

SOLHYDCRETE AN-ULTRA

High strength, fast setting concrete for deep repairs

SOLHYDCRETE AN-ULTRA is a self-consolidating concrete with high initial strength and shortened handling time. The spreading and maneuverability of the **SOLHYDCRETE AN-ULTRA** facilitates its placement and finish, while its high initial resistance guarantees a quick return to service of repaired structures. **SOLHYDCRETE AN-ULTRA** is dimensionally stable and forms an integral bond with existing concrete to restore its structural integrity. **SOLHYDCRETE AN-ULTRA** can be laid from 20mm to 200 mm (4/5 in to 8 in) in a single operation. This product contains the optimum percentage of KIM™ crystalline waterproofing agent and helps to seal the repair.

USES

Permanent indoor and outdoor deep concrete repairs for quick restart.

TYPICAL USES:

- Repair of concrete supports and footings
- Rehabilitation of elevated, on grade and underground concrete bases
- Repairs to bridge structures
- Rapid repair of floors, walls, concrete columns for industrial use

PRODUCT FEATURES

- Very fast and very high initial resistance
- Self-consolidating concrete, no vibration needed while placing material
- Very short workability and handling time.
- Dimensional stability
- Meets ASTM C-928 requirements for removal
- High resistance to adhesion
- Applications at different thicknesses
- The material can be easily pumped and placed
- Integral waterproofing with the KIM™ product

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 6 - 10 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

No primer is required.

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

COMPRESSION RESISTANCE CSA A23.5-5C CYLINDERS 100 MM X 200 MM (4 "X 6")

2 hrs	17,0 MPa	(2 500 psi)
24 hrs	33,0 MPa	(4 800 psi)
7 days	41,0 MPa	(5 980 psi)
28 days	50,0 MPa	(7 250 psi)

RESISTANCE TO FREEZE / THAW CYCLES ASTM C666 PROCEDURE B MODIFIED

Cycles	Sustainability factor (RDF)
300	86,3 %

CURING

Workability time minutes	12 to 15 minutes
Initial setting AST C-403	Min. 22 minutes
Final setting ASTM C-403	Max. 35 minutes

ASTM C672 SCALING RESISTANCE

50 cycles 0 Loss of 22,7g/m²

LENGTH CHANGE ASTM C157 WITH MODIFICATION C928

Time	Matures with air	Matures with water (in immersion)
5 days	-0,053 %	-0,013 %
28 days	-0,069 %	-0,010 %

FLOW RATE

Standard CSA A23.5 - 5C 550 mm ± 50 mm

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ESTIMATING / YIELD

SOLHYDCRETE AN-ULTRA, is packaged in a 25 kg bag that gives a yield of 13.8 L when mixed with 2.5-2.62 Liters of potable water (10.0 to 10.5% per pound of dry mix).

Spreading capacity per bag of 25 kg :

Nominal thickness	Approx. coverage
40 mm (1.6")	0,30 m ² (3,3 ft ²)
50 mm (2")	0,25 m ² (2,64 ft ²)
100 mm (4")	0,12 m ² (1,32 ft ²)

PRECAUTIONS AND RESTRICTIONS

- Do not apply on fresh concrete
- Do not use a bonding agent
- Do not apply at temperatures below 5 ° C
- Do not add adjuvant to this product

PRODUCT MIXING

Place the mixers near the workplace. **SOLHYDCRETE AN-ULTRA** remains manageable for a minimum of 10 minutes. Pour the recommended amount of water into the container. Add **SOLHYDCRETE AN-ULTRA** concrete and knead for at least 3 minutes until a homogeneous consistency is obtained. Pour or pump the mixture directly into the formwork on the surface to be repaired. Discard any material that has hardened. For large flows or applications at temperatures below 5 ° C or above 35 ° C contact your **SOLHYDROC** local representative

PRODUCT APPLICATION

PLACING

SOLHYDCRETE AN-ULTRA concrete requires no bonding agent. As soon as the mixing is finished, place the product on the surface to be repaired. Make the placement from one side to the other and not from the middle to the edges.

FINISH

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

CURING

As soon as the repaired surface has sufficiently hardened, saturate the surface with water, apply wet jute and cover with polyethylene for 2 hours, or apply a ripening membrane as soon as the **SOLHYDCRETE AN-ULTRA** has made its final setting

CONDITIONING

SOLHYDCRETE AN-ULTRA 25 kg bags
Qty: 56 bags per palette

RECOMMENDED TOOLS

The following tools will ensure efficient and economical installation:

- Mortar mixer
- Bunker B100 mortar pump
- Wood and magnesium trowel

CLEANING

Use water to clean tools immediately after use.

STORAGE

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

SAFETY

See the safety data sheet.

SOLHYDROC INC. GUARANTEES the quality of its products. These are in accordance with the description given in the data sheets, on the labels and are appropriate for the purpose for which they are intended. Solhydroc Inc. has no control over site conditions, methods of use and conditions of use. The Solhydroc guarantee only covers the high quality of its products.

Product for professional use

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