



## Flammability and Flooring

There is some confusion in the construction industry regarding flammability requirements and flooring products. Many people are familiar with ASTM E-84, "Standard Test Method for Surface Burning Characteristics of Building Materials." This test utilizes a Steiner tunnel for testing, and gives a resultant flame spread index (FSI) and a smoke-developed index.

The very first paragraph of the standard lists the limitations. (Emphasis added.)

*This fire-test-response standard for the comparative surface burning behavior of building materials **is applicable to exposed surfaces such as walls and ceilings**. The test is conducted with the specimen in the ceiling position with the surface to be evaluated exposed face down to the ignition source.*

Resilient floor coverings, such as vinyl sheet, linoleum, wood, recycled crumb rubber and/or virgin rubber, fall into a different category from wall and ceiling coverings, and as such are not subject to testing by ASTM E-84.

Floor coverings sold in the United States must meet the requirements of the National Fire Protection Association (NFPA) 101 Life Safety Code. Those requirements state that floor finish of traditional type, such as wood flooring and resilient floor coverings have no testing requirements, whatsoever. (Section 10.2.2.2) Carpet and carpet-like interior floor finishes are covered in section 10.2.7.1, and are required to pass the ASTM D2859 test, which is titled "Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials" also known as "the Pill Test" because it utilizes a Methenamine pill as the ignition source for the test.

Several other major standards require the Pill test, such as the following.

- The United States Consumer Product Safety Commission (CPSC) publication "16 C.F.R. Parts 1630 and 1631".
- The International Building Code, section 804.4.1 states that "In all areas, floor covering materials shall comply with the Department of Commerce (DOC) FF-1 "pill test".
- Health Canada's Hazardous Products Act, Test Method for Evaluating Carpets and Textile Floor Coverings for Flame Resistance, references Method 27.6, of Canadian General Standards Board (CGSB) Standard 4-GP-2, Flame Resistance - Methenamine Tablet Test.

Because of the multitude of standards which require the Methenamine Pill flammability testing, Ecore International has tested our resilient floor covering to meet those standards.

A handwritten signature in black ink that reads "Wanda M. Welch".

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Wanda M Welch  
Research & Development Manager