

# BONA R820



Bona R820 is a moisture cured silane-based adhesive for solid timber floors, including overlay, parquet, blocks and engineered floors.

Bona R820 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.

If a moisture barrier system is required Bona R540 can be used with Bona R820.

- One component
- Can be used as a 2-component system to shorten setting times
- Water and solvent free
- Fast setting with rapid initial bonding strength
- Excellent rib stability
- Classified as non-hazardous

## Technical data

Product type:	1 component Silane-based adhesive
Colour:	Beige / light brown
Density:	1.68 g / cm <sup>3</sup>
Open time:	Approx. 50 - 60 minutes 20° C / 60% RH
Sanding:	Allow a minimum 12 hours at 20° C / 60% RH
Surface treatment:	Up to 2 days depending on the style of flooring, and site conditions. N.B. Low temperatures and / or high humidity will extend the drying / curing time
Application tools:	Notched floor trowel
Application rate:	Standard installation: 1 – 1.5 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:	Dispose of in accordance with local regulations
Shelf life:	2 years NB. The shelf life is for <u>unopened</u> product
Storage / Transport:	The temperature must not fall below +5° C or exceed +25° C during storage and transport
Pack size:	6 KG tubular bag (sausage) Box quantity – 3 x 6 Kg tubular bag

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Bona R820 meets the requirements of EN ISO 17178

## 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),
- Board floors i.e. plywood, chipboard, etc.

For highly absorbent surfaces Bona R540 may be used to prime the substrate prior to installation. This will enable the normal open time for R820 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; it is usually expected that a moisture reading of 75% RH / 3 (electrical meter) would be considered acceptable. Detailed information on Bona R540 can be found in the datasheet.

## 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.

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

**NB.** It is important that 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.

Place the timber on the adhesive within the open time, approx. 50 - 60 minutes, and press down firmly. Be aware that high temperatures, a porous subfloor and other site conditions can reduce the open time, and applied adhesives may 'skin' whilst on the floor. Do not apply adhesive to a larger area than can be installed well within the open time. Where required boards should be weighted down.

Adhesive which is squeezed up into joints (so that it might come into direct contact with a coating system) must be carefully removed.

**2 Component installation** - It is possible to use Bona R820 as a 2-component product. The addition of a small amount of water to Bona R820 significantly reduces the setting time. This allows several lines of timber elements, strips, etc. to be laid and to be worked against when laying the remainder of the flooring; for instance, when laying parquet.

Apply Bona R820 to the floor using the appropriate trowel, spray sparingly with water, at a maximum rate of 5 ml per KG, and rework the adhesive. The open time is reduced to approximately 5 minutes so the timber must be laid immediately. After 2 – 4 hours the remainder of the floor can be laid.

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## 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.

Type	Dimensions mm	Coverage rate R820 g / m <sup>2</sup>
<b>Overlay (end matched and butt edged)</b>	12 mm – up to 86 mm 14 mm – up to 105 mm	1000 g / m <sup>2</sup>
<b>Parquet blocks</b>	19mm – up to 125 mm	1000 g / m <sup>2</sup>
<b>Secret nail profile</b>	80 x 19	Nailed & Glued:850 g / m <sup>2</sup> Glued only:1250 g / m <sup>2</sup>
<b>Top nail profile</b>	180 x 21 130 x 19	R820 along joists or battens
<b>Engineered prefinished planks</b>	2 layer 3 layer	1000 g / m <sup>2</sup> 1250 g / m <sup>2</sup>
<b>Acoustic matting</b> Bona silane adhesives are 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 / m <sup>2</sup>

**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 R820 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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