

Franklin's recommended products

Advantage 160

Highly water-resistant, exceeds ASTM D-5572 wet-use performance and ideal for finger jointing, edge gluing, radio frequency applications and hot pressing.

Advantage 405 & 415

Highly water-resistant two-part adhesives that surpass both the ASTM D-5572 wet-use finger joint and ASTM D-5751 wet-use laminate standard.

Advantage 425

Designed for finger jointing applications requiring excellent water-resistance and high performance. It surpasses the requirements for ASTM D-5572 wet use.

Multibond EZ-2

Designed for cold press applications including finger jointing, but can also be used for radio frequency, assembly and hot press gluing. It has a low minimum use temperature.

Multibond X-016

Highly water-resistant adhesive ideal for finger jointing, cold press, radio-frequency and hot-press applications.

ReactITE 8143

A one-component, low foam, moisture-curing adhesive designed for finger jointing applications. It is a 100% solids adhesive that eliminates the VOCs and waste associated with many traditional adhesives.

Woodbond F

Cost-effective, fast-setting PVA well-suited for finger jointing, doweling and general assembly work. Its low viscosity makes it easy to spread by mechanical adhesive applicators.

Woodbond X-338

Used in finger jointing of interior stock and capable of passing the ASTM-5572 dry use three cycle water soak while maintaining a high level of heat resistance.

Woodbond 1910

Ideal for finger jointing of interior stock and has excellent handling properties, high heat resistance and easy extrusion capabilities.

Woodbond 1920

One-component ASTM D-5572 interior use adhesive with shear thinning rheology which makes it ideal for extrusion on finger joints. It can be mixed with Catalyst A to provide ASTM D-5572 wet use performance.

Technical Leadership

With over 70 years of combined hands-on experience, our technical support team is one of the most recognized and respected in the industry. We welcome your calls and encourage you to contact us if you have any questions or concerns regarding any of our finger jointing adhesives.



For additional support, try our pressure point calculators available 24/7 online at www.FranklinAdhesivesandPolymers.com. With our collection of online calculators, you can determine the appropriate settings and costs when using our adhesives for finger jointing.

1.800.877.4583



gluing guide Adhesives for Finger Jointing



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Adhesives for Finger Jointing

Franklin Adhesives & Polymers has a complete line of non-structural finger jointing adhesives, each designed for a particular end-use requirement. For instance, Woodbond 1910 meets ASTM D-5572 dry use requirements and is frequently used for interior applications such as furniture and trim moldings. If some water-resistance is desired, Multibond EZ-2, a one-part cross-linking PVA, is a perfect choice. For exterior joints requiring ASTM D-5572 wet use performance, Advantage 405 and Advantage 160 are used by some of America's leading window and door manufacturers. If you are looking for the highest-performing finger joint glue on the market, consider Advantage 425. A highly water-resistant, two part cross-linking PVA, this product has a low minimum use temperature.

Trouble shooting guide

The preparation of joints as well as the adhesive itself 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 is a factor in 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 achieve a properly fitting finger joint or trouble shoot problems in your operation guidelines.

Cutter-heads

- Knife Stack/Set - Be sure to check overall knife stack for accuracy. Keep cutter-heads 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.

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.

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.
- If the adhesive is a two-component system, make sure the ingredients are properly mixed.
- Excess adhesive squeeze-out can cause arcing in a high frequency tunnel. It also causes adhesive build-up and adhesive waste. Too much adhesive can cause a hydraulic effect in finger joint back off.

Finger Jointing Trouble Shooting Guide

Below is a listing of the most common problems, causes and recommendations.

Problem	Possible cause	Recommendation
Pressed finger joint blanks fall apart	<ul style="list-style-type: none"> ■ Glue penetration into wood is not adequate ■ Temperature is too cold to allow glue to form a reliable bond and chalking occurs 	<ul style="list-style-type: none"> ■ Moisture content of wood is too high (above 15%) ■ Keep boards and surrounding work area above minimum use temperatures
Joint fingers too short or too long	<ul style="list-style-type: none"> ■ If fingers are too long – the fingers must be shortened by increasing the amount of wood the trim saw removes. If the fingers are too short – they must be lengthened by reducing the amount of wood the trim saw removes. 	<ul style="list-style-type: none"> ■ A good finger joint will have no gaps, allowing very little room for excess glue. This is accomplished when the fingers are equal in lamination.
Joint fingers have concave gap on side	<ul style="list-style-type: none"> ■ Cutters were not resharpened according to hook gauge. Cutters have too sharp of a hook angle. 	<ul style="list-style-type: none"> ■ Grind the cutters to match the hook gauge
Joint fingers have convex gap on side	<ul style="list-style-type: none"> ■ Cutter stack moved during setup and rotated too far forward for the correct set-up angle ■ Cutters were not resharpened according to hook gauge or have too blunt of an angle ■ Cutter stack was not pulled up to the alignment post 	<ul style="list-style-type: none"> ■ Reset the head and check alignment of cutter stack ■ Grind the cutters to match the hook gauge ■ Set cutter stacks against the alignment post of the set-up stand