Construction

Cemflex®

Universal waterproofer and bonding agent

Product Description	Cemflex® is an acrylic based emulsion, which improves the water resistance, and adhesion of Portland cement based composites.
Uses	Cemflex® mixed with Portland cement and water forms an effective waterproofing slurry that is used in conjunction with Cemflex® Fabric for: ■ Reservoirs ■ Shower floors and walls ■ Balcony and veranda floors (under tiles) ■ Retaining walls
Bonding/Bagging	Cemflex® added to a sand/Portland cement slurry forms a bonding coat for: ■ Plaster ■ Render The slurry can also be used for waterproofing between two skins of external brick walling.
Characteristics / Advantages	■ Watertight ■ Ideal for submerged or subterranean waterproofing ■ Good abrasion resistance ■ Non - toxic ■ Oil resistant ■ UV stable

Product Data

Form		
Appearance / Colour	Liquid	off white
Packaging	1, 5, 25 and 200 litre containers. A 1m^2 kit for DIY is also available. **Fabric:** Available in 1 metre wide rolls and various cut roll sizes.	
Storage		
Storage Conditions / Shelf-Life	12 Months in original, unopened container. Store in a dry area between 5ºC and 40ºC. Protect from direct sunlight.	

Technical Data

Chemical Base	
Density	±1,04kg/litre
Ph - Value	± 8.0

Application Details

Consumption / Dosage

Usage	1 litre of Cemflex® produces	Total Coverage
Waterproofing slurry	3,2 litres	1 m² (with membrane)
Bonding	4,5 litres	8 - 10 m²

Substrate Preparation / Priming

All surfaces must be clean, sound, cured and saturated with clean water. Remove all loose materials mechanically, with a wire brush, or by water or sand blasting.

Application Conditions / Limitations

Substrate Temperature	Min. 5°C – Max. 30°C.
Ambient Temperature	Min. 5°C – Max. 35°C.
Relative Air Humidity	< 80 %

Application Instruction

Mixing Ratio

	Unit	Mixing Ratio			
Cemflex®	litres	1,0	5,0	14,7	25,0
Water	litres	1,0	5,0	14,7	25,0
Portland cement	kgs	3,4	17,0	50,0	85,0
Yield	litres	3,2	16,0	47,0	80,0

Waterproofing

Mixing

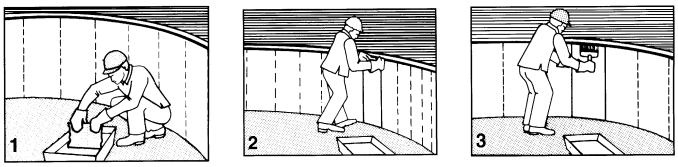
Mix the required amounts of Cemflex® and water first, then add the correct quantity of Portland cement slowly, while mixing, to avoid the formation of lumps.

Mixing can either be achieved manually or mechanically with a slow speed mixer (set at 400-600 rpm). Mechanical mixing is recommended for quantities in excess of 5 litres. Mixing should continue until a uniform, lump-free consistency is obtained. The slurry should be mixed periodically during application to prevent settlement.

Bonding/Bagging

Mixing

Cemflex® and water are mixed in **equal proportions by volume**. Mix clean building sand with Portland cement in **equal proportions by volume** and then add sufficient diluted Cemflex® and continue mixing until a uniform, lump-free consistency is obtained. Mix periodically during application to prevent settlement.

Application Method / Tools	
Waterproofing slurry	Saturate absorbent surfaces thoroughly with water. While the surface is still damp, apply a coat of waterproofing slurry. Precut the Cemflex® Fabric into convenient sizes for application, then soak the fabric in the slurry (see diagram 1). Remove the soaked fabric from the slurry and smooth it onto the primed substrate (see diagram 2) making sure to eliminate all air bubbles. Overlaps of adjacent fabric must be a minimum of 50mm. Once the entire area to be treated is covered, apply a generous coat of the slurry and allow to dry. A final coat of slurry is then applied to complete the application. (see diagram 3) 
Bonding/Bagging	For waterproof bagging, saturate the brick substrate and, while it is still damp, apply a coat of bonding/bagging slurry by means of a block brush. For bonding, saturate the substrate and, while it is still damp, apply a coat of bonding/bagging slurry by means of a block brush. Immediately apply a render of screed **while the slurry is still wet**.
Fish Ponds	Due to the sensitive nature of fish, it is important that the fish pond is adequately washed out after applying the Cemflex slurry. Cement is highly alkaline and will have an initial effect on the Ph of the water, so ensure that the water is conditioned before introducing your fish.
Cleaning of Tools	Remove uncured Cemflex® slurry from tools with water. Cured material can only be removed mechanically.
Notes on Application / Limits	Where the application is of a sensitive nature eg reservoirs or large Koi ponds, it is recommended that you seek professional applicators to apply the product. Do not apply Cemflex® on substrate in which significant vapour pressure may occur. Always ensure good ventilation when using Cemflex® in a confined space. Freshly applied Cemflex® should be protected from damp, condensation and water for at least 12 hours. The normal precautions pertaining to dew point should be observed All water retaining structures should undergo water conditioning to the required specification of their use, before becoming operational.
Curing Details	
Curing Treatment	Protect from wind and direct sunlight for at least 24 hours after application. For continuous submersion applications, allow the treated surface to cure for at least 48 hours before submerging.
Local Restrictions	Please note that as a result of specific local regulations the performances of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

Protective Measures	Contact with skin and eyes must be avoided.
Ecology	
Transportation Class	

Construction

Important Notes	Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities. Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the Material Safety Data Sheet.
Toxicity	
Legal Notes	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. 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 written recommendations, or from any other advice offered. 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 Product Data Sheet for the product concerned, copies of which will be supplied on request or accessed on the Internet under www.sika co.za.

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