



BUILDING OFFICIAL DETERMINATION
No. 2

Issue: Do bollards protecting a mechanical appliance in a garage have to be filled with concrete? Can a threaded flange be used as a substitute to a concrete footing?

Rule: 2012 IRC M1307.3.1 Appliances shall not be installed in a location subject to vehicle damage except where protected by an approved barrier. The IRC and the IMC require permanent protection for mechanical appliances subject to damage from vehicles.

Application: The codes list several options that comply with the "permanent barrier" requirement. Use of a concrete wheel bumper, a three-inch (3") diameter schedule 40 steel bollard, and a two-inch (2") diameter schedule 40 steel bollard filled with concrete are specifically mentioned as approved barriers. Both the three-inch and two-inch diameter bollards must be set in a minimum of a 12"x12"x12" concrete footing.

Determination: A three-inch diameter schedule 40 steel bollard does not have to be filled with concrete, but a two-inch (2") diameter steel schedule 40 bollard does. Both types of bollards must be set in a minimum of a 12"x12"x12" concrete footing; use of a threaded flange is not an approved substitute.



David Wardell, Building Official

3 January 2017

Date