

TECHNICAL BULLETIN — Roofing Systems

Bulletin Number: T11-017

Date: December 21, 2011

Distribution: External

Single Ply Water-Based Adhesive Cold Weather Guidelines

Background

This bulletin is meant to provide clarification and guidance for the installation of single ply membranes (TPO, PVC and EPDM) using water-based adhesive at cooler temperatures (below 50°F, 10°C).

Storage and Use Requirements

Water-based adhesives may only be used when ambient temperatures are expected to remain above 40°F (5°C) for a minimum of 48 hours after application. Water-based adhesives need to be stored in a protected area between 60°F and 80°F (16°C and 27°C). Prior to application (storage) and curing, water-based adhesives must never be exposed or stored at temperatures below 40°F (5°C); including any transportation of the adhesive. Johns Manville's storage and stocking locations conform to these temperature requirements and will ship material when conditions permit.

Troubleshooting

It will be very clear that water-base adhesive has become frozen during storage or shipment. When returned to room temperatures (about 70°F [21°C]) the adhesive will remain in a solid state with residual liquid present in the container.

See pictures below for clarification. The adhesive will not be able to be mixed or reconstituted back into a uniform mixture.

*Thawed Water-Based Adhesive in Clear Glass Container
That Had Been Previously Frozen*



Thawed Water-Based Adhesive Showing Solid Material and Residual Liquid



Thawed Water-Based Adhesive Showing Solid Consistency



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