Clear-Shield™

Clear Water-Based Roof Surface Solution



OVERVIEW & FEATURES

Clear-Shield is a patented, clear acrylic water-based solution designed to protect a roof's existing surface. The nontoxic solution includes antimicrobial products that, in turn, protect the coating itself. As the name suggests, it's like having a clear protective shield applied to your roof. Clear-Shield can be sprayed or roller applied to gravel and mineral-surfaced modified bitumen and single-ply roofs. When applied to mineral-surfaced roofs, Clear-Shield locks in minerals to aid in roof preservation. For best results, it is recommended Clear-Shield be applied with annual maintenance and cleaning.

Increases Substrate Life - Clear Shield's weatherable acrylic resin base forms a protective coating over the existing surface. Extending the life of the existing roof lowers its life-cycle cost and delays the need for a future roof replacement.

Surface Protection - Clear-Shield provides an overall cleaner surface and longer lasting protection for the roof. The water-based, nontoxic solution provides added protection by locking in minerals on mineral-surfaced modified bitumen roofs.

Roof Coating With Antimicrobial Products - Clear-Shield is designed to protect a roof's existing surface with the added benefit of antimicrobial products that, in turn, protect the coating itself.

Low Odor Formulation - Clear-Shield is a water-based formula so there are no harsh solvent odors to disturb building occupants.

APPLICATION

Prior to application, all designated areas must be free of dirt, dust, loose particles and all foreign materials. Remove all biological growth from the surface by washing with $D7^{\text{m}}$ and water, rinse thoroughly, and then allow the surface to dry completely.

Grease and oil stains must be removed using D7 and rinsed with water. Power washing may be required. It is recommended to perform a small test patch before full application to observe any discoloration. Surface color may vary slightly when Clear-Shield is fully cured. In addition, any previous coatings or cleaning applications may interfere with the performance and appearance of the product. Apply Clear-Shield with a roller or pump sprayer. When spraying, use a nozzle with a coarse, round tip to obtain a generous, rather than a fine, mist spray. For single-ply applications, a fine mist spray is required.

For coarse surfaces such as mineral or gravel, apply an even coat, using a continuous motion to avoid puddling, until the substrate is treated. If puddles develop, reduce the coverage rate to reduce the material application. Spread puddles with a roller or brush. Coverage rate will vary depending on the roof surface. Garland recommends

coverage rates of 200 sq. ft. per gallon (4.91 $\rm m^2$ per liter) for gravel-surfaced roofs, 250 sq. ft. per gallon (6.14 $\rm m^2$ per liter) for mineral-surfaced roofs and 300 sq. ft. per gallon (7.36 $\rm m^2$ per liter) for smooth, coated and single-ply roofs. Typical dry time at 70°F (21°C) will be six (6) hours.

Clean up with warm water and soap. If Clear-Shield comes in contact with skin, rinse off the area and then wash with warm water and soap.

STORAGE

- Only store material in original container, tightly closed
- Do not store at temperatures below 50°F (10°C)
- If material is stored outside, container must be under a tarp, off the ground and kept warm and dry

PRECAUTIONS

- Do not apply when the ambient temperature is below 50°F (10°C) or above 95°F (35°C)
- Do not apply when the surface temperature exceeds 150°F (65°C)
- Do not use on roof areas subject to ponding water; a 1/4:12 minimum slope is required
- Do not apply when rain is expected within 12 hours
- Do not allow product to freeze
- Store material in dry protected areas and on clean, raised platforms
- Do not apply over Millennium® Base or any coal tar-based product
- For external use only

NOTE: Be aware of wind direction at time of application and avoid overspray. Fine mist may travel long distances and inadvertently land on nearby cars or windows. If this occurs, wait until the coating dries and use a citrus-based cleaner such as Goo Gone® to remove the spots.

Clear-Shield will not perform in continually ponded areas (areas that remain wet longer than 24 to 48 hours after a rain event). Therefore, it is imperative that any drainage issues are addressed before Clear-Shield is applied.

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Technical Data	Clear-Shield
Flash Point	> 200°F (93.3°C)
Density @ 77°F (25°C) (ASTM D 1475)	8.9 lbs./gal. (0.995 g/mL)
Viscosity @ 77°F (25°C) (ASTM D 4212) Zahn #2 cup	Typical 15 sec.
Color	Milky white
рН	7.5 - 8.5
Carrier	Water
Coverage Gravel-surfaced Mineral-surfaced Smooth, coated and single-ply	200 ft² per gallon (4.91 m² per liter) 250 ft² per gallon (6.14 m² per liter) 300 ft² per gallon (7.36 m² per liter)
Packaging	5 gallon pail (18.9 liter)

Eco-Facts	Clear-Shield
voc	< 20 g/L

For application recommendation, please contact your local Garland representative or Garland Technical Services Department.





Clear-Shield product is protected by U.S. patent #9,303,168 and #9,683,110

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

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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 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.

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