FX-70-8DP™
Underwater Repair Mortar

DESCRIPTION
FX-70-8DP™ Underwater Repair Mortar is a single-component, rapid-hardening, cementitious repair mortar designed for hand-pack applications underwater.

WHERE TO USE
Most underwater applications, including:
- Pools
- Piers
- Concrete aquariums
- Sumps and pits

FEATURES
- Ready to use — simply add potable water
- Dry-pack by hand; no forming necessary
- Excellent bond, even underwater

PRODUCT DATA
Generic Description
Underwater cementitious repair mortar

Packaging
50 lb. (22.7 kg) bag (FX70-8DP)

Color
Gray

Product Yield
0.41 ft³ (0.012 m³)

Storage
Store dry between 40° and 95°F (4°–35°C)

Shelf Life
1 year in unopened packaging

VOC
0 g/L

TECHNICAL INFORMATION
The data herein is based on laboratory testing under controlled conditions. Variations may result from mixing methods and jobsite conditions. All materials conditioned to 50°F (10°C), testing performed at 73°F (23°C) and 50% R.H., with the maximum recommended water, unless noted otherwise.

Compressive Strength
ASTM C109/C109M
2 hours 1,100 psi 7.5 MPa
4 hours 1,950 psi 13.5 MPa
24 hours 2,500 psi 17.2 MPa
7 days 4,000 psi 27.6 MPa
28 days 6,000 psi 41.4 MPa

Set Time
ASTM C266
Air cure Initial Final
6 minutes 18 minutes

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SURFACE PREPARATION

Substrate and surrounding water temperature must be at least 35°F (2°C) prior to application. All surfaces must be sound, clean, and free of marine growth, oil, and other contaminants that could impair product adhesion, bond or performance.

Remove all loose or deteriorated concrete by high-pressure water-jetting or other mechanical means to reach sound concrete and achieve an open pore structure and surface profile per ICRI Guideline 310.2R CSP6-9, taking care to avoid micro-cracking.

All underwater repairs should be installed by certified professional divers.

MIXING

For optimal product performance, condition to 50°F (10°C). Do not prepare more material than can be used in the setting time of the product. Mix with a low-speed (300–600 rpm) drill and mixing paddle. For best results, add 90% of total mixing water and slowly add entire contents of FX-70-8DP™ while mixing to avoid clumping. Adjust using remaining 10% of total mixing water until desired consistency is achieved, scraping unmixed material from the sides and bottom of mixing container as needed to ensure all material is mixed. Consult the printed instructions on the product package for the maximum recommended amount of mixing water. Mix for approximately 3 minutes. Mixed product should be a minimum of 50°F (10°C) prior to placement. Do not overmix.

APPLICATION

Using chemical-resistant gloves, hand-trowel or hand-pack FX-70-8DP into repair area to desired application thickness. Strike off with trowel and allow product to set. For multiple lifts, roughen profile with trowel between lifts.
CAUTION

May cause serious eye and skin irritation or damage. When combined with water, may cause moderate to severe alkali burns. Contains silica; do not breathe dust.

Protective Measures: The use of safety glasses and chemical-resistant gloves is recommended. Use appropriate clothing to minimize skin contact. The use of a NIOSH-approved respirator is required to protect respiratory tract when ventilation is not adequate to limit exposure below the permissible exposure limit (PEL). Refer to Safety Data Sheet (SDS) available at strongtie.com/sds for detailed information.

FIRST AID

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open.
If redness, burning, blurred vision, or swelling persists, seek medical advice.

Skin Contact: Remove product and wash affected area with soap and water. Do not apply greases or ointments.

Ingestion: DO NOT INDUCE VOMITING. Seek medical advice. Never administer anything by mouth to an unconscious person. Rinse mouth out with water. Never leave affected person unattended. If vomiting occurs spontaneously, lay affected person on their side, keeping head below hips to prevent aspiration of material into lungs.

Inhalation: Remove affected person to fresh air. If affected person continues to experience difficulty breathing, seek medical advice.

CLEAN-UP

Spills: Sweep or vacuum material and place in a suitable container. Keep out of sewers, storm drains, surface waters, and soils.

Surface Clean: Remove any residue with hot soapy water. Cured material can be removed only by mechanical means.

Tools and Equipment: Clean with soap and water immediately after use.

Skin: Use a non-toxic, pumice-based soap, citrus-based hand-cleaner, or waterless hand-cleaner towel. Never use solvents to remove product from skin.

Disposal: Dispose of container and unused contents in accordance with federal, state, and local requirements. Containers may be recycled; consult local regulations for exceptions.

LIMITED WARRANTY

This product is covered by the Simpson Strong-Tie RPS Product One-Year Limited Warranty, which is available at strongtie.com/limited-warranties or by calling Simpson Strong-Tie at (800) 999-5099.