

# ProTerra™ RADIANT

## PRODUCT DESCRIPTION

The stabilizing force of in-floor heating systems, BoldStep ProTerra Radiant underlayment surrounds in-floor heating tubes and seals perimeter walls to create a thermal mass for uniform heat distribution without baseboard leaks. Use it to improve radiant floor heating performance and efficiency.

## INTENDED USE

- **Construction Type**  
Multifamily and light commercial
- **Project Type**  
Custom homes, multifamily, light commercial, commercial wood-frame and pre-cast, poured-in-place, pre-stressed concrete construction, renovations
- **Subfloor**  
Interior wood, concrete, steel

## FEATURES AND BENEFITS

- Purpose-made for radiant floor heating systems
- Eliminates gaps at perimeter walls to block baseboard drafts
- Suitable for all popular floor coverings
- Available in over 35 UL and ULC fire-resistance-rated designs

## PRODUCT INFORMATION

<b>Packaging</b>	80 lb bag
<b>Dry Time</b>	Usually 10-14 days * Dry times will vary based on relative humidity and temperature.
<b>Installation Environment</b>	50 °F (10 °C) for at least 24 hours prior to installation and until underlayment has set.
<b>Foot Traffic</b>	Typically within 2–4 hours
<b>Resume Trades</b>	24 hours
<b>Storage Environment</b>	50 – 100 °F (10 – 38 °C)
<b>Comprehensive Strength</b>	2,000–3,200 psi (13.8-20.7 MPa)
<b>Fire Performance ASTM E84</b>	Flame Spread – 0 Fuel Contribution – 0 Smoke Development – 0
<b>Dry Density</b>	110–120 lbs./ft <sup>3</sup> (1,762–1,922 kg/m <sup>3</sup> )
<b>Installation Depths</b>	3/4" (19 mm) above the top of the tubes or cables. For deeper pours, contact BoldStep.



### ENVIRONMENTAL IMPACT

Sample USGBC LEED® Credit Areas*		
Project	Credit	Category
<b>Environmental Quality</b>	EQ2	Low Emitting Materials
	EQ4	Indoor Air Quality Assessment
	EQ9	Acoustic Performance
<b>Material &amp; Resources</b>	MR3	Building Product Disclosure and Optimization – Sourcing Raw Materials

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

For additional information on product's environmental credits and certifications visit [BoldStep.co](https://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.

## INSTALLATION

At least 24 hours prior to installation, building interior and floor should be maintained above 50 °F (10 °C). Pack plumbing or electrical penetrations with insulation and seal prior to application. Minimize direct sunlight during the pour and over the next 72 hours. Maintain temperatures above 50 °F (10 °C) with no air movement until ProTerra Radiant has set. Once set, provide adequate air movement by opening windows to expedite drying.

### Wood Subfloor Preparation

Wood subfloors must be structurally sound, clean, and free of dust and contaminants. Wood subfloors must be primed with a BoldStep floor primer prior to ProTerra Radiant application.

### Concrete Subfloor Preparation

Adhere to the following guidelines to help ensure the successful application and longevity of ProTerra Radiant Underlayment:

- Subfloors must be structurally sound, fully cured, and free of moisture and efflorescence.
- Ensure the surface is clean and free of dust, dirt, and other contaminants.
- If cracks are present, consult a structural engineer to determine the appropriate remediation method.
- All concrete subfloors must be tested for moisture content before application. Refer to Limitation 4 for specific requirements.
- For moisture-free concrete subfloors and exposed edges, apply BoldStep Primer prior to pouring the underlayment to ensure proper adhesion and performance.

### Application

It is important to follow all safety protocol and adherence to manufacturer specifications, which is critical to achieving optimal performance including:

- ProTerra Radiant requires a minimum 3/4" (19 mm) thickness above the top of the tubes or cables in one or two pours at the discretion of the installer.
- If using with an AttenuWave sound mat, refer to applicable literature for minimum depth requirements.
- Refer to BoldStep.co for all associated product literature when installing underlayment.

### Drying

Continuous ventilation and adequate heat should be provided to rapidly remove moisture from the area until the underlayment is dry. The general contractor/project superintendent must supply mechanical ventilation and heat if necessary. Following required conditions, 3/4" (19 mm) thickness drying time is usually 10 to 14 days.

## LIMITATIONS

Following the guidelines below supports optimal performance and durability of ProTerra Radiant Underlayment. For general questions, inquiries on other applications or further assistance, contact BoldStep at 800-818-4864.

1. ProTerra underlayments are for interior use only. For installations scheduled before doors and windows are installed, contact BoldStep for specific recommendations.
2. Please consult BoldStep for guidance for on-grade or below-grade applications.
3. ProTerra underlayments are not designed to bond to wet subfloors and are not vapor or moisture barriers. Do not install moisture vapor barrier products over ProTerra underlayments. Avoid use in areas with prolonged or repetitive exposure to water or water vapor.
4. The general contractor is responsible to complete moisture testing prior to underlayment installation. If testing is necessary, use methods specified by the flooring manufacturer, typically ASTM F710. If the MVER exceeds 5 lbs (2.3 kg)/1,000 ft<sup>2</sup> (92.9 m<sup>2</sup>)/24 hours or an RH greater than 80%, treat the concrete subfloor with a moisture mitigating primer or epoxy. If flooring manufacturer specifies more stringent moisture limitations or practices, they must be followed. Contact BoldStep for further information.
5. Subfloors above crawl spaces must be protected by a vapor barrier. Special instructions apply for installation over plastic vapor barriers, particleboard, chipboard, hardboard (e.g., Masonite®), Lauan panels, metal, asbestos, or other non-dimensionally stable materials. Contact BoldStep for specific recommendations.
6. Turn off radiant heating systems 24 hours prior to installation and keep off for 24 hours following installation.
7. Avoid using oil-based or silicone-based sweeping compounds, as they leave residues that interfere with the underlayment bond. Clean the subfloor using a vacuum equipped with a HEPA filter.
8. For subfloors with organic adhesives, asphalt, coal-tar-based adhesives, or other oil based contaminants, contact BoldStep for proper remediation methods.
9. ProTerra underlayments can be scheduled before or after installation of drywall. For pouring before drywall, contact BoldStep.
10. 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.
11. Respect active control joints. Always ensure such joints are honored completely through ProTerra underlayment. In cases where control or expansion joints are not present in the subfloor, or cracking has occurred due to slab movement, consult a structural engineer.
12. Avoid walking on installed surface until set, typically within 2–4 hours.
13. Trade traffic may resume 24 hours after installation. To protect the underlayment from rolling dynamic loads or concentrated heavy loads, place temporary wood planking over the affected areas to minimize damage.

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**RADIANT****LIMITATIONS (continued)**

14. Prior to floor-covering installation, a moisture test of ProTerra Radiant underlayment is highly recommended. When testing the underlayment for dryness, use ASTM F2659. The moisture content should not exceed 5%. If underlayment pour is greater than 2", test using ASTM F2170. That RH should not exceed 80%. Do not install floor goods until limitations are met. If the flooring manufacturer specifies more stringent moisture limitations, they must be followed. Reference BoldStep Multifamily Procedures Guide at BoldStep.co.
15. ProTerra Radiant underlayment is not designed to serve as a wear surface. Additional flooring materials must be applied for long-term durability.

**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.

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**WARRANTY AND TECH SERVICES**

See boldstep.co for complete warranty information. Technical performance verification and service is available through BoldStep or BoldStep Regional Representatives throughout North America.

JOB NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

APPLICATOR: \_\_\_\_\_

BoldStep assumes no responsibility or liability for any errors or omissions in the content of this document. The information contained is subject to change without notice. Follow local and state regulations and use appropriate safety precautions and measures when installing BoldStep products. See related product literature at boldstep.co or contact BoldStep for more information prior to installation.

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