# ECB® 75

Anti-Fracture/Crack Isolation Membrane

## INSTALLATION SHEET

## SUITABLE SUBSTRATES

ECB®75 may be installed over a variety of interior, residential substrates: **Concrete**: Poured, pre-stressed and pre-cast concrete, concrete backerboard, mud beds, gypsum, lightweight concrete, leveling and patching compounds.

- *Some concrete boards are not suitable for the application of ECB 75 Membrane; check with manufacturer.*

**Wood**: Plywood, APA-rated sheathing, Sturd-I-Floor, hardwood, tongue and groove and OSB with standard face. (Gap between sheeting as required.)

**Other Substrates**: Existing and structurally sound installations of ceramic or porcelain tile, stone, terrazzo, VCT/VAT, metal, radiant-heated, painted and sealed floors and floors damaged by shrinkage and structural movement. A bond test is recommended.

## SURFACE PREPARATION

- Surfaces must be level, structurally sound and meet L/360 for ceramic and porcelain tile or L/720 for stone tile on live or dead loads. Maximum variation of 1/4" in 10' from the required plane. ***Refer to current TCNA Handbook for additional guidelines.***
- **DO NOT** install membrane **under** mortar beds or leveling and patching compounds.
- **DO** install membrane **over** cured mortar beds, leveling and patching compounds.
- Surfaces must be clean, dry and free of holes, projections, moisture or bond breakers such as waxes, petroleum based sealers, dirt, grease or oil.
- Grind bumps and level slab depressions with quality latex underlayment in accordance with manufacturer's instructions. Scarify smooth surfaces.
- Ensure joist spacing consists of no more than 16" on center and a double sub-floor consists of at least 5/8" per sheet.
- Perform Black Mat MVT (Moisture Vapor Transmission) test to determine if moisture is present.
  - If no MVT is present, proceed to the installation process.
  - If MVT is present, conduct a Relative Humidity Test or F-1869-98 test for emissions. If MVT is in excess of 3#/1000SF/24HRS or has an R.H. greater than 85%, call NAC for instructions.
- For absorptive substrates, up to three coats of Moisture Lock 101® may be applied according to manufacturer's instructions. ***(see Moisture Lock 101® PDS for complete info)***
- If a parge coat is applied, it must be allowed to cure for 24 hours prior to applying primer.
- A successful overnight bond test is required to determine if the membrane system will adhere to the substrate.
- Not recommended for vertical or overhead surfaces.

**NAC Primer Reference Chart**

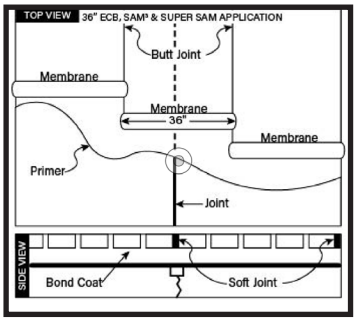
| NAC | Interior Application | | | Exterior Application | | |
|---|---|---|---|---|---|---|
| | Below Grade | On Grade | Above Grade | Below Grade | On Grade | Above Grade |
| NAC TAC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NAC TAC II | | ✓ | ✓ | | | |
| NS97 | | | | ✓ | ✓ | ✓ |

## INSTALLATION

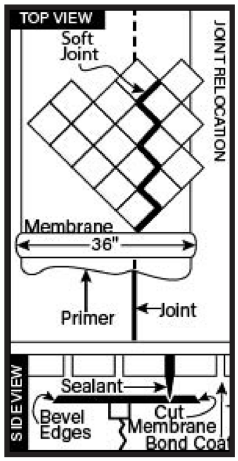
1. Measure and pre-cut membrane 4"-6" longer than required size. Re-roll membrane to half the room's depth.
2. Apply primer. (See primer reference chart for appropriate primer for application.)
   - NAC TAC or NAC TAC II should be applied with a short nap roller, flat trowel, brush applicator or sprayer. Substrate temperature should be a minium of 65°F.
     a. Shake, mix or stir primer thoroughly.
     b. Prime only an area that will covered by membrane within 1-4 hours. Apply a thin film of uniform thickness to substrate in single strokes. Do not re-roll primer.
     c. 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 minutes, depending upon temperature, humidity, internal moisture level/porosity of substrate and application thickness. Air pockets may form if membrane is installed over wet primer.
     ***(See NAC TAC or NAC TAC II label for additional information.)***
3. Slit release paper and allow membrane to roll out, adhesive-side down, across primed floor.
4. Press Membrane into place with flat side of trowel applying 50 lbs. of pressure/sq. inch or a 75-100# roller.

## FULL FLOOR COVERAGE

Butt joint 36" ECB 75 Membrane or overlap and single cut through to remove excess. For end seams, continue with next roll and butt joint ends. Membrane is non-directional.




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.




## STRIP APPLICATIONS

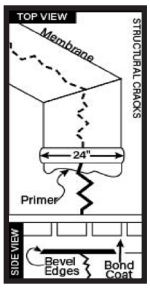
### Joint Relocation

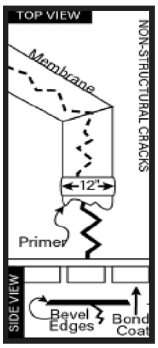
36" ECB 75 Membrane may be placed over control/saw-cut joints. Offset ECB 75 Membrane 2' to one side of joint. On 1' side of ECB 75 Membrane, cut through membrane at tile joint closest to control/saw-cut joint. This will assure lateral movement transfer to membrane. Apply appropriate caulk to new "soft joint". Bevel ECB 75 Membrane edges with thin-set or

mortar for a smooth transition to substrate.

### Structural Cracks

Center 36" ECB 75 membrane over cracks that completely penetrate slab. If crack turns, cut and butt joint ECB 75 membrane to accommodate direction. Bevel ECB 75 membrane edges with thin-set or mortar for a smooth transition to substrate.

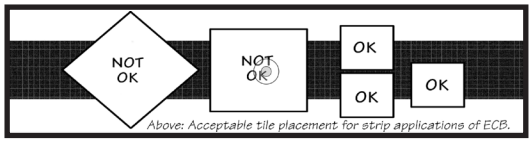



### Non-StructuralCracks

Center ECB 75 36" membrane over non-structural cracks such as hairline shrinkage cracks. If crack turns, cut and butt joint ECB 75 Membrane to accommodate direction. Bevel ECB 75 Membrane edges with thin-set or mortar for a smooth transition to substrate.

When using strip applications of ECB 75 membrane, be sure to follow the acceptable placement of tile according to the graphic below:



Above: Acceptable tile placement for strip applications of ECB.

## WET AREA APPLICATIONS

Substrate must be properly sloped to prevent standing water. All joints and termination points of the membrane must be sealed with 1/4" bead of NAC approved urethane sealant or SubSeal Liquid waterproofing membrane. Smooth out sealant with flat side of trowel and let cure. Contact NAC Products for additional information. **DO NOT USE FOR EXTERIOR APPLICATIONS.** Use Strataflex membrane for exterior applications.

## INTERIOR FLOORS USING RADIANT HEAT

Use ECB 75 membrane system, for full floor coverage, OVER in-floor, hydronic heating systems placed in poured gypsum/gypcrete or other lightweight products. Perform bond test to ensure primer and membrane will bond to new surface. If bond test fails, apply Moisture Lock 101 to seal pores and harden the surface. Apply NAC Primer as required and install ECB 75 membrane as directed.

## TILE WARMING SYSTEMS

Use ECB 75 membrane, full floor coverage, over substrates where low-voltage tile warming systems are to be installed. Follow ECB 75 Product Data and Install guidelines. Secure tile warming system to membrane as directed by warming system manufacturer. DO NOT puncture or staple the floor warming system to the membrane. Use appropriate Tile Setting Materials as noted below.

## TILE SETTING MATERIALS

A thin-bed, latex-modified mortar meeting a minimum material specification of ANSI A118.4 is required when installing porcelain, ceramic or decorative stone tile or related products. 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". Contact product manufacturer for trowel size when using organic adhesives and epoxy mortars suitable for ceramic tile applications.

## WOOD & VCT INSTALLATIONS

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 hydrostatic head pressure or excessive moisture vapor transmission. Use NAC TAC for MVT protection up to 10#/1000SF/24HRS or NAC TAC II for protection up to 7#/1000SF/24HRS.
- 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 or 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.
- For use in residential applications,
- 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.

## APPLICATION NOTES FOR NAC TAC/NAC TAC PRIMER

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

Clean-Up: Remove wet NAC TAC or NAC TAC II with a damp cloth and plain water. Use mineral spirits for dried primer.

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

***See Primer labels and SDS for additional instructions on use, storage and disposal. Visit www.NACproducts.com or contact NAC Products at 800-633-4622 with any questions and for additional information.***

**National Applied Construction Products, Inc.**
www.nacproducts.com
800.633.4622 ▪ fax: 330.644.3117

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