



# PILKINGTON

## Technical Information

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### **Pilkington Energy Advantage™ Low-E Windows Reduce Annual Fuel Costs**

The use of Pilkington **Energy Advantage** Low-E glass can greatly reduce the energy requirements associated with a window, and therefore reduce the heating and cooling costs of a home or building.

**Energy Advantage** Low-E glass is a clear glass with a thin, transparent metal-oxide coating applied to one surface which reduces the flow of heat through the glass. The use of **Energy Advantage** Low-E glass instead of ordinary clear glass works on any orientation (North, South, East, or West) and in any geographic location to keep you warmer in winter and cooler in summer.

In the winter, ordinary clear glass absorbs heat from inside of your home and transfers it to the cold exterior, causing your furnace to work harder. Windows using insulating glass units incorporating **Energy Advantage** Low-E glass are more than three times better than ordinary single pane windows at keeping heat inside in winter.

In summer, ordinary clear glass transmits heat from the outside into the cooler interior, putting added strain on your air conditioners and fans. Since **Energy Advantage** Low-E glass reduces this heat flow, it helps you save money all year long.

There are many factors which affect the energy costs associated with windows: the thermal performance of the glass, the framing material, the window construction, the quality of installation, the climate you live in, the location of the window, the amount of windows, and especially the heating and cooling fuel costs. Since glass makes up over two-thirds of any window, the quality and properties of the glass used are extremely important in measuring overall window performance.

Annual savings in total heating and cooling costs resulting from the use of Pilkington **Energy Advantage** Low-E glass have been estimated for a typical residence in a number of geographic locations. The graph shown below represents the energy savings resulting from the use of windows incorporating Pilkington **Energy Advantage** Low-E glass in insulating glass units versus the same house using ordinary single glazed aluminum frame windows. Annual fuel savings are based on a residence having 300 square feet of windows, which are equally distributed on all four elevations, and average fuel costs of \$0.6/therm for natural gas heat and \$0.09/kWh for electric air-conditioning. Cities having similar climates and fuel costs to those cities shown will have approximately the same energy savings.

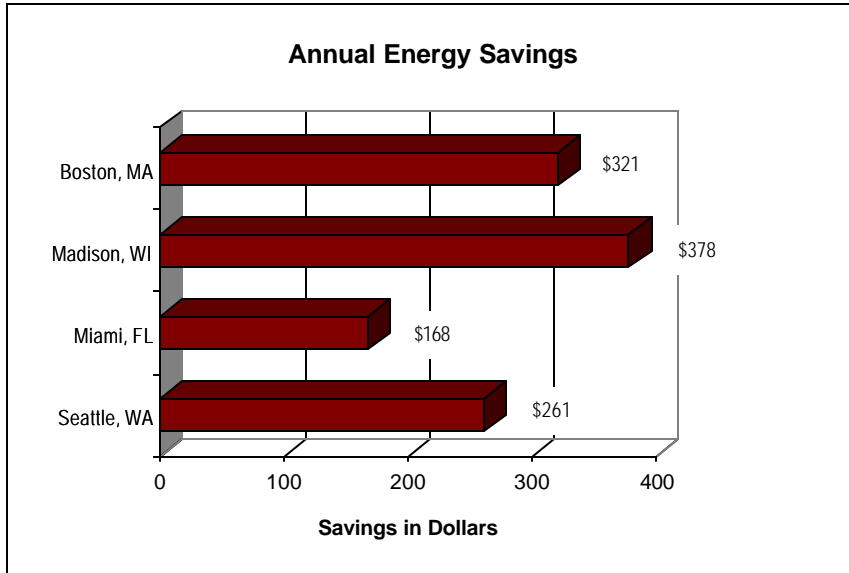
ATS-147

Pilkington **Energy Advantage**<sup>TM</sup> Low-E Windows

Reduce Annual Fuel Costs

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Page 2



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