

# GRAFTech International

## YBDXX™ Carbon

GrafTech International is a global leader in graphite and carbon products. We enable customer leadership better and faster than our competition, through the creation, innovation and manufacture of carbon and graphite material science based solutions.

### YBDXX™ Carbon

Grade YBDXX™ carbon has enhanced properties over those of YBDX™ and YBD™ carbon. Grade YBDXX™ carbon has higher density and mechanical properties, and lower porosity. This grade is specially manufactured for electrolysis involving fluorine applications.

### Typical Applications

- Anodes for fluorine cells
- Cathodes for fluorine cells
- Electrolysis involving the presence of fluorine

### Sizes

- 2" x 8" x 25.5" rectangles
  - 51 mm x 203 mm x 648 mm rectangles
  - 2" x 7" x 25.5" rectangles
  - 51 mm x 178 mm x 648 mm rectangles
- Custom lengths are also available*

### Typical Properties (Room Temperature)\*

	<u>ENGLISH</u>	<u>WG</u>	<u>AG</u>	<u>SI</u>	<u>WG</u>	<u>AG</u>
Density	lbs/ft <sup>3</sup>	103		g/cm <sup>3</sup>	1.65	
Maximum Particle Size	Inches	0.03		mm	0.76	
Specific Resistance	10 <sup>-4</sup> Ω in.	15.7	18.1	μΩm	40	46
Flexural Strength	Psi	3400	3100	MPa	24	21
Young's Modulus	10 <sup>6</sup> Psi	2.1	1.5	GPa	14	10
Tensile Strength	psi	2600	2000	MPa	18	14
Compressive Strength	psi	15,800	15,800	MPa	109	109
Permeability	Darcy	0.005		Darcy	0.005	
Thermal Conductivity	BTU-ft/hr ft <sup>2</sup> °F	3.1	2.7	W/mK	5.1	4.5
CTE (RT to 100 °C)	10 <sup>-6</sup> /°F	1.4	2.3	10 <sup>-6</sup> /K	2.5	4.1
Ash Content	%	0.2		%	0.2	
Porosity	%	13		%	13	

\* Please contact GrafTech for high temperature and additional properties

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