



SAINT-GOBAIN

epidermix® 350

STRUCTURAL DRY-TO-DRY EPOXY ADHESIVE

DESCRIPTION

Two-component, solvent-free, filled, polysulphide modified epoxy compound.

USES

- Structural bonding of precast concrete, brickwork, steel, aluminium elements to themselves and in any combination
- Bonding of fibre cement and unglazed ceramic to most structural materials. Suitable where gap-filling properties as well as adhesion are required

NOTE: Bonded concrete assemblies should always be used in such a way that there is a compressive stress permanently on the bond line.

ADVANTAGES

- Structural adhesive for most building materials
- Use as a gap filler
- Non-slump
- High ultimate strengths
- Non-shrink
- Mixing control with coloured components

SURFACE PREPARATION

The concrete surfaces must be clean, mechanically sound and dry. Surfaces must be free of dust, laitance and any foreign matter as well as cracked or loose stone. Maximum bond strength is only achieved if main aggregate of existing concrete is exposed. This may be done by scabbling, grinding, abrasive blasting or manual chipping. All cracked and loose aggregate must be removed. Steel must be degreased and abrasive blast cleaned to a minimum of Sa 2,5 on the Swedish Code of Practice SIS 055900.

Aluminium must be abraded with medium grit emery paper and washed with **abe® thinners no. 3** to degrease the surface and remove all debris of preparation. Apply adhesive as soon as possible after solvent application, to reduce re-oxidation of metal surface.

PROPERTIES OF WET MATERIAL

| | |
|--------------------|----------------------------------|
| Mixing ratio | 2 base: 1 activator by volume |
| Density | 1.29 g/cm ³ |
| Colour: | |
| Base | Black |
| Activator | White |
| Mixed material | Blue – Grey |
| Flash point | 100 °C |
| Dilution | Do not dilute |
| Consistency | Paste |
| Toxicity | Uncured material is toxic |
| Shelf life | 2 years from date of manufacture |
| Storage conditions | Under cover in cool conditions |
| Packaging | 500 ml, 1 l, 2 l |

PROPERTIES DURING APPLICATION

| | |
|---------------------------------|---|
| Application by | Trowel or putty knife |
| Application temperature | 10 °C to 40 °C |
| Spreading rate | 1 litre/m ² @ 1 mm thickness |
| Recommended wet film thickness | 5 mm maximum |
| Volume solids | 100% |
| Practical cure | 5 days |
| Full cure | 14 days |
| Fire resistance of wet material | Non-flammable |

PROPERTIES OF CURED MATERIAL

| | |
|-------------------------------------|--|
| Toxicity | Cured material is non-toxic |
| Maximum service temperature | 60 °C |
| Compressive yield strength | 75.1 MPa |
| Tensile strength | 22.2 MPa |
| Bond strength in concrete | Bonded assembly fails in concrete Arizona Shear Test using +60 MPa concrete |
| Colour | Grey |
| Steel/steel lap shear | 11 MPa |
| Keep bond line to minimum thickness | |

| POT LIFE (MINUTES) | | | |
|--------------------|--------|---------|---------|
| | 500 ml | 1 l kit | 2 l kit |
| 15 °C | 120 | 100 | 80 |
| 20 °C | 90 | 75 | 60 |
| 25 °C | 60 | 50 | 40 |
| 30 °C | 45 | 37 | 30 |
| 35 °C | 30 | 25 | 20 |

| CURE PERIOD | LAP SHEAR STRENGTH – MPa | | |
|-------------|--------------------------|-------|-------|
| DAYS | 10 °C | 15 °C | 25 °C |
| 5 | 0.1 | 13.3 | 10.6 |
| 14 | 11.8 | 11.8 | 12.2 |
| 28 | 9.4 | 12.2 | 11.9 |

BONDING/PRIMING

Self priming.

MIXING

Always carry out mixing in coolest area available.

Individually stir the contents well of each container. If using an entire kit, remove the lip from both containers using a tin opener.

Remove all or the required amount of base and activator from the containers and place them side by side on a clean board or steel plate.

Mix together by using trowels or paint scrapers, until a streak-free, grey material results. This is likely to require at least 5 minutes. Remove mixed material to a clean board prior to placing, to obviate the chance of picking up any unmixed material.

COVERAGE

1 l/m² at 1 mm thick.

APPLICATION

Apply mixed **epidermix® 350** to one working face, placing material in such a fashion that the highest point of the application is in the centre and no depressions exist in the surface of the compound.

Mate the other face to be bonded in the wet adhesive mound so that material extrudes all around the bonded assembly. Scrape extruded material off with a clean spatula off to obtain a neat finish. If an extremely neat finish is required masking tape may be used. Any bonded joint must be kept under full compression for at least 5 days.

CLEANING

Tools, brushes and mixing equipment should be cleaned immediately after use and before material has set with **abe® super brush cleaner** followed by washing with soap and water.

PROTECTION ON COMPLETION

Maintain compression on bonded surfaces until cured. Compression must be maintained permanently for concrete assemblies.

MODEL SPECIFICATION

Two component, polysulphide modified, dry to dry, structural epoxy adhesive for precast concrete, steel and brickwork in any combination. The structural adhesive shall be **epidermix® 350**, a two component, solvent free, polysulphide modified, dry to dry epoxy adhesive applied in accordance with the recommendations of **a.b.e.®** and have a steel/steel lap shear strength of 11 MPa.

PACKAGING

epidermix® 350 is supplied in 500 ml, 1 litre and 2 litre metal containers.

HANDLING & STORAGE

This product has a shelf life of 24 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH & SAFETY

Wet **epidermix® 350** is toxic and flammable. Always ventilate the working area well during application and drying. Avoid flames in vicinity. Always wear gloves and eye protection when working with the material and avoid excessive inhalation and skin contact. If material is splashed in the eye, wash with copious quantities of clean water and seek medical attention.

Cured **epidermix® 350** is inert and harmless.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.®** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot accept any liability for application – because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

a.b.e.® has a wealth of technical and practical experience built up over the years in the company's pursuit of excellence in building and construction technology.

Please consult our website for our latest datasheets.

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a.b.e.® is an ISO 9001:2015 registered company
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