# HunterDouglas Architectural

# FACADES

SCREEN PANELS \_ VENTILATED FACADES \_ FOLDING & SLIDING SHUTTERS \_ SINGLE SKIN PANELS INSULATED PANELS \_ FINISHINGS

## HUNTER DOUGLAS PUBLICATIONS

#### **TECHNICAL BOOKS**



INTERIOR PRODUCTS: Most people spend over 90% of their time indoors, which means that it is truly important to provide solutions that are an excellent alternative for your interior design projects.

SOLAR CONTROL: Hunter Douglas gives architects the knowledge and skills necessary to integrate sun control systems into their project design work and to work together to improve the aesthetics of façades and provide highly effective protection.

FACADES: Hunter Douglas provides a wide variety of solutions in different materials such as Terracotta, metal or wood that allow architects to design with great freedom to achieve the desired language in relation to shape, texture, transparency and color.

INDUSTRIAL ROOFING AND CLADDINGS: Ideal for industrial applications that require a clean, architectural finish. These are systems of panels that consider a geometry that allows rigidity, load resistance and tightness.

#### BOOKS



LATAM: Latin American Contemporary Architecture

The Latam Books (LATAM 01 and LATAM 02) are a series of publications that bring together the work of Latin American architects with a selection of 50 projects from five countries in each volume. The editors decided to organize the cases by latitude, bringing together locations within the continent in a transversal manner and allowing the reader to compare and contrast diverse forms of architecture in an unusual way. While the projects belong to dissimilar cultural traditions, they share climatic-geo-graphic variables that connect them.

#### JOURNALS



MILÍMETRO is a Latin American magazine that includes works that stand out because of their architectural innovation and design. The privileged situation of Latin America today offers a great deal of potential for dissemination and research. The region has become a focus of cultural development which has generated very complex cultural processes that intersect at a time of redefinition. The journal Milímetro seeks to capture these situations and position topics of current interest, presenting new architectural experiences from the region.

MM07 /Facades MM06 / Latin American Young Architects MM05/ Cultural Spaces MM04/ Sports Infrastructure MM03/ Office Architecture MM02/ Residential MM01/ Education

# FACADES







Hunter Douglas is a world leader in architectural products. Our tradition of bringing innovative solutions to the market makes us the ideal company for a broad range of interior and exterior façades, suspended ceilings, and sun control solutions. We are always seeking out, testing and developing new concepts and products that allow us to meet increasingly stringent regulations and serve as a positive influence in the world of design, architecture, and building sustainability. Based on the client's specifications, we work with architects, designers and builders to manage light, heat and sound. Our experience in customization, manufacturing, installation and technical support allows us to offer exceptional products with our hallmark design, performance and exceptional durability.

In addition to considering functional aspects such as efficiency, energy, lighting, ventilation, and weather protection, building envelopes express the language that the architect chooses to ensure that the project has the best possible fit with its surroundings. Hunter Douglas façade products offer a wide range of solutions in materials such as terracotta, metal and wood that allow the architect to design freely in the language that they wish to use in regard to form, texture, transparency and color.



Hunter Douglas is the global leader in the manufacture of architectural products including innovative window treatment systems, sun control, walls and ceilings, and façades. Our main products include:

- Roller shades and screen shades
- Exterior Venetian blinds
- A wide range of shading systems for windows
- Automated and customized shading systems
- Suspended ceilings
- Wall panels
- NBK Terracotta façades
- Metal Quadroclad façades
- 3form resin panels

#### HUNTER DOUGLAS' PRESENCE IN LATIN AMERICA

Hunter Douglas Latin America operations:

- Argentina (26 years)
- Brazil (51 years)
- Chile (56 years)
- Colombia (61 years)
- Mexico (41 years)

#### HUNTER DOUGLAS LATIN AMERICA EXPORT DISTRIBUTION NETWORK

Bolivia, Costa Rica, Dominican Republic, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.



#### **OUR STORY**

Hunter Douglas was built on the basis of recycled aluminum. In 1940, company founder Henry Sonnenberg emigrated from Holland to the United States, where he founded the Douglas Machinery Corporation. A few years later, he started working with inventor Joe Hunter, who had recently invented the continuous casting and machining of aluminum. This gave rise to the production of lightweight aluminum lamella for blinds.



#### **DEVELOPMENT OF CEILINGS**

Based on this unique aluminum casting system and the development of laminating and stamping systems, Henry and Joe were pioneers in the development of aluminum blinds. Together, they created the Hunter Douglas company that we know today. In 1962, the company began to manufacture linear metallic ceilings, creating a standard system that has evolved and generated a wide range of products for all kinds of projects.



#### GLOBAL PRESENCE

Today, many Hunter Douglas operations continue to focus on aluminum recycling. The company has a recycling plant, casting oven and continuous caster in Rotterdam, Holland. From there, the company operates manufacturing and distribution plants in over 100 countries with installations in thousands of projects around the world.



#### **SUSTAINABILITY**

Hunter Douglas is on the cutting edge of the development of ideas for sustainable products. We seek to simplify assembly, improve production processes and eliminate waste while reducing the maintenance of our own operations. We also partner with organizations such as the US Green Building Council (USGBC) and the Green Building Initiative (GBI) to generate a positive impact on every phase of the construction industry.



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StripWeave P. 62



GeoClad p. 150



SL Panels p. 208



Paints p. 242



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WindScreen р.70



ScreenPanel C p. 21



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GKD Metallic Mesh p. 50



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Motorization p. 136



M Cladding p. 204



#### **SYMBOLS**

Hunter Douglas uses a series of simple icons to clearly identify the main attributes of our products. This system allows us to provide essential information and makes it easier to understand the technical specifications. The symbols are explained below and appear at the top of our new technical sheets.



FACADES	₿	Ş	0	*		<u>]</u> ן	Ð	•••	•	0
SCREENPANEL J - C- XL - XL W		$\checkmark$								
METALSCREEN		$\checkmark$								
GKD		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	
STRIPSCREEN		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
STRIPWEAVE		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
WINDSCREEN		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
NBK		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
QUADROCLAD - QUADROGLASS - QUADROCLAD S25-S14		$\checkmark$								
FOLDING & SLIDING SHUTTERS	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
TEXSCREEN		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$
GEOCLAD		$\checkmark$								
QUADROLINES		$\checkmark$								
MINIWAVE		$\checkmark$								
SOFTWAVE		$\checkmark$								
UVELINE		$\checkmark$								
MULTIPANEL		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
FS CLADDING		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
M CLADDING		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
SL PANELS		$\checkmark$								
CD 408 PANEL		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
84R CLADDING		$\checkmark$								
TIMBERLINE		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
PYRAMID		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
SIDEWALL		$\checkmark$								





# R

### SCREENPANEL





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ScreenPanel is a single skin product that can be used to clad facades. It can be installed vertically or horizontally. The product is unique in that it can be perforated using numerical control laser technology cutting based on figures or using random perforations that the client can create, giving excellent flexibility.

There are five types of ScreenPanel depending on the type of application:

- ScreenPanel G: Vertical application
- ScreenPanel J: Horizontal application
- ScreenPanel C: Vertical or horizontal application with 10 mm open joint
- ScreenPanel XL: Large format application in aluminum or galvanized steel
- ScreenPanel XL-W: Large format application in aluminum or galvanized steel with
- a W-shaped panel



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#### SCREENPANEL G, J and C

PRODUCT	MATERIAL	MODULE (mm)	MAX. LENGTH (mm)	THICKNESS (mm)	WEIGHT (km/m²)
SCREENPANEL G - J - C	ZINCALUM	481		1	10.06
		386		0.8	8.46
		280		0.8	9.23
	ALUMINUM	481		1.5	5.19
		386		1	3.63
		280	4000	I	3.97
	COPPER	481	4000	1.5	16.90
		386		1	11.84
		280		1	12.93
	CORTEN STEEL	481		1.9	19.12
		386		1	10.57
		280		1	11.54

Note: The thickness will depend on the type of perforation and open area of the panel.



SCREENPANEL G



**SECTION A** 



#### SECTION B



#### SECTION A

#### SECTION B







SECTION A







SCREENPANEL C











#### **SCREENPANEL** Facades | Screen panels

#### **INSTALLATION**



- Material: Aluminum, zincalum, corten steel and copper
- Thickness: 1.9 mm, 1.5 mm, 1 mm, 0.8 mm
  ScreenPanel G, J, C Colors: Over 100 standard colors and special colors available
- Finish: Perforated or unperforated
- Uses: Cladding
- Maximum length: ScreenPanel J: 4 m
- ScreenPanel C and G: 4 m
- Consumption (ml/m<sup>2</sup>): Depends on the module

≘tr

**COMPONENTS** 

#### **OPTION: HORIZONTAL BRACKET**

"L"-TYPE BRACKET 3 mm GALVANIZED STEEL



2 mm ZINCALUM SCREENPANEL **BRACKET GUIDE** 



7 MAXIMUM LENGTH 3000

PERFIL Z SCREENPANEL

1,5 mm ZINCALUM

WALL OR STRUCTURE DEPENDING ON PROJECT SUPPORT BRACKET HORIZONTAL "Z" PROFILE "L"- TYPE BRACKET <1 MAX. DISTANCE 1500 50 MAX. DISTANCE 1500 PANEL SCREENPANEL G









#### **SCREENPANEL J** Facades | Screen panels

#### **INSTALLATION**





#### COMPONENTS

#### 1.6 MM GALVANIZED STEEL CASSETTE SCREENPANEL BRACKET

TOP VIEW

TOP VIEW

**FRONT VIEW** SIDE VIEW

#### 35 **#**1,5 42





# ZINCALUM HD

**TOP VIEW** 

35

MULLION PROFILE

26

## PLASTIC RUBBER STRIP GUIDE

8 MM PLASTIC GUIDE

#### CENTRAL PANEL ISOMETRIC VIEW SCREENPANEL C VERTICAL INSTALLATION



SCREENPANEL



#### PERFORATIONS



CUSTOMIZED PERFORATION PATTERN

6000 MAX. LENGTH



5000 MAX. LENGTH

420 RANDOM PERFORATED PATTERN



#### CUSTOMIZED LASER CUTTING

1.2 MM ZINCALUM ANCHOR BRACKET



## SCREENPANEL XL

Facades | Screen panels

#### INSTALLATION



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#### SCREENPANEL XL

A SECTION









MAXIMUM 1050

#### **TECHNICAL DESCRIPTION**

#### SCREENPANEL XL

PRODUCT	MATERIAL	MAX. MODULE (mm)	MAX. LENGTH (mm)	THICKNESS (mm)	WEIGHT (kg/m²)
SCREENPANEL XL	ALUMINUM	1050	4000	3	9.23
	GALVANIZED STEEL	1050	4000	2	17.89
	CORTEN STEEL	1050	4000	1.9	16.99

• Material: Aluminum, galvanized steel, corten steel

• Thickness: 3 mm, 2 mm, 1.9 mm

- ScreenPanel XL Colors: Based on powder coating color menu
- Finish: Smooth or perforated
- Uses: Lining
- Maximum length: 4 m
- Yield: Depends on the module







## **SCREENPANEL XL W**

Facades | Screen panels



ScreenPanel XL-W is a single skin product that can be used to clad facades. It is installed vertically and is made out of a high-thickness 1200 mm wide aluminum plate bended into isosceles triangles in an 880 mm module and a maximum development of 1200 mm. This product can be perforated up to 45% of open area on one or two faces of each triangle.



#### **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	MODULE	MAX. LENGTH .	THICKNESS	WEIGHT
		(mm)	(mm)	(mm)	(kg/m²)
	ALUMINUM	880	4000	3	11.04
SCREENPAINEL AL - W	GALV. STEEL	880	4000	2	21.4

- Material: Aluminum, galvanized Steel
- Thickness: Al. 3mm/ GS 2 mm
- Uses: Cladding
- Finish: Perforated or unperforated
- Yield: Varies depending on module
  - Max. Module: 4000 x 880 mm
- Colors: Based on powder coating color chart

63

#### **COMPONENTS**

powder coating

9

4

138





OMEGA PROFILE OUTSIDE OF THE SLAB Galvanized Steel 2 mm

17,5

**GEOMETRY DESIGNS** 



BRACKET

9



#### LEVELING BRACKET







Please contact the technical department for other modulations.



#### PERFORATIONS



420 RANDOM PERFORATED PATTERN



CUSTOMIZED LASER CUTTING

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.







# METALSCREEN





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MetalScreen is a line of products that can be used on cladding, ceilings, louvres and architectural applications in general. This material combines the transparency benefits of a membrane with the mechanical resistance of metal. In contrast to electro-welded mesh or weaves, this product is formed using expanded material that does not have joints in its weave, creating a monolithic element that can be adjusted based on the desired design and weave with a minimum thickness of 0.5 mm and a maximum of 3 mm.

Due to its geometric qualities, MetalScreen can be used to create surfaces with texture and movement, thus favoring both volumetric design and thermal and light comfort based on the sun control role that it plays. The product can be used to achieve a versatile and functional layer that can generate shade and ventilation that contribute to energy savings.

#### **TECHNICAL DESCRIPTION**

- Uses: Facades, ceilings and louvres
- Lengths: The lengths vary based on project needs
- Colors: Powder coating
- Materials: Zincalum, aluminum. The Engineering Department must approve the use of other materials





#### FOLDING SHUTTER SYSTEM INSTALLATION





INTERIOR







EXTERIOR

DETAIL B

#### **METALSCREEN** Facades | Screen panels

#### METALSCREEN SLIDING SYSTEM

ISOMETRIC METALSCREEN MODULE WITH TEXSCREEN FRAME



#### METALSCREEN FOLDING SYSTEM

ISOMETRIC METALSCREEN MODULE IN 50 x 30 x 5 MM ANGLE FRAME



CLOSED METALSCREEN FOLDING SYSTEM



#### OPEN METALSCREEN FOLDING SYSTEM










# FINISHES AND RHOMBUS ALTERNATIVES

	MODEL	TYPE	WEAVE	NAME	A (mm)	B (mm)	C (mm)	E (mm)	% APPROX. OPEN AREA	MATERIAL	WEIGHT (kg/m <sup>2</sup> )
1	COLÓN		FINE	6 x 3 x 0,7 x 0,5	6	3	0,7	0,5	31	ZINCALUM	1,9
										ALUMINIUM	0,6
2	TOLUCA		FINE	3 x 2 x 0,5 x 0,5	3	2	0,5	0,5	46	ZINCALUM	2,0
										ALUMINIUM	0,6
3	FINE CALI		FINE	10 x 5 x 1 x 1	10	5	1	1	56	ZINCALUM	3,2
										ALUMINIUM	1
4	MEDIUM CALI		MEDIUM	10 x 5 x 2 x 0,8	10	5	2	0,8	19	ZINCALUM	5,10
										ALUMINIUM	1,50
	AREQUIPA		MEDIUM	16 x 11 x 3 x 2	16	11	3	2	43	ZINCALUM	8,7
5										ALUMINIUM	2,60
6	RÍO		THICK	28 x 14 x 4,5 x 2	28	14	4,5	2	33	ZINCALUM	10,3
0										ALUMINIUM	3,1
7	IGUAZÚ		THICK	42 x 13 x 4,5 x 2	42	13	4,5	2	28	ZINCALUM	11,1
										ALUMINIUM	3,3
8	CÓRDOBA		THICK	62 x 27 x 9 x 2	62	27	9	2	32	ZINCALUM	10,7
										ALUMINIUM	3,2
0	PUCÓN		THICK	70 x 30 x 10 x 2	70	30	10	2	31	ZINCALUM	10,7
9										ALUMINIUM	3,2

38|39

































# **GKD MESH**





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GKD is a German company that is the global leader in the manufacture of stainless steel mesh. The firm's collaboration with Hunter Douglas and production plant in Chile have made it possible to bring this type of product to Latin America. GKD meshes are composed of a textile, ductile and flexible structure that is also resistant and robust. It can be used to clad buildings, walls and ceilings.

The mesh products have different percentages of open area depending on the weave, allowing for visibility from the interior and exterior of the building. This contributes to sun protection and allows for attractive backlit solutions.

## **TECHNICAL DESCRIPTION**

- Types of GKD mesh: Lamelle, Lago, Tigris, Sambesi, Escale 10x1, Escale 7x1, Omega
- Material: Stainless steel vertical cables and horizontal rods
- Types of GKD mesh available in Latin America: Minitubrise, M Profile, Escale 10x1
- Material: Stainless steel vertical threads and Zincalum horizontal bars
- Thickness: The thickness of the cable and rod depend on the mesh
- Uses: Exterior and interior cladding, ceilings, sun protection, etc.
- Standard width: Depends on the mesh
- Maximum length: Continuous depending on the project
- Mesh colors: Available in over 100 colors, wood grains and mineral grains for Zincalum (only for Escale, Minitubrise and Perfil M)

### MESH COMPOSITION



### **TYPES OF MESH**

### **GKD LATAM**

MINITUBRISE -1 Ε

Material: Zincalum Open area: 50% Ø tube: 9 mm Ø cable: 3 x 2 mm AISI cable





Cable pitch: 80 mm

Mesh thickness: 14 mm

Bar pitch: 18 mm

Weight: 6.2 kg/m<sup>2</sup>

Mesh pitch: 3 mm

Mesh thickness: 3 mm Weight: 5.2 kg/m<sup>2</sup>

Mesh thickness: 3.65 m

Material: Stainless steel Open area: 44.3% Ø rod: 1.5 mm Ø cable: 4 x 0.75 mm Cable pitch: 26.4 mm

SAMBESI



Material: Stainless steel Open area: 40% Ø rod: 3 mm Ø cable: 4 x 2 mm Cable pitch: 50 mm





Material: Zincalum Open area: 50% M Profile width: 15 mm Ø cable: 3 x 2 mm AISI cable

Cable pitch: 80 mm M profile pitch: 22 mm Mesh thickness: 9 mm Weight: 2.6 kg/m<sup>2</sup>



Material: Galvanized steel Open area: 50% Ø tube: 8 mm Spiral: 10 x 1 mm

Spiral duct: 30 mm . Bar duct: 100 mm Mesh thickness: 22 mm Weight: 11.5 kg/m<sup>2</sup>



Material: Stainless steel Open area: 62.1% Ø rod: 3 mm Ø cable: 3 x 2 mm Cable duct: 80 mm

Weave duct: 10 mm Mesh thickness: 6.2 mm Weight: 6 kg/m<sup>2</sup> Weave width: 3.57 m



Material: Stainless steel Open area: 51% Weave thickness: 4.5 mm

Weight: 5.2 kg/m2 Maximum width: 8000 m<sup>2</sup>

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

Open area: 50%

Spiral: 7 x 1 mm

Ø rod: 7 mm



Material: Stainless steel Open area: 44% Ø rod: 2 mm Ø tube: 4 x 1 mm Cable duct: 36 mm

Mesh pitch: 4 mm Mesh thickness: 3.5 mm Weight: 6.8 kg/m<sup>2</sup> Mesh thickness: 3.63 m

Mesh thickness: 22 mm

Weight: 8.9 kg/m²

### ESCALE 7X1



**GKD MESH** Facades | Screen panels





# STRIPSCREEN





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StripScreen cladding is an innovative product that provides a unique appearance in facade renovations. The product uses a vertical strip that is supported on two parts of the facade, providing the appearance of lightness as well as energy efficiency. This is a versatile product because in addition to allowing for variation in the separation of fixed horizontal or vertical elements, different strip widths, colors and perforations can be combined. The perforation alternative makes it possible to obtain translucent and backlit facades and to use the cladding as a passive sun control element.

### **TECHNICAL DESCRIPTION**

- Material: Zincalum and corten steel
- Thickness: 1 mm, 0.8 mm and 0.6 mm
  Colors: Available in over 100 standard colors and special colors on request
- Finish: Perforated or un perforated
- Uses: Sun louvre
- Lengths: Maximum length of 10 m, 12 m zincalum, 15 mm corten steel
- Modules: Minimum of 250 mm and maximum of 605 mm

Note: Due to its length and wind load requests, this product always requires engineering calculation to determine the type of accessories to be used (spring, tensor, etc.).

The quantity and type of accessories may vary depending on the project conditions.







# INSTALLATION

### REFERENCE FIXING DIAGRAM

The number and type of accessories may vary depending on the project conditions.



### PERFORATIONS

### PERFORATED PATTERN BASED ON IMAGES



### 420 RANDOM PERFORATED PATTERN

#### LASER CUT CUSTOM PATTERN





### **FRONT VIEW**



### INSTALLATION OUTLINE





## STANDARD PERFORATIONS

							·····		•••
# 103	# 106	# 110-M1	# 110-M3	# 112	# 113	# 118	# 118 M2	# 130	# 131
Ø 2.95 ± 0.05 mm	Ø 2.5 ±0,05 mm	Ø 3.9 ±0.05 mm	Ø 3.9 ±0.05 mm	Ø 10 mm	Ø 15 mm	Ø 2 mm	Ø2mm	Ø 10 <sup>±0.05</sup> mm	Ø 15 <sup>±0.05</sup> mm
20% open	16% open	15% open	12% open	20% open	23% open	15% open	7.3% open	30% open	10% open
3.35 mm	3 mm	5.53 mm	5.53 mm	18 mm	27 mm	3 mm	3 mm	12.6 mm	50 mm
2.5 mm	3 mm	4.25 mm	7 mm	4 mm	6 mm	2.3 mm	6.6 mm	1.3 mm	12 mm

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# **STRIPWEAVE**





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# **STRIPWEAVE** Facades | Screen panels



StripWeave is a simple product, but offers very interesting results. It consists of metallic ribbons or strips that are woven between the system's unique tubular profiles to achieve a final image that is similar to a weave but on a large scale. This also allows it to generate transparencies and opacities.

# SIMPLE STRIPWEAVE



DOUBLE STRIPWEAVE

# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	STRIP WIDTH (mm)	THICKNESS (mm)	WEIGHT (kg/m²)
		100	0.5	4.0
		150	0.5	4.2
SIRIFWEAVE	ZINCALUM	200	0.5	4.5
		300	0.5	4.8

Note: This is the estimated weight. The true weight will depend on the width and perforation type of the strips.

- Colors: Available in over 100 standard colors and special colors on request as well as wood grains or mineral grains
- Finish: Perforated or unperforated
- Uses: Louvre and cladding
- Lengths: Variable
- Other available materials: Corten steel, aluminum, copper and zinc

StripWeave assembly is completed using horizontal and vertical elements placed at a certain distance. Vertical strips are then woven.

## **COMPONENTS**







### **INSTALLATION**



#### ISOMETRIC STRIPWEAVE PROFILE UNION

### STRIPWEAVE PANEL CARRIER STRIPWEAVE LOCK STRIPWEAVE RING STRUCTURE BASED ON CALCULATION 200 OVERLAP TUBRISE PROFILE **MIN 400** TUBRISE SETCION B CAP STRIPWEAVE PANEL CARRIER STRUCTURE BASED ON CALCULATION STRIPWEAVE LOCK

# STANDARD PERFORATIONS\*



STRIPWEAVE TENSION SPRING

INSTALLATION SYSTEM





Note: Include the  $\emptyset$  38 structural steel bar inside of the Tubrise profile in the beginning and end of the weave to support the strip tension. This solution is used if the project requires it.

#### DETAIL B



### STRIPWEAVE INSTALLATION SYSTEM-SPRING OPTION





#### \*Special personalized perforations may be available.

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications. Patent request MU 2171-12 has been submitted for this product.











# WINDSCREEN





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# WINDSCREEN Facades | Dynamic Sunscreens









The WindScreen louvre is composed of aluminum sheets that pivot on a panel carrier. The sheets form a surface area that moves with the wind. This quality yields a very attractive kinetic facade.



SECTION B

# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m²)
WINDSCREEN	ALUMINUM	0.6	1.73

• Material: Aluminum

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- Thickness: 0.6 mm
- Colors: Over 100 standard colors and special colors available upon request.
- Uses: Louvre
- Finish: Perforated or un perforated
- Dimentions sheet: 150 x 350 mm. For other dimentions, consult with the Hunter Douglas Technical Department
- Yield: Approximately 12.5 sheets per m<sup>2</sup>

#### **ISOMETRIC SET**



#### WINDSCREEN SHEET MOVEMENT



SECTION C





Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

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# VENTILATED FACADE









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# **VENTILATED FACADE** Facades | Ventilated Facades



# **VENTILATED CAVITY**

The ventilated cavity is what allows the exchange of air, heat, humidity and light between the building's interior and exterior. It is therefore the part of the building that offers the greatest opportunities to improve the interior environment and decrease energy consumption.

Hunter Douglas offers a wide variety of ventilated facades products in a range of materials (metal, terracotta, wood and HPL sheets) that improve energy performance and livability without sacrificing aesthetics.

# CHARACTERISTICS AND ADVANTAGES

A ventilated facade generally consists of an exterior layer that receives sun radiation, a ventilated air space, steam barrier, isolation layer and interior wall. A well-designed ventilated facade allows the building to be protected from rain, wind and humidity without any additional energy costs of any kind. It also acoustically isolates the exterior and improves the energy performance and interior environmental quality of the structure. One of the main advantages of ventilated facades is that they allow old buildings to be retrofitted in order to improve their aesthetic and performance.













CLADDING

NBK 18 LIGHT TERRART

WINDOW DETAIL

DETAIL A



DETAIL B

# HOW A VENTILATED FACADE WORKS

1. The sun impacts the outer layer of the facade, increasing its temperature.

2. The air inside of the ventilated chamber heats up and generates an upward current through convection.

3. The hot air emerges from the upper part of the facade and is replaced by cooler air. This allows heat and humidity to be removed simultaneously with no energy cost.

The effect of this is that part of the sun radiation that impacts the facade is removed in the form of warm air before it enters the building, thus decreasing the need to cool the building. The upward air current also allows humidity caused by rain or fog to dry, which increases the useful life of the building enclosure and avoids the proliferation of mold in rainy and humid climates. Finally, it is possible to use the upward air current to obtain free heat during the winter months.

# **KEY DESIGN PARAMETERS**

#### FACADE INSULLATION

Sun radiation is what makes a ventilated facade work. Without it, there would be no upward current and it would not perform. Facades facing the equator that will receive moderate sun radiation during most of the day are thus recommended along with facades facing the west and east that will receive intense sun radiation during specific times of day. Ventilated facades protect buildings from rain and decreases air conditioning needs, and so they are recommended in both rainy locations and warm areas with significant levels of solar radiation.

#### A. FINISH OF THE EXTERIOR LAYER OF THE FACADE

Hunter Douglas works with many materials, paints, colors and finishes. This makes it possible to optimize the ventilated facade while maintaining unique aesthetic characteristics that fit the project to be installed.

		PRODU	JCTS		
	QUADROCLAD	NBK	PRODEMA	SCREENPANEL	SINGLE SKIN
MIN. FORMAT (mm)	399 x 1000	220 - 900	1220 x 2440	N/A	N/A
MAX. FORMAT (mm)	1000 x 4000	700 - 1200	2440 x 1220	100 x 4000 (modelo XL) 481 x 3500 (modelo G)	N/A
MATERIALITY	ALUMINIO / ZINCALUM	TERRACOTA	ACOTA WOOD AL		ALUMINIUM / ZINCALUM
CHANNEL WIDTH (mm)	10	10	6 - 8	10	10
EXTERNAL TERMINATION	PAINTINGS / COLORS	PAINTINGS / COLORS	WOOD PLATE COLOR	PAINTINGS / COLORS	PAINTINGS / COLORS
SUBSTRUCTURE	VERTICAL DISTANCED 1200	VERTICAL DISTANCED between supports 1000 - 1200 - 3600	VERTICAL DISTANCED 600	VERTICAL DISTANCED 1200	MULLIONS ON SQUARES
AIR CHAMBER	60 - 170	60 - 75	60 - 75	100 - 120 o 50 - 70	40 - 100

#### B. VENTILATED CAVITY

The width of the facade cavity will affect the air flow in two ways. First, a smaller cavity generates greater friction. Second, a smaller cavity increases the chimney effect because it increases the stratification of the air. In the end, the cavity width does not have a significant impact on the amount of heat that enters the facade. However, there have been successful tests of widths between 4 and 24 cm.







# VENTILATED FACADE

Facades | Ventilated Facades



#### C. SUBSTRUCTURE

It is important to decrease the friction inside of the cavity. We thus recommend using a minimalist vertical substructure that allows for vertical air flow. Hunter Douglas offers products with a vertical substructure and perforated horizontal structure designed to facilitate air flow and improve the performance of the facade.







#### D. GAPS BETWEEN PANELS

The open joints between panels should not have a significant impact on the performance of the facade. However, we recommend placing gaps every 1 or 2 floors. If there is too much distance between the open joints, the air flow, which heats as it moves upward, may reach the temperature of the exterior of the facade. This will prevent the air flow from heating up and will cut off the force that generates the chimney effect, causing the ventilated facade to cease working. The cavity must be closed enough to allow the chimney effect to develop. The size of the open joints will vary depending on their number. We recommend that they be at least 15 mm if they are sufficient and 50 mm if there are few of them.

#### E. AIR ENTRY AND EXIT

The facades perform best when air can flow freely through the chamber. We thus recommend that the entry and exit points of the air do not present too much resistance to the upward current. In order to achieve this, we recommend that they have the same size as the cavity width. It is important to keep in mind that the ventilated facade does not replace the rest of the functions of the cladding, namely, insullation, air and steam barriers and other elements that should be considered whether or not there is a ventilated facade.

#### F. INSULATION

While the ventilated facade does not require thermal insulation to work, we recommend that this element be installed in order to avoid excessive temperature fluctuations inside of the building. Similarly, thermal bridges between the interior of the building and the ventilated facade are essential because the geometry of the latter lends itself to generating a significant exchange of heat between the outside and the building.

Hunter Douglas works with a variety of products that can be installed as a ventilated facade, increasing the variety of options to characterize the facade. Each product has specific characteristics that can be adjusted to each project.

#### VENTILATED FAÇADE DIAGRAM Façade window solution

## WINDOW CUTS







#### NBK FAÇADE WINDOW SOLUTION







FASTENING CLIPS



# VERTICAL SUPPORT CLIPS







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# **NBK - TERRART** Facades | Ventilated Facades



Poised on the cutting edge of technology and architecture, NBK is a Hunter Douglas company that is a leader in terracotta cladding for ventilated facades. NBK has been a pioneer in the manufacture and design of ventilated large format ceramic facades. The clay used to make the panels is a natural material that provides warmth and durability and has been used for centuries on structures around the world. It is a contribution to cutting edge architecture that offers flexibility, a rich range of colors and inherent sustainability.









## NBK FORMATS

#### NBK LIGHT 18 mm SECTION



## MID NBK SECTION



# LARGE NBK SECTION



The installation system is composed of an aluminum sub-structure that allows misalignments of the wall to be absorbed as well as dry and quick installation. Aluminum and EPDM materials allow the cladding to be installed in any climate without changes to its composition.



#### **SECTION A**



#### SECTION B



#### DETAIL



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.







# **NBK - TERRART** Facades | Ventilated Facades

# **INSTALLATION**



# CORNER DETAIL



# **COLORS AND SURFACES**

NBK uses a blend of pigments to achieve a wide range of colors. It is available in almost any shade. Clients can work with architects to create exclusive series that turn buildings into unique structures.

Surface: This product is available in three types of finishes: natural, polished and glazed.

#### ENAMELED (referential colors)

8144-10	8636-11	8636-15	8958-1	9043-32	9065-1	9166-116	9166-35	9166-47	9171-75	9175-3
9211-1	9238-7_9240	9288-20	9322-142	9322-187	9322-82	9374-5	9380-2	9399-16	9399-16_2	9399-20

D5-9211-104 D5-9322-109 D5-9322-135 D5-9448-10 D5-9524-24 D5-9524-24\_2

**TEXTURES AND FINISHINGS** 



# **NBK - TERRART** Facades | Ventilated Facades





# **NBK - BAGUETTE** Facades | Ventilated Facades



The Baguette is a ceramic profile with a square or rectangular section. This versatile product is mainly used on windows or for the design of ventilated facades. In the area of sun protection, the baguette offers ideal protection when used in combination with Terrart cladding.

It is easy to install with lateral supports or rear fasteners.

# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	WEIGHT (kg/ml)	THICKNESS (mm)	MAXIMUM LENGTH (mm)
50 x 50 cm BAGUETTE	TERRA COTTA	3.75	11	1800

- Material: Ceramic terracotta cladding
- Formats: 7 types
- Colors: Available in over 20 standard colors and custom colors on request
- Uses: Louvre, cladding
- Maximum length: 1.80 m

# AVAILABLE SECTION FORMATS







# BAGUETTE ISOMETRIC

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#### SECTION A

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#### **ISOMETRIC VIEW**

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50/50 mm

L PROFILES

STRUCTURE BASED ON PROJECT

Q

50/50 mm BAGUETTE





# QUADROCLAD | QUADROGLASS





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# QUADROCLAD Facades | Ventilated Facades



QuadroClad is a ventilated facade formed by panels composed of aluminum or zincalum strips on the exterior and an aluminum honeycomb structure on the inside. Due to its composition, this is the product that presents the best planimetry compared to other metallic facades. This is because its honeycomb base gives it exceptional structural properties. The QuadroClad trays' perimeter features hidden profiles, which allows for both a mounting system that allows the panel to expand, hides the fasteners and makes assembly easy. The installation generates 10 mm of gap between them. They can also alternate with panes of glass (QuadroGlass).

# **PRODUCT DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	MODULE	MAX. LENGTH TO FACE (mm)	TRAY WEIGHT (kg / m²)
	Tray: 0.7		395		9.6
	ALUMINUM	Cap: 0.5	595		8.1
QUADROCLAD	ZINCALUM	Tray: 0.6	395	2000	14.6
PANEL			495	3770	13.6
		Cap: 0.4	595		12.9
			695		12.5

• Material: Aluminum or zincalum

- Thickness: 0.5 mm interior skin and 0.7 mm exterior skin in aluminum 0.4 mm interior skin and 0.7 mm exterior skin in zincalum
- Colors: Available in over 100 standard colors and custom colors upon request
- Use: Exterior and interior cladding
- Finish: Flat
- Lengths: Maximum length 4 meters to axis
- Other materials: Zinc or copper

# **COMPOSITION**





- 1. Exterior skin in zincalum or aluminum
- 2 Adhesive
- 3. Aluminum honeycomb 4. Perimeter aluminum extrusion
- 5. Interior skin in zincalum or aluminum

# **ASSEMBLY**

This product is installed without visible fasteners using a hidden profile system that allows for expansion and easy assembly.

## QUADROCLAD PANEL



#### PANEL SECTION





# ALUMINUM QUADROCLAD INSTALLATION



**SECTION A** 







DETAIL B







#### QUADROCLAD FIXING COMPONENTS



ANCHOR BRACKET ZINCALUM QUADROCLAD MATERIAL: HOT GALVANIZED STEEL MEASUREMENTS: 80 X 60 X 2.5 MM

55

LENGTH BASED ON PROJECT

50

17





MULLION PROFILE MATERIAL: 1.5 MM ZINCALUM LENGTH BASED ON PROJECT

QUADROCLAD CLIP MATERIAL: EXTRUDED ALUMINUM LENGTH: 28 mm

79



# **QUADROCLAD INSTALLATION**

25.8



# **OUADROGLASS** Facades | Ventilated facades



QuadroGlass is a ventilated glass facade composed of perforated zincalum strip panels encapsulated between two glass panes or screen-printed glass. The panels leave 10 mm of gap between glass panes or can alternate with metallic (QuadroClad) panels.

# **PRODUCT DESCRIPTION**

- Material: Tempered glass (exterior)
- Thickness: 6 mmMaterial: Crude glass (interior)
- Thickness: 4 mm
- Material: Zincalum (strip between panes)
- Thickness: 0.5 mm
- Perforated strip: Available in over 100 standard colors and in custom colors
- Use: Exterior and interior cladding
- Finish: Perforated (strip between panes)
- Lengths: Maximum length 1900 / 2490 / 2990 meters to axis

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# QUADROGLASS PANEL



# PANEL SECTION





SECTION B



# ASSEMBLY

SECTION A

This product is installed without exposed fasteners using a hidden profiling system that allows for expansion and easy assembly.

# QUADROGLASS Facades | Ventilated facades



# QUADROGLASS

The construction system that this product uses is ideal for recovery application or retrofitting facades because it allows for functional and aesthetic reconstruction of the entire exterior of the building without the need to replace windows.

**GLASS - GLASS** 

# **COMBINATION OF PANELS**

**METAL - GLASS** 















# **STANDARD PERFORATIONS**



Ø 2.5 ±0,05 mm 16% open 3.35 mm 3 mm 2.5 mm 3 mm

# 110-M1 Ø 3,9<sup>±0,05</sup> mm 15% open 5.53 mm 4.25 mm



Ø 3,9<sup>±0,05</sup> mm 12% open 5.53 mm 7 m



# 112 Ø 10 mm 20% open 18 mm 4 mm



27 mm

6 mm

# 118 Ø 2 mm 15% open 8.6 mm 5 mm





4





#131 Ø 15±0,05 mm 10% open 50 mm 12 mm




# **QUADROCLAD S25 - S14** Facades | Ventilated facades



In contrast to the standard option, this version of QuadroClass S25-S14 does not have hidden profiling inside of it, which makes it possible to curve panels, maintaining their main attributes, the planimetry, and mechanical resistance.

# **TECHNICAL DESCRIPTION**

CHARACTERISTICS	QUADROCLAD S25	QUADROCLAD S14			
DIMENSIONS (mm) Panel thickness Panel width Maximum lengths	25 300 - 472 569 600 642 5.500	14 300 - 472 - 569 - 600 -642 5.000			
MATERIALS Front skin Structural filling Front skin	Corten steel, aluminum, Zincalum, copper or zinc, aluminum honeycomb, Zincalum or aluminum				
APPROXIMATE WEIGHT (kg/m <sup>2</sup> )	10 - 11	8.9			
FINISH (exposed face)					
FINISH PAINT ON FRONT SKIN	Regular, polyester, PVDF-2 (optional)	Regular, polyester, PVDF-2 (optional)			
COLORS (regular polyester paint)	Available in over 100 standard colors and custom colors on request.				

(\*) The weights of this project vary depending on the module. Note: Tray with exposed aluminum mill finish tray only perforated.

SIMPLE QUADROCLAD (WITHOUT INTERIOR PROFILE)

MINIMUM WIDTH 300 mm MINIMUM WIDTH 642 mm WIDTH TO AXIS SUPPORT BRACKET ž, HONEYCOMB **FIXING CLIP** T € MINIMUM LENGTH 250 m MINIMUM LENGTH 5000 m LENGTH TO AXIS











25 x 25 x 1.3 mm L PROFILE



10 x 20 x 1.3 mm L PROFILE BASED ON MODULE

# **INSTALLATION**



# SECTION A



# SECTION B



# **QUADROCLAD CURVES-25- S-14** Facades | Ventilated facades







PANEL OF EXTREME MECHANICAL RESISTANCE CURVED IN THE FACTORY SMALL CURVATURE RADIO



THICKNESS (mm)	CONDITION	RADIUS (mm)		
25	WITHOUT WING ON LENGTH	3000 > R > 1500 IN LENGTH		
	WITH WING ON LENGTH	R > 3000 IN LENGTH		
14	WITHOUT WING ON LENGTH	3000 > R > 1500 IN LENGTH		
	WITH WING ON LENGTH	R > 3000 IN LENGTH		
	WITHOUT WING IN MODULE	R > 200 IN MODULE		





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# **FOLDING & SLIDING SHUTTERS**





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# **FOLDING & SLIDING SHUTTERS**

Facades



Hunter Douglas offers folding and sliding shutters with an architectural aesthetic that deliver sun control solutions and are durable, colorful and regulate heat and light. With the introduction of a new generation of Folding & Sliding Shutters, Hunter Douglas has created an elegant, flexible, high performance solution for exterior sun control, mainly for residential applications, and also for office and commercial buildings. The various inlayer alternatives such as Metalbrise, Woodbrise, ScreenPanel and fabrics allow this solution to be customized to meet the architect's aesthetic and functional requirements. The extrusions that compose the aluminum frame and their accessories meet high standards, ensuring perfect performance over time for the sliding or folding system.

Hunter Douglas Sliding & Folding Shutters are the perfect solution for improving interior thermal and visual comfort in a building, creating an eye-catching, colorful exterior. Available in a wide range of colors, providing facades with a high quality architectural appearance.







# STANDARD COMPONENTS

UPPER RAIL Material: Aluminum Finish: Anodized or painted



# LOWER U-TYPE RAIL



HORIZONTAL PROFILE Material: Aluminum Finish: Anodized or painted



HEAVY DUTY (VERTICAL) PROFILE Material: Aluminum Finish: Anodized or painted



# SLIDING SHUTTERS INSTALLATION





# DETAIL B



# SLIDING ALTERNATIVES

1 RAIL





# 2 RAILS



### **3 RAILS**



4 RAILS



# FOLDING & SLIDING SHUTTERS Facades





# **FOLDING & SLIDING SHUTTERS**

Facades

# **INSTALLATION OF FOLDING & SLIDING SHUTTERS**





Note: The dimensions of the sheets should be assessed based on the project.

# DETAIL A



## DETAIL B



### DETAIL C



# DETAIL D



# DETAIL E





# TWO SHEETS FOLDING SHUTTERS





# INSTALLATION OPTIONS FOR TWO SHEET SLIDING SHUTTER





# FOUR SHEETS FOLDING SHUTTERS SIDE





# INSTALLATION FOR FOUR SHEET FOLDING SHUTTER



# FOLDING & SLIDING SHUTTERS INSTALLATION





# **INLAYER OPTIONS**

# ALTERNATIVE MATERIALS

In addition to standard laminates, there is a wide range of materials that can be used in Hunter Douglas sliding shutters. Various inlayer options are shown below. Please consult with a member of our team for other materials and customized solutions.

PERFORATED METAL



QUADROBRISE 32 X 32



# WOOD



METALSCREEN



METAL



# TEXSCREEN



# METALBRISE



- Materials: aluminum, zincalum
- Colors: over 100 solid colors, wood grains and
- mineral grainsSun control: fixed angle or operable

# SCREENPANEL



- Materials: aluminum, zincalum
- Finish: perforated or flat
- Colors: Powder Coating options

QUADROLINE 15 X 10



- Materials: aluminum, zincalum
- Finish: perforated or flatColors: over 100 solid
- colors, wood grains and
- mineral grainsPosition: horizontal and vertical

# QUADROBRISE 32 X 32



- Materials: aluminum, zincalum
- Finish: perforated or flat
- Colors: over 100 solid colors, wood grains and mineral grains
- Position: horizontal and vertical Position: horizontal and vertical



### LOWER DETAIL



**DETAIL A** 

DETAIL B



.



**METALSCREEN** 

WOODBRISE TRAPEZOIDAL

WOODBRISE 66 / 100

# RECTANGULAR 30 X 18 WOODBRISE



- Materials: Aluminum, Zincalum
- Colors: Electrostatic powder paint options.
- Position: Horizontal and vertical

- Materials: Lenga, bamboo • Finish: Stain or no color
- based on EETTSun control: Fixed angle or
- operable



- Materials: lenga, cedro, bambú
- Finish: Stain or no color based on EETT
- Sun control: Fixed angle or operable



- Materials: Lenga, bamboo
- Finish: Stain or no color based on EETT
- Position: Horizontal and vertical

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# FOLDING & SLIDING SHUTTERS Facades





# TEXSCREEN





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# **TEXSCREEN** Facades | Folding & Sliding Shutters



TexScreen is a product composed by a fabric screen within an aluminum frame, that can be integrated as a building's skin, giving it a beautiful, clean look. It is a light, homogeneous product, designed to be installed on the exterior, allowing for the addition of new colors and textures and contributing to excellent sun control and glare prevention. The product can be used on the facade of any building, contributing:

– Sun control from various directions towards the inside of the building, improving user comfort. Unlike other materials, the fabric can generate clear views of the exterior despite having a low percentage of transparency. This decreases solar gains and effectively prevents glare without generating a feeling of being closed in. Based on this, some tangible benefits are:

- Lower energy consumption on climate control
- Better quality natural light
- Visibility of the exterior (depending on levels of transparency)
- Privacy in interior spaces during the day

# **TECHNICAL DESCRIPTION**

- Frame: Aluminum painted with powder coating
- Fabric: Serge Ferrari brand acrylic fabric (fiberglass + PVC)
- Transparency levels: 5% and 12%
- Standard width: 1200 mm
- Standard height: 3500 mm
- Installation options: Between openings or outside of openings

# **GLAZING AND HEATING**

The fabric can prevent solar radiation from entering the building even if it is impacting the facade at a perpendicular angle. This makes the product ideal for protecting eastand west-cladding facades, skylights and, in practice, any other orientation.





# WITHOUT EXTERIOR SHUTTER

# 80%

# WITH EXTERIOR SHUTTER



Light is an electromagnetic wave that changes in longitude when it passes through media, turning into color. Our louvres project shade onto the facade and prevent this from happening. This substantively improves the thermal behavior inside of the building.

# WITH INTERIOR SHADE



# SLIDING SHUTTER SYSTEM









Note: An engineering study must be conducted for Folding & Sliding Shutter products in order to identify formats and anchors based on the project conditions. Maximum two sheets per system.

# FIXED FRAME INSTALLATION SYSTEM



In order to ensure correct installation when using a fixed frame, we recommend considering a technical corridor measuring at least 60 cm wide so that windows can be cleaned on the outside (in case of installation of fixed frames and tall buildings).



# **COLORS AND TRANSPARENCY OPTIONS**

In order to use space correctly, the interior must be protected from the direct impact of the sun. Texscreen prevents interior glare without preventing users from seeing outside, thus making the best use of the building's usable surface area.

The photographs below show an east-facing view during the morning. The yellow colors show high levels of glare, which is significantly improved by installing a fabric with an opening of 12%.

The various percentages of opening offered by Hunter Douglas generate different levels of sun control and exterior visibility.

SCALE GRAPHIC REAL PHO

High glare risk

Low glare risk

REAL PHOTO WITH TEXSCREEN





# FRAME-CLOTH MODULE AND OPENING SYSTEMS



# **TEXSCREEN** Facades | Folding & Sliding Shutters

# **COLOR OPTIONS**

Thermal protection: Blocks up to 94% of solar factor. Weight: 545 g/m<sup>2</sup>





Black / Pearl

White / Grey



White / Linen

Thermal protection: Blocks up to 81% of solar factor. Weight: 550 g/m2



Darker fabrics will generally provide greater visibility towards the exterior, while lighter ones will increase the performance of lamps and better disperse light within the building.

Note 1: Weather (wind-hail-UV) resistant.

Note 2: The colors, textures and technical characteristics are provided for informational purposes only and are subject to change. \*The company does not maintain continuous stock of these colors. Please consider for delivery timing.

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this

technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications. Patent MU 2171-12 has been requested for this product.

# ALUMINUM FRAME COLOR OPTIONS (POWDER COATED)

Hunter Douglas offers a range of finish colors for aluminum frames in order to provide the best finish for each project.



Code PP07





# MOTORIZATION









# **MOTORIZATION** Facades | Operable shades



Over the past few years, there has been significant development in the automation of facade systems. This has mainly been driven by the need to provide the user with more comfort. Motorized louvers has thus taken on an important role because it allows users to regulate the amount of light that enters a space.

In order to meet these needs, we present the general characteristics of the motors made by the German brand Elero. They are compatible with Somfy automation accessories and are both brands sold by Hunter Douglas.

# **CHARACTERISTICS**

- Elero motors are compatible with Somfy brand remote systems
- The motors are 100% weather-resistant stainless steel, which makes them ideal for exterior facades (IP 65 and IP 67 models)
- Applications for dynamic and static loads
- Their simple, compact casing makes them easy to install
- Excellent price-quality ratio











PRODUCT		SECTION	MATERIAL	MAX. LENGTH	MOTOR TYPE	MOTOR STROKE
METALBRISE		66 ×	ZINCALUM	1440	LOCKMASTER*	50
WOODBRISE -	WOODBRISE 66		CEDAR	1000	LOCKMASTER*	50
			LENGA			
			BAMBOO NFINITY			
	WOODBRISE 100		LENGA	1000	PICOLO XL 100	100
AEROSCREEN PLUS	AEROSCREEN PLUS CURVE 300	298	ALUMINUM ZINCALUM	4000	PICOLO XL 200	200
	AEROSCREEN PLUS FLAT 300	301				
	AEROSCREEN PLUS CURVE 370					
	FLAT AEROSCREEN PLUS 450					
AEROWING		149 FZ	ALUMINUM	1500	PICOLO XL 100	100
SLIDING SHUTTER			ALUMINUM ZINCALUM	1500 x 4000	ELECTRIC MOTOR	BASED ON PROJECT
FOLDING SHUTTER			ALUMINUM ZINCALUM	700 x 3000	LINEAR ACTUATOR	BASED ON PROJECT

 $^{\star}$  Note: motor in the process of replacement, evaluate with engineering

# **MOTORIZACIÓN** Facades | Operable shades

# LOUVRE INSTALLATION

# **AEROSCREEN PLUS 300**



# WOODBRISE 66

# UPPER PERIMETER



# WOODBRISE 100

TOP DETAIL



# LOWER PERIMETER



# **BOTTOM DETAIL**



# METALBRISE



# ELERO MOTOR FIXING BRACKETS



# ACTION BAR INSTALLATION DETAIL





BOTTOM FIXING DETAIL



# **MOTORIZATION** Facades | Operable louvers

# FOLDING & SLIDING SHUTTERS INSTALLATION

INSTALLATION OF FOLDING & SLIDING SHUTTERS

2 SHEETS FOLDING SHUTTER





**OPTIONS FOR INSTALLING 2 SHEETS** 



# SLIDING SHUTTERS MOVEMENT OPTIONS



3 RAILS





CONTROL SYSTEMS

Shutters can be manual or motorized. They can also be part of an entire building administration system that optimizes the shutter's shade performance. Various configurations are possible. See the examples below.
#### MOTORIZED SLIDING INSTALLATION DETAIL OF CAR UPPER CAR INSTALLATION, FRONT VIEW



#### TOP RAIL SETTING METHODS

The upper rails for sliding shutters can easily be affixed to the building structure using the following methods. Other solutions available on request.

#### HIDDEN FIXING

#### FLUSH FIXING

#### FRONT FIXING





### DETAIL OF FOLDED SHUTTER SEEN FROM THE OUTSIDE



COMPONENTS OF MOTORIZED FOLDING, DETAIL OF INSTALLED LINEAR ACTUATOR SEEN IN CROSS SECTION



## **MOTORIZATION** Facades | Operable louvers

#### **TECHNICAL DESCRIPTION**

These products use a linear electric servomotor with movement using a rod that is highly resistant to peak loads. This means that it is capable of generating thrust forces ranging from 50 N to 1200 N depending on the model. The available motors and their respective application are:

#### MOTOR FOR TERMOBRISE 150 AND WOODBRISE 100 LOUVRES

TECHNICAL DATA FOR PICOLO XL 100 MOTOR					
CASING DIAMETER (mm)	48				
ADJUSTMENT FORCE (N)	1200				
CURRENT INTENSITY	0,55 A				
POWER	126 W				
STROKE SPEED (mm/s)	6 (230V AC) / 5 (24V DC)				
STROKE LENGTH (mm)	100				
SERVICE VOLTAGE	230 V AC - 50 Hz / 24V DC				
NUMBER OF PHASES	1				
CASING	STAINLESS STEEL 4301				
TYPE OF PROTECTION	IP 65 (WEATHER-RESISTANT)				

#### MOTOR FOR AEROSCREEN PLUS

TECHNICAL DATA FOR PICOLO XL 100 MOTOR					
CASING DIAMETER (mm)	48				
ADJUSTMENT FORCE (N)	1200				
CURRENT INTENSITY	0,55 A				
POWER	126 W				
STROKE SPEED (mm/s)	6 (230V AC) / 5 (24V DC)				
STROKE LENGTH (mm)	200				
SERVICE VOLTAGE	230 V AC - 50 Hz / 24V DC				
NUMBER OF PHASES	1				
CASING	STAINLESS STEEL 4301				
TYPE OF PROTECTION	IP 65 (WEATHER-RESISTANT)				

#### MOTOR FOR WOODBRISE 66 AND METALBRISE LOUVRES

TECHNICAL DATA FOR LOCKMASTER MOTOR						
CASING DIAMETER (mm)	61,5					
LENGTH CASE (mm)	168					
ADJUSTMENT FORCE (N)	50					
CURRENT INTENSITY	0,7 A					
POWER	160 W					
STROKE SPEED (mm/s)	30					
STROKE LENGTH (mm)	50					
SERVICE VOLTAGE	230 V ~ 50 Hz / 0,55 A (126 W)					
NUMBER OF PHASES	1					
CASING	STAINLESS STEEL 4301					
TYPE OF PROTECTION	IP 67 0.1 BAR (WATERPROOF UP TO 1M DEEP)					

The PICOLO XL 100 and PICOLO XL 200 have IP 65 protection, which means that they are weather resistant under even the toughest environmental conditions. This makes them ideal for use on exterior facades.

The Lockmaster motor has IP 67 protection, which means that it is water proof up to 1 m. In addition, these motors do not require any maintenance and can thus be used under extreme environmental conditions in difficult assembly situations. All of the motors have a piston that is insured against torsion.

All of the models use 230 V single-phase current. It is also possible to consider motors that use 24 V and 12 V continuous current.





#### **OPERATING PANEL**

These motors can be operated using remote control or wall panels.

SWITCH/ ONLY 3C LIGHT/LIVING MODULE: For embedding. Box, plate and box cap must be purchased separately.

LIVING







#### ELECTRIC INSTALLATION DIAGRAM



When the project involves remodeling or posterior application, a remote control system is recommended. Two components must be included in this type of installation: a receiver and an RTS emitter.

In the Somfy INTEO CENTRALIS product line, the receiver is a Centralis RTS-2 Exterior Receiver.

The Centralis RTS-2 Exterior Receiver can be used to operate a motorized panel installed outside. It allows for control of up to 12 RTS or RT emitters.



## **MOTORIZATION** Facades | Operable louvers

The RTS command points or emitters include a wide range of models depending on the design, characteristics, etc. These command points can have one or several channels.

Single channel controls have three ergonomic buttons for each function: raise, lower and stop.

They can control all of the receivers installed within a free area of 100 meters in radius.

By contrast, multichannel controls have the same three buttons plus a button to select the channel (4 channels plus a general one). Each channel can control a certain number of receivers depending on the motorized panels to be operated.

### RADIO FREQUENCY EMITTERS

Reach: 20 meters if they must pass through two reinforced concrete walls (A). 200 meters in open space (B).



RF TELIS 1: Single channel emitter that can only operate one motor independently. However, various motors can be added to this single channel that all function at once.

RF TELIS 4: Emitter capable of operating four motors independently or various louver panels at the same time on one channel.

The installation of these controls can include wall support depending on the model.

REFFERENCE IMAGE SUPPORT AND EMITTER TYPE

WALL SUPPORT











If the project requires that only one control operates more than one motor, a Group Command (GC) System must be used. The Hunter Douglas Group Command is a component that allows the user to activate up to four motors at the same time.

A Bipolar Switch must be connected to the Group Command so that it can send commands to raise, lower or stop the motors simultaneously.

#### **GROUP COMMAND MODULE FOR 4 MOTORS**





Notes: 1. The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

2. Hunter Douglas develops special components and accessories to make the motorization of the product more efficient based on the project.

3. Motorized louver projects require specialized details that should be developed in collaboration with the Engineering Department and Sales Area.

### LIGHT, HEAT AND ENERGY

#### COMFORT AND ENERGY SAVINGS

The use of an adequate sun control system can significantly influence the interior climate. Using a system wisely improves the overall comfort of a room and minimizes energy costs (lighting, heat and cooling).

Effectively reducing the amount of solar radiation that enters the building with a sun control system immediately reduces the amount of energy required to cool it. The capacity of the cooling equipment can thus be reduced, which makes lower initial investment and operating costs possible.

By blocking, transmitting or reflecting direct sunlight and daylight, Hunter Douglas sun control systems make optimal use of this free source of light. Analyzing shade performance allows for optimal daylight levels and reduces glare to a minimum, thus providing a healthy, productive work environment.



Internal view at 12:00 a.m. on April 1



Internal view at 9:00 a.m. on December 1



External view at 9:00 a.m. on December 1





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## GEOCLAD





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The GeoClad product line has been designed to clad facades, for interior cladding, ceilings and roofs, providing a unique, dynamic and customized appearance. GeoClad allows the creation of panels with variable and unique geometries that can be installed horizontally or vertically. The system also allows for panels with different geometries to be combined.

These panels can be up to 8 meters long and can be made using different materials and textures, such as steel, zincalum, aluminum, corten steel, zinc, copper, perforated and folded metal (Cali Fine mesh,  $10 \times 5 \times 1 \times 1$ ), among others.

### **TECHNICAL DESCRIPTION**

- Colors: Available in over 100 standard colors and custom colors
- Finish: Perforated or flat
- Use: Cladding
- Length: We recommend that the length does not exceed 6000 mm





### **GEOCLAD SECTION TYPES**

#### T: TRIANGULAR

Triangular panels with variable sides and angles, longitudinally straight. The height and valley can be modified to create panels that are modulated precisely to the dimension of the facade without the need for adjustment panels that modify the initial geometry, achieving steps that match each project.

#### TC: CONIC TRIANGULAR

Triangular panels with variable sides and angles in which diagonal longitudinal folds can be used compensating for this geometry towards each side of the panel so that the result is a straight panel. If this is not the case, radial panels will be created.

The minimum side for 140° is 26 mm.

Conic panels should compensate for opposite sides to achieve parallel panels.

#### QL: SQUARES

Straight square panels can be used to create rectangular geometries with different sides and valley distances. The folding process allows us to create a series of different square panels for a random configuration. We can also personalize the step desired for a perfectly homogeneous facade.

#### QLC: CONIC SQUARES

The design of conic square panels allows for subtle diagonals to be created and even for the height of one side of the panel to be opposite on the other side. Trapezoidal forms can appear in the valleys and upper faces of the rectangles, creating a more organic effect or movement of the facades. Minimum height 30 mm for 2 or 3 mm. Low thicknesses minimum height 19 mm.

Conic panels should compensate opposite sides to create parallel panels.



MAX. FOLD -140°



MIN. 22













#### SW: CURVES

SoftWave is a type of panel that uses soft wave cones to create the largest number of variables when designing on the basis of tangent diameters of variable or homogeneous sizes. These curves and counter-curves can also be built by varying the size of the facet with a minimum of 10 mm. If one does not want the facet to be visible in the design, micro-perforated or metal screen materials are used and the facet disappears, yielding linear curve finishes.

#### SWC: CONIC CURVES

Conic curves are a bit more difficult to design because tangent diameters must be projected on one end of the panel that are inserted on the other side. We can also vary the length of the sides so that the facet is part of our design or using material with an opening percentage like a micro perforation or metal screen.

Facet measurements can be variable or equal.

Sequence: Angle, side and number of sides.

MIN. T

MIN. 10

Conic panels can compensate for opposite sides in order to achieve parallel panels.

VARIABLE

MX. 26°







## MOUNTING TYPES

#### EXPOSED MOUNT ALL THICKNESSES



HIDDEN MOUNT ONLY LOW THICKNESSES (INTERIOR)



### TONGUE-AND-GROOVE SYSTEM OPTIONS



JOINT WITH SUPPORT



HIDDEN MOUNT











## FOLD AND SHAPE OPTIONS









## **GEOCLAD** Facades | Single Skin Panels

## PROTOTYPES



QLC 45



QLC 456



QL 3025





SW 15





SW 90





## SW 1510





SW 1520





Τ6















T 8





## **GEOCLAD** Facades | Single Skin Panels

## INSTALLATION

#### EXTERIOR GEOCLAD





SCREW





BRACKET





### **INSTALLATION**

#### SCREENPANEL-TYPE GEOCLAD PANEL



STRUCTURE BASED ON PROJECT











## **GEOCLAD** Facades | Single Skin Panels

MODEL	3D VIEW	FRONT VIEW	COMMERCIAL	MATERIAL		NS (mm)	METALSCREEN ONLY	PERFORA	
			OL 605-430/Az	ZINCALUM	0.5-0.6-1.0-	PANEL WIDTH	HD FINE WEF13	IN LINE**	PUNCH-OUT ***
OLC 45		OI 605-430/AI		0.7-1.0-1.2				v	
		OL 605-430/Fu	SPECIAL	0.6-0.7-1.0-1.5	460	V	~		
	OL 605-430/Ac	ALUMINUM CORTEN	0.6-1.0-1.9	_					
			OL 605-460/Az	STEEL	0.5-0.6-1.0-				
			OI 605-460/AI		0.7-1.0-1.2				V
QLC 100			OL 605-460/Eu	SPECIAL	0.6-0.7-1.0-1.5	- 405	V	V	
			OL 605-460/Ac	ALUMINUM CORTEN	0.6-1.0-1.9				
			OL 605-350/Az	STEEL ZINCALUM	0.5-0.6-1.0-				
			OL 605-350/AI	ALUMINUM	0.7-1.0-1.2				
QL 456			OL 605-350/Eu	SPECIAL	0.6-0.7-1.0	350	V	V	~
			QL 605-350/Ac	CORTEN	0.6-1.0				
			QL 605-315/Az	ZINCALUM	0.5-0.6-1.0-				
			QL 605-315/Al	ALUMINUM	0.7-1.0-1.2		V	V	V
QL 3025		<i>44</i> 444A	QL 605-315/Eu	SPECIAL	0.6-0.7-1.0	312			
			QL 605-315/Ac		0.6-1.0				
			QL605-330/AZ	JIEL	0.5-0.6-1.0		~	~	v
QL 4025			QL605-330/AL	ALUMINUM	0.7-1.0-1.2	330			
			QL605-330/AC	STEEL	0.6-1.0				
			QL605-360/AZ	70101104	0.5-0.6-1.0	360	v	V	v
QL 6025			QL605-360/AL	ALUMINIO	0.7-1.0-1.2				
			QL605-360/AC	STEEL	0.6-1.0				
			QL 605-338/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		v	V	~
			QL 605-338/AI	ALUMINUM	0.7-1.0-1.2-3.0				
QL 8050			QL 605-338/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0	338			
		QL 605-338/Ac	CORTEN STEEL	0.6-1.0					
		QL 605-270/Az	ZINCALUM	0.5-0.6-1.0-1.2					
SW 15		QL 605-270/Al	ALUMINUM	0.7-1.0-1.2					
		A PHA	QL 605-270/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0	270	<ul> <li>✓</li> </ul>	~	~
		QL 605-270/Ac	CORTEN STEEL	0.6-1.0					
			QL 605-480/Az	ZINCALUM	0.5-0.6-1.0-1.2	480	V	v	
CI M OD		AA	QL 605-480/AI	ALUMINUM	0.7-1.0-1.2				~
SLW 90			QL 605-480/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0				
			QL 605-480/Ac	CORTEN STEEL	0.6-1.0				

MODEL	3D VIEW	FRONT VIEW	COMMERCIAL	MATERIAL	DIMENSIO	NS (mm)		PERFORA	
CODE			CODE		THICKNESS	PANELWIDTH	HD FINE WEF 15*	IN LINE**	PUNCH-OUT***
			QL 605-270/Az	ZINCALUM	0.5-0.6-1.0-1.2				
SW 100	$\mathcal{A}$	QL 605-270/AI	ALUMINUM	0.7-1.0-1.2	270	V	~	~	
			QL 605-270/Eu	ALUMINUM	0.6-0.7-1.0				
			QL 605-270/Ac	CORTEN STEEL	0.6-1.0				
			QL1000-750/Az	ZINCALUM	0.5-0.6-1.0-1.2				
SW 1510			QL1000-750/Al	ALUMINUM	0.7-1.0-1.2	750	V	×	V
			QL1000-750/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0				
			QL1000-750/Ac	CORTEN STEEL	0.6-1.0				
			QL1000-480/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		V		
SW/ 1520			QL1000-480/Al	ALUMINUM	0.7-1.0-1.2-3.0	490			
300 1320			QL1000-480/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0-1.5	480			~
			QL1000-480/Ac	CORTEN STEEL	0.6-1.0-1.9				
			QL 605-390/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		v		
т 1			QL 605-390/AI	ALUMINUM	0.7-1.0-1.2-3.0	300			V
		K/ADD	QL 605-390/Eu	SPECIL	0.6-0.7-1.0-1.5	370			
			QL 605-390/Ac	CORTEN STEEL	0.6-1.0-1.9				
			QL 605-550/Az	ZINCALUM	0.5-0.6-1.0-1.2	- 550	v	~	v
та			QL 605-550/Al	ALUMINUM	0.7-1.0-1.2				
10			QL 605-550/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0				
			QL 605-550/Ac	CORTEN STEEL	0.6-1.0				
			QL 605-365/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		V	V	v
то			QL 605-365/AI	ALUMINUM	0.7-1.0-1.2	365			
10			QL 605-365/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0-1.5				
			QL 605-365/Ac	CORTEN STEEL	0.6-1.0-1.9				
			QL 605-430/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		V	V	V
<b>T</b> 100			QL 605-430/AI	ALUMINUM	0.7-1.0-1.2-3.0	100			
1100			QL 605-430/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0-1.5	430			
			QL 605-430/Ac	CORTEN STEEL	0.6-1.0-1.9				
			QL 605-460/Az	ZINCALUM	0.5-0.6-1.0- 1.2-2.0		V	V	~
T 4 4 0			QL 605-460/AI	ALUMINUM	0.7-1.0-1.2-3.0				
1110			QL 605-460/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0-1.5	460			
			QL 605-460/Ac	CORTEN STEEL	0.6-1.0-1.9				
			QL 605-550/Az	ZINCALUM	0.5-0.6-1.0-1.2	550	V	~	V
70.4			QL 605-550/AI	ALUMINUM	0.7-1.0-1.2				
TC 4			QL 605-550/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0				
		QL 605-550/Ac	CORTEN STEEL	0.6-1.0					
			QL 605-440/Az	ZINCALUM	0.5-0.6-1.0-1.2	440	V		
TO OL			QL 605-440/AI	ALUMINUM	0.7-1.0-1.2				
10.21			QL 605-440/Eu	SPECIAL ALUMINUM	0.6-0.7-1.0			~	
			QL 605-440/Ac	CORTEN STEEL	0.6-1.0				

## **GEOCLAD** Facades | Single Skin Panels





# QUADROLINES





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QuadroLines panels have been designed to cover facades, providing a continuous and homogeneous appearance. Their linearity and geometry make this a simple panel. It can be installed horizontally or vertically, which makes it very versatile. Perforated panels can be installed cladding glass panes to provide excellent sun control.

### **TECHNICAL DESCRIPTION**

#### TABLE WEIGHT

PRODUCT	MATERIAL	MAX. LENGTH (ml)	THICKNESS (mm)	WEIGHT (kg/m²)	YIELD (Panels/m2)	
QUADROLINES 15 x 10	ZINCALUM		0.4	5.2		
	ZINCALUM		0.5	6.5	5.55	
	ALUMINUM		0.6	2.68		
	ALUMINUM	6000	0.7	3.12		
QUADROLINES 30 x 15	ZINCALUM	8000	0.5	6.14		
	ALUMINUM		0.6	2.53	2.6	
	ALUMINUM		0.7	2.95		
	CORTEN STEEL		0.6	7.5		

- Colors: Available in over 100 standard and custom colors
- Finish: Perforated or flat
- Use: Cladding
- Lengths: We recommend length not longer than 6000 mm
- Other available materials: Aluminum, copper, zinc and Corten steel only for 30 x 15





#### QUADROLINES 15 X 10 PANEL



QUADROLINES 30 X 15 PANEL



#### QUADROLINES 15 X 10 PANEL SECTION



#### QUADROLINES 30 X 15 PANEL SECTION



#### INSTALLATION

Installation of QuadroLines 15 x 10 panels is based on a tongue-and-groove system with panel carriers. Panel carrier "C" is designed for interior wall applications and curved surfaces. Panel carrier "V" is mainly used for facades and ceilings. The QuadroLines  $30 \times 15$  panel is affixed directly to the structure using a tongue-and-groove system that allows for a homogeneous reading without visible joints or mountings.

#### QUADROLINES 15 x 10 "C" PANEL CARRIER

#### QUADROLINES 15 x 10 "V" PANEL CARRIER

\*Panel carrier recommended for cladding installation.

\*Panel carrier recommended for ceiling installation.





**INSTALLATION** 



\* The QuadroLines 30 x 15 and 60 x 30 panel is affixed directly to the structure based on a tongue-and-groove joint system, which allows for a homogeneous reading without visible joints and mountings.

**QUADROLINES** Facades | Single Skin Panels

ISOMETRIC QUADROLINES CLADDING (30 x 15)













#### **INSTALLATION**

#### ISOMETRIC QUADROLINES 30 x 15




178 | 179

#### TOP WINDOW DETAIL



## STANDARD PERFORATIONS



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# MINIWAVE





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The Miniwave panel has been designed to be used as ceiling and cladding, interior or exterior, with a geometry based on fine wavy lines. It is installed with a tongue and groove connection system. The system may consider intermediate fixings on-demand, as required by the project. The panels can be installed horizontally or vertically. This perforated panel can be also used in passive sun control applications and acoustic solutions.



#### MINIWAVE SECTION



## **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m <sup>2</sup> )	YIELD (Panels/m²)
		0,4	4,5	2 70
WIINIVAVE	ZINCALUW	0,5	5,62	3,70

#### CURVED MINIWAVE PANEL WITH CONNECTION EDGES

MINIMUM RADIOS				
THICKNESS (mm)	RADIO (mm)	MAX. LENGTH (mm)		
0,4 - 0,5 13000 2500				

# CURVED MINIWAVE PANEL WITHOUT CONNECTION EDGES (deck application)

MINIMUM RADIOS						
THICKNESS	RADIO	MAX. LENGTH				
(mm)	(mm)	(mm)				
0,4	2500	2500				

The yield of the curved panel without lock is 4.1 ml/m

- Colors: Available in over 100 standard and custom colors
- Finish: Smooth, perforated, Woodgrains and Mineralgrains
- Use: Cladding
- Lengths: We recommend length no longer than 6000 mm
- Other available materials: Corten steel, aluminum, copper y zinc







## STANDARD PERFORATIONS



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.







# **SOFTWAVE 25 - 50**





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# SOFTWAVE 25 - 50

Facades | Single Skin Panels



SoftWave 25 - 50 panels have been designed to be used as cladding. They have a unique geometry that mainly responds to aesthetic requirements expressed in panels with curved lines. These are made in smooth and perforated finishes with 10 standard patterns. The perforated panels can be used as a sun control element. They can be installed on facades with horizontal or vertical waves. The splicing is tongue-and-groove and the smooth part is affixed to the structure. Unaligned or uneven structures should use an auxiliary structure based on Hunter Douglas mullion profiling.



# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS	WEIGHT	YIELD
			kg/m²	PANELS/m <sup>2</sup>
		0.5	5.76	2 4 2
SOFTWAVE 25		0.6	6.91	3.03
		0.5	5.61	2.22
SOFTWAVE SU		0.6	6.73	2.33

Colors: Available in over 100 colors and custom colors, wood grains or mineral grains
Finish: Perforated or flat

- Uses: Cladding
- Lengths: The length is based on project requirements, but we recommend that it not to exceed 8 m
- Other available materials: Corten steel, aluminum, copper and zinc

#### OPTION WITHOUT OPEN JOINT



#### OPTION WITH OPEN JOINT









#### TOP DETAIL HORIZONTAL SOFTWAVE 25-50 PANEL





# STANDARD PERFORATIONS



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# 

HORIZONTAL SOFTWAVE 25-50 PANEL

# UVELINE





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The UveLine panel has been designed to be installed as a cladding. It has a unique geometry expressed on the basis of straight lines. It can be installed vertically or horizontally.

Its sloped edges offer a unique appearance that changes dramatically depending on the angle at which the light impacts it.



# **TECHNICAL DESCRIPTION**

- Colors: Available in over 100 colors and custom colors, wood grains or mineral grains.
- Finish: Smooth or perforated
- Uses: Cladding
- Lengths: The length is based on project requirements, but we recommend that it not exceed 6 m
- Other available materials: Corten steel, aluminum, copper and zinc

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m²)	YIELD (panels/m²)
		0.5	5.9	2.5
OVELINE	ZINCALUM	0.6	7.5	2.5

# **INSTALLATION**

UveLine panels are easy, quick and inexpensive to install. They are fixed directly to the support structure using a self-perforating screw. The recommended seals are made of reticulated polyethylene. The connection between panels is done by a tongue-and-groove and is affixed to the structure in the valley.





### **OPTION B**



VERY RAINY AREAS

# **STANDARD PERFORATIONS**

STRUCTURE BASED ON CALCULATION

10 x 5/8" HWH SELF-TAPPING SCREWS

HORIZONTAL

UVELINE PANEL

									•••
# 103	# 106	# 110-M1	# 110-M3	# 112	# 113	# 118	# 118 M2	# 130	# 131
Ø 2.95 ± 0,05 mm	Ø 2.5 ±0,05 mm	Ø 3.9 <sup>±0,05</sup> mm	Ø 3.9 ±0,05 mm	Ø 10 mm	Ø 15 mm	Ø 2 mm	Ø 2 mm	Ø 10 <sup>±0,05</sup> mm	Ø 15 <sup>±0,05</sup> mm
20% open	16% open	15% open	12% open	20% open	23% open	15% open	7.3% open	30% open	10% open
3.35 mm	3 mm	5.53 mm	5.53 mm	18 mm	27 mm	3 mm	3 mm	12.6 mm	50 mm
2.5 mm	3 mm	4.25 mm	7 mm	4 mm	6 mm	2.3 mm	6.6 mm	1.3 mm	12 mm

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distribu-tor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# MULTIPANEL





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# **MULTIPANEL** Facades | Single Skin Panels



The MultiPanel F is mainly used as a cladding for facades. It can be installed vertically, horizontally or diagonally. The panel is also applied on ceilings, especially awnings. Its shape allows for attractive architectural solutions and it can be used with or without gaps with the exception of Panel 150F, which does not have gaps. The fact that it is a solution with a panel carrier and without visible joints allows for the free thermal dilation of the panel. This cladding is ideal for remodeling existing facades in residential, commercial and industrial applications and also allows for the incorporation of insulation into the building solution.



#### MULTIPANEL F WITH GAPS



MULTIPANEL WAVE



PANEL 150 F

# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m²)	YIELD (panels/ml)
		0.4	4.76	
MULTIPANEL 150 F CLADDING		0.5	5.96	6.6 panels / meter
		0.6	7.1	
MULTIPANEL 300 F CLADDING		0.6	6.58	3.3 panels / meter
MULTIPANEL 400 F CLADDING		0.8	8.16	2.5 panels / meter
MULTIPANEL 500 F CLADDING		1.0	7.81	2.0 panels / meter
MULTIPANEL 600 F CLADDING		1.0	9.43	1.7 panels / meter
MULTIPANEL WAVE CLADDING		0.6	6.0	2.3 panels / meter

- Colors: Over 100 standard colors and custom colors upon request, wood grains and mineral grains
- Texture: Smooth or sandy in the case of MultiPanel F 200, 300, 400, 500 and 600 Smooth or perforated in the case of MultiPanel 150 F and MultiPanel Wave
- Uses: Horizontal and vertical cladding
- Options: With and without stone work
- Other available materials: Corten steel, aluminum, zincalum and copper

## ASSEMBLY

The product is installed using a panel carrier that is placed perpendicular to the panel. If no panel carrier is used, it can be replaced with clips except in the case of the 150F panel. This means that no joints are visible and allows for quick assembly.











SECTION



SECTION





### INSTALLATION SYSTEM WITH MULTIPANEL F SETTING CLIP (WITHOUT GAPS)



Note: If the panel carrier wing is straightened after installation, the panel cannot be disassembled.

# **MULTIPANEL** Facades | Single Skin Panels

# **INSTALLATION DETAILS**

### INSTALLATION OF DIRECTION OF MULTIPANEL F





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### TABLE OF WEIGHTS

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (Kg/m²)
		0.4	4.64
	ZINCALUM	0.5	5.80
PANEL 150 F		ZINCALUM0.42INCALUM0.5ALUMINUM0.5ALUMINUM0.6ALUMINUM0.8COPPER0.8COPPER0.8ALUMINUM0.7ZINCALUM0.7COPPER0.8ALUMINUM0.7COPPER0.8COPTEN STEEL1ALUMINUM0.6COPTER STEEL1ALUMINUM0.8COPPER0.8COPPER0.8COPPER0.8ALUMINUM0.8ALUMINUM1COPPER1COPPER0.8ALUMINUM1COPPER1ALUMINUM1ALUMINUM1ALUMINUM1ALUMINUM1ALUMINUM1.5COPPER1.5COPPER1.5ALUMINUM1ALUMINUM1ALUMINUM1	6.97
		0.5	1.99
	ALUMINUM	0.7	2.79
	ZINCALUM	0.6	6.66
	ALUMINUM	0.8	3.05
WOLLIFANEL F	Image: Constant of the section of t	10.07	
		12.59	
	701001104	0.6	6.08
	ZINCALUM	0.8	8.11
MULTIPANEL F300	ALUMINUM	0.7	2.44
	COPPER	0.8	9.19
	CORTEN STEEL	1	10.13
		0.6	5.71
	ZINCALUM	0.8	7.62
		1	9.53
MULTIPANEL F400		0.8	2.62
		1	3.27
	COPPER	1	8.64
	CORTEN STEEL	0.8	9.53
		1	9.21
		0.8	7.36
	COPPER	1.2	10.44
MULTIPANEL F500		0.8	8.35
		1	3.16
		1.2	3.80
	CORTEN STEEL	1	9.21
	ZINCALUM	1	8.97
		1.2	3.70
MULTIPANEL F600	IIPANEL F400         0.6         0.6           1         0.8         1           ALUMINUM         0.8         1           ALUMINUM         0.8         1           COPPER         1         1           COPPER         1         1           COPTEN STEEL         0.8         1           TIPANEL F500         1         0.8           ALUMINUM         1.2         1           COPPER         1         1           COPPER         1.2         1           ALUMINUM         1.2         1           ALUMINUM         1.2         1           TIPANEL F500         ZINCALUM         1           ALUMINUM         1.2         1           TIPANEL F500         CORTEN STEEL         1           TIPANEL F500         CORTEN STEEL         1	4.63	
MULTIPANEL F300 MULTIPANEL F400 MULTIPANEL F500 MULTIPANEL F500 MULTIPANEL F600	COPPER	1.5	15.26
	CORTEN STEEL	1	8.97
	ALUMINUM	1	9.21
	ZINCALUM	0.6	5.74

# **FS CLADDINGS**





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# **FS CLADDINGS** Facades | Single Skin Panels



FSA panels are mainly used as a facade cladding. They can be installed vertically, horizontally or diagonally. The panel does not require a panel carrier and is installed directly on the structure. Its shape allows for attractive architectural solutions because it does not leave gaps between panels. The FS 150 and 220 panels can also be applied on ceilings and especially on awnings. There is a perforated panel option for ceilings that require high acoustic absorption. The 300 FS panel also has two options with insulation: the 300 FS Simple, which has a standard 300 FS panel and polystyrene insulation with varying thickness and a density of 20 kg/m<sup>3</sup>, and 300 FSA Compound, which has the aforementioned elements with an insulation thickness of 40 mm and an Zincalum closure tray on the back measuring 300 mm wide and 0.4 mm thick.









300 FS PANEL SECTION

#### 300 FSA SIMPLE PANEL SECTION



# 300 FSA COMPOUND PANEL SECTION



# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS	WEIGHT Kg/m²	YIELD Unit/m²
		0.4	4.9	
PANEL 150 FS		0.5	6.1	6.7
		0.6	7.4	
		0.4	4.3	
PANEL 220 FS		0.5	5.3	4.5
		0.6	6.4	
		0.4	4.0	
PANEL 300 FS	ZINCALUM	0.5	5.0	3.3
		0.6	6.0	
		0.4	5.3	
PANEL 300 FSA SIMPLE		0.5	6.4	3.3
		0.6	7.5	
		0.4	8.7	
PANEL 300 FSA COMPOUND		0.5	10.6	3.3
		0.6	12.5	

- Colors: Available in over 100 standard colors and custom colors upon request, wood grains and mineral grains
- Finish: Smooth
- Uses: Cladding
- Lengths: Custom based on the project requirements
- Yield: Based on panel width

## ASSEMBLY

FS panel assembly is simple and quick thanks to its special tongue-and-groove splicing system. The panel is affixed on the female flange using a self-perforating screw depending on the type of structure to which it will be affixed. For horizontal FS panel installation in rainy areas, we recommend working with the technical department to consider sealing options in order to achieve lining water tightness.





#### 150/220/300 FS VERTICAL ISOMETRIC PANEL USING LEVELING STRUCTURE



#### TOP DETAIL WINDOW



#### BOTTOM DETAIL WINDOW



#### EXTERIOR CORNER DETAIL 150/220/300 FS HORIZONTAL PANEL

#### **CORNER LINING**



# OPTIONAL LEVELING AUXILIARY STRUCTURE USE TYPICAL SITUATION FOR UNEVEN STRUCTURES



#### BRACKET



#### MULLION PROFILE



Note: For splicing and horizontal corner solutions, we recommend studying the case based on the project and weather conditions.

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# **M CLADDINGS**





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# **M CLADDINGS** Facades | Single Skin Panels



160 M and 230 M panels have a versatile design that can be used as a ceiling (especially awnings) and interior and exterior cladding. These panels have a profile lined by a central body and two support wings. The product is made in 160 and 230 mm wide options. The panels can be installed vertically, horizontally or diagonally.

160 M CLADDING

230 M CLADDING









# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m²)	YIELD (unit/m²)
		0.4	3.9	
160 M CLADDING		0.5	4.8	5.76
02.00110		0.6	5.9	
000.14	ZINCALOW	0.4	3.7	
230 M CLADDING		0.5	4.7	3.94
		0.6	5.6	

- Colors: Available in over 100 standard colors and custom colors, Mineralgrains and Woodgrains
- Finish: Smooth
- Uses: Cladding and ceilings
- Lengths: Based on project requirements. We recommend that the length not surpass 6 meters
- Other available materials: Corten steel, aluminum, copper and zinc

## INSTALLATION

Assembly is simple, quick and inexpensive because each panel is layered over the next and affixed using a self-perforating screw. Conventional enameled flashings are custom made for each project. Hunter Douglas Mullion profiles should be used as an auxiliary structure to correct uneven main structure.







# FINISH OPTIONS AGAINST WALL LONGITUDINAL SECTION

**CORNER JOINT** 



#### OPTIONS AGAINST WALL TRANSVERSAL SECTION



#### UPPER AND LOWER HORIZONTAL PANEL DETAIL



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# **SL PANELS**





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# **SL PANELS** Facades | Single Skin Panels









Hunter Douglas SL facade and roof panels have a simple appearance that is very similar to that of a veneer-and-lap seam, offering the option of using various panel widths (430, 455, 500 and 530 mm). The machine used to manufacture CD 455 SL, CD 500 SL and CD 530 SL panels can produce custom lengths. The maximum length of single piece panels manufactured at the plant is normally no more than 18 m because this is the longest length that can be transported.

The panels can be manufactured at the project and thus do not require transversal overlaps. This means that complete pieces can be installed from the gutter to the ridge. Using a special machine, the longitudinal joint of the panels can be connected at 90° (simple seam fill) or 180° (double seam), which allows for minimum slopes of 2%.

#### Manufactured on site.

-Allows for continuous length panels without overlaps

- -Efficient solution for any metallic roof design
- -Hermetic, safe lateral overlaps
- -Hidden joints without perforations (eliminates leaks)
- -Savings on materials and seals

-Greater yield of useful m<sup>2</sup>









## **TECHNICAL DESCRIPTION**

500 (ADVANCE)

PRODUCT	MATERIAL	THICKNESS	WEIGHT Kg/m <sup>2</sup>	YIELD Un/m²
PANEL CD 430 SL	ZINCALUM	0.5	4.6	2.22
		0.6	5.5	2.33
		0.5	5.3	2.20
FANEL CD 455 5L		0.6	6.4	2.20
		0.5	4.8	2.00
PAINEL CD500 SL		0.6	5.8	2.00
		0.5	4.5	1.90
FAINEL CD 530 SL		0.6	5.5	1.69

- Colors: Available in over 100 standard colors and custom colors, Woodgrains and Mineralgrains
- Finish: Smooth or perforated
- Uses: Roofs and cladding
- Lengths: We recommend that the length does not exceed 12 meters when pre manufactured

## ASSEMBLY

The panels are installed using hidden clips that are affixed to the support structure using self-perforating screws.



#### SETTING AND CRIMPING CLIP DETAILS PANEL LENGTHS LESS THAN 15M



SETTING CLIP HEIGHT VARIABLE BASED ON PANEL 430- 500- 530 SL PANEL



SLIDING SETTING CLIP DETAILS PANEL LENGTHS GREATER THAN 15 M









# **SL PANELS** Facades | Single skin panels

## COMPONENTS



SETTING CLIP: 430- 530 SL PANEL MATERIAL: ZINCALUM





4

32

31



SETTING CLIP: 500 SL PANEL MATERIAL: ZINCALUM





VARIABLE H SETTING CLIP PANEL 430-500-530 SL MATERIAL: ZINCALUM





VARIABLE H SETTING CLIP PANEL 455 SL MATERIAL: ZINCALUM



#### ROOF RIDGE CD 430 - 455 -500 - 530 SL



#### GUTTER CANAL MEETING (TYPE) CD 430 - 455 -500 - 530 SL



### GUTTER CANAL MEETING (TYPE) CD 430 - 455 -500 - 530 SL



### RIDGE PROFILE CD 430 - 455 -500 - 530 SL



#### GUTTER CANAL DETAIL (TYPE) CD 430 - 455 -500 - 530 SL



#### GUTTER CANAL DETAIL (TYPE) CD 430 - 455 -500 - 530 SL



#### FINISH TO WALL DETAIL CD 430 - 455 -500 - 530 SL



#### CROWNING PROFILE VARIABLE DEVELOPMENT



#### FINISH TO WALL PROFILE VARIABLE DEVELOPMENT



#### FINISH TO WALL DETAIL CD 430 - 455 -500 - 530 SL



### RAIN CAP PROFILE VARIABLE DEVELOPMENT



#### CROWNING PROFILE VARIABLE DEVELOPMENT



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# CD 408 PANEL





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# CD 408 PANEL Facades | Single Skin Panels



The CD 408 panel can be installed as cladding vertically, horizontally or diagonally with nerve towards the exterior or interior. When installing it horizontally, we recommend using finish profiles at the corners, wall seams or other finishes and reticulated polyethylene or similar seals. The panel is installed with the mounting nerve overlapped. It is affixed to the structure as a cover using an omega clip that ensures that the system is completely hermetic and water tight.











# **TECHNICAL DESCRIPTION**

PANEL	MATERIAL	THICKNESS (mm)	WEIGHT (kg/m <sup>2</sup> )	YIELD (panels / m)	MAXIMUM LENGTH
		0.4	4.7		8
CD 408	ZINCALUM	0.5	5.8	2.45	12
		0.6	7.0		12

- Colors: Available in over 100 standard colors and custom colors, Woodgrains and Mineralgrains
- Finish: Perforated or flat
- Uses: Roof and cladding
- Other available materials: Corten steel, aluminum, copper and zinc

# **INSTALLATION**

## CLADDING

The panel is affixed directly to the structure using a 12- 14 x 3/4" HWH SD or 12-14 1"  $\,$ HWH SD self-perforating screw.

In order to correct misalignments or unevenness in the main structure, we recommend using Mullion profiles as an auxiliary structure.

#### ROOF

The CD 408 panel is installed with an omega clip affixed to the edges with 10 x 5/8" HWH self-perforating screws when the structure is metallic and 6 x 1" self-perforating screws when the structure is made of wood.



# INSTALLATION OF CD 408 HORIZONTAL PANEL



### **CORNER PROFILE**



### INSTALLATION OF VERTICAL CD 408 PANEL



## CD408 HORIZONTAL EXTERIOR PANEL CORNER DETAIL



### LOWER DETAIL VERTICAL PANEL 408



DEVELOPMENT: 190



# **PANEL CD 408** Facades | Single Skin Panels









### **ROOF / CLADDING JOINT**





# CALCULATION FORMULA





 $r = C^2 + 4h^2$  I = 0.01745 r  $\alpha$   $\alpha = 57.2961 I$ 

### VARIABLE RADII

Possible curves: Thicknesses: Minimum curve radii:

Minimum countercurve radii:

Curvature angles: Maximum recommended length: Curves and countercurves 0.5 and 0.6 mm 2500 mm in 0.6 mm thickness 5500 mm in 0.5 mm thickness 8000 mm in 0.6 mm thickness 10000 mm in 0.5 mm thickness (all radii measured at the panel valley) 1° < to < 180° 7000 mm (for transportation and handling)

### FIXED RADIUS CURVED CD 408 PANEL



CURVATURE ANGLES: FOR RADIUS 565 mm 0Ã ≤ ≮ ≤ 104Ã FOR RADIUS 865 mm 0Ã ≤ ≮ ≤ 90Ã

STRAIGHT DISTANCE A AND C ≥ 250

CURVE PANEL MINIMUM DEVELOPMENT (A + B + C)  $\ge$  2400

# VARIABLE RADIUS CURVED CD 408 PANEL

### POSSIBLE CURVING

Curves and counter curves: Thicknesses: Minimum radii:

0.5 y 0.6 mm 2500 mm in 0.6 mm thickness 5500 mm in 0.5 mm thickness (all radii measured to the panel valley)  $10 \le x \le 180A$ 

Curvature angles:

CD 408 CURVE PANEL CD 408 CURVE PANEL CD 408 CURVE PANEL RADIUS: 2500 (0.6 THICKNESS) RADIUS: 2500 (0.6 THICKNESS) MAXIMUM DISTANCE MAXIMUM DISTANCE

#### **IMPORTANT**

- Curved and straight sections cannot be specified within the same panel
- Curved and countercurved sections cannot be specified within the same panel
- Curved sections with 2 or more radii within a single curve cannot be specified within the same panel

Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# 84R CLADDING





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# 84R CLADDING Facades | Single Skin Panels



The 84R panel is a metallic cladding for interior or exterior walls. It is composed of metallic slender rounded panels that can be supplied in any length up to 6000mm (as standard). Each panel is 84 mm wide and has rounded borders. The 84R panel can easily be incorporated into the curtain-wall system and form a continuous surface that can be with closed or open joints depending on the panel carrier used. It is light weight and easy to install, which makes 84R cladding an ideal material for covering large surfaces and for retrofitting applications.



# **TECHNICAL DESCRIPTION**

PRODUCTO	MATERIAL	THICKNESS	WEIGHT Kg/m <sup>2</sup>	YIELD Panels/m <sup>2</sup>	
		0.4	0.36		
STRAIGHT 84 PANFI	ZINCALUM	0.5	0.44	BASED ON PANEL	
OTTAINEE		0.6	0.53	O, WWW.ERTTPE	
CURVED		0.5	0.44	BASED ON PANEL	
84 PANEL		0.6	0.53	CARRIER TYPE	

- Colors: Available in over 100 standard colors and custom colors
- Finish: Perforated or flat
- Uses: Cladding
- Lengths: Based on project requirements. We recommend that the length does not exceed 6 meters
- Other available materials: Corten steel, aluminum, copper and zinc

# INSTALLATION

84 R panels are firmly pressed onto one of the 4 types of panel carriers designed for this system (V0; V3; V5; V6). Each has different yield and visual appearance.

### PANEL CARRIERS

V0 PANEL CARRIER

V3 PANEL CARRIER



V5 PANEL CARRIER





V6 PANEL CARRIER





### STRAIGHT 84R



CURVED 84R



### FIXED RADII OF CURVE / COUNTERCURVED PANEL



### VARIABLE RADII OF CURVED PANEL

#### SIMPLE



## STRAIGHT SEGMENT AND CURVED SEGMENT



#### COMPOUND











COMPOUND

# **84R CLADDING** Facades | Single Skin Panels



# STANDARD PERFORATIONS



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.



# TIMBERLINE CLADDING





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# **TIMBERLINE CLADDING**

Facades | Single Skin Panels



The Timberline cladding is unique in that it offers a smooth cladding with small open joints between the panels that are similar to wood roofing. It can thus be used for various purposes, including residential applications. Its even, flat appearance is particularly useful when required, and it is also lightweight and acoustic with a perforated panel option with acoustic fabric.

# **TECHNICAL DESCRIPTION**

MATERIAL	THICKNESS (mm)	WEIGHT (kg/m²)	WEIGHT (kg/m <sup>2</sup> )	YIELD (panels / m²)
ZINCALUM	0.5	90	5.77	11.1

- Material: Zincalum
- Thickness: 0.5 mm
- Colors: Available in over 100 standard colors and custom colors
- Finish: Flat or perforated, Woodgrains, Mineralgrains and Woodlines
- Uses: Cladding
- Lengths: We recommend that the length does not exceed 6 meters
- Other available materials: Aluminum, copper and zinc







# **INSTALLATION**

The panels are affixed to the panel carrier rail using pressure and do not require other fastening elements. They are easy to install.









TIMBERLINE PANEL CARRIER

LOWER BASE FINISH

#### **UPPER FINISH**



### STONE WORK DETAIL



# EXTERIOR CORNER JOINT OPTION 1





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# **PYRAMID CLADDING**





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# **PYRAMID CLADDING**

Facades | Single Skin Panels







Pyramid cladding is a 400 x 400 mm three dimensional panel. The product can enliven facades and provide a unique style based on its three dimensional qualities. Each tray is independent and can be rotated in any direction and installed on a facade without a specific pattern. Different colors can be combined to achieve an attractive visual effect.

### WEDGE-TYPE PYRAMID CLADDING





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PYRAMID CLADDING





# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS (mm)	WEIGHT kg/m²	YIELD panels/m <sup>2</sup>
REV. PIRAMID 400	ZINCALUM	0.65	5.06	6.25

- Colors: Available in over 100 standard colors and custom colors, Woodgrains and Mineralgrains
- Finish: Flat
- Use: Cladding
- Other materials: Corten steel, aluminum, copper and zinc

# **INSTALLATION**

It is simple to install and uninstall Pyramid modules. Each module has an anchor system that can be used to install them with or without gaps. They also can be installed in any direction, obtaining different designs. Given how simple it is to install, it is possible to have an easy register. Each panel can be installed or removed independently.



### SECTION A



Note: The components of the product on this sheet are constantly subject to innovation and development, and may be subject to change. The measurements listed on this technical sheet are expressed in millimeters (mm). In order to ensure that the product functions properly, installation should always be completed by an authorized distributor using all of the accessories identified in accordance with Hunter Douglas technical specifications.

# SIDEWALL





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# **SIDEWALL** Facades | Single Skin Panels



The SideWall panel is an exterior and/or interior cladding that can be used to build structures for diverse uses or to remodel old structures, giving them an attractive appearance similar to wood. It also provides a system with excellent structural rigidity.

# **TECHNICAL DESCRIPTION**

PRODUCT	MATERIAL	THICKNESS ZINCALUM (mm)	WEIGHT (kg/m²)
		0.4	3.94
SIDEWALL	ZINCALUM	0.5	4.93

- Material: Zincalum
- Thickness: 0.4 mm -0.5 mm
- Colors: Available in over 100 standard colors and custom colors
  - Finish: Sanded or flat
  - Uses: Cladding
  - Lengths: We recommend that lengths not surpass 7 linear meters
  - Yield: 3.7 linear meters per square meter
- Seals: We recommend reticulated polyethylene and Compriband seals





# SIDEWALL PANEL





### INSTALLATION BETWEEN PANELS

Place the next panel and gently press on it to hook it into the panel that has already been installed. Lift it to veneer it in, secure it and repeat.



TOP WINDOW DETAIL



BOTTOM WINDOW DETAIL



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# WOODGRAIN FINISHES



Chinese Cypress SideWall



Medium Oxidized Larch SideWall



Chestnut SideWall



Aged Poplar SideWall 6929



Dark Oxidized Poplar SideWall



American Cedar SideWall



Beech SideWall



Dark Walnut SideWall



Black Ebony SideWall



Eucalyptus 253 SideWall







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# PAINTS





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The use of paint on metallic bases in Hunter Douglas products has a decorative purpose in which the color scheme is used to give the product an aesthetic aspect. It also provides protection to surface areas that are impacted by humidity and corrosion. The paints that Hunter Douglas uses on its metallic products have excellent color stability properties and provide additional characteristics. For example, they are very easy to clean.

# TYPES OF COATING

### LIQUID COATING

This type of product is applied using rollers with liquid paint. It is used to create different types of finishes that generally blend various colors, providing different grains or textures.

### POLYESTER

This is the most frequently used product in Hunter Douglas processes. This type of paint can be used on various types of textures, including both smooth and sanded. There are various types of glosses and mattes, and it is 25 micras thick.

### POLYESTER APPLICATION SCHEME



### PVDF2

This type of paint provides excellent protection. It comes in a wide range of colors, providing a uniform finish and architectural finish in bright, lasting colors.

## ULTRA COOL OR COOL ROOF

All PVDF paints are Ultra Cool or Cool Roof because they have a high reflectance pigment that can be certified with a sun reflectance index (SRI). This reduces the temperature of the surface area of the product and protects it from UV radiation.



### PVDF APPLICATION SCHEME

TYPE OF ENVIRONMENT	CHARACTERISTICS	PRIMARY MATERIAL	PAINT SCHEME	SERVICE TIME (*)
URBAN OR RURAL	ENVIRONMENT WITHOUT THE PRESENCE OF ACIDS, URBAN AND RURAL AREAS	ALUZINC	POLYESTER	OVER 10 YEARS
SOFT MARINE, LIGHT INDUSTRIAL	OVER 400 M FROM THE SEA, INDUSTRIAL ENVIRONMENT, LOW POLLUTION	ALUZINC	POLYESTER	OVER 10 YEARS
URBAN OR RURAL	ENVIRONMENT WITHOUT THE PRESENCE OF ACIDS, URBAN AND RURAL AREAS	ALUMINUM/ALUZINC	PVDF-2	OVER 20 YEARS
SOFT MARINE, LIGHT INDUSTRIAL	OVER 400 M FROM THE SEA, INDUSTRIAL ENVIRONMENT, LOW POLLUTION	ALUMINUM/ALUZINC	PVDF-2 PLUS	OVER 20 YEARS
MEDIUM MARINE	100-400 M FROM THE SEA, COASTAL AREA, INDUSTRIAL ENVIRONMENT	ALUMINUM	PVDF-2 XL	OVER 20 YEARS
SEVERE MARINE, SEVERE INDUSTRIAL	LESS THAN 100 M FROM THE SEA, AGGRESSIVE ENVIRONMENTS, MINING	ALUMINUM	PVDF-2 XL PLUS	OVER 20 YEARS

# TYPES OF ENVIRONMENTS AND RECOMMENDED PAINT SCHEMES

### POWDER COATING

This type of paint is applied as dry powder. It is used to create a hard finish that is more resistant than conventional paint. The thickness of the paint is 70-10 micras. The process is carried out in facilities with a curing oven, cabins for application with electrostatic pistols and an aerial transportation chain from which the products are hung. This type of paint is mainly used to paint thicker products and elements, such as extruded aluminum profiles, Screenpanel XL, Plank XL and MetalScreen.



# COLORS AND FINISHINGS

### TYPES OF COLORS

### INTERIOR COLORS

Colors for interior application present ranges, tones and glosses that are appropriate for an environment with varying light intensity, limited exposure to UV rays and various atmospheric agents. Emphasis is placed on greater variety and adequate chromatic purity for combining with the various forms and styles of the interior architecture and design. The colors have a 15% gloss.



# EXTERIOR COLORS

The colors for exterior applications have been formulated based on the quality requirements necessary for their exposure to agents such as UV light, pollution and climate agents. The exterior colors have a 45% gloss. A 15% gloss is available for products that require flatness, such as Quadroclad, Multipanel F, Tiles, Screenpanel, etc.



## **FINISHES**

### SANDED FINISHES

This application provides a natural finish like clay and gives the exterior warmth and durability. It allows for a high level of flexibility, multiple options and has achieved a wide variety of colors and textures using a blend of pigments.



Natural Aluminum 7163 15% Fine Sanding



Blackboard 4577 25% Fine Sanding



Blackboard 4577 25% Thick Sanding

Note: The sanded finish option is not available for all products. Please contact the Specification Area.

#### PEARLED OPTIONS

These options can be used on any type of metallic application, preferably to give a brighter shine to the product and give it greater protection and durability. This finish can only be used on a limited number of products. Please contact the Specification Area.



Pearled Fire 5360 45%



Pearled Black 3070 45%

# WOODGRAINS | MINERALGRAINS











# WOODGRAINS | MINERALGRAINS Façades | Finishes



Wood has always required a great deal of care and constant maintenance in exterior applications. In view of this, Hunter Douglas has created a new finish for all metallic architectural products that provides the warmth of wood without the need for ongoing upkeep. The company has used Woodgrains technology to design a new collection of finishes for interior and exterior use and is unveiling a wide range of colors and grains that can be used on ceiling, louvre, lining and facing products for interior or exterior walls.

Note: A translucent PVDF varnish with UV protection is used for exterior applications.



# **TYPES OF VAINS**










#### WOODGRAINS COLORS



Aged Poplar



Chestnut



Eucalyptus



Beech



Medium Oxidized Larch



American Cedar



Dark Walnut



Native Cedar



Dark Oxidized Larch



Chinese Cypress



Oak



Black Ebony

# **WOODGRAINS | MINERALGRAINS** Façades | Finishes

#### MINERAL GRAIN COLORS



Corroded Copper 7678



Aged Copper 7679



Dark Corten Steel 7680



Light Corten Steel 7681



Rusted Steel 7682

Aged Corten Steel 7683

Note: Special colors can be developed for projects over 500 m².

It is also possible to use a finish for all of the metallic products that is similar to Corten Steel or Patina Copper using the same technology used in Woodgrains. Mineralgrains are recommended in applications in which it is not possible to use Corten steel or copper.



Marble 7685







Notre Dame 7683



Sandstone 7686



Concrete 7684



Sevilla 7685

# **WOODGRAINS | MINERALGRAINS** Façades | Finishes

#### MINERALGRAINS COLORS











Light Brown 6970

Cyan 6971



Siena 7686



San Basilio 7684



### PERFORATIONS









#### **PERFORATIONS** Façades | Finishes





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Hunter Douglas has a wide range of perforated materials which present various applications, finishes and coatings. Some of the many functions that perforated materials fulfill are absorbing, covering, decorating, filtering, protecting, separating and ventilating. The size and placement of the perforations, thickness of the veneer and material are key when adding design to functionality.

The attractiveness, formal and functional versatility, and variety of perforated veneers allows for complete customization of interior and exterior spaces in both the ceiling and facing and façade and covering lines, achieving a great variety of possible designs based on the requirements of each project. Hunter Douglas has high precision machinery, equipment and a large variety of matrixes for meeting each of its clients' needs. These perforations can be classified as:

- Standard perforations
- Special perforations

#### CONSIDERATIONS AND VARIABLES:

- Perforated surface (panels)
- Material and thickness
- Type and characteristics of perforations
- Image (if applicable)
- Perforation pattern (if applicable)
- Distance between perforations percentage open area
- Number of perforations per sqm

#### PERFORATIONS

#### STANDARD PERFORATIONS

PUNCHING	DIE PERFORATION
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ð 5 mm	Ø 2.95 mm
25% open	20% open
5 mm	3.35 mm ±0,0
5 mm	2.5 mm <sup>±0,05</sup>

#### CUSTOM PERFORATIONS



103 Available for material and thickness: Aluzinc 0.4, 0.5, 0.6, 1mm Aluminum 0.7 mm													
DESIGN	DIMENSIONS IN mm 20%		20% OPEN	NUMBER OF									
	A	B	Ø	<	AREA	PERFORATIONS M <sup>2</sup>							
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS	DIAMETER OF THE PERFORATION	ANGLE OF THE 00 PERFORATION 00	DIRECTION OF THE PERFORATION WITH RESPECT TO THE VENEER	#29.098							

106         Available for material and thickness: Aluzinc 0.5, 0.6 mm, Aluminum 0.5, 0.6, 0.7 mm												
DESIGN	DIMENSIONS IN mm 16% OPEN NUMBER OF				NUMBER OF							
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109	Available								
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110 M1	Available	for materia	l and thick	ness: Aluzii	nc 0.5, 0.6, 1 mm, Al	uminum 0.7 mm, Corten s	teel 0.6, 1 mm
DESIGN	DIMENSIONS IN mm				15% OPEN	NUMBER OF	
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## PERFORATIONS

Façades | Finishes



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DESIGN	DIMENSIONS IN mm			DIMENSIONS IN mm				20% OPEN	NUMBER OF	
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113 Available for material and thickness: Aluzinc 0.5, 0.6 mm, Corten steel 0.6 mm												
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[114 A	Available f	or material	and thickr	ess: Alumi	num 15 mm 12 mr		
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115	115         Available for material and thickness: Aluminum 1.5 mm													
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116	Available	for materia	and thick	ness: Alum	inum 1.5 mm		
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117	Available <sup>-</sup>	for materia	l and thick	ness: only i	300-C 0.7 mm		
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118	Available	for materia	I and thick	ness: Aluzi	nc 0.6 mm, Aluminu	m 0.7 mm	
DESIGN		DIMENSIC	ONS IN mm 15% OPEN NUMBER OF				
	A	B	Ø	<	AREA	PERFORATIONS m <sup>2</sup>	
$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\$	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL	DIAMETER OF THE PERFORATION	ANGLE OF THE	DIRECTION OF THE PERFORATION WITH RESPECT TO THE VENEER	#52.425	

118 M2	Available	for mater	rial and th	ickness: A	Juzinc and Alumin	um 0.5/0.6 mm	
DESIGN	DIMENSIONS IN mm			n	30% OPEN	NUMBER OF	
	A	В	Ø	<	AREA	PERFORATIONS m <sup>2</sup>	••••••
	DISTANCE BETWEEN ONGITUDINAL	DISTANCE BETWEEN RANSVERSAL ∞ ERFORATIONS	DIAMETER OF HE PERFORATION	NGLE OF THE 60 ERFORATION 0	IRECTION OF THE FERFORATION WITH ESPECT TO THE VENEER	#23.400	• • • • • • • • • • • • • • • • • • •

130	Available	vailable for material and thickness: Aluzinc and Aluminum 0.5/0.6 mm																	
DESIGN	DIMENSIONS IN mm			DIMENSIONS IN mm			DIMENSIONS IN mm			DIMENSIONS IN mm			DIMENSIONS IN mm			n	30% OPEN	30% OPEN NUMBER OF	
	A	В	Ø	<	AREA	PERFORATIONS m <sup>2</sup>													
	ICE BETWEEN TUDINAL RATIONS	ICE BETWEEN /ERSAL RATIONS	TER OF RFORATION	OF THE RATION	ION OF THE RATION WITH TTO THE VENEER	#3,873													
	DISTAN ONGIT	DISTAN	DIAME	ANGLE	PIRECT														

#### **PERFORATIONS** Façades | Finishes



140			Available							
DESIGN			DIMENSIONS IN mm 11% OPEN NUMBER OF			NUMBER OF				
	10 A		В	ÁREA	ÁREA < AREA PERFORATIONS		PERFORATIONS m <sup>2</sup>			
B <sup>+0,05</sup>		Ĥ	20	20	100mm <sup>2</sup>	45°	н. Н			
		<u> </u>	-	-			Ξ			
					Z		빌린			
		$\Box_{-}$	NS AL	N L N	ATIC	Ψz	[ 높줄뿐 슈	#1 700		
(45°		A <sup>+0,05</sup>		SSA III	0 S O	<u>⊢</u>	z22	#1.700	 	
			A LE	RA-RE	LE LE	NA OI	OT AT			
		_	A D D D	PANS RFO	E PE	E E E				
			PER DIS	DIS PEF	THE	PEP	PEF			

160	Available for material and thickness: Aluzi	nc 0.5/ 0.6 mm and a	aluminum 0.6 mm	
DESIGN	DIMENSIONS IN mm	OPEN AREA	NUMBER OF PERFORATIONS m <sup>2</sup>	
	Ø 5 Ø 8 Ø 10 Ø 15 Ø 22	18%	#1.594	

161	Available for material and thickness: Aluzi	nc 0.5 mm				
DESIGN	DIMENSIONS IN mm	OPEN AREA	NUMBER OF PERFORATIONS m <sup>2</sup>	•.•.•	•.•.•.	• • • • Ø 8
	Ø 3 Ø 4 Ø 5 Ø 8 Ø 10	21%	#5.728			-Ø16 -Ø6

401 / D10							
DESIGN	[	DIMENSIC	DNS IN mr	n		NUMBER OF	
	A	В	Ø	<	OF EIN AREA	PERFORATIONS m <sup>2</sup>	
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL∞ PERFORATIONS	DIAMETER OF THE PERFORATION 0	ANGLE OF THE 6 PERFORATION 0	24%	#3.136	

4	02							
D	ESIGN	DIMENSIONS IN mm					NUMBER OF	
		A	В	Ø	<	OFENAREA	PERFORATIONS m <sup>2</sup>	
-		DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS	DIAMETER OF THE PERFORATION 51	ANGLE OF THE 60 PERFORATION 00	20%	#9.18	

#### STANDARD PERFORATIONS



DESIGN		DIMEN	SIONS IN mm		OPEN	NUMBER OF	
	A	В	DETALLE	<	AREA	PERFORATIONS m <sup>2</sup>	
	4	4		30°			
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS	- 20	PERFORATION ANGLE	36%	#5.934	

Note: Minimum margin of 10 mm. Available in aluminum, Corten steel, Aluzinc, galvanized steel and copper.

406										
DESIGN		DIMEN	SIONS IN mm		OPEN	NUMBER OF				
	A	В	DETALLE	<	AREA	PERFORATIONS m <sup>2</sup>				
	5	5		90°						
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS		PERFORATION ANGLE	25%	#10,000				



408 Note: Minimum margin of 50 mm at the edge of the fold.												
DESIGN	DIN	ENSIONS IN mm		OPEN	NUMBER OF							
	A B DIMENSIÓN <			AREA	PERFORATIONS m <sup>2</sup>							
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS DISTANCE BETWEEN TRANSVERAL		PERFORATION 6 ANGLE 0	11%	#2.89		$\bigcirc$	$\bigcirc$				

#### **PERFORATIONS** Façades | Finishes





420							
DESIGN	C	DIMENSIONS IN mm			OPEN	NUMBER OF	
	A B Ø <		AREA	PERFORATIONS m <sup>2</sup>			
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS	DIAMETER OF 12/8/10/ 12/55 THE PERFORATION	PERFORATION 00 ANGLE	18%	#1.594	

421										
DESIGN	DIMENSIONS IN mm			n	OPEN	NUMBER OF				Ø8
	A B Ø <		AREA	PERFORATIONS m <sup>2</sup>	. • • • •	. • . • . •	•••••	•••		
	DISTANCE BETWEEN LONGITUDINAL PERFORATIONS	DISTANCE BETWEEN TRANSVERSAL PERFORATIONS	DIAMETER OF 3/4/2/ 8/10 THE PERFORATION	PERFORATION 00 ANGLE	21%	#5.728				●

422						
DESIGN	DIME	ENSIONS IN r	าm	OPEN	NUMBER OF	
	A	ВØ	<	AREA	PERFORATIONS m <sup>2</sup>	
7,5	15	15 3/5/8/ 10/15	90°			
2'2 2'2	BETWEEN INAL ONS BETWEEN	SAL ONS OF RATION	NO NO	14.5%	#2.238	
90°	DISTANCE F LONGITUDI PERFORATI DISTANCE F	TRANSVERS PERFORATI DIAMETER THE PERFO	PERFORATI ANGLE			

423					r		
DESIGN	IGN DIMENSIONS IN mm			OPEN NUMBER OF			
	A	В	Ø	<	AREA	PERFORATIONS m <sup>2</sup>	
5	15 15 3/4/5/ 8/10			90°			••••••••••••••••••••••
5	DISTANCE BETWEER LONGITUDINAL PERFORATIONS	DISTANCE BETWEEI TRANSVERSAL PERFORATIONS	DIAMETER OF THE PERFORATION	PERFORATION ANGLE	14%	#4.489	

#### SPECIAL PERFORATIONS (CNC)

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
0	RD - 3 Ø 3 mm	0.5 - 0.75 - 1 - 1.5 - 2
0	RD - 4 Ø 4 mm	0.5 - 0.8 - 1 - 1.5 - 1.9 - 2 - 3
0	RD - 5 Ø 5 mm	0.5 - 0.8 - 1 - 1.25 - 1.5 - 1.9 - 2 - 2.5 - 2.25 - 3
0	RD - 5,5 Ø 5.5 mm	1
0	RD - 6 Ø 6 mm	2.25 - 3
0	RD - 7 Ø 7 mm	1 - 2.25 - 0.75
0	RD - 8 Ø 8 mm	0.5 - 0.75 - 1 - 1.5 - 2 - 3
0	RD - 10 Ø 10 mm	0.5 - 0.75 - 1 - 1.25 - 1.5 - 1.75 - 1.9 - 2 - 2.5 - 3
$\bigcirc$	RD - 15 Ø 15 mm	0.5 - 0.75 - 1 - 1.25 - 1.5 - 1.75 - 1.9 - 2 - 2.25 - 2. 5 - 3
$\bigcirc$	RD - 20 Ø 20 mm	0.5 - 0.75 - 1 - 1.25 - 1.50 - 1.9 - 2 - 2.5 - 3
$\bigcirc$	RD - 22 Ø 22 mm	0.5 - 0.75 - 1 - 1.25 - 1.5 - 1.9 - 2 - 2.5 - 3
$\bigcirc$	RD - 25 Ø 25 mm	0.5 - 0.75 - 1 - 1.5 - 2 - 3
$\bigcirc$	RD - 30 Ø 30 mm	0.5 - 1 - 1.25 - 2 - 2.5 - 3
$\bigcirc$	RD - 35 Ø 35 mm	1.2 - 2
	RD - 40 Ø 40 mm	0.8 - 1 - 3

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
	RD - 41 Ø 41 mm	1.5
	RD - 44 Ø 44 mm	0.5 - 1 - 1.5 - 2
	RD - 45 Ø 45 mm	2
	RD - 50 Ø 50 mm	1 - 2
	RD - 67 Ø 67 mm	0.75
	RD - 80 Ø 80 mm	1

#### **PERFORACIONES** Fachadas | Terminaciones

#### SPECIAL PERFORATIONS (CNC)

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
	SQ - 5 5 mm	0.3 - 0.5 - 0.75 - 1 - 2 - 2.25 - 2.5 - 3
	SQ - 7 7 mm	3.5
	SQ - 8 8 mm	0.5 - 0.75 - 1 - 1.2 - 2
	SQ - 10 10 mm	0.5 - 0.75 - 1 - 1.2 - 2 - 2.5 - 3
	SQ - 10.5 10.5 mm	1
	SQ - 13 13 mm	1
	SQ - 15 15 mm	0.5 - 0.75 - 1 - 1.5 - 1.9 - 2 - 2.5 - 3
	SQ - 20 20 mm	0.5 - 0.75 - 1 - 1.2 - 3.5
	SQ - 25 25 mm	0.5 - 0.75 - 1 - 1.5 - 2
	SQ - 30 30 mm	0.5 - 0.75 - 1 - 1.5 - 2
	SQ - 40 40 mm	0.5 - 0.75 - 1 - 2
	SQ - 50 50 mm	2

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
0	HX - 8.7	1 - 2.5 - 3,5
$\bigcirc$	HX - 17.3	0.8
$\bigcirc$	HX - 34.6	0.8
$\bigcirc$	HX - 43.3	0.8
	HX - 69.3	0.8

#### SPECIAL PERFORATIONS (CNC)

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
	RE - 12.5 x 10 12.5 x 10 mm	1
	RT - 13 x 5 13 x 5 mm	1
	RT - 13 x 10.5 13 x 10.5 mm	1
	RT - 15 x 5 15 x 5 mm	1
	RT - 15,5 x 5 15.5 x 5 mm	1
	RT - 15.5 x 13 15.5 x 13 mm	1
	RE - 15 x 10 15 x 10 mm	1
	RE - 18 x 5 18 x 5 mm	1
	RE - 20 x 3 20 x 3 mm	0.5 - 0.75 - 1 - 1.5 - 2 - 2.5 - 3
	RE - 20 x 5 20 x 5 mm	1
	RE - 20,5 x 5 20.5 x 5 mm	1
	RE - 20.5 x 10.5 20.5 x 10.5 mm	0.45
	RE - 23 x 8 23 x 8 mm	1
	RE - 25 x 5 25 x 5 mm	1
	RE - 26 x 5 26 x 5 mm	1
	RE - 25 x 8 25 x 8 mm	1
	RE - 30 x 4 30 x 4 mm	2.25
	RE - 50 x 3 50 x 3 mm	2 - 2.25
	RE - 59 x 3 59 x 3 mm	1
	RE - 80 x 3 80 x 3 mm	0.5 - 0.75 - 1 - 2 - 2.25 - 3.5

DRAWING	PUNCH TYPE	ALLOWABLE THICKNESSES (mm)
0	OB - 15 x 3 15 x 3 mm	0.5 - 0.75 - 1
0	OB - 15 x 4 15 x 4 mm	0.5 - 0.75 - 1
0	OB - 15 x 5 15 x 5 mm	0.5 - 0.75 - 1 - 1.5 - 2 - 3
	OB - 20 x 4 20 x 4 mm	0.5 - 0.75 - 1 - 1.5 - 2 - 2.5 - 3
	OB - 20 x 3 20 x 3 mm	0.5 - 0.75 - 1 - 2
	OB - 20 x 5 20 x 5 mm	0.65
	OB - 20 x 8 20 x 8 mm	0.5 - 0.75 - 1 - 2
	OB - 24 x 10 24 x 10 mm	0.5 - 0.75 - 1 - 2
	OB - 27 x 7 27 x 7 mm	2.5 - 3.5
	OB - 30 x 4 30 x 4 mm	1
	OB - 30 x 6 30 x 6 mm	1 - 2 -3 - 3.5
	OB - 35 x 7 35 x 7 mm	0.6

# PERFORATIONS

Façades | Finishes

#### THEMATIC PERFORATIONS

#### THEMATIC PERFORATIONS

These are generated on the basis of an image, silhouette or specific shape (depending on the project requirements), configuring the perforations to generate a specific projection that stands in contrast to the panels.

#### VARIABLES

-Total surface area of panels to be perforated -Number of perforations per m2 -Definition of image -Contrasts -Number of distinct punch-outs

#### These are classified as:

- Single punch themes
- Multiple punch themes
- Laser cut themes

#### Single punch themes

These consist of the composition of flat figures such as silhouettes, numbers or letters using a single punch diameter. Single punch themes

# MULTIPLE PUNCH THEMES

#### Multiple punch themes

These consist of the composition of figures through the random placement of punches of varying diameters. This generates different planes, light and shadows, providing the image with greater contrast and definition.

#### MULTIPLE PUNCH THEMES



#### Laser Cut Theme

This type of perforation is achieved by making cuts around the shape (cut length). It can be used on very thick or long panels or plates.

#### LASER CUT THEME





PANEL TYPES



SUPERIMPOSED DESIGNS







PLATE A+B



#### SINGLE PUNCH THEMES

THEMATIC PERFORATIONS

#### MULTI PUNCH THEMES



IPP





# **PERFORATIONS** Façades | Finishes

PRODUCT	103	106	110M1	110M3	111	112	113	114	115	116	118	118M2	130	131	161
PANELES SCREEN			[												
SCREENPANEL C - G - L															
SCREENPANEL XI - W	Noo	nline	perforat	tion pos	l sihle	Only	l • ounch	-outs	•	•					· ·
								0413.							
GKD															
	<b>•</b>	•	<ul> <li>✓</li> <li>✓</li> </ul>	•		•	<ul> <li>✓</li> <li>✓</li> </ul>				•	•	<ul> <li>✓</li> <li>✓</li> </ul>	<ul> <li>✓</li> <li>✓</li> </ul>	
			•				<b>▼</b>						•	•	
															<u> </u>
SLIDING & FOLDING				1											
SLIDING & FOLDING SHUTTERS															
TEXSCREEN															
SINGLE SKIN PANELS		1	1	1											
GEOCLAD	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
QUADROLINES	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
MINIWAVE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
SOFTWAVE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
UVELINE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
MULTIPANEL	$\checkmark$	$\checkmark$													
FS FACING															
M FACING															
SL PANELS															
CD PANELS	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
84R FACING	$\checkmark$	$\checkmark$									$\checkmark$	$\checkmark$			
TIMBERLINE															
PIRAMID															
SIDEWALL															

PRODUCT	MATERIALS									FINISHES	
	ALUZINC	ALUMINUM	CORTEN STEEL	WOOD	TERRACOTTA CERAMIC	TEMPERED CLASS	SCREEN FABRIC	STAINLESS STEEL	GALVANIZED STEEL	100 COLORS/ WOODGRAINS	ELECTRO POWDER
SCREEN PANELS											
SCREENPANEL	$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
METALSCREEN	$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$		$\checkmark$
GKD	$\checkmark$							$\checkmark$	$\checkmark$	$\checkmark$	
STRIPSCREEN	$\checkmark$		$\checkmark$							$\checkmark$	
STRIPWEAVE	$\checkmark$		$\checkmark$							$\checkmark$	
WINDSCREEN		$\checkmark$								$\checkmark$	
VENTILATED FAÇADES											
VENTILATED FAÇADE	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	
NBK					$\checkmark$						
QUADROCLAD	$\checkmark$	$\checkmark$				$\checkmark$				$\checkmark$	
SLIDING & FOLDING											
SLIDING & FOLDING SHUTTERS	$\checkmark$	$\checkmark$								$\checkmark$	$\checkmark$
TEXSCREEN							$\checkmark$				
SINGLE SKIN PANELS											
GEOCLAD	$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$	$\checkmark$	$\checkmark$
QUADROLINES	$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$	$\checkmark$	
MINIWAVE	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	
SOFTWAVE	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	
UVELINE	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	
MULTIPANEL	$\checkmark$		$\checkmark$							$\checkmark$	
FS FACING	$\checkmark$									$\checkmark$	
M FACING	$\checkmark$									$\checkmark$	
SL PANELS	$\checkmark$		$\checkmark$							$\checkmark$	$\checkmark$
CD PANELS	$\checkmark$		$\checkmark$							$\checkmark$	$\checkmark$
84R FACING	$\checkmark$	$\checkmark$								$\checkmark$	
TIMBERLINE	$\checkmark$									$\checkmark$	
PIRAMID	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	
SIDEWALL	$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$	





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# HunterDouglas Architectural