

# **Emerson Testing Services, Inc.**

97 Lenox Street  
Norwood, Massachusetts 02062

617-762-8320 phone  
617-762-8357 fax

February 10, 1994  
Report No. CD2072

## DATA SUMMARY OF CARBON FIBER/EPOXY PLATE TESTING DONE FOR GOETZ MARINE TECHNOLOGY

Plate Identification:	1 ATM Cure	5 ATM Cure
Testing Axis:	0°	0°
Tensile Strength (ksi)	268.2	275.1
Tensile Modulus (psi x 10 <sup>6</sup> )	19.4	19.6
Compressive Strength (ksi)	172.3	176.7
Compressive Mod (psi x 10 <sup>6</sup> )	17.1	17.2
Short Beam Shear (ksi)	13.3	13.1
Average thickness (inches)	.143	.139
Density (pounds/inch <sup>3</sup> )	.057	.058
Resin Content (% by wt.)	34.9	33.1
Fiber Content (% by wt.)	65.1	66.9

### Notes:

1. Tensile testing in accordance with ASTM D-3039
2. Compressive testing in accordance with ASTM D-695
3. Shear testing in accordance with ASTM D-2344
4. Fiber content testing in accordance with ASTM D-3171
5. Reported properties represent the average of 5 to 6 individual test specimens.
6. ETS certifies that the above testing was performed in accordance with all standards with equipment that is calibrated to NIST traceable standards.

By: Peter Franklin 2/10/94

Peter Franklin

Lab Supervisor