation
13 01 51	Operation and Maintenance of Stress Instrumentation
13 01 52 13 01 53	Operation and Maintenance of Seismic Instrumentation
13 05 00	Operation and Maintenance of Meteorological Instrumentation
	Common Work Results for Special Construction
13 06 00	Schedules for Special Construction
13 06 10	Schedules for Special Facility Components
13 06 20 13 06 30	Schedules for Special Purpose Rooms Schedules for Special Structures
13 06 40	Schedules for Integrated Construction
13 06 50	Schedules for Special Instrumentation
13 08 00	Commissioning of Special Construction
13 08 10	Commissioning of Special Facility Components
13 08 11	Commissioning of Swimming Pools
13 08 12	Commissioning of Fountains
13 08 13	Commissioning of Aquariums
13 08 14	Commissioning of Amusement Park Structures and Equipment
13 08 18	Commissioning of Ice Rinks
13 08 20 13 08 21	Commissioning of Special Purpose Rooms Commissioning of Controlled Environment Rooms
13 08 23	Commissioning of Planetariums
13 08 30	Commissioning of Special Structures
13 08 40	Commissioning of Integrated Construction
13 08 50	Commissioning of Special Instrumentation
13 10 00	Special Facility Components
13 11 00	Swimming Pools
13 11 13	Below-Grade Swimming Pools
13 11 23	On-Grade Swimming Pools
13 11 33	Elevated Swimming Pools
13 11 43	Recirculating Gutter Systems
13 11 46	Swimming Pool Accessories
13 11 49 13 11 53	Swimming Pool Cleaning Equipment Movable Pool Bulkheads
13 11 56	Movable Pool Floors

13	12 00	Fountains
	13 12 13	Exterior Fountains
	13 12 23	Interior Fountains
13	13 00	Aquariums
13	14 00	Amusement Park Structures and Equipment
	13 14 13	Water Slides
	13 14 16	Wave Generating Equipment
	13 14 23	Amusement Park Rides
13	17 00	Tubs and Pools
	13 17 13	Hot Tubs
	13 17 23	Therapeutic Pools
42	13 17 33	Whirlpool Tubs
13	18 00	Ice Rinks
	13 18 13 13 18 16	Ice Rink Floor Systems Ice Rink Dasher Boards
12	19 00	Kennels and Animal Shelters
13	13 19 13	Kennel Enclosures and Gates
	13 19 13	Kennel Feeding Devices
12		
	20 00	Special Purpose Rooms
13	21 00	Controlled Environment Rooms
	13 21 13	Clean Rooms
	13 21 16 13 21 23	Hyperbaric Rooms Insulated Rooms
	13 21 23	Cold Storage Rooms
	13 21 26.13	Walk-in Coolers
	13 21 26.16	Walk-in Freezers
	13 21 29	Constant Temperature Rooms
	13 21 48	Sound-Conditioned Rooms
	22 00	Office Shelters and Booths
13	23 00	Planetariums
13	24 00	Special Activity Rooms
	13 24 16	Saunas
	13 24 26	Steam Baths
40	13 24 66	Athletic Rooms
13	26 00	Fabricated Rooms
40	13 26 13	Storm Shelter Rooms
13	27 00	Vaults
	13 27 16	Modular Fire Vaults
	13 27 53 13 27 53.13	Security Vaults Modular Concrete Security Vaults
	13 27 53.16	Modular Metal-Clad Laminated Security Vaults
13	28 00	Athletic and Recreational Special Construction
	13 28 13	Indoor Soccer Boards
	13 28 16	Safety Netting
	13 28 19	Arena Football Boards
	13 28 26	Floor Sockets
	13 28 33	Athletic and Recreational Court Walls

13 28 66	Demountable Athletic Surfaces
13 30 00	Special Structures
13 31 00	Fabric Structures
13 31 13	Air-Supported Fabric Structures
13 31 13.13	Single-Walled Air-Supported Structures
13 31 13.16	Multiple-Walled Air-Supported Structures
13 31 23	Tensioned Fabric Structures
13 31 33 13 32 00	Framed Fabric Structures
13 32 00	Space Frames
13 32 13	Metal Space Frames Wood Space Frames
13 33 00	Geodesic Structures
13 33 13	Geodesic Structures Geodesic Domes
13 34 00	Fabricated Engineered Structures
13 34 00	Glazed Structures
13 34 13.13	Greenhouses
13 34 13.16	Solariums
13 34 13.19	Swimming Pool Enclosures
13 34 13.23	Sunrooms Conservatories
13 34 13.26 13 34 16	Grandstands and Bleachers
13 34 16.13	Grandstands
13 34 16.53	Bleachers
13 34 18	Post Frame Building Systems
13 34 19	Metal Building Systems
13 34 23 13 34 23.13	Fabricated Structures Portable and Mobile Buildings
13 34 23.14	Fabricated Classroom Buildings
13 34 23.16	Fabricated Control Booths
13 34 23.19	Fabricated Dome Structures
13 34 23.23	Fabricated Substation Control Rooms
13 34 56	Observatories Parmod Forth Construction
13 35 00	Rammed Earth Construction
13 35 13 13 35 13.13	Rammed Earth Walls Traditional Rammed Earth Walls
13 35 13.23	Stabilized Insulated Rammed Earth Walls
13 36 00	Towers
13 36 13	Metal Towers
13 36 13.13	Steel Towers
13 36 23	Wood Towers
13 40 00	Integrated Construction
13 42 00	Building Modules
13 42 13	Bathroom Unit Modules
13 42 25	Hospitality Unit Modules
13 42 33	Apartment Unit Modules
13 42 43	Dormitory Unit Modules
13 42 46 13 42 63	Education Unit Modules Detention Cell Modules
13 42 63.13	Precast-Concrete Detention Cell Modules

13 42 63.16	Steel Detention Cell Modules
13 44 00	Modular Mezzanines
13 48 00	Sound, Vibration, and Seismic Control
13 48 13	Manufactured Sound and Vibration Control Components
13 48 23	Fabricated Sound and Vibration Control Assemblies
13 48 53	Manufactured Seismic Control Components
13 48 63	Fabricated Seismic Control Assemblies
13 49 00	Radiation Protection
13 49 13	Integrated X-Ray Shielding Assemblies
13 49 16	Modular X-Ray Shielding Rooms
13 49 23	Integrated RFI/EMI Shielding Assemblies
13 49 26	Modular RFI/EMI Shielding Rooms
13 50 00	Special Instrumentation
13 51 00	Stress Instrumentation
13 52 00	Seismic Instrumentation
13 53 00	Meteorological Instrumentation
13 53 13	Solar Instrumentation
13 53 23	Wind Instrumentation

Conveying Equipment 14 00 00 14 01 00 Operation and Maintenance of Conveying Equipment Operation and Maintenance of Dumbwaiters 14 01 10 14 01 10.71 **Dumbwaiter Rehabilitation** 14 01 20 Operation and Maintenance of Elevators 14 01 20.71 Elevator Rehabilitation Operation and Maintenance of Escalators and Moving Walks 14 01 30 Escalators and Moving Walks Rehabilitation 14 01 30.71 Operation and Maintenance of Lifts 14 01 40 14 01 40.71 Lift Rehabilitation 14 01 70 Operation and Maintenance of Turntables Operation and Maintenance of Scaffolding 14 01 80 Operation and Maintenance of Other Conveying Equipment 14 01 90 **Common Work Results for Conveying Equipment** 14 05 00 Schedules for Conveying Equipment 14 06 00 14 06 10 Schedules for Dumbwaiters 14 06 20 Schedules for Elevators Elevator Equipment Schedule 14 06 20.13 14 06 30 Schedules for Escalators and Moving Walks 14 06 40 Schedules for Lifts Lift Schedule 14 06 40.13 14 06 70 Schedules for Turntables 14 06 80 Schedules for Scaffolding Schedules for Other Conveying Equipment 14 06 90 14 08 00 Commissioning of Conveying Equipment 14 08 10 Commissioning of Dumbwaiters 14 08 20 Commissioning of Elevators 14 08 30 Commissioning of Escalators and Moving Walks 14 08 40 Commissioning of Lifts Commissioning of Turntables 14 08 70 Commissioning of Scaffolding 14 08 80 14 10 00 **Dumbwaiters** 14 11 00 **Manual Dumbwaiters** 14 12 00 **Electric Dumbwaiters Hydraulic Dumbwaiters** 14 14 00 14 20 00 **Elevators** 14 21 00 Electric Traction Elevators 14 21 13 **Electric Traction Freight Elevators** 14 21 23 Electric Traction Passenger Elevators Machine Room Electric Traction Passenger Elevators 14 21 23 13 14 21 23.16 Machine Room-Less Electric Traction Passenger Elevators 14 21 33 Electric Traction Residential Elevators 14 21 43 **Electric Traction Service Elevators** 14 24 00 Hydraulic Elevators 14 24 13 Hydraulic Freight Elevators 14 24 23 Hydraulic Passenger Elevators 14 24 33 Hydraulic Residential Elevators

14 24 43 14 26 00 14 27 00 14 27 13 14 27 16 14 28 00 14 28 16	Hydraulic Service Elevators Limited-Use/Limited-Application Elevators Custom Elevator Cabs and Doors Custom Elevator Cab Finishes Custom Elevator Doors Elevator Equipment and Controls Elevator Controls
14 28 19 14 28 19.13 14 28 19.16	Elevator Equipment Elevator Safety Equipment Elevator Hoistway Equipment
14 30 00	Escalators and Moving Walks
14 31 00	Escalators
14 32 00	Moving Walks
14 33 00	Moving Ramps
14 33 13	Motorized Ramps
14 33 16	Powered Ramps
14 40 00	Lifts
14 41 00	People Lifts
14 41 13	Counterbalanced People Lifts
14 41 16 14 42 00	Endless-Belt People Lifts Wheelchair Lifts
14 42 13	Inclined Wheelchair Lifts
14 42 16	Vertical Wheelchair Lifts
14 43 00	Platform Lifts
14 43 13	Orchestra Lifts
14 43 16	Stage Lifts
14 44 00	Sidewalk Lifts
14 45 00	Vehicle Lifts
14 70 00	Turntables
14 71 00	Industrial Turntables
14 71 11	Vehicle Turntables
14 72 00	Hospitality Turntables
14 72 25 14 73 00	Restaurant Turntables Exhibit Turntables
14 73 00	Display Turntables
14 74 00	Entertainment Turntables
14 74 61	Stage Turntables
14 80 00	Scaffolding
14 81 00	Suspended Scaffolding
14 81 13	Beam Scaffolding
14 81 16	Carriage Scaffolding
14 81 19	Hook Scaffolding Pope Climbors
14 82 00 14 82 13	Rope Climbers Manual Rope Climbers
17 02 13	manual Nope Ollinibers

14 82 16	Powered Rope Climbers
14 83 00	Elevating Platforms
14 83 13	Telescoping Platform Lifts
14 83 13.13	Electric and Battery Telescoping Platform Lifts
14 83 13.16	Pneumatic Telescoping Platform Lifts
14 83 16	Scissor Lift Platforms
14 83 19	Multi-Axis Platform Lifts
14 84 00	Powered Scaffolding
14 84 13	Window Washing Scaffolding
14 84 23	Window Washing Hoists
14 90 00	Other Conveying Equipment
14 90 00 14 91 00	Other Conveying Equipment Facility Chutes
	, , ,
14 91 00	Facility Chutes
14 91 00 14 91 13	Facility Chutes Coal Chutes
14 91 00	Facility Chutes Coal Chutes Escape Chutes
14 91 00 14 91 13 14 91 23 14 91 33	Facility Chutes Coal Chutes Escape Chutes Laundry and Linen Chutes
14 91 00 14 91 13 14 91 23 14 91 33 14 91 82	Facility Chutes Coal Chutes Escape Chutes Laundry and Linen Chutes Trash Chutes

21 00 00	Fire Suppression
21 01 00	Operation and Maintenance of Fire Suppression
21 01 10	Operation and Maintenance of Water-Based Fire-Suppression Systems
21 01 20	Operation and Maintenance of Fire-Extinguishing Systems
21 01 30	Operation and Maintenance of Fire-Suppression Equipment
21 05 00	Common Work Results for Fire Suppression
21 05 13	Common Motor Requirements for Fire-Suppression Equipment
21 05 16	Expansion Fittings and Loops for Fire-Suppression Piping
21 05 19	Meters and Gages for Fire-Suppression Systems
21 05 23 21 05 29	General-Duty Valves for Water-Based Fire-Suppression Piping Hangers and Supports for Fire-Suppression Piping and Equipment
21 05 29	Heat Tracing for Fire-Suppression Piping
21 05 48	Vibration and Seismic Controls for Fire-Suppression Piping and Equipment
21 05 53	Identification for Fire-Suppression Piping and Equipment
21 06 00	Schedules for Fire Suppression
21 06 10	Schedules for Water-Based Fire-Suppression Systems
21 06 20	Schedules for Fire-Extinguishing Systems
21 06 30	Schedules for Fire-Suppression Equipment
21 07 00	Fire Suppression Systems Insulation
21 07 16	Fire-Suppression Equipment Insulation
21 07 19	Fire-Suppression Piping Insulation
21 08 00	Commissioning of Fire Suppression
21 09 00	Instrumentation and Control for Fire-Suppression
	Systems
21 10 00	Water-Based Fire-Suppression Systems
21 11 00	Facility Fire-Suppression Water-Service Piping
21 11 16	Facility Fire Hydrants
21 11 19	Fire-Department Connections
21 12 00	Fire-Suppression Standpipes
21 12 13	Fire-Suppression Hoses and Nozzles
21 12 16	Fire-Suppression Hose Reels
21 12 19	Fire-Suppression Hose Racks
21 12 23	Fire-Suppression Hose Valves
21 13 00	Fire-Suppression Sprinkler Systems
21 13 13	Wet-Pipe Sprinkler Systems
21 13 16	Dry-Pipe Sprinkler Systems
21 13 19 21 13 23	Preaction Sprinkler Systems Combined Dry Ripe and Preaction Sprinkler Systems
21 13 25	Combined Dry-Pipe and Preaction Sprinkler Systems Deluge Fire-Suppression Sprinkler Systems
21 13 29	Water Spray Fixed Systems
21 13 36	Antifreeze Sprinkler Systems
21 13 39	Foam-Water Systems
21 16 00	Fire-Suppression Pressure Maintenance Pumps
21 20 00	Fire-Extinguishing Systems
21 21 00	Carbon-Dioxide Fire-Extinguishing Systems

	21 21 13	Carbon-Dioxide Fire-Extinguishing Piping
	21 21 16	Carbon-Dioxide Fire-Extinguishing Equipment
21	22 00	Clean-Agent Fire-Extinguishing Systems
	21 22 13	Clean-Agent Fire-Extinguishing Piping
	21 22 16	Clean-Agent Fire-Extinguishing Equipment
21	23 00	Wet-Chemical Fire-Extinguishing Systems
	21 23 13	Wet-Chemical Fire-Extinguishing Piping
	21 23 16	Wet-Chemical Fire-Extinguishing Equipment
21	24 00	Dry-Chemical Fire-Extinguishing Systems
	21 24 13	Dry-Chemical Fire-Extinguishing Piping
	21 24 16	Dry-Chemical Fire-Extinguishing Equipment
21	30 00	Fire Pumps
21	31 00	Centrifugal Fire Pumps
	21 31 13	Electric-Drive, Centrifugal Fire Pumps
	21 31 16	Diesel-Drive, Centrifugal Fire Pumps
21	32 00	Vertical-Turbine Fire Pumps
	21 32 13	Electric-Drive, Vertical-Turbine Fire Pumps
	21 32 16	Diesel-Drive, Vertical-Turbine Fire Pumps
21	33 00	Positive-Displacement Fire Pumps
	21 33 13	Electric-Drive, Positive-Displacement Fire Pumps
	21 33 16	Diesel-Drive, Positive-Displacement Fire Pumps
21	40 00	Fire-Suppression Water Storage
21	41 00	Storage Tanks for Fire-Suppression Water
	21 41 13	Pressurized Storage Tanks for Fire-Suppression Water
	21 41 16	Elevated Storage Tanks for Fire-Suppression Water
	21 41 19	Roof-Mounted Storage Tanks for Fire-Suppression Water
	21 41 23	Ground Suction Storage Tanks for Fire-Suppression Water
	21 41 26	Underground Storage Tanks for Fire-Suppression Water
	21 41 29	Storage Tanks for Fire-Suppression Water Additives

22 00 00	Plumbing
22 01 00	Operation and Maintenance of Plumbing
22 01 10	Operation and Maintenance of Plumbing Piping and Pumps
22 01 10.16	Video Piping Inspections
22 01 10.51	Plumbing Piping Cleaning
22 01 10.61	Plumbing Piping Repairs
22 01 10.62	Plumbing Piping Relining
22 01 30	Operation and Maintenance of Plumbing Equipment
22 01 40	Operation and Maintenance of Plumbing Fixtures
22 01 50	Operation and Maintenance of Pool and Fountain Plumbing Systems
22 01 60	Operation and Maintenance of Laboratory and Healthcare Systems
22 05 00	Common Work Results for Plumbing
22 05 13	Common Motor Requirements for Plumbing Equipment
22 05 16	Expansion Fittings and Loops for Plumbing Piping
22 05 19	Meters and Gages for Plumbing Piping
22 05 23	General-Duty Valves for Plumbing Piping
22 05 29	Hangers and Supports for Plumbing Piping and Equipment
22 05 33	Heat Tracing for Plumbing Piping
22 05 48	Vibration and Seismic Controls for Plumbing Piping and Equipment
22 05 53	Identification for Plumbing Piping and Equipment
22 05 73	Facility Drainage Manholes
22 05 76	Facility Drainage Piping Cleanouts
22 06 00	Schedules for Plumbing
22 06 10	Schedules for Plumbing Piping and Pumps
22 06 10.13	Plumbing Pump Schedule
22 06 12	Schedules for Facility Potable Water Storage
22 06 15	Schedules for General Service Compressed-Air Equipment
22 06 30	Schedules for Plumbing Equipment
22 06 30.13	Domestic Water Heater Schedule
22 06 40	Schedules for Plumbing Fixtures
22 06 40.13	Plumbing Fixture Schedule
22 06 50	Schedules for Pool and Fountain Plumbing Systems
22 06 60	Schedules for Laboratory and Healthcare Systems
22 07 00	Plumbing Insulation
22 07 16	Plumbing Equipment Insulation
22 07 19	Plumbing Piping Insulation
22 08 00	Commissioning of Plumbing
22 09 00	Instrumentation and Control for Plumbing
22 10 00	Plumbing Piping
22 11 00	Facility Water Distribution
22 11 13	Facility Water Distribution Piping
22 11 16	Domestic Water Piping
22 11 19	Domestic Water Piping Specialties
22 11 23	Domestic Water Pumps
22 11 23.13	Domestic-Water Packaged Booster Pumps
22 11 23.23	Close-Coupled, In-Line, Sealless Centrifugal Domestic-Water Pumps
22 11 23.26	Close-Coupled, Horizontally Mounted, In-Line Centrifugal Domestic-Water Pumps
22 11 23.29	Close-Coupled, Vertically Mounted, In-Line Centrifugal Domestic-Water Pumps

	22 11 23.33 22 11 23.36	Separately Coupled, In-Line Centrifugal Domestic-Water Pumps Separately Coupled, Horizontally Mounted, In-Line Centrifugal Domestic-Water Pumps
22	12 00	Facility Potable-Water Storage Tanks
	22 12 13	Facility Roof-Mounted, Potable-Water Storage Tanks
	22 12 16	Facility Elevated, Potable-Water Storage Tanks
	22 12 19	Facility Ground-Mounted, Potable-Water Storage Tanks
	22 12 21	Facility Underground Potable-Water Storage Tanks
	22 12 23	Facility Indoor Potable-Water Storage Tanks
	22 12 23.13	Facility Steel, Indoor Potable-Water Storage Pressure Tanks
	22 12 23.16	Facility Steel, Indoor Potable-Water Storage Non-Pressure Tanks
	22 12 23.23	Facility Plastic, Indoor Potable-Water Storage Pressure Tanks
22	22 12 23.26 13 00	Facility Plastic, Indoor Potable-Water Storage Non-Pressure Tanks
22		Facility Sanitary Sewerage
	22 13 13	Facility Sanitary Sewers
	22 13 16 22 13 19	Sanitary Waste and Vent Piping Sanitary Waste Piping Specialties
	22 13 19 22 13 19.13	Sanitary Waste Figing Specialities Sanitary Drains
	22 13 19.13	Fats, Oils, and Grease Disposal Systems
	22 13 19.26	Grease Removal Devices
	22 13 19.33	Backwater Valves
	22 13 19.36	Air-Admittance Valves
	22 13 23	Sanitary Waste Interceptors
	22 13 26	Sanitary Waste Separators
	22 13 29	Sanitary Sewerage Pumps
	22 13 29.13	Wet-Pit-Mounted, Vertical Sewerage Pumps
	22 13 29.16 22 13 29.23	Submersible Sewerage Pumps Sewerage Pump Reverse-Flow Assemblies
	22 13 29.23	Sewerage Pump Basins and Pits
	22 13 33	Packaged, Submersible Sewerage Pump Units
	22 13 36	Packaged, Wastewater Pump Units
	22 13 43	Facility Packaged Sewage Pumping Stations
	22 13 43.13	Facility Dry-Well Packaged Sewage Pumping Stations
	22 13 43.16	Facility Wet-Well Packaged Sewage Pumping Stations
	22 13 53	Facility Septic Tanks
	22 13 63	Facility Gray Water Tanks
22	14 00	Facility Storm Drainage
	22 14 13	Facility Storm Drainage Piping
	22 14 16	Rainwater Leaders
	22 14 19	Sump Pump Discharge Piping
	22 14 23	Storm Drainage Piping Specialties
	22 14 26	Facility Storm Drains
	22 14 26.13	Roof Drains
	22 14 26.16	Facility Area Drains
	22 14 26.19 22 14 29	Facility Trench Drains Sump Pumps
	22 14 29.13	Wet-Pit-Mounted, Vertical Sump Pumps
	22 14 29.16	Submersible Sump Pumps
	22 14 29.19	Sump-Pump Basins and Pits
	22 14 33	Packaged, Pedestal Drainage Pump Units
	22 14 36	Packaged, Submersible, Drainage Pump Units
	22 14 53	Rainwater Storage Tanks

22	15 00	General Service Compressed-Air Systems
	22 15 13	General Service Compressed-Air Piping
	22 15 16	General Service Compressed-Air Valves
	22 15 19	General Service Packaged Air Compressors and Receivers
	22 15 19.13	General Service Packaged Reciprocating Air Compressors
	22 15 19.16	General Service Packaged Liquid-Ring Air Compressors
	22 15 19.19	General Service Packaged Rotary-Screw Air Compressors
	22 15 19.23	General Service Packaged Sliding-Vane Air Compressors
22	30 00	Plumbing Equipment
	31 00	Domestic Water Softeners
	22 31 13	Residential Domestic Water Softeners
	22 31 13	Commercial Domestic Water Softeners
22		
22	32 00	Domestic Water Filtration Equipment
	22 32 13	Domestic-Water Bag-Type Filters
	22 32 16	Domestic-Water Freestanding Cartridge Filters
	22 32 19	Domestic-Water Off-Floor Cartridge Filters
	22 32 23	Domestic-Water Carbon Filters
	22 32 26	Domestic-Water Sand Filters
	22 32 26.13	Domestic-Water Circulating Sand Filters
	22 32 26.16	Domestic-Water Multimedia Sand Filters
	22 32 26.19	Domestic-Water Greensand Filters
22	33 00	Electric Domestic Water Heaters
	22 33 13	Instantaneous Electric Domestic Water Heaters
	22 33 13.13	Flow-Control, Instantaneous Electric Domestic Water Heaters
	22 33 13.16	Thermostat-Control, Instantaneous Electric Domestic Water Heaters
	22 33 30	Residential, Electric Domestic Water Heaters
	22 33 30.13	Residential, Small-Capacity Electric Domestic Water Heaters
	22 33 30.16	Residential, Storage Electric Domestic Water Heaters
	22 33 30.23	Residential, Collector-to-Tank, Solar-Electric Domestic Water Heaters
	22 33 30.26	Residential, Collector-to-Tank, Heat-Exchanger-Coil, Solar-Electric Domestic Water Heaters
	22 33 33	Light-Commercial Electric Domestic Water Heaters
	22 33 36	Commercial Domestic Water Electric Booster Heaters
	22 33 36.13	Commercial Domestic Water Electric Booster Heaters
	22 33 36.16	Commercial Storage Electric Domestic Water Heaters
22	34 00	Fuel-Fired Domestic Water Heaters
	22 34 13	Instantaneous, Tankless, Gas Domestic Water Heaters
	22 34 30	Residential Gas Domestic Water Heaters
	22 34 30.13	Residential, Atmospheric, Gas Domestic Water Heaters
	22 34 30.16	Residential, Direct-Vent, Gas Domestic Water Heaters
	22 34 30.19	Residential, Power-Vent, Gas Domestic Water Heaters
	22 34 36	Commercial Gas Domestic Water Heaters
	22 34 36.13	Commercial, Atmospheric, Gas Domestic Water Heaters
	22 34 36.16	Commercial, Power-Burner, Gas Domestic Water Heaters
	22 34 36.19	Commercial, Power-Vent, Gas Domestic Water Heaters
	22 34 36.23	Commercial, High-Efficiency, Gas Domestic Water Heaters
	22 34 36.26	Commercial, Coil-Type, Finned-Tube, Gas Domestic Water Heaters
	22 34 36.29	Commercial, Grid-Type, Finned-Tube, Gas Domestic Water Heaters
	22 34 46	Oil-Fired Domestic Water Heaters
	22 34 46.13	Large-Capacity, Oil-Fired Domestic Water Heaters
	22 34 56	Dual-Fuel-Fired Domestic Water Heaters

22	35 00	Domestic Water Heat Exchangers
	22 35 13	Instantaneous Domestic Water Heat Exchangers
	22 35 13.13	Heating-Fluid-in-Coil, Instantaneous Domestic Water Heat Exchangers
	22 35 13.16	Domestic-Water-in-Coil, Instantaneous Domestic Water Heat Exchangers
	22 35 13.19	Heating-Fluid-in-U-Tube-Coil, Instantaneous Domestic Water Heat Exchangers
	22 35 23	Circulating, Domestic Water Heat Exchangers
	22 35 23.13	Circulating, Compact Domestic Water Heat Exchangers
	22 35 23.16	Circulating, Storage Domestic Water Heat Exchangers
	22 35 29	Noncirculating, Domestic Water Heat Exchangers
	22 35 29.13	Noncirculating, Compact Domestic Water Heat Exchangers
	22 35 29.16	Noncirculating, Storage Domestic Water Heat Exchangers
	22 35 36	Domestic Water Brazed-Plate Heat Exchangers
	22 35 39	Domestic Water Frame-and-Plate Heat Exchangers
	22 35 43	Domestic Water Heat Reclaimers
22	2 40 00	Plumbing Fixtures
22	41 00	Residential Plumbing Fixtures
	22 41 13	Residential Water Closets, Urinals, and Bidets
	22 41 13.13	Residential Water Closets
	22 41 13.16	Residential Urinals
	22 41 13.19	Residential Bidets
	22 41 16	Residential Lavatories and Sinks
	22 41 16.13	Residential Lavatories
	22 41 16.16	Residential Sinks
	22 41 19	Residential Bathtubs
	22 41 23	Residential Showers
	22 41 26	Residential Disposers
	22 41 36	Residential Laundry Trays
	22 41 39	Residential Faucets, Supplies, and Trim
22	42 00	Commercial Plumbing Fixtures
	22 42 13	Commercial Water Closets, Urinals, and Bidets
	22 42 13.13	Commercial Water Closets
	22 42 13.16	Commercial Urinals
	22 42 16	Commercial Lavatories and Sinks
	22 42 16.13	Commercial Lavatories
	22 42 16.16	Commercial Sinks
	22 42 19	Commercial Bathtubs
	22 42 23	Commercial Showers
	22 42 26	Commercial Disposers
	22 42 29	Shampoo Bowls
	22 42 33	Wash Fountains
	22 42 36	Commercial Laundry Trays
	22 42 39	Commercial Faucets, Supplies, and Trim
	22 42 43	Flushometers
22	43 00	Healthcare Plumbing Fixtures
	22 43 13	Healthcare Water Closets
	22 43 16	Healthcare Sinks
	22 43 10	Healthcare Bathtubs
	22 43 19	
	22 43 23 22 43 39	
	22 43 39 22 43 43	
	44 4 3 43	I ICAILIICAIC FIUITIDIITU FIXLUIC FIUSTIOTICETS

22 45 00	Emergency Plumbing Fixtures
22 45 13	Emergency Showers
22 45 16	Eyewash Equipment
22 45 19	Self-Contained Eyewash Equipment
22 45 23	Personal Eyewash Equipment
22 45 26	Eye/Face Wash Equipment
22 45 29	Hand-Held Emergency Drench Hoses
22 45 33	Combination Emergency Fixture Units
22 45 36	Emergency Fixture Water-Tempering Equipment
22 46 00	Security Plumbing Fixtures
22 46 13	Security Water Closets and Urinals
22 46 13.13	Security Water Closets
22 46 13.16	Security Urinals
22 46 16	Security Lavatories and Sinks
22 46 16.13	Security Lavatories
22 46 16.16	Security Shawers
22 46 19	Security Showers
22 46 39	Security Flumbing Fiveure Flumbemators
22 46 43 22 46 53	Security Plumbing Fixture Flushometers Security Plumbing Fixture Supports
	• • • • • • • • • • • • • • • • • • • •
22 47 00	Drinking Fountains and Water Coolers
22 47 13	Drinking Fountains
22 47 16	
22 47 19	
22 47 23	
22 50 00	Pool and Fountain Plumbing Systems
22 51 00	Swimming Pool Plumbing Systems
22 51 13	Swimming Pool Piping
22 51 16	Swimming Pool Pumps
22 51 19	Swimming Pool Water Treatment Equipment
22 51 23	Swimming Pool Equipment Controls
22 52 00	Fountain Plumbing Systems
22 52 13	
22 52 16	Fountain Piping Fountain Pumps
	Fountain Piping
22 52 16	Fountain Piping Fountain Pumps
22 52 16 22 52 19 22 52 23	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls
22 52 16 22 52 19	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory
22 52 16 22 52 19 22 52 23 22 60 00	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities
22 52 16 22 52 19 22 52 23	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory
22 52 16 22 52 19 22 52 23 22 60 00	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities
22 52 16 22 52 19 22 52 23 22 60 00	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00 22 61 13 22 61 13.53 22 61 13.70	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities Compressed-Air Piping for Laboratory and Healthcare Facilities Laboratory Compressed-Air Piping Healthcare Compressed-Air Piping
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00 22 61 13 22 61 13.53 22 61 13.70 22 61 13.74	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities Compressed-Air Piping for Laboratory and Healthcare Facilities Laboratory Compressed-Air Piping Healthcare Compressed-Air Piping Dental Compressed-Air Piping
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00 22 61 13 22 61 13.53 22 61 13.70 22 61 19	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities Compressed-Air Piping for Laboratory and Healthcare Facilities Laboratory Compressed-Air Piping Healthcare Compressed-Air Piping Dental Compressed-Air Piping Compressed-Air Equipment for Laboratory and Healthcare Facilities
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00 22 61 13.53 22 61 13.70 22 61 13.74 22 61 19 22 61 19.53	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities Compressed-Air Piping for Laboratory and Healthcare Facilities Laboratory Compressed-Air Piping Healthcare Compressed-Air Piping Dental Compressed-Air Piping Compressed-Air Equipment for Laboratory and Healthcare Facilities Laboratory Compressed-Air Equipment
22 52 16 22 52 19 22 52 23 22 60 00 22 61 00 22 61 13 22 61 13.53 22 61 13.70 22 61 19	Fountain Piping Fountain Pumps Fountain Water Treatment Equipment Fountain Equipment Controls Gas and Vacuum Systems for Laboratory and Healthcare Facilities Compressed-Air Systems for Laboratory and Healthcare Facilities Compressed-Air Piping for Laboratory and Healthcare Facilities Laboratory Compressed-Air Piping Healthcare Compressed-Air Piping Dental Compressed-Air Piping Compressed-Air Equipment for Laboratory and Healthcare Facilities

22 62 00	Vacuum Systems for Laboratory and Healthcare
	Facilities
22 62 13	Vacuum Piping for Laboratory and Healthcare Facilities
22 62 13.53	Laboratory Vacuum Piping
22 62 13.70	Healthcare, Surgical Vacuum Piping
22 62 13.74	Dental Vacuum Piping
22 62 19	Vacuum Equipment for Laboratory and Healthcare Facilities
22 62 19.53	Laboratory Vacuum Equipment
22 62 19.70	Healthcare Vacuum Equipment
22 62 19.74	Dental Vacuum and Evacuation Equipment
22 62 23	Waste Anesthesia-Gas Piping
22 63 00	Gas Systems for Laboratory and Healthcare Facilities
22 63 13	Gas Piping for Laboratory and Healthcare Facilities
22 63 13.53	Laboratory Gas Piping
22 63 13.70	Healthcare Gas Piping
22 63 19	Gas Storage Tanks for Laboratory and Healthcare Facilities
22 63 19.53	Laboratory Gas Storage Tanks
22 63 19.70	Healthcare Gas Storage Tanks
22 66 00	Chemical-Waste Systems for Laboratory and
	Healthcare Facilities
22 66 53	Laboratory Chemical-Waste and Vent Piping
	Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping
22 66 70	Healthcare Chemical-Waste and Vent Piping
22 66 70 22 66 83	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks
22 66 70 22 66 83 22 66 83.13	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks
22 66 70 22 66 83 22 66 83.13 22 66 83.16	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.16	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping Deionized-Water Piping
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.16 22 67 13.19	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.16 22 67 13.19 22 67 19	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping Deionized-Water Piping Processed Water Equipment for Laboratory and Healthcare Facilities
22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.19 22 67 19 22 67 19.13	Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping Deionized-Water Piping Processed Water Equipment for Laboratory and Healthcare Facilities Distilled-Water Equipment

23 07 13

23 07 16

Duct Insulation

HVAC Equipment Insulation

Heating, Ventilating, and Air 23 00 00 **Conditioning (HVAC) Operation and Maintenance of HVAC Systems** 23 01 00 23 01 10 Operation and Maintenance of Facility Fuel Systems 23 01 20 Operation and Maintenance of HVAC Piping and Pumps Operation and Maintenance of HVAC Air Distribution 23 01 30 23 01 30.51 **HVAC Air-Distribution System Cleaning** Operation and Maintenance of Central Heating Equipment 23 01 50 23 01 60 Operation and Maintenance of Central Cooling Equipment 23 01 60.71 Refrigerant Recovery/Recycling Operation and Maintenance of Central HVAC Equipment 23 01 70 Operation and Maintenance of Decentralized HVAC Equipment 23 01 80 Diagnostic Systems for HVAC 23 01 90 Common Work Results for HVAC 23 05 00 Common Motor Requirements for HVAC Equipment 23 05 13 23 05 16 Expansion Fittings and Loops for HVAC Piping Meters and Gages for HVAC Piping 23 05 19 23 05 23 General-Duty Valves for HVAC Piping 23 05 29 Hangers and Supports for HVAC Piping and Equipment Heat Tracing for HVAC Piping 23 05 33 23 05 48 Vibration and Seismic Controls for HVAC 23 05 53 Identification for HVAC Piping and Equipment Anti-Microbial Coatings for HVAC Ducts and Equipment 23 05 63 Anti-Microbial Ultraviolet Emitters for HVAC Ducts and Equipment 23 05 66 23 05 93 Testing, Adjusting, and Balancing for HVAC 23 06 00 Schedules for HVAC 23 06 10 Schedules for Facility Fuel Service Systems Schedules for HVAC Piping and Pumps 23 06 20 23 06 20.13 Hydronic Pump Schedule 23 06 30 Schedules for HVAC Air Distribution **HVAC Fan Schedule** 23 06 30.13 23 06 30.16 Air Terminal Unit Schedule 23 06 30.19 Air Outlet and Inlet Schedule **HVAC Air Cleaning Device Schedule** 23 06 30.23 23 06 50 Schedules for Central Heating Equipment 23 06 50.13 Heating Boiler Schedule Schedules for Central Cooling Equipment 23 06 60 23 06 60.13 Refrigerant Condenser Schedule 23 06 60.16 Packaged Water Chiller Schedule Schedules for Central HVAC Equipment 23 06 70 23 06 70.13 Indoor, Central-Station Air-Handling Unit Schedule 23 06 70.16 Packaged Outdoor HVAC Equipment Schedule 23 06 80 Schedules for Decentralized HVAC Equipment Decentralized Unitary HVAC Equipment Schedule 23 06 80.13 Convection Heating and Cooling Unit Schedule 23 06 80.16 23 06 80.19 Radiant Heating Unit Schedule 23 07 00 **HVAC Insulation**

23 07 19	HVAC Piping Insulation
23 08 00	Commissioning of HVAC
23 09 00	Instrumentation and Control for HVAC
23 09 13	Instrumentation and Control Devices for HVAC
23 09 13.13	Actuators and Operators
23 09 13.23	Sensors and Transmitters
23 09 13.33	Control Valves
23 09 13.43 23 09 23	Control Dampers Direct-Digital Control System for HVAC
23 09 23	Electric and Electronic Control System for HVAC
23 09 43	Pneumatic Control System for HVAC
23 09 53	Pneumatic and Electric Control System for HVAC
23 09 93	Sequence of Operations for HVAC Controls
23 10 00	Facility Fuel Systems
23 11 00	
	Facility Fuel Piping
23 11 13 23 11 16	Facility Fuel-Oil Piping Facility Gasoline Piping
23 11 16	Facility Gasoline Fibring Facility Natural-Gas Piping
23 11 26	Facility Natural-Gas riping Facility Liquefied-Petroleum Gas Piping
23 12 00	Facility Fuel Pumps
23 12 13	Facility Fuel-Oil Pumps
23 12 16	Facility Gasoline Dispensing Pumps
23 13 00	Facility Fuel-Storage Tanks
23 13 13	Facility Underground Fuel-Oil, Storage Tanks
23 13 13.13	Double-Wall Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.16	Composite, Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.19	Jacketed, Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.23	Glass-Fiber-Reinforced-Plastic, Underground Fuel-Oil, Storage Tanks
23 13 13.33	Fuel-Oil Storage Tank Pumps
23 13 23	Facility Aboveground Fuel-Oil, Storage Tanks
23 13 23.13 23 13 23.16	Vertical, Steel, Aboveground Fuel-Oil, Storage Tanks Horizontal, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.19	Containment-Dike, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.23	Insulated, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.26	Concrete-Vaulted, Steel, Aboveground Fuel-Oil, Storage Tanks
23 20 00	HVAC Piping and Pumps
23 21 00	Hydronic Piping and Pumps
23 21 13	Hydronic Piping
23 21 13.13	Underground Hydronic Piping
23 21 13.23	Aboveground Hydronic Piping
23 21 13.33	Ground-Loop Heat-Pump Piping
23 21 16	Hydronic Piping Specialties
23 21 23	Hydronic Pumps
23 21 23.13 23 21 23.16	In-Line Centrifugal Hydronic Pumps
23 21 23.16	Base-Mounted, Centrifugal Hydronic Pumps Vertical-Mounted, Double-Suction Centrifugal Hydronic Pumps
23 21 23.19	Vertical-Mounted, Bouble-Suction Centinugar Hydronic Fumps Vertical-Turbine Hydronic Pumps
23 21 29	Automatic Condensate Pump Units
23 22 00	Steam and Condensate Piping and Pumps

	23 22 13	Steam and Condensate Heating Piping
	23 22 13.13	Underground Steam and Condensate Heating Piping
	23 22 13.23	Aboveground Steam and Condensate Heating Piping
	23 22 16	Steam and Condensate Heating Piping Specialties
	23 22 23	Steam Condensate Pumps
	23 22 23.13	Electric-Driven Steam Condensate Pumps
22	23 22 23.23	Pressure-Powered Steam Condensate Pumps
23	23 00	Refrigerant Piping
	23 23 13	Refrigerant Piping Valves
	23 23 16	Refrigerant Piping Specialties
	23 23 19	Refrigerant Safety Relief Valve Discharge Piping
	23 23 23	Refrigerants
23	24 00	Internal-Combustion Engine Piping
	23 24 13	Internal-Combustion Engine Remote-Radiator Coolant Piping
	23 24 16	Internal-Combustion Engine Exhaust Piping
23	25 00	HVAC Water Treatment
	23 25 13	Water Treatment for Closed-Loop Hydronic Systems
	23 25 16	Water Treatment for Open Hydronic Systems
	23 25 19	Water Treatment for Steam System Feedwater
	23 25 23	Water Treatment for Humidification Steam System Feedwater
22	30 00	HVAC Air Distribution
23	31 00	HVAC Ducts and Casings
	23 31 13	Metal Ducts
	23 31 13.13	Rectangular Metal Ducts
	23 31 13.16	Round and Flat-Oval Spiral Ducts
	23 31 13.19	Metal Duct Fittings
	23 31 16	Nonmetal Ducts
	23 31 16.13	Fibrous-Glass Ducts
	23 31 16.16 23 31 16.19	Thermoset Fiberglass-Reinforced Plastic Ducts PVC Ducts
	23 31 16.19	Concrete Ducts
	23 31 19	HVAC Casings
22	32 00	Air Plenums and Chases
23		
	23 32 13	Fabricated, Metal Air Plenums
	23 32 33	Air-Distribution Ceiling Plenums
	23 32 36	Air-Distribution Floor Plenums
	23 32 39	Air-Distribution Wall Plenums
	23 32 43	Air-Distribution Chases Formed by General Construction
	23 32 48	Acoustical Air Plenums
23	33 00	Air Duct Accessories
	23 33 13	Dampers
	23 33 13.13	Volume-Control Dampers
	23 33 13.16	Fire Dampers
	23 33 13.19	Smoke-Control Dampers
	23 33 13.23	Backdraft Dampers
	23 33 19	Duct Silencers
	23 33 23	Turning Vanes
	23 33 33	Duct-Mounting Access Doors
	23 33 43	Flexible Connectors
	23 33 46	Flexible Ducts

23 33 53	Duct Liners
23 34 00	HVAC Fans
23 34 13	Axial HVAC Fans
23 34 16	Centrifugal HVAC Fans
23 34 23	HVAC Power Ventilators
23 34 33	Air Curtains
23 35 00	Special Exhaust Systems
23 35 13	Dust Collection Systems
23 35 13.13	Sawdust Collection Systems
23 35 16	Engine Exhaust Systems
23 35 16.13	Positive-Pressure Engine Exhaust Systems
23 35 16.16	Mechanical Engine Exhaust Systems
23 36 00	Air Terminal Units
23 36 13	Constant-Air-Volume Units
23 36 16	Variable-Air-Volume Units
23 37 00	Air Outlets and Inlets
23 37 13	Diffusers, Registers, and Grilles
23 37 16	Fabric Air Distribution Devices
23 37 23	HVAC Gravity Ventilators
23 37 23.13	
23 37 23.16	•
23 37 23.19	HVAC Gravity Upblast Ventilators
23 38 00	Ventilation Hoods
23 38 13	Commercial-Kitchen Hoods
23 38 13.13	Listed Commercial-Kitchen Hoods
23 38 13.16	Standard Commercial-Kitchen Hoods
23 38 13.16 23 38 16	Standard Commercial-Kitchen Hoods Fume Hoods
23 38 13.16 23 38 16 23 40 00	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices
23 38 13.16 23 38 16	Standard Commercial-Kitchen Hoods Fume Hoods
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33	Standard Commercial-Kitchen Hoods Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13 23 43 16	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13 23 43 13 23 43 13 23 43 23	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13 23 43 13 23 43 13 23 43 23	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners
23 38 13.16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13 23 43 16 23 43 23 23 50 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners Central Heating Equipment
23 38 13.16 23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00 23 42 13 23 42 16 23 42 19 23 43 13 23 43 13 23 43 13 23 43 23	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners

	23 51 13.16 23 51 13.19	Vent Dampers Barometric Dampers
	23 51 16	Fabricated Breechings and Accessories
	23 51 19	Fabricated Stacks
	23 51 23	Gas Vents
	23 51 33	Insulated Sectional Chimneys
	23 51 43	Flue-Gas Filtration Equipment
	23 51 43.13	Gaseous Filtration
	23 51 43.16	Particulate Filtration
23	52 00	Heating Boilers
	23 52 13	Electric Boilers
	23 52 16	Condensing Boilers
	23 52 16.13	Stainless-Steel Condensing Boilers
	23 52 16.16	Aluminum Condensing Boilers
	23 52 17	Low Mass Boilers
	23 52 19	Pulse Combustion Boilers
	23 52 23	Cast-Iron Boilers
	23 52 33	Water-Tube Boilers
	23 52 33.13	Finned Water-Tube Boilers
	23 52 33.16	
	23 52 33.19	Copper Water-Tube Boilers
	23 52 39	Fire-Tube Boilers
	23 52 39.13	
	23 52 39.16	Steel Fire-Tube Boilers
	23 52 83	Boiler Blowdown Systems
23	53 00	Heating Boiler Feedwater Equipment
	23 53 13	Boiler Feedwater Pumps
	23 53 16	Deaerators
23	54 00	Furnaces
	23 54 13	Electric-Resistance Furnaces
	23 54 16	Fuel-Fired Furnaces
	23 54 16.13	
	23 54 16.16	
23	55 00	Fuel-Fired Heaters
	23 55 13	Fuel-Fired Duct Heaters
	23 55 13.13	Oil-Fired Duct Heaters
	23 55 13.16	Gas-Fired Duct Heaters
	23 55 23	Gas-Fired Radiant Heaters
	23 55 23.13	Low-Intensity Gas-Fired Radiant Heaters
	23 55 23.16	High-Intensity Gas-Fired Radiant Heaters Fuel-Fired Unit Heaters
	23 55 33 23 55 33.13	Oil-Fired Unit Heaters
	23 55 33.16	Gas-Fired Unit Heaters
23	56 00	
23		Solar Energy Heating Equipment
	23 56 13	Heating Solar Collectors
	23 56 13.13 23 56 13.16	Heating Solar Flat-Plate Collectors Heating Solar Concentrating Collectors
	23 56 13.19	Heating Solar Vacuum-Tube Collectors
	23 56 16	Packaged Solar Heating Equipment
	23 56 23	Solar Air-Heating Panels
23	57 00	Heat Exchangers for HVAC
	J. UU	ricat Excitatigets for 11470

	23 57 13 23 57 16 23 57 19 23 57 19.13 23 57 19.16	Steam-to-Steam Heat Exchangers Steam-to-Water Heat Exchangers Liquid-to-Liquid Heat Exchangers Plate-Type, Liquid-to-Liquid Heat Exchangers Shell-Type, Liquid-to-Liquid Heat Exchangers
23	23 57 33 60 00	Direct Geoexchange Heat Exchangers Central Cooling Equipment
		<u> </u>
23	61 00 23 61 13	Refrigerant Compressors
	23 61 13.13	Centrifugal Refrigerant Compressors Non-Condensable Gas Purge Equipment
	23 61 16	Reciprocating Refrigerant Compressors
	23 61 19	Scroll Refrigerant Compressors
	23 61 23	Rotary-Screw Refrigerant Compressors
23	62 00	Packaged Compressor and Condenser Units
	23 62 13	Packaged Air-Cooled Refrigerant Compressor and Condenser Units
	23 62 23	Packaged Water-Cooled Refrigerant Compressor and Condenser Units
23	63 00	Refrigerant Condensers
	23 63 13	Air-Cooled Refrigerant Condensers
	23 63 23 23 63 33	Water-Cooled Refrigerant Condensers Evaporative Refrigerant Condensers
22	64 00	
23	23 64 13	Packaged Water Chillers Absorption Water Chillers
	23 64 13.13	Direct-Fired Absorption Water Chillers
	23 64 13.16	Indirect-Fired Absorption Water Chillers
	23 64 16	Centrifugal Water Chillers
	23 64 16.13	Air-Cooled Centrifugal Water Chillers
	23 64 16.16	Water-Cooled Centrifugal Water Chillers
	23 64 19 23 64 23	Reciprocating Water Chillers Scroll Water Chillers
	23 64 26	Rotary-Screw Water Chillers
23	65 00	Cooling Towers
	23 65 13	Forced-Draft Cooling Towers
	23 65 13.13	Open-Circuit, Forced-Draft Cooling Towers
	23 65 13.16	Closed-Circuit, Forced-Draft Cooling Towers
	23 65 16	Natural-Draft Cooling Towers
	23 65 23	Field-Erected Cooling Towers
	23 65 33	Liquid Coolers
23	70 00	Central HVAC Equipment
23	71 00	Thermal Storage
	23 71 13	Thermal Heat Storage
	23 71 13.13	Room Storage Heaters for Thermal Storage
	23 71 13.16 23 71 13.19	Heat-Pump Boosters for Thermal Storage Central Furnace Heat-Storage Units
	23 71 13.19	Pressurized-Water Thermal Storage Tanks
	23 71 16	Chilled-Water Thermal Storage
	23 71 19	Ice Storage
	23 71 19.13	Internal Ice-on-Coil Thermal Storage
	23 71 19.16 23 71 19 19	External Ice-on-Coil Thermal Storage Encapsulated-Ice Thermal Storage

	23 71 19.23 23 71 19.26	Ice-Harvesting Thermal Storage Ice-Slurry Thermal Storage
23	72 00	Air-to-Air Energy Recovery Equipment
	23 72 13	Heat-Wheel Air-to-Air Energy-Recovery Equipment
	23 72 16	Heat-Pipe Air-to-Air Energy-Recovery Equipment
	23 72 19	Fixed-Plate Air-to-Air Energy-Recovery Equipment
	23 72 23	Packaged Air-to-Air Energy-Recovery Units
23	73 00	Indoor Central-Station Air-Handling Units
	23 73 13	Modular Indoor Central-Station Air-Handling Units
	23 73 23	Custom Indoor Central-Station Air-Handling Units
	23 73 33 23 73 33.13	Indoor Indirect Fuel-Fired Heating and Ventilating Units Indoor Indirect Oil-Fired Heating and Ventilating Units
	23 73 33.16	Indoor Indirect On-Fried Heating and Ventilating Units
	23 73 39	Indoor, Direct Gas-Fired Heating and Ventilating Units
23	74 00	Packaged Outdoor HVAC Equipment
	23 74 13	Packaged, Outdoor, Central-Station Air-Handling Units
	23 74 23	Packaged, Outdoor, Heating-Only Makeup-Air Units
	23 74 23.13	Packaged, Direct-Fired, Outdoor, Heating-Only Makeup-Air Units
	23 74 23.16	Packaged, Indirect-Fired, Outdoor, Heating-Only Makeup-Air Units
22	23 74 33 75 00	Dedicated Outdoor-Air Units
23	75 00	Custom-Packaged Outdoor HVAC Equipment
	23 75 13 23 75 23	Custom-Packaged, Outdoor, Central-Station Air-Handling Units Custom-Packaged, Outdoor, Heating and Ventilating Makeup-Air Units
	23 75 23	Custom-Packaged, Outdoor, Heating and Cooling Makeup Air-Conditioners
23	76 00	Evaporative Air-Cooling Equipment
25	23 76 13	Direct Evaporative Air Coolers
	23 76 16	Indirect Evaporative Air Coolers
	23 76 19	Combined Direct and Indirect Evaporative Air Coolers
23	80 00	Decentralized HVAC Equipment
25	81 00	Decentralized Unitary HVAC Equipment
	23 81 13 23 81 16	Packaged Terminal Air-Conditioners Room Air-Conditioners
	23 81 19	Self-Contained Air-Conditioners
	23 81 19.13	Small-Capacity Self-Contained Air-Conditioners
	23 81 19.16	Large-Capacity Self-Contained Air-Conditioners
	23 81 23	Computer-Room Air-Conditioners
	23 81 26	Split-System Air-Conditioners
	23 81 26.13 23 81 26.16	Small-Capacity Split-System Air-Conditioners Large-Capacity Split-System Air-Conditioners
	23 81 29	Variable Refrigerant Flow HVAC Systems
	23 81 43	Air-Source Unitary Heat Pumps
	23 81 46	Water-Source Unitary Heat Pumps
23	82 00	Convection Heating and Cooling Units
	23 82 13	Valance Heating and Cooling Units
	23 82 14	Chilled Beams
	23 82 16	Air Coils
	23 82 19	Fan Coil Units Unit Ventilators
	23 82 23 23 82 26	Induction Units

23 82 29 23 82 33 23 82 36 23 82 39 23 82 39.13	Radiators Convectors Finned-Tube Radiation Heaters Unit Heaters Cabinet Unit Heaters
23 82 39.16	Propeller Unit Heaters
23 82 39.19	Wall and Ceiling Unit Heaters
23 82 41	Water-to-Water Heat Pumps
23 83 00	Radiant Heating Units
23 83 13	Radiant-Heating Electric Cables
23 83 13.16	Radiant-Heating Electric Mats
23 83 16	Radiant-Heating Hydronic Piping
23 83 23	Radiant-Heating Electric Panels
23 83 33	Electric Radiant Heaters
23 84 00	Humidity Control Equipment
23 84 13	Humidifiers
23 84 13.13	Heated-Pan Humidifiers
23 84 13.16	Wetted-Element Humidifiers
23 84 13.19	Atomizing Humidifiers
23 84 13.23	Direct-Steam-Injection Humidifiers
23 84 13.26	Jacketed, Steam Humidifiers
23 84 13.29	Self-Contained Steam Humidifiers
23 84 13.33	Portable Humidifiers
23 84 16	Mechanical Dehumidification Units
23 84 16.13	Outdoor, Mechanical Dehumidification Units
23 84 16.16	Indoor, Mechanical Dehumidification Units
23 84 16.33	Portable Dehumidifiers
23 84 19	Desiccant Dehumidification Units

25 00 00	Integrated Automation
25 01 00	Operation and Maintenance of Integrated Automation
25 01 10	Operation and Maintenance of Integrated Automation Network Equipment
25 01 20	Operation and Maintenance of Integrated Equipment
25 01 30	Operation and Maintenance of Integrated Automation Instrumentation and
25 01 90	Terminal Devices Diagnostic Systems for Integrated Automation
25 05 00	Common Work Results for Integrated Automation
25 05 13	Conductors and Cables for Integrated Automation
25 05 26	Grounding and Bonding for Integrated Automation
25 05 28	Pathways for Integrated Automation
25 05 28.29	Hangers and Supports for Integrated Automation
25 05 28.33	Conduits and Backboxes for Integrated Automation
25 05 28.36	Cable Trays for Integrated Automation
25 05 28.39 25 05 48	Surface Raceways for Integrated Automation Vibration and Seismic Controls for Integrated Automation
25 05 53	Identification for Integrated Automation
25 06 00	Schedules for Integrated Automation
25 06 11	Schedules for Integrated Automation Network
25 06 12	Schedules for Integrated Automation Network Gateways
25 06 13	Schedules for Integrated Automation Control and Monitoring Network
25 06 14	Schedules for Integrated Automation Local Control Units
25 06 30	Schedules for Integrated Automation Instrumentation and Terminal Devices
25 08 00	Commissioning of Integrated Automation
25 10 00	Integrated Automation Network Equipment
25 11 00	Integrated Automation Network Devices
25 11 13	
25 11 13 25 11 16	Integrated Automation Network Servers
25 11 16	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems
25 11 16 25 11 19	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations
25 11 16 25 11 19 25 12 00	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways
25 11 16 25 11 19 25 12 00 25 12 13	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Control
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Local Control Units
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00 25 14 13	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Remote Control Panels Integrated Automation Remote Control Panels
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Local Control Units
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00 25 14 13 25 14 16	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Local Control Units Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00 25 14 13 25 14 16 25 14 19	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Local Control Units Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels Integrated Automation Terminal Control Units
25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00 25 14 13 25 14 16 25 14 19 25 14 23	Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integrated Panels Integrated Automation Local Control Units Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels Integrated Automation Terminal Control Units Integrated Automation Field Equipment Panels

25 15 19	Integrated Automation Software for Local Control Units
25 30 00	Integrated Automation Instrumentation
	and Terminal Devices
25 31 00	Integrated Automation Instrumentation and Terminal
	Devices for Facility Equipment
25 32 00	Integrated Automation Instrumentation and Terminal
0E 22 00	Devices for Conveying Equipment
25 33 00	Integrated Automation Instrumentation and Terminal
25 34 00	Devices for Fire-Suppression Systems Integrated Automation Instrumentation and Terminal
23 34 00	Devices for Plumbing
25 35 00	Integrated Automation Instrumentation and Terminal
	Devices for HVAC
25 35 13	Integrated Automation Actuators and Operators
25 35 16 25 35 10	Integrated Automation Sensors and Transmitters
25 35 19 25 35 23	Integrated Automation Control Valves Integrated Automation Control Dampers
25 35 26	Integrated Automation Compressed Air Supply
25 36 00	Integrated Automation Instrumentation and Terminal
	Devices for Electrical Systems
25 36 13	Integrated Automation Power Meters
25 36 16	Integrated Automation KW Transducers
25 36 19 25 36 23	Integrated Automation Current Sensors Integrated Automation Battery Monitors
25 36 25 25 36 26	Integrated Automation Dattery Monitors Integrated Automation Lighting Relays
25 36 29	Integrated Automation UPS Monitors
25 37 00	Integrated Automation Instrumentation and Terminal
	Devices for Communications Systems
25 38 00	Integrated Automation Instrumentation and Terminal
	Devices for Electronic Safety and Security Systems
25 50 00	Integrated Automation Facility Controls
25 51 00	Integrated Automation Control of Facility Equipment
25 52 00	Integrated Automation Control of Conveying
05 50 00	Equipment
25 53 00	Integrated Automation Control of Fire-Suppression
05 54 00	Systems
25 54 00	Integrated Automation Control of Plumbing
25 55 00	Integrated Automation Control of HVAC
25 56 00	Integrated Automation Control of Electrical Systems
25 57 00	Integrated Automation Control of Communications
	Systems

25 58 00	Integrated Automation Control of Electronic Safety and Security Systems
25 90 00	Integrated Automation Control Sequences
25 91 00	Integrated Automation Control Sequences for Facility Equipment
25 92 00	Integrated Automation Control Sequences for Conveying Equipment
25 93 00	Integrated Automation Control Sequences for Fire- Suppression Systems
25 94 00	Integrated Automation Control Sequences for Plumbing
25 95 00	Integrated Automation Control Sequences for HVAC
25 96 00	Integrated Automation Control Sequences for Electrical Systems
25 97 00	Integrated Automation Control Sequences for Communications Systems
25 98 00	Integrated Automation Control Sequences for Electronic Safety and Security Systems

26 00 00	Electrical
26 01 00	Operation and Maintenance of Electrical Systems
26 01 10	Operation and Maintenance of Medium-Voltage Electrical Distribution
26 01 20	Operation and Maintenance of Low-Voltage Electrical Distribution
26 01 26	Maintenance Testing of Electrical Systems
26 01 30	Operation and Maintenance of Facility Electrical Power Generating and Storing Equipment
26 01 40 26 01 50	Operation and Maintenance of Electrical and Cathodic Protection Systems Operation and Maintenance of Lighting
26 01 50.51	Luminaire Relamping
26 01 50.81	Luminaire Replacement
26 05 00	Common Work Results for Electrical
26 05 13	Medium-Voltage Cables
26 05 13.13	Medium-Voltage Open Conductors
26 05 13.16	Medium-Voltage, Single- and Multi-Conductor Cables
26 05 19	Low-Voltage Electrical Power Conductors and Cables
26 05 19.13	Undercarpet Electrical Power Cables
26 05 19.23 26 05 23	Manufactured Wiring Assemblies Control-Voltage Electrical Power Cables
26 05 26	Grounding and Bonding for Electrical Systems
26 05 29	Hangers and Supports for Electrical Systems
26 05 33	Raceway and Boxes for Electrical Systems
26 05 33.13	Conduit for Electrical Systems
26 05 33.16	Boxes for Electrical Systems
26 05 33.23	Surface raceways for Electrical Systems
26 05 36	Cable Trays for Electrical Systems
26 05 39	Underfloor Raceways for Electrical Systems
26 05 43	Underground Ducts and Raceways for Electrical Systems
26 05 46	Utility Poles for Electrical Systems
26 05 48	Vibration and Seismic Controls for Electrical Systems
26 05 53	Identification for Electrical Systems
26 05 73	Overcurrent Protective Device Coordination Study
26 05 83	Wiring Connections
26 06 00	Schedules for Electrical
26 06 10	Schedules for Medium-Voltage Electrical Distribution
26 06 20	Schedules for Low-Voltage Electrical Distribution
26 06 20.13	Electrical Switchboard Schedule
26 06 20.16	Electrical Panelboard Schedule
26 06 20.19	Electrical Motor-Control Center Schedule
26 06 20.23	Electrical Circuit Schedule
26 06 20.26	Wiring Device Schedule
26 06 30	Schedules for Facility Electrical Power Generating and Storing Equipment
26 06 40	Schedules for Electrical and Cathodic Protection Systems
26 06 50	Schedules for Lighting
26 06 50.13	Lighting Panelboard Schedule
26 06 50.16	Lighting Fixture Schedule
26 08 00	Commissioning of Electrical Systems
26 09 00	Instrumentation and Control for Electrical Systems
26 09 13	Electrical Power Monitoring
26 09 15	Peak Load Controllers

	26 09 16	Electrical Controls and Relays
	26 09 17	Programmable Controllers
	26 09 19	Enclosed Contactors
	26 09 23	Lighting Control Devices
	26 09 26	Lighting Control Panelboards
	26 09 33	Central Dimming Controls
	26 09 33.13	Multichannel Remote-Controlled Dimmers
	26 09 33.16	Remote-Controlled Dimming Stations
	26 09 36	Modular Dimming Controls
	26 09 36.13 26 09 36.16	Manual Modular Dimming Controls Integrated Multipreset Modular Dimming Controls
	26 09 43	Network Lighting Controls
	26 09 43.13	Digital-Network Lighting Controls
	26 09 43.16	Addressable Fixture Lighting Control
	26 09 43.19	Wireless Network Lighting Controls
	26 09 61	Theatrical Lighting Controls
26	10 00	Medium-Voltage Electrical Distribution
26 ′	11 00	Substations
	26 11 13	Primary Unit Substations
	26 11 16	Secondary Unit Substations
26 ′	12 00	Medium-Voltage Transformers
	26 12 13	Liquid-Filled, Medium-Voltage Transformers
	26 12 16	Dry-Type, Medium-Voltage Transformers
	26 12 19	Pad-Mounted, Liquid-Filled, Medium-Voltage Transformers
26 ′	13 00	Medium-Voltage Switchgear
	26 13 13	Medium-Voltage Circuit Breaker Switchgear
	26 13 16	Medium-Voltage Fusible Interrupter Switchgear
	26 13 19	Medium-Voltage Vacuum Interrupter Switchgear
	26 13 23	Medium-Voltage Metal-Enclosed Switchgear
	26 13 26	Medium-Voltage Metal-Clad Switchgear
00	26 13 29	Medium-Voltage Compartmentalized Switchgear
_	16 00	Medium-Voltage Metering
26 ′	18 00	Medium-Voltage Circuit Protection Devices
	26 18 13	Medium-Voltage Cutouts
	26 18 16	Medium-Voltage Fuses
	26 18 19	Medium-Voltage Lightning Arresters
	26 18 23	Medium-Voltage Surge Arresters
	26 18 26	Medium-Voltage Reclosers
	26 18 29	Medium-Voltage Enclosed Bus
	26 18 33	Medium-Voltage Enclosed Fuses Cutouts
	26 18 36 26 18 39	Medium-Voltage Enclosed Fuses Medium-Voltage Motor Controllers
26	20 00	
	20 00 21 00	Low-Voltage Electrical Transmission
20 4		Low-Voltage Electrical Service Entrance
	26 21 13 26 21 16	Low-Voltage Underground Floatrical Service Entrance
26 4		Low Voltage Transformers
40	22 00	Low-Voltage Transformers
	26 22 13	Low-Voltage Distribution Transformers

26 22 16	Low-Voltage Buck-Boost Transformers
26 22 19	Control and Signal Transformers
26 23 00	Low-Voltage Switchgear
26 23 13	Paralleling Low-Voltage Switchgear
26 24 00	Switchboards and Panelboards
26 24 13	Switchboards
26 24 16	Panelboards
26 24 19	Motor-Control Centers
26 25 00	Enclosed Bus Assemblies
26 26 00	Power Distribution Units
26 27 00	Low-Voltage Distribution Equipment
26 27 13	Electricity Metering
26 27 16	Electrical Cabinets and Enclosures
26 27 19	Multi-Outlet Assemblies
26 27 23	Indoor Service Poles
26 27 26	Wiring Devices
26 27 73	Door Chimes
26 28 00	Low-Voltage Circuit Protective Devices
26 28 13	Fuses
26 28 16	
26 28 16.16	Enclosed Circuit Breakers Enclosed Switches
26 29 00	Low-Voltage Controllers
26 29 13	Enclosed Controllers
26 29 13.13	Across-the-Line Motor Controllers
26 29 13.16	Reduced-Voltage Motor Controllers
26 29 23	Variable-Frequency Motor Controllers
26 29 33	Controllers for Fire Pump Drivers
26 29 33.13	Full-Service Controllers for Fire Pump Electric-Motor Drivers
26 29 33.16 26 29 33.19	Limited-Service Controllers for Fire Pump Electric-Motor Drivers
	Controllers for Fire Pump Diesel Engine Drivers
26 30 00	Facility Electrical Power Generating and
	Storing Equipment
26 31 00	Photovoltaic Collectors
26 32 00	Packaged Generator Assemblies
26 32 13	Engine Generators
26 32 13.13	Diesel-Engine-Driven Generator Sets
26 32 13.16	Gas-Engine-Driven Generator Sets
26 32 13.26	Gas-Turbine Engine-Driven Generators
26 32 16 26 32 19	Steam-Turbine Generators Hydro-Turbine Generators
26 32 23	Wind Energy Equipment
26 32 26	Frequency Changers
26 32 29	Rotary Converters
26 32 33	Rotary Uninterruptible Power Units
26 32 36	Resistive Load Banks
26 33 00	Battery Equipment
26 33 13	Batteries

26 33 16	Battery Racks
26 33 19	Battery Units
26 33 23	Central Battery Equipment
26 33 33	Static Power Converters
26 33 43	Battery Chargers
26 33 46	Battery Monitoring
26 33 53	Static Uninterruptible Power Supply
26 35 00	Power Filters and Conditioners
26 35 13	Capacitors
26 35 16 26 35 23	Chokes and Inductors
26 35 25 26 35 26	Electromagnetic-Interference Filters Harmonic Filters
26 35 33	Power Factor Correction Equipment
26 35 36	Slip Controllers
26 35 43	Static-Frequency Converters
26 35 46	Radio-Frequency-Interference Filters
26 35 53	Voltage Regulators
26 36 00	Transfer Switches
26 36 13	Manual Transfer Switches
26 36 23	Automatic Transfer Switches
26 40 00	Electrical and Cathodic Protection
26 41 00	Facility Lightning Protection
26 41 13	Lightning Protection for Structures
26 41 13.13	Lightning Protection for Buildings
26 41 16	Lightning Prevention and Dissipation
26 41 19 26 41 23	Early Streamer Emission Lightning Protection
26 42 00	Lightning Protection Surge Arresters and Suppressors Cathodic Protection
26 42 13 26 42 16	Passive Cathodic Protection for Underground and Submerged Piping Passive Cathodic Protection for Underground Storage Tank
26 43 00	Surge Protective Devices
26 43 13	Surge Protective Devices for Low-Voltage Electrical Power Circuitsrical Power Circuits
26 50 00	Lighting
26 51 00	Interior Lighting
26 51 13	Interior Lighting Fixtures, Lamps, And Ballasts
26 52 00	Emergency Lighting
26 53 00	Exit Signs
26 54 00	Classified Location Lighting
26 55 00	Special Purpose Lighting
26 55 23	Outline Lighting
26 55 29	Underwater Lighting
26 55 33	Hazard Warning Lighting
26 55 36	Obstruction Lighting
26 55 39	Helipad Lighting
26 55 53	Security Lighting
26 55 59	Display Lighting

26 55 61 26 55 63 26 55 70 26 55 83	Theatrical Lighting Detention Lighting Healthcare Lighting Broadcast Lighting
26 56 00	Exterior Lighting
26 56 13	Lighting Poles and Standards
26 56 16	Parking Lighting
26 56 19	Roadway Lighting
26 56 23	Area Lighting
26 56 26	Landscape Lighting
26 56 29	Site Lighting
26 56 33	Walkway Lighting
26 56 36	Flood Lighting
26 56 68	Exterior Athletic Lighting

27 00 00	Communications
27 01 00	Operation and Maintenance of Communications
	Systems
27 01 10	Operation and Maintenance of Structured Cabling and Enclosures
27 01 20	Operation and Maintenance of Data Communications
27 01 30	Operation and Maintenance of Voice Communications
27 01 40	Operation and Maintenance of Audio-Video Communications
27 01 50	Operation and Maintenance of Distributed Communications and Monitoring
27 05 00	Common Work Results for Communications
27 05 13	Communications Services
27 05 13.13	Dialtone Services
27 05 13.23 27 05 13.33	T1 Services DSL Services
27 05 13.43	Cable Services
27 05 13.53	Satellite Services
27 05 26	Grounding and Bonding for Communications Systems
27 05 28	Pathways for Communications Systems
27 05 29	Hangers and Supports for Communications Systems
27 05 33 27 05 36	Conduits and Backboxes for Communications Systems
27 05 36 27 05 39	Cable Trays for Communications Systems Surface Raceways for Communications Systems
27 05 43	Underground Ducts and Raceways for Communications Systems
27 05 46	Utility Poles for Communications Systems
27 05 48	Vibration and Seismic Controls for Communications Systems
27 05 53	Identification for Communications Systems
27 06 00	Schedules for Communications
27 06 10	Schedules for Structured Cabling and Enclosures
27 06 20	Schedules for Data Communications
27 06 30	Schedules for Voice Communications
27 06 40	Schedules for Audio-Video Communications
27 06 50	Schedules for Distributed Communications and Monitoring
27 08 00	Commissioning of Communications
27 10 00	Structured Cabling
27 11 00	Communications Equipment Room Fittings
27 11 13	Communications Entrance Protection
27 11 16	Communications Cabinets, Racks, Frames, and Enclosures
27 11 19	Communications Termination Blocks and Patch Panels
27 11 23 27 11 26	Communications Cable Management and Ladder Rack Communications Rack Mounted Power Protection and Power Strips
27 13 00	Communications Backbone Cabling
27 13 00	Communications Dackbone Cabling Communications Copper Backbone Cabling
27 13 13.13	Communications Copper Backbone Cability Communications Copper Cable Splicing and Terminations
27 13 23	Communications Optical Fiber Backbone Cabling
27 13 23.13	Communications Optical Fiber Splicing and Terminations
27 13 33	Communications Coaxial Backbone Cabling
27 13 33.13	Communications Coaxial Splicing and Terminations
27 13 43 27 13 43.13	Communications Services Cabling Dialtone Services Cabling
ZI 10 40.10	Diatono Oci vicos Cabiling

	27 13 43.23	T1 Services Cabling
	27 13 43.33 27 13 43.43	DSL Services Cabling Cable Services Cabling
	27 13 43.43	Satellite Services Cabling
27	15 00	Communications Horizontal Cabling
	15 00.16	Voice Communications Horizontal Cabling
	15 00.10	
		Data Communications Horizontal Cabling
	15 00.23	Audio-Video Communications Horizontal Cabling
27	15 00.39	Patient Monitoring and Telemetry Communications
		Horizontal Cabling
27	15 00.43	Nurse Call and Intercom Communications Horizonta
		Cabling
27	15 00.46	Paging Communications Horizontal Cabling
	15 00.49	Intermediate Frequency/Radio Frequency
Z I	13 00.49	
	45.00.50	Communications Horizontal Cabling
21	15 00.53	Antennas Communications Horizontal Cabling
	27 15 13	Communications Copper Horizontal Cabling
	27 15 23 27 15 33	Communications Optical Fiber Horizontal Cabling Communications Coaxial Horizontal Cabling
	27 15 33	Communications Coaxial Horizontal Cability Communications Faceplates and Connectors
27	16 00	Communications Connecting Cords, Devices, and
21	10 00	
	27.16.12	Adapters Communications Custom Coble Assemblies
	27 16 13 27 16 16	Communications Custom Cable Assemblies Communications Media Converters, Adapters, and Transceivers
	27 16 19	Communications Patch Cords, Station Cords, and Cross Connect Wire
27	7 20 00	Data Communications
27	21 00	Data Communications Network Equipment
	27 21 13	Data Communications Firewalls
	27 21 16	Data Communications Routers, CSU/DSU, Multiplexers, Codecs, and Modems
	27 21 26	Data Communications Network Management
	27 21 29	Data Communications Switches and Hubs
	27 21 33	Data Communications Wireless Access Points
27	22 00	Data Communications Hardware
	27 22 13	Data Communications Mainframes
	27 22 16	Data Communications Storage and Backup
	27 22 19	Data Communications Servers
	27 22 23	Data Communications Desktops
	27 22 26 27 22 29	Data Communications Laptops Data Communications Handhelds
27	24 00	
Z I	27 24 13	Data Communications Peripheral Data Equipment Printers
	27 24 13 27 24 16	Scanners
	27 24 19	External Drives
	27 24 23	Audio-Video Devices
	27 24 26	Virtual Reality Equipment

	27 24 29	Disaster Recovery Equipment
27	25 00	Data Communications Software
	27 25 13	Virus Protection Software
	27 25 16	Application Suites
	27 25 19	Email Software
	27 25 23	Graphics/Multimedia Software
	27 25 26	Customer Relationship Management Software
	27 25 29	Operating System Software
	27 25 33	Database Software
	27 25 37	Virtual Private Network Software
	27 25 39	Internet Conferencing Software
27	26 00	Data Communications Programming and Integration
		Services
	27 26 13	Web Development
	27 26 16	Database Development
	27 26 19	Application Development
	27 26 23	Network Integration Requirements
	27 26 26	Data Communications Integration Requirements
27	30 00	Voice Communications
21	31 00	Voice Communications Switching and Routing
		Equipment
	27 31 13	PBX/ Key Systems
	27 31 23	Internet Protocol Voice Switches
27	32 00	Voice Communications Terminal Equipment
	27 32 13	Telephone Sets
	27 32 16	Wireless Transceivers
	27 32 23	Elevator Telephones
	27 32 26	Ring-Down Emergency Telephones
	27 32 29	Facsimiles and Modems
	27 32 36	TTY Equipment
	27 32 43	Radio Communications Equipment
27	33 00	Voice Communications Messaging
	27 33 16	Voice Mail and Auto Attendant
	27 33 23	Interactive Voice Response
	27 33 26	Facsimile Servers
27	34 00	Call Accounting
	27 34 13	Toll Fraud Equipment and Software
	27 34 16	Telemanagement Software
27	35 00	Call Management
	27 35 13	Digital Voice Announcers
	27 35 16	Automatic Call Distributors
	27 35 19	Call Status and Management Displays
	27 35 23	Dedicated 911 Systems
27	40 00	Audio-Video Communications
	41 00	
4 1		Audio-Video Systems
	27 41 13	Architecturally Integrated Audio-Video Equipment
	27 41 16	Integrated Audio-Video Systems and Equipment

27 41 16.25 27 41 16.28	Integrated Audio-Video Systems and Equipment for Restaurants and Bars Integrated Audio-Video Systems and Equipment for Conference Rooms
27 41 16.29	Integrated Audio-Video Systems and Equipment for Board Rooms
27 41 16.51	Integrated Audio-Video Systems and Equipment for Classrooms
27 41 16.52	Integrated Audio-Video Systems and Equipment for Religious Facilities
27 41 16.61	Integrated Audio-Video Systems and Equipment for Theaters
27 41 16.62	Integrated Audio-Video Systems and Equipment for Auditoriums
27 41 16.63	Integrated Audio-Video Systems and Equipment for Stadiums and Arenas
27 41 19	Portable Audio-Video Equipment
27 41 23	Audio-Video Accessories
27 41 33	Master Antenna Television Systems
27 41 43	Audio-Video Conferencing
27 42 00	Electronic Digital Systems
27 42 13	Point of Sale Systems
27 42 16	Transportation Information Display Systems
27 42 19	Public Information Systems
27 50 00	Distributed Communications and
	Monitoring Systems
27 51 00	Distributed Audio-Video Communications Systems
27 51 13	Paging Systems
27 51 13.13	Overhead Paging Systems
27 51 16	Public Address Systems
27 51 19	Sound Masking Systems
27 51 23	Intercommunications and Program Systems
27 51 23.20	Commercial Intercommunications and Program Systems
27 51 23.30	Residential Intercommunications and Program Systems
27 51 23.50	Educational Intercommunications and Program Systems
27 51 23.63	Detention Intercommunications and Program Systems
27 51 23.70 27 51 26	Healthcare Intercommunications and Program Systems
	Assistive Listening Systems
27 52 00	Healthcare Communications and Monitoring Systems
27 52 13	Patient Monitoring and Telemetry Systems
27 52 16	Telemedicine Systems
27 52 19	Healthcare Imaging Systems
27 52 23	Nurse Call/Code Blue Systems
27 53 00	Distributed Systems
27 53 13	Clock Systems
27 53 13.13	Wireless Clock Systems
27 53 16	Infrared and Radio Frequency Tracking Systems
27 53 19	Internal Cellular, Paging, and Antenna Systems

28 00 00	Electronic Safety and Security
28 01 00	Operation and Maintenance of Electronic Safety and Security
28 01 10	Operation and Maintenance of Electronic Access Control and Intrusion Detection
28 01 10.51	Maintenance and Administration of Electronic Access Control and Intrusion Detection
28 01 10.71 28 01 20	Revisions and Upgrades of Electronic Access Control and Intrusion Detection Operation and Maintenance of Electronic Surveillance
28 01 30 28 01 30.51	Operation and Maintenance of Electronic Detection and Alarm Maintenance and Administration of Electronic Detection and Alarm
28 01 30.71 28 01 40	Revisions and Upgrades of Electronic Detection and Alarm Operation and Maintenance of Electronic Monitoring and Control
28 01 40.51 28 01 40.71	Maintenance and Administration of Electronic Monitoring and Control Revisions and Upgrades of Electronic Monitoring and Control
28 05 00	Common Work Results for Electronic Safety and
	Security
28 05 13 28 05 13.13	Conductors and Cables for Electronic Safety and Security CCTV Communications Conductors and Cables
28 05 13.16	Access Control Communications Conductors and Cables
28 05 13.19	Intrusion Detection Communications Conductors and Cables
28 05 13.23	Fire Alarm Communications Conductors and Cables
28 05 26	Grounding and Bonding for Electronic Safety and Security
28 05 28 28 05 28.29	Pathways for Electronic Safety and Security
28 05 28.33	Hangers and Supports for Electronic Safety and Security Conduits and Backboxes for Electronic Safety and Security
28 05 28.36	Cable Trays for Electronic Safety and Security
28 05 28.39	Surface Raceways for Electronic Safety and Security
28 05 48	Vibration and Seismic Controls for Electronic Safety and Security
28 05 53 28 06 00	Identification for Electronic Safety and Security
28 06 10	Schedules for Electronic Safety and Security Schedules for Electronic Access Control and Intrusion Detection
28 06 20	Schedules for Electronic Access Control and Intrusion Detection Schedules for Electronic Surveillance
28 06 30	Schedules for Electronic Detection and Alarm
28 06 40	Schedules for Electronic Monitoring and Control
28 08 00	Commissioning of Electronic Safety and Security
28 10 00	Electronic Access Control and Intrusion
	Detection
28 13 00	Access Control
28 13 13	Access Control Global Applications
28 13 16	Access Control Systems and Database Management
28 13 19	Access Control Systems Infrastructure
28 13 26	Access Control Remote Devices Wireless Access Control Povices
28 13 26.11 28 13 33	Wireless Access Control Devices Access Control Interfaces
28 13 33.16	Access Control Interfaces to Access Control Hardware
28 13 33.26	Access Control Interfaces to Intrusion Detection
28 13 33.33	Access Control Interfaces to Video Surveillance
28 13 33.36	Access Control Interfaces to Fire Alarm

	28 13 43	Access Control Identification Management Systems
	28 13 53	Security Access Detection
	28 13 53.13	Security Access Metal Detectors
	28 13 53.16	Security Access X-Ray Equipment
	28 13 53.23	Security Access Explosive Detection Equipment
	28 13 53.29	Security Access Sniffing Equipment
	28 13 63	Access Control Vehicle Identification System
28	16 00	Intrusion Detection
	28 16 13	Intrusion Detection Control, GUI, and Logic Systems
	28 16 16	Intrusion Detection Systems Infrastructure
	28 16 19	Intrusion Detection Remote Devices and Sensors
	28 16 33	Intrusion Detection Interfaces
	28 16 33.13	Intrusion Detection Interfaces to Remote Monitoring
	28 16 33.16	Intrusion Detection Interfaces to Access Control Hardware
	28 16 33.23 28 16 33.33	Intrusion Detection Interfaces to Access Control System Intrusion Detection Interfaces to Video Surveillance
	28 16 33.36	Intrusion Detection Interfaces to Video Surveillance
	28 16 43	Perimeter Security Systems
20		
_	20 00	Electronic Surveillance
28	23 00	Video Surveillance
	28 23 13	Video Surveillance Control and Management Systems
	28 23 16	Video Surveillance Monitoring and Supervisory Interfaces
	28 23 19	Digital Video Recorders and Analog Recording Devices
	28 23 23	Video Surveillance Systems Infrastructure
	28 23 26	Video Surveillance Remote Positioning Equipment
	28 23 29	Video Surveillance Remote Devices and Sensors
28	26 00	Electronic Personal Protection Systems
	28 26 13	Electronic Personal Safety Detection Systems
	28 26 16	Electronic Personal Safety Alarm Annunciation and Control Systems
	28 26 19	Electronic Personal Safety Interfaces to Remote Monitoring
	28 26 23	Electronic Personal Safety Emergency Aid Devices
28	30 00	Electronic Detection and Alarm
	31 00	Fire Detection and Alarm
20	28 31 11	
		Digital, Addressable Fire-Alarm Systems
	28 31 12 28 31 13	Zoned (DC Loop) Fire-Alarm Systems Fire Detection and Alarm Control, GUI, and Logic Systems
	28 31 23	Fire Detection and Alarm Control, Gol, and Logic Systems Fire Detection and Alarm Annunciation Panels and Fire Stations
	28 31 33	Fire Detection and Alarm Interfaces
	28 31 33.13	Fire Detection and Alarm Interfaces to Remote Monitoring
	28 31 33.16	Fire Detection and Alarm Interfaces to Access Control Hardware
	28 31 33.23	Fire Detection and Alarm Interfaces to Access Control System
	28 31 33.26	Fire Detection and Alarm Interfaces to Intrusion Detection
	28 31 33.33	Fire Detection and Alarm Interfaces to Video Surveillance
	28 31 33.43	Fire Detection and Alarm Interfaces to Elevator Control
	28 31 43	Fire Detection Sensors
	28 31 46	Smoke Detection Sensors
	28 31 49	Carbon-Monoxide Detection Sensors
	28 31 53	Fire Alarm Initiating Devices
	28 31 53.13 28 31 53.23	Fire Alarm Pull Stations Fire Alarm Level Detectors Switches
	70.31.3575	LUE MAIN LEVEL DELEGIOS OWIIGHES

28 31 53.33	Fire Alarm Flow Switches
28 31 53.43	Fire Alarm Pressure Sensors
28 31 63	Fire Alarm Integrated Audio Visual Evacuation Systems Fire Alarm Horns and Strobes
28 31 63.13	
28 32 00	Radiation Detection and Alarm
28 32 13	Radiation Detection and Alarm Control, GUI, and Logic Systems
28 32 23	Radiation Detection and Alarm Integrated Audio Evacuation Systems
28 32 33	Radiation Detection Sensors
28 32 43	Radiation Dosimeters
28 33 00	Gas Detection and Alarm
28 33 13	Gas Detection and Alarm Control, GUI, and Logic Systems
28 33 23	Gas Detection and Alarm Integrated Audio Evacuation Systems
28 33 33	Gas Detection Sensors
28 34 00	Fuel-Oil Detection and Alarm
28 34 13	Fuel-Oil Detection and Alarm Control, GUI, and Logic Systems
28 34 23	Fuel-Oil Detection and Alarm Integrated Audio Evacuation Systems
28 34 33	Fuel-Oil Detection Sensors
28 35 00	Refrigerant Detection and Alarm
28 35 13	Refrigerant Detection and Alarm Control, GUI, and Logic Systems
28 35 23	Refrigerant Detection and Alarm Integrated Audio Evacuation Systems
28 35 33	Refrigerant Detection Sensors
28 36 00	Water Detection and Alarm
28 36 13	Water Detection and Alarm Control, GUI, and Logic Systems
28 36 33	Water Detection Sensors
28 36 43	Building Envelope Water Detection and Alarm
28 39 00	Mass Notification Systems
28 40 00	Electronic Monitoring and Control
28 41 00	Electronic Structural Monitoring Systems
28 46 00	Electronic Detention Monitoring and Control Systems
28 46 13	Hard-Wired Detention Monitoring and Control Systems
28 46 16	Relay-Logic Detention Monitoring and Control Systems
28 46 19	PLC Electronic Detention Monitoring and Control Systems
28 46 23	Computer-Based Detention Monitoring and Control Systems
28 46 26	Discreet-Logic Detention Monitoring and Control Systems
28 46 29	Discreet-Distributed Intelligence Detention Monitoring and Control Systems

31 01 10 Maintenance of Clearing 31 01 20 Maintenance of Earth Moving 31 01 40 Maintenance of Shoring and Underpinning 31 01 50 Maintenance of Excavation Support and Protection 31 01 60 Maintenance of Special Foundations and Load Bearing Elements Maintenance of Driven Piles Driven Pile Repairs Maintenance of Bored and Augered Piles Maintenance of Bored and Augered Piles Maintenance of Tunneling and Mining Maintenance of Bored and Augered Piles Maintenance of Duren Piles Maintenance of Bored and Augered Piles Maintenance of Duren Piles Maintenance of Bored and Augered Piles Maintenance of Bored and A	31 00 00) Earthwork
31 01 20 Maintenance of Earth Moving 31 01 40 Maintenance of Shoring and Underpinning 31 01 50 Maintenance of Special Foundations and Load Bearing Elements 31 01 62 Maintenance of Driven Piles 31 01 62.61 Driven Pile Repairs 31 01 63 Maintenance of Bored and Augered Piles 31 01 63.61 Bored and Augered Pile Repairs 31 01 70 Maintenance of Tunneling and Mining 31 05 00 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.19 Geomembranes for Earthwork 31 05 19.29 Geonets 31 05 19.29 Geonets 31 06 00 Schedules for Earthwork 31 06 10.20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 60.13 Driven Pile Schedule 31 06 60.15 Driven Pile Schedule 31 06 70 Schedules for Execuation Support and Protection 31 08 10 8 10 8 13 Pile Load Testing 31 08 10 9 00 Geotechnical Instrumentation and Monitoring of Earthwork	31 01 00	Maintenance of Earthwork
31 01 40 Maintenance of Shoring and Underpinning 31 01 50 Maintenance of Excavation Support and Protection 31 01 60 Maintenance of Special Foundations and Load Bearing Elements 31 01 62 Maintenance of Driven Piles 31 01 62.61 Driven Pile Repairs 31 01 63.61 Bored and Augered Pile Repairs 31 01 70.61 Maintenance of Tunneling and Mining 31 01 70.61 Tunnel Leak Repairs 31 05 00 Common Work Results for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.14 Geogrids for Earthwork 31 05 19.15 Geocomposites 31 05 19.25 Geocomposites 31 05 19.26 Geocomposites 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Clearing 31 06 20.13 Trench Dimension Schedule 31 06 60.13 Schedules for Special Foundations and Load Bearing Elements 31 08 10.3 Driven Pile Schedule 31 08 00 Commissioning of Earthwork 31 08 10.3 Pile Load Testing 31 08 10 8 10 Geotechnical Instrumentation and Monitoring of Earthwork		<u> </u>
31 01 50 Maintenance of Excavation Support and Protection 31 01 62 Maintenance of Special Foundations and Load Bearing Elements 31 01 62.61 Driven Pile Repairs 31 01 63.61 Bored and Augered Piles Bored and Augered Piles 31 01 70 Maintenance of Tunneling and Mining 31 05 10 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.19 Geosynthetics Clay Liners 31 05 19.29 Geosyntes 31 06 20. 3 Trench Dimension Schedule 31 06 20. 16 Backfill Material Schedule 31 06 60. 13 Ochedules for Excavation Support and Protection 31 08 00 Commissioning of Earthwork 31 08 10. 10 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork		• • • • • • • • • • • • • • • • • • •
31 01 60 Maintenance of Special Foundations and Load Bearing Elements Maintenance of Driven Piles 31 01 62.61 Driven Pile Repairs 31 01 63.61 Bored and Augered Piles 31 01 70.61 Maintenance of Bored and Augered Piles 31 01 70.61 Maintenance of Tunneling and Mining 31 05 10 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.19 Geosynthetic Clay Liners 31 05 19.29 Geosomets 31 05 19.29 Geomets 31 06 20.13 Trench Dimension Schedule 31 06 20.15 Schedules for Earth Moving 31 06 60.16 Schedules for Shoring and Underpinning 31 06 60.16 Schedules for Excavation Support and Protection 31 08 10 10 Schedules for Tunneling and Mining 31 08 10 10 Schedules for Tunneling and Mining 31 08 10 10 Schedules for Shoring and Underpinning 31 08 10 10 Schedules for Shoring and Underpinning 31 08 10 Schedules for Tunneling and Mining 31 08 10 Schedules for Shoring and Underpinning 31 08 10 Schedules for Tunneling and Mining		
31 01 62 Maintenance of Driven Piles 31 01 62.61 Driven Pile Repairs 31 01 63.61 Bored and Augered Piles Pepairs 31 01 70 Maintenance of Tunneling and Mining 31 01 70.61 Tunnel Leak Repairs 31 05 00 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 16 Aggregates for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.19 Geogritheory 31 05 19.29 Geosynthetic Clay Liners 31 05 19.20 Geocomposites 31 05 19.20 Geonets 31 05 19.20 Geonets 31 05 19.20 Geonets 31 06 00 Schedules for Earthwork 31 06 20 Schedules for Earthwork 31 06 20 Schedules for Clearing 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 60.13 Driven Pile Schedule 31 06 60.13 Driven Pile Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13 Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 01 62.61 Driven Pile Repairs 31 01 63.61 Bored and Augered Piles 31 01 70.61 Maintenance of Tunneling and Mining 31 01 70.61 Tunnel Leak Repairs 31 05 00 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 16 Aggregates for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.19 Geosynthetic Clay Liners 31 05 19.29 Geonets 31 05 19.29 Geonets 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.15 Schedules for Special Foundations and Load Bearing Elements 31 08 00 Commissioning of Earthwork 31 08 10 7 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13.13 Dynamic Pile Load Testing 31 08 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 01 63 31 01 63.61 31 01 63.61 31 01 70 31 01 70.61 31 07 00 31 07 00 31 05 00 31 05 13 31 05 13 31 05 16 31 05 19 31 05 19 31 05 19.13 31 05 19.19 31 05 19.19 31 05 19.23 31 05 19.23 31 05 19.23 31 05 19.23 31 05 19.23 31 05 19.23 31 05 19.20 31 05 23 31 06 00 31 08 00 31 08 00 31 08 13 31 08 13 31 08 13.13 31 08 13.16 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 01 63.61 31 01 70 31 01 70.61 31 01 70.61 31 05 00 31 05 00 31 05 13 31 05 13 31 05 16 31 05 19 31 06 00 31 06 00 31 06 20 31 06 20 31 06 20 31 06 40 31 06 40 31 06 40 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 60 31 06 70 31 08 00 Commissioning of Earthwork 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		•
31 01 70 31 01 70.61 31 01 70.61 31 05 00 31 05 13 31 05 13 31 05 16 31 05 16 31 05 19 32 33 05 19 34 35 19 36 20 37 20 38 20 38 20 39 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30		
31 05 00 Common Work Results for Earthwork 31 05 13 Soils for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.23 Geotextiles for Earthwork 31 05 19.29 Geosynthetic Clay Liners Geosynthetic Clay Liners Geosynthetic Clay Liners Geotemets Common Work Results for Earthwork Geosynthetic Farthwork Geotemethwork Geosynthetic Clay Liners Geosynthetic Clay Liners Geocomposites Geocomposites Common Work Results for Earthwork Geosynthetic Farthwork Geosynthetic Clay Liners Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Farthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Clay Liners Geocomposites Common Work Results for Earthwork Geosynthetic Starthwork Ceocomposites Geocomposites Geocomposites Geocomposites Geocomposites Geocomposites Geocomposites Carthwork Schedules for Earthwork Common Schedule Schedule Sor Clearing Caison Schedule Caison Schedule Caison Schedule Caison Schedule Caison Schedule Common Schedule C		·
31 05 13 Soils for Earthwork 31 05 16 Aggregates for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.16 Geomembranes for Earthwork 31 05 19.16 Geomembranes for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.23 Geosynthetic Clay Liners 31 05 19.29 Geonets 31 05 19.29 Geonets 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Earthwork 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 60.16 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 08 00 Commissioning of Earthwork 31 08 13.10 Dynamic Pile Load Testing 31 08 13.11 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 05 16 Aggregates for Earthwork 31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.16 Geomembranes for Earthwork 31 05 19.29 Geogrids for Earthwork 31 05 19.29 Geonets 31 05 19.29 Geonets 31 05 19.29 Geonets 31 06 00 Schedules for Earthwork 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 60 31 06 60 31 06 60 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 08 10 70 Schedules for Tunneling and Mining 31 08 10 8 13.13 Dynamic Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork	31 05 00	Common Work Results for Earthwork
31 05 19 Geosynthetics for Earthwork 31 05 19.13 Geotextiles for Earthwork 31 05 19.16 Geomembranes for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.29 Geosynthetic Clay Liners 31 05 19.29 Geonets 31 05 19.29 Geonets 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Earthwork 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 60.15 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 13 Dynamic Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork	31 05 13	Soils for Earthwork
31 05 19.13 Geotextiles for Earthwork 31 05 19.16 Geomembranes for Earthwork 31 05 19.21 Geosynthetic Clay Liners Geocomposites 31 05 19.29 Geonets 31 05 19.29 Geonets 31 06 00 Schedules for Earthwork 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 13 31 08 13 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 05 19.16 Geomembranes for Earthwork 31 05 19.19 Geogrids for Earthwork 31 05 19.23 Geosynthetic Clay Liners 31 05 19.26 Geocomposites 31 05 19.29 Geonets 31 05 19.29 Geonets 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Clearing 31 06 20.13 Trench Dimension Schedule 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 08 10 Commissioning of Earthwork 31 08 13 108 13.13 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 05 19.19 Geogrids for Earthwork 31 05 19.23 Geosynthetic Clay Liners 31 05 19.26 Geocomposites 31 05 19.29 Geonets 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Earth Moving 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 08 00 Commissioning of Earthwork 31 08 13.13 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 05 19.23 Geosynthetic Clay Liners 31 05 19.26 Geocomposites 31 05 19.29 Geonets 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Clearing 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 08 00 Commissioning of Earthwork 31 08 13.13 Schedules for Tunneling and Mining Commissioning of Earthwork 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 05 19.26 Geocomposites 31 05 19.29 Geonets 31 05 23 Cement and Concrete for Earthwork 31 06 00 Schedules for Earthwork 31 06 10 Schedules for Clearing 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13.13 Dynamic Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 00 31 06 00 31 06 10 31 06 20 31 06 20 31 06 20.13 31 06 20.16 31 06 40 31 06 50 31 06 60 31 06 60.13 31 06 60.16 31 06 70 31 08 13 31 08 13.13 31 08 13.13 31 09 00 Schedules for Earth Moving Commission Schedule Schedules for Shoring and Underpinning Achieved Schedules for Special Foundations and Load Bearing Elements Schedules for Special Foundations and Load Bearing Elements Schedules for Tunneling and Mining Commissioning of Earthwork Static Pile Load Testing Geotechnical Instrumentation and Monitoring of Earthwork		, ,
31 06 00 Schedules for Earthwork 31 06 10 Schedules for Clearing 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 10 Schedules for Clearing 31 06 20 Schedules for Earth Moving 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 20 31 06 20.13 Trench Dimension Schedule 31 06 20.16 Backfill Material Schedule 31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60 Schedules for Special Foundations and Load Bearing Elements Driven Pile Schedule Caisson Schedule 31 06 60.16 Schedules for Tunneling and Mining Commissioning of Earthwork Pile Load Testing Dynamic Pile Load Testing Static Pile Load Testing Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 20.13 31 06 20.16 31 06 40 31 06 50 31 06 60 31 06 60.13 31 06 60.16 31 06 70 31 08 13 31 08 13.13 31 08 13.16 31 09 00 Trench Dimension Schedule Backfill Material Schedule Backfill Material Schedule Schedules for Shoring and Underpinning Schedules for Excavation Support and Protection Schedules for Special Foundations and Load Bearing Elements Driven Pile Schedule Caisson Schedule Caisson Schedule Schedules for Tunneling and Mining Commissioning of Earthwork Pile Load Testing Static Pile Load Testing Geotechnical Instrumentation and Monitoring of Earthwork		· · · · · · · · · · · · · · · · · · ·
31 06 20.16 31 06 40 31 06 40 31 06 50 31 06 50 31 06 60 31 06 60.13 31 06 60.15 31 06 60.16 31 08 13 31 08 13.13 31 08 13.16 31 09 00 Backfill Material Schedule Schedules for Shoring and Underpinning Schedules for Excavation Support and Protection Schedules for Special Foundations and Load Bearing Elements Driven Pile Schedule Caisson Schedule Schedules for Tunneling and Mining Commissioning of Earthwork Pile Load Testing Dynamic Pile Load Testing Static Pile Load Testing Geotechnical Instrumentation and Monitoring of Earthwork		<u> </u>
31 06 40 Schedules for Shoring and Underpinning 31 06 50 Schedules for Excavation Support and Protection 31 06 60 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 50 Schedules for Excavation Support and Protection 31 06 60 Schedules for Special Foundations and Load Bearing Elements 31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 60 31 06 60.13 31 06 60.14 31 06 70 31 08 00 31 08 13 31 08 13.13 31 08 13.15 31 09 00 Schedules for Special Foundations and Load Bearing Elements Driven Pile Schedule Caisson Schedule Schedules for Tunneling and Mining Commissioning of Earthwork Pile Load Testing Dynamic Pile Load Testing Static Pile Load Testing Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 60.13 Driven Pile Schedule 31 06 60.16 Caisson Schedule 31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 06 70 Schedules for Tunneling and Mining 31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork	31 06 60.1	13 Driven Pile Schedule
31 08 00 Commissioning of Earthwork 31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 08 13 Pile Load Testing 31 08 13.13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 08 13.13 Dynamic Pile Load Testing 31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 08 13.16 Static Pile Load Testing 31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork		
Earthwork		
	31 09 00	
21 00 12 Controbated Instrumentation and Manitorina	24 00 42	
31 09 13 Geotechnical Instrumentation and Monitoring 31 09 13.13 Groundwater Monitoring During Construction		_
31 09 16 Foundation Performance Instrumentation		
31 09 16.26 Bored and Augered Pile Load Tests		
	31 10 00	
•	31 11 00	
3	31 12 00	

31	13 00	Selective Tree and Shrub Removal and Trimming
	31 13 13	Selective Tree and Shrub Removal
	31 13 16	Selective Tree and Shrub Trimming
31	14 00	Earth Stripping and Stockpiling
	31 14 13	Soil Stripping and Stockpiling
	31 14 13.13	Soil Stripping
	31 14 13.16	Soil Stockpiling
	31 14 13.23	Topsoil Stripping and Stockpiling
	31 14 16	Sod Stripping and Stockpiling
	31 14 16.13	Sod Stripping
~ 4	31 14 16.16	Sod Stockpiling
31	20 00	Earth Moving
31	21 00	Off-Gassing Mitigation
	31 21 13	Radon Mitigation
	31 21 13.13	Radon Venting
	31 21 16	Methane Mitigation
	31 21 16.13	Methane Venting
31	22 00	Grading
	31 22 13	Rough Grading
	31 22 16	Fine Grading
	31 22 16.13	Roadway Subgrade Reshaping
	31 22 19	Finish Grading
0.4	31 22 19.13	Spreading and Grading Topsoil
31	23 00	Excavation and Fill
	31 23 13	Subgrade Preparation
	31 23 16	Excavation
	31 23 16.13	Trenching Structural Excavation for Minor Structures
	31 23 16.16 31 23 16.26	Rock Removal
	31 23 10.20	Dewatering
	31 23 23	Fill
	31 23 23.13	Backfill
	31 23 23.23	Compaction
	31 23 23.33	Flowable Fill
	31 23 23.43	Geofoam
	31 23 33	Trenching and Backfilling
31	24 00	Embankments
	31 24 13	Roadway Embankments
	31 24 16	Railway Embankments
31	25 00	Erosion and Sedimentation Controls
	31 25 14	Stabilization Measures for Erosion and Sedimentation Control
	31 25 14.13	Hydraulically-Applied Erosion Control
	31 25 14.16	Rolled Erosion Control Mats and Blankets
	31 25 24	Structural Measures for Erosion and Sedimentation Control
	31 25 24.13	Rock Barriers Potentian Magazines for Fracian and Sadimentation Controls
	31 25 34 31 25 34.13	Retention Measures for Erosion and Sedimentation Controls Rock Basins
24		
3 1	30 00	Earthwork Methods
31	31 00	Soil Treatment

	31 31 13 31 31 13.16 31 31 13.19 31 31 13.23 31 31 13.26 31 31 16.13 31 31 16.16 31 31 16.19 31 31 19.13	Rodent Control Rodent Control Bait Systems Rodent Control Traps Rodent Control Electronic Systems Rodent Control Repellants Termite Control Chemical Termite Control Termite Control Bait Systems Termite Control Barriers Vegetation Control Chemical Vegetation Control
31	32 00	Soil Stabilization
	31 32 13	Soil Mixing Stabilization
	31 32 13.13 31 32 13.16	Asphalt Soil Stabilization Cement Soil Stabilization
	31 32 13.19	Lime Soil Stabilization
	31 32 13.23	Fly-Ash Soil Stabilization
	31 32 13.26 31 32 16	Lime-Fly-Ash Soil Stabilization Chemical Treatment Soil Stabilization
	31 32 16.13	Polymer Emulsion Soil Stabilization
	31 32 17	Water Injection Soil Stabilization
	31 32 19	Geosynthetic Soil Stabilization and Layer Separation
	31 32 19.13 31 32 19.16	Geogrid Soil Stabilization Geotextile Soil Stabilization
	31 32 19.19	Geogrid Layer Separation
	31 32 19.23	Geotextile Layer Separation
	31 32 23 31 32 23.13	Pressure Grouting Soil Stabilization Cementitious Pressure Grouting Soil Stabilization
	31 32 23.16	Chemical Pressure Grouting Soil Stabilization
	31 32 33	Shotcrete Soil Slope Stabilization
	31 32 36 31 32 36.13	Soil Nailing Driven Soil Nailing
	31 32 36.16	Grouted Soil Nailing
	31 32 36.19	Corrosion-Protected Soil Nailing
	31 32 36.23 31 32 36.26	Jet-Grouted Soil Nailing Launched Soil Nailing
31	33 00	Rock Stabilization
٠.	31 33 13	Rock Bolting and Grouting
	31 33 23	Rock Slope Netting
	31 33 26	Rock Slope Wire Mesh
	31 33 33	Shotcrete Rock Slope Stabilization
21	31 33 43 34 00	Vegetated Rock Slope Stabilization Soil Reinforcement
J I	31 34 19	Geosynthetic Soil Reinforcement
	31 34 19.13	Geogrid Soil Reinforcement
	31 34 19.16	Geotextile Soil Reinforcement
	31 34 23 31 34 23.13	Fiber Soil Reinforcement Geosynthetic Fiber Soil Reinforcement
31	35 00	Slope Protection
U 1	31 35 19	Geosynthetic Slope Protection
	31 35 19.13	Geogrid Slope Protection
	31 35 19.16	Geotextile Slope Protection

	31 35 19.19	Slope Protection with Mulch Control Netting
	31 35 23	Slope Protection with Slope Paving
	31 35 23.13 31 35 23.16	Cast-In-Place Concrete Slope Paving Precast Concrete Slope Paving
	31 35 23.10	Concrete Unit Masonry Slope Paving
	31 35 26	Containment Barriers
	31 35 26.13	Clay Containment Barriers
	31 35 26.16	Geomembrane Containment Barriers
	31 35 26.23	Bentonite Slurry Trench
31	36 00	Gabions
_	31 36 13	Gabion Boxes
	31 36 19	Gabion Mattresses
	31 36 19.13	Vegetated Gabion Mattresses
31	37 00	Riprap
-	31 37 13	Machined Riprap
	31 37 16	Non-Machined Riprap
	31 37 16.13	Rubble-Stone Riprap
	31 37 16.16	Concrete Unit Masonry Riprap
	31 37 16.19	Sacked Sand-Cement Riprap
31	40 00	Shoring and Underpinning
31	41 00	Shoring
_	31 41 13	Timber Shoring
	31 41 16	Sheet Piling
	31 41 16.13	Steel Sheet Piling
	31 41 16.16	Plastic Sheet Piling
	31 41 19	Metal Hydraulic Shoring
	31 41 19.13	Aluminum Hydraulic Shoring
	31 41 23	Pneumatic Shoring
	31 41 33	Trench Shielding
31	43 00	Concrete Raising
	31 43 13	Pressure Grouting
	31 43 13.13	Concrete Pressure Grouting
	31 43 13.16	Polyurethane Pressure Grouting
	31 43 16 31 43 19	Compaction Grouting
24		Mechanical Jacking Vibroflotation and Densification
J I	45 00	
	31 45 13	Vibroflotation
~ 4	31 45 16	Densification
31	46 00	Needle Beams
	31 46 13	Cantilever Needle Beams
31	48 00	Underpinning
	31 48 13	Underpinning Piers
	31 48 19	Bracket Piers
	31 48 23	Jacked Piers
	31 48 33	Micropile Underpinning
31	50 00	Excavation Support and Protection
	51 00	Anchor Tiebacks
	31 51 13	Excavation Soil Anchors
	31 51 16	Excavation Rock Anchors
	-	

31	52 00	Cofferdams
	31 52 13	Sheet Piling Cofferdams
	31 52 16	Timber Cofferdams
	31 52 19	Precast Concrete Cofferdams
31	53 00	Cribbing and Walers
-	31 53 13	Timber Cribwork
31	54 00	Ground Freezing
_	56 00	Slurry Walls
J 1	31 56 13	Bentonite Slurry Walls
	31 56 13.13	Soil-Bentonite Slurry Walls
	31 56 13.16	Cement-Bentonite Slurry Walls
	31 56 13.19	Slag-Cement-Bentonite Slurry Walls
	31 56 13.23	Soil-Cement-Bentonite Slurry Walls
	31 56 13.26	Pozzolan-Bentonite Slurry Walls
	31 56 13.29	Organically-Modified Bentonite Slurry Walls
	31 56 16	Attipulgite Slurry Walls
	31 56 16.13 31 56 19	Soil-Attipulgite Slurry Walls Slurry-Geomembrane Composite Slurry Walls
	31 56 23	Lean Concrete Slurry Walls
	31 56 26	Bio-Polymer Trench Drain
24		
5	60 00	Special Foundations and Load-Bearing
		Elements
31	62 00	Driven Piles
•	31 62 13	Concrete Piles
	31 62 13.13	
	31 62 13.16	Concrete Displacement Piles
	31 62 13.19	Precast Concrete Piles
	31 62 13.23	Prestressed Concrete Piles
	31 62 13.26	Pressure-Injected Footings
	31 62 16	Steel Piles Sheet Steel Piles
	31 62 16.13 31 62 16.16	Steel H Piles
	31 62 16.19	Unfilled Tubular Steel Piles
	31 62 19	Timber Piles
	31 62 23	Composite Piles
	31 62 23.13	Concrete-Filled Steel Piles
0.4	31 62 23.16	Wood and Cast-In-Place Concrete Piles
31	63 00	Bored Piles
	31 63 13	Bored and Augered Test Piles
	31 63 16	Auger Cast Grout Piles
	31 63 19 31 63 19.13	Bored and Socketed Piles Rock Sockets for Piles
	31 63 23	Bored Concrete Piles
	31 63 23.13	Bored and Belled Concrete Piles
	31 63 23.16	Bored Friction Concrete Piles
	31 63 26	Drilled Caissons
	31 63 26.13	Fixed End Caisson Piles
	24 62 26 46	Concrete Caissons for Marine Construction
	31 63 26.16	
	31 63 29 31 63 29 31 63 29.13	Drilled Concrete Piers and Shafts Uncased Drilled Concrete Piers

	31 63 29.16 31 63 33	Cased Drilled Concrete Piers Drilled Micropiles
31	64 00	Caissons
٠.	31 64 13	Box Caissons
	31 64 16	Excavated Caissons
	31 64 19	Floating Caissons
	31 64 23	Open Caissons
	31 64 26	Pneumatic Caissons
	31 64 29	Sheeted Caissons
31	66 00	Special Foundations
	31 66 13	Special Piles
	31 66 13.13	Rammed Aggregate Piles
	31 66 15	Helical Foundation Piles
	31 66 16	Special Foundation Walls
	31 66 16.13 31 66 16.23	Anchored Foundation Walls Concrete Cribbing Foundation Walls
	31 66 16.26	Metal Cribbing Foundation Walls
	31 66 16.33	Manufactured Modular Foundation Walls
	31 66 16.43	Mechanically Stabilized Earth Foundation Walls
	31 66 16.46	Slurry Diaphragm Foundation Walls
	31 66 16.53 31 66 16.56	Soldier-Beam Foundation Walls Permanently-Anchored Soldier-Beam Foundation Walls
	31 66 19	Refrigerated Foundations
31	68 00	Foundation Anchors
J I	31 68 13	Rock Foundation Anchors
	31 68 16	Helical Foundation Anchors
31		
	70 00	Tunneling and Mining
	70 00 71 00	Tunneling and Mining Tunnel Excavation
	70 00 71 00 31 71 13	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation
	70 00 71 00 31 71 13 31 71 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting
	70 00 71 00 31 71 13 31 71 16 31 71 19	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting
31	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Precast Concrete Tunnel Lining
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16 31 74 19	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Precast Concrete Tunnel Lining Shotcrete Tunnel Lining
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Precast Concrete Tunnel Lining Shotcrete Tunnel Lining Shaft Construction
313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16 31 74 19 75 00	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Shotcrete Tunnel Lining Shaft Construction Cast-in-Place Concrete Shaft Lining
31313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16 31 74 19 75 00 31 75 13	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Precast Concrete Tunnel Lining Shotcrete Tunnel Lining Shaft Construction
31313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16 31 74 19 75 00 31 75 13 31 75 16	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Precast Concrete Tunnel Lining Shaft Construction Cast-in-Place Concrete Shaft Lining Precast Concrete Shaft Lining Precast Concrete Shaft Lining
31313131	70 00 71 00 31 71 13 31 71 16 31 71 19 31 71 23 72 00 31 72 13 31 72 16 73 00 31 73 13 31 73 16 74 00 31 74 13 31 74 16 31 74 19 75 00 31 75 13 31 75 16 77 00	Tunneling and Mining Tunnel Excavation Shield Driving Tunnel Excavation Tunnel Excavation by Drilling and Blasting Tunnel Excavation by Tunnel Boring Machine Tunneling by Cut and Cover Tunnel Support Systems Rock Reinforcement and Initial Support Steel Ribs and Lagging Tunnel Grouting Cement Tunnel Grouting Chemical Tunnel Grouting Tunnel Construction Cast-in-Place Concrete Tunnel Lining Shotcrete Tunnel Lining Shaft Construction Cast-in-Place Concrete Shaft Lining Precast Concrete Shaft Lining

32 01 90 32 01 90.13

32 01 90.16

32 01 90.19

32 01 90.23

32 01 90.26

32 01 90.29

Fertilizing

Mowing

Pruning

Watering

Amending Soils

Topsoil Preservation

Exterior Improvements 32 00 00 **Operation and Maintenance of Exterior Improvements** 32 01 00 Paving Cleaning 32 01 11 Rubber and Paint Removal from Paving 32 01 11.51 32 01 11.52 Rubber Removal from Paving 32 01 11.53 Paint Removal from Paving Flexible Paving Surface Treatment 32 01 13 Slurry Seal (Latex Modified) 32 01 13.61 **Asphalt Surface Treatment** 32 01 13.62 32 01 16 Flexible Paving Rehabilitation 32 01 16.71 Cold Milling Asphalt Paving Asphalt Paving Reuse 32 01 16.72 32 01 16.73 In Place Cold Reused Asphalt Paving In Place Hot Reused Asphalt Paving 32 01 16.74 32 01 16.75 Heater Scarifying of Asphalt Paving 32 01 17 Flexible Paving Repair Sealing Cracks in Asphalt Paving 32 01 17.61 Stress-Absorbing Membrane Interlayer 32 01 17.62 Rigid Paving Surface Treatment 32 01 19 32 01 19.61 Sealing of Joints in Rigid Paving 32 01 19.62 Patching of Rigid Paving 32 01 23 Base Course Reconditioning 32 01 26 Rigid Paving Rehabilitation **Grooving of Concrete Paving** 32 01 26.71 32 01 26.72 **Grinding of Concrete Paving** 32 01 26.73 Milling of Concrete Paving 32 01 26.74 **Concrete Overlays** 32 01 26.75 Concrete Paving Reuse 32 01 29 Rigid Paving Repair Partial Depth Patching of Rigid Paving 32 01 29.61 Concrete Paving Raising 32 01 29.62 32 01 29.63 Subsealing and Stabilization 32 01 30 Operation and Maintenance of Site Improvements 32 01 30.13 Snow Removal Operation and Maintenance of Irrigation 32 01 80

32 01 90.33 Tree and Shrub Preservation 32 05 00 Common Work Results for Exterior Improvements

Operation and Maintenance of Planting

32 05 13	Soils for Exterior Improvements
32 05 16	Aggregates for Exterior Improvements
32 05 19	Geosynthetics for Exterior Improvements
32 05 19.13	Geotextiles for Exterior Improvements
32 05 19.16	Geomembranes for Exterior Improvements
32 05 19.19	Geogrids for Exterior Improvements
32 05 23	Cement and Concrete for Exterior Improvements
32 05 33	Common Work Results for Planting

32	06 00	Schedules for Exterior Improvements
_	32 06 10	Schedules for Bases, Ballasts, and Paving
	32 06 10.13	Pedestrian Walkway Schedule
	32 06 30	Schedules for Site Improvements
	32 06 30.13	Retaining Wall Schedule
	32 06 80	Schedules for Irrigation
	32 06 80.13	Irrigation Piping Schedule
	32 06 90 32 06 90.13	Schedules for Planting Planting Schedule
22	08 00	Commissioning of Exterior Improvements
	2 10 00	Bases, Ballasts, and Paving
32	11 00	Base Courses
	32 11 13	Subgrade Modifications
	32 11 13.13	Lime-Treated Subgrades
	32 11 13.16	Bituminous-Treated Subgrades
	32 11 16 32 11 16.13	Subbase Courses Sand-Clay Subbase Courses
	32 11 16.15	Aggregate Subbase Courses
	32 11 23	Aggregate Base Courses
	32 11 23.13	Sand-Clay Base Courses
	32 11 23.23	Base Course Drainage Layers
	32 11 26	Asphaltic Base Courses
	32 11 26.13	Plant Mix Asphaltic Base Courses
	32 11 26.16	Road Mix Asphaltic Base Courses
	32 11 26.19	Bituminous-Stabilized Base Courses
	32 11 29	Lime Treated Base Courses
	32 11 29.13 32 11 33	Lime-Fly Ash-Treated Base Courses Cement-Treated Base Courses
	32 11 33.13	Portland Cement-Stabilized Base Courses
	32 11 36	Concrete Base Courses
	32 11 36.13	Lean Concrete Base Courses
	32 11 36.16	Plain Cement Concrete Base Courses
	32 11 36.19	Hydraulic Cement Concrete Base Courses
32	12 00	Flexible Paving
	32 12 13	Preparatory Coats
	32 12 13.13	Tack Coats
	32 12 13.16	Asphaltic Tack Coats
	32 12 13.19	Prime Coats
	32 12 13.23 32 12 16	Asphaltic Prime Coats Asphalt Paving
	32 12 16.13	Plant-Mix Asphalt Paving
	32 12 16.16	Road-Mix Asphalt Paving
	32 12 16.19	Cold-Mix Asphalt Paving
	32 12 16.23	Reinforced Asphalt Paving
	32 12 16.26	Fiber-Modified Asphalt Paving
	32 12 16.29	Polymer-Modified Asphalt Paving
	32 12 16.33	Granulated Rubber-Modified Asphalt Paving
	32 12 16.36 32 12 19	Athletic Asphalt Paving Asphalt Paving Wearing Courses
	32 12 19 32 12 19.13	Road-Mix Asphalt Paving Wearing Courses
	32 12 19.16	Resin-Modified Asphalt Paving Wearing Courses
	32 12 19.19	Porous Friction Asphalt Paving Wearing Courses
		-

	32 12 33 32 12 36.13 32 12 36.16 32 12 36.19 32 12 36.23 32 12 43 32 12 73 13 00 32 13 13.13 32 13 13.16 32 13 13.19 32 13 13.23 32 13 13.33 32 13 16.13 32 13 16.13 32 13 16.16 32 13 16.19 32 13 16.23 32 13 73.13 32 13 73.13 32 13 73.16 32 13 73.19 14 00 32 14 13.13 32 14 13.16 32 14 13.16 32 14 13.16 32 14 13.16	Flexible Paving Surface Treatments Seal Coats Asphaltic Seal and Fog Coats Coal Tar Seal Coats Coal Tar Seal Coats with Unvulcanized Rubber Fuel-Resistant Sealers Porous Flexible Paving Asphalt Paving Joint Sealants Rigid Paving Concrete Paving Exposed Aggregate Concrete Paving Power-Compacted Concrete Paving Prestressed Concrete Paving Concrete Paving Surface Treatment Plain Concrete Paving Decorative Concrete Paving Patterned Concrete Paving Roller-Compacted Concrete Paving Imprinted Concrete Paving Stamped Concrete Paving Pervious Concrete Paving Concrete Paving Joint Sealants Fuel-Resistant Concrete Paving Joint Sealants Field-Molded Concrete Paving Joint Sealants Compression Concrete Paving Joint Sealants Unit Paving Precast Concrete Unit Paving Interlocking Precast Concrete Unit Paving Precast Concrete Unit Paving Precast Concrete Unit Paving
	32 14 16 32 14 23 32 14 26	Brick Unit Paving Asphalt Unit Paving Wood Paving
	32 14 29 32 14 40	Recycled-Rubber Paving Stone Paving
	32 14 43	Porous Unit Paving
32	15 00	Aggregate Surfacing
	32 15 13 32 15 40	Cinder Surfacing Crushed Stone Surfacing
32	16 00	Curbs, Gutters, Sidewalks, and Driveways
UL.	32 16 13	Curbs and Gutters
	32 16 13.13	Cast-In-Place Concrete Curbs and Gutters
	32 16 13.16 32 16 13.23	Steel Faced Curbs Precast Concrete Curbs and Gutters
	32 16 13.33	Asphalt Curbs
	32 16 13.43	Stone Curbs Sidewalks
	32 16 23 32 16 33	Driveways
32	17 00	Paving Specialties
	32 17 13	Parking Bumpers
	32 17 13.13 32 17 13.16	Metal Parking Bumpers Plastic Parking Bumpers

32 ′	32 17 13.19 32 17 13.23 32 17 13.26 32 17 16 32 17 23 32 17 23.13 32 17 23.23 32 17 23.33 32 17 26 32 17 43 18 00 32 18 13 32 18 16 32 18 16.13 32 18 23 32 18 23.13 32 18 23.13 32 18 23.16 32 18 23.19	Precast Concrete Parking Bumpers Rubber Parking Bumpers Wood Parking Bumpers Speed Bumps Pavement Markings Painted Pavement Markings Raised Pavement Markings Plastic Pavement Markings Tactile Warning Surfacing Pavement Snow Melting Systems Athletic and Recreational Surfacing Synthetic Grass Surfacing Synthetic Resilient Surfacing Playground Protective Surfacing Athletic Surfacing Baseball Field Surfacing Natural Baseball Field Surfacing Synthetic Baseball Field Surfacing
32	32 18 23.23 32 18 23.26 32 18 23.29 32 18 23.33 32 18 23.36 32 18 23.39 32 18 23.43 32 18 23.53 32 18 23.56 32 18 23.59 30 00	Field Sport Surfacing Natural Field Sport Surfacing Synthetic Field Sport Surfacing Running Track Surfacing Natural Running Track Surfacing Synthetic Running Track Surfacing Synthetic Running Track Surfacing Recreational Court Surfacing Tennis Court Surfacing Natural Tennis Court Surfacing Synthetic Tennis Court Surfacing Synthetic Tennis Court Surfacing Site Improvements
	30 00 31 00	Fences and Gates
JZ .	32 31 11	Gate Operators
	32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.33 32 31 13.53 32 31 16 32 31 17 32 31 19 32 31 23 32 31 26 32 31 29 32 31 32 32 31 53	Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Cattle Guards
32 3	32 00	Retaining Walls
	32 32 13 32 32 16 32 32 19 32 32 23 32 32 23.13 32 32 23.16	Cast-in-Place Concrete Retaining Walls Precast Concrete Retaining Walls Unit Masonry Retaining Walls Segmental Retaining Walls Segmental Concrete Unit Masonry Retaining Walls Manufactured Modular Walls

32 32 26 32 32 29 32 32 34 32 32 36 32 32 43 32 32 53 32 34 13 32 34 23 32 34 33 32 35 13 32 35 16 32 39 00 32 39 13 32 39 33	Metal Crib Retaining Walls Timber Retaining Walls Reinforced Soil Retaining Walls Gabion Retaining Walls Soldier-Beam Retaining Walls Stone Retaining Walls Fabricated Bridges Fabricated Pedestrian Bridges Fabricated Roadway Bridges Fabricated Railway Bridges Fabricated Roadway Bridges Screening Devices Screens and Louvers Sound Barriers Manufactured Site Specialties Manufactured Metal Bollards Artificial Rock Fabrications
32 70 00	Wetlands
32 71 00 32 72 00	Constructed Wetlands Wetlands Restoration
32 80 00	Irrigation
32 82 00	Irrigation Pumps
32 84 00	Planting Irrigation
32 84 13	Drip Irrigation
00 04 00	Underground Christdere
32 84 23	Underground Sprinklers
32 86 00	Agricultural Irrigation
32 86 00 32 90 00	
32 86 00 32 90 00 32 91 00	Agricultural Irrigation Planting Planting Preparation
32 86 00 32 90 00 32 91 00 32 91 13	Agricultural Irrigation Planting Planting Preparation Soil Preparation
32 86 00 32 90 00 32 91 00	Agricultural Irrigation Planting Planting Preparation
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16 32 91 16.13	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.16 32 91 16.19	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Structural Soil Mixing Planting Beds Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19.13	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19.13 32 92 119.13	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.19 32 91 19 32 91 19 32 91 19.13 32 92 00 32 92 13 32 92 16	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.3 32 91 16.13 32 91 16.19 32 91 16.19 32 91 19.13 32 92 00 32 92 13 32 92 16 32 92 19	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.19 32 91 19 32 91 19 32 91 19.13 32 92 00 32 92 13 32 92 16	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging
32 86 00 32 90 00 32 91 00 32 91 13.13 32 91 13.16 32 91 13.16 32 91 13.26 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.19 32 91 16.19 32 91 19.13 32 92 10 32 92 13 32 92 16 32 92 19 32 92 19.13	Agricultural Irrigation Planting Planting Preparation Soil Preparation Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding Mechanical Seeding

32 92 26.13	Stolonizing
32 93 00	Plants
32 93 13	Ground Covers
32 93 23	Plants and Bulbs
32 93 33	Shrubs
32 93 43	Trees
32 93 93	Exterior Artificial Plants
32 94 00	Planting Accessories
32 94 13	Landscape Edging
32 94 16	Landscape Timbers
32 94 19	Landscape Surfacing
32 94 33	Planters
32 94 43	Tree Grates
32 94 46	Tree Grids
32 95 00	Exterior Planting Support Structures
32 96 00	Transplanting
32 96 13	Ground Cover Transplanting
32 96 23	Plant and Bulb Transplanting
32 96 33	Shrub Transplanting
32 96 43	Tree Transplanting

33 00 00 Utilities

00	1 00	
33 (01 00	Operation and Maintenance of Utilities
	33 01 10	Operation and Maintenance of Water Utilities
	33 01 10.71	Water Utility Storage Tank Rehabilitation
	33 01 20	Operation and Maintenance of Wells
	33 01 30	Operation and Maintenance of Sewer Utilities
	33 01 30.13	Sewer and Manhole Testing
	33 01 30.16	TV Inspection of Sewer Pipelines
	33 01 30.51	Maintenance of Sewer Utilities
	33 01 30.52	Pond and Reservoir Maintenance
	33 01 30.61	Sewer and Pipe Joint Sealing
	33 01 30.62	Manhole Grout Sealing
	33 01 30.71	Rehabilitation of Sewer Utilities
	33 01 30.72 33 01 50	Relining Sewers Operation and Maintenance of Fuel Distribution Lines
	33 01 50.51	Cleaning Fuel-Storage Tanks
	33 01 50.71	Lining of Steel Fuel-Storage Tanks
	33 01 60	Operation and Maintenance of Hydronic and Steam Energy Utilities
	33 01 70	Operation and Maintenance of Electrical Utilities
	33 01 80	Operation and Maintenance of Communications Utilities
22 (Common Work Results for Utilities
33 (05 00	
	33 05 13	Manholes and Structures
	33 05 13.13	Manhole Grade Adjustment
	33 05 16	Utility Structures
	33 05 16.13	Precast Concrete Utility Structures
	33 05 16.53	Rebuilding Utility Structures Proceure Dining Tied Joint Restraint System
	33 05 19	Pressure Piping Tied Joint Restraint System
	33 05 23	Trenchless Utility Installation
	33 05 23.13 33 05 23.16	Utility Horizontal Directional Drilling Utility Pipe Jacking
	33 05 23.19	Microtunneling
	33 05 23.23	Utility Pipe Ramming
	33 05 23.26	Utility Impact Moling
	33 05 23.29	Cable Trenching and Plowing
	33 05 26	Utility Identification
	33 05 26.13	Utility Identification Signs
	33 05 26.16	Utility Identification Markers
	33 05 26.19	Utility Identification Flags
	33 05 26.23	Utility Identification Trace Wires
33 (06 00	Schedules for Utilities
	33 06 10	Schedules for Water Utilities
	33 06 20	Schedules for Wells
	33 06 30	Schedules for Sanitary Sewerage Utilities
	33 06 40	Schedules for Storm Drainage Utilities
	33 06 40.13	Storm Drainage Schedule
	33 06 50	Schedules for Fuel Distribution Utilities
	33 06 60	Schedules for Hydronic and Steam Energy Utilities
	33 06 70	Schedules for Electrical Utilities
	33 06 80	Schedules for Communications Utilities
33 (08 00	Commissioning of Utilities
-	33 08 10	Commissioning of Water Utilities
	30 00 10	Commission of the Commission o

33 08 20	Commissioning of Wells
33 08 30	Commissioning of Sanitary Sewerage Utilities
33 08 40	Commissioning of Storm Drainage Utilities
33 08 50	Commissioning of Fuel Distribution Utilities
33 08 60	Commissioning of Hydronic and Steam Energy Utilities
33 08 70	Commissioning of Electrical Utilities
33 08 80	Commissioning of Communications Utilities
33 09 00	Instrumentation and Control for Utilities
33 09 10 33 09 20	Instrumentation and Control for Water Utilities Instrumentation and Control for Wells
33 09 30	Instrumentation and Control for Sanitary Sewerage Utilities
33 09 40	Instrumentation and Control for Storm Drainage Utilities
33 09 50	Instrumentation and Control for Fuel Distribution Utilities
33 09 60	Instrumentation and Control for Hydronic and Steam Energy Utilities
33 09 70	Instrumentation and Control for Electrical Utilities
33 09 80	Instrumentation and Control for Communications Utilities
33 10 00	Water Utilities
33 11 00	Water Utility Distribution Piping
33 11 13	Public Water Utility Distribution Piping
33 11 13.13	Ductile Iron Public Water Utility Distribution Piping
33 11 13.16	Cast Iron Public Water Utility Distribution Piping
33 11 13.23	Plastic Public Water Utility Distribution Piping
33 11 13.26 33 11 13.33	Galvanized Steel Public Water Utility Distribution Piping
33 11 13.33	Concrete Public Water Utility Distribution Piping Site Water Utility Distribution Piping
33 11 19	Fire Suppression Utility Water Distribution Piping
33 12 00	Water Utility Distribution Equipment
33 12 13	Water Service Connections
33 12 13.13	Water Supply Backflow Preventer Assemblies
33 12 16	Water Utility Distribution Valves
33 12 19	Water Utility Distribution Fire Hydrants
33 12 23 33 12 33	Water Utility Pumping Stations Water Utility Metering
33 13 00	Disinfecting of Water Utility Distribution
33 16 00	Water Utility Storage Tanks
33 16 13 33 16 13.13	Aboveground Water Utility Storage Tanks Steel Aboveground Water Utility Storage Tanks
33 16 13.16	Prestressed Concrete Aboveground Water Utility Storage Tanks
33 16 13.19	Plastic Aboveground Water Utility Storage Tanks
33 16 16	Underground Water Utility Storage Tanks
33 16 19	Elevated Water Utility Storage Tanks
33 20 00	Wells
33 21 00	Water Supply Wells
00.04.40	117
33 21 13	Public Water Supply Wells
33 21 13 33 21 16	Public Water Supply Wells Irrigation Water Wells
	• • •
33 21 16	Irrigation Water Wells

33 24 13 33 25 00	Groundwater Monitoring Wells Recharge Wells
33 26 00	Relief Wells
33 29 00	Well Abandonment
33 30 00	Sanitary Sewerage Utilities
33 31 00	Sanitary Utility Sewerage Piping
33 31 13	Public Sanitary Utility Sewerage Piping
33 31 16	Industrial Waste Utility Sewerage Piping
33 32 00	Wastewater Utility Pumping Stations
33 32 13 33 32 13.13	Packaged Utility Lift Stations Packaged Sewage Lift Stations, Wet Well Type
33 32 13.13	Packaged Utility Wastewater Pumping Stations
33 32 16.13	Packaged Sewage Grinder Pumping Units
33 32 19	Public Utility Wastewater Pumping Stations
33 33 00	Low Pressure Utility Sewerage
33 33 13 33 33 16	Sanitary Utility Sewerage Combined Utility Sewerage
33 34 00	Sanitary Utility Sewerage Force Mains
33 34 13	Sanitary Utility Sewerage Inverted Siphons
33 36 00	Utility Septic Tanks
33 36 13	Utility Septic Tank and Effluent Wet Wells
33 36 13.13	Concrete Utility Septic Tank
33 36 13.16 33 36 13.19	Fiberglass Utility Septic Tank Polyethylene Utility Septic Tank
33 36 16	Utility Septic Tank Effluent Pumps
33 36 16.13	Utility Septic Tank High-Head Effluent Pump
33 36 16.16 33 36 19	Utility Septic Tank Effluent Pump Package Utility Septic Tank Effluent Filter
33 36 19.13	Utility Septic Tank Effluent Tube Filter
33 36 19.16	Utility Septic Tank Effluent Textile Media Filter
33 36 33 33 36 33.13	Utility Septic Tank Drainage Field
33 36 33.16	Utility Septic Tank Tile Drainage Field Utility Septic Tank Shallow Pressurized Dispersal System
33 38 00	Treatment Lagoons
33 38 13	Municipal Wastewater Treatment Lagoons
33 38 16	Industrial Waste Lagoons
33 38 23 33 38 26	Agricultural Waste Lagoons Residential Sewerage Lagoons
33 39 00	Sanitary Utility Sewerage Structures
33 39 13	Sanitary Utility Sewerage Manholes, Frames, and Covers
33 39 23	Sanitary Utility Sewerage Cleanouts
33 40 00	Storm Drainage Utilities
33 41 00	Storm Utility Drainage Piping
33 41 13	Public Storm Utility Drainage Piping
33 42 00	Culverts
33 42 13	Pipe Culverts
33 42 13.13	Public Pipe Culverts

	33 42 16	Concrete Culverts
	33 42 16.13	Precast Concrete Culverts
	33 42 16.16	Cast-in-Place Concrete Culverts
33	44 00	Storm Utility Water Drains
	33 44 13	Utility Area Drains
	33 44 13.13	Catchbasins
	33 44 16	Utility Trench Drains
	33 44 19	Utility Storm Water Treatment
	33 44 19.13	In-Line Utility Storm Water Filters
	33 44 19.16	Catch Basin Insert Utility Storm Water Filters
	33 44 19.19	Utility Oil and Gas Separators
33	45 00	Storm Utility Drainage Pumps
33	46 00	Subdrainage
	33 46 13	Foundation Drainage
	33 46 13.13	Foundation Drainage Piping
	33 46 13.16	Geocomposite Foundation Drainage
	33 46 16	Subdrainage Piping
	33 46 16.13	Subdrainage Piping
	33 46 16.16	Geocomposite Subdrainage
	33 46 16.19	Pipe Underdrains
	33 46 19	Underslab Drainage
	33 46 19.13	Underslab Drainage Piping
	33 46 19.16	Geocomposite Underslab Drainage
	33 46 23	Drainage Layers
	33 46 23.16	Gravel Drainage Layers
	33 46 23.19	Geosynthetic Drainage Layers
	33 46 26	Geotextile Subsurface Drainage Filtration
	33 46 33	Retaining Wall Drainage
33	47 00	Ponds and Reservoirs
	33 47 13	Pond and Reservoir Liners
	33 47 13.13	Pond Liners
	33 47 13.53	Reservoir Liners
	33 47 16	Pond and Reservoir Covers
	33 47 16.13	Pond Covers
	33 47 16.53	Reservoir Covers
	33 47 19	Water Ponds and Reservoirs
	33 47 19.13	Water Distribution Ponds
	33 47 19.16	Water Retainage Reservoirs
	33 47 19.23	Cooling Water Ponds
	33 47 19.33	Fire-Protection Water Ponds
	33 47 26	Storm Drainage Ponds and Reservoirs
	33 47 26.13	Stabilization Ponds
	33 47 26.16	Retention Basins
	33 47 26.19	Leaching Pits
33	49 00	Storm Drainage Structures
	33 49 13	Storm Drainage Manholes, Frames, and Covers
	33 49 22	Storm Drainage Water Detention Structures
	33 49 23	Storm Drainage Water Retention Structures
	33 49 23.13	Underground Storm Drainage Water Retention Tanks
	33 49 24	Storm Drainage Water Storage Structures
22	50.00	Fuel Distribution Utilities

33 51 00	Natural-Gas Distribution
33 51 13	Natural-Gas Piping
33 51 33	Natural-Gas Metering
33 52 00	Liquid Fuel Distribution
33 52 13	Fuel-Oil Distribution
33 52 13.13	Fuel-Oil Piping
33 52 13.23	Fuel-Oil Pumps
33 52 16	Gasoline Distribution
33 52 16.13	Gasoline Piping
33 52 16.23	Gasoline Pumps
33 52 19	Diesel Fuel Distribution
33 52 19.13	Diesel Fuel Piping
33 52 19.23 33 52 43	Diesel Fuel Pumps Aviation Fuel Distribution
33 52 43.13	Aviation Fuel Piping
33 52 43.16	Aviation Fuel Connections
33 52 43.19	Aviation Fuel Grounding
33 52 43.23	Aviation Fuel Pumps
33 56 00	Fuel-Storage Tanks
33 56 13	Aboveground Fuel-Storage Tanks
33 56 16	Underground Fuel-Storage Tanks
33 56 43	Aviation Fuel-Storage Tanks
33 56 43.13	Aboveground Aviation Fuel-Storage Tanks
33 56 43.16	Underground Aviation Fuel-Storage Tanks
33 56 53	Compressed Gases Storage Tanks
33 60 00	Hydronic and Steam Energy Utilities
33 61 00	Hydronic Energy Distribution
33 61 13	Underground Hydronic Energy Distribution
33 61 23	Aboveground Hydronic Energy Distribution
33 61 33	Hydronic Energy Distribution Metering
33 63 00	Steam Energy Distribution
33 63 13	Underground Steam and Condensate Distribution Piping
33 63 23	Aboveground Steam and Condensate Distribution Piping
33 63 33	Steam Energy Distribution Metering
33 70 00	Electrical Utilities
33 71 00	
	Electrical Utility Transmission and Distribution
33 71 13 33 71 13.13	Electrical Utility Towers Precast Concrete Electrical Utility Towers
33 71 13.13	Steel Electrical Utility Towers
33 71 13.33	Clock Electrical Clinty Tollicio
33 71 16	Wood Electrical Utility Towers
	Wood Electrical Utility Towers Electrical Utility Poles
33 71 16.13	
33 71 16.13 33 71 16.23	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles
33 71 16.13 33 71 16.23 33 71 16.33	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles Wood Electrical Utility Poles
33 71 16.13 33 71 16.23 33 71 16.33 33 71 19	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles Wood Electrical Utility Poles Electrical Underground Ducts and Manholes
33 71 16.13 33 71 16.23 33 71 16.33 33 71 19 33 71 19.13	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles Wood Electrical Utility Poles Electrical Underground Ducts and Manholes Electrical Manholes and Handholes
33 71 16.13 33 71 16.23 33 71 16.33 33 71 19 33 71 19.13 33 71 23	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles Wood Electrical Utility Poles Electrical Underground Ducts and Manholes Electrical Manholes and Handholes Insulators and Fittings
33 71 16.13 33 71 16.23 33 71 16.33 33 71 19 33 71 19.13	Electrical Utility Poles Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles Wood Electrical Utility Poles Electrical Underground Ducts and Manholes Electrical Manholes and Handholes

	33 71 26	Transmission and Distribution Equipment
	33 71 26.13	Capacitor Banks
	33 71 26.16	Coupling Capacitors
	33 71 26.23	Current Transformers
	33 71 26.26	Potential Transformers
	33 71 36	Extra-High-Voltage Wiring
	33 71 36.13	Overhead Extra-High-Voltage Wiring
	33 71 39	High-Voltage Wiring
	33 71 39.13 33 71 39.23	Overhead High-Voltage Wiring Underground High-Voltage Wiring
	33 71 39.33	Underwater High-Voltage Wiring
	33 71 49	Medium-Voltage Wiring
	33 71 49.13	Overhead Medium-Voltage Wiring
	33 71 49.23	Underground Medium-Voltage Wiring
	33 71 49.33	Underwater Medium-Voltage Wiring
	33 71 53	Direct-Current Transmission
	33 71 73	Electrical Utility Services
	33 71 73.33	Electric Meters
	33 71 83	Transmission and Distribution Specialties
33	72 00	Utility Substations
	33 72 13	Deadend Structures
	33 72 23	Structural Bus Supports
	33 72 23.13	Bus Support Insulators
	33 72 26	Substation Bus Assemblies
	33 72 26.13	Aluminum Substation Bus Assemblies
	33 72 26.16	Copper Substation Bus Assemblies
	33 72 33	Control House Equipment
	33 72 33.13	Relays
	33 72 33.16	Substation Control Panels
	33 72 33.23	Power-Line Carriers
	33 72 33.26	Substation Metering
	33 72 33.33	Raceway and Boxes for Utility Substations
	33 72 33.36 33 72 33.43	Cable Trays for Utility Substations Substation Backup Batteries
	33 72 33.46	Substation Converter Stations
	33 72 43	Substation Control Wiring
33	73 00	Utility Transformers
J J		
	33 73 13	Liquid-Filled Utility Transformers
22	33 73 23	Dry-Type Utility Transformers
33	75 00	High-Voltage Switchgear and Protection Devices
	33 75 13	Air High-Voltage Circuit Breaker
	33 75 16	Oil High-Voltage Circuit Breaker
	33 75 19	Gas High-Voltage Circuit Breaker
	33 75 23	Vacuum High-Voltage Circuit Breaker
	33 75 36	High-Voltage Utility Fuses
	33 75 39	High-Voltage Surge Arresters
	33 75 43	Shunt Reactors
33	77 00	Medium-Voltage Utility Switchgear and Protection
		Devices
	33 77 13	Air Medium-Voltage Circuit Breaker
	33 77 16	Oil Medium-Voltage Circuit Breaker
	55 11 15	Sil modisini voltago onodit Broakol

	33 77 19	Gas Medium-Voltage Circuit Breaker
	33 77 23	Vacuum Medium-Voltage Circuit Breaker
	33 77 26	Medium-Voltage Utility Fusible Interrupter Switchgear
	33 77 33	Medium-Voltage Utility Cutouts
	33 77 36	Medium-Voltage Utility Fuses
	33 77 39	Medium-Voltage Utility Surge Arresters
	33 77 53	Medium-Voltage Utility Reclosers
33 7	79 00	Site Grounding
	33 79 13	Site Improvements Grounding
	33 79 13.13	Electric Fence Grounding
	33 79 16	Tower Grounding
	33 79 16.13	Communications Tower Grounding
	33 79 16.16	Antenna Tower Grounding
	33 79 19	Utilities Grounding
	33 79 19.13	Electrical Utilities Grounding
	33 79 19.16	Communications Utilities Grounding
	33 79 23	Utility Substation Grounding
	33 79 83	Site Grounding Conductors
	33 79 83.13 33 79 83.16	Grounding Wire, Bar, and Rod Chemical Rod
	33 79 83.23	
	33 79 83.33	Earth Grounding Enhancement
	33 79 83.43	Deep Earth Grounding
	33 79 93	Site Lightning Protection
	33 79 93.13	Lightning Strike Counters
	33 79 93.16	Lightning Strike Warning Devices
33	80 00	Communications Utilities
	31 00	Communications Structures
	31 00 33 81 13	Communications Structures Communications Transmission Towers
	31 00 33 81 13 33 81 16	Communications Structures Communications Transmission Towers Antenna Towers
	31 00 33 81 13 33 81 16 33 81 19	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles
	33 81 13 33 81 16 33 81 19 33 81 23	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware
	33 81 13 33 81 16 33 81 19 33 81 23 33 81 26	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes
	33 81 13 33 81 16 33 81 19 33 81 23	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures
33 8	33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13.13 33 82 23	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling
33 8	33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23 33 82 23.13 33 82 33	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling
33 8	33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23.13 33 82 33 33 82 33.13	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23 33 82 33 33 82 33 33 82 33 33 82 43	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations Grounding and Bonding for Communications Distribution
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23 33 82 33 33 82 33 33 82 33 33 82 43 33 82 46	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations Grounding and Bonding for Communications Distribution Cable Pressurization Equipment
33 8	33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13.13 33 82 13.13 33 82 23.13 33 82 33.13 33 82 33.13 33 82 43 33 82 46 33 82 53	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations Grounding and Bonding for Communications Distribution Cable Pressurization Equipment Cleaning, Lubrication, and Restoration Chemicals
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13 33 82 13 33 82 23 33 82 23 33 82 33 33 82 33 33 82 33 33 82 43 33 82 46 33 82 53 33 82 53	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations Grounding and Bonding for Communications Distribution Cable Pressurization Equipment Cleaning, Lubrication, and Restoration Chemicals Wireless Communications Distribution
33 8	31 00 33 81 13 33 81 16 33 81 19 33 81 23 33 81 26 33 81 29 33 81 33 32 00 33 82 13.13 33 82 13.13 33 82 23.13 33 82 33.13 33 82 33.13 33 82 46 33 82 53 33 82 53 33 82 53 33 82 53 33 82 53	Communications Structures Communications Transmission Towers Antenna Towers Communications Utility Poles Aerial Cable Installation Hardware Communications Underground Ducts, Manholes, and Handholes Communications Vaults, Pedestals, and Enclosures Communications Blowers, Fans, and Ventilation Communications Distribution Copper Communications Distribution Cabling Copper Splicing and Terminations Optical Fiber Communications Distribution Cabling Optical Fiber Splicing and Terminations Coaxial Communications Distribution Cabling Coaxial Splicing and Terminations Grounding and Bonding for Communications Distribution Cable Pressurization Equipment Cleaning, Lubrication, and Restoration Chemicals Wireless Communications Distribution Laser Transmitters and Receivers

34 00 00	Transportation
34 01 00	Operation and Maintenance of Transportation
34 01 13	Operation and Maintenance of Roadways
34 01 23	Operation and Maintenance of Railways
34 01 23.13	Track Removal and Salvage
34 01 23.81	Track Crosstie Replacement
34 01 33	Operation and Maintenance of Airfields
34 01 43	Operation and Maintenance of Bridges
34 05 00	Common Work Results for Transportation
34 05 13	Common Work Results for Roadways
34 05 23	Common Work Results for Railways
34 05 33	Common Work Results for Airports
34 05 43	Common Work Results for Bridges
34 06 00	Schedules for Transportation
34 06 13	Schedules for Roadways
34 06 23	Schedules for Railways
34 06 33	Schedules for Airfields
34 06 43	Schedules for Bridges
34 08 00	Commissioning of Transportation
34 08 13	Commissioning of Roadways
34 08 23	Commissioning of Railways
34 08 33	Commissioning of Airfields
34 08 43	Commissioning of Bridges
34 10 00	Guideways/Railways
34 11 00	Rail Tracks
34 11 13	Track Rails
34 11 13.13	
34 11 13.23	Heavy Rail Track
34 11 16	Welded Track Rails
34 11 16.13	
34 11 16.16	Pressure-Welded Track Rail
34 11 16.19	Thermite-Welded Track Rail
34 11 19	Track Rail Joints
34 11 23 34 11 23.13	Special Trackwork
34 11 23.16	Ballasted Special Track Rail Direct-Fixation Track
34 11 23.23	Running Rail
34 11 23.26	Precurved Running Rail
34 11 26	Ballasted Track Rail
34 11 26.13	Track Rail Ballast
34 11 26.16	Track Rail Subballast
34 11 29	Embedded Track Rail
34 11 33	Track Cross Ties
34 11 33.13	Concrete Track Cross Ties
34 11 33.16 34 11 33.19	Timber Track Cross Ties Resilient Track Cross Ties
34 11 33.19	Track Rail Fasteners
34 11 36.13	Direct-Fixation Fasteners
34 11 39	Track Collector Pans
34 11 39.13	Fiberglass Track Collector Pans

34 11 93	Track Appurtenances and Accessories
34 12 00	Monorails
34 12 13	Elevated Monorails
34 12 16	On-Grade Monorails
34 12 19	Below-Grade Monorails
34 12 23	Maglev Monorail
34 12 63	Monorail Track
34 13 00	Funiculars
34 13 13	Inclined Railway
34 14 00	Cable Transportation
34 14 13	Aerial Tramways
34 14 19	Gondolas
34 14 26	Funitels
34 14 33	Chairlifts
34 14 39	Surface Lifts
34 14 46	Ropeway Tows
34 14 53	Cable Car Systems
34 20 00	Traction Power
34 21 00	Traction Power Distribution
34 21 13	High Power Static Frequency Converters
34 21 16	Traction Power Substations
34 21 16.13	AC Traction Power Substations
34 21 16.16	DC Traction Power Substations
34 21 19	Traction Power Switchgear
34 21 19.13	AC Traction Power Switchgear
34 21 19.16	DC Traction Power Switchgear
34 21 19.23 34 21 23	Frequency Changer Traction Power Transformer-Rectifier Units
34 23 00	Overhead Traction Power
34 23 13	Traction Power Poles
34 23 13 34 23 16	Overhead Cable Suspension
34 23 23	Overhead Traction Power Cables
34 24 00	Third Rail Traction Power
34 24 13	Bottom-Contact Third Rail
34 24 16	Side-Contact Third Rail
34 24 19	Top-Contact Third Rail
34 40 00	Transportation Signaling and Contro
34 40 00	
	Equipment
34 41 00	Roadway Signaling and Control Equipment
34 41 13	Traffic Signals
34 41 16	Traffic Control Equipment
34 41 23	Roadway Monitoring Equipment
34 42 00	Railway Signaling and Control Equipment
34 42 13	Railway Signals
34 42 13.13	General Railway Signal Requirements
34 42 13.16	Signal Solid State Coded Track Circuits
3 <i>4 4</i> 2 16	Train Control Wires and Cables

	34 42 19	Vital Interlocking Logic Controllers
	34 42 23	Railway Control Equipment
	34 42 23.13	Mainline Train Control Room Equipment
	34 42 23.16	Yard Train Control Room Equipment
	34 42 23.19	Integrated Control Equipment
	34 42 23.23	Interlocking Railway Control Equipment
	34 42 26	Rail Network Equipment
	34 42 29	Station Agent Equipment
	34 42 33	Yard Management Equipment
	34 42 36	Supervisory Control and Data Acquisition
34	43 00	Airfield Signaling and Control Equipment
	34 43 13	Airfield Signals
	34 43 13.13	Airfield Runway Identification Lights
	34 43 13.16	Airfield Runway and Taxiway Inset Lighting
	34 43 16	Airfield Landing Equipment
	34 43 16.13	Microwave Airfield Landing Equipment
	34 43 16.16	Instrument Airfield Landing Equipment
	34 43 16.19	Airfield Visual-Approach Slope Indicator Equipment
	34 43 16.23	Airfield Short-Approach Lighting Equipment
	34 43 16.26	Airfield Omni-Directional-Approach Lighting Equipment
	34 43 16.29	Airfield Low-Intensity-Approach Lighting Equipment
	34 43 16.33	Airfield High-Intensity-Approach Lighting Equipment
	34 43 16.36	Airfield Precision-Approach Path Indicator Equipment
	34 43 19	Airfield Traffic Control Tower Equipment
	34 43 23	Weather Observation Equipment
	34 43 23.13	Automatic Weather Observation Equipment
	34 43 23.16	Airfield Wind Cones
	34 43 26	Airfield Control Equipment
	34 43 26.13	Airfield Lighting Control Equipment
	34 43 26.16 34 43 26.19	Airfield Lighting PLC Control Equipment Airfield Lighting Regulator Assembly
21	48 00	
J +		Bridge Signaling and Control Equipment
	34 48 13	Operating Bridge Signals
	34 48 16	Operating Bridge Control Equipment
34	50 00	Transportation Fare Collection Equipment
34	52 00	Vehicle Fare Collection
	34 52 16	Vehicle Ticketing Equipment
	34 52 16.13	Vehicle Ticket Vending Machines
	34 52 26	Vehicle Fare Collection Equipment
	34 52 26.13	Vehicle Coin Fare Collection Equipment
	34 52 26.16	Vehicle Electronic Fare Collection Equipment
	34 52 33	Vehicle Fare Gates
34	54 00	Passenger Fare Collection
	34 54 16	Passenger Ticketing Equipment
	34 54 16.13	Passenger Ticket Vending Machines
	34 54 16.16	Passenger Addfare Machines
	34 54 16.23	Passenger Intermodal Transfer Machines
	34 54 26	Passenger Fare Collection Equipment
	34 54 26.13	Passenger Coin Fare Collection Equipment
	34 54 26.16	Passenger Electronic Fare Collection Equipment
	34 54 33	Passenger Fare Gates

34 70 00

Equipment 34 71 00 **Roadway Construction** 34 71 13 Vehicle Barriers 34 71 13.13 Vehicle Median Barriers 34 71 13.16 Vehicle Crash Barriers 34 71 13.19 Vehicle Traffic Barriers 34 71 13.26 Vehicle Guide Rails 34 71 13.29 Vehicle Barrier Fenders 34 71 16 Impact Attenuating Devices 34 71 19 Vehicle Delineators 34 71 19.13 Fixed Vehicle Delineators 34 71 19.16 Flexible Vehicle Delineators 34 72 00 Railway Construction 34 72 13 Railway Line 34 72 16 Railway Siding 34 73 00 Airfield Construction 34 73 13 Aircraft Tiedowns 34 73 16 Airfield Grounding 34 73 16.13 Aircraft Static Grounding 34 73 19 Jet Blast Barriers 34 73 23 Manufactured Airfield Control Towers 34 73 26 Manufactured Helipads 34 75 00 Roadway Equipment Operable Roadway Equipment 34 75 13 34 75 13.13 Active Vehicle Barriers 34 76 00 Railway Equipment 34 76 13 Roadway Crossing Control Equipment 34 77 00 Transportation Equipment 34 77 13 Passenger Boarding Bridges 34 77 13.13 Fixed Aircraft Passenger Boarding Bridges 34 77 13.16 Movable Aircraft Passenger Boarding Bridges 34 77 13.23 Ship Passenger Boarding Bridges 34 77 33 Baggage Scanning Equipment 34 77 36 **Baggage Scales** 34 77 39 **Baggage Conveying Equipment** 34 80 00 **Bridges** 34 81 00 Bridge Machinery Single-Swing Bridge Machinery 34 81 13 34 81 16 Double-Swing Bridge Machinery 34 81 19 Cantilever Bridge Machinery 34 81 23 Lift Bridge Machinery Sliding Bridge Machinery 34 81 26 Pontoon Bridge Machinery 34 81 29 34 81 32 Bascule Bridge Machinery 34 82 00 **Bridge Specialties** 34 82 13 **Bridge Vibration Dampers** 34 82 13.13 Visco Elastic Bridge Vibration Dampers

Transportation Construction and

34 82 13.16	Tuned-Mass Bridge Vibration Dampers
34 82 19	Bridge Pier Protection
34 82 19.13	Bridge Pier Ice Shields

35 00 00	Waterway and Marine Construction
35 01 00	Operation and Maintenance of Waterway and Marine
	Construction
35 01 30	Operation and Maintenance of Coastal Construction
35 01 40	Operation and Maintenance of Waterway Construction
35 01 40.51	Waterway Dredging
35 01 40.92 35 01 50	Preservation of Water Courses Operation and Maintenance of Marine Construction
35 01 50.51	Marine Dredging
35 01 50.71	Channel Excavation, Cleaning and Deepening
35 01 70	Operation and Maintenance of Dams
35 05 00	Common Work Results for Waterway and Marine
	Construction
35 05 30	Common Work Results for Coastal Construction
35 05 40	Common Work Results for Waterway Construction
35 05 50	Common Work Results for Marine Construction
35 05 70	Common Work Results for Dams
35 06 00	Schedules for Waterway and Marine Construction
35 06 30	Schedules for Coastal Construction
35 06 40	Schedules for Waterway Construction Schedules for Marine Construction
35 06 50 35 06 70	Schedules for Dams
35 08 00	Commissioning of Waterway and Marine Construction
35 08 30	Commissioning of Coastal Construction
35 08 40	Commissioning of Waterway Construction
35 08 50	Commissioning of Marine Construction
35 08 70	Commissioning of Dams
35 10 00	Waterway and Marine Signaling and
00 10 00	
05 44 00	Control Equipment
35 11 00	Signaling and Control Equipment for Waterways
35 11 13	Signaling Equipment for Waterways
35 11 53 35 12 00	Control Equipment for Waterways Marine Signaling and Control Equipment
	Marine Signaling and Control Equipment
35 12 13 35 12 13.13	Marine Signaling Equipment Lighthouse Equipment
35 12 33	Marine Navigation Equipment
35 12 53	Marine Control Equipment
35 13 00	Signaling and Control Equipment for Dams
35 13 13	Signaling Equipment for Dams
35 13 53	Control Equipment for Dams
35 20 00	Waterway and Marine Construction and
	Equipment
35 20 13	Hydraulic Fabrications
35 20 13.13	Hydraulic Bifurcation Panels
35 20 13.16	Hydraulic Bulkheads
35 20 13.19	Hydraulic Manifolds

35 20 13.23 35 20 13.26 35 20 16.13 35 20 16.19 35 20 16.26 35 20 16.33 35 20 16.39 35 20 16.53 35 20 16.53 35 20 16.59 35 20 19.13 35 20 19.23 35 20 23 35 20 23.13 35 20 23.23 35 20 23.33	Hydraulic Penstocks Hydraulic Trashracks Hydraulic Gates Hydraulic Spillway Crest Gates Hydraulic Head Gates Hydraulic Sluice Gates Hydraulic Miter Gates Hydraulic Sector Gates Hydraulic Tainter Gates and Anchorages Hydraulic Vertical Lift Gates Hydraulic Closure Gates Hydraulic Valves Hydraulic Butterfly Valves Hydraulic Regulating Valves Dredging Mechanical Dredging Integrated Dredging and Dewatering
35 30 00	Coastal Construction
35 31 00 35 31 16	Shoreline Protection Seawalls
35 31 16 35 31 16.13 35 31 16.16 35 31 16.23 35 31 16.40 35 31 19.13 35 31 19.16 35 31 19.16 35 31 19.36 35 31 23.13 35 31 23.13 35 31 23.16 35 31 26.13 35 31 26.16 35 31 26.40 35 31 29.35 35 31 29.13 35 31 29.16 35 31 29.16	Concrete Seawalls Segmental Seawalls Steel Sheet Piling Seawalls Timber Seawalls Stone Seawalls Revetments Sacked Cement-Sand Revetments Concrete Unit Masonry Revetments Gabion Revetments Stone Revetments Breakwaters Rubble Mound Breakwaters Precast Breakwater Modules Jetties Concrete Jetties Concrete Unit Masonry Jetties Gabion Jetties Stone Jetties Groins Concrete Unit Masonry Groins Steel Groins
35 31 29.36 35 31 29.40	Gabion Groins Stone Groins
35 31 29.40 35 32 00 35 32 13.13 35 32 13.19 35 32 13.33 35 32 16.13 35 32 16.13	Artificial Reefs Scrap Material Artificial Reefs Scrap Concrete Artificial Reefs Scrap Steel Artificial Reefs Sunken Ship Artificial Reefs Constructed Artificial Reefs Constructed Artificial Reefs Constructed Steel Artificial Reefs

35 40 00	Waterway Construction and Equipment
35 41 00	Levees
35 41 13 35 41 13.13 35 41 13.16 35 41 16	Landside Levee Berms Stability Landside Levee Berms Seepage Landside Levee Berms Levee Cutoff Trenches
35 41 19	Levee Relief Wells
35 42 00	Waterway Bank Protection
35 42 13 35 42 13.19 35 42 13.23 35 42 13.26 35 42 29 35 42 34 35 42 35 35 42 36 35 42 37 35 42 53 35 42 53.16 35 42 53.19	Piling Bank Protection Steel Sheet Piling Bank Protection Timber Piling Bank Protection Plastic Piling Bank Protection Grout-Bag Bank Protection Soil Reinforcement Bank Protection Slope Protection Bank Protection Gabion Bank Protection Riprap Bank Protection Wall Bank Protection Concrete Unit Masonry Wall Bank Protection Segmental Wall Bank Protection
35 42 53.40	Stone Wall Bank Protection
35 43 00	Waterway Scour Protection
35 43 29 35 43 34 35 43 35 35 43 36 35 43 37 35 43 53 35 43 53.13 35 43 53.16 35 43 53.40	Grout-Bag Scour Protection Soil Reinforcement Scour Protection Slope Protection Scour Protection Gabion Scour Protection Riprap Scour Protection Wall Scour Protection Concrete Unit Masonry Wall Scour Protection Segmental Wall Scour Protection Stone Wall Scour Protection
35 49 00	Waterway Structures
35 49 13 35 49 13.13 35 49 13.16 35 49 23 35 49 23.13 35 49 23.23 35 49 26	Floodwalls
35 50 00	Marine Construction and Equipment
35 51 00	Floating Construction
35 51 13 35 51 13.23 35 51 13.26 35 51 23	Floating Piers Floating Wood Piers Floating Plastic Piers Pontoons
35 52 00	Offshore Platform Construction
35 52 13 35 52 23 35 52 33	Fixed Offshore Platform Construction Semi-Submersible Offshore Platform Construction Floating Offshore Platform Construction

35 53 00	Underwater Construction
35 53 23	Underwater Harbor Deepening
35 53 33	Underwater Pipeline Construction
35 53 43	Underwater Foundation Construction
35 53 53	Underwater Structures Construction
35 53 63	Underwater Waterproofing
35 59 00	Marine Specialties
35 59 13	Marine Fenders
35 59 13.13	Prestressed Concrete Marine Fender Piling
35 59 13.16	Resilient Foam-Filled Marine Fenders
35 59 13.19	Rubber Marine Fenders
35 59 23	Buoys
35 59 23.13	Mooring Buoys
35 59 23.16	Anchor Pendant Buoys
35 59 23.19	Navigation Buoys
35 59 29	Mooring Devices
35 59 29.13 35 59 29.16	Quick-Release Mooring Hooks Laser Docking Systems
35 59 29.10	Capstans
35 59 33	Marine Bollards and Cleats
35 59 33.13	Cast-Steel Marine Bollards and Cleats
35 59 33.16	Cast-Iron Marine Bollards and Cleats
35 59 33.19	Stainless-Steel Marine Bollards and Cleats
35 59 33.23	Plastic Marine Bollards and Cleats
35 59 93	Marine Chain and Accessories
35 59 93.13	Marine Chain
35 59 93.16	Marine Shackles
35 59 93.19	Marine Chain Tensioners
35 70 00	Dam Construction and Equipment
35 71 00	Gravity Dams
35 71 13	Concrete Gravity Dams
35 71 16	Masonry Gravity Dams
35 71 19	Rockfill Gravity Dams
35 72 00	Arch Dams
35 72 13	Concrete Arch Dams
35 73 00	Embankment Dams
35 73 13	Earth Embankment Dam
35 73 16	Rock Embankment Dams
35 74 00	Buttress Dams
35 74 13	Concrete Buttress Dams
35 79 00	Auxiliary Dam Structures
35 79 13	Fish Ladders
35 79 13.13	Concrete Fish Ladders

40 00 00	Process Integration
40 01 00	Operation and Maintenance of Process Integration
40 01 10	Operation and Maintenance of Gas and Vapor Process Piping
40 01 20	Operation and Maintenance of Liquids Process Piping
40 01 30	Operation and Maintenance of Solid and Mixed Materials Piping and
	Chutes
40 01 40	Operation and Maintenance of Process Piping and Equipment Protection
40 05 00	Common Work Results for Process Integration
40 05 13	Common Work Results for Process Piping
40 05 13.13	Steel Process Piping
40 05 13.16	Lined or Internally-Coated Steel Process Piping
40 05 13.19	Stainless-Steel Process Piping
40 05 13.23	Aluminum Alloys Process Piping
40 05 13.33	Brass, Bronze, Copper, and Copper Alloys Process Piping
40 05 13.43	Nickel and Nickel Alloys Process Piping
40 05 13.53	Ductile, Malleable, and Cast Iron Alloys Process Piping
40 05 13.63 40 05 13.73	Titanium and Titanium Alloys Process Piping Plastic Process Piping
40 05 13.76	Fiberglass-Reinforced Plastic and Resins Process Piping
40 05 13.93	Other Metals Process Piping
40 05 23	Common Work Results for Process Valves
40 05 23.13	Carbon Steel Process Valves
40 05 23.16	Low and Intermediate Alloy Steel Process Valves
40 05 23.19	Stainless-Steel Process Valves
40 05 23.33	Brass and Iron Process Valves
40 05 23.43	Nickel and Nickel Alloys Steel Process Valves
40 05 23.73 40 05 23.93	Plastic and Plastic Lined Process Valves Other Metals Process Valves
40 06 00	
	Schedules for Process Integration
40 06 10	Schedules for Gas and Vapor Process Piping
40 06 20 40 06 30	Schedules for Liquids Process Piping Schedules for Solid and Mixed Materials Piping and Chutes
40 06 30	Schedules for Process Piping and Equipment Protection
40 10 00	Gas and Vapor Process Piping
40 11 00	Steam Process Piping
40 11 13	Low-Pressure Steam Process Piping
40 11 16	Intermediate-Pressure Steam Process Piping
40 11 19	High-Pressure Steam Process Piping
40 11 23	Condensate Process Piping
40 12 00	Compressed Air Process Piping
40 12 13	Breathing Compressed Air Process Piping
40 12 16	Non-Breathing Compressed Air Process Piping
40 13 00	Inert Gases Process Piping
40 13 13	Argon Process Piping
40 13 13	Carbon-Dioxide Process Piping
40 13 16	Helium Process Piping
40 13 19	Krypton Process Piping
40 13 23	Neon Process Piping
40 13 20	Nitrogen Process Piping
70 10 20	Thirtogori i 100000 i ipirig

	40 13 33	Xenon Process Piping
	40 13 93	Mixed Inert Gases Process Piping
40	14 00	Fuel Gases Process Piping
	40 14 13	Blast Furnace Piping
	40 14 16	Blue (Water) Fuel Gas Piping
	40 14 19	Butane Piping
	40 14 23	Carbon-Monoxide Piping
	40 14 26	Chlorine Fuel Gas Piping
	40 14 29	Coke Oven Gas Piping
	40 14 33	Ethane-Gas Piping
	40 14 36	Hydrogen Fuel Gas Piping
	40 14 39	Liquid Natural-Gas Process Piping
	40 14 43	Methylacetylene-Propadiene Fuel Gas Piping
	40 14 49	Natural-Gas Process Piping
	40 14 49.13	Synthetic Natural-Gas Piping
	40 14 49.23	Propane-Air Mixes Fuel Gas Piping
	40 14 53	Octane Fuel Gas Piping
	40 14 59	Propane Fuel Gas Process Piping
	40 14 63	Sewage Fuel Gas Piping
	40 14 93	Mixed Fuel Gases Piping
40	15 00	Combustion System Gas Piping
	40 15 13	Combustion Air Piping
	40 15 16	Oxygen Combustion System Gas Piping
	40 15 19	Flue-Gas Combustion System Piping
	40 15 23	Exothermic-Gas Combustion System Piping
	40 15 26	Endothermic-Gas Combustion System Piping
	40 15 29	Disassociated-Ammonia-Gas Combustion System Piping
40	16 00	Specialty and High-Purity Gases Piping
	40 16 13	Ammonia Gas Piping
	40 16 16	Boron Gas Piping
	40 16 26	Diborane Gas Piping
	40 16 29	Flourine Gas Piping
	40 16 33	Hydrogen Sulfide Gas Piping
	40 16 36	Nitrous-Oxide Gas Process Piping
	40 16 39	Ozone Gas Piping
	40 16 43	Phosphine Gas Piping
	40 16 46	Silane Gas Piping
	40 16 49	Sulphur-Dioxide Gas Piping
	40 16 53	Specialty Gas Mixtures Piping
	40 16 56	High-Purity Gas Piping Components
40	17 00	Welding and Cutting Gases Piping
	40 17 13	Acetylene Welding and Cutting Piping
	40 17 16	Acetylene-Hydrogen Mix Welding and Cutting Piping
	40 17 19	Methylacetylene-Propadiene Welding and Cutting Piping
	40 17 23	Oxygen Welding and Cutting Piping
	40 17 26	Inert Gas Welding and Cutting Piping
40	18 00	Vacuum Systems Process Piping
	40 18 13	Low-Vacuum Systems Process Piping
	40 18 16	High-Vacuum Systems Process Piping

40 20 00	Liquids Process Piping
40 21 00	Liquid Fuel Process Piping
40 21 13	Bio Fuels Process Piping
40 21 16	Gasoline Process Piping
40 21 19	Diesel Process Piping
40 21 23	Fuel-Oils Process Piping
40 21 23.13	No. 2 Fuel-Oil Process Piping
40 21 23.16	No. 4 Fuel-Oil Process Piping
40 21 23.19	No. 5 Fuel-Oil Process Piping
40 21 23.23	No. 6 Fuel-Oil Process Piping
40 21 23.26 40 21 23.29	Kerosene Process Piping Tar Process Piping
40 22 00	Petroleum Products Piping
40 22 13	Heavy-Fractions Petroleum Products Piping
40 22 16	Light-Fractions Petroleum Products Piping
40 23 00	Water Process Piping
40 23 13	Deionized Water Process Piping
40 23 16	Distilled-Water Process Piping
40 23 19	Process Plant Water Piping
40 23 23	Potable Water Process Piping
40 23 29	Recirculated Water Process Piping
40 23 33	Reverse-Osmosis Water Process Piping
40 23 36	Sanitary Water Process Piping
40 24 00	Specialty Liquid Chemicals Piping
40 24 13	Alcohol Piping
40 24 16	Gel Piping
40 24 19	Slurries Process Piping
40 24 23	Thixotropic Liquid Piping
40 25 00	Liquid Acids and Bases Piping
40 25 13	Liquid Acids Piping
40 25 16	Liquid Bases Piping
40 26 00	Liquid Polymer Piping
40 30 00	
40 30 00	Solid and Mixed Materials Piping and
	Chutes
40 32 00	Bulk Materials Piping and Chutes
40 32 13	Abrasive Materials Piping and Chutes
40 32 16	Nonabrasive Materials Piping and Chutes
40 33 00	Bulk Materials Valves
40 33 13	Airlock Bulk Materials Valves
40 33 16	Blind Bulk Materials Valves
40 33 19	Butterfly Bulk Materials Valves
40 33 23	Cone Bulk Materials Valves
40 33 26	Diverter Bulk Materials Valves
40 33 29	Double or Single Dump Bulk Materials Valves
40 33 33	Knife and Slide Gate Bulk Materials Valves
40 33 36	Pinch Bulk Materials Valves
40 33 39	Swing Bulk Materials Valves

40 33 43	Specialty Bulk Materials Valves
40 34 00	Pneumatic Conveying Lines
40 34 13	Dense Phase Pneumatic Conveying Lines
40 34 16	Dilute Phase Pneumatic Conveying Lines
40 40 00	Process Piping and Equipment Protection
40 41 00	Process Piping and Equipment Heat Tracing
40 41 13	Process Piping Heat Tracing
40 41 13.13	Process Piping Electrical Resistance Heat Tracing
40 41 13.16	Process Piping Electrical Conductance Heat Tracing
40 41 13.19	Process Piping Gas Heat Tracing
40 41 13.23	Process Piping Steam Heat Tracing
40 41 13.26	Process Piping Thermal Fluids Heat Tracing
40 41 23 40 41 23.13	Process Equipment Heat Tracing
40 41 23.16	Process Equipment Electrical Resistance Heat Tracing Process Equipment Electrical Conductance Heat Tracing
40 41 23.19	Process Equipment Gas Heat Tracing
40 41 23.23	Process Equipment Steam Heat Tracing
40 41 23.26	Process Equipment Thermal Fluids Heat Tracing
40 42 00	Process Piping and Equipment Insulation
40 42 13	Process Piping Insulation
40 42 13.13	Cryogenic Temperature Process Piping Insulation
40 42 13.16	Low Temperature Process Piping Insulation
40 42 13.19	Intermediate Temperature Process Piping Insulation
40 42 13.23	High Temperature Process Piping Insulation
40 42 13.26	Process Piping Insulation for Specialty Applications
40 42 23 40 42 23.13	Process Equipment Insulation Cryogenic Temperature Process Equipment Insulation
40 42 23.16	Low Temperature Process Equipment Insulation
40 42 23.19	Intermediate Temperature Process Equipment Insulation
40 42 23.23	High Temperature Process Equipment Insulation
40 42 23.26	Process Equipment Insulation for Specialty Applications
40 46 00	Process Corrosion Protection
40 46 16	Coatings and Wrappings for Process Corrosion Protection
40 46 42	Cathodic Process Corrosion Protection
40 47 00	Refractories
40 47 13	Silica Refractories
40 47 16	Alumina Refractories
40 47 19	Carbon and Graphite Refractories
40 47 23	Castable Refractories
40 47 26	Rammed Refractories
40 47 29	Refractory Concrete
40 80 00	Commissioning of Process Systems
40 90 00	Instrumentation and Control for Process
	Systems
40 91 00	Primary Process Measurement Devices
40 91 13	Chemical Properties Process Measurement Devices
40 91 13.13	Ammonia Process Measurement Devices
40 91 13.16	Chlorine Process Measurement Devices
40 91 13.19	Fluoride Process Measurement Devices

40 91 13.23	Gas Analysis Process Measurement Devices
40 91 13.26	Gas Chromatograph Process Measurement Devices
40 91 13.29 40 91 16	pH Level Process Measurement Devices
40 91 16.13	Electromagnetic Process Measurement Devices
40 91 16.16	Amperes Process Measurement Devices Capacitance Process Measurement Devices
40 91 16.19	Conductivity Process Measurement Devices
40 91 16.23	Inductance Process Measurement Devices
40 91 16.26	Lumens Process Measurement Devices
40 91 16.29	Magnetic Field Process Measurement Devices
40 91 16.33	Electrical Power Process Measurement Devices
40 91 16.36	Radiation Process Measurement Devices
40 91 16.39	Electrical Resistance Process Measurement Devices
40 91 16.43	Ultraviolet Sensors
40 91 16.46	Voltage Process Measurement Devices
40 91 19	Physical Properties Process Measurement Devices
40 91 19.13	Density Process Measurement Devices
40 91 19.16	Humidity Process Measurement Devices
40 91 19.19	Mass Process Measurement Devices
40 91 19.23	Particle Counters Process Measurement Devices
40 91 19.26	Gas Pressure Process Measurement Devices
40 91 19.29	Liquid Pressure Process Measurement Devices
40 91 19.33	Stress/Strain Process Measurement Devices
40 91 19.36 40 91 19.39	Temperature Process Measurement Devices Vapor Pressure Process Measurement Devices
40 91 19.39	Weight Process Measurement Devices
40 91 19.43	Miscellaneous Properties Measurement Devices
40 91 23.13	Acceleration Process Measurement Devices
40 91 23.16	Angle Process Measurement Devices
40 91 23.19	Color Process Measurement Devices
40 91 23.23	Count Process Measurement Devices
40 91 23.26	Distance Process Measurement Devices
40 91 23.29	Energy Process Measurement Devices
40 91 23.33	Flow Process Measurement Devices
40 91 23.36	Level Process Measurement Devices
40 91 23.39	Physical Resistance Process Measurement Devices
40 91 23.43	RPM Process Measurement Devices
40 91 23.46	Time Process Measurement Devices
40 91 23.49	Turbidity Process Measurement Devices
40 91 23.53	Velocity Process Measurement Devices
40 92 00	Primary Control Devices
40 92 13	Primary Control Valves
40 92 13.13	Electrically-Operated Primary Control Valves
40 92 13.16	Hydraulically-Operated Primary Control Valves
40 92 13.19	Pressure Policif Primary Control Valves
40 92 13.23	Pressure-Relief Primary Control Valves
40 92 13.26 40 92 13.29	Solenoid Primary Control Valves Specialty Primary Control Valves
40 92 13.29	Current-To-Pressure Converters
40 92 29	Self-Contained Flow Controllers
40 92 36	Linear Actuators and Positioners
40 92 39	
	Self-Contained Pressure Regulators
40 92 43	Rotary Actuators
40 92 46	Saturable Core Reactors

	40 92 49	Variable Frequency Drives
	40 92 53	Voltage-To-Pressure Converters
40 9	3 00	Analog Controllers/Recorders
	40 93 13	Analog Controllers
	40 93 13.13	Electronic Analog Controllers
	40 93 13.16	Electro-Hydraulic Analog Controllers
	40 93 13.19	Electro-Pneumatic Analog Controllers
	40 93 13.23	Hydraulic Analog Controllers
	40 93 13.26	Pneumatic Analog Controllers
	40 93 23	Chart Recorders
40 9	4 00	Digital Process Controllers
	40 94 13	Digital Process Control Computers
	40 94 13.13	Host Digital Process Control Computers
	40 94 13.16	Personal Digital Process Control Computers
	40 94 13.19	Personal Digital Assistant Digital Process Control Computers
	40 94 23	Distributed Process Control Systems
	40 94 33	Human – Machine Interfaces
	40 94 43	Programmable Logic Process Controllers
40 9	5 00	Process Control Hardware
	40 95 13	Process Control Panels and Hardware
	40 95 13.13	Local Process Control Panels and Hardware
	40 95 13.23	Main Process Control Panels and Hardware
	40 95 20	Process Control Display Devices
	40 95 23	Process Control Input/Output Modules
	40 95 26	Process Control Instrument Air Piping and Devices
	40 95 33	Process Control Networks
	40 95 33.13	Cabled Process Control Networks
	40 95 33.23	Fiber Optic Process Control Networks
	40 95 33.33	Wireless Process Control Networks
	40 95 43	Process Control Hardware Interfaces
	40 95 46	Process Control Mounting Racks and Supports
	40 95 49	Process Control Routers
	40 95 53	Process Control Switches
	40 95 56	Process Control Transformers
	40 95 63	Process Control Wireless Equipment
	40 95 63.13	Process Control Wireless Transmitters
	40 95 63.16	Process Control Wireless Receivers
	40 95 63.19	Process Control Wireless Repeaters
	40 95 73 40 95 73.23	Process Control Wiring Process Control Cable
	40 95 73.23	Process Control Cable Process Control Conduit, Raceway and Supports
	40 95 73.43	Process Control Junction Boxes
40 Q	6 00	Process Control Software
70 3		Process Control Software Architecture
	40 96 10	
	40 96 15	Process Control Software Input/Output Lists
	40 96 20	Process Control Software Instrument Lists
	40 96 25	Process Control Software Logic Diagrams
	40 96 30	Process Control Software Loop Diagrams
	40 96 35	Process Control Software Programming
46.5	40 96 40	Process Control Software Reports
40 9	7 00	Process Control Auxiliary Devices

40 97 10 I	Process Control Annunciators
40 97 15 I	Process Control Gages
40 97 20 I	Process Control Rotameters
40 97 25 I	Process Control Potentiometers
40 97 30 I	Process Control Test Equipment

4	1 00 00	Material Processing and Handling
		Equipment
41	01 00	Operation and Maintenance of Material Processing and
		Handling Equipment
	41 01 10	Operation and Maintenance of Bulk Material Processing Equipment
	41 01 20	Operation and Maintenance of Piece Material Handling Equipment
	41 01 30	Operation and Maintenance of Manufacturing Equipment
	41 01 40	Operation and Maintenance of Container Processing and Packaging
	41 01 50	Operation and Maintenance of Material Storage
44	41 01 60	Operation and Maintenance of Mobile Plant Equipment
41	06 00	Schedules for Material Processing and Handling
		Equipment
	41 06 10	Schedules for Bulk Material Processing Equipment
	41 06 20	Schedules for Piece Material Handling Equipment
	41 06 30 41 06 40	Schedules for Manufacturing Equipment Schedules for Container Processing and Packaging
	41 06 50	Schedules for Material Storage
	41 06 60	Schedules for Mobile Plant Equipment
41	08 00	Commissioning of Material Processing and Handling
		Equipment
	41 08 10	Commissioning of Bulk Material Processing Equipment
	41 08 20	Commissioning of Piece Material Handling Equipment
	41 08 30	Commissioning of Manufacturing Equipment
	41 08 40	Commissioning of Container Processing and Packaging
	41 08 50	Commissioning of Material Storage
	41 08 60	Commissioning of Mobile Plant Equipment
41	10 00	Bulk Material Processing Equipment
41	11 00	Bulk Material Sizing Equipment
	41 11 13	Bulk Material Agglomerators
	41 11 16	Bulk Material Air Mill Classifiers
	41 11 19	Bulk Material Centrifuges
	41 11 23	Bulk Material Crushers
	41 11 26 41 11 29	Bulk Material Cyclones Bulk Material Fluid Bed Separators
	41 11 33	Bulk Material Grinders
	41 11 36	Bulk Material Homogenizers
	41 11 39	Bulk Material Lump Breakers
	41 11 43	Bulk Material Mills
	41 11 46	Bulk Material Pulverizers
	41 11 49	Bulk Material Screens
	41 11 53 41 11 56	Bulk Material Shredders
11	12 00	Bulk Material Convoying Equipment
41	41 12 13	Bulk Material Conveying Equipment
	41 12 13 41 12 13.13	Bulk Material Conveyors Airslide Bulk Material Conveyors
	41 12 13.16	Auger Bulk Material Conveyors
	41 12 13.19	Belt Bulk Material Conveyors

41 12 13.23	Container Bulk Material Conveyors
41 12 13.26	Drag Chain Bulk Material Conveyors
41 12 13.29	Hopper Bulk Material Conveyors
41 12 13.33	Reciprocating Bulk Material Conveyors
41 12 13.36	Screw Bulk Material Conveyors
	Stacking and Reclaim Bulk Material Conveyors
	Trough Bulk Material Conveyors
	Tube Bulk Material Conveyors
	Vibratory Bulk Material Conveyors
	Weigh-Belt Bulk Material Conveyors
	Bucket Elevators
	Pneumatic Conveyors
	Dense Phase Pneumatic Conveyors
	Dilute Phase Pneumatic Conveyors
13 00	Bulk Material Feeders
41 13 13	Bin Activators/Live Bin Bottoms
41 13 23	Feeders
41 13 23.13	Airlock Bulk Material Feeders
41 13 23.16	Apron Bulk Material Feeders
41 13 23.19	Rotary-Valve Bulk Material Feeders
41 13 23.23	Screw Bulk Material Feeders
41 13 23.26	Vibratory Bulk Material Feeders
41 13 23.29	Volumetric Bulk Material Feeders
41 13 23.33	Weigh Bulk Material Feeders
14 00	Batching Equipment
41 14 13	Bag-Handling Batching Equipment
	Batch Cars/Transports
	Batch Hoppers
	Bulk Bag-Handling Batching Equipment
	Blenders
	Drum-Handling Batching Equipment
	Mixers
	Weigh Scales
20 00	Piece Material Handling Equipment
21 00	Conveyors
	-
	Automatic Guided Vehicle Systems
	Piece Material Conveyors
	Belt Piece Material Conveyors
	Container Piece Material Conveyors Drag-Chain Piece Material Conveyors
	Hopper Piece Material Conveyors
	Monorail Piece Material Conveyors
	Power and Free Piece Material Conveyors
	Reciprocating Piece Material Conveyors
	Roller Piece Material Conveyors
	Vibratory Piece Material Conveyors
	Walking-Beam Piece Material Conveyors
	Weigh-Belt Piece Material Conveyors
41 21 23.53	Postal Conveyors
41 21 26	Piece Material Diverter Gates
	Piece Material Gravity Slides
41 21 33	Piece Material Transfer Cars
	41 12 13.29 41 12 13.33 41 12 13.39 41 12 13.43 41 12 13.49 41 12 13.53 41 12 16 41 12 19 41 12 19.16 13 00 41 13 13 41 13 23.16 41 13 23.16 41 13 23.23 41 13 23.23 41 13 23.29 41 13 23.33 14 00 41 14 13 41 14 16 41 14 19 41 14 23 41 14 26 41 14 29 41 14 33 41 14 26 41 14 29 41 14 33 41 14 36 20 00 21 00 41 21 13 41 21 23.19 41 21 23.29 41 21 23.29 41 21 23.33 41 21 23.26 41 21 23.29 41 21 23.33 41 21 23.36 41 21 23.36 41 21 23.36 41 21 23.39 41 21 23.46 41 21 23.46 41 21 23.53 41 21 23.53 41 21 23.53 41 21 23.53 41 21 23.53 41 21 23.53 41 21 23.53 41 21 23.53 41 21 29

	41 21 36	Piece Material Turntables
	41 21 39	Piece Material Feeders
	41 21 39.13	Piece Material Vibratory Feeders
41	22 00	Cranes and Hoists
	41 22 13	Cranes
	41 22 13.13	Bridge Cranes
	41 22 13.16	Gantry Cranes
	41 22 13.19	Jib Cranes
	41 22 13.23	Mobile Cranes
	41 22 13.26	Tower Cranes
	41 22 13.29	Specialty Cranes
	41 22 23	Hoists
	41 22 23.13	Fixed Hoists
	41 22 23.16	Portable Hoists
	41 22 23.19	
	41 22 23.23	Specialty Hoists
	41 22 33	Derricks
41	23 00	Lifting Devices
	41 23 13	Clamps
	41 23 16	Grabs
	41 23 19	Hooks
	41 23 23	Lifts
	41 23 26	Slings
	41 23 29	Spreader Bars/Beams
	41 23 33	Tongs
41	24 00	Specialty Material Handling Equipment
71	41 24 13	Aeration Devices
	41 24 16	Bin Vibrators
	41 24 19	
		Dehydrators
	41 24 23	Hydraulia Rower Systems
	41 24 26	Hydraulic Power Systems
	41 24 29	Lubrication Systems
	41 24 33	Magnetic Separators
	41 24 36	Metal Detectors
	41 24 39	Railcar Movers
	41 24 43	Turnheads/Distributors
	41 24 46	Sorting Machines
	41 24 46.13	Postal Sorting Machines
41	30 00	Manufacturing Equipment
41	31 00	Manufacturing Lines and Equipment
	41 31 13	Manufacturing Lines
	41 31 13.13	Assembly Lines
	41 31 13.16	Casting Lines
	41 31 13.19	Coating Lines
	41 31 13.23	Converting Lines
	41 31 13.26	Disassembly Lines
	41 31 13.29	Extrusion Lines
	41 31 13.33	Machining Lines
	41 31 13.36	Molding Lines
	41 31 13.39	Finishing/Painting Lines
	41 31 13.43	Painting Lines

	41 31 13.46 41 31 13.49 41 31 13.53 41 31 13.56 41 31 13.63 41 31 16 41 31 19 41 31 23	Web Processing Lines Pick and Place Systems Manufacturing-Line Robots Specialty Assembly Machines
41	32 00	Forming Equipment
	41 32 13	Bending Equipment
	41 32 16	Blow-Molding Equipment
	41 32 19 41 32 23	Brake-Forming Equipment
	41 32 23	Cold-Forming Equipment Die-Casting Equipment
	41 32 29	Drawing Equipment
	41 32 33	Electroforming Equipment
	41 32 36	Forging Equipment
	41 32 39	Extruding Equipment
	41 32 43	Metal-Spinning Equipment
	41 32 46	Piercing Equipment
	41 32 49	Powder Metal-Forming Equipment
	41 32 53	Pressing Equipment
	41 32 56	Roll-Forming Equipment
	41 32 59	Shearing Equipment
	41 32 63	Spinning Equipment
	41 32 66	Stretching/Leveling Equipment
44	41 32 69	Swaging Equipment
41	33 00	Machining Equipment
	41 33 13	Automatic Screw Machining Equipment
	41 33 16	Boring Equipment
	41 33 16 41 33 19	Boring Equipment Broaching Equipment
	41 33 16 41 33 19 41 33 23	Boring Equipment Broaching Equipment Drilling Equipment
	41 33 16 41 33 19 41 33 23 41 33 26	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment
	41 33 16 41 33 19 41 33 23 41 33 26	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43 41 33 46	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43 41 33 46 41 33 53	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 36 41 33 36 41 33 43 41 33 43 41 33 53 41 33 53	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43 41 33 53 41 33 53 41 33 53.13 41 33 53.16	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43 41 33 53 41 33 53.13 41 33 53.16 41 33 60	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 39 41 33 43 41 33 53 41 33 53 41 33 53.13 41 33 53.16	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment Planing Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 43 41 33 46 41 33 53 41 33 53.13 41 33 53.16 41 33 60 41 33 63	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 36 41 33 39 41 33 43 41 33 46 41 33 53 41 33 53.13 41 33 53.16 41 33 60 41 33 60 41 33 69 41 33 73	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment Planing Equipment Reaming Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 43 41 33 43 41 33 53.13 41 33 53.16 41 33 60 41 33 63 41 33 69 41 33 73 41 33 76	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment Planing Equipment Reaming Equipment Routing Equipment Sawing Equipment Shaping Equipment
	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 36 41 33 39 41 33 43 41 33 46 41 33 53 41 33 53.13 41 33 53.16 41 33 60 41 33 66 41 33 69 41 33 73 41 33 76 41 33 79	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Planing Equipment Reaming Equipment Routing Equipment Sawing Equipment Shaping Equipment Threading Equipment
41	41 33 16 41 33 19 41 33 23 41 33 26 41 33 29 41 33 33 41 33 36 41 33 43 41 33 43 41 33 53.13 41 33 53.16 41 33 60 41 33 63 41 33 69 41 33 73 41 33 76	Boring Equipment Broaching Equipment Drilling Equipment Electro-Discharge Machining Equipment Grinding Equipment Hobbing Equipment Lapping Equipment Lathe Equipment Leveling Equipment Machining Center Equipment Milling Equipment Horizontal Milling Equipment Vertical Milling Equipment Multi-Axis Machine Equipment Planing Equipment Reaming Equipment Routing Equipment Sawing Equipment Shaping Equipment

	41 34 13 41 34 16 41 34 23 41 34 23.13 41 34 23.16 41 34 23.23	Anodizing Equipment Barrel Tumbling Equipment Coating Equipment Diffusion Coating Equipment Dipping Coating Equipment Film Coating Equipment Phosphatizing Coating Equipment
	41 34 23.26 41 34 23.29	Plasma Coating Equipment Hardface Welding Coating Equipment
	41 34 23.33 41 34 26	Spray Painting Booth Deburring Equipment
	41 34 36	Electroplating Equipment
	41 34 46	Grinding Equipment
	41 34 49 41 34 53	Honing Equipment Lapping Equipment
	41 34 56	Shot Peening Equipment
	41 34 59	Superfinishing/Polishing Equipment
41	35 00	Dies and Molds
	41 35 13 41 35 13.13	Dies Drawing Dies
	41 35 13.16	Extrusion Dies
	41 35 13.19 41 35 13.23	Press Dies Rotary Dies
	41 35 13.26	Rule Dies
11	41 35 33 36 00	Molds Assembly and Testing Equipment
71	41 36 13	Applicators
	41 36 13.13	Adhesive Applicators
	41 36 13.16 41 36 13.19	Lubricant Applicators Sealer Applicators
		Fixtures and Jigs
	41 36 16	<u> </u>
	41 36 19	Joining Equipment
	41 36 19 41 36 19.13 41 36 19.16	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.19	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.19 41 36 19.23 41 36 19.26	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23 41 36 23.13	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Torches
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23 41 36 23.13 41 36 23.16 41 36 23.19	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment
	41 36 19 41 36 19.13 41 36 19.16 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.13 41 36 23.16 41 36 23.23	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.13 41 36 23.19 41 36 23.23 41 36 26.13	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment Process Tools Air Process Tools
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.13 41 36 23.16 41 36 23.23 41 36 26.13 41 36 26.13	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment Process Tools Air Process Tools Electric Process Tools
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.16 41 36 23.19 41 36 23.23 41 36 26.19 41 36 26.19 41 36 26.23	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment Process Tools Air Process Tools Electric Process Tools Manual Process Tools
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.16 41 36 23.19 41 36 23.23 41 36 26.16 41 36 26.13 41 36 26.19 41 36 26.23 41 36 29	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment Process Tools Air Process Tools Electric Process Tools Hydraulic Process Tools Manual Process Tools Manufacturing Measurement and Testing Equipment
	41 36 19 41 36 19.13 41 36 19.19 41 36 19.23 41 36 19.26 41 36 19.29 41 36 19.33 41 36 23.13 41 36 23.16 41 36 23.19 41 36 23.23 41 36 26.19 41 36 26.19 41 36 26.23	Joining Equipment Adhesive Joining Equipment Arc-Welding Equipment Brazing Equipment Resistance-Welding Equipment Riveting Equipment Sintering Equipment Soldering Equipment Cutting Equipment Cutting Equipment Cutting Torches High-Pressure Water Cutting Equipment Laser Cutting Equipment Plasma Cutting Equipment Process Tools Air Process Tools Electric Process Tools Manual Process Tools

	41 36 29.23 41 36 29.26 41 36 29.29	Magnaflux Measurement and Testing Equipment Optical Comparators Profilometers
	41 36 29.33	Radiograph Measurement and Testing Equipment Surface Tables
	41 36 29.36 41 36 29.39	Ultrasonic Measurement and Testing Equipment
	41 36 29.43	Test Weigh Scales
4 1	40 00	Container Processing and Packaging
41	41 00	Container Filling and Sealing
	41 41 13	Bulk Container Fillers/Packers
	41 41 16	Container Cappers
	41 41 19	Container Fillers
	41 41 19.13	Bag Fillers
	41 41 19.16	Box Fillers
	41 41 19.19 41 41 23	Bottle Fillers
44	_	Container Sealers
41	42 00	Container Packing Equipment
	41 42 13	Box Packing Equipment
	41 42 13.13 41 42 13.16	Box Makers Box Packers
	41 42 13.16	Bulk Material Loaders
	41 42 16.13	
		Truck Bulk Material Loaders
		Railcar Bulk Material Loaders
	41 42 16.29	Ship Bulk Material Loaders
	41 42 16.33	Barge Bulk Material Loaders
	41 42 19	Carton Packers
	41 42 23	Carton Sealers
	41 42 26	Carton Shrink Wrappers
	41 42 29	Carton Stackers
41	43 00	Shipping Packaging
	41 43 13	Banding/Strapping Equipment
	41 43 16	Barcode Equipment
	41 43 16.13	Barcode Readers
	41 43 16.16 41 43 19	Barcode Printers
	41 43 19	Labeling Equipment Pallet Stacking/Wrapping Equipment
11		
	50 00	Material Storage
41	51 00	Automatic Material Storage
	41 51 13	Automatic Storage/Automatic Retrieval Systems
41	52 00	Bulk Material Storage
	41 52 13	Bins and Hoppers
	41 52 13.13	Fixed Bins and Hoppers
	41 52 13.23	Portable Bins and Hoppers
	41 52 13.33	Bulk Material Containers
	41 52 13.43 41 52 13.53	Returnable Bins and Hoppers Throwaway Bins and Hoppers
	41 52 13.53	Silos
	41 52 16.13	Concrete Silos
	41 52 16.16	Concrete Masonry Unit Silos
	41 52 16.19	Steel Silos

	41 52 19 41 52 19.13 41 52 19.23	Material Storage Tanks Horizontal Material Storage Tanks Vertical Material Storage Tanks
	41 52 19.33	Portable Material Storage Tanks
41	53 00	Storage Equipment and Systems
	41 53 13	Storage Cabinets
	41 53 16	Container Storage Systems
	41 53 19	Flat Files
	41 53 23	Storage Racks
	41 53 23.13	Mobile Storage Racks
	41 53 26	Mezzanine Storage Systems
41	60 00	Mobile Plant Equipment
41	61 00	Mobile Earth Moving Equipment
	41 61 13	Backhoes
	41 61 16	Bulldozers
	41 61 19	Compactors
	41 61 23	Excavators
	41 61 26	Graders
	41 61 29	Payloaders
	41 61 33	Trenchers
41	62 00	Trucks
	41 62 13	Cement Mixer Trucks
	41 62 16	Dump Trucks
	41 62 19	Flatbed Trucks
	41 62 23	Forklift Trucks
	41 62 26	Pickup Trucks
	41 62 29	Tank Trucks
41	63 00	General Vehicles
	41 63 13	Bicycles
	41 63 16	Carts
	41 63 19	Maintenance Vehicles
	41 63 23	Utility Vehicles
	41 63 26	Vans
	41 63 29	Wagons
41	64 00	Rail Vehicles
	41 64 13	Locomotives
	41 64 13.13	Diesel Locomotives
	41 64 13.23	Electric Locomotives
	41 64 16	Mobile Railcar Movers
41	65 00	Mobile Support Equipment
	41 65 13	Mobile Air Compressors
	41 65 16	Mobile Generators
	41 65 19	Mobile Welders
41	66 00	Miscellaneous Mobile Equipment
	41 66 13	Mobile Boring and Drilling Rigs
	41 66 16	Mobile Lifts and Cherrypickers
	41 66 19	Mobile Paving Equipment
	41 66 23	Mobile Sweepers/Vacuums

41 67 00	Plant Maintenance Equipment
41 67 13	Plant Lube Oil System
41 67 16	Plant Fall Protection Equipment
41 67 19	Plant Safety Equipment
41 67 23	Plant Maintenance Tools
41 67 26	Plant Maintenance Washing Equipment

42 00 00	Process Heating, Cooling, and Dryin
	Equipment
42 01 00	Operation and Maintenance of Process Heating,
	Cooling, and Drying Equipment
42 01 10	Operation and Maintenance of Process Heating Equipment
42 01 20	Operation and Maintenance of Process Cooling Equipment
42 01 30	Operation and Maintenance of Process Drying Equipment
42 06 00	Schedules for Process Heating, Cooling, and Drying
	Equipment
42 06 10	Schedules for Process Heating Equipment
42 06 20 42 06 30	Schedules for Process Cooling Equipment
42 08 00	Schedules for Process Drying Equipment Commissioning of Process Heating, Cooling, and
42 00 00	
42.00.40	Drying Equipment
42 08 10 42 08 20	Commissioning of Heating Equipment Commissioning of Cooling Equipment
42 08 30	Commissioning of Drying Equipment
42 10 00	Process Heating Equipment
	<u> </u>
42 11 00	Process Boilers
42 11 13 42 11 16	Low-Pressure Process Boilers Intermediate-Pressure Process Boilers
42 11 19	High-Pressure Process Boilers
42 11 23	Specialty Process Boilers
42 12 00	Process Heaters
42 12 13	Electric Process Heaters
42 12 16	Fuel-Fired Process Heaters
42 12 19	Thermoelectric Process Heaters
42 12 23 42 12 26	Solar Process Heaters
42 13 00	Specialty Process Heaters Industrial Host Exchangers and Recuperators
42 13 10	Industrial Heat Exchangers and Recuperators Industrial Gas-to-Gas Heat Exchangers
42 13 16	Industrial Gas-to-Gas Fleat Exchangers Industrial Liquid-to-Gas/Gas-to-Liquid Heat Exchangers
42 13 19	Industrial Liquid-to-Liquid Heat Exchangers
42 13 23	Industrial Gas Radiation Heat Exchangers
42 13 26	Industrial Solar Radiation Heat Exchangers
42 14 00	Industrial Furnaces
42 14 13	Annealing Furnaces
42 14 16 42 14 19	Atmosphere Generators
42 14 19	Industrial Baking Furnaces Industrial Brazing Furnaces
42 14 26	Industrial Calcining Furnaces
42 14 29	Industrial Heat-Treating Furnaces
42 14 33	Industrial Melting Furnaces
42 14 33.13	Ceramics and Glass Melting Furnaces
42 14 33.16 42 14 33.19	Ferrous Melting Furnaces Non-Ferrous Melting Furnaces

42 14 36	Primary Refining Furnaces
42 14 43	Reactor Furnaces
42 14 46	Industrial Reheat Furnaces
42 14 53	Industrial Sintering Furnaces
42 14 56	Industrial Vacuum Furnaces
42 15 00	Industrial Ovens
42 15 13	Industrial Drying Ovens
42 15 16	Industrial Curing Ovens
42 15 19	Industrial Specialty Ovens
42 20 00	Process Cooling Equipment
42 21 00	Process Cooling Towers
42 21 13	Open-Circuit Process Cooling Towers
42 21 16	Closed-Circuit Process Cooling Towers
42 22 00	Process Chillers and Coolers
42 22 13	Centrifugal Process Chillers and Coolers
42 22 16	Reciprocating Process Chillers and Coolers
42 22 19	Refrigerant Process Chillers and Coolers
42 22 23 42 22 26	Rotary Process Chillers and Coolers Thermoelectric Process Chillers and Coolers
42 23 00	Process Condensers and Evaporators
42 23 13	Process Condensers
42 23 16	Process Cooling Evaporators
42 23 19	Process Humidifiers
42 30 00	Process Drying Equipment
42 31 00	Gas Dryers and Dehumidifiers
42 31 13	Drying Evaporators
42 31 16	Desiccant Equipment
42 31 19	Regenerative Dryers
42 31 23	Refrigerant Dryers
42 32 00	Material Dryers
42 32 13	Centrifugal Material Dryers
42 32 16	Conveyor Material Dryers
42 32 19	Flash Material Dryers
42 32 23	Fluid-Bed Material Dryers
42 32 26	Material Roasters
42 32 29	Rotary-Kiln Material Dryers
42 32 33	Spray Material Dryers
42 32 36	Tower Material Dryers
42 32 39	Vacuum Material Dryers
42 32 43	Specialty Material Dryers

43 00 00	Process Gas and Liquid Handling,
	Purification, and Storage Equipment
43 01 00	Operation and Maintenance of Process Gas and Liquid
	Handling, Purification, and Storage Equipment
43 01 10	Operation and Maintenance of Gas Handling Equipment
43 01 10.13	Gas Blowers Maintenance and Rehabilitation
43 01 10.16 43 01 20	Gas Compressors Maintenance and Rehabilitation Operation and Maintenance of Liquid Handling Equipment
43 01 20.13	Liquid Pumps Maintenance and Rehabilitation
43 01 20.16	Liquid Process Equipment Maintenance and Rehabilitation
43 01 30	Operation and Maintenance of Gas and Liquid Hi-Purification Equipment
43 01 40 43 01 40.13	Operation and Maintenance of Gas and Liquid Storage Non-pressurized Tanks Cleaning, Maintenance, and Rehabilitation
43 01 40.16	Pressurized Tanks Cleaning, Maintenance, and Rehabilitation
43 05 00	Common Work Results for Process Gas and Liquid
	Handling, Purification, and Storage Equipment
43 05 10	Common Work Results for Gas Handling Equipment
43 05 20	Common Work Results for Liquid Handling Equipment
43 05 30 43 05 40	Common Work Results for Gas and Liquid Hi-Purification Equipment Common Work Results for Gas and Liquid Storage
43 06 00	Schedules for Process Gas and Liquid Handling,
73 00 00	Purification, and Storage Equipment
43 06 10	Schedules for Gas Handling Equipment
43 06 20	Schedules for Liquid Handling Equipment
43 06 30	Schedules for Gas and Liquid Hi-Purification Equipment
43 06 40	Schedules for Gas and Liquid Storage
43 08 00	Commissioning of Process Gas and Liquid Handling,
	Purification, and Storage Equipment
43 08 10 43 08 20	Commissioning of Gas Handling Equipment
43 08 30	Commissioning of Liquid Handling Equipment Commissioning of Gas and Liquid Purification Equipment
43 08 40	Commissioning of Gas and Liquid Storage
43 10 00	Gas Handling Equipment
43 11 00	Gas Fans, Blowers, Pumps and Boosters
43 11 11	Direct Drive Single Stage Centrifugal Blowers
43 11 12	Integrally Geared Single Stage Centrifugal Blowers
43 11 13	Separately Geared Single Stage Centrifugal Blowers
43 11 14 43 11 17	Direct Drive Integral Shaft Single Stage Centrifugal Blowers Horizontally Split Multistage Centrifugal Blowers
43 11 18	Vertically Split Multistage Centrifugal Blowers
43 11 19	Centrifugal Fans
43 11 23	Axial Blowers
43 11 26	Axial Fans Potary Holical Scrow Blowers
43 11 31 43 11 33	Rotary Helical Screw Blowers Rotary Lobe Blowers
43 11 34	Regenerative Rotary Blowers
43 11 36	Rotary Vane Blowers

43 11 41	Gas-handling Venturi Jet Pumps
43 11 43	Gas-handling Vacuum Pumps
43 11 46	Gas Boosters
43 12 00	Gas Compressors
43 12 11	Centrifugal Compressors
43 12 13	Diagonal or Mixed-flow Compressors
43 12 16	Axial-flow Compressors
43 12 33	Single-acting Reciprocating Compressors
43 12 34	Double-acting Reciprocating Compressors
43 12 37	Diaphragm Reciprocating Compressors
43 12 51	Rotary Screw Compressors
43 12 53	Rotary Vane Compressors
43 12 56	Rotary Liquid-ring Compressors
43 12 57	Rotary Scroll Compressors
43 13 00	Gas Process Equipment
43 13 13	Gas Blenders
43 13 19	Gas Mixers
43 13 23	Gas Pressure Regulators
43 13 31	Gas Separation Equipment
43 13 33	Gas Dehydration Equipment
43 13 36	Combined Gas Separation and Dehydration Equipment
43 13 39	Gas Recovery and Condensing Equipment
43 13 43	Waste Gas Burner System
43 13 46	Gas Control and Safety Equipment
43 15 00	Process Air and Gas Filters
43 15 13	Blower Intake and Turbine Air Filters
43 15 13.13	
43 15 13.16	Static Final Filters
43 15 13.19	
43 15 13.23 43 15 33	Pulse Filters Grease Filters
43 15 43	Mist Eliminators
43 15 63	High-temperature Air Filters
43 15 73	Multiple-application Air Filters
43 15 73.11	Air Filter Media
43 15 73.12	Permanent Washable Filters
43 15 73.13	Poly-ring Air Filters
43 15 73.15	Rigid Cell Filters
43 15 73.17	Automatic Roll-type Air Filters
43 15 76	Chemical Media for Air and Gas Filters
43 20 00	Liquid Handling Equipment
43 21 00	Liquid Pumps
43 21 13	Centrifugal Liquid Pumps
43 21 16	Diaphragm Liquid Pumps
43 21 19	Dispensing Liquid Pumps
43 21 19	Drum Liquid Pumps
43 21 26	Gear Liquid Pumps
43 21 29	Metering Liquid Pumps
43 21 33	Piston/Plunger Liquid Pumps
43 21 36	Positive Displacement Liquid Pumps

	43 21 39	Submersible Liquid Pumps
	43 21 43	Sump Liquid Pumps
	43 21 46	Vane Liquid Pumps
43	22 00	Liquid Process Equipment
	43 22 13	Liquid Aeration Devices
	43 22 16	Liquid Agitators
	43 22 19	Liquid Blenders
	43 22 23	Liquid Centrifuges
	43 22 26	Liquid Deaerators
	43 22 29	Drum Handling Liquid Process Equipment
	43 22 33	Liquid Emulsifiers
	43 22 36	Liquid Evaporators
	43 22 39	Liquid Feeders
	43 22 56	Liquid Process Mixers
	43 22 59	Liquid Process Pressure Regulators
	43 22 63	Liquid Separation Towers
	43 22 66	Liquid Weigh Systems
	43 22 69	Liquid Grease Receiving and Dewatering Systems
	43 22 73	Liquid Fillers
	43 22 76	Liquid Screeners
	43 22 79	Liquid Clarifiers
	43 22 83	Liquid Classifiers
	43 22 86	Liquid Homogenizers
	43 22 89	Liquid Presses
	43 22 96	Liquid Versators
	43 22 99	Liquid Votators
43	27 00	Process Liquid Filters
	43 27 13	Cyclonic Liquid Filters
	43 27 16	Centrifugal Horizontal Pressure Leaf Liquid Filters
	43 27 19	Press Liquid Filters
	43 27 23	Liquid Bag Filters
	43 27 33	Mechanically Cleaned Liquid Filters
	43 27 43	Tubular Backwashing Liquid Filters
	43 27 53	Vacuum Belt Liquid Filters
	43 27 63 43 27 63.13	Woven Media Liquid Filters Disc Liquid Filters
	43 27 63.13	Rotating Drum Liquid Filters
	43 27 63.33	Layer Liquid Filters
	43 27 63.43	Candle Liquid Filters
	43 27 63.53	Vertical Leaf Liquid Filters
	43 27 73	Nonwoven Media Liquid Filters
	43 27 73.13	Surface Liquid Filters
	43 27 73.23	Depth Liquid Filters
43	30 00	Gas and Liquid Purification Equipment
43	31 00	Gas and Liquid Purification Filtration Equipment
	43 31 13	Gas and Liquid Purification Filters
	43 31 13.13	Activated Carbon-Gas and Liquid Purification Filters
	43 31 13.16	Gas and Liquid Purification Filter Presses
	43 31 13.19	High-Purity Cartridge Gas and Liquid Purification Filters
	43 31 13 23	Membrane Diaphragm Gas and Liquid Purification Filters

	43 31 13.26 43 31 13.29 43 31 13.33	Multimedia Gas and Liquid Purification Filters Pretreatment Cartridge Gas and Liquid Purification Filters
12	32 00	Ultrafilter Units Gas and Liquid Purification Process Equipment
43	43 32 13	Gas and Liquid Purification Process Beds
	43 32 13.13	Anion-Gas and Liquid Purification Process Beds
	43 32 13.16	Cation-Gas and Liquid Purification Process Beds
	43 32 23	Gas and Liquid Purification Process Clarifier Systems
	43 32 26	Gas and Liquid Purification Decarbonators
	43 32 29	Electronic Deionization Purification Units
	43 32 33	External Regeneration Systems
	43 32 36	Mixed-Bed Ion-Exchange Vessels
	43 32 39	Gas and Liquid Purification Mixed Beds
	43 32 39.13	Externally Regenerable Gas and Liquid Purification Mixed Beds
	43 32 39.16	In-Situ Regenerable Gas and Liquid Purification Mixed Beds
	43 32 53	Packed-Bed Ion-Exchange Vessels
	43 32 56	Reverse-Osmosis Purification Units
	43 32 59	Gas and Liquid Purification Scrubbers
	43 32 63	Ultraviolet Sterilizers
	43 32 66	Vacuum Degasifiers
	43 32 69	Chemical Feed Systems
	43 32 73	Ozonation Equipment
	43 32 76	Chlorination Equipment
43	40 00	Gas and Liquid Storage
43	41 00	Non-pressurized Tanks and Vessels
	43 41 11	Bolted Steel Tanks
	43 41 13	Welded Steel Tanks
	43 41 13.13	Glass-lined Welded Steel Tanks
	43 41 13.23	Rubber-lined Welded Steel Tanks
	43 41 13.33	Epoxy-lined Welded Steel Tanks
	43 41 13.43	Ceramic-lined Welded Steel Tanks
	43 41 23	Stainless Steel Tanks
	43 41 26	Aluminum Tanks
	43 41 31	Metallic Specialty Tanks
	43 41 41	Polyvinyl Chloride Tanks
	43 41 43	Polyethylene Tanks
	43 41 45 43 41 53	Fiberglass Reinforced Plastic Tanks Wood Stave Tanks
	43 41 63	Precast Concrete Tanks
	43 41 73	Ceramic Tanks
	43 41 83	Non-metallic Specialty Tanks
12	42 00	Pressurized Tanks and Vessels
43		
	43 42 11	Cast Iron Pressure Tanks
	43 42 13	Ductile Iron Pressure Tanks
	43 42 21	Welded Steel Pressure Tanks
	43 42 23	Glass-lined Steel Pressure Tanks
	43 42 26	Welded Steel Gas Storage Sphere
	43 42 33	Stainless Steel Pressure Tanks
	12 12 26	Aluminum Proceuro Tanke
	43 42 36 43 42 41	Aluminum Pressure Tanks Metallic Specialty Pressure Tanks

43 42 53	Fiberglass Reinforced Plastic Pressure Tanks
43 42 83	Non-metallic Specialty Pressure Tanks

44 00 00	Pollution and waste Control
	Equipment
44 01 00	Operation and Maintenance of Pollution and Waste
	Control Equipment
44 01 10	Operation and Maintenance of Air Pollution Control
44 01 20	Operation and Maintenance of Noise Pollution Control
44 01 30	Operation and Maintenance of Odor Control Equipment
44 01 40	Operation and Maintenance of Water Pollution Control Equipment
44 01 50	Operation and Maintenance of Solid Waste Control and Reuse
44 01 60	Operation and Maintenance of Waste Thermal Processing Equipment
44 05 00	Common Work Results for Pollution and Waste Control
	Equipment
44 06 00	Schedules for Pollution and Waste Control Equipment
44 06 10	Schedules for Air Pollution Control
44 06 20	Schedules for Noise Pollution Control
44 06 30	Schedules for Odor Control Equipment
44 06 40	Schedules for Water Pollution Control Equipment
44 06 50	Schedules for Solid Waste Control and Reuse
44 06 60	Schedules for Waste Thermal Processing Equipment
44 08 00	Commissioning of Pollution and Waste Control
	Equipment
44 08 10	Commissioning of Air Pollution Control
44 08 20	Commissioning of Noise Pollution Control
44 08 30	Commissioning of Odor Control Equipment
44 08 40	Commissioning Water Pollution Control Equipment
44 08 50	Commissioning Solid Waste Control and Reuse
44 08 60	Commissioning of Waste Thermal Processing Equipment
44 10 00	Air Pollution Control
44 11 00	Particulate Control Equipment
44 11 13	Fugitive Dust Control
44 11 16	Fugitive Dust Barrier Systems
44 11 19	Atmospheric Air Quality Monitoring Equipment
44 11 20	Gravitational Separators
44 11 31	Venturi Scrubbing Equipment
44 11 33	Spray Tower/Chamber Scrubbing Equipment
44 11 36	Cyclone Scrubbing Equipment
44 11 51	Pulse Jet Fabric Filtration Equipment
44 11 53	Reverse Flow Fabric Filtration Equipment
44 11 54	Shake/Deflate Fabric Filtration Equipment
44 11 56	Cartridge Filtration Equipment
44 11 59	Disposable Dry Filtration Equipment
44 11 71	Cyclone Dust Collection Equipment
44 11 73	Multicylone Dust Collection Equipment
44 11 76 44 11 93	Mist Elimination Equipment Wet Electrostatic Precipitator Equipment
44 11 93	Dry Plate Electrostatic Precipitator Equipment
 11 2 0	Divinuo Elogrogiario i rogipitaroi Equipitiotit

44 13 00	Gaseous Air Pollution Control Equipment
44 13 11	Spray Tower/Chamber Absorption Equipment
44 13 13	Packed Tower/Chamber Absorption Equipment
44 13 14	Tray Tower Absorption Equipment
44 13 16	Jet Bubbling Reactor Equipment
44 13 17	Venturi Absorption Equipment
44 13 20	Vacuum Extraction Systems
44 13 31	Powdered Injection Adsorption Equipment
44 13 33	Fluidized Bed Adsorption Equipment
44 13 34	Fixed Bed Adsorption Equipment
44 13 36	Rotary Bed Adsorption Equipment
44 13 39	Radial Bed Adsorption Equipment
44 13 51	Thermal Oxidation Equipment
44 13 53	Catalytic Oxidation Equipment
44 13 56	Flare Oxidation Equipment
44 13 59	Claus Sulfur Recovery Equipment
44 13 71	Thermal Reduction Equipment
44 13 73	Catalytic Reduction Equipment
44 13 76	Non-catalytic Reduction Equipment
44 13 77	Selective Non-catalytic Reduction Equipment
44 13 81	Condensation Systems
44 13 83	Contact Condensing Equipment
44 13 86	Solvent Recovery Equipment
44 13 91	Biofilter Media
44 13 93	Fixed Bed Biofilter Equipment
44 13 96	Fixed Bed Biotrickling Filter Equipment
44 13 97	Fixed Bed Bioscrubbing Equipment
44 20 00	Noise Pollution Control
44 21 00	Noise Pollution Control Equipment
44 21 13	Fixed Noise Abatement Barriers
44 21 16	Flexible Noise Abatement Barriers
44 21 19	Portable Noise Abatement Barriers
44 21 23	Noise Pollution Silencers
44 21 26	Frequency Cancellers
44 30 00	Odor Control
44 31 00	Odor Treatment Equipment
44 31 11	Wet Chemical Packed Tower Odor Control Equipment
44 31 13	Chemical Mist System Odor Control Equipment
44 31 16	Activated Carbon Adsorption Odor Control Equipment
44 31 19	Packaged Odor Control Systems
44 31 21	Odor Control Biofilters
44 31 28	Odor Control Biofilter Aeration Floor
44 31 29	Odor Control Biofilter Media
44 31 31	Odor Control Biotrickling Filter Equipment
44 31 33	Odor Control Bioscrubbing Equipment
44 31 41	Odor Control Vapor Combustion Equipment
44 31 83	Adjusting and Balancing Odor Control Systems

44 32 00	Odor Dispersing and Masking/Counteracting
	Equipment
44 32 13	Odor Dispersing Exhaust Stacks
44 32 13.13	Fan-equipped Odor Dispersing Exhaust Stacks
44 32 23	Odor Masking/Counteracting Equipment
44 40 00	Water Pollution Control Equipment
44 41 00	Water Pollution Containment and Cleanup Equipment
44 41 13	Spill Cleanup
44 41 21	Containment Booms
44 41 23	Marine Spill Accessories
44 41 31	Spill Decks
44 41 32	Drum Containment Units
44 41 33	Containment Pallets
44 41 34	Prefabricated Spill Containment Curbing
44 41 36	Prefabricated Spill Containment Berms
44 41 37	Prefabricated Berms for Tank Containment
44 41 41	Collapsible Storage Tanks
44 50 00	Solid Waste Control and Reuse
44 51 00	Solid Waste Collection, Transfer, and Hauling
	Equipment
44 51 13	Solid Waste Portable Containers
44 51 16	Solid Waste Stationary Containers
44 51 23	Solid Waste Transfer Trailers
44 53 00	Solid Waste Processing Equipment
44 53 11	Live-floor Storage Bins
44 53 13	Refuse Cranes and Accessories
44 53 16	Solid Waste Screens
44 53 21	Car Crushers
44 53 23	Shears and Guillotines
44 53 26	Shredders and Grinders
44 53 27	Perforators
44 53 31	Bag Breakers
44 53 33	Granulators
44 53 36	Crumb Rubber Systems
44 53 39 44 53 41	Briquetters Vibratory Table Separation Equipment
44 53 41	Vibratory Table Separation Equipment Ferrous Metals Separation Equipment
44 53 44	Eddy Current Separation Equipment
44 53 46	Single-stream Materials Separation Equipment
44 53 49	Ballistic Separators
44 53 51	Air Classifying Equipment
44 53 52	Air Knives
44 53 53	Optical Sorting Equipment
44 53 56	Packaged Sorting Stations
44 53 59	Packaged Reclaimer Stations
44 53 61	Solid Waste Compactors
44 53 63	Solid Waste Baling Equipment
44 53 64	Bagging Equipment

44 53 66	Wrappers
44 53 73	Solid Waste Liquid Extraction Equipment
44 55 00	Composting Equipment
44 55 11	Electromechanical Composters
44 55 13	Compost Screening Equipment
44 55 16	Compost Shredding Equipment
44 55 23	Compost Pile Turning Equipment
44 55 26	Compost Mixing and Blending Equipment
44 55 33	In-vessel Composing Equipment
44 55 43	Compost Pad System
44 55 73	Compost Liquid Extraction Equipment
44 60 00	Waste Thermal Processing Equipment
44 61 00	Waste-to-Energy Plants
44 61 13	Waste Receiving, Management, and Feed Equipment
44 61 16	Mass Burn Combustion Equipment
44 61 23	Refuse-derived Fuel Feed Equipment
44 61 26	Refuse-derived Fuel Combustion Equipment
44 61 29	Modular Combustion System Equipment
44 61 31	Ash Handling Equipment
44 61 33	Post-combustion Ferrous Metals Recovery Equipment
44 61 36	Post-combustion Non-ferrous Metals Recovery Equipment
44 62 00	Fluidized Bed Combustion Equipment
44 63 00	Rotary Kiln Incinerators
44 64 00	Gasification Equipment
44 64 13	Counter-current Fixed Bed Gasification Equipment
44 64 23	Co-current Fixed Bed Gasification Equipment
44 64 33	Fluidized Bed Gasification Equipment
44 64 43	Entrained Flow Gasification Equipment
44 64 53	Plasma Arc Gasification Equipment
44 65 00	Pyrolysis Equipment
44 66 00	Hazardous Waste and Medical Waste Incinerators
44 67 00	Heat Recovery Equipment for Waste Thermal
	Processing
44 68 00	Synthesis Gas Cleanup and Handling Equipment

45	5 00 00	Industry-Specific Manufacturing
		Equipment
45	08 00	Commissioning of Industry-Specific Manufacturing
		Equipment
45	11 00	Oil and Gas Extraction Equipment
70	45 11 01	Operation and Maintenance of Oil and Gas Extraction Equipment
	45 11 06	Schedules for Oil and Gas Extraction Equipment
		45 12 99 User-Defined Oil and Gas Extraction Equipment
45	13 00	Mining Machinery and Equipment
. •	45 13 01	Operation and Maintenance of Mining Machinery and Equipment
	45 13 06	Schedules for Mining Machinery and Equipment
		45 14 99 User-Defined Mining Machinery and Equipment
45	15 00	Food Manufacturing Equipment
	45 15 01	Operation and Maintenance of Food Manufacturing Equipment
	45 15 06	Schedules for Food Manufacturing Equipment
		45 16 99 User-Defined Food Manufacturing Equipment
45	17 00	Beverage and Tobacco Manufacturing Equipment
	45 17 01	Operation and Maintenance of Beverage and Tobacco Manufacturing
		Equipment
	45 17 06	Schedules for Beverage and Tobacco Manufacturing Equipment
	45 17 10 to	45 18 99 User-Defined Beverage and Tobacco Manufacturing Equipment
45	19 00	Textiles and Apparel Manufacturing Equipment
	45 19 01	Operation and Maintenance of Textiles and Apparel Manufacturing
		Equipment
	45 19 06	Schedules for Textiles and Apparel Manufacturing Equipment
		45 20 99 User-Defined Textiles and Apparel Manufacturing Equipment
45	21 00	Leather and Allied Product Manufacturing Equipment
	45 21 01	Operation and Maintenance of Leather and Allied Product Manufacturing
		Equipment
	45 21 06	Schedules for Leather and Allied Product Manufacturing Equipment
	45 21 10 to	9
45	00.00	Equipment
45	23 00	Wood Product Manufacturing Equipment
	45 23 01	Operation and Maintenance of Wood Product Manufacturing Equipment
	45 23 06 45 23 40 to	Schedules for Wood Product Manufacturing Equipment
A E		45 24 99 User-Defined Wood Product Manufacturing Equipment
45	25 00	Paper Manufacturing Equipment
	45 25 01	Operation and Maintenance of Paper Manufacturing Equipment
	45 25 06	Schedules for Paper Manufacturing Equipment
<i>1</i> E		45 26 99 User-Defined Paper Manufacturing Equipment
45	27 00	Printing and Related Manufacturing Equipment
	45 27 01	Operation and Maintenance of Printing and Related Manufacturing
	45 27 06	Equipment Schedules for Printing and Related Manufacturing Equipment
		45 28 99 User-Defined Printing and Related Manufacturing Equipment
	7021 1010	TO 20 00 0001-DOMING I THRING AND NOBIGIOU MAHAMAGUINING EQUIDING II

45	29 00	Petroleum and Coal Products Manufacturing Equipment
	45 29 01	Operation and Maintenance of Petroleum and Coal Products Manufacturing
	45 29 06 45 29 10 to	Equipment Schedules for Petroleum and Coal Products Manufacturing Equipment 45 30 99 User-Defined Petroleum and Coal Products Manufacturing
	4529 1010	Equipment
45	31 00	Chemical Manufacturing Equipment
70	45 31 01	Operation and Maintenance of Chemical Manufacturing Equipment
	45 31 06	Schedules for Chemical Manufacturing Equipment
		45 32 99 User-Defined Chemical Manufacturing Equipment
45	33 00	Plastics and Rubber Manufacturing Equipment
70	45 33 01	Operation and Maintenance of Plastics and Rubber Manufacturing
	+0 00 01	Equipment
	45 33 06	Schedules for Plastics and Rubber Manufacturing Equipment
		45 34 99 User-Defined Plastics and Rubber Manufacturing Equipment
45	35 00	Nonmetallic Mineral Product Manufacturing Equipment
	45 35 01	Operation and Maintenance of Nonmetallic Mineral Product Manufacturing Equipment
	45 35 06	Schedules for Nonmetallic Mineral Product Manufacturing Equipment
	45 35 10 to	· · · · · · · · · · · · · · · · · · ·
		Equipment
45	37 00	Primary Metal Manufacturing Equipment
	45 37 01	Operation and Maintenance of Primary Metal Manufacturing Equipment
	45 37 06	Schedules for Primary Metal Manufacturing Equipment
	45 37 10 to	45 38 99 User-Defined Primary Metal Manufacturing Equipment
45	39 00	Fabricated Metal Product Manufacturing Equipment
	45 39 01	Operation and Maintenance of Fabricated Metal Product Manufacturing Equipment
	45 39 06	Schedules for Fabricated Metal Product Manufacturing Equipment
	45 39 10 to	45 40 99 User-Defined Fabricated Metal Product Manufacturing Equipment
45	41 00	Machinery Manufacturing Equipment
	45 41 01	Operation and Maintenance of Machinery Manufacturing Equipment
	45 41 06	Schedules for Machinery Manufacturing Equipment
	45 41 10 to	45 42 99 User-Defined Machinery Manufacturing Equipment
45	43 00	Computer and Electronic Product Manufacturing
		Equipment
	45 43 01	Operation and Maintenance of Computer and Electronic Product
		Manufacturing Equipment
	45 43 06	Schedules for Computer and Electronic Product Manufacturing Equipment
	45 43 10 to	45 44 99 User-Defined Computer and Electronic Product Manufacturing
		Equipment
45	45 00	Electrical Equipment, Appliance, and Component
		Manufacturing Equipment
	45 45 01	Operation and Maintenance of Electrical Equipment, Appliance, and Component Manufacturing Equipment

	45 45 06	Schedules for Electrical Equipment, Appliance, and Component	
	45 45 10 to	Manufacturing Equipment 5 46 99 User-Defined Electrical Equipment, Appliance, and Component Manufacturing Equipment	t
45	47 00	Transportation Manufacturing Equipment	
	45 47 01	Operation and Maintenance of Transportation Manufacturing Equipment	
	45 47 06	Schedules for Transportation Manufacturing Equipment	
	45 47 10 to	5 48 99 User-Defined Transportation Manufacturing Equipment	
45	49 00	Furniture and Related Product Manufacturing	
		Equipment	
	45 49 01	Operation and Maintenance of Furniture and Related Product Manufacturing Equipment	
	45 49 06	Schedules for Furniture and Related Product Manufacturing Equipment	
	45 49 10 to	5 50 99 User-Defined Furniture and Related Product Manufacturing	
		Equipment	
45	51 00	Other Manufacturing Equipment	
	45 51 01	Operation and Maintenance of Other Manufacturing Equipment	
	45 51 06	Schedules for Other Manufacturing Equipment	
	45 51 10 to	5 52 99 User-Defined Other Manufacturing Equipment	

46 00 00 46 01 00	Water and Wastewater Equipment Operation and Maintenance of Water and Wastewater Equipment
46 01 07 46 01 20 46 01 30 46 01 40	Operation and Maintenance of Packaged Treatment Equipment Operation and Maintenance of Preliminary Treatment Equipment Operation and Maintenance of Chemical Feed Equipment Operation and Maintenance of Clarification and Mixing Equipment
46 01 50 46 01 60	Operation and Maintenance of Secondary Treatment Equipment Operation and Maintenance of Advanced Treatment Equipment
46 01 70	Operation and Maintenance of Residuals Handling and Treatment
46 05 00	Common Work Results for Water and Wastewater
40.00.00	Equipment
46 06 00	Schedules for Water and Wastewater Equipment
46 06 07 46 06 20	Schedules for Packaged Treatment Equipment Schedules for Preliminary Treatment Equipment
46 06 30	Schedules for Chemical Feed Equipment
46 06 40	Schedules for Clarification and Mixing Equipment
46 06 50	Schedules for Secondary Treatment Equipment
46 06 60	Schedules for Advanced Treatment Equipment
46 06 70	Schedules for Residuals Handling and Treatment
46 07 00	Packaged Water and Wastewater Treatment Equipment
46 07 13	Packaged Water Treatment Equipment
46 07 53	Packaged Wastewater Treatment Equipment
46 08 00	Commissioning of Water and Wastewater Equipment
46 08 07	Commissioning of Packaged Treatment Equipment
46 08 20	Commissioning of Preliminary Treatment Equipment
46 08 30	Commissioning of Chemical Feed Equipment
46 08 40 46 08 50	Commissioning of Clarification and Mixing Equipment Commissioning of Secondary Treatment Equipment
46 08 60	Commissioning of Advanced Treatment Equipment
46 08 70	Commissioning of Residuals Handling and Treatment
46 20 00	Water and Wastewater Preliminary
	Treatment Equipment
46 21 00	Screening Equipment
46 21 11	Climber-type Bar Screens
46 21 13	Chain-and-Rake Bar Screens
46 21 16	Flexible Rake Bar Screens
46 21 17	Catenary Bar Screens
46 21 19	Continuous Belt Screens
46 21 23	Cylindrical Bar Screens
46 21 26 46 21 22	Step Screens Retary Drum Screens
46 21 33 46 21 39	Rotary Drum Screens Spiral Screens
46 21 43	Band Screens
46 21 46	Disc Screens
46 21 51	Traveling Water Screens

46 21 53	Perforated Plate Screens
46 21 56	Wedge Wire Screens
46 21 57	Element Screens
46 21 71	Trash Raking Equipment
46 21 73	Screenings Washing and Compacting Equipment
46 21 76 46 21 79	Vacuum Screenings Conveying Equipment Screenings Storage Containers
46 21 83	Septage Receiving Equipment
46 23 00	
	Grit Removal and Handling Equipment
46 23 13	Chain-and-Bucket Grit Removal Equipment
46 23 16 46 23 23	Chain-and-Flight Grit Removal Equipment
46 23 23	Vortex Grit Removal Equipment Cyclone Degritters
46 23 33	Aerated Grit Removal Equipment
46 23 43	Inline Baffled Grit Removal Equipment
46 23 53	Traveling Bridge Grit Removal Equipment
46 23 63	Grit Classifying and Washing Equipment
46 23 66	Grit Storage Containers
46 24 00	Grinding and Shredding Equipment
46 24 13	Macerators
46 24 16	Comminutors
46 24 23	Inline Grinders
46 24 33	Open-channel Grinders
46 24 36	Modular Grinding-Screening-Compacting Equipment
46 25 00	Oil and Grease Separation and Removal Equipment
46 25 13	Coalescing Oil-Water Separators
46 25 16	API Oil-Water Separators
46 25 23	Grease Traps
46 25 33	Dissolved Air Flotation Grease and Oil Separation Equipment
46 25 41	Helical Scum Skimming and Removal Equipment
46 25 43 46 25 46	Tipping Trough Scum Skimming and Removal Equipment Chain and Flight Scum Collection and Removal Equipment
46 25 47	Floating Scum Skimming and Removal Equipment
46 30 00	Water and Wastewater Chemical Feed
40 30 00	
	Equipment
46 31 00	Gas Chemical Feed Equipment
46 31 11	Chlorine Gas Feed Equipment
46 31 13	Sulfur Dioxide Gas Feed Equipment
46 31 16	Ammonia Gas Feed Equipment
46 31 23	Gas Storage, Weighing, and Leak Detection Equipment
46 31 26 46 31 33	Emergency Gas Treatment Systems Chlorine Dioxide Reactors
46 31 43	Carbon Dioxide Gas Feed Equipment
46 31 53	Ozone Generating and Feed Equipment
46 31 56	Liquid Oxygen Storage and Feed Equipment
46 31 59	Cleaning Requirements for Oxygen Service
46 31 83	Gas Chemical Feed Accessories and Safety Equipment
46 33 00	Liquid Chemical Feed Equipment

	46 33 13	Sodium Hypochlorite Generating Equipment
	46 33 23	Liquid Chemical Weighing Equipment
	46 33 33	Polymer Blending and Feed Equipment
	46 33 41	Liquid Chemical Feed System Coordination and Integration
	46 33 42	Diaphragm-type Metering Pumps
	46 33 44	Peristaltic Metering Pumps
	46 33 46	Progressing Cavity Metering Pumps
	46 33 48	Lobe Metering Pumps
	46 33 53	Drum Pumps
	46 33 66	Liquid Chemical Transfer Pumps
	46 33 73	Liquid Chemical Diffusers
	46 33 83	Liquid Chemical Feed Accessories and Safety Equipment
46	36 00	Dry Chemical Feed Equipment
	46 36 11	Dry Chemical Feed System Coordination and Integration
	46 36 13	Storage Silos
	46 36 23	Dry Chemical Weighing Equipment
	46 36 33	Volumetric Feed Equipment
	46 36 36	Gravimetric Feed Equipment
	46 36 43	Lime Slaking Equipment
	46 36 53	Chemical Tablet Feeding Equipment
	46 36 83	Dry Chemical Feed Accessories and Safety Equipment
16		
40	40 00	Water and Wastewater Clarification and
		Mixing Equipment
46	41 00	Mixing Equipment
	46 41 11	Rapid Mixers
	46 41 13	Inline Blender-type Rapid Mixers
	46 41 16	Induction-type Rapid Mixing Equipment
	46 41 17	Inline Static Mixers
	46 41 21	Jet Mixing Equipment
	46 41 23	Submersible Mixers
	46 41 26	Floating Mechanical Mixers
	46 41 27	Paddle Mixers
	46 41 29	Pin Mixers
	46 41 31	Vertical Reel Flocculation Equipment
	46 41 33	Horizontal Reel Flocculation Equipment
	46 41 34	Vertical Turbine Flocculation Equipment
	46 41 36	Walking-beam Flocculation Equipment
	46 41 38	Horizontal Oscillating Flocculation Equipment
	46 41 41	Top-entering Tank Mixers
		Cido ontre Tonk Missoro
	46 41 43	Side-entry Tank Mixers
	46 41 43 46 41 46	Portable Tank Mixers
46		Portable Tank Mixers
46	46 41 46 43 00	Portable Tank Mixers Clarifier Equipment
46	46 41 46	Portable Tank Mixers Clarifier Equipment Chain-and-Flight Clarifier Equipment
46	46 41 46 43 00 46 43 11	Portable Tank Mixers Clarifier Equipment Chain-and-Flight Clarifier Equipment Traveling Bridge Clarifier Equipment
46	46 41 46 43 00 46 43 11 46 43 14 46 43 16	Portable Tank Mixers Clarifier Equipment Chain-and-Flight Clarifier Equipment Traveling Bridge Clarifier Equipment Differential Head Clarifier Equipment
46	46 41 46 43 00 46 43 11 46 43 14 46 43 16 46 43 18	Portable Tank Mixers Clarifier Equipment Chain-and-Flight Clarifier Equipment Traveling Bridge Clarifier Equipment Differential Head Clarifier Equipment Oscillating Scraper-type Clarifier Equipment
46	46 41 46 43 00 46 43 11 46 43 14 46 43 16	Portable Tank Mixers Clarifier Equipment Chain-and-Flight Clarifier Equipment Traveling Bridge Clarifier Equipment Differential Head Clarifier Equipment

46 43 63	Dissolved Air Flotation Equipment for Water Treatment
46 43 66	Ballasted High-rate Clarifier Equipment
46 43 67	High rate Clarification/Thickening Equipment
46 43 73	Tube Settlers
46 43 76	Inclined Plate Settlers
46 46 00	Sediment Removal Equipment
46 46 13	Tipping Sediment Flushing Tanks
46 46 16	Flushing Gates
46 46 23	Water Cannon
46 46 26	Nozzle Systems
46 50 00	Water and Wastewater Secondary
	Treatment Equipment
46 51 00	Air and Gas Diffusion Equipment
46 51 11	Fixed Mechanical Aerators
46 51 13	Floating Mechanical Aerators
46 51 16	Submersible Aspirating Aerator Equipment
46 51 17	Jet Aeration Equipment
46 51 21	Coarse Bubble Diffusers
46 51 23	Swing-type Channel Aeration Equipment
46 51 26	Shear Box Diffusers
46 51 31	Flexible Membrane Tube Diffusers
46 51 33	Flexible Membrane Disc Diffusers
46 51 36	Ceramic Disc Fine Bubble Diffusers
46 51 43	Floating Membrane Diffusers
46 51 46	Membrane Diffusers
46 51 53	Cascading Aerators
46 51 63	Pure-oxygen Generating Equipment
46 53 00	Biological Treatment Systems
46 53 13	Rotating Biological Contactors
46 53 23	Trickling Filter Rotary Distributor Equipment
46 53 24	Trickling Filter Media
46 53 26	Bio-towers
46 53 33	Moving-bed Biological Reactors
46 53 36	Integrated Fixed-film Activated Sludge Equipment
46 53 41	Intermittent Sand Filters for Wastewater Treatment
46 53 43	Deep-bed Denitrification Filters
46 53 46	Biologically Activated Filters
46 53 49	Membrane Biological Reactors
46 53 53 46 53 61	Sequencing Batch Reactors
46 53 61 46 53 63	Oxidation Ditch Equipment
	Vertical Loop Reactors
46 60 00	Water and Wastewater Advanced
	Treatment Equipment
46 61 00	Filtration Equipment
46 61 13	Filter Media
46 61 16	Filter Surface Wash Agitators
46 61 17	Filter Air Scour Equipment

46 61 19	Wash Water Troughs
46 61 21	Pressure Filters
46 61 23	Gravity Filters
46 61 26	High-rate Sand Filters
46 61 29	Traveling Bridge Filters
46 61 33	Microfiltration and Ultrafiltration Membrane Equipment
46 61 41	Disc Cloth Filters
46 61 43	Rotary Drum Cloth Filters
46 61 46	Automatic Backwash Cloth Filter Equipment
46 61 53	Cartridge Filters
46 61 63	Bag Filters
46 61 73	Automatic Straining Equipment
46 63 00	Demineralization Equipment
46 63 11	Ion-exchange Vessel Media
46 63 13	Mixed Bed Ion-exchange Vessel Systems
46 63 16	Packed Bed Ion-exchange Vessel Systems
46 63 17	Electrodialysis Reversal Equipment
46 63 23	Reverse-Osmosis and Nanofiltration Membrane Equipment
46 63 31	Multiple-effect Distillation Equipment
46 63 33	Desalination Mechanical Vapor Compression Equipment
46 63 34	Desalination Thermal Vapor Compression Equipment
46 63 36	Desalination Multi-stage Flash Equipment
46 63 41	Desalination Falling Film Evaporators
46 63 43	Desalination Rising Film Evaporators
46 63 53	Desalination Forced-circulation Crystallizing Equipment
46 63 63	Desalination Spray Dry Evaporation Equipment
46 63 73	Demineralization Energy Recovery Equipment
46 66 00	Ultraviolet Equipment
46 66 13	Closed-vessel Low-pressure/Low-intensity Ultraviolet Treatment Equipment
46 66 16	Closed-vessel Low-pressure/High-intensity Ultraviolet Treatment
40.00.00	Equipment
46 66 23	Closed-vessel Medium-pressure Ultraviolet Treatment Equipment
46 66 53	Open-channel Low-pressure/Low-intensity Ultraviolet Treatment Equipment
46 66 56	Open-channel Low-pressure/High-intensity Ultraviolet Treatment
46 66 63	Equipment Open-channel Medium-pressure Ultraviolet Treatment Equipment
46 70 00	Water and Wastewater Residuals Handling
	and Treatment
46 71 00	Residuals Thickening Equipment
46 71 13	Circular Gravity Thickeners
46 71 16	Gravity Belt Thickeners
46 71 23	Dissolved Air Flotation Thickening Equipment
46 71 33	Rotary Drum Thickening Equipment
46 71 36	Centrifuge Thickening Equipment
46 71 43	Disc Thickeners
46 71 46	Thickening Screw Press
46 71 53	Scum Concentrator Equipment
46 73 00	Residuals Stabilization

	46 73 11	Radial Beam Fixed Digester Covers
	46 73 12	Dual Deck Truss-type Fixed Digester Covers
	46 73 14	Radial Beam Floating Digester Covers
	46 73 16	Dual Deck Truss-type Floating Digester Covers
	46 73 17	Radial Beam Floating Gas-holding Digester Covers
	46 73 18	Dual Deck Truss-type Floating Gas-holding Digester Covers
	46 73 19	Digester Appurtenances
	46 73 21	Aerobic Digester Aeration Equipment
	46 73 24	Autothermal Thermophilic Aerobic Digestion Equipment
	46 73 26	Egg-shaped Digesters
	46 73 31	External Draft Tube Digester Mixing System
	46 73 32	Internal Draft Tube Digester Mixing System
	46 73 33	Confined Gas Mixing System
	46 73 34	Unconfined Gas Mixing System
	46 73 41	Digester Heating Equipment
	46 73 63	Residuals Pasteurization Equipment
46	76 00	Residuals Dewatering Equipment
	46 76 13	Vacuum Filters
	46 76 21	Belt Filter Presses
	46 76 23	Plate-and-Frame Filter Presses
	46 76 26	Rotary Presses
	46 76 27	Screw Presses
	46 76 33	Dewatering Centrifuges
	46 76 53	Belt Dryers
	46 76 60	Direct-heat Residuals Drying Equipment
	46 76 70	Indirect-heat Residuals Drying Equipment
46	78 00	Thermal Treatment of Residuals
	46 78 13	Multiple-hearth Sludge Incinerators
	46 78 23	Fluidized-bed Sludge Incinerators
	46 78 33	Ash Handling Equipment
	46 78 41	Recuperative Air Preheating Equipment
	46 78 46	Regenerative Thermal Oxidizers
	46 78 47	Waste Heat Recovery Boilers
	46 78 49	Waste Heat Recovery Heat Exchangers
	46 78 73	Thermal Oxidation Equipment

48 00 00	Electrical Power Generation
48 01 00	Operation and Maintenance for Electrical Power
48 01 10	Generation Operation and Maintenance of Electrical Power Generation Equipment
48 01 70	Operation and Maintenance of Electrical Power Generation Equipment Operation and Maintenance of Electrical Power Generation Testing
48 05 00	Common Work Results for Electrical Power Generation
48 06 00	Schedules for Electrical Power Generation
48 06 10 48 06 70	Schedules for Electrical Power Generation Equipment
48 08 00 48 08 00	Schedules for Electrical Power Generation Testing Commissioning of Electrical Power Generation
48 09 00	Instrumentation and Control for Electrical Power
40 03 00	Generation
48 10 00	Electrical Power Generation Equipment
48 11 00	Fossil Fuel Plant Electrical Power Generation
10 11 00	Equipment
48 11 13	Fossil Fuel Electrical Power Plant Boilers
48 11 16	Fossil Fuel Electrical Power Plant Condensers
48 11 19	Fossil Fuel Electrical Power Plant Steam Turbines
48 11 23 48 11 26	Fossil Fuel Electrical Power Plant Gas Turbines
48 12 00	Fossil Fuel Electrical Power Plant Generators Nuclear Fuel Plant Electrical Power Generation
40 12 00	
48 12 13	Equipment Nuclear Fuel Reactors
48 12 13.13	Nuclear Fuel Reactors Nuclear Fuel Fission Reactors
48 12 13.16	Nuclear Fuel Fusion Reactors
48 12 23	Nuclear Fuel Electrical Power Plant Steam Generators
48 12 26	Nuclear Fuel Electrical Power Plant Condensers
48 12 29 48 12 33	Nuclear Fuel Electrical Power Plant Turbines Nuclear Fuel Electrical Power Generators
48 13 00	Hydroelectric Plant Electrical Power Generation
40 13 00	
48 13 13	Equipment Hydroelectric Power Plant Water Turbines
48 13 16	Hydroelectric Power Plant Electrical Power Generators
48 14 00	Solar Energy Electrical Power Generation Equipment
48 14 13	Solar Energy Collectors
48 14 13.13	Amorphous Solar Energy Collectors
48 14 13.16 48 14 13.19	Plate Cell Solar Energy Collectors Vacuum Tube Solar Energy Collectors
48 15 00	Wind Energy Electrical Power Generation Equipment
48 15 13	Wind Turbines
48 15 16	Wind Energy Electrical Power Generators
48 16 00	Geothermal Energy Electrical Power Generation
	Equipment
48 16 13	Geothermal Energy Heat Pumps
48 16 16	Geothermal Energy Condensers

48 16 19	Geothermal Energy Steam Turbines
48 16 23	Geothermal Energy Electrical Power Generators
48 17 00	Electrochemical Energy Electrical Power Generation
	Equipment
48 17 13	Electrical Power Generation Batteries
48 18 00	Fuel Cell Electrical Power Generation Equipment
48 18 13	Electrical Power Generation Fuel Cells
48 18 16	Hydrogen Control Equipment
48 19 00	Electrical Power Control Equipment
48 19 13	Electrical Power Generation Battery Charging Equipment
48 19 16	Electrical Power Generation Inverters
48 19 19	Electrical Power Generation Solar Tracking Equipment
48 19 23	Electrical Power Generation Transformers
48 19 26	Electrical Power Generation Voltage Regulators
48 70 00	Electrical Power Generation Testing
48 71 00	Electrical Power Generation Test Equipment
48 71 13	Electrical Power Generation Corona Test Equipment
48 71 16	Electrical Power Generation Current Test Equipment
48 71 19	Electrical Power Generation Power Test Equipment
48 71 23	Electrical Power Generation Resistance Test Equipment
48 71 26	Electrical Power Generation Voltage Test Equipment