

INSTALL *Strataflex Waterproofing Membrane*

National Applied Construction Products, Inc. • 800.633.4622 • Fax: 330.644.3557 • www.NACproducts.com

IMPORTANT: Proper installation of this Membrane System requires use of the appropriate Primers and Companion Products. Read and understand Product Data (PDS) and Material Safety Data (MSDS) Sheets for all products prior to installation.

Suitable Substrates

Concrete: commercial & residential cement, pre-stressed and pre-cast concrete, backerboard, mud beds, gypsum, lightweight concrete and patching compounds. **Wood:** Exterior or exposure 1 plywood, APA-rated sheathing, Sturd-I-Floor, hardwood, tongue and groove and OSB with standard face (gap between sheathing as required). **Existing Substrates:** Ceramic and porcelain tile, stone, terrazzo, VCT/VAT, metal, radiant-heat, painted and sealed floors and floors damaged by dry shrinkage and structural movement.

Surface Preparation:

- Prior to installation, substrate must meet requirements given by the TCNA handbook, ANSI A108 and ANSI 118.10.
- Surfaces must be level, structurally sound and meet 1/360 for ceramic and porcelain tile or 1/720 for stone tile on live or dead loads. Maximum variation of 1/4" in 10' from the required plane.
- Grind bumps and level slab depressions with a quality latex underlayment in accordance with manufacturer's instructions. Surfaces must be free of holes, projections, moisture or bond breakers. Scarify smooth surfaces.
- Assure joist spacing consists of no more than 16" on center and a double sub-floor consists of at least 5/8" per sheet.
- Perform a Black Mat MVT (Moisture Vapor Transmission) test. If MVT is present, conduct F-1869-98 test for emissions. Measured MVT levels in excess of 3#/1000SF/24HRS shall be treated with NAC's Moisture Lock 101™. Contact NAC if MVT levels are in excess of 3#/1000SF/24HRS.
- Apply Moisture Lock 101™ to porous surfaces such as mud beds, gypsum/gypcrete, lightweight concrete and patching/leveling compounds. Allow Moistuer Lock 101™ to cure 24 hours prior to applying Primer.
- Waterproofing applications with prolonged water exposure or excessive moisture conditions shall be installed over a sloped substrate (1/4" per foot) per TCNA handbook. A flood test is also advisable for these conditions. Installations include but are not limited to shower bases, exterior decks, kitchens, bath areas & over living spaces.

General Installation Instructions:

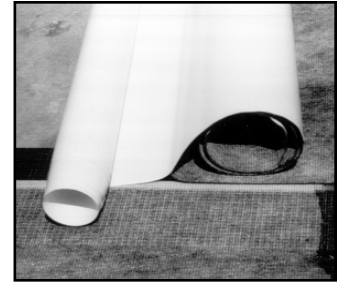
1. All installations begin with a clean, dry floor. Substrates must be well adhered and clean of wax, petroleum sealers, dirt, grease, oil or other bond-breakers.
2. **Membrane layout is critical.** Measure and pre-cut membrane to 4"-6" longer than required size. Re-roll membrane to half the room's depth. For sloped areas, position first sheet of membrane in lowest area with overlap strip on high side. Ascending sheet overlaps strip on first sheet, similar to shingles on a roof. **For casual water areas:** membrane shall be butt-jointed to the wall and caulked with NAC polyurethane sealant. **For water containment areas:** flash Strataflex up wall to desired height. On adjacent wall, apply NAC Seam Tape up wall to desired height. Overlap Strataflex over Seam Tape. Refer to "Base, Wall and Corner Treatment" on page 2 for more installation guidelines.
3. Apply NAC TAC, NAC TAC II Interior or NS97 Exterior Primer.

NAC TAC or NAC TAC II Interior Primer should be applied with a short nap roller, flat trowel, brush applicator or sprayer. Substrate temperature should be minimum 65°F.

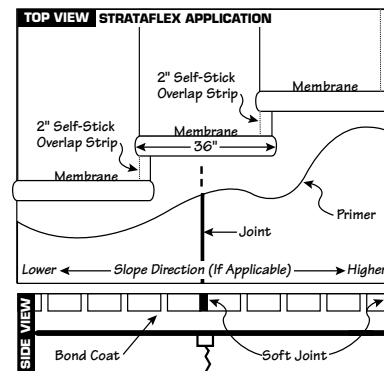
NS97 Exterior Primer should be applied a short nap roller or paintbrush. Substrate temperature should be minimum 55°F.

- a. Shake, mix or stir Primer thoroughly prior to opening.
- b. Prime only an area that will covered by Membrane within four hours. Apply a thin film of uniform thickness to substrate in single strokes. Do not re-roll primer.
- c. Air pockets may form if membrane is installed over wet primer. Allow Primer to dry until tacky to touch, but non-transferable to finger. This may take as little as 10 minutes, but usually no more than 45, depending upon temperature, humidity, internal moisture level/porosity of substrate and application thickness. See NAC TAC, NAC TAC II or NS97 label for additional information.

4. Slit white release paper and allow membrane to roll out, adhesive-side down, across primed floor. Do not remove protective film from 2" overlap area on top of membrane.



5. Position next membrane sheet over protective film on first sheet. Remove film and press seam together. Use 6" Seam Tape for butt-jointed end seams and other areas without an overlap strip. Trim Tape to desired length and install 3" beneath and perpendicular to membrane. Overlap remaining 3" with next membrane sheet. Seal termination points with SubSeal or NAC Polyurethane Sealant.
6. Press Membrane into place with flat side of trowel applying 50 lbs. of pressure/sq. inch or a 75-100# Roller. If air pockets occur, wait and re-inspect the next day. If they remain, place a small slit in the affected area and coat with SubSeal® Liquid



Waterproof Membrane or NAC Polyurethane Sealant. Smooth out with a roller or trowel. Trim ends to desired length.

Design Detail: Overlap sides of 36" Strataflex with 2" overlap strips. Butt-joint ends of membrane and install 6" Seam Tape at end seams. Seal termination points with Subseal®

or NAC Polyurethane Sealant. Placement of control joints may be ignored. Isolation joints, such as around weight bearing columns, and expansion joints placed for vertical movement need to be carried through to tile installation. Soft joints in tile patterns are required as per TCNA Handbook method EJ-171.

Exterior Waterproofing

Balcony and Deck Treatment: Prior to installation, follow TCNA method F103 and/or F104. Substrate must be sloped min. 1/4" per ft. to ensure proper drainage. 1. Follow Strataflex general installation guidelines. 2. Apply one (1) coat (20mil wet) of SubSeal® Liquid Waterproofing Membrane on top of Strataflex. Refer to SubSeal® installation instructions for more detail. 3. Install NAC Polyurethane Sealant to all termination points of the membrane. 4. Install setting materials & finished surface.

Patio, Walkway & Pool Decks: Prior to installation, refer to TCNA method F101. Slope substrate to provide complete surface drainage. 1. Follow Strataflex general installation guidelines. 2. Apply one (1) coat (20mil wet) of SubSeal Liquid Waterproofing Membrane on top of Strataflex. Refer to SubSeal installation instructions for more detail. 3. Install NAC Polyurethane Sealant to all termination points of the membrane. 4. Install setting materials & finished surface.

Waterproof Treatment Details

Base & Wall Treatment: Turn Strataflex up wall to flood point or plan height. Position membrane with desired amount of upturn and crease to provide a tight corner. With membrane still in place and with release paper attached, fold in half lengthwise to face wall. Carefully cut release paper at fold and pull toward you to expose and unroll membrane. Follow same procedure in opposite direction with other half of membrane. Carefully crease membrane at wall with flat side of trowel.

For casual water areas: membrane shall be butt-jointed to the wall and caulked with NAC polyurethane sealant.

For water containment areas: flash Strataflex up wall to desired height. On adjacent wall, apply NAC Seam Tape up wall to desired height. Overlap Strataflex over Seam Tape.

Corner Treatment: 6" Seam Tape may be formed into corners. Lightweight, preformed inside (PFI) and outside (PFO) corners are also available. PFI and PFO corners are made of a strong breathable fabric that is used in conjunction with SubSeal Liquid Waterproof Membrane. See PDS and Install Sheets for information and instructions.

Drains and Protrusions: Follow TCNA recommendations and ANSI standards. Drains are required to have clamping ring to fasten membrane to drain base. A slope of 1/4" per foot must be met prior to installation of membrane to negate standing water. 1. Remove clamping ring and strainer, leaving the drain base exposed. 2. Install Strataflex over drain base per membrane general installation instructions. 3. Press membrane in place, making sure to outline drain opening. Assure adequate bond between base and membrane. 4. Carefully cut for drain opening and punch holes for clamping ring bolts through membrane. 5. Reset clamping ring and strainer to desired height. Install thin-set and tile.

In-Floor Heating Systems

Use Membrane System, full floor coverage, over in-floor, hydronic heating systems placed in poured gypsum/gypcrete or other lightweight products. Read Moistuer Lock 101™ Product Data and Installation Sheet. Apply NAC TAC Primer or NS97 Primer as required and install Strataflex Membrane as directed. Use A118.4 or better mortar for tile installation.

Tile Warming Systems

Use Strataflex, full floor coverage, over substrates where low-voltage tile warming systems are to be installed. Secure tile warming system to membrane as directed by manufacturer. Use A118.4 or better mortar for tile installation. Do not nail or staple heating system through Strataflex membrane.

Tile Setting Materials

When installing porcelain, ceramic and decorative stone tile or related products, a thin-bed, latex-modified mortar meeting ANSI A118.4 must be used. Apply membrane over level coats, mortar and mud beds. Key setting material into membrane with flat side of trowel. Re-apply mortar with notch side of trowel using minimum trowel size of 1/4" x 3/8".

Wood & VCT Installations

Duo to the nature of the overlap joint on Strataflex membrane, the overlap joint may transfer through the finished VCT. We recommend using ECB™ 75 membrane in these applications. When installing wood or VCT over membrane, a solvent free or urethane glue/adhesive must be used. Follow general membrane installation instructions.

Cautions:

- Not recommended for use on concrete floors with excessive moisture vapor transmission above 10#/1000SF/24HRS or excessive hydrostatic head pressure.
- Protect floors from traffic until new floor is fully cured. Large format tile installations may require extended cure times.
- Membrane and companion products must be protected from the elements and UV rays until tile is installed, grouted and cured.
- **DO NOT** install membrane under mortar beds, leveling and patching compounds. **DO** install membrane over cured mortar beds, leveling and patching compounds.
- Do not use petroleum-based cleaners or sealers for tile, marble, stone or grout.
- Impervious tile (less than 0.5% absorption) requires a 48 hour cure time prior to grouting.
- Protect floors from heavy construction equipment during installation to prevent damage.
- Not recommended for vertical applications. Use SubSeal Liquid Waterproof Membrane in place of sheet membrane.
- Movement joints must be installed in finished tile system per TCNA method EJ171. Interior: 20' to 25' in each direction. If exposed to direct sunlight or moisture then 8' to 12' in each direction. Exterior: 8' to 12' in each direction.

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Application Notes for NAC TAC Primer

Coverage: 375-425 square feet per gallon depending upon applicator type and porosity of substrate.

Clean-Up: Remove wet NAC TAC with a damp cloth and plain water. Use Mineral Spirits for dried Primer.

- NAC TAC Primer is not freeze/thaw stable. Do not store below 35°F. If NAC TAC separates, shake to remix. If product will not remix, do not use.
- Due to increased adjustability of Primer bond to Membrane, a pull test, if needed, should be delayed 24 hours. A permanent bond is established in 48 hours.

Application Notes for NS97 Primer

Coverage: 300-400 square feet per gallon depending upon applicator type and porosity of substrate.

Clean-Up: Tools, equipment and spillage may be cleaned up with Mineral Spirits.

Spill or Leak Procedures: Contain spill if possible. Wipe up or absorb with suitable material and shovel up. Prevent entry into sewers and waterways.

- Do not use over copper shower pan liners. Application equipment must be compatible with chlorinated solvents. Avoid contact with aluminum, copper, copper alloys or polystyrene foam. May damage painted surfaces, vinyl and plastics. Test a small area for damage before use.
- Make sure the area is well-ventilated. Prevent vapor buildup by providing fresh air to maintain levels below exposure limits. Open windows and doors or use other means to ensure continuous movement of fresh air and cross ventilation during application and drying. Vapor is heavier than air and will collect in low areas. Do not use in basements or other poorly ventilated areas. Wear a NIOSH approved self-contained breathing apparatus or other approved respiratory protection device if use conditions generate vapors at a level in excess of recommended exposure limits.
- Avoid skin contact. Wear gloves. Wear eye protection and side shields. Contact with flame or hot surfaces may produce toxic gases. Do not smoke.

IMPORTANT: See NAC TAC and NS97 Primer labels and MSDS for additional instructions on use, storage and disposal.

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