INFORMAL CODE INTERPRETATION

NC Department of Insurance Office of the State Fire Marshal - Engineering Division 1202 Mail Service Center, Raleigh, NC 27699-1202 919-661-5880

Sill Plate Anchor Bolt Hole Size

Code: 2012 Residential Code Section: R403.1.6

Date: July 2, 2012

Question:

How large can the hole in the sill plate be for the 1/2" anchor bolt?

Answer:

The code does not address this directly. It is assumed that the hole will not exceed the capabilities of the washer and nut to withstand the same tensile strength as the 1/2" anchor bolt. Also the compression of the wood fiber around the hole must also be considered. With these factors considered the hole should not exceed the diameter of the anchor bolt plus 2 times the washer thickness. The hole may be elongated in one direction for alignment with the anchor bolt. Half of the diameter of the elongated hole can not be more than two times the thickness of the washer from the outside diameter of the anchor bolt.