

# PLASTICS' ENERGY AND GREENHOUSE GAS SAVINGS USING HOUSEWRAP APPLIED TO THE EXTERIOR OF SINGLE FAMILY RESIDENTIAL HOUSING

## Quick Facts:

- The addition of plastic housewrap will reduce the infiltration of outside air into the average home by 10 to 50 percent and, by extension, will reduce the amount of energy required to heat or cool infiltrated air by the same proportions.
- The energy savings made possible by plastic housewrap will save the average homeowner \$75 to \$390 per year.
- The U.S. Department of Energy calculates that air infiltration accounts for roughly half of all energy used in heating or cooling a home.
- The energy saved by the use of housewrap surpasses the energy used to make the plastic product less than two months after installation.
- The greenhouse gas emissions avoided due to reduced energy use surpass the emissions released in the manufacture of housewrap in three weeks or less.
- Insulating plastic films have reduced greenhouse gas emissions in the United States by 120 to 600 million tons since 1980. Although, housewrap designed to reduce air infiltration is a fairly recent innovation, plastic films have been used as moisture barriers and insulation enhancers on the interior walls of houses for several decades. These films also reduce air infiltration. The statistic above assumes that all homes built since 1980 feature some form of plastic film barrier.
- The greenhouse gas emissions avoided since 1980 are roughly equal to the emissions resulting from the combustion of 12 to 60 billion gallons of gasoline.

*Source: Franklin Associates, February 2000*

