INTEGRATED LOUVERS OR INTEGRATED BLINDS?

Specifying the Right Privacy Solution for Your Doors and Openings

By Jean-Francois Couturier
When specifying glazing solutions for privacy and daylighting control in doors and windows, architects and designers often come down to a choice between integrated louvers and integrated blinds.

Integrated louvers are typically hermetically sealed glass units combining louvers within glass that can be customized to virtually any shape for both interior and exterior glazing applications. Their louvered glazing technology commonly eliminates strings and cords, ensures alignment, requires no maintenance and provides the ideal daylighting or privacy solution for many building types. When installed in exterior applications, integrated louvers can significantly reduce energy consumption in support of LEED requirements.

Integrated blinds are usually a system of blinds that are permanently sealed within a double-glazed cavity for a dust-free environment. They ensure protection against dirt, germs and weather conditions. Integrated blinds can filter light transmission and control the many effects of daylight with a simple tilting of the blinds.

Specifying the Best Solution By Building Type
The intended purpose and function of a building will often be the best indicator of whether the optimal solution to be specified in doors and windows is integrated louvers or integrated blinds. For example:

Healthcare Facilities
Both integrated solutions make sense for healthcare construction where privacy, safety and hygiene are key considerations. They are equally hygienic as both louvers and blinds are hermetically sealed within glazing. They can both be made with fire-rated glazing and adaptable anti-ligature operators to protect patients and staff. Integrated louvers, however, deliver a greater advantage as they provide superior levels of vision, sound, heat and light control. For example, integrated louvers ensure completely adjustable privacy and visibility levels, whereas integrated blinds can have visibility gaps. Integrated louvers further offer better sound control, as the louvers-within-glass product assembly delivers sound wave barriers on par with concrete block walls in a setting where tranquility can help facilitate the patient recovery process. In addition, integrated louvers support Health Insurance Portability and Accountability Act (HIPAA) requirements for doctor-patient privacy.

Correctional Facilities
To ensure maximum safety for both inmates and staff, correctional facilities have many interior windows in doors to monitor activity in inmate areas and rooms. These windowed portals need to have adjustable visibility for privacy considerations, and shatter and bullet-resistant glass that is strong enough to withstand violent impacts. Both integrated solutions can offer the required levels of safety while...
providing adjustable visibility for staff monitoring. Both can come with high-impact glazing or polycarbonates that are impact and shatter resistant and eliminate the risk of dangerous glass shards. Integrated louvers, however, have an edge in correctional facilities as the extruded aluminum louvers provide the highest levels of sound attenuation and ensure fully blocked visibility when required.

**Educational Facilities**

Studies indicate that the effective use of daylight improves student performance and expedites learning. More specifically, the effective use of daylight in educational environments is proven to increase student and teacher attendance, boost achievement rates, reduce fatigue and improve student health.

For exterior door and window applications, integrated louvers have the advantage as they provide the highest levels of daylight control for optimal thermal efficiencies and LEED contributions. Integrated louvers are proven to best reduce cooling costs in warm weather and heating costs in cold weather.

For interior applications, integrated blinds typically gain the advantage in K-12 schools as they are less costly, making them a more palatable option for stringent public educational budgets. Like integrated louvers, they provide the adjustable vision and light control required for classrooms, study halls, libraries, labs and more.

**Commercial/Office Buildings**

Modern office space must provide more than a place to work. A contemporary workspace should take into consideration a healthy environment that translates into higher productivity and lower operating costs. Natural lighting is a key component of a healthy workplace, but this needs to be properly managed to mitigate heat and glare.

In this case, integrated louvers deliver significant advantages, and they provide the highest levels of daylight and shading control. They also ensure optimal thermal efficiencies by reducing heating, cooling and lighting costs. Integrated louvers better contribute to LEED certification for green building specifications and are better suited for the look and feel of a commercial building. Their construction ensures superior sound dampening capabilities for more tranquil working environments. In addition, integrated louvers typically offer better long-term ROI and come with superior product warranties, which are important considerations for commercial budgets.

**Art Galleries and Museums**

Museums, art galleries and other buildings designed to showcase, house and protect items of value, require discerning architectural design. Daylight enhances and adds beauty to exhibits and interiors, but it can also usher in damaging UV rays, unwanted heat and glare. Using ample glazing in doors and windows is an essential part of creating beautiful art-oriented and cultural spaces – but ample glazing also necessitates effective sunlight management.

Integrated louvers once again provide an advantage as they ensure optimal daylight management. They provide the maximum levels of daylight, heat and light control that galleries and museums need to protect exhibits from damaging UV rays. They further permit the flexibility of design required to suit even the most unique architectural requirements. To filter light in the most efficient manner, they
can be specified into any openings - sloped, vertical, flat and overhead glazing.

**Conclusion**

Integrated blinds address many glazing design requirements for vision, sound, heat and light control. They are cleaner and more hygienic than just blinds that are separate from glass, and they are typically the less expensive integrated option at the outset. They offer moderate levels of privacy, heat, light and sound control. They can also get easily misaligned, leaving visual gaps. Even when fully closed, the spacing between slats does not offer complete privacy and light blockage. They are not known for long-term durability. However, they are generally the more cost-effective integrated alternative and lend themselves well to educational facility design.

Integrated louvers competently address all glazing design requirements for maximum levels of vision, sound, heat and light control. This tends to make them ideal for application in hospitals, museums, office buildings and institutions. They typically feature double glazing with up to a 2.5” (63.5mm) airspace that has a Sound Transmission Class (STC) rating on par with drywall and concrete block walls. In exterior applications, the integrated louvers offer complete daylight control and optimal thermal efficiencies in support of LEED certification. Integrated louvers are typically the costlier integrated option at the outset, but tend to be more cost-effective long-term, as they reduce the need for cleaning, maintenance and replacement costs.

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