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PU150 Polyurethane Tooling Board

PU150 is an easily workable polyurethane tooling board with excellent milling properties and low dust formation. The milled product exhibits an excellent surface quality.

APPLICATIONS

- Manufacture of design and styling models
- Manufacture of substructure for cubing and data control models

TYPICAL PROPERTIES	VALUE	TEST METHOD
Colour	Light green	---
Hardness, Shore D	-	ISO 868
Nominal density, g/cm ³ (kg/m ³)	0.15 (150)	ASTM D 1622
Heat distortion temperature, °C	100	DIN 53424
Coefficient of Thermal Expansion, 10 ⁻⁶ cm/cm/°C	80 x 10 ⁻⁶	ISO 11359
Flexural strength, MPa	2.5	ISO 178
Compressive strength, MPa	2	ASTM D 1621

Unless otherwise specified, average values are determined at 23°C throughout the cross section.

AVAILABLE BOARD DIMENSIONS (Length, width, depth)

2000mm x 1000mm x 50mm
2000mm x 1000mm x 200mm

2000mm x 1000mm x 100mm
2000mm x 1000mm x 300mm

STORAGE OF BOARDS

The material should be stored flat and in a dry place avoiding large temperature variations.

BONDING OF BOARDS

1. Cut, prepare and dry assemble blocks.
2. Key both surfaces of the joint use a 320 grit paper.
3. Once the entire bonding surface has been treated use a suitable solvent to remove any contaminants from the surfaces to be bonded. Repeat this operation until satisfied the surface is clean.
4. Allow any residual solvent to evaporate
5. Mix the appropriate adhesive as per the corresponding technical data sheet
6. Apply using a castellated spreader evenly across both surfaces of the joint
7. Bring together the two wet surfaces and apply an even amount of pressure until the adhesive starts to expel from the joint. Remove this excess and check the joint for uniform thickness and that it does not exceed 1mm.
8. Mechanical clamping is recommended during the bonding operation to ensure integral bond lines and uniform thickness.
9. When designing and constructing the pattern, consideration should be given to the machining and where ever possible material should be removed from the end of blocks.

Precautions should be taken when selecting an adhesive for bonding tooling board. Please contact Base Group Sales team or technical department for advice on adhesive selection.

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