FIRE SUPPRESSION SERVICES, INC.

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September 5, 2019

To: Arun
From: William Gubler

EXHAUST DUCT DEFICIENCIES.
The grease exhaust ducting you asked me to inspect at Heritage Gardens Care Center in Springville Utah was, for the most part, inaccessible for inspection.

The exterior of the new ducting was surrounded with a HVAC type of ducting.

I could not get to the new upper portion of the duct to determine if the seams and joints had been welded.

I could see that the older portion had been welded to the hood from inside the plenum; the seams were welded, and had 2 layers of fire-wrap.

I was able to determine the new upper portion had 1 layer of fire-wrap but it did not extend to the upper end of the duct into the fan curb.

From the upper end of the duct I could see that caulk had been used in the seams and joints however I was unable to determine if they had been welded.

I also could see screw tips inside the new duct just above the joint where the old duct and new duct connect.
I could not get to the material that hangs down 18" from the roof line that surrounds the outer HVAC ducting to determine what it was.

I could not verify if the upper fire-wrap is banded or whether the seams and joints are taped.
They must be overlapping, taped and banded as per manufactures specs. (Code)

There is no thermal sensor or other means of "Interconnect" as per IMC section 507.2.1.1, 2006 edition.

The makeup air system has been removed and the duct is capped at the old roof line.

RANGE GUARD SUPPRESSION SYSTEM DEFICIENCIES.
KIMCO Fire Protection Inc. tags are attached to the kitchen hood suppression system (dated February 5, 2019).
Note from my photo the tag was punched D/C *(dry chemical).*

At the time this system was installed, "End-of-Line" pull-stations were permitted along with high-proximity nozzles protecting open-burner ranges with back-shelves.
Current manufacturers' specifications do not allow "End-of-Line" pull-stations and require "Low Proximity" nozzles under the range shelf to protect open-burner ranges with shelves.

The range had been moved to the right end of the hood from the location where it was when the nozzles were installed.
The current appliance nozzle locations and aiming is not correct.

The pull-station is no longer on a route of egress. The exterior door that was the route of egress has been framed over and is no longer an exit.
There is not a location inside the kitchen that is in the 10' – 20' from the hood where it can be located and may need to be moved to the dining area to meet that standard.

The Range Guard hood suppression system did not appear to be connected to the building alarm system.

The gas pipe to the cooking appliances needs more support bracing.

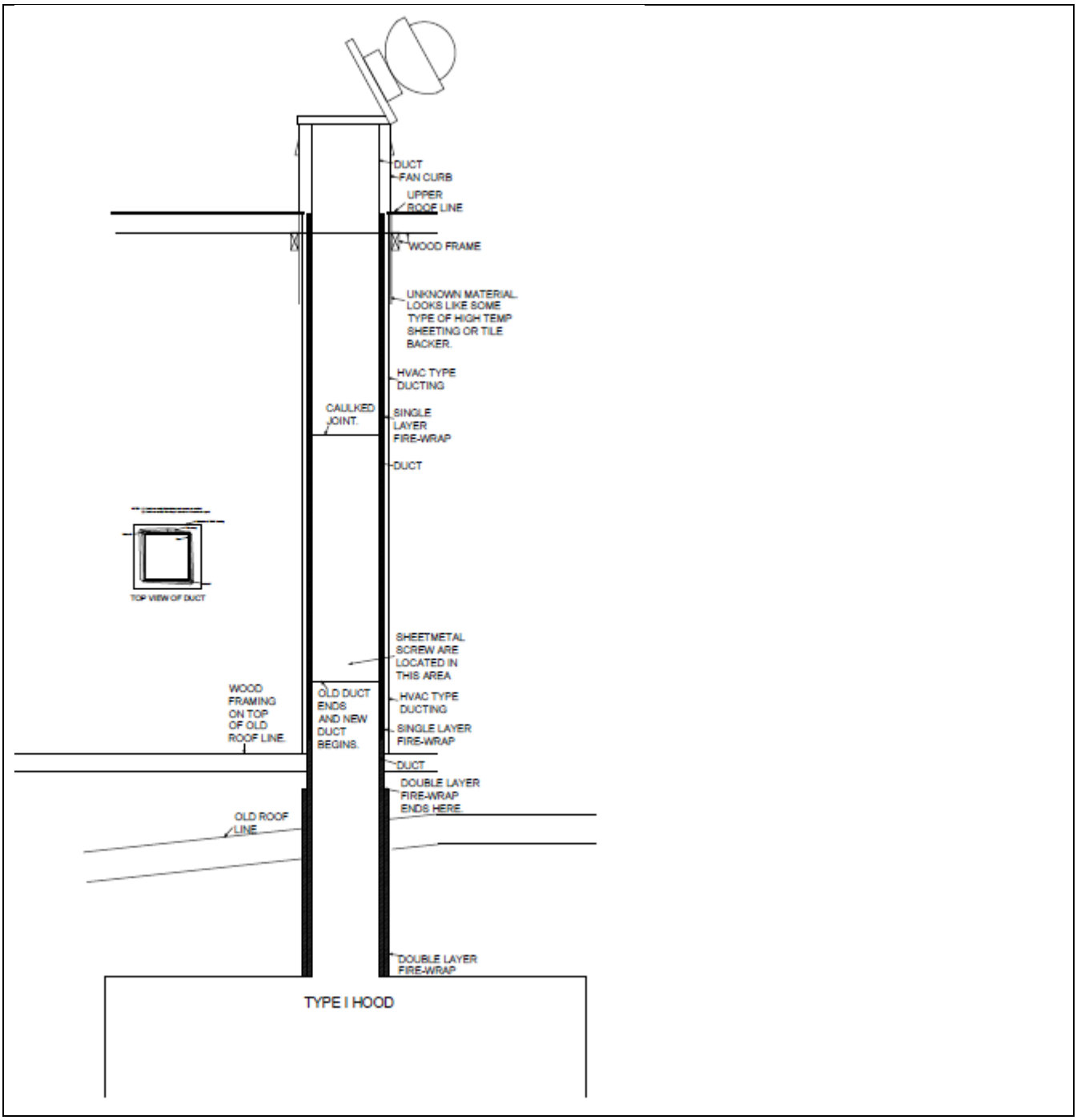
Pictures are below.

Bill Gubler
Fire Suppression Services Inc.

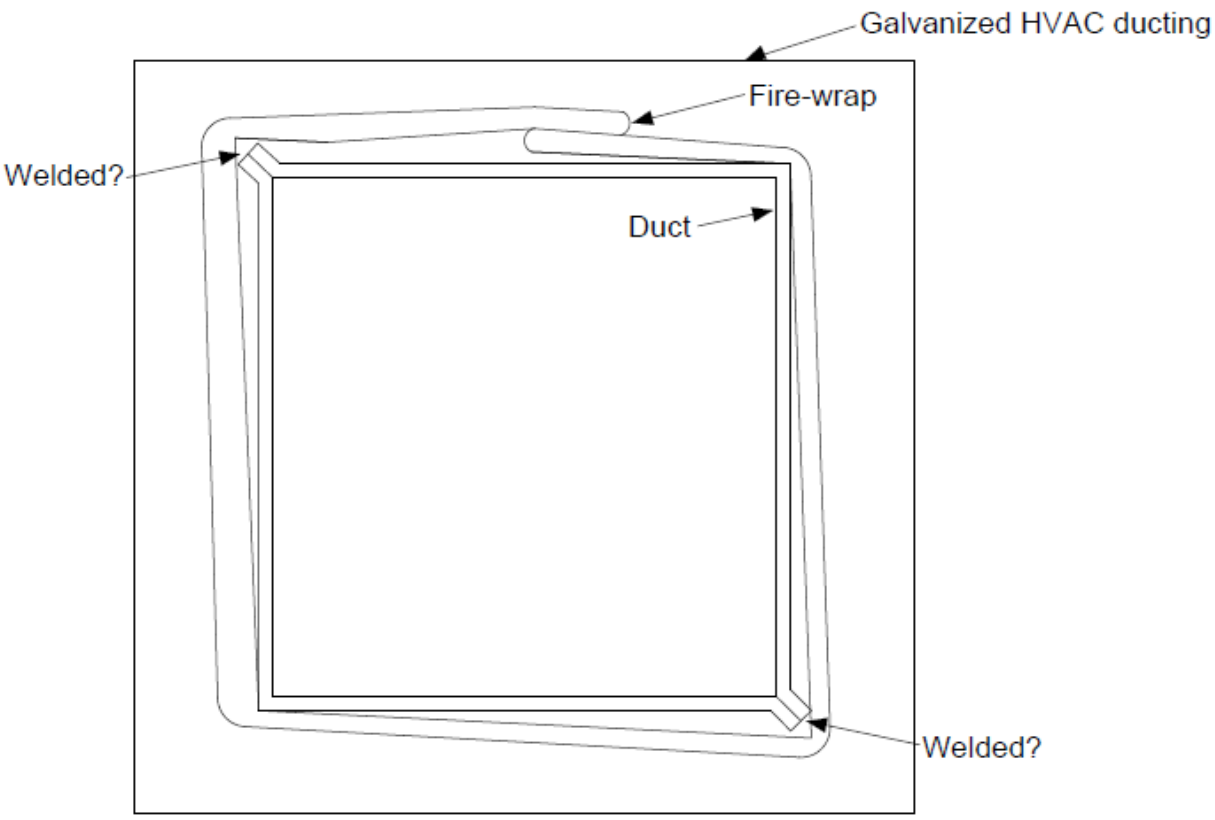
See drawings next pages:

Drawings:

Overall view: Heritage Gardens Springville Kitchen Hood Exhaust

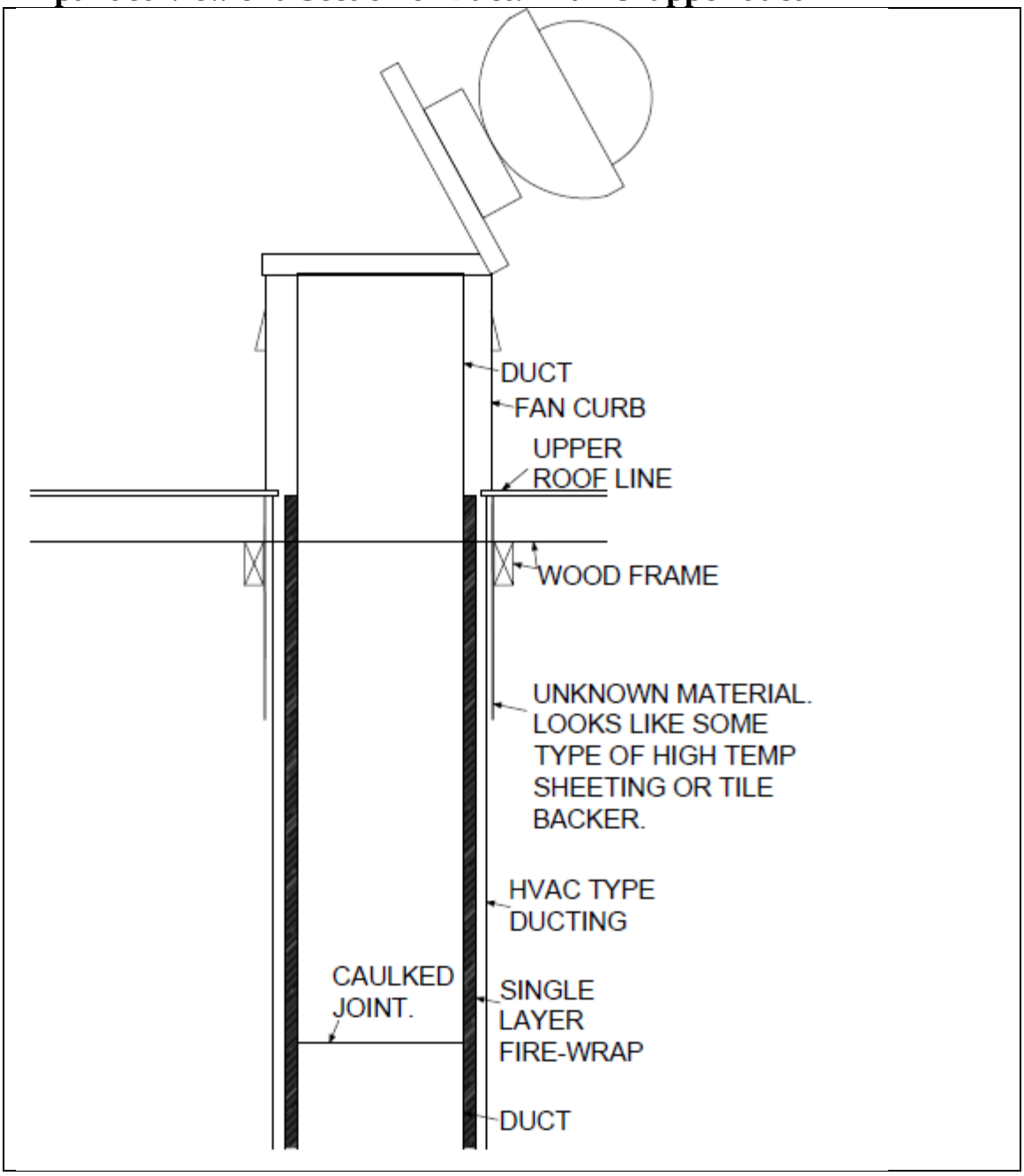


NOTES: (1) Could not verify if duct joints and seams are welded.
(2) Could not verify if fire-wrap is banded or if seams are taped.

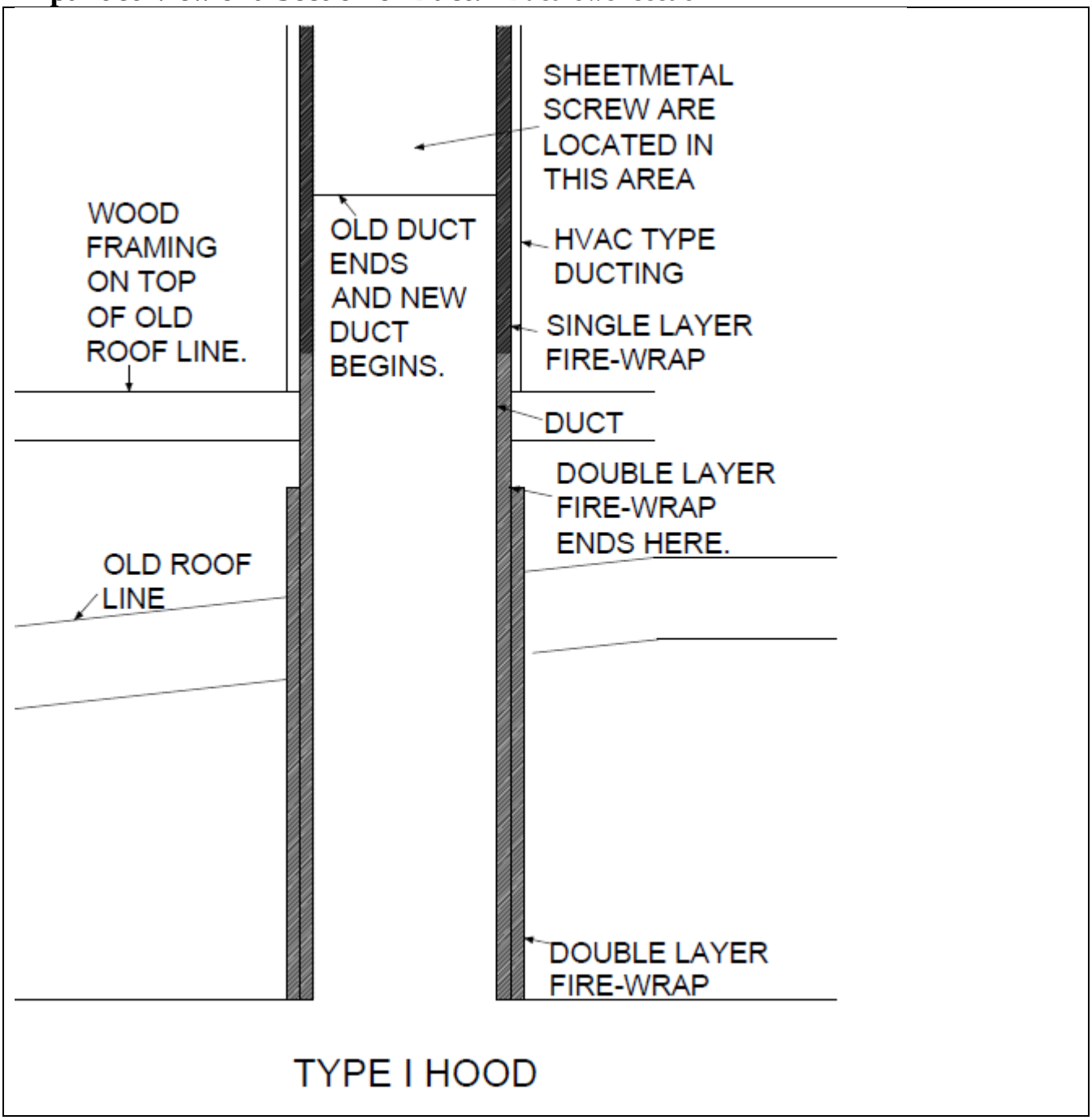


TOP VIEW OF DUCT

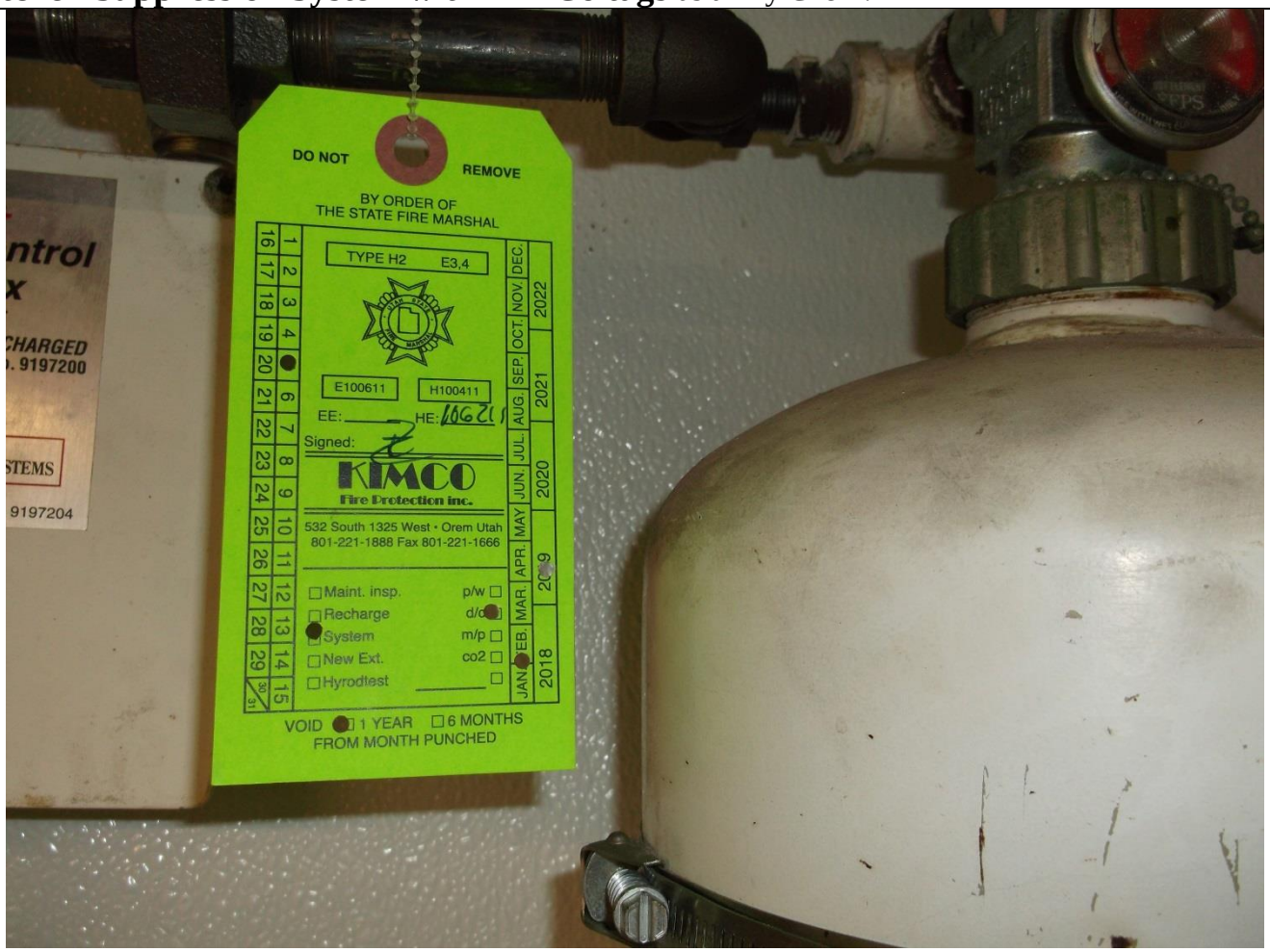
Expanded view of a Section of Duct: Fan & upper duct



Expanded view of a Section of Duct: Duct lower section



Kitchen Suppression System with KimCo tags as a Dry Chem?



Tag on end-of-line pull station: Dry chem?

Caulk in seams

Lower duct seam weld

Lower duct has 2 layers of wrap, upper has single

Combo range with shelf

Nozzle over nothing

Damaged lanyard roof fan

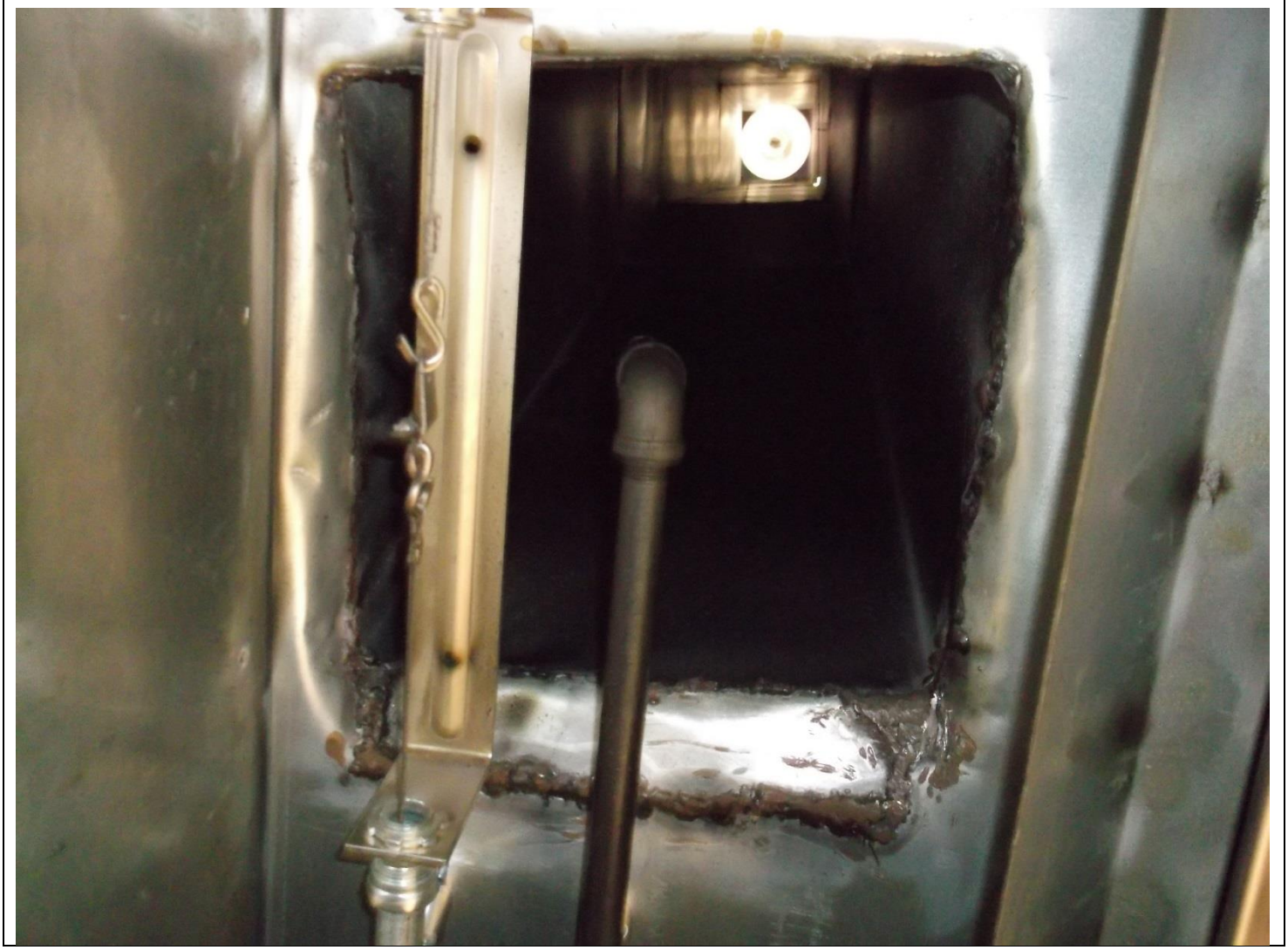
Upper duct opening

Electrical conduit penetration thru roof

Unbraced gas line on wall by door

Griddle nozzle

Duct to Hood welds



Stop work order