Fire Safety & Foam Sheathing Use

The Foam Sheathing Committee of the American Chemistry Council (FSC) focuses on using reliable science in support of sound design and installation of foam sheathing. Member companies include: Atlas Roofing, Dow, GAF, Hunter Panels, Johns Manville, Kingspan Insulation, Owens Corning, and RMAX.

The foam sheathing industry has a long-standing history of advocating for the safe use of foam plastics through U.S. model codes and standards, in particular IBC Chapter 26 and NFPA 285. These provisions together with other fire-safety requirements of the IBC have served to provide a sound basis for reliable use and safe performance of foam sheathing.

Recent Widdely Reported Exterior Fires Support Value of IBC & NFPA 285 Compliant Design & Installation

A FRESH LOOK AT FIRE SAFETY

In view of the Grenfell, Torch Tower, and other international fire events, it is important for the building safety community to take a fresh look at the U.S. codes and standards environment compared to those abroad. While these events have raised interest in the use of combustible materials on exterior walls of buildings, U.S. codes and standards for safe use of foam plastics are particularly robust and have performed well due to an effective combination of building and fire code requirements.

30 Years of Experience has Demonstrated that NFPA 285 is Effective

Current Code Requirements are Effective

ENGINEERING EVALUATIONS ARE A CRITICAL COMPONENT

Successful experience in the U.S., as described above, has included appropriate use of the NFPA 285 assembly test data directly and together with small-scale tests and engineering analysis, to evaluate safe substitutions of materials through engineering evaluations by fire engineering experts. Engineering evaluations are necessary because:

- They provide a basis for material substitutions that do not add risk to the tested NFPA 285 assemblies.
- It is impractical to separately test the thousands of potential combinations of materials each as a separate assembly test variation.

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COMPLIANCE AND ENFORCEMENT FOCUS

When the reported international fire events are viewed in the context of the effectiveness and reliability of U.S. codes, which govern the use of foam plastics in exterior walls, clearly a crucial focus needs to be on compliance and enforcement. This is a very important and appropriate response. Refer to key resources listed below.

References

To promote compliance and enforcement, FSC has developed a resource for use of foam sheathing materials: building envelopes at www.continuousinsulation.org and a list of NFPA 285 compliant assemblies by FSC member manufacturers is available at www.drjengineering.org/system/files/dj/ter/node/56/dj120204foamintypeivconstruction.pdf

Resources

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- References