Glazing by Orientation



Using different low-e coatings on different sides of the house helps lower energy costs. Low-e coatings reduce heat loss and yet are essential visibly transparent. In general there are two types; Solar Gain and the slightly better insulating Solar Shade.

The Solar Gain low-e is an obvious choice for a south window. Over the heating season, a window so equipped can gain seven times as much as an R-30 wall loses. During the cooling season, that same window gains very little heat; the mid-day sun being so high in the sky.



Sun Angle









Glazing by Orientation- continued

Equally obvious, the Solar Shade low-e is usually the best choice for unshaded east and particularly west windows - to ovoid summer overheating.

A north window, due to indirect solar gain, does experience some solar gain. Interestingly, there is enough gain, even on the north that the Solar Gain low-e can be a slightly more energy efficient choice



The Energy Flows shown above 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 Specific or ERS for Ottawa, Ontario and a 211 day heating season. Our calculation makes assumptions that will affect your results, including: unshaded windows, open curtains (day and night) and all solar gains are used