Engineering Specification

Model XL Institutional Sprinkler

**Recommended CSI MasterFormat Specification Location: 21 13 00, Fire Suppression Sprinkler Systems (formerly 13900)**

Institutional sprinklers shall be cULus Listed quick response, **[**pendent, standard coverage sprinklers**] [**horizontal sidewall sprinklers, standard coverage**] [**pendent, extended coverage**] [**horizontal sidewall, extended coverage**]**. Sprinkler and deflector to be of bronze construction, with ½” NPT thread. Levered fusible solder link shall consist of an approved black-painted beryllium-nickel link assembly. Fusible link shall be designed to release a suspended load that exceeds 50 lbs. (22.7 kg) when dropped from a 1-inch (25.4 mm) height. Water seal shall consist of a PTFE-coated Bellville spring washer and bronze diffuser sub-assembly containing no plastic parts. Institutional escutcheons shall be of zinc or aluminum construction with zinc ring plate and tamper resistant screws. Sprinkler K-factor shall be nominal 5.6 gpm/psi1/2 (81.0 l/min/bar1/2) – standard orifice. Sprinkler temperature rating shall be 165 °F (74 °C). Sprinklers shall have a rated working pressure of 175 psi (12 bar). Standard cover finish: **[**Bright chrome plated**] [**Specialty – specify**]**.

Sprinklers shall be Reliable Model XL Institutional **[**Pendent, Standard Coverage, SIN R1314**] [**Pendent, Extended Coverage, SIN R1344**] [**Horizontal Sidewall, Standard Coverage, SIN R1334**] [**Horizontal Sidewall, Extended Coverage, SIN R1364**]**. Refer to Reliable Technical Bulletin 113 for associated sprinkler information.