NA 1200

Shower Base Mix

Cement-Based Trowelable Underlayment

North American ADHESIVES®

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* 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* 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) Statement on Deflection Criteria

Floor systems, including the framing system and subfloor panels, over which tile will be installed should be in conformance with the IRC [International Residential Code] for residential applications, the IBC [International Building Code] for commercial applications, or applicable building codes.

Note: The owner should communicate in writing to the project design professional and general contractor the "intended use" of the tile installation, in order to enable the project design professional and general contractor to make necessary allowances for the expected live load, concentrated loads, impact loads, and dead loads including the weight of the tile and setting bed. The tile installer shall not be responsible for any floor framing or subfloor installation not compliant with applicable building codes, unless the tile installer or tile contractor designs and installs the floor framing or subfloor.

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

SUITABLE SUBSTRATES (properly prepared)

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 "Application" section).

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

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the mortar bed and tile. If the structure suitability is unclear, consult a structural engineer or design consultant.

See North American Adhesives' (NAA) "Surface Preparation Requirements" document 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* is not for wall or vertical applications.

HEALTH AND SAFETY

Consult the (Material) Safety Data Sheet for safe-handling instructions.

MIXING

Use 2 to 3 U.S. qts. (1,89 to 2,84 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* into a wheelbarrow or mortar box.
2. Gradually add water to *NA 1200* 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* and mix.

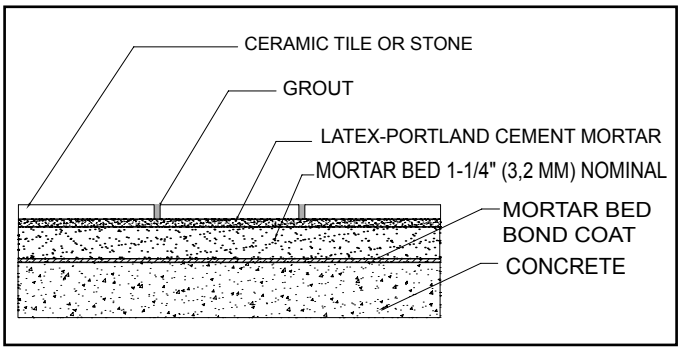
Mixing a slurry bond coat (for direct bond of *NA 1200* to concrete)

If bonding *NA 1200* 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



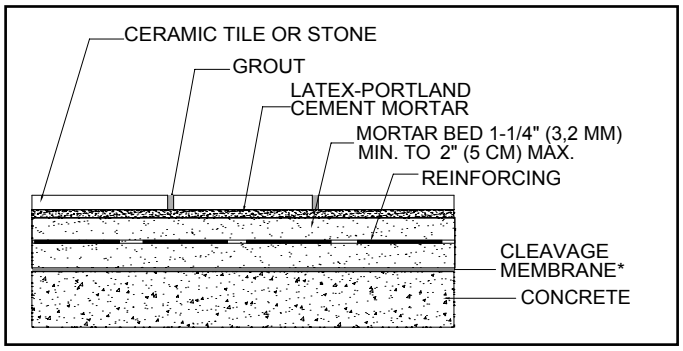
1. Install the slurry (and *NA 1200*) when the substrate and ambient temperature are 40°F to 95°F (4°C to 35°C).
2. If *NA 1200* is to be screeded, set screed guides using float strips or mortar screeds to the required floor tolerances. Screed guides should be tooled to a square-edge right angle (not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

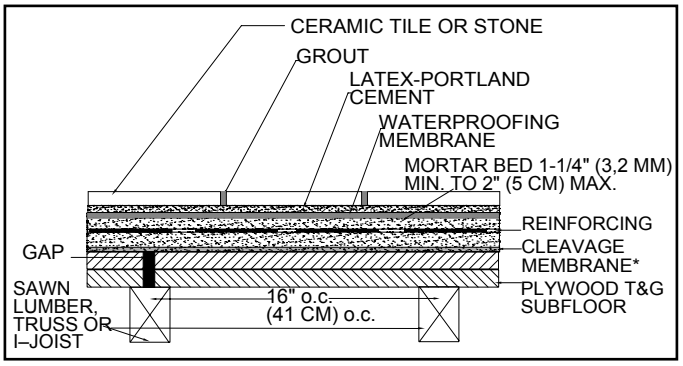
Square-edge profile

Do not bevel-edge

3. Scrub the slurry into the concrete with a broom before applying *NA 1200* 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* on the floor between the screed guides with a magnesium or wood float.
6. Immediately follow with more *NA 1200* 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.

Unbonded installations (cleavage membrane and wire reinforcement)

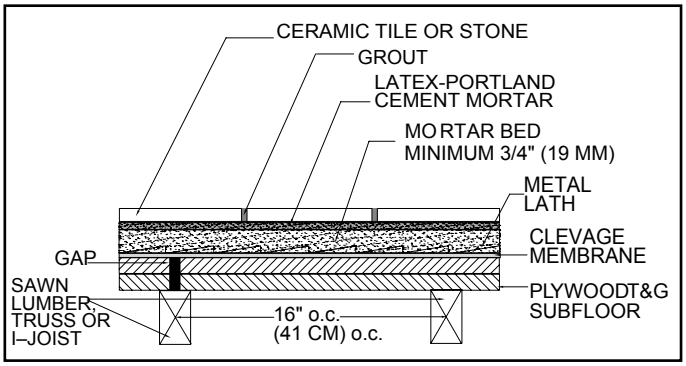




** A cleavage membrane (or slip sheet) is typically used to isolate screeds or mortar beds from problem substrates or substrates that are difficult to bond to.*

1. Apply a cleavage membrane or slip sheet – 6-mil (0,15-mm) 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* 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 (0,15-mm) 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 m^2) of metal lath. Overlap by 2" (5 cm) and fasten to the plywood substrate with nails or staples.
3. Apply *NA 1200*, 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 for 5 to 7 days from rain, snow, freezing and direct sun (which will cause curing and performance deficiencies).
- Cure for at least 72 hours at 73°F (23°C) before installing moisture-sensitive tile and stone.
- If the installation is to be covered by a nonbreathable membrane, cure for 24 to 48 hours.

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Technical Quick Reference **Product Characteristics** at 73°F (23°C) and 50% relative humidity	
Color	Gray powder
Packaging Bag: 55 lbs. (24,9kg)	 Product code #11460125
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.*

Industry Standards and Approvals	
LEED Points Contribution	**LEED Points**
MR Credit 5, Regional Materials***	Up to 2 points

**** Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.*

North American ADHESIVES®

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For the most current product data and warranty information, visit www.na-adhesives.com.

Statement of Responsibility

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **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.**