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Solvent and Low VOC TPO and EPDM Adhesive Applications in Cold Weather

Johns Manville (JM) is pleased to announce we are expanding the approved temperature ranges for installing Solvent and Low VOC TPO and EPDM membrane adhesives. Recent testing has shown the historical limitations of 40°F and rising are too restrictive as the adhesives perform well when installed at lower temperatures.

JM TPO and EPDM documentation reflects the application range, storage conditions and environmental limits. The critical aspects of the new installation guidelines are as follows:

- Ambient Temperature
  - Apply when ambient temperature is 25°F and rising
  - Do NOT apply when the dew point is within 10°F of the ambient temperature

- Adhesive Temperature
  - Adhesive temperature must be greater than 32°F during application
  - If the adhesive temperature falls below 32°F, the adhesive must be moved into the warming area until the temperature of the adhesive returns to 60°F or greater

- Storage on the Job Site
  - Adhesive containers must be stored in a warming area or hut between 60°F – 80°F (16°C - 27°C) when ambient temperatures are at or below 40°F (4.4°C)
  - Adhesive must not freeze

The Solvent and Low VOC membrane adhesives will take longer to flash due to the colder ambient temperatures. Roll the adhesive onto the membrane and substrate in a smooth, even, thin coat to avoid agglomerates and puddling. Maintaining warmer temperatures of the adhesive will help accomplish this application. Agglomerates and puddling will contain a higher level of solvent which increases the probability of blistering and poor adhesion of the membrane. Special attention must be taken to monitor the dew point when ambient temperatures are cold due to higher probability of condensation forming on the surface of the adhesive.

All other best practices of adhesive installation apply. Unroll the membrane and allow it to relax for at least 15 minutes prior to application of the adhesive; additional time may be necessary in colder temperatures. Both the membrane and substrates must be clean and dry. Do not allow the adhesive to dry completely and if there is no tack, the membrane cannot be installed. Do not thin the adhesive. The membrane should be broomed and rolled to ensure good contact.

Please visit www.jm.com/roofing to view the latest specifications and system requirements or contact JM Guarantee Services at (800) 922-5922 opt. 3.

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