

# **VIKING PRODUCT SPECIFICATIONS**

## **Quick Response Sprinklers**

### **A. Quick Response Sprinklers**

1. Microfast QR Sprinkler
  - 1A. Cocoon
2. QR Fusible Element Sprinkler
3. Microfast QR Small Orifice Sprinkler
4. QR Fusible Element Small Orifice Sprinkler
5. Microfast QR HSW Sprinkler
  - 5A. Cocoon
6. QR HSW Large Orifice Sprinkler
7. QR Fusible Element HSW Sprinkler
8. Microfast QR HSW Small Orifice Sprinkler
9. QR Fusible Element HSW Small Orifice Sprinkler
10. Microfast QR Vertical SW Sprinkler
11. QR Fusible Element Vertical SW Sprinkler
12. QR Flush Pendent Sprinkler
13. QR Flush HSW Sprinkler
14. QR ELO Pendent (Storage-Density/Area) Sprinkler
15. QR ELO Upright (Storage-Density/Area) Sprinkler
16. QR Fusible Element ELO Upright (Storage-Density/Area) Sprinkler

### **B. HP Quick Response Sprinklers**

17. Microfast HP QR High Pressure Sprinkler
  - 176A. Cocoon
18. HP QR Fusible Element High Pressure Sprinkler
19. Microfast HP QR High Pressure Small Orifice Sprinkler
20. HP QR Fusible Element High Pressure Small Orifice Sprinkler
21. Microfast HP QR High Pressure HSW Sprinkler
  - 21A. Cocoon
21. HP QR Fusible Element High Pressure HSW Sprinkler
23. Microfast HP QR High Pressure HSW Small Orifice Sprinkler
24. HP QR Fusible Element High Pressure HSW Small Orifice Sprinkler

### **C. Quick Response Concealed Sprinklers**

25. QR Concealed Pendent Sprinkler
26. HP High Pressure Concealed Pendent Sprinkler
27. QR Domed Concealed Pendent Sprinkler
28. QR Concealed HSW Sprinkler
29. QR Small Orifice (2.8K) Concealed Pendent Sprinkler
30. QR Small Orifice (4.2K) Concealed Pendent Sprinkler
31. QR Large Orifice Concealed Pendent Sprinkler
32. QR Fusible Element ELO Concealed Pendent Sprinkler
33. MRI Room QR Concealed Pendent Sprinkler Cover
34. QR Cleanroom Sprinkler Concealed Pendent and Cover Assembly
35. QR Domed Concealed Pendent Fusible Element Sprinkler

## **A. Quick Response Sprinklers**

### **1. MICROFAST QUICK RESPONSE SPRINKLER**

### **SPRINKLER 41A & 51A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response frangible bulb type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Exposed sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a standard or large orifice and a 5.6 or 8.0 nominal K Factor. Sprinklers shall be cULus Listed and/or FM Approved. Quick response sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Sprinklers (formerly Model M) shall be Viking SIN VK302 (5.6K Standard Orifice Pendent) or SIN VK352 (8.0K Large Orifice Pendent) Data Page 41a. Or, SIN VK300 (5.6K Standard Orifice Upright), SIN VK310 (5.6K Standard Orifice Conventional), SIN VK350 (8.0K Large Orifice Upright), or SIN VK354 (8.0K Large Orifice Conventional) Data Page 51a.

### **1A. COCOON**

### **SPRINKLER 41A**

The sprinkler shall be installed with the escutcheon adapter threaded onto the sprinkler, with three wraps of Teflon<sup>®</sup> tape, all protected during shipping, installation, dry-walling and painting with a plastic cap. Quick Response Sprinklers (formerly Model M) shall be Viking 5.6K Standard Orifice SIN VK302 (Base Part No. 06662B—K), or 8.0K Large Orifice SIN VK352 (Base Part No. 06666B--K).

### **2. QUICK RESPONSE FUSIBLE ELEMENT SPRINKLER**

### **SPRINKLER 40A, 47A, & 51H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response metal type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a standard orifice with a 5.6 nominal K Factor, or a large orifice with an 8.0 nominal K Factor. Sprinklers shall be cULus Listed and/or FM Approved. Quick response sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Sprinklers shall be Viking SIN VK303 (5.6K Standard Orifice Pendent, Data Page 47a), SIN VK301 (5.6K Standard Orifice Upright, Data Page 47a), SIN VK353 (8.0K Large Orifice Pendent, Data Page 40a), SIN VK351 (8.0K Large Orifice Upright, Data Page 51h), SIN VK311 (5.6K Standard Orifice Conventional, Data Page 51h), or SIN VK355 (8.0K Large Orifice Conventional, Data Page 51h).

### **3. MICROFAST QUICK RESPONSE SMALL ORIFICE SPRINKLER**

### **SPRINKLER 41A & 51A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response frangible bulb type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Exposed sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a small orifice, and a nominal K Factor of 2.8 or 4.2. Sprinklers shall be cULus Listed or FM Approved for use in Light Hazard occupancies. Quick Response Small Orifice Sprinklers (formerly Model M) shall be Viking SIN VK329 (2.8K Pendent) or SIN VK331 (4.2K Pendent) Data Page 41a. Or, SIN VK325 (2.8K Upright) or SIN VK327 (4.2K Upright) Data Page 51a.

**4. QUICK RESPONSE FUSIBLE ELEMENT SMALL ORIFICE SPRINKLER SPRINKLER 40A & 51H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response metal type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a small orifice, and a nominal K Factor of 2.8 or 4.2. Sprinklers shall be cULus Listed and/or FM Approved for use in Light Hazard occupancies. Quick Response Sprinklers shall be Viking SIN VK330 (2.8K Pendent, Data Page 40a), VK332 (4.2K Pendent, Data Page 40a), SIN VK326 (2.8K Upright, Data Page 51h), or SIN VK328 (4.2K Upright, Data Page 51h).

**5. MICROFAST QUICK RESPONSE HORIZONTAL SIDEWALL SPRINKLER SPRINKLER 43A & 52A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers shall have a quick response frangible bulb or metal type fusible element. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sprinklers shall be 1/2" NPT with a standard orifice, a stepped orifice (VK305), and a nominal K Factor of 5.6. Sidewall sprinklers shall be cULus Listed and/or FM Approved. Quick Response Horizontal sidewall sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Sidewall Sprinklers (formerly Model M/M-5) shall be Viking SIN VK304 (Base Part Number 06725B, Data Page 52a) or SIN VK305 (Base Part Number 12121, Data Page 43a).

**5A. MICROFAST QUICK RESPONSE HSW SPRINKLER COCOON SPRINKLER 43A**

The sprinkler shall be installed with the escutcheon adapter threaded onto the sprinkler, with three wraps of Teflon<sup>®</sup> tape, all protected during shipping, installation, dry-walling and painting with a plastic cap. Quick Response Commercial Cocoon Horizontal Sidewall Sprinkler (formerly Model M-5) shall be Viking SIN VK305 (Base Part Number 12121--K).

**6. QUICK RESPONSE HORIZONTAL SIDEWALL LARGE ORIFICE SPRINKLER SPRINKLER 430**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers shall have a quick response frangible bulb type fusible element. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sprinklers shall be 3/4" NPT with a large orifice, and a nominal K Factor of 8.0. Sidewall sprinklers shall be cULus Listed. Quick Response Horizontal Sidewall Sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Sidewall Large Orifice Sprinklers shall be Viking SIN VK360 (Base Part Number 15591).

**7. QUICK RESPONSE FUSIBLE ELEMENT HORIZONTAL SIDEWALL SPRINKLER SPRINKLER 43H & 52U**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers shall have a quick response metal type fusible element. Sprinklers shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sprinklers shall be 1/2" NPT with a standard orifice, and a nominal K Factor of 5.6. Sidewall sprinklers shall be cULus Listed and/or FM Approved. Quick response horizontal sidewall sprinklers shall be installed in conformance with the manufacturer's installation guidelines. Quick response flush pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Fusible Element Sidewall Sprinklers shall be Viking SIN VK307 (Light Hazard only, Base Part Number 13948, Data Page 52U) or SIN VK308 (Base Part Number 13950, Data Page 43H).

**8. MICROFAST QUICK RESPONSE HSW SMALL ORIFICE SPRINKLER** **SPRINKLER 52A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response frangible bulb type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sidewall sprinklers shall be cULus Listed for Light Hazard occupancies. QR Horizontal Sidewall Small Orifice Sprinklers (formerly Model M) shall be Viking 2.8K SIN VK333 (Base Part Number 10035).

**9. QUICK RESPONSE FUSIBLE ELEMENT HSW SMALL ORIFICE SPRINKLER** **SPRINKLER 52U**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response metal type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sidewall sprinklers shall be cULus Listed for Light Hazard occupancies. QR Fusible Element Horizontal Sidewall Small Orifice Sprinklers shall be Viking 2.8K SIN VK334 (Base Part Number 13962).

**10. MICROFAST QUICK RESPONSE VERTICAL SIDEWALL SPRINKLER** **SPRINKLER 52E**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers shall have a quick response frangible bulb type fusible element. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers to be installed through a ceiling shall be chrome finish (or finish as specified elsewhere) vertical sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Vertical sidewall sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Sidewall sprinklers shall be FM Approved for use in Light Hazard occupancies. Quick Response Vertical Sidewall Sprinklers (formerly Model M) shall be Viking SIN VK306.

**11. QUICK RESPONSE FUSIBLE ELEMENT VERTICAL SIDEWALL SPRINKLER** **SPRINKLER 50A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers shall have a quick response metal type fusible element. Sprinklers to be installed through a ceiling shall be chrome finish (or finish as specified elsewhere) vertical sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Vertical sidewall sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Sidewall sprinklers shall be FM Approved for use in Light Hazard occupancies. Quick Response Fusible Element Vertical Sidewall Sprinklers shall be Viking SIN VK309.

**12. QUICK RESPONSE FLUSH PENDENT SPRINKLER** **SPRINKLER 53A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Quick response flush pendent sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Quick response flush pendent sprinklers shall be chrome finish (or finish as specified elsewhere) with a listed escutcheon of the same specified finish. Quick response flush pendent sprinklers shall be cULus Listed and FM Approved. Quick response flush pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Flush Pendent Sprinklers (formerly Model H) shall be Viking Horizon SIN VK402 or SIN VK413 (LPCB Approved).

**13. QUICK RESPONSE FLUSH HORIZONTAL SIDEWALL SPRINKLER** **SPRINKLER 62A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass body construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Quick response sidewall sprinklers shall have a standard orifice, a 1/2" NPT, and a nominal K Factor of 5.6. The Quick Response Flush Horizontal Sidewall Sprinklers shall have a chrome finish (or finish as specified elsewhere). Quick response sidewall sprinklers shall be cULus Listed for use in Light Hazard occupancies. Horizontal Sidewall Sprinklers (formerly Model H-4) shall be Viking SIN VK403 (Base Part Number 10741).

**14. QUICK RESPONSE ELO PENDENT (STORAGE-DENSITY/AREA) SPRINKLER** **SPRINKLER 70A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response frangible bulb type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. For areas of the building in which commodity storage is anticipated, extra-large orifice quick response sprinklers specifically listed and tested for commodity storage applications shall be installed. Quick response sprinklers shall have a 3/4" NPT, an extra-large orifice, and a nominal K Factor of 11.2. Extra-large orifice quick response sprinklers shall be cULus Listed for the application in which they are installed. Quick Response Extra-Large Orifice Pendent Sprinklers (formerly Model M) shall be Viking SIN VK377 (Base Part Number 08337).

**15. QUICK RESPONSE ELO UPRIGHT (STORAGE-DENSITY/AREA) SPRINKLER** **SPRINKLER 70H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response frangible bulb type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. For areas of the building in which commodity storage is anticipated, extra-large orifice quick response sprinklers specifically listed and tested for commodity storage applications shall be installed. Quick response sprinklers shall have a 3/4" NPT, an extra-large orifice, and a nominal K Factor of 11.2. Extra-large orifice quick response sprinklers shall be cULus Listed and FM Approved for the application in which they are installed. Quick Response Extra-Large Orifice Upright Sprinklers (formerly Model M) shall be Viking SIN VK531 (Base Part Number 10633).

**16. QR FUSIBLE ELEMENT ELO UPRIGHT (STORAGE-DENSITY/AREA)** **SPRINKLER 70W**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response metal type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. For areas of the building in which commodity storage is anticipated, extra-large orifice quick response sprinklers specifically listed and tested for commodity storage applications shall be installed. Quick response sprinklers shall have a 3/4" NPT, an extra-large orifice, and a nominal K Factor of 11.2. Extra-large orifice quick response sprinklers shall be cULus Listed for the application in which they are installed. Quick Response Fusible Element Extra-Large Orifice Upright Sprinklers shall be Viking SIN VK533 (Base Part Number 13978).

**B. HP Quick Response Sprinklers**

**17. MICROFAST HP QUICK RESPONSE HIGH PRESSURE SPRINKLER** **SPRINKLER 41A & 51A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response frangible bulb type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Exposed sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a standard orifice, and a 5.6 nominal K Factor. Quick response high-pressure sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR). Quick Response High Pressure Sprinklers (formerly Model M) shall be Viking SIN VK317 (Pendent, Data Page 41a) or SIN VK315 (Upright, Data Page 51a).

**17A. MICROFAST HP QR HIGH PRESSURE PENDENT SPRINKLER COCOON SPRINKLER 41A**

The sprinkler shall be installed with the escutcheon adapter threaded onto the sprinkler, with three wraps of Teflon<sup>®</sup> tape, all protected during shipping, installation, dry-walling and painting with a plastic cap. Quick Response High Pressure Sprinklers (formerly Model M) shall be Viking Cocoon Sprinkler Base Part Number 12282—K (SIN VK317).

**18. HP QR HIGH PRESSURE FUSIBLE ELEMENT SPRINKLER SPRINKLER 40A & 51H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response metal type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a standard orifice, and a 5.6 nominal K Factor. Quick response high-pressure fusible element sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR). Quick Response High Pressure Fusible Element Sprinklers shall be Viking SIN VK318 (Pendent, Data Page 40a) or SIN VK316 (Upright, Data Page 51h).

**19. MICROFAST HP QR HIGH PRESSURE SMALL ORIFICE SPRINKLER SPRINKLER 41A & 51A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response frangible bulb type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Exposed sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a small orifice, and a nominal K Factor of 2.8. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR) in Light Hazard occupancies. Quick Response High Pressure Small Orifice Sprinklers (formerly Model M) shall be Viking Pendent SIN VK342 (Base Part Number 12290, Data Page 41a) or Upright SIN VK340 (Base Part Number 12286, Data Page 51a).

**20. HP QR HIGH PRESSURE FUSIBLE ELEMENT SMALL ORIFICE SPRINKLER SPRINKLER 40A & 51H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response metal type fusible element. Sprinklers to be installed in areas with no ceilings shall be of a brass finish and shall be of adequate temperature for the hazard. Sprinklers to be installed through a ceiling shall be chrome finish pendent sprinklers (or finish as specified elsewhere) with an adjustable semi-recessed escutcheon of same specified finish. Sprinklers shall have a 1/2" NPT, a small orifice, and a nominal K Factor of 2.8. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR) in Light Hazard occupancies. Quick Response High Pressure Fusible Element Small Orifice Sprinklers shall be Viking SIN VK343 (Pendent, Data Page 40a) or SIN VK341 (Upright, Data Page 51h).

**21. MICROFAST HP QUICK RESPONSE HIGH PRESSURE HSW SPRINKLER SPRINKLER 43A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response frangible bulb type fusible element. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Quick response horizontal sidewall sprinklers shall be installed in conformance with the manufacturer's installation guidelines. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR). Horizontal sidewall sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Sprinklers shall have a 1/2" NPT, a standard orifice, a stepped orifice, and a nominal K Factor of 5.6. Sidewall sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of same specified finish. Quick Response High Pressure Horizontal Sidewall Sprinklers (formerly Model M-5) shall be Viking SIN VK319 (Base Part Number 12285).

**21A. MICROFAST HP QR HIGH PRESSURE HSW SPRINKLER COCOON SPRINKLER 43A**

The sprinkler shall be installed with the escutcheon adapter threaded onto the sprinkler, with three wraps of Teflon<sup>®</sup> tape, all protected during shipping, installation, dry-walling and painting with a plastic cap. Quick Response High Pressure (HP) Commercial Cocoon Horizontal Sidewall Sprinklers (formerly Model M-5) shall be Viking SIN VK319 (Base Part Number 12285--K).

**22. HP QUICK RESPONSE HIGH PRESSURE FUSIBLE ELEMENT HSW SPRINKLER SPRINKLER 43H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers shall have a quick response metal type fusible element. Quick response horizontal sidewall sprinklers shall be installed in conformance with the manufacturer's installation guidelines. Sprinklers shall be cULus Listed for working water pressures up to 250 PSI (17 BAR). Horizontal sidewall sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Sprinklers shall have a 1/2" NPT, a standard orifice, a stepped orifice, and a nominal K Factor of 5.6. Sidewall sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of same specified finish. Quick Response High Pressure Fusible Element Horizontal Sidewall Sprinklers shall be Viking SIN VK320 (Base Part Number 13955).

**23. MICROFASTHP QR HIGH PRESSURE HSW SMALL ORIFICE SPRINKLER SPRINKLER 52A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response frangible bulb type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sidewall sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating. Sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sidewall sprinklers shall be listed for working water pressures up to 250 PSI (17 BAR). Sidewall sprinklers shall be cULus Listed for Light Hazard occupancies. Quick Response Horizontal Sidewall Small Orifice Sprinkler (formerly Model M) shall be Viking 2.8K SIN VK344 (Base Part Number 12287).

**24. HP QR HIGH PRESSURE FUSIBLE ELEMENT HSW SMALL ORIFICE SPRINKLER SPRINKLER 52U**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response metal type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Sprinklers installed under finished ceilings shall be chrome finish (or finish as specified elsewhere) horizontal sidewall sprinklers with an adjustable semi-recessed escutcheon of the same specified finish. Sidewall sprinklers shall be listed for working water pressures up to 250 PSI (17 BAR). Sidewall sprinklers shall be cULus Listed for Light Hazard occupancies. Quick Response Fusible Element Horizontal Sidewall Small Orifice Sprinkler shall be Viking 2.8K SIN VK346 (Base Part Number 13965).

**C. Quick Response Concealed Sprinklers**

**25. CONCEALED PENDENT SPRINKLER SPRINKLER 54A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed sprinklers shall have a cover plate that is a push-on, thread-off assembly with a 2-3/4" or 3-5/16" diameter. Concealed sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed Pendent Sprinkler shall be FM Approved Viking Mirage Sprinkler SIN VK462 (Base Part Number 13503A). (No Substitutions Allowed).

**26. HIGH PRESSURE (HP) CONCEALED PENDENT SPRINKLER** **SPRINKLER 54A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Concealed sprinklers shall be listed for working pressures up to 250 PSI (17 BAR). Concealed sprinkler shall have a cover plate that is a push-on, thread-off assembly with a cover diameter no greater than 2-3/4". Concealed sprinklers shall be cULus Listed with a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Standard Response High Pressure Concealed Sprinklers shall be Viking Mirage SIN VK463 (Base Part Number 13667A). (No Substitutions Allowed).

**27. QUICK RESPONSE DOMED CONCEALED PENDENT SPRINKLER** **SPRINKLER 41H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response frangible bulb type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Quick response concealed pendent sprinklers shall have a 1/2" NPT and standard orifice with a nominal K Factor of 5.6, or a 3/4" NPT and large orifice with a nominal K Factor of 8.0. The concealed pendent sprinkler shall be installed with an adapter and a push-on, pull-off cover assembly, with 1/2" of adjustment, and a cover diameter no greater than 3-1/8". The concealed pendent sprinklers shall have a chrome finish cover plate (or finish as specified elsewhere). Quick response concealed pendent sprinklers shall be cULus Listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Concealed Sprinklers shall be Viking 5.6K Standard Orifice SIN VK302 (Base Part Number 06662BA-X), or 8.0K Large Orifice SIN VK352 (Base Part Number 06666BA-X).

**28. QUICK RESPONSE CONCEALED HORIZONTAL SIDEWALL SPRINKLER** **SPRINKLER 63A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Quick response concealed horizontal sidewall sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed horizontal sidewall sprinklers shall have a chrome finish (or finish as specified elsewhere) cover plate that is a push-on, pull-off assembly with a cover diameter no greater than 2-3/4". Concealed sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Quick response horizontal sidewall sprinklers shall be cULus Listed for Light and Ordinary Hazard occupancies. Concealed Horizontal Sidewall Sprinklers shall be Viking SIN VK408 (Base Part Number 11451).

**29. QUICK RESPONSE SMALL ORIFICE CONCEALED PENDENT SPRINKLER** **SPRINKLER 54H**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed sprinklers shall be cULus Listed as quick response for working pressures up to 175 PSI. Quick response concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed sprinklers shall have a cover plate that is a push-on, thread-off assembly with a 2-3/4" or 3-5/16" diameter. Concealed sprinklers shall have a nominal K Factor of 2.8 and a small orifice. Quick Response Concealed Sprinklers shall be Viking Mirage SIN VK461 (Base Part Number 13831A). (No Substitutions Allowed).

**30. QUICK RESPONSE SMALL ORIFICE CONCEALED PENDENT SPRINKLER** **SPRINKLER 64A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed sprinklers shall be cULus Listed as quick response for working pressures up to 175 PSI. Quick response concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed sprinklers shall have a cover plate that is a push-on, thread-off assembly with a 2-3/4" or 3-5/16" diameter. Concealed sprinklers shall have a nominal K Factor of 4.2 and a small orifice. Quick Response Concealed Sprinklers shall be Viking Mirage SIN VK465 (Base Part Number 14262A). (No Substitutions Allowed).



**31. QUICK RESPONSE LARGE ORIFICE CONCEALED PENDENT SPRINKLER SPRINKLER 55A**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass construction with a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed sprinklers shall be cULus Listed as quick response for working pressures up to 175 PSI. Quick response concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed sprinklers shall have a cover plate that is a push-on, thread-off assembly with a 2-3/4" or 3-5/16" diameter. Concealed sprinklers shall have a nominal K Factor of 8.0 and a large orifice. Quick Response Concealed Sprinklers shall be Viking Mirage SIN VK464 (Base Part Number 13614A). (No Substitutions Allowed).

**32. QUICK RESPONSE FUSIBLE ELEMENT ELO CONCEALED PENDENT SPRINKLER SPRINKLER 55O**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass construction with a quick response metal type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed ELO sprinklers shall be cULus Listed as quick response for working pressures up to 175 PSI. Quick response ELO concealed pendent sprinklers shall be listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Concealed sprinklers shall have a cover plate that is a push-on, thread-off assembly with a 3-5/16" diameter. Concealed sprinklers shall have a nominal K Factor of 11.2 and an extra large orifice. Quick Response Fusible Element ELO Concealed Sprinklers shall be Viking Mirage SIN VK469 (Base Part Number 15764A). (No Substitutions Allowed).

**33. MRI ROOM QUICK RESPONSE CONCEALED PENDENT SPRINKLER SPRINKLER 54P**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Concealed MRI Room sprinklers shall be cULus Listed as a quick response sprinkler for use in Light Hazard occupancies. Concealed pendent sprinklers shall be cULus listed for installation in Ordinary Hazard occupancy if installed in Ordinary Hazard occupancy. Concealed sprinklers shall have a white finish cover plate that is a push-on, thread-off assembly with a 2-3/4" diameter. Concealed MRI room sprinkler shall be made from non-magnetic Material's that are acceptable for use in a high magnetic field environment like those associated with a magnetic resonance system. Concealed MRI room sprinkler shall be cULus listed and tested for use with a 3-Tesla MR system in accordance with ASTM F2503-05 criteria. Concealed MRI room sprinkler shall be acceptable for use in an environment with a static magnetic field of 3-Tesla or less and the highest spatial gradient magnetic field of 720-Gauss/cm or less. Concealed sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Or a 3/4" NPT, a large orifice, and a nominal K Factor of 8.0 K. Concealed sprinkler shall have a brass cover adapter made of non ferrous materials. Quick Response Concealed Pendent Sprinklers shall be made of non ferrous materials and shall be a Viking SIN VK462 or a Viking SIN VK464 MRI Room Sprinkler with brass cover adapter and white copper cover (UNS-C11000 copper rating). All sprinklers used in pendent position in MRI room shall be Viking MRI Room concealed pendent sprinkler SIN VK462 (Part Number 15480A) (5.6K Standard Orifice) or SIN VK464 (Part Number 15481A), (8.0K Large Orifice). (No Substitutions Allowed).

**34. CLEANROOM SPRINKLER CONCEALED PENDENT & COVER ASSEMBLY SPRINKLER 136G**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction utilizing a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Cleanroom concealed sprinklers shall have a Cleanroom Cover Assembly consisting of a low-profile cover intended for use in Cleanroom environments with Viking Mirage® Quick Response Concealed Pendent Sprinkler VK462. The cover plate shall be a 3-5/16" diameter push-on, thread-off assembly (Base Part Number 13642-/CR) with the silicone cover gasket that is an acceptable sprinkler seal for use in a Cleanroom or clean zone. Concealed sprinklers shall have a 1/2" NPT, a standard orifice, and a nominal K Factor of 5.6. Concealed Cleanroom pendent sprinklers shall be a cULus listed quick response sprinkler as required per NFPA13 for installation in Light Hazard occupancy. Concealed pendent sprinklers shall be cULus listed for installation in Ordinary Hazard occupancy if installed in Ordinary Hazard occupancy. Concealed Pendent Sprinkler shall be cULus Listed Viking Mirage Sprinkler SIN VK462 (Base Part Number 13503A) with Cleanroom concealed cover plate with silicone cover Gasket (Base Part Number 13642-/CR). (No Substitutions Allowed).

**35. QUICK RESPONSE DOMED CONCEALED PENDENT FUSIBLE ELEMENT SPRINKLERS 420**

Fire sprinklers shall be of one manufacturer throughout the building. No mixing of sprinkler brands shall be permitted. Sprinklers shall be of all brass frame construction with a quick response solid link type fusible element and a metal Belleville spring seal, coated on both sides with Teflon film. Sprinklers utilizing non-metal parts in the sealing portion of the sprinkler are strictly prohibited. Quick response concealed pendent sprinklers shall have a 3/4" NPT and large orifice with a nominal K Factor of 8.0. The concealed pendent sprinkler shall be installed with an adapter and a push-on, pull-off cover assembly, with 1/2" of adjustment, and a cover diameter no greater than 3-1/8". The concealed pendent sprinklers shall have a chrome finish cover plate (or finish as specified elsewhere). Quick response concealed pendent sprinklers shall be cULus Listed for installation in an Ordinary Hazard occupancy if installed in an Ordinary Hazard occupancy. Quick Response Concealed Sprinklers shall be Viking 8.0K Large Orifice SIN VK353 (Base Part Number 13975A-X). (No Substitutions Allowed).