



EXPANSION JOINTS

FOR ABOVE-GROUND VERTICAL DWV STACKS.
NOW 1½" THROUGH 6".

Temperature changes make DWV and rainwater piping expand and contract. **Fernco Expansion Joints accommodate that movement in vertical, above-ground systems with a simple, one-piece design that helps eliminate costly offsets.** With no sliding parts to jam, freeze or leak, they deliver dependable, maintenance-free pipe expansion and contraction control—long after concealment.

ONE PIECE. NO SLIDING PARTS.

Accommodates thermal expansion and contraction of pipe without sliding parts that can jam, freeze or leak.

NO OFFSET TO BUILD.

Handles movement at the joint, helping eliminate costly expansion offsets in vertical, above-ground DWV piping.

CLAMP ON. KEEP MOVING.

Pipe ends insert to internal stops for positive positioning. Stainless steel clamps tighten with standard tools.

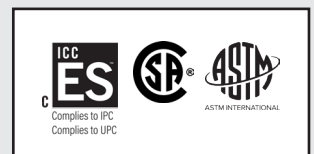
PART NUMBERS AND DIMENSIONS

Part Number	Nominal Pipe Size	Carton Quantity	Weight	Torque
XJ-150	1½"	20	0.38 lb	60 in-lb
XJ-2	2"	20	0.47 lb	60 in-lb
XJ-3	3"	20	0.61 lb	60 in-lb
XJ-4	4"	20	0.75 lb	60 in-lb
XJ-6 NEW	6"	6	2.93 lb	120 in-lb



Drawings, submittals, installation instructions and where to buy.
Or reach out with a question and our technical group will help you work it through.

- ICC-ES PMG-1117 to ASTM C1173 and CSA B602 covers XJ-150 through XJ-4; above-ground use is subject to the approval of the code official.
- Gasket to ASTM D5926 per Fernco published data. Specify under CSI 22 05 16.



EXPANSION JOINTS

Technical Data



ROOM TO EXPAND. ROOM TO CONTRACT.

Fernco Expansion Joints accommodate up to 1½" pipe expansion and ½" pipe contraction from the normal position.

PUT MOVEMENT IN PERSPECTIVE.

A 30-foot section of PVC expands approximately ⅔" with a 60°F temperature rise.

Standard ABS expands approximately 1.2" under the same conditions.*

* Illustrative calculations using pipe manufacturers' published coefficients for PVC and standard ABS.

Confirm movement using data for the specific pipe being installed.

** Customer to provide non-movement restricting pipe bracing to be consistent with building.

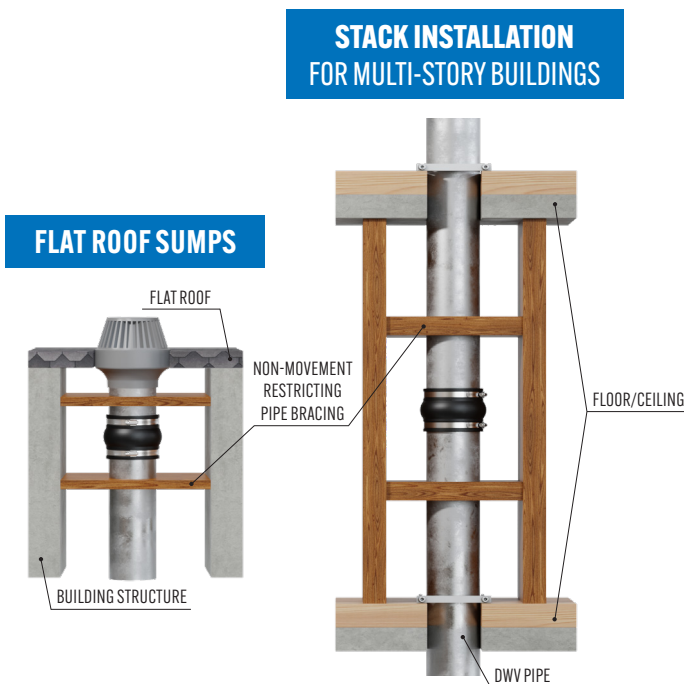


Illustration only. Not to scale.

- 1 **Plan the pipe section.** Determine joint locations, supports and guides using the applicable plumbing code, project design and manufacturer instructions.
- 2 **Calculate the movement.** Use your pipe manufacturer's published data to calculate expansion and contraction for each section. Account for pipe material, section length and temperatures above and below the installation temperature.
- 3 **Check both directions.** Compare expected expansion and contraction with the joint's available travel at its installed position. If either exceeds capacity, revise the section length and joint spacing.

Support the pipe independently. Provide supports and guides to carry the piping and maintain alignment. The expansion joint does not support the stack.

Applications: vertical, above-ground DWV stacks and inside rainwater conductors.

RATINGS AND SPECIFICATIONS

- **Above-ground vertical DWV and rainwater conductors**
- **Movement:** 1½" expansion, ½" contraction from the normal position
- **Maximum test pressure:** 4.3 psi
- **Maximum operating temperature:** 140°F nonconsistent
- **Fits:** plastic, cast iron and steel pipe
- **Gasket:** elastomeric PVC to ASTM D5926, Shore A 65 ±5
- **Tensile strength minimum:** 1000 psi
- **Elongation at rupture minimum:** 250%
- **Tear strength minimum:** 150 lb/in.
- **Brittleness temperature:** -40°F
- **Clamp bands:** 300 stainless steel (316 stainless steel on XJ-6)
- **Installation torque:** 60 in-lbs (120 in-lbs on XJ-6 due to high torque bands)