# UNDERPINNING

## **P3**

Bemix P3 is a pumpable universal mortar for underpinning. Runny consistency with good pumpability that is easily applied with the flexible Bemix pump.

## Work description

#### Preparation:

The concrete substrate must be clean and free of dust, damaged concrete, grease or other contaminants that may impair adhesion. Substrate with a roughened and raw surface with closely spaced irregularities provide better adhesion. Clean the substrate carefully and if possible pre-water 24 hours before casting. Remove surface water immediately before casting.

#### Mixing:

Do not mix by hand. The best mixer is a rapid mixer type Rojo 50, automatic mixer or flat mixer. For smaller quantities, mixing with a drill and mixer attachment works well. Mix to an even and clump-free consistency. Always pour in the water first. Use a graduated mixing vessel and ensure that the temperature of the mix is 20°C. The mixed grout must be used within 20 minutes.

#### Casting:

The mix is pumped or poured into the mould continuously and as quickly as possible. There must be no interruptions until casting is finished. Vibrate the concrete with suitable equipment so that no air pockets occur.

#### Reinforcement:

Castings should normally be reinforced. This is especially important when casting floors. The reinforcement is laid in the mould/formwork before casting with the recommended covering layer.

#### After treatment:

Concrete that needs to be removed is scraped off with a finishing trowel once it has hardened sufficiently. The work can be made easier by pushing a sheet of metal down onto the concrete to form a limitation and assist chiselling.

#### After-curing:

Free and unprotected surfaces are protected immediately after casting so that shrinkage and dehydration cracks do not occur. After casting, the surface can be moisture-cured with a thin, light mist of

water, but that cannot mechanically damage the mortar. At air temperatures above 5°C, curing may take place with remaining form, covering or supply of water and may last the entire first week. As soon as the surface hardens, it can be watered and covered.

#### Technical data

Technical information		
Property	Declared value	Method
General		
Binder type	Cement CEMII/A-LL 42,5R	
Stone max	4 mm	
Consumption	25 kg gives 12.5 litres of mix	
Recommended layer thickness	20–150 mm non reinforced	
Max water addition	3.25 litres/25 kg	
WCR with maxwater addition	0,39	

Finja cannot be held responsible for information other than that given in Technical data being correct. Conditions that are outside Finja's responsibility can be e.g. handling, treatment, working methods, possible reactions with other materials and

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local conditions at the storage or workplace. For current information always refer to www.finja.se

Rec.Lowest application temperature	≥ +5°C (Weather and wind must always be taken into account)	
Rec.Highest application temperature	< +30°C (Weather and wind must always be taken into account)	
Fresh mortar		
Expansion after 1 and 24 hours	0,4-2 %	
Consistency after 5 min	≥ 340 mm	SP-method 1651
Air content (%)	>5%	SS EN 1015-7
Cured mortar		
Compressive strength at 20°C		
After 24 hours	> 20 MPa	EN 12190
After 28 days	> 60 MPa	EN 12190
Exposure class	XC4/XS2/XD3/XF4/XA1	SS 13703:2015
Frost resistance, 56 cycles, flaking	Good	SS 13 72 44:2019 1A
Shrinkage (%)	<2‰	SS-EN12390
Fire class	A1	
Waterlight	Yes	SS 137003:2015

## **Packaging**

The product is supplied as standard in 25 kg bags but can normally also be obtained in 800 kg big bags. The 25 kg bags consists partly of recycled plastic an recycle as soft plastic or according to local instructions in the municipality.

## **Storage**

Use with in 24 months of the date of manufacture given on the pack. Store in a dry place. Big Bags use within 6 months from the date of manufacture.

