

## Self-levelling epoxy mortar for polymeric chemical beam head restoration

### Application

- For the restoration of beam heads and beam head joints that are damaged by wood rot and insects
- For use in “polymer chemical beam head restoration”, where the product is poured into a formwork around the damaged beam

### Properties

- 3 components: resin + hardener + fillers.
- Well flowing epoxy mortar.
- Particularly high adhesion to wood.
- Particularly low cold flow.
- Nearly shrink-proof hardening.
- Almost no heat to be released.
- Slightly elastic (can be compared to oak wood).

### Directions

#### Preparation

- Make sure to sufficiently support the beam.
- Remove all affected wood.
- Make sure work is carried out on a dry (< 6,5% of moisture), clean, dust-free and grease-free base.
- The substrate must be dry (< 6,5% humidity), clean, free of dust and grease.
- Reinforce the beams, preferably using glass fibre rods. The number of reinforcing rods and their location should be determined by a research unit.
- Make a formwork in which you will be pouring the mortar.
- This formwork can be permanent, in which case it is usually made of oak and integrated into the existing beam. If the formwork needs to be removed, it should first be coated with a release agent, a micro-crystalline wax.
- Prime the bonding surface of the existing wood with Artipox Multi.
- Mix component A (resin component) with component B (hardener component) until full homogeneity.
- Then stir and add component C (filler) simultaneously.
- Mix during 3 minutes with a slow-turning mixer.
- Take care not to let too much air into the mixture when mixing, otherwise a foam layer may form on the mortar.
- The entire packaging, predosed components, has to be processed.

#### Work method

- Immediately pour the mixed mass into the formwork that was put around the beam body.
- Leave the beam head propped during at least 7 days.
- The reinforcing bars are filled or injected through their drill holes along the beam side.

**Important remarks**

- The ideal ambient temperature is 15°C. In case of lower temperatures, a longer hardening period has to be taken into account. Anyhow, the ambient temperature has to exceed 5°C.
- Cleaning of tools with Articlean 02.

**Technical characteristics****Chemical composition:**

- Component A modified fluid epoxy resin with pigment
- Component B amino-amide hardener combination with slow reaction rate and very low heat development during the reaction
- Component C mixture of mineral fillers especially designed to ensure a good flow

Colour	dark brown yellow (oak wood colour)
Specific gravity	+/- 1,9 kg/ltr
Potlife after mixture 15°C	1 hour
Hardening time 15°C	24 hours
Fully capable of carrying loads	after 7 days
Peak temperature	max 40°C (in 1 ltr of mixture)
Resistance to compression	62 N/mm <sup>2</sup>
Martens temperature HDT	62°C
Tensile strength	14,5 N/mm <sup>2</sup>
Elongation at rupture	+/- 1,5%
Modulus of elasticity	3500 N/mm <sup>2</sup>

**Mixture**

Component A	1,82 kg
Component B	0,80 kg
Component C	17,38 kg

**Quantity to use**

1,9 kg/ltr

**Packaging**

Predosed sets of 20 kg

**Safety information – Transport – Handling and storage - Waste**

Consult the most recent and product-related safety information sheet from Rewah in compliance with the (EU) 453/2010 annex II/A guidelines. The information on the abovementioned safety information sheet has been drawn up with the greatest care and is based on the knowledge available at the date of issue. We accept no liability for damage or hindrance of any kind which could be caused by the use of the product concerned.

**Transport and storage**

Transport and store away from frost. Protect the product and its packaging against direct sunlight. Avoid storage at temperatures >30°C.

**Storage life**

1 year after manufacturing in the original closed packaging.

**Considerations**

The data included in this sheet, the application advices and other recommendations are based on extensive research and experience. They are however not binding also in relation to third party liability. They do not protect the customer against checking the products and directions for their suitability for the purpose. The characteristics and properties described are average values and analyses registered at 20°C, variances are tolerated. Our customer service will gladly answer your questions. The rewrite of this sheet replaces all previous sheets.