

Fire Protection Piping C-Factor Evaluation

Background

The provisions of NFPA 13, *Standard for the Installation of Sprinkler Systems*, contain specific C-Factors for the various piping and system types and have since the introduction of hydraulic calculations. During this latest revision cycle the Discharge Committee for NFPA 13 voted to change C-Factors for various piping types. For example, the C-Factor for galvanized dry pipe systems was changed from C-120 to C-100 based on reported observations that the galvanized dry piping “looked” no different than dry black steel piping. Specific measurable data is needed to demonstrate the appropriate factor to be utilized.

Project Description

This project involves a data search of the available technical research related to measured C-Factors for various piping types. This data could come from pipe manufacturers and hydraulic system design manuals.

The information found should then be compiled into a report to assess the knowledge base of information along with any gaps in the information.

How this Information Will be Used

The information found during the literature review could be presented to the Discharge Committee to be used as the technical basis to uphold or change the C-Factors currently mandated. If deemed necessary, where insufficient data is currently available, a program of obtaining sample groups and testing of aged piping can be completed to identify the specific C-Factors.