

FX-763

Low-Modulus Trowel-Grade Epoxy



A Simpson Strong-Tie® Company

DESCRIPTION

FX-763 Low-Modulus Trowel-Grade Epoxy is a two-component, 100% solids, moisture-tolerant, non-sag epoxy designed for vertical, horizontal, and overhead applications and uses.

SPECIFICATION COMPLIANCE

FX-763 exceeds the performance requirements of ASTM C 881, Type I, Grade 3, Class B.

WHERE TO USE

- Joint repairs
- Mortar when combined with FX-701 Graded Silica Filler for heavy-traffic floor repairs
- For vertical and overhead concrete patching
- Vertical, horizontal and overhead crack sealing
- Securing ports and paste-over for pressure injection applications
- As a jacket joint sealer and top-bevel material for the FX-70® Structural Repair and Protection System

PERFORMANCE FEATURES

- Bonds well to most construction materials
- Bonds to dry or damp surfaces
- Excellent chemical and abrasion resistance in wastewater and other industrial applications
- Exceptional resistance to hydrogen sulfide (H₂S) gas
- Easily applied with trowel or putty knife
- Can be feather edged

GENERAL FEATURES

PRODUCT DATA

All testing performed at 23°C and 50% R.H.

Generic Description

Trowel-grade epoxy

Packaging

11.4 Litre kit (FX763KT3) contains:

- 2 x 3.8 Litre cans of Component "A" (FX763-1A)
- 1 x 3.8 Litre can of Component "B" (FX763-1B)

56.8 Litre kit (FX763KT15) contains:

- 2 x 18.93 Litre pails of Component "A" (FX763-5A)
- 1 x 18.93 Litre pail of Component "B" (FX763-5B)

Colour

Mixed Epoxy: Grey

Mixing Ratio

2A:1B

Product Yield

0.001 m³/L neat

0.0015 m³/L when mixed 1 part by volume with FX-701 Oven-Dried Graded Silica Filler

Pot Life

30 min. at 22°C

Storage

Store dry between 4 – 35°C

Shelf Life

2 years in unopened packaging

Solids Content

100% by volume

Viscosity

Non-sag

TECHNICAL INFORMATION

All testing performed at 23°C and 50% R.H.

Tensile strength 22.2°C

ASTM D 638

6,000 psi min 34.5 MPa

Linear coefficient of shrinkage on cure

ASTM D 2566

0.005

Compressive strength, 7 days

ASTM D 695

9,000 psi min 62 MPa

Compressive modulus

ASTM D 695

200,000 psi 1,380 MPa

Bond strength (slant shear), 7 days

ASTM C 882

2,500 psi min 10.3 MPa



LIMITATIONS

- Do not apply to surfaces below 4°C
- Do not apply to surfaces above 32°C
- 2.5 cm maximum lift thickness for vertical and overhead repairs
- Material is a vapour barrier after cure. Concrete surface must not exhibit an active moisture vapor drive.
- Adhesion and product compatibility testing must be performed prior to over-coating existing coatings
- Product may discolour if exposed to direct sunlight
- Not recommended for large exterior repairs or applications subject to large thermal change
- Not for use as a structural anchoring adhesive
- Do not exceed one part by volume FX-701 Graded Silica Filler for mortar mixes

Please note: This product has not been evaluated for resisting long-term sustained loads in anchor applications. Please contact S&P for solutions in this field.

SURFACE PREPARATION

All surfaces must be sound, clean and free of all contaminants that could impair product adhesion or performance.

Steel: All welds must be ground smooth. Remove weld spatter. Round sharp edges to a minimum 3 mm radius. Pre-stripe all welds, edges and protrusions. Prepare surface by abrasive blasting or other mechanical means necessary. Apply FX-763 immediately or prime before flash rusting can occur. Contact S&P for primer recommendations.

Concrete: Concrete should be a minimum of 28 days old and fully cured prior to coating application. Prepare surface by abrasive blasting or other mechanical means necessary.

For Repair Mortar applications: Prepare the repair area in accordance with guidelines, taking care to avoid micro-cracking. Please contact S&P for priming recommendations with a zinc-rich primer.

Wood/Previously Painted Surfaces: Remove all surface contaminants and mechanically abrade substrate to achieve the equivalent of a 100 grit sandpaper profile.

MIXING

For optimal product performance, condition individual components to 21°C and stir thoroughly prior to use.

Do not prepare more material than can be used within the pot life of the product. For neat resin: Proportion components at a 2A:1B ratio by volume in a clean pail or use calibrated mixing equipment. Mix thoroughly with a low-speed (300 – 600 rpm) drill and mixing paddle for 2 – 3 minutes, scraping unmixed material from sides and bottom of mixing container as needed to achieve a uniform consistency. Avoid entrapping air into mixture.

For grout or patching mortar: Mix neat resin as stated above, then add up to 1 parts of FX-701 Oven-Dried Graded Silica Filler by volume, slowly to avoid clumping, while continuing to mix for approximately 2 – 3 minutes or until a uniform consistency is achieved, scraping the pail as needed. Do not thin FX-763.

APPLICATION

For anchor grouting/doweling/pinning: Fill hole ½ to ¾ full. Insert clean, oil-free anchor, turning slowly until the anchor contacts the bottom of the hole. Do not disturb anchor until fully cured (see cure time schedule).

General Concrete Repair/Adhesive: Apply properly mixed FX-763 Low-Modulus Trowel Grade Epoxy to the prepared substrates with a putty knife. Secure in place until fully cured.

For repair mortar: Trowel mixed material into repair area. Screed and finish with a steel trowel.

Crack Injection Paste-Over/Port Adhesive: Apply properly mixed FX-763 Low-Modulus Trowel Grade Epoxy to the surface of injection ports and adhere the ports to concrete surface. After ports have set, seal the entire crack by applying FX-763 Low-Modulus Trowel Grade Epoxy with a putty knife at a minimum thickness of 5 mm and 25 mm wide over the crack. Cover all ports with a minimum thickness of 0.6 cm and extend 2.5 cm beyond the base of the port. If possible, seal the backside of the crack. Allow FX-763 Low-Modulus Trowel Grade Epoxy to fully cure before injecting.

FX-763 Low-Modulus Trowel Grade Epoxy can be applied to (SSD) concrete. Do not apply to wet concrete surfaces. All other surfaces must be dry. Do not apply in direct sunlight and protect from large temperature variations for 24 hours following installation.

IMPORTANT SAFETY INSTRUCTIONS

For detailed safety information, we recommend that you see the current safety data sheets which are available on www.sp-reinforcement.eu or you can contact us on +41 41 825 0070.

S&P's range of products are for industrial use. They must be installed by specialised personnel and competent professionals with adequate training. The installation instructions must be followed.

IMPORTANT INFORMATION

It is the responsibility of each purchaser and user of each product to determine the suitability of the product for its intended use. Prior to using any product, consult a qualified design professional for advice regarding the suitability and use of the product, including whether the capacity of any structural building element may be impacted by a repair. As jobsite conditions vary greatly, a small-scale test patch is required to verify product suitability prior to full-scale application. The installer must read, understand and follow all written instructions, and warnings contained on the Limited Warranty, product label(s), Product Data Sheet(s), Material Safety Data Sheet(s) and the www.sp-reinforcement.eu website prior to use. For industrial use only by qualified applicators. KEEP OUT OF REACH OF CHILDREN!

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