

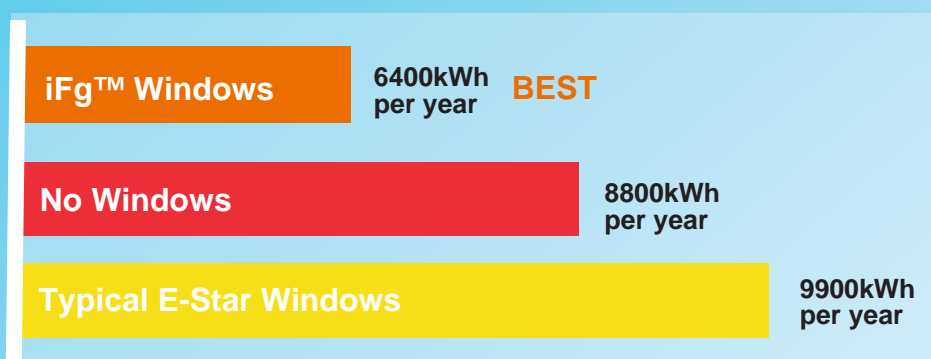
# NET Gain Windows™

Window energy efficiency differs significantly from wall energy efficiency; insulating value is only half the story. In cold climates, capturing and retaining heating season solar gains is a critical part of making buildings energy efficient. Thermotech Fiberglass Fenestration considers both the losses and gains when making its iFg™ Windows for heating climates. Compared to not having any windows at all, a super insulated house with Thermotech's iFg™ Windows would use about 30% less energy for space heating. On the other hand, the same house with typical Energy Star windows would use about 10% more energy, for space heating.

## Space Heating Energy for Super Insulated House

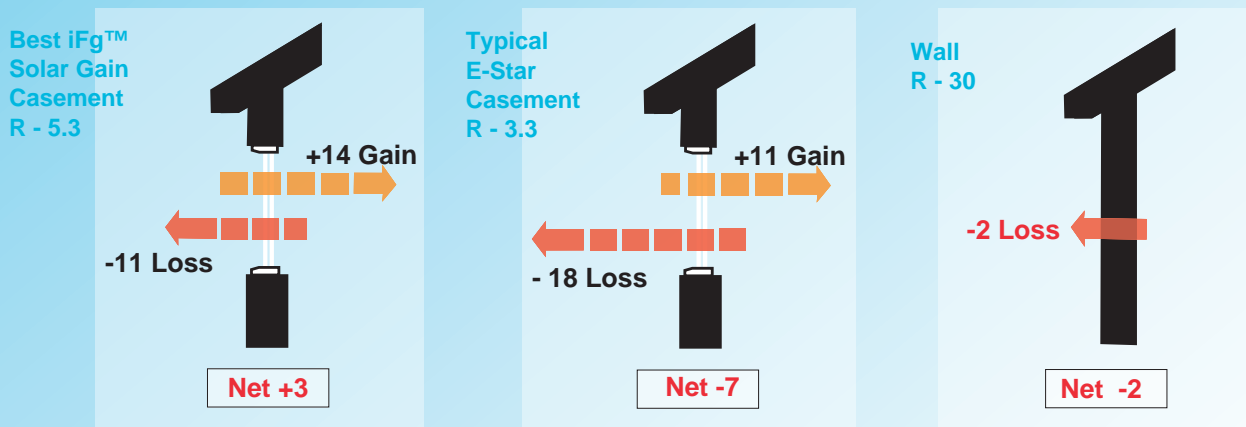


with



In a heating climate, a key element to building windows that are more energy efficient than walls, is using a Solar Gain low-e. In general there are two types of low-e coatings; Solar Gain and Solar Share. Both reduce heat loss and yet are essentially visibly transparent. Of the two, the Solar Shade low-e insulates about 20% better than the Solar Gain low-e. On the other hand, and more significantly, the Solar Gain low-e admits about 50% more free heat from the sun than the Solar Shade low-e.

Besides having a preference for Solar Gain low-e, for its heating season gains, Thermotech Fiberglass includes several features in its iFg™ Windows to reduce heat loss. They include; insulated fiberglass frame and sashes, double compression weatherstrips and triple glazing with warm edge spacers.



The Energy Flows shown are in kWh/ft²/yr and are based on the calculation procedure described in the CSA Thermal Performance Standard for Windows. Specifically they are based on the Energy Rating or ER, average.