STATE BUILDING CODE INTERPRETATION NO. 1-9-02

April 9, 2002

The following is offered in response to your letter to me in which you request a formal interpretation of sections 602.7 (item 4) and 602.7.1 of the 1995 CABO One and Two Family Dwelling Code portion of the 1999 State Building Code.

Question: Is mineral wool insulation (AKA rock wool) an acceptable material for firestopping at floor openings, including around pipe, wire or duct penetrations?

Answer: Section 602.7 (item 4) of the 1995 CABO One and Two Family Dwelling Code portion of the 1999 State Building Code requires that openings around vents, pipes, ducts, chimneys and fireplaces be firestopped at ceiling and floor level, with noncombustible materials. Research I have performed into various mineral wool products indicates that most of them have passed the ASTM E-136 test procedure for defining noncombustibility of elementary materials, so such materials would be code compliant for the purposes of section 602.7. The issue to be addressed in the field is how the material is installed, so that the code official can be certain that it will remain in place during fire conditions for at least as long as the item that it surrounds stays in place.

For other firestopping locations the code, at section 602.7.1, specifies prescriptive materials deemed adequate for firestopping purposes. Since mineral wool is not one of the materials mentioned in the code at this section, its use is not recognized for firestopping purposes other than to fill the annular space around penetrations mentioned above and as indicated in section 602.7, item 4.

While section 108.1 of the referenced code allows the code official to accept alternative materials to those which the code prescribes, it is incumbent on the code official to ensure that such alternative materials are at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire-resistance, durability and safety. The code official would have to be satisfied that mineral wool was the equivalent of the prescribed materials prior to allowing its use. Section 108.3 of the referenced code goes on to mention testing requirements should such tests be needed to verify equivalency.