# **ULTRABIT**

Waterproofing paste with high-speed drying and thick application

One component, bituminous paste water-based waterproofing, enriched with polystyrene microspheres to realise a thickness up to 3 mm (0.12in) in only one coat. *Ultrabit* can be applied at low temperature and in case of high environmental relative humidity to waterproof and to level irregular supports such as foundations, roofs, terraces, balconies and flower boxes.

#### **BENEFITS**

- Quick film formation after 30 minutes from the application.
- Cold application in one coat up to 3 mm (0.12in).
- Excellent filling ability of cracks and irregularities of the support.
- Applicable at low temperatures and in case of high environmental relative humidity.
- It does not need reinforcement mesh and it realises a continuous layer without joints.
- It can be applied on tiled surfaces in combination with *Grip Primer* (see technical data sheet).
- · Easy and quick application.
- · LEED product.

#### VIFI D

2.0 l/m<sup>2</sup> for about 2.5 mm (0.1 in) of thickness.

## **COLOR**

Black.

## **PACKAGING**

25 I (6.60 gal U.S.) plastic bucket.

Pallet: 32 buckets, 25 I each (tot 800 I - 211.34 gal U.S.).



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18
EN 1504-2

Products and systems for the protection and restoration of concrete structures – Part 2: Systems to protect concrete surfaces

Adhesion test – direct traction: 0.11 N/mm², break type B.

## **APPLICATION FIELDS**

Ultrabit is created to waterproof irregular concrete supports such as terraces, balconies, foundations and flower boxes. Thanks to its high versatility and thixotropy, it is suitable for any area, horizontal or vertical, where the waterproofing is more difficult. Ultrabit can be applied on tiled surfaces in combination with *Grip Primer* (see technical data

The product can be applied both inside and outside.

# **STORAGE**

Store the product in its original containers, well closed and in well ventilated areas, away from sunlight, rain and ice, at temperature between +5°C (+41°F) and +35°C (+95°F).

Storage time 12 months.

# PREPARATION OF SUPPORT

The substrate must be completely hardened and resistant enough. The surface must be carefully clean, dry, well consolidated, without oils, greases, debris, detaching parts or any other material that might compromise the product adhesion.

When the surface is friable, scarify totally until the obtainment a good support, correct lesions or deteriorated areas with proper mortar.

The humidity on the support and the steam that creates the irradiation may compromise the adherence of the applied products.

In case of water cleaning, wait that the support is completely dry.







For application videos, product page, safety data sheet and other information.

## Waterproofing-paste

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Technical data						
Features		Unit				
Yield	2.0 l/m <sup>2</sup> for 2.5 mm (0.1 in) of thickness	l/m²				
Aspect	paste	-				
Colour	black	-				
Dilution	do not dilute	-				
Application temperature	+5 /+35 +41/+95	°C °F				
Drying time (T= +23°C / +73.4°F; R.H. 50%)	4	hours				
Storage	12	months				
Packaging	25 I (6.60 gal U.S.) plastic bucket	I - gal U.S.				

LEED <sup>®</sup> Credits					
GBC HOME Standard					
Thematic Area	Credit	Points			
Materials & Resources	MRp2 – Construction Waste Management	Mandatory			
	MRc2- Construction Waste Management	From 1 to 2			
	MRc3 – Low Emission Materials	From 1 to 3			
	MRc4 – Recycled Content	From 1 to 2			
	MRc5 – Regional Materials	From 1 to 2			
Standard LEED for New Construction & Major Renovation, LEED for Schools, LEED for Core & Shell, v. 2009					
Thematic Area	Credit	Points			
Materials & Resources	MRc2- Construction Waste Management	From 1 to 2			
	MRc4 - Recycled Content	From 1 to 2			
	MRc5 – Regional Materials	From 1 to 2			
Indoor Environmental Quality	IEQc3.2 - Construction Indoor Air Quality Management Plan—Before Occupancy	1			
	IEQc4.1 - Low Emitting Materials - Adhesives and Sealant	1			
Chandaud I EED for New Construction 0 Major Departing or 0000					

Standard LEED for New Construction & Major Renovation, v. 2009				
Thematic Area	Credit	Points		
Materials & Resources	MRc2 – Waste Construction Management	From 1 to 2		
	MRc4 – Recycled Content	From 1 to 2		
	MRc5 - Regional Materials	From 1 to 2		
Indoor Environmental Quality	Qlc3.2 – Construction Indoor Air Quality Management Plan- Before Occupancy	1		
	Qlc4.1 – Low Emitting Materials – Adhesives and Sealants	1		

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Final Performances		Unit	Regulation	Result
Resistance to wash out (up to +5 °C / +41°F and 98% R.H.)	30	min.	internal method	-
Break Elongation	91.40 <u>+</u> 19.90	%	ISO 527-1	-
Tensile Strength	0.42 <u>+</u> 0.08	$MPa = N/mm^2$	ISO 527-1	_
	60.92 <u>+</u> 11.60	lbf/in <sup>2</sup>	-	
Adhesion test – direct traction on concrete	0.11 15.95	$MPa = N/mm^2$ $Ibf/in^2$	EN ISO 1542 ASTM D4541	break type B

<sup>\*</sup>The above data, even if carried out according to regulated tests, are indicative and they may change when specific site conditions vary.

#### Concrete

For new concrete floors, it must be sufficiently dry. In case of damaged or crumbly concrete, restore it with suitable cement mortar.

For a better adhesion on smooth concrete, on not moist supports, it is possible to use *Grip Primer* (see technical data sheet).

On moist supports, in order to prevent blistering or detaching phenomena, use *Vapostop* (see technical data sheet) as primer.

If the support is subjected to rising damp, it is strictly necessary the use of *WATstop* (see technical data sheet). *WATstop* can also be used to fill small cracks. On raw concrete is recommended to use *Vapostop* (see technical data sheets) primer.

## **Smooth or tiled surfaces**

Old floorings must be attached to the support (otherwise remove them and fill with concrete mortar) and do not present on the surface traces of detaching substances like greases, oils, chemical products etc. After carefully clean tiled surface, it must be treated with *Grip Primer* (see technical data sheet) before the application of *Ultrabit*.

Use WATstop (see technical data sheet) for filling tile joints and create a perfect smoothed surface. WATstop must be used also in case of moisture of the support or rising damp.

According to the wide range of tiles that can be found on the market, it is recommended to perform a test, in order to verify the correct product adhesion.

#### Wood

Carefully clean the surface and eliminate all the dust, the friable parts as well as the detaching flakes. The wood must be completely dry and coherent.

On non-treated wood supports, proceed with a direct application of the product.

In every other case is recommended to execute a preliminary test to check the adhesion properties.

For supports not mentioned in technical data sheet, please contact Diasen technical department.

## **Treatment of expansion joints**

Before proceeding with the waterproofing intervention, it's necessary to predispose, at regular intervals, appropriate expansion joints.

This type of joints divides the screed surface in smaller areas such that it allows the differential movements (generated by variation in the environmental conditions or concrete maturation phenomena) among these latter. Expansion joints must be done carefully in order to avoid water infiltrations. The designer must evaluate the size of the areas and its realization modality according to the substrate conditions.

Joints must be filled with the polyurethane sealant Diaseal *Strong* (see technical data sheet).

Apply *Diaseal Strong* also in the contact points with doors and windows.

The corners must be waterproofed with *Safety Joint Top* (see technical data sheet).

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#### **MIXING**

*Ultrabit* is a one-component and ready to use product. Mix the product manually until obtaining a homogeneous mix. Do not dilute and do not add extraneous substances to the product.

Attention: do not mix *Ultrabit* with drill mixer.

## **APPLICATION**

# Waterproofing of vertical walls

Apply *Ultrabit* in one coat by trowel, creating a thickness of about  $2.5-3.0\,\mathrm{mm}$  ( $0.10-0.12\,\mathrm{in}$ ). Immediately after the application, smooth the surface of *Ultrabit* by trowel. Perform the application with a constant thickness over the entire surface, in order to create a continuous layer, well bonded to the support. Do not interrupt the work at connection points between vertical and horizontal surfaces or on angles. Once the product is dry, before putting the layer of embankment, protect the waterproofing realised with *Ultrabit* with protective membrane in PVC, to avoid damages caused by roots or stones.

#### Waterproofing of horizontal surfaces

- **1.** Wait the complete drying of the primer used and waterproof vertical joints with *Safety Joint Top* (see technical data sheet).
- **2.** Apply *Ultrabit* in one coat by trowel, creating a thickness of about 2.5 3.0 mm (0.10 0.12 in).
- **4.** Once the product is dry, it has always to be covered and protect.

*Ultrabit* can also be applied by DS-1500 Texture Sprayer **peristaltic pump** (*Diasen product*), with 6 mm nozzle diameter, 7.5 m pipe and 25 mm diameter.

#### **DRYING TIME**

At a temperature of  $+23^{\circ}\text{C}$  (+73.4°F) and 50% relative humidity level, the product dries in about 4 hours.

- The product resists to superficial phenomena of fading and wrinkling caused by high relative humidity, dew and fog after 30 minutes from the application.
- If applied with greater thickness, it may dry in the surface but it will dry more slowly in the bottom.
- Drying time is influenced by environmental relative humidity and by temperature and it may significantly change.
- Protect the product from water contact until it is completely dry.
- Once dry, *Ultrabit* must always be coated with tiles. Apply tiles with a specific glue for outdoor.

#### **SUGGESTIONS**

- Do not apply at temperature lower than +5°C (+41°F) and higher than +35°C (+95°F).
- During summer season, apply the product in the cooler hours of the day.
- Do not apply with imminent threat of rain or frost.
- Apply the product on completely dry surfaces.

# **CLEANING**

Wash tools with water before the product hardens.

# **SAFETY**

While handling, please respect the instructions described in the safety data sheet of the product and always use personal protective equipment.















