

Division Opinion

Inquiry Number: 2015-01

Subject: Ducts installed in floors over unconditioned spaces

Code: 2015 Minnesota Residential Code
Sections R402.2.7 and R403.2.2

Approved By: Scott McLellan, State Building Official

Issue Date: May 14, 2015

Question:

Can ducts installed in a floor over unconditioned space be considered to be within the conditioned space of the building envelope? If so, are the ducts required to be tested for leakage in accordance with section R403.2.2?

Answer:

Yes. These ducts can be considered to be within the conditioned space of the building envelope but do not have to be tested for air tightness provided the following items are met:

1. Ducts, including the duct boot where they intersect the floor above must be sealed in accordance with provisions of section R403.2.2 using materials listed in the Minnesota Mechanical Code section 603.9.
2. The insulation in the floor assembly must not be compressed, must meet the required "R" value listed in Table R402.1.1, and be installed completely below the duct.
3. If the duct is also used to provide cooled conditioned air to the room or space above, it shall be insulated to a minimum of an R-8 with a vapor retarder installed in accordance with section 604.11 of the Minnesota Mechanical Code.