# W1000

## Premium Polymer Thin Set Mortar



Weco® W1000 is a Premium polymer-modified thin-set designed for the installation of tiles and stone. It exhibits high adhesion and durability, making it suitable for both interior and exterior applications on walls and floors. This versatile product is ideal for installing porcelain, ceramic, and most types of marble and natural stone in residential and commercial applications.

#### **USES**

- For marble, granite, mosaic, natural stones, porcelain and ceramic tile installation on floors and walls on interior and exterior surfaces.
- · Acceptable Surfaces: Completely cured concrete (at least 28 days), mortar beds, masonry, drywall, unglazed tile, terrazzo, stone, and waterproofing and crack isolation membranes (i.e. W151 Barrier Ultra) and existing tiles treated with W160 Prime-2 BOND™.
- Suitable for exterior grade plywood CSA-0121 (in dry interior residential areas), gypsum and backed interior board "Wonder Board", when treated with a waterproofing and crack isolation membranes (i.e. W151 Barrier Ultra), per installation guidelines in standard ANSI A108.11.

#### **LIMITATIONS**

- Install only within the recommended temperature range: 40°F to 95°F (4°C to 35°C).
- Do not use for installing resin backed tiles, dark marble, green marble, or moisture sensitive agglomerate.
- · Do not install over hardwood surfaces, plywood type luan, parquet or particle board.
- Do not use for leveling floors or applications exceeding 3/4".
- Do not install over padded vinyl floors or adhesives, sponge back containing asbestos or residues, metal, fiberglass or OSB walls.

#### **INDUSTRY STANDARDS**



ANSI: Exceeds bond strength requirements per ANSI118.4 & A118.11. ISO 13007: C2ET classification.

LEED\* Program: MR Credit 5, Regional Materials (up to 2 points).

\*The use of this product can help provide valuable points for LEED (Leadership in Energy and Environmental Design) certification of projects in the categories listed TROWEL GUIDE & COVERAGE above. Points are awarded based on input from all materials used in the project.

The product is manufactured without petroleum or plastic.

### **TECHNICAL DATA**

Test Method	Specification	Result
ANSI A118.4: Shear Strength, Impervious Ceramic (Porcelain) Mosaics	>200 psi (1.38 MPa), 28 days	Up To 375 psi (2.58MPa), 28 days
ANSI A118.4: Shear Strength, Glazed Wall Tile	>300 psi (2.07 MPa), 28 days	Up To 550 psi (3.79 MPa), 28 days
ANSI A118.4: Shear Strength, Quarry to Quarry Tile	>150 psi (1.03 MPa), 28 days	Up To 350 psi (2.41 MPa), 28 days
ANSI A118.11: Shear Strength, Quarry Tile to Plywood	>150 psi (1.03 MPa), 28 days	Up To 200 psi (1.38MPa), 28 days

### **TECHNICAL DATA**

Test Method	Specification	Result
ISO 13007: T (Vertical Slip Resistance)	≤ 0.019" (0.5 mm) after 20 min	Pass
ISO 13007: E (Extended Open Time)	≥ 72.5 psi (0.5 MPa) after 20-30 minutes	Pass
ISO 13007: S1 (Normal Mortar Deformation)	≥ 2.5 mm (0.1")	Pass

Product Performance Properties at 73°F (23°C) and 50% relative humidity		
Working time**	> 30 minutes	
Pot life**	> 2 hours	
Time before grouting**	16-24 hours	
Time to traffic	24 hours	
Shelf life	1 year	
VOCs	0 g/L	

<sup>\*</sup>Product performance properties at 73°F (23°C) and 50% relative humidity.

#### **PACKAGING**

Product Code	UOM Color
WE0810501	50 lbs. White
WE0810502	50 lbs. Gray

Typical Trowel Coverage	Approximate Coverage* per 50 lbs. (22.7 kg)	
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)		75 to 90 sq. ft. (6.97 to 8.36 m2)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)		55 to 65 sq. ft. (5.11 to 6.04 m2)

<sup>&</sup>quot;Trowel dimensions are joint width x depth, x notch space. Coverage depends on substrate condition, tile or stone selected and notched trowel used



<sup>\*\*</sup>Installation time, pot life and time before grouting will vary based on jobsite conditions.

#### SURFACE PREPARATION

Surface preparation must be according to prevailing TCNA and ANSI guidelines and recommendations. Mechanically eliminate all paint, weak or loose topcoats. All surfaces must be in good structural condition, clean, dry and free of any contaminants that can affect product adhesion. Concrete and plaster surfaces must be: porous, fully cured and should not be subjected to hydrostatic pressure. Surfaces with installed tiles or slabs, must be well bonded and sanded thoroughly. For installation of porcelain thin slab panels or installation over exterior grade plywood CSA-0121 (in dry interior residential areas), gypsum and backed interior board "Wonder Board", follow TCNA and ANSI guidelines or call our Technical Department before proceeding.

#### **CONTROL & EXPANSION JOINTS**

It is generally recommended to provide for a movement joint every 18-20 ft when installing tiles on interior surfaces and 10-12 ft when installing on exteriors. Follow ANSI A108.01-3.7 and TCNA Method EJ171 to provide for control and expansion joints. Do not cover expansion joints with mortar.

#### **MIXTURE**

- 1. Use a clean container for mixing. Pour approximately 1 to 1 ¼ gallons (4.5 to 5.7 L) of clean, cold water per 50 lbs.
- Gradually add Weco® W1000 to the water. Mix with a paddle or an
  electric drill at low speed (approximately 300 rpm) to avoid air entrapment, and
  stir while achieving a smooth consistency with no lumps
  (approximate time: 5 minutes).
- 3. Let the mix rest for 1 minute and mix again for an additional (1) minute.
- 4. Do not use if let dry in container. Stir occasionally without adding additional water.

#### **APPLICATION**

- 1. Use a proper sized notched trowel to ensure full coverage on tiles and substrate.
- 2. Apply mortar with notched side of trowel on the substrate at a 35° to 40° angle, to force material into surface irregularities.
- Apply a thin layer of mortar with the flat side of trowel on the back of each tile or stone (back buttering).
- 4. Press tiles or stones, firmly into place, with a slight perpendicular motion relative to the notches, and press in place with a rubber mallet.
- Pull up a tile or stone occasionally and make sure that the right amount of mortar coverage has been achieved (95% minimum).
- 6. To avoid surface skin formation, do not apply an excessive amount of mortar on the substrate; apply a maximum of 2 square meters (22 ft2). If the material begins to dry (becomes non-sticky), mix again using the notched trowel. If too dry, discard and replace with fresh material. Material in container can be used for application within 60 minutes, depending on jobsite and climate conditions.

#### **CAUTION**

Job failures can occur from setting tiles or stones on mortar that has become dry and has begun to form skin (typically over 15 minutes). Check any mortar that has been on the substrate longer than 15 minutes by pressing the slab firmly onto trowel notches of mortar. If proper coverage isn't obtained, recomb mortar to reactivate or remove and apply fresh material.

#### **CURING & PROTECTION**

Do not move tiles or apply grout for 8-16 hours on wall installations and 24 hours on floor installations. Protect from light traffic for at least 24 hours, general traffic for at least 72 hours and heavy traffic for at least 7 days. Protect from rain for at least 72 hours, and avoid total immersion in water and extremely cold climate for at least 28 days. Protect against impact and vibration for at least 28 days after installation. When installing tiles at cold temperatures allow additional time for mortar to dry before grouting and walking over it.

#### **CLEANING & MAINTENANCE**

Use only neutral pH cleaners and sealers. Avoid use of muriatic acid (HCL) to prevent tile, stone and mortar deterioration, and grout discoloration.

#### **SAFETY**

Please refer to the Safety Data Sheet (SDS) for safety data. KEEP OUT OF THE REACH OF CHILDREN.

#### **LEGAL DISCLAIMER**

Before applying this product, customer must read the product information in this Technical Data Sheet to determine its suitability for the intended application. This product warranty is limited to its replacement or its refund value should it not comply with the specifications of the manufacturer and does not include any application costs. Customer must present original proof of purchase and submit claim in writing within 15 days from the alleged situation. The information in the Technical Data Sheet supersedes any other product information available from packaging and any other company or marketing documentation. Visit our website at www.wecopr.com for the most up-to-date official TDS.

