

A. Thermoforming

Technical Bulletin A - 1

VERSATEX Heat Bending / Forming

VERSATEX Trimboards can be heat formed into an assortment of shapes in a fraction of time it takes to curve natural wood products. Heat forming VERSATEX is easy, using conventional techniques such as heat bending, pressure forming or vacuum forming. Constructing the same shape in natural wood products requires sanding and finishing, and takes a longer period of time. Achieving a near perfect bend radius with VERSATEX trimboards can be accomplished by utilizing convectional air circulating ovens, strip heaters, heating blankets, radiant heaters or calrods. Heat guns can be used only on small areas where appearance and uniformity may be compromised.

Heating times and temperatures should be controlled to prevent the surface temperature of the product from exceeding 300°F for more than ten (10) minutes. Heat should be applied on both sides of the product to assure uniform distribution of heat and to avoid product distortion. The edges of the product are most susceptible to rapid heat loss, so edge heating is critical. Heating times are generally about three (3) minutes per 1/4" of product thickness. Heat should be applied evenly and consistently along the products length until it has become flexible and easy to form. Once the VERSATEX board has reached a workable temperature, the heat can be removed from the board and the product can be bent or formed into the desired shape using any type of fixture. Overheating of the VERSATEX product should be avoided. Rough texture of the surface and discoloration or yellowing of the product are results of overheating. VERSATEX textured appearance will fade away when thermoforming. Cooling can be accomplished through normal air circulation or more rapidly by using fans or compressed air. Special care should be taken when handling hot material. To prevent serious burns, special gloves and protective clothing should be worn.

Convection Thermoforming Ovens can be purchased from:

The Pinshe Edge

119 Main Street

P. O. Box 68

Plato, MN 55370

www.pinske-edge.com; info@pinske-edge.com

P (320) 238-2196

F (320) 238-2385

Builders Automation Machinery

Largo, FL

www.buildersautomation.com

P (727) 538-2180

F (727) 536-2624