

### Manufacturers of Precision Board

P.O. Box 4875 Orange, CA 92863-4875 (714) 771.4969 (800) 845.0745 Fax: (714) 771.6422 Email: <u>hdu@precisionboard.com</u> www.precisionboard.com

**Product Data Sheet** 



Curbell Plastics is a proud supplier of Coastal Enterprises materials.

# Precision Board Plus<sup>TM</sup> PBLT-15

#### **DESCRIPTION & APPLICATION:**

PBLT-15 is a rigid, High Density Urethane, (HDU), Tooling/Modeling board designed for Prototype Machining, Water Jet Cutting, Pattern Making, Thermoforming, Prepreg Composite Layup Tooling, Vacuum Form Tooling, Tool Path Proofing, Lost Wax Casting Masters, Master Model Making, Artistic Carving Blocks, Indoor and Outdoor Signage. PBLT Plus is made in the USA.

Precision Board Plus PBLT is formulated with eco-friendly, "Green" urethane components. The new Plus material has a Certified "Carbon Foot Print" of 3 to 1 and a Certified "Rapidly Renewable Green Resource Content" of 23.9%. This means each 3"x 4'x8' sheet of PBLT-20 saves 38.5 pounds of plastic material which assists meeting LEED requirements for obtaining USGBC and ICC 700 building credits.

Precision Board Plus does not contain: CFCs or VOCs. See MSDS for details.

Precision Board Plus PBLT comes in standard sizes of 20"x60", 24"x60", 30"x80", 45"x60" 4'x8', 4'x10', 5'x8' and 5'x10'. Thickness ranges from 1/2" to 24". Custom bonded blocks available in <u>any</u> size. PBLT Densities are 4, 6, 8, 10, 12, 15, 18, 20, 30, 34, 40, 48, 60, 70, & 75 pcf. Other densities available.

Precision Board Plus is **non-abrasive**, can be machined with HSS bits or cut with any standard cutting tool. PBLT's tight cell structure allows adjusting spindle speed & table feed to produce either chips or dust as desired. Check Coastal's on-line Onsrud Router Search guide for most efficient cutter bit for desired speeds & feeds. PBLT Plus <u>does not outgas</u> or affect prepreg resin cure. **See FAQ for important oven/autoclave ramping procedures and other pertinent information.** \*\*

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

#### **PHYSICAL PROPERTIES:**

Density ASTM D-1623 15 lbs/Cubic Foot ASTM D-1621 510 psi Compressive Strength Compressive Modulus ASTM D-1621 20,360 psi Tensile Strength ASTM D-1623 395 psi **Tensile Modulus** ASTM D-1623 32,060 psi Shear Strength ASTM C-273 326 psi Shear Modulus 3,870 psi ASTM C-273 Flexural Strength Method 1A 487 psi ASTM D-790 Flexural Modulus Method 1 A ASTM D-790 16,218 psi Hardness Shore D ASTM D-2240 22 Elongation 6.8% **Dimensional Stability** ASTM D-2126 1.2% Max. Water Absorption 0.02% by Vol. after 96 hrs. ASTM D-2842 Closed Cell Content ASTM D-2856 97% "K" Value Insulation Factor ASTM C-177 0.453 Impact Resistance 0°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 200° F Coefficient of Thermal Expansion (CTE) 25 X 10<sup>-6</sup> °F Glass Transition DMA/TMA 258°F Specific Heat @ 77°F **ASTM E-1269** 0.235 Flammability Tests: FAR 25.853 Vertical Burn Pass MIL P 26514 Burn Test Pass ASTM D-1692-74 Burn Test Pass ASTM D635-06 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 www.PrecisionBoard.com

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 is 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.