

Energy Analysis Report

<http://www.cardinalcorp.com/application/energycalc.htm>

Details

Location:
Buffalo, NY

House Type:
Two-story

Vintage:
New

House Size:
2,400 sq. ft.

Orientation:
East/West

Exterior Shade:
None

Interior Shade (Winter):
Privacy

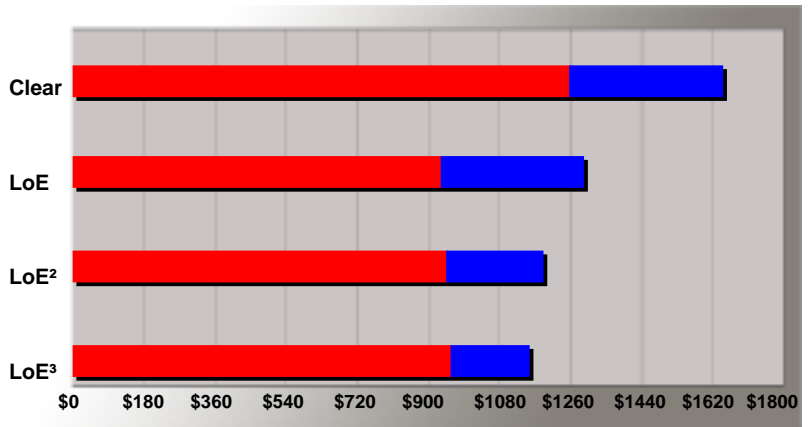
Interior Shade (Summer):
Privacy

Gas Price:
\$1.20

Electric Price:
\$0.14

Report printed on: Jul 31, 2010

Annual Energy Cost



	<u>HEAT</u>	<u>COOL</u>	<u>TOTAL</u>	<u>SAVINGS</u>
Clear	\$1,260	\$387	\$1,647	----
LoE	\$934	\$360	\$1,294	21%
LoE ²	\$948	\$243	\$1,191	28%
LoE ³	\$959	\$197	\$1,156	30%

Disclaimers: Building details are consistent with the National Fenestration Rating Council (www.nfrc.org) draft procedure 901: "Guidelines to Estimate the Effects of Fenestration on Heating and Cooling Energy Consumption in Single Family Residences".

The house model assumes that 50% of the windows face to the rear, 30% face the front, and 10% are on each end of the building. Windows on the end are assumed to be shaded by adjacent buildings. Total window area is set to 18% of the conditioned floor area for new houses and 15% for existing.

The analysis uses a thermostat offset to accomplish equal comfort. For windows with clear double pane glass the heating setpoint is 2°F higher than for low-E windows. For windows with high solar gain glass (clear and LoE-178) the cooling setpoint needs to be lowered by 4°F to maintain the same comfort as windows using LoE² or LoE³.