



Bona R590

SILANE-BASED MOISTURE BARRIER



1K silane primer for priming and/or sealing residual moisture in cement screeds or concrete.

Bona R590 is to be used for priming and/or sealing the residual moisture in cement screeds or concrete (up to 5 CM-% / 95 % RH), before the installation of a wood floor. It can also be used for the reinforcement of weak sub-floor surfaces up to a certain level. It is compatible with all Bona silane adhesives, as well as Bona levelling compounds. It contains no liquid extenders or components that can migrate after curing.

- Reinforcing effect
- Moisture retardant up to 5 CM-% or 95 % RH
- Water and solvent free
- Superior to regular epoxy resin systems



Bona R590

SILANE-BASED MOISTURE BARRIER

TECHNICAL DATA

Product type / base:	Silane
Colour:	White-beige
Density:	1.56 g/cm ³
Drying time:	approx. 4–6 hours at 20 °C and 50 % RH
Application tools:	Bona trowel 500F or flat trowel.
Cleaning agents:	Bona Cleaning Wipes, acetone, ethanol, white spirit. Hardened material can only be removed mechanically.
Shelf life:	12 months from date of manufacture in unopened container. If the product shows signs of separation after longer storage times, stir thoroughly prior to use.
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.
Pack size:	8 kg bucket.
Certificates/approvals:	EMICODE EC 1PLUS

Additional detailed information is noted in the Safety Data Sheet.

SUBFLOOR PREPARATION

The subfloor build-up must include a functioning structural damp proof membrane. Bona R590 is intended only to suppress residual construction moisture in cementitious screeds or concrete (within the stated limits). It must not be used to address rising damp or to compensate for a missing or failed structural damp proof membrane.

The subfloor must be level, dry, clean and physically sound. It must be free from dust, laitance, weak layers, residues and other contamination that may impair adhesion. The subfloor must comply with relevant local standards and codes of practice. Any deficiencies must be rectified prior to application.

Separating layers and contaminants, such as paints, curing compounds, adhesive residues, old levelling compounds or other surface treatments, must be mechanically removed. Dense or smooth cementitious subfloors must be

mechanically abraded to ensure adequate surface strength and adhesion, such as with a Bona FlexiSand 1.9 fitted with diamond segments.

All surfaces must be thoroughly vacuum cleaned prior to application.

The moisture content of the subfloor must be measured in accordance with local standards prior to application. The permissible residual moisture limits for use as a moisture barrier are stated in this Technical Data Sheet.

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.



Bona R590

SILANE-BASED MOISTURE BARRIER

SUITABLE SUBSTRATES

- Cementitious screed (CT) according to EN 13813
- Calcium sulphate screed (CA) according to EN 13813 (only as a primer, not as a moisture barrier)
- Concrete floors

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, and relative humidity max. 70 % RH. The floor temperature shall not exceed 25 °C during the first three days after installation.

The product is protected by an aluminium disc, which shall be removed together with any small amounts of hardened material prior to use. Apply the primer evenly using a Bona 500F trowel (TKB A3) or a flat trowel.

If the subsequent application of Bona levelling compounds is required, dry quartz sand (grain size 0.3–0.8 mm) shall be broadcast into the wet primer. After curing, surplus sand shall be removed by sweeping and vacuum cleaning.

After approx. 4–6 hours (the surface may still feel slightly tacky), wood flooring installation can be carried out using a Bona silane adhesive. Installation shall be carried out within a short time frame in order to minimise dust contamination on the primed surface.

CONSUMPTION

As a moisture barrier: approx. 500 g/m² (application using a Bona 500F trowel).

As a primer: approx. 150–250 g/m² (application using a flat trowel).

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

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 the flooring manufacturer and the provisions of relevant standards.