



OSMOFLEX AB

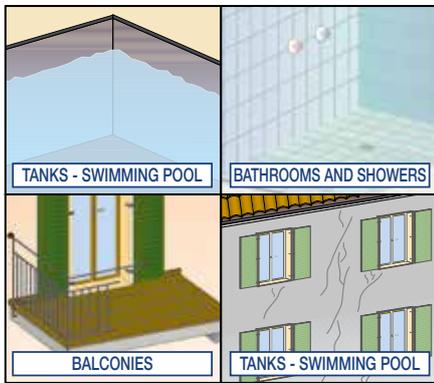
ELASTIC CEMENT-BASED TWO COMPONENT POLYMER MODIFIED
CEMENT WATERPROOFING
FOR CONCRETE, TANKS, CONCRETE SCREEDS,
BALCONIES, TERRACES AND BATHROOMS

GRANTS *LEED* CREDITS

CHARACTERISTICS			ENVIRONMENTAL	METHOD OF USE			PRECAUTIONS	
TWO-COMPONENT	WATER BASED	WATERPROOFING	ECO GREEN	MIX MECHANICALLY	APPLY BY INOX SPATULA	APPLY MECHANICALLY USING A SPRAY PUMP	STORAGE: IN A DRY PLACE	STORAGE: KEEP AWAY FROM FROST

PROBLEM

TO WATERPROOF:



Concrete structures designed to withstand mechanical or dynamic strain may be subject to deterioration problems such as micro or macro cracking caused by continuous structural movements following settling of the ground, thermal expansion and vibrations. These micro cracks are the main cause for deterioration, which may even occur quite rapidly, due to infiltrations of water or through oxidation of the reinforcement caused by atmospheric chemical aggression.

SOLUTION

OSMOFLEX AB is a two-part waterproofing treatment. The first component is a premixed powder consisting of hydraulic binders, selected aggregates, additives to improve workability and impermeability. The second component is a latex formed of special synthetic polymers in aqueous solution. The two components are mixed together to form a mortar that is easy to apply and that bonds well to all types of background. **OSMOFLEX AB** forms an elastic waterproof coating capable of absorbing structural movements of concrete without cracking and which is impermeable to aggressive atmospheric gases such as CO₂-SO₂.

APPLICATION FIELDS

OSMOFLEX AB is used for:

- to waterproof structures requiring long-term protection against water infiltration, including structures subject to pressure and vibration such as water tanks and swimming pools;
- waterproof screeds, balconies, terraces and bathrooms.
- smoothing and levelling concrete surfaces and as a protection against carbonation for structures and plasters with fine cracks;
- for the protection of concrete surfaces subject to chemical attack from salts or sulphates;
- form an elastic joint between floor slabs and walls, floors and thresholds, pipes and masonry, etc.. It also adheres to the back of ceramic tiles.

ADVANTAGES

- High degree of workability allowing coverage of cracks up to 1mm wide in the background without deterioration or damage to the coating.
- Excellent adhesion to various types of surface.
- Highly impermeable to water.
- Resistant to frost-thaw cycles; maintains high degree of plasticity even at low temperatures.
- Easy to apply to both horizontal and vertical surfaces.
- Non-toxic.
- **OSMOFLEX** forms a flexible coating that is impermeable to CO₂, SO₂, chlorides and sulphates.



CERTIFICATIONS



Certification
"TVFA" tu Wien



Certification
"SGS" Taiwan Ltd.



METHOD OF USE

• SURFACE PREPARATION

Concrete backgrounds must be prepared to ensure optimum adhesion of the **OSMOFLEX AB** waterproof coating. All loose and crumbling material must be removed by scraping (1), wire brushing or pressure jet washing. All traces of oil, release agent, rust and contamination in general must be removed and the surfaces must be free of water ponds. Deteriorated areas and loose stone foundations must be repaired with RESISTO TIXO or RESISTO UNIFIX mortar to obtain a uniform surface (1).

Apply covering joint strip COVERBAND on perimetric joints of structures such as tanks or balconies (2).

• MORTAR PREPARATION

Pour component **B** (liquid) into the container and gradually add component **A** (powder), mixing with a mechanical mixer at low speed (3) to obtain a lump-free mix of uniform consistency that has good flow, thixotropy and is easy to apply.

• APPLICATION

OSMOFLEX AB can be applied mechanically using a spray pump or manually by stainless steel spatula, spreading the mortar in both vertical and horizontal directions to obtain a maximum thickness of 2 mm per coat. In areas subject to greater stresses, **OSMOFLEX AB** should be applied to RETINVETRO FOR SMOOTHING RENDERS reinforcement with 4x5 mm (4). In hot weather, the back should be wetted prior to application of the coating to prevent it drying out too rapidly.

Recommended thickness: max 2 mm per coat.

• FINISHING AND FOLLOWING WORKS

To protect the concrete, it will be painted with two coats of ELASTOLIQUID S to improve resistance to aggressive agents (5a).

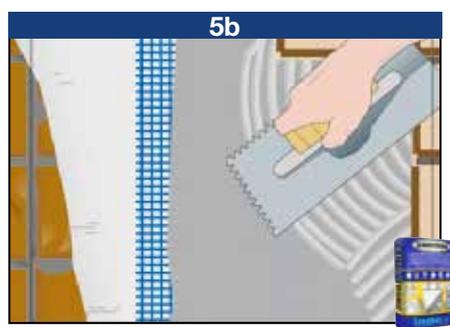
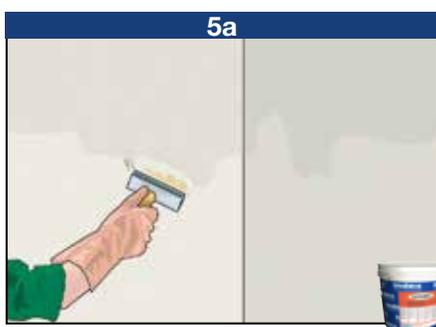
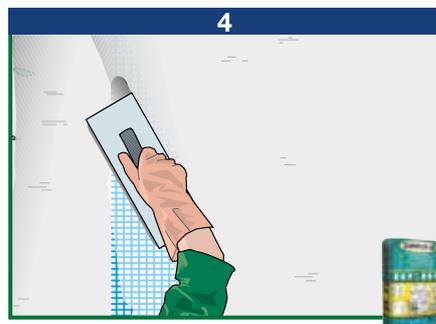
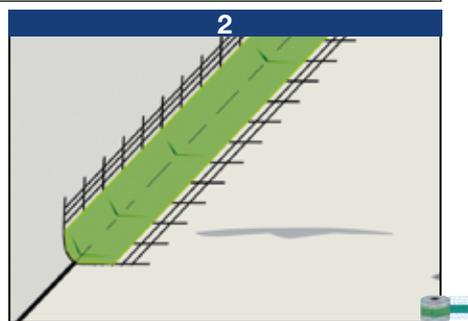
To glue the tiles, use adhesives with improved adhesion (C2-S1/S2) suitable for the type of material to be glued (5b).

• COVERAGE

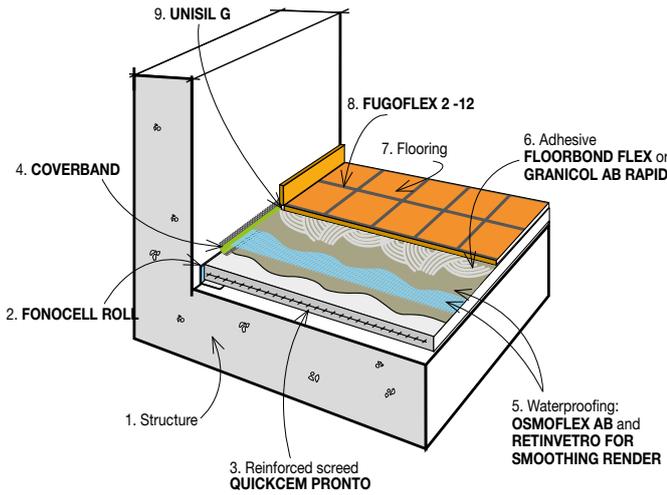
1,5 kg/m²×mm

• PRECAUTIONS

- Don't use on metal or rubber surfaces, vinyl flooring, wood, linoleum or PVC
- Do not apply at temperatures below +5°C; once frozen, component B can no longer be used.
- Store the powder component in a dry, cool place, sealed in its original container.
- Do not add cement or aggregates to the mortar.
- Do not apply **OSMOFLEX AB** in thicknesses greater than 2 mm.
- For best results do not mix by hand; always use a mechanical mixer.
- In the case of negative pressure waterproofing, the surfaces should be treated with **OSMOSEAL**.
- Protect the coating from rain until it has set.
- Wash tools immediately after use.



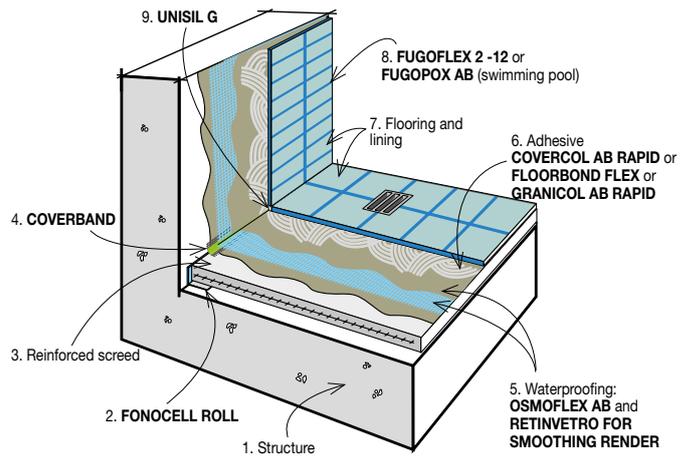
Waterproofing of terraces and balconies



STRATIGRAPHIED ELEMENTS

1. Structure
2. FONOCCELL ROLL
3. Reinforced screed QUICKCEM PRONTO
4. COVERBAND
5. Waterproofing: OSMOFLEX AB and RETINVETRO FOR SMOOTHING RENDERS
6. Adhesive FLOORBOND FLEX or GRANICOL AB RAPID
7. Flooring
8. FUGOFLEX 2-12
9. UNISIL G

Waterproofing of shower, bathrooms, dressing rooms, swimming pool



STRATIGRAPHIED ELEMENTS

1. Structure
2. FONOCCELL ROLL
3. Reinforced screed
4. COVERBAND
5. Waterproofing: OSMOFLEX AB and RETINVETRO FOR SMOOTHING RENDERS
6. Adhesive COVERCOL AB RAPID
7. Flooring and lining
8. FUGOFLEX 2-12
9. UNISIL G

REFERENCES



Hydroelectric channels, spray application

TECHNICAL CHARACTERISTICS

		OSMOFLEX AB	
		COMPONENT A	COMPONENT B
Appearance		Powder	Latex
Mix ratio		25	8,7
Apparent volume mass	EN 1015-6	1.45 ± 0.10 kg/L	1.01 ± 0.10 kg/L
Colour		Grey	
Storage in original packaging in a dry place		12 months	
Mix properties and workability			
Volume mass of the mix		1.65 ± 0.05 kg/L	
pH mix		12	
Workable mix duration (*)		about 50 minutes	
Application temperature		+5°C ÷ +35°C	
Maximum application thickness		2 mm (in two coats)	
Adhesives class for application of ceramic		C2S1-C2S2, in accordance with EN 12004:2007+A1:2012	
Waiting time - for overpainting with ceramic or paints (*)		3 days	
Performance characteristics	Standard	Product performance	
Class and type	EN 1504-2	C PI-MC-IR	
Class and type	EN 14891	CM OP	
Initial adhesion strength	EN 14891	≥1.00 N/mm ²	
Adhesion strength - after immersion in water	EN 14891	≥0.50 N/mm ²	
Adhesion strength - after basic water dipping	EN 14891	≥0.50 N/mm ²	
Adhesion strength - after chlorate water dipping	EN 14891	≥0.50 N/mm ²	
Adhesion strength - after heat	EN 14891	≥1.00 N/mm ²	
Adhesion strength - after thaw-frost cycles	EN 14891	≥0.50 N/mm ²	
Cold flexibility	UNI 1109	-30°C	
Water vapour permeability	EN 7783	Sd <5 m - class I	
Adhesion strength	EN 1542	≥1.0 MPa	
Capillary absorption and water permeability	EN 1062-3	w<0.1 kg/m ² ·h0.5	
CO₂ permeability	EN 1062-6	Sd >50 m	
Watertightness	EN 14891	>500 KPa - waterproof	
Crack bridging	EN 1062-7	>0.5 mm - class A3	
Crack bridging ability at +20°C	EN 14891	>0.75 mm	
Crack bridging ability at -20°C	EN 14891	>0.75 mm	
Ultimate elongation at 23°C and 50% R.H.	NFT 46002	30±5%	
Thermal resistance - Working temperature		-40°C ÷ +90°C	
Fire reaction	EN 13501-1	E	
Hazardous substances	EN 1504-2	According note in ZA.1	

Test conditions: temperature 23±2°C, 50±5% R.H. and air velocity in test area <0.2 m/s. **These data may change depending on specific site conditions: temperature, ventilation, moisture and substrate absorbency.**

(*) The times indicated will be longer or shorter as the temperature drops or rises.

Pursuant to European standard **EN 1504-9** - General principles for the use of products and systems.

the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

PACKAGING

OSMOFLEX AB

- Component A: 25-kg Sack
- Component B: 8.7-kg can

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

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