

Close Contour Casting & Close Contour Block

Filled, Cast Polyurethane

Key Properties

- Very dense structure, can be polished
- High temperature resistance
- High compressive strength and modulus
- Good chemical resistance

Applications

- Molds for ceramic pressure casting
- Metal sheet forming
- Vacuum forming tools and LTM lay-up tools
- RTM molds

Advantages of Close Contour Casting

- Close Contour Casting (CC-6506) is supplied as a three dimensional shape which is already a close contour of your final shape
- Close Contour Block (CB-6506) is supplied as a customized size of a rectangular, unmachined block
- Quicker machining, less tool wear and less wastage through close contour shape
- Less manual finishing required as the surface is seamless, smooth and very dense
- No handling of liquid chemistry, concentration on milling technology
- Good dimensional stability as the material exhibits little stresses and is isotropic like board material

Mechanical Properties

			CC-6506 & CB-6506
Color	visual		Dark gray
Density	ASTM D-792	g/cm ³ (lb/ft ³)	ca. 1.90 (ca. 119)
Shore hardness D	ASTM D-2240		90 – 95
Coefficient of thermal expansion	ASTM D-3386	10 ⁻⁶ K ⁻¹ (in/in/°F x 10 ⁻⁶)	35 – 40 (19 – 22)
Deflection temperature, HDT	ASTM D-648	°C (°F)	110 – 115 (230 – 239)
Compressive strength	ASTM D-695	MPa (psi)	120 – 130 (174,000 – 189,000)
Compressive modulus	ASTM D-695	MPa (psi)	10,000 - 13,000 (14,500,000 - 18,900,000)

Processing

The product should have a temperature of 20°C – 25°C (68-77°F) during processing.

Storage

The material should be stored flat and in a dry place. Temperature variations should be avoided during storage and transportation.



Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.
