

Leggett & Platt® Flooring Products

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

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**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  
307 W. 7th St., Suite 1800  
Ft. Worth, TX 76102  
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.

### *Uses*

ACI-125 is engineered for use under approved thin-set mortar for ceramic and porcelain tile installations to help reduce sound between floors and, in testing, was found to help mitigate the transmission of 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.

### *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

### *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/ACI-125.com](http://LPFlooringProducts/ACI-125.com) 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 thin-set mortar and adhesive to ensure suitability with ACI-125 prior to beginning the installation. Selecting the right thin-set 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 any tile whether they do or do not use an acoustical membrane.

*Technical Data*

Product Specifications

Composition:	Made with 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	
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

Acoustical Properties

Impact Insulation Class (IIC) (ASTM E989)*	63
ΔIIC (ASTM E2179)	17
Sound Transmission Class (STC) (ASTM E413)*	64

\*When tested with floor-ceiling assembly

**Applicable Standards and Physical Properties Table**

(Installation procedures for Robinson tests are detailed in the Appendix on page 3)

Standard	Test	Subfloor	Installation**	Tile	Cycles	Description of Requirement	Result
ANSI A118.12	System crack resistance	-	-	-	-	>0.125 (1/8") for high performance	Pass
1 ASTM C627-18	Robinson test	Concrete	Thin-set	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 underlayment over 23/32" tongue & groove plywood over 16" on center joist	Thin-set	Porcelain	1-6	Light commercial, residential	Pass
6 ASTM C627-18	Robinson test		Multipurpose adhesive	Porcelain	1-12	Heavy commercial, Light commercial, residential	Pass

\*\*Installation is simply notating the material used to attach ACI to the **concrete subfloor**.

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### *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 mortar applied with a 1/4" x 1/4" square notched trowel. The thin-set 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 mortar. 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 mortar and a 1/4" x 1/4" square notched trowel. Thin-set 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 mortar and a 1/4" x 1/4" square notched trowel. Thin-set 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 mortar and a 1/4" x 1/4" square notched trowel. Thin-set 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 thin-set 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 mortar. 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 mortar and a 1/2" x 1/2" square notched trowel. Thin-set 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.

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