

# Exterior & Specialty Systems



**NYSAN**

SOLAR CONTROL

A Hunter Douglas Contract Company





# Service. Performance. Innovation.

Nysan solar control systems deliver uncompromising performance, backed by unmatched engineering. From roller shades to exterior blinds and sun louvers, to fully automated control systems, Nysan solutions from Hunter Douglas Contract integrate management of light and energy into the windowed wall.

Nysan systems are specified and installed in hundreds of buildings worldwide. See full product details and selected projects at [www.nysan.com](http://www.nysan.com).

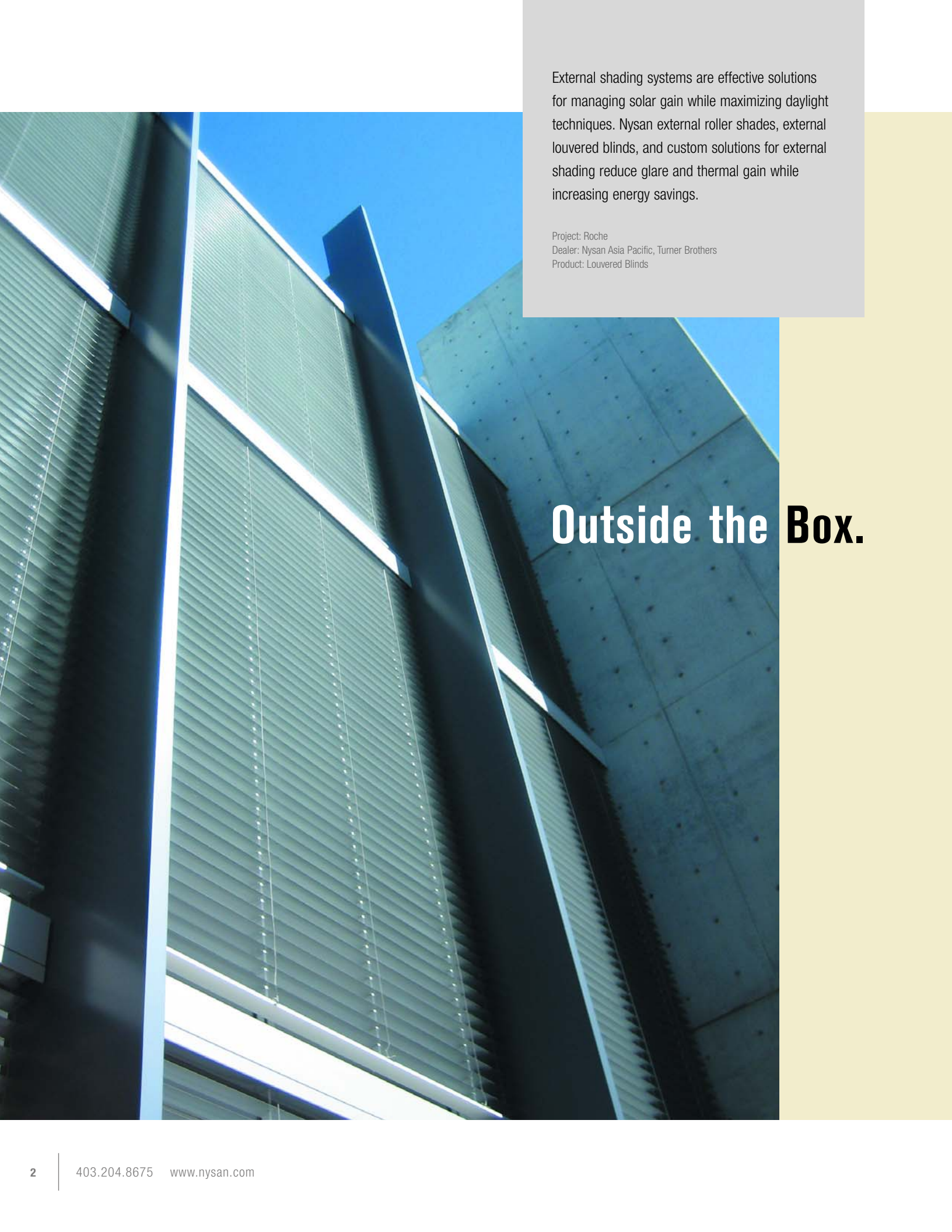
*Cover*  
Project: Alley 24  
Architect: NBBJ  
Dealer: Pacific Shades  
Product: External Louvered Blinds

*Above*  
Project: Morgan Library and Museum  
Architect: Renzo Piano Building Workshop  
Dealer: The DK Group  
Product: External Roller Shades



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External shading systems are effective solutions for managing solar gain while maximizing daylight techniques. Nysan external roller shades, external louvered blinds, and custom solutions for external shading reduce glare and thermal gain while increasing energy savings.

Project: Roche  
Dealer: Nysan Asia Pacific, Turner Brothers  
Product: Louvered Blinds

**Outside the Box.**

Nysan external and specialty shading systems are designed to address the solar control and daylighting needs of each specific project. All our systems offer:

- Full motorization and automation available for raising, lowering, and tilting
- Available configuration and control via the Nysan SolarWare™ system, which uses solar tracking to automatically adjust the system to the optimal shading position and performance
- External system components engineered to withstand loads from wind, snow/ice, and other environmental conditions
- Hassle-Free™ Warranty on all components, including operating mechanisms and controls

#### **THERMAL GAIN:**

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Passive solar heating generated as the sun hits a building. Management of thermal gain can reduce cooling loads in the summer and assist in heating during the winter.

#### **SOLAR TRACKING:**

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A method of calculating sun angle of incidence onto a specific glazing/opening, taking into account building location and orientation.





# External Louvered Blinds – the Most Effective Solution.

One of the most versatile and effective methods of solar control, Nysan external and specialty louvered blinds offer a number of key advantages:

- Operable external systems which can be positioned as needed for solar control and retracted when not required
- Slats can be tilted to optimize shading at varying sun angles, managing thermal gain and glare, while also utilizing the natural daylight
- Integration with intelligent controls makes it possible to create an active shading solution on sun-facing elevations

Project: 30 Hickson Road, The Bond  
Architect: Bovis Lend Lease  
Dealer: Nysan Asia Pacific, Turner Brothers  
Product: External Louvered Blinds





Nysan engineers its louvered blinds for years of reliable service with minimal maintenance.

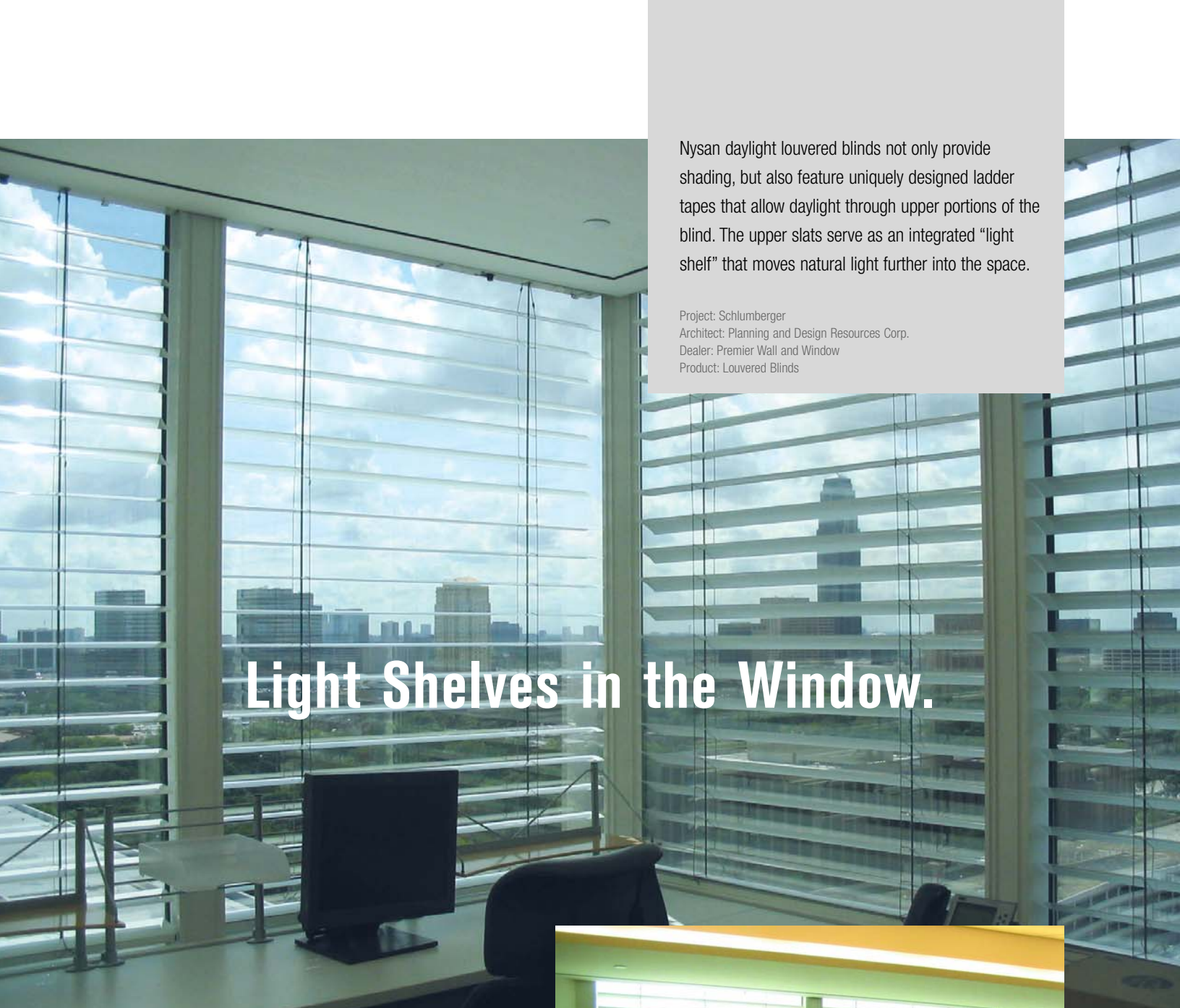
Heavy-duty operating mechanisms feature:

- Headrail, slats, and bottom rail engineered to withstand ice and snow loads
- Side guides, lift tapes, and ladders designed to prevent vibration due to wind, along with available wind-sensing controls that retract blinds when needed



Resilient louvers offered with a range of options, including:

- Slats in 0.4 and 0.5 gauge metal, available in 2" (50mm), 3" (75mm), 4" (100mm), and 6" (150mm) sizes
- Wide selection of durable finishes, including double-stove-enameled, polyester-powder-coated, and fluoropolymer-painted finishes
- Optional perforation that allows various openness to maintain exterior views even when blinds are fully closed



Nysan daylight louvered blinds not only provide shading, but also feature uniquely designed ladder tapes that allow daylight through upper portions of the blind. The upper slats serve as an integrated “light shelf” that moves natural light further into the space.

Project: Schlumberger  
Architect: Planning and Design Resources Corp.  
Dealer: Premier Wall and Window  
Product: Louvered Blinds

# Light Shelves in the Window.



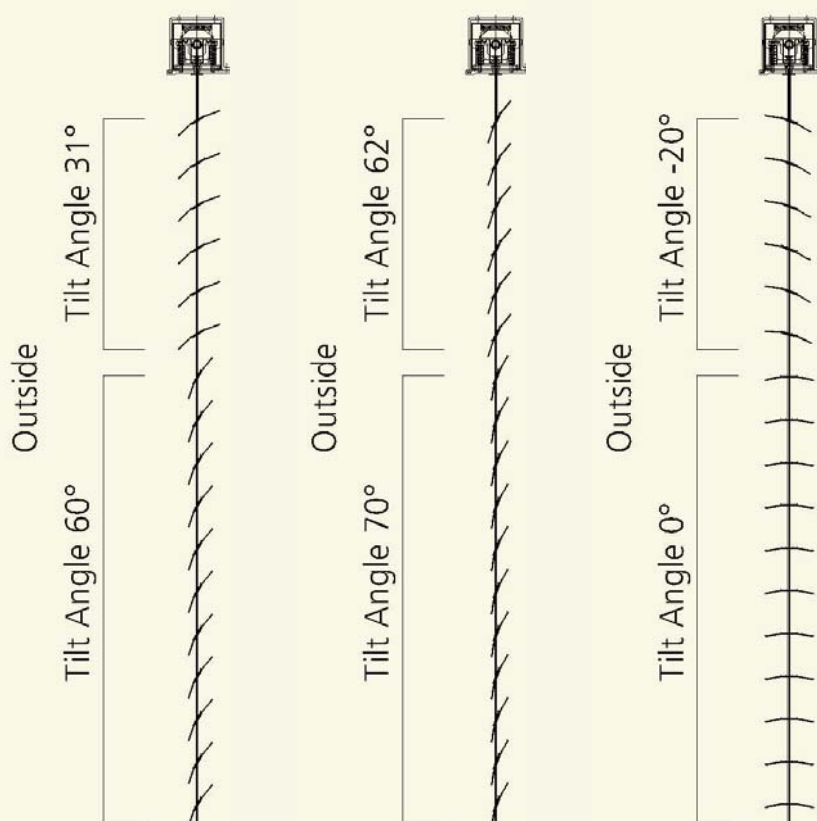


## Nysan Daylight Louvered Blind Features

Designed on the basis of a large specialty louvered blind, daylight blinds combine the solar performance of a standard blind with the added ability to reflect daylight through the upper portion of the system.

- Durable 0.4 and 0.5 gauge slats available in 2" (50mm), 3" (75mm), 4" (100mm), and 6" (150mm) sizes with the entire range of slat finishes
- Designed for both interior and exterior applications, daylight blinds are most effective when used in internal environments
- Optional perforation that allows various openness to maintain exterior views even when blinds are fully closed
- Full automation and sun-tracking capabilities available

### DAYLIGHT BLIND TILT ANGLES



#### DAYLIGHTING:

A scheme designed to optimize harvesting of natural light in a space, including such factors as building location and orientation; size, location, and shape of windows and skylights; and integration of light shelves/pipes, solar control systems, lighting controls, and shading systems.



SHADING  
WITHIN A FAÇADE

# Comfortable in Your Own Skin.



Project: University of Toronto  
Architect: architectsAlliance  
and Behnisch Architekten  
Dealer: Commercial Vision  
Product: Ventilated Façade  
Photo: Ben Rahn/A-Frame, Inc.



Architects are increasingly designing double-skin passive and active ventilated facades to lower buildings' energy requirements for heating and cooling. While more expensive to build than a traditional design, such facades provide significantly higher levels of environmental control and offer both long-term financial and sustainability advantages.

Double facades have an inner and outer glazed skin with a variable space between. External and specialty louvered blinds are installed in the space between the two skins, where they serve as a key method of controlling the amount of solar energy that passes into and through this void. The blinds automatically raise, lower and tilt as required depending on environmental conditions:

- In the summer, blinds will remain partially or fully closed, absorbing and reflecting solar energy to shield the interior from solar gain. Vents at the top and bottom of the void (or on each floor) then open, allowing warm air continually to be replaced with cooler air via the stack effect
- In the winter, blinds will remain mostly open to maximize passive solar heating, except as needed for glare control. Façade vents remain closed, creating a thermal barrier of warmer air in the void

#### **ACTIVE FAÇADE:**

A building wrapped with two glazed surfaces – typically an outer single glazing and an inner double glazing – with external louvered blinds and vents that control (natural or forced) air flow between the two surfaces.







# Made in the Shade.

Nysan external roller shades offer exceptionally efficient solutions for flexible range of applications, including gravity drop roller shades, tension systems and customized solutions. Our durable exterior fabrics are colorfast, resistant to damage from water, rot, and heat, and remain dimensionally stable to prevent sagging and stretching.

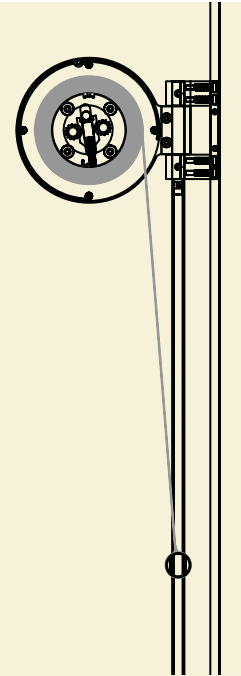
Project: Four Seasons Centre for Performing Arts  
Architect: Diamond and Schmitt Architects, Inc.  
Dealer: Commercial Vision  
Product: External Rollers

Nysan external roller shades feature:

- Very good protection against thermal gain and glare, with performance superior to internal window coverings
- The ability to retract shades completely when not required
- A wide variety of fabric colors, openesses, and options to customize the aesthetics and performance of the shade
- Integration with intelligent controls makes it possible to create an active shading solution on sun-facing elevations
- Gravity drop roller shades, which resemble standard interior shades but feature specially designed operating mechanisms and fabrics

All systems feature:

- Attractive headrail to protect the fabric (and motor) in the raised position
- Durable roller tube incorporating the motor and onto which the fabric shade is attached
- Heavy-duty brackets, bottom rail, and side guides engineered to withstand adverse environmental conditions
- Full motorization and automation available for raising, lowering, and adjusting the shade



Our engineering team collaborates with architects and designers to develop innovative and highly customized external shading solutions to meet the aesthetic and performance requirements of any project.

- Sliding screens in metal, wood, fabric, or other materials
- Specialty configurations for inclined and compound glazing surfaces
- Very large louvered blinds and custom slat sizes/profile





## Improving IEQ to Boost Productivity

Studies show that a typical large company can achieve productivity gains of \$10 million or more annually by creating an environment that boosts productivity by just 5%. That's about 15 minutes more work from each employee per day.

Productivity gains are the payoff for investing in internal environmental quality. When the comfort and well-being of employees improves, productivity rises.

A well-designed solar-control solution will significantly enhance the comfort and well being of a building's occupants. By managing natural light, thermal gain, and glare, Nysan systems improve indoor environmental quality.

The diagrams opposite illustrate how well-designed schemes for solar control improve indoor environmental quality (IEQ) by:

- Admitting ample light and exterior views
- Enhancing daylighting schemes
- Reducing glare on computer screens and other reflective surfaces
- Managing thermal gain from incident solar energy
- Giving occupants independent control of the light, air, and temperature in a space

### INTERNAL SYSTEMS OPTIMIZE NATURAL LIGHTING

Providing excellent contact with the outdoors, windows also admit plenty of daylight. Light shelves, daylight blinds, and other systems reflect natural light deeper into the space, spreading the benefits among more people and reducing dependence on artificial lights.

### WINDOW SHADES AND BLINDS REDUCE GLARE

Internal shading systems such as roller shades and horizontal blinds allow people to control how much daylight falls on their workspace, allowing them to eliminate glare and annoying reflections on computer screens, for example.

### EXTERNAL SYSTEMS REGULATE HEAT

By controlling incident solar energy before it enters the building envelope, external louvered blinds, brise soleil, and sun louvers regulate the temperature to reduce the need for air conditioning.

### LOW-EMITTING MATERIALS MAINTAIN AIR QUALITY

Careful selection of low-emitting materials – textiles and other materials free of PVC and halogen, for example – in order to minimize the presence of air contaminants such as harmful or irritating dust and odors.

### INTERNAL ENVIRONMENTAL QUALITY:

A standard for evaluating the comfort and well being of the occupants of a space. Incorporates factors such as light and glare, temperature regulation, acoustics, and air quality.



# Holistic Approach

Nysan Solar Control products and systems are designed to improve indoor environmental quality and conserve energy. These systems help create built environments that are comfortable, healthy, productive, and sustainable. Our engineering and production processes minimize embodied environmental impact while meeting the highest standards for commercial, hospitality, industrial, institutional, and commercial applications.

Sustainable products include:

- **GreenScreen PVC-free fabrics** for roller shades that are best in class for quality, performance, and design choices
- **External louvered blinds, brise soleil, and sun louvers** – the most effective shading systems available. Proven to deflect three times more thermal gain than traditional window coverings
- **Advanced controls** – including sun-tracking and intelligent, context-based solutions – that integrate fully with building management systems to optimize performance
- The industry's widest range of custom and design-built solutions to express the latest developments in green architecture

## RECENT GREEN PROJECTS

Our engineers have worked on numerous green and sustainably designed projects, from manufacturing facilities to high-rise office towers. Some recent examples appear below:

Wind NRG, Hinesburg, VT (Gold LEED)

One Bryant Park, New York, NY (Platinum LEED)

Alley 24, Seattle, WA (Gold LEED)

Schlumberger, Houston, TX (LEED CI)

Electronic Arts, Vancouver, BC (Gold LEED)

California Academy of Sciences, San Francisco, CA (Platinum LEED)

Art Institute of Chicago, Chicago, IL (Silver LEED)

SmithCarter, Winnipeg, MB (Silver LEED)

University of Toronto Center for Biosciences Technology and Design

University of Michigan Bio Science Research Building

30 Hickson Road, The Bond

Alberta Children's Hospital, Calgary, AB





# HunterDouglasContract

WINDOW COVERINGS

CEILINGS

SOLAR CONTROL



Nysan Solar Control Systems  
#1-115 28th Street SE  
Calgary, AB  
Canada  
T2A 5K4  
phone: 403.204.8675  
fax: 403.204.8676  
[www.nysan.com](http://www.nysan.com)