



BROWARD COUNTY BOARD OF RULES AND APPEALS

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FBC 6th Edition (2017) FORMAL INTERPRETATION (# 1)

DATE: October 12, 2017

TO: All Building Officials

FROM: James DiPietro, Administrative Director

SUBJECT: Mechanical Code 602.2.1 Materials Exposed within Plenums.

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This portion of the Interpretation concerns the residential portion of R-2 occupancies.

At its meeting of October 12, 2017, the Broward County Board of Rules and Appeals approved the following Formal Interpretation.

Section 602.2.1 of the 6th Edition (2017) Florida Mechanical Code requires materials exposed within plenums to be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E 84-2013A.

CPVC Flowguard Gold Pipe, SDR11 was tested by Southwest Research Institute using a modified ASTM E-84 test methodology in the following sizes.

0.5 inch (nominal) water filled CPVC pipe: SwRI Project No. 01.04017.01.301b [1]

2.0 inch (nominal) water filled CPVC Pipe: SwRI Project No. 01.04017.01.301c [1]

0.5 inch (nominal) empty CPVC Pipe: SwRI Project No. 01.10083.01.158e

0.75 inch (nominal) empty CPVC Pipe: SwRI Project No. 01.10083.01.158f [1]

All four Modified ASTM E-84 Tests showed flame spread indices of not more than 25 and smoke-developed indices of not more than 50.

By accepting these four Modified ASTM-E 84 Tests, the Broward County Board of Rules and Appeals approved the use of CPVC Flowguard Gold Pipe, SDR11 installed in Mechanical Closets and Mechanical Equipment/Appliance Rooms used as plenums in the residential portion of R-2 Occupancies. Approval is limited to 0.5 inch (nominal) thru 2 inch (nominal) water filled CPVC and 0.5 inch (nominal) and 0.75 inch (nominal) empty CPVC pipe.

At its meeting of September 11, 2008 the above Interpretation was expanded to include the following language which applies to both commercial and residential occupancies:

CPVC piping may be accepted for use in plenums in instances where the manufacturers have tested their product with an approved testing agency to an acceptable alternate method to ASTM E-84 – “Standard Test Method for Surface Burning Characteristics of Building Materials”. Evidence must be submitted to the Authority Having Jurisdiction (AHJ) that the piping has a flame spread index of not more than 25 and a smoke developed index of not more than 50 when tested in general accordance with ASTM E-84, 2009 Edition, Pipe can be tested empty or water filled and in various pipe diameters.

EFFECTIVE DATE: October 20, 2005

RE-ISSUED: October 12, 2017

EFFECTIVE DATE: January 1, 2018

*****PLEASE POST AT YOUR PERMIT COUNTER*****

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