

## Extended Coverage Sprinkler Listings – Part 1

This issue of NFSA's TechNotes updates the listing for NFSA member manufacturers' extended coverage (EC) sprinklers in the following categories:

### *Underwriters Laboratories Listings*

- I. EC – Light Hazard – HSW
- II. QREC – Light Hazard – HSW
- III. EC – Light Hazard – Pendent and Upright
- IV. QREC – Light Hazard – Pendent and Upright
- V. EC – Ordinary Hazard – HSW
- VI. EC – Ordinary Hazard – Pendent and Upright
- VII. EC – Extra Hazard and Storage

The listings found herein are as of December 2014. Each category is broken down by manufacturer and sprinklers are listed according to their Sprinkler Identification Number (SIN). All values in the tables are in English units (°F, ft, and gpm).

The EC sprinkler approvals with FM for NFSA member manufacturers' will be published in a future edition of TechNotes.

### **I. UL Extended Coverage Sprinklers – Light Hazard – Horizontal Sidewall**

NFPA 13 currently requires that all light hazard occupancies are protected with quick response sprinklers. There are extended coverage standard response sprinklers that maintain their listing for existing systems and replacement purposes. See the UL Directory for sprinklers in this category.

### **II. UL Quick Response Extended Coverage Sprinklers – Light Hazard – Horizontal Sidewall**

For the table in this section, the "distance below ceiling" is presented in a range of inches.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>Globe Fire Sprinkler Corporation</b>								
GL5613	Conc. HSW	5.6	135, 155, 175	16	18	29	4-6	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL5613	Conc. HSW	5.6	135, 155, 175	16	18	32	6-12	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL5613	Conc. HSW	5.6	135, 175	16	20	32	4-12	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL5628	HSW, Rec. HSW	5.6	200	16	16	26	4-6	
GL5628	HSW, Rec. HSW	5.6	135, 155, 175	16	16	26	4-12	
GL5628	HSW, Rec. HSW	5.6	200	16	18	29	4-6	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>Globe Fire Sprinkler Corporation (continued)</b>								
GL5628	HSW, Rec. HSW	5.6	135, 155, 175	16	18	29	4-12	
GL5628	HSW, Rec. HSW	5.6	135, 155, 175	16	20	32	4-12	
GL5628	HSW, Rec. HSW	5.6	200	18	18	32	4-6	
GL5628	HSW, Rec. HSW	5.6	135, 155, 175	18	18	32	4-12	
GL8113	Conc. HSW	8.1	135, 155, 175	16	16	26	4-12	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8113	Conc. HSW	8.1	135, 155, 175	16	18	29	4-6	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8113	Conc. HSW	8.1	135, 155, 175	16	18	32	6-12	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8113	Conc. HSW	8.1	135, 175	16	20	32	4-6	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8113	Conc. HSW	8.1	135, 175	16	20	37	6-12	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8114	Conc. HSW	8.1	135	16	22	36	4-6	Utilizes a 135°F cover plate only.
GL8114	Conc. HSW	8.1	135	16	24	39	4-6	Utilizes a 135°F cover plate only.
GL8114	Conc. HSW	8.1	135	18	20	36	4-12	Utilizes a 135°F cover plate only.
GL8114	Conc. HSW	8.1	135	18	22	40	4-12	Utilizes a 135°F cover plate only.
GL8115	Conc. HSW	8.1	135	16	22	40	6-12	Utilizes a 135°F cover plate only.
GL8128	HSW	8	175	16	20	33	4-6	
GL8128	HSW, Rec. HSW	8	135, 155, 175, 200	16	16	26	4-6	
GL8128	HSW, Rec. HSW	8	135, 155, 175, 200	16	18	29	4-6	
GL8128	HSW, Rec. HSW	8	135	16	20	33	4-6	
GL8128	HSW, Rec. HSW	8	135	16	22	37	4-6	
GL8128	HSW, Rec. HSW	8	135	16	24	42	4-6	
GL8129	HSW	8	175	16	20	33	6-12	
GL8129	HSW, Rec. HSW	8	135, 155, 175	16	16	26	6-12	
GL8129	HSW, Rec. HSW	8	135, 155, 175	16	18	29	6-12	
GL8129	HSW, Rec. HSW	8	135	16	20	33	6-12	
GL8129	HSW, Rec. HSW	8	135	16	22	37	6-12	
GL8129	HSW, Rec. HSW	8	135	16	24	42	6-12	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>Reliable Automatic Sprinkler Company, Inc.</b>								
R1364	Flush HSW	5.6	165	16	16	26	4-6	
R1364	Flush HSW	5.6	165	16	16	27	6-12	
R4862	HSW, Rec. HSW	8	135, 155	14	26	46	6-12	
R4862	HSW, Rec. HSW	8	135, 155	14	26	39	4-12	
R4862	HSW, Rec. HSW	8	135, 155, 175	16	16	26	4-12	
R4862	HSW, Rec. HSW	8	135, 155, 175	16	18	29	4-12	
R4862	HSW, Rec. HSW	8	135, 155, 175	16	20	32	4-12	
R4862	HSW, Rec. HSW	8	135, 155, 175	16	22	36	4-12	
R4862	HSW, Rec. HSW	8	135, 155, 175	16	24	39	4-12	
R4862	HSW, Rec. HSW	8	135, 155	18	18	33	4-12	
R4862	HSW, Rec. HSW	8	135, 155	18	22	40	4-12	
R4865	HSW, Rec. HSW	5.6	135, 155, 175	16	16	26	4-12	
R4865	HSW, Rec. HSW	5.6	135, 155, 175	16	18	29	4-12	
R4865	HSW, Rec. HSW	5.6	135, 155, 175	16	20	32	4-12	
R5962	Conc. HSW	8	135	14	26	39	4-6	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	155	14	26	46	6-12	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	135	14	26	46	4-12	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	155	16	18	29	4-12	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	135	16	22	37	4-12	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	135, 155	18	18	33	4-12	Utilizes a 135°F coverplate.
R5962	Conc. HSW	8	135	18	22	40	4-12	Utilizes a 135°F coverplate.
RA0362	Conc. HSW	8	155	28	14	40	4-12	Utilizes a 135°F coverplate.
RA0362	HSW, Rec. HSW	8	155	28	14	40	4-12	Utilizes a 135°F coverplate.
RA1564	Rec. HSW, Conc. HSW	5.6	155, 175, 200	28	8	23	4-12	Utilizes a 135°F or 165°F coverplate.
RA1564	Rec. HSW, Conc. HSW	5.6	155, 175, 200	28	10	28	4-12	Utilizes a 135°F or 165°F coverplate.
RA1664	Dry Rec. HSW, Conc. HSW	5.6	155, 175, 200	28	8	23	4-12	Utilizes a 135°F or 165°F coverplate.
RA1664	Dry Rec. HSW, Conc. HSW	5.6	155, 175, 200	28	10	28	4-12	Utilizes a 135°F or 165°F coverplate.
RA2865	HSW, Rec. HSW	5.6	135, 155, 175	16	16	26	4-12	
RA2865	HSW, Rec. HSW	5.6	135, 155, 175	16	18	29	4-12	
RA2865	HSW, Rec. HSW	5.6	135, 155, 175	16	20	32	4-12	
RA4762	Conc. HSW	8	165	14	22	31	4-6	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	14	22	35	6-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	14	24	35	4-6	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	14	24	39	6-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	16	16	26	4-12	Utilizes a 135°F coverplate.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>Reliable Automatic Sprinkler Company, Inc. (continued)</b>								
RA4762	Conc. HSW	8	165	16	18	29	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	16	20	32	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	16	22	36	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	16	24	39	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	18	18	33	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	18	20	36	4-12	Utilizes a 135°F coverplate.
RA4762	Conc. HSW	8	165	18	22	40	4-12	Utilizes a 135°F coverplate.
<b>Tyco Fire Protection Products</b>								
TY3302	HSW	5.6	135	16	22	36	4-18	
TY3302	HSW, Rec. HSW	5.6	200	16	16	26	4-12	
TY3302	HSW, Rec. HSW	5.6	135, 155	16	16	26	4-18	
TY3302	HSW, Rec. HSW	5.6	135, 155	16	18	29	4-18	
TY3302	HSW, Rec. HSW	5.6	135, 155	16	20	32	4-18	
TY3307	HSW, Rec. HSW	5.6	135, 155, 175	16	16	26	4-12	
TY3307	HSW, Rec. HSW	5.6	135, 155, 175	16	18	29	4-12	
TY3307	HSW, Rec. HSW	5.6	135	16	20	32	4-6	
TY3307	HSW, Rec. HSW	5.6	135	16	22	35	4-6	
TY3322	HSW	5.6	165	16	16	29	4-12	
TY3322	HSW	5.6	165	16	20	33	4-12	
TY3322	HSW	5.6	165	18	16	29	4-12	
TY3332	HSW, Rec. HSW	5.6	135, 155, 175	16	16	26	4-12	
TY3332	HSW, Rec. HSW	5.6	135, 155, 175	16	18	29	4-12	
TY3332	HSW, Rec. HSW	5.6	135, 155, 175	16	20	32	4-6	
TY3332	HSW, Rec. HSW	5.6	135	16	22	35	4-6	
TY3338	Dry HSW	5.6	135, 155	16	16	26	4-12	
TY3338	Dry HSW	5.6	135, 155	16	18	29	4-12	
TY3338	Dry HSW	5.6	135, 155	16	20	32	4-12	
TY3338	Dry HSW	5.6	135, 155	18	16	29	4-12	
TY3339	Dry HSW	5.6	135, 155	16	16	26	4-12	
TY3339	Dry HSW	5.6	135, 155	16	18	29	4-12	
TY3339	Dry HSW	5.6	135, 155	16	20	32	4-12	
TY3339	Dry HSW	5.6	135, 155	18	16	29	4-12	
TY3382	Flush HSW	5.6	165	16	16	26	4-12	
TY4322	HSW	8	165	16	16	26	4-6	
TY4322	HSW	8	165	16	18	29	4-6	
TY4322	HSW	8	165	16	20	34	4-6	
TY4322	HSW	8	165	16	22	37	4-6	
TY4322	HSW	8	165	16	18	38	4-18	
TY4322	HSW	8	165	18	16	31	4-6	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>Tyco Fire Protection Products (continued)</b>								
TY4322	HSW	8	165	18	18	33	4-6	
TY4322	HSW	8	165	20	16	35	4-6	
TY4332	Conc. HSW	8	155	16	16	26	4-12	Utilizes a 135°F coverplate.
TY4332	HSW, Rec. HSW	8	135, 155, 175	16	16	26	4-12	
TY4332	HSW, Rec. HSW	8	135, 155, 175	16	18	29	4-12	
TY4332	HSW, Rec. HSW	8	135	16	20	32	4-6	
TY4332	HSW, Rec. HSW	8	135	16	20	33	4-12	
TY4332	HSW, Rec. HSW	8	135	16	22	35	4-6	
TY4332	HSW, Rec. HSW	8	135	16	22	36	4-12	
TY4332	HSW, Rec. HSW	8	135	16	24	39	4-6	
TY4332	HSW, Rec. HSW	8	135	16	24	40	4-12	
<b>Victaulic Company</b>								
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	16	26	4-6	
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	16	28	6-12	
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	18	29	4-6	
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	20	32	4-6	
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	18	33	6-12	
V3416	HSW, Rec. HSW	8.0	135, 155, 175, 200	16	20	35	6-12	
V3416	HSW, Rec. HSW	8.0	135, 155, 175	16	22	36	4-6	
V3416	HSW, Rec. HSW	8.0	135	16	22	36	4-12	
V3416	HSW, Rec. HSW	8.0	135	16	24	39	4-6	
V3416	HSW, Rec. HSW	8.0	135	16	24	41	6-12	
<b>The Viking Corp.</b>								
VK188	Dry HSW	5.6	155, 175	16	16	26	4-6	
VK188	Dry HSW	5.6	155, 175	16	18	29	4-6	
VK188	Dry HSW	5.6	155, 175	16	20	32	4-6	
VK605	HSW, Rec. HSW	5.6	155	16	16	26	4-6	For use below smooth, flat, sloped ceilings with pitches between 2/12 to 4/12 (in./in.) at the minimum flow rates specified. The calculation to determine the design area in accordance with NFPA 13 shall not be credited for the quick response feature and not be debited for installation with slopes with pitches greater than 2/12 (in./in.).

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>The Viking Corp. (continued)</b>								
VK605	HSW, Rec. HSW	5.6	155	16	18	29	4-6	For use below smooth, flat, sloped ceilings with pitches between 2/12 to 4/12 (in./in.) at the minimum flow rates specified. The calculation to determine the design area in accordance with NFPA 13 shall not be credited for the quick response feature and not be debited for installation with slopes with pitches greater than 2/12 (in./in.).
VK605	HSW, Rec. HSW	5.6	135, 175	16	20	32	4-6	For use below smooth, flat, sloped ceilings with pitches between 2/12 to 4/12 (in./in.) at the minimum flow rates specified. The calculation to determine the design area in accordance with NFPA 13 shall not be credited for the quick response feature and not be debited for installation with slopes with pitches greater than 2/12 (in./in.).
VK605	HSW, Rec. HSW	5.6	155	16	16	26	6-12	
VK605	HSW, Rec. HSW	5.6	155	16	18	29	6-12	
VK605	HSW, Rec. HSW	5.6	135, 175	16	20	32	6-12	
VK606	HSW, Rec. HSW	8	135, 155, 175	16	16	26	4-12	Model F1 escutcheon only.
VK606	HSW, Rec. HSW	8	135, 155, 175	16	18	29	4-12	Model F1 escutcheon only.
VK606	HSW, Rec. HSW	8	135, 155, 175	16	20	32	4-12	Model F1 escutcheon only.
VK606	HSW, Rec. HSW	8	135, 155, 175	16	22	36	4-6	Model F1 escutcheon only.
VK606	HSW, Rec. HSW	8	135, 155, 175	16	22	38	6-12	Model F1 escutcheon only.
VK609	HSW, Rec. HSW	5.6	165, 205	16	16	26	4-6	For use below smooth, flat, sloped ceilings with pitches between 2/12 to 4/12 (in./in.) at the minimum flow rates specified. The calculation to determine the design area in accordance with NFPA 13 shall not be credited for the quick response feature and not be debited for installation with slopes with pitches greater than 2/12 (in./in.).
VK609	HSW, Rec. HSW	5.6	165	16	18	29	4-6	For use below smooth, flat, sloped ceilings with pitches between 2/12 to 4/12 (in./in.) at the minimum flow rates specified. The calculation to determine the design area in accordance with NFPA 13 shall not be credited for the quick response feature and not be debited for installation with slopes with pitches greater than 2/12 (in./in.).
VK609	HSW, Rec. HSW	5.6	165, 205	16	16	26	6-12	
VK609	HSW, Rec. HSW	5.6	165	16	18	29	6-12	
VK612	HSW, Rec. HSW	5.6	155	16	16	26	6-12	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>The Viking Corp. (continued)</b>								
VK612	HSW, Rec. HSW	5.6	155	16	18	29	6-12	
VK612	HSW, Rec. HSW	5.6	135, 175	16	20	32	6-12	
VK613	HSW, Rec. HSW	5.6	165, 205	16	16	26	6-12	
VK613	HSW, Rec. HSW	5.6	165	16	18	29	6-12	
VK630	Conc. HSW	8	135	14	24	34	4-6	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135	14	24	36	6-12	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135	14	26	39	4-6	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135, 175	14	26	46	6-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK630	HSW, Rec. HSW	8	135, 155, 175	14	24	34	4-6	
VK630	HSW, Rec. HSW	8	135, 155, 175	14	24	36	6-12	
VK630	HSW, Rec. HSW	8	135, 175	14	26	38	4-6	
VK630	HSW, Rec. HSW	8	135, 175	14	26	46	6-12	
VK630	Conc. HSW	8	135, 175	16	16	26	4-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK630	Conc. HSW	8	135, 175	16	18	29	4-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK630	Conc. HSW	8	135, 175	16	20	32	4-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK630	Conc. HSW	8	135	16	22	36	4-12	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135	16	24	39	4-12	Utilizes 135°F cover plate.
VK630	HSW, Rec. HSW	8	135, 155, 175	16	16	26	4-12	
VK630	HSW, Rec. HSW	8	135, 155, 175	16	18	29	4-12	
VK630	HSW, Rec. HSW	8	135, 155, 175	16	20	32	4-12	
VK630	HSW, Rec. HSW	8	135, 175	16	22	36	4-12	
VK630	HSW, Rec. HSW	8	135, 175	16	24	39	4-12	
VK630	Conc. HSW	8	135	18	18	33	4-12	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135	18	20	36	4-12	Utilizes 135°F cover plate.
VK630	Conc. HSW	8	135	18	22	40	4-12	Utilizes 135°F cover plate.
VK630	HSW, Rec. HSW	8	135, 175	18	18	33	4-12	
VK630	HSW, Rec. HSW	8	135, 175	18	20	36	4-12	
VK630	HSW, Rec. HSW	8	135, 175	18	22	40	4-12	
VK638	Conc. HSW	8	135, 155, 175, 200	28	12	34	4-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK638	Conc. HSW	8	135, 155, 175, 200	28	14	40	4-12	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK638	HSW, Rec. HSW	8	135, 155, 175, 200	28	12	34	4-12	
VK638	HSW, Rec. HSW	8	135, 155, 175, 200	28	14	40	4-12	
VK680	Conc. HSW	8	165	14	22	31	4-12	Utilizes 135°F cover plate.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Distance Below Ceiling	Notes
<b>The Viking Corp. (continued)</b>								
VK680	Conc. HSW	8	165	16	16	26	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	16	18	29	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	16	20	32	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	16	22	36	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	18	18	33	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	18	20	36	4-12	Utilizes 135°F cover plate.
VK680	Conc. HSW	8	165	18	22	40	4-12	Utilizes 135°F cover plate.

### III. UL Extended Coverage Sprinklers – Light Hazard – Pendent and Upright

NFPA 13 currently requires that all light hazard occupancies are protected with quick response sprinklers. There are extended coverage standard response sprinklers that maintain their listing for existing systems and replacement purposes. See the UL Directory for sprinklers in this category.

### IV. UL Quick Response Extended Coverage Sprinklers – Light Hazard – Pendent and Upright

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>Globe Fire Sprinkler Corporation</b>							
GL1111	Pendent, Rec. Pendent	11.2	135, 155, 175, 200	16	16	30	
GL1111	Pendent	11.2	135, 155, 175, 200	20	20	40	
GL1112	Pendent	11.2	135, 155, 175, 200	18	18	33	
GL1112	Pendent, Rec. Pendent	11.2	135, 155, 175, 200	18	18	33	
GL1112	Pendent	11.2	135, 155, 175	20	20	40	
GL1112	Pendent, Rec. Pendent	11.2	135, 175	20	20	40	
GL5603	Conc. Pendent	5.6	135,155,175	16	16	26	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL5603	Conc. Pendent	5.6	135,155,175	18	18	33	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL5603	Conc. Pendent	5.6	135	20	20	40	
GL5614	Pendent, Rec. Pendent	5.6	135, 155, 175, 200	16	16	26	
GL5614	Pendent, Rec. Pendent	5.6	135, 155, 175, 200	18	18	33	
GL5614	Pendent, Rec. Pendent	5.6	135	20	20	40	
GL8104	Conc. Pendent	8	135, 155, 175, 200	16	16	26	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.



SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>Globe Fire Sprinkler Corporation (continued)</b>							
GL8104	Conc. Pendent	8	135, 155, 175, 200	18	18	32	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8104	Conc. Pendent	8	135	20	20	40	The 135°F and 155°F sprinklers utilize a 135°F coverplate and the 175°F, 200°F sprinklers utilize a 155°F coverplate.
GL8109	Pendent, Rec. Pendent	8.1	135, 155, 175, 200	16	16	26	
GL8109	Pendent, Rec. Pendent	8.1	135, 155, 175, 200	18	18	33	
GL8109	Pendent, Rec. Pendent	8.1	135	20	20	40	
<b>Reliable Automatic Sprinkler Company, Inc.</b>							
R1344	Flush Pendent	5.6	165	16	16	26	
R4441	Conc. Pendent	11.2	165	16	16	30	Utilizes a 135°F coverplate. May utilize a 1 in. adjustable inlet feature with 1 in. male threads. Concealed pendent type sprinklers may utilize a perforated style cover plate.
R4441	Conc. Pendent	11.2	165	18	18	33	Utilizes a 135°F coverplate. May utilize a 1 in. adjustable inlet feature with 1 in. male threads. Concealed pendent type sprinklers may utilize a perforated style cover plate.
R4441	Conc. Pendent	11.2	165	20	20	40	Utilizes a 135°F coverplate. May utilize a 1 in. adjustable inlet feature with 1 in. male threads. Concealed pendent type sprinklers may utilize a perforated style cover plate.
R4842	Conc. Pendent	8	155	16	16	26	Utilizes a 135°F coverplate.
R4842	Pendent, Rec. Pendent	8	135, 155	16	16	26	
R4842	Conc. Pendent	8	155	18	18	32	Utilizes a 135°F coverplate.
R4842	Pendent, Rec. Pendent	8	135, 155	18	18	33	
R4842	Conc. Pendent	8	155	20	20	40	Utilizes a 135°F coverplate.
R4842	Pendent, Rec. Pendent	8	135	20	20	40	
R4845	Pendent, Rec. Pendent	5.6	135, 155	16	16	26	
R4845	Pendent, Rec. Pendent	5.6	135, 155	18	18	33	
R4845	Pendent, Rec. Pendent	5.6	135	20	20	40	
R5942	Conc. Pendent	8	135	16	16	26	Utilizes a 135°F coverplate.
R5942	Rec. Pendent	8	155	16	16	26	
R5942	Conc. Pendent	8	135	18	18	33	Utilizes a 135°F coverplate.
R5942	Rec. Pendent	8	155	18	18	32	
R5942	Conc. Pendent	8	135	20	20	40	Utilizes a 135°F coverplate.
R5942	Rec. Pendent	8	135	20	20	40	
R5945	Conc. Pendent	5.6	135,155	14	14	21	Utilizes a 135°F coverplate.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>Reliable Automatic Sprinkler Company, Inc. (continued)</b>							
R5945	Conc. Pendent	5.6	135, 155	16	16	26	Utilizes a 135°F coverplate.
R5945	Conc. Pendent	5.6	135, 155	18	18	33	Utilizes a 135°F coverplate.
R5945	Conc. Pendent	5.6	135	20	20	40	Utilizes a 135°F coverplate.
R7216	Pendent, Rec. Pendent	11.2	165, 212	16	16	30	
R7216	Pendent, Rec. Pendent	11.2	165, 212	18	18	33	
R7216	Pendent, Rec. Pendent	11.2	165, 212	20	20	40	
R7236	Upright	11.2	165	16	16	30	
R7326	Upright	11.2	165	18	18	33	
R7326	Upright	11.2	165	20	20	40	
RA2845	Conc. Pendent	5.6	135,155	14	14	21	Utilizes a 135°F coverplate.
RA2845	Conc. Pendent	5.6	135,155	16	16	26	Utilizes a 135°F coverplate.
RA2845	Pendent, Rec. Pendent	5.6	135, 155	16	16	26	
RA2845	Conc. Pendent	5.6	135,155	18	18	33	Utilizes a 135°F coverplate.
RA2845	Pendent, Rec. Pendent	5.6	135, 155	18	18	33	
RA2845	Conc. Pendent	5.6	135,155	20	20	40	Utilizes a 135°F coverplate.
RA2845	Pendent, Rec. Pendent	5.6	135	20	20	40	
RA3045	Conc. Pendent	5.6	135, 155	14	14	21	Utilizes a 135°F coverplate.
RA3045	Conc. Pendent	5.6	135, 155	16	16	26	Utilizes a 135°F coverplate.
RA3045	Rec. Pendent	5.6	155	16	16	26	
RA3045	Conc. Pendent	5.6	135, 155	18	18	33	Utilizes a 135°F coverplate.
RA3045	Rec. Pendent	5.6	155	18	18	32	
RA3045	Conc. Pendent	5.6	135	20	20	40	Utilizes a 135°F coverplate.
RA3045	Rec. Pendent	5.6	135	20	20	40	
RA7216	Pendent, Rec. Pendent	11.2	155, 200	16	16	30	
RA7216	Pendent, Rec. Pendent	11.2	155, 200	18	18	33	
RA7216	Pendent, Rec. Pendent	11.2	155, 200	20	20	40	
RA7326	Upright	11.2	155, 200	16	16	30	
RA7326	Upright	11.2	155, 200	18	18	33	
RA7326	Upright	11.2	155, 200	20	20	40	
<b>Tyco Fire Protection Products</b>							
TY3232	Pendent, Rec. pendent	5.6	135, 155	16	16	26	
TY3232	Pendent, Rec. pendent	5.6	135, 155	18	18	33	
TY3232	Pendent, Rec. pendent	5.6	135	20	20	40	
TY3282	Flush Pendent	5.6	165	16	16	26	
TY3532	Conc. Pendent	5.6	155, 200	16	16	26	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY3532	Conc. Pendent	5.6	155, 200	18	18	33	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>Tyco Fire Protection Products (continued)</b>							
TY3532	Conc. Pendent	5.6	155, 200	20	20	40	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY3539	Dry Conc. Pendent	175	155, 200	16	16	26	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY3539	Dry Conc. Pendent	175	155, 200	18	18	33	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY4232	Pendent	8	155	16	16	26	
TY4232	Pendent, Rec. Pendent	8	135	16	16	26	
TY4232	Pendent	8	155	18	18	33	
TY4232	Pendent, Rec. Pendent	8	135	18	18	33	
TY4232	Pendent	8	155	20	20	40	
TY4232	Pendent, Rec. Pendent	8	135	20	20	40	
TY5237	Pendent, Rec. pendent	11.2	135, 155, 175, 200, 286	16	16	30	
TY5237	Pendent, Rec. pendent	11.2	135, 155, 175, 200, 286	18	18	33	
TY5237	Pendent	11.2	135, 155, 175	20	20	40	
TY5237	Rec. pendent	11.2	135, 175	20	20	40	
TY5238	Dry Pendent, Rec. Pendent	11.2	135, 155, 175, 200	16	16	30	
TY5238	Dry Pendent	11.2	135, 155, 175, 200	18	18	33	
TY5522	Conc. Pendent	11.2	160, 212	16	16	30	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY5522	Conc. Pendent	11.2	160, 212	18	18	33	The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.
TY6237	Pendent	14	135, 155, 175, 200, 286	18	18	37	
TY6237	Rec. Pendent	14	135, 155, 175, 200	18	18	37	
TY6237	Pendent	14	135, 155, 175, 200, 286	20	20	40	
TY6237	Rec. Pendent	14	135, 155, 175, 200	20	20	40	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>Victaulic Company</b>							
V3102	Conc. Pendant	8.0	135	16	16	26	Utilizes 135 F coverplate.
V3102	Conc. Pendant	8.0	135	18	18	33	Utilizes 135 F coverplate.
V3102	Conc. Pendant	8.0	135	20	20	40	Utilizes 135 F coverplate.
V3104	Conc. Pendant	11.2	135	16	16	30	Utilizes 135 F coverplate.
V3104	Conc. Pendant	11.2	135	18	18	33	Utilizes 135 F coverplate.
V3104	Conc. Pendant	11.2	135	20	20	40	Utilizes 135 F coverplate.
V3412	Pendant, Rec. Pendant	11.2	135, 155, 175, 200	16	16	30	
V3412	Pendant, Rec. Pendant	11.2	135, 155, 175, 200	18	18	33	
V3412	Pendant	11.2	135, 155, 175, 200	20	20	40	
V3412	Rec. Pendant	11.2	135, 175	20	20	40	
V3414	Pendant, Rec. Pendant	14.0	135, 155, 175, 200	18	18	37	
V3414	Pendant, Rec. Pendant	14.0	135, 155, 175, 200	20	20	40	
V3904	Conc. Pendant	8.0	135, 155	16	16	26	Utilizes 135 F coverplate.
V3904	Conc. Pendant	8.0	175, 200	16	16	26	Utilizes 165 F coverplate.
V3904	Conc. Pendant	8.0	135, 155	18	18	32	Utilizes 135 F coverplate.
V3904	Conc. Pendant	8.0	175, 200	18	18	32	Utilizes 165 F coverplate.
V3904	Conc. Pendant	8.0	135	20	20	40	Utilizes 135 F coverplate.
<b>The Viking Corp.</b>							
VK186	Dry Pendant, Rec. Pendant	5.6	155, 175	16	16	26	
VK186	Dry Pendant, Rec. Pendant	5.6	155, 175	18	18	33	
VK196	Dry Conc. Pendant	5.6	135, 155	16	16	26	Utilizes 135°F cover plate.
VK196	Dry Conc. Pendant	5.6	175	16	16	26	Utilizes 165°F coverplate.
VK196	Dry Conc. Pendant	5.6	135	18	18	33	Utilizes 135°F cover plate.
VK196	Dry Conc. Pendant	5.6	175	18	18	33	Utilizes 165°F coverplate.
VK196	Dry Conc. Pendant	5.6	135	20	20	40	Utilizes 135°F cover plate.
VK196	Dry Conc. Pendant	5.6	175	20	20	40	Utilizes 165°F coverplate.
VK532	Upright	11.2	135,155, 175	16	16	30	
VK532	Upright	11.2	135,155, 175	18	18	33	
VK532	Upright	11.2	135, 175	20	20	40	
VK534	Pendant, Rec. Pendant	11.2	135, 155, 175	16	16	30	
VK534	Pendant, Rec. Pendant	11.2	135, 155, 175	18	18	33	
VK534	Pendant, Rec. Pendant	11.2	135, 175	20	20	40	
VK600	Pendant, Rec. Pendant	5.6	135, 155, 175	16	16	26	
VK600	Pendant, Rec. Pendant	5.6	135, 155, 175	18	18	33	
VK600	Pendant	5.6	135	20	20	40	

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>The Viking Corp. (continued)</b>							
VK601	Pendent, Rec. Pendent	5.6	165, 205	16	16	26	
VK601	Pendent, Rec. Pendent	5.6	165	18	18	33	
VK602	Pendent, Rec. Pendent	8	135, 155, 175	16	16	26	
VK602	Pendent, Rec. Pendent	8	135, 155, 175	18	18	33	
VK602	Pendent	8	135	20	20	40	
VK603	Pendent, Rec. Pendent	5.6	165, 205	16	16	26	
VK603	Pendent, Rec. Pendent	5.6	165	18	18	33	
VK604	Pendent, Rec. Pendent	5.6	135, 155, 175	16	16	26	
VK604	Pendent, Rec. Pendent	5.6	135, 155, 175	18	18	33	
VK604	Pendent, Rec. Pendent	5.6	135, 175	20	20	40	
VK607	Pendent, Rec. Pendent	5.6	165, 205	16	16	26	
VK607	Pendent, Rec. Pendent	5.6	165, 205	18	18	33	
VK607	Pendent, Rec. Pendent	5.6	205	20	20	40	
VK608	Pendent, Rec. Pendent	11.2	135, 155, 175	16	16	30	
VK608	Pendent, Rec. Pendent	11.2	135, 155, 175	18	18	33	
VK608	Pendent, Rec. Pendent	11.2	135, 175	20	20	40	
VK614	Domed Conc. Pendent	5.6	135, 155	16	16	26	Utilizes 135°F cover plate.
VK614	Domed Conc. Pendent	5.6	175	16	16	26	Utilizes 165°F coverplate.
VK614	Domed Conc. Pendent	5.6	135	18	18	33	Utilizes 135°F cover plate.
VK614	Domed Conc. Pendent	5.6	175	18	18	33	Utilizes 165°F coverplate.
VK614	Domed Conc. Pendent	5.6	135	20	20	40	Utilizes 135°F cover plate.
VK614	Domed Conc. Pendent	5.6	175	20	20	40	Utilizes 165°F coverplate.
VK616	Conc. Pendent	8	135, 155	16	16	26	Utilizes 135°F cover plate.
VK616	Conc. Pendent	8	175	16	16	26	Utilizes 165°F coverplate.
VK616	Conc. Pendent	8	135	18	18	33	Utilizes 135°F cover plate.
VK616	Conc. Pendent	8	175	18	18	33	Utilizes 165°F coverplate.
VK616	Conc. Pendent	8	135	20	20	40	Utilizes 135°F cover plate.
VK616	Conc. Pendent	8	175	20	20	40	Utilizes 165°F coverplate.
VK618	ELO Conc. Pendent	11.2	135, 155	16	16	30	Utilizes 135°F cover plate.
VK618	ELO Conc. Pendent	11.2	175	16	16	30	Utilizes 165°F coverplate.
VK618	ELO Conc. Pendent	11.2	135	18	18	33	Utilizes 135°F cover plate.
VK618	ELO Conc. Pendent	11.2	175	18	18	33	Utilizes 165°F coverplate.
VK618	ELO Conc. Pendent	11.2	135	20	20	40	Utilizes 135°F cover plate.
VK618	ELO Conc. Pendent	11.2	175	20	20	40	
VK632	Conc. Pendent	5.6	135, 155, 175, 200	16	16	26	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK632	Conc. Pendent	5.6	135, 155, 175, 200	18	18	33	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK632	Conc. Pendent	5.6	135, 175	20	20	40	Utilizes 135°F coverplate. Utilizes 165°F coverplate.

SIN	Style	K-factor	Temp	Max W	Max L	Min Flow	Notes
<b>The Viking Corp. (continued)</b>							
VK634	Conc. Pendent	8	135, 155, 175, 200	16	16	26	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK634	Conc. Pendent	8	135, 155, 175, 200	18	18	33	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK634	Conc. Pendent	8	135, 175	20	20	40	Utilizes 135°F coverplate. Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	165	16	16	30	Utilizes 133°F cover plate. Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	205	16	16	30	Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	165	18	18	33	Utilizes 133°F cover plate. Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	205	18	18	33	Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	165	20	20	40	Utilizes 133°F cover plate. Utilizes 165°F coverplate.
VK636	Conc. Pendent	11.2	205	20	20	40	Utilizes 165°F coverplate.

#### V. UL Extended Coverage Sprinklers – Ordinary Hazard – Horizontal Sidewall

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Tyco Fire Protection Products</b>									
TY5332	HSW	SR	11.2	155, 200	16	16	38	OH1	
TY5332	HSW	SR	11.2	155, 200	16	18	43	OH1	
TY5332	HSW	SR	11.2	155, 200	16	20	48	OH1	
TY5337	HSW	SR	11.2	200	16	22	53	OH1	
TY5337	HSW	SR	11.2	200	16	24	58	OH1	
TY5339	Dry HSW	SR	11.2	155, 200	16	16	38	OH1	
TY5339	Dry HSW	SR	11.2	155, 200	16	18	43	OH1	
TY5339	Dry HSW	SR	11.2	155, 200	16	20	48	OH1	
TY5332	HSW	SR	11.2	155, 200	16	16	51	OH2	
TY5332	HSW	SR	11.2	155, 200	16	18	58	OH2	
TY5332	HSW	SR	11.2	155, 200	16	20	64	OH2	
TY5337	HSW	SR	11.2	200	16	22	71	OH2	
TY5337	HSW	SR	11.2	200	16	24	77	OH2	
TY5339	Dry HSW	SR	11.2	155, 200	16	16	51	OH2	
TY5339	Dry HSW	SR	11.2	155, 200	16	18	58	OH2	
TY5339	Dry HSW	SR	11.2	155, 200	16	20	64	OH2	

#### VI. UL Extended Coverage Sprinklers – Ordinary Hazard – Pendent and Upright

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Globe Fire Sprinkler Corporation</b>									
GL1113	Pendent, Rec. Pendent	QR	11.2	155, 200	14	14	30	OH1	
GL1113	Pendent, Recessed Pendent	QR	11.2	155, 200	14	14	39	OH2	

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Globe Fire Sprinkler Corporation (continued)</b>									
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	16	16	39	OH1	
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	16	16	51	OH2	
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	18	18	49	OH1	
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	18	18	65	OH2	
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	20	20	60	OH1	
GL1113	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	20	20	80	OH2	
GL1121	Upright	QR	11.2	155, 200	14	14	30	OH1	
GL1121	Upright	QR	11.2	155, 200	14	14	39	OH2	
GL1121	Upright	SR	11.2	155, 175, 200, 286	16	16	39	OH1	
GL1121	Upright	SR	11.2	155, 175, 200, 286	16	16	51	OH2	
GL1121	Upright	SR	11.2	155, 175, 200, 286	18	18	49	OH1	
GL1121	Upright	SR	11.2	155, 175, 200, 286	18	18	65	OH2	
GL1121	Upright	SR	11.2	155, 175, 200, 286	20	20	60	OH1	
GL1121	Upright	SR	11.2	155, 175, 200, 286	20	20	80	OH2	
<b>Reliable Automatic Sprinkler Company, Inc.</b>									
R6043	Pendent, Rec. Pendent	SR	14	165, 212	18	18	49	OH1	
R6043	Pendent, Rec. Pendent	SR	14	165, 212	18	18	65	OH2	
R6043	Pendent, Rec. Pendent	SR	14	165, 212	20	20	60	OH1	
R6043	Pendent, Rec. Pendent	SR	14	165, 212	20	20	80	OH2	
R6553	Upright	SR	14	165, 212	20	20	60	OH1	
R6553	Upright	SR	14	165, 212	20	20	80	OH2	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	14	14	30	OH1	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	16	16	39	OH1	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	16	16	51	OH2	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	18	18	49	OH1	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	18	18	65	OH2	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	20	20	60	OH1	
R7216	Pendent, Rec. Pendent	SR	11.2	165, 212	20	20	80	OH2	

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Reliable Automatic Sprinkler Company, Inc. (continued)</b>									
R7326	Upright	SR	11.2	165, 212	14	14	30	OH1	
R7326	Upright	SR	11.2	165, 212	14	14	39	OH2	
R7326	Upright	SR	11.2	165, 212	16	16	39	OH1	
R7326	Upright	SR	11.2	165, 212	16	16	51	OH2	
R7326	Upright	SR	11.2	165, 212	18	18	49	OH1	
R7326	Upright	SR	11.2	165, 212	18	18	65	OH2	
R7326	Upright	SR	11.2	165, 212	20	20	60	OH1	
R7326	Upright	SR	11.2	165, 212	20	20	80	OH2	
RA7216	Pendent, Rec. Pendent	QR	11.2	155, 200	14	14	30	OH1	
RA7216	Pendent, Rec. Pendent	QR	11.2	155, 200	14	14	39	OH2	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	16	16	39	OH1	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	16	16	51	OH2	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	18	18	49	OH1	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	18	18	65	OH2	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	20	20	60	OH1	
RA7216	Pendent, Rec. Pendent	SR	11.2	155, 200	20	20	80	OH2	
RA7326	Upright	QR	11.2	155, 200	14	14	30	OH1	
RA7326	Upright	QR	11.2	155, 200	14	14	39	OH2	
RA7326	Upright	SR	11.2	155,200	16	16	39	OH1	
RA7326	Upright	SR	11.2	155,200	16	16	51	OH2	
RA7326	Upright	SR	11.2	155,200	18	18	49	OH1	
RA7326	Upright	SR	11.2	155,200	18	18	65	OH2	
RA7326	Upright	SR	11.2	155,200	20	20	60	OH1	
RA7326	Upright	SR	11.2	155,200	20	20	80	OH2	
<b>Tyco Fire Protection Products</b>									
TY5137	Upright	QR	11.2	135, 155, 175, 200, 286	14	14	30	OH1	
TY5137	Upright	QR	11.2	135, 155, 175, 200, 286	14	14	39	OH2	
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	16	16	39	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	16	16	51	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.



SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Tyco Fire Protection Products (continued)</b>									
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	18	18	49	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	18	18	65	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	20	20	60	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5137	Upright	SR	11.2	135, 155, 175, 200, 286	20	20	80	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	QR	11.2	135, 155, 175, 200, 286	14	14	30	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	QR	11.2	135, 155, 175, 200, 286	14	14	39	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	16	16	39	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	16	16	51	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	18	18	49	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	18	18	65	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	20	20	60	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5237	Pendent, Rec. Pendent	SR	11.2	135, 155, 175, 200, 286	20	20	80	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY5238	Pendent, Rec. Pendent	QR	11.2	135, 155, 175, 200, 286	14	14	30	OH1	

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Tyco Fire Protection Products (continued)</b>									
TY5238	Pendent, Rec. Pendent	QR	11.2	135, 155, 175, 200, 286	14	14	39	OH2	
TY5238	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	16	16	39	OH1	
TY5238	Pendent, Rec. Pendent	SR	11.2	155, 175, 200, 286	16	16	51	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	QR	14	135, 155, 175, 200, 286	14	14	39	OH1	
TY6137	Upright	QR	14	135, 155, 175, 200, 286	14	14	51	OH2	
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	16	16	39	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	16	16	51	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	18	18	49	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	18	18	65	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	20	20	60	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6137	Upright	SR	14.5	135, 155, 175, 200, 286	20	20	80	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent	QR	14	135, 155, 175, 200, 286	14	14	39	OH1	
TY6237	Rec. Pendent	QR	14	135, 155, 175, 200	14	14	39	OH1	
TY6237	Pendent	QR	14	135, 155, 175, 200, 286	14	14	51	OH2	
TY6237	Rec. Pendent	QR	14	135, 155, 175, 200	14	14	51	OH2	

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Tyco Fire Protection Products (continued)</b>									
TY6237	Pendent, Rec. Pendent	SR	14.5	135, 155, 175, 200, 286	16	16	39	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent, Rec. Pendent	SR	14	135, 155, 175, 200, 286	16	16	51	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent, Rec. Pendent	SR	14	135, 155, 175, 200, 286	18	18	49	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent, Rec. Pendent	SR	14	135, 155, 175, 200, 286	18	18	65	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent, Rec. Pendent	SR	14	135, 155, 175, 200, 286	20	20	60	OH1	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
TY6237	Pendent, Rec. Pendent	SR	14	135, 155, 175, 200, 286	20	20	80	OH2	Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.
<b>Victaulic Company</b>									
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	16	16	38	OH1	
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	16	16	51	OH2	
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	18	18	49	OH1	
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	18	18	65	OH2	
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	20	20	60	OH1	
V3421	Pendent, Rec. Pendent	SR	14.0	155, 175, 200, 286	20	20	80	OH2	
V3425	Upright	SR	14.0	155, 175, 200, 286	16	16	38	OH1	
V3425	Upright	SR	14.0	155, 175, 200, 286	16	16	51	OH2	
V3425	Upright	SR	14.0	155, 175, 200, 286	18	18	49	OH1	
V3425	Upright	SR	14.0	155, 175, 200, 286	18	18	65	OH2	
V3425	Upright	SR	14.0	155, 175, 200, 286	20	20	60	OH1	
V3425	Upright	SR	14.0	155, 175, 200, 286	20	20	80	OH2	

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp.</b>									
VK532	Upright	QR	11.2	155	14	14	30	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK532	Upright	QR	11.2	155	14	14	39	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	16	16	38	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK532	Upright	SR	11.2	155, 175, 200, 286	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Pendent, Rec. Pendent	QR	11.2	155	14	14	30	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK534	Pendent, Rec. Pendent	QR	11.2	155	14	14	39	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK534	Pendent	SR	11.2	155, 175, 200, 286	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp. (continued)</b>									
VK534	Pendent	SR	11.2	155, 175, 200, 286	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Pendent	SR	11.2	155, 175, 200, 286	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Pendent	SR	11.2	155, 175, 200, 286	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Pendent	SR	11.2	155, 175, 200, 286	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Pendent	SR	11.2	155, 175, 200, 286	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK534	Rec. Pendent	SR	11.2	155, 175, 200	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK535	Upright	QR	11.2	165, 205	14	14	30	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK535	Upright	QR	11.2	165, 205	14	14	39	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK535	Upright	SR	11.2	165, 205	16	16	38	OH 1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp. (continued)</b>									
VK535	Upright	SR	11.2	165, 205	16	16	51	OH 2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK535	Upright	SR	11.2	165, 205	18	18	49	OH 1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK535	Upright	SR	11.2	165, 205	18	18	65	OH 2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK535	Upright	SR	11.2	165, 205	20	20	60	OH 1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK535	Upright	SR	11.2	165, 205	20	20	80	OH 2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Pendent	QR	11.2	165, 205	14	14	30	OH 1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK537	Pendent, Rec. Pendent	QR	11.2	155	14	14	30	OH 1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK537	Pendent	QR	11.2	165, 205	14	14	39	OH 2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK537	Pendent, Rec. Pendent	QR	11.2	155	14	14	39	OH 2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK537	Pendent	SR	11.2	165, 205	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Pendent	SR	11.2	165, 205	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp. (continued)</b>									
VK537	Pendent	SR	11.2	165, 205	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Pendent	SR	11.2	165, 205	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Pendent	SR	11.2	165, 205	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Pendent	SR	11.2	165, 205	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK537	Rec. Pendent	SR	11.2	165, 205	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK538	Concealed Pendent	QR	11.2	165	14	14	30	OH1	
VK538	Concealed Pendent	QR	11.2	165	14	14	39	OH2	
VK538	Concealed Pendent	QR	11.2	165	16	16	39	OH1	
VK538	Concealed Pendent	QR	11.2	165	16	16	51	OH2	
VK538	Concealed Pendent	QR	11.2	165	18	18	49	OH1	
VK538	Concealed Pendent	QR	11.2	165	18	18	65	OH2	
VK538	Concealed Pendent	QR	11.2	165	20	20	60	OH1	
VK538	Concealed Pendent	QR	11.2	165	20	20	80	OH2	
VK570	Upright	QR	14	155, 175, 200, 286	14	14	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK570	Upright	QR	14	155, 175, 200, 286	14	14	39	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK570	Upright	SR	14	155, 175, 200, 286	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp. (continued)</b>									
VK570	Upright	SR	14	155, 175, 200, 286	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK570	Upright	SR	14	155, 175, 200, 286	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK570	Upright	SR	14	155, 175, 200, 286	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK570	Upright	SR	14	155, 175, 200, 286	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK570	Upright	SR	14	155, 175, 200, 286	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Pendent, Rec. Pendent	QR	14	155, 175, 200, 286	14	14	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK572	Pendent, Rec. Pendent	QR	14	155, 175, 200, 286	14	14	39	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA-13.
VK572	Pendent	SR	14	155, 175, 200, 286	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	16	16	39	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Pendent	SR	14	155, 175, 200, 286	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	16	16	51	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Pendent	SR	14	155, 175, 200, 286	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	18	18	49	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.



SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>The Viking Corp. (continued)</b>									
VK572	Pendent	SR	14	155, 175, 200, 286	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	18	18	65	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Pendent	SR	14	155, 175, 200, 286	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	20	20	60	OH1	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Pendent	SR	14	155, 175, 200, 286	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.
VK572	Rec. Pendent	SR	14	155, 175, 200, 286	20	20	80	OH2	These sprinklers are suitable for installation below noncombustible obstructed construction as describe in NFPA-13.

#### VII. UL Extended Coverage Sprinklers – Extra Hazard and High Piled Storage

SIN	Style	Response	K-factor	Temp	Max W	Max L	Min Flow	Hazard	Notes
<b>Reliable Automatic Sprinkler Company, Inc.</b>									
RA0842	Pendent	SR	25.2	165, 212	12	12		Storage	These sprinklers have not been investigated for use as a Control Mode Specific Application (CMSA) sprinkler in accordance with Chapter 21 of NFPA 13.
RA0842	Pendent	SR	25.2	165, 212	14	14		Storage	These sprinklers have not been investigated for use as a Control Mode Specific Application (CMSA) sprinkler in accordance with Chapter 21 of NFPA 13.
<b>Tyco Fire Protection Products</b>									
TY9128	Upright	SR	25.2	165, 214	14	14		Storage	These sprinklers have not been investigated for use as a Control Mode Specific Application (CMSA) sprinkler in accordance with Chapter 21 of NFPA 13.
<b>The Viking Corp.</b>									
VK595	Upright	SR	25.2	165, 214	14	14		Storage	