313.11 Plastic piping penetrating framing members to within 25mm (1 in.) of the exposed framing shall be protected by steel nail plates not less than 1.3mm (0.05 in. [18 gauge]) in thickness. The steel nail plate shall extend along the framing member not less 40mm (1-1/2 in.) beyond the outside diameter of the pipe or tubing.

313.12 Sleeves.

313.12.1 Sleeves shall be provided to protect piping through concrete and masonry walls and concrete floors.

Exception: Sleeves shall not be required where openings are drilled or bored.

313.12.2 Piping through concrete or masonry walls shall not be subject to any load from building construction.

313.12.3 In exterior walls, annular space between sleeves and pipes shall be sealed and made water-tight, as approved by the Authority Having Jurisdiction. Any penetration through fire-resistive construction shall be in accordance with Section 313.9.

313.12.4 Any pipe sleeve through a firewall shall have the space around the pipe completely sealed with an approved fire-resistive material in accordance with other codes.

313.13 Any structural member that has been weakened or impaired by cutting, notching, or otherwise, shall be reinforced, repaired, or replaced so as to be left in a safe structural condition in accordance with the requirements of the applicable Building Codes or as required by the Authority Having Jurisdiction.

313.14 Ratproofing.

313.14.1 Strainer plates on drain inlets shall be designed and installed so that no opening is exceeding 15mm (0.5 in.) in the least dimension.

313.14.2 Meter boxes shall be constructed in such a manner that rats cannot enter a building by following the service pipes from the box into the building.

313.14.3 In or on buildings where openings have been made in walls, floors, or ceilings for the passage of pipes, such openings shall be closed and protected by the installation of approved metal collars securely fastened to the adjoining structure.

313.14.4 Tub waste openings in framed construction to crawl spaces at or below the first floor shall be protected by the installation of approved metal collars or metal screens securely fastened to the adjoining structure with no opening exceeding 15mm (0.5 in.) in the least dimension.

314.0 Hangers and Supports.

314.1 Suspended piping shall be supported at intervals not to exceed those shown in Table 3-3.

314.2 Piping shall be supported in such a manner as to maintain its alignment and prevent sagging.

314.3 Piping in the ground shall be laid on a firm bed for its entire length; where other support is otherwise provided, it shall be approved per Section 301.0 of this code.

314.4 Hangers and anchors shall be of sufficient strength to support the weight of the pipe and its contents. Piping shall be isolated from incompatible materials.

314.5 Piping, fixtures, appliances, and appurtenances shall be adequately supported in accordance with this code, the manufacturer's installation instructions, and as required by the Authority Having Jurisdiction.

314.6 Hanger rod sizes shall be no smaller than those shown in Table 3-2.

TABLE 3-2
Hanger Rod Sizes

Pipe and Tube Size mm	Rod Size mm
15 - 100	10
125 - 200	15
250 - 300	16

SI: 1mm = 0.04 in.

314.7 Gas piping shall be supported by metal straps or hooks at intervals not to exceed those shown in Table 3-3.

314.8 Piping for manifold systems shall be supported in accordance with the manufacturer's instructions. Hot and cold water distribution piping shall maintain separation at all points within the system.

315.0 Trenching, Excavation, and Backfill.

315.1 Trenches deeper than the footing of any building or structure and paralleling the same shall be not less than 0.8 radian (45 degrees) therefrom, or as approved per Section 301.0 of this code.

315.2 Tunneling and driving shall be permitted to be done in yards, courts, or driveways of any building site. Where sufficient depth is available to permit, tunnels shall be permitted to be used between open-cut trenches. Tunnels shall have a clear height of 60cm (2 ft.) above the pipe and shall be limited in length to 1/2 the depth of the trench, with a maximum length of 2.4m (8 ft.). When pipes are driven, the drive pipe shall be not less than one size