



weber undervattensbetong vinter

- Pumpable
- Underwater Concrete
- Winteradditives

About this product

Underwater concrete winter 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 winter 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

Constraints

- Should not be used in temperatures below -5°C

Mixing

Pumping

Use Duomix 2000 with water volume set to 500-600l/h. Minimum 38mm hose diameter, recommended hose length is 40m.

Manual mixing

The concrete is mixed mechanically 5 minutes with about 3.6l of water per 25 kg, whereby about 13l 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.

Product specification

Material consumption	20 kg/m ² at 10mm layerthickness
Recommended water content	0,14499999999999999
Pot life (Operating time)	30min
Curing start	approx 4 hours
Consistency	Esay flowing
Binder	Constructioncement Cem I
Cement type and class	Cem I 42,5 MH/LA/SR
Aggregate	Natural gravel/sand 0-4mm
Additive	Underwater additives + winter additives
Compressive strength class	C40/50
Cold compression strength	The product is frost protected, but not accelerated in strength growth. This should be taken into account when used in minus degrees.
Compressive strength 1 day	>10 MPa according to EN 12390-3
Compressive strength 3 days	>25 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, XF4 according to SS 13 72 44 (salt environment)
Waterproof	Yes, according to SS 137214
Air content	approx 7%
Expansion	0,2-2,0 %
Water cement ratio	approx 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

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 applied 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.

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 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.

Safety regulation

Always read the applicable safety data sheets, use personal protective equipment and follow the workplace safety regulations.

Recycling

Please visit your local weber website to find information on waste material and packagings.

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.