



Manufacturers of
Precision Board

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Precision Board Plus™

PBHT-48

DESCRIPTION & APPLICATION:

PBHT-48 is a rigid urethane Tooling/Modeling board designed for Prototype Machining, Pattern Making, Thermoforming, Prepreg Composite Layup Tooling, Vacuum Form Tooling, Tool Proofing, & Master Model Making. PBHT Plus is made in the USA.

Precision Board Plus PBHT is formulated with eco-friendly, "Green" urethane components. The new Plus formulations have achieved a Certified "Carbon Balance" of 3 to 1 and a Certified "Rapidly Renewable Green Resource Content" of 11.9%. This has also allowed a tighter cell structure which results in more chips and less dust during cutting and machining.

Precision Board Plus **does not contain: CFC's or VOC's**

Precision Board Plus PBHT comes in standard sizes of 20"x60", 24"x60", 30"x80", 4'x8', 4'x10', 5'x8' and 5'x10'. Thickness ranges from 1/2" to 24". Other special sizes and custom bonded shapes are available upon request. Standard densities are available in 4, 6, 8, 10, 12, 15, 18, 20, 30, 34, 40, 48 and 60 pounds per cubic foot (pcf). Other special densities are available.

Precision Board PBHT is **non-abrasive** and can be machined and cut with HSS cutters, or any standard cutting tool. PBHT Plus does not outgas or affect prepreg resin cure. **See FAQ for important oven/autoclave ramping procedures and other pertinent information.**

PBHT can be bonded to itself or most other substrates using Coastal Enterprises' single component urethane adhesives: PB Bond-240 and PB Fast Set, or EP-76, two part, epoxy adhesive.

PHYSICAL PROPERTIES:

Density	ASTM D-1623	48 lbs/Cubic Foot
Compressive Strength	ASTM D-1621	4,447 psi
Compressive Modulus	ASTM D-1621	70,680 psi
Tensile Strength	ASTM D-1623	2,264 psi
Tensile Modulus	ASTM D-1623	32,864 psi
Shear Strength	ASTM C-273	688 psi
Shear Modulus	ASTM C-273	7,644 psi
Flexural Strength Method 1A	ASTM D-790	3,362 psi
Flexural Modulus Method 1A	ASTM D-790	172,036 psi
Hardness	Shore D	65
Elongation		6.8%
Dimensional Stability	ASTM D-2126	1.2% Max.
Water Absorption	ASTM D-2842	0.01% by Vol. after 96 hrs.
Closed Cell Content	ASTM D-2856	97%
"K" Value Thermal Conductivity	ASTM C-177	1.194
Impact Resistance	O°F 4.6 oz. 1" Dia. 9'6" drop	No cracking observed
Freeze Thaw	ASTM D-2126, 25 Cycles	No disbonding or distortion occurred
Mold and Mildew Resistance	ASTM D-3273	Does not support growth
Dielectric Constant	ASTM D-1678	1.3
Maximum Service Temperature	Dry	300° F
Coefficient of Thermal Expansion (CTE)		26 X 10 ⁻⁶ °F
Glass Transition	DMA	274° F
Specific Heat	ASTM E-1269	0.329
Flammability Tests:	FAR 25.853 Vertical Burn	Pass
	MIL P 26514 Burn Test	Pass
	ASTM D-1692-74 Burn Test	Pass

Follow heat temperature ramping of 1°F up per minute & 2°F down per minute. See FAQ for additional data.

Any Questions please contact Coastal Enterprises Company

(800) 845-0745

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WARRANTY: All recommendations for product use have been derived from experience and test data believed to be reliable. We warrant and guarantee the uniformity of our products within manufacturing tolerance. However, since the use of our products are beyond our direct control, they are furnished upon the condition that each party shall make his/her own tests to determine their suitability for his/her particular purpose. Except as stated herein, Coastal Enterprises Company makes no warranty or guarantee, expressed or implied, and disclaims all responsibility for results obtained, nor assumes any liability for any damages, whether arising out of negligence or breach of guarantee and is hereby expressly limited to replacement of product only. For additional information on product handling, please refer to Precision Board Plus MSDS.