

Insulating Against Condensation

- The traditional method for dealing with condensation is to try and insulate the roof so that the temperature on the panel never reaches the dew point.
- And to add a vapor barrier so the moist air does not glow up through the insulation and condense.
- But in many uses, vapor barriers can tear and the system fails.

Why is condensation a problem?

- Condensation occurs when you reach the dew point. The dew point is a function of relative humidity and temperature difference. For our purposes it is only important that you remember a couple of things.
 - Warm air holds ore moisture than cold air.
 - Wet air is actually lighter than dry air.
- As it gets cold at night, the temperature inside a building is warmer than that outside. Warm, wet air rises and meets the cold roof and cools. As it cools, its ability to hold humidity decreases and that excess moisture ends up as drops of condensation on the roof.
- This condensation will continue to drip until either the temperature goes back above the dew point, or enough moisture is released in the form of water droplets to alter the dew point.

Self Storage Companies

- In this economy, saving money is also important. \$0.10-\$0.15/ft² might help make the numbers work for loan purposes.
- 80% of SS businesses are still the "Mom & Pop" businesses. They want to cash checks not have any headaches or maintenance issues.
- Regardless of what is in the rental agreement, if condensation drips down renters will complain that the roof is leaking and try and recoup money. DS is an easy, relatively inexpensive answer to this.

How DR!PSTOP Works

- DR!PSTOP works different. DR!PSTOP provides a medium for trapping this condensation in the specially designed pockets in the membrane.
- DR!PSTOP holds that moisture until conditions go back above the dew point and it is released back into the air in the form of normal humidity.
- It acts much like a sponge that soaks up the moisture when it appears and releases it as it returns to its humid air state.

Advantages

- Saves \$
- Saves Time
- Very Durable
- Helps Fight Corrosion
- Can be installed in Windy Conditions
- Easy to Clean
- No Bird Nesting Troubles
- Reduces Rain Noise
- Can Identify Roof Leaks Easier

DR!PSTOP



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How to Properly Prep Panels & Trim:

For all points of exposure to outside environment, a recommended length of the panel should be prepared, such as:

- Eave overhang (overhang + 1")*
 - Panel to panel endlaps (length of lap minus ¼")
recommended to avoid endlaps and run panels continuously from eave to ridge
 - Ridge cap laps (length of lap minus ¼")
- 1. Lay/stack panels with **Dripstop** Condensation Control material facing up and recommended length of each panel exposed.
- 2. Using a heat gun set at 1200°F, move the gun along the exposed end portion of each panel, heating/fusing the fibers of the **Dripstop**
 - Hold the heat gun approximately 1" away from the **Dripstop** material.
 - Keep the heat gun in constant motion to avoid overheating one spot, potentially damaging the panel's finish.
 - Do not completely melt the **Dripstop** material.
 - If at lap, do not extend fusing past the lap.
- 3. Allow panels to cool.
- 4. Install panels as normal.

**Eaves may be prepared after installation of panels.*

Failure to properly prepare panels may result in the Dripstop material attracting water from outside, resulting in possible leaks, mold and/or mildew -- ultimately voiding your panel warranty.

Common Questions or Concerns

- R Value - has almost none.
- How much water will it hold? About 1 quart per 10ft² - it forms in the pockets. Must have some ventilation to clear itself.
- Wood framing. Will not affect the wood framing - might get damp, but it will clear the same as the DS.

Technical Data

- Smoke generation and Flame Spread - UL 723 approved - can see on website.
- Capillarity - Can wick in moisture - that is why it does not go all the way into the lap of the panel. Need to seal the eave - hot air gun - fuse fibers.
- Anti microbial - polyester and rubber - does not provide food for fungi or microbes.
- Noise reduction - up to 20% of rain noise and helps with reflective noise.
- Has been in virtually every climate condition on every continent.
- Ventilation - will clear itself of moisture.
- Absorption - holds up to 10 times its own weight in water - more than 1 qt per 10 ft².

Contractors - The Biggest Winners

- **Contractors typically save 1-3 days on a job site.**
 - *Many say it saves half the time on the roof!*
- More efficiency means more jobs, more \$ and meeting more deadlines.
- If there is a leak, it's easier to find, no cutting out of insulation and vapor barrier.
- No risk of electricians or other subcontractors pulling out a razor and ruining the insulation system.
- Shipped already applied, no more waiting on insulation, or working with fiberglass
- No stretching out vapor barrier and insulation in windy conditions cutting time and eliminating tearing.
- Less calls from irate customers claiming a leaky roof.



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