Engineering Specification

Model DH80 Dry Quick Response Extended Coverage

Horizontal Sidewall Automatic Sprinklers

**Recommended CSI MasterFormat Specification Location: 21 13 00, Fire Suppression Sprinkler Systems (formerly 13930)**

Sprinklers shall be quick-response extended coverage concealed horizontal sidewall sprinklers that are cULus Listed for Light Hazard occupancies. Sprinklers to be of bronze frame construction with a special deflector capable of providing a discharge over a coverage area of 28 ft (8.5 m) wide, and 14 ft (4.3 m) long horizontal throw. Water seal assembly shall consist of a PTFE coated Belleville spring washer and machined brass cup with 3 mm glass bulb containing no plastic parts. Installation shall permit sprinkler deflectors to be positioned 4 in (102 mm) to 12 in (305 mm) below the ceiling. Sprinklers shall have a nominal K-factor of 8.0 gpm/psi1/2 (115 l/min/bar1/2) and 1” NPT thread. Sprinkler temperature rating shall be **[**155°F (68°C)**] [**175°F (79°C)**] [**200°F (93°C)**]**. Rated working pressure shall be 250 psi (17.2 bar). Standard finish: **[**White**] [**Chrome**] [**Bronze**] [**Special Finish – specify**]**.

Quick-response extended coverage horizontal sidewall dry sprinklers shall be Reliable Model DH80, SIN RA5532, Reliable Bulletin 055.

**For recessed horizontal sidewall sprinklers, add:**

Recessed escutcheon assembly shall be a two-piece escutcheon of push-on and thread off design with ½” (13mm) adjustment. Standard finish: **[**White**] [**Chrome**] [**Bright brass**] [**Special finish – specify**]**.

**For concealed horizontal sidewall sprinklers, add:**

Cover plate assembly shall consist of a brass cover plate and copper alloy retainer flange. Method of attaching the cover plate to the sprinkler cup shall be a push-on and thread-off design allowing a ½” (13mm) cover plate adjustment. Cover plate temperature rating shall be **[**135°F (57°C)**] [**165°F (74°C)**]**. A plastic protective cap shall be provided and factory installed inside the sprinkler cup to protect the sprinkler from damage, which could occur during construction before the cover plate is installed. Standard cover plate finish: **[**White**] [**Custom Color – specify**]**.