

CASE STUDY: The Erie School System, Erie, Illinois

School cuts energy costs 15%



SITUATION: The Erie School System, a combination of the high school, elementary and pre-schools on one campus, had serious budget concerns led by high heating and air conditioning costs. To address the issue, school authorities contacted Johnson Controls, a global Energy Services Company (ESCO) to audit their campus and to recommend energy conservation measures.

SOLUTION: LLumar Neutral Series N-1020B film was recommended for the project because of its superior heat control properties. Professionally installed by the local LLumar dealer, this window film reduces excessive summer solar heat gain by 73%. The film further contributes to the learning environment by reducing glare 78%. As part of the project, LLumar Exterior Series RK-20 film was fitted to the outside of 70 panes of skylight glass to successfully curb heat and glare by 83%.

RESULTS: LLumar contributed energy savings of 15% across the campus. In addition, these films created a clean contemporary appearance, provided added comfort for building occupants, and significantly reduced glare.

Building
Erie School System
Location
Erie, Illinois
Film
N-1020B SR CDF (Bronze)
Type
Solar Control Film

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Performance Data

Neutral Series

N-1020B SR CDF (Bronze)

	% Total Solar Transmittance	% Total Solar Reflectance	% Total Solar Absorptance	% Visible Light Transmittance	% Visible Reflectance (exterior)	% Visible Reflectance (interior)	Winter Merit U-Value	Shading Coefficient	% Ultraviolet Reflected	Emissivity	Solar Heat Gain Coefficient	% Total Solar Energy Rejected	Light-to-Solar Heat Gain Ratio	% Summer Solar Heat Gain Reduction	% Winter Heat Loss Reduction	% Glare Reduction
Neutral films reduce glare, provide moderate heat rejection and are specified where a soft, neutral appearance is desired. These films are made with sputtered technology. Neutral films are scratch-resistant and shield 99% of ultraviolet rays.	12	49	39	20	37	35	0.93	0.27	99	0.69	0.23	77	0.87	73	10	78