



Premium Building Products
That Protect

Crack Free 90[®] Anti Fracture Membrane

PRODUCT DATA SHEET



1. PRODUCT NAME

Crack Free 90 Anti Fracture
membrane

2. MANUFACTURER

Protecto Wrap Co.
1955 South Cherokee St.
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3. PRODUCT DESCRIPTION

Crack Free 90 Anti Fracture Membrane is an economic contractor grade peel and stick sheet membrane specifically designed for use in interior applications under ceramic tile, porcelain and natural stone as a stress relieving material used in conjunction with thin set methods.

Accessory Materials

No. 6000 Primer - This high tack water based primer is used on all indoor applications. Available as a concentrate, this primer can be mixed at the jobsite with clean water or used in its full concentrate form, depending on the condition and porosity of the substrate.

Packaging

Crack Free 90 Anti Fracture Membrane
30" wide x 50' rolls

Coverage

Crack Free 90 Anti Fracture Membrane
Approximate 150 ft² (13.8 m²) per roll

Shelf Life

Crack Free 90 Anti Fracture membrane maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

Uses

- For interior applications under thin set ceramic, porcelain and dimensional stone tile installations

Advantages

- Provides an economical solution for preventing in plane cracks from surfacing in tile floor finishes
- Has the flexibility and strength to help withstand structural movement and concrete shrinkage cracks without transferring stress load to finished tile

- Provides sound reduction on subfloors with gypsum board ceiling assemblies
- Can be installed with radiant heat floor systems

Suitable Substrates (Interior only)

- Concrete
- Mortar beds
- Plywood
- Cement backer board
- Cement terrazzo
- Ceramic tile and stone

Limitations

- Do not apply over marine-grade plywood, wood plank flooring, particle board, Luan, Masonite, laminate, metal or fiberglass surfaces
- Not for use under agglomerate tile, LVT, cement and epoxy floor topping systems
- Not for use as a waterproofing membrane
- Not for use on exterior applications
- Not for use on concrete floors where hydrostatic pressure exists or where moisture vapor transmission exceeds 4 lb.
- Do not install over expansion, control or structural movement joints
- Do not install over cracks larger than 1/4"
- Do not use under mortar beds thicker than 3/8 inch, installations requiring more than 3/8" of thin-set mortar need to be raised with a self-leveling compound or a pre-mortar bed and allowed to cure prior to installation
- Do not use solvent based sealants or sealers where contact with membrane may occur
- Do not install over wet primer

- Existing cracks larger than 3/16" should be prepared with proper backing material prior to installation of membrane

4. TECHNICAL DATA

Property	Test method	Result
Color		White top/black adhesive
Thickness		90 mil
Application Temperature		45°F to 120°F (7°C to 49°C)
Operating Temperature		-20°F to 180°F (-29°C to 82°C)
8" Concrete with gypsum board ceiling assembly	ASTM E90	STC 63
8" Concrete with gypsum board ceiling assembly	ASTM E492	IIC 62

5. INSTALLATION

Surface Preparation

Subfloor must conform to ANSI A108.01 standards. Assemblies over which Crack Free 90 Anti Fracture Membrane will be installed 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. Flooring and membrane must acclimate to jobsite conditions before installation. Concrete subfloors must be dry, clean and free of dirt, grease, wax, paint, oil or anything that would adversely affect adhesion

of the Crack Free 90 Anti Fracture Membrane. Check subfloor for excessive moisture using ASTM E1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete subfloor using Anhydrous Calcium Chloride. Readings must be less than 4 lb. (1.8 kg). Leveling cements must be completely dry before installing membrane.

Priming

Always apply the Protecto Wrap No. 6000 Primer to the subfloor and allow to dry (approximately 30 minutes) before installing the Crack Free 90 to ensure a good bond.

For localized crack isolation, treat in accordance with TCNA F125 (Partial Coverage). Measure and cut off the desired length so that membrane covers 1 1/2 times the width of any and all tiles that cross a crack so that all tiles that bridge a crack sit fully on the membrane.

For full floor coverage, treat in accordance with TCNA F125 (Full Coverage)

Layout

Unroll Crack Free 90 Anti Fracture Membrane with the release liner side down. Cut the length approximately 12" longer than the distance to be covered. Trim membrane to fit tightly against walls and cutouts (within ¼"). Fold back half of the length of the roll back over the other half of the material. Score through the release liner only and take care not to cut completely through membrane.

Application

Pull release liner away from membrane where scored. As the release liner is pulled away, hand-smooth the membrane to contact the primed subfloor. Keep the release liner material close to the floor while pulling away; this will allow for a more controlled application of the membrane. Align membranes in a butt joint fashion making sure not to overlap seams.

Note - There will be an immediate and aggressive bond of the membrane to the primed subfloor. Realignment of the membrane can be difficult once adherence to the subfloor begins.

After Crack Free 90 is installed, ceramic or stone tiles can be installed 3/8" or less bed of mortar that meets the ANSI 118.4 standards.

Continue to follow the TCNA and ANSI installation requirements through the remainder of the installation.

6. AVAILABILITY AND COST

Flex Deck 90 Anti Fracture Membrane is manufactured in Denver, CO; it is competitively priced and available worldwide through a network of Protecto Wrap distributors. For detailed product information or to find a local representative or distributor, contact Protecto Wrap Company corporate office for information.

7. WARRANTY

Call for limitations and coverage.

8. MAINTENANCE

None required. If installed in accordance with manufacturer's recommendations, Crack Free 90 Anti Fracture Membrane should last the life of the structure.

9. TECHNICAL SERVICES

Complete technical assistance and information are available from Protecto Wrap field representatives and distributors or by contacting the manufacturer.

10. FILING SYSTEM

Additional product information is available on our website at protectowrap.com or contacting our corporate office at 1-800-759-9727.