

UNDERPINNING

Köldbruk

Bemix Köldbruk is a ready-mixed, expanding cold-weather concrete for casting in sub-zero temperatures or when rapid formwork removal is required. Applications: underpouring for pillars or prefab elements or when there is a requirement for rapid removal of formwork. Note! Cures in sub-zero temperature.

Work description

Preparation:

Clean the substrate thoroughly for good adhesion.

Mixing:

Bemix Köldbruk is ready mixed. Only water is added for casting. A rapid mixer or flat mixer can be used, or a mixer attachment, paint mixer or similar. Small batches and rapid mixing are recommended.

Casting:

For casting the mix should have a temperature of 20 °C. This is to prevent the mix from hardening too quickly. For example, if the dry cement has a temperature of -10°C the water added should have a temperature of 40 °C. To keep the mix workable for longer, hot water should be used whatever the ambient temperature. The mix will cure without heating even at temperatures down to -10°C. The mixture must be used within 20 minutes after mixing. The mix is poured in from one side. Avoid trapping air pockets. Mix and pour at an even pace.

After treatment:

After treatment should not be done if applying in cold conditions. As soon as the surface has hardened enough to stand watering it should be watered for a long period or, best of all, covered with water saturated industrial felt or jute fabric.

Winter application:

Bemix Köldbruk hardens and cures without heating even if the temperature of the mix itself drops below 0 °C.

Technical data

General		
Property	Value	Method
Consumption	25 kg gives approx 12.5 litres of concrete mix	
Binder	Cement CEM III/A-V 52,5N, CEM I 52,5 R	
Stone max	4 mm	
Recommended cast thickness	20–150 mm	
Max water quantity	3.75 litres / 25 kg	
Fresh mortar		
Property	Value	Method
Usable time at 20°C	Approx 30 min	
Begins to set after	Approx 45 min	
Cured mortar		
Property	Value	Method
Pressure resistance at 20 °C		
After 24 hours	> 15 MPa	EN 12190
After 28 days	> 40 MPa	EN 12190
Pressure resistance at –10 °C		
After 3 days	> 10 MPa	EN 12190
After 28 days	> 25 MPa	EN 12190
Water seal	Yes	SS 137003:2015
Exposure class	XC4/XS2/XD2/XF1/XA1	SS 137003:2015

Packaging

The product is supplied as standard in 25 kg sacks.

Storage

Use within 12 months of the date of manufacture given on the pack. Store in a dry place.

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

The logo for FINJA, featuring the word "FINJA" in a bold, sans-serif font. The letters "F", "I", and "N" are connected, as are "J" and "A". The logo is underlined with two horizontal lines.