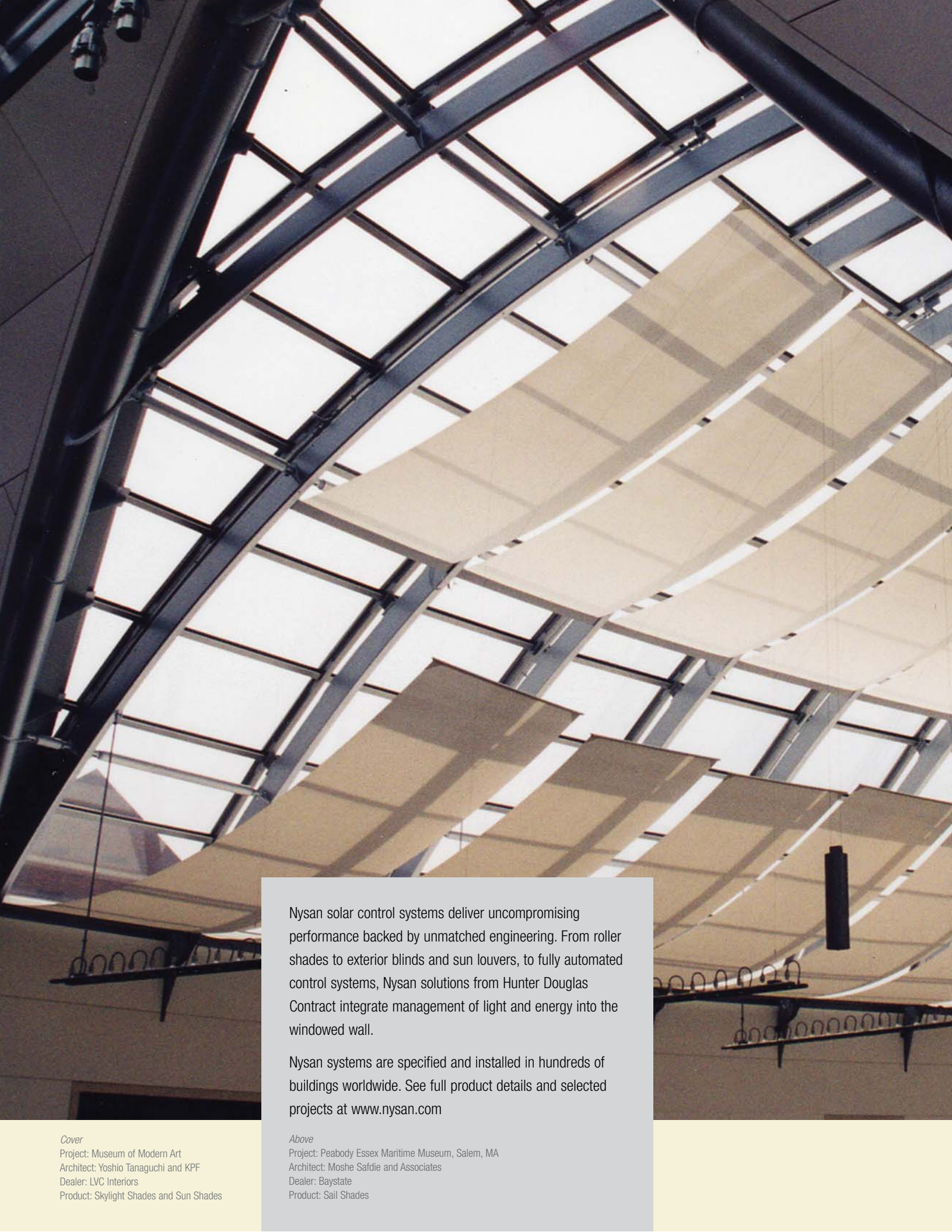


Skylight Shading



SOLAR CONTROL

A Hunter Douglas Contract Company



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

Cover
Project: Museum of Modern Art
Architect: Yoshio Tanaguchi and KPF
Dealer: LVC Interiors
Product: Skylight Shades and Sun Shades

Above
Project: Peabody Essex Maritime Museum, Salem, MA
Architect: Moshe Safdie and Associates
Dealer: Baystate
Product: Sail Shades



Service. Performance. Innovation.

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Architects have long used skylights to bring natural light into their designs. In the 1930s, Louis Kahn placed north-facing skylights in industrial and manufacturing spaces. Today, skylights appear in applications ranging from museums to shopping malls.

Project: Private Residence, Calgary, Canada
Dealer: RGO Office Products
Product: Internal Roller Shades

Make Skylights Easy.

Traditionally difficult to shade, skylights represent a challenge to building owners. While these glazing surfaces maximize daylight entry into a space, they also introduce significant glare and thermal gain along with the natural light. Addressing these and other factors – such as specialty glazing shapes – can require considerable technical expertise.

Nysan skylight systems are designed to address the solar control and daylighting needs of each specific project.

All our systems offer:

- Full range of choices for openness, color, and outward visibility, including PVC-free fabrics for internal environmental quality and dual-color/metallicized fabrics for optimal thermal control
- Optional automated control optimization through the Nysan SolarWare™ system
- Hassle-Free™ Warranty

OPENNESS FACTOR:

A measure of the proportion of the holes in a fabric to the total area of the fabric. A low openness factor indicates a very close weave. Openness factor can also be defined as the amount of UV light that can transfer through the material.

SOLAR PROPERTIES:

Measures of the solar performance of a fabric. Solar transmittance – the amount of solar energy that passes through a fabric. Solar reflectance – the amount of solar energy reflected by a fabric. Solar absorptance – the amount of solar energy absorbed by a fabric.

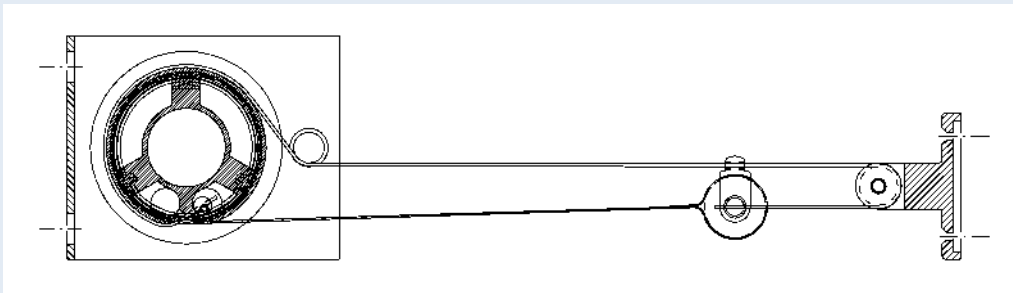


Setting the Standard in Tension Shades.

Nysan tension shades are the most capable systems available in the market today, offering uncompromising quality, simple installation, and ease of operation. In addition, Nysan tension shades offer exclusive single motor drives and motor coupling tension systems to reduce installation costs, controllers and wiring. Nysan is also able to deliver dual and irregular shaped tension systems including triangles and shades that travel along compound curves.

Project: Museum of Modern Art
Architect: Yoshio Tanaguchi and KPF
Dealer: LVC Interiors
Product: Skylight Shades and Sun Shades

HORIZONTAL TENSION SHADE



Nysan tension shades offer the most complete range of design solutions available today. Designed to maintain a flat, taut fabric plane, Nysan tension shades feature:

- Innovative tensioning system adjusts automatically to keep shades taut across longer spans
- Single motor both extends and retracts the shade, reducing installation, controller and wiring complexity
- Coupling of 2 tension systems through a single motor to reduce costs
- Available dual-shade systems make it possible to create solutions that combine both translucent and blackout shades

COMPOUND CURVE:

Two curves of a different radii, but curving in the same direction, connected together.

Setting Sail.



Dramatic and one of a kind, Nysan sail shades are designed to provide distinct light control and diffusion. Nysan sail shades offer a wide range of design options for skylights of any shape and size, including even very large atria.

Project: Peabody Essex Maritime Museum, Salem, MA
Architect: Moshe Safdie and Associates
Dealer: Baystate
Product: Sail Shades

Designed to meet the requirements of the space, sail shades can provide impressive solar control for both small and large skylights and atria. Available with the full line of Nysan fabric including GreenScreen®, sail shades can be used to reduce glare and solar gain, diffuse light and increase natural daylight depending on the application and installation.

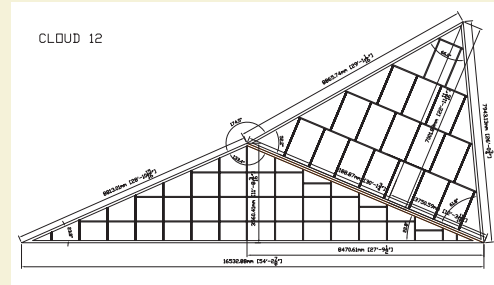
Our engineering expertise ensures effective and reliable shading in even the largest and most difficult applications:

- **Free-hanging fixed shades** – Shade clouds that diffuse sunlight, eliminating glare and enhancing daylighting
- **Counterweight systems** – Dramatically draped shades that utilize hanging weights to facilitate operation
- **Tension and Suspension Systems** – Designed specifically to integrate with the skylight system, fixed or operable suspension systems provide custom solar control alternatives for architects and designers

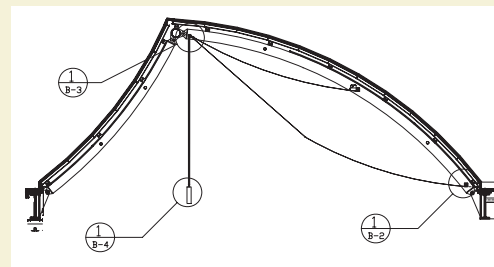
SUN ANGLE:

The position of the sun is determined from two angles – the altitude angle and the azimuth angle. The altitude angle indicates the height of the sun in the sky; the azimuth angle indicates how far the sun is from due north/south.

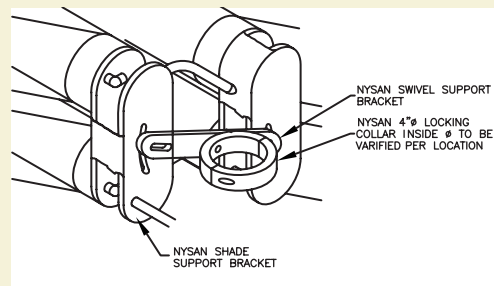
SHADE CLOUDS



COUNTERWEIGHT



SUSPENSION SYSTEM



No Limits.

From custom fabrics and specialized shapes to fully automated systems, our engineering team collaborates with architects and designers, creating innovative systems to meet the aesthetic and performance requirements of any project.



Custom Nysan shading systems remove virtually all limits on skylight shading design. An extensive international portfolio includes solutions created for:

- Specialty shapes, including trapezoids, triangles, and fan arrays
- Inclined, sloped, horizontal, and compound glazing applications
- Extraordinarily large tension skylight shades up to 30 feet, custom sail shades and suspension systems even larger
- Unique integrated rainscreen and cleaning systems



Facing Page:
Project: Skirball Cultural Center
Architect: Moshe Safdie and Associates
Dealer: Modern Interiors
Product: Custom

Left:
Project: KBC Bank
Architect: Michael Jaspers, AR-TE
Product: Custom

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 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.

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.



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



*Below: Alley 24, Seattle, WA
Architect: NBBJ
Dealer: Pacific Shades
Product: External Louvered Blinds*



*Below: Peabody Essex Maritime Museum, Salem, MA
Architect: Moshe Safdie and Associates
Dealer: Baystate
Product: Sail Shades*



SELECTED PROJECTS

Skirball Cultural Center, Los Angeles, CA
Architect: Moshe Safdie

Museum of Modern Art, New York, NY
Architect: Yoshio Tanaguchi and KPF

Financial Trading Center, Charlotte, NC
Architect: Skidmore Owings & Merrill LLP (SOM)

Vancouver Public Library, Vancouver, BC
Architect: Moshe Safdie; Downs/Archambault Part.

World Trade Center, Seattle, WA

Fluor Headquarters, Calgary, AL
Architect: Riddel Kurczaba

Wind NRG Partners, LLC, Hinesburg, VT
Architect: William Maclay Architects & Planners

MIT Stata Center, Cambridge, MA
Architect: Frank Gehry

Muhammad Ali Center, Louisville, KY
Architect: Beyer Blinder Belle

University of Michigan Bio Science
Research Building,
Ann Arbor, MI
Architect: Polshek Partnership

Nelson Atkins Museum of Art, Kansas City, MO
Architect: Steven Holl

Lambeau Stadium, Green Bay, WI

Citi National Plaza, Los Angeles, CA

California Academy of Sciences, San Francisco, CA
Architect: Renzo Piano Building Workshop

Art Institute of Chicago, Chicago, IL
Architect: Renzo Piano Building Workshop

Below: Museum of Modern Art, New York, NY
Architect: Yoshio Tanaguchi and KPF
Dealer: LVC Interiors
Product: Skylight Shades and Sun Shades



Below: Biodesign Institute at ASU, Tempe, AZ
Architect: Gould Evans and Lord, Aeck & Sargent Architecture
Dealer: HCI Resources
Product: Custom Wood Louver System



Learn More

For the last 80 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings. Architects and designers from around the world have taken advantage of Hunter Douglas' unmatched project development, service and support. Chances are, you've seen more of Hunter Douglas than you think. Just look around. With major operation centers in North America, Europe, Latin America, Asia and Australia, we've contributed to thousands of high-profile installations, from retail and commercial facilities to major transit centers and government buildings. Not only are the world's architects and designers our partners, they're our inspiration. As they continue to raise the bar for excellence, we're creating projects to bring their visions to life.

- Call 800.727.8953, option 3 to speak with a specialist
- Visit www.nysan.com

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