

# **Waterproof Coating**

# Waterproofing and Crack-Isolation Membrane



#### PRODUCT DESCRIPTION

*NA 1740* Waterproof Coating is a premixed, fast-drying, liquid-applied waterproofing and crack-isolation membrane for installation under ceramic tile or stone in residential, commercial and industrial environments. *NA 1740* provides a thin, continuous barrier to protect adjacent rooms and floors below from water damage. *NA 1740* can be applied with a roller or brush and is ready to receive tile or stone after 45 to 90 minutes of drying time.

When using *NA 1740*, ceramic tile or stone can be installed with any North American Adhesives (NAA) polymer-modified or epoxy mortar. For common problem areas like coves, corners, cracks and drains, *NA 1740* can be combined with optional *NA 1750* Waterproof Coating Fabric to provide additional protection. *NA 1740* can be flood-tested after 12 hours of drying time, and exceeds ANSI A118.10 and ANSI A118.12 standards. *NA 1740* has no odor and is great for use in confined spaces.

#### **USES**

- For residential and commercial interior/exterior floors, walls and ceilings; industrial interior floors and walls
- For tub and shower surrounds bathrooms; kitchens; food prep, dishwashing and cafeteria areas; countertops; and laundry rooms
- For residential and commercial submerged applications freshwater pools, fountains and water features (completely covered by ceramic tile)
- For cantilevered balconies and decks over unoccupied space (see the "Limitations" section)
- For balconies and decks over occupied space when used in conjunction with a primary waterproofing membrane
- For steam rooms when used in conjunction with a vapor barrier (refer to TCNA Handbook sections SR613 and SR614 or TTMAC 321SR)
- For in-plane crack isolation up to 1/8" (3 mm) over nonstructural cracks

*NA 1750* Waterproof Coating Fabric is available but optional for use on coves, corners and field application.

#### **SUBSTRATE REQUIREMENTS**

- All recommended substrates must be structurally sound, stable, clean and free of any substance preventing adhesion.
- Do not use chemicals (acid etching or stripping) to prepare approved substrates.
- Concrete substrates should have a concrete surface profile #2 per International Concrete Repair Institute (ICRI).
- Mechanically clean and profile by diamond-cup grinding or other engineer-approved method when necessary.
- Substrate and room temperatures must be 45°F to 95°F (7°C to 35°C) during and at least 24 hours after application.

# 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.



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### **SUITABLE SUBSTRATES (properly prepared)**

#### Interior and exterior

- Fully cured concrete at least 28 days old (see "Limitations")
- · Masonry walls of cement block or brick
- Cured cement mortar beds or leveling coats
- Cement backer units (CBUs)

#### Interior only

- Gypsum wallboard (walls only, in approved application areas only)
- Properly prepared radiant-heated substrates
- Properly prepared unglazed ceramic tile and cement terrazzo floors, and gypsum underlayments

Note: Existing unglazed ceramic tile must be abraded, and existing cement terrazzo must be mechanically profiled. Both must be skimcoated with an appropriate NAA latex- or polymer-modified mortar.

- Exterior-grade plywood (for interior residential floors and countertops in dry areas only)
- PVC, copper, brass and stainless-steel pipe penetrations (abraded)

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

#### **LIMITATIONS**

- *NA 1740* is not for use over structural cracks, in-plane cracks beyond 1/8" (3 mm) or where vertical out-of-plane movement occurs.
- Do not use over substrates containing asbestos, dimensionally unstable substrates such as hardwood flooring, particleboard, oriented strand board (OSB), Masonite or metal.
- Do not use over plank flooring, treated plywood, Lauan, gypsum-based floor-patching or leveling compounds, vinyl, glazed tile, laminate, fiberglass or epoxy floors, or storage tanks.
- Do not use where excessive substrate moisture and/or where negative hydrostatic pressure exists. Maximum allowable moisture is 8 lbs. per 1,000 sq. ft. (3,63 kg per 92,9 m²) per 24 hours per ASTM F1869 or up to 85% relative humidity as measured with moisture probes.
- Do not use as a single-application roof-deck membrane, wear surface or primary waterproofing membrane on balconies or decks directly over occupied space or in storage tanks.
- Do not allow direct contact with solvent-based materials.

#### **MIXING**

Consult the Safety Data Sheet for safe-handling instructions.

- · Mix by hand before using.
- Do not dilute with any other material.
- Promptly wash tools with water after mixing.

#### **APPLICATION**

Fill all cracks, control joints and gaps with an appropriate filler material in corners and coves that are greater than 1/32" (1 mm). Force the material into the crack and finish smooth with a trowel. Let dry. *NA 1750* may be used with *NA 1740* in any of the areas discussed below.

#### Pre-treat cracks, corners and coves (floor/wall intersections)

- 1. Apply *NA 1740* liquid 6" (15 cm) on both sides of cracks, corners and coves with a paintbrush or roller. Let dry to a red color.
- 2. Apply a second coat and let dry.

#### Pre-treat drains

- 1. Review the drain manufacturer's instructions for waterproof membrane installation in conjunction with these instructions.
- 2. Fill the space between the drain pipe and the substrate with the appropriate expansion joint materials (typically a foam backer rod and sealant).
- 3. For drains with a bolt-down collar and weep holes, loosen and remove bolts from the drain flange. Abrade the drain flange with sandpaper, and clean and dry thoroughly.
- 4. With a paintbrush, apply a heavy coat over and around the drain flange. Let dry to a red color.
- 5. Apply a second coat and let dry.

#### Pre-treat openings around pipes and other penetrations

- Pack/fill the openings/spaces between the drain pipe and the substrate with the appropriate expansion joint materials (typically a foam backer rod and sealant).
- 2. Apply *NA 1740* with a brush around and up onto floor or wall penetrations. Let dry to a red color.
- 3. Apply a second coat and let dry.

#### Complete the main area

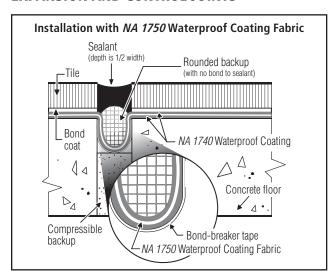
1. Apply *NA 1740* to the entire area to be waterproofed (including previously coated areas such as cracks, drains and penetrations) by using a 1/2" (12-mm) nap roller. Let dry to a red color.



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- 2. Apply a second coat to the entire installation. Let dry 55 to 90 minutes before installing tile or stone.
- 3. The final dry thickness of the first and second coats combined in the main area should be about 25 mils minimum (about the thickness of a credit card).
- 4. Inspect and, as needed, recoat pinholes or areas not completely covered. Let dry.
- 5. Apply bead of silicone or urethane sealant around the drain flange at the drain throat to join *NA 1740* to the drain assembly. Leave no voids.
- 6. Bolt down the collar to the drain flange.
- 7. Where *NA 1740* ends on any penetration, apply a bead of silicone or urethane sealant.

#### **EXPANSION AND CONTROL JOINTS**



- Do not cover any substrate expansion or control joints with mortar or tile.
- Provide where specified per the most current TCNA Handbook for ceramic tile installation, Detail EJ171, or TTMAC Tile Installation Manual, Detail 301MJ.
- If waterproofing integrity is required in expansion and control joints, provide per the "Installation with *NA 1750* Waterproof Coating Fabric" drawing.
- NA 1750 can be embedded into NA 1740 liquid, allowed to dry and filled with appropriate joint sealant or an expansion molding system.
- Protect tile work with metal strips (edge metal) along both edges of structural building expansion joints.

Contact Technical Services for more information.

#### **CLEANUP**

 Remove excess NA 1740 (while fresh) with a damp sponge, soap and warm water. Any completely dried material may be mechanically removed.

#### **PROTECTION**

- Protect from foot traffic, rain and freezing for 24 hours.
- Protect installed NA 1740 from contamination, excessive heat and extended sun exposure.

<b>Product Characteristics</b> at 73°F (23°C) and 50% relative humidity	
Color	Pink when wet; red when dry
VOCs (Rule #1113 of California's SCAQMD)	0 g per L
VOCs (Section 01350 of California's CDPH)	Passed
Shelf life	2 years when stored in original, unopened container
Drying time between first and second coats	When red and dry to the touch
Drying time after second coat (before applying ceramic tile or stone)	About 55 to 90 minutes (when red and dry to the touch)
Drying time before flood-testing	After 12 hours at 73°F (23°C) and 50% relative humidity
Final dry thickness (2 coats)	About 25 mils minimum (about credit-card thickness)
Freeze/thaw stability (liquid)	Up to 5 cycles at 32°F (0°C)
Storage	Store in cool, dry place. Protect from freezing.

Packaging (NA 1740 Waterproof Coating)		
Size	Approximate Coverage*	
Pail: 1 U.S. gal. (3,79 L)	55 sq. ft. (5,11 m²)	
Pail: 3.5 U.S. gals. (13,2 L)	193 sq. ft. (17,9 m²)	

Packaging (optional NA 1750 Waterproof Coating Fabric)	
Size	Approximate Coverage*
Roll: 38" x 75' (97 cm x 22,9 m)	237.5 sq. ft. (22,1 m²)

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



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#### **Industry Standards and Approvals**

ANSI: Exceeds A118.10 standard (Waterproofing Membranes for Thin-Set Ceramic Tile) and A118.12 standard (Crack-Isolation Membranes for Thin-Set Ceramic Tile)

ASTM: C627 (Robinson) service rating for extra heavy

IAPMO: Listed for use as shower-pan liner

 LEED v4 Points Contribution
 LEED Points

 Health Product Declaration (HPD)\*
 Up to 2 points

#### **Additional Green Certifications**

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



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<u>Canada</u>

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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.

PR: 5877 MKT: 18-1067

#### 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. <a href="ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE">ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE</a> IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.

<sup>\*</sup> 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.