

## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings 280 Broadway, New York, NY 10007 Robert D. LiMandri, Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

## MEA 89-92-E Vol. 42

Manufacturer:

The Viking Corporation, 210 N. Industrial Park Drive,

Hastings, MI 49058

Trade Name(s):

**Viking Corporation** 

**Product:** 

Automatic fire sprinklers for fire protection service

**Pertinent Code Section(s):** 

Subchapter 17 and Reference Standard RS 17-2

**Prescribed Test(s):** 

UL 199, UL 1626

Laboratory:

Underwriters Laboratories, Inc.

Test Report(s):

- 1. UL File Ex3836, Projects: 04NK21104, 05CA24622, 06NK08727, 06NK23448, 06NK21375 and 07CA49552 issued March 18, 2005, revised December 11, 2007.
- 2. UL File Ex643, Projects: 85NK22507, 85NK15762, 87NK23362, 89NK28067, 90NK24296, 91NK6712, 91NK19768, 94NK6186, 95NK6133, 95NK9541, 97NK8448, 98NK5103, 98NK20794, 99NK21353, 98NK40010, 03NK09286, 02NK14247, 03NK08543, 04NK13848 and 04NK15031 issued January 13, 1987, revised December 13, 2004.
- 3. UL File Ex3836, Projects: 03CA06609, 03NK33586, 05NK05068, 05CA43687, 06NK07613, 06NK14337, 06CA54461 and 06NK13655 issued September 25, 2003, revised January 30, 2007.
- UL File Ex3836, Projects: 02NK26636, 03NK11223, 03NK08543, 03NK17401 and 06NK26160 issued February 4, 2003, revised May 4, 2007.
- UL File EX3836, Projects: 97NK21624, 98NK5103, 99NK36385 / Ex643, 00NK24588, 02NK16262, 01NK34435, and 02NK38001 issued July 18, 1997, revised October 11, 2002.

6. UL File Ex643, Projects: 90NK436, 91NK9882, 91NK15461, 92NK21474, 92NK24995, 92NK22885, 93NK16332, 93NK25801, 97NK30246, 97NK36974, 98NK11873, 99NK21033, 98NK20794, 01NK09248, 02NK33, 01NK51086, 02NK25369, 02NK46230, 03NK8319, 03NK22550, 03NK31725, 03NK28087, 03NK35777, 05CA08364 and 04NK15551 issued September 17, 1991, revised July 21, 2005.

**Description:** Residential-type automatic fire sprinklers of the following types and temperature ratings:

Model No.	Description				
	ITEM 1: Freedom® Residential Horizontal Sidewall and Recessed Horizontal Sidewall Sprinkler VK460 (5.8 K-Factor), nominal 3 mm glass bulb type, ½" NPT. Temperature				
	rating 155° F or 175° F. For installation in residential occupancies with wet systems 175 psig maximum. Finishes: Brass, Chrome-Enloy®, or painted. UL File Exprojects: 04NK21104, 05CA24622, 06NK08727, 05NK23448 and 06NK21375 i March 18, 2005, revised December 11, 2007.				
	Maximum Areas of Coverage	Minimum Water Supply Requirements	Temperature Ratings		
	ceilings with slopes up to and petween 4" and 6".				
	12' x 12'	16 gpm @ 7.6 psi	155 and 175° F		
	14' x 14'	16 gpm @ 7.6 psi	155 and 175° F		
	16' x 16'	20 gpm @ 11.9 psi	155° F		
	16' x 16'	21 gpm @ 13.1 psi	175° F		
	16' x 16'	22 gpm @ 14.4 psi	155 and 175° F		
VK460	16' x 20'	26 gpm @ 20.1 psi	155 and 175° F		
	16' x 22'	31 gpm @ 28.6 psi	155° F		
	18' x 18'	23 gpm @ 15,7 psi	155 and 175° F		
	18' x 20'	29 gpm @ 25.0 psi	155 and 175° F		
	20' x 20'	30 gpm @ 26.8 psi	155 and 175° F		
	Installed below smooth, flat, horizontal ceilings, including ceilings with slopes up including 2/12 (9.5°), with the deflector located between 4" and 6".				
	12' x 12'	16 gpm @ 7.6 psi	155 and 175° F		
	14' x 14'	18 gpm @ 9.7 psi	155 and 175° F		
	16' x 16'	24 gpm @ 18.4 psi	155 and 175° F		
	16' x 16'	27 gpm @ 21.7 psi	155 and 175° F		
	16' x 20'	32 gpm @ 30.4 psi	155 and 175° F		
	16' x 22'	37 gpm @ 40.7 psi	155° F		
	18' x 18'	29 gpm @ 25.0 psi	155 and 175° F		
	18' x 20'	35 gpm @ 36.4 psi	155 and 175° F		
	20' x 20'	36 gpm @ 38.5 psi	155 and 175° F		

Model No.	Description				
	ITEM 2: Freedom® Residential Pendent and Recessed Pendent Sprinkler VK466 (5.2 K-Factor), nominal 3 mm glass bulb type, ½" NPT. Temperature rating 155° F or 175° F. For installation in residential occupancies with wet systems only, 175 psig maximum. Finishes: Brass, Chrome-Enloy®, or painted. UL File Ex3836, Projects: 03CA06609, 03NK33586, 05NK05068, 05CA43687, 06NK07613, 06CA14337, 06CA54461 and 06NK13655 issued September 25, 2003, revised January 30, 2007.				
	Maximum Areas of Coverage	Minimum Water Supply Requirements	Temperature Ratings		
	Installed below smooth, flat, horizontal ceilings, including ceilings with slopes up including 2/12 (9.5°).				
	12' x 12'	14 gpm @ 7.2 psi	155 and 175° F		
VK466	14' x 14'	14 gpm @ 7.2 psi	155 and 175° F		
	16' x 16'	14 gpm @ 7.2 psi	155 and 175° F		
	18' x 18'	17 gpm @ 10.7 psi	155 and 175° F		
	20' x 20'	20 gpm @ 14.8 psi	155 and 175° F		
	beams.				
	12' x 12'	14 gpm @ 7.2 psi	155° F		
	14' x 14'	14 gpm @ 7.2 psi	155° F		
	16' x 16'	14 gpm @ 7.2 psi	155° F		
	18' x 18'	17 gpm @ 10.7 psi	155° F		
	18' x 20'	21 gpm @ 16.3 psi	155° F		
	Installed below	ceilings with slopes up to and inc			
	20' x 20'	20 gpm @ 14.8 psi	155° F		
	20' x 20'	23 gpm @ 19.6 psi	175° F		
	nominal 3 mm glass bulb to cover plate. For installati maximum. Finishes: Polis 03NK33586 05NK05068	IM 3: Freedom® Residential Concealed Pendent Sprinkler VK466 (5.2 K-Factor), minal 3 mm glass bulb type, ½" NPT. Temperature rating 155°F or 175°F.with a 135°F over plate. For installation in residential occupancies with wet systems only, 175 psig eximum. Finishes: Polished Chrome or painted. UL File Ex3836, Projects: 03CA06609, NK33586, 05NK05068, 05CA43687, 06NK07613, 06CA14337, 06CA54461 and NK13655 issued September 25, 2003, revised January 30, 2007.			
VK466	Maximum Areas of	Minimum Water Supply	Temperature Ratings		
Concealed	Coverage Requirements  Installed below smooth, flat, horizontal ceilings, including ceilings with slopes up to and including 2/12 (9.5°).				
	12' x 12'	14 gpm @ 7.2 psi	155 and 175° F		
	14' x 14'	14 gpm @ 7.2 psi	155 and 175° F		
	16' x 16'	14 gpm @ 7.2 psi	155 and 175° F		
	18' x 18'	17 gpm @ 10.7 psi	155 and 175° F		
	20' x 20'	20 gpm @ 14.8 psi	155 and 175° F		
	Installed below ceilings with slopes up to and including 8/12 (33.7°).				
	20' x 20'	23 gpm @ 19.6 psi	155 and 175° F		

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 February 19, 2008, F.P. Index #0802020).

Terms and Conditions: The above units are accepted on the following conditions:

- 1. All uses, applications and installations shall comply with all applicable New York City Building codes, rules and regulations, especially New York City Building Code, Subchapter 17 and Reference Standard RS 17-2A & 17-2B. Further, the installation of these sprinklers shall be in accordance with the manufacturer's recommendation and UL Standard 1626.
- 2. Underwriters Laboratories, Inc.'s listing requirements and limitations shall be complied with.
- 3. Manufacturer's installation instructions, maintenance procedures and limitations shall be complied with.
- 4. Above sprinklers shall be used in residential occupancies with wet systems only.
- 5. The working pressure shall not exceed 175 psi (12 bars).
- 6. Periodic maintenance and system tests shall be conducted in accordance with the regulations of Fire Department and manufacturer's recommendations.
- 7. 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 those tested and accepted for use, as provided in Section 27-131 of the New York City Building Code.

Final Acceptance

**Examined By**