

FIBERGLASS WEIRS, BAFFLES, BAFFLE SUPPORTS, & WASHERS

Subject: Mechanical Properties of Fiberglass Reinforced Thermoset Polyester Resin
 Material (Compression Molded Laminate)

<u>Results: ASTM</u>	<u>Values, Units</u>	<u>Standard Deviation, Units</u>
Thickness by ASTM D 638-97	0.28 inches	0.001 inches
Barcol Harness by ASTM D 2583-95	59	2.8
Tensile Strength by ASTM D 683-97	15,700 psi	900 psi
Flexural Strength by ASTM D 790-97	27,700 psi	1,700 psi
Flexural Modulus by ASTM D 790-97	1,470,000 psi	30,000 psi
Notch Izod Impact by ASTM D 256-A	15.5 ft-lbs/ inch	0.5 ft-lbs/inch
Water Absorption by ASTM D 570	0.04 percent	0.01 percent
CTE by ASTM D 831	10.1 X 10 ⁻⁶ in/in/°F-----	

Material is molded with UV Inhibitor

Procedure

All tests were performed in accordance with the procedures specified by ASTM
 The tensile and flexural tests were conducted using a mechanical tester and 30,000 LB. load cell. The hardness tests were performed with a Barcol Hardness Tester; the Izod Impact Tests were performed on an Impact Machine; and the CTE was performed on a Thermomechanical Analyzer.