

## Thermal Guard (Exterior)

Thermal insulating paint for exterior walls & masonry.

### Description

**Thermal Guard Exterior** is a high-quality acrylic elastomeric emulsion paint with thermal insulating properties, ideal for exterior use. It contains special nano and micro-sized thermal insulating ingredients contributing to energy savings during winter and summer. The particles block heat transfer, reflect thermal radiation, and create a moisture barrier that can result in significant energy savings. **Thermal Guard Exterior** delivers excellent opacity and coverage, strong adhesion, coating flexibility, elastomeric behavior for crack-bridging, UV and alkali resistance. It provides significant reduction in thermal conductivity, reflectance of thermal radiation and decreased water absorption of the final coating. **Thermal Guard Exterior** can prevent the development of Urban Heat Islands (UHIs), by reflecting more than 90% of the incident heat radiation away from building's structure. Moreover, it presents excellent gap bridging even in very low temperature conditions (-20°C) and/or high temperature differences without risk of flaking.

### Recommended Use

Ideal for exterior surfaces, such as walls, masonry, concrete, plaster board and wherever water based, acrylic paints are applied. Suitable for application on masonry exposed to adverse weather conditions and for the protection of damaged surfaces with micro cracks.

### Key Benefits

- Conserves energy
- Thermal insulation
- Reflects 94.2% of infrared (IR) radiation
- Elastomeric formulation for crack-bridging
- UV and alkali-resistant
- Low VOC water-based paint
- Easy application
- Excellent opacity and coverage
- Anti-fungal

### Technical Specifications

<b>Form/Type:</b>	Water-based 100% acrylic
<b>Color:</b>	White – can be used as tinting base for light shades
<b>Density (EN ISO 2811-1) :</b>	1.05 ± 0.05 kg/L
<b>pH:</b>	9.0 ± 0.5
<b>VOC (Volatile Organic Compounds) :</b>	11 g/L
<b>Viscosity (ASTM D562-10) :</b>	110 ± 15 KU
<b>Thinner / Cleaning Solvent:</b>	Water
<b>Application Temperature:</b>	46.4°F - 95°F (8°C - 35°C)
<b>Mixing Ratio (%w/w) :</b>	Up to 10% by volume
<b>Dry Through Time:</b>	1 hour @ 68°F (20°C)
<b>Minimum Recoat Interval</b>	4-6 hours @ 68°F (20°C)

Drying and recoating time may be prolonged under low temperatures and high humidity.

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### International Standards Testing

<b>Reflectance (ASTM E903-06)</b>	Total: 90.98% (250-2200nm) Infrared: 94.19% (700-2200nm)
<b>Thermal Conductivity (EN ISO 12667:2004)</b>	0.1 W/(mK)
<b>Emittance (ASTM E408-71)</b>	0.91
<b>Thermal performance of building components (ISO 13786:2007)</b>	The paint coating (2 applications) provides thermal insulation equal to EPS of about 2cm
<b>Scrub resistance (ISO 11998:2006)</b>	Class 1

### Surface Preparation

All surfaces should be clean, dry and free from dust, oil, grease and other foreign matters or contamination.

### Application

Stir well before application. Do not dilute for bridging gaps and hairline cracks of up to 0,5 mm. For cracks bigger than 1mm, fill the gap with a suitable putty. If thinning is required add up to 10% water by volume. Application temperature should be between 8 - 35°C. Apply 2-3 even coats using a good quality brush, roller or by spraying with a tip of a diameter 1.4mm or more. Do not overbrush. Ensure corners and edges are adequately covered. Additional coats should be applied 4-6 hours after the previous application.

New substrates from cement or masonry: Should have cured for more than 3-4 weeks before primer application.

For better results apply Armus Universal Primer as base coat. Adverse conditions during or immediately after application may affect the coating's properties.

Cleaning of tools: All tools and equipment should be cleaned immediately after use with water.

### Consumption

Estimated consumption rate: 400 – 500 sq. ft. per gallon strongly dependent on the properties of the surface applied.

### Storage

Store only in the original container. Store the containers sealed, in a cool and well-ventilated place. Keep away from direct sunlight. Keep far away from sources of heat, open flame and sparks and other sources of ignition. Keep containers away from any incompatible materials.

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### Available Packaging

- 0.8 gal (1L) Paint can
- 2.5 gal (10L) Plastic can

- **Notes & Precautions:** Adverse weather conditions during or after the product application may affect the properties of the coating. Store closed containers, in controlled dry and enclosed space, away from sources of ignition and temperatures from 41°F to 95°F (5°C to 35°C), for up to 18 months.
- The Technical Data Sheet should be read in conjunction with the Safety Data Sheet. The current edition of this technical data sheet automatically cancels any previous one concerning the same product. For more information, please contact Armus: [info@armussolutions.com](mailto:info@armussolutions.com)
- The Technical Data Sheets and the recommendations for using Armus products are based on our scientific knowledge, laboratory studies, and long-term experience. Therefore, the information provided must be considered indicative and subject to constant review in relation to the circumstances and each practical application. Furthermore, the product's suitability should be examined in each case for each specific use.
- The end-user bears complete & exclusive responsibility for any side effects that may arise from the incorrect use or storage of the aforementioned product.



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