Polyurethane Insulation: Reducing Building Energy Consumption

- ~40% of the overall U.S. energy demand goes into the building sector
- ~40% of the energy used in buildings goes into heating and cooling
- PU insulation in the building envelope can reduce heating and cooling energy loads significantly

**PU insulation products have some of the highest R-values**

The higher the R-value, the better the material serves as insulation from heat transfer. R-value is a measure of the thermal resistance of a material.

**PU insulation products help reduce energy loss through air infiltration**

According to the U.S. Dept. of Energy (DOE), the average home spends $1,300 annually on heating/cooling utility costs. Studies show that 40% of that energy is lost due to air infiltration.

Source: 2007 Building Energy Databook, Table 4.21, 2005 Energy Cost Data

**PU insulation helps meet energy reduction targets**

- **Federal Buildings:** Executive Order 13514 – All new federal buildings net zero building energy requirement by 2030
- **Architects:** AIA 2030 target: net zero energy buildings by 2030
- **Building Codes:** Ashrae 90.1, IECC 2009 higher R-value requirements