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Films Save Energy, Deliver Rapid Returns

Paul Feeley of American Window Film installs a new film. Note the contrast between the pane on the left and the un-filmed pane on the right.

For immediate improvement in your building's performance and a rapid return on your investment, consider applying an energy-saving film to your windows. Among the many sustainable solutions Chapman's Building Performance team explores as part of our construction management services, we've found window filming to be one of the simplest, most cost-effective, and least invasive measures to implement.

For example, the payback for filming a suburban office building can be as little as two years, an astonishingly short Return on Investment. Not only do window films make it easier to condition your building, they also cut down on glare, increasing occupant comfort, and can eliminate 99% of ultraviolet light, increasing fabric lifespan.

Our Building Performance team can calculate your ROI for window film either as a standalone measure or as part of a broader performance upgrade analysis. They will evaluate current building performance data, such as yearly electric, gas, and water consumption to estimate your savings based on the specifications of a particular window film.

Here is a comparison of three 3M films and their ROIs for a 31,000-square-foot suburban office building:

	LE35AMARL	P18ARL	PR40
	Amber 35 Low E	Silver	Prestige
Annual Energy Cost	$159,467	$161,301	$166,378
Annual Energy Savings	$11,003	$9,169	$4,092
Installed Cost	$25,000	$25,000	$34,000
Simple payback	2.27 years	2.73 years	8.31 years
Visible Light Reflected	18%	20%	7%
Visible Light Transmitted	19%	10%	39%
Heat Gain Reduction	57%	57%	--
Heat Loss Reduction	30%	10%	--
Glare reduction	62%	80%	56%
UV Blocked	99%	99%	99%
Total Solar Energy Rejected	74%	74%	59%

As part of our continuing effort to test sustainable products, we have installed these films on windows in our office so that visitors can see what they look like and judge their effectiveness for themselves.

Each film excels in a particular area: the Amber 35 is designed to keep heat inside the building in the winter; the Silver P18 reduces glare the best, and the PR40 lets in the most natural light.

If you are interested in viewing these products or others installed in our Platinum LEED-certified office, why not stop by for a tour? Or if you'd like us to evaluate the beneficial effect of window film and other building performance improvements in your current office or as a part of your next construction project, contact Allison Wellman at Chapman.

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