

TABLE 12-3
Support of Piping
[NFPA 54: Table 7.2.6.2]

Steel Pipe, Nominal Size of Pipe	Spacing of Supports	Nominal Size of Tubing Smooth Wall	Spacing of Supports
mm	m	mm	m
15	1.8	15	1.2
20 or 25	2.4	16 or 20	1.8
32 or larger – Horizontal	3.0	22 or 25	2.4
32 or larger – Vertical	Every Floor Level	25 or larger – Vertical	Every Floor Level

SI: 1mm = 0.04 in.; 1m = 3.3 ft.

54:7.2.2.2] Permission shall be obtained from the Authority Having Jurisdiction.

1210.2.3 Other than Dry Gas. Drips, sloping, protection from mechanical damage, and branch pipe connections, as provided for in Sections 1210.8.1 and 1210.10 shall be provided when other than dry gas is distributed and climactic conditions make such provisions necessary. [NFPA 54:7.2.3]

1210.2.4 Gas Piping to be Sloped. Piping for other than dry gas conditions shall be sloped not less than 6mm/4.6m (1/4 in./15 ft.) to prevent traps. [NFPA 54:7.2.4]

1210.2.4.1 Ceiling Locations. Gas piping shall be permitted to be installed in accessible spaces between a fixed ceiling and a dropped ceiling, whether or not such spaces are used as a plenum. Valves shall not be located in such spaces.

Exception: Appliance shutoff valves required by this code shall be permitted to be installed in accessible spaces containing vented gas utilization appliances.

1210.2.5 Prohibited Locations. Gas piping inside any building shall not be installed in or through a circulating air duct, clothes chute, gas vent, ventilating duct, dumbwaiter, or elevator shaft. [NFPA 54:7.2.5]

1210.2.6 Hangers, Supports, and Anchors.

(A) Piping shall be supported with metal pipe hooks, metal pipe straps, metal bands, metal brackets, metal hangers, or building structural components, suitable for the size of piping, of adequate strength and quality; and located at intervals so as to prevent or damp out excessive vibration. Piping shall be anchored to prevent undue strains on connected equipment and shall not be supported by other piping. Pipe hangers and supports shall conform to the requirements

of MSS SP-58, *Pipe Hangers and Supports Materials, Design and Manufacture* or equivalent International Standard(s) approved by the Authority Having Jurisdiction. [NFPA 54:7.2.6.1]

(B) Spacings of supports in gas-piping installations shall not exceed as shown in Table 12-3. Spacing of supports for CSST shall be in accordance with the CSST manufacturer's instruction. [NFPA 54:7.2.6.2]

(C) Supports, hangers, and anchors shall be installed so as not to interfere with the free expansion and contraction of the piping between anchors. All parts of the supporting equipment shall be designed and installed so they will not be disengaged by movement of the supported piping. [NFPA 54:7.2.6.3]

1210.2.7 Removal of Pipe. Where piping containing gas is to be removed, the line shall be first disconnected from sources of gas and then thoroughly purged with air, water, or inert gas before any cutting or welding is done (see Section 1213.6.). [NFPA 54:7.2.7]

1210.3 Concealed Piping in Buildings.

1210.3.1 General. Gas piping in concealed locations shall be installed in accordance with this section. [NFPA 54:7.3.1]

1210.3.2 Connections. Where gas piping is to be concealed; unions, tubing fittings, right and left couplings, bushings, swing joints, and compression couplings made by combinations of fittings shall not be used. Connections shall be of the following type [NFPA 54:7.3.2]:

- (1) Joining tubing by brazing, welding or flanges.
- (2) Fittings listed for use in concealed spaces that have been demonstrated to sustain, without leakage, any forces due to temperature expansion or contraction, vibration, or fatigue based on their geographic location, application, or operation.