



Franklin International

	Product	Uses	Туре	Sizes	Rate Of Streng Minutes	th Development Pounds	Bon Temperature	d Strength (ASTM D Strength	0-905) Wood Failure	Assembly Time After Gluing Application	Chalk Temperature	Use Temperature	VOC (less water)	Freeze/thaw stable	Shelf Life	Clean-up
<u>ELUE LINE GUIDE</u>	<b>Titebond</b> <sup>©</sup> <b>Original Wood Glue</b> The industry's first aliphatic resin glue that has been the professional's choice for over 40 years. It provides a strong initial tack and fast speed of set to reduce clamp time. Titebond Original also develops a bond stronger than wood, offers excellent sandability and is unaffected by finishes.	Can be used on wood, hardboard, high pressure laminates, particleboard, leather, supported vinyl, cloth, paper and many other porous materials.	Aliphatic Resin	4 oz 8 oz 16 oz 32 oz gallon 5 gallon drum	3 5 10	185 319 550	70°F* 150°F*	3600 psi 1600 psi	77% 10%	5 minutes	50°-55°F	above 50°F	10.7 g/L	Yes	2 years	Water when wet sand when dry
	<b>Titebond</b> <sup>©</sup> <b>II Premium Wood Glue</b> The only leading brand, one-part wood glue that passes ANSI Type II water-resistance. It is ideal for exterior woodworking projects, including outdoor furniture, birdhouses, mailboxes, and picnic tables. Titebond II Premium provides a strong initial tack, fast speed of set, superior strength and excellent sandability. It is FDA approved for indirect food contact and is ideal for radio frequency (R-F) gluing systems.	For use on wood-to-wood and on most other porous materials where a water resistant glue is required. Limitations: Titebond II passes Type II water-resistance tests. Titebond II is not recommended for continuous submersion or for use below the waterline. Because of the variances in the surfaces of treated lumber, it is a good idea to test for adhesion first.	Crosslinking Polyaliphatic Ernulsion	4 oz 8 oz 16 oz 32 oz gallon 5 gallon drum	3 5 10	207 354 591	70°F* 150°F*	3750 psi 1750 psi	72% 6%	5 minutes	55°-60°F	above 55°F	13.7 g/L	Yes	3-4 years	Water when wet sand when dry
	<b>Titebond</b> <sup>©</sup> <b>Dark Wood Glue</b> A special formula that combines all the outstanding qualities of Titebond Original with a darker glue line. It provides a strong initial tack and fast speed of set to reduce clamp time. Titebond Dark also develops a bond stronger than the wood itself, offers excellent sandability and is unaffected by finishes.	Can be used on wood, hardboard, high pressure laminates, particleboard, leather, supported vinyl, cloth, paper and many other porous materials.	Aliphatic Resin	8 oz 16 oz gallon 5 gallon	3 5 10	185 319 550	70°F* 150°F*	3600 psi 1600 psi	77% 10%	5 minutes	50°-55°F	above 50°F	10.7 g/L	Yes	2 years	Water when wet sand when dry
	<b>Titebond</b> <sup>®</sup> <b>Wood Molding Glue</b> The thickest, fastest-drying glue available for use with porous and semi-porous materials. It provides a strong initial tack and fast speed of set, yet allows realignment of working pieces. Titebond Wood Molding also develops a bond stronger than wood, offers excellent sandability and is unaffected by finishes.	Ideal for finish trim, crown molding, baseboards, window casings and other applications requiring a professional- strength, no-run wood glue.	Thixotropic Polyvinyl Acetate	4 oz 8 oz 16 oz	3 5	162 253	70°F* 150°F*	3582 psi 800 psi	8% 0%	3-5 minutes	50°-55°F	above 55°F	9.8 g/L	Yes	1 year	Water when wet sand when dry
	<b>Titebond Liquid Hide Glue</b> The first hide glue to be offered in a liquid, ready-to-use form. Professional woodworkers use Titebond Liquid Hide for its long assembly time, exceptional strength and unique crackling effect on wood. Its sensitivity to moisture allows for easy disassembly of parts, a critical benefit in antique restoration or the repair of musical instruments.	Can be used on wood, hardboard, high pressure laminates, particleboard, leather, supported vinyl, cloth, paper and many other porous materials. Also used to create a "crackling" effect on wood and other surfaces.	Natural Protein Emulsion	4 oz 8 oz 32 oz 5 gallon	3 5	105 147	70°F* 150°F*	3591 psi 3916 psi	77% 64%	10 minutes	NA	above 50°F	0 g/L	Yes	1 year	Water when wet or dry
	<b>Titebond</b> <sup>©</sup> <b>Polyurethane Glue</b> Titebond Polyurethane Glue is a professional-strength, waterproof glue specifically designed for multi-purpose applications. Twice as thick as traditional polyurethanes, it provides a no-run, no-drip glue line for more precise applications. Titebond Polyurethane is ready-to-use, offers excellent sandability and is unaffected by finishes.	Versatile performance! Ideal for wood, metal, plastic, ceramics, HPL, stone, Corian®and more.	Polyurethane	5 oz 8 oz 16 oz	NA	NA	70°F* 150°F*	3510 psi 2515 psi	58% 7%	20 minutes	NA	above 50°F	0 g/L	Yes	1 year (unopened)	Mineral spirits when wet, sand or scrape when dry
	<b>Titebond</b> <sup>®</sup> <b>Home/School Glue</b> Specifically designed for home, school and craft projects. It is washable and won't stain clothing, making it ideal for children of all ages. It is also non-toxic, safe to use and FDA approved for indirect food contact. Titebond Home/School is an all-purpose formula that sets fast and dries clear.	For use on paper, fabric, wood, pottery, cloth, Styrofoam®, yarn, felt, glitter and more.	Polyvinyl Acetate	4 oz 8 oz gallon	3 5 10	203 279 424	70°F* 150°F*	3689 psi 1582 psi	6% 0%	5 minutes	55°-60°F	above 60°F	12.0 g/L	Yes	1 year	Water when wet or dry

## Tips For Successful Gluing

The following information pertains to all Titebond wood glues with the exception of Titebond Polyurethane Glue. For additional information about Titebond Polyurethane Glue, please see label or call Tech Service 1-800-347-GLUE.



### **Optimum Conditions**

We recommend that the moisture content of the wood be between 6-8% and the relative humidity be between 40-50%.



#### General Clamp Pressure

For softwoods (pine): 100-150 psi For medium density woods (cherry, soft maple): 150-200 psi For hardwoods (oak, birch): 200-300 psi



### Clamp Time

*Clamp time is dependent on wood species, moisture content and environmental conditions. For edge & face gluing: 2-4 hours Cure time on most glues: 24 hours* 

Do not use metal tools with any Titebond wood glue. Iron may contaminate the glue and darken the glue line. Iron will not, however, adversely affect the strength of the glue.

Care should be taken to ensure a tight fit between wood pieces with no saw marks and no burnishing of the surfaces to be glued.

*Clamps should be positioned a minimum of 1 1/2-2 inches in from sides and evenly spaced at 8-12 inches throughout piece.* 

# **Common Gluing Terms**

#### Assembly Time

Assembly time refers to the time lapse between glue spreading and application of pressure.

## Chalk Temperature

In a wood glue, the particles of adhesive are suspended in water. When it dries, the loss of water pulls the particles together with enough force to form a continuous adhesive film. If the drying temperature is below a critical point, the effect of the water evaporation is not enough to pull the particles into a continuous film. The particles are not joined together and are left in the joint. The dried film in the joint will appear whiter than normal. This is known as "chalking" and the critical temperature is the "chalk temperature." When chalking occurs, the glued joint loses strength.



### Freeze-Thaw Stability

Freeze-thaw stability means that the product will go through 5 freeze-thaw cycles before becoming unusable. Some wood glues will have a "cottage cheese" look after one freezing. When this happens, stirring will bring the glue back to a normal thickness.

## **Technical Support**

Since 1935, Franklin International has backed its products with the highest degree of technical support in the industry. Call our Technical Support Hot Line if you have a question about any of our products.

1-800-347-GLUE (4583)

Compliments of your quality Franklin dealer:

