

LAST-A-FOAM® FR-3700 PERFORMANCE CORE SERIES

FR-3700 is a CFC-free, rigid, closed-cell, flame-retardant polyurethane foam available in densities ranging from 3 to 40 pounds per cubic foot. It exhibits a high strength-to-weight ratio due to its cellular structure and cross-linked resin. Because of its closed-cell structure, LAST-A-FOAM FR-3700 has great resistance to water absorption, and will not swell, crack, or split on exposure to water. It particularly supports the following industries:

Aerospace

FR-3700 meets the requirements of aircraft BMS 8:133. This rigid, polyurethane foam is comparable to the FR-6700 series in strength, temperature resistance and flammability performance. However, the FR-3700 is tougher (less friable) for cutting crisper edges.

Medical

High-density rigid polyurethane FR-3700 foam is used to simulate human bone as a test medium within the medical device industry.

Nuclear

FR-3700 foams are chosen for nuclear material applications and transportation of extremely hazardous waste. When used as an impact- and fire-insulation liner in transport containers, FR-3700 can be engineered to provide the ultimate in fire and collision protection for hazardous cargo, outperforming wood and other polymeric materials. The FR-3700 formulation is specially designed to allow predictable impact-absorption performance under dynamic loading. At the same time, it provides an intumescent char layer that insulates and protects hazardous materials, even when exposed to pool-fire conditions.

In particular, our FR-3700 foam has a solid history of successful use in radioactive materials (RAM) transportation packages. The regulations governing RAM packages often require energy absorption of 30-foot free drops and exposure to a 1,475°F, 30-minute fire under accident conditions. Our FR-3700 series foam is one of very few materials that can support the RAM package design in mitigating both mechanical and thermal energy.

Advantages

- Stable and inert
- Flame retardant

Applications

- Models and design prototypes
- Composite core, especially where flame retardation is

Advantages

- High strength-to-weight ratio from cross-linked resin
- Resistant to most chemicals and solvents
- Easily shaped with common woodworking tools
- Performs well as wood replacement
- Will not support fungal growth

Applications

important

- Honeycomb edge closeout for aircraft interior sandwich panels used in overhead storage bins, passenger cabin class dividers, galleys and lavatories
- Radioactive materials (RAM) transportation packages
- Impact- and fire-insulation liner for hazardous waste containers
- Vacuum form dies and mold patterns
- Artificial human bone test media
- Core material for composite prostheses
- Load bearing

Sizing Chart

English Unit (Inches)

Products	Density	(lbs/ft ³)	Height	Width	Length
FR-3704	4		24	48	96
FR-3704.5	4.5		24	48	96
FR-3705	5		24	48	96
FR-3706	6		24	48	96
FR-3707	7		24	48	96
FR-3708	8		24	48	96
FR-3710	10		24	48	96
FR-3712	12		18	18	100
FR-3718	18		18	18	100
FR-3730	30		12	24	96
FR-3730	30		18	18	100
FR-3740	40		10	18	100
FR-3740	40		12	24	100

Shown are maximum standard stock sizes based on density. Custom sizes are available. Cut sizes are available from .125 inches (3.175 mm) up to standard stock heights as listed above.

Metric Unit (Cm)

Products	Density (kg/m³)	Height	Width	Length
FR-3704	64	60	120	240
FR-3704.5	72	60	120	240
FR-3705	80	60	120	240
FR-3706	96	60	120	240

Products	Density (kg/m³)	Height	Width	Length
FR-3707	112		60	120	240
FR-3708	128		60	120	240
FR-3710	160		60	120	240
FR-3712	192		45	45	250
FR-3718	288		45	45	250
FR-3730	481		30	60	240
FR-3730	481		45	45	250
FR-3740	641		25	45	250
FR-3740	641		30	60	250

Shown are maximum standard stock sizes based on density. Custom sizes are available. Cut sizes are available from .125 inches (3.175 mm) up to standard stock heights as listed above.

For technical details or pricing on any of these grades and sizes, contact Professional Plastics

PROFESSIONAL PLASTICS, INC.

<u>www.professionalplastics.com</u> <u>sales@proplas.com</u>

USA (888) 995-7767 - Singapore +65 6266-6193 - 台湾 Taiwan +886 (3) 5357850