BUILDING TRUST CONSTRUIRE LA CONFIANCE



## PRODUCT DATA SHEET

Edition 12.2020/v1 CSC Master Format™ 09 67 00 FLUID-APPLIED FLOORING

## Sikafloor<sup>®</sup> Morritex<sup>®</sup> Epoxy Cove Mortar System

VERTICAL-GRADE, EPOXY COVING AND DETAILING MORTAR

Description	Sikafloor <sup>®</sup> Morritex <sup>®</sup> 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 <sup>®</sup> Morritex <sup>®</sup> Epoxy Cove Mortar is typically installed at 3 to 6 mm (1/8 to 1/4 in) thickness.					
Where to Use	<ul> <li>Sikafloor<sup>®</sup> Morritex<sup>®</sup> Epoxy Cov seamless connection between</li> <li>It is typically employed where r making the junction at vertical</li> </ul>	poxy Cove Mortar is used in conjunction with other Sikafloor <sup>®</sup> epoxy systems to provide a etween the floor and vertical surfaces such as walls, machinery bases or curbs. I where maximum sanitation/hygiene is required as it provides a rounded and sealed corner, t vertical and horizontal interfaces easier to clean.				
Advantages	stly site batching and m ion to vertical surfaces. ete will fail first.	ixing errors.				
	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				
		10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)		
	Open Time on Substrate (min)	~ 70	~ 45	~ 40		
	Overcoating Times (hrs) (min./max.) Curing Time	~ 24/96	~ 8/48	~ 5/24		
	Normal traffic/Chemical Exposure (days)	~ 10	~ 7	~ 5		
	Compressive Strength ASTM D695	~ 41 MPa (5946 psi)				
	Iensile Strength ASTM D638	~ 36 MPa (5221 psi)				
	Percentage Elongation	<sup>10</sup> 10.3 %				
	Thermal Compatibility ASTM C884	> 1.7 MPa (240.5 psi) (substrate failure)				
	Hardness, Shore D ASTM D2240	~ 92				
	Indentation MIL-PRE-24612	00 ~ 7 1/ %				
	Impact Peristance ASTM D2704	~ 2 29 Joules (2 5 ft lb)				
	Abrasion Resistance ASTM D2754	3.39 Joules (2.5 It lb)				
	CS17/1000  cycles/1000  g (2.2  lb)	~ 0 15 g (0 0053 oz)				
	Flammability ASTM D635	~ 55 mm (2.17 in)				
	VOC Content	~ 5 g/L				
	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, clean both surfaces and apply a fillet bead of Sikaflex <sup>®</sup> 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.				
	<b>Transition Detailing -</b> 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 <sup>®</sup> Morritex <sup>®</sup> Epoxy Cove Mortar - Typical Details. Available upon request.				
	<b>Expansion Joints</b> - 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. <b>DO NOT DUMP!</b> 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. <b>Mix full units only.</b>				
Application	<b>Primer Coat:</b> Mix and apply Sikafloor® Vertical Epoxy Primer (see Product Data Sheet for complete instructions) at a rate of approximately 4 m <sup>2</sup> /L (160 ft <sup>2</sup> /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 <sup>®</sup> Morritex <sup>®</sup> 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.				
Limitations	<ul> <li>Sikafloor® Morritex® Epoxy Cove Mortar is best installed by skilled and experienced applicators. Consult Sika Canada for advice and recommendations.</li> <li>Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every three (3) hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.)</li> <li>Moisture content of concrete substrate must be ≤ 4 % by mass (pbw – part by weight) as measured with a Tramex®CME/ CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to ICRI / CSP 3 - 4). Do not apply to concrete substrate with moisture levels exceeding 4 % mass (pbw – part by weight) as measured with Tramex® CME / CMExpert type concrete moisture meter, use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA.</li> <li>ASTM F2170 testing is not a substitute for measuring substrate moisture content with a Tramex® CME / CMExpert type concrete as described above.</li> <li>When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85 %. If values exceed 85 % according to ASTM F2170, use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA.</li> <li>Material temperature: Precondition material for at least 24 hours between 18 to 24 °C (65 to 75 °F)</li> <li>Ambient and substrate temperature - Minimum / Maximum: 10 / 30 °C (50 / 85 °F).</li> <li>Mixing and application attempted at material, ambient and/or substrate temperature conditions less than 18 °C (65 °F) will result in a decrease in product workability and slower cure rates.</li> </ul>				
	<ul> <li>Beware of condensation! The substrate must be at least 3 °C (5 °F) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or "blushing" on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.</li> </ul>				



Limitations	Do not hand mix Sikafloor <sup>®</sup> materials. Mechanically mix only.					
Limitations continued	<ul> <li>Do not hand mix Sikafloor® materials. Mechanically mix only.</li> <li>Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapour drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapour drive.</li> <li>Freshly applied material should be protected from dampness, condensation and water for at least 24 hours.</li> <li>Will discolour over time when exposed to sunlight (UV) and under certain artificial lighting conditions.</li> <li>Substrates must be primed with Sikafloor® Vertical Epoxy Primer.</li> <li>Do not apply Sikafloor® to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor® product after application. If concrete substrate has or is supported to have ACB (Alkali Silici Silica Reaction) areas to have a superstant to have ACB (Alkali Silici Silica Reaction) areas to use</li> </ul>					
	<ul> <li>Any aggregate used with Sikafloor<sup>®</sup> systems must be non-reactive and oven-dried.</li> </ul>					
	<ul> <li>This product is not designed for negative side waterproofing.</li> </ul>					
	Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.					
	Do not apply to substrates exposed to extreme thermal shock.					
	<ul> <li>Direct-fired gas or kerosene heaters produce by-products that can have adverse effects on the curing primer. To avoid this occurrence, heaters must be exhausted to the exterior of the building to avoid defects such as amine blush, whiteping, loss of adhesion or other surface deficiencies</li> </ul>					
	<ul> <li>Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface</li> <li>imperfections and other defects.</li> </ul>					
	<ul> <li>The influence of colour selection should be allowed for in material consumption/coverage. Light or bright colours may require higher wet film thicknesses or additional coats to achieve desired opacity. Consult Sika Canada for guidance at time of colour selection.</li> </ul>					
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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