

Sliding Shutter Screen

**HunterDouglas** 

SUN CONTROL





Above : Residential building

Product : HunterDouglas® Sliding Shutter Screen
Special : 113105 bronze-tangerine 2 sides combination



HunterDouglas® Sliding Shutter Screen application offers an elegant, flexible and high performance solution for sun control. Highly durable Outdoor Screen Fabrics mounted on the outside of the shutter frame, provide optimal solar effectiveness for managing internal comfort.

The frameless look and functionality of Sliding Shutter Screen for external application, gives an architecture aesthetic to the building with design flexibility in colour and application. A selection of high performance Outdoor Screen Fabrics is available to create the desired solution.



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Above : Residential building

Product: HunterDouglas® Sliding Shutter Screen
Special: 112101 sand-white (front), 112112 sand,
112113 sand-bronze (front) combination

Right : Residential building

Product: HunterDouglas® Sliding Shutter Screen
Special: 113105 bronze-tangerine 2 sides combination



#### SOPHISTICATED DESIGN

The HunterDouglas® Sliding Shutter
Screen consists of a frame of extruded
aluminium profiles and fibreglass Screen
Fabric with concealed fixation.
The solution presents an architectural
appearance with sophisticated technical
design that provides consistent tension
in the Screen Fabric and minimises dirt
accumulation around the aluminium
frame.

#### **FLEXIBILITY**

A wide range of Outdoor Screen Fabrics, based on Enduris® Glass Core technology, is available for outside shutter infill application. The many colours in the Outdoor Screen Fabrics collection enable unlimited creative possibilities. The colouring of the aluminium frame of the HunterDouglas® Sliding Shutter Screen can be matched with the building design and is available in anodised or powdercoat finish. The system offers maximum flexibility by manual, motorised or Building Management control options for both easy-to reach and out-of-the-way spaces.

#### CONTROL OVER COMFORT

A comfortable and pleasant indoor environment is the goal of virtually any building designer. HunterDouglas® Sliding Shutter Screen system is designed to improve the indoor visual and thermal comfort. The openness of the woven screen material filters direct sunlight and reduces the impact of solar radiation. Since solar shading properties vary depending on fabric characteristics, the selection of the right, Outdoor Screen Fabric is a key to creating an optimal shading solution.



#### **SCREEN - KEY FEATURES**

- Screen Fabrics as shutter infill for outdoor applications
- Wide range of high performance Screen Fabrics in different colour shades for external application
- Screen Fabrics based on Enduris® Glass Core technology
- 3% openness factor in Screen Fabrics
- Screen Fabric filters direct sunlight and reduces the impact of solar radiation
- Highly durable and concealed fixation of the Screen Fabrics
- Frameless architectural appearance
- Shutter height upto 3.2 meter as standard.
- Compatible with HunterDouglas® Sliding Shutter program
- Manual or motorised positioning systems
- Concealed motor fixation
- Can be fully integrated with the range of HunterDouglas® Façades
- Easy installation and maintenance



Above : Residential building

Product: HunterDouglas® Sliding Shutter Screen

Special: 101101 white, 108108 grey, 118118 black combination

### SCREEN FABRICS

The selection of Outdoor Screen Fabrics is based on the high performance Enduris® Glass Core technology. The proprietary combination of superior quality coatings and glass yarns offers proven performance characteristics for controlling heat and light. The selected Screen Fabrics are woven in the Sergé pattern, according to fully tested production techniques, all with an openness factor of 3%. Outdoor Screen Fabrics are available in a wide palette of attractive designs for interior and exterior applications.

#### **DURABILITY**

The selected Outdoor Screen Fabrics are an environmental friendly solution for sun shading. The woven Screen Fabric is extremely light-fast and fire-retardant with outstanding dimensional stability. Highly resistant to wear, the anti-static treatment repels dirt, resulting in a particularly long life span. The glass core, with its excellent tensile strength and tear resistance, makes the Screen Fabric highly resistant to high wind impact. With its resistance to humidity, rot and dirt, the Outdoor Screen Fabrics with Enduris® Glass Core technology offers the ideal solution for external sun shading.

#### CHOOSING THE RIGHT FABRIC

The right application of Outdoor Screen Fabrics can greatly influence the interior comfort levels.

- Light colours are more efficient for heat protection, reflecting more heat and light back toward the exterior of the building.
- Darker-coloured fabrics absorb more heat and provide better outward visibility than lighter ones, as they reflect less interior light back toward the occupant.

The open structure of the Screen Fabric diffuses daylight, whilst blocking direct rays, reducing heat built up and playing a key role in creating balanced natural lighting in interior spaces.

Hunter Douglas can help to create an optimal solution using our extensive knowledge and proprietary Energy and Light software tool that can analyze the building, location, space and other critical factors and recommend the ideal sun control solution.



Enduris® Glass Core technology, a proprietary combination of superior-quality coatings and glass yarns, fully tested production techniques and proven performance characteristics, are the best in glass-core shading fabrics.



## Sliding Shutter Screen System

#### **SCREEN TENSION**

Imposed windloads onto the shutter and the screen infill can in the long term affect the tensioning of the Screen Fabric infill, causing sagging.

The HunterDouglas® Sliding Shutter Screen has been specially designed to maintain a consistent applied tension in the Screen Fabric and withstand the negative effects that imposed windloads can cause.

#### CONTAMINATION PREVENTION

In external conditions rainwater containing dirt can run down the shutter frame and finally into the screen which tries to filter the debris. The unwanted dirt and residue causes contamination of the Screen Fabric.

To prevent this contamination
Hunter Douglas has designed the
aluminium frame with an angled surface
that minimises the contact surface
between the Screen Fabric and frame and
drainage openings at the bottom of the
frame.

#### **FRAME**

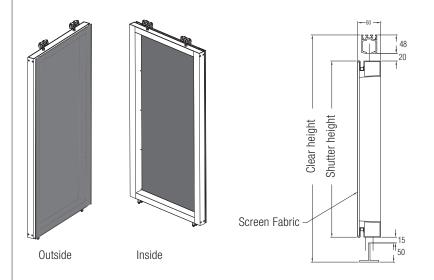
Both horizontal and vertical frame profiles are made of extruded aluminium

#### SURFACE TREATMENT

The aluminium components can either be anodised or powder coated. Many colours are available upon request.

#### MADE TO MEASURE

The HunterDouglas® Sliding Shutter Screen is available as a made to measure application, delivered fully assembled and ready for installation. The HunterDouglas® Sliding Shutter Screen is designed to offer an elegant, flexible and functional sun control solution. The special construction of the aluminium frame gives a 'frameless' appearance that integrates with the manual and motorised positioning systems developed for the standard HunterDouglas® Sliding Shutter System. The special construction also solves potential problems, like sagging and contamination, and enables easy and durable fixation of the Screen Fabric onto the shutter frame.

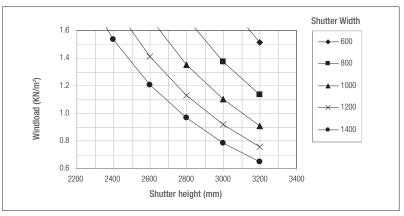


#### SHUTTER HEIGHT

The clear height is the total height of the Sliding Shutter Screen including the top rails, bottom rails and the required clearance in-between. Once the clear height has been determined, the 'shutter height' can be calculated.

#### FRAME DIMENSIONS

Frame dimensions - the height and the width - depend on the wind loads acting on the shutter .



#### Note

Calculating the value of the local windload is the responsibility of others (e.g. the design team), who will need to take into account local factors such as at corners, roof edges, building features and in accordance with relevant local country Building Standards / Codes etc.

## **Energy and Light Tool**

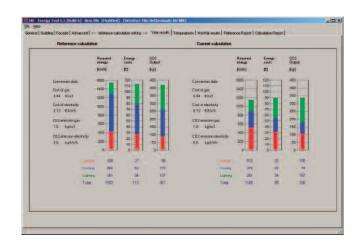
Using the right Sun Control System can greatly influence the thermal and visual indoor climate. Effective reduction of the amount of solar radiation entering the building, immediately decreases the amount of energy needed to cool the building. Blocking, transmitting, or reflecting direct sunlight and daylight enables HunterDouglas® Sun Control Systems to optimize the interior brightness and glare levels and to maintain the visual contact with the outdoors. Providing good thermal and visual comfort at a minimum energy cost calls for a careful matching of façade walls, glazing, sun control, lighting and HVAC equipment. This is a distinctly non-trivial exercise. Choices made in the early design phases can have a huge impact on the energy use of a building.

#### **ENERGY TOOL**

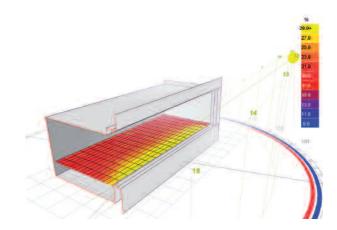
The Hunter Douglas thermal simulation package, the Energy Tool can calculate how much cooling and heating energy can be saved when using a Sun Control System, compared to a scenario without such an application. The Energy Tool helps make thermal comfort tangible by calculating solar energy transmittance for a model office with and without Sun Control Systems and with different types of glass. It takes into account factors such as geographic location, orientation, time of day and can also account for the effect of daylight-responsive artificial lighting. Our specialists can assist in modeling various product scenarios.

#### **LIGHT TOOL**

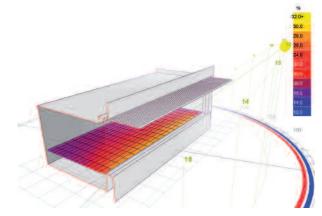
When designing an office space the question often arises what measures do we have to take to guarantee good visual comfort? The Hunter Douglas Light Tool makes visual comfort tangible by calculating luminance levels for a model office with and without sun control. The amount of glass, the orientation of the façade, the location on earth, weather, season and time of day are all taken into account. The images and analysis produced by the Light Tool give a good indication of the luminance ratios that can be expected with a particular solar shading system on varying times of the day and under varying circumstances. Calculating visual comfort is a key element in developing a sun control strategy. The Hunter Douglas Light Tool helps clients choose the sun control product that provides visual comfort under their particular circumstances.



Representative output of Energy Tool



Luminance level output by the Light Tool, situation without Sun Control System



Luminance level output by the Light Tool, situation with Sun Control System







#### **HUNTER DOUGLAS ARCHITECTURAL PROJECTS**

For 50 years, Hunter Douglas has been dedicated to innovation. As the field of Sun Control grows, we pride ourselves on leading the way as pioneers in the area.

We're working alongside architects and designers throughout the globe, discovering new, inventive methods of managing heat, light and energy. We've committed ourselves to crafting products that meet the highest standards of materials, construction and performance because we believe that you need the right tools to create projects that inspire.



Promoting sustainable forest management www.pefc.org



Hunter Douglas products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.



Our paint and aluminium melting processes are considered to be one of the industry standards in terms of clean production processes. All aluminium products are 100% recyclable at the end of their lifecycle.





**HunterDouglas** 

SUN CONTROL

#### **ARCHITECTURAL SERVICES**

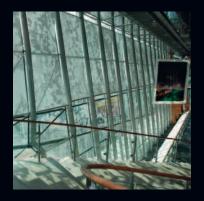
We support our business partners with a wide range of technical consulting and support services for architects, developers, and installers. We assist architects and developers with recommendations regarding materials, shapes and dimensions, colours and finishes. We also help creating design proposals, visualisations, and installation drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.

# Innovative Products Make Innovative Projects



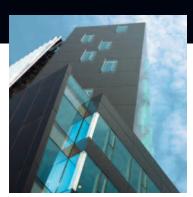
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