# PROTECTION BOARDS

### **Expanded Polystyrene Insulation.**

R-Shield® expanded polystyrene Protection Boards are economical, light weight and easy to install over foundation walls that have been dampproofed or waterproofed with coatings/membranes.

Installed prior to backfilling, R-Shield Protection Boards provide impact puncture protection for foundation wall coatings/membranes from rocks and potential construction debris in backfill soil. Protection is also provided against crushed stone/gravel used in many foundation drainage designs.

- R-value that never changes and is stable over time
- Range of compressive strengths available
- Closed cell insulation with superior moisture resistance
- High drying potential to rapidly release absorbed moisture
- Meets code requirements for continuous insulation

## Strength/R-value.

R-SHIELD RIGID INSULATION	Compressive Strength <sup>1</sup> , psi	R-value/inch²	
		75°F³	40°F⁴
100	10	3.9	4.2
130	13	3.9	4.3
150	15	4.2	4.6
250	25	4.4	4.8

<sup>&</sup>lt;sup>1</sup> Compressive strength @ 10% deformation.

### Proven to meet, or exceed, building codes.

R-Shield is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER40361-01 and ICC ESR-4743. R-Shield meets ASTM C578, "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".

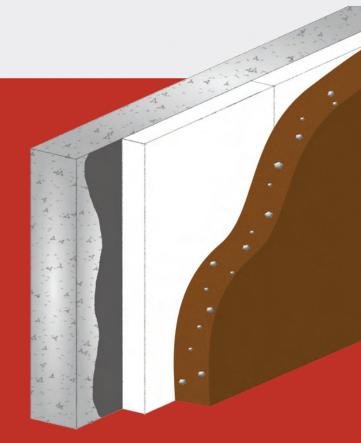




#### Protection.

R-Shield Protection Boards are available in a range of thicknesses up to 4" and types to assure optimum protection against potential larger stones and construction debris, and for deep fill foundations.





## **FOAM FACTS:**

# R-Shield outperforms XPS.

- R-Shield provides a stable long-term R-value at a lower cost
- R-Shield uses a blowing agent with 10 x lower global warming potential and 10,000 x lower ozone depletion
- R-Shield meets strength requirements at a lower cost
- R-Shield and XPS have resistance to moisture, but R-Shield has a higher vapor permeance leading to superior drying potential
- R-Shield with termite treatment available to provide termite resistance

<sup>&</sup>lt;sup>2</sup>R-value units are °F·ft<sup>2</sup>·h/Btu.

<sup>&</sup>lt;sup>3</sup>Recommended for design in WARM climates.

<sup>&</sup>lt;sup>4</sup>Recommended for design in COLD climates.

### Performance Value.

When you consider all performance characteristics and cost, R-Shield is your best choice for foam insulation.

R-Shield has air in its closed cells and therefore has a stable R-value. Many other insulations use blowing agents that cause R-value loss and are harmful to the environment.

R-Shield has compressive strength to meet specific project requirements.

R-Shield is manufactured to resist moisture absorption in wetting conditions and release absorbed moisture quickly during drying periods, which means R-Shield maintains R-value.

### **Termite Resistant.**

One of the most destructive forces anywhere is termites. R-Shield can be manufactured with a proven and safe additive, that effectively resists termites.

R-Shield is treated to meet ICC ES AC239, "Acceptance Criteria for Termite-Resistant Foam Plastics".

### Recyclable.

After it's life as a building insulation, R-Shield is 100% recyclable. It can be ground into granules and reincorporated into new R-Shield products or it can be thermally processed into a resin that's used to manufacture other new products.

### Ready to take control? Start here.

If you're ready to have R-Shield contribute to your next project, just contact your Premier Building Systems Technical Sales Representative. They will be happy to give you design consultation, information about R-Shield products, pricing, and answers to all of your questions.



