

# SOLHYDCRETE AN

High performance, fast setting,  
thick-set concrete

SOLHYDCRETE AN is a self-consolidating concrete with a high initial resistance and extended handling time. SOLHYDCRETE AN contains fibers and is shrinkage compensated. It is dimensionally stable and forms an intergral bond with existing concrete, to restore its structural integrity. SOLHYDCRETE AN can be placed in one step, at thicknesses ranging from 40 mm to 400 mm (1,5" to 16").

## ■ USES

Permanent indoor and outdoor concrete product for rapid repair.

### TYPICAL USES:

- Concrete supports and footings repairs
- Rehabilitation of concrete base
- Bridge structure repairs
- Quick repair of concrete floor, walls and columns for industrial use

## ■ PRODUCT FEATURES

- Very fast and very high initial resistance
- Self-consolidating concrete, no vibration needed while placing material
- Increased handling time
- Dimensional stability
- Meets the requirements of ASTM C- 928 about concrete removal
- High resistance to adhesion
- Possible application to different concrete thicknesses
- The material can be easily pumped and placed
- Fiber is incorporated into the mix
- Compatible with the use of corrosion inhibitors\*
- Increased resistance to de-icing salts

## ■ SURFACE PREPARATION

The surface to be repaired must be clean and rough and must be free from any curing agent, oil, grease, delaminated concrete, dirt and dust or any other substance may interfere with adhesion. Remove any damaged concrete to obtain a healthy substrate. Delimit by a kerf of at least 25 mm around the surface to be repaired. Preparation must be done mechanically to achieve a contoured surface condition (CSP) of 3 according to the guide 310.2 from ICRI. Saturate the surface to be repaired with clean water; remove any stagnant water before and during the work. The surface must be saturated, superficially dry (SSS). steel must be well cleaned and free of all traces of rust in accordance with SSPC SP10. A space of at least 25 mm must be released behind any exposed reinforcing steel.

## ■ PRIMING

Primer is not required. If necessary, prime the rebar with SOLHYDBOND ARMATURE.

\*For more information regarding the use of corrosion inhibitors, please contact your BMQ SOLUTIONS representative.

## MATERIAL PHYSICAL PROPERTIES @ 22°C (72°F)

COMPRESSION RESISTANCE CSA A23.5-5C CYLINDER OF 100 MM X 200 MM (4X6")			SCALING RESISTANCE ASTM C672		
2 hours	18.0 MPa	(2,610 psi)	50 cycles	0	Loss of 22.7g/m <sup>2</sup>
24 hours	36.0 MPa	(5,220 psi)			
7 days	45.0 MPa	(6,500 psi)			
28 days	53.0 MPa	(7,685 psi)			
RESISTANCE TO FREEZE / THAW ASTM C666 PROCEDURE B MODIFIED			LENGTH CHANGE ASTM C157 WITH C928 MODIFICATION		
Cycles	Sustainability factor (RDF)		Temps	Mûrit à l'air	Mûrit à l'eau (en immersion)
300	86.3 %		5 days	-0.049 %	-0.014 %
			28 days	-0.062 %	-0.009 %
CURING			FLOW RATE		
Working time	40 minutes		Norm CSA A23.5 - 5C	675 mm ± 75 mm	
Initial Setting ASTM C-403	Min. 45 minutes		RAPID CHLORIDE PERMEABILITY ASTM C-1202		
Final Setting ASTM C-403	Max. 75 minutes		28 days	< 500 coulombs	



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## ■ ESTIMATING / YIELD

SOLHYDCRETE AN, is packaged in 25kg bags or boilers that yields 12.5L when mixed with 2.4L to 2.6L drinking water (10% to 10.5% per weight of dry mix).

### SPREADING CAPACITY PER 25 KG BAG :

<i>Nominal thickness</i>	<i>Coverage approx.</i>
40 mm (1.6")	0.3 m <sup>2</sup> (3.3 ft <sup>2</sup> )
50 mm (2")	0.25 m <sup>2</sup> (2.64 ft <sup>2</sup> )
100 mm (4")	0.12 m <sup>2</sup> (1.32 ft <sup>2</sup> )

## ■ PRODUCT MIXING

- Place the mixers near the workplace. SOLHYDCRETE A.N remains manageable for a minimum of 40 minutes.
- Pour the recommended amount of water into a mixer.
- Add SOLHYDCERTE A.N and mix for a 3 minutes period until a homogeneous consistency is achieved.
- Pour or pump the mixture directly into the formwork on the surface to be repaired.
- Throw any material that has hardened.
- For larger flows or any applications at temperatures below 5°C or above 35°C, you must contact your local BMQ SOLUTIONS representative.

## ■ PRODUCT APPLICATION

### PLACING

SOLHYDCRETE AN concrete does not require any bonding agent. As soon as the mixing is complete, palce the product on the surface to be repaired. Make the placement from one side to the other and not from the middle to te edges.

### FINITION

Smooth and level the material to the desired height. After leveling, the surface can be finished with trowel of wood.

## ■ CURING

As soon as the repaired surface had sufficiently hardened, saturate the surface with water, then apply wet burlap and cover it with polyethylene for at least 2 hours, or apply a ripening membrane as soon as SOLHYDCRETE AN has made its final setting. To improve the ripening leave the formwork in place for 3 days following the application of SOLHYDCRETE AN.

## ■ PRECAUTIONS AND RESTRICTIONS

- Do not apply on fresh concrete
- Do not use bounding agent
- Do not apply at any temperature below 5oC
- Do not add adjuvant to this product
- Do not add agregate to this product. Already formulated for deep repair.

## ■ PACKAGING

### SOLHYDCRETE AN :

25 kg bag

Qty: 56 un. per pallet

## ■ RECOMMENDED TOOLS

The following tools will ensure efficient and economical installation:

- Mixing machine
- Mortar pump - Bunker B100
- Wood or magnesium trowel

## ■ CLEANING

Use water to clean tools immediately after use.

## ■ STORAGE

Store in a cool / dry place. The product can be kept in closed bags for 12 months.

## ■ SAFETY

See material safety data sheet. This product contains Portland cement and silica sand. It may cause irritation to eyes and skin. Avoid contact with eyes and prolonged contact with skin. Do not breathe the powder. In case of contact, rinse well with plenty of water.

BMQ SOLUTIONS WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Data Sheet when used in accordance with its directions. BMQ Solutions makes NO OTHER WARRANTY either expressed or implied.  
Buyer assumes all risk in handling.

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