

Technical Bulletin: Cold Weather Application of Perm-A-Barrier® HRA Waterproofing Membrane

Ideal Application Conditions

Under optimal circumstances, GCP recommends applying the Perm-A-Barrier®HRA waterproofing membrane when ambient temperatures are 40°F (4°C) and rising. This ensures the best adhesion and performance of the membrane. However, we understand that projects often extend into late summer or early fall, making it challenging to predict and achieve these ideal temperatures.

Cold Weather Application Conditions

When ambient temperatures drop below 40°F (4°C), Perm-A-Barrier®HRA waterproofing membrane can still be installed at temperatures as low as 0°F (-18°C), provided surface is clean, dry, free of ice, snow, and frost. To be able to ensure proper surface for installation below 40°F, the following conditions must be met:

- 1. Cured Concrete Deck:** Ensure the concrete deck is fully cured before any freezing temperatures occur. Uncured concrete can lead to poor adhesion and potential failures.
- 2. Absence of Surface Moisture:** The application surface must be free of any moisture, including snow, frost, and ice. Moisture on the surface can prevent proper adhesion and compromise the integrity of the membrane.
- 3. Priming:** The deck must be primed evenly following the primer Bituthene B2 LVC guideline. Proper priming is crucial for ensuring the membrane adheres correctly to the substrate.
- 4. Membrane Heating and Application:** The membrane must be heated to a minimum of 380°F (193°C) and should not exceed 400°F (204°C). This temperature range is critical to achieve the desired fluidity and adhesion properties.
- 5. Monitoring for Moisture Presence:** If you observe any signs of moisture, such as the membrane bubbling, stop the waterproofing process immediately. Moisture presence not only poses a safety risk but can also significantly reduce adhesion and the effectiveness of the waterproofing system.

Additional Precautions

- **Equipment Protection:** One of the primary challenges in cold weather applications is maintaining optimal heating conditions for the equipment. Ensure the equipment is shielded from the wind to prevent heat loss. This helps maintain the membrane at the required application temperature.
- **Cold Material Risks:** Applying the membrane at cold temperatures can compromise adhesion. Always ensure the material is adequately heated and applied as per the recommended guidelines to achieve the best results.

By following these precautions, contractors can successfully apply the Perm-A-Barrier®HRA waterproofing membrane in colder temperatures, ensuring the continued protection and integrity of the structure.

For further assistance or inquiries, please contact GCP Technical Services. Thank you for your attention to these important guidelines.

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