# W704 Polygrout HD



# Tile Mortar & Sanded/Unsanded Grout in One

Ultra Premium high-density, fast-setting tile mortar and grout in one (2 in 1). Formulated with specialty cements, additives and sands to form a tightly packed, non-shrink, color-consistent impervious grout joint with enhanced resistance to efflorescence, stains and mildew. It can be used as tile mortar and grout in one step, for mortar bed applications up to 1/2", exhibiting high adhesion and flexibility, with minimum slump and sag. It is available in a variety of architectural colors and can be used for grout joints up to 1/2" (12 mm) wide, eliminating the need to choose among sanded or unsanded grouts.

# **USES**

- For interior and exterior, wall and floor commercial, industrial and residential applications on 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).
- For pools and other submerged areas that are properly balanced in accordance with pool industry standards. Note: Allow curing for 72 hours.
- For use where grout will be exposed to foot traffic within 4 to 8 hours.
- For grouting most types of ceramic, porcelain, mosaic, marble, granite, glass, low absorption natural stones, quarry, brick pavers, and clay tiles, among others.

#### LIMITATIONS

- Install only within the recommended temperature range: 50 to 95°F (10 to 35°C).
- Test in a small area to determine desired color before grouting the entire installation. Job site conditions will affect the final color of grouts.
- Do not use when special industrial tile installations or highly chemical stainresistant grout is required. Instead, use WECO® W705 Epoxy Color 2K<sup>TM</sup> (see the corresponding Technical Data Sheet [TDS] for details).
- · Do not use acid to clean colored grout joints.
- · Do not use as tile mortar for setting large and heavy tiles or stones.
- Do not use as tile mortar over hardwood surfaces, plywood type luan, parquet or particle board.
- · Do not use for leveling floors.
- Do not install over padded vinyl floors or adhesives, sponge back containing asbestos or residues, metal, fiberglass or OSB walls.

#### **QUALITY STANDARDS**





ANSI: Exceeds bond strength requirements per ANSI118.4, ANSI A118.7 and ANSI A118.11. ISO 13007: Classification CG2, W, F, & T.

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 above. Points are awarded based on input from all materials used in the project.

### **TECHNICAL DATA (GROUT)**

Test Method	Specification	Result
ISO 13007: CG2 (cementitious grout, improved)	Shrinkage ≤ 0.30% shrinkage in 28 days	Pass
ISO 13007: W (reduced water absorption)	Water absorption ≤ 5 g after 4 hours	Pass
ANSI A118.7 – compression	3,000 psi (20.7 MPa) at 28 days	>3,000 (20.7 MPa) at 28 days
ANSI A118.7 – tensile strength	500 psi (3.45 MPa) at 28	>500 psi (3.45 MPa) at 28 days

### **TECHNICAL DATA (MORTAR)**

Test Method	Specification	Result
ANSI A118.4: Shear Strength, Impervious Ceramic (Porcelain) Mosaics	>200 psi (1.38 MPa), 28 days	Up To 500 psi (3.45MPa), 28 days
ANSI A118.4: Shear Strength, Glazed Wall Tile	>300 psi (2.07 MPa), 28 days	Up To 600psi (4.14 MPa), 28 days
ANSI A118.4: Shear Strength, Quarry to Quarry Tile	>150 psi (1.03 MPa), 28 days	Up To 500 psi (3.45MPa), 28 days
ANSI A118.4T – sag on verticalsurfaces	< 0.02" (0.5 mm) at 20 minutes	Pass

Product Performance Properties at 73°F (23°C) and 50% relative humidity				
Working time**	Up to 20 minutes			
Pot life**	Up to 1 hour			
Time before cleaning**	15 @ 30 minutes			
Time to traffic (when used as grout)	4 hours			
Time to traffic (when used as mortar)	8 to 16 hours			
Shelf life	1 year			
VOCs	0 g/L			

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

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

#### **PACKAGING**

Product Code	UOM Color
WE1062000	10 lbs White

# **TROWEL GUIDE & COVERAGE**

Approximate Coverage\* per 10 lbs. (4.54 kg)

Typical Trowel Sizes	Coverage
1/8" x 13/16" x 1/8" (3 x 4.5 x 3 mm)	18 to 24 sq. ft. (1.67 to 2.23 m²)
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.



#### SURFACE PREPARATION

- Use as Tile Grout: Check that the tmortar used to install the tiles is completely dry
  and cured. Remove tile spacers and make sure joints are clean and free of dust
  and debris. Follow TCNA and ANSI guidelines or call our Technical Department
  before applying grout, when in doubt.
- Use as Tile Mortar and Grout: Substrate must be clean, well-adhered and free of
  dust, grease, wax, oil molds, paint, efflorescence and any other contaminant.
  Mechanically eliminate all paint, weak or loose topcoats. 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. Follow TCNA and ANSI guidelines or call our Technical Department
  before proceeding, when in doubt.

### **CONTROL & EXPANSION JOINTS**

When using this product as tile mortar, remember that it is generally recommended to provide for a movement joint every 18 to 20 ft when installing tiles on interior surfaces, and 10 to 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. In a clean mixing bowl, add approximately 1.0 to 1.5 quarts (1.0 to 1.4 L) of clean water, per 10 Lbs. bag. For small batches use 4-parts powder to 1-part clean water by volume. Note: Use of less water than the recommended may cause the material to set faster.
- 2. Gradually add Weco® W704 POLYGROUT HD™ 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 and a uniform blending of the colored grout (approximate time: 5 minutes). Note: For optimal results, mix entire contents of bag to avoid color variations. Grout should be mixed by one person only. If two or more bags are to be used, all of the contents should be dry-blended together. Uniform mixing and cleaning techniques will provide consistent product results.
- 3. Let the mix rest for 1 minute and mix again for an additional (1) minute.
- Do not use if let dry in container. Stir occasionally without adding additional water to the mix.

# **APPLICATION (GROUT)**

- Moisten surface of tile or stone with a clean damp sponge immediately before grouting. Do not flood tiles or leave water in joint which have not been grouted.
- Apply grout onto the joints using high-quality rubber float to ensure full coverage.
   Fill completely by exerting force onto the joints, so that they are fully compact without any cracks or empty spaces.
- 3. Remove excess material holding the float at a 45° angle.
- 4. Perform an initial cleaning with clean water and a sponge approximately 10 to 30 minutes upon application. Note: Time before cleaning depends on the temperature, humidity and absorption of the tile or stone.
- Continue to clean with clean water and sponge until residues are removed from the tile. For best results, replace water in the bucket with fresh clean water regularly. Do not use excessive amounts of water, as to remove grout from the joint.
- 6. Allow 2 to 4 hours and perform a final clean with a damp cloth followed by a dry cloth to remove remaining grout haze.

### APPLICATION (GROUT / ADHESIVE)

- 1. Use a proper sized notched trowel to ensure full coverage on tiles and substrate.
- 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**

When using as tile mortar and grout, protect from light traffic for at least 24 hours, general traffic for at least 72 hours and heavy traffic for at least 7 days. When using as grout, keep free from foot traffic for at least 3 hours after grouting and protect of vibration, impact, rain and submerged jobsites for at least 72 hours. Avoid extremely cold climate for at least 28 days.

#### **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.



	Grout Joint Width							
Tile Size	1/16" (1.5 mm)	1/8" (3 mm)	3/16" (4.5 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	3/4" (19 mm)
1" x 1" x 1/4" (25 x 25 x 6 mm)	39 (3.62)	20 (1.86)	13 (1.21)	10 (0.93)	7 (0.65)	5 (0.46)	4 (0.37)	4 (0.37)
2" x 2" x 1/4" (50 x 50 x 6 mm)	78 (7.25)	39 (3.62)	26 (2.42)	20 (1.86)	13 (1.21)	10 (0.93)	8 (0.74)	7 (0.65)
3" x 3" x 1/4" (75 x 75 x 6 mm)	117 (10.9)	59 (5.48)	39 (3.62)	30 (2.79)	20 (1.86)	15 (1.39)	12 (1.11)	10 (0.93)
4" x 8" x 1/2" (100 x 200 x 12 mm)	104 (9.66)	52 (4.83)	35 (3.25)	26 (2.42)	18 (1.67)	13 (1.21)	11 (1.02)	9 (0.84)
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	165 (15.3)	83 (7.71)	55 (5.11)	42 (3.90)	28 (2.60)	21 (1.95)	17 (1.58)	14 (1.30)
6" x 6" x 1/4" (150 x 150 x 6 mm)	233 (21.6)	117 (10.9)	78 (7.25)	59 (5.48)	39 (3.62)	30 (2.79)	24 (2.23)	20 (1.86)
6" x 6" x 1/2" (150 x 150 x 12 mm)	117 (10.9)	59 (5.48)	39 (3.62)	30 (2.79)	20 (1.86)	15 (1.39)	12 (1.11)	10 (0.93)
6" x 24" x 3/8" (150 x 610 x 10 mm)	249 (23.1)	125 (11.6)	83 (7.71)	63 (5.85)	42 (3.90)	32 (2.97)	25 (2.32)	21 (1.95)
8" x 8" x 3/8" (200 x 200 x 10 mm)	207 (19.2)	104 (9.66)	69 (6.41)	52 (4.83)	35 (3.25)	26 (2.42)	21 (1.95)	18 (1.67)
12" x 12" x 3/8" (300 x 300 x 10 mm)	311 (28.9)	156 (14.5)	104 (9.66)	78 (7.25)	52 (4.83)	39 (3.62)	32 (2.97)	26 (2.42)
12" x 24" x 3/8" (300 x 600 x 10 mm)	414 (38.5)	207 (19.2)	138 (12.8)	104 (9.66)	69 (6.41)	52 (4.83)	42 (3.90)	35 (3.25)
13" x 13" x 3/8" (330 x 330 x 10 mm)	337 (31.3)	169 (15.7)	113 (10.5)	85 (7.90)	57 (5.30)	43 (3.99)	34 (3.16)	29 (2.69)
18" x 18" x 3/8" (457 x 457 x 10 mm)	466 (43.3)	233 (21.6)	156 (14.5)	117 (10.9)	78 (7.25)	59 (5.48)	47 (4.37)	39 (3.62)
20" x 20" x 3/8" (508 x 508 x 10 mm)	518 (48.1)	259 (24.1)	173 (16.1)	130 (12.1)	87 (8.08)	65 (6.04)	52 (4.83)	44 (4.09)
24" x 24" x 3/8" (610 x 610 x 10 mm)	621 (57.7)	311 (28.9)	20 7(19.2)	156 (14.5)	104 (9.66)	78 (7.25)	63 (5.85)	52 (4.83)
32" x 32" x 3/8" (812 x 812 x 10 mm)	828 (76.9)	414 (38.5)	276 (25.6)	207 (19.2)	138 (12.8)	104 (9.66)	83 (7.71)	69 (6.41)

<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.

