



- ▶ Made of **EXTREME-DENSITY SYNTHETIC RUBBER**
- ▶ For use under **Ceramic** and **Porcelain Tile**
- ▶ Also for use under **Luxury Vinyl Tile/Plank (including w/attached back), Laminate, Engineered Wood, and Solid Hardwood**
- ▶ Guaranteed to retain its thickness and never crush

Leggett & Platt® Flooring Products

# ACI-125®

Stained  
or sealed  
concrete?  
**No problem.**

## Acoustical Crack Isolation Membrane

- Extreme density for unmatched support under today's popular ceramic and porcelain tile
- Pliable rubber composition allows movement to reduce stress transmission from the concrete slab to the tile installation to help prevent tiles from cracking
- Protects against horizontal, in-plane slab substrate cracks up to 1/8"
- Can be used as a slip sheet (floated) over concrete with tile installed over top
  - Eliminates expensive demolition while minimizing dust at the end of the product life cycle
  - Perfect solution for stained and sealed concrete
- Helps reduce sound transference between floors and retains acoustic properties over time
- Can be used above or below grade and installs quickly
- For use over in-floor heating and is recommended by the Radiant Professionals Alliance
- Fresh Dimension® antimicrobial helps to inhibit the growth of mold, mildew, and odor-causing bacteria
- Passes California Section 01350 for low VOC emissions

# ACI-125<sup>®</sup> Acoustical Crack Isolation Membrane

## SPECIFICATIONS

Composition:	Made of Extreme-Density Synthetic Rubber	
Density:	66 lbs/ft <sup>3</sup> or 40 oz/yd <sup>2</sup>	
Thickness:	0.051" (1.3 mm)	
R-Value:	0.02	
Color:	Tan	
Water Vapor Emission:	0.511 lbs/1000 ft <sup>2</sup> /24 hrs	
Permeance*:	2.329	
Product Codes:	BM0087	BM0088
Dimensions:	36" x 33.33'	54" x 44.44'
Ft <sup>2</sup> /Roll:	100	200
Yd <sup>2</sup> /Roll:	11.11	22.22
Roll Weight:	28 lbs	56 lbs

\*Conduct moisture tests in accordance with flooring manufacturer installation guidelines and requirements

## ACOUSTICAL PROPERTIES

Impact Insulation Class (IIC) (ASTM E989)**	73
HIIC	88
ΔIIC (ASTM E2179)	22
Sound Transmission Class (STC) (ASTM E413)**	64

\*\*When tested with LVT with floor-ceiling assembly

## PERFORMANCE PROPERTIES

Standard	Test	Subfloor	Installation***	Tile	Cycles	Description of Requirement	Result
ANSI A118.12	System Crack Resistance	Concrete	-	-	-	>0.125 (1/8") for High Performance	Pass
1 ASTM C627-18	Robinson Test	Concrete	Thinset	Ceramic	1-12	Heavy Commercial, Light Commercial, Residential	Pass
2 ASTM C627-18	Robinson Test		Multipurpose Adhesive	Ceramic	1-6	Light Commercial, Residential	Pass
3 ASTM C627-18	Robinson Test		Spray-Lock Adhesive	Ceramic	1-6	Light Commercial, Residential	Pass
4 ASTM C627-18	Robinson Test		Pressure-sensitive Adhesive	Ceramic	1-3	Residential	Pass
5 ASTM C627-18	Robinson Test	15/32" Plywood Over 23/32" Tongue and Groove Plywood Over 16" On Center joist	Thinset	Porcelain	1-6	Light Commercial, Residential	Pass
6 ASTM C627-18	Robinson Test	Concrete	Multipurpose Adhesive	Porcelain	1-12	Heavy Commercial, Light Commercial, Residential	Pass
7 ASTM C627-18	Robinson Test		Slip Sheet (floated)	Ceramic	1-3	Residential	Pass
8 ASTM C627-18	Robinson Test (X3)****	Concrete	Slip Sheet (floated)	Porcelain	1-6	Light Commercial, Residential	Pass

\*\*\*Installation describes the adhesive type used to attach ACI to the subfloor.

\*\*\*\*Three different porcelain tiles passed Light Commercial, Residential when tested on ACI-125 as a slip sheet installation.

Robinson Test (ASTM C627-18)  
System Crack Resistance Test (ANSI A118.12)

## PROTECTION

Indoor Air Quality:	Passes California Section 01350 for low VOC emissions
Antimicrobial:	Fresh Dimension®
Warranty:	Limited

## LIFE-OF-THE-FLOOR UNDER WHICH IT IS INSTALLED WARRANTY

Please visit [LPFlooringProducts.com/ACI-125](http://LPFlooringProducts.com/ACI-125) for detailed warranty information.



Leggett & Platt® Flooring Products

# ACI-125<sup>®</sup> Acoustical Crack Isolation Membrane

**Engineered for use under a wide variety of flooring products, including ceramic and porcelain tile.**

## PRODUCT NAME

ACI-125<sup>®</sup> Acoustical Crack Isolation Membrane

## MANUFACTURER

Leggett & Platt Flooring Products  
720 Whitley Rd  
Keller, TX 76248  
800-475-0010 telephone  
817-626-6699 fax

## PRODUCT DESCRIPTION

ACI-125 is an extremely dense synthetic rubber underlayment that is thermo-reinforced and features a non-woven point-bonded polyester layer on the top and bottom. This is a non-porous product.

### *Uses*

ACI-125 is engineered for use under approved thinset mortar for ceramic and porcelain tile installations to help reduce sound between floors and, in testing, was found to help mitigate the transmission of horizontal cracks. When used under tile, it is intended as a complete room underlayment and therefore **not intended as a limited area patch**. ACI-125 can be used under today's popular ceramic and porcelain flooring tile styles, which are available in many dimensions for both square and plank designs. Intended for indoor use only. Can be used as a slip sheet (floated) on concrete subfloors that meet TCNA Guidelines.

### *Advantages*

Fast and easy installation (no wait time like poured products).  
Rated for High Performance in crack resistance (ANSI A118.12).  
Can be secured to substrate with different methods.  
Remains dimensionally stable for long-term performance and reliability.  
Offers a great solution over stained and sealed concrete as it can be installed as a slip sheet providing simple removal at the end of its' life cycle with minimal dust.

### *Suitable Substrates*

Concrete slabs  
Concrete mortar beds  
Self-leveling compounds  
Lightweight gypsum concrete  
Cement backer-board  
Suitable wood subfloor

### *Packaging*

One roll of BM0087 is 0.051" (1.3 mm) thick by 36" wide by 33.33' long totaling 100 square feet while one roll of BM0088 is 0.051" (1.3 mm) thick by 54" wide by 44.44' long totaling 200 square feet.

Visit [LPFlooringProducts.com/ACI-125](http://LPFlooringProducts.com/ACI-125) for more information.

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### *Shelf Life*

Product in original packaging shall remain first quality for up to one year if stored within 32 and 110 degrees Fahrenheit.

### *Product Limitations*

- Reference the TCNA Handbook for your specific installation requirements and limitations.
- **Consult your selected manufacturer of thinset and adhesive to ensure suitability with ACI-125 prior to beginning the installation. Selecting the right thinset for use in between two non-porous layers is important to ensure a successful tile installation.** Mortars should be at a minimum ANSI 118.11 specification level of performance.
- Do not install over designed substrate expansion joints or where vertical movement is present.
- **Always perform a moisture test on the slab prior to installation.** When hydrostatic pressure is detected in the slab, proper moisture mitigation steps must be performed prior to installing ACI.
- Do not install over any substrate that does not provide a smooth, solid foundation. **Always reference the TCNA Handbook for your specific installation requirements and limitations.**
- It is the responsibility of the installer to verify the deflection of the floor structure to ensure adequate support exists for live and dead loads prior to installing a crack isolation membrane.

### *Availability*

Contact your Leggett & Platt Flooring Products Representative or call us at 800-475-0010.

### *Warranty*

To request a copy, please contact Leggett & Platt Flooring Products.

### *Maintenance*

ACI-125 is maintenance-free and will perform as designed when properly installed.

### *Technical Services*

Additional information can be found by visiting us at [LPFlooringProducts.com/ACI-125](http://LPFlooringProducts.com/ACI-125) or by calling us at 800-475-0010.

## Appendix: Installation procedures used for testing ACI-125 to the Robinson Test. Consult the TCNA manual for your particular floor configuration for more information related to structural requirements.

### Concrete Subfloor

1. ACI-125 installed on a slab using premium modified thinset applied with a 1/4" x 1/4" square notched trowel. The thinset mix ratio was 20.9:100 by weight. 8" x 8" ceramic tiles (back buttered with a skim coat) were installed using the same trowel and thinset. Sanded grout was applied using the same mix ratio by weight with a joint gap of 1/4". Total grouted installation was cured for 28 days.
2. ACI-125 installed on a slab using premium multipurpose adhesive applied with a 3/32" x 3/32" x 3/32" flat V-notched trowel. 8" x 8" ceramic tiles (back buttered with a skim coat) were installed using premium modified thinset and a 1/4" x 1/4" square notched trowel. Thinset mix ratio was 20.9:100 by weight. Sanded grout was applied using the same mix ratio by weight with a joint gap of 1/4". Total grouted installation was cured for 28 days.
3. ACI-125 installed on a slab using premium aerosol adhesive. 8" x 8" ceramic tiles (back buttered with a skim coat) were installed using premium modified thinset and a 1/4" x 1/4" square notched trowel. Thinset mix ratio was 20.9:100 by weight. Sanded grout was applied using the same mix ratio by weight with a joint gap of 1/4". Total grouted installation was cured for 35 days.
4. ACI-125 installed on a slab using pressure-sensitive adhesive applied with a 1/16" x 1/32" x 5/64" U-notched trowel. 8" x 8" ceramic tiles (back buttered with a skim coat) were installed using premium modified thinset and a 1/4" x 1/4" square notched trowel. Thinset ratio mix was 20.9:100 by weight. Sanded grout was applied using the same mix ratio by weight with a joint gap of 1/4". Total grouted installation was cured for 37 days.

### Wooden Subfloor

5. ACI-125 installed on 15/32" plywood underlayment over 23/32" tongue & groove exterior plywood grade over 16" on center joist using premium modified mortar applied with a 1/8" x 1/8" square notched trowel. The thinset mix ratio was 20.9:100 by weight. 18" x 18" porcelain tiles (back buttered with a skim coat) were installed using a 1/2" x 1/2" square notched trowel and the same thinset. Sanded grout was applied using the same mix ratio by weight with a joint gap of 3/16". Total grouted installation was cured for 31 days.
6. ACI-125 installed on 15/32" plywood underlayment over 23/32" tongue & groove exterior plywood grade over 16" on center joist using premium multipurpose adhesive applied with a 1/16" x 1/16" square notched trowel. 18" x 18" porcelain tiles (back buttered with a skim coat) were installed using premium modified thinset and a 1/2" x 1/2" square notched trowel. Thinset mix ratio was 20.9:100 by weight. Sanded grout was applied using the same mix ratio by weight with a joint gap of 3/16". Total grouted installation was cured for 30 days.

### Concrete Subfloor

7. ACI-125 loose laid over concrete as a slip sheet on a slab (no adhesive). 18" x 18" ceramic tiles (back buttered with a skim coat) were installed using a 1/2" x 1/2" square-notched trowel. The premium modified thinset ratio was 33.9:100 by weight. Sanded grout was applied using 19.8:100 mix ratio by weight with a joint gap of 3/16". Total grouted installation was cured for 32 days. A barrier was added on four sides to prevent rotational movement of the test specimen.
8. ACI-125 loose laid over concrete as a slip sheet on a slab (no adhesive). 24" x 24" rectified porcelain tiles (back buttered with a skim coat) were installed using a 1/2" x 1/2" square-notched trowel. The premium modified thinset ratio was 33.9:100 by weight. Sanded grout was applied using 19.8:100 mix ratio by weight with a joint gap of 1/8". Total grouted installation was cured for 28 days. A barrier was added on four sides to prevent rotational movement of the test specimen.

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# ACI-125<sup>®</sup> Acoustical Crack Isolation Membrane

## Recommended Installation Instructions – Multiple Methods

### Surface Preparation:

Concrete must be installed in compliance with industry standards as well as dry (28 days minimum) prior to installing ACI-125. The surface must be smooth with no voids or other irregularities. Ensure there are no sealers, paint, oil/grease or any other contamination on the slab that would possibly hinder a successful bond if it will not be installed as a slip sheet. Use a modified Portland cement underlayment to provide a smooth finish if needed. *Concrete should be tested for both moisture vapor transmission and hydrostatic pressure using a calcium chloride test.*

For wood subfloors, it is the responsibility of the installer to verify the deflection of the floor structure and that subfloor does not exceed L/360 of the span under combined live or dead loads. Refer to wooden subfloor industry guidelines for more specific information.

**For both wood and concrete subfloors, reference the TCNA Handbook for specific installation requirements and limitations.**

### Installing ACI-125 over thinset:

- Subfloor must be clean, dry, flat, and structurally sound. Always follow the thinset manufacturer's guidelines.
- Apply modified thinset using the thinset manufacturer's recommended trowel to ensure evenness of the application. If none is recommended, a 1/8" x 1/8" square notched trowel may be used.
- Roll out the ACI-125. Seams should be butted tight to ensure no gaping. Packing-style tape can be used to hold seams tight as needed.
- Ensure proper adhesion of the underlayment to the substrate – no air pockets. Roll with the ACI-125 roll core at a 45-degree angle to ensure proper adhesion.
- Refer to the most current edition of the TCNA (Tile Council of North America) handbook for ceramic tile installation for instructions for applying a thinset mortar bed.

### Installing ACI-125 using multipurpose adhesive:

- Subfloor must be clean, dry, flat, and structurally sound. Always follow the adhesive manufacturer's guidelines.
- Apply adhesive using the multipurpose adhesive manufacturer's recommended trowel to ensure evenness of the application. If none is recommended, a 3/32" x 3/32" x 3/32" flat V-notched trowel may be used.

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- Roll out the ACI-125, leaving a minimum of 1/8" expansion along the walls. Seams should be butted tight to ensure no gaping. Packing-style tape can be used to hold seams tight as needed.
- Ensure proper adhesion of the underlayment to the substrate – no air pockets. Roll with a maximum 50 lb. roller at a 45-degree angle to ensure proper adhesion. The ACI-125 roll core can also serve the same function.

#### **Installing ACI-125 using Spray-Lock adhesive:**

- Subfloor must be clean, dry, flat, and structurally sound.
- Refer to [www.spraylock.com](http://www.spraylock.com) for installation instructions using Spray-Lock 6500.
- Roll out the ACI-125, leaving a minimum of 1/8" expansion along the walls. Seams should be butted tight to ensure no gaping. Packing-style tape can be used to hold seams tight as needed.
- Ensure proper adhesion of the underlayment to the substrate – no air pockets. Roll with a maximum 50 lb. roller at a 45-degree angle to ensure proper adhesion. The ACI-125 roll core can also serve the same function.

#### **Installing ACI-125 using pressure-sensitive adhesive:**

- Subfloor must be clean, dry, flat, and structurally sound. Always follow the adhesive manufacturer's guidelines.
- Apply adhesive using the pressure-sensitive adhesive manufacturer's recommended trowel to ensure evenness of the application. If none is recommended, a 1/16" x 1/32" x 5/64" U-notched trowel may be used.
- After the adhesive sets up, roll out the ACI-125 and leave a minimum of 1/8" expansion along the walls. Seams should be butted tight to ensure no gaping. Packing-style tape can be used to hold seams tight as needed.
- Ensure proper adhesion of the underlayment to the substrate – no air pockets. Roll with a maximum 50 lb. roller at a 45-degree angle to ensure proper adhesion. The ACI-125 roll core can also serve the same function.

#### **Installating ACI-125 as a slip sheet (floated):**

- Concrete subfloor must be clean, dry, flat, and structurally sound.
- Roll out ACI-125. Seams should be butted tight to ensure no gaping. Packing style tape can be used to hold seams tight.

#### **Important Note:**

**When installing under ceramic or porcelain over a wooden subfloor, it is imperative to confirm adequate support per TCNA requirements to prevent stress on tiled flooring due to subfloor flex.**