

# HIDROMAL FLEKS

*Two component, elastic waterproofing based on cement and polymer  
In compliance with EN 1504-2/2.2 (C); 8-8.2 (C)*

## FIELD OF APPLICATION

Waterproofing for constructions exposed to positive and negative hydrostatic pressure, for indoor and outdoor waterproofing of pools, water treatment plants, wall and floor surfaces in basements, technical and drinking water reservoirs, ducts, concrete pipes, manholes, balconies, toilettes, kitchens, underground concrete elements and other.

## PROPERTIES

- two component product that is simple to prepare
- concrete protection of water and moisture penetration;
- resistant to positive and negative hydrostatic pressure;
- ceramic tiles can be applied directly on the waterproofing, using tile adhesive;
- suitable for drinking water reservoirs;
- application on moisturized substrate;
- excellent adhesion to the substrate;
- bridges the micro-cracks;
- elastic;
- bacteriologically resistant;
- resistant to ice;
- doesn't contain chlorides;
- economic;
- non- toxic;
- simple application.

## TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance		
A component	-	grey powder
B component	-	white liquid
Mixing ratio	-	A:B = 1:1
Bulk density of the product prepared for application	MKC EN 1015-6	1,14-1,26 g/cm <sup>3</sup>
Consistency of fresh mix	MKC EN 1015-3	240±20mm
Adhesion to the substrate (Bond strength)	EN 1542	≥0,8 MPa
Adhesion to the substrate after exposure to thermal cycles (freeze and thaw)	EN 13687-3	≥0,8 (0,5) MPa
Vapor-permeability	EN ISO 7783-1	Sd<5m - class I
Capillary absorption and water permeability	EN 1602-3	w<0,1kg/m <sup>2</sup> h <sup>1/2</sup>
Elongation at brake, at 20°C	-	15%
Reaction to fire	EN 13501	F
Temperature for application		10°C-35°C
Workability time		2-3h

Dry at 20°C		
Forming dry layer of the surface		2-3h
Dry		24-48h
Apply next layer at 20°C		after 12h
Application of ceramic tiles on 20°C		after 24h
Use		after 7 days

## METHOD FOR CONSTRUCTION

### SUBSTRATE PREPARATION

Substrate for application of Hidromal Fleks is concrete, cement mortar, stone or gypsum cardboard panels. The substrate should be sound, clean, solid and stable, without cracks, labile parts, existing coatings, grease or dust.

The application of the floor waterproofing should be executed on solid, stable and compact cement mortar substrate with slope.

For executing waterproofing on the construction joints (horizontal and vertical, floor and wall), it is highly recommended to perform curved element (holker) made of Reparatur Malter F or to place ADING self-adhesive tape to bridge the joints, in case of constructive movements.

According to the details and the potentials of the building, joints at concreting, penetrations of installations through the construction, penetrations of the formwork spacers and similar should be appropriate treated with Reparatur malter F, ADING self-adhesive tape or with elastic acrylate sealant Adingakril.

In case of wide floor substrates, where the waterproofing is intended to be applied on cement mortar substrate or on additional reinforced concrete plate with slope, it is recommended to split (cut) the substrate on fields 9-12m<sup>2</sup> wide (24h after the construction), to prevent the risk of unplanned cracks of the substrate, which would need additional treatment. 28 days after the concreting fill the joints (cuts) with elastic sealant or place ADING self-adhesive tape.

For reconstructions, remove all labile parts of the substrate and clean it from dirt and dust. When the construction has any segregation or cracks, it is recommended to repair them with Eksmal, Reparatur Malter F, ADING self-adhesive tape or elastic sealant Adingakril, according to the detail and the potentials of the building.

Before the application of Hidromal Fleks on warm and very dry substrate, wet the surface with water, to prevent burnout of the material.

### APPLICATION

To prepare Hidromal Fleks add B component (liquid) into A component (powder) and mix until it homogenize using mechanical mixer with medium speed (300-500 revolutions per minute). Use the product when the mixture is fully homogenized.

Apply it with brush or roller in two or three layers. The application of next layer on completely dry layer, in normal direction of 90°C to the previous. According to the temperature, the period of time between two layers should be between 6-24h. The total thickness of the layers is intended to be 1-2mm.

In case of mechanical damages of the waterproofing, the correction is simple, by overpainting the area.

Treated surfaces are intended to be protected of rain, wind, frost and freezing, at least 24h after the application. The temperature is intended to be between 10-35°C.

Protect the underground surfaces waterproofed with Hidromal Fleks mechanically using protective membrane, expanded polystyrene or cement mortar. Protect the over ground surfaces of the building using geotextile, ceramic tiles, Adingfleks or other type of water based coating.

## CONSUMPTION

for two layers: 1.2-1.4kg/m<sup>2</sup> (kitchens)

for three layers: 1.8-2.0kg/m<sup>2</sup> (toilettes, terraces, pools)

## CLEANING

Tools and equipment should be cleaned with water, immediately after use.

## PACKING

Plastic bucket for 10kg set:

A component- 5kg

B component- 5kg

40kg set:


A component- 20kg

B component- 20kg

## STORAGE

In original, closed packaging, in dry spaces, at temperature between 5-35°C, protected from direct exposure to sunlight. Shelf life: 12 months.

## CE MARK

 2032	
ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 14 GFAB001/7 EN 1504-2:2004 <b>HIDROMAL FLEKS</b> Elastic waterproofing coating, for surface protection for concrete and moisture control	
Permeability to water vapour	<b>Class I, S<sub>D</sub> &lt; 5 m</b>
Capillary absorption and permeability to water	<b>w &lt; 0,1 kg/m<sup>2</sup>·h<sup>0,5</sup></b>
Adhesion strength by pull-off test	<b>≥ 0,8 N/mm<sup>2</sup></b>
Reaction to fire	<b>Class F</b>
Dangerous substances	<b>No performance determined</b>

**Health hazards:** Avoid contact of the product with skin and eyes, such as direct inhalation. In case of accidental contact of the product with skin, immediately remove it using soap and water. In case it splashes into eyes, immediately rinse them using plenty of water and seek for medical help.

**Fire:** Hidromal Fleks is not flammable.

**Cleaning and storage:** Clean loose residues of Hidromal Fleks with water. Old and used packaging should be disposed in accordance with the local rules and regulations for that type of waste. It is recommended to adjust the method of application and necessary quantities according to the potential of the building, as well as mandatory use of appropriate equipment.