

FLAMMABILITY RATING



Calico Solid Surface Products

ASTM E-84 Flammability Ratings

Purpose

While only a small percentage of residential construction is currently regulated, fire codes and/or specifications are very important to the commercial building market. The top rating given to Calico Solid Surfaces products is, therefore, most significant.

In light of this ever-increasing emphasis on fire performance, the purpose of this bulletin is to summarize the test method used to measure the flammability of STONIA®, to report results obtained, and to compare the data with other selected building materials.

Test Result

Flammability	All Colors
Flame Spread	<15
Smoke Developed	<15
Class	I

Sample Preparation and Conditioning:

Three (3) panels (1/2" thick measuring 2' X 8') were fitted end-to-end to form a 24" X 24" sample. Sample required no further preparation as it was self-supporting. Sample was conditioned at 73 °F (plus minus 5 °F) and 50% RH

Test procedure:

Natural gas was used to thoroughly pre-heat tunnel. Once the brick temperature was sensed to be 105 °F (plus or minus 5 °F) as prescribed by a floor thermocouple, the sample was inserted into the tunnel and the test conducted in accordance with the standard ASTM E-84 procedures. Proper operation of the tunnel was verified by performing a 10 minute test with an inorganic board on the day of the test.

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Fire ratings used by regulatory code agencies relate primarily to the performance of materials when used in high-density building areas such as schools, healthcare facilities for the elderly, hospitals, high-rise apartments, motels, hotels, etc. The flame spread is the primary criterion as tabulated below.

Flame Smoke

Spread Range	Developed	Rating
0–25	450	Class I
26–75	450	Class II
76–225	450	Class III

Reference

ITEM	FLAME SPREAD	SMOKE DEVELOPED
Wallboard, Gypsum	15	0
Wood Particle Board	155	200
Fiberglass Reinforced Panels	70	500+
Laminates, Plastic	70	35
Wall Covering, Interior	25	15
Hardboard	150	400