

FIRESHIELD FABRIC

Sun FireDefense's FireShield material is a thin, lightweight and flexible fire-retardant fabric designed for high-temperature insulation and fire/hydrocarbon fire protection in residential, commercial and marine applications. It is available in a variety of thicknesses and densities. The material parameters chosen depends upon the specific application and the Fire Rating Class required.

The unique technology used to create the fabric, combined with mechanical needling of the fibers, results in a material with high tensile strength and superior thermal and acoustical properties. The result is a flexible product form with lower installation costs and significant weight savings over competing products. The fabric is a completely inorganic and contains magnesia, silica and quicklime to enhance bio-solubility, creating a product that is much safer to work with. The fabric is chemically stable, and its thermal properties are unaffected by exposure to water immersion or high-humidity. Its flexible form allows the material to be easily contoured around beams, corners and to fit into tight spaces. It requires no special tools or pre-cutting and installation is straightforward. The fabric can be provided in standard rolls or stitched with high-temperature thread for custom sizes. For custom window coverings, material is cut to size, stitched, and encased in a tough outer fire-retardant casing and fitted with grommet-like inserts that line up with small wall or trim-installed threaded eyelets.

Sun FireDefense also offers FireShield fabric treated with SPF3000 Clear Spray, a proprietary formula that offers added insulation and fire stopping power in extreme situations like fire-shelters.

Typical Applications for FireShield Material Include:

- Window coverings
- Roof liners
- Vent and structural opening protection
- Fire shelters, bunkers and safe rooms
- Electrical boxes, engine rooms, storage areas, etc.
- Non-combustible insulation
- Exhaust ducts and pipes
- Steel bulkheads and decks

Product Information

Melting Point (prolonged exposure)	2300°F (1260°C)
Temperature Grade	2012°F (1100°C)
LOI (Loss on Ignition)	0%
Flame Spread Index (Surface Burning Characteristics per ASTM E84)	0
Standard Thicknesses	0.5", 1.0", 1.5", 2.0" and 2.5" (13mm, 25mm, 38mm and 55mm)
Density	6, 8 and 9 lb./cu.ft. (96, 128 and 144 kg/m3) (available upon request)
Standard Width	Standard: 36" (600mm) (additional options available upon request)
Facings/Wrappers	Silica/Aluminum Foil, Fireproof 'Burlap'
Coatings	SPF3000 treatment for increased temperature rating and insulation



Jim Moseley, Sun FireDefense CEO, uses a MAPP gas torch to melt a penny on his hand, using only a square of 1/2" FireShield fabric as protection