

# DuPont™ Tyvek® ThermaWrap™



## 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™ helps to regulate the radiant energy of wall systems for increased comfort and reduced energy costs. In winter, DuPont™ Tyvek® ThermaWrap™ 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.

DuPont™ Tyvek® ThermaWrap™ has a very high vapor permeability (36 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. While the face of DuPont™ Tyvek® ThermaWrap™ 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.