



Tentative Interim Amendment

NFPA[®] 291

Recommended Practice for Fire Flow Testing and Marking of Hydrants

2019 Edition

Reference: 4.7.3 Equations a and b

TIA 19-1

(TIA Log #1411)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 291, *Recommended Practice for Fire Flow Testing and Marking of Hydrants*, 2019 edition. The TIA was processed by the Technical Committee on Private Water Supply Piping Systems and the Correlating Committee on Automatic Sprinkler Systems, and was issued by the Standards Council on February 28, 2019, with an effective date of March 20, 2019.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

1. Revise 4.7.3 Equations a and b to read as follows:

4.7.3 The formula used to compute the discharge, Q , in gpm (L/min) from these measurements is as shown in Equations 4.7.3a and 4.7.3b:

$$Q = 29.84 \, c d^2 \sqrt{p} \quad [4.7.3a]$$

where:

Q = flow (gpm)

c = coefficient of discharge (see Figure 4.7.1)

d = diameter of the outlet (in.)

p = pitot pressure (velocity head) (psi)

$$Q_M = 0.0666 \, c \, d^2 \sqrt{P_M} \quad Q_M = 0.666 \, c d^2 \sqrt{p_M} \quad [4.7.3b]$$

where:

Q_M = flow (L/min)

c = coefficient of discharge (see Figure 4.7.1)

d = diameter of the outlet (mm)

p_M = pitot pressure (velocity head) (kPa or bar)

Issue Date: February 28, 2019

Effective Date: March 20, 2019

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/docinfo)

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