

# Green-Lock® Plus

High-Performance Membrane Adhesive



## OVERVIEW & FEATURES

Green-Lock Plus Membrane Adhesive is a high-performance moisture-cured polymer adhesive used to construct cold process roofing systems on single or multiple plies of Garland approved base sheets and Garland approved membranes. The result is a high performance, solvent free, cold applied multi-ply modified bitumen roof system with an outstanding life span that functions equally well on flat surfaces and slopes up to 3:12. Green-Lock Plus Membrane Adhesive is easy to apply by squeegee.

**Versatile** - Green-Lock Plus Membrane Adhesive is approved for use with Garland's approved base and cap sheets. Green-Lock Plus Membrane Adhesive can be directly applied to G-P Gypsum DensDeck Prime®, DensDeck DuraGuard®, SecuRock®, or high density asphalt coated wood fiberboard. Green-Lock Plus Membrane Adhesive can also be used as a surfacing adhesive to adhere roofing aggregate. Compatible with asphalt-based roofing mastics, adhesives and sealers and resists softening and staining of modified bitumen membranes.

**Environmentally Friendly** - Green-Lock Plus Membrane Adhesive contains zero VOCs and is 100% solids and solvent free. This non-asphaltic formulation is very low odor and it lowers the carbon footprint of roofing assemblies.

## APPLICATION

In cool weather, store all adhesive containers at 70°F (21°C) for 24 hours before use. Applying cold adhesive to a cold substrate will increase the application rate of the adhesive due to the increase in the viscosity of the adhesive. The adhesive is to be applied at a minimum application temperature of 50°F (10°C) and rising.

**Interply** - Starting at the low point on the roof, the salvage edge of the sheet shall be "up slope." Unroll cap sheet and base sheet and allow to relax; this will aid a flat uniform application - re-roll prior to application. Snap chalk lines in areas where application of the adhesive to the sheet will occur. Pour a liberal amount of the adhesive on the roof substrate and use a 3/8" notched squeegee to spread the adhesive covering the entire substrate at a minimum application rate of 2-2.5 gal./100 sq. ft. (0.82- 1.02 L/m<sup>2</sup>). Uneven surfaces may require additional adhesive. Recommended coverage rates are 2-2.5 gal./100 sq. ft. (0.82- 1.02 L/m<sup>2</sup>) for the base ply and 2-2.5 gal./100 sq. ft. (0.82- 1.02 L/m<sup>2</sup>) per interply or cap sheet.

Unroll the sheet into the wet adhesive and repeat the adhesive application procedure for the next roll/sheet covering any head or side laps as required. If desired, the adhesive can be applied to the side laps and head laps with a 4" (101 mm) wide medium nap roller. If curling occurs on the head laps, adhesive can be applied to both bonding surfaces. This will hold the head laps in place. Apply a temporary weight if necessary. Roll the entire surface of the membrane with a lawn roller to ensure adhesion to the substrate. Apply roofing granules into the adhesive bleed out at 28 lbs./100 sq. ft.

**Flood Coat** - To apply Green-Lock Plus Membrane Adhesive as a flood coat, sweep or blow away any dust, dirt or debris off the cap sheet. Then pour a liberal amount of Green-Lock Plus Membrane Adhesive onto the cap sheet at a rate 4-5 gal./100 sq. ft. (1.63-2.0 L/m<sup>2</sup>). Finally, broadcast 400 lbs./100 sq. ft. (181 kg/9.29m<sup>2</sup>) of gravel immediately into the adhesive.

## PRECAUTIONS

- Not a sprayable product; dispense only by Garland-approved methods
- High levels of humidity decreases work time of product
- May only be used as a flood coat on new, smooth or mineral surfaces
- Only use as a flood coat on smaller projects due to quick cure time
- Coverage rate increases over more porous insulation
- Roofing granules **must** be installed in adhesive bleed out prior to applying reflective coatings
- Must allow adhesive to cure for 21 days before applying any roof coatings due to staining
- Do not mix water into the pails of adhesive
- Do not use in freezing conditions and do not apply the adhesive over ice or moisture
- Do not apply the adhesive in the rain
- Must be kept at 40°F (4.4°C) and rising
- Do not heat-weld seams

# Green-Lock® Plus

Technical Data	Green-Lock Plus Membrane Adhesive
<b>Flash Point</b> (ASTM D 93)	400°F (232°C)
<b>Density @ 77°F (25°C)</b> (ASTM D 1475)	11.4 lbs./gal. (1.36 g/m <sup>3</sup> )
<b>Non-Volatile</b> (ASTM D 4586)	100%
<b>Slope Limitations</b>	3:12
<b>Viscosity @ 73.4 ± 2°F (23 ± 2°C)</b> Brookfield Spindle T-E, 5 RPM	124,000 cPs
<b>Tack-Free Time @ 70°F (21°C)</b> and 50% Humidity	4-6 hours
<b>Color</b>	Slate
<b>Shelf Life</b>	12 months
<b>Coverage</b> Interply	2 - 2.5 gal./100 sq. ft. (0.82 - 1.02 L/m <sup>2</sup> )
New Flood Coat	4 - 5 gal./100 sq. ft. (1.63-2.04 L/m <sup>2</sup> )
<b>Wet Mil Thickness</b> Interply	32 - 40 mils
New Flood Coat	64 - 80 mils
<b>Packaging</b>	5 gallon pail (18.9 L)

Eco-Facts	Green-Lock Plus Membrane Adhesive
<b>VOC</b>	0 g/L

For specific application recommendations, please contact your local Garland Representative or Garland Technical Service Department.



For more information, visit us at: [www.garlandco.com](http://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)

**The Garland Company UK, LTD**  
Second Way Centre, Second Way  
Avonmouth, Bristol UK BS11 8DF  
Phone: 011 44 1174 401050 (Outside UK)  
Toll Free: 0800 328 5560 (Only in UK)

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

Garland Greenhouse is a trademark of The Garland Company, Inc. Green-Lock are trademarks of The Garland Company, Inc. and Garland Canada, Inc. DensDeck Prime and DensDeck DuraGuard are registered trademarks of Georgia-Pacific Gypsum LLC. SecuRock is a registered trademark of United States Gypsum Company.