

3M

Balsa Panels

Technical Data

October, 2012

Product Description

3M™ Balsa Panels are made of end grain balsa, a highly processed ultra light wood product, imparts impressive strength and stiffness to the sandwich panel. The end grain configuration of balsa provides high resistance to crushing and is very difficult to tear apart. End grain balsa cored panels also have the ability to handle excessive dynamic loads with high resistance to fatigue. The balsa panels end grain orientation gives it exceptional compression and shear properties. As an added benefit, balsa panels provide good thermal and acoustic insulation. Balsa panels are available in 9.5 lb/ft³ density.

Features

- Scored and scrimmed to allow wrapping of outside curves.
- Can be sealed with urethane for protection.
- Rigid variety 1" x 1.5" blocks comprise each sheet. It is not scored or scrimmed nor is it sealed. Used predominantly in flat panel construction.

Markets

- **Industrial**
- **Specialty Vehicle**
- **Marine**
- **Transportation**
- **Wind**
- **Architectural**
- **Automotive**

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Panels Details

- Balsa panels are a select quality, kiln dried, end grain Balsa wood suitable as a structural core material in composite sandwich construction and is a naturally renewable resource.
- Rigid balsa panels are available in 24" x 48" up to 20" thick by special order.
- Various facings are available by special order. Contact your local sales rep for details.
- Scoring available 1" x 2" in length direction (L), width direction (W), double scored (DS) or scored both ways (S).
- All balsa panels are available coated to reduce resin consumption.
- Infusion grade grooved and (or) perforated balsa panels are available.
- PITH Grade Balsa available, supply can be limited, please contact your 3M sales rep or CSR for availability.
- Balsa panels are available in 24" x 48" in all scored applications up to 1.5" thick.

Typical Performance Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. The properties below are the spray applied Part A and Part B 3M HD Polyurea Coating.

Typical Physical Properties

| | |
|---------------------------------------|------------------------------|
| | BL 9.5 R |
| Compressive Strength ASTM C365 | 1895 psi |
| Compressive Modulus ASTM C365 | 590,000 psi |
| Tensile Strength ASTM C297 | 1,900 psi |
| Density | 8.0-11.0 lbs/ft ³ |
| Shear Strength ASTM C273 | 432 psi |
| Shear Modulus ASTM C273 | 23,100 psi |
| Average Moisture Content | 9.66% |

Storage and Handling

Store panels in a horizontal position, a dry environment and away from insect infestation.

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Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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ISO 9001:2008

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.



Industrial Adhesives and Tapes Division

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