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Energy Cost Savings and ROI Report

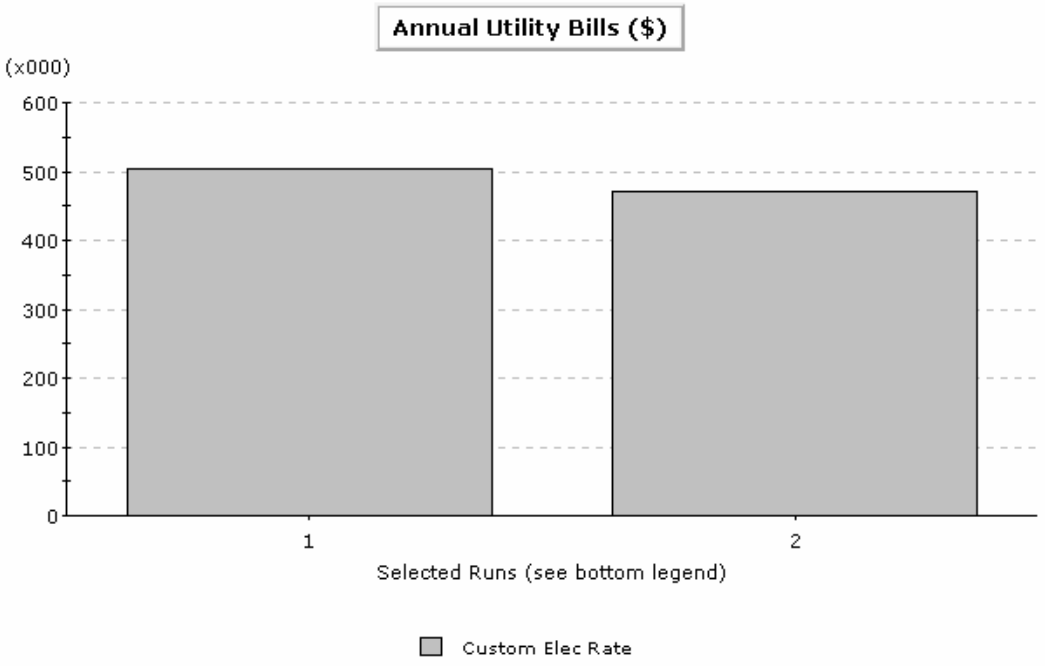
December 20, 2004

Ross Park Mall
1000 Ross Park Mall Dr.
Pittsburgh, PA 15237

The attached economic analysis report was performed by McLaughlin Erectors Inc. using the energy simulation software known as eQUEST. Today's building managers must view their responsibilities from a much broader, even global, perspective. Operating costs and energy efficiency are the primary concerns when designing and performing simulation tests. The accuracy of eQuest is achieved by utilizing the U.S. Department of Energy's sophisticated DOE-2 building energy analysis software. DOE-2 is a widely used and accepted building energy analysis program that can predict the energy use and cost for all types of buildings by using a description of the building layout, usage, conditioning systems (lighting, HVAC, etc.) and utility rates provided by the user, along with weather data, to perform an hourly simulation of the building and to estimate utility bills.

The goal of this report is to give a projected energy cost saving summary that a building can actualize through the use of energy conservation products applied to its skylight systems. In this case, the summary yielded an annual savings amount of **$33,304**. For this particular model, we applied Madico External SDSS-200-SK Kynar based film to the existing 27,356 square ft. of clear insulated glass on the Super Sky, Inc. skylight systems.

The attached report gives a numeric and graphical representation of the input data used to model Ross Park Mall. By viewing the results summary, you will be able to make a more calculated decision to invest in energy conservation products provided by MEI.



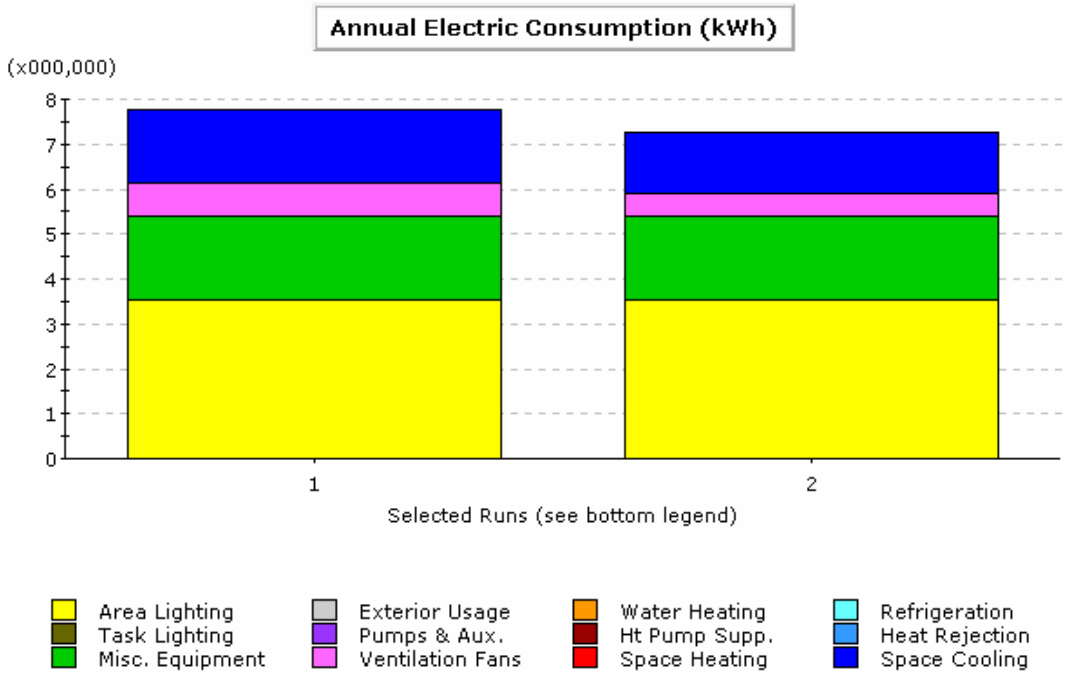
	Ann. Energy Costs*	Savings	Cost of Installation	Simple Payback
Baseline (1):	$503,423	----	---	---
Tinted (2):	$470,119	$33,304	$177,814	5.3 yrs

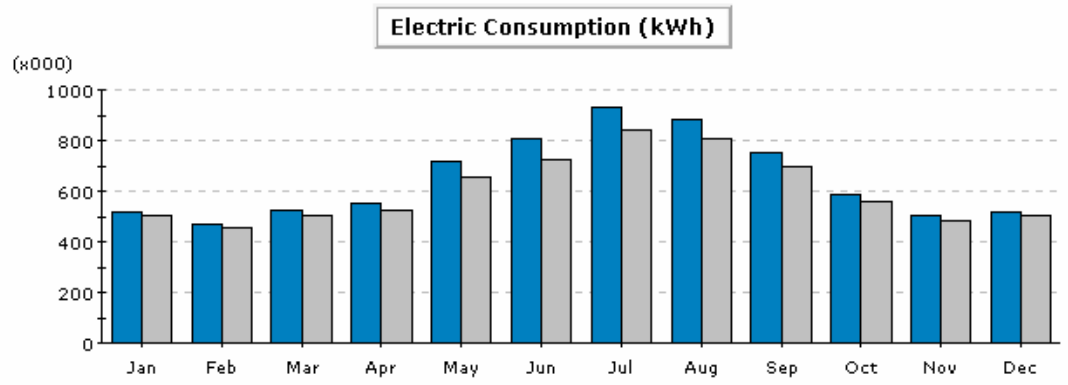
*Cost measures express common area directly affected by skylights

The parametric run for the area affected by the skylights in Ross Park Mall shows a significant reduction in annual utility bills with the proposed skylight systems yielding a return on investment slightly above five years. As shown in the matrix below, the film reduces the shading coefficient of the glass dramatically. The most important feature of the film products is that when combined with the skylight glass, it can prevent 80% of the solar heat from entering the mall.

SKYLIGHTS	Shading Coefficient*
Existing insulated clear glass	0.98
Madico SDSS-220-SK Applied Film	0.23

* The ratio of solar heat gain passing through a glazing system to the solar heat gain that occurs under the same conditions if the window was made of 1/8" clear single glass. The lower the SC number, the less solar heat it transmits and the better the solar control efficiency of the glazing system. (source: NFRC)

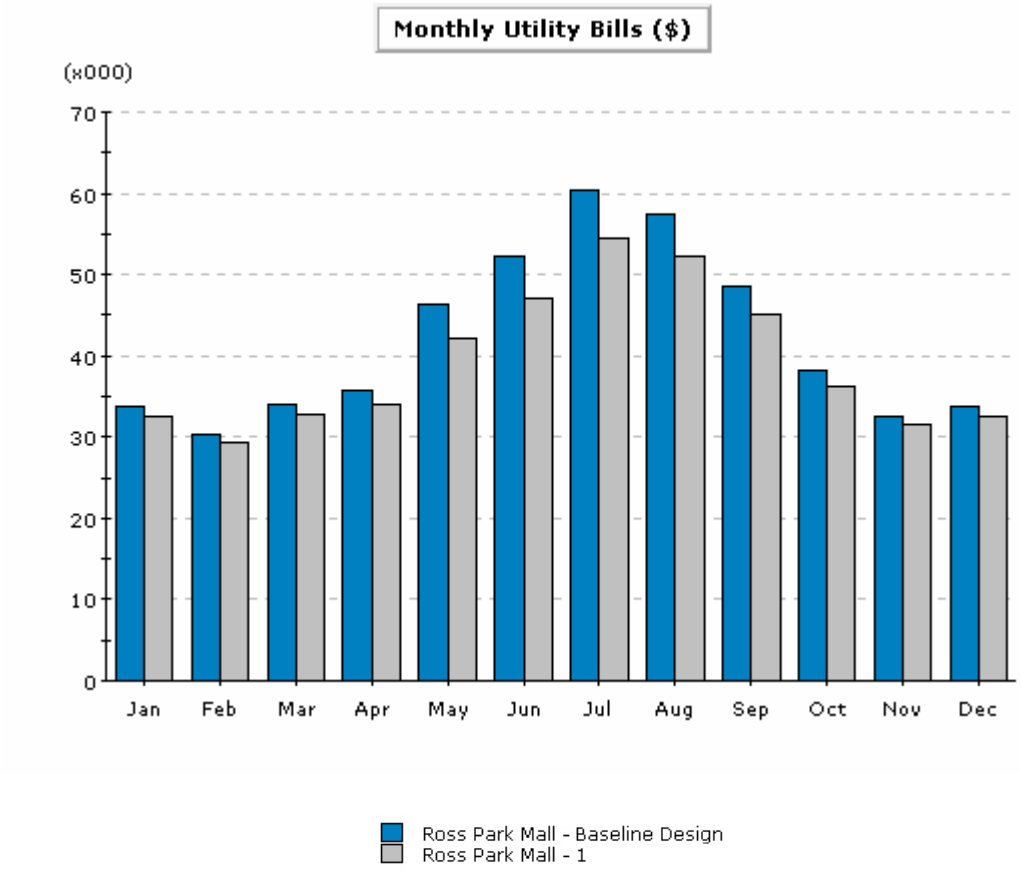




	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Run 1.	520.6	469.2	524.2	552.5	715.6	805.0	933.7	884.6	751.1	588.9	502.8	520.6	7,768.9
Run 2.	502.6	453.0	505.0	523.3	651.9	727.5	842.1	804.8	696.1	560.0	485.6	503.0	7,254.9
Run 3.													
Run 4.													
Run 5.													

Annual Energy and Demand

	Ann. Source Energy		Ann. Site Energy	Lighting	HVAC Energy		
	Total Mbtu	EUI kBtu/sf/yr	Elect kWh	Electric kWh	Electric kWh	Nat Gas Therms	Total Mbtu
Baseline	90,024	250.07	7,768,871	3,523,270	2,387,144	92,954	17,443
Tinted	86,337	239.83	7,254,925	3,523,270	1,873,197	108,706	17,264



NOTE: While the U.S. Department of Energy's DOE-2 energy simulation program is nationally recognized as credible and accurate, McLaughlin Erectors Inc., nor the product manufacturer assumes liability in connection with the inability to realize the estimated energy savings shown within this report. The data reflects cooling and heating loads due to solar heat gains and conductive heat losses through window areas. The analysis is a representation of the model compiled from the data sets provided by the mall and the product manufacturer.