



# Submittal Information for Spears® Manufacturing Company PVC DWV Vertical Stack Expansion Joints

GSDWVEJ-0223

Date: \_\_\_\_\_

Job Name: \_\_\_\_\_ Location: \_\_\_\_\_

Engineer: \_\_\_\_\_ Contractor: \_\_\_\_\_

**Scope:**

This submittal covers Spears® PVC DWV Expansion Joints intended for use in vertical riser Drain, Waste and Vent stack applications where the application operating temperature does not exceed 140° F (63°C).

**Product Specification:**

All Spears® PVC DWV Vertical Expansion Joints in 1-1/2" through 6" shall be manufactured in the U.S.A. by Spears® Manufacturing Company. PVC DWV Expansion Joints shall be constructed from white Polyvinyl Chloride (PVC) Type I compound having a cell classification of 12454 conforming to ASTM D1784. PVC DWV Expansion Joints shall be certified to IAPMO PS-51 for DWV Vertical applications and labeled with an "NSF U.P. Code by NSF International under program (SE7992). All PVC DWV Expansion Joints shall be furnished with double o-ring seal in EPDM elastomer material. Socket x Spigot (S118) or Socket x Socket (S119) end connections shall be offered. Expansion Joint body shall have an engraved flow direction arrow for proper installation placement. PVC DWV Expansion Joints shall be suitable for use in DWV vertical stack drainage applications to compensate for building settlement, thermal dynamic changes in DWV piping systems.

**Product Marking:**

All Spears® PVC DWV Expansion Joints shall be labeled with an "NSF U.P. Code to indicate conformance to the Uniform Plumbing Code. Expansion Joint body shall have an engraved flow direction arrow for proper installation placement. PVC DWV Expansion Joints shall be suitable for use in DWV vertical stack drainage applications to compensate for thermal dynamics in DWV piping systems.

**Installation:**

- (a) Support, but do not rigidly restrain piping at changes of direction.
- (b) Holes through framing members must be adequately sized to allow for free pipe movement.
- (c) Install expansion joint in a manner that takes into account the ambient temperature in which it will be installed. See Expansion Joint Installation–Determine Piston Installation Position.
- (d) While Spears® Expansion Joints are maintenance-free, access panels are recommended.
- (e) Use suitable solvent cements per ASTM D2564 and primers per ASTM F656 for proper installation.

**DWV Vertical Installation Instructions:**

**Vertical Installation:** (Sizes: 1-1/2" through 6") Locate expansion joint with arrow in direction of flow beneath the lowest fixture (piston side up) using appropriate anchors placed directly behind the expansion joint to secure the expansion body (outer sleeve) in place. On the piston side of the expansion joint, use appropriate bracket guides in close proximity of the piston to allow the piston to move freely yet restrict lateral pipe movement directing expansion into the joint's piston. Follow solvent cement joining procedures located in this bulletin.

**NOTE:** PVC piping systems are suitable for oil-free air handling to 25 psi, not for distribution of compressed air or gas.

**Referenced Standards:**

- ASTM D1784 – Rigid Vinyl Compounds
- ASTM D2564 – Solvent Cements for PVC Pipe & Fittings
- ASTM F656 – Primers for PVC Pipe & Fittings

**Approvals:**

NSF® - SE 7992 (IAPMO PS-51) - Expansion Joints and Flexible Expansion Joints for DWV Piping Systems

**PROJECT APPROVAL**

Approved: \_\_\_\_\_  
PRINT

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

