

3C120 CARBON FIBRE COMPOSITE

High strength light weight material, suitable for use as hot face linings in pressure quench furnaces offering maximum insulation protection and hence package lifetime. Its high strength to weight ratio makes it the ideal choice for structural assemblies and fixtures for work piece support in vacuum, sintering and HIP furnaces. Typical designs can yield greatly increased charge capacities of between 30 & 50%.

TYPICAL PROPERTIES ARE:

Density	1.5	g/cc
Open porosity	<12	%
Flexure strength	150	MPa
Tensile strength	120	MPa
Tensile modulus	80	GPa
Thermal conductivity		
Parallel	10-12	W/mK
Perpendicular	4-5	W/mK

Coefficient of Thermal Expansion

Parallel	-0.5 to 0 x10 ⁻⁶	/K
Perpendicular	4 to 5.5 x10 ⁻⁶	/K

Stock sizes

Plates	1000mm x 1000mm x 1.4mm
L-Profiles	65/65 x 1000mm x 1.5mm wall
U-Profiles	60/40/60 x 1000mm x 1.5mm wall

Other sizes, sections and shapes available to order.