weber undervattensbetong

- Pumpable
- Underwater Concrete

About this product

Underwater concrete 0-4mm C40/50 AnI is a pumpable dry concrete. Only mix with water to obtain a ready-to-use concrete mass. Provides good freezing resistance in salt environment. Compression strength class C40/50. Easy flowing consistency.

Area of use

Underwater concrete 0-4mm C40/50 AnI is very suitable for underwater casting as it contains UV additive. Pump concrete is used for concrete laying and casting work where a pumpable high-grade and very durable concrete is required. The underwater concrete is intended to be used in the casting of structures from 30mm. The pump concrete is specially adapted to be pumped with a screw or piston pump. The underwater concrete also works in the ripple zone when it is tested according to Swedish standard, SS 13 72 44 1A.

Substrate type

- Concrete
- Stone

Mixing

The concrete is mixed mechanically 5 minutes with about 2,7l of water per 20 kg, whereby about 10l of concrete mass is obtained in easy-flowing consistency. No additional additives are required. Mixing is done with a mixer, quick mixer or free-fall mixer.

Work instructions

Underwater Casting
Mix the concrete. Fill the molds with the help of a concrete pump. For best results, ensure that the water in the mold is stationary and not in a state of current. The pump hose should always be submerged in the concrete.

Casting over water on or against existing substrate
Clean the cast site well. Raw scraped concrete molding surface provides the best adhesion. Always premoisture the casting site so that water is not drawn away from the casting compound. Adjust the consistency to the type of casting work. The concrete should be used within 30 minutes. Exposed surfaces above the waterline are watered down the first 2 days to prevent early dehydration. When aftertreatment is done, Weber CMS 8030 (shrink barrier) can be appiled for the best results.

Casting
Mix the concrete. Fill the molds. At larger thicknesses, compression may be required for each layer of 30cm. Use primarily a slender vibrator rod. Make frequent drops. For horizontal castings, the use of a "vibration girder" or similar can improve the surface finish. Immediately protect the casting from rapid dehydration.

Product specification	
Material consumption	20 kg/m² at 10mm layerthickness
Recommended water content	approx 2,7 L / 20 kg
Mixed volume	approx 10 L / 20 kg bag
Pot life (Operating time)	30 minutes
Curing start	approx 4 hours
Consistency	Esay flowing
Binder	Portlandcement
Cement type and class	Cem I 42,5 MH/LA/SR3
Aggregate	Natural gravel/sand 0-4mm
Additive	Underwater additives
Compressive strength 1 day	>10 MPa according to EN 12390-3
Compressive strength 3 days	>20 MPa according to EN 12390-3
Compressive strength 7 days	>35 MPa according to EN 12390-3
Compressive strength 28 days	>50 MPa according to EN 12390-3. For accredited strength testing report at 28 days, contact Weber.
Exposure class	X0, XC4, XS3, XD3, XF4, XA2 according to EN 206-1
Frost resistance	Yes, according to SS 13 72 44 1A (XF4)
Waterproof	Yes, according to SS 137214
Air content	approx 7%
Expansion	0,2-2,0 %
Water cement ratio	0,40
Storage conditions	Storage time for bags on a plastic-covered pallet is approx. 12 months from date of packing. Store in a dry place.
Package	20 kg bag, 1000 kg bigbag, Bulk

Please observe

Winter Management:
At a temperature lower than +5 ° C, the strength growth nearly stops. Also castings against cold concrete surfaces must be considered. Use warm concrete and protect castings against cooling. The concrete must not be exposed to frost before

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the strength of 5MPa is reached, normally after 1-3 days. For any uncertainties regarding use please contact us. The above tasks are indicative and the work execution is beyond our control. Our responsibility is limited to the quality of the delivered goods.

Disclaimer

As there are different conditions at every opportunity, Weber can not be held responsible for anything other than the information provided under the heading "Product Specification". Examples of information and circumstances, which are outside Saint-Gobain (whether specifically stated or not) include storage, construction, processing, interoperability with other products, workmanship and local conditions.

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