



Florida Fire Marshals And Inspectors Association

Informal Interpretation

Date: November 10, 2009

NFPA Document Number: Chapter 3 – NFPA 101, Chapter 7 – NFPA 5000 / 220, Chapter 7 – FBC

Edition:

Paragraph Reference:

If this involves an actual situation, explain briefly:

In accordance with the Florida Fire Prevention Code (NFPA-1 / 101), both limited-combustible and non-combustible materials are permitted to be used in Type I, II and III construction. The definitions of limited-combustible and non-combustible are found in sections 3.3.160.2 and 3.3.160.3 of NFPA 101. The definitions of Type I, II and III construction are found in sections 7.2.3.1 and 7.2.4.1 of NFPA 5000 (otherwise known as NFPA 220).

Limited-combustible materials are defined as those materials “that, in the form in which it is used, has a potential heat value not exceeding 3500 btu/lb, where tested in accordance with NFPA 259”,“and includes either of the following: (1) ... and (2) ...”

Examples of limited-combustible materials include paper-faced gypsum board having a potential heat value of 760 btu/lb, rock wool batting with paper enclosure having a potential heat value of 1050 btu/lb and roof insulation board having a potential heat value of 3380 btu/lb.

An exception to the maximum allowable potential heat value is made in the FFPC for fire-retardant-treated wood. Section 7.2.3.2.9.2 of NFPA 5000 states “fire-retardant-treated wood shall be permitted for roof construction” in Type I and II buildings. Fire-retardant-treated wood has a potential heat value of 7050 btu/lb.

Reason for the Question: The Florida Building Code (FBC) does not reference “limited-combustible materials” anywhere in the code. Section 703.4 of the FBC requires that materials used in Type I, II and III construction be tested in accordance with, and pass, the ASTM E-136 vertical furnace test. Because limited-combustible materials such as gypsum board, rock wool batting and roof insulation board do not pass the ASTM E-136 test, the FBC can be interpreted to exclude these materials for use in Type I, II and III construction.

Question *(should be worded so that it can be answered with either "Yes" or "No"):*

Does the State of Florida permit the use of limited-combustible materials in Type I, II and III construction in accordance with the provisions of section 3.3.160.2 and 8.2.1.2 of the Florida Fire Prevention Code?



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Informal Interpretation (Continued)

Answer:

NO.

The question, "Does the STATE OF FLORIDA permit the use of limited-combustible materials in Type I, II and III construction in accordance with the provision of section 3.3.160.2 and 8.2.2 of the Florida Fire Prevention code?" is a very broad question and is effected by local amendments to the Florida Fire Prevention Code (FFPC). If the question is "Does the FFPC permit the use of limited-combustible materials, the answer is yes. However, if the Florida Building Code (FBC) does not permit limited-combustibles there appears to be a conflict between the FFPC and the FBC. FS 633.01(5) states that potential conflicts shall be resolved through coordination and cooperation of the State Fire Marshal and the Florida Building Commission as provided by this chapter and part IV of chapter 553. Until the conflict is resolved, the most stringent code would apply.

Committee Answer Submitted by,

Bart Wright, Chair
Informal Fire Code Interpretation Committee