



TYPICAL INSTALLATION  
**Z190**  
 VERTICAL EXPANSION JOINT

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice

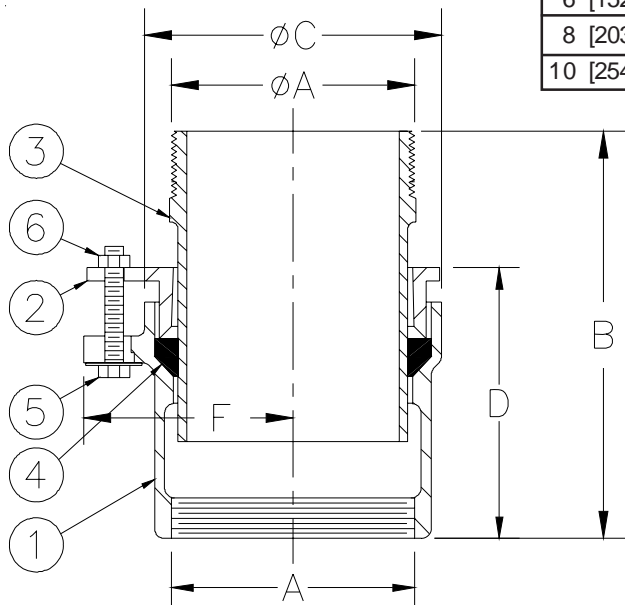
The Z190 Vertical Expansion Joint is designed to help prevent damage to roofs and piping around roof drains due to thermal expansion and contraction. The Expansion Joint Sleeve will slide inside the Expansion Joint Body when thermal movement occurs. This allows the pipes other connections to remain intact.

**Installation**

For typical applications the expansion joint should be adjusted to the midpoint of its overall length to allow for equal movement in both directions prior to installation. To do this, loosen all three nuts until the sleeve can be adjusted to the correct length. The length should be halfway between the min. and max. "B" dimension found on Table 1 for the size joint you have. Once correct length is achieved, nuts should be tightened until gasket creates watertight seal between sleeve and body. Care should be taken to make sure sleeve and body are aligned straight with each other and not cocked to one side. Also gasket should be checked periodically to make sure it is in good condition and not loose.

**Table 1**

A Pipe Size Inches	Dimensions In Inches					Approx. Wt. Lbs. [kg]
	B		C	D	F	
	Min.	Max.				
2 [51]	6 1/2 [165]	8 1/2 [216]	3 5/8 [92]	5 [127]	2 3/4 [70]	8 [4]
3 [76]			4 5/8 [117]		3 1/4 [82]	11 [5]
4 [102]			5 1/2 [140]	4 3/4 [121]	3 3/4 [95]	13 [6]
5 [127]	6 7/8 [175]	8 5/8 [219]	6 1/2 [165]	5 [127]	4 1/4 [108]	18 [8]
6 [152]			7 7/8 [200]		5 [127]	25 [11]
8 [203]	7 7/8 [200]	10 7/8 [276]	9 7/8 [251]		6 [152]	6 [152]
10 [254]			11 3/4 [298]	6 7/8 [175]		45 [20]



Parts List	
1	BODY
2	CLAMPING COLLAR
3	SLEEVE
4	GASKET
5	SCREW, 5/16-18 HHCS
6	HEX NUT, 5/16-18

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