CRANE
Composites

information
6549

FIRE RATING INFORMATION SHEET

FIRE RATING CLASSIFICATION

ASTM E-84: Standard test method for surface burning characteristics of building materials. This test is applicable to exposed surfaces for ceilings and walls. Flame spread and smoke density developed are reported.

FLAME SPREAD RATING

Flame spread is determined from the relative burning behavior of the material by observing the flame spread along the specimen. Asbestos cement board and red oak flooring have been arbitrarily given 0 and 100 flame spread ratings, respectively.

SMOKE DEVELOPMENT RATINGS

Smoke development is determined by measuring the amount of smoke density during this test procedure. Asbestos cement and red oak flooring have been arbitrarily given 0 and 100 smoke development ratings, respectively. The International building codes (IBC) requires wall and ceiling finishes to fall within the following categories:

CLASS A (I) Flame Spread of 25 or Less Smoke Development of 450 or Less	**CLASS B (II)** Flame Spread between 26 and 75 Smoke Development of 450 or Less	**CLASS C (III)** Flame Spread between 75 and 200 Smoke Development of 450 or Less
GLASBORD PRODUCS: FXE, FX, FXR, FSFM, FSI, SAN		**GLASBORD PRODUCS:** PIF, FTSTF, PSIF, CGI, RE, REI, PSM, PWI, LPCE
DESIGNS PRODUCTS: IPSA		**DESIGNS PRODUCTS:** IPSC
VARIETEX PRODUCS: STA, SSTA, LBALN		**VARIETEX PRODUCS:** STC, SSTC, LBCLN, FTBB, SMXGJ, MXGJ
SEQUENTIA PRODUCTS: FRFRJ, FX, FSI		**SEQUENTIA PRODUCTS:** FTSTF, FTSTJ, FSQF, CPPF

These ratings are for wall finishes which are to be installed over a substrate, such as gypsum board, not to be used in lieu of gypsum board. It is also recommended that Class A finishes be used in areas that will be used as a means of exit in case of a fire. In all cases, local codes should apply

FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect hazards presented by Crane Composites products or any other material under actual fire conditions. These ratings are determined by small-scale tests conducted by Underwriters Laboratories and other independent testing facilities using the American Society for Testing and Materials E-84 test standard (commonly referred to as the “Tunnel Test”).
Crane Composites PROVIDES THESE RATINGS FOR MATERIAL COMPARISON PURPOSES ONLY. Like other organic building materials (e.g. wood), panels made of fiberglass reinforced plastic will burn. When ignited, frp may produce dense smoke very rapidly. All smoke is toxic. Fire safety requires proper design of facilities and fire suppression systems, as well as precautions during construction and occupancy. Local codes, insurance requirements and any special needs of the product user will determine the correct fire-rated interior finish and fire suppression system necessary for a specific installation.

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FACTORY MUTUAL APPROVAL

Fire-X Glasbord (FXE and FSFM) is the only fiberglass reinforced interior wall and ceiling panel that is accepted under Factory Mutual Research approved FRP, Plastic Interior Finish Materials when installed in accordance with Factory Mutual Research Approval Standard 4880. This information is available at www.approvalguide.com and www.FRP.com/FMApproved.pdf

HOURLY FIRE RATINGS

ASTM E-119 fire test for construction material systems is for “assemblies” or “systems”. In this test a complete wall (studs with gypsum board on both sides) is tested. Painted gypsum board is the most common wherein all joints have been taped and sealed. This meets the one-hour fire rating. By itself, frp does not meet this and must be used over a substrate.

Another part of the E-119 test pertains to the thermal barriers. This is relevant only when foam insulation is being used. Since most foams are quite flammable, the material covering the foam is to be a thermal barrier. If a fire does occur, the thermal barrier is required to keep the foam insulation from increasing in temperature for 15 minutes. No frp wall and ceiling panel meets this requirement. If the ASTM E-119 rating is required, a gypsum board, galvanized steel, or aluminum substrate has to be used between the frp and the foam.

TOXICITY

U.S. Testing Company tested Fire-X Glasbord for toxicity per the NYC Modified Pittsburgh Protocol and determined that Fire-X Glasbord smoke is no more toxic than smoke from red oak.

A global leading provider of resilient wall and ceiling coverings. Kemlite® was established in 1954 and the company changed names to Crane Composites in 2007. Crane Composites is headquartered in Channahon, IL and all our products are manufactured in the United States. We work with hundreds of distributors, ensuring our products are easily accessible and readily available to our customers.