



ACC 400 Series Fine Grain Molded Graphite Defined

The 400 series is American Carbon Company's high density graphite for applications where fine grain structure and low porosity are key. It performs equally well as most traditional isostatically pressed graphite in many applications traditionally reserved for only ISO graphite, but at a greatly reduced cost. This versatile graphite is breaking the mold when it comes to traditional graphite choices.

Standard Applications

- Casting molds for metals and ceramics
- Crucibles for melting and alloying
- Boats and trays for sintering applications
- Parts for aluminum gas injection systems
- Ceramic Industry applications
- Complex machining applications

Standard Sizes*

Description	Dimensions (English)	Dimensions (Metric)
50-401	5.51" x 12.21" x 15.75"	140mm x 310mm x 400mm
50-402	6.30" x 12.21" x 15.75"	160mm x 310mm x 400mm
50-403	7.09" x 12.21" x 15.75"	180mm x 310mm x 400mm
50-404	5.51" x 13.78" x 15.16"	140mm x 350mm x 385mm
50-405	5.91" x 13.78" x 15.16"	150mm x 350mm x 385mm
50-406	6.30" x 13.78" x 15.16"	160mm x 350mm x 385mm
50-410**	7.87" x 15.75" x 22.44"	200mm x 400mm x 570mm
50-411**	9.45" x 13.78" x 17.72"	240mm x 350mm x 450mm

*Custom Blocks are available upon request. **50-410 and 50-411 are close to the maximum size for this material

Table of Properties at 65°F

Physical Properties	English	Metric
Density	0.0646 lb/in ³	1.79 g/cm ³
Maximum Particle Size	0.00177 in	0.045 mm
Porosity	12-15%	12-15%
Specific Resistance	0.2 μΩ•in	8 μΩ•m
Flexural Strength	3,770 psi	26 mpa
Compressive Strength	7,977 psi	55 mpa
C.T.E. (100-600°C)	1.7 10 ⁻⁶ /°F	2.9 10 ⁻⁶ /°C
Ash Content	≤0.10%	≤0.10%
Allowable Tolerance Width	± 0.079 in	± 2 mm
Allowable Tolerance Height	± 0.079 in	± 2 mm
Allowable Tolerance Length	± 0.079 in	± 2 mm
Allowable Camber	0.5%	0.5%

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