



DYNAFLEX 600

PREMIUM GRADE



Description

The ultimate one-step, polymer modified, thin-set mortar for interior and exterior installation of ceramic tile, porcelain stoneware, natural stone, quarry tile, pavers and brick. *DYNAFLEX 600* is designed to be mixed with water, has a long open time, high sag and slip resistance with unsurpassed adhesion and workability. It can be used for most interior/exterior residential and commercial tile applications on floors and walls.

Uses

- Excellent for exterior, interior and underwater applications.
- It can also be used on EGP- exterior grade plywood (interior only) as well as concrete substrates.
- Most interior/exterior residential and commercial installations on floors and walls.
- Installation of ceramic and porcelain tile, glass tile, quarry tile, pavers, Saltillo tile, and many types of marble, granite and natural and manufactured stone.
- It can be used for thin-set and medium bed applications.

Standards

Exceeds ANSI A118.4, ANSI A118.11, ANSI A118.15
ISO 13007 Classification C2TES1P2

Limitations

1. Install only at temperatures between 40°F and 95°F (4°C and 35°C).
2. Do not use for moisture-sensitive stone (green marble, most agglomerates, resin-backed tiles, some limestone and granite tiles). Instead, use a suitable epoxy or urethane adhesive.
3. Do not use over dimensionally unstable substrates such as hardwood floors, oriented strand board (OSB), substrates containing asbestos, luan, Masonite® or metal. To use directly over gypsum-based patching or leveling substrates, apply suitable primer before use.
4. Use a white mortar when installing light colored or translucent stone and glass tile.

DYNAFLEX 600
POLYMER-MODIFIED THIN-SET MORTAR

5. Installations of tile over nonporous surfaces (waterproofing membranes, sheet membranes, existing tile, etc.) will require extended setting and curing times.
6. Installation of large format tiles will require extended setting and curing times.
7. For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
8. Surfaces must be structurally sound and stable 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 L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations.

Suitable Substrates

- Concrete (cured at least 28 days).
- Masonry cement block, brick, cement mortar beds and leveling coats.
- Cement backer units (CBUs).
- Gypsum wallboard and plaster – interior walls in dry areas only.
- EGP-APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only).
- Properly prepared vinyl composition tile (VCT), plastic laminate countertops, non-cushioned and sheet vinyl (interior only).
- Non-water soluble cutback adhesive residue (interior only).
- Properly prepared existing ceramic and porcelain tile, cement terrazzo, quarry tile, natural stone and pavers.
- **DYNA** waterproofing, crack-isolation and sound reduction membranes.

Surface Preparation

1. All substrates should be structurally sound, stable, dry, clean and free of any substances that may reduce or prevent proper adhesion.
2. Painted surfaces must be completely sanded, scrapped, or chipped to promote adhesion. Surfaces may be cleaned with a **DYNA** brand of cleaner if thoroughly flushed and neutralized.
3. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface.
4. Concrete slabs must be plumb and true to within 1/4" (6 mm) in 10 feet (3 m).
5. Rough or uneven concrete surfaces should be made smooth with a **DYNA** Latex Portland Cement Underlayment to provide a wood float (or better) finish.
6. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal" or TTMAC Specification Guide 09 30 00 Detail 301EJ. Do not cover expansion joints with mortar.
7. For Exterior grade plywood substrates the wood sub-flooring must be structurally sound and securely fastened with screw type or ring shank nails and adhesive. Plywood flooring should be free from dust, dirt, oil, grease, etc. There must be 2 layers of 5/8" (16 mm) exterior grade plywood on bridged floor joists 16" (400 mm) on center with a maximum deflection of L/360 of the span for ceramic tile and L/480 of the span for stone installations. Joints on the top layer should be offset from the joints on the bottom layer of plywood. A gap of 1/4" (6 mm) is required between overlay sheets and all materials they abut such as walls, adjacent sheets, posts, etc. The adjacent edges of plywood sheets shall not be more than 1/32" (0.8 mm) above or below each other.

Mixing

1. Read the SDS for this product thoroughly and wear the appropriate safety gear.
2. Into a clean mixing vessel, pour about 5 to 6 U.S. qts. (4,73 to 5,68 L) of clean potable water.
3. Gradually add 50 lbs. (22,7 kg) of powder while slowly mixing.
4. Use a low-speed mixing drill (at about 300 rpm). Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.

5. Allow the mortar to stand ("slake") for 10 minutes. Remix but do not add more water.
6. Wash your tools immediately after mixing.
7. The pot life of the mix is between 4 and 6 hours. If mixture becomes heavy or stiff, remix without adding more water or powder.

Application

1. Use of a notched trowel with adequate depth to achieve an 80% mortar contact, after beat-in, to the back of the tile and substrate for all interior applications, and more than 95% for exterior, commercial floor and wet applications is recommended. It is recommended to back butter tiles larger than 8" x 8" (200 mm x 200 mm) to provide full bedding and firm support (Refer to ANSI A108.5 specifications and TCNA handbook guidelines).
2. Using the flat edge of the trowel, spread a thin coat over the substrate.
3. Then apply additional material and comb the mortar with the notched side of the trowel. Do not spread more mortar than can be covered with the tiles within 10 to 15 minutes. Otherwise a skin may form on top of the mortar and proper adhesion will not be achieved.
4. Place the tiles firmly into position with a slight twisting motion. Then once the tile has been set, properly beat in the tiles with a beating block in order that at least 1/4 of the thickness of the tile is set into the mortar bed. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage.
5. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage. Should coverage not be adequate, remove the dry or skinned mortar and replace it with fresh mortar.
6. Clean out the joints and smudges from the face of the tile immediately with a damp towel. Leave at least 2/3 of the joint depth open for grouting (see ANSI A108.10 guidelines).

Expansion And Control Joints

Provide expansion and control joints where specified. Do not cover any expansion joints with mortar. Follow ANSI A 3.8, "Requirements for Expansion Joints", TCNA Detail EJ171 or TTMAC Specifications Guide 09 30 00 Detail 301EJ.

Cleaning

Wash your tools immediately after mixing. Clean your hands and tools with water while the mortar is wet.

Protection

Protect tile-work from freezing and complete water immersion for at least 28 days after the completion of the work performed. Do not walk on the tiles for at least 48 hours after the installation. Plywood stepping boards may be used after 24 hours when it is unavoidable to occasionally step on the floor. Do not permit heavy traffic to pass on the tiles for at least 7 days after the installation. Protect walls from impact, heavy hammering and vibration on opposite and adjacent walls for at least 14 days after installation. When working in cold temperatures or high humidity protect the tile-work for an extended period of time to permit the mortar to adequately cure before you grout or permit traffic to walk on the tiles.

Caution

Consult and read the SDS thoroughly for this product for more safety information. This product is corrosive as it contains Portland cement. Portland cement when mixed with water results in a solution of calcium hydroxide and is therefore injurious to the eyes and can cause skin irritation. Therefore, avoid eye contact and prolonged contact with the skin. Protect eyes with goggles and skin with waterproof gloves. If splashed in eyes, flush thoroughly for at least 15 minutes and consult a physician immediately. In case of ingestion, drink milk or water (avoid fruit juices) and consult a physician immediately.

KEEP OUT OF REACH OF CHILDREN





DYNAFLEX 600
POLYMER-MODIFIED THIN-SET MORTAR

Notice

DYNA shall not be liable for incidental and consequential damages, indirectly or directly sustained, nor for any loss by application of these goods not in accordance with the printed instructions or for other than the intended use. Before using the user shall determine the suitability of the product for its intended use and the user will assume all risks and liabilities that may arise in connection therewith. **DYNA's** liability is expressly limited to the replacement of defective goods. Any claim shall be deemed waived unless the claim is made in writing to **DYNA** within 30 days from the date it was, or reasonably should have been, discovered that the product was defective.

Technical Data

Product Performance		
ANSI Test Procedure	ANSI Specification	Test Results
ANSI A118.15 Shear strength, glazed wall tile	> 450 psi (3,11 MPa) at 7 days	500 to 700 psi (3,45 to 4,83 MPa)
ANSI A118.15 Shear strength, impervious ceramic mosaics	> 400 psi (2,76 MPa) at 28 days	500 to 800 psi (3,45 to 5,52 MPa)
ANSI A118.15 Shear strength, quarry tile	> 150 psi (1,03 MPa) at 28 days	400 to 550 psi (2,75 to 3,8 MPa)
ANSI A118.11 Shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	300 to 450 psi (2,07 to 3,3 MPa)
ISO 13007 Classification	Classification Requirement	
C2 (cementitious, improved adhesion)	≥ 145 psi (1.0 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles	
T (vertical slip resistance)	≤ 0.019" (0,5 mm) porcelain tile	
E (extended open time)	≥ 75 psi (0,52 MPa) after 30 minutes	
S1 (improved deformation of mortar)	≥ 0.1" (2,5 mm)	
P2 (improved adhesion to plywood)	≥ 145 psi (1,0 MPa)	
Properties		
<i>at 72°F (22°C) and 50% relative humidity</i>		
Shelf life	1 year	
Open time	45 minutes	
Pot life	> 4 hours	
Time before grouting	16 to 24 hours	
Final Cure	28 days	
VOCs (Rule #1168 of California's SCAQMD)	0 g/L.	
Packaging		
Product Code	Size And Color	
600G50	50 lbs. (22.7 kg) Grey	
600UW50	50 lbs. (22.7 kg) Ultra White	

Coverage	
Trowel Size	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 m ²)
 1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)	55 to 65 sq. ft. (5,11 to 6,04 m ²)
 1/2" x 1/2" x 1/2" (12 x 12 x 12 mm)	38 to 45 sq. ft. (3,53 to 4,18 m ²)
 3/4" x 9/16" x 3/8" (19 x 14 x 10 mm)	25 to 30 sq. ft. (2,32 to 3,79 m ²)

DYNAFLEX 600
POLYMER-MODIFIED THIN-SET MORTAR

DYNA[®]
ADVANCED BUILDING SYSTEMS

We support the following organizations:



NAFTA Region / Corporate Head Office 37 Creditstone Road
Concord (ON) Canada L4K 1N3

CARICOM Region Lot 19, Naggo Head
Industrial Estate, Bridgeport Post Office,
St. Catherine, Jamaica



? Questions:
mail@dyna.ca

www.dyna.ca

NAFTA 1 866-861-6424
CARICOM 1 876 998 6519