NC Department of Insurance Office of the State Fire Marshal - Engineering Division 1202 Mail Service Center, Raleigh, NC 27699-1202 919-647-0000

Garage Fire Separation Opening Protection

Code: 2018 Residential Code Date: March 21, 2019

Section: R302.5.1

Question:

A garage is required to be separated from the dwelling and its attic area by gypsum board (taped or blocked) applied to the garage side. What types of openings are permitted in the gypsum board membrane and what level of protection is required?

Answer:

Doors, including attic access, are required to be either 1-3/8-inch solid core wood, 1-3/8 honeycomb core steel, or 20-minute fire-resistance rated. A standard frame and hardware (dead bolt, peep hole, etc.) are acceptable. Door glazing must be either wire glass in a metal frame or 20-minute fire-resistance rated. Ducts located in the garage must be 26 gage steel and have no openings into the garage. Other penetrations (electrical, plumbing, etc.) must be fireblocked as required for top plates. Section R302.5.1 prohibits openings from the garage directly into a sleeping room.

Key Words:

bedroom, bonus room, habitable room