

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** The use of a waste connector and sealing gasket is now permitted as an acceptable means to connect floor outlet plumbing fixtures, allowing for water closet installations that are provided with a gasketed waste tube outlet connection.

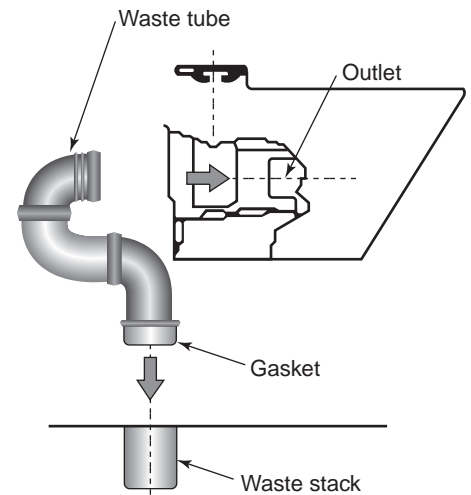
**2012 CODE: 405.4 Floor and Wall Drainage Connections.** Connections between the drain and floor outlet plumbing fixtures shall be made with a floor flange or a waste connector and sealing gasket. The waste connector and sealing gasket joint shall comply with the joint tightness test of ASME A112.4.3 and shall be installed in accordance with the manufacturer's installation instructions. The flange shall be attached to the drain and anchored to the structure. Connections between the drain and wall-hung water closets shall be made with an *approved* extension nipple or horn adaptor. The water closet shall be bolted to the hanger with corrosion-resistant bolts or screws. Joints shall be sealed with an *approved* elastomeric gasket, flange-to-fixture connection complying with ASME A112.4.3 or an *approved* setting compound.

**CHANGE SIGNIFICANCE:** Historically, a “flanged” outlet connection for floor-mounted water closets has been the only acceptable method for making the connection between the drain and a floor outlet plumbing fixture. Connections of this type are typical of water closets designed for the North American market. The recognition of a waste connector and sealing gasket allows for another acceptable type of water closet connection method that will make more water closet products available to designers and installers. The new allowance recognizes this commonly used international method of connection. The connection arrangement consists of a waste tube connector on the water closet that is inserted into an elastomeric gasket. The waste tube and gasket are then inserted into the drain pipe opening at the floor line, and the gasket provides the seal between the water closet's waste tube and the drain pipe. The water closet fixture is then anchored directly to the floor using mounting brackets or fasteners. These anchors are often concealed to allow for a smooth, sanitary exterior interface to the floor.

This design is used almost exclusively in Europe and other locations worldwide, and offers many advantages over wax-ring flange seals. ASME A112.4.3, a standard already referenced in the IPC and the International Residential Code (IRC), requires that the connection be leak-tight to pressures up to 10 psi. Such water closet designs are available in a wide range of rough-in dimensions.

## 405.4

### Floor and Wall Drainage Connections



Gasketed waste tube connection for water closet