

NA 3000



North American
ADHESIVES®

Latex Additive for Mortar



GOOD	BETTER	BEST
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PRODUCT DESCRIPTION

An acrylic latex additive for NA 3100 Floor Set and NA 3120 Dual Set thin-set mortars. When added to thin-set mortar, NA 3000 increases the bond strength and provides the freeze/thaw resistance needed for outdoor installations.

USES

Mix NA 3000:

- With NA 3100 Floor Set for floors only.
- With NA 3120 Dual Set for floors, walls and countertops.

Use mortars mixed with NA 3000:

- For setting ceramic, porcelain, mosaic, quarry tile, pavers, glass and dimensionally stable natural stone. When installing white, light-colored and translucent marble and their agglomerates, use the appropriate white mortar – either white NA 3100 Floor Set or white NA 3120 Dual Set.
- For residential indoor/outdoor floor, wall and countertop installations.
- For light commercial indoor floor, wall and countertop installations, and outdoor floor installations.
- For use in submerged applications.
- For installations over properly prepared existing ceramic tile (indoor only), vinyl composition tile (VCT), vinyl asbestos tile (VAT), old cutback adhesive, noncushioned vinyl sheet and plastic laminate countertops, provided that these surfaces are well-bonded to an approved substrate (in residential and light commercial use only).

Note: Marble, granite and slate are products of nature made from a vast combination of minerals and chemicals, which may cause the material to behave or react in a manner beyond our control. Likewise, we do not have control over any of the materials or processes used in the manufacturing of agglomerates. Therefore, determine the suitability of all the materials before proceeding with the installation.

SUBSTRATE REQUIREMENTS

Must be in accordance with ANSI A108.5 current standards and recommendations.

All supporting surfaces must be structurally sound. The surface area that will receive tile must be dry, clean and free of dust, oil, grease, tar, paint, wax, curing agents, primers, sealers, release agents, existing adhesives and any other deleterious substance that can weaken the product's bond to the substrate. If the surface contains these substances, they must be mechanically removed.

SUITABLE SUBSTRATES (Properly prepared)

Use mortars mixed with NA 3000 over:

- Fully cured concrete (at least 28 days old).
- Cement mortars and leveling coats.
- Cement backer units (see manufacturer for recommendations).
- Gypsum wallboard (properly primed).
- Gypsum plaster (properly primed).
- Concrete, brick and masonry block.
- Cement terrazzo.
- Outdoor-grade plywood (indoor residential floors and countertops in dry areas only), Group 1 CC type conforming to APA classification and U.S. Product Standard PS 1-95 or similar performing underlayment qualities. (See the following deflection statement.)

TECHNICAL QUICK REFERENCE

When NA 3000 is mixed with ANSI A118.1 mortars, they will achieve ANSI A118.4 and A118.11 performance.

Product characteristics at 73°F (23°C) and 50% relative humidity

Pot life	About 4 hours
Open time	30 minutes
Initial cure	24 hours
Final cure	28 days

Shear strength per ANSI A118.4 tests:

Nonvitreous tiles	325 psi (2,24 MPa)
Vitreous tiles	260 psi (1,79 MPa)
Shear strength over plywood	150 psi (1,03 MPa)

Cleanup With water while fresh

Color Milky white

Shelf life 2 years when stored in original, sealed container in a dry area and at room temperature. Protect from moisture and freezing.

PACKAGING Jug: 2 U.S. gals. (7,57 L)
Pail: 5 U.S. gals. (18,9)

TYPICAL TROWELS AND APPROXIMATE COVERAGES*

Based on 2 U.S. gals. (7,57 L) of NA 3000 mixed with a 50-lb. (22,7-kg) bag of dry-set mortar

1/4" x 1/4" x 1/4"	70 to 90 sq. ft.
(6 x 6 x 6 mm)	(6,50 to 8,36 m ²)
1/4" x 3/8" x 1/4"	55 to 65 sq. ft.
(6 x 10 x 6 mm)	(5,11 to 6,04 m ²)

* Trowel dimensions are width/depth/space. Coverages are for estimating purposes only. Actual coverages may vary according to substrate conditions, trowel used and setting practices. To ensure appropriate contact, proper trowel selection is mandatory (see "Application").

HEALTH AND SAFETY

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

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.

NA 3000

LIMITATIONS

Do not use mortars mixed with *NA 3000*:

- Over presswood, oriented strand board (OSB), particleboard, chipboard, Masonite, Luan, gypsum floor-patching compounds, gypsum leveling compounds, metal or similar dimensionally unstable substrates.
- To set moisture-sensitive tile, natural stone or their agglomerates.
- To set outdoor commercial-building facades such as shopping malls, high-rise residential buildings and office buildings.

MIXING

1. Into a clean mixing container, pour about 2 U.S. gals. (7,57 L) of *NA 3000* liquid. Add 50 lbs. (22,7 kg) of thin-set powder.
2. Mix using a low-speed mixer (at about 350 rpm). Mix thoroughly to a smooth consistency.
3. Avoid prolonged mixing, which will cause air entrapment and shorten the pot life.
4. Let stand for 5 minutes. Re-stir without adding more liquid or powder.
5. Some stiffening may occur before all material is used. If so, simply re-stir by hand or machine, but do not add more liquid.
6. Wash hands and tools with water immediately after mixing.

APPLICATION

1. Apply only at temperatures between 40°F and 95°F (4°C and 35°C).
2. Use a typical notched trowel (see chart) with sufficient depth to achieve at least 85% mortar contact to the back of the tiles for all indoor applications, 95% for outdoor installations as well as commercial floors and shower applications, and 100% when installing marble, granite and agglomerate tile floors. It may be necessary to use the trowel's flat edge to back-butter each tile before laying, to achieve 100% mortar contact and a void-free installation.
Note: When back-buttering is required, do so when applying the mortar to the substrate. (Refer to ANSI A108.5 specifications and TCNA guidelines.)
3. Using the trowel's straight edge, spread a thin pressure-applied coat on the substrate. Using the trowel's notched edge, follow immediately with additional material, combing in a single direction to achieve an even-setting bed. Do not spread more material than can be covered with tiles before material begins to skin over.
4. In hot or dry conditions, take precautions to ensure that the mortar does not flash-set. Cooling a concrete slab with water before the installation may be beneficial. Remove all excess water before applying the mortar. Also, cooling the *NA 3000* with water will aid in the installation.
5. Set tiles before skinning occurs. If skinning does occur, scrape it off and replace with fresh mortar.
6. Set tiles firmly over the fresh mortar with a slight push/pull motion across the direction of the mortar ridges to achieve good tile-to-mortar contact.
7. Follow immediately with a proper and thorough beat-in to flatten the ridges or notches into a continuous bed, allowing at least 25% of the thickness of each tile to be embedded in the mortar.
8. Make all alignments and adjustments immediately following the beat-in.
9. Clean all joints and wipe smudges from the tile face with a damp towel or sponge before material hardens.
10. Wash hands and tools with water while material is still fresh.
11. Do not disturb, grout or walk over tiles for at least 24 hours after installation.

EXPANSION AND CONTROL JOINTS

1. Provide for expansion and control joints where specified. Refer to the most current TCNA handbook for ceramic tile installation, Detail EJ-171.
2. Do not cover any substrate expansion joint or control joints with mortar or tiles.
3. When necessary, cut tiles along both edges of the expansion joints. Do not allow tile and mortar to overlap the joints.

4. Protect tilework with metal strips (edge metal) along both edges of structural building expansion joints.
5. Install the specified compressible bead and sealant into all expansion and control joints.

GROUTING

Allow tiles to reach a firm set, and then grout with the appropriate North American Adhesives grout.

PROTECTION

1. Protect containers from freezing in transit and storage. *NA 3000* is freeze/thaw-stable down to 0°F (-18°C). However, protect all water-based products from prolonged exposure to deep freezing. If the material is frozen, do not stir it until it has completely thawed.
2. Provide dry, heated storage on site and deliver materials at least 24 hours before use.
3. Protect installation from freezing and avoid immersing it in water for at least 21 days after completion of tilework.
4. **Floors:** Protect from light traffic for at least 24 hours, from general traffic for at least 72 hours, and from heavy traffic for at least 7 after installation.
5. **Walls:** Protect from impact, vibrations and heavy hammering on adjacent and opposite walls for at least 14 days after installation.
6. Because temperature and humidity (during and after the installation of tile) affect the final curing time, allow for extended periods of cure and protection when temperatures drop below 60°F (16°C) and/or when the relative humidity is higher than 70%.

IMPORTANT NOTICE

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.**

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



North American
ADHESIVES®

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PR 5347 3000D_A08vp
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