

# Mud Bed Mix

# **1. PRODUCT NAME**

TEC<sup>®</sup> Skill Set<sup>™</sup> Mud Bed Mix

# 2. MANUFACTURER

H.B. Fuller Construction Products Inc. 1105 South Frontenac Street Aurora, IL 60504-6451 U.S.A. 800-832-9002 Customer Support 800-952-2368 Fax tecskillset.com



# **3. DESCRIPTION**

TEC® Skill Set<sup>™</sup> Mud Bed Mix is a preblended mixture of finely graded sand and Portland cement used for thick-bed mortar installations. TEC® Skill Set<sup>™</sup> Mud Bed Mix flattens and levels an existing substrate before the installation of tile and stone.

#### Key Benefits and Features

- Ideal for creating shower bases
- Flattens and levels concrete and wood substrates from 3/8" to 3"
- Mix with water or TEC® Skill Set<sup>™</sup> Latex Mortar Additive for added performance.

### Packaging

50 lbs. paper bag

#### Coverage

Coverages show are approximate. Actual coverages may vary according to substrate conditions and thickness of applications.

Application Depth		
Unit Size	1"	2"
50 lbs.	4.75 – 5.25 sq. ft.	2.4-2.6 sq. ft.

#### Suitable Substrates

When properly prepared, suitable substrates include:

- Cured concrete floors
- Adequately designed wood frame floor systems (see Tile Council of North America Handbook.

#### Storage

Store in a cool, dry area away from direct sunlight. Do not store open containers.

#### Shelf Life

Maximum of 1 year when stored in a dry location, sealed in original containers at room temperature.

#### Limitations

TEC® Skill Set<sup>™</sup> Mud Bed Mix can be mixed with water for most interior conditions. For exterior and wet areas, mixed with TEC Skill Set Latex-Mortar Additive. If added performance is desired in other areas, TEC® Skill Set<sup>™</sup> Latex-Mortar Additive can also be used in place of water. See ANSI A108.1 for industry standard for details on mortar bed installations. For direct-bond applications, the concrete surface should have a profile of CSP #3 to #5 or greater. The surface must be primed with a slurry bond coat mixture (see "Mixing" section for details). Woodframe structures must be designed to handle the loads of floating mortar beds and tile assemblies. If the suitability of the structure is unclear, consult a structural engineer or design consultant. Not for use as a final wear layer. For covering large areas, please contact technical support at 1-800-832-9023, for recommendations.

# Cautions

IMPORTANT: Sanding releases dust harmful to lungs. Use appropriate respiratory protection to avoid breathing dust. FIRST AID MEASURES: In all cases, seek medical attention if symptoms develop or persist. EYES: Flush with water for 20 minutes. SKIN: Wash with soap and water. IF VAPORS INHALED: Remove to fresh air. IF SWALLOWED: Do not induce vomiting. WARNING! This product contains chemicals known to the State of California to cause cancer, birth defects or reproductive harm. KEEP OUT OF REACH OF CHILDREN. For Medical Emergency Information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC® Skill Set<sup>™</sup> brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

# 4. TECHNICAL DATA

Applicable Standard		
Laboratory Tests		
90-120 minutes		
40°F to 95°F (4°C to 35°C)		
>2,500 psi (17,2 MPa)		
Pull-out rupture (28 days)		
>72 psi (0,50 MPa)		
>260 psi (1,79 MPa)		
Gray		
With water while fresh		

# 5. Installation Instructions

#### Surface Preparation

For direct bond application: Concrete should be in a roughened or broom finish condition. Concrete to be leveled shall be structurally sound, dry and free from oil, grease, dust, loose or peeling paint, concrete sealers or curing compounds. Any or all contaminates of this nature, if they exist, must be removed prior to the installation of TEC® Skill Set<sup>™</sup> Mud Bed Mix.



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#### Instructions for Mixing

For best results, TEC® Skill Set<sup>™</sup> Mud Bed Mix should be installed in temperatures between 40°-95°F. Maintain temperature control for 24 hours before, during and 48 hours after installation.

**Step 1:** TEC® Skill Set<sup>™</sup> Mud Bed Mix can be mixed by hand in a clean wheelbarrow or mortar box, or by machine in a mortar mixer. Mix each 50 lb. bag with 1.75-2.75 quarts of clean cool water or with 2-3 quarts of TEC® Skill Set<sup>™</sup> Latex Mortar Additive for added performance. *For hand mixing,* gradually add water (or additive) to mud bed while mixing with a mortar hoe in a wheelbarrow or mortar box. *For machine mixing,* add water (or additive) first to mixer. Mix to a dry or semi-dry consistency that can be formed by hand into a ball without crumbling apart. NOTE: Adding too much water or additive can lead to shrinkage cracks.

*Step 2:* When bonding mud bed, apply a slurry bond coat, using one of the following mixes:

- Portland cement mixed with water or additive (1:1 ratio)
- Any TEC® Skill Set<sup>™</sup> latex-modified mortar suitable for your tile application.

# Application Instructions

Direct-bond mortar bed:

1. Broom or scrub slurry bond coat into the concrete substrate. It is critical that the slurry be completely wet (rather than partially dry) when applying the mud bed mix. Keep a constantly wet slurry on the floor. Set the screed guides using float strips or mortar screeds to the necessary floor tolerances.

2. On sloping floors, slope where necessary to the drains. Screed guides should be tooled to a square-edge right angle.

3. While the slurry is still wet, spread a thin layer of the mud bed mix onto the floor surface between strips using a straight edge. Work the mud bed mix with a wood or magnesium float into the slurry bond coat. Immediately follow with more mud bed mix to the desired height, compacting and closing up the surface.

4. Finish the surface true and flat to tolerances necessary, typically 1/4" in 10 ft. for tile and stone.

#### Floating or unbonded mortar bed:

1. Floating screeds are typically used when it is necessary to isolate a tile assembly from problematic floor conditions using a cleavage membrane or slip sheet. The TCNA has a variety of application details covering tile installations over mortar beds incorporating the use of a cleavage membrane. See the latest TCNA handbook for more information on floating mortar beds.

2. Apply a cleavage membrane or slip sheet (6 mil polyethylene or 15 lb. roofing felt) to the substrate.

3. Lay out rolled or self-furred sheets of 2" x 2" 16-gauge galvanized wire mesh throughout installation. Overlap mesh by 2" and connect using wire ties.

4. Apply mud bed mix into the wire mesh. The mesh must be either propped up before or during the application, so that the mesh is approximately in the middle of the mortar bed with at least 5/8" of mortar thickness covering the wire mesh.

5. Work the mortar mixture with a wood or magnesium float to compact and close up the surface.

6. Finish the surface true and flat to tolerances necessary, typically 1/4" in 10 ft. for tile and stone.

#### Expansion and control joints:

- For expansion and control joints, see complete details in TCNA Handbook Detail EJ171.
- Expansion and control joints placed within the mortar bed should be carried up through the tile work and left as soft joints that are filled with an approved elastic material.

# **Clean Up**

Clean tools and tile while the mortar is fresh.

# **Protection and Curing**

- Provide for dry, heated storage on site and deliver materials at least 24 hours before work begins.
- Protect from rain, snow, freezing and direct solar heat, which will cause curing and performance deficiencies.
- Because temperature and humidity (during and after installation of tile) affect the final curing time, allow for extended periods of cure and protection when jobsite temperatures drop below 60°F and/or when relative humidity is higher than 70%.
- Allow mortar to fully cure before installing tile.
- If the installation will be covered with a non-breathable membrane or if a moisture-sensitive stone is the finish, allow an extended period of curing before applying the membrane.

# 6. WARRANTY

For details about our limited warranties, see your sales associate or **tecskillset.com**.

# 7. TECHNICAL SERVICES

# **Technical Assistance**

Information is available by calling the Technical Service Helpline. Toll Free: 800-832-9023 Fax: 630-952-1235

# **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at **tecskillset.com**.