

File Ex5085
Project 02NK34302
Project 04NK12694
Project 04NK25455
Project 05NK30824
Project 07NK20900

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REPORT

on

EARLY-SUPPRESSION FAST-RESPONSE (ESFR) SPRINKLERS

Viking Corp.
Hastings, MI

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GENERAL

INTRODUCTION:

This Report describes the investigation of Early-Suppression Fast-Response (ESFR) Sprinklers intended to be installed in accordance with the National Fire Protection Association Standard for the Installation of Sprinkler Systems, NFPA 13 and the manufacturers installation and design parameter instructions (see Figure 1).

OBJECT:

The object of this investigation was to determine compliance of the ESFR sprinkler with the Standard for Early-Suppression Fast-Response Sprinklers for Fire Protection Service, UL 1767.

PLAN:

The investigation of the ESFR sprinklers consisted of conducting a product conformance evaluation and performance testing as described in UL 1767.

DESCRIPTION

PRODUCT COVERED:

SIN VK510, pendent 25.2 "K-Factor," 1 in. NPT inlet, fusible link type, heat responsive element, 165°F and 205°F temperature rated sprinklers have a maximum pressure of 175 psig and a minimum pressure of 15 psig for wet systems only.

For use with a maximum 50% by volume of propylene glycol and water antifreeze solution with a maximum ceiling height of 40 ft., a maximum commodity height of 35 ft., with a maximum deflector distance below the ceiling of 18 in. and a maximum system volume of antifreeze solution of 1,100 gallons at a minimum starting pressure of 40 psi at a minimum ambient temperature of -23°F (-30.6°C)

For use with a maximum 50% by volume of propylene glycol and water antifreeze solution with a maximum ceiling height of 45 ft. 3 in., a maximum commodity height of 40 ft., with a maximum deflector distance below the ceiling of 14 in. and a maximum system volume of antifreeze solution of 1,100 gallons at a minimum starting pressure of 60 psi at a minimum ambient temperature of -23°F (-30.6°C)

CONSTRUCTION DETAILS:

The devices have been examined and found to comply with the Standard for Early-Suppression Fast-Response Sprinklers for Fire Protection Service, UL 1767, in effect as of the date of this Report.

USE:

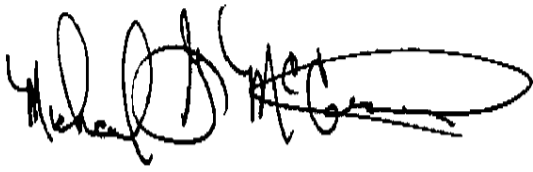
The product(s) covered by this Report are for use in accordance with the National Fire Protection Association Standard for the Installation of Sprinkler Systems, NFPA 13.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the UL Mark on such products which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the UL Mark are considered as Listed by Underwriters Laboratories Inc.

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