



North American
ADHESIVES®

NA 1200

Shower Base Mix

Cement-Based Trowelable Underlayment



PRODUCT DESCRIPTION

NA 1200 Shower Base Mix is an economical blend of select sand and Portland cement. Mix with water to create a semi-dry underlayment mortar bed from 3/8" to 3" (10 mm to 7.5 cm) thick. *NA 1200 Shower Base Mix* is excellent for leveling rough or uneven concrete floors, and for building slopes on shower floors or other surfaces before installing ceramic tile or stone.

USES

- For use over most indoor residential, commercial, cured and stable concrete floors or adequately designed wood-frame floor systems in both wet or dry areas
- For building interior shower bases with sloped floors
- For directly bonding or installing as a floating mortar bed over a cleavage or waterproof membrane
- For use in a wet-set method per ANSI A108.1A or dry-set method per ANSI A108.1B
- For use with a wide range of floor-covering adhesives, epoxy adhesives and polyurethane adhesives, as well as dry-set or polymer-modified mortars

SUBSTRATE REQUIREMENTS

All supporting surfaces must be structurally sound. Concrete substrates must be at least 28 days old, completely cured and free of moisture-related problems. The surface area to receive *NA 1200 Shower Base Mix* must be dry, clean and free of dust, oil, grease, tar, paint, wax, curing agents, primers, sealers, release agents, existing adhesives and any other substance that can weaken the product's bond to the substrate. If the surface contains these substances, they must be mechanically removed. Substrates must be in accordance with ANSI A108.01, General Requirements: Subsurfaces and Preparations by Other Trades.

Tile Council of North America (TCNA) Maximum Allowable Deflection for Floor Systems and Substrates

Floor systems, whether wood framed or concrete, over which the tile will be installed using the appropriate TCNA method, according to the Floor Tiling Installation Guide, shall be in conformance with the International Residential Code (IRC) for residential applications, the International Building Code (IBC) for commercial applications, or applicable building codes.

The owner should communicate in writing to the project design professional and general contractor the intended uses of the tile installation, including in-service loads or information to allow a project design professional to calculate such.

The tile contractor shall not be responsible for problems resulting from any structural subfloor installation not compliant with applicable building codes, unless structural subfloor was designed and installed by tile contractor, nor for problems from overloading. Please reference the most current version of the TCNA Handbook for more complete substrate requirements.

Consult Technical Services for installation recommendations regarding substrates and conditions not listed.

SUITABLE SUBSTRATES

Indoor, cured concrete subfloors:

- If bonding directly to concrete, ensure that the surface has a concrete surface profile (CSP) of #2 or greater.
- Concrete must be primed first with a slurry bond coat (see the "Application" section).

NA 1200

Shower Base Mix

Indoor, structurally sound plywood subfloors:

- If installing over plywood, adequately design the wood-frame floor systems and have a cleavage or waterproof membrane.
- Wood-frame structures must be designed to handle the total load of the mortar bed and tile. If the structure suitability is unclear, consult a structural engineer or design consultant.

See the "Surface Preparation for Tile and Stone Installations" reference guide in the Document Library section of NAA's Website at www.na-adhesives.com.

LIMITATIONS

- Do not use as a wear surface, deep-fill mortar mix or patch material.
- Do not use as a setting material for ceramic tile or stone.
- Do not direct-bond to wood substrates, gypsum floor-patching compounds, sheet vinyl, self-stick tile, laminate surfaces, poured epoxy floors, metal or dimensionally unstable materials. *NA 1200 Shower Base Mix* is not for wall or vertical applications.

MIXING

Consult the Safety Data Sheet for safe-handling instructions.

Use 3 U.S. qts. to 1 U.S. gal. (2.84 to 3.79 L) of cool, clean water per 55 lbs. (24.9 kg). The final mix should be a semi-dry consistency that can be formed, by hand, into a ball without crumbling.

Hand-mixing (with mortar hoe in wheelbarrow or mortar box)

1. Empty 55 lbs. (24.9 kg) of *NA 1200 Shower Base Mix* into a wheelbarrow or mortar box.
2. Gradually add water to *NA 1200 Shower Base Mix* while mixing with a mortar hoe.

Machine-mixing

1. Add water to the mixer. (Note: Adding too much water will reduce the overall performance and invite shrinkage cracks over time.)
2. Gradually add 55 lbs. (24.9 kg) of *NA 1200 Shower Base Mix* and mix.

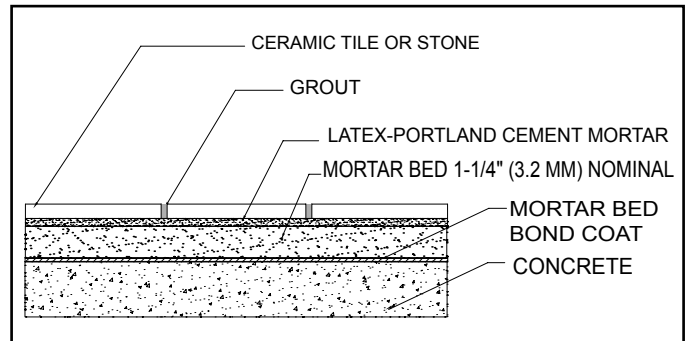
Mixing a slurry bond coat (for direct bond of *NA 1200 Shower Base Mix* to concrete)

If bonding *NA 1200 Shower Base Mix* to concrete, first mix a slurry (primer) of one of the following:

- Portland cement and water; or
- An NAA polymer-modified mortar and water

APPLICATION

Direct bond to concrete installations



1. Install the slurry (and *NA 1200 Shower Base Mix*) when the substrate and ambient temperature are 40°F to 95°F (4°C to 35°C).
2. If *NA 1200 Shower Base Mix* is to be screeded, set screed guides using float strips or mortar screeds to the required floor tolerances. Screed guides should be tooled to a square-edge right angle (not bevel-edged).

Square-edge profile



Do not bevel-edge

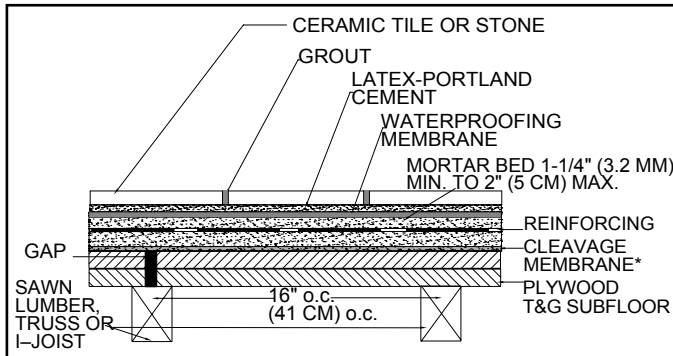
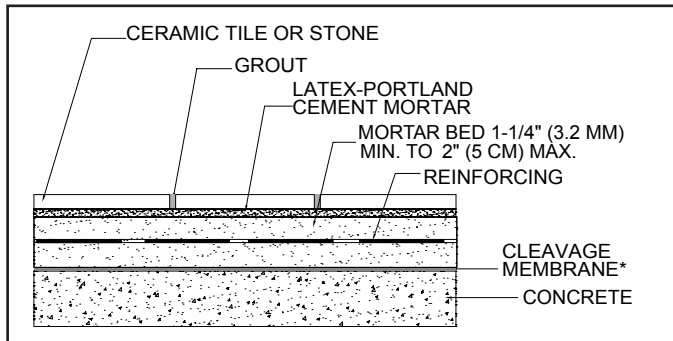


3. Scrub the slurry into the concrete with a broom before applying *NA 1200 Shower Base Mix* to ensure the best bond.
4. On sloping floors, slope where required to the floor drain(s).
5. While the slurry is wet, spread a thin layer of *NA 1200 Shower Base Mix* on the floor between the screed guides with a magnesium or wood float.
6. Immediately follow with more *NA 1200 Shower Base Mix* to the desired height. Compact and close up the surface.
7. Finish the surface true and flat to the required tolerances – typically 1/4" in 10 ft. (6 mm in 3.05 m) for tile and stone.

NA 1200

Shower Base Mix

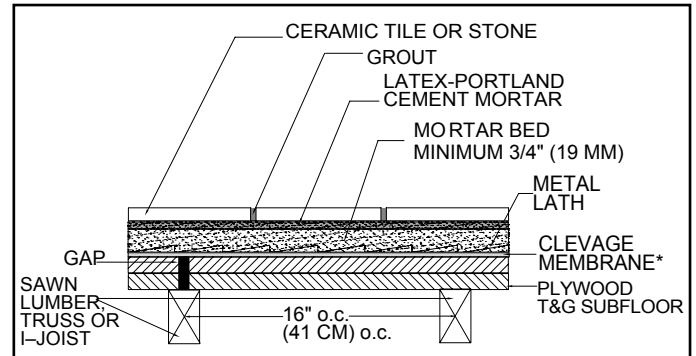
Unbonded installations (cleavage membrane and wire reinforcement)



* A cleavage membrane (or slip sheet) is typically used to isolate screeds or mortar beds from problem substrates or substrates that are difficult to bond to.

1. Apply a cleavage membrane or slip sheet – 6-mil thick polyethylene or 15-lb. (6.80-kg) roofing felt – to the substrate.
2. Lay out rolled or self-furred sheets of 2" x 2" (5 x 5 cm) 16-gauge, galvanized wire mesh throughout the installation. Overlap the mesh by 2" (5 cm) and connect using wire ties.
3. Apply *NA 1200 Shower Base Mix* into the mesh so that the mesh is in the middle of the mortar bed; the mesh must be covered with at least 5/8" (16 mm) of mortar thickness above and below.
4. Work the mortar with a wood or magnesium float to compact and close up the surface.
5. Finish the surface true and flat to the required tolerances – typically 1/4" in 10 ft. (6 mm in 3.05 m) for tile and stone.

Mechanical bonded installations (cleavage membrane and metal lath)



* A cleavage membrane (or slip sheet) is typically used to isolate screeds or mortar beds from problem substrates or substrates that are difficult to bond to.

1. Apply a cleavage membrane or slip sheet – 6-mil thick polyethylene or 15-lb. (6.80-kg) roofing felt – to the plywood substrate.
2. Lay out 2.5 lbs. per sq. yd. (1.13 kg per 0.84 m²) of metal lath. Overlap by 2" (5 cm) and fasten to the plywood substrate with nails or staples.
3. Apply *NA 1200 Shower Base Mix*, working it into the lath with a wood or magnesium float. The mortar must be at least 3/4" (19 mm) thick.
4. Compact and close up the surface of the mortar.
5. Finish the surface true and flat to the required tolerances – typically 1/4" in 10 ft. (6 mm in 3.05 m) for tile and stone.

MOVEMENT JOINTS

- Provide for expansion and movement joints per TCNA Detail EJ-171.
- Do not cover expansion or movement joints with tile or stone.
- Expansion and movement joints placed within the mortar bed should be carried up through the tilework and left as soft joints that are later filled with approved expansive material.

PROTECTION

- 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 (16°C) and/or when relative humidity (RH) is higher than 70%.

NA 1200

Shower Base Mix

- Allow the 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.
- Protect the floor from foot traffic for 16 hours and from heavy traffic for 72 hours.

Product Characteristics at 73°F (23°C) and 50% RH	
Color	Gray powder
Packaging	Bag: 55 lbs. (24.9 kg)
VOCs (Rule #1168 of California's SCAQMD)	0 g per L
Shelf life	1 year when stored in original sealed container at room temperature in a dry, heated area. Protect from moisture, freezing and excessive heat.
Initial cure (before tiling)	Up to 72 hours
Final cure	28 days
Tensile bond (28 days)	> 72 psi (0.50 MPa)
Average compressive strength (ASTM C109, 28 days)	> 2,500 psi (17.2 MPa)
Pot life*	1.5 to 2 hours

* Pot life varies based on jobsite conditions.

Approximate Coverage**

per 55 lbs. (24.9 kg)

Thickness	Coverage
1" (2.5 cm)	5 to 6 sq. ft. (0.46 to 0.56 m ²)
2" (5 cm)	2.5 to 3 sq. ft. (0.23 to 0.28 m ²)

** Coverage shown is for estimating purposes only. Actual coverage depends on substrate profile and porosity, equipment used, thickness applied, temperature and humidity.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the NAA product installation. For the most up-to-date TDS and warranty information, visit our Website at www.na-adhesives.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED NAA WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**