

## Technical Data Sheet

# RENOLIT CEMdicht 3 in 1 Cement slurry

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Waterproofing layer for the construction details.

### DESCRIPTION

**RENOLIT CEMdicht 3 in 1** is a cementitious waterproofing slurry obtained by the combination of a mineral powder –the **RENOLIT CEMdicht POWDER** mixed with additive **RENOLIT CEMdicht FLEX**.

Installed like a coating on the concrete, it creates a waterproofing layer on the surface creating insoluble crystals and clogging gels.

Once it is hardened, the cementitious waterproofing slurry silt remains so flexible that it can be applied to highly stressed, crack-prone surfaces. It can be applied by brush, trowel or with suitable spraying equipment.



### APPLICATIONS

In combination with **RENOLIT ALKORPLAN Pro** membrane, the **RENOLIT CEMdicht 3 in 1** is mainly used to waterproof by crystallisation pile caps and the foundation footing projection.

Thanks to his strong bonding properties, it is also able to completely glue the **RENOLIT ALKORPLAN Pro** membrane on the concrete surface. If it is applied on reinforced concrete or masonry brick work or cement render, the **RENOLIT CEMdicht 3 in 1** can be is used also to protect buildings against penetration of ground dampness and water.

### REGULATIONS & STANDARDS

- Test Report PG-ÜBB / abP.
- Waterproofing test in BDA Agreement Certification according to British standard BS 8102: 2009 and NHBC.
- CE Marking - EN 15651-1.

### STORAGE & HANDLING

The two components **RENOLIT CEMdicht POWDER** and **RENOLIT CEMdicht FLEX +** should be stored off the ground, in dry conditions, free from frost and shaded from direct sunlight.

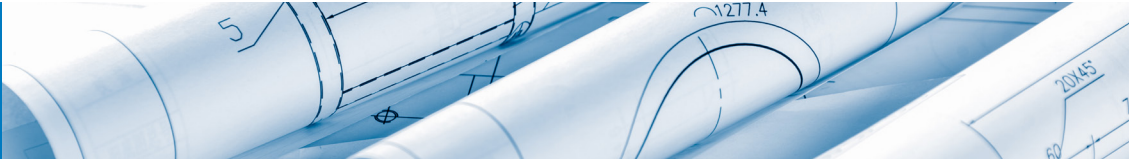
The mixture ratio is: 30 kg of mortar **RENOLIT CEMdicht POWDER** for 10 liters of **RENOLIT CEMdicht FLEX +** additive.

Code	Description	Packaging
75000033	<b>RENOLIT CEMdicht 3 in 1 – 15 kg + 5 l. – Bucket Version</b> Cementitious waterproofing slurry used to waterproof by crystallisation pile caps and foundation footing projection. Mix the two components on site.	15 kg of <b>RENOLIT CEMdicht POWDER</b> with 5 l. canister of <b>RENOLIT CEMdicht FLEX +</b> bucket of 20 kg
75000034	<b>Dry POWDER RENOLIT CEMdicht – Bag of 30 kg</b> Dry Mineral Powder to mix with the CEMdicht FLEX +.	Bag of 30 kg 36 bags per pallet
75000035	<b>Additive RENOLIT CEMdicht FLEX +</b> Liquid additive to mix with CEMdicht POWDER.	Canister of 10 l. 36 canisters per pallet

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Rely on it.

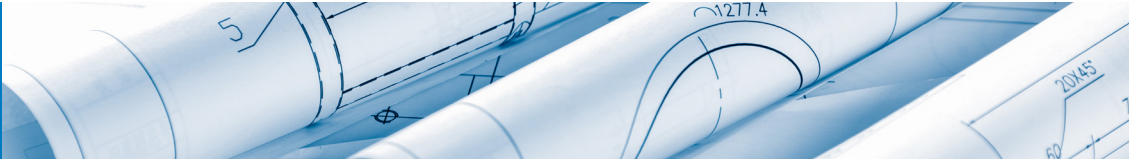


## ESSENTIAL FEATURES

Properties	Test standard	Units	Performance
Consistency	EN 1015-3	cm	26
Raw density (fresh mortar)	EN 1015-6	kg/dm <sup>3</sup>	1.93
Solids Content (CEMdicht FLEX+)	EN ISO 3251	% of the mass	55
Air content of fresh mortar	EN 1015-7	% of the volume	4
Compression strength (hardened mortar)	EN 196-1	N/mm <sup>2</sup>	21
Tensile strength (hardened mortar)	ISO 527-2	N/mm <sup>2</sup>	0.70
-Dry		N/mm <sup>2</sup>	0.60
Tensile strain (hardened mortar)	ISO 527-2	%	17
-Dry		%	13
-Wet			

## ESSENTIAL FEATURES ACCORDING TO THE FULLY BONDED FIELD

Properties	Test standard	Units	Performance
Thickness of the <b>RENOLIT</b> CEMdicht 3 in 1 per layer on a flat surface	Certificate adP	Mini : mm/layer Maxi : mm/layer	2.0 5.0
Watertightness on concrete surface	ASTM D 5385 1500kPa	-	Watertight
Watertightness in combination with <b>RENOLIT</b> ALKORPLAN Pro membrane	ASTM D 5385 300kPa	-	Watertight



## INSTALLATION

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The substrate should be firm, load carrying and free from separating substances. The concrete should not contain additives or be treated with products that could potentially harm the waterproofing slurry.

Do not apply at temperatures  $< +5\text{ }^{\circ}\text{C}$  or when frost or rain is expected.

Mix thoroughly one 30 kg bag of **RENOLIT CEMdicht 3 in 1** with one 10 liter can of liquid component **RENOLIT CEMdicht FLEX** using a slow speed drill with rotating mixer. If necessary add a small amount of water to obtain the working consistency. Apply a minimum of:

### ■ Application on flat surface

Apply with a brush a minimum of 2 coats in the presence of wet soil and at least 3 coats in the presence of water under pressure. The minimum thickness of each layer should be at least 2.5mm in the presence of wet soil and at least 2mm in presence of pressurized water without exceeding a maximum of 5mm.

There should be a waiting time between the different coats in order to allow the previous coat to dry.

As an indication, the estimated mortar consumption is  $3\text{ kg / m}^2$  in the presence of wet soil and  $4\text{ kg / m}^2$  in the presence of water under pressure. (These consumptions given refer to the weight of dry mortar).

### ■ Pile cap application

For the treatment of pile caps in combination with the **RENOLIT ALKORPLAN Pro** casing waterproofing system, the piles should be properly copped and any poor or polluted concrete should be removed. In order to allow the continuity of the reinforcement as well as the continuity of the waterproofing above the concrete piles, the layer **RENOLIT CEMdicht** grout should be applied to a thickness of 20mm in a single coat. This layer will cover the geomembrane on either side of the pile for a minimum of 50mm.

The **RENOLIT CEMdicht** waterproofing slurry should be used within 30 minutes after the mixing. Each subsequent layers need to be applied in opposite direction to the previous layer when this later is strong enough to be not damaged when applying a layer. Ensure the minimum thickness is maintained on all edges and at corners.

After the final layer application, keep moist the **RENOLIT CEMdicht** with clean water during 3 days. Allow ten days minimum to be load carrying and fully functional.

Brickwork with joints must be rendered with a PIII mortar render (minimum layer thickness 10 mm). Onto solidly filled brickwork as per DIN 1053, **RENOLIT CEMdicht** waterproofing slurry can be applied directly.

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