Technical Data Sheet



OVERVIEW & FEATURES

Insul-Lock HR is a highly elastomeric, one step, VOC compliant, high rise roof insulation adhesive that contains no solvents and sets in minutes. Insul-Lock HR is designed to give you the benefits of a two component insulation adhesive without the errors of improper mixing. Insul-Lock HR was designed for bonding approved roof insulations to a building's structural roof deck, base sheets, other insulation boards, smooth and mineral roof systems or properly prepared coal tar and asphalt graveled built-up roof surfaces.

Ease of Installation – Insul-Lock HR is an easy-to-apply, self contained, two-component insulation adhesive that does not require manual or mechanical mixing. Mixing is done through a static mixing tip. Simply apply Insul-Lock HR in 1/4 in. – 1/2 in. (0.64 cm – 1.27cm) wide beads 12 in. o.c. per 4 ft. x 4 ft. insulation board. Simply place, do not slide, the boards into the adhesive.

High-Rise – Insul-Lock HR provides an alternate attachment method for the application over gravel roofs. Insul-Lock HR will rise to adhere insulation board to properly prepared gravel roof systems, eliminating the labor cost involved in fastening to all types of decks.

No Deck Penetration/No Fastener Backout – Leaving the deck completely intact lessens the possibility of structural damage and moisture entry while preventing the disruption of interior operations. Eliminating fasteners not only prolongs the life of the waterproofing system, but it also eliminates the potential for thermal bridging and a future cause of leaks.

Versatile and Low Odor – Insul-Lock HR is compatible with a variety of insulation types that are listed on the back. It provides a fast set in a variety of temperatures. The low odor nature of this product makes it a perfect fit for sensitive environments, such as schools and hospitals and a must for all environmentally conscious facilities. Insul-Lock HR is a VOC compliant solution that will not disrupt building occupants.

APPLICATION

All work surfaces should be clean, dry, free of dirt, dust, debris, oils, loose gravel, unadhered coatings, deteriorated membrane and other contaminants that may result in a surface that is not sound or is uneven.

Prior to the application of Insul-Lock HR over gravel or mineral re-cover applications, be sure to remove all gravel or debris before applying Insul-Lock HR Universal Primer at a rate of 150-250 sq. ft. $(13.94-23.22\ m^2)$ per gallon.

Insul-Lock HR in new construction or mineral re-cover applications is applied at a rate of $600 \, \text{sq.}$ ft. $(55.74 \, \text{m}^2)$ per case. Over irregular surfaces, the coverage rate will vary and may be reduced to $300 - 400 \, \text{sq.}$ ft. $(27.87 - 37.16 \, \text{m}^2)$ per case. Perimeters and corners require more adhesive, see application guide.

Snap off the molded cap on the top of the adhesive cartridge and screw on the mixing tip. Attach a mixing tip to the threaded mixing head. Place the cartridge into the appropriate Insul-Lock HR applicator.

Apply Insul-Lock HR adhesive directly to the substrate, using a ribbon pattern. Space 1/4 in. – 1/2 in. (0.64 cm – 1.27cm) wide beads, 12 in. o.c. (30.5 cm), to achieve proper coverage rates for insulation attachment. As Insul-Lock HR adhesive is applied, immediately place insulation board into wet adhesive. Do not allow the adhesive to skin over. Eliminate uneven surfaces to ensure positive contact between the insulation board and substrate. Unused material can be applied at a later date by simply plugging the cartridges (with provided half moon plugs) and using a new Insul-Lock HR cartridge tip.

STORAGE

Insul-Lock HR should be stored at room temperature 65°F to 85°F (18°C to 29°C) for at least 24 hours prior to using the product.

SHELF LIFE

Insul-Lock HR Insulation Adhesive has a shelf life of 12 months.

PRECAUTIONS

- Do not apply to a wet surface.
- Not recommended for use with insulation boards larger than 4 ft. x 4 ft. (1.22 m x 1.22 m).
- Do not use warped or curled insulation boards. All insulation boards must lay flat upon the roof surface.
- Do not apply Insul-Lock HR Adhesive over a smooth or sanded APP or single-ply roof surface.

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Technical Data	Insul-Lock HR
Tensile Strength (ASTM D 412)	250 psi
Density (ASTM D 1875)	8.5 lbs./gal.
Viscosity (ASTM D 2556)	22,000 - 60,000 cP
Peel Strength (ASTM D 903)	17 lb./in.
Flexibility (ASTM D 816)	Pass @ -70°F (-56.7°C)
Shelf Life	12 months
Packaging	4-50.7oz.(1.51) Cartridges/Case 600 sq. ft. (55.74 m²) case

COVERAGE

Existing Roof Surface	Board Size	Bead Size
Smooth 600 sq. ft. (55.74 m²)/Case	4x4	1/4 in. – 1/2 in. (0.64 – 1.27 cm) beads 12 in. (30.5 cm) o.c.
Irregular 300–400 sq. ft./case (27.87–37.16 m²) Coverage rates may vary	4x4	1/4 in. – 1/2 in. (0.64 – 1.27 cm) beads 12 in. (30.5 cm) o.c.

For specific recommendations and coverage rates, please contact your local Garland Representative or Garland Technical Service Department.

APPROVED DECKS AND INSULATION

Decks	
Structural concrete	
Gypsum with nailed base sheet	
Tectum with nailed base sheet	
Steel	
Lightweight concrete with nailed base sheet	
Treated wood with nailed base sheet	

Insulation	
Wood Fiber	
Polyisocyanurate	
Perlite (min. 3/4 in.)	
SecuRock	
Dens Deck	
Polystyrene	

Please see the most current Factory Mutual RoofNav for the most up to date system approval.

Eco Facts	Insul-Lock HR
voc	0 g/L







The GreenLock Membrane Adhesive product is protected by U.S. Patent #7,772,301.

For more information, visit us at: www.garlandco.com

The Garland Company, Inc. 3800 East 91st Street

Cleveland, OH 44105 FAX: 216-641-0633 Phone: 216-641-7500 Toll Free: 800-321-9336 **Garland Canada Inc.** 209 Carrier Drive

Toronto, Ontario
Canada, M9W 5Y8
FAX: 416-747-1980
Phone: 416-747-7995
Toll Free: 800-387-5991
(Only in Canada)

Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or the home office for more information.

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