



Figure 1

TEST RESULTS

The test results, calculated on the basis of observed flame propagation and the integrated area under the recorded smoke density curve, are presented below. The Flame Spread Index obtained in E84 is rounded to the nearest number divisible by five. Smoke Developed Indices are rounded to the nearest number divisible by five unless the Index is greater than 200. In that case, the Smoke Developed Index is rounded to the nearest 50 points. The flame spread and smoke development data are presented graphically at the end of this report.

| Test Specimen | Flame Spread Index | Smoke Developed Index |
|---|--------------------|-----------------------|
| Fiber-Reinforced Cement Board, Grade II | 0 | 0 |
| Red Oak Flooring | 100 | 100 |
| 5-inch Polystyrene Foam Crown Molding | 5 | 85 |

OBSERVATIONS

Specimen ignition over the burners occurred at 0.25 minute. Surface flame spread was observed to a maximum distance of 0.71 feet beyond the zero point at 0.92 minute. The maximum temperature recorded during the test was 513°F.

CLASSIFICATION

The Flame Spread Index and Smoke Developed Index values obtained by ASTM E84 tests are frequently used by code officials and regulatory agencies in the acceptance of interior finish materials for various applications. The most widely accepted classification system is described in the National Fire Protection Association publication NFPA 101 *Life Safety Code*, where:

| | | |
|---------|-----------------------------|-------------------------------|
| Class A | 0 – 25 Flame Spread Index | 0 – 450 Smoke Developed Index |
| Class B | 26 – 75 Flame Spread Index | 0 – 450 Smoke Developed Index |
| Class C | 76 – 200 Flame Spread Index | 0 – 450 Smoke Developed Index |

Class A, B, and C correspond to Type I, II, and III respectively in other codes. They do not preclude a material being otherwise classified by the authority of jurisdiction.