

Millennium PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive

Description

Millennium PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive is a two component, essentially VOC free, all purpose, low rise, polyurethane foamable adhesive that contains no solvents and sets in minutes. It is approved for use in VOC regulated markets such as California and the OTC States.

Application is quick and easy resulting in significant labor savings for the contractor. PG-1 Fleeceback Membrane Adhesive is dispensed through any of the application tools designed for 2-part cartridge material including the Patented Multi-Bead and Multi-Bead Plus applicators, the Millennium Cyclone pump cart, or an approved low pressure pump cart which equally mixes Part 1 and Part 2 of the adhesive.

Basic Use

Millennium PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive is designed for use as an adhesive for bonding approved fleece backed single ply membranes (TPO, PVC, EPDM) to a building's structural roof deck, base sheets, insulation boards, and smooth surfaced built-up and modified bitumen roof surfaces. It is dispensed in 1/2" to 3/4" (1.3cm - 1.9cm) wide liquid beads that will quickly spread to a width of 2-3 inches. The adhesive will expand and rise to fill minor surface irregularities.

Approved Insulations and Substrates

- HD wood fiber
- Polyisocyanurate
- Perlite (Upon Approval)
- Polystyrene (XPS & EPS)
- Gypsum cover board
- Asphaltic cover boards
- Concrete
- Gypsum roof deck
- Cementitious wood fiber
- Wood or steel
- Lightweight insulating concrete
- Modified bitumen membranes and base sheets (sanded or granule surfaced)
- Approved insulations (multi-layer applications)
- Smooth or gravel surface built-up roof (re-roof applications)

For a complete list of approved substrates and insulation types, or for additional information, contact our Technical Department.



Features

- Universal formula
- Replaces fasteners
- Low rise foam
- Solvent free

Benefits

- Approved for both insulation and membrane attachment
- Minimizes penetrations deck corrosion, and thermal bridging
- Accommodates minor surface irregularities
- Essentially VOC free, approved for use in VOC regulated markets

Surface preparation

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

For re-cover applications over gravel surfaces apply Millennium Universal Primer prior to the application of PG-1 Insulation Adhesive. For applications over fresh and/or non-oxidized asphalt, coal tar or plastic film membranes, Millennium Surface Treatment may be required prior to the application of PG-1 Insulation Adhesive.

Safety

Prior to working with this or any adhesive product consult product label and Safety Data Sheet (SDS) for necessary health and safety precautions.

Limitations

- Do not apply to wet surface.
- Not recommended for use with insulation boards larger than 4' x 4' (1.2m x 1.2m).
- Do not use warped or curled insulation boards. All insulation boards must lay flat upon the roof surface.
- **Do not apply when temperatures are below 40°F (5°C).**

Color

Foamed adhesive will appear off white-light amber.

CAUTION: All statements and technical information in this document are based on tests or data that Royal believes is reliable. However, Royal does not warrant or guarantee the accuracy or completeness of this information. The user has sole knowledge and control of factors that can affect the performance of Royal's products in the user's intended application. It is the user's responsibility to conduct tests to determine the compatibility of Royal's product with the design, structure, and materials of the user's end product and the suitability of Royal's product for the user's method of application and intended use. The user assumes all risk and liability arising out of such use.

Application

- Note:** material must be approximately 70°F (22°C) for best application. Material stored and utilized at cold temperatures will be prone to crystallization of Part 1. Attach a One Step™ mixing nozzle to the threaded mixing head. When using 5 gallon box packaging open the box utilizing the convenient tear strip and remove the plastic bladder from the box utilizing the easy-lift handle. Remove cap on plastic bladder and replace by attaching the quick connect fitting supplied in each box. (Connect the black fitting to the Part 1 bladder and the grey fitting to the Part 2 bladder.) Place the plastic bladder on the Millennium Cyclone pump cart. **Make sure that the bladder labeled “Part 1” is placed in the Cyclone tray labeled “Part 1” and that the bladder labeled “Part 2” is placed in the tray labeled “part 2”.**
- Place the cartridge into the appropriate One Step™ applicator. When using the Millennium Cyclone low pressure pump cart, connect the black Part 1 fitting to the black feed hose fitting. Connect the gray Part 2 fitting to the gray feed hose fitting. Operate the pump according to Manufacturer’s instructions (see Cyclone Operator’s Manual).
- Utilize the empty cardboard container to capture adhesive pre-dispense or recycle empty cardboard containers.
- Apply PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive directly to the substrate, using the roof membrane manufacturer’s recommended ribbon pattern to achieve proper coverage rates for membrane attachment. As adhesive is applied, allow to begin rising then place insulation board/membrane into wet adhesive and roll membrane with a weighted roller to ensure positive contact between membrane, adhesive and substrate. 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 plugs) and using a new One Step™ mixing nozzle. When using the box packaging properly clean and grease dispensing wand and pump unit according to the pump manufacturer’s recommendation.
- Plastic bladders are designed for easy visibility to ensure adhesive maintains a 1:1 ratio. If material is not consumed at a 1:1 ratio stop application and check for blockage in hose or dispensing manifold.
- PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive provided in 50 gallon drum sets can be used with approved pump systems. The adhesives should be placed on a drum roller or agitated prior to use.

Equipment

- Patented Multi-Bead Plus**
- Patented Multi-Bead**
- Battery Powered Single Bead
- Pneumatic Single Bead
- Ultra Drive Manual Applicator
- Heavy Duty Manual Applicator
- Millennium Cyclone Pump Machine
- Graco Predator E-10 Reactor
- Graco Predator
- Adhesives Systems Technology GMP-075
- Adhesives Systems Technology PCH GMP-500

For a complete list of approved low pressure pump carts, or additional information, contact our Technical Department.

Code #0092-0714

WARRANTY: Royal Adhesives and Sealants warrants its products to conform to Royal’s specifications at the time of sale when tested according to Royal standards. If a product is proven to be defective when tested according to Royal standards, Royal will, at its option, refund the purchase price or replace or repair the defective product. THIS LIMITED WARRANTY IS THE BUYER’S SOLE AND EXCLUSIVE REMEDY AGAINST ROYAL ADHESIVES AND SEALANTS AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall Royal be liable for any special, incidental, consequential, or punitive damages arising out of any claims whether based on negligence, contract, warranty, strict liability or otherwise.



Packaging and Coverage

Millennium PG-1 Fleeceback Membrane Adhesive Low Viscosity Insulation Adhesive is available in the following packages:

<u>Cartridge Size</u>	<u>Part #</u>	<u>Cartridges/Case</u>
1.5 Liter	PG-FA15-04	4

Covers 600 sq ft (56m²) per case. Coverage estimates indicate total square feet of insulation/membrane attachment per case.

<u>Size</u>	<u>Part #</u>	<u>Sets/Pallet</u>
5 gal (18.9L) box, Part 1 (A)	PG-FA5B-A01	18
5 gal (18.9L) box, Part 2 (B)	PG-FA5B-B01	
50 gal (189L) drum, Part 1 (A)	PG-FADR-A01	1
50 gal (189L) drum, Part 2 (B)	PG-FADR-B01	

Part 1 and Part 2 mixed through an approved low pressure pump cart will produce the following coverage rates:

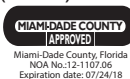
5 gallon (18.9L) Kit: 2,000-2,500 sq ft (186m²-232m²)
 50 gallon (189L) Kit: 20,000- 25,000 sq ft (1,860m²- 2322m²)

Coverage estimates indicate total square feet of insulation attachment per kit. Rates are based on an application pattern of 4 (four) 1/2" - 3/4" (1.3cm - 1.9cm) ribbons spaced 12" (30cm) o.c. per 4' x 4' (1.2m x 1.2m) insulation board.

NOTE: A 1/2" - 3/4" (1.3cm - 1.9cm) wide uncured adhesive bead will produce a 2" - 3" (5.1cm - 7.6cm) wide cured adhesive bead that will rise approximately 3/4" - 1" (1.9cm - 2.5cm) above the substrate. Coverage rates may be lower when used over irregular surfaces and will vary depending on roughness.

Storage

Keep temperature of contents between 45°F to 95°F (7°C to 35°C). Bring temperature of material to approximately 70°F (22°C) before use. Do not store in direct sunlight or above 95°F (35°C). Store boxes valve side up. **Keep from freezing!**



Insulation Adhesives for roofing systems as to external fire exposure see UL Directory of products certified for Canada and UL Roofing Materials and Systems Directory. IWS



*Subject to the conditions of Approval when installed as described in the current edition of the FM Approval Guide.