The optimal architectural envelope for daylight control

Unicel Architectural presents the newest addition to its solar shading solutions – motorized louvers or sunblades that provide optimized daylight control. These shading systems are made of maximum strength extruded aluminum profiles that ensure better control of solar heat gain and daylight performance, while adding immense aesthetic appeal to a building’s design.

Unicel offers solar shading systems that are renowned for their precision, quality assembly, cost effectiveness and superior construction to the North American market. Unicel’s solar shading systems can be installed in fixed or variable positions for adjustable shading to ensure maximum comfort and energy efficiency.
SOLAR SHADING
SYSTEMS: Motorized Louvers

Key Benefits:

- **Daylight control**: Glare reduction and greater comfort
- **Heat control**: Optimal solar heat gain and energy efficiency
- **Sound control**: Acoustic insulation and enhanced tranquility
- **Visual appeal**: State of the art aesthetic features that enhance overall design
- **Low maintenance**: Durable and easy to maintain
- **Flexibility**: Adaptable to many building and architectural designs

Features:

- 6063-T5 aluminum alloy extrusions
- Hardware fits aluminum blade solutions
- Custom colors in painted or anodized finishes
- Fixed or mobile blades
- Available in vertical, horizontal and cantilevered configurations
- Remote controlled system

Sizing Highlights:

The motorized louvers system is designed to minimize aluminum weight and cost less per square foot:

- **Minimum elliptical section**: 4" (100 mm)
- **Maximum elliptical section**: 17 ¾" (450 mm)
- **Maximum glass blade thickness**: ½" (14 mm)
- **Maximum profile length**: 256" (6500 mm)

Applications:

The motorized louvers provide an attractive architectural envelope for a wide variety of construction - in atrium skylights, walkways, welcome galleries and office spaces. Whatever the building design or purpose, the motorized louvers deliver both practical and visual benefits.

Technology:

1. Extruded blade
2. Stainless steel shaft
3. Aluminum cap
4. Plastic ring
5. Extruded support
Solar Architecture:

North American weather ranges from extreme cold to extreme heat, with many variations in-between. Today's design approaches need to consider weather patterns and how to best maximize energy efficiencies to address these. Unicel's fixed and motorized louvers provide optimal weather protection for the harshest climates and temperature extremes, while ensuring interior comfort and desired levels of vision.

**LEED** - Motorized louvers optimize solar heat gain and lighting. This results in a reduction in HVAC costs and a significant increase in energy efficiency.

**Design:**

The motorized louvers can be installed as an independent structure or connected to the main facade system. Additionally, they can be painted in any color to enhance their visual impact.

When designing an architectural envelope, interior and exterior design requirements need to work together as a dynamic system to respond to variations in temperature, daylight and vision requirements. The motorized louvers complement almost any design and are highly adaptable to the most rigorous heat and vision control requirements.

When employing motorized louvers, key design considerations include:
- Structural and thermal loads
- Surface finishes
- Exposed surfaces
- Solar zoning
- Shading requirements
About Unicel Architectural

For 50 years, Unicel Architectural has built a reputation for the most advanced aluminum and glass solutions. These solutions encompass louvered glazing, skylights and more, to enhance major global construction initiatives with utmost quality and reliability. With its proprietary technology, Unicel’s Vision Control® delivers unprecedented comfort and control of vision, light, temperature and sound with a patented combination of louvered between glass that are hermetically sealed and cordless. Unicel’s solutions are guaranteed for longevity, optimized for energy efficiency, and customizable to any design, environmental or cultural requirements. Unicel combines its market leading know-how with great design to ensure optimal aesthetics and sustainable performance.