

# THINSET MORTAR

**USED TO SET TILE, MARBLE, STONE AND THIN BRICK OVER A VARIETY OF PROPERLY PREPARED HORIZONTAL SUBSTRATES**

**THINSET MORTAR** is a select blend of aggregates, Portland cement and special additives designed for setting all types of tile, marble, stone and thin brick over properly prepared horizontal surfaces including concrete, masonry, cement board, exterior grade plywood (interior only), linoleum and ceramic tile.

## **USES and ADVANTAGES**

- May be used over a variety of properly prepared horizontal surfaces.
- Suitable for interior applications, above or below grade.
- Available in white or gray.

## **SURFACE PREPARATION**

Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed industry standards of L/360 for thin bed ceramic tile/brick installations and L/480 for thin bed stone installations where L=span length.

### **Concrete and Masonry**

Must be sound and clean. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, curing compounds, form release agents, paint or any other foreign material which might effect the bond. If after cleaning, the surface is extremely dusty, porous or if there is any question of bonding, prime the surface with Bond All Exterior. New concrete slabs must cure at least 28 days prior to application. All slabs must be plumb and true to within 1/4" in 10 feet.

### **Cement Board**

Cement board must be properly attached. Follow cement board manufacturer's instructions regarding proper installation. Heads of fasteners must be set level with or below the surface. Make sure that the surface is clean and dust free then prime with Bond All Exterior. Add Mix-21 must then be used in place of water when mixing.

### **Exterior Grade Plywood**

Interior use only. Exterior grade plywood (5/8" thick) must be clean, dust free, rigid and well fastened. Nail or screw heads must be set level with or below the surface. Exterior grade plywood must be primed with Bond All Exterior. Add Mix-21 must then be used in place of water when mixing.

### **Linoleum and Ceramic Tile**

When applying over linoleum or ceramic tile, scrape or sand to roughen the surface. Make sure that the surface is clean and dust free then prime with Bond All Exterior. Add Mix-21 must then be used in place of water when mixing.

**Always perform a spot test (of sufficient size) prior to application in order to ensure compatibility between Thinset Mortar and the substrate as well as to confirm that performance is acceptable.**

## **MIXING**

In a clean container, mortar box or mixer, add approximately 5 quarts of clean water to each 50 lb. bag of Thinset Mortar. Mix thoroughly to a thick, creamy consistency. Proper consistency is such that the notched trowel ridges in the Thinset Mortar will not slump or flow when applied to the substrate. If using a drill mixer, use a low speed, high torque drill not to exceed 600 rpm, fitted with a

suitable mixing blade so as not to entrap air in the mix. Allow mixture to sit for ten minutes and then remix before applying. Do not add any additional water to the Thinset Mortar after the soaking period. Working time is approximately 1/2 hour to one hour depending on temperature and humidity.

**For installations subject to wet environments such as bathrooms and kitchens or when applying over exterior grade plywood, cement board, linoleum, ceramic tile or any other surface where bonding is in question use Umaco Add Mix-21 in place of water when mixing in order to help ensure a proper bond.**

**As with any Portland cement-based material, mixing liquid should be kept to a minimum to avoid decreasing strength and adhesive properties.**

## **TROWEL CHOICE**

### **Slate**

1/4" wide x 1/4" deep x 1/4" apart

### **Quarry, brick paver, large ceramic tile**

1/4" wide x 3/8" deep x 1/4" apart

### **Ceramic tile 3" or smaller:**

3/16" deep V-notched trowel

## **APPLICATION**

Apply a thin, pressured-on skim coat to the substrate with the flat edge of the trowel. Using the appropriate notched trowel for the tile being installed, apply a second coat combing the Thinset Mortar into ridges to obtain an even setting bed. Trowel an area no greater than 20 square feet at a time. Apply dry tiles with a twisting motion, making sure that 25% of the thickness of the tile is



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embedded in the Thinset Mortar. Make all adjustments immediately after the beat in procedure. Clean all joints and wipe smudges from the tile face with a damp sponge or rag. If a "skin" forms over the troweled in place Thinset Mortar, remove it and reapply. All tile must be set in accordance with industry practice and the recommended minimum requirements for materials and workmanship as set forth by ANSI A108.5 specifications and the "Handbook for Ceramic Tile Installation" published by the Tile Council of America.

### **EXPANSION JOINTS**

Expansion joints must be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI Specifications AN-3.8 "Requirements for Expansion Joints". Do not cover expansion joints with Thinset Mortar.

### **COVERAGE**

- Approximately 70-80 square feet per 50 lb. bag with a 1/4" x 1/4" notched trowel.
- Approximately 50-60 square feet per 50 lb. bag with a 1/4" x 3/8" notched trowel.

### **GROUTING**

All traffic should be kept off floors prior to grouting. Grout only after the Thinset Mortar has cured for at least 24 hours at 70 degrees F making sure that the tile has firmly set. Unglazed tile may require sealing prior to grouting in order that discolorations do not occur.

### **PRECAUTIONS**

- Do not apply over Masonite, luan, hardwood floors, particle board or similarly unstable substrates.
- Thinset Mortar should be applied when the ambient and surface temperatures are 50 degrees F or above and will remain so for at least 48 hours.
- Keep all traffic off floors prior to grouting.
- Clean mixing tools and equipment during and immediately after use.
- Do not use below grade where hydrostatic pressure and excessive moisture conditions exist.

### **WARNING!**

Do not take internally. Contains Portland cement and Silica sand. May be irritating to the eyes and nose. Prolonged inhalation may cause lung injury. Avoid eye contact or prolonged contact with skin. Wash hands thoroughly with water after handling. In case of eye contact, flush with plenty of water for at least fifteen minutes. If irritation persists, consult a physician immediately. Dust masks, eye protection and gloves are recommended when using this product. Read Material Safety Data Sheet (MSDS) before using this product which may be obtained from your retailer or by calling 978-453-8881.

24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300

**KEEP OUT OF THE REACH OF CHILDREN!**

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust or fumes. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.**

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto [www.epa.gov/lead](http://www.epa.gov/lead). Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

**For technical assistance call 978-453-8881**

[www.umaco.com](http://www.umaco.com)

### **LIMITED WARRANTY**

*The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective.*

*Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.*

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- Concrete Patching and Repair Products
- Masonry Waterproofing Products
- Acrylic Admixtures and Bonding Agents



- Decorative Masonry and Concrete Coatings
- Traditional and Synthetic Stucco Systems
- Flooring Underlayments and Resurfacers