

# Carbon Foam FPA-10

Technical Data Sheet 4058

## Product Overview

GRAFOAM® FPA-10 is a carbon foam product that has a nominal density of 10 lb/ft<sup>3</sup>. The material has unique properties such as high strength and lightweight, and is an excellent thermal insulator at temperatures up to 1000°C.

## Applications

- Applications in high temperature and corrosive environments
- Other applications include composite tooling, insulation, fire resistant panels and batteries

## Sizes\*

- 6" X 18" X 72"

## Typical Properties at Room Temperature\*\*

Characteristic	Unit	WG	AG	Unit	WG	AG
Bulk Density	lbs/ft <sup>3</sup>	10.4		g/cm <sup>3</sup>	0.166	
CTE (30-1000°C)	10 <sup>-6</sup> /°F	1.3		10 <sup>-6</sup> /°C	2.3	
Specific Resistance	Ωin	0.14	0.10	μΩm	3542	2510
Flexural Strength	psi	175	335	MPa	1.2	2.3
Young's Modulus	psi x 10 <sup>6</sup>	0.07		GPa	0.5	
Compressive Strength	psi	760	470	MPa	5.2	3.2
Gas Permeability	Darcy	nm		Darcy	nm	
Apparent Porosity	%	~90		%	~90	
Tensile Strength	psi	276	148	MPa	1.91	1.02
Thermal Conductivity	BTU/hr ft °F	0.07	0.06	W/mK	0.12	0.11
Shear Strength (Torsional)	psi	160		MPa	1.1	

Notes:

\* Additional sizes available upon request

\*\* Properties listed are typical and cannot be used as accept/reject specifications

It is not recommended that FPA-10 be used in oxidizing atmospheres above 200°C.

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**Redefining limits**