Multibond 300 FJ

Multibond 300-FJ is a one-part crosslinking polyvinyl acetate emulsion adhesive developed with a low minimum use temperature for use in a wide variety of plant conditions. Multibond 300-FJ meets DIN EN204 D3 as well as ASTM D-5572 dry use for finger joints in non-structural lumber products.

PHYSICAL PROPERTIES

Chemical family description: *Crosslinking polyvinyl acetate emulsion adhesive*
Appearance: *Light yellow /cream colored liquid*
Typical viscosity (cps): *2500 - 4000 (3/12/83°F)*
Weight solids (%): *45.5 - 48.5%*
pH: *2.25 - 3.25*
Specific gravity: *1.09* ***Weight pounds per gallon:*** *9.09*
Suggested minimum use temperature: *45°F/ 7°C*

KEY PRODUCT FEATURES

- Excellent for finger jointing in colder climates
- Light colored glue line
- Water-resistant
- Low minimum use temperature
- Meets the definition of NAF for CARB and TSCA Title VI

PERFORMANCE PROPERTIES

- Meets European Standard DIN EN204 D3
- Meets ASTM D-5572-99 Dry Use
- Meets WDMA Type 1 and 2 water resistance
- 175.105 FDA Compliant

DIN EN 204 D3 Classification of Thermoplastic Wood Adhesives for Non-structural Applications: Load group D3 Beech

Storage sequence	Minimum required average value (N/mm^2)	Average value (N/mm^2) on Multibond 300-FJ
1	≥ 10	15.5
3	≥ 2	2.2
4	≥ 8	13.5

**Results from internal testing*

ASTM D-5572-99 Dry Use for fingerjoints in non-structural Lumber Products

	Test results				Requirements			
Exposure	*Strength (psi) Average*	*Strength (psi) Minimum*	*Wood failure (%) Average*	*Wood failure (%) Minimum*	*Strength (psi) Average*	*Strength (psi) Minimum*	*Wood failure (%) Average*	*Wood failure (%) Minimum*
Dry	*6405*	*N/A*	*100*	*100*	*2000*	*N/A*	*60*	*30*
3 cycle soak	*5300*	*N/A*	*98*	*95*	*1000*	*N/A*	*30*	*15*
Elevated Temp.	*4105*	*N/A*	*N/A*	*N/A*	*1000*	*N/A*	*N/A*	*N/A*

**Results from internal testing*

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Like all adhesives, proper gluing practices are needed to achieve stated performance.

APPLICATION GUIDELINES

Moisture content: Six to eight percent is the recommended moisture content for the gluing stock. High moisture content will dramatically increase the clamp time needed. Panel shrinkage may occur resulting in stress cracks or end-joint delamination.

Finger joint cutter-heads: Knife stack/set - be sure to check overall knife stack for accuracy. Keep cutterheads in pairs and properly cleaned. Cutter-heads should be sharpened as a set. Knife set should cut only 0.25 mm or 0.010 inches to 0.75 mm or 0.030 inches of wood.

Finger joint assembly: End pressure should be set to provide 14.0 kg/cm² - 35.0 kg/cm² or 200 - 500 psi pressure for non-structural joints. Crowder wheels should be aligned to match fingers accurately.

Finger joint adhesive application: Sufficient adhesive spread will provide a uniform coverage that should cover one-half to two-thirds 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. Too much adhesive can cause a hydraulic effect.

Minimum use temperature: Curing temperatures should be higher than the minimum use temperature of the adhesive. This includes the temperature of the stock to be glued as well as the air and adhesive temperatures. If the temperatures are below the minimum use temperatures you will see a white, chalky appearance of the glue line. These bonds are usually weak.

Clean-up: For easy removal of adhesive from equipment, clean up while it is still wet with warm water (this includes the glue roller and pans) . For dried glue, steam and or hot water are the most effective. Using glue release agents on equipment will also allow for easier clean up.

STORAGE AND HANDLING

Shelf life: Best if used within twelve months of date of manufacture. Mix before use for best results. Product is freeze-thaw stable, but may need to be mixed prior to use.

For additional questions, Franklin's technical service team is available at 1.800.877.4583. 24/7 technical service is available online at www.franklinadhesivesandpolymers.com.

IMPORTANT NOTICE TO CUSTOMER:

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