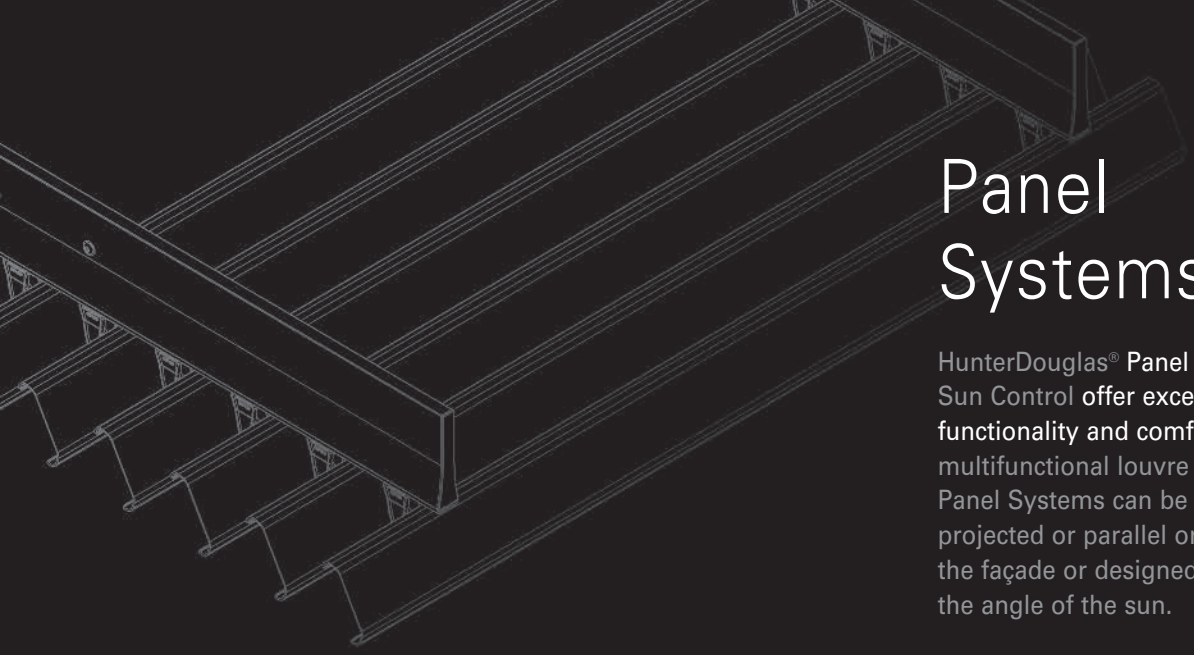
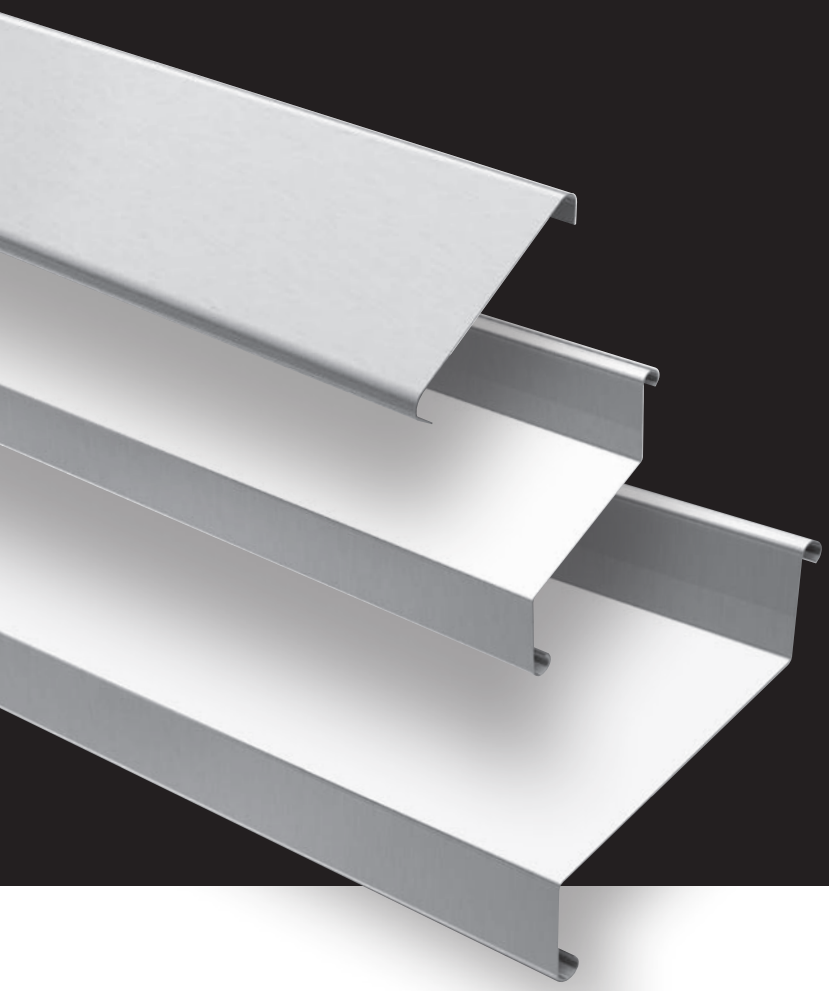


Panel Systems

HunterDouglas® Panel Systems for Sun Control offer excellent design, functionality and comfort with multifunctional louvre systems. Panel Systems can be installed in a projected or parallel orientation to the façade or designed in relation to the angle of the sun.



HunterDouglas
Architectural

Panel Systems

In line with style

DESIGN FLEXIBILITY

HunterDouglas® Panel Systems within the Sun Louvre product range, give architects the freedom to choose the right system to meet aesthetic, performance and comfort criteria.

Create an elegant, light appearance with gently curved/ segmented edges with aluminium rollformed panels 84R, 70S and 132S. Almost all HunterDouglas® Panel Systems can be mounted on the same substructure and projected horizontally, vertically or sloped.

DURABILITY

The high quality components, used to manufacture the Panel Systems, deliver high performance and low maintenance: products built to last.

EASY INSTALLATION

Panel Systems are easy and quick to install with very few tools required. All systems can be installed using the same extruded aluminium substructure.

Steel wall brackets fitted to the façade ensure the carrier profiles with brackets or stringers are easily fixed in place. Panels are snapped into place on the brackets or stringers without tools.

All Panel Systems (84R, 70S/132S) are aluminium single skin panels with a range of support structures. Horizontal and vertical projections come in a variety of panels and modulations to meet the project specification and design.

LIGHT, HEAT & ENERGY

Because great looks are not enough, Hunter Douglas has developed computer simulation and calculation tools to ensure optimal shading performance. Considering location, building orientation, pre-defined building requirements and local weather data, our project support team can analyse and custom-optimise the Sun Control system for each project.

CONTENT

Designed to work for you

Production by Hunter Douglas Ceiling Center

84R

SYSTEM DESCRIPTION

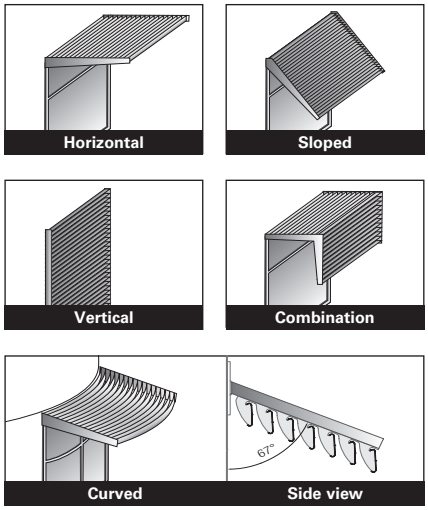
The HunterDouglas® 84R Panel System is a classic system ideal for straight, curved or sloped façade applications and has an elegant and light appearance with smooth rounded edges.

INSTALLATION

HunterDouglas® 84R Panel System is easy and quick to install with a minimum of tools required. When the steel wall brackets* are fitted to the façade, the carrier profiles with (pre-fixed) brackets and spacers or stringers slide over the wall brackets and are easily fixed with a bolt-through connection. The C-shaped panels (in full length) are clipped on to the brackets.

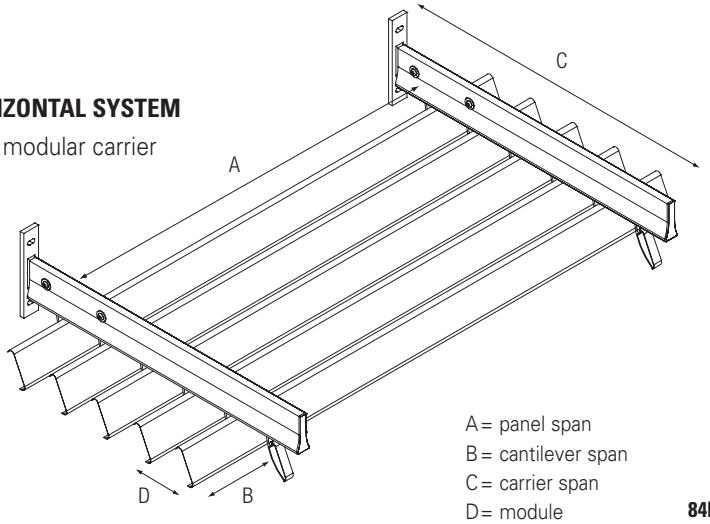
A wide range of carrier profiles with fixed or variable modulation is available to ensure that optimal shading angles and openness are achieved for each application. 84R Panel Systems can also be used as ventilated façades.

The 84R Panel System can be installed in 5 ways:



HORIZONTAL SYSTEM

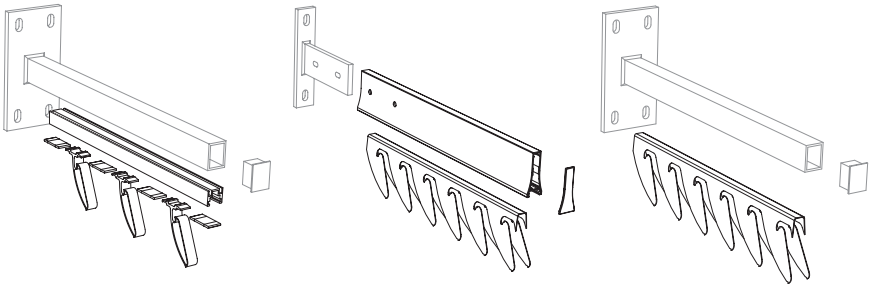
with modular carrier



A = panel span
B = cantilever span
C = carrier span
D = module

84R Panel (Alu)

OTHER SUPPORT STRUCTURES:



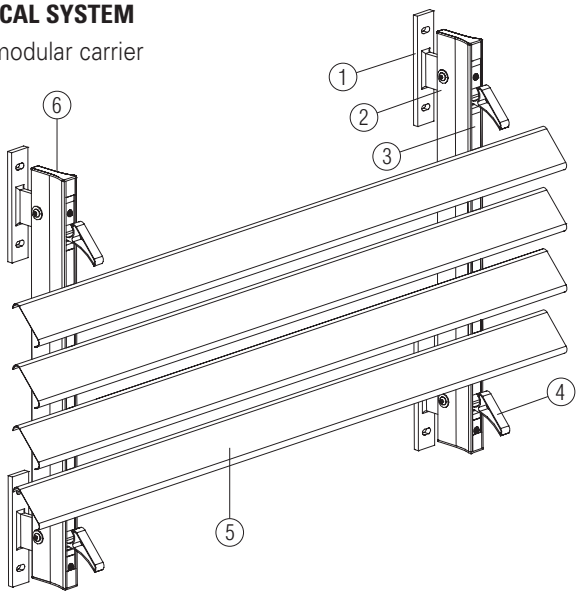
Modular system & rectangular hollow section

Carrier profile & stringer

Stringer & rectangular hollow section (in combination with washer sets)

VERTICAL SYSTEM

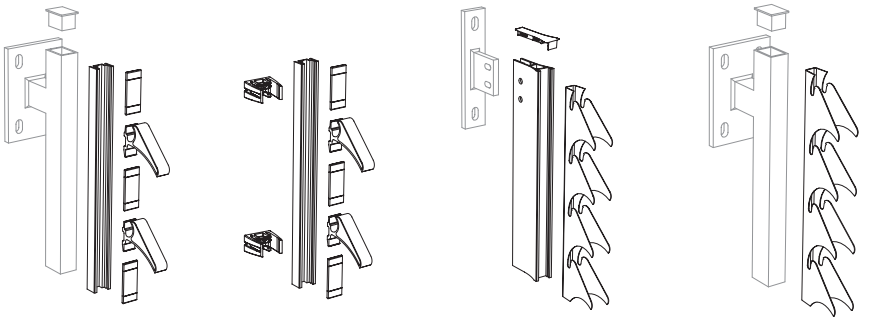
with modular carrier



1 = wall bracket*
2 = carrier profile
3 = spacer
4 = panel bracket
5 = panel
6 = end cap

84R Panel (Alu)

OTHER SUPPORT STRUCTURES:



Modular system & rectangular hollow section

Modular system & direct fixing clip

Carrier profile & stringer

Stringer & rectangular hollow section (in combination with washer sets)

** The steel wall brackets are usually designed and manufactured by the installers and are not a standardised part of the system*

84R

CARRIER SYSTEMS

A variety of carrier systems is available allowing the optimal solution for each application:
- the fixed SL-2/3/4/5 stringers
- the self supporting extruded SLR-40/60/60V/100 and the direct mount SLR-10 with different modules by using different spacers and brackets.

Each solution has its own modulation and shading angle.

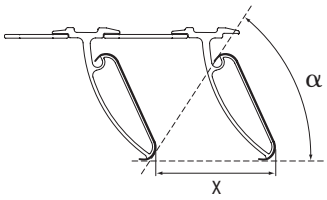
See page 6 - 7 for a complete overview of stringers and carrier systems suitable for 84R.

MATERIAL

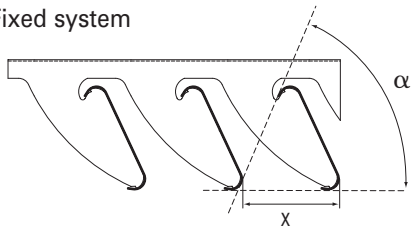
The 84R panels are roll formed from 0.6 mm thick pre-painted (Luxacote® system) stove enameled aluminium strip of corrosion resistant alloy EN-AW-3005.
The stringers are roll formed pre-painted profiles. The SLR-carrier system, brackets and spacers are aluminium extruded profiles.

SHADING ANGLES - Horizontal

Modular system



Fixed system

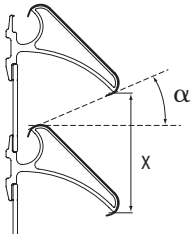


Modular system			Fixed system		
Spacer	**x**	**α**	**Stringer**	**x**	**α**
48	74	67°	SL-2	74	66°
63	89	57°	SL-4*	86	67°
88	114	45°			

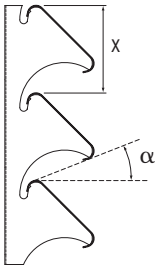
** to be mounted on top of a rectangular hollow section*

SHADING ANGLES - Vertical

Modular system



Fixed system



Modular system			Fixed system		
Spacer	**x**	**α**	**Stringer**	**x**	**α**
48	71	8°	SL-3	69	0°
63	86	23°	SL-4	86	21°
88	111	41°	SL-5	74	23°

SHADING ANGLES - Angled

The shading angle of a sun control system mounted under an angle is different to a horizontal projected system. For each individual mounting angle the shading angle can be calculated by our project support team (also for combined systems).

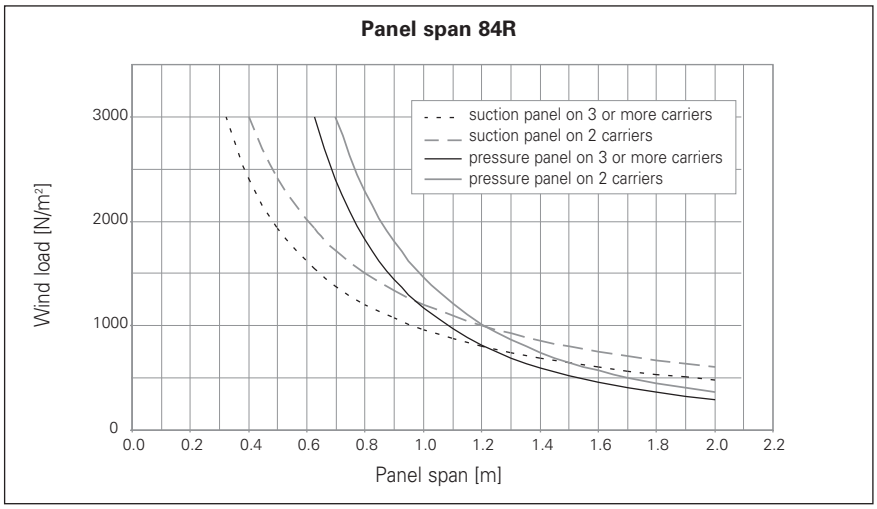
MAXIMUM SPANS

Panel Span

The panel span in relation to the wind load (pressure or suction), can be calculated from the graph on the right.

There are two graphs per wind load type based on the application:
- If a multi-span panel system is required, consult the '3 carriers or more' graph.
- When using 2 carriers, consult the '2 carriers' graph.

Note: Calculating the value of the local wind load is the responsibility of the installer who must take into account the regulations laid down by local authorities. For corners, roof edges or special designs, wind pressure/suction shall be determined with due consideration of the relevant local country's Standard Code of Building Practice.



For other carrier tables using our stringers or the modular carrier system, please consult the Hunter Douglas sales office. For snowloads consult your local building regulations.

70S/132S

SYSTEM DESCRIPTION

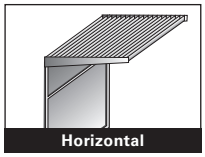
The HunterDouglas® 70S and 132S Panel System consist of sturdy Z-shaped panels. The panels provide a crisp, pleasing aesthetic design.

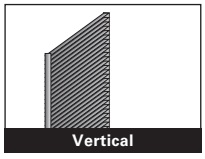
INSTALLATION

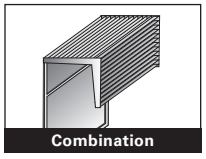
HunterDouglas® 70S and 132S Panel Systems are quick and easy to install with a minimum of tools required. When the steel wall brackets* are fitted to the façade, the carrier profiles with (pre-fixed) brackets and spacers slide over the wall bracket and are easily fixed with a bolt-through connection. The Z-shaped panels (in full length) are clipped onto the brackets.

A wide range of stylish carrier profiles with sliding brackets are available to ensure that optimal shading angles and openness are achieved for each application.
70S and 132S Panel Systems can also be used as ventilated façades.

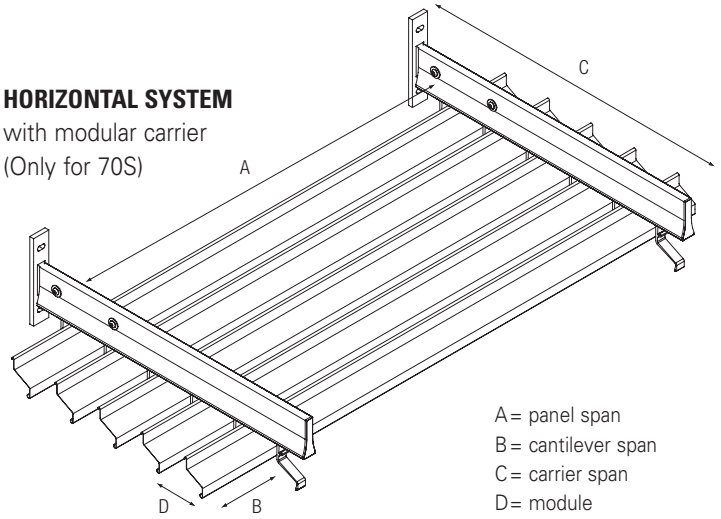
The 70S and 132S Panel System can be installed in 3 ways:



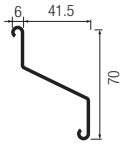




HORIZONTAL SYSTEM
with modular carrier
(Only for 70S)

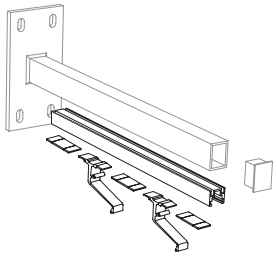


A = panel span
B = cantilever span
C = carrier span
D = module



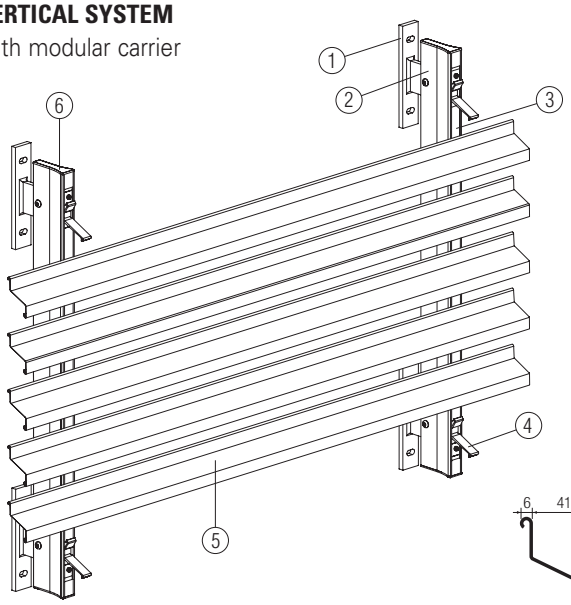
70S Panel (Alu)

OTHER SUPPORT STRUCTURES:

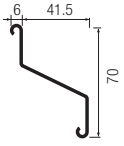


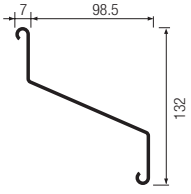
Modular system &
rectangular hollow section (Only for 70S)

VERTICAL SYSTEM
with modular carrier



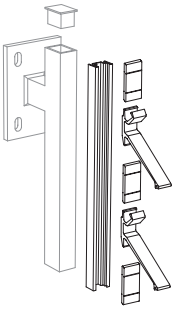
1 = wall bracket*
2 = carrier profile
3 = spacer
4 = panel bracket
5 = panel
6 = end cap



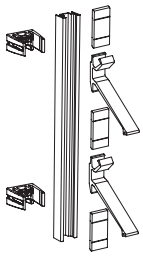


70S Panel (Alu) **132S Panel (Alu)**

OTHER SUPPORT STRUCTURES:



Modular system &
rectangular hollow section



Modular system &
direct fixing clip

** The steel wall brackets are usually designed and manufactured by the installers and are not a standardised part of the system*

70S/132S

CARRIER SYSTEMS

A variety of carrier systems is available allowing the optimal solution for each application:
- the self supporting extruded SLR-40/60/60V/100 and the direct mount SLR-10 with different modules due to different spacers and brackets.

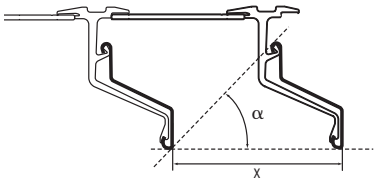
Each solution has its own modulation and shading angle.

See page 6 - 7 for a complete overview of carrier systems suitable for 70S and 132S.

MATERIAL

The 70S and 132S panels are roll formed from 0.6 mm pre-painted (Luxacote® system) stove enamelled aluminium strip of corrosion resistant alloy EN-AW-3005.
The SLR-carrier system, brackets and spacers are aluminium extruded profiles.

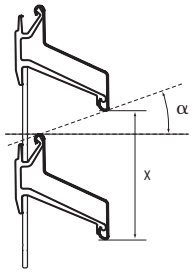
SHADING ANGLES - Horizontal



70S

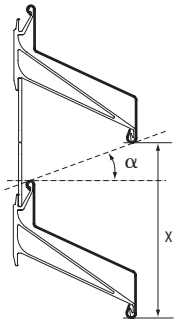
Spacer	x	α
48 mm	75	67°
63 mm	90	57°
88 mm	115	44°

SHADING ANGLES - Vertical



70S

Spacer	x	α
48 mm	70	0°
63 mm	85	20°
88 mm	110	43°



132S

Spacer	x	α
88 mm	132	0°
126 mm*1	170	22°
176 mm*2	220	42°

*1 126 mm (2 x 63 mm) - *2 176 mm (2 x 88 mm)

SHADING ANGLES - Angled

The shading angle of a sun control system mounted under an angle is different to a horizontal projected system. For each individual mounting angle the shading angle can be calculated by our project support team (also for combined systems).

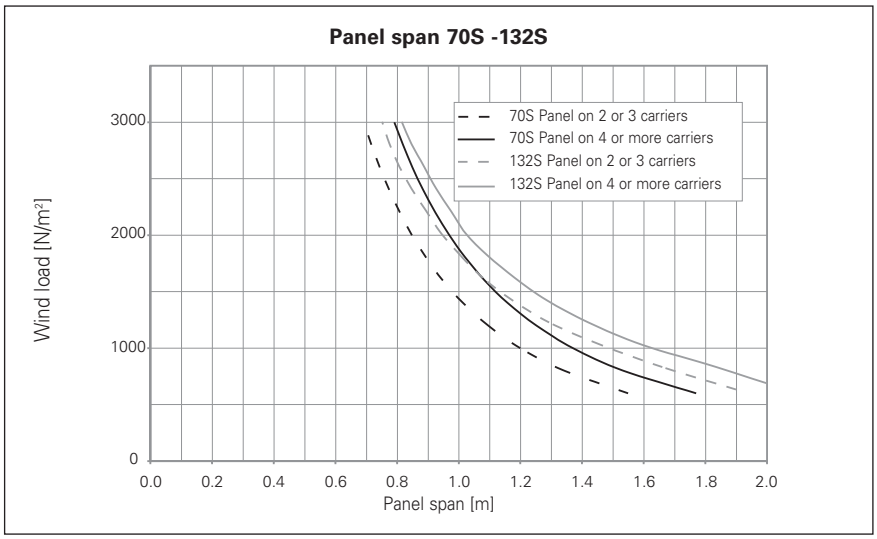
MAXIMUM SPANS

Panel Span

The panel span in relation to the wind load (pressure or suction), can be calculated from the graph to the right.

There are two graphs per wind load type based on the application:
- If a multi-span panel system is required, consult the '4 carriers or more' graph.
- When using 2 or 3 carriers, consult the '2 or 3 carriers' graph.

Note: Calculating the value of the local wind load is the responsibility of the installer who must take into account the regulations laid down by local authorities. For corners, roof edges or special designs, wind pressure/suction shall be determined with due consideration of the relevant local country's Standard Code of Building Practice.



For other carrier tables using our modular carrier system, please consult the Hunter Douglas sales office. For snowloads consult your local building regulations.

Substructure

DESCRIPTION

For the 84R, 70S and 132S Panel Systems there is a variety of (self-supporting) extruded carriers available. The 84R Panel System also has stringers available (see page 7).

SELF SUPPORTING CARRIERS:

To apply the SLR-self supporting carriers, only a wall bracket* is required. Carriers can be fixed directly on the wall-bracket, except the SLR-10. SLR-10 is fixed directly on the façade with the direct fixing clip (vertical installation) or on a rectangular hollow section (horizontal installation).

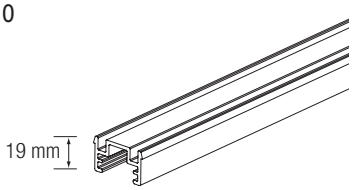
The extruded aluminium profiles of the SLR-system are available in:
- natural anodised finish
- mill finish to be powder coated / anodised in any colour

Each panel system is designed with its own specific brackets and spacers that easily slide into the SLR-carriers (See page 7)

The SLR-carriers can be closed with a specific end cap (excluding the SLR-10).

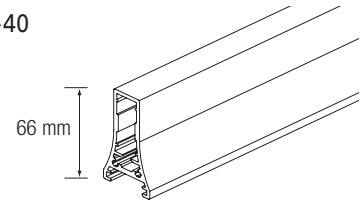
HORIZONTAL SYSTEM

SLR-10



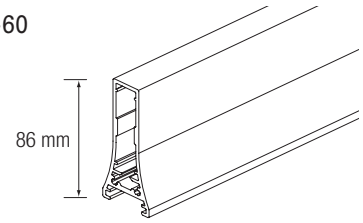
- to be used on a support structure
- for 84R and 70S

SLR-40



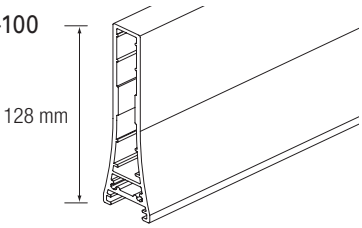
- to be used directly on wall bracket (40 x 10 mm)
- for 84R and 70S

SLR-60



- to be used directly on wall bracket (60 x 10 mm)
- for 84R and 70S

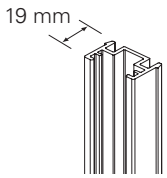
SLR-100



- to be used directly on wall bracket (100 x 10 mm)
- for 84R and 70S

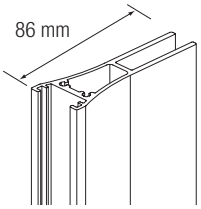
VERTICAL SYSTEM

SLR-10



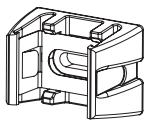
- to be used on a support structure
- for 84R, 70S and 132S

SLR-60V

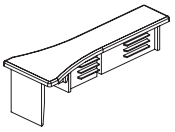


- to be used directly on wall bracket (with thickness 10 mm)
- for 84R, 70S and 132S

GENERAL PRODUCTS



Wall Bracket
- direct fixing clip for the SLR-10



End Cap
- available for the SLR-40, 60, 60V and 100

** The steel wall brackets are usually designed and manufactured by the installers and are not a standardised part of the system*

Specific carriers / Components

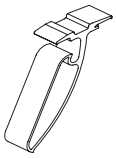
DESCRIPTION

The self supporting carriers and panel system have specific brackets and spacers.

84R SYSTEM

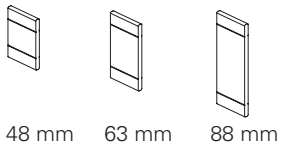
Fixed stringers are available to create more flexibility and can be mounted on:
- SLR-system
- Rectangular hollow section
  (in combination with washer sets)

COMPONENTS FOR THE SLR-SYSTEM

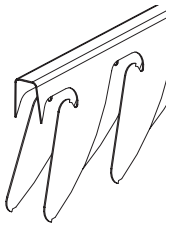


Horizontal Bracket (65°)
(natural anodised)

Vertical Bracket (45°)
(natural anodised)



Spacers
(natural anodised)

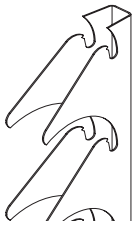


SL-2 (65°)

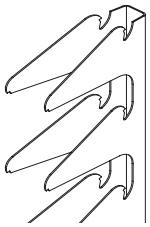
SL-4 (45°)

Stringers for horizontal applications
(pre-painted)

SL-3 (66°)



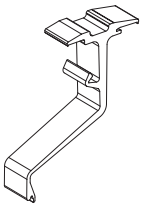
SL-4 (45°)



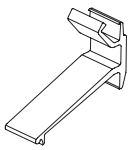
SL-5 (25°)

Stringers for vertical applications
(pre-painted)

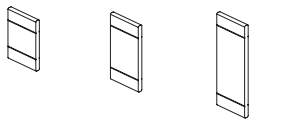
70S SYSTEM



Horizontal Bracket (65°)
(natural anodised)

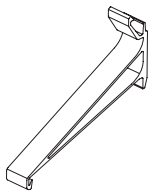


Vertical Bracket (65°)
(natural anodised)

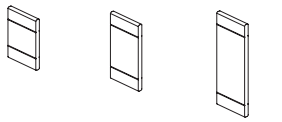


Spacers
(natural anodised)

132S SYSTEM



Vertical Bracket (65°)
(natural anodised)



Spacers
(natural anodised)

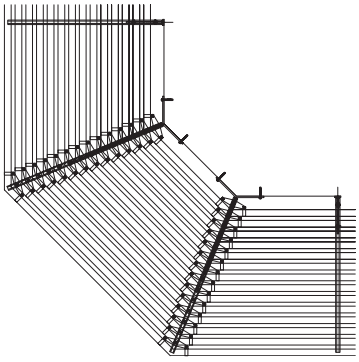
Design Options

CORNER SOLUTIONS

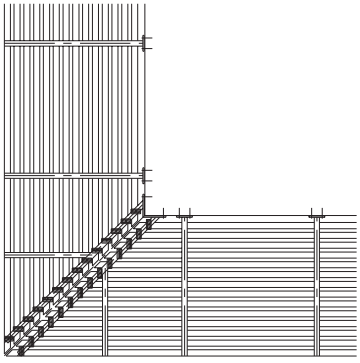
For each of the HunterDouglas® Panel Systems we offer solutions for every corner. As standard we have the following solutions per system.

System	A	B	C	D
84R	x*	x*	x	x
70S	x*	x*	x	x
132S	x	x	x	x

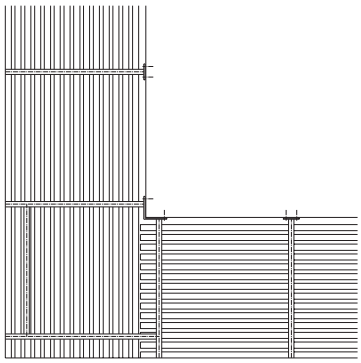
** These corners are easy to create with our standard corner brackets*



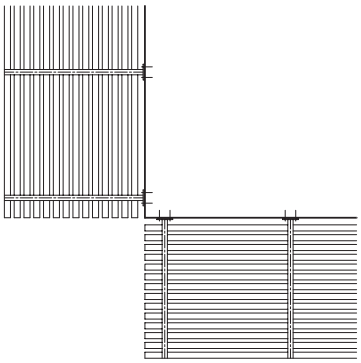
A: Fragmented Cut
(Panels have to be cut on site)



B: Mitre Cut
(Panels have to be cut on site)



C: Straight Cut



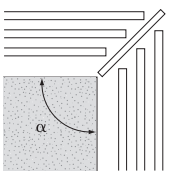
D: Open Corner

CORNER BRACKET

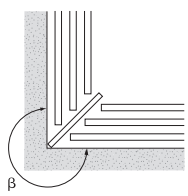
84R and 70S panels in combination with the Hunter Douglas SLR system come with a standard adjustable corner bracket. With the corner bracket you can easily install panels in every possible corner.

CORNER SOLUTION

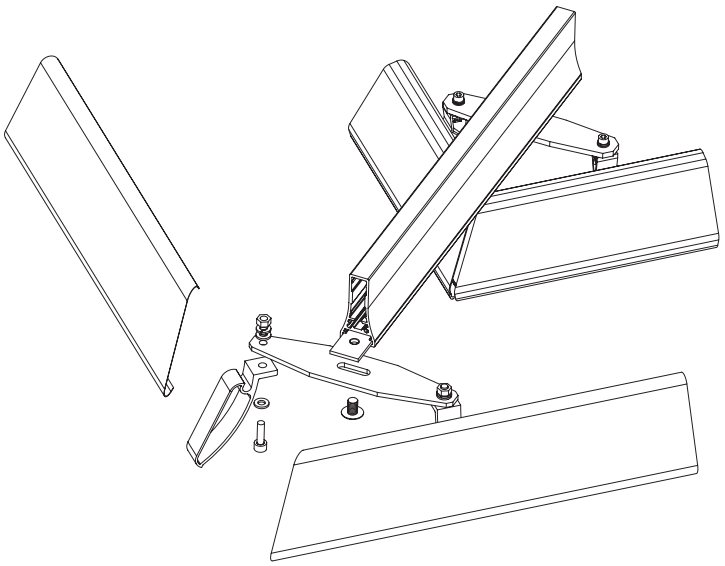
Angle	From	Till
α	45°	180°
β	180°	270°



Outside



Inside



Installation of the 84R panel with the adjustable corner bracket (also standard available for 70S) (Panels have to be cut on site)

Impressions

Project : Police Office
Location: Dongen, the Netherlands
Product : 84R with corner solution

Project : Comair
Location: Kempton Park, South Africa
Product : 70S with corner solution

Material specifications

ROLL FORMED 84R, 70S AND 132S PANELS

The panels are roll formed from 0.6 mm thick pre-painted (Luxacote® system) stove enameled aluminium strip (according to EN 1396). The strip is made from a corrosion resistant alloy EN AW-3005 or equivalent.

There is a wide standard colour range available for the roll formed panels. See the HunterDouglas® Exterior colour program. Other (RAL or NCS) colours are available on request. The panels have a full white coating on the back-side to enhance interior light levels.

SLR SELF SUPPORTING CARRIERS

The SLR-carriers are made of extruded aluminium (according to EN 755-9). Standard available in natural anodised (according to EN 12373) and mill-finish to give the freedom for anodising or powder coating.

ROLLFORMED STRINGERS

The 84R Panel System is also available with fixed stringers. The stringers are roll formed from 0.95 mm thick pre-painted (polyester paint) aluminium alloy HD5050 or equal (according to EN 1396).

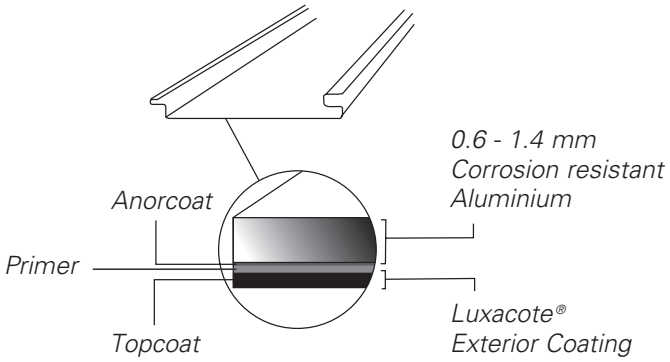
SLR BRACKETS AND SPACERS

The SLR-brackets and spacers are made of extruded aluminium (according to EN 755-9). Standard available in natural anodised finish.

LUXACOTE® (ONLY FOR THE ROLL FORMED PANELS)

Luxacote® is an exclusive Hunter Douglas innovation that enhances the durability of exterior aluminium building applications. Its strength and efficiency comes from a powerful 3-layered system that consists of an anorcoat pretreatment, a primer, and a pigmented topcoat.

Unprecedented Protection
LUXACOTE®
for exterior application



ANORCOAT - THE KEY TO DURABILITY

After degreasing and cleaning the aluminium substrate, an anorcoat conversion layer is applied to the product. This conversion layer accomplishes two things:
- Permanently anchors the paint to the aluminium surface
- Prevents the aluminium surface from corroding

Anorcoat is the key to the excellent performance of the Luxacote® system; it provides far superior protection than conventional conversion layers.

PRIMER - FOR ENHANCED LONGEVITY

Over the anorcoat we apply a primer that seals the substrate, resulting in enhanced longevity of the panels.

TOPCOAT - THE FINAL TOUCH

The pigments in the polyurethane topcoat provide the panels their colour while the integrated polyamide particles are the finishing touch of the Luxacote® system, giving products a scratch- and wear-resistant surface. Additionally, the polyamid particles protect from UV rays, improving the durability of the colour and gloss.

Hunter Douglas has completely integrated the application of Luxacote® into the production process. The result: extremely durable products with slightly textured surfaces that manage potentially damaging outdoor conditions.

A SPECTRUM OF STRENGTH: THE COLOURS OF LUXACOTE®

The colours available to the Luxacote® system vary from traditional subtle shades to vivid, bold and exciting colour palettes.
A full range of metallic colours is also available.

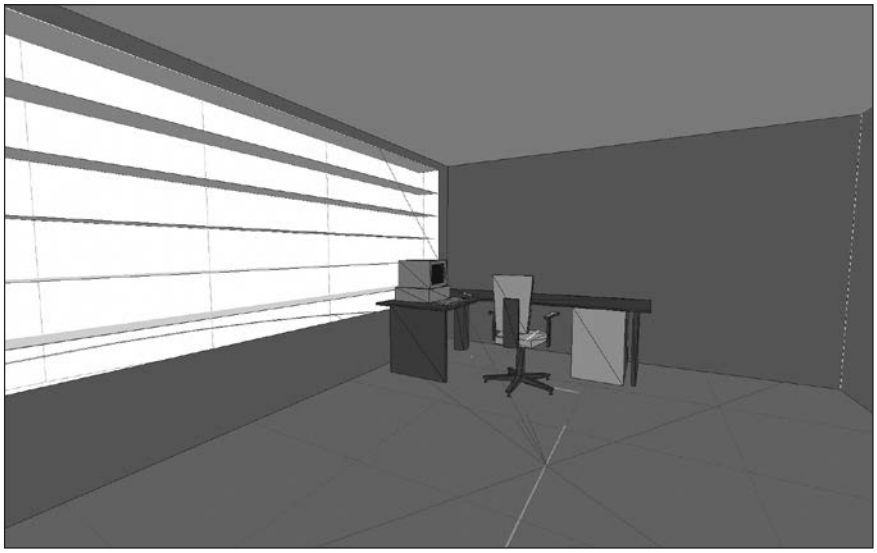
Light, Heat and Energy

COMFORT AND ENERGY SAVING

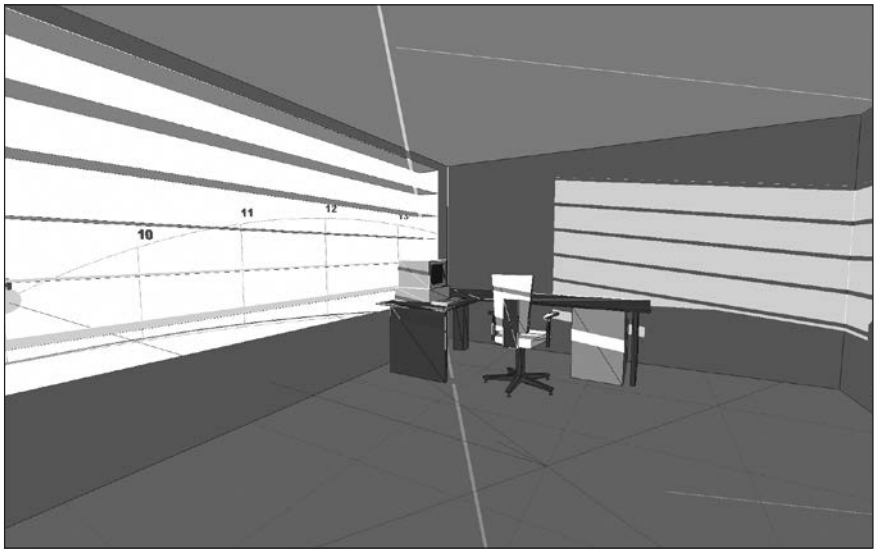
Using the right HunterDouglas® Sun Control system can greatly influence the thermal and visual indoor climate. Using the system intelligently both improves the overall comfort of a room, and minimises energy costs (lighting, heating and cooling installations).

By effectively reducing the amount of solar radiation entering the building with Sun Control systems, the amount of energy needed to cool the building is immediately decreased. Therefore, the capacity of the cooling equipment can be reduced, resulting in lower initial investments and operational costs.

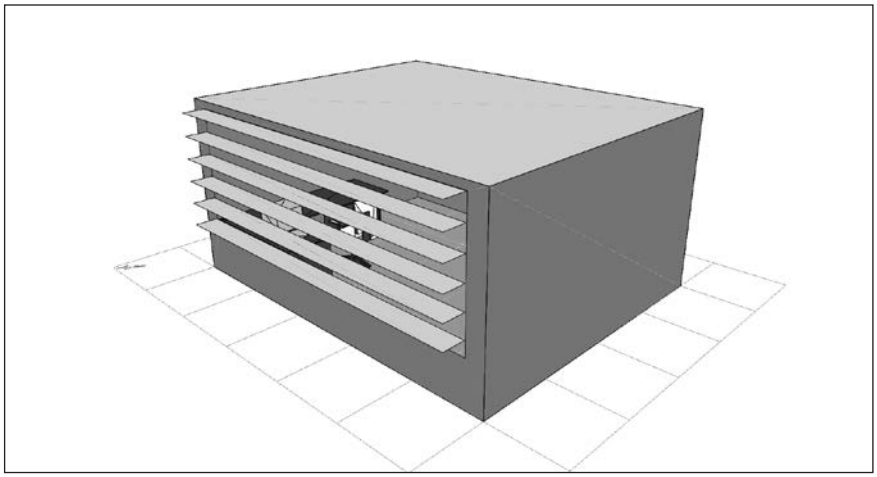
By either blocking, transmitting, or reflecting direct sunlight and daylight the HunterDouglas® Sun Control Systems make optimal use of this free source of light. By analysing the shading performance, optimal daylight levels are achieved and glare kept to a minimum, resulting in a healthy and productive working environment.



Internal view 12:00 AM, April 1st



Internal view 9:00 AM, December 1st



External view 9:00 AM, December 1st

HUNTER DOUGLAS

ARCHITECTURAL

For more than 60 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings. Architects, designers, investors and contractors from around the world have taken advantage of Hunter Douglas' unmatched product development, service and support. Chances are, you've seen more of Hunter Douglas than you think.

Major operation centres in Europe, North America, Latin America, Asia and Australia, we've contributed to thousands of high-profile projects, from retail and commercial facilities to major transit centres and government buildings.

▲ *SUN LOUVRES*

▲ *CEILINGS*

FAÇADES ▼

Not only are the world's architects and designers our partners, they're our inspiration. They continue to raise the bar for excellence. We create products that help bring their visions to life: Ceilings, Sun Louvres and Façades.

Designed to work for you

Dutch Green Building Council PARTICIPANT

HunterDouglas
Architectural

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 with the creation of 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.

Hunter Douglas adopts the cradle to cradle (C2C) product philosophy to the design of products that fit the circular paradigm. Both our metal and felt ceilings are Cradle to Cradle™ Bronze certified. They are designed for longevity, using materially healthy technical nutrients that can be reused at end of life as a high-quality source for something new.

Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

Learn More

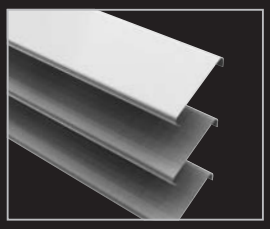
- Contact our Sales office
- www.hunterdouglasarchitectural.eu

Printed on EU Ecolabel certified paper

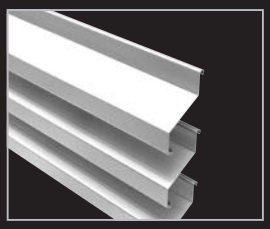
Hunter Douglas products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.

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.

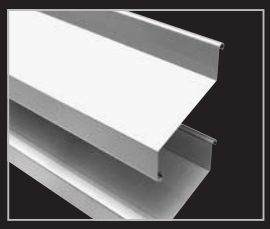
HunterDouglas
Architectural



84R



70S



132S

Belgium
Bulgaria
Croatia / Slovenia
Czech Republic
Denmark
France
Germany
Greece
Hungary
Italy
The Netherlands
Norway
Poland
Portugal
Romania
Russia
Serbia
Slovakia
Spain
Sweden
Switzerland
Turkey
United Kingdom
Africa
Middle East

Asia
Australia
Latin America
North America

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