

# Technical Data Sheet

## FORTIS AD5105-S

### FEATURES

- Structural Glue Lam Adhesive
- GLTAA Certificate #007
- EN302 /AS/NZS 4364:2010
- Suitable for most hardwoods
- 3-9 minute working time
- Expands as it dries
- Water resistant
- Superior adhesion at low dosage
- Excellent heat resistance

### TYPICAL APPLICATION

- Timber Glue Lamination
- Structural Beams

### TECHNICAL DATA

Color: Opaque/green liquid

Coverage: 55-110 g/m<sup>2</sup>

Clamp Time: 15-20min @ 20°C (65% RH)

**FORTIS AD5105-S** is a single component, moisture curing structurally certified polyurethane timber adhesive used for glue lamination. It reacts rapidly with atmospheric moisture, to provide a superior bond for load bearing timber applications.

### SURFACE PREPARATION

Excellent wood-to-wood contact is necessary to achieve optimum bond strength. A smooth surface achieved through planing or similar technique will aid in providing a good wood-to-wood contact. A good mechanical fit for finger-jointing is necessary and internal or bonding pressures for laminating must be at least 1400kPa for optimum performance.

Extensive laboratory experiments have shown that to achieve optimum performance with the **FORTIS AD5105-S** a water mist must be applied to the wood. The water mist applied prior to glue application, "**TO BOTH ADHERING SURFACES**". The water application should be approximately 30-50 gsm for both adhering faces. (this process has been found beneficial for the oiliest of Australian Timbers)

### APPLICATION

With the use of a water mist, **FORTIS AD5105-S** is not drastically affected by the moisture content of the wood. Assembly time tolerances will be mill and substrate specific. However, a good rule of thumb for minimum assembly time tolerances with the recommended water misting is 2-3 minutes total assembly time.

**FORTIS AD5105-S** can be heated up to 35°C prior to pumping to reduce the apparent viscosity and improve pumping ability and flow. (Ask Fortis for simple setup of heat rooms)

The cure time of **FORTIS AD5105-S** can be accelerated with heat and consequently retarded with colder temperatures. Heating of the substrate, glue line or adhesive itself can accelerate cure.

**FORTIS AD5105-S** generally requires lower dosages than traditional resins used for engineered wood products. Typically dosages of 55 – 140 grams per square meter (gsm) are common

### Disclaimer

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Assembly time tolerances are dependent on the wood moisture content, spread rate, temperature of the substrate, temperature and relative humidity of the mill and atmospheric conditions, etc. As previously mentioned an excellent wood-to-wood contact is necessary to achieve optimum bond strength. If products have not been under pressure for the full time to a testable bond (as in finger - jointing applications), it is important that the finished products are handled gently until a testable bond has been achieved

### CLEAN UP

Allow glue to dry then scrape, chisel, sand or cut excess glue

Clean tools with acetone or white spirit immediately after use (before adhesive dried).

### SAFETY

- Contains isocyanates. Please refer to Material Safety Data Sheet prior to use.
- Store in cool, dry conditions, out of direct sunlight and in a well-ventilated area. DO NOT store below 5°C or over 50°C.
- Good industrial hygiene should be observed always – Appropriate PPE should be worn including impervious gloves & eye wear.

### PACK SIZE

225kg

### SHELF LIFE

12mths @ 25°C unopened

*For further information, refer to the Fortis website [www.fortisadhesives.com.au](http://www.fortisadhesives.com.au) It contains not only the Safety Data Sheets but also technical bulletins on adhesive applications and surface preparation.*



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