

Underwriters Laboratories

File Ex643 Project 02NK46059 Project 04NK7979 Project 06NK09804 **Project 09CA11579**

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REPORT

on

Automatic Sprinklers

The Viking Corporation Hastings, MI

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GENERAL

INTRODUCTION:

This Report describes the investigation of automatic sprinklers intended to be installed in accordance with the National Fire Protection Association Standard For The Installation of Sprinkler Systems, NFPA 13.

OBJECT:

The object of this investigation was to determine compliance of the automatic sprinklers with the Standard For Automatic Sprinklers For Fire Protection Service, UL 199.

PLAN:

The investigation of the automatic sprinklers consisted of conducting a product conformance evaluation and performance testing as described in UL 199, **11th** Edition.

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DESCRIPTION

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PRODUCT COVERED:

Automatic Sprinklers of the fusible link type of the following types and temperature ratings.

| | | Model | Description | | Remarks |
|------|-----|--------------|----------------------------------|----------|-------------------|
| USL, | CNL | VK301 | Upright style, 5.6 K-factor | Rated 1 | 65, 205 and 286°F |
| USL, | CNL | VK303 | Pendent style, 5.6 K-factor | Rated 1 | 65, 205 and 286°F |
| USL, | CNL | VK307 | Horizontal Sidewall Style, 5.6 K | Rated 1 | 65, 205 and 286°F |
| USL, | CNL | VK308 | Horizontal Sidewall Style, 5.6 | Rated 10 | 65, 205 and 286°F |
| | | | K, Light and Ordinary Hazard | | |
| USL, | CNL | VK311 | Conventional Style, 5.6 K | Rated 10 | 55, 205 and 286°F |
| USL, | CNL | VK316 | Upright Style, 5.6 K 250 psig | Rated 10 | 55, 205 and 286°F |
| | | | Rated | | |
| USL, | CNL | VK318 | Pendent Style, 5.6 K 250 psig | Rated 10 | 55, 205 and 286°F |
| | | | Rated | | |
| USL, | CNL | VK320 | Horizontal Sidewall Style, 5.6 K | Rated 10 | 55, 205 and 286°F |
| | | | 250 psig Rated | | |
| USL, | CNL | VK326 | Upright Style, 2.8 K | | 55, 205 and 286°F |
| USL, | | VK328 | Upright Style, 4.2 K | | 55, 205 and 286°F |
| USL, | CNL | VK330 | Pendent Style, 2.8 K | | 55, 205 and 286°F |
| USL, | CNL | VK332 | Pendent Style, 4.2 K | | 55, 205 and 286°F |
| USL, | CNL | VK334 | Horizontal Sidewall Style, 2.8 K | | 55, 205 and 286°F |
| USL, | CNL | VK341 | Upright Style, 2.8 K 250 psig | Rated 16 | 55, 205 and 286°F |
| | | | Rated | | |
| USL, | CNL | VK343 | Pendent Style, 2.8 K 250 psig | Rated 16 | 55, 205 and 286°F |
| | | | Rated | | |
| USL, | CNL | VK346 | Horizontal Sidewall Style, 2.8 K | Rated 16 | 55, 205 and 286°F |
| | | | 250 psig Rated | | |
| USL, | CNL | VK351 | Upright Style, 8.0 K | Rated 16 | 55, 205 and 286°F |
| USL, | CNL | VK353 | Pendent Style, 8.0 K | Rated 16 | 55, 205 and 286°F |
| USL, | CNL | VK355 | Conventional Style, 8.0 K | | 55, 205 and 286°F |
| USL, | CNL | VK533 | Upright Style, 11.2 K Area | Rated 16 | 55, 205 and 286°F |
| | | | Density | | |
| USL, | CNL | VK535 | Upright Style, 11.2 K Extended | Rated 16 | 55 and 205°F |
| | | | Coverage Ordinary Hazard | | |
| USL, | CNL | VK537 | Pendent Style, 11.2 K Extended | Rated 16 | 55 and 205°F |
| | | | Coverage Ordinary Hazard | | |
| USL, | CNL | VK551 | Upright Intermediate Level | Rated 16 | 55, 205 and 286°F |
| | | | Style, 5.6 K | | |
| USL, | CNL | VK601,VK603. | Pendent Style, 5.6 K Extended | Rated 16 | 55 and 205°F |
| | | VK607 | Coverage light Hazard | | |
| USL, | CNL | VK609 | Horizontal Sidewall Style, 5.6 K | Rated 16 | 55 and 205°F |
| | | | Extended Coverage light Hazard | | |
| USL, | CNL | VK609 | Horizontal Sidewall Style, 5.6 K | Rated 16 | 5 and 205°F |
| | | | Extended Coverage light Hazard | | |
| USL, | CNL | VK611 | Pendent Style, 5.6 K Extended | Rated 16 | 5 and 205°F |
| | | | Coverage light Hazard, 250 psig | | |
| | | | Rated | | |
| USL, | CNL | VK613 | Horizontal Sidewall Style, 5.6 K | Rated 16 | 5 and 205°F |

| Extended Coverage light Hazard, |
|--|
| 250 psig Rated |
| Horizontal Sidewall Style, 8.0 K Rated 165 and 205°F Extended Coverage light Hazard |
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CONSTRUCTION DETAILS:

The devices have been examined and found to comply with the Standard For Automatic Sprinklers in effect as of the date of this Report.

USE:

The products covered by this Report are for use in accordance with the National Fire Protection Association Standard For The Installation of Sprinkler Systems, NFPA 13, and the manufacturer's installation instructions See Fig. 1.

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CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the class and the products are judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the Laboratories' 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 Laboratories' Mark are considered as Listed by Underwriters Laboratories Inc.

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