

AttenuWave™ 1/4"

PRODUCT DESCRIPTION

The sound control workhorse, BoldStep AttenuWave 1/4" is an entangled mesh sound mat bonded to a water-resistant non-woven fabric that improves IIC and STC ratings over interior wood frame and concrete floors when combined with 1" BoldStep underlayment. Use it to create an air gap between subfloor and underlayment for a system that reduces both airborne and impact sound transmission. Maintain occupant satisfaction in multifamily, light commercial, and low-rise hotels/motels with this effective sound control solution.

INTENDED USE

- **Construction Type**
Multifamily, Light Commercial, Low-Rise Hotels/Motels
- **Subfloor**
Interior wood, Concrete, Steel

FEATURES AND BENEFITS

- Entangled mesh sound mat attached to a water-resistant, non-woven fabric
- Combine with 1" BoldStep ProTerra underlayment to control sound in multifamily buildings, light commercial spaces, and low-rise hotels/motels
- Effectively insulates against both airborne and impact sound
- Provides an isolating air gap between the subfloor and BoldStep underlayment

PRODUCT INFORMATION

Thickness	1/4" (6 mm)
Color	Green with water-resistant grey fabric
Underlayment Depth	Minimum 1" (25 mm)
Coverage	600 ft² (55.7 m²)/Roll
Weight	64 lbs (29 kg)/Roll
Packaging	Roll 60 in. x 120 ft (152.4 cm x 36.6 m)
Installation Environment	Above 50 °F (10 °C) for at least 24 hours
Storage Environment	Keep in a dry, cool place



ENVIRONMENTAL IMPACT

Sample USGBC LEED® Credit Areas*		
Project	Credit	Category
Environmental Quality	EQ2	Low Emitting Materials
	EQ4	Indoor Air Quality Assessment
	EQ9	Acoustic Performance

* Credits may vary depending on project type and BoldStep products used.

For additional information on product's environmental credits and certifications visit BoldStep.co.

UL FIRE RESISTANCE-RATED DESIGNS

UL Design						
L528	L579	L547	L501	L540	M518	
L546	M508	L570	L502	L541	M519	
L563	L518	L589	L512	L569	G561	
L576	L530	M502	L520	L593	G560	

ULC Design					
L003	L511	M500	M503	M520	I530
L201	L512	M501	M514	M521	I533

For more information on current UL and ULC Designs, contact BoldStep.

GENERAL INSTRUCTIONS

- Maintain the interior building temperature and the floor temperature above 50°F (10°C) for at least 24 hours prior to installing the sound mat and until the underlayment topping has fully set.
- Ensure all plumbing and electrical penetrations are packed with insulation and properly sealed.

Wood Subfloor Preparation

- Verify that wood subfloors are structurally sound, clean, and free of dust or contaminants.
- Apply back-blocking to all non-tongue-and-groove OSB or plywood subfloors.

Concrete Subfloor Preparation

- Ensure concrete subfloors are structurally sound, fully cured, and free of moisture and efflorescence.
- Test all concrete subfloors for moisture before installing the AttenuWave 1/4" sound mat (refer to Limitation 3).
- The substrate surface must be clean and free of dust and contaminants.
- If cracks are present in the concrete prior to installation, consult a structural engineer for remediation recommendations.
- For radiant heating systems:
 - Follow the Radiant Panel Association (RPA) guidelines (radiantprofessionalsalliance.org).
 - Turn off radiant heating systems 24 hours before and 24 hours after applying ProTerra underlayment.

Steel Deck Preparation

Verify that steel decks are structurally sound and clean and free of dust and contaminants. Ensure steel decks meet the Steel Deck Institute requirements:

- Conform to an L/360 design deflection limitation.
- Utilize a minimum 22-gauge steel.

Installation Instructions

1. The AttenuWave 1/4" is to be loose laid over the entire concrete or wood subfloor.
2. Carefully smooth out the mat to avoid wrinkles.
3. Cut openings as needed for any protrusions to ensure proper coverage.

Note: Do not use adhesives, screws, nails, staples, or any fasteners to attach the mat. These can diminish soundproofing efficiency.

INSTALLATION CONTINUED

4. Use the built-in zip-strips to connect sections together seamlessly, or secure the connections with AttenuWave Perm Tape.
5. To eliminate flanking paths, apply AttenuWave Perimeter Isolation Strips around the entire perimeter of the room and any penetrations through the sound mat.
Note: These strips can be installed either before or after laying down the AttenuWave 1/4" sound mat as long as a seal is created using tape between the sound mat and perimeter strip. See AttenuWave Perimeter Isolation Strip Technical Data Sheet (TDS) at BoldStep.co for further instructions.
6. For transitions between areas with and without a sound mat:
 - A pour stop and isolation strip are recommended.
 - **For doorways less than 3' wide** - A smooth transition can also be created by continuing the sound mat 12" into the area not intended to receive sound mat.
 - **For large transition areas** - Using a pour stop and isolation strip is the only method for providing adequate protection against flanking. For relevant detail drawings, contact BoldStep at BoldStep.co.
 - Spray BoldStep primer onto the surface of the sound mat for proper adhesion of the next layer.
7. Cover the sound mat with ProTerra underlayment at a minimum depth of 1" (25mm). For reinforced or fiber-based underlayments, 3/4" (19mm) is acceptable. Use tools like a gauge rake to ensure even distribution and desired depth.
8. Refer to the ProTerra underlayment TDS for specific drying times and any floor covering considerations.
9. Once dried, finalize your flooring system with your preferred finish.
10. For all drawings and additional technical resources, contact BoldStep.

LIMITATIONS

Following the guidelines below supports optimal performance and durability of AttenuWave 1/4" Sound Mat. For general questions, inquiries on other applications or further assistance, contact BoldStep at 800-818-4864.

1. To ensure optimal sound performance, do not use fasteners such as screws, nails, staples, or any type of adhesive to attach AttenuWave 1/4" to wood subfloors.
2. AttenuWave 1/4" is not recommended for applications with prolonged contact with water or water vapor unless specifically ordered for exterior use. For more information on suitable applications, please contact BoldStep.
3. The general contractor is responsible for conducting moisture testing prior to installation of sound mat and underlayment. Testing methods should comply with flooring manufacturer specifications, typically ASTM F710. If the Moisture Vapor Emission Rate (MVER) exceeds 5 lbs (2.3 kg)/1,000 ft² (92.9 m²)/24 hours or the Relative Humidity (RH) exceeds 80%, treat the subfloor with a moisture-mitigating primer or epoxy. Follow more stringent requirements if specified by the flooring manufacturer and contact BoldStep for additional guidance.

LIMITATIONS CONTINUED

4. AttenuWave sound mats and ProTerra underlayments are non-structural and are not intended to reinforce subfloors that are structurally deficient. The structural floor must be capable of supporting design loads with deflection limitations of L/360. Certain floor coverings may require stricter deflection limits. It is the responsibility of a qualified structural professional, not BoldStep or the applicator, to ensure the subfloor meets these requirements.

STORAGE AND DISPOSAL

Product should be stored in original, sealed packaging in a cool, dry environment, protected from humidity and water. Maintain storage temperatures between 50–100°F (10–38°C). Dispose of contents and containers in compliance with all applicable regulations.

WARRANTY AND TECH SERVICES

For complete warranty information, visit: BoldStep.co. For technical performance verification or customer service, contact: BoldStep at 800-818-4864

UL ER41598

**Job Name:****Date:****Applicator:**

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