

# Installation, Maintenance, & Repair Series SS Riser

In-Building Riser

Sizes: 4" – 10" (100 – 250mm)\*\*



**⚠ WARNING**



Read this Manual **BEFORE** using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.



Keep this Manual for future reference.

**⚠ WARNING**

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

\*\* Metric Dimensions are nominal pipe diameter. This product is produced with ASME/ANSI flanged end connections or DN flanged end connections.

# Basic Installation Instructions

Ames Company In-Building Risers are designed for easy installation in standard configurations as outlined using standard construction method.

The floor penetration detail of the In-Building Riser shall be restrained per direction outlined by site plans. Consult Uni-Bell handbook of PVC pipe if instructions are not provided.

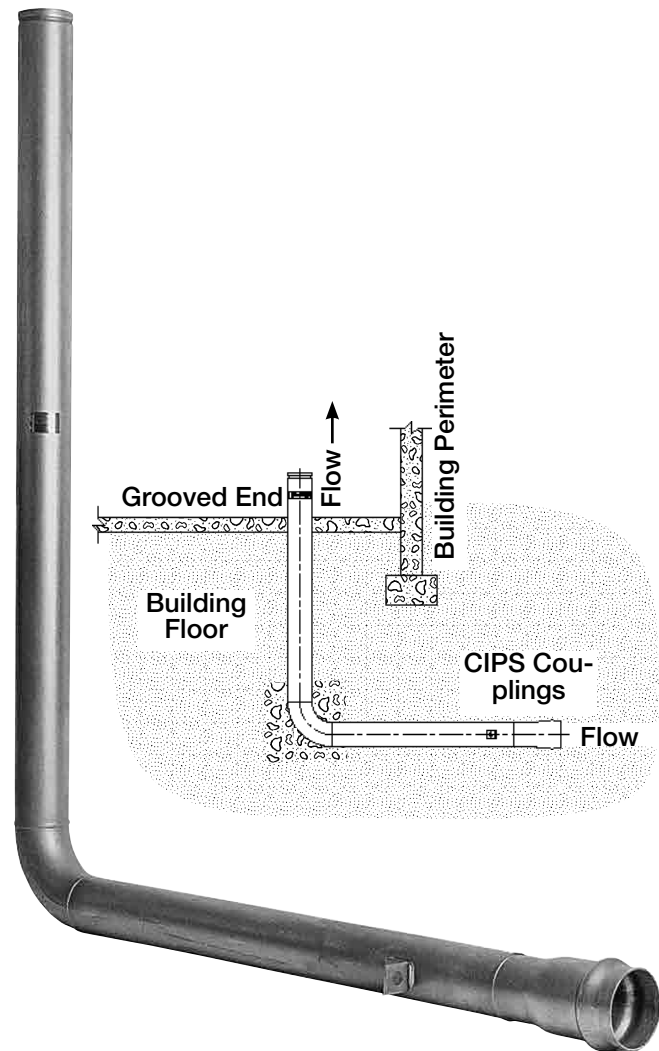
The below ground connection is a standard AWWA C900 gasketed coupler (either ductile iron or PVC). Installation in accordance with the following information (from Uni-Bell handbook).

1. Clean out inside of coupler making certain the beveled spigot end and the gasket groove are free of dirt.
2. Apply lubricant to beveled spigot (male).
3. Insert gasket into coupling groove and seat firmly.
4. Push lubricated end past gasket into the bell housing. (Ames in-building risers are equipped with the lugs placed 180° apart on either side of the unit which can be used to “pull” the pipe into the bell using a “come a-long” type equipment. Also, the “bar and block method described in the Uni-Bell handbook can also be used for installation).
5. The maximum allowable pipe deflection angle between the IBR and underground pipe is as follows:

TR Size	Maximum Deflection
4"	1°
6"	1°
8"	1°
10"	1°

The above ground connection is an AWWA specification C606 groove. All underwriters Laboratory approved groove couplers made to fit the AWWA C606 grooves can be used to join the connection to the in-building supply line.

1. Check gasket and lubricate it using groove coupler manufacturer’s recommended lubricant or approved equal.
2. Install gasket. Place gasket over pipe end being sure gasket lip does not overhang pipe end.
3. Align and bring two pipe ends together and slide gasket into position centered between grooves or each pipe (no portion of the gasket should extend into the groove of either pipe.)
4. Apply housings. Place housings over gasket, being sure the housing keys engage into the grooves of the pipe. (No portion of the gasket should extend into the groove of either pipe.)
5. If restraint fitting is being used tighten nuts: Tighten nuts alternately and equally until housing bolt pads are firmly together metal to metal: Uneven tightening will cause gasket to pinch.



# Installation

## Materials

Because the In-Building Riser is buried, the material of construction has been chosen as Type 304L Stainless Steel. This material is generally recognized as a corrosion resistant material which is superior to Cast, Ductile Iron, or Coated Steel pipe for corrosion resistance, and which is superior to engineered plastics for strength and longevity. In general, the stainless steel is the cathode in joints of dissimilar metal, so that any corrosion which may occur will not affect the stainless steel. In addition, an extra protection is provided in that there is no actual metal to metal contact at either joint due to the CIPS bell connection design and the groove coupler design.

## Installation Practices

Good installation practice for all types of buried pipe often calls for wrapping of the pipe to decrease corrosion due to soil conductivity. Although stainless steel is less susceptible to corrosion. Inquire with local governing authorities for local installation requirements.

## Field Test Procedures

Normal field test procedures call for a hydrostatic pressure test of the system prior to final acceptance. Often, segments of the system will be tested individually prior to the complete system test. Two methods are recommended to hydrostatically test the In-Building Riser based upon the following conditions.

### 1. Constrained Piping

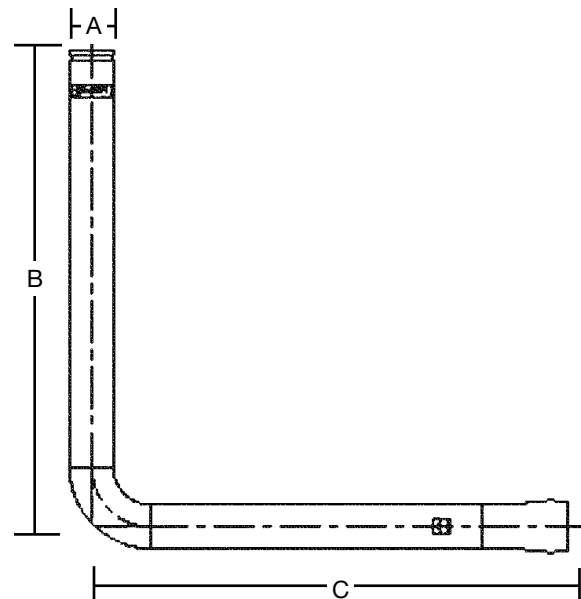
If the piping installation is essentially complete, the piping restraints may adequately take the thrust loads generated by having a blind end on the pipe system. In these cases, no special actions to restrain thrust or side loads are required, and the fitting installed in the system may be adequate for hydrostatic testing.

### 2. Free Piping

If just the riser or riser/main connection is to be tested, then the thrust loads from the blind end cap on the riser may need to be restrained. The riser design has been tested in the unrestrained state using a rigid coupler and end cap grooved fitting. Flange adapters, expansion fittings, or other styles of end connectors may result in excessive end thrust which may cause a leak or fitting malfunction. In addition, couplings which are adequately rated for high pressure testing should be used if thrust restraints are not feasible.

#### **NOTICE**

It is important that all air is bled from the system before pressurizing any component.



### Dimensions/Weights

SIZE		ORDERING CODE	A	B	C	WEIGHT
<i>in.</i>	<i>mm</i>		<i>inch</i>	<i>ft.</i>	<i>ft.</i>	<i>lbs.</i>
4	100	0690970	4½ OD	6	6	71
6	150	0690969	6⅝ OD	6	6	98
8	200	0690968	8⅝ OD	6	6	129
10	250	0690971	10¾ OD	6	6	202

### End Connections

**Bell End:** Mates with Ductile Iron Pipe and AWWA C900 Pipe (PVC Pipe with Cast Iron Pipe Equivalent OD's)

SIZE		SEALING GASKET (CIPS – C900)	
<i>in.</i>	<i>mm</i>	<i>Mating Pipe OD</i>	<i>Spare Part Ordering code</i>
4	100	4.80	7014421
6	150	6.90	7014422
8	200	9.05	7014423
10	250	11.10	7014424

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
**For more information: [Watts.com/prop65](http://Watts.com/prop65)**

**Limited Warranty:** Ames Fire & Waterworks (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

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The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

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