CUSTOMFLEX™
PREMIUM FLEXIBLE MORTAR SYSTEM

- Two-component system with exceptional bond strength
- Excellent for setting dense tile or stone
- Flexible system isolates cracks up to 1/16" (1.6 mm)
- Long term durability for hard-to-bond substrates

PRODUCT DESCRIPTION

A premium two-component mortar system consisting of CustomFlex™ Ultra-Strength Thin-Set Additive and MasterBlend™ Standard Thin-Set Mortar. Excellent for difficult-to-bond substrates and when setting hard-to-bond tile and stone. This flexible system can bridge minor cracks up to 1/16" (1.6 mm) wide and withstand minor deflection. Specified for the most demanding installations where long-term durability is required. Exceeds ANSI A118.4 and A118.11.

USES — TILE TYPES

- Vitreous, semi-vitreous or absorptive tile: ceramic, quarry, cement
- Brick and mini-brick
- Precast terrazzo
- Natural stone tile
- Impervious porcelain tile, glass mosaics

AREAS OF USE

- Interior or exterior floors, walls, countertops
- Concrete, mortar beds, masonry, Portland cement plaster
- Gypsum wallboard (dry areas)
- Water-resistant wallboard
- WonderBoard®, RhinoBoard®, cement backerboards
- 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

LIMITATIONS

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic and OSB panels.
- When setting moisture sensitive natural stone, tile or agglomerates (check with manufacturer) use OptiCure™ Fortified Thin-Set Mortar or 100% Solids Epoxy Mortar.
- Do not use to install resin-backed tile.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Technical Support for recommendations regarding subfloor deflection requirements.

SURFACE PREPARATION

General Surface Preparation:
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. 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.

Cementitious Surfaces:
Concrete or plaster must be fully cured and 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. The contaminants should be 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 roughened to ensure a good bond.

Plywood Substrates:
Plywood floors including those under resilient flooring must be built to industry standards. Deflection not to exceed L/360. For questions about proper subfloor installation, call Technical Support.

WonderBoard® and RhinoBoard® Backerboards:
As a superior alternative to an additional layer of plywood, WonderBoard or RhinoBoard backerboards may be installed over plywood subfloors. Refer to their respective data sheets for installation information.

Existing Ceramic Tile, Resilient Flooring or Plastic Laminates:
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 contaminates. 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.

Expansion Joints:
Expansion joints, control joints and cold joints should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant.

CUSTOM® BUILDING PRODUCTS

Cutback Adhesive over Concrete:
Thick accumulations, powdery, brittle or weak adhesive layers must be removed. Use extreme caution as adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Use the wet-scraping and wet-sweeping method outlined in the Resilient Floor Covering Institute pamphlet “Recommended Work Practices for Removal of Resilient Floor Coverings”. Never use adhesive removers or solvents, as they weaken or soften the adhesive and may cause it to penetrate into the concrete. The remaining residue should be no thicker than a coat of paint and should be almost transparent. Always install an adequate number of properly located test areas.

MIXING
For installations requiring an ANSI A118.1 mortar, thoroughly mix 2 gallons (7.55 L) CustomFlex and a 50 lb. (22.68 kg) bag of MasterBlend together to a smooth, paste-like consistency. Mix by hand or use a low speed (150 - 200 RPM) 1/2" (13 mm) drill. Let slake or stand 5 - 10 minutes, stir again and use. Stir occasionally to keep fluffy, but do not add more water. When properly mixed, troweled ridges will stand with no slump.

APPLICATION
INSTALLATION TO CONFORM TO ANSI A108.5. Use proper sized notch trowel to ensure 100% coverage under tiles. Using flat side of trowel, apply skim coat of mortar to the surface. Apply additional mortar with notched side of trowel held at a 45° angle to the surface, combing in one direction. Press tile firmly into place in a perpendicular motion across ridges, moving back and forth. Perpendicular pressing flattens ridges and closes valleys allowing maximum coverage. With some tile, back buttering is advisable. Adjust tile promptly and beat in with block and rubber mallet. Periodically pull up a tile and check the back to ensure complete coverage with the adhesive. Do not spread more material than can be tiled in 15 minutes or while material has wet tack (sticky to the touch). If material has skinned over (not sticky), recomb with notch trowel. If too dry, remove and replace with fresh material. Material in bucket will remain workable in excess of 2 hours.

CURING
Allow to cure for a minimum of 24 hours before grouting or light traffic, depending upon temperature and humidity. Polyblend® Grout is recommended.

COVERAGE
90 - 100 sq. ft. per 50 lbs. (8.3 - 9.3m²/22.68 kg) applied with a 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) square-notch trowel.

CLEAN-UP
Clean with water before material dries.

STORAGE
Store in a cool dry area.

SAFETY
Contains Portland cement. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. This product contains free silica. Do not breathe dust; wear NIOSH approved respirator.

ORDERING INFORMATION

	ITEM CODE	SIZE	COLOR	PACKAGE
USA	MBG15	15 lb. (6.8 kg)	Gray	Box
USA	MBW15	15 lb. (6.8 kg)	White	Box
USA	MBG25	25 lb. (11.34 kg)	Gray	Bag
USA	MBG50	50 lb. (22.68 kg)	Gray	Bag
USA	MBGW50	50 lb. (22.68 kg)	White	Bag
Canada	CCMBG25	25 lb. (11.34 kg)	Gray	Bag
Canada	CCMBW25	25 lb. (11.34 kg)	White	Bag
Canada	CCMBG50	50 lb. (22.68 kg)	Gray	Bag
Canada	CCMBGW50	50 lb. (22.68 kg)	White	Bag
USA	CF2P	2 gallon (7.57 L)		Pail
USA	CF5	5 gallon (18.93 L)		Pail
Canada	CCF1	1 gallon (3.78 L)		Bottle
Canada	CCF2P	2 gallon (7.57 L)		Pail

TECHNICAL DATA
Exceeds A118.4 and A118.11.

	CUSTOMFLEX PREMIUM FLEXIBLE MORTAR SYSTEM
Pot Life	4 hours
Open Time	65 - 70 minutes
Adjustment Time	55 - 60 minutes
Shear Bond @ 28 Days:	
Bisque Tile	810 psi (56.9 kg/cm²)
Porcelain Tile	530 psi (37.3 kg/cm²)
Quarry Tile to Plywood	290 psi (20.4 kg/cm²)