

Unicrete

Polymer-based repair mortar

1. PRODUCT DESCRIPTION

1.1. PRINCIPAL USE

- 1.1.1. Bomix® Unicrete is a polymer-based repair mortar for long-term repair of cracks and imperfections on concrete surfaces.
- 1.1.2. Bomix® Unicrete allows you to repair imperfections ranging from 3 mm (1/8 in.) to 75 mm (3 in.) in a single mix.

1.2. ADVANTAGES

- Easy to apply: superb workability
- Excellent resistance to freeze/thaw cycles and salts de-icing
- High resistance to abrasion
- Indoor and outdoor use

2. SURFACE PREPARATION

- 2.1. The surfaces to be covered must be structurally sound, clean and free of any material that could affect adhesion such as grease, dust, oil, paint or any other harmful substance.
- 2.2. Ensure that the ambient, surface and product temperatures are between 5 °C (40 °F) and 35 °C (95 °F) during application and for a period of 48 hours following application.
- 2.3. Do not apply under blazing sun.
- 2.4. Before installation, moisten the surface well with clean water, making sure not to create accumulation.

3. MIXING

- 3.1. In a clean container, pour 700 ml (25 ounces) of water per 5 kg of Unicrete Bomix®.
- 3.2. Gradually add the dry ingredients while stirring.
- 3.3. Mix for a minimum of 3 minutes, scraping the sides of the container and making sure to obtain a homogeneous mixture.
- 3.4. It is possible to use a drill equipped with a paint mixer type agitator.
- 3.5. Do not use a concrete mixer as it does not mix vigorously enough.
- 3.6. The mixed mortar should be used within 30 to 40 minutes.

Note : *Respect the prescribed quantity of water to avoid shrinkage during the treatment.*

4. APPLICATION

- 4.1. Apply the mixture using a steel trowel to a maximum thickness of 75 mm (3 in.).

5. FINISHING

- 5.1. Finish using a steel trowel.



6. PROTECTION AND CURING

- 6.1. Cover the work for the first 24 hours using a plastic sheet (taking care that it does not touch the surface) to prevent the water from evaporating too quickly and to protect the surface against sun, rain and wind.
- 6.2. Allow to ripen for 24 hours before allowing pedestrian passage (wait 48 hours in cooler weather < 15 °C, 59 °F).

7. CLEANING

- 7.1. Clean equipment, tools, mixer and containers with water while the mixture has not yet hardened. Once the mixture has hardened, only mechanical cleaning will be effective.

8. PACKAGING

- 8.1. This product is available in 5 kg (11 lb) and 15 kg (33 lb) containers.

9. STORAGE

9.1. INDOOR STORAGE

- 9.1.1. Store in a cool, dry place. Avoid placing the bags directly on the ground.

9.2. EXTERIOR STORAGE

- 9.2.1. Cover bags with waterproof wrap. Do not store directly on the ground.

9.3. LIFETIME

- 9.3.1. Storage time is 12 months in unopened, well-protected bags. Do not use a product that has agglomerations of hardened materials.

10. FIRST AID

- 10.1. **Important: Read the following carefully before using the product. WEAR WATERPROOF GLOVES, such as nitrile, eye protection and rubber boots. DANGER – CORROSIVE: CAUSES SEVERE BURNS AND SERIOUS EYE DAMAGE.** Do not rely on pain to detect cement burns. Portland cement may cause dermatitis or sensitization. Do not mix with other chemicals including acids and cleaners. Do not breathe or swallow dust. Do not allow product to contact eyes, skin or clothing.
- 10.2. Repeated and chronic inhalation of dust can cause lung damage and even cancer.
- 10.3. Handle with Care. Wash contaminated body and clothing immediately and thoroughly. Use only in an area with good ventilation. Wear a CSA approved respirator (mask), such as N95, when used in poorly ventilated areas, for prolonged or repeated use, or when maximum exposure limits may be exceeded.
- 10.4. **FIRST AID: Contains silica sand, portland cement, calcium sulfoaluminate, hydrated lime and calcium aluminate.** If swallowed: immediately call a poison control center or doctor; rinse your mouth and do not induce vomiting. In case of contact with eyes; rinse carefully with water; remove contact lenses if present and if it is easy to do; continue rinsing for 5 minutes.

- 10.5. In case of contact with skin: wash thoroughly immediately. In case of contact with clothing: remove clothing immediately and wash it. If inhaled; remove the exposed person to fresh air. If you experience a burn, rash or skin irritation; consult a doctor immediately. See a doctor immediately if symptoms are severe or persist. The safety data sheet is available online at www.bomix.ca. In case of emergency: 1-800-535-5053.

11. TECHNICAL SERVICE

- 11.1. Contact Bomix® for further information on application methods or conditions as well as to obtain the most recent version of the technical documents.

Tel: 1-800-561-2664, (514) 328-1253

Fax: (514) 328-7694

Les Produits Daubois Inc.

6155, boul. des Grandes-Prairies, Saint-Leonard, Qc H1P 1A5, Canada

<http://www.bomix.ca>

12. WARRANTY

- 12.1. You can obtain the terms of the applicable LIMITED WARRANTY at <https://www.bomix.ca/en/product-warranty.php> Or send a written request to Les Produits Daubois Inc., Five Concourse Parkway, Atlanta, GA 30328, USA . ©Quikrete Canada Holdings, Limited. Manufactured by or under the authority of Les Produits Daubois Inc. ©2024 Quikrete International, Inc.

Table 1: Typical results

Characteristics	Term	Results
Initial setting time (minutes) - ASTM C-191		3
Final setting time (minutes) - ASTM C-191		4 ½
Compressive force - ASTM C-109	1 day	10.0 MPa (1450 psi)
	3 days	20.0 MPa (2900 psi)
	7 days	28.0 MPa (4060 psi)
	28 days	34.0 MPa (4930 psi)
Flexural strength - ASTM C-348	1 day	3.0 MPa (435 psi)
	7 days	5.0 MPa (725 psi)
	28 days	5.0 MPa (725 psi)
Adhesion strength on a concrete block - CSA 23.2-6B	7 days	1.5 MPa (218 psi)
	28 days	1.8 MPa (261 psi)
Volumic mass kg/L (lb/ft³) ASTM C-185		2150 (134)
Covering power per kilogram		0.05 m² at 12 mm thick (0.5 ft² at 1/2 in. thickness)

Note: Results obtained in laboratory at 23°C (72°F)