Engineering Specification

Residential Riser Assembly

**Recommended CSI MasterFormat Specification Location: 21 13 13, Wet-Pipe Sprinkler Systems (formerly 13930)**

Residential Riser Assembly shall be cULus approved for horizontal or vertical installation as a one-piece, factory assembled unit for use in NFPA 13D and 13R residential systems. The riser manifold assembly shall consist of a **[**1” (25mm)**]** **[**1-1/2” (40 mm)**] [**2” (50 mm)**]** cast, non-welded stainless steel body with **[available for 1” only:** male NPT threaded**]** **[**female NPT threaded**] [available for 1½” only:** grooved**]** end connections.

The manifold piping shall contain cast-on lettering clearly identifying manifold pipe size, flow direction, cULus Listing, and the test and drain outlet. A built-in drain port shall be available to permit hydrostatic testing without draining the system. Assembly shall have a working pressure rating of 175 psi (12.1 bar). Cast mounting holes shall be provided for recessed or flush mounting to wall. For stud mounting, a support bracket shall be provided specifically designed for the cast mounting holes.

**Basic Trim**

**[**Residential riser manifold assembly trim shall include a 3-way valve and associated cULus Listed pressure gauge, a drain valve, and dedicated waterflow detector containing two sets of SPDT (Form C) contacts, having an electrical rating of 10A @ 125/250 VAC/2.5 A @ 24VDC.**]**

**Basic Trim with Test & Drain Valve**

**[**Residential riser manifold assembly trim shall include a 3-way valve and associated cULus Listed pressure gauge, a Test & Drain valve, and a dedicated waterflow detector containing two sets of SPDT (Form C) contacts, having an electrical rating of 10A @ 125/250 VAC/2.5 A @ 24VDC. The test orifice size for the Test & Drain assembly shall be 3/8” (10 mm), 7/16” (11 mm) or ½” (15 mm).**]**

**Basic Trim with Test & Drain Valve with Pressure Relief Valve Trim Kit**

**{**Residential riser manifold assembly trim shall include a 3-way valve and associated cULus Listed pressure gauge, a Test & Drain valve, and dedicated waterflow detector containing two sets of SPDT (Form C) contacts, having an electrical rating of 10A @ 125/250 VAC/2.5 A @ 24VDC. Pressure relief valve trim kit with **[**175 psi (12.1 bar)**]** **[**185 psi (12.8 bar)**] [**210 psi (14.5 bar)**] [**260 psi (17.9 bar)**] [**310 psi (21.4 bar)**]** rating shall be provided.**}**

Residential Riser Assembly shall be the Reliable Residential Riser. Refer to Reliable Bulletin 425 for associated information.