Multibond® EZ-2

PRODUCT DESCRIPTION

Multibond EZ-2 *is a shelf stable, one-component (pre-catalyzed), cross linking polyvinyl acetate emulsion adhesive designed for finger jointing. With a very fast set rate, a low minimum use temperature, and a stable viscosity Multibond EZ-2 can be used for a variety of assembly gluing applications. It develops a DIN EN 204 D3 water-resistant bond with a clear glue line and passes ASTM D 5572 dry use finger jointing standards.*

PHYSICAL PROPERTIES[1]

Chemical Family Description: *Crosslinking polyvinyl acetate emulsion adhesive*

Appearance: *Cream*

Freeze/Thaw Stable[2]: *Yes*

pH: *2.2 - 3.2*

Typical Viscosity (cps): *2,500 - 5,500*

Suggested Minimum Use Temperature[3]: *45° F*

Weight Per Gallon (lbs): *9.10*

Weight Solids (%): *45.5 – 48.5*

APPLICATION GUIDELINES

The finger jointing of lumber is increasingly popular as a method of reducing wood waste and providing maximum wood utilization resulting in lower raw material costs. Structural and non-structural finger jointed products have gained wide acceptance throughout the wood industry. The preparation of these joints, as well as the adhesive, plays a critical role in the quality of finger jointed products. Most failures of finger jointed lumber are caused by poorly machined and poorly fitted dry joints. The adhesive plays a role in finger joint back off, heat and water resistance. However, even the best adhesive available cannot make up for a poor fitting joint. The fit of the dry finger joint should be checked before gluing begins. The following tips may help you in reaching a properly fitting finger joint or trouble shooting finger jointing problems in your operation.

Knives and Cutterhead: *Be sure to check overall knife stack for accuracy. Keep cutterheads in pairs and properly cleaned. Cutterheads should be sharpened as a set. Knife set should cut only .010" to .030" of wood. Knives should be sharpened after running approximately 30,000 board feet. (wood species may cause this to vary).*

Cutting Machine: *Make sure cutterhead spindle is set vertically with no wear or play in the bearings. Chain carrier lugs should be squared with the trim saws and cutterheads. Make sure trim saws are set true. Check bed rails for wear on a regular basis. Check hold down pressure to provide sufficient pressure to prevent movement of stock while cutting the joint.*

Joint Assembly: *Pressure should be held constant until joint is cured. End pressure should be set to provide 150-200 psi pressure for non-structural joints. Crowder wheels should be aligned to match fingers accurately.*

Adhesive Application: *Sufficient adhesive spread will provide a uniform coverage that should cover 1/2-2/3 the length of the finger on both sides in a thin continuous film. Make sure fingers aren't skipped and that the adhesive is applied to the whole joint, not just the tips of the fingers. Excess adhesive squeeze-out can cause arcing in a Radio Frequency tunnel. It also causes adhesive build-up and poor adhesive efficiency. Too much adhesive can cause a hydraulic effect resulting in finger joint back off.*

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product data sheet

Wood Adhesives

Multibond EZ-2

PERFORMANCE PROPERTIES

Finger Joint results per TECO report: 01-114 - ASTM D 5572-99									
		Test Results				**Requirements**			
Adhesive	*Exposure*	*Strength (psi)*		*Wood failure%*		*Strength (psi)*		*Wood failure %*	
		Avg.	*Min.*	*Avg.*	*Min.*	*Avg.*	*Min.*	*Avg.*	*Min.*
Multibond EZ-2	*Dry*	*6405*	*N/A*	*100*	*100*	*2000*	*N/A*	*60*	*30*
	Three-Cycle Soak	*5300*	*N/A*	*98*	*95*	*1000*	*N/A*	*30*	*15*
	Elevated Temp.	*4105*	*N/A*	*70*	*15*	*1000*	*N/A*	*40*	*20*

Meets or exceeds the following industry standards:

- *ANSI/HPMA 1994 Type II water resistance*
- *NWWDA Type I and Type II water resistance*
- *European Standard DIN EN 204 D3 (formerly DIN 68602 B3)*
- *European E-1 formaldehyde emission standard*
- *ASTM D 5572 Dry use finger joint standard*

ASTM D-905 Block Shear Strength:	***Psi***	***wood failure%***
Room Temperature	*3,582*	*38*
Overnight 150°F	*1,324*	*0*

Room Temperature Speed of Set: *0.94 (Fast)*

STORAGE AND HANDLING

Shelf Life: *12 months at 70°F. Store in closed containers.*

[1] *All numerical values represent typical properties.*
[2] *If product has been frozen, contact Technical Service for instructions.*
[3] *Measured by Franklin's film formation test. Gluing conditions will affect minimum use temperature.*

IMPORTANT NOTICE TO CUSTOMER:
The recommendations and data contained in this Product Data Sheet for use of this product are based on information Franklin believes to be reliable. They are offered in good faith without guarantee, as conditions and methods for use of our product by Customer and are beyond Franklin's control. Customer must determine the suitability of the product for a particular application before adopting it on a commercial scale. Discoloration and checking of wood veneer materials may occur with use of the product. These occurrences range in appearance, color and may also vary depending upon the species of wood veneer to which the product is applied. Such discoloration and checking may appear during or after the manufacturing process which utilizes the product. Environmental conditions in some manufacturing plants and end-use locations can contribute to discoloration and checking. Because such discoloration and checking are attributable to conditions beyond Franklin's control, Franklin cannot assume any responsibility or liability for any discoloration and/or checking problems that might occur.

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Franklin Adhesives & Polymers