

Leggett & Platt® Flooring Products

ACI-125™ Acoustical Crack Isolation Membrane

Engineered for use under Ceramic & Porcelain Tile

PRODUCT NAME

ACI-125™ Acoustical Crack Isolation Membrane

MANUFACTURER

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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 mitigate the transmission of cracks while helping reduce sound between floors. Designed for use under the entire ceramic floor; **not intended as a limited area patch**. ACI-125 can be used under today's popular ceramic and porcelain flooring tile, which are available in many dimensions for both square and plank design. 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.

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.**

Technical Data

Product Specifications

Composition:	Made with Extreme-Density Synthetic Rubber	
Density:	66 lbs/ft ³ or 40 oz/yd ²	
Thickness:	0.051" (1.3 mm)	
R-Value	0.02	
Product Codes:	BM0087	BM0088
Dimensions:	36" x 33.33'	54" x 44.44'
Ft ² /Roll:	100	200
Yd ² /Roll:	11.11	22.22
Roll Weight:	28 lbs	56 lbs

Applicable Standards and Physical Properties Table

(Installation procedures for Robinson tests are detailed in the Appendix on page 4)

	Standard	Test	Installation*		Description of Requirement	Result
1	ASTM C627	Robinson Test	Thin-set	Cycles 1-12	Heavy Commercial/Light Com/Residential	Pass
2	ASTM C627	Robinson Test	Multipurpose Adhesive	Cycles 1-6	Residential/Light Commercial	Pass
3	ASTM C627	Robinson Test	Spray-Lock Adhesive	Cycles 1-6	Residential/Light Commercial	Pass
4	ASTM C627	Robinson Test	Pressure-sensitive Adhesive	Cycles 1-3	Residential	Pass
	ANSI A118.12	System Crack Resistance	-	-	>0.125 (1/8") for High Performance	Pass
	ASTM E989 IIC	Impact Insulation Class	-	-	-	63
	ASTM E2179 ΔIIC	Delta Impact Insulation Class	-	-	-	17
	ASTM E413 STC	Sound Transmission Class	-	-	-	64

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

ACI-125 Recommended Instructions - Multiple Methods

All substrates must be structurally sound and clean. Concrete slabs must be free of any surface residue that could affect the bond with thin-set or adhesive. **For both wood and concrete subfloors, reference the TCNA Handbook for your particular installation requirements and limitations.**

Installing ACI-125 over thin-set:

- Subfloor must be clean, dry, flat, and structurally sound. **Always follow the thin-set manufacturer's guidelines.**
- Apply thin-set using the thin-set 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 thin-set 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.
- 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 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 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.

Availability

Contact your Leggett & Platt Flooring Products Representative or contact 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 or by contacting us at **800-475-0010**.

Appendix: Installation procedures used for Robinson tests 1-4

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.