

2009 International Plumbing Code

TABLE 308.5 HANGER SPACING

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10^b
Aluminum tubing	10	15
Brass pipe	10	10
Cast-iron pipe	5^a	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, 1 $\frac{1}{4}$ -inch diameter and smaller	6	10
Copper or copper-alloy tubing, 1 $\frac{1}{2}$ -inch diameter and larger	10	10
Cross-linked polyethylene (PEX) pipe	2.67 (32 inches)	10^b
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	2.67 (32 inches)	4
CPVC pipe or tubing, 1 inch and smaller	3	10^b
CPVC pipe or tubing, 1 $\frac{1}{4}$ inches and larger	4	10^b
Steel pipe	12	15
Lead pipe	Continuous	4
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	2.67 (32 inches)	4
Polypropylene (PP) pipe or tubing 1 inch and smaller	2.67 (32 inches)	10^b
Polypropylene (PP) pipe or tubing, 1 $\frac{1}{4}$ inches and larger	4	10^b
PVC pipe	4	10^b
Stainless steel drainage systems	10	10^b

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

a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.

b. Midstory guide for sizes 2 inches and smaller.

2012 Uniform Plumbing Code

TABLE 313.1 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 Tube and Pipe	Soldered or Brazed	1½ inches and smaller, 6 feet; 2 inches and larger, 10 feet	Each floor, not to exceed 10 feet ⁵
Steel and Brass Pipe for Water or DWV	Threaded or Welded	¼ inch and smaller, 10 feet; 1 inch and larger, 12 feet	Every other floor, not to exceed 25 feet ⁵
Steel, Brass, And Tinned Copper Pipe for Gas	Threaded or Welded	½ inch, 6 feet; ¾ inch and 1 inch, 8 feet; 1 ¼ inches and larger, 10 feet	½ inch, 6 feet; ¾ inch and 1 inch, 8 feet; 1 ¼ 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 ¼ inches and larger, 4 feet	Base and each floor; provide mid story guides ⁶
Lead	Wiped or Burned	Continuous Support	Not to exceed 4 feet
Copper	Mechanical	In accordance with standards acceptable to the Authority Having Jurisdiction	
Steel and Brass	Mechanical	In accordance with standards acceptable to the Authority Having Jurisdiction	
PEX	Cold Expansion, Insert and Compression	1 inch and smaller, 32 inches; 1 ¼ inches and larger, 4 feet	Base and each floor; provide mid story guides
PEX AL PEX	Metal Insert and Metal Compression	½ inch; ¾ inch; 1 inch - All sizes 98 inches	Base and each floor; provide mid story guides
PE AL PE	Metal Insert and Metal Compression	½ inch; ¾ inch; 1 inch - All sizes 98 inches	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 ¼ 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 join not to exceed 18 inches

² Brace not to exceed 40 feet (12,192 mm) intervals to prevent horizontal movement

³ Support at each horizontal branch connection

⁴ Hanger 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 expansion and contraction, where first approved by the Authority Having Jurisdiction

⁶ See the appropriate IAPMO Installation Standard for expansion and other special requirements