

# Installation

**S19-310TW8**

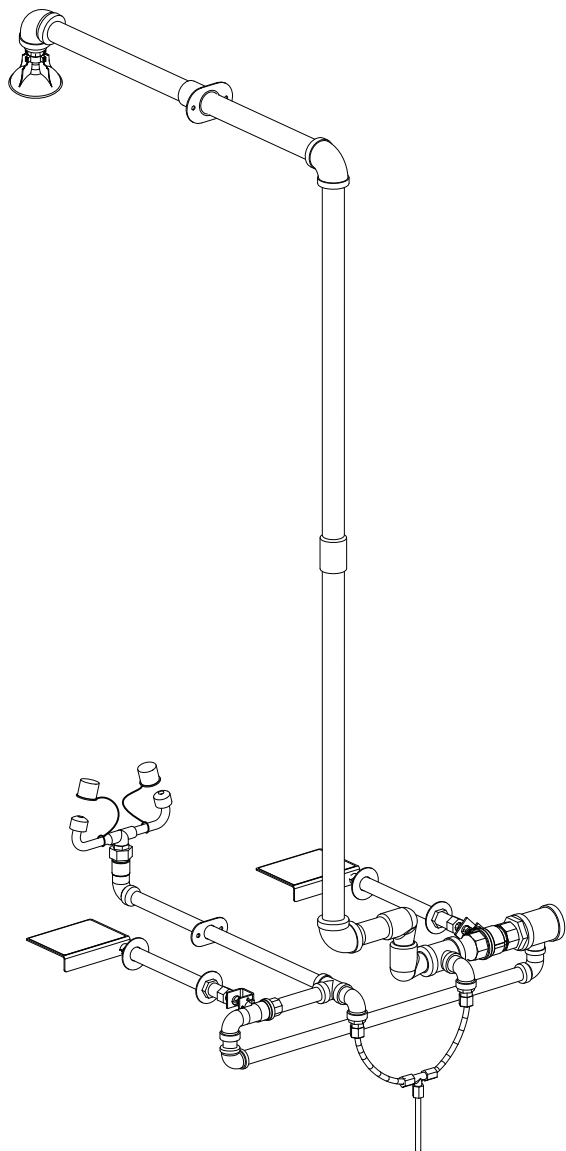
**S19-310TW12**

**S19-310TW18**

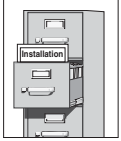
**Frostproof Combination Drench  
Shower and Eyewash**

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**⚠ WARNING ⚠**



Read this installation manual completely to ensure proper installation, then file it with the owner or maintenance department. Compliance and conformity to drain requirements and other local codes and ordinances is the responsibility of the installer.



Separate parts from packaging and make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.



Flush the water supply lines before beginning installation and after installation is complete. Test the unit for leaks and adequate water flow. Main water supply to the eyewash should be "ON" at all times. Provisions shall be made to prevent unauthorized shutoff.



The ANSI Z358.1 standard requires an uninterrupted supply of flushing fluid at a minimum 30 PSI (0.21 MPa) flowing pressure. Flushing fluid should be tepid per ANSI Z358.1.



The inspection and testing results of this equipment should be recorded weekly to verify proper operation. This equipment should be inspected annually to ensure compliance with ANSI Z358.1.



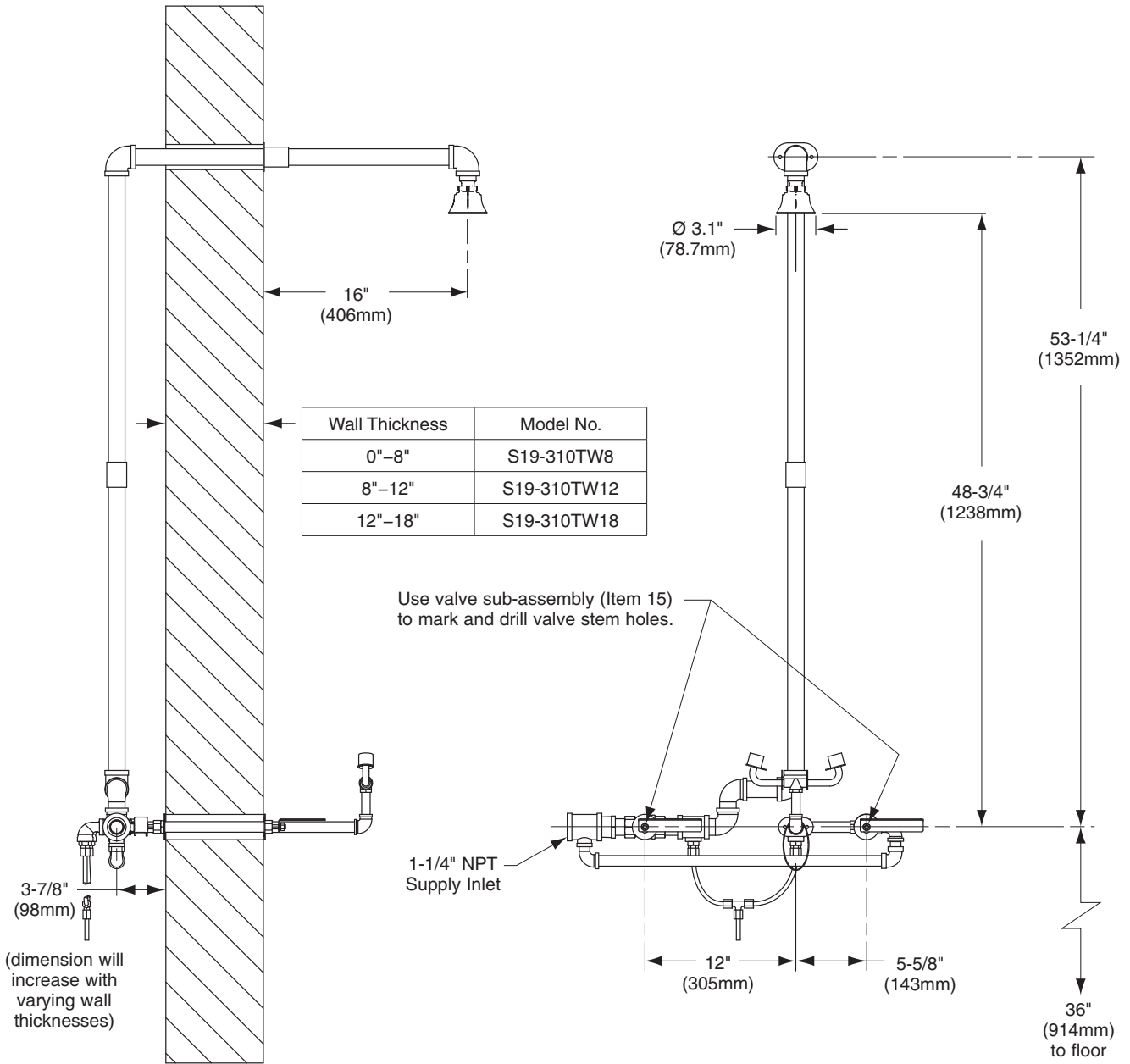
Workers who may come in contact with potentially hazardous materials should be trained regarding the placement and proper operation of emergency equipment per ANSI Z358.1.



For questions regarding the operation or installation of this product, visit [www.bradleycorp.com](http://www.bradleycorp.com) or call 1-800-BRADLEY.

Product warranties and service parts information may also be found under "Products" on our web site at [www.bradleycorp.com](http://www.bradleycorp.com).

# S19-310TW Dimensions



**NOTE:** All dimensions assume standard thread engagement. Variations in manufacturing allow for +/- 1/8" (3mm) per threaded joint. To find the tolerance of a dimension, add the number of thread joints in between a dimension and multiply it by 1/8" (3mm).

## Installation

### Supplies Required:

- Teflon tape and pipe sealant
- Piping to 1-1/4" NPT water supply inlet
- Adequate supply pipe supports
- Minimum 4" (102mm) drain to accommodate 30 gallons (115 liters) per minute discharge for drench shower waste
- OPTIONAL: Sign-mounting hardware

*NOTE: Local codes may require the installation of a backflow prevention valve to complete proper installation. Compliance with local codes is the responsibility of the installer. Valve must be tested annually to verify that it is functioning properly. Backflow prevention valves are not included with the fixture and may be supplied by the contractor or purchased from Bradley Corporation.*



**IMPORTANT: Do not rely on Bradley's Combination Unit to support supply piping.**

### Step 1: Assemble drench shower and eyewash components

1. From the outside of the building, drill a 1" dia. hole in the wall 36" up from the ground floor for the eyewash piping. Use the sub-assembly (Item 15) to measure, mark and drill two 1-3/8" dia. holes for the valve operating stems.

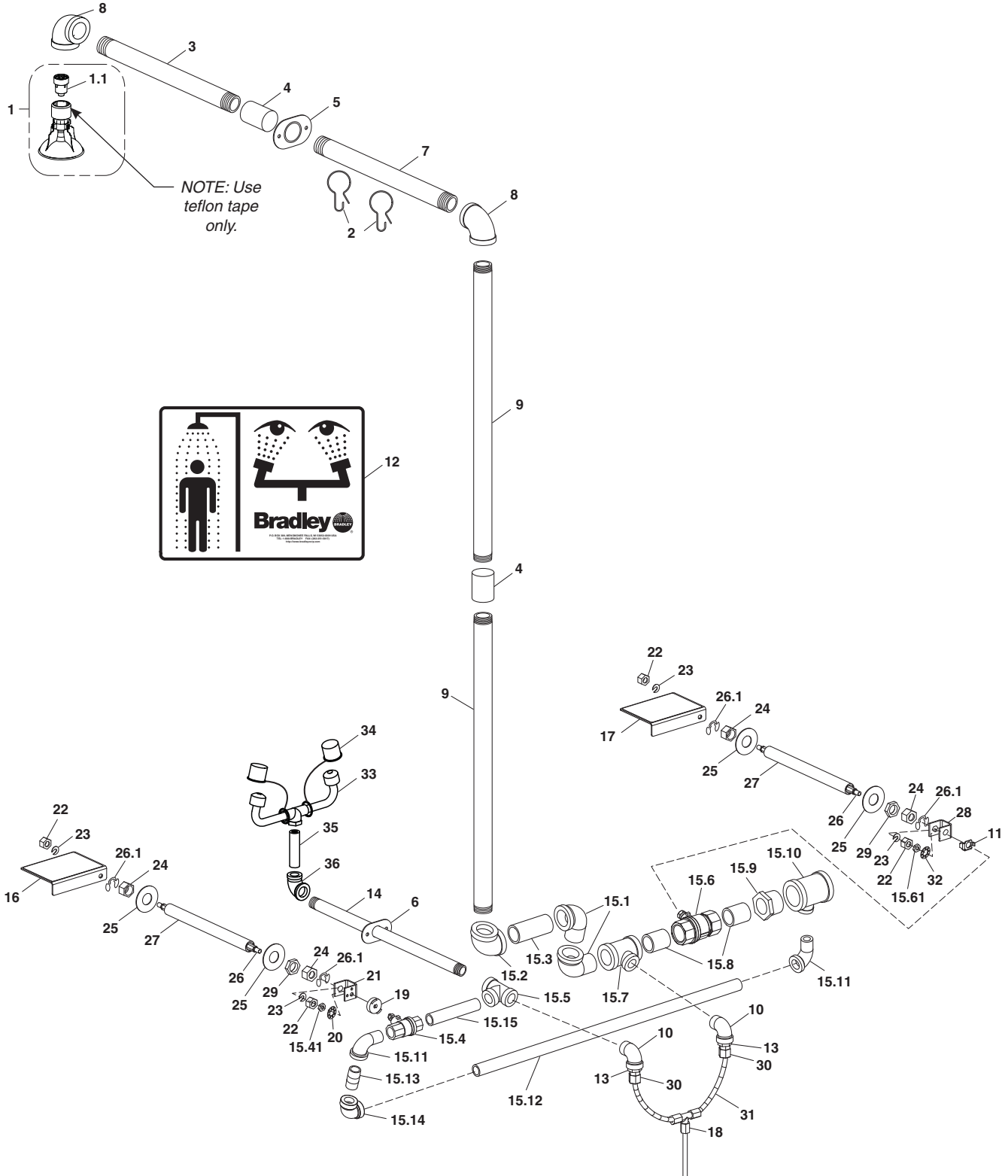
*NOTE: This unit has been designed to accommodate varying wall thicknesses. When installing the operating stem support sleeve (Item 27), make sure that a minimum 5/8" of threaded pipe protrudes from the wall.*

2. Assemble the two valve stems as shown on page 5 and connect the stems to the assembly through the holes in the wall.
3. Secure the assembly to the wall with adequate supports supplied by installer. Make sure that Item 14 is pitched a minimum of 1/2" toward the building to allow for proper weep valve drainage.
4. Connect Items 4, 8, 9 and another Item 9 (as shown on page 5) and attach them to Item 15.2.
5. Mark and drill a 1-3/8" dia. hole for the shower pipe.
6. Assemble the rest of the unit as shown on page 5.

### Step 2: Connect water supply

1. Connect water supply piping to the 1-1/4" NPT inlet (piping supplied by installer). Provide adequate supports (supplied by installer) for supply pipe using pipe hangers or other means.
2. Run the drain's 5/16" tubing to an adequate drain containment.
3. Hang the safety sign from the unit with the curtain hooks provided (or mount it to the wall using sign-mounting hardware by installer).

# Assembly of Components



<b>Parts List</b>							
<b>Item</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>	<b>Item</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	S24-188	1	Showerhead, Plastic	15.11	169-025	2	90° Street Elbow 1/2" NPT
1.1	S24-187	1	Flow control Assembly, 23 gpm	15.12	113-1114	1	Pipe, 1/2" NPT x 23-17/32"
2	151-001	2	Hook	15.13	113-1084	1	Pipe, 1/2" NPT x 1-1/2"
3	113-1107	1	Pipe, 1" NPT x 14"	15.14	169-839	1	Elbow 1/2" NPT
4	169-1027	2	Coupling, 1" NPT	15.15	113-1115	1	Pipe, 1/2" NPT x 4-1/4"
5	150-212	1	Escutcheon, Shower Pipe	16	S08-361	1	Handle, Eyewash
6	150-213	1	Escutcheon, Eyewash Pipe	17	S08-360	1	Handle, Shower
7	113-1108	1	Pipe, 1" NPT x 11-1/2" (S19-10TW8)	18	269-1720	1	Tee, 1-2"-20 UNC Nylon
	113-1109	1	Pipe, 1" NPT x 15-1/2" (S19-10TW12)	19	153-372R	1	Adapter, 1/2" Ball Valve
	113-1110	1	Pipe, 1" NPT x 21-1/2" (S19-10TW18)	20	142-002DA	1	Lockwasher, 5/16" Internal Tooth
8	169-847	2	Elbow, 1" NPT	21	128-151	1	Adapter, 1/2" Ball Valve Handle
9	113-1112	2	Pipe, 1" NPT x 24"	22	161-036	4	Nut, Hex 5-16"-18 Stn. Steel
10	169-025	2	Elbow, 1/2" NPT Street	23	142-002BK	4	Lockwasher, 5/16" Stn. Steel
11	140-720	1	Bracket, 1" Ball Valve Adapter	24	110-191	4	Nut, 1/2"-14 NPS Connector
12	114-052	1	Safety Sign	25	142-002CB	4	Washer, 7/8" x 2" Stainless Steel
13	S29-068	2	Weep Valve Assembly	26	S21-067	2	Rod, Operating (S19-310TW8)
14	113-1116	1	Pipe, 1/2" NPT x 18-3/4" (S19-10TW8)		S21-067A	2	Rod, Operating (S19-310TW12)
	113-1117	1	Pipe, 1/2" NPT x 22-3/4" (S19-10TW12)		S21-067B	2	Rod, Operating (S19-310TW18)
	113-1118	1	Pipe, 1/2" NPT x 28-3/4" (S19-10TW18)	26.1	132-042	4	Clip, Retaining
15	S08-369	1	Valve Sub-Assy, Eyewash/Shower	27	113-006NN	2	Sleeve, Operating Rod (S19-310TW8)
15.1	169-723	2	1" Street Elbow 90°		113-006NR	2	Sleeve, Operating Rod (S19-310TW12)
15.2	169-847	1	Elbow, 1" NPT		113-006NU	2	Sleeve, Operating Rod (S19-310TW18)
15.3	113-1113	1	Pipe, 1" x 3"	28	128-164	1	Adapter, 1" Ball Valve Handle
15.4	S27-282	1	1/2" Ball Valve with Nut	29	110-115	2	Nut, Jam
15.41	110-215	1	Nut (only)	30	269-882	2	Connector, 1/4" NPT, 1/2"-20 UNC Nylon
15.5	169-838	1	Tee, 1/2" NPT	31	R68-600015	4 ft.	Tube, 5/16" Nylon
15.6	S27-278	1	1" Ball Valve with Nut	32	142-002DC	1	Lockwasher, 3/8" Internal Tooth
15.61	110-214	1	Nut (only)	33	S05-091	1	Eyewash Yoke
15.7	169-840	1	Tee, 1" x 1" x 1/2"	34	107-371	2	Tethered Dust Cover
15.8	113-935	2	Pipe, 1" NPT x 1-1/2"	35	S21-077	1	Stem
15.9	269-1721	1	Reduc'g Bushing, 1-1/4" x 1"	36	169-1069	1	Elbow, Reducing
15.10	269-1104	1	Tee, 1-1/4" x 1/2"				