

NER – 420 and Koffel Letters

1. The NER-420 report of May 1, 2003 is the ICC (International Code Council) Evaluation Service Legacy Report on the Surface Burning Characteristics of Icynene. This paper is reporting the results of the test ASTM E 84. In that test Icynene is shown to have a flame-spread index of less than 25 and a smoke development index of less than 450 when installed at a maximum thickness of 5.5 inches.
The ASTM E 84 test is conducted in a vessel that is 5.5 inches deep and by the definition of the test cannot test for thicknesses beyond 5.5 inches. This report is posted on www.icc-es.org.
2. The tests and evidence for this report were conducted by:
 - A. Warnock Hersey for ASTM E 84
 - B. **Omega Point Laboratories** for SwRI Procedure 99-02
 - C. Koffel Associates for evaluation of SwRI Procedure 99-02 test results.
 - D. Inchcape Testing Services for ASTM E 119
3. The Koffel Associates letter of Aug 18, 2003 reports on the test results for 8” of Icynene
 - A. This letter recounts the testing by **Omega Point Laboratories** for 8” of Icynene in the SwRI Procedure 99-02.
 - B. SwRI Procedure 99-02 has been used and accepted by the National Evaluation Service as a means to demonstrate equivalency with respect to foam plastics in attics and crawl spaces.
 - C. The conclusion of that Koffel report is that 8 inches of Icynene may be installed to the underside of a roof or crawl space.
4. The Koffel Associates letter of Oct 18, 2004 reports on the test results for 11” of Icynene
 - A. This letter recounts the testing by **Omega Point Laboratories** for 11” of Icynene in the SwRI Procedure 99-02.
 - B. SwRI Procedure 99-02 has been used and accepted by the National Evaluation Service as a means to demonstrate equivalency with respect to foam plastics in attics and crawl spaces.
 - C. The conclusion of that Koffel report is that 11 inches of Icynene may be installed to the underside of a roof or crawl space.

The purpose of these tests is to determine if the product has a flame-spread index (FSI) of less than 25 and a smoke development index (SDI) of less than 450. The code will then allow the use of the product in attic and crawl spaces provided that there be a 15 minute approved thermal barrier of .5 inches of gypsum wallboard or equivalent and that conditions be met as outlined in the NER-420 report for assemblies 1 through 5.

Therefore, based upon these tests by and for the ICC Icynene may be sprayed in those attic and crawl spaces to a depth of 11 inches and will be in compliance with the Code.