



Bona R540

ONE COMPONENT POLYURETHANE PRIMER

Multipurpose usage



1K polyurethane primer/damp-proof membrane for absorbent and non-absorbent sub-floors.

Bona R540 is a reactive 1-component polyurethane primer, used on absorbent and non-absorbent sub floors before the use of Bona silane adhesives. The product can also be used for damp proofing cement screeds and concrete floors up to 5 CM-% or 95 % RH. Furthermore, it can be used to reinforce slightly weak subfloors.

- Moisture barrier up to 5 CM-% or 95 % RH
- Multipurpose usage
- Easy to apply
- High penetration



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TECHNICAL DATA

Product type / base:	Polyisocyanat-Prepolymer
Colour:	transparent brown
Density:	1.14 g/cm ³
Application tools:	Trowel, Floor brush or Bona Microfibre roller (5 mm pile)
Giscode:	RU1
Safety:	Classified. (see Safety Data Sheet).
Curing time:	Between 6 and 24 hours, depending on the subsequent adhesive system (see Application Instructions on the following page).
Cleaning agents:	Bona Cleaning Wipes, Acetone, Ethanol, Alcohol. Dried material can only be removed mechanically.
Shelf life:	12 months from date of production in original unopened container.
Storage/Transport:	The temperature must not fall below +5°C or exceed +25°C during storage and transport. Store in a dry, well ventilated place.
Disposal:	Waste and empty containers should be handled in accordance with local regulations.
Pack size:	6 kg can.
Certificates/approvals:	EMICODE EC 1PLUS

Additional detailed information is noted in the appropriate Safety Data Sheet.



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SUBFLOOR PREPARATION

The subfloor must be level, sound, permanently dry and free from dust, laitance, weak layers, residues and other contamination that may impair adhesion. Where applicable, the subfloor must comply with relevant local standards and codes of practice. If these conditions are not met, the subfloor must be suitably prepared and any deficiencies rectified prior to installation.

All surfaces must be thoroughly vacuum cleaned prior to application.

Separating layers and contaminants, such as paints, varnishes, adhesive residues, old levelling compounds and floor coverings, must be mechanically removed.

Bona R540 can be used to reinforce slightly weak screeds or concrete surfaces. The suitability of the substrate must be assessed on an individual basis.

Where moisture suppression is required due to residual construction moisture, Bona R540 may be used as a moisture barrier within the stated limits.

The moisture content of the subfloor must be measured in accordance with local standards and codes of practice prior to application.

The subfloor must incorporate a functioning structural damp proof membrane within the subfloor build-up. Bona R540 does not replace such a membrane and is intended only to suppress residual construction moisture within the stated limits..

This product is described as a “moisture barrier” in line with common industry terminology. It functions by reducing and slowing water vapour transmission and is not designed to fully block vapour movement. It cannot be considered equivalent to a dedicated structural damp proof membrane.

SUITABLE SUBSTRATES

- Suitable substrates (including those with underfloor heating) are:
- Cementitious screed (CT) according to EN 13813
- Calcium sulfate screed (CA) according to EN 13813. Only as a primer. Must not be used as a DPM
- Concrete
- New chipboards (P4-P7) or OSB 2 – OSB 4 boards, screwed tightly.
- Mastic asphalt screed (AS) according to EN 13813, broadcast with quartz sand.
- Precast screed panels
- Old and new dry and sound sub floors such as gypsum fibre boards.
- Bona levelling compounds can be applied by using Bona D515 (undiluted) as an intermediate primer (see note in Application Instructions below).



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APPLICATION INSTRUCTIONS

Optimal conditions for use are an air temperature between 18 °C and 25 °C, a floor temperature min. 15 °C and max. 20 °C during installation (including underfloor heating), and relative humidity max. 65 % RH. Higher temperature and RH will accelerate curing; lower temperature and RH will slow down curing. Foaming of Bona R540 may occur at excessive application rates. Apply evenly and avoid excess application.

Application as a primer:

If necessary, allow Bona R540 to reach room temperature (18–25 °C) prior to application. Apply evenly using a Floor Brush or a Bona Microfibre roller (5 mm pile). Avoid the formation of pools. Allow to cure to a transparent film. Allow the following minimum curing times before installation with Bona silane adhesives: Bona R820, Bona R848, Bona R848T, Bona Quantum and Bona Quantum T: 24 hours; for Bona Titan: 6 hours is sufficient.

Application as a moisture barrier:

Where residual construction moisture is present in cementitious substrates, Bona R540 can be used as a

moisture barrier up to 5 CM-% or 95 % RH by applying two coats within a maximum of 24 hours. Apply the first coat as described under “Application as a primer”. When the surface is sufficiently dry to accept foot traffic (normally 1–2 hours), apply the second coat. The second coat must be applied within a maximum of 24 hours of the first coat.

After application of the second coat, allow the following minimum curing times before installation with Bona silane adhesives: Bona R820, Bona R848, Bona R848T, Bona Quantum and Bona Quantum T: 24 hours; for Bona Titan: 6 hours is sufficient. Final installation of the flooring must be completed within 48 hours.

Subsequent application of a Bona levelling compound:

When a subsequent application of a levelling compound is required, a coat of undiluted Bona D515 Multiprime shall be applied over the final coat of Bona R540 in order to ensure adhesion. Refer to the relevant Bona Technical Data Sheet for detailed application guidance.

CONSUMPTION

As a primer: approx. 100–150 g/m².

As a moisture barrier: approx. 250–350 g/m² (two coats).

Consumption depends on the substrate condition; very rough or porous subfloors may result in higher consumption.

IMPORTANT!

As from 24 August 2023 adequate training is required before industrial or professional use. Further information is available at feica.eu/PUinfo and safeusediisocyanates.eu



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The information in this document and all other advice and recommendations that we provide to help and assist the applicator are based on previous experience and extensive testing but makes no claim to be complete.

Because of the wide range of possible uses and conditions of application of our products, we do not relieve users from the need to carry out their own trials or to seek technical advice from Bona before use. Bona can only guarantee its products and not the construction as a whole. Observe recommendations from flooring manufacturer and the provisions of relevant standards.