Sikafloor® Morritex Epoxy Cove Mortar System
VERTICAL- GRADE, EPOXY COVING AND DETAILING MORTAR

Description
Sikafloor® Morritex Epoxy Cove Mortar is a pre-proportioned, three-component, vertical-grade coving and detailing mortar based upon a solvent-free, solid-coloured epoxy resin and specially-graded aggregates. It produces a finely-textured surface which provides excellent resistance to abrasion and impact. Sikafloor® Morritex Epoxy Cove Mortar is typically installed at 3 to 6 mm (1/8 to 1/4 in) thickness.

Where to Use
- Sikafloor® Morritex Epoxy Cove Mortar is used in conjunction with other Sikafloor® epoxy systems to provide a seamless connection between the floor and vertical surfaces such as walls, machinery bases or curbs.
- It is typically employed where maximum sanitation/hygiene is required as it provides a rounded and sealed corner, making the junction at vertical and horizontal interfaces easier to clean.

Advantages
- Pre-proportioned kit allows quick, accurate mixing, eliminating costly site batching and mixing errors.
- Sag-resistant formulation designed specifically for trowel application to vertical surfaces.
- Low VOC content; neutral odour.
- Bond strength in excess of the tensile strength of concrete; concrete will fail first.
- High mechanical resistance.
- CFIA acceptance for use in food plants in Canada.
- USDA acceptance for use in food plants in the U.S.A.

Technical Data

Packaging
18.9 kg (10.4 L) kit / 41.6 lb (2.7 US gal.) kit, (All 3 components shipped in a single 20 L (5.3 US gal.) pail for use as the mixing vessel.)

Colour
Concrete Grey

Yield
Approximately 5.8 linear metres (19 linear feet) per kit; calculation based on a 100 mm x 100 mm (4 in x 4 in) high cove applied at 4 mm (3/16 in) thickness with a 25 mm (1 in) radius cove trowel. These figures do not allow for surface porosity, profile or wastage.

Shelf Life
2 years in original, unopened package. Store dry between 5 and 32 °C (41 and 89 °F). Condition at 18 to 30 °C (65 to 86 °F) before using.

Mix Ratio
Components A+B+C = Mix full units only

Properties at 23 °C (73 °F) and 50 % R.H.

Service Temperature
Min./Max. 0 °C/50 °C (32 °F/122 °F)

Pot Life, 250 g (8.8 oz)
35 - 40 min

Open Time on Substrate (min)
10 °C (50 °F) 24/96
20 °C (68 °F) 45/48
30 °C (86 °F) 40/52

Overcoating Times (hrs) (min./max.)
Curing Time
Normal Traffic/Chemical Exposure (days)
10
7
5

Impact Resistance ASTM D2794
3.39 Joules (2.5 ft lb)

Indentation MIL-PRF-24613
7.14 %

Hardness, Shore D ASTM D2240
83

Tensile Strength ASTM D638
36 MPa (5221 psi)

Compressive Strength ASTM D695
41 MPa (5946 psi)

Percentage Elongation
10.3 %

Bond Strength ASTM D4541
> 1.7 MPa (246.5 psi) (substrate failure)

Thermal Compatibility ASTM C884
Passes

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

HOW TO USE

Surface Preparation
Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, bleeding, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residue or any other contaminants which may prohibit good bond. Prepare the surface by appropriate mechanical means in order to achieve a profile equivalent to ICRI-CSP 3-6. The compressive strength of the concrete substrate should be at least 25 MPa (3625 psi) at 28 days with a minimum of 1.5 MPa (218 psi) in tension at the time of application. Repairs to cementitious substrates, filling of blowholes, levelling of irregularities, etc. should be carried out separately using an appropriate Sika profiling mortar. Contact Sika Canada Technical Sales for a recommendation.
Edge Terminations - Installation of an integral cove base is normally terminated on vertical surfaces using one of the following application methods, chosen in accordance with the substrate and in-service requirements:

1. Mark a level, straight line at the appropriate height; adhere or mechanically fasten a preformed, "L"-shaped, non-corroding, metal cap divider strip. The outward edge of the strip should produce a 3 mm to 4 mm (1/8 in to 3/16 in) wide gap to accommodate a consistent thickness of trowelled cove mortar. To create an optional, watertight seal between the divider strip and wall assembly, apply a fillet bead of Sikaflex® sealant. Contact Sika Canada Technical Sales for a specific recommendation.

2. On concrete substrates, to produce a smooth transition between the wall system and floor, mark a level, straight line at the appropriate height and dry-cut a 3 mm (1/8") deep key/chase. Apply masking or duct tape along the outside edge of the key/chase to protect the adjacent surfaces during installation of the cove mortar. Press the mortar into the key/chase and smooth the surface to create a flush transition with the wall. Note: always remove the protective tape before the epoxy primer or epoxy cove mortar begins to harden.

Transition Detailing - Typical detailing of vertical surfaces with metal cap transition strip and vertical surfaces with a smooth transition to be executed as illustrated in the document Sikafloor® Morritex Epoxy Cove Mortar - Typical Details. Available upon request.

Expansion Joints - These should be provided in the substrate at the intersection of dissimilar materials. Isolate areas subject to thermal stresses, vibration movements or around load-bearing columns and at vessel sealing rings.

Mixing

Mixing will be affected by temperature; condition materials for use to between 18 and 30 °C (65 and 86 °F). A Kol-type mixer, incorporating a motor spun mixing pail and a shear angle mixing blade, is recommended. Pre-stir Components A and B separately, making sure all pigment is uniformly distributed and even consistency is achieved. Start mixer; add Component A and Component B and blend for one (1) minute. Add Component C (aggregate) to the mix, incorporating slowly into the liquid over a period of 15 seconds. DO NOT DUMP! Allow Component C to blend for a further two (2) minutes to ensure complete mixing. During the mixing operation, scrape down the sides and bottom of the container at least once with a flat or straight-edge trowel to ensure complete mixing of Components A+B+C. Mix full units only.

Application

Primer Coat: Mix and apply Sikafloor® Vertical Epoxy Primer (see Product Data Sheet for complete instructions) at a rate of approximately 4 m²/L (160 ft²/US gal.), using a brush or roller to provide a uniform coverage of 10 mils. Primer must be tacky during the application of Sikafloor® Morritex Epoxy Cove Mortar. Only mix and apply the amount of primer that can be overlaid before it loses its tackiness (approximately 1 hour at 20 °C [68 °F]). If the primer becomes glossy or loses tackiness, remove any surface contaminates and recoat with additional Sikafloor® Vertical Epoxy Primer.

Mortar: Apply Sikafloor® Morritex Epoxy Cove Mortar using steel trowels to spread and compact the mortar on vertical surfaces. Bottle coves and other shaped fillets can be achieved using the appropriate tools. A light brushing while the mortar is still workable will close any surface voids. Allow a minimum 8 hour cure period at 20 °C (68 °F) before overcoating.

Clean Up

Clean all tools and equipment with Sika® Epoxy Cleaner. Once hardened, product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner towels.

Limitations

- Minimum/Maximum substrate temperature: 10 °C/30 °C (50 °F/86 °F).
- Maximum relative humidity during application and cure: 85 %.
- Substrate temperature must be at least 3 °C (5.5 °F) above the measured dew point.
- Moisture content of the substrate must be < 4 % when coving is applied.
- Substrates must be primed with Sikafloor® Vertical Epoxy Primer.
- Do not apply onto porous surfaces where moisture vapour transmission will occur during application.
- Not suitable for use on exterior, slab-on-grade concrete substrates.
- Protect from dampness, condensation and water contact during the initial 24 hour cure period.
- Surface may discolour in areas exposed to constant ultra-violet light.
- Do not mix Sikafloor® materials by hand; mix by mechanical means only.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

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