EMBEDDED ITEMS

Wall pipes are water tight conveyances through the walls of buildings. Wall pipes are generally placed in forms and concrete walls are poured around them. Later, process piping connections are made to the wall pipe ends.

Wall pipes are usually of the following possible configurations:
WALL COLLARS

All wall pipe configurations employ wall collars which may be of cast ductile iron or mild steel. The wall collar’s primary function is to control seepage. It may also provide varying degrees of thrust restraint depending upon application.

Currently, no ANSI/AWWA standards exist for wall pipe and sleeves. They are routinely fabricated from component material; pipe, threaded flanges, cast or thread-on mechanical joint Bells, and welded wall collars. They may also be static cast to size with integral wall collars, however they are restricted in size and availability. Fabrication provides the most versatile and consistent method of producing wall pipe and sleeves in a timely manner.

Fabricated wall pipe end connections conform to the same standards of the fabricated process piping being connected to it, ANSI/AWWA C115/A21.15 (re: Section 3). However, the critical positioning of wall pipe requires the overall length tolerance be revised to +0/-.125. It should be further noted that although flanged ends must be aligned as per the standard above, it is unnecessary to align bolt holes on mechanical joint ends. All embedded bolt holes must be tapped for studs. Tapped holes may be provided between standard cast holes where required.

WELDING

Wall collars may be attached to fabricated pipe by means of continuous automatic arc or stick welding. All other fabrication should be completed prior to the welding process. Pipe and components must be free of oil, grease and rust on surfaces to be welded. Annealing oxide and thin pipe coatings need not be removed prior to welding.

Field welding is not recommended (re: Section 6 Restrained Joints).