# BONA QUANTUM T



Bona Quantum T is a hard-elastic moisture cured silane-based adhesive for solid timber floors, including overlay, parquet, blocks and engineered timber floors. Its revolutionary Titanium technology brings a rapid crosslinking action with a high initial bond strength. With a slightly higher viscosity than similar products Bona Quantum T has an increased level of 'green' grab. Bona Quantum T has been optimised for use in the Bona OptiSpread UX application system.

Bona Quantum T withstands the thrust created during expansion of a timber floor, like conventional adhesives, whilst having a low resistance against shrinkage. This means that tension between the timber and the substrate, to which the timber floor is fixed, is reduced giving a more stable floor.

Where moisture levels are below 95% Bona Quantum T can be used as a combined moisture barrier and adhesive application using the Bona Trowel Plus applicator; this ensures complete coverage of the concrete floor surface whilst maintaining a rib structure. Alternatively, Bona R540 can be used where a moisture barrier system is required.

- Powerful titanium crosslinking
- Fast setting with rapid crosslinking and high initial bonding strength
- Floor sanding possible after 12 hours
- Excellent rib stability
- Combined moisture barrier and adhesive application
- Classified as non-hazardous

## Technical data

Product type: Colour: Open time: Sanding: Surface treatment:	1 component Silane-based adhesive Cream / Beige (Oak tones) Approx. 40 minutes 20° C / 60% RH Allow a minimum 12 hours at 20° C / 60% RH May be applied 24 hours after installation but, depending		
Sunace realment.	on the style of flooring, and site conditions a 2 day curing period may be needed. N.B. Low temperatures and / or high humidity will extend the drying / curing time		
Application tools:	Notched floor trowel / Bona Trowel Plus / OptiSpread UX		
Application rate:	Standard installation: 1 – 1.5 KG per m <sup>2</sup>		
	Installation & Moisture barrier: 2 – 2.5 KG per m <sup>2</sup>		
Safety:	Please consult the Safety Datasheet		
Flash point:	Non-flammable		
Cleaning agents:	Acetone or Ethanol		
	Set material must be removed by mechanical means.		



Waste: Shelf life: Storage / Transport: Dispose of in accordance with local regulations
2 years in unopened original packaging
The temperature must not fall below +5° C or exceed
+25° C during storage and transport
9 KG tubular bag (Can be use with Bona OptiSpread)
6 KG tubular bag (Box quantity – 3 x 6 Kg)

Pack size:

# Preparation

The substrate must be even, dry to the touch, clean, free from cracks and physically sound. The surface should be slightly textured.

Suitable substrates include:

- Cementitious screed / Concrete
- Floors levelled with levelling compounds (min. 2 mm thick plasticiser resistant),
- Board floors i.e. plywood, chipboard, etc.

For highly absorbent or slightly friable surfaces Bona R540 may be used to prime the substrate prior to installation. This will enable the normal open time for Quantum to be maintained.

If a moisture barrier is required for a cementitious screed / concrete prior to the installation of the timber floor Bona R540 should be used. Detailed information can be found in the appropriate product datasheet.

Alternatively, on floors with up to 95% moisture content Bona Quantum T may be used as a combined system – see Application.

## Application

For the optimum performance the following climatic conditions should be met.

- Air temperature: min. 18° C
- Floor temperature: min. 15° C (underfloor heating max. 20)
- R.H: max. 70 %

If lower temperatures or higher humidity is experienced drying / curing periods may be extended.

**Standard installation** - The adhesive should be applied evenly using a notched trowel appropriate to the flooring being laid (see Consumption).

**Moisture barrier + installation** - Where moisture levels are below 95% Bona Quantum T can be used as a combined moisture barrier and adhesive application. This must be completed using the Bona Trowel Plus applicator. Bona Trowel Plus is designed to ensure complete coverage of the concrete floor surface, leaving a 2 mm layer of adhesive, to act as a moisture barrier, whilst creating a rib structure, as with a normal trowel application. As the metal nibs on the blade will wear it is important that the Bona Trowel Plus bar is replaced every  $7 - 10 \text{ m}^2$  to ensure that the correct coverage is maintained. Insufficient coverage or an uneven coverage will compromise the efficacy of the system.

**NB.** It is important that careful measurement of the moisture content of the floor is carried out to a high standard. Assessment of the suitability and selection of a treatment schedule is the responsibility of the flooring contractor. A specification with a greater level of protection against moisture should be used where doubt remains regarding the moisture content of the floor.

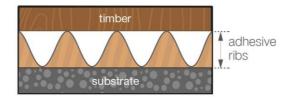


Bona R540 is suitable to be used with Bona Quantum T; detailed information can be found in the product datasheet.

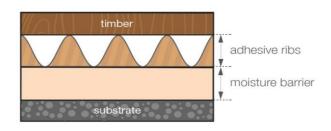
Place the timber on the adhesive within the open time, approx. 40 minutes, and press down firmly. Be aware that high temperatures, a porous subfloor and other site conditions can reduce the open time. Do not apply adhesive to a larger area than can be installed well within the open time. Where required boards should be weighted down.

Where the open time has been affected by external factors applied adhesive may 'skin' whilst on the floor. If this occurs remove the affected material and apply new adhesive. Adhesive which is squeezed up into joints (so that it might come into direct contact with the finish) must be carefully removed.

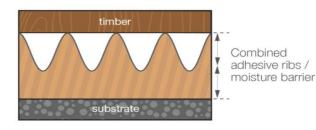
### Standard application



# Moisture barrier & adhesive application



# Combined moisture barrier & adhesive application



# **Bona Trowel Plus applicator**







Australian datasheet only - October 2024

#### Consumption / Timber size

It is important that timber is laid at the correct moisture content and in accordance with current Australian standards. The application rate of the adhesive is vitally important as the movement of timber of different dimensions produces varying amounts of stress upon the bond to the subfloor. Ensure that the correct coverage rates and even spread of the adhesive are achieved. Bona application trowels are available in the required sizes.

Туре	Dimensions mm	Coverage rate g / m <sup>2</sup>		
Overlay (end matched and butt edged)	12 mm – up to 86 mm 14 mm – up to 105 mm	1000 g / m²		
Parquet blocks	19mm – up to 125 mm	1000 g / m²		
Secret nail profile	80 x 19	Nailed & Glued:850 g / m <sup>2</sup> Glued only:1250 g / m <sup>2</sup>		
Top nail profile	180 x 21 130 x 19	Along joists or battens		
Engineered prefinished planks	2 layer 3 layer	1000 g / m² 1250 g / m²		
Acoustic matting Bona Quantum T is suitable for the installation of most acoustic underlays based on granules of rubber and cork with PU elastomer bonding agent. It is recommended that trial applications are made to ensure that the adhesion is satisfactory.		850 - 1000 g / m²		

When using Bona Quantum as a combined moisture barrier and adhesive the quantities required per  $m^2$  will be <u>doubled</u> – approximately <u>twice</u> that used for a standard installation.

**N.B.** Outside of the advice noted above it is not generally recommended that solid timber with a depth to width ratio greater than 1:6 is laid using Bona Quantum as the sole fixing method. Timber elements with a greater ratio may be more prone to gaps forming at the joints during extended periods of high temperatures and / or low humidity.

#### Surface treatment

Sanding (minimum 12 hours) and the application of a surface coating may usually be carried out after a minimum 24 hours has elapsed. However, depending on the type of parquet, absorbency of the substrate and the prevailing atmospheric conditions a period of up to 2 days may be required. After 24 - 48 hours the floor may be used.

#### Important notes

The information provided is prepared to the best of our current knowledge and makes no claim to be complete. The User is responsible for establishing that the product and recommendations herein are fit for the designated purpose, wood type and present situation before use.

Bona can only guarantee the delivered product. A professional and thereby successful application of the product is beyond our control. If in doubt, make a preliminary test.

The User is required to read and understand all information contained on package labels and safety data sheets before using this product

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