SWFCONTRACT AND SOMFY
ENERGY SAVINGS THROUGH
AUTOMATED SOLAR SHADING SYSTEMS

The demand for greater energy efficiency continues to drive major changes in commercial building design and facility operations. Automated solar shading systems from SWFcontract and Somfy can play a key role in these efforts. Our system of integrated climate sensors and intelligent controllers adjusts shades based on both external conditions and occupancy needs, profoundly improving user comfort and lowering energy costs over the life of a building.
In summer, an automated solar shading system is raised or lowered based on the orientation of the sun, controlling heat gain and reducing glare. In winter, solar sensors can be programmed to close the shades in the evening to avoid heat loss. The controls can also be adjusted manually based on vacancy periods.

**SYSTEM BENEFITS**
- Blocks up to 100% of damaging UV rays, depending on fabric selection
- Allows daylight integration, leading to appreciable energy savings by reducing the use of artificial lighting
- Controls solar heat gain and moderates demand on HVAC systems during peak usage
- Contributes to LEED certification (up to 15 points)
- Offers scalable solutions for small, large, and custom projects

**ENERGY SAVINGS**
- Provides more than double the energy savings as compared to manually operated shades
- Significantly reduces peak loads in renovation projects
- Reduces heat gain by up to 29%

**FINANCIAL SAVINGS**
- Delivers high return on investment through long-term reduction in energy costs
- Decreases HVAC costs, for both initial installation and ongoing usage
- Lowers maintenance costs, since the system is automated
- Increases the life span of furnishings by controlling exposure to UV radiation that causes premature fading of carpeting, upholstery, and artwork

**OCCUPANT COMFORT**
- Regulates room temperature
- Optimizes natural light
- Reduces glare and eye strain
- Offers views of external surroundings

**IMPACT ON PRODUCTIVITY**
According to a 2009 study done by the Rocky Mountain Institute, companies that invested in natural lighting retrofits have seen worker productivity jump between 13% and 16%. Similarly, a 2003 study by the California Energy Commission found that exposure to daylight was consistently linked with a higher level of concentration and better short-term memory recall for office workers.

**BENEFITS OF AUTOMATED LIGHTING AND SHADING CONTROLS CASE STUDY**

Honda Headquarters
Markham, Ontario, Canada
138,000 square feet on four floors,
LEED Gold certified
- 22% reduction in annual lighting energy demand
- 23% reduction in peak cooling load
- 28% reduction in annual cooling energy consumption