

Morgan State University: LEEDing by Example

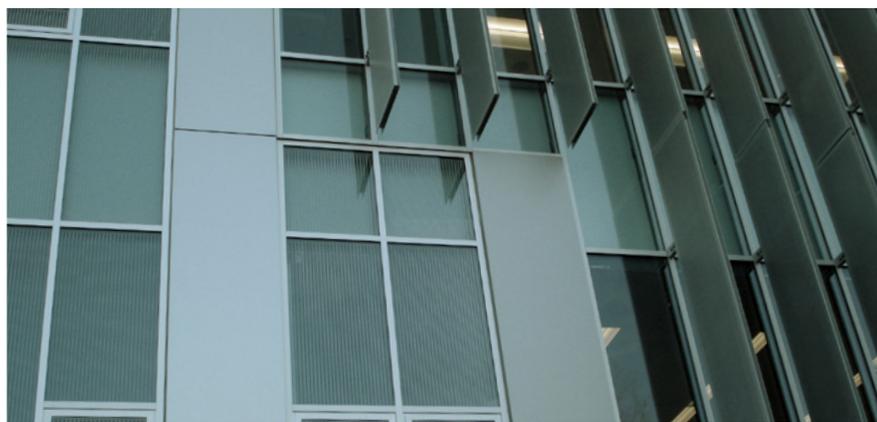


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for academic, engineering and design programs in Baltimore, Maryland. From the outset, Morgan State mandated that the new CBEIS facility set a high bar for sustainable design practices by using high performance materials and ensuring peak thermal performance. LEED® Certification was a must.

Accepting the challenge, The Freelon Group architects, with Hord Coplan Macht and construction manager the Barton Malow Company, reviewed industry options for an architectural envelope that would ensure thermal performance.

Their approach is worth noting.



As a longtime manufacturer of vision and daylight control solutions for the construction industry, we have been part of many unique and stunning new building projects that deserve attention – be it either for their esthetics, their functionality or their sustainability.

Every once in a while, we get to participate in a project that scores on all three fronts.

Such is the case with Morgan State University's new Center for the Built Environment and Infrastructure Studies (CBEIS) - a 126,000 square foot shared facility



They first established a set of criteria for technical capabilities that included:

1. Light Transmittance – The CBEIS needed to have optimal light distribution plus the prevention of unwanted glare, heat and UV rays. The design team wanted daylight to enhance the power of natural lighting without compromising building aesthetics and functionality.
2. Heat Control – The solution needed to provide solar heat barriers for optimal thermal performance so that sufficient daylight could enter the building without excessive or unwanted solar gains. Specifically, they wanted to reradiate solar energy back outside before it would penetrate into the interior space, thereby reducing excessive heat build-up and optimizing thermal performance.
3. Product Life Cycle Costs – Understanding the high costs of energy consumption for electrical lighting, heating, and cooling, the design team wanted a solution that would ultimately pay for itself. The desired solution would need to control the sun's rays and manage the contribution of daylighting throughout the building. More specifically, they wanted a solution that would



ensure significant thermal performance and substantial energy savings, resulting in an important decrease in capital cost and annual operational energy costs. They also wanted a solution that would eliminate the need for dusty blinds, screens or curtains – a completely maintenance-free solution.

The design team then implemented a rigorous review of potential industry solutions. After exacting proof-of-concept testing, we were proud to have been selected for the CBEIS project.

Today, our Vision Control® delivers the required u-values to help CBEIS achieve LEED® Gold Certification. The spacing between each Vision Control® louver allows for an expanded view through the window, while restricting unwanted heat build-up and maintaining an optimum level of daylight inside the working area. The Vision Control® solution further eliminates glare and meets with CBEIS daylighting and shading requirements.