INCREASING INSTALLED R-VALUE OF A WALL SYSTEM

Nearly two-thirds of the total heat lost or gained through the building envelope occurs through radiant heat flow.

DuPont™ Tyvek® ThermaWrap™ LE is designed to manage convective heat flow by providing a vapor-permeable air barrier to reduce air flow through walls. An added low-emissivity ("low-e") metalized surface changes the dynamics of radiant heat flow across the entire wall system and dramatically improves the insulating value of the wall system.

OUR SPECIALIST NETWORK

A national group of over 160 highly-trained field representatives is available to assist you with your installations. From the latest updates on building codes, to on-site consulting and training, your local DuPont™ Tyvek® Specialist will help make sure each installation is done right.

1-800-44-Tyvek
www.weatherization.tyvek.com
REDUCING RADIANT HEAT FLOW

DuPont™ Tyvek® ThermaWrap™ LE helps to regulate the radiant energy of wall systems for increased comfort and reduced energy costs. In winter, Tyvek® ThermaWrap™ LE helps keep radiant energy that’s accumulated in the wall sheathing from releasing to the exterior. In summer, the metalized surface reflects radiant heat out of the wall, helping to keep the interior cooler. Reducing radiant heat flow through the wall system is particularly important at the studs, plate lines, joists and headers where conductive heat flow through the wall is the greatest. This not only saves energy and reduces heating and cooling costs, it also changes the dew point in the wall to help reduce the risk of condensation which can lead to mildew, mold and wood rot in wall cavities.

PREVENTING MOISTURE PROBLEMS

Tyvek® ThermaWrap™ LE has a very high vapor permeability (68 perms), which makes it the only high-perm reflective membrane available today. Due to its high vapor permeability and thermal resistance or R-value, it provides the best possible control of condensation in a wall structure, minimizing the risk of mold, mildew and wood rot. This is especially important to keep in mind in hot, humid climates, where foil-faced sheathing and other radiant barriers are often installed on the exterior to reflect heat away from homes. Aluminum foil is a perfect vapor barrier, so whenever the vapor drive moves from inside to the outside—a common occurrence whenever the outside temperature drops below the indoor temperature—humid air will become trapped behind the foil. This is a leading cause of mold and rot in Gulf coast homes.

A HIGH-PERM MEMBRANE WITH A LOW-E SURFACE

While the face of Tyvek® ThermaWrap™ LE is metalized and can reflect heat away from wall surfaces, it still retains its vapor permeability. The walls continue to breathe, and can dry out under any climate conditions. A high-perm membrane and a low-e surface—the best of both worlds.

HOT CLIMATE

The metalized surface reflects radiant heat out of the wall, keeping a cool interior and cutting down air conditioning needs.

COLD CLIMATE

The low-e surface cuts down radiant heat flow through the wall, keeping a warm interior and reducing the heating bill.