

PRODUCT DATA

3 03 01 20 **Concrete
Rehabilitation**

ALL-CRETE 5

Very rapid-setting cementitious patching material**Description**

All-Crete 5 is a one-component very rapid-setting cementitious concrete patching material that can be covered with concrete or asphalt within 5 minutes following application. It can be used to repair horizontal and vertical surfaces, above and below grade.

Yield

0.45 ft³ per 50 lb bag
(0.013 m³ per 22.7 kg bag)

0.50 ft³ per 60 lb pail
(0.014 m³ per 27 kg pail)

Packaging

50 lb (22.7 kg) bags

60 lb (27 kg) pails

Shelf Life

1 year when properly stored

Storage

Store in unopened containers at 60 to 80° F (16 to 27° C) in clean, dry conditions.

Where to Use

APPLICATION

- Concrete repairs
- Precast and concrete pipe repairs

Features

- Very rapid-setting
- High early strength
- One component
- Durable
- Can be used down to 40° F (4° C)

Benefits

- Sets in 5 minutes
- Puts repaired areas back in service within hours
- Easy to prepare and mix
- Resists oil, grease, salt solutions, diesel fuel
- Suitable for cold-weather applications

LOCATION

- Horizontal or vertical surfaces
- Interior or exterior
- Above and below grade

How to Apply**Surface Preparation**

CONCRETE

1. All substrates should be clean and free of dust, plaster, oil, paint, grease, corrosion deposits, and any other contaminants.
2. Remove excess laitance by mechanical means.
3. Mechanically roughen smooth substrates by scabbling or needle gun to provide an adequate key.
4. Presoak the prepared concrete surface to a saturated surface-dry (SSD) condition with no standing water.
5. To get maximum bonding strengths, control the depth of repairs. Perimeter cut the edges of repair areas at least 3/8" (10 mm).

STEEL

1. Expose any steel reinforcement in the repair area around its full circumference and clean it to remove all loose scale and corrosion deposits.
2. Prime steel with MBT® Zincrich Rebar Primer and allow to cure.

Mixing

1. Water ratios of 4 – 5 qts (3.7 to 4.8 L) per 50 lbs (22.7 kg) of powder will produce a mixed consistency from putty to plastic, depending upon handling preference and job requirements.
2. Add All-Crete 5 to water and mix for 1 minute by hand. The temperature of the substrate, water, material, and air will affect mixing time, mixed consistency, and set.

Application

1. Apply scrub coat of the mixed material by brushing it into the SSD substrate. Do not dilute the scrub coat.
2. While scrub coat is still wet, apply All-Crete 5, ensuring good compaction of the mortar by tamping or troweling on both horizontal and vertical surfaces. Place material in layers no greater than 3" (76 mm) at a time.
3. Initial set will occur in 3 – 5 minutes, final set in 10 – 12 minutes.

Curing

To ensure peak performance, cure All-Crete 5 in accordance with good concrete practices (ACI 308). Use an ASTM C 309-compliant curing compound when the surface cannot be marred by the application process.

Clean Up

Clean up with water before cure. Cured material must be removed mechanically.

Technical Data

Composition

All-Crete 5 is a proprietary blend of cement, graded aggregate, shrinkage-compensating agents, and set-control additives.

Test Data

PROPERTY	RESULTS	TEST METHODS
Compressive strength, psi (MPa), at 16.7% water, putty consistency		ASTM C 109
1 day	5,500 (37.9)	
3 days	6,980 (48.1)	
7 days	7,710 (53.2)	
14 days	8,490 (58.5)	
28 days	9,070 (62.5)	
Bond strength, psi (MPa)		ASTM C 1062
7 days	600 (4.1)	
28 days	1,100 (7.6)	
Flexural strength, psi (MPa)		ASTM C 293
7 days	1,200 (8.3)	
28 days	1,600 (11.0)	
Splitting tensile strength, psi (MPa)		ASTM C 496
7 days	750 (5.2)	
28 days	900 (6.2)	
Set times, min, at 75° F		ASTM C 191
Initial	3 – 5	
Final	10 – 12	

All application and performance values are typical for the material, but may vary with test methods, conditions, and configurations.

For Best Performance

- Not recommended for placing below 40° F (4° C).
- Not recommended for continuous immersion or applications subject to constant moisture.
- Do not retemper after initial set.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

ALL-CRETE 5

Caution

All-Crete 5 contains crystalline silica, Portland

cement, calcium sulfate, clay, and fly ash.

Risks

Product is alkaline on contact with water and may cause injury to skin or eyes. Ingestion or inhalation of dust may cause irritation. Contains free respirable quartz, which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin and eyes. Prevent inhalation of dust. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or is used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL

ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0 lbs/gal or 0 g/L

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

BASF Building Systems

889 Valley Park Drive
Shakopee, MN, 55379

www.BASFBUILDINGSYSTEMS.COM

Customer Service 800-433-9517

Technical Service 800-243-6739

LIMITED WARRANTY NOTICE: Every reasonable effort is made to apply BASF exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, BASF MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and BASF shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the BASF Technical Manager.

This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. In particular, BASF disclaims all CONDITIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. BASF SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. BASF reserves the right to make any changes according to technological progress or further developments. It is the customer's responsibility and obligation to carefully inspect and test any incoming goods. Performance of the product(s) described herein should be verified by testing and carried out only by qualified experts. It is the sole responsibility of the customer to carry out and arrange for any such testing. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of any product and does not imply that similar products could not be used.

For professional use only. Not for sale to or use by the general public.