## CITY OF NEW YORK DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of Materials and Equipment Acceptance (MEA) Division.

## Patricia J. Lancaster, A.I.A., Commissioner MEA 89-92-E Vol. XXIV Report of Material and Equipment Acceptance Division

Manufacturer - The Viking Corporation

Trade Name(s) - Viking Sprinklers

Product - Automatic fire sprinklers for fire protection service.

Pertinent Code Section(s) - NFPA 13, NFPA 13D, NFPA 13R, Reference Standard RS 17-2, RS 17-6, 27-954 through 27-967.

Prescribed Tests - UL 199 and UL 1626.

Laboratory - Underwriter's Laboratories, Inc.

Test Report(s) - As indicated below.

Description - Residential type automatic fire sprinklers, rated 175 psig, of the following types and temperature ratings:

| Model<br>No. | Description   |   |                         |  |  |
|--------------|---|---|-------------------------|--|--|
|              | ITEM 1: Microfast® Residential Pendent-Sprinkler (3.1 K-Factor), 3 mm glass bulb type pender and recessed pendent, ½" NPT, 175 psig max. Finishes: Brass, Bright Brass, Chrome-Enloy®, White (paint), and Navajo White (paint). UL File Ex3836, Projects 96NK37710, 98NK5103 99NK36385/Ex643, 00NK24588, and 02NK16262, Issued Nov. 25, 1997, Revised April 19, 2002. |   |                         |  |  |
| SIN<br>VK434 | Maximum Areas of Coverage<br>Width x Length   | Minimum Water<br>Supply Requirements  | Temp. Rating            |  |  |
| VIVAGA       | Installed below   |   |                         |  |  |
|              | 12' x 12'   | 11 gpm @ 12.6 psi   |                         |  |  |
|              | 14' x 14'   | . 13 gpm @ 17.6 psi   | 155 °F only             |  |  |
|              | 16' x 16'   | 13 gpm @ 17.6 psi   |                         |  |  |
|              |   |   | 1, 122 2 2 2 3 10, 1001 |  |  |
|              | Revised October 11, 2002.  Max. Areas of Covg. (W x L)  | Min. Water Supply Reqmts  |                         |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hor  | rizontal ceilings only.   | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hor  12' x 12'   | rizontal ceilings only 16 gpm @ 8.5 psi   |                         |  |  |
| 0111         | Max. Areas of Covg. (W x L)  For smooth, flat, how  12' x 12'  14' x 14'  | rizontal ceilings only 16 gpm @ 8.5 psi 19 gpm @ 11.9 psi   |                         |  |  |
| SIN<br>VK432 | Max. Areas of Covg. (W x L)  For smooth, flat, hou  12' x 12'  14' x 14'  16' x 16'   | rizontal ceilings only.  . 16 gpm @ 8.5 psi 19 gpm @ 11.9 psi 19 gpm @ 11.9 psi   |                         |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, how  12' x 12'  14' x 14'  16' x 16'  18' x 18'  | rizontal ceilings only.  . 16 gpm @ 8.5 psi  . 19 gpm @ 11.9 psi  . 19 gpm @ 11.9 psi  . 21 gpm @ 14.6 psi  |                         |  |  |
| SIN<br>VK432 | Max. Areas of Covg. (W x L)  For smooth, flat, hou  12' x 12'  14' x 14'  16' x 16'  18' x 18'  20' x 20'   | 16 gpm @ 8.5 psi<br>19 gpm @ 11.9 psi<br>19 gpm @ 11.9 psi<br>19 gpm @ 11.9 psi<br>21 gpm @ 14.6 psi<br>24 gpm @ 19.0 psi   | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hore 12' x 12' 14' x 14' 16' x 16' 18' x 18' 20' x 20'  For sloped ceilings to   | rizontal ceilings only.  . 16 gpm @ 8.5 psi  . 19 gpm @ 11.9 psi  . 19 gpm @ 11.9 psi  . 21 gpm @ 14.6 psi  | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hou  12' x 12'  14' x 14'  16' x 16'  18' x 18'  20' x 20'   | rizontal ceilings only.  . 16 gpm @ 8.5 psi 19 gpm @ 11.9 psi 19 gpm @ 11.9 psi 21 gpm @ 14.6 psi 24 gpm @ 19.0 psi 2 an 8/12 (in./in.) pitch.  | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, how  12' x 12'  14' x 14'  16' x 16'  18' x 18'  20' x 20'  For sloped ceilings to   | 16 gpm @ 8.5 psi<br>19 gpm @ 11.9 psi<br>19 gpm @ 11.9 psi<br>21 gpm @ 14.6 psi<br>24 gpm @ 19.0 psi<br>21 gpm @ 14.6 psi<br>24 gpm @ 19.0 psi  | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hou  12' x 12'  14' x 14'  16' x 16'  18' x 18'  20' x 20'  For sloped ceilings to  12' x 12'  14' x 14'   | rizontal ceilings only.  . 16 gpm @ 8.5 psi 19 gpm @ 11.9 psi 19 gpm @ 11.9 psi 21 gpm @ 14.6 psi 24 gpm @ 19.0 psi 21 gpm @ 14.6 psi       | Temp. Rating            |  |  |
|              | Max. Areas of Covg. (W x L)  For smooth, flat, hore  12' x 12'  14' x 14'  16' x 16'  18' x 18'  20' x 20'  For sloped ceilings to 12' x 12'  14' x 14'  16' x 16'  | 16 gpm @ 8.5 psi<br>19 gpm @ 11.9 psi<br>19 gpm @ 11.9 psi<br>21 gpm @ 14.6 psi<br>24 gpm @ 19.0 psi<br>2 an 8/12 (in./in.) pitch.<br>21 gpm @ 14.6 psi<br>21 gpm @ 14.6 psi<br>21 gpm @ 14.6 psi | Temp. Rating            |  |  |

| lodel        |  | Description  |                   |  |  |
|--------------|--|--|-------------------|--|--|
| (            | ITEM 3: Microfast® Residential HSW Sprinkler (4.3 K-Factor). 3 mm glass-bulb type horizontal sidewall and recessed horizontal sidewall. ½" NPT, 175 psig max. Finishes: Brass, Bright Brass, Chrome-Enloy*, White (paint), and Navajo White (paint). UL File Ex3836. Projects 95NK26511. 96NK25030, 98NK5103, 00NK24588, 02NK16262, and 01NK34435. Issued September 27, 1996, Revised October 8, 2002. Projects 95NK26511 and 96NK25030, Issued September 27,  |  |                   |  |  |
|              | 1996, Revised April 19, 2002.  Maximum Areas of Coverage  Width x Length   | Minimum Water<br>Supply Requirements   | Temp. Rat-<br>ing |  |  |
| SIN<br>/K440 | Installed below smooth, flat, horizontal ceilings with the deflector positioned between 6" and 12" below the ceiling.  |  |                   |  |  |
|              |  | 19 gpm @ 19.5 psi  | 155 °F            |  |  |
|              | 12' x 12'  | 21 gpm @ 23.9 psi  | and<br>175°F      |  |  |
|              | Installed below sloped ceilings to 8/12 (in./in.) pitch with sprinklers at peak spraying down the slope with the deflector positioned between 4" and 6" below the ceiling.   |  |                   |  |  |
|              | 12' x 12'  | 19 gpm @ 19.5 psi  | - aloo bill       |  |  |
|              | ITEM 4: Microfast®/MicrofastHP® Residential HSW Sprinkler (5.5 K-Factor), 3 mm type horizontal sidewall and recessed horizontal sidewall, ½" NPT, 175 psig max type horizontal sidewall and recessed horizontal sidewall, ½" NPT, 175 psig max type horizontal sidewall and recessed horizontal sidewall, ½" NPT, 175 psig max type horizontal sidewall, ½" NPT, 1 |  |                   |  |  |
|              | Maximum Areas of Coverage Width x Length   | Minimum Water Supply Requirements  | Temp.<br>Rating   |  |  |
| · ·          | Installed below smooth, flat, horizontal ceilings with the deflectors positioned between 4" and 12" below the ceiling.   |  |                   |  |  |
|              | 12' x 12'  | 21 gpm @ 14.6 psi  |                   |  |  |
|              | 14' × 14'  | 22 gpm @ 16.0 psi  | -                 |  |  |
| SIN<br>VK442 | to Aallad holow smooth, flat, horizontal ceilings  |  |                   |  |  |
|              | 16' x 16'  | 24 gpm @ 19.0 psi  | 155 °F<br>and     |  |  |
|              | 16' v 18'  | 27 gpm @ 24.1 psi  | 175 °F            |  |  |
|              | Installed below sloped ceilings to an 8/12 (in./in.) pitch with sprinklers at peak spraying down the slope with the deflector positioned between 4" and 6" below the ceiling.  |  |                   |  |  |
|              | 12' x 12'  | 21 gpiii @ 14.0 psi  |                   |  |  |
|              | 14' × 14'  | 22 gpm @ 16.0 psi  |                   |  |  |
|              | 16' x 16'  | 24 gpm @ 19.0 psi  |                   |  |  |
|              | 16' x 18'  | 28 gpm @ 25.9 psi  | ala linktypa      |  |  |
| SIN<br>VK4   | NPT, 175 psig max. Finishes. Brushed Chrome, Brushed Coppers 98NK20823 and   | icealed Pendent Sprinkler (4.1 K-Factor), fusil<br>ght Brass, Brushed Brass, Antique Brass, Po<br>per, White (paint), Ivory (paint), and black<br>d 02NK16262, Issued December 13, 1999, R | (naint) UL F      |  |  |
| 1            | Continued on Next Page.  |  |                   |  |  |

| Model<br>No.   | Description   |                                      |   |  |  |  |
|--|---|--------------------------------------|---|--|--|--|
|  | Maximum Areas<br>of Coverage  | Minimum Water<br>Supply Requirements | Temp. Rating                                  |  |  |  |
|  | Installed   |                                      |   |  |  |  |
| SIN<br>VK425   | 12' x 12'   | 15 gpm @ 13.4 psi                    | 140 °F sprinkler<br>(with 135 °F cover plate) |  |  |  |
| 7,1425   | 14' x 14'   | 16 gpm @ 15.2 psi (w                 |   |  |  |  |
| -  | 16' x 16'   | 20 gpm @ 23.8 psi                    |   |  |  |  |
| ITEM 6: Microfast® Residential Pendent Sprinkler (4.3 K-Factor), 3 mm glass-bulb typ dent and recessed pendent, ½" NPT, 175 psig max. Finishes: Brass, Bright Chrome-Enloy®, White (paint), and Navajo White (paint). UL File Ex3836, Projects 95NK 95NK34820, 97NK21624, 98NK5103, 99NK36385/Ex643, 00NK24588, and 02NK16262, October 26, 1995, Revised April 19, 2002. |   |                                      |   |  |  |  |
|  | Max. Areas of Coverage  | Min. Water Supply Reqmts.            | Temp. Rating                                  |  |  |  |
| SIN  | Installed below smooth, flat, horizontal ceilings.  |                                      |   |  |  |  |
| VK430  | 12' x 12'   | - 12 gpm @ 7.8 psi                   |   |  |  |  |
|  | 16' x 16'   | 13 gpm @ 9.1 psi                     | 155 °F  |  |  |  |
|  | 18' x 18'   | 17 gpm @ 15.6 psi                    | and<br>175 °F                                 |  |  |  |
|  | 20' x 20'   | 21 gpm @ 23.9 psi                    |   |  |  |  |
| 1 .  | For sloped ce   |                                      |   |  |  |  |
|  | 16' x 16'   | : 18 gpm @ 17.5 psi                  |   |  |  |  |
| SIN<br>VK448   | ITEM 7: Microfast® Residential HSW Sprinkler (4.3 K-Factor), 3 mm glass-bulb type horizontal sidewall, ½" NPT, 175 psig max. Finishes: Brass, Bright Brass sidewall and recessed horizontal sidewall, ½" NPT, 175 psig max. Finishes: Brass, Bright Brass Chrome-Enloy®, White (paint), and Navajo White (paint). UL File Ex3836, Project 02NK15163, Is sued October 1, 2002. |                                      |   |  |  |  |
|  | Max. Areas of Coverage  | Min. Water Supply Reqmts.            | Temp. Rating                                  |  |  |  |
|  | Installed below smooth, fla   |                                      |   |  |  |  |
|  | 16' x 18'   | . 23 gpm @ 28.6 psi                  | 155 °F  |  |  |  |
|  | 16' x 20'   | 25 gpm @ 33.8 psi                    | and   |  |  |  |
|  | Installed below smooth, fl  | 175 °F                               |   |  |  |  |
|  | 16' x 18'   | 24 gpm @ 31.2 psi                    |   |  |  |  |
|  | 16' x 20'   | 26 gpm @ 36.6 psi                    |   |  |  |  |

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections letter dated January 14, 2003, F.P. Index0301017.

Recommendation - That the above equipment be accepted on the following conditions:

- 1. Installation shall comply with all applicable New York City codes, rules, regulations and testing requirements and in particular with the requirements of Subchapter 17 and RS 17-2 of the Administrative Code.
- 2. Underwriters Laboratories Inc.'s listing requirements and limitations shall be adhered to.
- 3. Manufacturer's installation, maintenance procedures and limitations shall be complied with.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance MARCH

Examined by