

NA 3240 Rapid Flex



North American
ADHESIVES®

Fast-Set Polymer Thin-Set Mortar

formerly NA 3500/3501



GOOD	BETTER	BEST
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PRODUCT DESCRIPTION

A single-component, polymer-modified, high-performance, rapid-setting mortar that comes in gray and white. NA 3240 Rapid Flex is for ceramic, porcelain, quarry, paver tile and most natural-stone tile installations.

USES

- For residential indoor/outdoor floor and wall installations
- For commercial indoor wall and floor installations, and outdoor floors
- Use for the installation of all types of ceramic, quarry, porcelain and natural-stone tiles over most traditional well-prepared substrates.
- For rapid tiling of floors and walls that must be ready for use within a short time, such as supermarkets, factories, hospitals, airports and shopping malls
- Use white NA 3240 Rapid Flex when installing light-colored and translucent marble, and their agglomerates (see "Limitations").

SUBSTRATE REQUIREMENTS

The substrate 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 substance that can weaken the adhesive's bond to the substrate. If the surface contains these substances, they must be mechanically removed.

SUITABLE SUBSTRATES (properly prepared)

- Fully cured concrete (at least 28 days old)
- Masonry block and brick
- Cement mortars and leveling coats
- Cement terrazzo
- Gypsum wallboard (primed)
- Cement backer units (see manufacturer for recommendations)
- For installations over existing ceramic tile, vinyl composition tile (VCT), vinyl asbestos tile (VAT) or old cutback adhesive plastic laminate countertops and noncushioned vinyl sheet goods, provided that these surfaces are well-bonded to an approved substrate (indoor residential and light commercial use only)
- Exterior-grade plywood for indoor residential floors and countertops in dry areas only. Plywood must be Group 1, CC-type, conforming to APA classification and U.S. Product Standard PS 1-95 or COFI exterior plywood "Select" or "Select Tight Face" conforming to CSA-0121 standard for Douglas fir. (See TCNA Handbook for additional information and statement below regarding deflection.)

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.

TECHNICAL QUICK REFERENCE

Meets or exceeds ANSI A118.4 and ANSI A118.11 requirements

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

Pot life	30 minutes
Open time	About 20 minutes
Initial set	1 hour, 10 minutes
Final set	1 hour, 30 minutes

Shear strength per ANSI A118.4 tests:

	4 hours	1 day	7 days	28 days
Ceramic mosaic	221 psi (1,52 MPa)	375 psi (2,59 MPa)	520 psi (3,59 MPa)	675 psi (4,66 MPa)
Quarry tile to plywood	N/A	N/A	222 psi (1,53 MPa)	327 psi (2,26 MPa)
Quarry tile to quarry tile	300 psi (2,07 MPa)	425 psi (2,93 MPa)	545 psi (3,76 MPa)	550 psi (3,79 MPa)

Cleanup With water while fresh

Colors Gray; white

Shelf life 1 year when stored in original sealed container in a dry area and at room temperature

Packaging

Gray NA 3240 Rapid Flex Bags: 25 lbs. (11,3 kg); 50 lbs. (22,7 kg)
White NA 3240 Rapid Flex Bag: 50 lbs. (22,7 kg)

TYPICAL TROWELS AND APPROXIMATE COVERAGES*

Per 25-lb. (11,3-kg) bag

1/4" x 1/4" x 1/4" 35 to 45 sq. ft.
(6 x 6 x 6 mm) (3,25 to 4,18 m²)

1/4" x 3/8" x 1/4" 25 to 32 sq. ft.
(6 x 10 x 6 mm) (2,32 to 2,9 m²)

Per 50-lb. (22,7-kg) bag

1/4" x 1/4" x 1/4" 75 to 90 sq. ft.
(6 x 6 x 6 mm) (6,97 to 8,36 m²)

1/4" x 3/8" x 1/4" 55 to 65 sq. ft.
(6 x 10 x 6 mm) (5,11 to 6,04 m²)

* Trowel dimensions are width/depth/space. Coverages shown are given for estimating purposes only. Actual job-site coverages may vary according to substrate conditions, type of trowel used and setting practices.

HEALTH AND SAFETY

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

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.

LIMITATIONS

- Do not apply over presswood, particleboard, chipboard, oriented strand board (OSB), Masonite, Luan, gypsum floor-patching, gypsum leveling compounds, metal or similar dimensionally unstable substrates.
- Before using in areas subject to extreme climate variations, contact Technical Services for recommendations.
- Do not use for installations subject to submerged conditions, such as pools, spas, fountains or in gang showers.

NA 3240 Rapid Flex

- Do not use on commercial outdoor building facades (such as shopping malls, high-rise residential buildings and office buildings).
- Do not use for setting moisture-sensitive tile, natural stone or their agglomerates. Instead, contact Technical Services Department for recommendations regarding setting material.

Note: Marble, granite and slate are products of nature made from a vast combination of minerals and chemicals that 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 and processes used in the manufacturing of agglomerates. Therefore, determine the suitability of all the materials before proceeding with the installation.

MIXING

1. Into a clean mixing container:
 - 1.1 **For a 25-lb. (11,3-kg) bag:** Pour about 2-1/2 to 3 U.S. qts. (2,37 to 2,84 L) of cool, clean water. Gradually add 25 lbs. (11,3 kg) of gray NA 3240 Rapid Flex powder while slowly mixing.
 - 1.2 **For a 50-lb. (22,7-kg) bag:** Pour about 5 to 6 U.S. qts. (4,73 to 5,68 L) of cool, clean water. Gradually add 50 lbs. (22,7 kg) of gray or white NA 3240 Rapid Flex powder while slowly mixing.
2. Use a low-speed mixer (at about 300 to 400 rpm).
3. Avoid air entrapment by prolonged mixing, which will shorten the pot life.
4. Mix thoroughly to a homogenous and smooth consistency.
5. Do not let sit. Spread immediately.
6. Some stiffening may occur before all material is used. If so, simply remix by hand or machine, but do not add any liquid.
7. Wash hands and tools with water immediately after mixing.

APPLICATION

1. Use 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 floor 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 at the same time that the mortar is applied to the substrate. (Refer to ANSI A108.5 specifications and TCNA guidelines.)
3. Using the trowel's flat or straight edge, spread a thin pressure-applied coat on the substrate. Then using the trowel's notched side, 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, using cold water will aid in the installation.
5. Do not spread more adhesive than can be covered before the adhesive begins to skin over ("set up"). To test for skinning, simply place a finger into the ridges of the applied adhesive. If there is no transfer of adhesive to the finger, skinning has occurred; scrape off and replace with fresh adhesive.
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 proper and thorough beat-in to flatten 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 beat-in.
9. Clean all joints and wipe smudges from the tile face with a damp sponge or towel before material hardens.
10. Wait at least 2-1/2 hours after installation to grout.
11. Wash hands and tools with water while material is still fresh.

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 joints or control joints with mortar or tiles.
3. When necessary, cut tiles along both edges of the expansion joints. Do not allow tiles or mortar to overlap the joints.
4. Protect the 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 (at least 2-1/2 hours), and then grout with an appropriate North American Adhesives (NAA) grout.

PROTECTION

1. Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.

Note: The following recommendations for protecting the tilework refer to the actual tile-setting procedure. When determining the protection for the completed installation, take into consideration the grout being used and see the Technical Data Sheet of the respective grout.
2. **Floors (NA 4200 sanded grout and NA 4300 unsanded grout):** Protect floors from general foot traffic for at least 16 to 24 hours after grouting. Protect from heavy commercial traffic and equipment for 72 hours. Protect tilework from adverse weather for at least 21 days after grouting installation.
3. **Floors (NA 4240 sanded fast-set polymer grout):** Protect floors from general foot traffic for at least 3 to 4 hours after grouting. Protect from heavy commercial traffic and equipment for 24 hours. Protect tilework from adverse weather for at least 7 days after grouting installation.
4. **Walls:** Protect tilework from impact, vibrations and heavy hammering on adjacent and opposite walls for at least 72 hours after installation.
5. Because temperature and humidity (during and after the installation of tile) affect the final curing time, allow for extended periods of curing 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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