Ask Jon Eakes

Weather Restrictions: Elastomeric Sheet Membranes for Roofing

Last Updated: Thursday, September 26th, 2013, Created: Sunday, August 31st, 2008

Connect to your favourite weather forecaster and look for the following conditions:

Category: Roofing Product: Elastomeric Sheet Membranes
Temperature Limitations: Material and workmen are most flexible above +10 C (+50 F) -- emergency repairs can be made down to -10 C (+14 F)
Rain Limitations: No rain or snow on exposed roof or between layers of roofing
Wind Limitations: Do not work on a roof in high wind conditions -- sheet membranes are like kites when there is wind.
Humidity Limitations: n/a
Continuous Conditions: Dry and reasonably warm during working

Comments: Elastomeric membranes are applied either with heating equipment, or peel and stick. Both require a dry surface. Heavy rollers should be used on all peel and stick products, not just hand pressed or smoothed out with a 2x4.
Weather limitations on most renovation products can be located on the WEATHER tab above.
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APPLICATION / INSTALLATION DETAILS
Elastomeric sheet membranes are rolls of a rubberized material that are rolled out and then sealed to each other and to the roof deck.
The most common residential use is for a 3 foot strip of self adhesive material at the overhang of a shingled roof to protect against water backup from ice dams although there has been an increasing use of these membranes as competition to asphalt & gravel for flat or low slopped roofs and even some tendency to cover the whole of a pitched roof under the shingles.
Click here for a comparison of ASPHALT V.S. ELASTOMERIC membranes including some information on the difficulties and dangers of applying these to a wooden structure.
Click here for an EXAMPLE OF A FLAT ROOF MEMBRANE.
Click here for some information on that ICE SHIELD on shingled roofs.
For small structures, like sheds or garages you can even find DIY material for total covering of the roof with elastomeric membranes.
Whether you are working with these materials yourself, or hiring someone to do it, it is worthwhile understanding the various types of application techniques.
The traditional elastomeric rolls require using an open flame torch to bond or almost melt two layers together at the seam to make it permanently waterproof -- this flame is the real problem on a wooden roof deck. Some new materials are using a heating device that does not have an open flame torch.
Many materials are self adhesive with a peel & stick backing.
One important detail on using self adhesive materials whether applying them directly to wood, or especially when sealing a seam between two layers: pushing down with your hand, or even a 2x4 is not enough pressure to make it really stick. Self adhesive elastomeric sheets should be heavy rolled for adhesion. A 150 pound roller should be used on a low sloped roof application. A 30 pound hem roller should be used on a hemmed membrane (overlap adhesion), and this even on any overlapping of ice shield on a slopped roof application. A roller applies very heavy pressure on a very small area, really compressing adhesive for a good bond.
Any time you are trying to lay out a peel & stick self adhesive roll: roll out a bit to make sure it is properly lined up, go back to the first few feet while it is rolled out and reach under with a knife to cut

and remove the adhesive protective paper allowing you to glue down the first edge properly lined up. Roll the material back up to where it is stuck down and reach under to grab the protective paper and then remove the paper as you roll out the material. This will avoid creating a bump because you need to re-align the layout, or having too much adhesive exposed and creating a bump because you got ahead of yourself -- or worse yet it is all stuck to itself like a long strip of Scotch tape.
Ideally work in a temperature that keeps the material flexible, usually above +10C -- and always work on a dry surface.

Keywords:
Garage, Flat Roof, Waterproof, Renovation, Ice, Water, Membrane, Techniques, Weather, Roof