



Four Simple Rules for Choosing a Housewrap

There are a lot of conflicting claims in the marketplace regarding the relative performance of various housewrap products. After consultation with building envelope scientist and engineers we identified four (4) key performance indicators.

1) Liquid Water Protection

In most applications, resistance to liquid water is the most important job that a housewrap performs in a building envelope. No matter what the exterior cladding is, as some point wind-driven rain or other source of liquid water is going to get behind it. It is vital that the housewrap act as a redundant barrier to prevent the infiltration of liquid water into the wall cavity. The best laboratory measurement to indicate how well a housewrap protects a wall from liquid water is the hydrostatic head test (AATCC 127). Higher values mean better protection.

2) Air Permeance

Too much air movement across the building envelope means the loss of heated air in heating zones or conditioned air in cooling zones. This quite simply the loss of dollars because of the energy costs involved in heating or cooling the living environment. Look for an air leakage rate below 0.02 L/ (s.m²), the lower number the better.

3) Balanced Water Vapour Permeance

Many building envelope authorities, including the U.S. Dept of Housing and Urban Development (HUD) recommend that low to moderate permeance housewraps be used in hot, humid and mixed climates. Overly high vapour permeance values can trap water inside the wall cavity when there is a moisture drive from the exterior. Look for a housewrap with a water vapour transmission rate in the range of 10 to 20 US Perms.

4) Mechanical Strength

A housewrap needs to have good fastener-holding strength so that it will not blow off the walls of a building in left exposed prior to installation of the exterior cladding. Trapezoidal tear strength or burst strength (Mullen type) are good ways to predict the fastener-holding properties of a housewrap. Look for high values of these properties.

For further information on housewraps you can consult your ECP representative or watch the Air Barrier Association of America video on housewrap codes and standards associate with installation that is available at www.airbarrier.org/resistive/benefits_e.php.

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