

Style 257C Differential Settlement Joint for Ductile Iron Pipe (AWWA) 3 – 36-inch/DN80 – DN900 Sizes

⚠ WARNING	
	<ul style="list-style-type: none"> • Read and understand all instructions before attempting to install any Victaulic products. • Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products. • Wear safety glasses, hardhat, and foot protection. <p>Failure to follow these instructions could result in death or serious personal injury and property damage.</p>

Style 257C Differential Settlement Joints consist of up to four pairs of Victaulic flexible couplings, a grooved center pipe spool, and up to six grooved pipe nipples. When installed in accordance with these instructions, the Style 257C can accommodate up to 4 inches/102 mm of dynamic movement, including differential settlement, seismic, and thermal movement. The 'Installed Length' for the Style 257C is factory determined (refer to Section 3.0).

The system designer or their representative is responsible for ensuring that the installation site is prepared in accordance with national and local codes and standards for the jobsite with regard to dielectric/cathodic protection of the piping system, compaction, drainage, etc.

1.0 RECEIVING AND HANDLING THE STYLE 257C

- Upon receipt, and immediately prior to installation, visually inspect the Style 257C. All components shall be free of damage, including coatings and linings.
- End couplings do not ship pre-assembled on the unit and shall be installed in accordance with the "Installation Requirements" section on the following page.
- Damage to the pipe, couplings, and coatings shall be avoided during handling of the Style 257C.
- To unload the Style 257C, use a fabric/cloth-type strap (i.e. nylon) around the outside diameter of the Style 257C at the locations noted below. **DO NOT** use metallic strapping.
- Verify that the strap(s) and crane are rated for the weight of the Style 257C. Do not use lifting lugs or coupling hardware for lifting the Style 257C. Use caution to prevent damage to the pipe and coatings during any handling of the Style 257C.

1-Pair Configuration



2-Pair Configuration



3-Pair Configuration



4-Pair Configuration



2.0 STORAGE

Until the time of installation, Victaulic products with exposed elastomeric components shall be stored in typical warehouse conditions, where components are protected from outside environmental factors such as: sun exposure, ozone exposure, extreme temperatures, and extreme relative humidity (or as specified by national and local codes and standards for the jobsite).

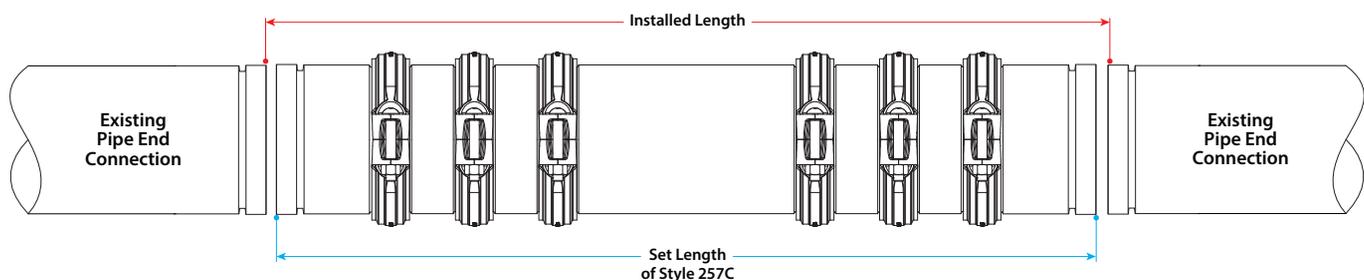
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3.0 SITE PREPARATION/INSTALLED LENGTH

⚠ CAUTION

- The 'Installed Length' and 'Set Length' shall be verified prior to installation of the Style 257C.
 - Verify that the two adjoining, field-installed pipe ends are concentric and colinear along their centerline.
- Failure to follow these instructions will decrease the ability of the joint to deflect.



- Installation of a Style 257C Settlement Joint requires verification of two critical values: the 'Installed Length' and the 'Set Length'.
- As defined above, the 'Installed Length' is the actual distance (opening) between the field-installed pipe ends into which a particular Style 257C shall be installed. Having the pipe-to-pipe field opening at the calculated 'Installed Length' ensures that a particular Style 257C can achieve the angular deflection necessary to accommodate the designed settlement value.
- As defined above, the 'Set Length' is the length of the assembled unit (without end couplings) when the couplings are set with the appropriate pipe end separation. Having the appropriate 'Set Length' ensures that a particular settlement joint can achieve the designed settlement value. The 'Set Length' is determined by reducing the marked 'Installed Length' by:
 - 1/16 inch/1.6 mm for nominal pipe sizes of 14 inches/DN350 and smaller
 - 1/8 inch/3.2 mm for nominal pipe sizes of 16 – 24 inches/DN400 – DN600
 - 1/4 inch/6.4 mm for nominal pipe sizes of 30 inches/DN750 and larger
- Check all pre-installed couplings prior to installation to verify that all sets of hardware are tightened completely and that metal-to-metal bolt pad contact is present at all bolt pads. Refer to the I-300 Field Installation Handbook that is supplied with the Style 31 Coupling. This handbook can be downloaded at victaulic.com by scanning the QR code provided below.
- Before placing the unit for installation, verify that the two existing pipe end connections are concentric and colinear along their centerline. Measure the space between the two pipe ends and verify that it corresponds to the 'Installed Length' that is marked on the side of the Style 257C.
- The existing pipe end connections shall remain fixed in order to maintain the 'Installed Length'.
- Measure the length of the Style 257C to verify that it corresponds to the appropriate 'Set Length'. If the measured length is shorter than the appropriate 'Set Length', expand the Style 257C until the appropriate 'Set Length' is achieved. If the measured length is longer than the appropriate 'Set Length', compress the Style 257C until the appropriate 'Set Length' is achieved.
- Pre-install a gasket from each end coupling onto the end of each existing pipe end connection. Refer to the I-300 Field Installation Handbook.

4.0 INSTALLATION

Once the conditions listed in Section 3.0 are met:

- Lift the Style 257C slowly while guiding it into place in the pipeline. Verify that the weight of the Style 257C remains balanced as it is lifted and moved into position.
- Bring the Style 257C into position between the two existing pipe end connections. To prevent damage to coatings and linings, DO NOT allow the Style 257C to impact the two existing pipe end connections. Verify that the two existing pipe end connections and the Style 257C are concentric and colinear and that the pipe ends are square to the Style 257C.
- Provisions shall be made for supporting the Style 257C throughout the entire installation process and for maintaining the 'Set Length'. If the 'Set Length' changes during the lifting process, the Style 257C shall be either compressed or expanded to correspond to the marked 'Set Length' prior to installation of the end couplings.
- After the Style 257C is in position (at the marked 'Installed Length' and concentric, colinear, and square to the two existing pipe end connections), install the end coupling connections. Refer to the I-300 Field Installation Handbook that is supplied with the Style 31 Couplings. This handbook can be downloaded at victaulic.com by scanning the QR code provided to the right.



Scan QR code to access Style 31 Coupling installation instructions in the I-300 Field Installation Handbook.

5.0 POST INSTALLATION

The 'Installed Length' and 'Set Length' shall be maintained during construction of the piping system.

For complete contact information, visit victaulic.com

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