CustomFlex® Ultra-Strength Thin-Set Additive

1 Product Name
CustomFlex® Ultra-Strength Thin-Set Additive

2 Manufacturer
Custom® Building Products

3 Product Description
NOTE: This product has been discontinued.

An advanced latex additive that substantially increases bond strength and flexibility when combined with CustomBlend® Standard Thin-Set Mortar or MultiSet Modified Thin-Set Mortar. Excellent for use over difficult-to-bond surfaces such as plywood and vinyl and when setting hard-to-bond vitreous or nonporous tile and stone. Adds flexibility to non-modified thin-sets, producing a mortar that can bridge minor cracks up to 1/16" (1.6 mm) wide and withstand minor deflection.

Key Features
- Adds flexibility - can bridge cracks up to 1/16" wide
- Excellent when setting dense tile or stone

Uses
- Add to CustomBlend® or MultiSet Thin-Set Mortars
- To meet ANSI A118.4 and A118.11 installation requirements
- When setting impervious porcelain tile, glass mosaics or when higher bond strength is desired
- Interior and exterior floors, walls, countertops
- Areas subject to freeze-thaw cycles
- Exterior Grade Plywood (interior residential and light commercial dry areas)
- Existing ceramic tile
- Sheet vinyl flooring, VCT
- Plastic laminates
- Cutback adhesive

Suitable Tile Types
- Vitreous, semi-vitreous or non-vitreous tile: ceramic, mosaic, quarry, cement body tile
- Impervious porcelain and glass tile
- Brick and stone veneer
- Cement-based precast terrazzo
- Natural stone tile

Suitable Substrates
- Concrete, mortar beds, masonry, Portland cement plaster
- WonderBoard® Lite cement backerboards
- Liquid applied waterproofing membranes such as RedGard® and Custom® 9240
- Crack prevention sheet membranes such as Crack Buster® Pro
- Exterior Grade Plywood (interior residential and light commercial dry areas)
- Gypsum wallboard (interior dry areas)
- Existing ceramic tile
- Fully-bonded sheet vinyl flooring
- Plastic laminates
- Cutback adhesive (see preparation instructions)

Limitations to the Product
- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- When setting moisture sensitive natural stone, cement or agglomerate tile use EBM-Lite® Epoxy Bonding Mortar 100% Solids or CEG-Lite® 100% Solids Commercial Epoxy Grout.
- Do not use to install resin-backed stone use EBM-Lite® Epoxy Bonding Mortar 100% Solids, CEG-Lite® 100% Solids Commercial Epoxy Grout or contact Custom's® Technical Services for recommendations.
- When setting glass tile larger than 6" x 6" (15 x 15 cm), contact Custom's® Technical Services for recommendations.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Custom's® Technical Services for recommendations regarding subfloor deflection requirements.

Packaging
- 2 gallon (7.57 L) pail
- 5 gallon (18.93 L) pail

4 Technical Data
Applicable Standards
American National Standards Institute (ANSI) ANSI A108.5; A118.4; A118.11 of the American National Standards for the Installation of Ceramic Tile
Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171

Technical Properties Chart
Refer to individual thin-set mortar technical data sheets for information.

Environmental Consideration
Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

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- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

5 Instructions

General Surface Prep

**USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.**

Surfaces must be structurally sound, clean, dry and free from grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, stripped and cleaned of waxes, dirt or any contaminants. Concrete must be cured 28 days and accept water penetration. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a broomed or brushed finish to enhance the bond. Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Technical Services. Smooth concrete surfaces, existing glazed tile, terrazzo, or polished stone should be roughened or scarified. Sheet vinyl must be well bonded and stripped of old finish. Roughen the surface by sanding or scarifying, rinse and allow to dry. Expansion joints should never be bridged with setting material. Do not sand flooring materials containing asbestos. Ambient temperature, surfaces and materials should be maintained at a temperature above 50° F (10° C) or below 100° F (38° C) for 72 hours.

**Bonding to Concrete Surfaces**

Concrete or plaster must be fully cured and must accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved; if water beads, surface contaminants are present, and loss of adhesion may occur. Contaminants should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a broomed or brushed finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to ensure a good bond.

**Bonding to Plywood Surfaces**

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all ANSI A108.01 Part 3.4 requirements. See TCNA F150. For questions about proper subfloor installation, call Custom® Building Products.

**Bonding to Backerboards**

WonderBoard® Lite Backerboard may be installed over plywood subfloors as an alternative to an additional layer of plywood. Refer to TCNA F144.

**Bonding to Existing Surfacing Material**

Plywood flooring must be structurally sound and meet all ANSI and deflection requirements. Resilient flooring or plastic laminates must be well-bonded, clean and free of all contaminants. Roughen the surface by sanding or scarifying, rinse and allow to dry. Do not sand flooring containing asbestos. For existing well-bonded ceramic tile, mechanically abrade with carborundum stone. Rinse and allow to dry. When sanding we recommend the use of an approved respirator.

**Bonding to Cutback Adhesive**

Adhesive layers must be removed as they reduce mortar bond strength to cement surfaces. Use extreme caution as adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet-scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. Do a test bond area first, to determine desirable results. Refer to the RFCI Pamphlet, “Recommended Work Practices for Removal of Resilient Floor Coverings”, for further information.

**Application of Product**

Refer to individual product technical data sheets for detailed installation instructions.

**Cleaning of equipment**

Clean with soap and water before material dries. Cured material is difficult to clean from surfaces.

**Storage**

Keep from freezing. Close container after each use.

**Health Precautions**

Do not take internally. Avoid eye and skin contact. If eye contact occurs, immediately flush with water for 15 minutes and consult a physician. If skin contact occurs, wash immediately with soap and water. Dried material becomes extremely difficult to remove.

**Conformance to Building Codes**

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6 Availability & Cost

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<thead>
<tr>
<th>Item Code</th>
<th>Size</th>
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<tr>
<td>CF2P*</td>
<td>2 gallons (7.57 L)</td>
<td>Pail</td>
</tr>
<tr>
<td>CF5*</td>
<td>5 gallons (18.93 L)</td>
<td>Pail</td>
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</tbody>
</table>

7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at [www.custombuildingproducts.com/product-warranty](http://www.custombuildingproducts.com/product-warranty) or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. © 2017 Quikrete International, Inc.

8 Product Maintenance

Properly installed product requires no special maintenance.

9 Technical Services Information

For technical assistance, contact Custom technical services at 800-272-8786 or visit custombuildingproducts.com.
Additional product information is available from the manufacturer upon request.

Expected Wear
Properly installed tile will last for more than 60 years.

Related Products
CustomBlend® Economical Non-Modified Thin-Set Mortar
MultiSet Economical Thin-Set Mortar
Polyblend® Sanded Grout
CustomFlex® Ultra-Strength Thin-Set Additive

Coverage

Refer to individual thin-set mortar technical data sheets for information.

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