

## Fortafix and Fortafix plus

Expanding urethane repair system for foundations

### 1. DESCRIPTION:

BOMIX® FORTAFIX / BOMIX® FORTAFIX PLUS is a one-component, moisture-reacting polyurethane injection system specially formulated for the repair of cracks in foundations. The reaction between urethane and moisture creates a foam that expands 20 times its volume to completely seal cracks. To carry out a repair, you must have the FORTAFIX cartridges, the Fortafix plus injection sleeves and BOMIX® SWIFT-PATCH patching mortar.

#### 1.1. USE

1.1.1. The FORTAFIX/FORTAFIX PLUS system is used for effective and permanent repair of cracks in foundation walls. It can repair very small cracks (1/16 inch, 2 mm) up to larger cracks (1/2 inch, 12.5 mm).

#### 1.2. RECOMMENDED SURFACES

1.2.1. FORTAFIX can only be used to fill cracks in concrete walls.

#### 1.3. RESTRICTIONS

1.3.1. The concrete temperature must be equal to or greater than 8 °C (46 °F) during all preparation stages and for 3 days following injection. Do not inject between wood and concrete. Do not use for cracks larger than 12.5 mm (1/2 inch). This product must be injected in a confined space since it expands considerably in the open air. Do not use to fill open areas.

### 2. SURFACE PREPARATION

#### 2.1. PREPARATION

2.1.1. Remove any friable part of the wall and brush the concrete (at least 5 cm, 2 in) on each side of the crack. Clean with water. Insert a good quantity of water all along the crack to ensure a humid environment which greatly promotes the reaction rate (swelling, hardening) of the injection resin. Install the sleeves and seal the crack in a short time to keep the moisture in the wall.

#### 2.2. INSTALLATION OF FORTAFIX PLUS SLEEVES

2.2.1. Nail the sleeves with finishing nails or glue them with hot glue, silicone or patching cement. Make sure the sleeve opening is positioned over the crack and is not obstructed by the chosen adhesive. Lay the first sleeve 5 cm (2 in) from the ground. Install the following sleeves every 15 to 20 cm (6 to 8 in.), depending on the width of the crack. The thinner the crack, the closer the sleeves will be. Note: For corner cracks, cut the base of the sleeves lengthwise so that the opening covers the crack.

#### 2.3. PATCHING

2.3.1. Very important: The success of the injection depends on the application of the sealing cement. Take great care to properly seal the surface of the crack and the bases of the sleeves. Mixing the mortar to seal: Use SWIFT-PATCH to seal the crack and the base of the sleeves.



Note: This product was initially marketed under the CYNTECH brand

2.3.2. Carefully follow the mixing instructions on the package. Mix only the amount that can be applied in 10 minutes. Apply the mortar to the crack in a thin layer (3 mm or 1/8 in) taking care to cover the base of the sleeves well. Allow the mortar to harden for a minimum of 3 hours before grouting.

### 3. INJECTION

3.1. Warning: Read all health and safety instructions on the cartridge carefully before handling the product. Use a good quality caulking gun that can withstand good pressure. Wear gloves and an appropriate mask.

3.2. For very fine cracks, slightly heat the material by dipping the cartridge in hot water. Unscrew and remove the injection tip. Cut a small piece off the end of the cartridge with a sharp knife. Put the injection tip back in place. Install the cartridge in the caulking gun then remove the protective cap on the nozzle. Introduce a little water into the sleeves. Start the injection in the lower sleeve, insert the tip into the sleeve then apply constant pressure until the resin comes out of the 2nd sleeve. Install a plug on the bottom sleeve then continue injecting into the second sleeve until the resin comes out through the 3rd sleeve, and so on. In the event of a leak, stop the injection immediately, thoroughly clean the flow, re-plug, wait 3 hours then resume the injection operation.

*Note: Once opened, the product cannot be kept for future use since the resin is no longer protected from humidity. It is best to use the full contents of the cartridge. If this is not possible, allow the material to harden in the cartridge and dispose according to municipal regulations. Once opened this container is no longer child resistant.*

#### 4. FINITION

- 4.1. It is possible to remove the sleeves and the sealing mortar using a cold chisel, 48 hours after the injection.

#### 5. REMARKS

- 5.1. The injection can be done from the inside or the outside but it is absolutely necessary to ensure that the crack is blocked at the other end to avoid leaks and loss of material.
- 5.2. This product can be applied even if there is water infiltration with light flow, it is not necessary to wait for the flow to end before proceeding with the injection.
- 5.3. When the crack does not seem to fill following the injection of a good quantity of material, there is probably an opening or a cavity in the foundation creating a leak of material. Stop the injection and look for the problem.

#### 6. CLEANING

- 6.1. Clean equipment, tools and containers with water immediately after application. It may be necessary to use paint thinner to clean up the resin.

#### 7. STORAGE

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- 7.1.1. Store in a cool, dry place. Protect from freezing.

##### 7.2. SHELF LIFE

- 7.2.1. Shelf life is 12 months in original, unopened containers.

#### 8. FIRST AID

- 8.1. This product contains diphenylmethane diisocyanate and is irritating to the skin, eyes and respiratory system. Avoid contact with eyes, skin or clothing. Avoid breathing vapours. Handle with Care. Keep out of the reach of children. Use in a well ventilated area. If swallowed, call a poison control center or doctor immediately. Do not induce vomiting. In case of eye contact, flush with water for a minimum of 15 minutes, keeping eyelids open. Consult a physician immediately. In case of contact with skin, rinse thoroughly with water for a minimum of 15 minutes. Consult a doctor if irritation occurs. In case of contact with clothing, remove them. If inhaled, move exposed person to fresh air. Consult MSDS for details.

#### 9. TECHNICAL SERVICES

- 9.1. 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>

#### 10. WARRANTY

- 10.1. 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. ©2023 Quikrete International, Inc.

### Features

<b>Appearance</b>	FORTAFIX: Amber resin;
	FORTAFIX PLUS: plastic sleeves
<b>Packaging</b>	FORTAFIX: Pack of 2 cartridges of 300 ml
	FORTAFIX PLUS: Box of 12 sleeves
<b>Yield</b>	1 cartridge of FORTAFIX fills approximately
	1 crack of 2.5 m * 20 cm * 2 mm (8 feet * 8 in * 1/16 in).
<i>Important: Note that cracks may be irregular and contain cavities</i>	