### PRODUCT SPECIFICATIONS

| Titebond  ORIGINAL             | Titebond PREMIUM             | Titebond <b>ULTIMATE</b>   |
|--------------------------------|------------------------------|----------------------------|
| BOND STRENGTH<br>3,600 psi     | STRONGER<br>3,750 psi        | STRONGEST<br>4,000 psi     |
| ASSEMBLY TIME<br>4-6 minutes   | SHORTER<br>3-5 minutes       | LONGER<br>8-10 minutes     |
| APPLICATION TEMPERATURE ≥ 50°F | HIGHER<br>≥ 55°F             | LOWER<br>≥ 47°F            |
| INTERIOR USE                   | EXTERIOR USE<br>Weatherproof | EXTERIOR USE<br>Waterproof |

# **PATENTED GLUE TIP**

- Removable/washable clear tip
- Easy to clean wont clog
- Flat glue bead



# THE WOODBOND STORY

In 1986 John Pfitzner discovered the Titebond product at an Atlanta machine fair. He began importing 44-gallon drums of Titebond Regular from Franklin International for his own use and one other local manufacturer, and Woodbond Adhesives was formed. By reputation alone, the business has grown from one tonne per year to now over 150 tonnes, with a much larger product range.

But the Titebond story begins more than 60 years earlier. Franklin has been the industry leader in bonding wood and wood products. Their history of innovation started in 1935 with Liquid Hide Glue, a ready-to-use formula that revolutionised the woodworking industry.

In 1955 Franklin again set the standard with the development of the first aliphatic resin glue, Titebond Original Wood Glue. Then in 1991 introduced Titebond II Premium Wood Glue, the first one-part Type II water-resistant glue, and later Titebond III Ultimate which passes the Type 1 boil test achieving the highest bond strength of all the wood glue range. Franklin's long-standing commitment to research and development continues to bring new and innovative products to the market.

Woodbond Adhesives now offer an expanded line of Titebond products, having introduced smaller packaging for the small professional woodworker as well as the larger furniture and woodworking markets. These wood glues are at the leading edge of technology and we will continue to provide innovative products to meet the needs of the Australian

## SPECIFIC APPLICATION

## Edge and face gluing

This process involves gluing solid or composite stock timber, either edge to edge, face to face or edge to face. Joint preparation is of critical importance since often, no other fasteners are used. The joints should fit tightly, squarely and be free of saw marks, knife marks, glazing or burnishing. On wide edge glued panels, care should be exercised in relation to the annular ring alignment pattern of the component parts to minimise warping and cupping of the panel.

Recommended products: Titebond Original, Titebond Original Extend, Super Titebond, Titebond Supreme, Titebond II Premium and Titebond III Ultimate.

# Assembly gluing

The gluing of mortise and tenon, dovetail, tongue and groove, corner block, dowel, biscuit, mitre, cleat and many other types of joints can be classified as assembly gluing. Many types of assembly joints involve the gluing of long grain to long grain and long grain to end grain. Joint preparation is important as with other types of gluing. Joints should be cut accurately with sharp tools and fit tightly when clamped or assembled, as assembly glues are not designed to fill gaps.

Recommended products: Titebond Original, Titebond Original Extend, Super Titebond, Titebond Supreme, Titebond II Premium (Weather-proof), Titebond III Ultimate (for high water resistance) and Titebond Polyurethane.

# **Radio frequency gluing**

#1 Selling Formula

Water-resistant

Interior/Exterior

Fast set time

tronger than wood Water cleanup

NET 16 FL OZ (473 mL)

Rated #1 By Pros

NET 16 FL OZ (473 mL)

RF gluing is similar in concept to hot pressing, in that heat is used to accelerate the curing process. The heat that helps dry the glue line is supplied by electrical energy (similar to microwave energy), but unlike hot press, the process can be used on materials of many different shapes. Cross-linking polymer glues like Titebond II Premium and Multibond EZ-2 are required for successful radio frequency curing, and provide the additional benefit of HPVA Type II water-resistance.

Recommended products: Titebond II Premium, Multibond EZ-2.

## GENERAL APPLICATION TIPS

# Joint preparation

Our glues work by penetrating the pores of the wood in a well formed joint to develop a bond stronger than the wood itself.

For this to occur, the surfaces to be bonded must be free of knife marks, saw marks, glazing, burnishing or any foreign materials that would tend to seal the pores of the bonding surface. Although the glues have some gap-filling ability, they are not designed to fill significant gaps.

As a rule, the strongest glue joints result from tight-fitting, well-machined and square joints. Dull cutting tools can result in burnished or glazed joints, or fuzzy surfaces containing a lot of short, torn wood fibres. All of these conditions can produce poor joints.

Assembly joints that fit so tightly that they must be hammered together can also be a cause for concern. The glue can be scraped away from the bonding surface as the joint is forced together.

## Clean up

With proper application and tight-fitting joints there is still a potential for glue squeeze-out. This can be removed with a damp cloth while still in the wet stage, but excessive rubbing can cause a diluted film of glue to penetrate the surface, possibly causing problems in the finishing process. Use of a scraper to remove the excess can avoid the glue spot problems in the finishing process.

All of the products that we recommend for edge, face and assembly gluing are very sandable. The dried films of these products are very heat resistant and will not clog sanding belts or melt during the sanding process. This eliminates problems in the finishing process. The dried films of all the products are also non-abrasive and will not damage cutting tools.

Special care should be exercised in the clean up of water-resistant glues, such as *Titebond II Premium* and *Titebond III*, from clothing and other surfaces, as the dried films are very difficult to remove.

Note: The use of a release agent on machine metal parts prior to gluing will result in easy removal of dried adhesive build-up.

Technical support 1300 133 439



# WOODBOND —ADHESIVES—



www.woodbond.com.au

#### PRODUCT RANGE

## Titebond® Original

An extremely fast-setting, high-quality aliphatic resin emulsion adhesive. It dries very rapidly to give a short clamp time and has high solvent-resistance. It is excellent for sandable general purpose assembly for particle board, MDF, plywood and other porous materials as well as edge and face gluing of hardwoods and softwoods. It is preferred by musical instrument makers around the world.

## Super Titebond® (formerly Titebond 50)

A ready to use aliphatic resin emulsion adhesive. For over 55 years, it has been the premier choice for bonding wood substrates. It is fast setting and has excellent heat resistance. Titebond Super can be used in edge and face gluing and general assembly applications for interior use. It also performs well in conventional cold press equipment. Available in 20Lt only.

## Titebond® Extend (formerly Titebond Regular)

A slower setting version of Titebond Original, it offers superior performance in a broad range of applications, including edge and face gluing. It is particularly useful in complex operations such as curved railings and other assemblies that require more time to align. It develops a bond stronger than wood itself, offers excellent sandability and is unaffected by finishes. It is compatible with all common species of wood, as well as particleboard, MDF, plywood and other porous materials.

# Titebond® Supreme

A very fast-setting aliphatic resin emulsion adhesive that is specifically formulated to provide short clamp time for oak and other ring-porous woods. It has excellent heat and solvent resistance and excellent durability for interior exposures. Excellent for Ash and Oak high volume production. Available in 20Lt only.

#### Titebond® II Premium

A shelf stable, one part (pre-catalysed) cross-linking PVA adhesive. It is recommended for high frequency and hot or cold press, edge and face gluing and finger joint applications. With its very fast setting rate, viscosity stability and high percentage solids, it can also be used for a variety of assembly gluing applications. It develops a DIN EN 204 D3 water-resistant bond with a light-coloured glue line.

#### Multibond EZ-2

A shelf-stable, one part (pre-catalysed) cross-linking PVA adhesive. It is designed for cold press applications including finger jointing, but can also be used for radio frequency and hot press gluing. With its very fast setting rate, viscosity stability and high percentage solids, it can also 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 can be used in low temperature conditions. Available in 20Lt only.

#### **Titebond® III Ultimate**

The most advanced wood glue available today. While all Titebond products provide superior performance, Titebond III is especially useful for outdoor applications in cooler temperatures or when concern for substantial moisture calls for the use of a Type I glue (USA boil test). For interior applications, the longer working time provides woodworkers the necessary latitude to ensure that substrates are precisely aligned before being bonded. Overall it combines superior strength, sandability with water cleanup and the ease of use of aliphatic resins with the, durability and water resistance of polyurethanes into one easy-to-use formulation.

### Titebond® Cold Press Veneer

A high-quality, economical alternative to contact cement for large-scale bonding of veneers to flat surfaces. It is specifically formulated for cold press laminating of wood to solid woods, particleboard, MDF, plywood and other porous materials. It offers a moderate speed of set, a translucent glue line and contains none of the harmful or corrosive fumes typical of most contact cements. It also prevents bleed-through on open-grained and unbacked wood veneers.

## Titebond® Melamine

A glue designed for bonding wood, particleboard, MDF and other porous substrates to synthetic materials such as melamine, vinyl and HPL, as well as metals. It offers a fast initial tack, yet has a longer open time that allows for the accurate alignment of working materials. It is a water-based adhesive that is nonflammable, has low odour, dries clear and cleans up with water. Its thicker formulation offers fewer runs and drips, making it easier to use and more effective for precise assemblies.

## Titebond® Polyurethane

A breakthrough in adhesive technology. It is the only polyurethane glue to combine a long 20 minute working time with a short 45 minute clamp time. It is a versatile, professional-strength glue specifically formulated for multi-purpose applications. In addition to its superior wood-to-wood performance, it is ideal for metals, ceramics, most plastics, HPL, Corain, stone and other porous/non-porous materials. It is ready-to-use, offers excellent sandability and is unaffected by finishes.

# Titebond® No-Run, No-Drip

The thickest, fastest-drying glue available for use with porous and semi-porous materials. It is ideal for finish trim, crown molding, baseboards, window casings and other applications requiring a professional-strength, no-run wood glue. It provides a strong initial tack and fast speed of set, yet allows realignment of working pieces. It also develops a bond stronger than the wood itself, offers excellent sandability and is unaffected by finishes.

#### Titebond® Quick & Thick Multi-Surface

The thickest, fastest drying water-based glue available for use with porous and semi-porous materials. It is ideal for wood, pottery, ceramic, stone, glass, fabrics, leather and most craft-type materials. It provides a strong initial tack and fast speed of set, yet allows realignment of working pieces. It also develops a bond stronger than the wood itself, dries clear and is unaffected by finishes.

# **Titebond® All Purpose White**

Ideal for crafts, home repairs and general woodworking. It is a versatile, professional-grade formula now available for hobbyists, crafters and school teachers alike! It provides strong initial tack, excellent strength, and a fast set on wood, paper, fabrics, pottery and more. Titebond All Purpose White Glue is safe-to-use, non-toxic, cleans up with water and conforms to EN71-3 and ASTM D4236. Performance plus safety makes this glue a great choice for many interior applications.

| Product                                 | Туре                         | Strength <sup>+</sup> | Min use<br>temp. | Dried film           | Clean up | VOC      | Speed*<br>of set | Open/closed<br>assembly time | Moisture<br>resistance                         | Recommended  |
|---|------------------------------|-----------------------|------------------|----------------------|----------|----------|------------------|------------------------------|--|--|
| Titebond Original                       | Aliphatic<br>Resin           | 3,600 psi             | 10°C             | Light yellow         | *        | 10.7 g/L | 1.37             | 5/10 minutes                 | Internal use                                   | Extremely fastest setting aliphatic for general purpose, assembly, musical instrument making. Wood to wood.          |
| Super Titebond<br>(Titebond 50)         | Aliphatic                    | 3,600 psi<br>Resin    | 2°C              | Light yellow         | *        | 2.4 g/L  | 1.11             | 5/30 minutes                 | Internal use                                   | Best general-purpose aliphatic glue. Edge, face & cold press laminating. Wood to wood.                               |
| Titebond Extend<br>(Titebond Regular)   | Aliphatic                    | 3,510 psi<br>Resin    | 2°C              | Light yellow         | *        | 3.12 g/L | 1.00             | 10/30 minutes                | Internal use                                   | The first & most economical aliphatic glue. Excellent for edge, face gluing & cold press laminating.                 |
| Titebond Supreme                        | Aliphatic<br>Resin           | 3,635 psi             | 5°C              | Light yellow         | *        | 7.1 g/L  | 1.16             | 5/30 minutes                 | Internal use                                   | Very fast setting aliphatic specifically for ring porous hardwoods like oak/ash. Edge, face & cold press laminating. |
| Titebond II Premium                     | Crosslinking<br>PVA          | 3,750 psi             | 13°C             | Light yellow         | *        | 3 g/L    | 1.26             | 5/10 minutes                 | D3, E-1, ANSI Type 2<br>Soak Test Weatherproof | Edge, face & finger jointing. Cold and RF cure.  One part adhesive.  |
| Multibond EZ-2                          | Crosslinking<br>PVA          | 3,750 psi             | 7°C              | Cream                | *        | 33 g/L   | 0.94             | 5/30 minutes                 | D3, E-1, ANSI Type 2<br>Weatherproof           | Edge, face & finger jointing. Cold and RF cure.  Low minimum temperature use. One part adhesive.                     |
| Titebond III Ultimate                   | Proprietary<br>Polymer       | 4,000 psi             | 8°C              | Light brown          | *        | 9 g/L    | 1.00             | 10/15 minutes                | D3, ANSI Type 1 Boil<br>Test, Waterproof       | Edge, face & finger jointing. Assembly where waterproof joint required. FDA approved.                                |
| Titebond Cold Press<br>Veneer           | Modified PVA<br>Emulsion     | 2,508 psi             | 10°C             | Dark brown           | *        | 2 g/L    | 0.93             | 15/20 minutes                | D3, E-1, ANSI Type 1<br>Boil Test, Waterproof  | Low VOC economical alternative to contact cement.  Veneer to substrate minimal bleed through.                        |
| Titebond Melamine                       | Acrylic/ Styrene<br>Emulsion | n/a                   | 5°C              | Clear                | *        | 77 g/L   | n/a              | 5/15 minutes                 | Internal use                                   | Bonds melamine & vinyl coated products (non porous) to porous materials. Dries clear. Water cleanup. Low odour.      |
| Titebond<br>Polyurethane                | Polyurethane                 | 3,510 psi             | 10°C             | Tan                  | +        | 0 g/L    | n/a              | 20 minutes<br>total          | D4, E-1, ANSI Type 1<br>Boil Test, Waterproof  | Fast set, gluing timber to plastic and metal.  Moisture activated adhesive.  |
| Titebond<br>No-Run, No-Drip             | Thixotropic<br>PVA           | 3,000 psi             | 10°C             | Translucent          | *        | 2.4 g/L  | n/a              | 5/15 minutes                 | Internal use                                   | Porous & semi porous materials. Finish trim & mouldings, fill small gaps.  |
| Titebond Quick &<br>Thick Multi-Surface | Thixotropic<br>PVA           | 3,000 psi             | 10°C             | Transparent<br>amber | *        | 2.4 g/L  | n/a              | 5/15 minutes                 | Internal use                                   | Fast set, gluing timber, most craft materials.  3 times thicker than PVA glues and 2 times faster.                   |
| Titebond<br>All Purpose White           | PVA<br>Emulsion              | 3,550 psi             | 10°C             | Clear                | *        | 2.0 g/L  | n/a              | 5/15 minutes                 | Internal use                                   | Dries fast & clear, non-toxic, Ideal for craft, home repairs and general woodworking.                                |

Water when wet or dry.

dry. 

Mineral spirits when wet, sand or scrape when dry.

\* Water when wet, sand when dry. + Maple to Maple (ASTM D-905) Strength at 20°C.

\* Speed of set relative to Titebond Extend. (The greater the number, the faster the set.)