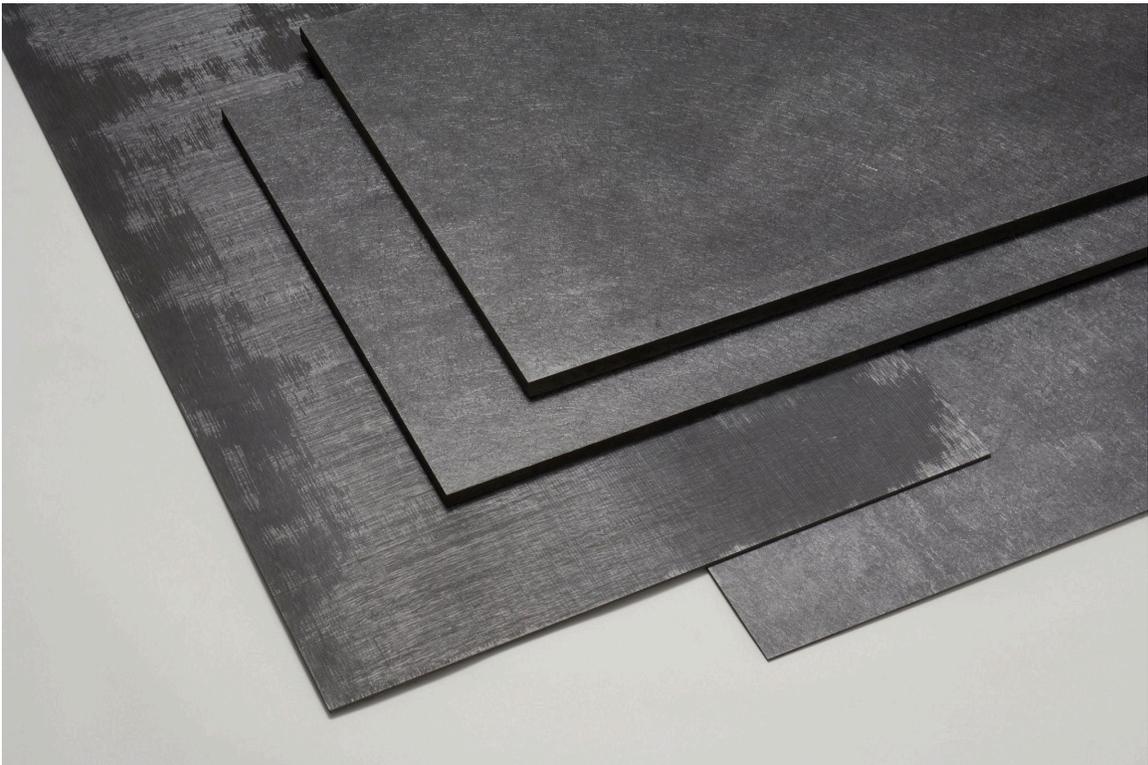


Carbon-Carbon Plates & Sheets

CFC Design specializes in providing both standard and custom carbon-carbon (C/C) plates and sheets. These materials are highly valued for their lightweight structure, exceptional heat resistance, and superior strength. Their outstanding performance and economic efficiency lead to reduced replacement and maintenance costs in challenging applications.



CFC Standard Plate

FS140 Plate



Grade	Length x Width x Thickness	
System of Units	mm	Inch
FS140	2000 x 1000 x 27 mm	78.74" x 39.37" x 1.06"

Characteristics		System of Units	FS140	System of Units	FS140
Heat Treat Temperature		(°C)	2500	(°F)	4532
Bulk Density		(g/cm ³)	1.6	(lb _m /in. ³)	0.058
Flexural Strength	Perpendicular	(MPa)	130	(psi)	18855
Flexural Modulus	Perpendicular	(GPa)	650	(ksi)	94275
Tensile Strength	In-Plane	(MPa)	100	(psi)	14504
Tensile Modulus	In-Plane	(GPa)	70	(ksi)	10153
Compressive Strength	In-Plane	(MPa)	50	(psi)	7252
	Perpendicular		75		10878
Interlaminar Shear Strength		(MPa)	15	(psi)	2176
Coefficient of Thermal Expansion (room temp to 1000°C)	In-Plane	(10 ⁻⁶ /°C)		0.2	
	Perpendicular			10.8	
Thermal Conductivity (25°C)	In-Plane	(W/m-K)		120	
	Perpendicular			32	
Specific Heat	In-Plane	(J/kg-K)		750	
	Perpendicular			1970	
Volume Resistivity	In-Plane	(μΩcm)		1300	
Reinforcement Fiber	Short Chopped Fibers				
Fiber Orientation	2D Random				
Main Applications	Precision Machined Components				

FS240 Plate



Grade	Length x Width x Thickness	
	mm	Inch
FS240	2000 x 1000 x 3 mm	78.7" x 39.4" x .118"
	2000 x 1000 x 4 mm	78.7" x 39.4" x .157"
	2000 x 1000 x 5 mm	78.7" x 39.4" x .197"
	2000 x 1000 x 6 mm	78.7" x 39.4" x .236"
	2000 x 1000 x 8 mm	78.7" x 39.4" x .315"
	2000 x 1000 x 10 mm	78.7" x 39.4" x .394"
	2000 x 1000 x 15 mm	78.7" x 39.4" x .591"
	2000 x 1000 x 20 mm	78.7" x 39.4" x .787"

Characteristics		System of Units	FS240	System of Units	FS240
Heat Treat Temperature		(°C)	2000	(°F)	3632
Bulk Density		(g/cm ³)	1.6	(lb _m /in. ³)	0.058
Flexural Strength	Perpendicular	(MPa)	180	(psi)	26107
Flexural Modulus	Perpendicular	(GPa)	45	(ksi)	6527
Tensile Strength	In-Plane	(MPa)	120	(psi)	17405
Tensile Modulus	In-Plane	(GPa)	52	(ksi)	7542
Compressive Strength	In-Plane	(MPa)	100	(psi)	14504
	Perpendicular		100		14504
Interlaminar Shear Strength		(MPa)	13	(psi)	1885
Coefficient of Thermal Expansion (room temp to 1000°C)	In-Plane	(10 ⁻⁶ /°C)		0.7	
	Perpendicular			8.6	
Thermal Conductivity (25°C)	In-Plane	(W/m-K)		34	
	Perpendicular			15	
Specific Heat	In-Plane	(J/kg-K)		750	
	Perpendicular			1970	
Volume Resistivity	In-Plane	(μΩcm)		2500	
Reinforcement Fiber			Long Continuous Fibers		
Fiber Orientation			0°/90°		
Main Applications			Heat Resistant Structures		

FS740 Plate

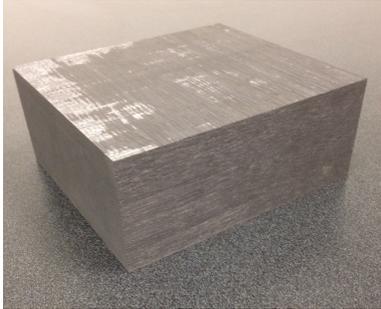


Grade	Length x Width x Thickness	
	mm	Inch
FS740	1000 x 1000 x 6.4 mm	39.4" x 39.4" x .252"
	1000 x 1000 x 9 mm	39.4" x 39.4" x .354"
	1000 x 1000 x 11 mm	39.4" x 39.4" x .433"
	1000 x 1000 x 13 mm	39.4" x 39.4" x .512"
	1000 x 1000 x 15 mm	39.4" x 39.4" x .591"
	1000 x 1000 x 21 mm	39.4" x 39.4" x .827"

Characteristics		System of Units	FS740	System of Units	FS740
Heat Treat Temperature		(°C)	2000	(°F)	3632
Bulk Density		(g/cm ³)	1.6	(lb _m /in. ³)	0.058
Flexural Strength	Perpendicular	(MPa)	190	(psi)	27557
Flexural Modulus	Perpendicular	(GPa)	41	(ksi)	5947
Tensile Strength	In-Plane	(MPa)	190	(psi)	27557
Tensile Modulus	In-Plane	(GPa)	50	(ksi)	7252
Compressive Strength	In-Plane	(MPa)	130	(psi)	18855
	Perpendicular				
Interlaminar Shear Strength		(MPa)	17	(psi)	2466
Coefficient of Thermal Expansion (room temp to 1000°C)	In-Plane	(10 ⁻⁶ /°C)		0.6	
	Perpendicular				
Thermal Conductivity (25°C)	In-Plane	(W/m-K)		40	
	Perpendicular				
Specific Heat	In-Plane	(J/kg-K)		750	
	Perpendicular				
Volume Resistivity	In-Plane	(μΩcm)		2500	
Reinforcement Fiber			Short Chopped Fibers		
Fiber Orientation			2D Random		
Main Applications			Precision Machined Components		

CFC Standard Bar

FS240 Bar



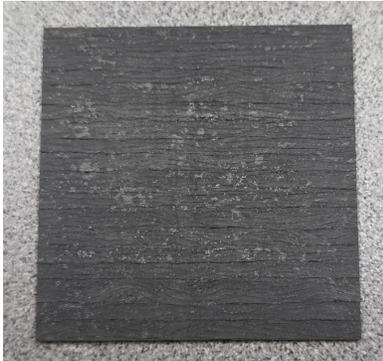
Grade	Length x Width x Thickness	
	mm	Inch
FS240 Bar	2000 x 190 x 75 mm	78.74" x 7.48" x 2.95"

Characteristics		System of Units	FS240	System of Units	FS240
Heat Treat Temperature		(°C)	2000	(°F)	3632
Bulk Density		(g/cm ³)	1.6	(lb _m /in. ³)	0.058
Flexural Strength	Perpendicular	(MPa)	147	(psi)	21321
Flexural Modulus	Perpendicular	(GPa)	44	(ksi)	6382
Tensile Strength	In-Plane	(MPa)	98	(psi)	14214
Tensile Modulus	In-Plane	(GPa)	52	(ksi)	7542
Compressive Strength	In-Plane	(MPa)	95	(psi)	13779
	Perpendicular		95		13779
Interlaminar Shear Strength		(MPa)	13	(psi)	1885
Coefficient of Thermal Expansion (room temp to 1000°C)	In-Plane	(10 ⁻⁶ /°C)		0.7	
	Perpendicular			8.6	
Thermal Conductivity (25°C)	In-Plane	(W/m-K)		34	
	Perpendicular			15	
Specific Heat	In-Plane	(J/kg-K)		750	
	Perpendicular			1970	
Volume Resistivity	In-Plane	(μΩcm)		2500	
Reinforcement Fiber			Long Continuous Fibers		
Fiber Orientation			0°/90°		
Main Applications			Heat Resistant Structures		

CFC Standard Sheets

CFC Design sheets serve as furnace lining cover sheets, primarily for insulation protection. They are available in various types.

FS240 Sheet



Grade	Length x Width x Thickness	
	mm	Inch
FS240 Sheet	2000 x 1000 x 1.2 (XD) mm	78.7" x 39.4" x .047" (XD)
	2000 x 1000 x 1.2 (YD) mm	78.7" x 39.4" x .047" (YD)
	2000 x 1000 x 1.6 mm	78.7" x 39.4" x .063"
	2000 x 1000 x 2 mm	78.7" x 39.4" x .079"

** FS240 sheet is heat-treated at 2500°C temperature

** There are two types of FS240 sheet 1.2mm thickness XD (Type A) and YD (Type B)

FS320HB Sheet

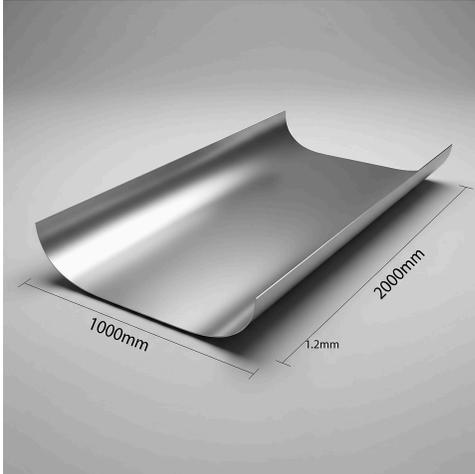


Grade	Length x Width x Thickness	
	mm	Inch
FS320HB Sheet	2000 x 1000 x 1.4 mm	78.7" x 39.4" x .055"
	2000 x 1000 x 2 mm	78.7" x 39.4" x .079"

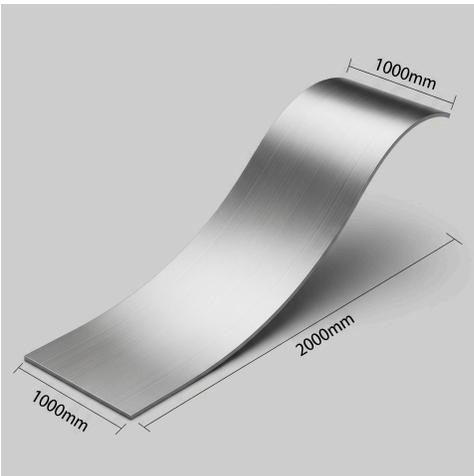
** FS320 sheets feature long, 0-90° oriented continuous fibers, with a surface layer of 2D random chopped fibers.

FS240 sheet 1.2mm thickness XD (Type A) and YD (Type B)

** XD (Type A) is flexible along the 1000mm direction



** YD (Type B) is flexible along the 2000mm direction



Custom Plate Types & Design

CFC Design specializes in customized carbon-carbon plate solutions, offering a wide range of products beyond standard plates and sheets. Our expertise allows us to provide cutting-edge technology and tailored solutions for your specific needs, including but not limited to:

- Machined precision plates
- Plates handling systems
- Carrier plates
- Heater plates
- Friction plates
- Flat plates
- Custom coated plates
- Semiconductor plates

Have Questions or Ready to Order?

Our engineering team is ready to help you select the perfect plates and sheets for your needs.

- **Visit our Website:** www.acrosscc.com
- **Call Us Today:** (310) 635 3555
- **Email for a Quote:** info@acrosscc.com