

Microsphere Syntactic Foam

Fire Shield LFST - 42E

Technical Data Sheet

Premium Performance

FireShield - LFST is a low-density syntactic materials specifically designed to meet the flame, smoke and toxicity requirements of the construction industry. Produced from the most advanced resin and hollow glass microspheres available, this flame retardant material provides all the strength of traditional building materials at a fraction of the weight.

Industry Applications

FireShield - LFST is ideally suited for civil infrastructure applications where adherence to fire code safety codes are mandatory. As a light weight alternative to traditional building materials such as concrete or masonry, FireShield - LFST provides the additional benefit of radio frequency wave transparency.

Product Availability

FireShield - LFST syntactic materials are available in sheet form and may be readily used for customer installation. Standard sheet sizes range from: 0.5" x 24" x 60" (13 x 610 x 1,524 mm) up to 2" x 24" x 60" (51 x 610 x 1,524 mm). Custom sizes and coatings are available upon request.

	Density	Compressive		Tensile Strength	Thermal Conductivity	Time to Ignition	Avg Heat Release	Heat of Combustion	Smoke Release Rates	Critical Heat Flux
		Strength	Modulus							
	lb/ft ³	psi	feet	psi	BTU/hr ft F		@ 180 s			
Test Method	ASTM D3575	ASTM D695	ASTM D695	ASTM D638	ASTM D5930	ASTM E1354-10	ASTM E1354-10	ASTM E1354-10	ASTM E1354-10	ASTM E1354-10
Spec Requirement	35 min	3,900 min	179 min	3,000 min	0.0049 min	>5 sec	<360 Kw/m ²	<29 kJ/g	<0.245 m ² /sec	>18
Result	42	6,200	227	4,200	0.065	20	205	31	.0334	15

- Meets flame, smoke and toxicity requirements for building construction
- Same strength as concrete at 20% of the weight

Highlights

- Exceptional performance for infrastructure applications
- Installs quickly and is easily modified
- Radio frequency wave transparent