FACILITIES & MAINTENANCE

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Framing the Future: Pro Tips for Choosing Windows that Meet Your Goals for Beauty, Energy Efficiency and Safety

BY HOPE'S® WINDOWS

Windows play a critical role in shaping both the appearance and performance of campus buildings, influencing everything from energy efficiency and sustainability to safety and student well-being. For private colleges and universities, selecting the right window systems—whether for new construction or the renovation of historic facilities—requires balancing architectural integrity with modern performance standards.

In this Q&A, Matthew Fuller of Hope's Windows shares insights into the evolving technologies, design considerations, and long-term maintenance factors that campus decision-makers should evaluate when planning window installations. His perspective offers valuable guidance for institutions seeking solutions that enhance building performance while preserving the character and welcoming atmosphere that define many private college campuses.

Q: When private colleges evaluate windows for a new construction project versus a renovation, what are the biggest differences in priorities—and where do you see institutions getting it right or wrong?

A: Private colleges generally have similar requirements for both new construction and renovation projects. New construction projects typically feature a modern design aesthetic, while renovation projects usually involve buildings listed on the National Register of Historic Places. Institutions routinely execute thorough research, requesting product samples and reviewing mockups to ensure product suitability. However, a common issue is the failure to evaluate the entire window system, including the glass, frame, and surrounding conditions. Frequently, those neglected details involve components that lack adequate thermal breaks or barriers.

Q: Energy efficiency is often a top concern. What window technologies or performance metrics should campus decision-makers focus on to make the biggest long-term impact on operating costs?

A: Private colleges are working toward carbon-neutral campuses by selecting products with thermal breaks and advanced glazing technologies, such as Vacuum Insulated Glass. Institutions should likewise prioritize air leakage ratings and conduct on-site testing, since air infiltration diminishes thermal performance.

Q: Many private campuses are a mix of historic and modern buildings. How can institutions balance architectural integrity with modern window performance in renovation projects?

A: Proven products continue to evolve to enhance window performance. For instance, Hope's Thermal Evolution Technology incorporates a thermal break into traditional hot-rolled steel window frames, which have been in use since the 1800s. These frames preserve historic aesthetics while accepting thicker glass.

Q: How do windows contribute to campus safety and security today, and what features should colleges be prioritizing to protect students while maintaining an open, welcoming feel?

A: Window security requires a comprehensive evaluation of components, including laminated glazing, multipoint hardware, reinforcements, and integration with controlled-access systems. Security should be assessed as a complete system, taking into account the frame, glazing, anchors, hardware, and surrounding conditions.

Q: Daylighting and student well-being are gaining more attention. How can strategic window selection support learning environments, residence halls, and common spaces?

A: Research demonstrates that natural daylighting yields measurable benefits for health, productivity, and efficiency. Narrow sightlines in window frames maximize daylight penetration in interior spaces.

Q: What role do windows play in helping private institutions meet sustainability goals or achieve LEED and other green building certifications?

A: Steel window frames composed of 99% recycled steel help achieve institutional green objectives.

Q: With multiple buildings and phased projects, how can campuses create consistency in window performance and appearance without sacrificing flexibility in design?

A: Institutions should establish baseline performance standards, including U-value, Solar Heat Gain Coefficient (SHGC), air and water performance, acoustics, and glazing type, to guide the selection of framing profiles.

Q: What maintenance and lifecycle considerations should facilities teams understand before selecting window systems—especially when budgets and staffing are limited?

A: Products with a demonstrated lifecycle of 75+ years and features such as removable glass stops, durable hardware, weatherstripping, and corrosion-resistant finishes ought to be prioritized.

Q: Are there emerging trends or innovations in window design or materials that private colleges should be paying attention to right now?

A: Vacuum Insulated Glass (VIG) is gaining popularity among private colleges. Single-pane VIG typically achieves a U-value of approximately 0.08, while double-pane VIG achieves a U-value of approximately 0.06, depending on the manufacturer. This commercially available technology substantially outperforms standard insulated glass units.

Q; Looking ahead 10 to 20 years, how do you see window systems evolving on private college campuses, and what should institutions be doing now to future-proof their investments?

A: Colleges and universities are expected to continue leading in design and construction through leveraging resources to research, design, and invest in new technologies. Proven systems will likely be retained as long as they demonstrate improvements in thermal performance.

ABOUT THE AUTHOR: Hope's Windows® is the world's largest steel window manufacturer, blending over a century of handcrafted excellence with innovative design. Renowned for durability, beauty, and performance, each custom window and door is meticulously crafted to meet unique architectural visions, delivering lasting quality, timeless elegance, and unmatched value for generations.