



North American
ADHESIVES®

NA 3210

Multi Flex™ Super

**Multipurpose, Polymer-Modified Tile
and Stone Mortar**



PRODUCT DESCRIPTION

NA 3210 Multi Flex Super is a professional-grade, polymer-modified mortar that provides an excellent bond for ceramic, porcelain, pavers and most marble, granite and natural-stone tile installations. NA 3210 Multi Flex Super is formulated with nonsag characteristics for wall applications. NA 3210 Multi Flex Super carries the ISO 13007 classification of C2TE and meets or exceeds ANSI A118.4TE and ANSI A118.11 requirements when mixed with water.

FEATURES AND BENEFITS

- Nonsag formula for wall applications
- Smooth and creamy consistency makes it easy to apply.
- Polymer-enriched for high performance

USES

- For most interior and exterior residential installations on floors, walls and countertops in dry and wet areas (see wall specifications under the "Limitations" section)
- For most interior and exterior commercial installations on floors and countertops
- For most interior commercial installations on walls
- For installation of ceramic and porcelain tile, engineered stone, quarry tile, pavers, Saltillo tile, and most types of marble, granite and natural stone
- For use in tub surrounds and showers
- For use over exterior-grade plywood

SUBSTRATE REQUIREMENTS

All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion. See North American Adhesives' "Surface Preparation Requirements" document at www.na-adhesives.com.

SUITABLE SUBSTRATES (properly prepared)

- Concrete (cured at least 28 days)
- Masonry cement block, brick, cement mortar beds and leveling coats
- Cement backer units (CBUs) – see the manufacturer's installation guidelines
- Gypsum wallboard and plaster with an NAA-approved primer – interior walls in dry areas only
- APA Group 1 and CANPLY 0121 exterior-grade plywood (interior, residential and light commercial floors/countertops in dry conditions only)

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

LIMITATIONS

- Install only at temperatures between 40°F and 95°F (4°C and 35°C).
- Do not use for moisture-sensitive stone (green marble; some limestone and granite), agglomerate tiles, cultured marble or resin-backed tiles. Instead, use suitable epoxy or urethane adhesives. See the respective Technical Data Sheets for more information.
- Do not use with glass tile. Instead, use NA 3500 Glass Set™ mortar.
- Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See the "Suitable Substrates" section.
- To use directly over gypsum-based patching or leveling substrates, apply a suitable sealer/primer before use.
- Use a white mortar when installing light-colored stones and translucent marble.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times. Dimensionally weak stone (limestone and travertine) is limited to thin-set applications only.

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- Do not use for installations subject to water immersion, such as pools and spas.
- Do not use for exterior commercial wall applications.
- Not recommended for areas subject to severe freeze/thaw conditions

MIXING

Consult the Safety Data Sheet for safe-handling instructions.

1. Pour between 6 to 6.75 U.S. qts. (5,68 to 6,39 L) of clean water in a clean mixing container.
2. Gradually add 50 lbs. (22,7 kg) of powder while slowly mixing.
3. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or double-box mixer. Mix thoroughly until the mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
4. Let the mixture stand ("slake") for 5 minutes.
5. Remix.
6. If the mixture becomes heavy or stiff, remix without adding more water.

APPLICATION

1. Choose a notched trowel (see the "Approximate Coverage" chart) with sufficient depth to achieve more than 85% mortar contact to both the tile and substrate for all interior applications, and more than 95% for exterior, commercial floor and wet applications. It may be necessary to back-butter tiles in order to meet these requirements. (Refer to ANSI A108.5 specifications and TCNA handbook guidelines.)
2. With pressure, apply a coat of mortar by using the trowel's flat side to key the mortar into the substrate.
3. Apply additional mortar, using the trowel's notched side to comb the mortar in a single direction parallel to the tile's shortest dimension.
4. Spread only as much mortar as can be tiled before the product skins over. Open time can vary with jobsite conditions.
5. Place tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between the mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
6. Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting (see ANSI A108.10 guidelines).

EXPANSION AND CONTROL JOINTS

- Provide for expansion and control joints as specified per TCNA Method EJ171 or TTMAC Specification Guide 093000, Detail 301MJ. Do not cover any expansion joints with mortar.

CLEANUP

- While the mortar is fresh, clean tools and tile with water.

PROTECTION

- Protect from foot traffic for 24 hours before grouting.
- Allow for extra drying time if applying over a membrane.
- Protect from heavy traffic, frost and rain for 7 days.



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Product Characteristics

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

Colors	Gray; white
Packaging	Bag: 50 lbs. (22,7 kg), gray Bag: 50 lbs. (22,7 kg), white
Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)
Open time*	Up to 30 minutes
Pot life*	3 hours
Time before grouting*	24 hours
VOCs (Rule #1168 of California's SCAQMD)	0 g per L
Application temperature range	40°F to 95°F (4°C to 35°C)

* Cold temperature or high humidity may alter these properties.

ISO 13007 Classification

Classification Code	Classification Requirement	Test Characteristic
C2 (cementitious, improved adhesive)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles	Using porcelain tile
T (vertical slip resistance)	≤ 0.019" (0,5 mm)	Using porcelain tile
E (extended open time)	≥ 72.5 psi (0,5 MPa) after 30 minutes	Using ceramic wall tile

ANSI Specification

Test Method	Specification Standard	Test Results
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	200 to 300 psi (1,38 to 2,07 MPa)
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 28 days	325 to 440 psi (2,24 to 3,03 MPa)
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	275 to 400 psi (1,90 to 2,76 MPa)
ANSI A118.4T – sag on vertical surfaces	< 0.02" (0,5 mm) at 20 minutes	Pass
ANSI A118.4E – extended open time	> 72.5 psi (0,5 MPa) at 30 minutes	Pass
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	Pass

Industry Standards and Approvals

LEED v4 Points Contribution	LEED Points
Environmental Product Declaration (EPD): Tile Council of North America (TCNA) Industry Average EPD for Mortars**	1/2 point
Health Product Declaration (HPD)**	Up to 2 points





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

Additional Green Certifications

Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC website.

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Approximate Coverage* per 50 lbs. (22,7 kg)	
Typical Trowels	Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) 	80 to 98 sq. ft. (7,43 to 9,10 m²)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm) 	60 to 70 sq. ft. (5,57 to 6,50 m²)
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm) 	40 to 49 sq. ft. (3,72 to 4,55 m²)
3/4" x 9/16" x 3/8" (19 x 14 x 10 mm) 	27 to 32 sq. ft. (2,51 to 2,97 m²)

* Trowel dimensions are width/depth/space. Actual coverage will vary according to substrate profile and tile type.



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Refer to the Safety Data Sheet for specific data related to health and safety as well as product handling. 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.**

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