Impact of Integrated Louvers on Heat Transfer and U-values

Architects often ask us if, and how, insulating glass with integrated louvers can measurably control heat transfer and reduce U-values.

So we published an industry white paper, "Integrated Louvers and the Three Types of Heat Transfer", which examines the interaction of integrated louvers in relation to conductive, convective and radiative heat transfer activity. The white paper is geared toward architects who seek effective design techniques for lowering a building's U-values for improved overall thermal performance.

Integrated louvers are active U-value thermal-control elements that can be used to effectively modulate all three types of heat transfer from external sources. They are proven to redirect and/or block transmitted daylight to control solar heat gain and light. This white paper is intended to illustrate the fundamentals of this interaction.

Integrated or internal louvers can offer the following benefits by lowering the glazing U-values:

- Boost energy efficiency for optimal building thermal performance;
- Support enhanced comfort, health and productivity of building occupants;
- Decrease the need for air conditioning in the summer and heating in the winter;
- Support energy efficiency compliance/excellence.

Download the white paper