

4714.0313 HANGERS AND SUPPORTS.

Subpart 1. **Section 313.** Table 313.3 is amended to read as follows:

TABLE 313.3			
HANGERS AND SUPPORTS			
MATERIALS	TYPES OF JOINTS	HORIZONTAL	VERTICAL
Cast	Lead and Oakum	5 feet, except 10 feet where 10 foot lengths are installed ^{1,2,3}	Base and each floor, not to exceed 15 feet
	Compression Gasket	Every other joint, unless over 4 feet then support each joint ^{1,2,3}	Base and each floor, not to exceed 15 feet
Cast-Iron Hubless	Shielded Coupling	Every other joint, unless over 4 feet then support each joint ^{1,2,3,4}	Base and each floor, not to exceed 15 feet
Copper & Copper Alloys	Soldered, Brazed, Threaded, or Mechanical	1-1/2 inches and smaller, 6 feet; 2 inches and larger, 10 feet	Each floor, not to exceed 10 feet ⁵
Steel Pipe for Water or DWV	Threaded or Welded	3/4 inch and smaller, 10 feet; 1 inch and larger, 12 feet	Every other floor, not to exceed 25 feet ⁵
Steel Pipe for Gas	Threaded or Welded	1/2 inch, 6 feet; 3/4 inch and 1 inch, 8 feet; 1-1/4 inches and larger, 10 feet	1/2 inch, 6 feet; 3/4 inch and 1 inch, 8 feet; 1-1/4 inches every floor level
Schedule 40 PVC and ABS DWV	Solvent Cemented	All sizes, 4 feet; allow for expansion every 30 feet ^{3,6}	Base and each floor; provide mid-story guides; provide for expansion every 30 feet ⁶
CPVC	Solvent Cemented	1 inch and smaller, 3 feet; 1-1/4 inches and larger, 4 feet	Base and each floor; provide mid-story guides
CPVC-AL-CPVC	Solvent Cemented	1/2 inch, 5 feet; 3/4 inch, 65 inches; 1 inch, 6 feet	Base and each floor; provide mid-story guides
Lead	Wiped or Burned	Continuous Support	Not to exceed 4 feet
Steel	Mechanical	In accordance with standards acceptable to the Authority Having Jurisdiction	
PEX	Cold Expansion,	1 inch and smaller, 32 inches; 1-1/4 inches and larger, 4 feet	Base and each floor; provide mid-story guides

	Insert, and Compression		
PEX-AL-PEX	Metal Insert and Metal Compression	1/2 inch; 3/4 inch; 1 inch All sizes 98 inches	Base and each floor; provide mid-story guides
PE-AL-PE	Metal Insert and Metal Compression	1/2 inch; 3/4 inch; 1 inch All sizes 98 inches	Base and each floor; provide mid-story guides
PE-RT	Insert and Compression	1 inch and smaller, 32 inches; 1-1/4 inches and larger, 4 feet	Base and each floor; provide mid-story guides
Polypropylene (PP)	Fusion Weld (socket, butt, saddle, electrofusion), Threaded (metal threads only), or Mechanical	1 inch and smaller, 32 inches; 1-1/4 inches and larger, 4 feet	Base and each floor; provide mid-story guides

For SI units: 1 inch = 25.4 mm, 1 foot = 304.8 mm

Notes:

- ¹ Support adjacent to joint, not to exceed 18 inches (457 mm).
- ² Brace not to exceed 40-foot (12,192 mm) intervals to prevent horizontal movement.
- ³ Support at each horizontal branch connection.
- ⁴ Hangers shall not be placed on the coupling.
- ⁵ Vertical water lines shall be permitted to be supported in accordance with recognized engineering principles with regard to expansions and contraction, where first approved by the Authority Having Jurisdiction.
- ⁶ For expansion joints, see Table 313.3.1.

Subp. 2. **Section 313.** Table 313.3.1 is added to read as follows:

TABLE 313.3.1

Schedule 40 PVC and ABS DWV and Storm Pipe Expansion Table

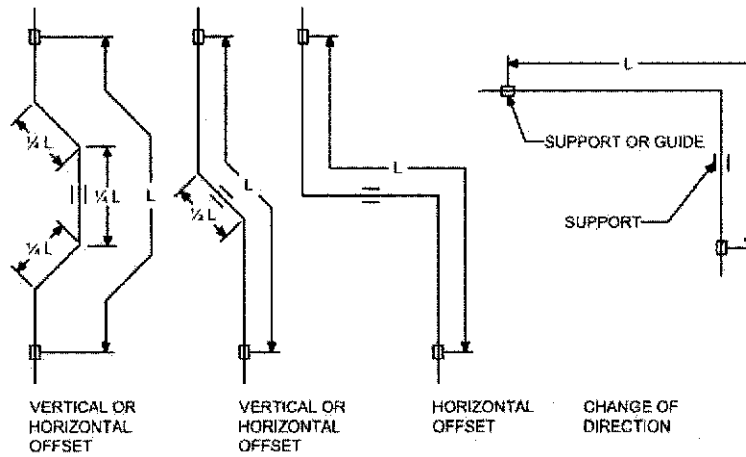
Inside the building thermal envelope

Length of Run (ft.)

Pipe Size	Expansion joint length (in.) = L		
	10 ¹	20 ¹	30
1.5"	20	28	34
2"	22	31	38
3"	27	38	46
4"	30	43	52
6"	37	52	63
8"	42	59	72
10"	47	66	80
12"	51	72	88

Outside the building thermal envelope

Pipe Size	Length of Run (ft.)		
	Expansion joint length (in.) = L		
	10 ¹	20 ¹	30
1.5"	26	36	44
2"	29	41	50
3"	35	49	60
4"	40	56	68
6"	48	68	83
8"	55	77	94
10"	61	86	105
12"	66	94	114



¹ Multiple offsets shall be allowed to provide expansion for each 30-foot developed length of run.

Subp. 3. **Section 313.7.** UPC section 313.7 is deleted in its entirety.

Statutory Authority: *MS s 326B.43; 326B.435*

History: *40 SR 71; 45 SR 1007*

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