



THE FUNCTION OF FIRE RETARDANT PROTECTION:

The function of fire retardant coatings is to protect the surfaces to which they are applied against the ravages of fire. When applied to combustible surfaces, fire retardant coatings sharply limit the flame spread, fuel contributed and smoke development that would otherwise occur if surfaces underwent fire exposure without a protective coating.

ASTM E-84:

This ASTM E-84 test procedure evaluates the hazard characteristics of a finished surface exposed to fire — i.e., spread, fuel contributed and smoke developed. To evaluate the fire hazard classification of a particular finished surface, it is compared in performance to two established bench marks — cement asbestos board typically regarded as totally incombustible and red oak regarded as a typical combustible surface.

Cement asbestos board is calibrated as having the following characteristics: flame spread — 0, fuel contributed — 0, smoke developed — 0.

Red oak is calibrated as having the following characteristics: flame spread — 100, fuel contributed — 100, smoke developed — 100.

In the ASTM E-84 test, the finished surface of the assembly to be evaluated is placed at the top of a tunnel, 25 feet long, 17-1/2 feet wide and 12 feet high.

A gas flame is introduced into this tunnel so that the flame impinges on the surface about 5-1/2 feet from one end of the tunnel. In a 10 minute fire exposure, wherein

To provide a means of determining the surface burning characteristics of combustible materials, the American Society of Testing Materials developed a test standard to evaluate the fire hazard characteristics of typical construction products. This test standard, known today as ASTM E-84, is described as the “Standard Test Method for Surface Burning Characteristics of Building Materials”.

temperatures in the tunnel rise to approximately 1200°F., the flame spread across the specimen is measured along the remaining 19-1/2 foot distance in the tunnel. The test is of 10 minutes duration.

The flame spread classification is measured by an engineering formula after determination of the number of feet of flame spread travel within the 10 minute test duration.

The fuel contributed is measured by the supplementary BTU build-up in the tunnel over and above the BTU input by the fire.

The smoke density is measured by a photo-electric cell located in the vent pipe exhaust.

The fire hazard classification of the treated surface is then listed in accordance with the results obtained. These interior finish classifications generally carry an alphabetical listing which pertains to the degree of “incombustibility” or protection offered by the finished surfaces.

Most building and insurance codes rate construction in accordance with the following classifications:

FIRE HAZARD CLASSIFICATION:

Class	Flame Spread	Smoke Development
Class A	0-25	0-50
Class B	26-75	50-125
Class C	76-200	126-200

It is important to consider coverage rates as well as flame spread ratings when evaluating fire retardant coatings. A low flame spread rating only indicates part of a coatings’ thermal efficiency. The most thermally efficient fire retardant coatings are those with both high coverage rates and the low flame spread ratings.

Albi fire retardant coatings have been extensively tested under the ASTM E-84 test method and are listed by Underwriters’ Laboratories, Inc. as Class A Fire Retardant Coatings.

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WARRANTY

LIMITED WARRANTY/LIMITATION OF LIABILITY: Seller warrants that its products will meet the specifications which it sets for them. Seller’s responsibility under this warranty will be limited solely to replacing the products which prove defective, provided that Buyer gives Seller prompt notice in writing of said defect and satisfactory proof thereof. Products may be returned to Seller only after written authorization has been obtained from Seller. The foregoing warranty is in lieu of all other warranties, whether oral, written, express, implied or statutory. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WILL NOT APPLY. Technical or other advice is furnished by us solely as an accommodation and shall not increase the scope of our responsibilities or liability. Seller’s warranty obligations and Buyer’s remedies hereunder are solely and exclusively as stated herein: In no event will Seller be liable either for the labor and other associated costs incurred in replacing the product, including, but not limited to, its removal and application, or for other incidental or consequential damages.