# RENO E742 STRUCTURE

## 2-COMPONENT EPOXY FOR REPAIRING CRACKS AND CONSOLIDATING SUBSTRATE SURFACES

### KEY BENEFITS

- **High penetrating ability**
- **Improve shear strength**
- **No stapling needed**
- **Suitable for exterior use (if covered)**

ÉMISSIONS DANS L'AIR INTÉRIEUR* A+ (A+ A B C)


### APPLICATIONS

#### 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 levelling compound.
Can be use for exterior cracks/joints repairs if covered afterwards.

**RENO E742 STRUCTURE** is available as:
- **400 ml dual-cartridge** for crack repairs with a caulking gun
- **1kg or 5kg unit** that can be applied in mixed form directly to the floor surface to fill cracks and consolidate weak upper layers of the substrate.

#### DESTINATION

Treatment of construction joints, stress control joints and stabilized cracks of less than 1 mm before applying a Bostik self-levelling compounds.

**Areas of applications :**

- Concrete
- Cement screeds
- Calcium sulphate screeds
- Underfloor heating system

### PRODUCT CHARACTERISTICS

| | |
|---|---|
| **Color** | Clear liquid epoxy clear (part A) + yellowish hardener (part B) |
| **Composition** | 2-components solvent free epoxy resin |
| **Specific gravity blend** | 1,04 – 1,08 |
| **Brookfield viscosity blend** | 200 – 400 mPa.s |
| **Application temperature** | +10°C to 25°C |
| **Mixing ratio by volume** | Part A : 2<br>Part B : 1 |
| **Coverage** | 1 kg of mixed product per 5 to 7 linear meters of cracks or approx. 4 sqm of surface consolidation |
| **Working time**** | 30 – 45 min |
| **Curing time**** | 24h |
| **Hardness shore D** | 81/84 |
| **Compressive strength After 7 days cure**** | 82 MPa |
| **Tensile strength After 7 days cure**** | 35 MPa |
| **Storage / Shelf Life*** | 24 months |

*from date of manufacture in original, unopened packaging, clear of the ground, in cool, dry conditions within the temperature range +5°C to +25°C and out of direct sunlight. Protect from frost, damp, condensation and dew.
**these times are determined at + 23° C and 50 % relative humidity on normally absorbent substrates

## SUBFLOOR PREPARATION

### APPLICATION CONDITIONS

The substrate must be sound, dry, free from materials (dirt, oil, grease) that would impair adhesion. 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. . Dense, smooth and metallic substrates have to be degreased and grinded.

For optimum performance, a stable room temperature of +10°C to +25°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.

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 & APPLICATION

**RENO E742 STRUCTURE** must be mixed correctly prior to application to minimize 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 appropriated epoxy mixing paddle (type Collomix LX). Mix thoroughly for 2 – 3 minutes with a slow speed electric drill. 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 TKB B2 spatula,

Important: Material is exothermic and can generate heat after mixing. Therefore, don't leave the container unattended after mixing and take it outside after use to allow residues to cure.

### SURFACE CONSOLIDATION

**RENO E742 STRUCTURE** 1kg or 5kg 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 spatula, move the product slowly over the surface as it sinks into 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.

### CAULKING PROCESS

Screwed the mixing nozzle on 2-part **RENO E742 STRUCTURE** 400 ml cartridge. Then place the 2-part cartridge into the dual component caulking gun and start extrude the resin into the cracks/joints until saturation.
Once properly filled, sprinkle the wet resin with dry quartz sand **BOSTIK S409** (0,4-0,9 mm). This step will improve the bonding of levelling compound or adhesive to be applied afterwards.

Please note: if the mixture disappears quickly into the crack, it is recommended to load the resin with our quartz sand **BOSTIK S409** (1 part sand to 1 part resin + hardener mix).
Allow the product to fully cure, normally 24 hours in good ambient conditions and then remove the excess and non-bonded quartz sand from the resin using a broom and/or vacuum.

### SUBSEQUENT APPLICATIONS

Subsequent smoothing compound applications must incorporate the use of **GRIP A936 XPRESS** Primer.
Ensure the **RENO E742 STRUCTURE** has fully cured. Within 36 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.

## COVERAGE

**As a crack repair solution**
400 ml cartridge of RENO E742 STRUCTURE per 3-4 linear meters (depends on the opening and depth of the crack)

**As a subfloor consolidation**
1 kg kit of RENO E742 STRUCTURE cover approx. 4 sqm of surface treatment (depends on subfloor porosity)

## CLEANING

Fresh resin can be cleaned with a solvent. Dry resin can only be removed mechanically.

## STORAGE STABILITY

Up to 24 months in the original, unopened containers, stored in a dry place at +10°C and +25°C.

## PRODUCT INFORMATION

| Code | UC | PCB | PALLET | GENCOD |
|---|---|---|---|---|
| 30619177 | 5kg | 1 | 50 | 3549211666225 |
| 30619176 | 1kg | 1 | 216 | 3549211666218 |
| 30619280 | 400ml | 8 | 50 | 3549210017318 |
| 30084445 | Dual caulking gun for RENO E742 STRUCTURE 400ml cartridge | | | |

**Additionnal product informations**

| Code | Art. | Pallet | GENCOD |
|---|---|---|---|
| 30123600 | Sand S409 (0,4-0,9 mm) - 25 kg | 48 | 3549210018971 |
| 30615708 | GRIP A936 XPRESS - 20 kg | 32 | 3549212484873 |

**SAFETY**

**For more details, consult the safety data sheet on**
https://bostiksds.thewercs.com/default.aspx



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