



RENO E742 STRUCTURE

EPOXY REPAIR RESIN FOR REPAIRING CRACKS AND JOINTS AND CONSOLIDATING SUBSTRATE SURFACES

TECHNICAL SHEET NO: TDS02230 24/02/2023

SMART ADVANTAGES

- Suitable for repairing cracks and joints in excess of 1mm
- Consolidation of weak friable sand/cement screed and concrete substrates
- Highly efficient repair of micro fractured surfaces

DESCRIPTION

RENO E742 STRUCTURE is a two-part, solvent-free epoxy resin specifically designed for repairing cracks and filling joints in reinforced concrete and sand/cement screeds, treating fractured bases, sawn shrinkage joints and static cracks before applying any Bostik smoothing compound or surface DPM.

RENO E742 STRUCTURE is available as a 5kg unit and can be applied in mixed form directly to the floor surface to fill cracks and consolidate weak upper layers of the substrate.

It is suitable for use with warm water underfloor heating systems, provided a surface temperature of +27°C is not exceeded. It is suitable for use in areas subjected to high solar gain.



TECHNICAL CHARACTERISTICS

Colour	Part A: Liquid clear Part B: Pale yellow
Form	Liquid
Composition	Two component, solvent free epoxy resin
Application temperature	+10°C to +25°C
Specific gravity	1.04-1.08
Viscosity blend	200-400 mPa.s
Mixing ratio	Part A: 2 Part B: 1
Working times	30-45 minutes*
Drying times	24 hours (at 23°C)*
Compressive strength	Typically 82N/mm ² after 28 days
Flexural strength	Typically 35N/mm ² after 28 days

*Depending on temperature, ambient conditions, humidity, coating weight and substrate.

COVERAGE

- 2-5m² per 1kg. For joint and crack filling, approx. 5-7 l/m per 1kg. (Depending on the absorbency of the floor surface. A test area should be undertaken to ascertain consumption.)

APPLICATION

IMPORTANT: Before using Bostik RENO E742 STRUCTURE, refer to the relevant Health & Safety Data Sheet, available at www.bostik.com/uk.

All phases of installation should be undertaken in accordance with the latest editions of:

- BS 8102 Code of Practice for protection of structures against water from the ground.
- BS 5325 Code of Practice for installation of textile floor coverings.
- BS 8203 Code of Practice for installation of resilient floor coverings.
- BS 8201 Code of Practice for installations of for flooring of timber, timber products and wood based panel products.

Always wear appropriate PPE during use.

PREPARATION

Subfloor

- The subfloor should be tested for moisture in accordance with BS 8203:2017 Annex B. A reading of 75%RH or less confirms that the subfloor is satisfactorily dry. For readings above 75%RH, a suitable Bostik surface-applied damp proof membrane must be used.
- Any contaminants that may hinder adhesion, such as grease, oil, dirt, dust, curing compounds, surface hardeners, additives and adhesive residues must be completely removed using appropriate mechanical preparation equipment.
- For optimum performance, a stable room temperature of +10°C to +23°C should be maintained for at least 24 hours prior to, during and 24 hours post application. The temperature of the subfloor must be at least +10°C throughout the application and curing phase. Ensure that a maximum room temperature of +25°C is not exceeded during application.

Underfloor heating systems

- Warm water underfloor heating systems must be switched off for 48 hours prior to, during and for a minimum of 48 hours after application. After this time, gradually turn up the underfloor heating until operational temperature is achieved.

CRACK PREPARATION

- Cracks which have a width in excess of 1mm require confirmation from a structural engineer to confirm that the crack is suitable to be repaired and not indicative of

significant structural deficiencies. If confirmed as suitable to receive repair, then the crack can be opened up by mechanical means and repaired.

- Cracks up to 1mm in width do not require opening up to be repaired and the resin can be applied directly.
- Cracks 1mm or wider and confirmed as static require opening up with a suitable cutting disc and dust extraction system to a minimum of 5mm in depth of the substrate.
- Vacuum the crack using industrial vacuum equipment to ensure all dust has been removed and the crack is completely dust free.

JOINT PREPARATION

- Remove all debris, contamination and friable material from the joint.
- Vacuum the joint using industrial vacuum equipment to ensure all dust is removed and the joint is completely dust free.

MIXING

RENO E742 STRUCTURE must be mixed correctly prior to application to minimise air entrainment and formation of bubbles in the applied resin. Mixed resin can be used to fill multiple substrate cracks up to 1mm in width without the need for opening the crack up. It can also be used as an alternative method to filling prepared crack and joints.

- Slowly add the hardener (Part B) to the resin (Part A) whilst mixing with an electric drill and an epoxy mixing paddle.
- Mix thoroughly for 2 – 3 minutes with a slow speed electric drill and an epoxy-mixing paddle.
- Do not exceed a speed of 300 rpm to avoid air entrainment and bubble formation.
- Once mixed, immediately apply the mixed resin directly to the prepared substrate using a B2 notched spreading trowel, ensuring that the angle of the trowel is no less than 60°.

Note: It is essential that the product be back-mixed in the empty container (A). Pour some of the mixed material from container (B) back in to container (A) and fully mix with the residues to ensure all components are combined. Once mixed, pour the material back in to container (B) and use. After back mixing is performed, all material when hardened will be inert and deemed non-hazardous and normal waste streams can be used. Unmixed material is hazardous and will require specialist disposal. Contact Technical Services for detailed instructions. Consult with Local & National Authority regulations for safe disposal.

Never leave mixed material unattended. The product is exothermic and will generate heat when left in the original containers.

APPLICATION TO CRACKS AND JOINTS

- Apply the mixed resin directly to the prepared crack or joint by pouring the resin along the crack or joint until the resin fills the entire void.
- Smooth off any overspill or residue using a spreading trowel or scraper.
- Top up where needed to ensure that the crack or joint is completely filled.
- Allow to fully cure.

Note: For cracks or joints wider than 1mm, embed a strip of Bostik Mesh 100 glass fibre reinforcing mesh into the still wet surface of the epoxy resin and ensure it is fully embedded into the resin and bridges the crack or joint a minimum of 25mm either side.

SURFACE CONSOLIDATION

RENO E742 STRUCTURE can be used to consolidate or case harden weak friable screeds that fail BRE In-Situ Crushing Resistance Test (ISCR) or sometimes called “Drop Hammer Test”

- Pour the resin over a small area of the subfloor and, using a B2 notched trowel, move the product slowly over the surface as it sinks in to the subfloor. Once the section being worked upon no longer allows resin to penetrate, move the product on to a small adjacent area and repeat until the entire surface has been covered to saturation.
- Allow the product to fully cure, normally 24 hours in good ambient conditions.

SUBSEQUENT APPLICATIONS

Smoothing Compounds

Subsequent smoothing compound applications must incorporate the use of Bostik GRIP A936 XPRESS Primer.

- Ensure the RENO E742 STRUCTURE has fully cured.
- Within 24 hours of RENO E742 STRUCTURE achieving cured status, apply GRIP A936 XPRESS to the surface of the substrate.
- Allow the primer to fully dry. Typically 1-2 hours depending on ambient conditions.
- Apply the chosen Bostik smoothing compound in accordance with the Technical Data Sheet literature.

Epoxy Surface Membrane

RENO E742 STRUCTURE is suitable for use under Bostik Epoxy Moisture control liquid membranes.

- Ensure the RENO E742 STRUCTURE has fully cured.
- Within 24 hours of RENO E742 STRUCTURE achieving cured status, apply the chosen Bostik Epoxy surface membrane to the surface of the substrate in accordance with the relevant Technical Data Sheet literature.
- Within 24 hours of the chosen Bostik Epoxy Surface Membrane achieving cured status, apply GRIP A936 XPRESS

to the surface of the substrate.

- To a fully cured RENO E742 STRUCTURE, apply GRIP A936 XPRESS.
- Allow the primer to fully dry.
- Apply the chosen Bostik smoothing compound in accordance with the relevant Technical Data Sheet literature.

CLEANING

- Uncured resin can be cleaned with a solvent. Dry and hardened resin can only be removed mechanically.
- Clean tools and equipment with solvent. Remove surplus compound from surfaces whilst it is still wet. Dried and hardened material can only be removed mechanically.

STORAGE

- Store and transport securely in an upright position. Ensure the lid is fully closed. Store for up to 24 months from date of manufacture in original, unopened packaging in cool, dry conditions within the temperature range +5°C to +25°C and out of direct sunlight. Protect from frost.

PRECAUTIONS IN USE

For any application not covered, please contact Technical Services on +44 (0)1785 272625 or visit www.bostik.com/uk for advice.

Recommendations and suggestions are for guidance only, since conditions of use are completely beyond our control.

For health and safety instruction, first aid measures and spillage and disposal instructions, see separate Health and Safety Data sheet for Bostik RENO E742 STRUCTURE, available at www.bostik.com/uk.

PACKAGING

Product codes	30619177	5 kg
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