

OUTDOOR

THE AVANT-GARDE
OF COMPOSITE
AND NATURAL
WOODS



**BREAKING
THE MOULD.**

AGAIN.



DÉCO

ALL AROUND COVERINGS

Déco is the company that for years has been pushing the boundaries and market trends of flooring and coverings.

Investing each day in the development of new technologies to continue to offer innovative materials and solutions, many times over the years, Déco has been able to create new needs and redefine the very concept of contemporary living.

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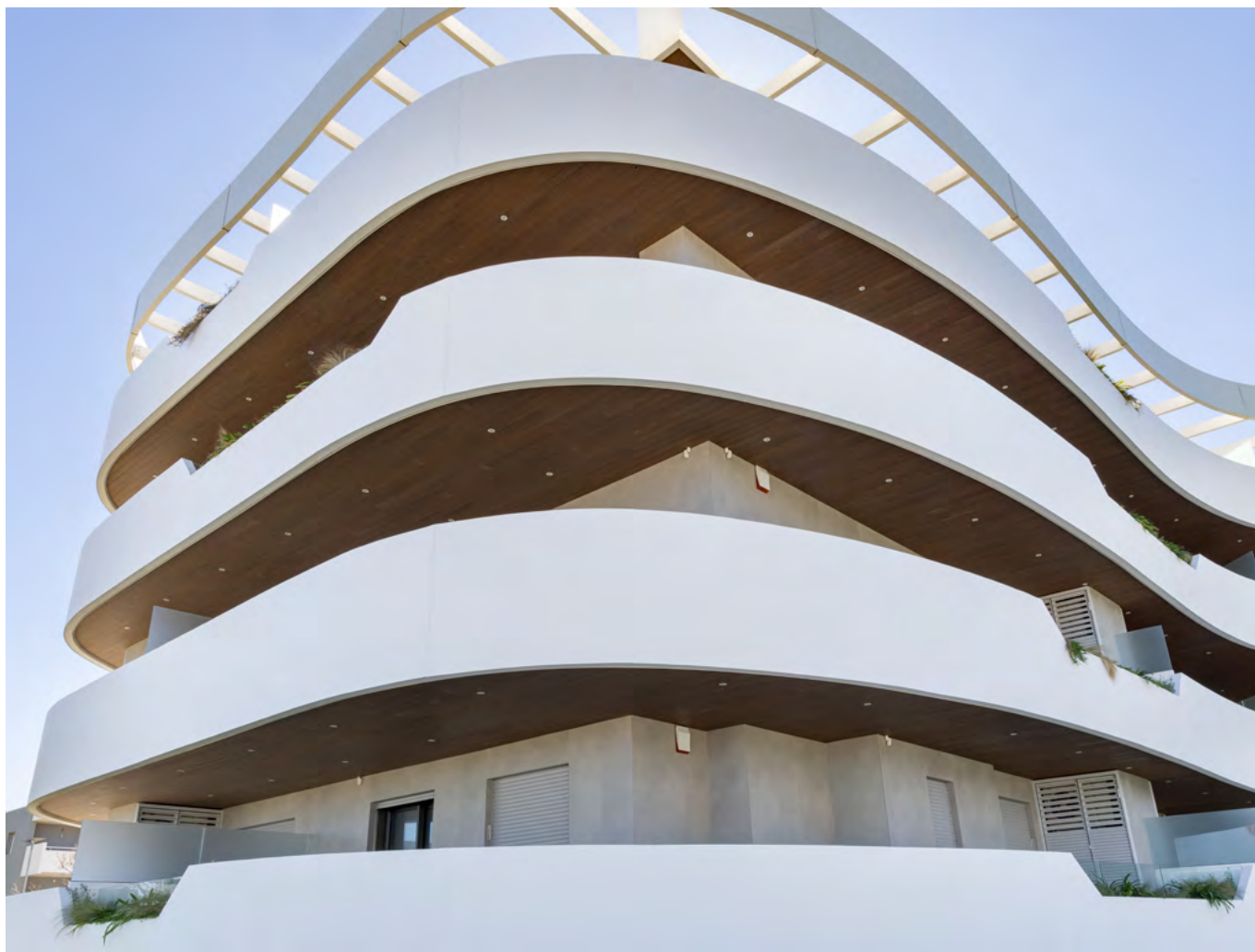


OUTDOOR

THE NEW WAY TO LIVE THE OUTDOORS

Déco opens new possibilities to outdoor living and to exterior design proposing high performing coverings in composite and natural wood, durable and with a minimum need for maintenance.





ALL-AROUND SOLUTIONS

Déco's outdoor coverings offer is studied to cover a wide range of applications: perfect for floor, wall, false ceiling installations and to create sunshades.

The products by Déco indulge design creativity, stimulating it with their personal distinctive and surprising aesthetic result.





DECKING FLOORS FOR EXTERIORS

Thanks to the use of innovative technologies and extremely durable materials, the horizontal coverings by Déco are designed to guarantee the maximum levels of resistance and stability.

CLADDING FAÇADE SYSTEMS

Déco places particular attention in the development of new ventilated façade covering systems to offer solutions capable of optimising the energy and acoustic performance of buildings.



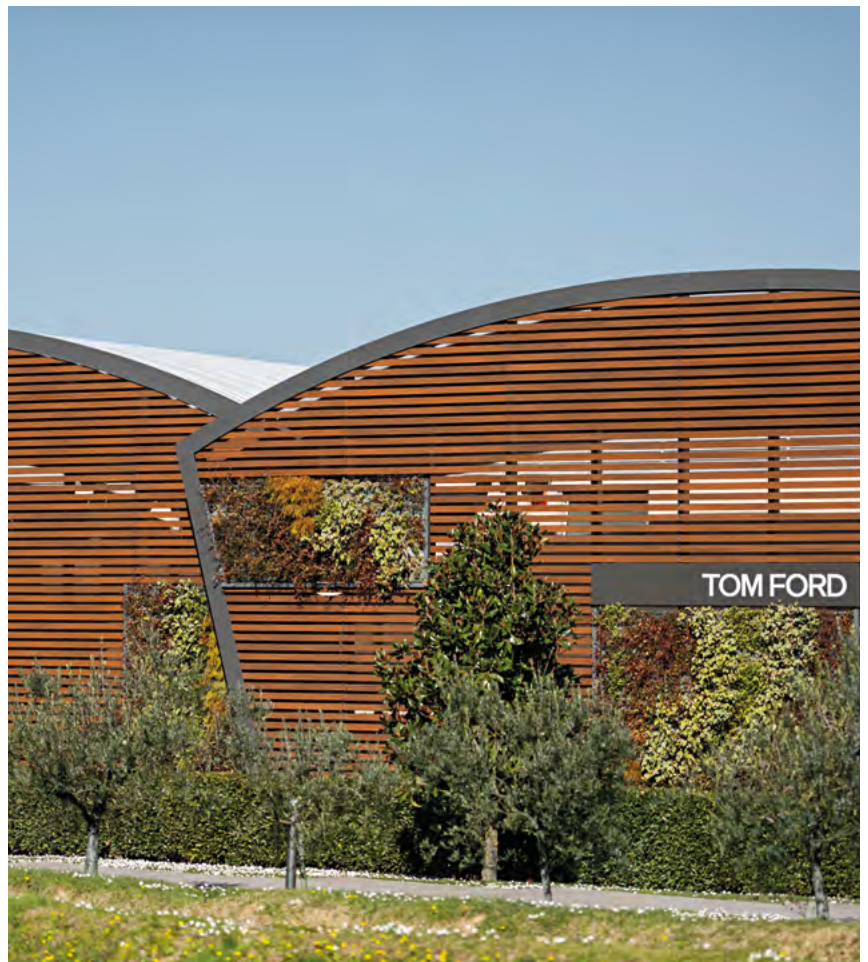
CEILINGS

Perfect for false ceiling installations, the products by Déco indulge the creativity of architects and designers creating solutions with a strong visual identity.



SUNSHADES

Privacy, protection from sun rays and light and shade symmetries: the Stilo collection by Déco allows for creating unique and highly customisable sunshade shields.



FIREWALL

THE DURABILITY EVERYONE EXPECTED

Resistance, security and performance. Déco introduces Firewall, totally new in the area of composite wood coverings.

Firewall is a unique material designed to offer the aesthetic performance of natural wood with Class B fire reaction.







SAFETY GUARANTEE

Designed to achieve class B fire reaction, the profiles from the Firewall line feature an innovative thermo-plastic shield that makes the products resistant to flames and perfect for commercial, domestic use or redevelopment works which require compliance with specific safety regulations.



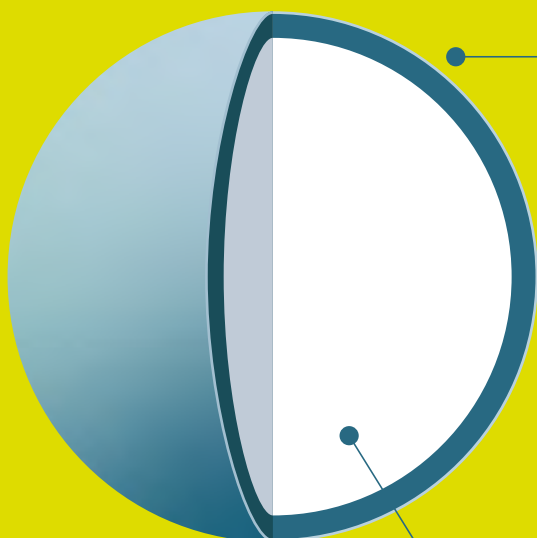


RESISTANT ON EVERY FRONT

Firewall is a one-of-a-kind material, designed to guarantee maximum reliability and resistance against flames, UV rays, mould, insects, humidity, weather and chemical agents. Without requiring maintenance, the Firewall products maintain their beauty unaltered over time without fearing fading and deterioration.



FIREWALL TECHNOLOGY



THERMOPLASTIC SHIELD

CLASSE B FIRE REACTION



compliant with European regulation BS EN 13501 1:2018

RESISTANT TO BIOLOGICAL AND ENVIRONMENTAL AGENTS

Immune to: mould, parasites, fading, cracking

TOTALLY WATERPROOF

Perfect for outdoor and pool side applications

CENTRAL CORE

- Recycled hard wood flour
- HDPE
- additives

FIREWALL RANGE

Firewall is a one-of-a-kind composite wood material thanks to the protection of the innovative external shield, made by taking advantage of the exceptional technical performance of a thermoplastic material already widely used in the automotive industry for its durability and heat resistance characteristics.



FIREWALL IS UNIQUE

- **CLASS B FIRE RESISTANCE**

In compliance with the European regulation BS EN 13501 1:2018, Firewall offers a Class B fire reaction, one of the highest levels in terms of resistance to flames

- **PROTECTION FROM STAINS AND UV RAYS**

The beauty of Firewall coverings is designed to last over time thanks to the protective shield that totally covers the trim preventing the formation of stains or fading due to the action of UV rays.

- **REALISM**

Always looking for new processing methods to achieve the maximum levels of realism and the visual impact of solid wood coverings, Firewall offers the charm and aesthetic performance of natural essences.

- **PROFILE RANGE AND APPLICATIONS**

Firewall offers a complete range of products: boards, Firewall Twix modules and Firewall Stilo sunshade profiles are created to indulge every project need guaranteeing the possibility to create totally safe decking, cladding and false ceiling applications.

- **ZERO MAINTENANCE**

The innovative technology and the co-extruded process at the basis of Firewall make it possible to obtain an extremely durable products with zero maintenance. Strong in its excellent resistance to deformations, atmospheric agents, mould and insects, Firewall proves to be a practical and functional covering system.

BOARD FIREWALL

In virtue of their extreme resistance to wear, to flames, to weather and parasites, the Firewall boards are perfect in all outdoor contexts, both public and residential because they are capable of maintaining their aesthetic value unaltered over time without requiring treatment or maintenance.

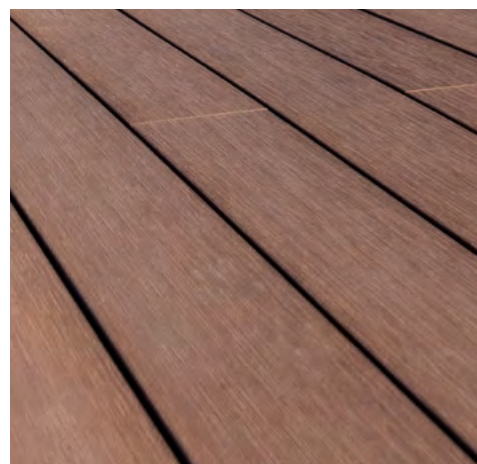
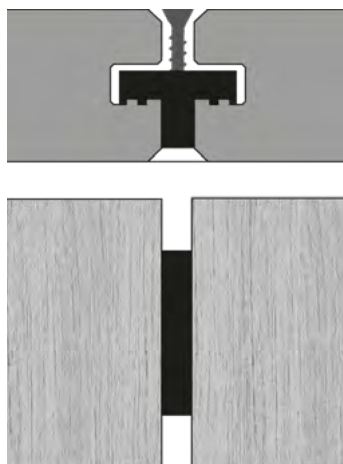




FIREWALL BOARD INSTALLATION SYSTEMS

CLASSIC SYSTEM

The gap between boards is 5 mm. The Firewall Classic board is installed with the stainless steel locking clip and the PE expansion clip system.



CLASSIC BOARD FIREWALL

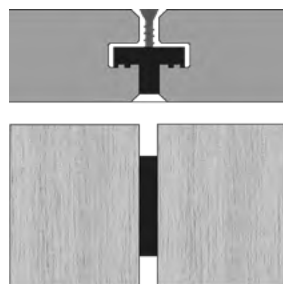
SIZES

23 x 138 x 2200 mm



INSTALLATION SYSTEMS

Classic

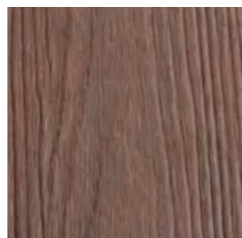
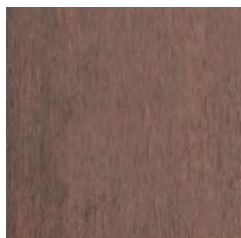


RANGE OF COLOURS AND FINISHES

IPE

smooth

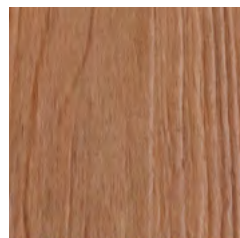
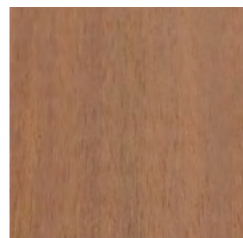
veined



TEAK**

smooth

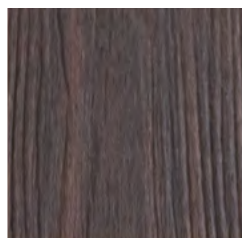
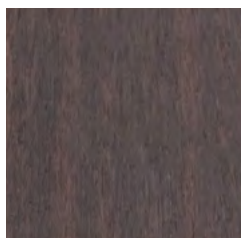
veined



WALNUT**

smooth

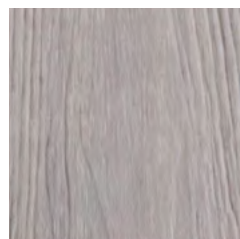
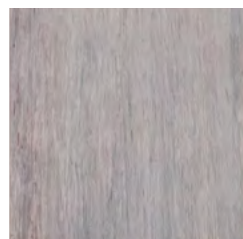
veined



ANTIQUE**

smooth

veined



** always check availability and delivery times with Déco.

In case the product is not available in stock, the minimum quantity that can be ordered is 280 m².

TWIX FIREWALL

The Twix® by Déco iconic system of modular coverings with listel gap effect is now available also in Firewall. Taking advantage of the revolutionary technology in this material, Twix geometries can enhance even contexts where a Class B2 fire reaction is required.





TWIX CLASSIC* FIREWALL

SIZES

29 x 207 x 3000 mm



*available from summer 2023

COLOUR RANGE

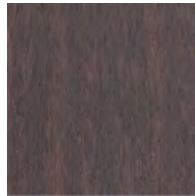
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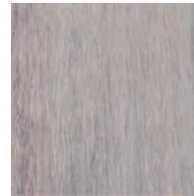
TEAK**



WALNUT**



ANTIQUÉ**



** always check availability and delivery times with Déco. In case the product is not available in stock, the minimum quantity that can be ordered is 415 m2.

TWIX XL* FIREWALL

SIZES

29 x 207 x 3000 mm



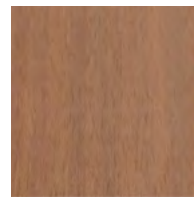
*available from summer 2023

COLOUR RANGE

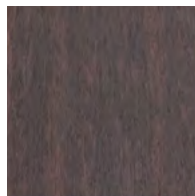
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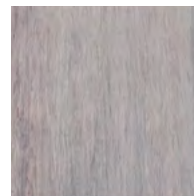
TEAK**



WALNUT**



ANTIQUÉ**



** always check availability and delivery times with Déco. In case the product is not available in stock, the minimum quantity that can be ordered is 415 m2.

TWIX FULL CLADDY FIREWALL

SIZES

16 x 150 x 2800 mm

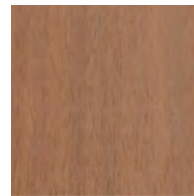


COLOUR RANGE

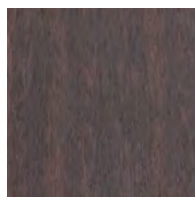
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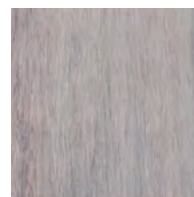
TEAK**



WALNUT**



ANTIQUE**



** always check availability and delivery times with Déco. In case the product is not available in stock, the minimum quantity that can be ordered is 300 m2.

TWIX WALLY* FIREWALL

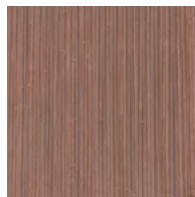
SIZES

18 x 173 x 2900 mm



COLOUR RANGE

TEAK

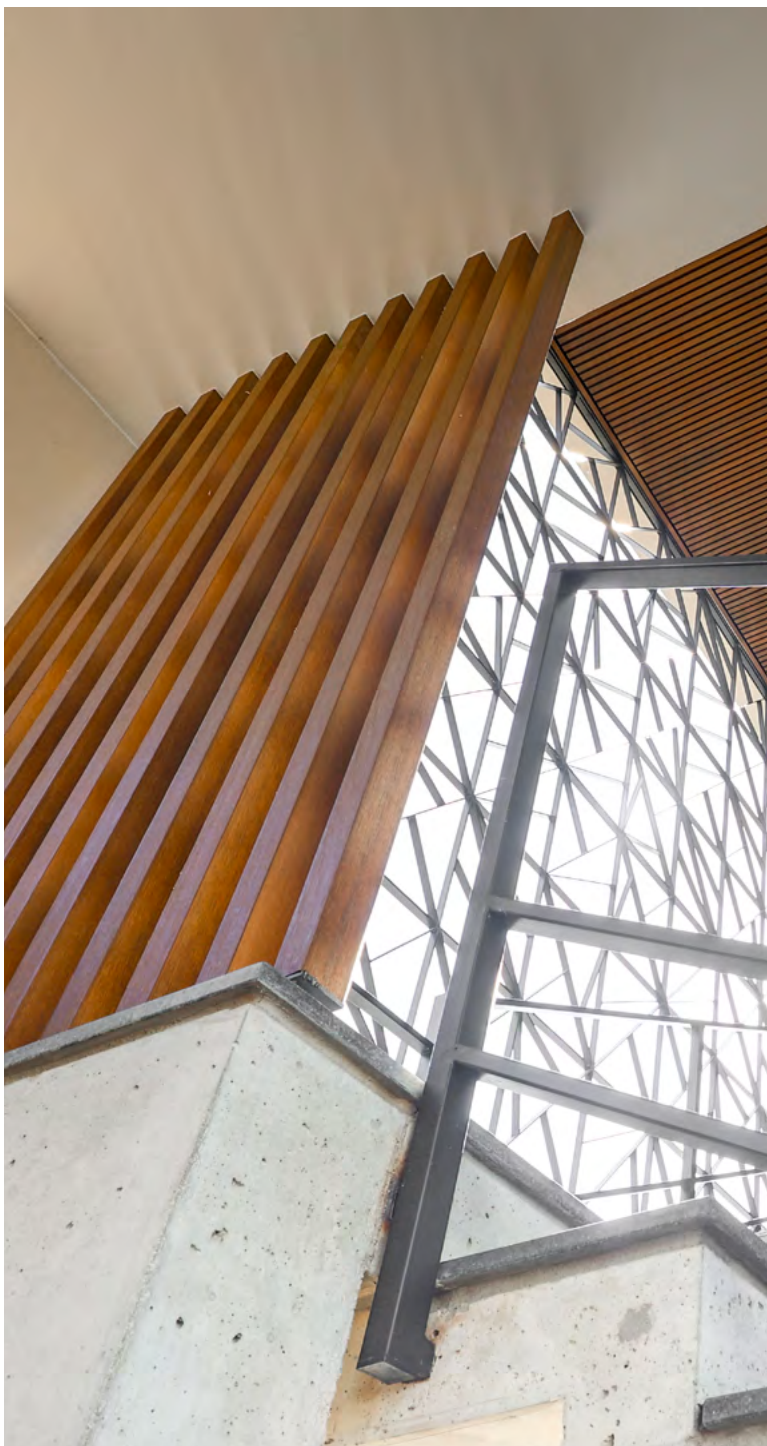


ANTIQUE



*available from summer 2023

STILO FIREWALL



The Stilo collection by Déco, now also in Firewall technology is imagined to achieve unique and custom sunshade screens offering architects and designers unlimited composition possibilities. Used both in indoor and outdoor environments, the Stilo Firewall sunshades are perfect to create original and functional architectural solutions.



STILO COLLECTION FIREWALL

FIREWALL STILO S



SIZES

50 x 25 x 3000 mm



COLOUR RANGE

Ipe / Teak** / Walnut** / Antique**

** always check availability and delivery times with Déco.

In case the product is not available in stock, the minimum quantity that can be ordered is 2010 linear metres.

FIREWALL STILO M*



SIZES

75 x 50 x 3000 mm



COLOUR RANGE

Ipe / Teak** / Walnut** / Antique**

*available from summer 2023

** always check availability and delivery times with Déco.

In case the product is not available in stock, the minimum quantity that can be ordered is 2010 linear metres.

FIREWALL STILO L



SIZES

100 x 50 x 3000 mm



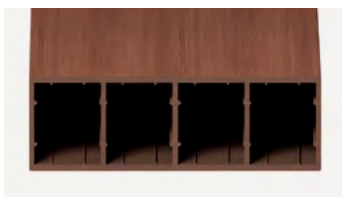
COLOUR RANGE

Ipe / Teak** / Walnut** / Antique**

** always check availability and delivery time with Déco.

In case the product is not available in stock, the minimum quantity that can be ordered is 2010 linear metres.

FIREWALL STILO XL*



SIZES

200 x 75 x 3000 mm



COLOUR RANGE

Ipe / Teak** / Walnut** / Antique**

*available from summer 2023

** always check availability and delivery times with Déco.

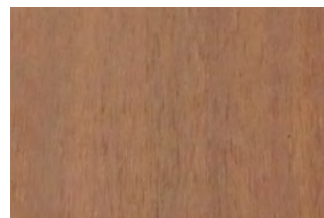
In case the product is not available in stock, the minimum quantity that can be ordered is 2010 linear metres.

AVAILABLE COLOURS

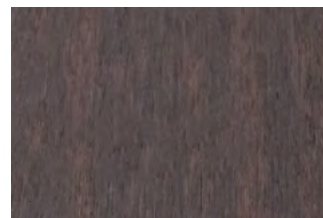
IPE



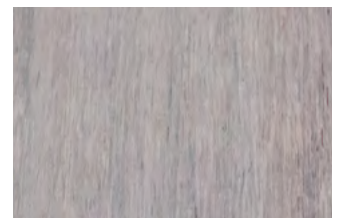
TEAK**



WALNUT**



ANTIQUE**







FIREWALL

ACCESSORIES FOR BOARDS

	PRODUCT NAME	SIZES (mm)	SURFACE
	Lateral frame	150x12x2200	smooth
	Locking Clip - Classic System	-	stainless steel - black
	Expansion Clip - Classic System	-	PE - black
	Screws (self-drilling, torx insert)	3,9x25	stainless steel - black
	Start/End Clip	-	stainless steel - black
	Screws for Start/End Clip (self drilling, torx insert)	3,9x16	stainless steel - black

FIREWALL

ACCESSORIES FOR STILO SUNSHADES

	Stilo S Sunshade Terminal	50x25	smooth
	Stilo L Terminal	100x50	smooth

FIREWALL

ACCESSORIES FOR TWIX

	PRODUCT NAME	SIZES (mm)	SURFACE
Twix Full Claddy			
	Twix Clip	-	aluminum
	Screws for clips (self-drilling, torx insert)	3,9x16	stainless steel
Twix Wally			
	Starting trim	46,5x61x2900	painting aluminum
	Corner trim	50x50x2900	painting aluminum
	Locking Clip (self-drilling, torx insert)	3,9x16	stainless steel

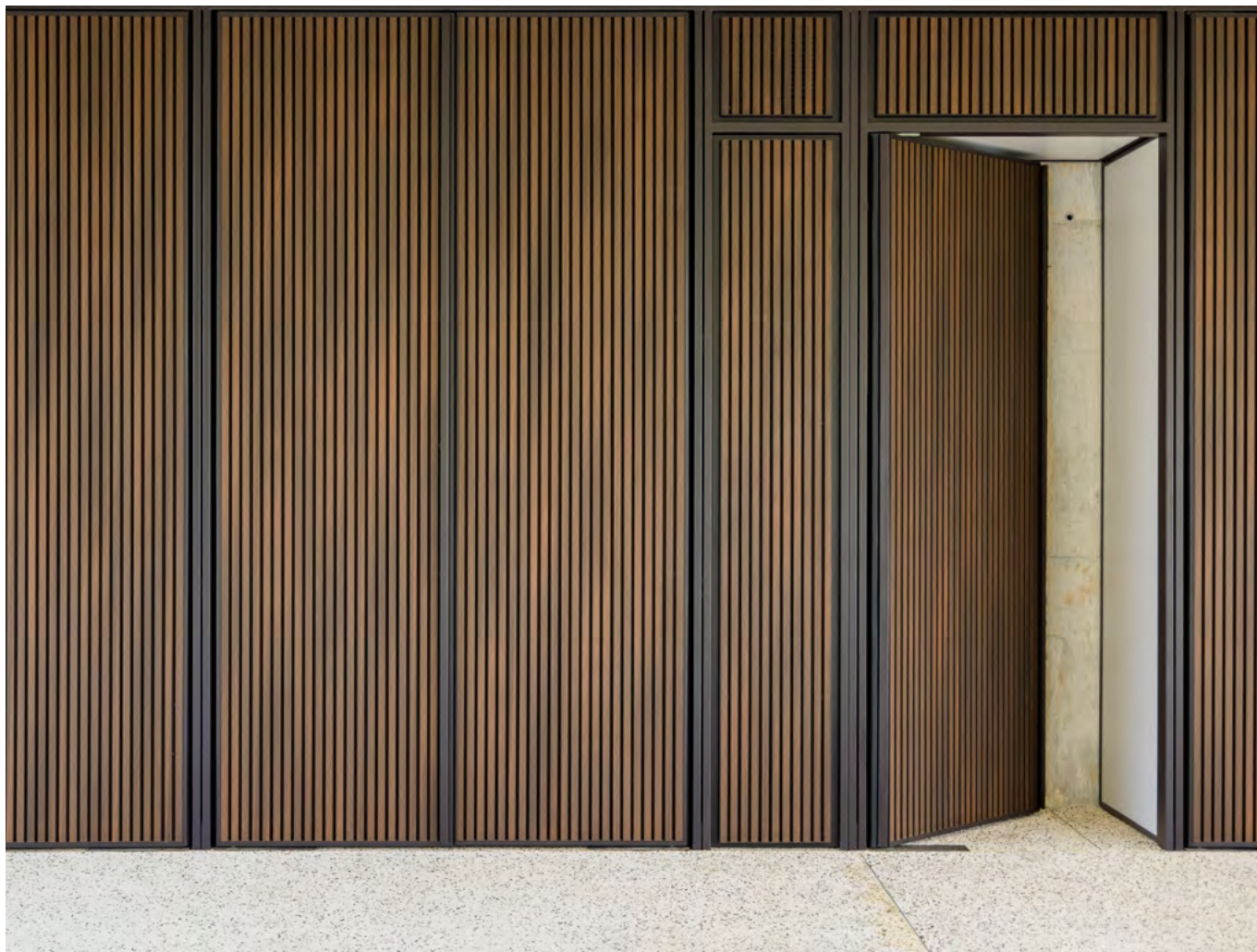
ULTRASHIELD

SECOND GENERATION COMPOSITE WOOD

Ultrashield is a second-generation composite wood designed to combine all the advantages of composite wood to the charm of natural wood.

Without requiring maintenance, Ultrashield is resistant to biological and weather agents, maintaining its technical and aesthetic characteristics intact over time.





ULTRA- RESISTANCE

Characterised by the presence of a protective shield fixed to the internal product mix through a co-extrusion process, Ultrashield is a material extremely resistant to weather agents, fading, water and humidity: characteristics which make Ultrashield a perfect product for any outdoor application.



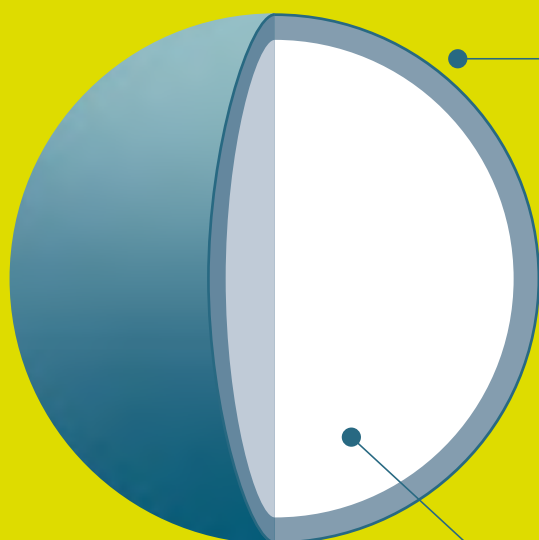


A COMPLETE RANGE

Available in the Board, Tile, Twix modules and Stilo sunshades formats, Ultrashield is a complete range of outdoor products able to excel thanks to the versatility, originality and durability over time without requiring maintenance.



ULTRASHIELD TECHNOLOGY



PROTECTION SHIELD

COVERS AND ENCAPSULATES THE PROFILE GUARANTEEING ULTRA-PROTECTION FROM

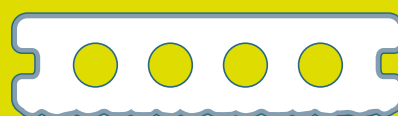
- stains
- splitting and cracks
- chlorine and salt
- decomposition
- colour changes
- water and humidity

CENTRAL CORE

A soul made up of:

- recycled hard wood flour
- HDPE
- additives

The special protective shield encapsulates all the formats of the Ultrashield range (Board, Twix, Stilo Sunshade) makes the coverings perfect for any outdoor application because immune to the action of moulds, parasites, atmospheric agents, chlorine and salt.



25-Year warranty for residential use.
10-Year warranty for commercial and public use.

Manufactured by NewTechWood







ULTRASHIELD IS UNIQUE

- **TOTAL PROTECTION SHIELD**

The special protective shield that encapsulates all the formats of the Ultrashield range makes the coverings perfect for any outdoor application because immune to the action of moulds, parasites, atmospheric agents, chlorine and salt.

- **MINIMAL MAINTENANCE**

Extremely resistant to splitting and fading caused by UV rays, the Ultrashield coverings offer a beauty that is durable over time without requiring extraordinary treatments and oiling.

- **REALISM AND ESSENTIALITY**

Ultrashield is the result of the ambitious intention to give life to the most realistic composite wood board ever. The particular surface workmanship and the inner technical characteristics of the products make Ultrashield the perfect synthesis between the charm of the natural wood and the benefits of composite woods.

- **INDOOR AND OUTDOOR ENVIRONMENTS**

The Twix and Stilo collections are created to insert themselves naturally in both indoor and outdoor context offering the possibility to create seamless coverings and privacy screens completely colour consistent between indoor and outdoor applications.

- **ECO-SUSTAINABLE MATERIAL**

95% of its composition comes from recycled materials between regenerated hard wood fibres and clear plastic bottles, Ultrashield is a product with FSC international certification and EPD voluntary environmental certification.





BOARD ULTRASHIELD

Resistant to all atmospheric conditions, parasites, moulds, humidity and the corrosive action of chlorine and salt, the Ultrashield boards find natural application in any outdoor context, both private and public, making it possible to create elegant and functional decking by the pool, on terraces, balconies and walkways.

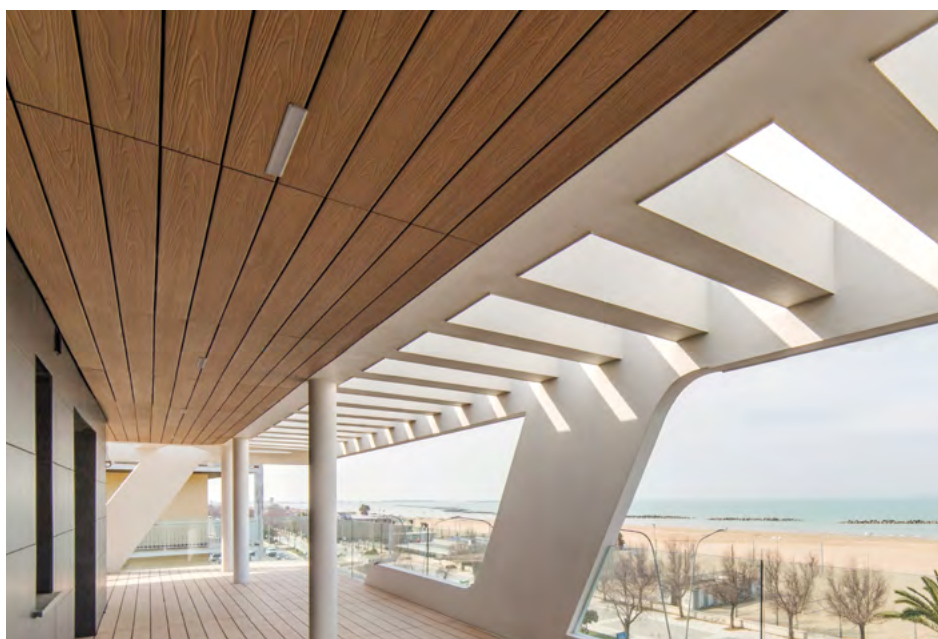




DECKING FLOORS FOR EXTERIORS

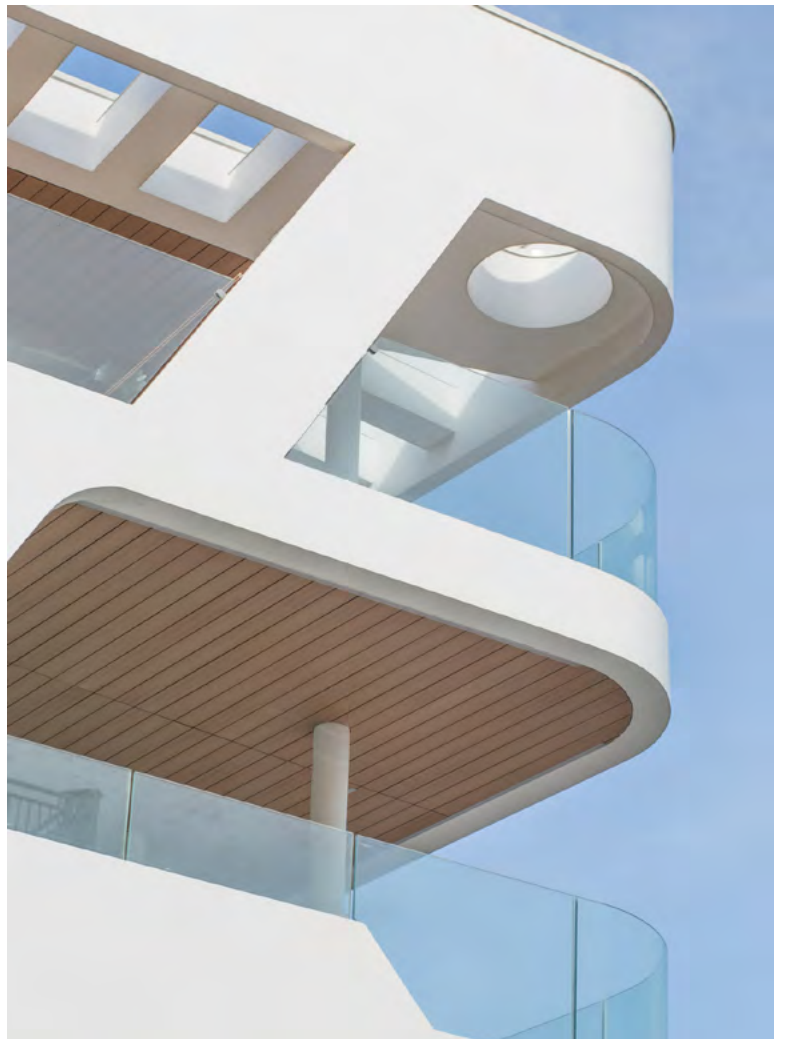


CLADDING FAÇADE SYSTEM



CEILING FALSE CEILING

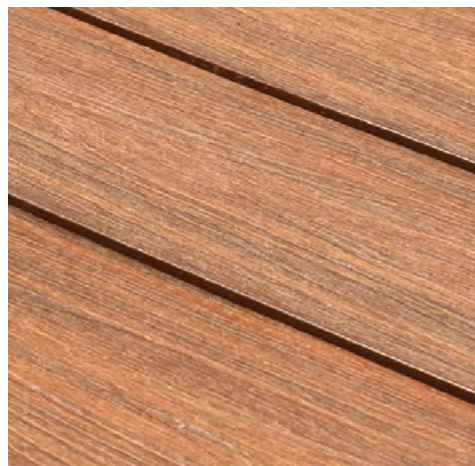
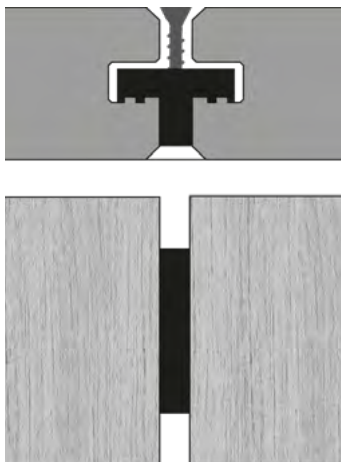




ULTRASHIELD BOARD INSTALLATION SYSTEMS

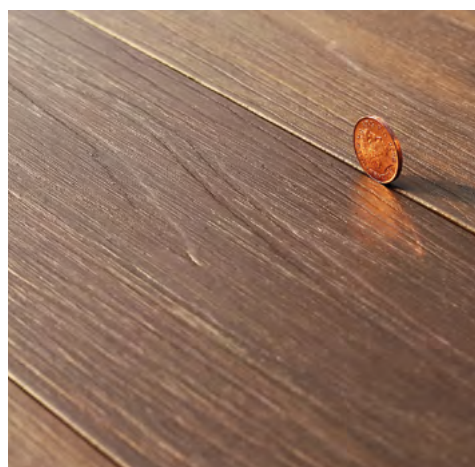
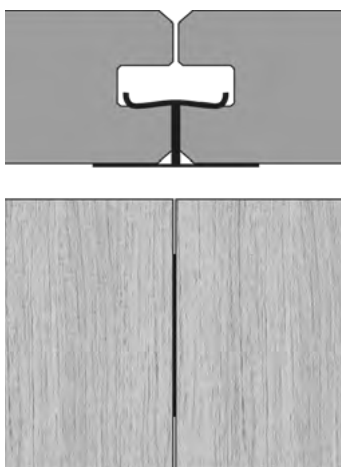
CLASSIC SYSTEM

The gap between boards is 5 mm. The Ultrashield Classic board, S or XL, is installed with the stainless steel locking clips and PE expansion clips system.



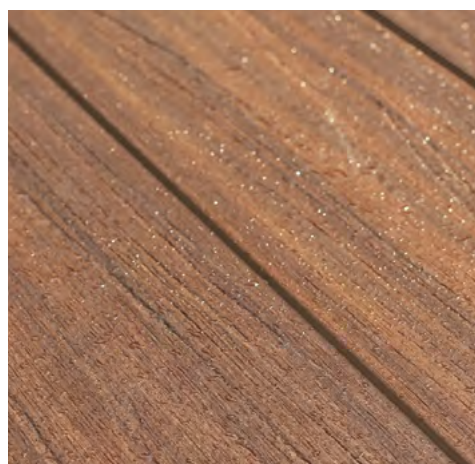
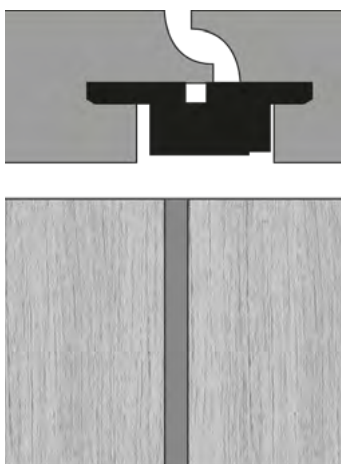
SMALL GAP SYSTEM

The side distance between boards is 1mm. The Ultrashield Classic or S board is installed with the locking clips and stainless steel expansion clips system.



INVISIBLE SYSTEM

The boards are overlapped on the side, ensuring visual seamlessness. The patented Ultrashield "Invisible Profile" board, size 23x145mm, is installed with the locking clips and PE expansion clips system. In calculating the surface, an excess of 5% is to be considered besides the normal waste.





CLASSIC BOARD ULTRASHIELD



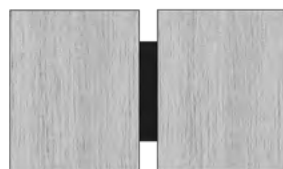
SIZES

23 x 138 x 2200 mm

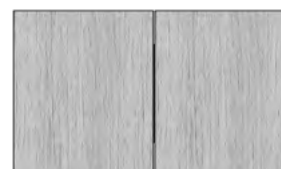


INSTALLATION SYSTEMS

Classic



Small gap system



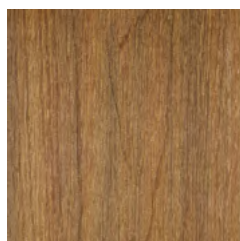
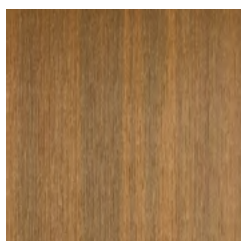
RANGE OF COLOURS AND FINISHES

* always check availability and delivery times with Déco.

TEAK

smooth

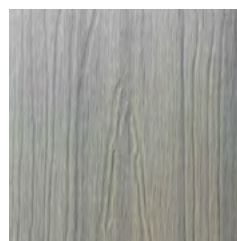
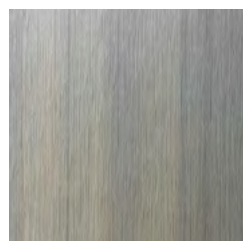
veined



ANTIQUE

smooth

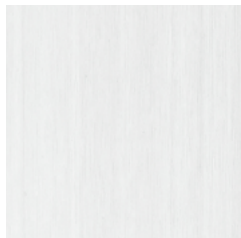
veined



SNOW *

smooth

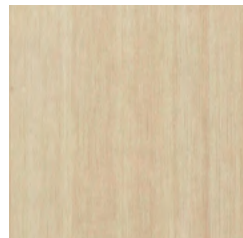
veined



CEDAR

smooth

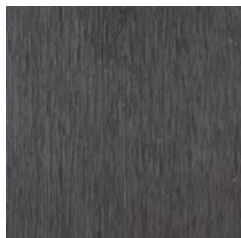
veined



CHARCOAL *

smooth

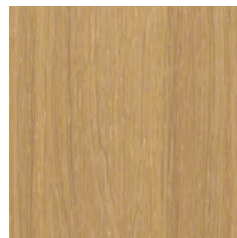
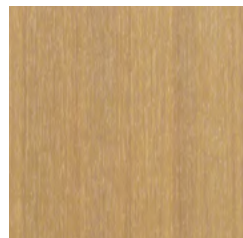
veined



RED CEDAR

smooth

veined



S BOARD ULTRASHIELD



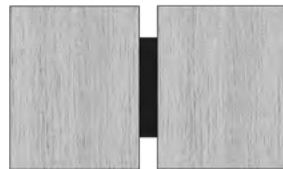
SIZES

23 x 90 x 2200 mm



INSTALLATION SYSTEMS

Classic



Small gap system

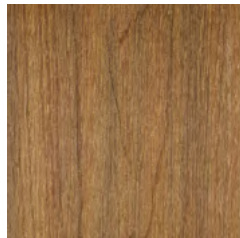
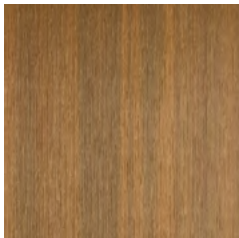


RANGE OF COLOURS AND FINISHES

TEAK *

smooth

veined



* always check availability and delivery times with Déco.



XL BOARD ULTRASHIELD



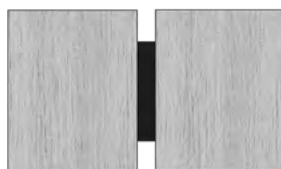
SIZES

23 x 210 x 2200 mm



INSTALLATION SYSTEMS

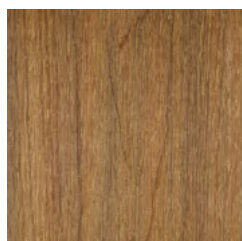
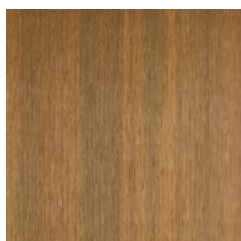
Classic



RANGE OF COLOURS AND FINISHES

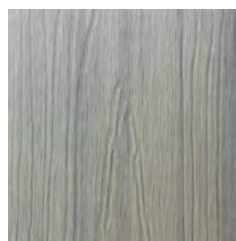
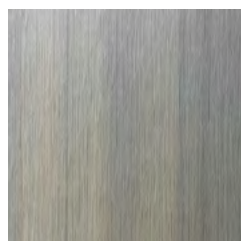
TEAK *
smooth

veined

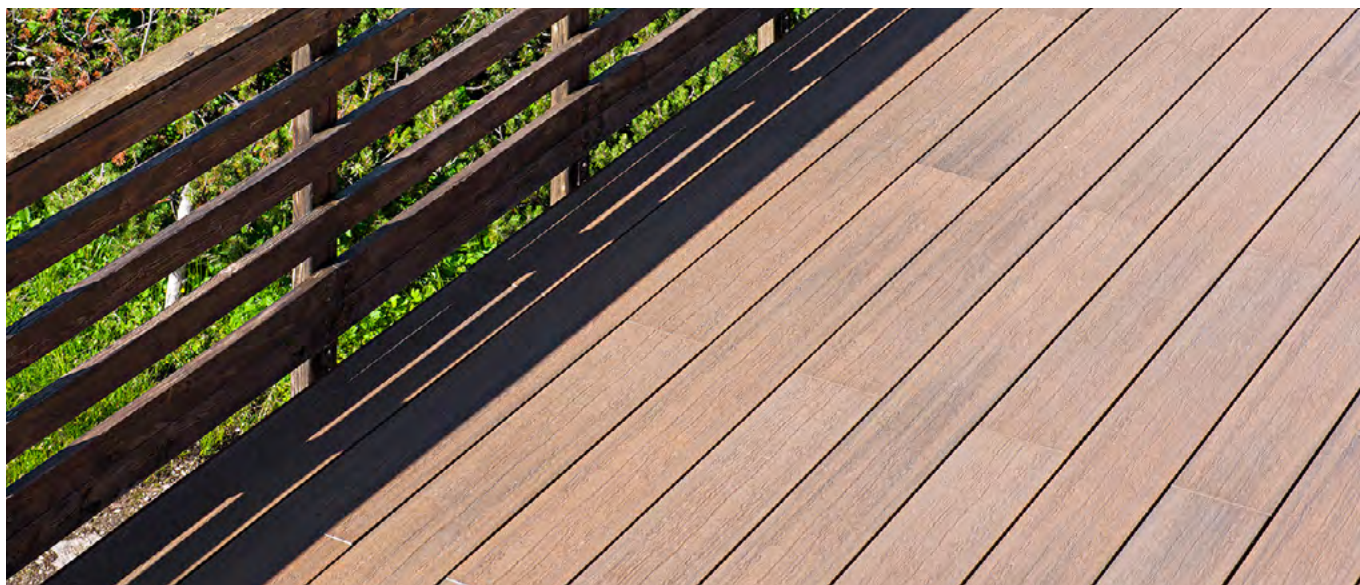


ANITQUE *
smooth

veined



* always check availability and delivery times with Déco.



INVISIBLE SYSTEM BOARD ULTRASHIELD



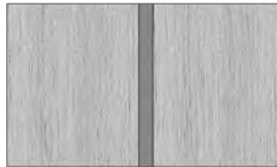
SIZES

23 x 145 x 2200 mm



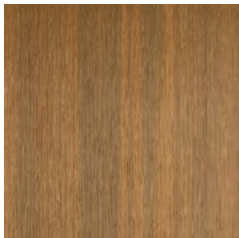
INSTALLATION SYSTEMS

Invisible system

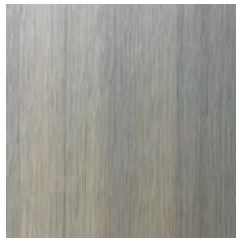


RANGE OF COLOURS AND FINISHES

TEAK
smooth



ANTIQUE
smooth

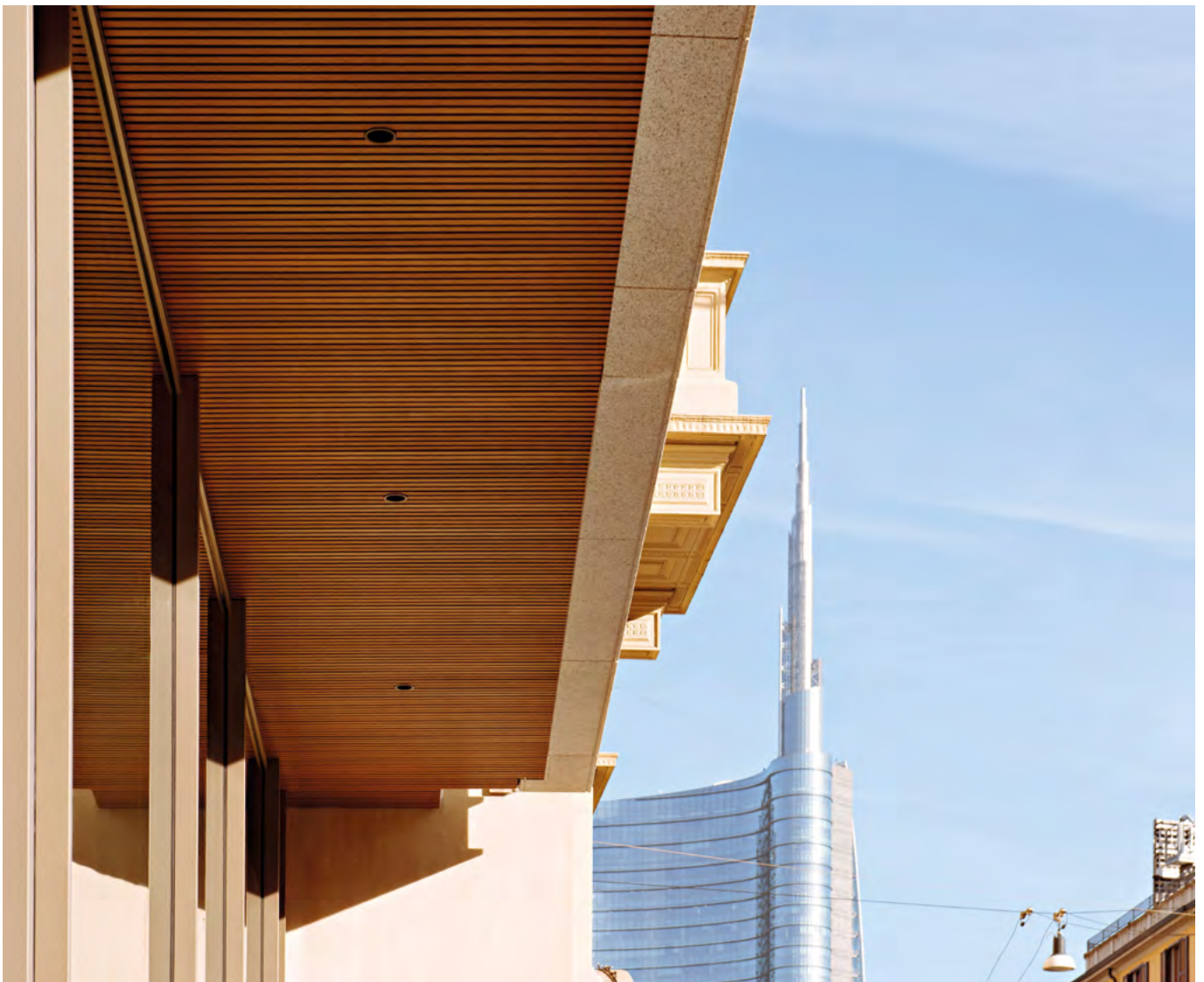


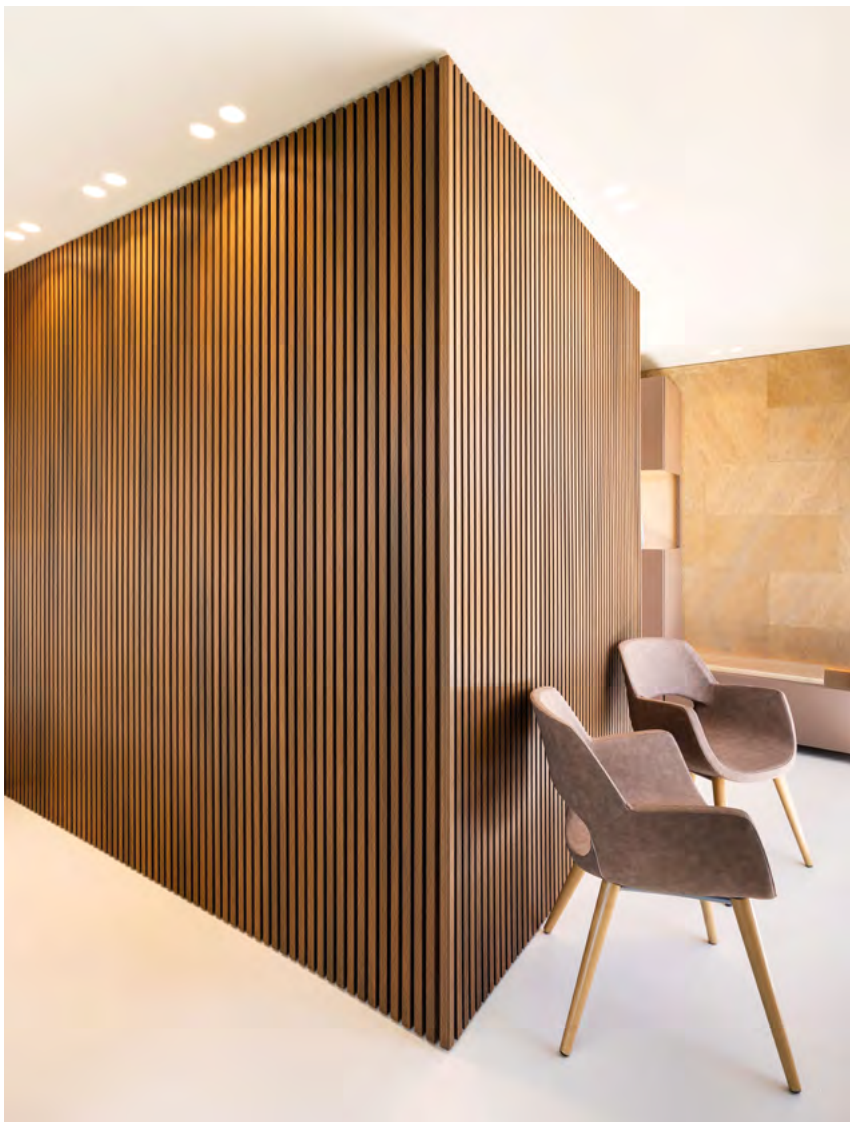
* always check availability and delivery times with Déco.



TWIX ULTRASHIELD

The Twix® by Déco collection for wall coverings and false ceilings finds perfect, seamless use both indoors and outdoors. Available in two listel gap sizes and two board-like sizes, the Twix modules help to improve the energy and acoustic performance of buildings facilitating the absorption of reverberation.









TWIX CLASSIC ULTRASHIELD

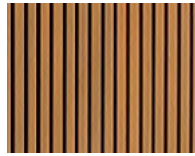
SIZES

25 x 197 x 3000 mm

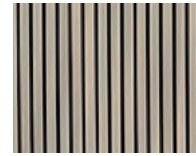


RANGE OF COLOURS

TEAK



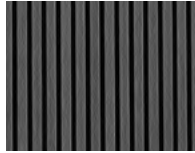
ANTIQUE



WALNUT



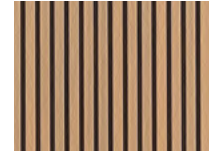
CHARCOAL*



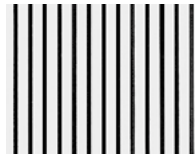
CEDAR*



RED CEDAR



SNOW*



* always check availability and delivery times with Déco.

TWIX XL ULTRASHIELD

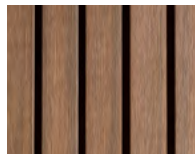
SIZES

25 x 197 x 3000 mm



RANGE OF COLOURS

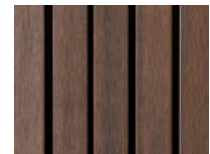
TEAK



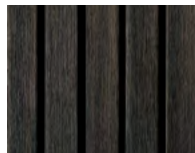
ANTIQUE*



WALNUT



CHARCOAL*



CEDAR*



RED CEDAR*



SNOW*



* always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum quantity that can be ordered is 397 m2, with fulfilment times to be verified at the time the order is placed.

TWIX CLADDY ULTRASHIELD

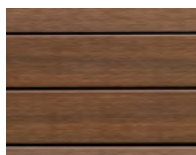
SIZES

18 x 210 x 3000 mm



RANGE OF COLOURS

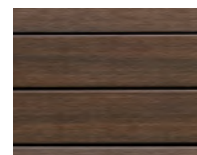
TEAK



ANTIQUE*



WALNUT*



CHARCOAL*



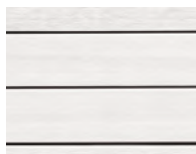
CEDAR*



RED CEDAR*



SNOW*



** always check availability and delivery times with Déco. In case the product is not available in stock, the minimum quantity that can be ordered is 455 m2.

TWIX FULL CLADDY ULTRASHIELD

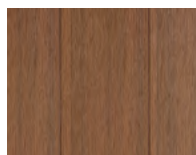
SIZES

13 x 142 x 3000 mm



RANGE OF COLOURS

TEAK



ANTIQUE*



WALNUT



CHARCOAL*



CEDAR*



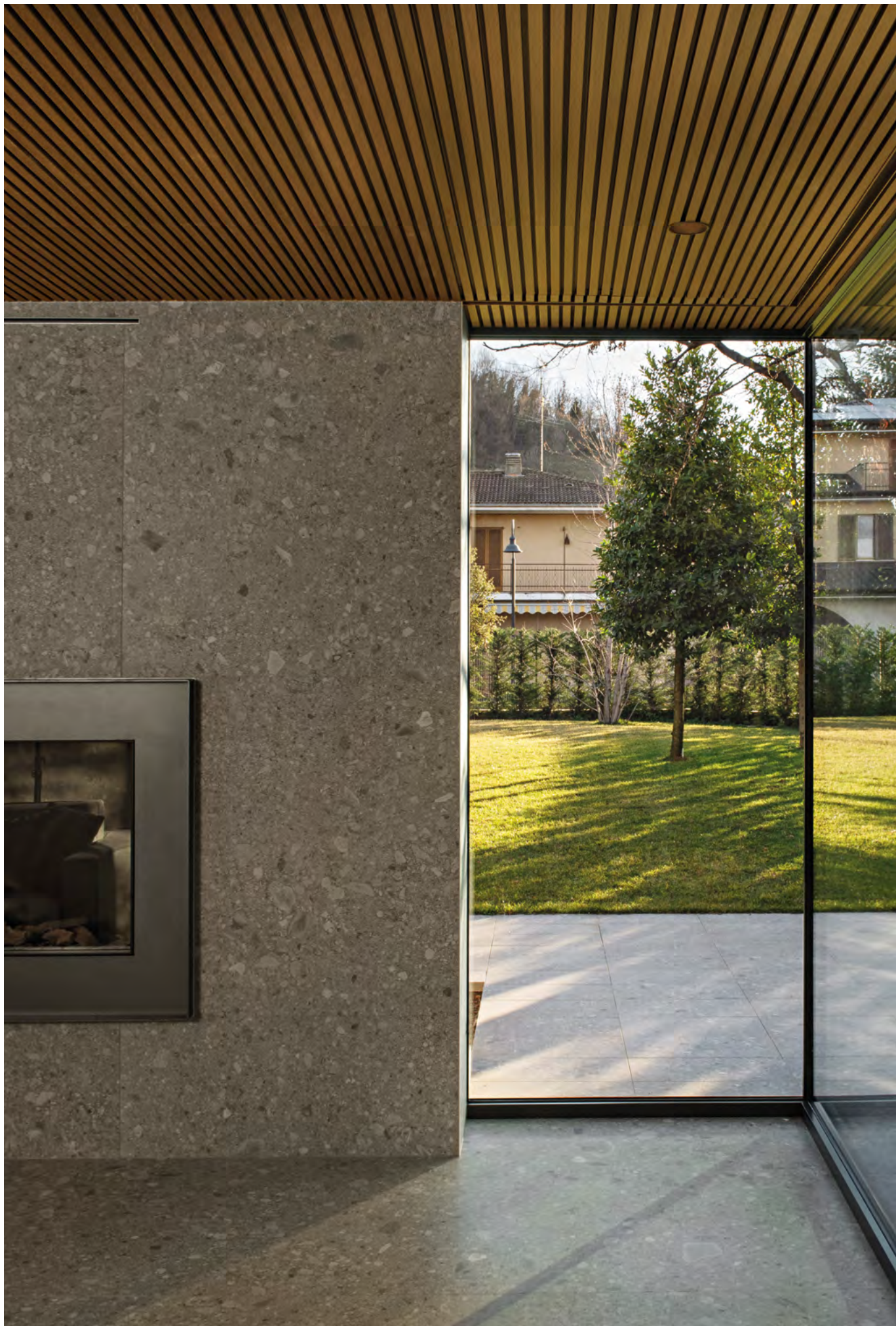
RED CEDAR



SNOW*



* always check availability and delivery times with Déco. In case the product is not available in stock, the minimum quantity that can be ordered is 509 m2.





STILO ULTRASHIELD



Ultrashield Stilo is the collection of profiles created to offer architects and designers the possibility to create unique sunshade screens, customisable for every project. In addition to guaranteeing a significant aesthetic performance and pleasant shade, the Ultrashield Stilo sunshades foster an increase in the insulation coefficient optimising, therefore, thermal comfort and energy performance of buildings.







STILO COLLECTION ULTRASHIELD

ULTRASHIELD STILO S



SIZES

60 x 42 mm



AVAILABLE COLOURS

Teak / Walnut* / Red Cedar* / Cedar* /
Antique** / Charcoal** / Snow**

* always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum quantity that can be ordered is 1300 linear meters, with fulfilment times to be verified at the time the order is placed.

** always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum quantity that can be ordered is 2600 linear meters, with fulfilment times to be verified at the time the order is placed.

ULTRASHIELD STILO M



SIZES

100 x 52 mm



AVAILABLE COLOURS

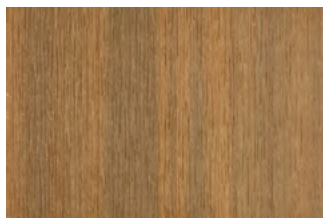
Teak / Walnut* / Red Cedar* / Cedar* /
Antique** / Charcoal** / Snow**

* always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum quantity that can be ordered is 850 linear meters, with fulfilment times to be verified at the time the order is placed.

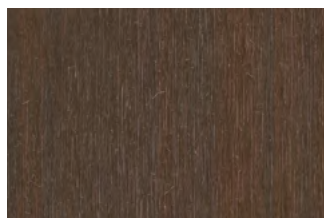
** always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum quantity that can be ordered is 1700 linear meters, with fulfilment times to be verified at the time the order is placed.

RANGE OF COLOURS

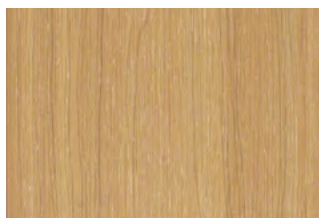
TEAK



WALNUT



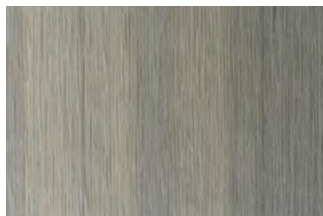
RED CEDAR



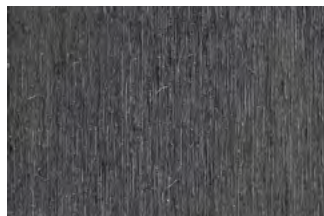
CEDAR



ANTIQUE



CHARCOAL



SNOW



ULTRASHIELD STILO L

SIZES

120 x 62 mm

AVAILABLE COLOURS

Teak / Walnut* / Red Cedar* / Cedar* /
Antique* / Charcoal* / Snow*

** always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum
quantity that can be ordered is 1400 linear meters, with
fulfilment times to be verified at the time the order is placed.



ULTRASHIELD STILO SLIM

SIZES

108 x 31 mm

AVAILABLE COLOURS

Teak* / Walnut* / Red Cedar* / Cedar* /
Antique* / Charcoal* / Snow*

** always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum
quantity that can be ordered is 2700 linear meters, with
fulfilment times to be verified at the time the order is placed.



ULTRASHIELD STILO EXTRA SLIM

SIZES

56 x 31 mm

AVAILABLE COLOURS

Teak / Walnut* / Red Cedar* / Cedar* /
Antique** / Charcoal** / Snow**

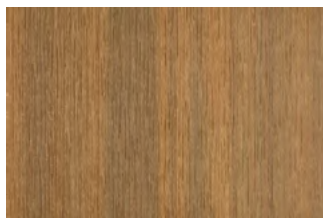
* always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum
quantity that can be ordered is 1600 linear meters, with
fulfilment times to be verified at the time the order is placed.

** always check availability and delivery times with Déco.
In case the product is not available in stock, the minimum
quantity that can be ordered is 3200 linear meters, with
fulfilment times to be verified at the time the order is placed.

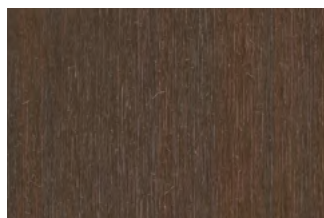


RANGE OF COLOURS

TEAK



WALNUT



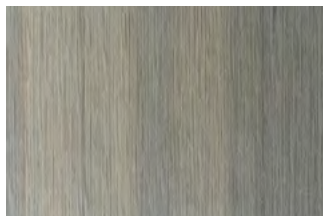
RED CEDAR



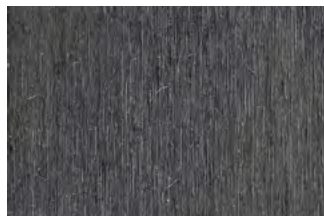
CEDAR



ANTIQUE



CHARCOAL



SNOW



TILE ULTRASHIELD

The self-laying tiles in Ultrashield combine the aesthetic and technical performance of composite wood with the immediate convenience of interlocking installation, also easy to remove in case of temporary or seasonal flooring.



TILE ULTRASHIELD

INSTALLATION SYSTEMS

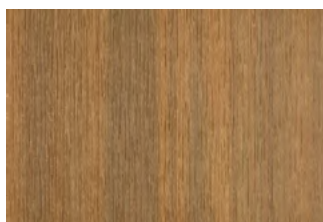


SIZES

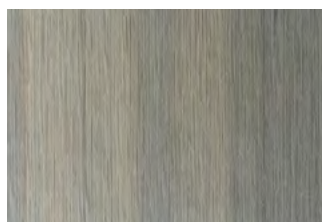
300 x 300 x 22 mm

RANGE OF COLOURS

TEAK













ANTIQUE



ULTRASHIELD

ACCESSORIES FOR BOARDS

	PRODUCT NAME	SIZES (mm)	SURFACE
	Locking Clip - Classic System	-	stainless steel - black
	Expansion Clip - Classic System	-	PE - black
	Screws for Clips - Classic System	3,5x35 (reduced head)	stainless steel - black
	Locking Clip - Small Gap System	-	stainless steel - black
	Expansion Clip - Small Gap System	-	stainless steel - black
	Screws for Clips - Small Gap System	3,5x20	stainless steel
	Locking Clip - Invisible System	-	PE - black
	Expansion Clip - Invisible System	-	PE - black
	Screws for Clips - Invisible System	4x20	stainless steel
	Start/End Clip	-	stainless steel
	Screws for Start/End Clips	4x20	stainless steel

	PRODUCT NAME	SIZES (mm)	SURFACE
	End cap for Classic Board	23x138	smooth
	End cap for XL Board	23x210	smooth
	End cap for Square Board	23x140	smooth
	End cap for S Board	23x90	smooth
	Lateral Frame	85x10x2200	smooth/non-slip
	Lateral Frame	138x10x2200	smooth/grained
	Lateral Frame	138x15x2200	smooth/grained
	Lateral Frame	180x15x2200	smooth/grained
	Corner	40x40x2200	only smooth side
	SPE Edge Profile - Classic System	23x138x2200	smooth/veined

ULTRASHIELD

ACCESSORIES FOR TILES



Straight frame for tiles

300x22x22

smooth



External trim for tiles

325x22x22

smooth



Inner trim for tiles

305x22x22

smooth

ULTRASHIELD

ACCESSORIES FOR SUNSHADES



Interlocking Clips for Sunshade installation (two clips)

black painted stainless steel



Shaped-profile for sunshade installation

stainless steel



End cap stilo sunshades S

60x42

smooth



End cap stilo sunshades M

100x52

smooth



End cap stilo sunshades L

120x62

smooth



End cap stilo sunshades slim

108x31

smooth



End cap stilo sunshades extra slim

56x31

smooth

ULTRASHIELD

ACCESSORIES FOR TWIX



Twix Clip

-

aluminium



Screws for clips

3,5x20

stainless steel



Locking screws

3,0x10

stainless steel



Rubber pad for last board

-

rubber pad

Twix Classic



Starting trim

54x76x3000

smooth



Outside corner trim

79x79x3000

smooth

Twix XL



Starting trim

90x54x3000

smooth



Outside corner trim

130x130x3000

smooth

Twix Claddy



Starting trim

48x36x3000

smooth



Outside corner trim

129x129x3000

smooth

Twix Full Claddy



Starting trim

44x46x3000

smooth



Outside corner trim

60x60x3000

smooth

DÉCOWOOD

THE STRENGTH OF FIBREGLOSS

Perfect synthesis of technology and tradition, Décowood is the result of a revolutionary formula that combining hard wood powders, recycled polymers and fibreglass has given life to a gentle composite wood and texture, innovative and able to offer a uniquely valuable mix of technical and aesthetic characteristics.





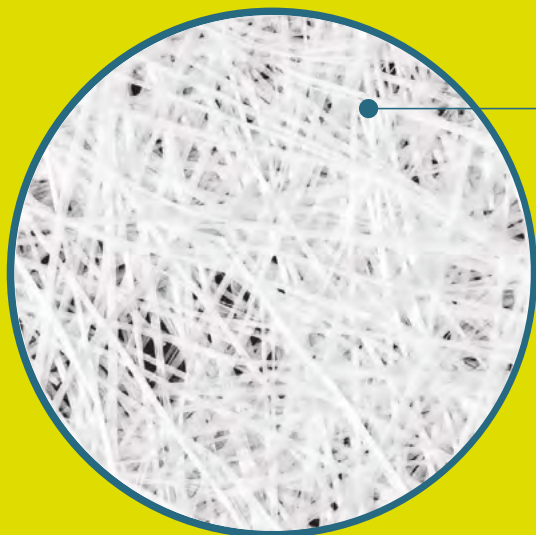
TEXTURE AND TECHNOLOGY

With a finely surface processed to texture to recreate the texture of wood at the touch and sight, Décowood gives back the authentic experience of a natural essence offering, at the same time, the advantages and practicality of a technologically advanced material.



DÉCOWOOD

FIBERGLASS TECHNOLOGY

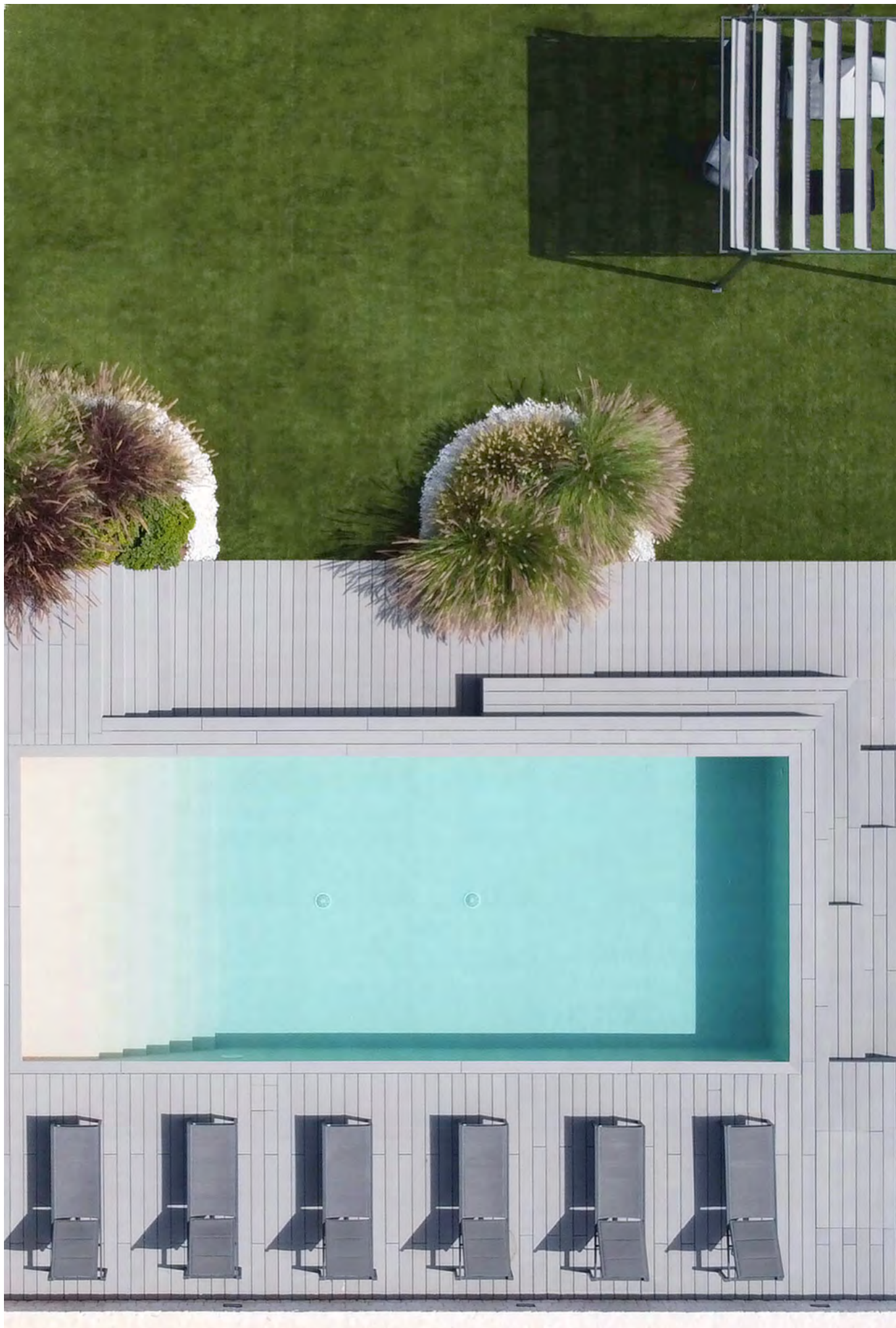


FIBREGLASS

The Décowood® formula calls for the use of fibreglass, widely used material in the aeronautics and industrial industries for its proven properties of mechanical resistance.

The Décowood Fibreglass formula allows for obtaining a product up to 40% more durable and stronger than traditional composite woods.

FEATURE	GENERIC FLOORING	DÉCOWOOD fibreglass formula
Breaking load	3.126 N	4.566 N
Static bending strenght	24.39 N	35.72 N
Modulus of elasticity	3.652 MPa	4.072 MPa
Impact resistance	3.1 kj/m ²	4.4 kj/m ²



DÉCOWOOD IS UNIQUE

- **FIBREGLASS FORMULA**

Décowood uses an innovative technology that unites the fibreglass properties to a compound of hard wood powder and recycled polymers to obtain an enhanced product in terms of mechanical resistance, durability and dimensional stability. The Fibreglass technology is applied on all Décowood Classic and Décowood Plus hollow profile.

- **40% MORE RESISTANT**

Compared to other generic coverings, Décowood is up to 40% more resistant in terms of load breakage, elasticity and resistant to impact. These properties allow Décowood to excel in domestic contexts as much as in public locations subject to high traffic.

- **WATERPROOF AND NON-SLIP**

Given its formulation and the particular surface workmanship to give greater grip, the Décowood boards are perfect also for poolside application since they are not subject to swelling due to water or humidity.

- **NATURAL WOOD TACTILE FEELING**

With all the benefits and advantages of a composite wood, at the touch, Décowood has all the fibrous texture of a natural essence.

- **DOUBLE TEXTURE PROFILES**

Décowood boards, in the Plus, Classic and Poetto profiles, can indulge different styles and needs offering, for each profile, two sides with different workmanship: non-slip and with two lines, non-slip and with three lines, smooth and channelled.



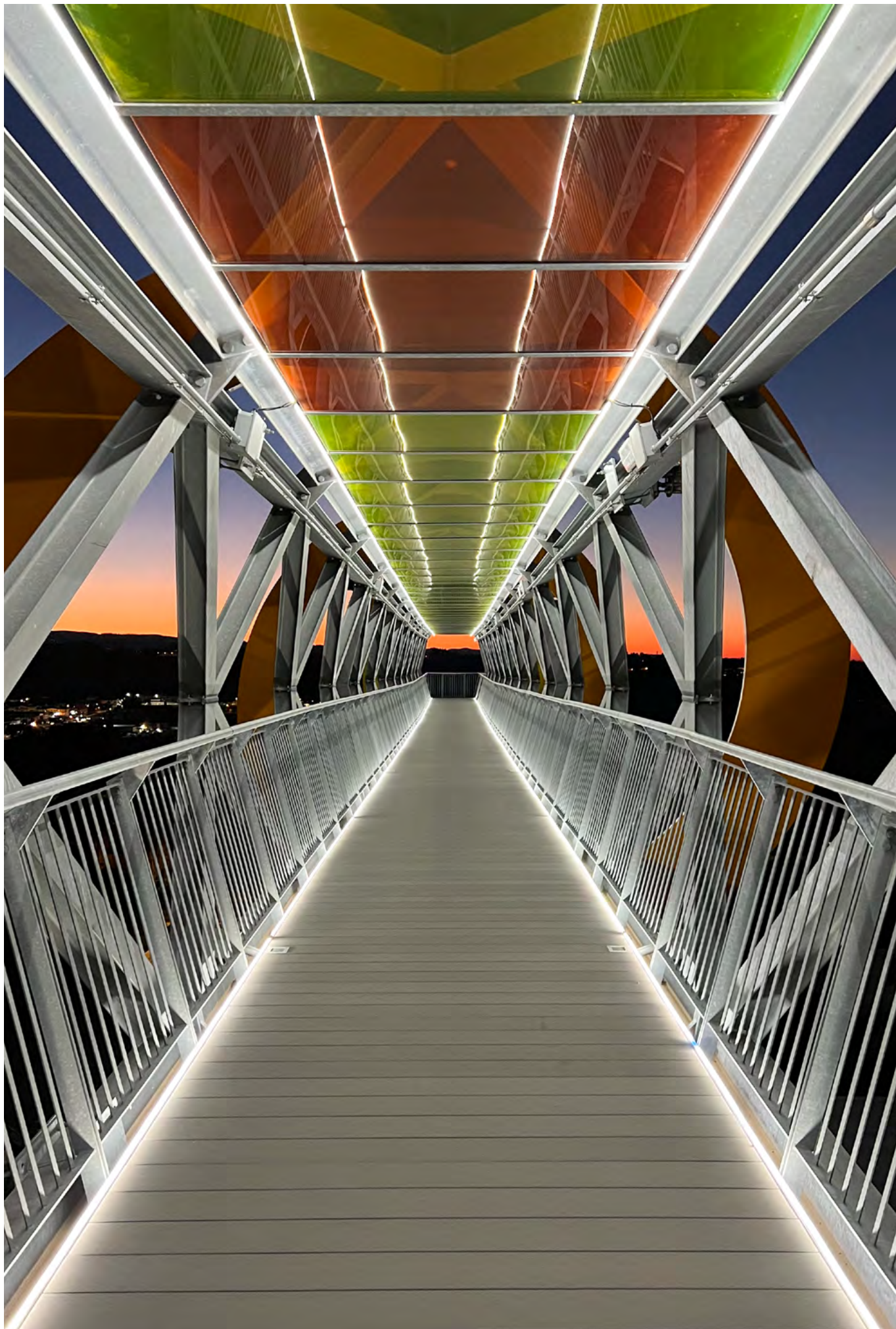




DÉCOWOOD PLUS FIBERGLASS

Décowood Plus is the Décowood board with advanced aesthetics and functionality. The grain size of the wood powder is designed to achieve an exceptional aesthetic result that is even closer to wood.





DÉCOWOOD PLUS FIBERGLASS



SIZES

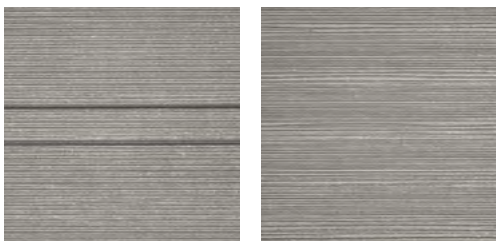
HOLLOW PROFILE
23 x 165 x 2200 mm

SOLID PROFILE
20 x 165 x 2200 mm

RANGE OF COLOURS AND FINISHES

STONE
2 lines

channel



SAND
2 lines

channel



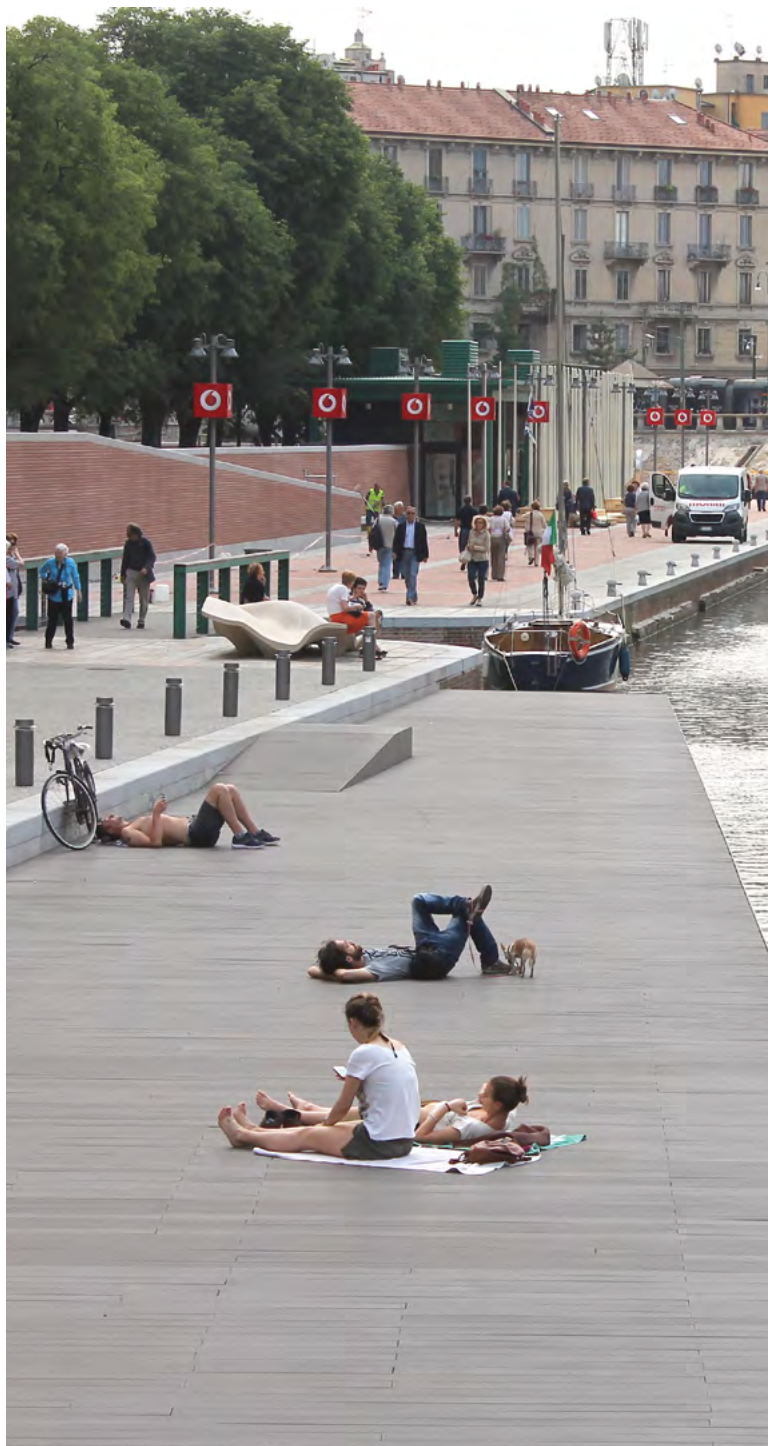
TROPICAL
2 lines

channel





DÉCOWOOD CLASSIC FIBERGLASS



Décowood Classic boards are the result of an extremely contemporary technology that combines wood, polymers and fibreglass. Perfect to install as flooring in gardens, terraces, dehors, and poolside, the Décowood Classic boards are rot-proof and immune to attacks from insects, fungi, moulds and atmospheric or chemical agents such as diluted acids, saline or chlorine solutions.



DÉCOWOOD CLASSIC FIBERGLASS



SIZES

PROFILE

23 x 146 x 2200 mm

RANGE OF COLOURS AND FINISHES

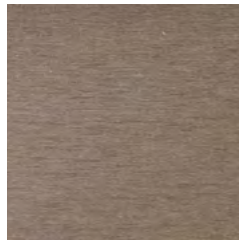
STONE
smooth

antislip



TROPICAL
smooth

antislip





DÉCOWOOD POETTO

Specifically created for the redevelopment project of the Poetto promenade in Cagliari, the Décowood Poetto board was then permanently included in the Déco product catalogue. Thanks to the surface workmanship, the Décowood Poetto boards are non-slip, highly resistant to scratches and suitable for high traffic areas.





DÉCOWOOD POETTO



SIZES

PROFILE

19 x 146 x 2900 mm

RANGE OF COLOURS AND FINISHES

SAND

channel

3 lines













DÉCOWOOD

ACCESSORIES FOR BOARDS

	PRODUCT NAME	SIZES (mm)	SURFACE
	Locking Clip - Décowood Classic and Plus	-	stainless steel
	Expansion Clip - Décowood Classic and Plus	-	PE - black
	Clip - Décowood Poetto/Plus Solid	-	stainless steel
	Screws for clips - Standard	3,5x35	stainless steel
	Screws for clips - For joist thickness 19mm	4x30	stainless steel
	Screws for clips - For Solid Profiles	3,5x20	stainless steel
	Screws for clips - For aluminium joist	3,9x25	stainless steel
	Screws for clips - For aluminium joist	3,9x16	stainless steel
	Start/End Clip	-	stainless steel
	Screws for Start/End Clip	4x20	stainless steel

	PRODUCT NAME	SIZES (mm)	SURFACE
	End Cap for Classic/Plus Board	-	smooth
	Lateral Frame	78x10x2200/2900	smooth/channel
	Corner	40x40x2200/2900	only smooth side
	Décowood Joist Only on drillable concrete	40x23x2200/2900	tropical brown
	Décowood Protective Shield	1l	stain-proof impregnating agent
	Décowood Protective Shield	5l	stain-proof impregnating agent
	Décowood Colour Stabilizer	5l	-
	Spray Cleaner	200ml	for localised dirt stains

PANORAMA

THE DURABILITY OF HEAT-TREATED BAMBOO

Panorama is the bamboo board collection designed to enhance the plant's natural resistance and versatility through a thermo-treatment at 200°.

This extraordinary processing produces boards that are perfect for installation in any outdoor context as they are extremely resistant to impact, traction, moisture and have a class B fire reaction.







AN ECO-SUSTAINABLE SOLUTION

Bamboo is considered an eco-sustainable alternative to natural wood thanks to its capacity to regenerate very quickly and to limit its impact on deforestation. Furthermore, the interlocking installation system of the Panorama boards makes it possible to minimize raw material waste.



PANORAMA TECHNOLOGY

Obtained from the compression of multiple bamboo fibres and subjected to high temperatures, the Panorama boards are a product with an internal density so high as to be impenetrable not just to fungi, insects and mould but also flames, achieving Class B fire reaction.



**CLASS B
FIRE REACITON**

AN ECO-SUSTAINABLE SOLUTION



**100%
RECYCLABLE**

The use of bamboo in construction is a sustainable alternative to natural wood in virtue of this plant's extraordinary regeneration ability.

In line with Déco's attention to the environment, the Panorama collection boards are made with 100% recyclable material.

A bamboo plant reaches full maturity at a young age, in five to seven years, so as to significantly limit deforestation.

**BAMBOO MATURITY
IN 5-7 YEARS**



**MINIMUM IMPACT ON
DEFORESTATION**





PANORAMA IS UNIQUE

- **CLASS B FIRE RESISTANCE**

The high internal density of the boards gives the material an incredible capacity for fire reaction certified in Class B according to current European regulations.

- **INTERLOCKING INSTALLATION OR WITH VISIBLE SCREWS**

In addition to being installed with visible screws, the Panorama boards also allow for interlocking installation by choosing the male/female grooving on the heads. The interlocking installation system also allows for minimum waste of material during installation.

- **DURABILITY AND RESISTANCE**

The density and degree of compactness that characterise Panorama make the material much more durable and resistant to rotting and to UV rays compared to common wood.

- **HIGH LEVEL STABILITY**

The absence of knots in the section of the material gives Panorama Bamboo high standards of flexibility that bring the boards to efficiently absorb vibrations and reduce subsequent contractions.

- **IMMUNE TO FUNGI AND PARASITES**

For their internal characteristics, the Panorama Bamboo boards are totally immune to attacks from insects, fungi, moulds and parasites.

- **RESISTANT TO HUMIDITY**

Panorama is extremely resistant to humidity and to adverse climate conditions, perfect for application on terraces, patios, walkways and poolside.





CLASSIC BOARD



SIZES

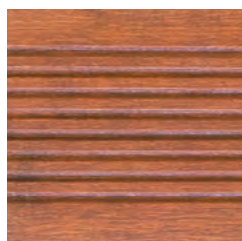
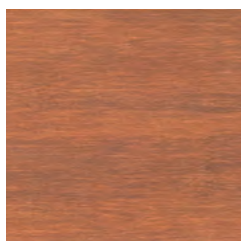
OAK*
18 x 137 x 1850 mm

WENGE
18 x 139 x 1860 mm

RANGE OF COLOURS AND FINISHES

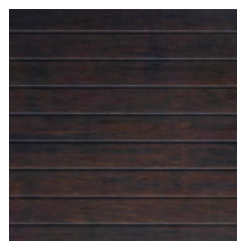
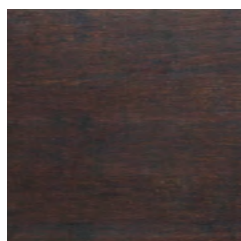
OAK*
smooth

channel



WENGE
smooth

channel









*In case the product is not available in stock, the minimum quantity that can be ordered is 300 m².



PANORAMA

ACCESSORIES

	PRODUCT NAME	SIZES (mm)	SURFACE
	Locking Clip (Classic, L)	-	stainless steel
	Screws for Clips - Wood joist use	3,5x20	stainless steel
	Screws for Clips - Aluminium joist use	3,9x16	stainless steel
	Screws - Visible heads installation	4,5x35	stainless steel
	Screws - Visible heads installation	4,5x50	stainless steel
	Panorama Oil	2,5l	specific oil, revives colour (oak, wenge)



IPE LAPACHO

THE HARDEST WOOD IN THE WORLD

The Ipe Lapacho, from the forests of South America, has high levels of resistance and flexibility, offering high performance in every outdoor use. Considered one of the hardest woods in the world, the Ipe boards can resist for more than 25 years to humidity, atmospheric agents, parasites, fungi and stress.





DISTINCTIVE NUANCES

The varied hues that make Ipe so recognisable tend, as the years go by, to change to grey-silvery tones: a feature that makes Ipe a unique essence but that can be minimised supporting the colour with the use of specific oils.



THE COLLECTION

S BOARD



SIZES
19 x 90 mm

M BOARD



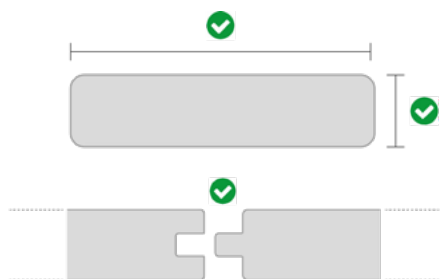
SIZES
21 x 100 mm

L BOARD



SIZES
20 x 140 mm

ITALIA PROFILE AVAILABLE OPTION



- board calibrated in width
- board cut to measure and 90° headed
- board processed with male-female at the head



ANGELIM AMARGOSO

AMBER CHARM

Angelim Amargoso is a South American noble wood, with a warm and intense colour similar to Teak, very popular with decking enthusiasts. Its warmth enhances and embellishes environments where it is installed, whether residential context or convivial, dehors, restaurants or large public works.

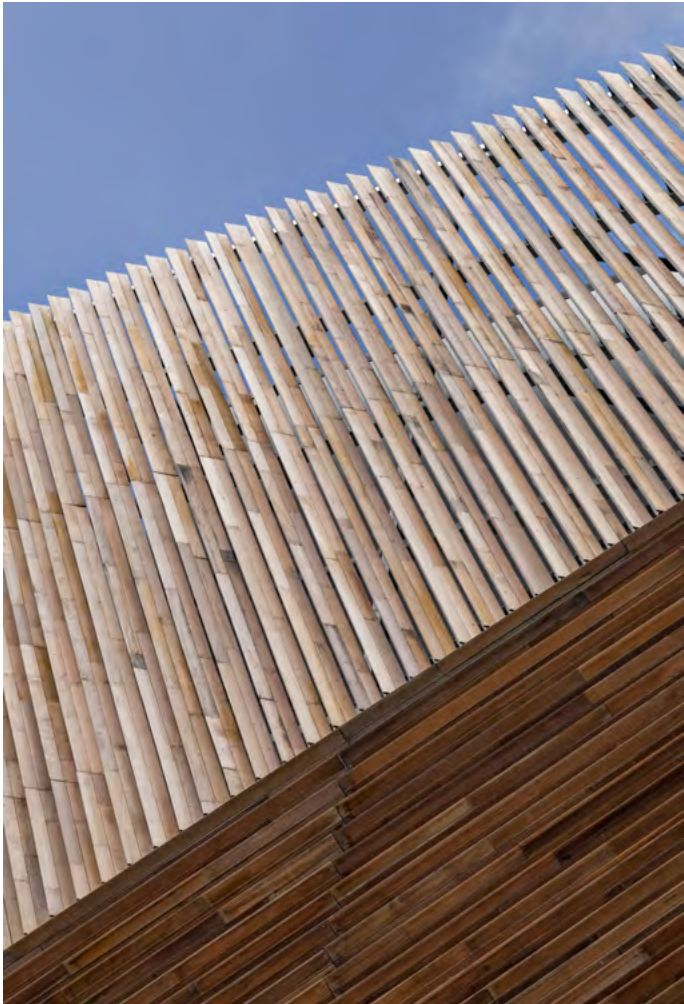




RELIABILITY AND PERFORMANCE

Angelim Amargoso is among the most stable, reliable and high-performance wood for decking, with an excellent price positioning. The excellent performance, together with the sober and gently aesthetic impact, had brought Angelim Amargoso to be one of the most used natural woods globally for coverings in outdoor environments.





THE COLLECTION

S BOARD



SIZE
19 x 90 mm



TEAK

EXOTIC CHARM, DESIGN AND PERFORMANCE

With a golden colour and characteristic fragrance, Teak is a noble essence from Burma and Indonesia, particularly suited to enhance refined environments. For the aesthetic and technical characteristics it offers, this essence represents all that can be desired from a natural wood covering.





QUALITY AND RESISTANCE

Just like all exotic woods selected by Déco, this noble essence from Indonesia and Burma is also specific for outdoors and waterproof, resistant to salt and all weather agents. With a golden colour and characteristic fragrance, Teak is a choice particularly suited to private and refined environments where duration, stability and aesthetics are expressed with extreme sophistication.



THE COLLECTION

S BOARD



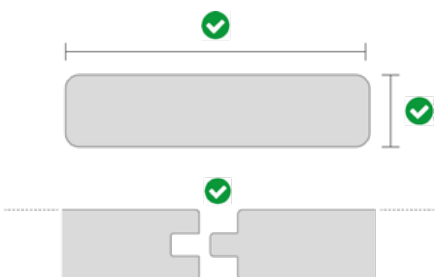
SIZES
19 x 90 mm

L BOARD



SIZES
19 x 120 mm

ITALIA PROFILE AVAILABLE OPTION













- board already calibrated and cut to measure
- board processed with male-female at the head



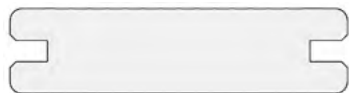
NATURAL WOODS

ACCESSORIES

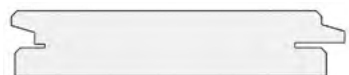
	PRODUCT NAME	SIZES (mm)	SURFACE
	Locking Clip	-	stainless steel (4 holes for the screws)
	Screws for Clips - Wood joist use	3,5x20 (reduced head)	stainless steel
	Screws for Clips - Aluminium joist use	4x16 (4 holes for screws)	stainless steel
	Screws - Visible heads installation	4,5x35	stainless steel
	Screws - Visible heads installation	4x50	stainless steel
	Screws for Structure Frame	6x130	galvanized steel
	Bolt for concrete	8x80	galvanized steel
	Pedestals for Décotiles thickness	sp. 15mm	plastic
	Décoil	1l	specific oil, revives colour
	Décoil	5l	specific oil, revives colour

NATURAL WOODS

WOODWORKS AND FINISHING



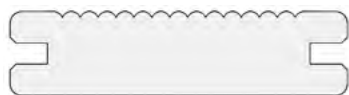
Grooving for Clips - Classic System



Grooving for Clips - Invisible System



Rough for non-slip



Non-slip + Grooving - Classic System

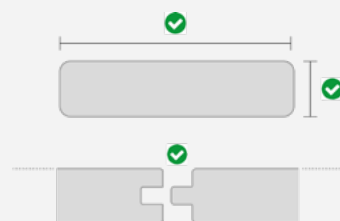


Non-slip + Grooving - Invisible System

ITALIA PROFILE

- board calibrated in width
- board cut to measure and 90° headed
- board processed with male-female at the head

AVAILABLE OPTION



TECHNICAL DATA SHEETS

ULTRASHIELD CLASSIC BOARD

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
BOARD DIMENSIONS	/	138 x 23 mm
WEIGHT	/	19 k /m ²
ABRASION RESISTANCE	ASTM D4060-10	33 mg (1000cycles)
INNER COHESION	EN319	Tensile strength > 2,3 Mpa, no visible marks after test
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D696	38.9 x 10 ^{ww} mm/mm°C
	EN15534	32.2 x 10 ⁻⁶ K ⁻¹
VISCOSITY	EN15534	Δ S:4.70mm, Δ Sr:2.81mm (l = 350 mm)
LEVEL OF PENTACHLOROPHENOL	CE (EN14041(2004))	2,99 ppm
DEFORMATION RECOVERY	ASTM D7032	after 24h: 93%
LEVEL OF CHALKING	EN15534	class 0, no chalking
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2	Cfl
SHOCK RESISTANCE	EN15534	Crack max length: no crack, max. indentation: 0,14 mm
LEVEL OF FORMALDEHYDE	EN717-1	not detectable
	ASTM D6007-14	not detectable
MECHANICAL PROPERTIES	ASTM D6109	bend resistance: 26,2 Mpa (l = 350mm) tensile modulus: 3,10 Gpa (l = 350mm) max load: 4537 N (l = 350mm)
LEVEL OF HEAVY METALS	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND
IMPACT RESISTANCE	ASTM D4226	MFE > 396J
MOULD RESISTANCE	ASTM G21	class 0
UMIDITY LEVEL	EN15534 / EN322	0,83%

FEATURE	STANDARD	RESULTS
HUMIDITY RESISTANCE UNDER TEST CYCLES	EN15534	original MOR: 27,4 Mpa - after exposure MOR: 24,8 Mpa, Decrease: 9,6%
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO NICKS	EN15534	With 2000N, Brinell: 72 Mpa, Elastic recovery: 65%
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000 h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
ROCKWELL HARDNESS	ASTM D785	78,7 R
SLIPPING RESISTANCE	DIN51130	Oil-wet ramp test: Angle: 19.7° Rating: R11
	DIN51097	Wet-load ramp test: Front View: Angle: 31.2° Rating: C Back View: Angle: 29.0° Rating: C
SWELLING AND WATER ABSORPTION (24 H IMMERSION)	EN15534	1- Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. 2- Water absorption: 0.49%
SWELLING AND WATER ABSORPTION (28 DAYS IMMERSION)	EN15534	1- Swelling: 0.78% in thickness, 0.07% in width, 0.12% in length. 2- Water absorption: 1.66%
UV RAYS RESISTANCE	ASTM G154	After 3000 h, Grey Scale 3, $\Delta E^* = 3.56$
VOC & TVOC	ASTM DS116-11	not detectable
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique / Cedar / Red Cedar / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insect attack - Highly insulating (*2), durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD S BOARD

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
BOARD DIMENSIONS	/	90 x 23 mm
WEIGHT	/	19 k/m ²
ABRASION RESISTANCE	ASTM D4060-10	33 mg (1000cycles)
INNER COHESION	EN319	Tensile strength > 2,3 Mpa, no visible marks after test
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D696	38.9 x 10 ^{ww} mm/mm°C
	EN15534	32.2 x 10 ⁻⁶ K ⁻¹
VISCOSITY	EN15534	Δ S:4.70mm, Δ Sr:2.81mm (l = 350 mm)
LEVEL OF PENTACHLOROPHENOL	CE (EN14041(2004))	2,99 ppm
DEFORMATION RECOVERY	ASTM D7032	after 24h: 93%
LEVEL OF CHALKING	EN15534	class 0, no chalking
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2	Cfl
SHOCK RESISTANCE	EN15534	Crack max length: no crack, max. indentation: 0,14 mm
LEVEL OF FORMALDEHYDE	EN717-1	not detectable
	ASTM D6007-14	not detectable
MECHANICAL PROPERTIES	ASTM D6109	bend resistance: 26,2 Mpa (l = 350mm) tensile modulus: 3,10 Gpa (l = 350mm) max load: 4537 N (l = 350mm)
LEVEL OF HEAVY METALS	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND
IMPACT RESISTANCE	ASTM D4226	MFE > 396J
MOULD RESISTANCE	ASTM G21	class 0
UMIDITY LEVEL	EN15534 / EN322	0,83%

FEATURE	STANDARD	RESULTS
HUMIDITY RESISTANCE UNDER TEST CYCLES	EN15534	original MOR: 36,3 Mpa - after exposure MOR: 32,1 Mpa, Decrease: 11,7%
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO NICKS	EN15534	With 2000N, Brinell: 72 Mpa, Elastic recovery: 65%
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000 h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
ROCKWELL HARDNESS	ASTM D785	78,7 R
SLIPPING RESISTANCE	DIN51130	Oil-wet ramp test: Angle: 19.7° Rating: R11
	DIN51097	Wet-load ramp test: Front View: Angle: 31.2° Rating: C Back View: Angle: 29.0° Rating: C
SWELLING AND WATER ABSORPTION (24 H IMMERSION)	EN15534	1- Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. 2- Water absorption: 0.49%
SWELLING AND WATER ABSORPTION (28 DAYS IMMERSION)	EN15534	1- Swelling: 0.78% in thickness, 0.07% in width, 0.12% in length. 2- Water absorption: 1.66%
UV RAYS RESISTANCE	ASTM G154	After 3000 h, Grey Scale 3, $\Delta E^* = 3.56$
VOC & TVOC	ASTM DS116-11	not detectable
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak - High resistance to break, deformations, atmospheric agents, insect attack - Highly insulating (*2), durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD XL BOARD

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
BOARD DIMENSIONS	/	210 x 23 mm
WEIGHT	/	19 k/m ²
ABRASION RESISTANCE	ASTM D4060-10	33 mg (1000cycles)
INNER COHESION	EN319	Tensile strength > 2,3 Mpa, no visible marks after test
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D696	35.6 x 10 ⁻⁶ mm/mm°C
	EN15534	32.2 x 10 ⁻⁶ K ⁻¹
VISCOSITY	EN15534	Δ S:4.70mm, Δ Sr:2.81mm (l = 350 mm)
LEVEL OF PENTACHLOROPHENOL	CE (EN14041(2004))	2,99 ppm
DEFORMATION RECOVERY	ASTM D7032	after 24h: 93%
LEVEL OF CHALKING	EN15534	class 0, no chalking
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2	Cfl
SHOCK RESISTANCE	EN15534	Crack max length: no crack, max. indentation: 0,14 mm
LEVEL OF FORMALDEHYDE	EN717-1	not detectable
	ASTM D6007-14	not detectable
MECHANICAL PROPERTIES	ASTM D6109	bend resistance: 26,2 Mpa (l = 350mm) tensile modulus: 3,10 Gpa (l = 350mm) max load: 4537 N (l = 350mm)
LEVEL OF HEAVY METALS	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND
IMPACT RESISTANCE	ASTM D4226	MFE > 396J
MOULD RESISTANCE	ASTM G21	class 0
UMIDITY LEVEL	EN15534 / EN322	0,83%

FEATURE	STANDARD	RESULTS
HUMIDITY RESISTANCE UNDER TEST CYCLES	EN15534	original MOR: 27,4 Mpa - after exposure MOR: 24,8 Mpa, Decrease: 9,6%
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO NICKS	EN15534	With 2000N, Brinell: 72 Mpa, Elastic recovery: 65%
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000 h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
ROCKWELL HARDNESS	ASTM D785	78,7 R
SLIPPING RESISTANCE	DIN51130	Oil-wet ramp test: Angle: 19.7° Rating: R11
	DIN51097	Wet-load ramp test: Front View: Angle: 31.2° Rating: C Back View: Angle: 29.0° Rating: C
SWELLING AND WATER ABSORPTION (24 H IMMERSION)	EN15534	1- Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. 2- Water absorption: 0.49%
SWELLING AND WATER ABSORPTION (28 DAYS IMMERSION)	EN15534	1- Swelling: 0.78% in thickness, 0.07% in width, 0.12% in length. 2- Water absorption: 1.66%
UV RAYS RESISTANCE	ASTM G154	After 3000 h, Grey Scale 3, $\Delta E^* = 3.56$
VOC & TVOC	ASTM DS116-11	not detectable
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique - High resistance to break, deformations, atmospheric agents, insect attack - Highly insulating (*2), durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD TILES

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
BOARD DIMENSIONS	/	300 x 300 x 22 mm
INNER COHESION	EN319	Tensile strength > 2,3 Mpa, no visible marks after test
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D696	$38.9 \times 10^{-6} \text{ mm/mm}^{\circ}\text{C}$
	EN15534	$32.2 \times 10^{-6} \text{ K}^{-1}$
VISCOSITY	EN15534	$\Delta S: 4.70 \text{ mm}$, $\Delta Sr: 2.81 \text{ mm}$ (l = 350 mm)
LEVEL OF PENTACHLOROPHENOL	CE (EN14041(2004))	2,99 ppm
DEFORMATION RECOVERY	ASTM D7032	after 24h: 93%
LEVEL OF CHALKING	EN15534	class 0, no chalking
SHOCK RESISTANCE	EN15534	Crack max length: no crack, max. indentation: 0,14 mm
LEVEL OF FORMALDEHYDE	EN717-1	not detectable
	ASTM D6007-14	not detectable
LEVEL OF HEAVY METALS	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND
IMPACT RESISTANCE	ASTM D4226	MFE > 396J
MOULD RESISTANCE	ASTM G21	class 0
UMIDITY LEVEL	EN15534 / EN322	0,83%
HUMIDITY RESISTANCE UNDER TEST CYCLES	EN15534	original MOR: 27,4 Mpa - after exposure MOR: 24,8 Mpa, Decrease: 9,6%
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO NICKS	EN15534	With 2000N, Brinell: 72 Mpa, Elastic recovery: 65%

FEATURE	STANDARD	RESULTS
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000 h of exposure $\Delta E^* = 1.09$, Grey Scale=4-5
DUREZZA DI ROCKWELL	ASTM D785	78,7 R
SLIPPING RESISTANCE	DIN51130	Oil-wet ramp test: Angle: 19.7° Rating: R11
	DIN51097	Wet-load ramp test: Front View: Angle: 31.2° Rating: C Back View: Angle: 29.0° Rating: C
SWELLING AND WATER ABSORPTION (24 H IMMERSION)	EN15534	1- Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. 2- Water absorption: 0.49%
SWELLING AND WATER ABSORPTION (28 DAYS IMMERSION)	EN15534	1- Swelling: 0.78% in thickness, 0.07% in width, 0.12% in length. 2- Water absorption: 1.66%
UV RAYS RESISTANCE	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
VOC & TVOC	ASTM DS116-11	not detectable
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique - High resistance to break, deformations, atmospheric agents, insect attack - Highly insulating (*2), durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD TWIX CLASSIC

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS (BOARD IMPRINT)	/	197 x 3000 mm
THICKNESS	/	25 mm
YIELD NET OF SUPERIMPOSITION	/	9 ML / MQ -- 1,10 MQ/MQ
BOARDS ORIENTATION	/	vertical / horizontal
FIXING METHOD	/	aluminium clips
SUBSTRUCTURE	/	aluminium / larch
RESISTANCE TO ATMOSPHERIC AGENTS (2000 H)	ISO 4892 - 1	E*= 2,5, grey scale 3-4
FIRE RESISTANCE	BS EN 13501-1:2018	E
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique / Walnut / Cedar* / Red Cedar / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD TWIX XL

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS (BOARD IMPRINT)	/	197 x 3000 mm
THICKNESS	/	25 mm
YIELD NET OF SUPERIMPOSITION	/	9 ML / MQ -- 1,10 MQ/MQ
BOARDS ORIENTATION	/	vertical / horizontal
FIXING METHOD	/	aluminium clips
SUBSTRUCTURE	/	aluminium / larch
RESISTANCE TO ATMOSPHERIC AGENTS (2000 H)	ISO 4892 - 1	E*= 2,5, grey scale 3-4
FIRE RESISTANCE	BS EN 13501-1:2018	E
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD TWIX CLADDY

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS (BOARD IMPRINT)	/	210 x 3000 mm
THICKNESS	/	18 mm
YIELD NET OF SUPERIMPOSITION	/	1,05 MQ/MQ
BOARDS ORIENTATION	/	vertical / horizontal
FIXING METHOD	/	aluminium clips
SUBSTRUCTURE	/	aluminium / larch
RESISTANCE TO ATMOSPHERIC AGENTS (2000 H)	ISO 4892 - 1	E*= 2,5, grey scale 3-4
FIRE RESISTANCE	BS EN 13501-1:2018	E
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
 - Different production batches may show shading, even strong, between different batches.
 - The product shows surface brushing due to the processing of the material itself.
- A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD TWIX FULL CLADDY

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		2nd generation WPC (Wood Polymer Composite), covered by a polymeric shield coextruded with the inner core. Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS (BOARD IMPRINT)	/	142 x 3000 mm
THICKNESS	/	13 mm
YIELD NET OF SUPERIMPOSITION	/	1,10 MQ/MQ
BOARDS ORIENTATION	/	vertical / horizontal
FIXING METHOD	/	aluminium clips
SUBSTRUCTURE	/	aluminium / larch
RESISTANCE TO ATMOSPHERIC AGENTS (2000 H)	ISO 4892 - 1	E*= 1,09, grey scale 3-4
FIRE RESISTANCE	BS EN 13501-1:2018	E
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD STILO S

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		WPC (Wood Polymer Composit) si seconda generazione, ricoperto da film in plastica coestruso con il nucleo del prodotto. Prodotto composto da: 60% ca. fibra di legni duri 30% ca. polietilene (HDPE) 10% ca. additivi
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS	/	60 x 42 mm
AVAILABLE SPACE TO INSERT THE STIFFENING CORE	/	20 x 30 mm
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2EN13501-1, EN ISO9239-1, EN ISO11925-2	Efl
MOULD RESISTANCE	ASTM G21	class 0
BOARDS ORIENTATION	/	vertical / horizontal
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO UV RAYS	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
 - Different production batches may show shading, even strong, between different batches.
 - The product shows surface brushing due to the processing of the material itself.
- A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD STILO M

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		WPC (Wood Polymer Composit) si seconda generazione, ricoperto da film in plastica coestruso con il nucleo del prodotto. Prodotto composto da: 60% ca. fibra di legni duri 30% ca. polietilene (HDPE) 10% ca. additivi
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS	/	100 x 52 mm
AVAILABLE SPACE TO INSERT THE STIFFENING CORE	/	40 x 40 mm
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2EN13501-1, EN ISO9239-1, EN ISO11925-2	Efl
MOULD RESISTANCE	ASTM G21	class 0
BOARDS ORIENTATION	/	vertical / horizontal
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO UV RAYS	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD STILO L

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		WPC (Wood Polymer Composite) si seconda generazione, ricoperto da film in plastica coestruso con il nucleo del prodotto. Prodotto composto da: 60% ca. fibra di legni duri 30% ca. polietilene (HDPE) 10% ca. additivi
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS	/	120 x 62 mm
AVAILABLE SPACE TO INSERT THE STIFFENING CORE	/	50 x 50 mm
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2EN13501-1, EN ISO9239-1, EN ISO11925-2	Efl
MOULD RESISTANCE	ASTM G21	class 0
BOARDS ORIENTATION	/	vertical / horizontal
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO UV RAYS	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD STILO SLIM

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		WPC (Wood Polymer Composit) si seconda generazione, ricoperto da film in plastica coestruso con il nucleo del prodotto. Prodotto composto da: 60% ca. fibra di legni duri 30% ca. polietilene (HDPE) 10% ca. additivi
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS	/	108 x 31 mm
AVAILABLE SPACE TO INSERT THE STIFFENING CORE	/	18 x 18 mm
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2EN13501-1, EN ISO9239-1, EN ISO11925-2	Efl
MOULD RESISTANCE	ASTM G21	class 0
BOARDS ORIENTATION	/	vertical / horizontal
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO UV RAYS	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak* / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

ULTRASHIELD STILO EXTRA SLIM

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
PRODUCT TYPE		WPC (Wood Polymer Composit) si seconda generazione, ricoperto da film in plastica coestruso con il nucleo del prodotto. Prodotto composto da: 60% ca. fibra di legni duri 30% ca. polietilene (HDPE) 10% ca. additivi
INTENDED USE (*1)	/	Non-structural-use outdoor and indoor coverings
BOARD DIMENSIONS	/	56 x 31 mm
AVAILABLE SPACE TO INSERT THE STIFFENING CORE	/	18 x 18 mm
FIRE RESISTANCE	EN13501-1, EN ISO9239-1, EN ISO11925-2EN13501-1, EN ISO9239-1, EN ISO11925-2	Efl
MOULD RESISTANCE	ASTM G21	class 0
BOARDS ORIENTATION	/	vertical / horizontal
RESISTANCE TO ATMOSPHERIC AGENTS	EN15534 / ISO4892 - 2	After 2000h of exposure $\Delta E^* = 1.09$, Grey Scale = 4-5
RESISTANCE TO SCRATCHES	ISO4586-2	class 2
RESISTANCE TO UV RAYS	ASTM G154	After 3000 h, Grey Scale3, $\Delta E^* = 3.56$
MAIN FEATURES		<ul style="list-style-type: none"> - It looks exactly like natural wood - Available colours: Teak / Antique* / Walnut* / Cedar* / Red Cedar* / Snow* / Charcoal* - High resistance to break, deformations, atmospheric agents, insects attack - Highly durable and easy to maintain - Easy installation - Resistant to stains - Resistant to scratches - Resistant to discolouring

(*1) To install the product, follow the installation guidelines at the end of the catalogue.

(*2) Particular environmental conditions of friction with other non conductive materials could cause some electrostatic phenomena. These events reduce with the normal use of the boards and can be contained with the use of specific antistatic spray.

NOTE:

- Technical data may be subject to change without notice.
- Different production batches may show shading, even strong, between different batches.
- The product shows surface brushing due to the processing of the material itself.

A tolerance of +/-2% in stave dimensions is acceptable.

DÉCOWOOD PLUS - SOLID PROFILE

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	20 x 165 x 2200 mm ca.
PRODUCT TYPE	/	WPC (Wood Polymer Composite), Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
DENSITY	EN 323/93	1.500 kg/m ³ ca. +/- 5%
BREAKING LOAD (F MAX) (*2)	EN 310/93	≥ 5.500 N
RESISTANCE TO HUMIDITY. TEST IN BOILING WATER (*3)	EN 1087-1/95	Weight variation ≤ 2% Length variation ≤ 0,5% Width variation ≤ 1% Thickness variation ≤ 1,5%
RESISTANCE TO SCREWS EXTRACTION (*4)	EN 320/94	2779 N
BEND UNDER PERMANENT LOAD AFTER THERMAL TREATMENT (*5)	EN ISO 899-2 /2006	≤ 10 mm
COEFFICIENT OF LINEAR THERMAL EXPANSION	ISO 11359-2 DIN 53572	Length variation 0,036 mm/mC° Width variation 0,068 mm/mC° Thickness variation 0,098 mm/mC°
COLOUR VARIATION	/	≤ 2%
SLIPPERINESS	DIN 51130 / 51131	Smooth side ≥ Class R11
MAIN FEATURES		<ul style="list-style-type: none"> - Natural look - Available colours: Tropical / Stone / Sand - High resistance to break, deformations, atmospheric agents, insects attack - Long-lasting and easy maintenance - Easy installation - Non slip even if wet

(*1) The product must be installed according to our installation guidelines.

(*2) Tested with a distance of 400 mm between the cylindrical supports.

The applied load consists of a cylindrical head having a diameter of 30 ± 0.5 mm. Sample conditioning: Temp 18-24 ° C - U.R. 40-60%.

(*3) Test performed after keeping the samples in hot water and then in cold water (18-22 ° C) for a period of 15-120 minutes.

(*4) Average extraction value on 3 types of screw.

(*5) The profiles were subjected to bending in 3 points under a permanent load of 85 kg., duration 168 h (7 days), Temp. 50 ° C - 50% U.R. The maximum bend, the minimum bending and their difference are calculated.

(*6) Small chromatic variations are allowed, ≤ 2% and therefore not noticeable to the naked eye if not by direct comparison with a rough stave. They are unavoidable for any product of the category and for this reason they do not constitute defect or lack of conformity.

NOTE:

- Technical data may be subject to change without prior notice.

- Different production batches may have variations, even strong ones.

A tolerance of +/-2% in stave dimensions is acceptable.

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	23 x 165 x 2200 mm ca.
PRODUCT TYPE	/	WPC (Wood Polymer Composite), Composed by: 60% hard woods, 40% polyethylene (HDPE)
INTENDED USE (*1)	/	Non-structural outdoor coverings
DENSITY	EN 323/93	1.350 kg/m ³ ca. +/- 5%
BREAKING LOAD (F MAX) (*2)	EN 310/93	≥ 4.500 N
RESISTANCE TO HUMIDITY. TEST IN BOILING WATER (*3)	EN 1087-1/95	Weight variation ≤ 2% Length variation ≤ 0,5% Width variation ≤ 1% Thickness variation ≤ 1,5%
RESISTANCE TO SCREWS EXTRACTION (*4)	EN 320/94	2779 N
BEND UNDER PERMANENT LOAD AFTER THERMAL TREATMENT (*5)	EN ISO 899-2 /2006	≤ 10 mm
COEFFICIENT OF LINEAR THERMAL EXPANSION	ISO 11359-2 DIN 53572	Length variation 0,036 mm/mC° Width variation 0,068 mm/mC° Thickness variation 0,098 mm/mC°
COLOUR VARIATION	/	≤ 2%
SLIPPERINESS	DIN 51130 / 51131	Smooth side ≥ Class R11
MAIN FEATURES		<ul style="list-style-type: none"> - Natural look - Available colours: Tropical / Stone / Sand - High resistance to break, deformations, atmospheric agents, insects attack - Long-lasting and easy maintenance - Easy installation - Non slip even if wet

(*1) The product must be installed according to our installation guidelines.

(*2) Tested with a distance of 400 mm between the cylindrical supports.

The applied load consists of a cylindrical head having a diameter of 30 ± 0.5 mm. Sample conditioning: Temp 18-24 ° C - U.R. 40-60%.

(*3) Test performed after keeping the samples in hot water and then in cold water (18-22 ° C) for a period of 15-120 minutes.

(*4) Average extraction value on 3 types of screw.

(*5) The profiles were subjected to bending in 3 points under a permanent load of 85 kg., duration 168 h (7 days), Temp. 50 ° C - 50% U.R. The maximum bend, the minimum bending and their difference are calculated.

(*6) Small chromatic variations are allowed, ≤ 2% and therefore not noticeable to the naked eye if not by direct comparison with a rough stave. They are unavoidable for any product of the category and for this reason they do not constitute defect or lack of conformity.

NOTE:

- Technical data may be subject to change without prior notice.

- Different production batches may have variations, even strong ones.

A tolerance of +/-2% in stave dimensions is acceptable.

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	23 x 146 x 2200 mm ca.
PRODUCT TYPE	/	WPC (Wood Polymer Composite), Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
DENSITY	EN 323/93	1.350 kg/m ³ ca. +/- 5%
BREAKING LOAD (F MAX) (*2)	EN 310/93	≥ 4.500 N
BEND TO 500 N (51 KG) LOAD (*2)	EN 310/93	≤ 1,5 mm
RESISTANCE TO HUMIDITY. TEST IN BOILING WATER (*3)	EN 1087-1/95	Weight variation ≤ 2% Length variation ≤ 0,5% Width variation ≤ 1% Thickness variation ≤ 1,5%
RESISTANCE TO SCREWS EXTRACTION (*4)	EN 320/94	2779 N
BEND UNDER PERMANENT LOAD AFTER THERMAL TREATMENT (*5)	EN ISO 899-2 /2006	≤ 10 mm
COEFFICIENT OF LINEAR THERMAL EXPANSION	ISO 11359-2 DIN 53572	Length variation 0,036 mm/mC° Width variation 0,068 mm/mC° Thickness variation 0,098 mm/mC°
COLOUR VARIATION	/	≤ 2%
SLIPPERINESS	DIN 51130 / 51131	Smooth side ≥ Class R11 Channel side ≥ Class R12
MAIN FEATURES		- Natural look - Available colours: Tropical / Stone - High resistance to break, deformations, atmospheric agents, insects attack - Long-lasting and easy maintenance - Easy installation - Non slip even if wet

(*1) The product must be installed according to our installation guidelines.

(*2) Tested with a distance of 400 mm between the cylindrical supports.

The applied load consists of a cylindrical head having a diameter of 30 ± 0.5 mm. Sample conditioning: Temp 18-24 ° C - U.R. 40-60%.

(*3) Test performed after keeping the samples in hot water and then in cold water (18-22 ° C) for a period of 15-120 minutes.

(*4) Average extraction value on 3 types of screw.

(*5) The profiles were subjected to bending in 3 points under a permanent load of 85 kg., duration 168 h (7 days), Temp. 50 ° C - 50% U.R. The maximum bend, the minimum bending and their difference are calculated.

(*6) Small chromatic variations are allowed, ≤ 2% and therefore not noticeable to the naked eye if not by direct comparison with a rough stave. They are unavoidable for any product of the category and for this reason they do not constitute defect or lack of conformity.

NOTE:

- Technical data may be subject to change without prior notice.

- Different production batches may have variations, even strong ones.

A tolerance of +/-2% in stave dimensions is acceptable.

DÉCOWOOD POETTO

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	23 x 146 x 2200 mm ca.
PRODUCT TYPE	/	WPC (Wood Polymer Composite), Composed by: 60% hard woods, 30% polyethylene (HDPE), 10% additives.
INTENDED USE (*1)	/	Non-structural outdoor coverings
DENSITY	EN 323/93	1.500 kg/m ³ ca. +/- 5%
BREAKING LOAD (F MAX) (*2)	EN 310/93	≥ 5.500 N
BEND TO 500 N (51 KG) LOAD (*2)	EN 310/93	≤ 1,5 mm
RESISTANCE TO HUMIDITY. TEST IN BOILING WATER (*3)	EN 1087-1/95	Weight variation ≤ 2% Length variation ≤ 0,5% Width variation ≤ 1% Thickness variation ≤ 1,5%
RESISTANCE TO SCREWS EXTRACTION (*4)	EN 320/94	2779 N
BEND UNDER PERMANENT LOAD AFTER THERMAL TREATMENT (*5)	EN ISO 899-2 /2006	≤ 10 mm
COEFFICIENT OF LINEAR THERMAL EXPANSION	ISO 11359-2 DIN 53572	Length variation 0,036 mm/mC° Width variation 0,068 mm/mC° Thickness variation 0,098 mm/mC°
COLOUR VARIATION	/	≤ 2%
SLIPPERINESS	DIN 51130 / 51131	Smooth side ≥ Class R11 Channel side ≥ Class R12
MAIN FEATURES		- Natural look - Available colours: Sand - High resistance to break, deformations, atmospheric agents, insects attack - Long-lasting and easy maintenance - Easy installation - Non slip even if wet

(*1) The product must be installed according to our installation guidelines.

(*2) Tested with a distance of 400 mm between the cylindrical supports.

The applied load consists of a cylindrical head having a diameter of 30 ± 0.5 mm. Sample conditioning: Temp 18-24 ° C - U.R. 40-60%.

(*3) Test performed after keeping the samples in hot water and then in cold water (18-22 ° C) for a period of 15-120 minutes.

(*4) Average extraction value on 3 types of screw.

(*5) The profiles were subjected to bending in 3 points under a permanent load of 85 kg., duration 168 h (7 days), Temp. 50 ° C - 50% U.R. The maximum bend, the minimum bending and their difference are calculated.

(*6) Small chromatic variations are allowed, ≤ 2% and therefore not noticeable to the naked eye if not by direct comparison with a rough stave. They are unavoidable for any product of the category and for this reason they do not constitute defect or lack of conformity.

NOTE:

- Technical data may be subject to change without prior notice.

- Different production batches may have variations, even strong ones.

A tolerance of +/-2% in stave dimensions is acceptable.

PANORAMA - OAK

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	18 x 137 x 1850 mm
TOLERANCE	/	length tolerance: ± 0.5 mm width tolerance: ± 0.2 mm thickness tolerance: ± 0.15 mm
DENSITY	/	1.1 -1.3g/cm ³
CONTENT OF HUMIDITY	/	8-12%
HARDNESS	DIN EN 1534	79.2N/mm ²
SLIP RESISTANCE	DIN 51097	19° B
FIRE RESISTANCE	DIN EN 13501-1:2010	Bf1-s1
STATIC BEND RESISTANCE	DIN EN 408	73.8N/mm ²
TENSILE MODULUS	DIN EN 408	16700 N/mm ²
LEVEL OF RESISTANCE TO TERMITES	EN117	DC M
DURABILITY TO BIOLOGICAL AGENTS	EN 350:2016	Class 1
FORMALDEHYDE EMISSION	GB/T17657-2013	E1(0.1mg/m ² h)
THICKNESS RATE OF SWELL	DIN EN 15534-1	0,04
LENGTH RATE OF SWELL	DIN EN 15534-1	0,6%
ASPECT		The surface texture with smooth grain and smooth texture. Natural grain and color may vary as this is a natural fiber product.

NOTES: The product must be installed according to our installation guidelines for natural woods. Physical properties based mature hardwood specimens can vary greatly depending on the origin and growth conditions. Wood is a natural element: the dimensions of the boards may vary up to a +/- 3% difference compared to the nominal measures. Panorama should be oiled with specific oil for Panorama in two coats, 48 hours apart, immediately after installation. It is recommended to carry out the oiling in mild temperatures and in the absence of rain for the next two days to promote proper absorption. Maintenance requires 1\2 oilings per year with specific oil for Panorama. Discolouration, slight rippling or micro-cracks may occur particularly in the areas most exposed to the sun, they are not critical and should be considered normal due to the course that is typical of any natural essence. Treatments with specific oil for Panorama are helpful in containing these natural phenomena.

PANORAMA - WENGE

TECHNICAL FEATURES

FEATURE	STANDARD	RESULTS
BOARD DIMENSIONS	/	18 x 139 x 1860 mm
DENSITY	/	1150 kg/m ³
BRINELL HARDNESS	NF EN 1534-2010	8,61 Kg/mm ²
UV EXPOSURE	ISO 4892-3	ΔE = 1,69
DIMENSIONAL STABILITY (24H IN WATER AT 20°C)	/	0,02
FORMALDEHYDE EMISSION	EN 717-1 : 2004	0,001 mg/m ³
DURABILITY	CEN /TS 15083-1 EN EN 350	Class 1
FIRE RESISTANCE	EN 13501-1 : 2007 + A1 : 2009	Bfl-S1
TENSILE MODULUS	EN ISO 178-2019	14060 MPa
SLIP RESISTANCE	CEN /TS 15676 : 2007	SRV (sec) 74
ASPECT		The surface texture with smooth grain and smooth texture. Natural grain and color may vary as this is a natural fiber product.

NOTES: The product must be installed according to our installation guidelines for natural woods. Physical properties based mature hardwood specimens can vary greatly depending on the origin and growth conditions. Wood is a natural element: the dimensions of the boards may vary up to a +/- 3% difference compared to the nominal measures. Panorama should be oiled with specific oil for Panorama in two coats, 48 hours apart, immediately after installation. It is recommended to carry out the oiling in mild temperatures and in the absence of rain for the next two days to promote proper absorption. Maintenance requires 1\2 oilings per year with specific oil for Panorama. Discolouration, slight rippling or micro-cracks may occur particularly in the areas most exposed to the sun, they are not critical and should be considered normal due to the course that is typical of any natural essence. Treatments with specific oil for Panorama are helpful in containing these natural phenomena.

IPE LAPACHO

TECHNICAL FEATURES (SOURCE TROPIX, CIRAD UE)

Dimensions	19x90x1000/2150 mm, 21x100x950/2150 mm, 21x140x950/2150 mm Please, always check the availability of profiles and lengths
Origin	Brazil, Bolivia
Commercial name	Ipe
Family	Bigoniaceae
Scientific name	Tabebuia Serratifolia
Durability to fungi and mildew	Class 1: molto durabile (UNI CEN/TS 15083-1/2005)

	Mean	Standard Deviation
Density	1.04 g/cm ³	0.9
Monning hardness	14.6	3.1
Coef of volumetric shrinkage	0.68%	0.09
Tangential shrinkage	6.4%	0.9%
Radial shrinkage	5.1%	0.5%
Crushing strength	95 MPa	10
Static bending strength	166 MPa	28
Modulus of elasticity	22760 MPa	2244

NOTES

The product must be installed according to our installation guidelines for natural woods.

Physical properties based on mature hardwood specimens can vary greatly depending on the origin and growth conditions.

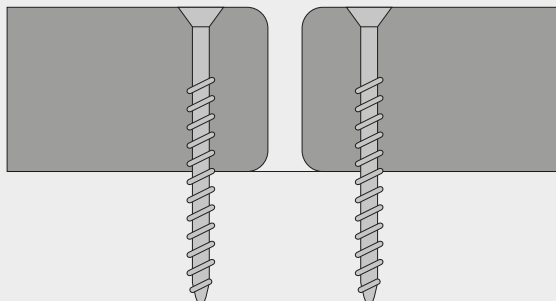
Wood is a natural element: the dimensions of the boards may vary up to a +/- 3% difference compared to the nominal measures.

The staves must be cut to size and end-butteted at 90°.

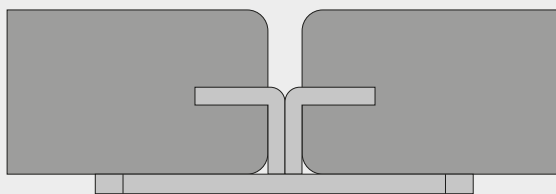
The colour of the staves is naturally very shaded.

INSTALLATION METHODS

VISIBLE SCREWS INSTALLATION

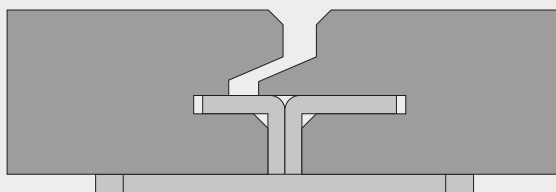


CLASSIC CLIP INSTALLATION



HIDDEN CLIP INSTALLATION (VALINGE)

A 5% excess in boards calculation must be considered and added to the standard waste.



All draws are provided as a guide.
For technical draws, please contact our technical department.

ANGELIM AMARGOSO

TECHNICAL FEATURES (SOURCE TROPIX, CIRAD UE)

Dimensions	19 x 90 x 1000 / 4600 mm
Origin	Brazil
Commercial name	Angelim Amargoso
Family	Fabaceae
Scientific name	Hymenolobium spp
Durability to fungi and mildew	Class 3: moderatamente durabile (UNI CEN/TS 15083-1/2005)

	Mean	Standard Deviation
Density	0.80 g/cm ³	0.07
Monning hardness	6.3	1.7
Coef of volumetric shrinkage	0.67%	0.09
Tangential shrinkage	8.3%	1.5%
Radial shrinkage	4.9%	0.8%
Crushing strength	67 MPa	7
Static bending strength	117 MPa	15
Modulus of elasticity	28870 MPa	3828

NOTES

The product must be installed according to our installation guidelines for natural woods.

Physical properties based on mature hardwood specimens can vary greatly depending on the origin and growth conditions.

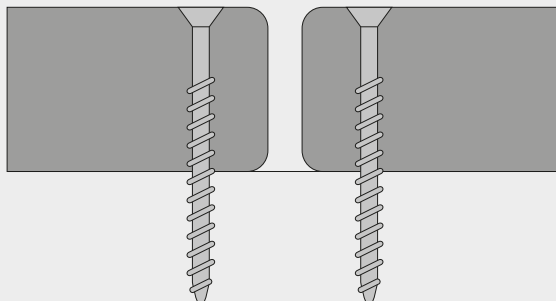
Wood is a natural element: the dimensions of the boards may vary up to a +/- 3% difference compared to the nominal measures.

The staves must be cut to size and end-butteted at 90°.

The colour of the staves is naturally very shaded.

INSTALLATION METHODS

VISIBLE SCREWS INSTALLATION



All draws are provided as a guide.
For technical draws, please contact our technical department.

TEAK

TECHNICAL FEATURES (SOURCE TROPIX, CIRAD UE)

Dimensions	19x90x900/2400 mm, 19x120x900/2400 mm Please, always check the availability of profiles and lengths
Origin	Asia
Commercial name	Teak
Family	Lamiaceae
Scientific name	Tectona Grandis
Durability to fungi and mildew	Class 1: molto durabile (UNI CEN/TS 15083-1/2005)

	Mean	Standard Deviation
Density	0.67 g/cm ³	0.06
Monning hardness	4.2	1.3
Coef of volumetric shrinkage	0.34%	0.07%
Tangential shrinkage	4.7%	0.8%
Radial shrinkage	2.6%	0.4%
Crushing strength	56 MPa	6
Static bending strength	98 MPa	13
Modulus of elasticity	13740 MPa	2749

NOTES

The product must be installed according to our installation guidelines for natural woods.

Physical properties based on mature hardwood specimens can vary greatly depending on the origin and growth conditions.

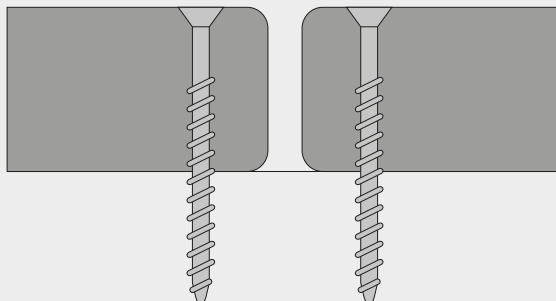
Wood is a natural element: the dimensions of the boards may vary up to a +/- 3% difference compared to the nominal measures.

The staves must be cut to size and end-buttet at 90°.

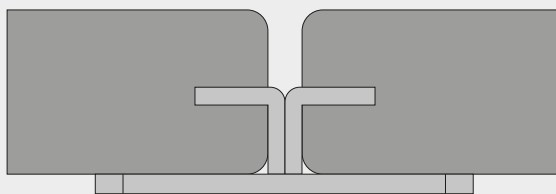
The colour of the staves is naturally very shaded.

INSTALLATION METHODS

VISIBLE SCREWS INSTALLATION

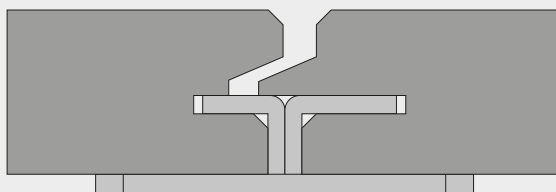


CLASSIC CLIP INSTALLATION



HIDDEN CLIP INSTALLATION (VALINGE)

A 5% excess in boards calculation must be considered and added to the standard waste.



All draws are provided as a guide.
For technical draws, please contact our technical department.

INSTALLATION GUIDELINES

UNDERSTRUCTURES AND NATURAL WOODS - INSTALLATION GUIDELINES

Instructions about Preparation of Soil and Installation of the Substructure are to be applied both to Natural Woods and Composite Woods - Ultrashield and Décowood.

While for all specific instructions about Composite Woods, please see next pages.

Not only about great quality and look. The procedure for installing your decking highly contributes to meeting the expectations of the customer. Carefully following the installation guidelines significantly limits the risk that the wood, a natural living element, might move, therefore compromising the overall tightness of the floor. We recommend that you read carefully the following requirements. If you encounter any questions or concerns during the design or installation, please do not hesitate to contact us and we will be happy to offer you all the assistance needed. The general instructions about the installation of joists are suitable for hardwood as well as Ultrashield and Décowood. The specific instructions for Ultrashield and Décowood installation are in the next few pages.

STORAGE

Déco profiles must always be stored horizontally, on stable, flat surfaces, taking care not to allow materials to protrude beyond the support surface and not to load them with additional weights. Uneven surfaces such as ground or grass, or otherwise unstable surfaces, are not suitable.

Déco profiles are supplied packaged, strapped and protected with film on special pallets to allow the materials to rest correctly; if the pallets are repaired, the same conditions must be repeated. It is compulsory to store the materials under cover, away from direct sunlight, rain and humidity, in dry and ventilated places. Failure to comply with the storage instructions will result in the guarantee being invalidated.

PREPARATION OF THE UNDERSTRUCTURE

Joists must be as straight as possible. It is mandatory that all ends of the boards are placed on and fixed to a joist, designing and assembling the understructure as a result, by doubling the joists where two ends meet. This is because the heads of the boards are the most sensitive area for the movement of the wood and it is important to be well anchored to the substructure, being them fixed with two screws or clips.

1. INSTALLATION ON AN UNSTABLE GROUND (FIG. 1)

In case of installation on an unstable ground (Fig.1) it is necessary to dig the ground according to the dimensions of the joists that will be used and perfectly level the surface. Then, spread a layer of fabric to prevent the regrowth of the grass. In order to stabilize the surface upon which the joists will be laid, it is necessary to use concrete beams sized 40x40cm or similar. It is recommended to build a double frame with two perpendicular rows of joists, the first with 50cm distance (according to the strength of the first frame), the second with a distance of about 30cm (in case of installation with clips) or about 45 cm (in case of installation with screws): this will make the structure perfectly stable. In order to achieve the best stability, Déco recommends to build the substructure in durable wood, even in case of different heights and uneven soil. This recommendation applies in case of installation of hardwood decking as well as Ultrashield or Décowood.

2. INSTALLATION ON A PIERCEABLE GROUND (FIG. 2)

The ground floor must be made flat with a slope of about 2 cm per linear meter. To correct an uneven slope you can use "compensation heels" - that is wooden pieces derived from the same joists and fixed to the ground and/or the joists. The distance between joists must be no more than 30 cm in case of installation with clips and about 45 cm in case of installation with visible screws.

Joists must be fixed to the ground with bolts at least every 50 cm.

3. INSTALLATION ON AN UNPIERCEABLE GROUND (FIG. 3)

If the joists cannot be fixed to the ground (e.g. terrace with waterproof sheeting), build a structure with braces (Fig. 3) or a double frame (see above 1st point).

INSTALLATION OF DECKING

For a proper installation of decking, it is important to wash the boards before proceeding. This is to ensure that the tannins in the wood is released therefore preventing it from staining the areas adjacent to the pavement. A tolerance of 3% in the dimension of boards is acceptable. Because of that, before installation all boards must be cut at 90 degrees in order to uniform lengths. There are two ways to install decking: with visible screws and with clips.

4. VISIBLE SCREWS (FIG. 4)

Visible screws are undoubtedly the most secure method because they allow the boards to anchor directly to the substructure. Despite the overall look is considered less attractive by some, this remains the preferred method.

The procedure is as follows:

- Install the first row of boards, which must be perfectly straight.
- Once having installed all the boards, it will be necessary to use a chisel (or any suitable object to act as a lever) to space the boards evenly at 5 mm.
- It is always necessary to make a pilot hole (Fig. 4.1) and countersink before installing the screws. These must be at a distance of approx. 2 cm from the ends and the sides of the boards in order to avoid cracks in the wood (Fig. 4.2).
- The boards are then installed with the convex side towards the previous ones and firstly fixed with screws only at the ends. The end has to be pushed to the board, this way also determining the correct distance between the two strips (no less than 5 mm) (Fig. 4.2).
- Finally screw the boards to the joists (Fig. 4.2), using a wiretap to draw a perfectly straight line and this way improve the look of the pavement (Fig. 4.3).

5. CLIPS (FIG. 5)

The clips do not allow the boards to be directly fixed to the joists, thus exposing the flooring to the risk of movements. This type of installation is therefore recommended only with proven stability woods. Moreover, the inspection and / or replacement of damaged boards will be very difficult with this type of installation.

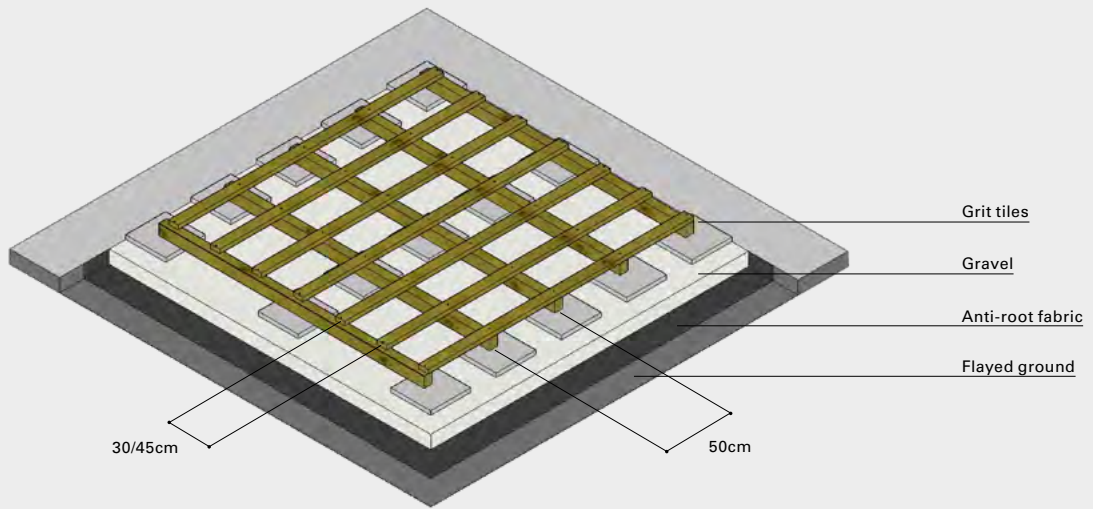
The procedure is as follows:

- Install the first row of boards, which must be perfectly straight and secured with screws on the very outer side (Fig. 5.1).
- Insert the clips into the groove, ensuring that they are properly seated (Fig. 5.2).
- Tighten the clips to the underneath joist (Fig. 5.1).
- Proceed this way with the further rows, then check every 3 or 4 boards that the distance between the first and the last ones is always the same along the whole line. Otherwise you should review the parallels.
- Complete the deck and fix the outer side of the last board with screws.
- A possible pattern is shown in Fig. 5.3.

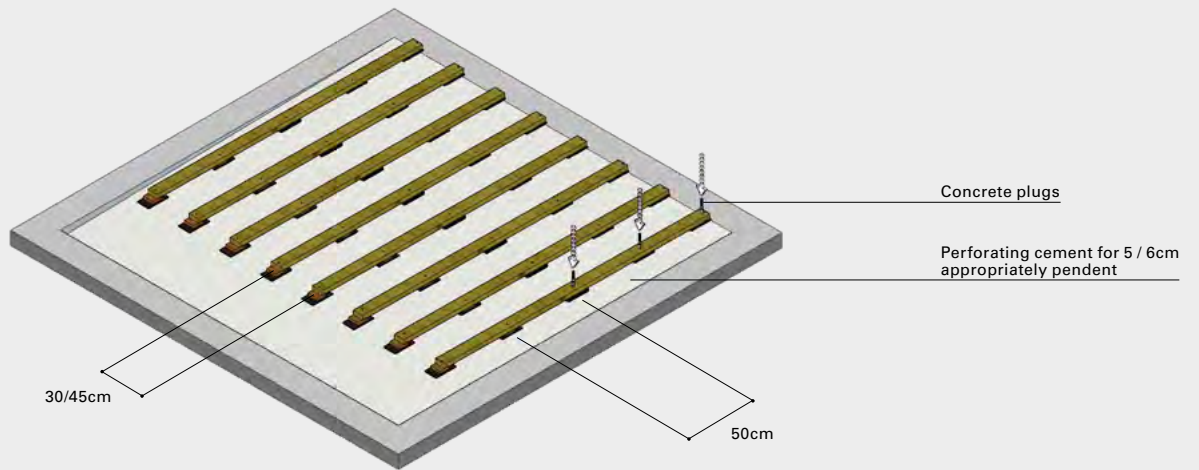
OILING (OPTIONAL)

Once decking is installed, it is recommended to apply two coats of exterior oil, 72 hours one after the other. This operation, to be repeated every 6 months/1 year depending on weather conditions, it is necessary to preserve the colour of the wood and prevent it from cracking, especially on the ends of the boards. On the other hand, the lack of this kind of maintenance does not affect the stability of the floor at all.

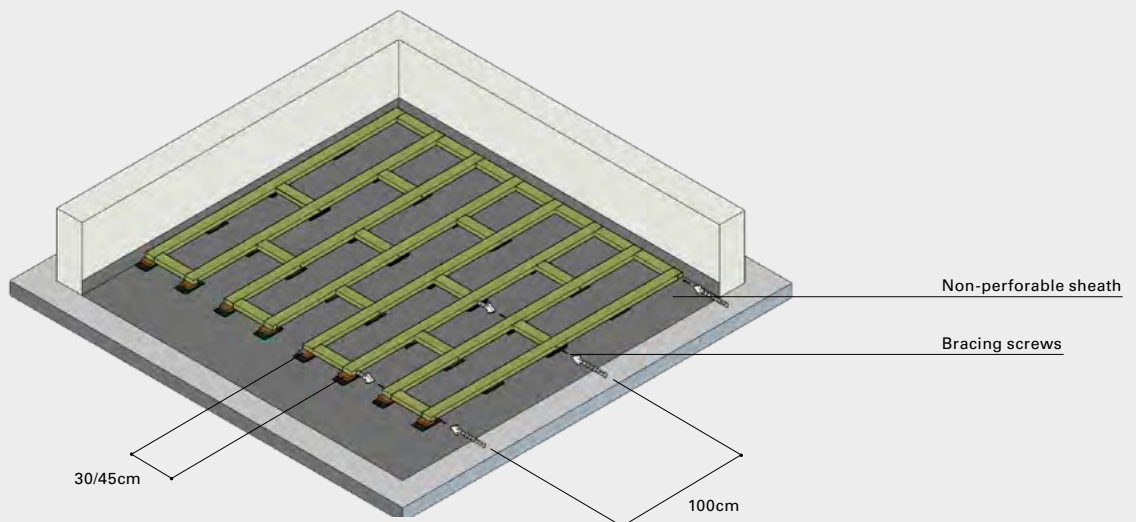
1 INSTALLATION ON UNSTABLE SURFACE



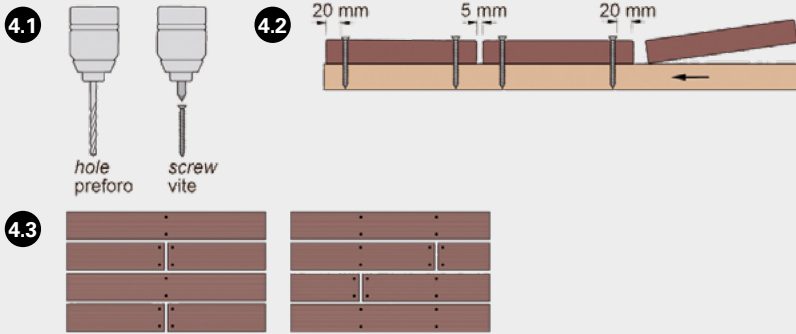
2 INSTALLATION ON CONCRETE



3 INSTALLATION ON WATERPROOF SHEETING

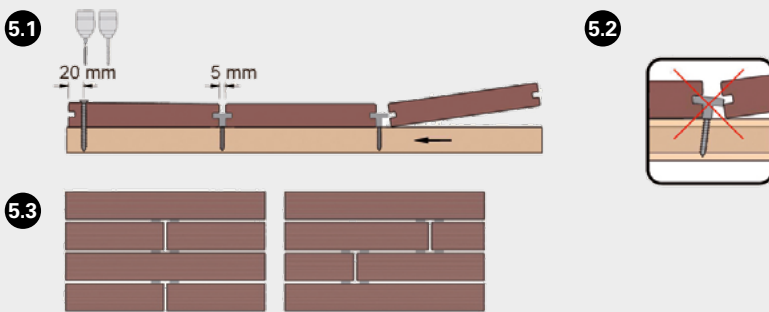


4 INSTALLATION WITH VISIBLE SCREWS



Boards must be fixed with screws in correspondence with each joist. Every board end must be fixed with two screws. If necessary, double the joist.

5 INSTALLATION WITH CLIPS



Boards must be fixed with screws in correspondence with each joist. Every board end must be fixed with two screws. If necessary, double the joist.

ULTRASHIELD - INSTALLATION GUIDELINES

Déco invites you to strictly respect the installation instructions so that you can enjoy your floor without any problem in the years to come. The installation guidelines are illustrated on the following pages.

GENERAL INFORMATION

Ultrashield is capped with an advanced premium shield. The unique formula of the shield ensures its colour stays the same over a much longer period than first gen WPCs. Its fading is not visible by the human eyes.

- Please use original items only. Maintain the distances and dimensions specified in the installation guidelines.
- To prevent the floor from collapsing or deforming it is necessary to make the ground flat and stable.
- Regarding the boards dimension, consider both the tolerance of the material (+/-3%) and its expansion.
- Direct contact between the boards and the grass or the ground floor must be avoided.
- Never install the pavement with a temperature below 0 degrees.
- To allow water to flow and thus prevent its accumulation, it is important to install the decking with a slope of around 1%, on a stable grass free soil. To achieve this we recommend to lay fabric before assembling the substructure.
- Before proceeding with the installation of the boards it is necessary to carefully follow the installation instructions for the understructures (see pag.165)
- Ultrashield is not suitable for sustaining vehicles.

STORAGE

Déco profiles must always be stored horizontally, on stable, flat surfaces, taking care not to allow materials to protrude beyond the support surface and not to load them with additional weights. Uneven surfaces such as ground or grass, or otherwise unstable surfaces, are not suitable.

Déco profiles are supplied packaged, strapped and protected with film on special pallets to allow the materials to rest correctly; if the pallets are repaired, the same conditions must be repeated. It is compulsory to store the materials under cover, away from direct sunlight, rain and humidity, in dry and ventilated places. Failure to comply with the storage instructions will result in the guarantee being invalidated.

1. INSTALLATION OF JOISTS (FIG. 1)

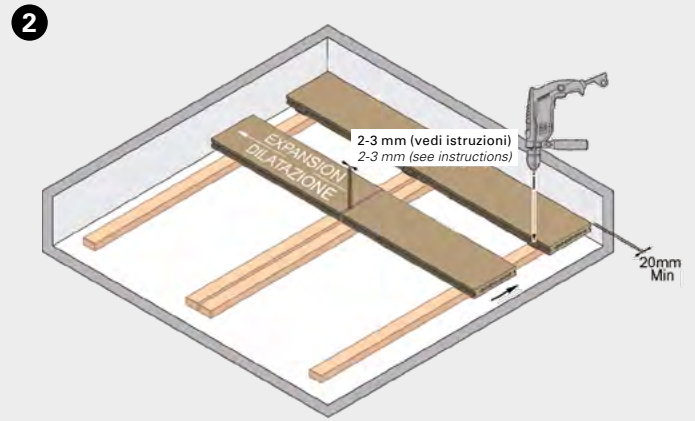
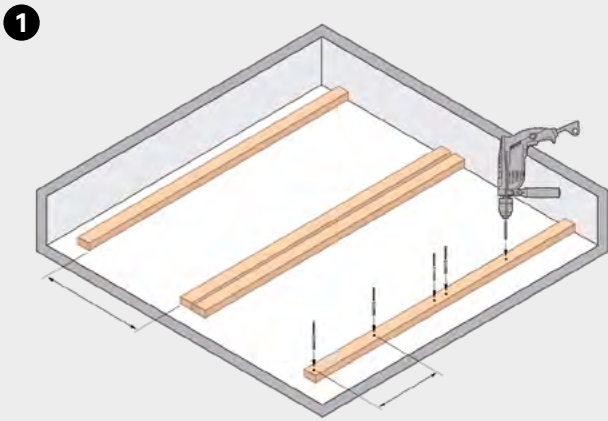
- In order to build a solid, stable and long-lasting understructure, Déco recommends to always use durable wood joists, That's mandatory in case of installation on water-proof sheeting or unstable surface.
- The joists must be fixed to the concrete with screws or bolts every 50 cm.
- The distance between the joists must not exceed 30/35 cm. Should the flooring be installed diagonally, it is necessary to reduce the distance between the joists at 20-25 cm.
- The boards having length between 35 and 80 cm must be supported by three joists: consider this in the design and installation of the joists. Should the joist be not large enough to host two clips, it is necessary to double the joists where two ends of the boards meet. That's because every end must be supported by and fixed to a joist.
- In case of installation on unstable ground (eg. gravel, sand, soil) or unscrewable surface, refer to the relative installation procedures.

2. INSTALLATION OF THE FLOOR (FIG. 2)

- Always remember to leave at least a 2 cm space from the walls or other obstacles to allow the expansion of the material.
- The distance between two ends of the boards should be of 6 mm, while on the side it is determined by the clip.
- A tolerance of 3% in the dimension of boards is acceptable. Because of that, before installation all boards must be cut at 90 degrees in order to uniform lengths
- The ends of the boards cannot exceed the joist of more than 5 cm
- Install the first board with the start / end clip.
- To fix the clips, you must make a pilot hole with a peak of 2.5 mm and countersink to prevent the boards from cracking or breaking.
- To get a better finish you can use the end cap in Ultrashield or the lateral frame, in which case you will need to drill holes in the bottom of the board so as to make the water drain.
- Ultrashield must be installed with two kind of clips: Expansion Clip and Blocking Clip, both with their own purpose. Expansion Clip = allows the board to dilate; Blocking Clip = one of its edge blocks the boards so as to force the dilation in the desired direction. This unique system has been designed in order to control the dilation of the boards and to avoid the any movements due to foot traffic. The aim is to keep uniform the gaps between the boards. In order to achieve the best result Déco recommends to place the plastic and stainless steel clips according to the type of installation (see figures 2.1-2.5).
- Boards must be fixed with clips in correspondence with each joist. The ends of two boards must not share the same clips, but on the contrary every end of the boards must be fixed to the joist with two dedicated clips. If necessary, double the joist.
- To build steps and other finishing like lateral or windows/doors frames it is possible to use the Step and finishing profile. This profile has a finished corner to be installed with start/end clips and a grooved corner to be fixed with expansion/blocking clips.

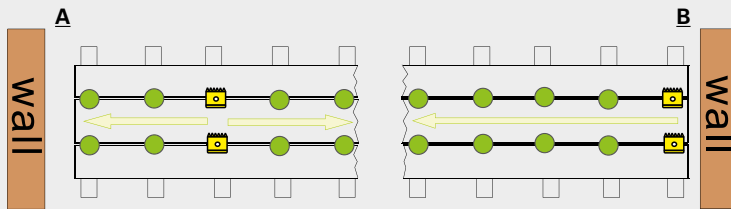
3. ROUTINE MAINTENANCE

Ultrashield flooring can be cleaned with a simple brush or high pressure water. In the latter case it is necessary to maintain a minimum distance of 30 cm from the boards. If you need to clean the floor with intensity, just rub it hard. In case of very strong dirt, you can use a mild soap, but remember not to use a detergent that may affect the synthetic component of the material. It is recommended not to lay items such as hot barbecues, hot pots, torches or the like on the floor without using any protection.



PARALLEL LAYOUT

2.1 SITUATION 1: ONLY ONE BOARD IN A ROW



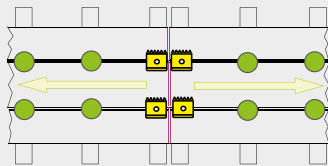
A / CEC clip against wall, min. 2 mm gaps per 1 m board.

B / Locking clip against the wall no gap.

A / If there is no wall on both sides or walls on both sides: locking down in the middle remember to leave min. 2 mm gap for every meter of decking board, when CEC clips against wall.

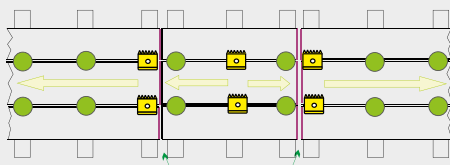
B / If only one side has a wall: lock down closest to the wall. Lock down where the two boards meet on butt joints.

2.2 SITUATION 2: TWO BOARDS IN A ROW



Lock down along the central line on the butt joints and the neighbor boards at where they meet the middle board.

2.3 SITUATION 3: THREE OR MORE BOARDS IN A ROW

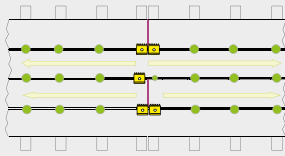


In between middle boards min 2 mm gap on each side

Middle boards must be fixed with 1 locking clip in the middle. The 2 external boards must be fixed with a locking clip wherever they meet with the heads of the central boards in order to force the expansion outwards. Leave a 2 mm distance from the walls for each meter of board.

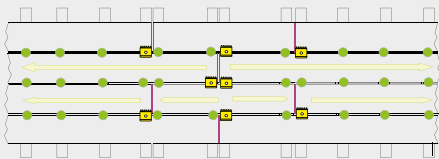
BRICK LAYOUT

2.4 SITUATION 1: 2-1-2 LAYOUT









Lock down along the central line on the butt joints. Remember to leave min. 2 mm gap for every meter of decking board, when CEC clip against wall

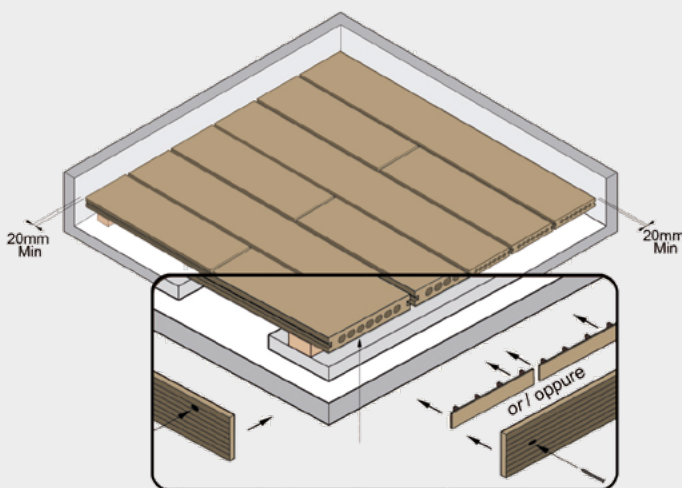
2.5 SITUATION 2: LAYOUT 3-2-3 OR MORE (4-3-4, 5-4-5, etc)



Middle boards must be fixed with 1 locking clip in the middle. The 2 external boards must be fixed with a locking clip wherever they meet with the heads of the central boards in order to force the expansion outwards. Leave a 2 mm distance from the walls for each meter of board.

	Locking Clip	Move		Lock	<p>Note: Always one locking clip on one board. The mounting clips must all be laid from the same direction throughout the flooring</p>
	CEC Clip				
	Direction of expansion and contraction			The bite side is the lock side	

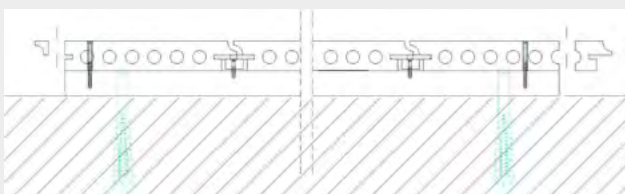
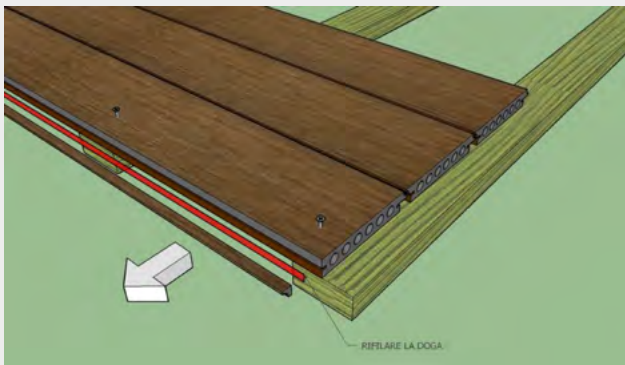
3



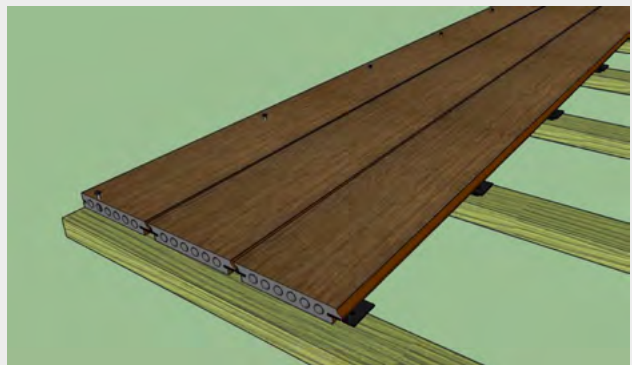
If you use finishing profiles, make a hole in the bottom of the profile for water disposal.

ULTRASHIELD - LAYING INSTRUCTIONS FOR INVISIBLE PROFILE

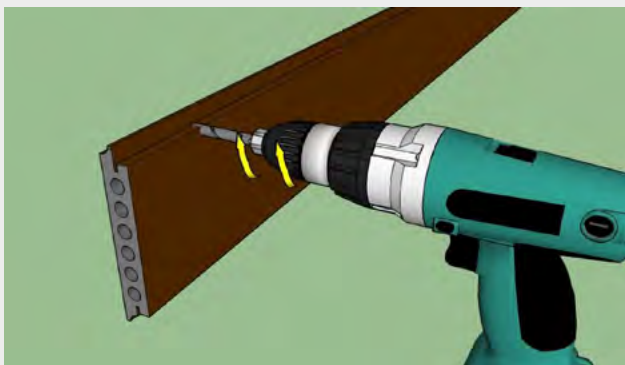
- 1** The first and last stave must be trimmed and fastened with an exposed screw with a diameter 1 mm wider than the thread of the locking screw.



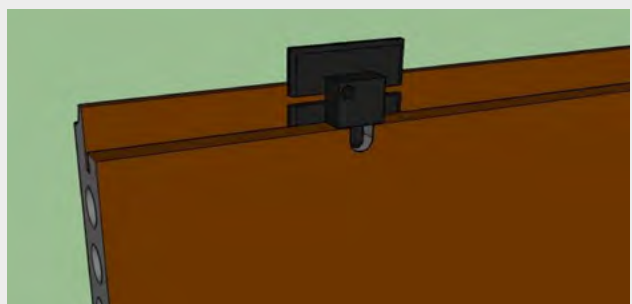
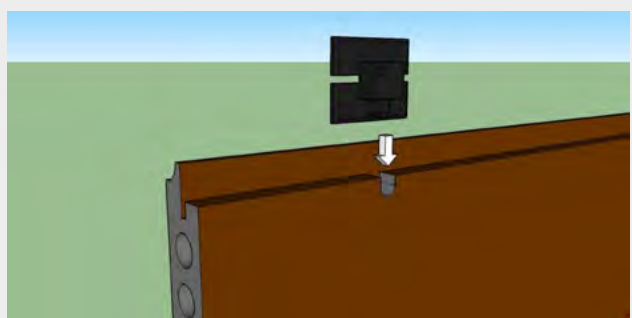
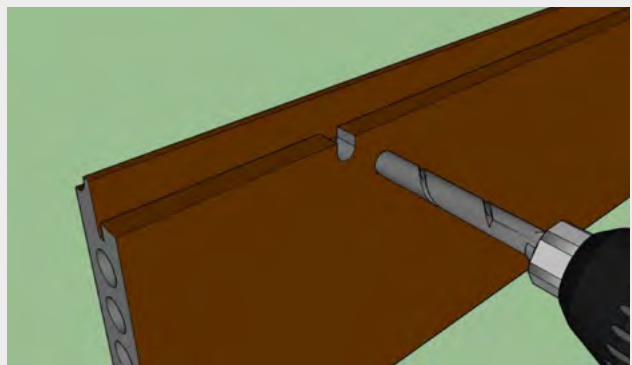
- 2** Prior to inserting the screw, pre-drill the hole with the screwscrew.



- 3** For the correct insertion of the locking clips, a hole must be drilled in the back of the stave on the lower lip of the 'male' milling with an 8 mm diameter drill bit.



- 4** For guidance on the position of the clamping clips see Ultrashield installation instructions.



DÉCOWOOD - INSTALLATION GUIDELINES

Déco invites you to strictly respect the installation instructions so that you can enjoy your floor without any problem in the years to come. The installation guidelines are illustrated on the following pages.

GENERAL INFORMATION

Décowood is a composite material made of wood and synthetic components. Since wood is a natural product, small colour differences can arise. Décowood will tend to slightly lighten up in the first weeks after installation, after which the colour will settle. All this gives the floor a pleasant natural effect and does not affect at all the durability and quality of the product.

- Maintain the distances and dimensions specified in the installation guidelines.
- To prevent the floor from collapsing or deforming it is necessary to make the ground flat and stable.
- Regarding the boards dimension, consider both the tolerance of the material (+/-3%) and its expansion.
- Direct contact between the boards and the grass or the ground floor must be avoided.
- Never install the pavement with a temperature below 0 degrees.
- To allow water to flow and thus prevent its accumulation, it is important to install the decking with a slope of around 1%, on a stable grass free soil. To achieve this we recommend to lay fabric before assembling the substructure.
- Before proceeding with the installation of the boards it is necessary to carefully follow the installation instructions for the understructures (see pag.165).
- Décowood is not suitable for sustaining vehicles.

STORAGE

Déco profiles must always be stored horizontally, on stable, flat surfaces, taking care not to allow materials to protrude beyond the support surface and not to load them with additional weights. Uneven surfaces such as ground or grass, or otherwise unstable surfaces, are not suitable. Déco profiles are supplied packaged, strapped and protected with film on special pallets to allow the materials to rest correctly; if the pallets are repaired, the same conditions must be repeated. It is compulsory to store the materials under cover, away from direct sunlight, rain and humidity, in dry and ventilated places. Failure to comply with the storage instructions will result in the guarantee being invalidated.

1. INSTALLATION OF JOISTS (Fig. 1)

- Décowood joists are to be used just in case of installation on concrete. However Déco recommends to use durable wood joists. That's mandatory in case of installation on water-proof sheeting or unstable surface.
- The joists must be fixed to the concrete with screws or bolts every 50 cm.
- The distance between the joists must not exceed 30/35 cm. Should the flooring be installed diagonally, it is necessary to reduce the distance between the joists at 20-25 cm.
- The boards shorter than 80 cm must be supported by three joists: consider this in the design and installation of the joists. Should the joist be not large enough to host two clips, it is necessary to double the joists where two ends of the boards meet. That's because every end must be supported by and fixed to a joist.
- In case of use of Décowood joists, remember that they also expand. It is then necessary to leave a minimum distance of 8mm where they are parallel, adjacent to one another, and 15 mm whereas their ends meet.
- In case of installation on unstable ground (eg. gravel, sand, soil) or unscrewable surface, refer to the relative installation procedures.

2. INSTALLATION OF THE FLOOR (Fig. 2)

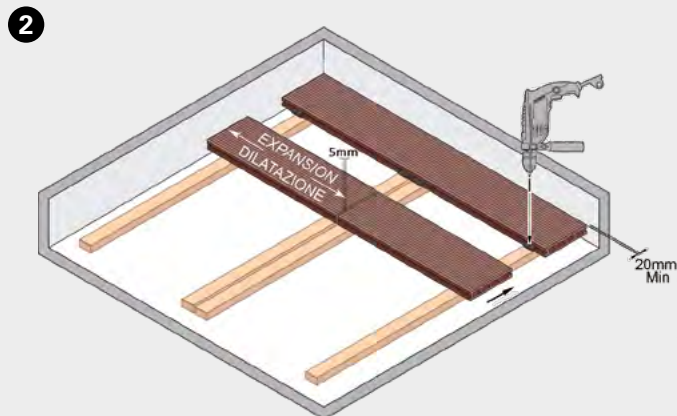
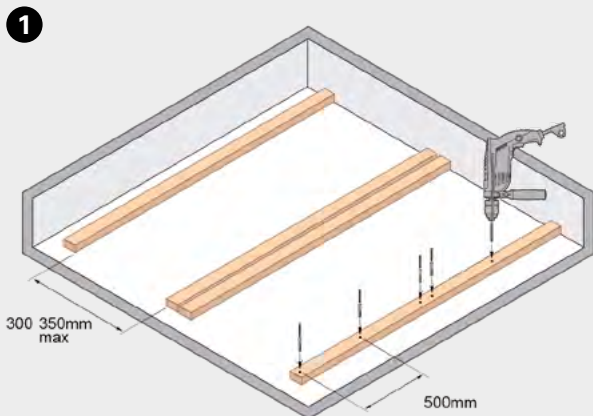
- Always remember to leave at least a 2 cm space from the walls or other obstacles to allow the expansion of the material.
- The distance between two ends of the boards should be of 6 mm, while on the side it is determined by the clip.
- The ends of the boards cannot exceed the joist of more than 5 cm.
- Install the first board with the start / end clip.
- To fix the clips, you must make a pilot hole with a peak of 2.5 mm and countersink to prevent the boards from cracking or breaking.
- Place the first board and proceed the same way with the clip. To get a better finish you can use the end cap in Décowood or the lateral frame, in which case you will need to drill holes in the bottom of the board so as to make the water drain.
- Décowood must be installed with two kind of clips: Expansion Clip and Blocking Clip, both with their own purpose. Expansion Clip = allows the board to dilate; Blocking Clip = one of its edge blocks the boards so as to force the dilation in the desired direction.

This unique system has been designed in order to control the dilation of the boards and to avoid the any movements due to foot traffic. The aim is to keep uniform the gaps between the boards. In order to achieve the best result Déco recommends to place the plastic and stainless steel clips according to the type of installation (see fig.da 2.1-2.5).

- Boards must be fixed with clips in correspondence with each joist. The ends of two boards must not share the same clips, but on the contrary every end of the boards must be fixed to the joist with two dedicated clips. If necessary, double the joist. Décowood Poetto and Décowood Plus Solid are installed with just one kind of stainless steel clip.

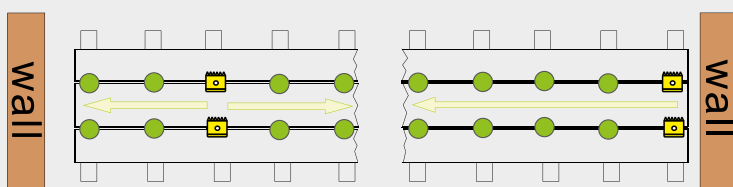
3. ROUTINE MAINTENANCE

Décowood flooring can be cleaned with a simple brush or high pressure water. In the latter case it is necessary to maintain a minimum distance of 30 cm from the boards. If you need to clean the floor with intensity, just rub it hard. You may then notice a difference in colour on the surface. This is because the natural colour resurfaces, but it will fade again over time. In case of very strong dirt, you can use a mild soap, but remember not to use a detergent that may affect the synthetic component of the material. It is recommended not to lay items such as hot barbecues, hot pots, torches or the like on the floor without using any protection.



PARALLEL LAYOUT

2.1 SITUATION 1: ONLY ONE BOARD IN A ROW

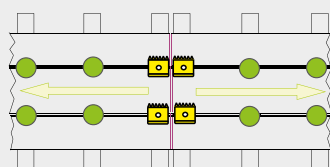


A / CEC clip against wall, min. 2,5 mm gaps per 1 m board.
 B / Locking clip against the wall no gap.

A / If there is no wall on both sides or walls on both sides: locking down in the middle remember to leave min. 2 mm gap for every meter of decking board, when CEC clips against wall.

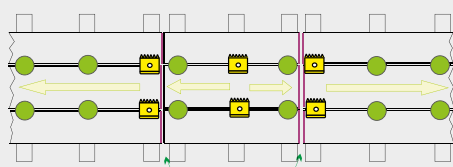
B / If only one side has a wall: lock down closest to the wall. Lock down where the two boards meet on butt joints.

2.2 SITUATION 2: TWO BOARDS IN A ROW



Lock down along the central line on the butt joints and the neighbor boards at where they meet the middle board

2.3 SITUAZIONE 3: FILA CONTRE O PIÙ DOGHE



Nelle doghe centrali min. 2 mm di distanza su ogni estremità

Middle boards must be fixed with 1 locking clip in the middle. The 2 external boards must be fixed with a locking clip wherever they meet with the heads of the central boards in order to force the expansion outwards. Leave a 2 mm distance from the walls for each meter of board.

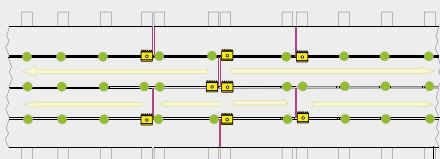
BRICK LAYOUT

2.4 SITUATION 1: 2-1-2 LAYOUT



Lock down along the central line on the butt joints. Remember to leave min. 2 mm gap for every meter of decking board, when CEC clip against wall

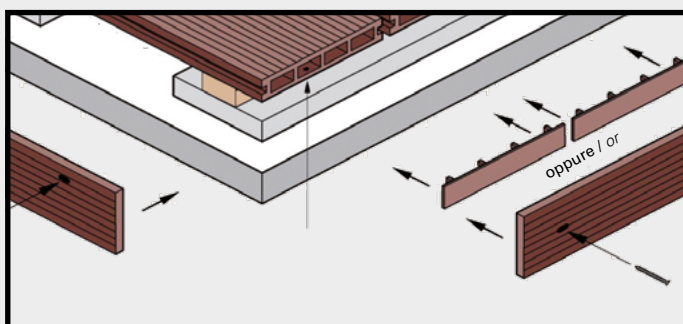
2.5 SITUATION 2: LAYOUT 3-2-3 OR MORE (4-3-4, 5-4-5, etc)



Middle boards must be fixed with 1 locking clip in the middle. The 2 external boards must be fixed with a locking clip wherever they meet with the heads of the central boards in order to force the expansion outwards. Leave a 2 mm distance from the walls for each meter of board.

	Locking Clip	Move		Lock	<p>Note: Always one locking clip on one board. The mounting clips must all be laid from the same direction throughout the flooring</p>
	CEC Clip				
	Direction of expansion and contraction			The bite side is the lock side	

3



If you use finishing profiles, make a hole in the bottom of the profile for water disposal.

ULTRASHIELD TWIX - INSTALLATION GUIDELINES

Déco invites you to strictly respect the installation instructions so that you can enjoy your covering without any problem in the years to come.

Prior to installing Twix, it is recommended that you check with local building codes for any special requirements or restrictions. The diagrams and instructions outlined in this guide are for illustration purposes only and are not meant or implied to replace a licensed professional. Any construction or use of Déco must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction and use of this product.

STORAGE

Déco profiles must always be stored horizontally, on stable, flat surfaces, taking care not to allow materials to protrude beyond the support surface and not to load them with additional weights. Uneven surfaces such as ground or grass, or otherwise unstable surfaces, are not suitable.

Déco profiles are supplied packaged, strapped and protected with film on special pallets to allow the materials to rest correctly; if the pallets are repaired, the same conditions must be repeated. It is compulsory to store the materials under cover, away from direct sunlight, rain and humidity, in dry and ventilated places. Failure to comply with the storage instructions will result in the guarantee being invalidated.

SAFETY

When dealing with any type of construction project, it is necessary to wear appropriate safety equipment to avoid any risk of injuries. When handling, cutting and installing Déco products, Déco recommends the following equipment: gloves, a respiratory protection, long sleeves, pants, and safety glasses.

TOOLS

Standard woodworking tools may be used. It is recommended that all blades have a carbide tip. Standard stainless steel or acceptable coated deck screws and nails are recommended.

ENVIRONMENT

A clean, smooth, flat, and strong surface is needed to install Déco products correctly. Please check with local building codes before ever installing any type of cladding. If installation does not occur immediately, Déco products need to be put on a flat surface at all times. It should never be put on a surface that is not flat.

PLANNING

Plan a layout for your cladding before starting it to ensure the best possible looking cladding for your project. We recommend drawing out a site plan of your proposed project that you intend to do to minimize errors and make your perfect cladding.

CONSTRUCTION

Déco Ultrashield Twix is not intended for use as columns, support posts, beams, joist stringers, support against a force, or other primary load-bearing members. Déco must be supported by a code-compliant substructure. Twix modules are great for retrofits, but these products cannot be installed on existing cladding boards.

VENTILATION

Déco products cannot be directly installed onto a flat surface. It must be installed onto a substructure, so there is adequate and unobstructed air flow under the cladding to prevent excessive water absorption. A minimum of 20 mm of continuous net free area + 8 mm clip distance under the siding surface is required for adequate ventilation on all siding, so air can circulate between adjacent members to promote drainage and drying.

HEAT AND FIRE

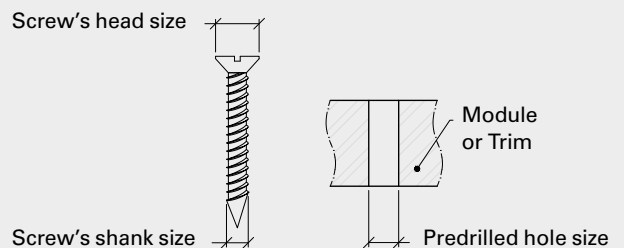
Excessive heat on the surface of Déco products from external sources such as, but not limited to, fire or reflection of focussing sunlight from some optical objects can potentially harm Déco products. Installation near low-emissivity glass can potentially damage the products. This type of glass, designed to prevent overheating of internal environments, can cause a high accumulation of heat on external surfaces. This extreme elevation of surface temperatures, which exceeds that of normal exposure, can possibly cause Déco products to melt, sag, warp, discolor, increase expansion/contraction, and accelerate weathering. If there is concern about the installation in the presence of low-emissivity glass, it is advisable to contact the company in order to have adequate suggestions.

FASTENERS

When fastening Déco products all screws that are face fastened should always be driven in at a 90 degree angle to the siding surface. Toe nailing/screwing should never be done to the products. An extra joist should be added if a 90 degree angle cannot be driven into the board. Use white chalk, straight boards, or string lines as templates for straight lines. Never use colored chalk. Colored chalk will permanently stain Déco products and are highly not recommended. All screws that are face fixed should always be stainless steel. Depending on the screws that you use when face fixing, there could be potential bulging or mushrooming. It is recommended to take care of these mushrooms/bulges by taking a rubber mallet and patting them down to give your siding a better look. When choosing which screws to use, always check first with your local home centers and hardware stores to see if they have screws that are engineered specifically for composite wood. These screws will always work and give Déco products the best looking outcome, using other screws that are not recommended for composite could potentially damage/harm the cladding. If you are unsure which screw to use, contact your manufacturer for more information.

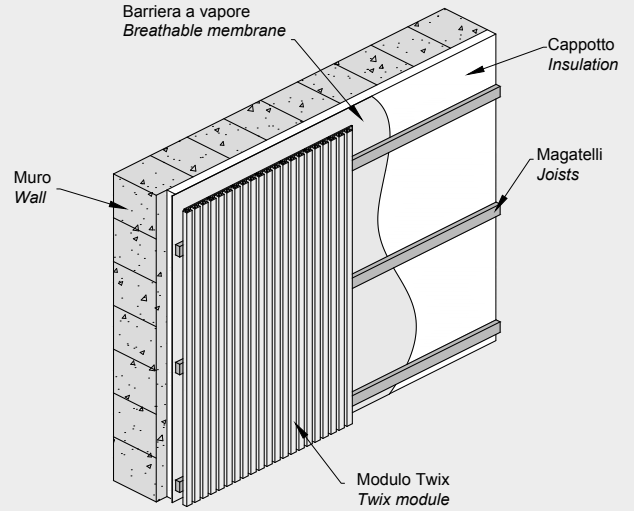
PREDRILL

When face fixing, it is recommended to predrill the holes slightly larger on the profiles and the trims to allow for expansion and contraction response to temperature change. The predrilled hole size should be larger than the screw thread size, from 1.5 mm to 2 mm. Moreover, the predrilled hole size should also be smaller than the screw head size, at least 2 mm. A washer can be applied if the predrilled hole size is smaller than the screw head size below 2 mm.



UNDER CONSTRUCTION

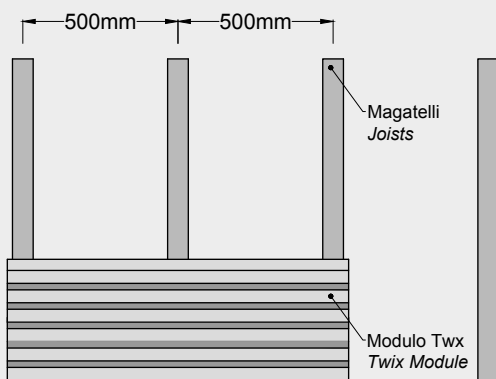
We recommend for the under construction aluminum or pressure treated wood joists. Each Twix board needs to be supported by a joist no more than 500mm from center to center. For Claddy and Full Claddy profiles each Twix board needs to be supported by a joist no more than 400 mm from center to center. Extra care is required in order to provide sufficient joisting in and around obstacles such as windows, fascia's, soffits, guttering, ventilation points etc. On the right is an example of the layers that would occur in a typical installation, but a licensed professional should always be consulted prior to any installation. A building professional should be consulted regarding vapor barriers and insulation for your project.



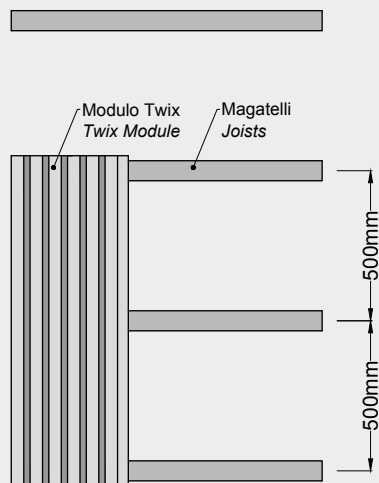
JOISTS INSTALLATION

- The joist needs to have a minimum thickness of 20mm.
- Wood joists should be fixed into position at a maximum of 500mm centers, 400 mm for Claddy and Full Claddy profiles .
- All joists needs to be flat and leveled against the wall surface use shims if necessary.

N.B. l'interasse massimo va ridotto a 400 mm per la corretta installazione dei moduli Claddy e Full Claddy.



Horizontal installation



Vertical installation

LOCKING TWIX LATERAL MODULES

Since the composite wood must allow for expansion and contraction due to temperature change, the board must be locked at one or two adjacent fixed points depending on length to allow the remaining board to expand and contract freely. In the case there is a need to lock the board, the Clip comes with a separate hole as shown in figure 1,2 and 3. Do not lock any other clips for the same board.

The distance between the two ends of the planks must be calculated according to the following formula:
 $0.04\text{mm (coefficient of linear expansion)} \times \text{length of plank} \times \text{temperature (max or min of its area - installation temperature)}$.

e.g. the installation of 2.2 metre long planks at 20 degrees in Italy (max. temperature 40 degrees) $0.04 \times 2.2 \times (40-20) = 0.04 \times 2.2 \times 20 = 1.76\text{mm}$, rounded to 2mm.

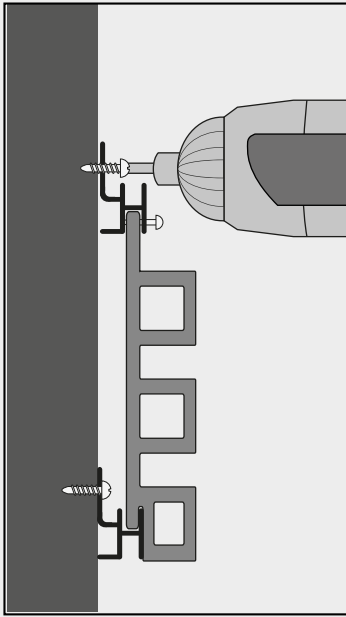


Figura 1 / Figure 1

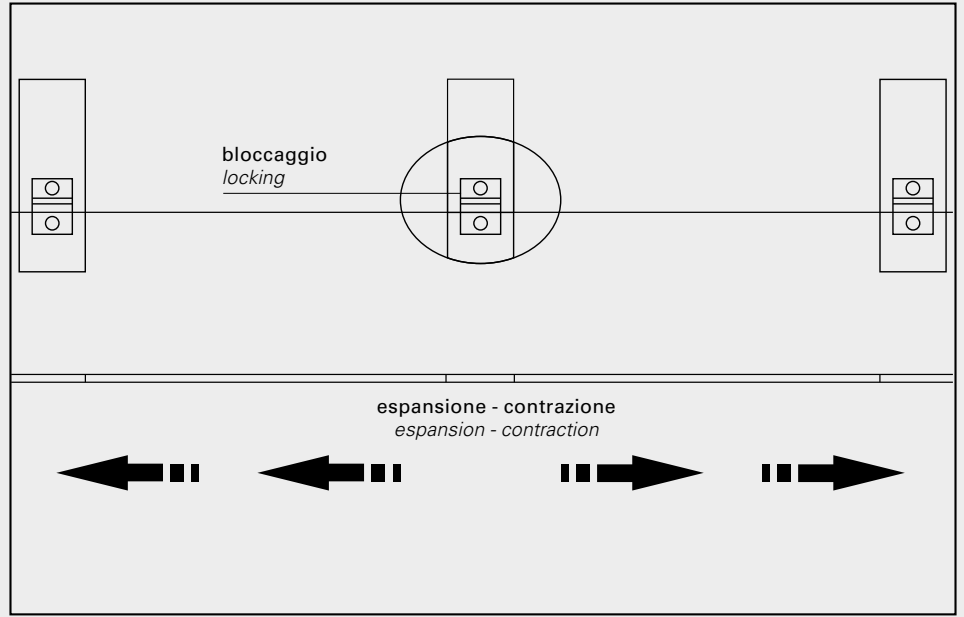


Figura 2 / Figure 2

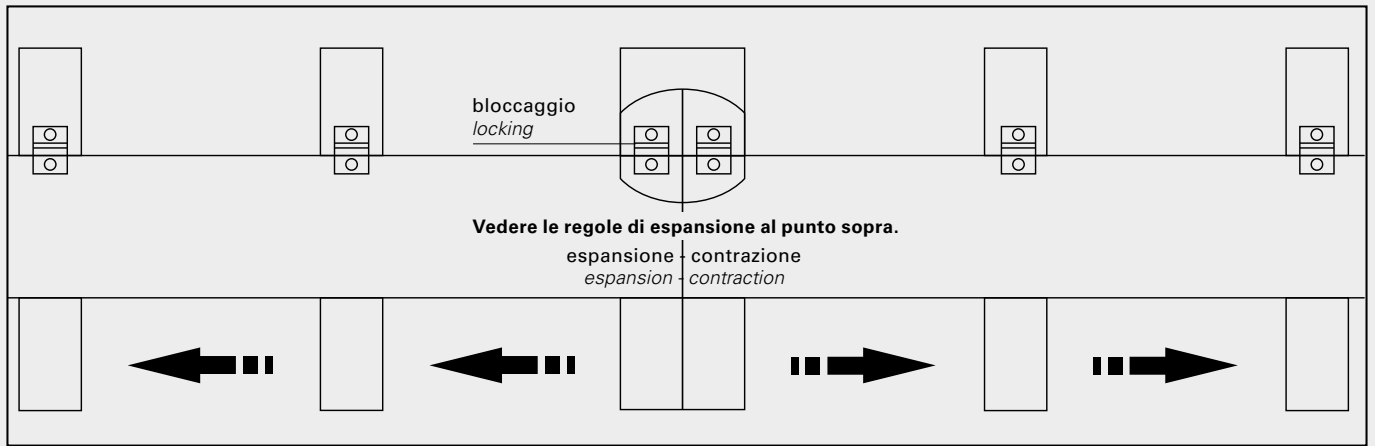
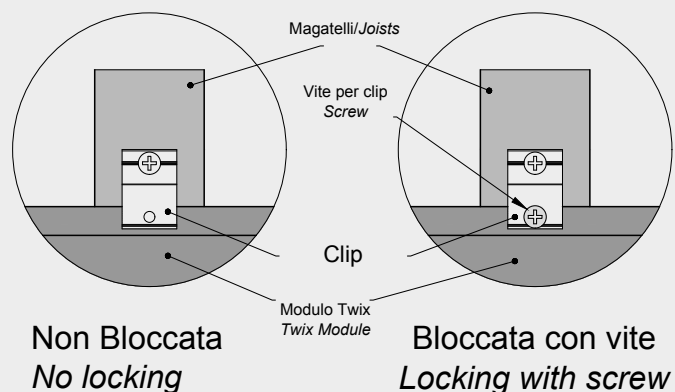


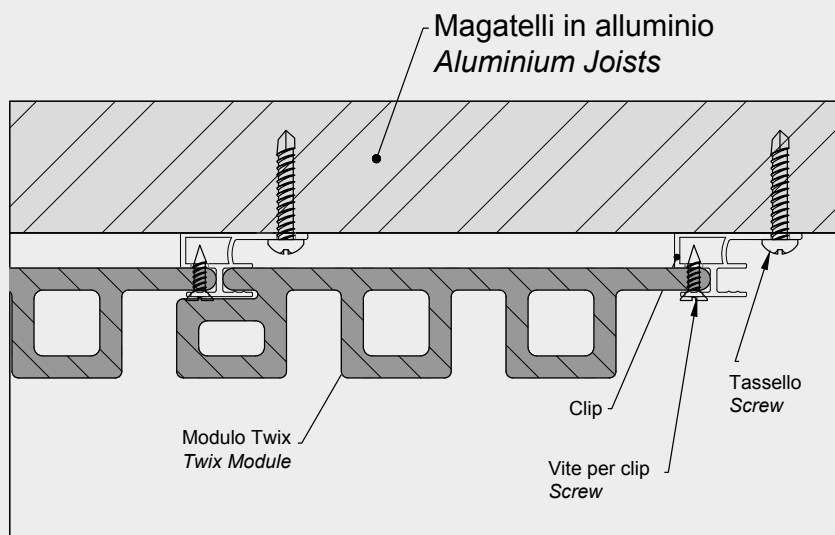
Figura 3 / Figure 3

LOCKING TWIX LATERAL MODULES

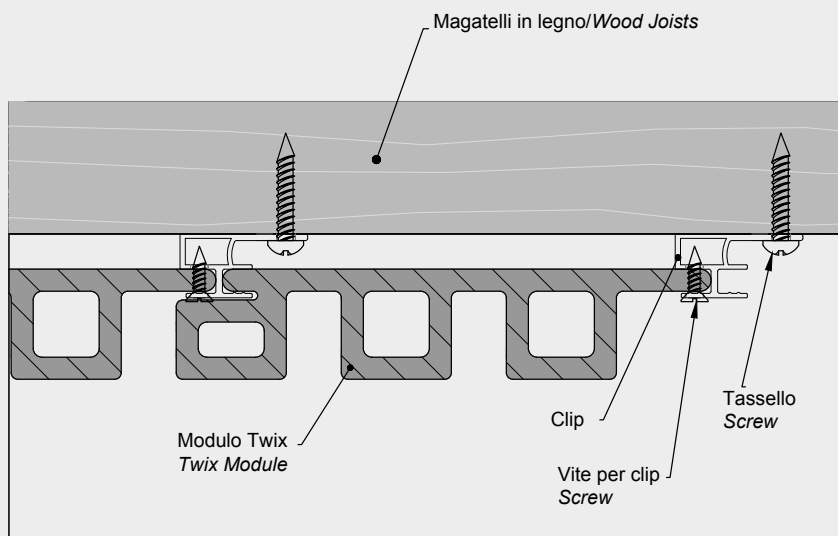
Note: do not lock every clip.
Each plank needs only one locking point for horizontal or ceiling installation and two close locking points for vertical installation.



VERTICAL INSTALLATION ALUMINIUM JOISTS

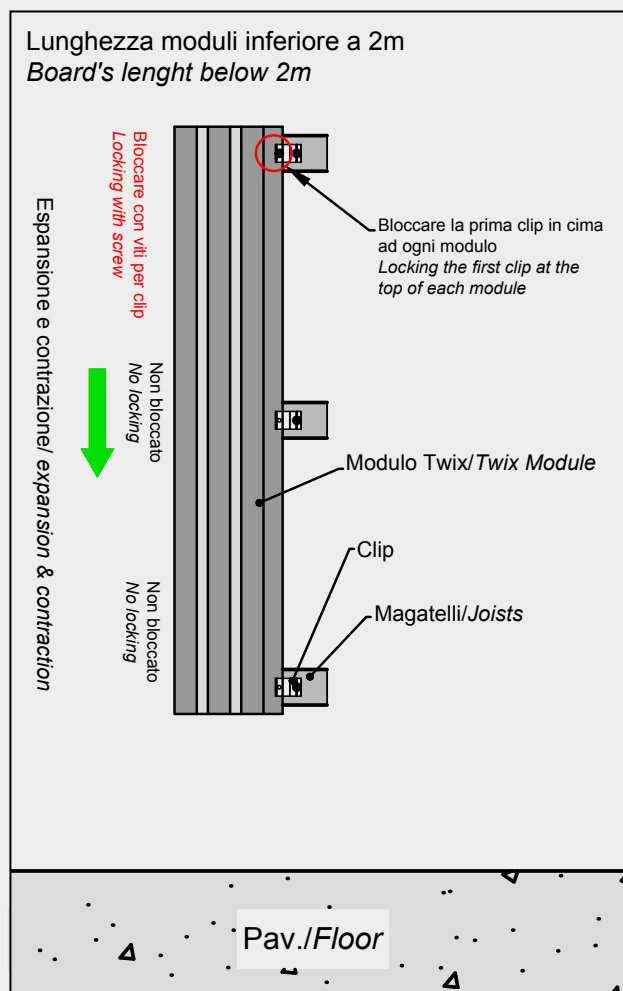


VERTICAL INSTALLATION WOOD JOISTS

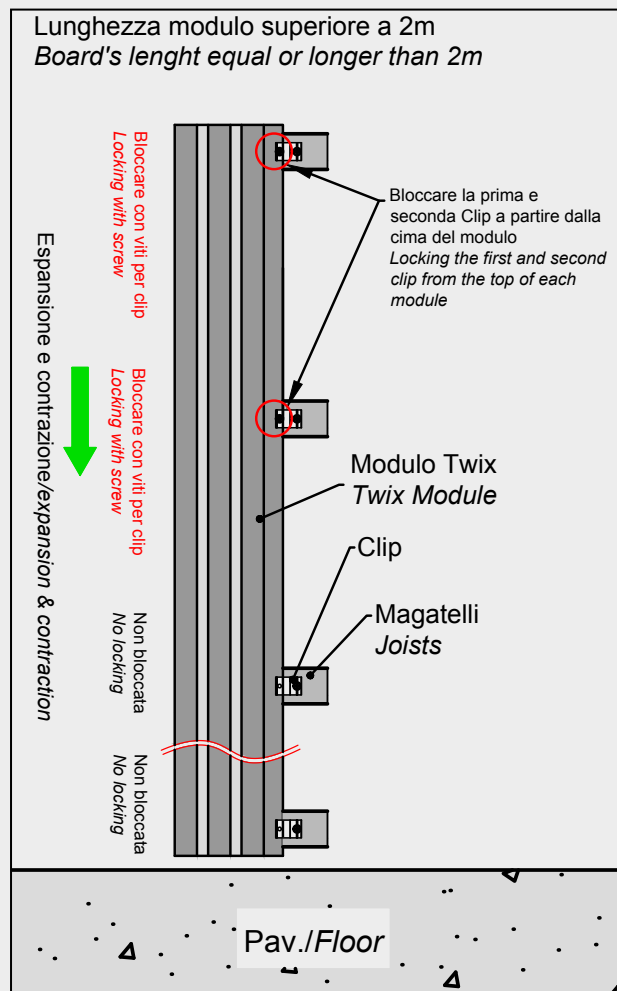


VERTICAL INSTALLATION

When installing vertically, it is required to lock the clip at the top of the board to allow the remaining board to expand and contract freely.



Note: When the board's length is below 2m, lock only the first clip at the top of the board.

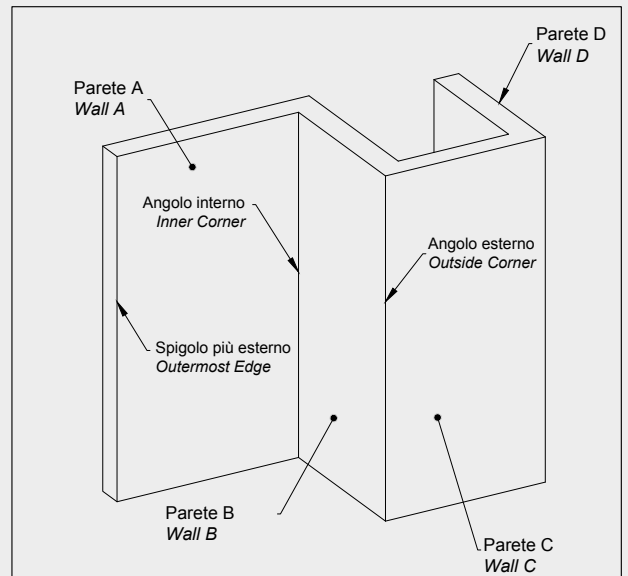


Note: When the board's length is equal to or longer than 2m, it is required to lock the first and second clip counted from the top of the board. Do not lock any other clip for the same board.

FRAMING

The frame needs to be level before installing Twix. The diagram down below shows the wall replicating different scenarios potentially occurring when installing the siding boards.

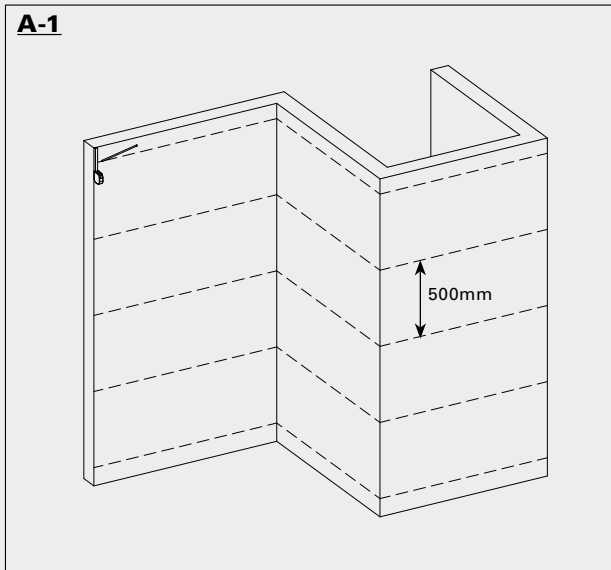
- Wall A: Wall between the Outermost Edge and the Inside Corner
- Wall B: Wall between the Inside Corner and the Outside Corner
- Wall C: Wall between two Outside Corners
- Wall D: Wall between the Outside Corner and the Outermost Edge



SUBSTRUCTURE

1

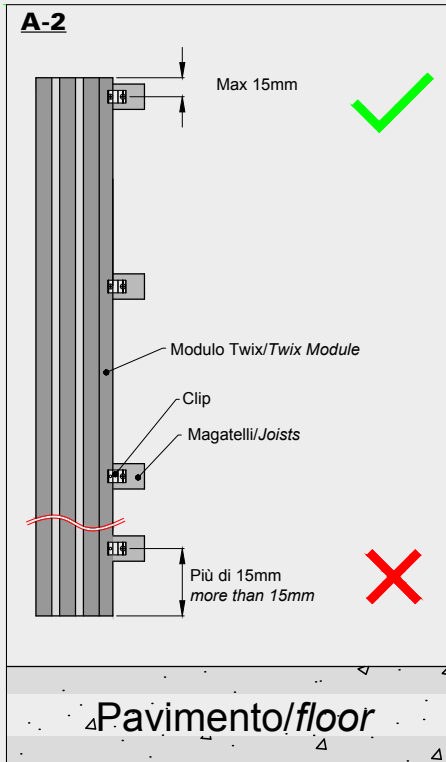
Measure and chalk the joists according to the span data specified before.



Notes:

We are using wood joists for this installation. If you are using aluminum joists, please use recommended screws. An adequate span between the joists is required to keep the Cladding boards from bending as shown in diagram A-1. Please review the distances specified before.

It is recommended there should be a clip on both ends of the same board at the max distance of 15mm against the corresponding end edge to avoid the board's end from warping as shown in diagram A-2.

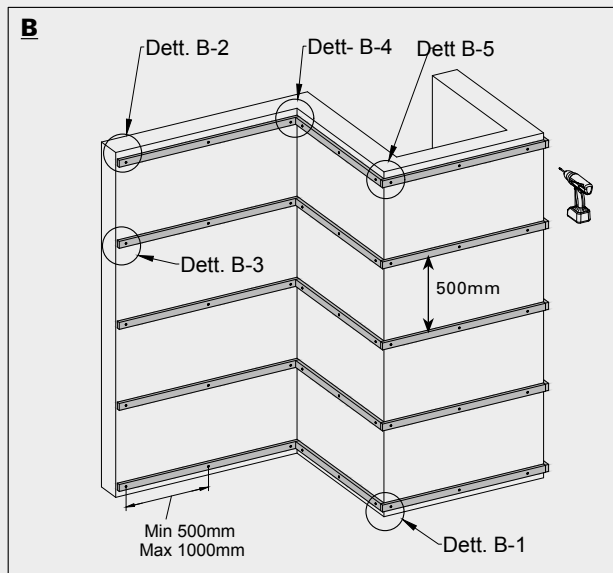


Notes:

We recommend using one entire piece of profile cladding board across the wall height to have no horizontal gap presented on the wall cladding. It is not recommended to use multiple pieces of profile cladding board across the height of the wall. If it is not possible, please plan the layout to optimize the gaps presentation of the cladding panel, such as location the gap in the higher position where it is out of eyesight. On the one hand, it is vital to have a gap between the profile cladding board to allow for expansion and contraction in response to the temperature change.

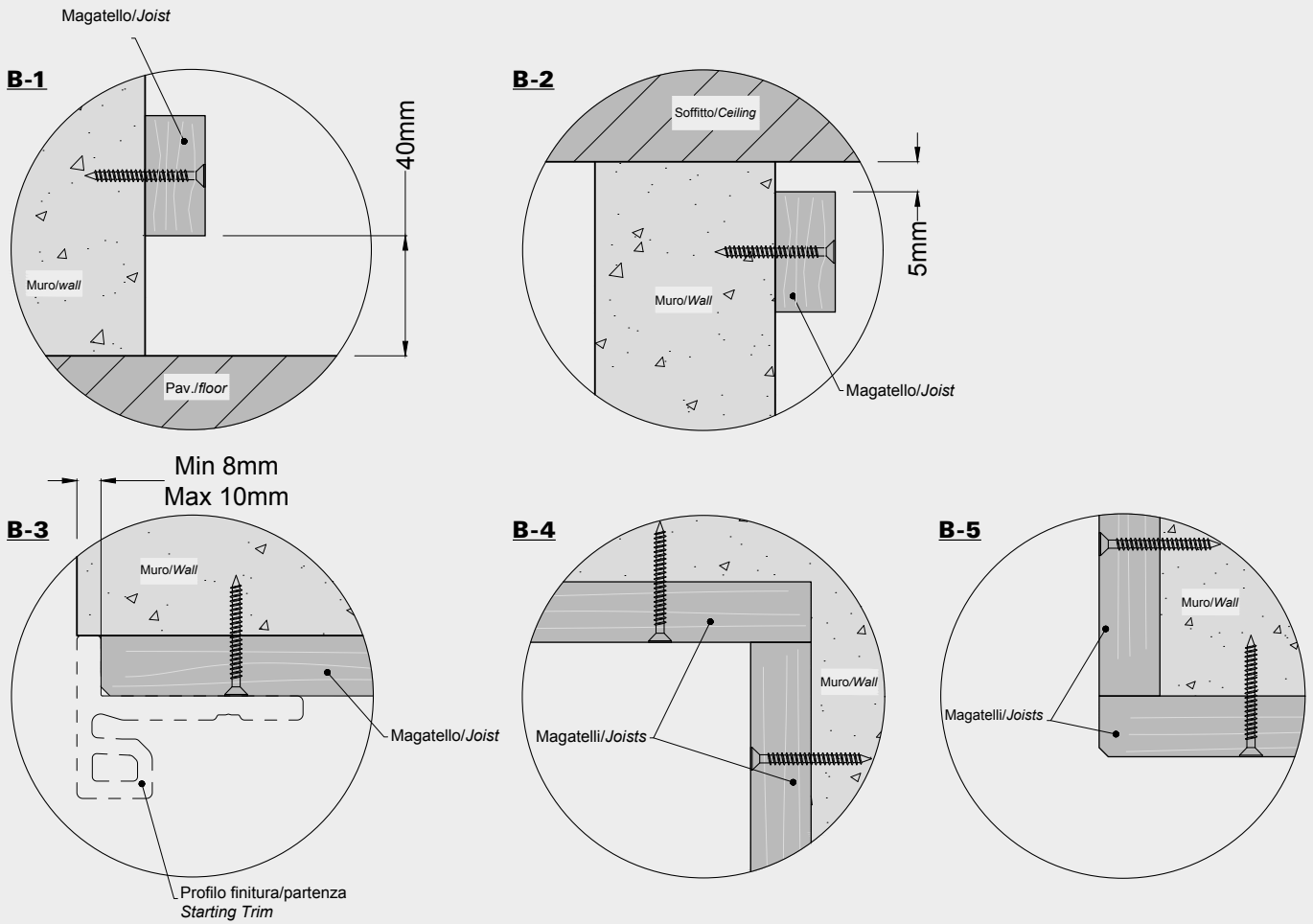
2

Fix the joists onto the wall that you intend to install with screws in distance at least 500mm and max to 1000mm on center.



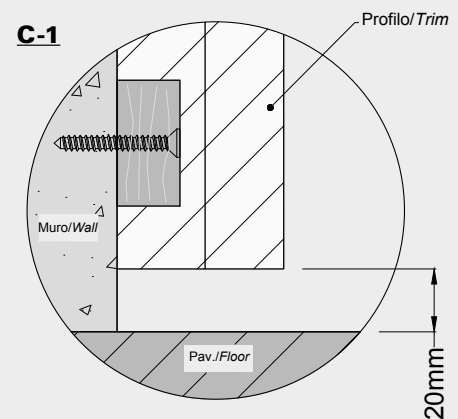
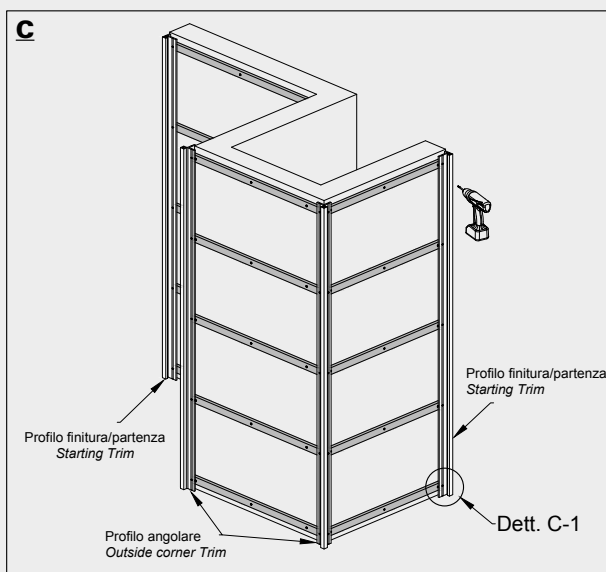
Notes:

A minimum gap of 40mm needs to be left at the bottom of each joist opposite the floor as shown in diagram B-1.
 A gap of 5mm needs to be left between the Ceiling and the joist's end as shown in diagram B-2.
 For the Outermost Edge, please install according to diagram B-3.
 For the Inside Corner, please install according to diagram B-4.
 For the Outside Corner, please install according to diagram B-5.



TRIM INSTALLATION

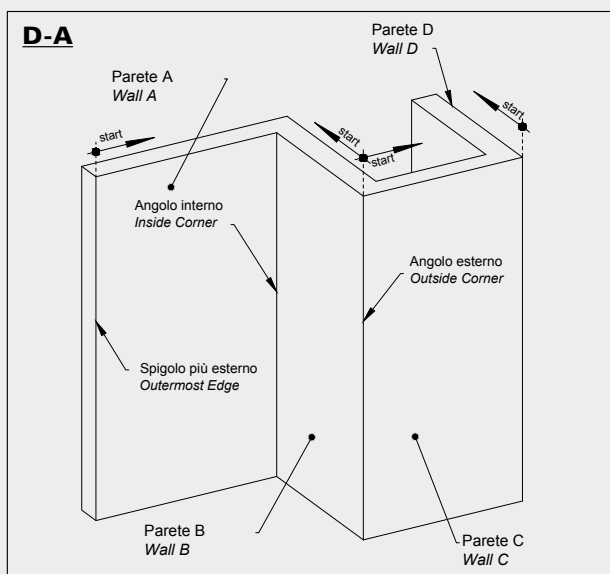
- 3** Secure the Starting Trim onto the wall outermost edge joist and the Outside Corner Trim onto the wall outside corner joist with screws in distance at least 500mm and max to 1000mm on center, respectively as shown in diagram C.



Notes: A minimum gap of 20mm needs to be left between the bottom of trims and the floor as shown in diagram C-1.

INSTALLATION OF TWIX MODULES

- 4** Installing the first course. Start the installation according to diagram D-A.

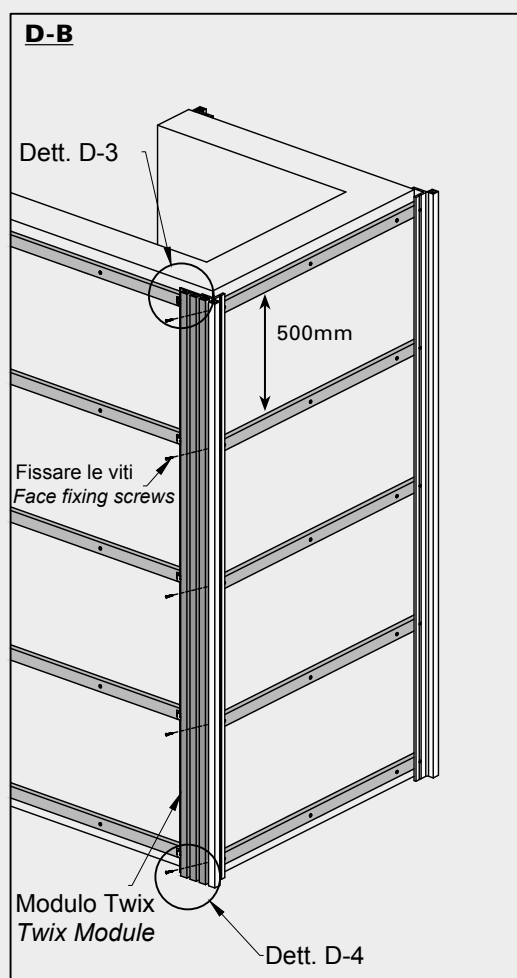


Wall A between the outermost edge and the inside corner: start from the outermost edge.

Wall B between the inside corner and the outside corner: start from the outside corner.

Wall C between two outside corners: start from one of the outside corners.

Wall D between the outside corner and the outermost edge: start from the outside corner.



Put the first Twix module in place over the trims, then face fix it the side next to the Starting Trim onto the joist with screws, and fasten it's another side onto the joist with Clip, as shown in Diagram D-B.

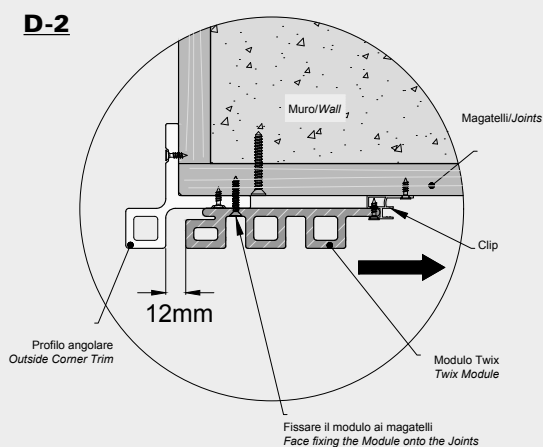
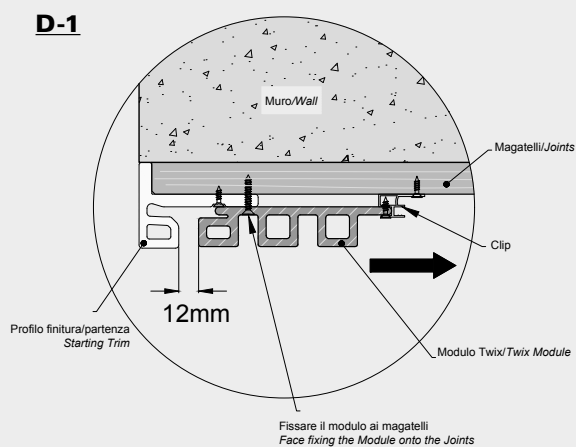
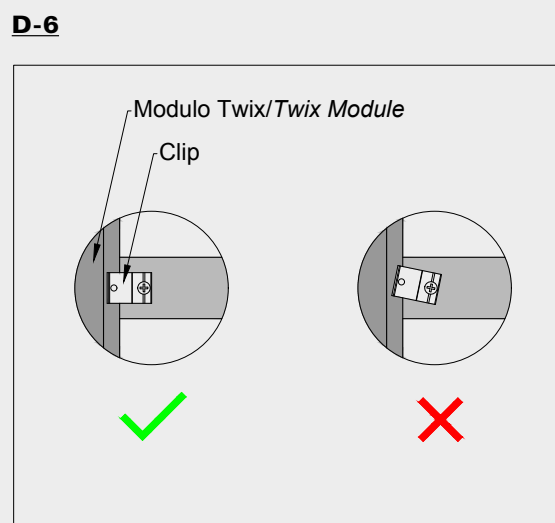
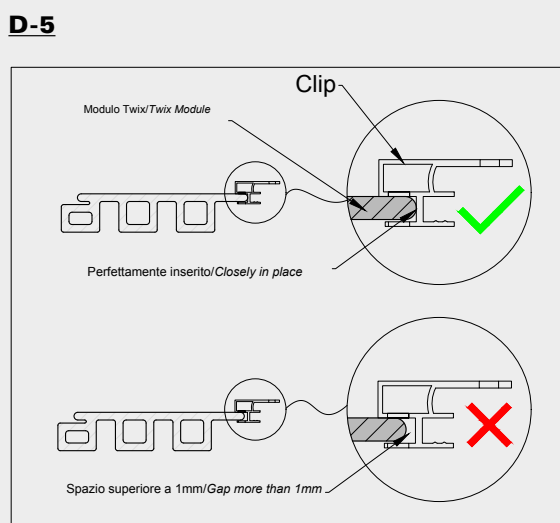
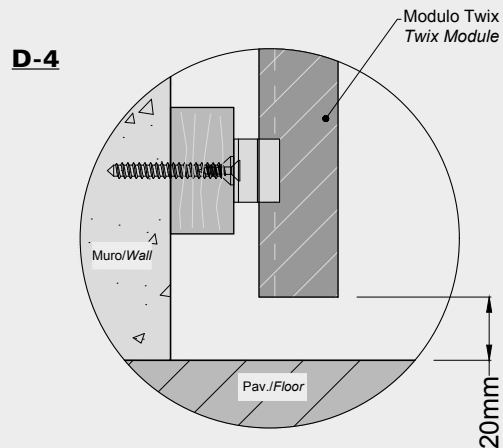
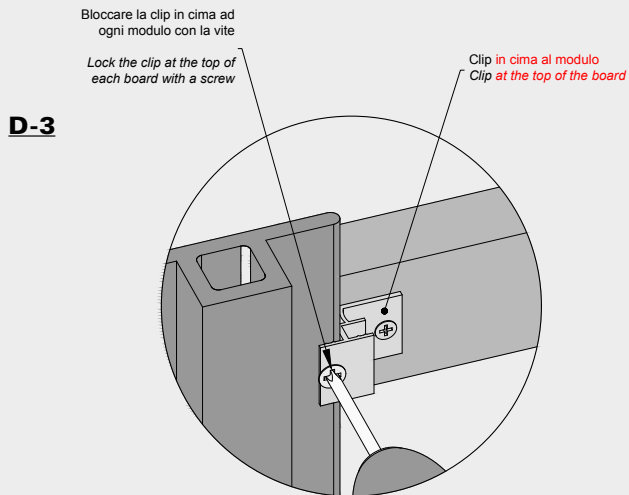


Diagram D-1: shows the first board installation on the outermost edge with starting trim.

Diagram D-2: shows the first board installation on the outside corner with the outside corner trim.



Since the composite wood must allow for expansion and contraction due to temperature change, lock the board at one or two adjacent fixed points depending on length to enable the remaining board to move freely. When installing vertically, it is required to lock the Clip at the top of each board, as shown in diagram D-3.

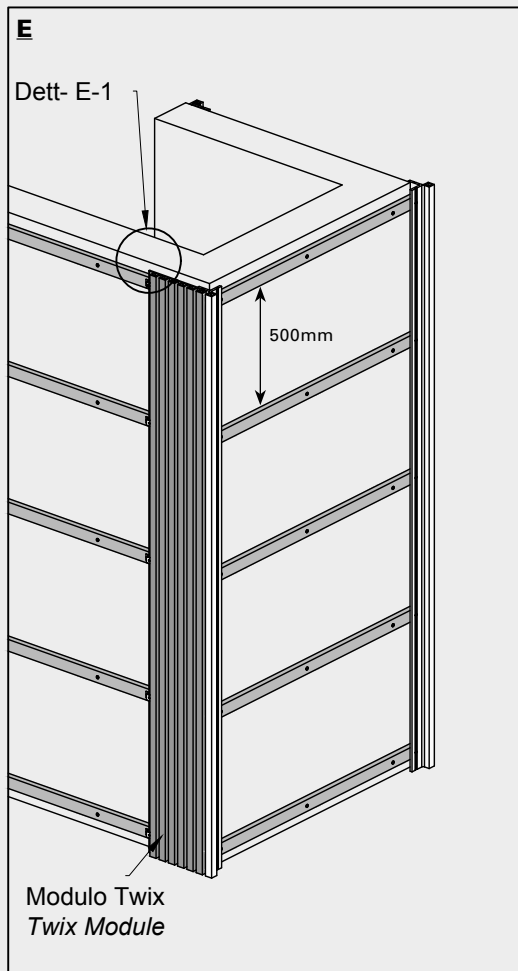
Allow a gap at least 20mm between the floor and Twix, as shown in diagram D-4.

Ensure all the Clips to be assembled with the board in place correctly. If there is a bit tighter to insert the clip onto the board's tongue in place, use a rubber mallet to hit the clip slightly towards the board until the clip is in place, as shown in diagram D-5.

The clip also can't be slanted against the board. It should be completely snap with the board's tongue at a right angle, as shown in Diagram D-6.

INSTALLING THE SCOND COURSE

- 5** Put the second board over the first board's clip and fasten it's another side onto the joist with the Clip, as shown in Diagram E.



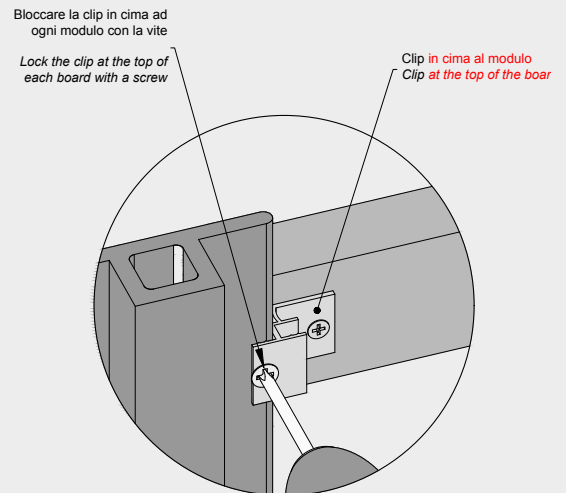
Notes:

Since the composite wood must allow for expansion and contraction due to temperature change, lock the board at one or two adjacent fixed points depending on length to enable the remaining board to move freely. When installing vertically, it is required to lock the Clip at the top of each board, as shown in diagram E-1.

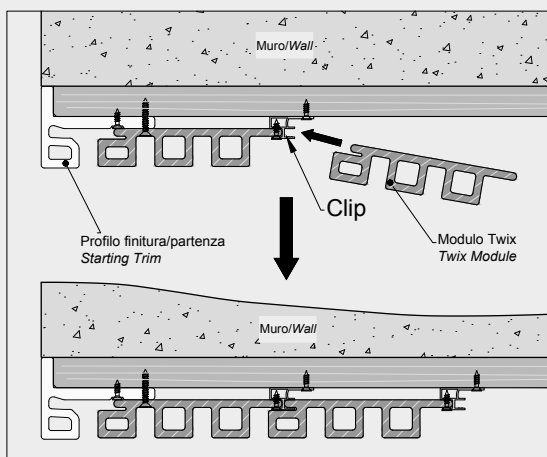
Diagram E-2: outermost edge with Starting Trim.

Diagram E-3: outside corner with Outside Corner Trim.

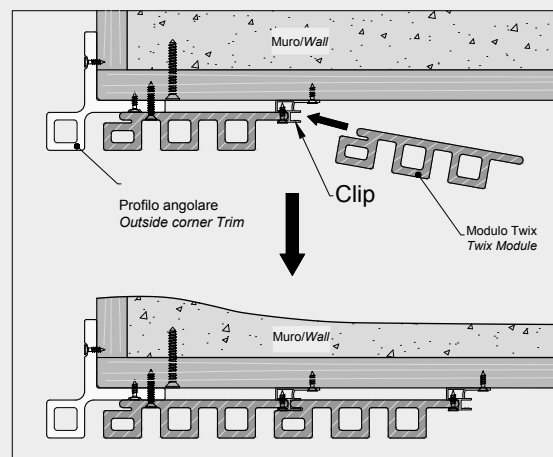
E-1



E-2

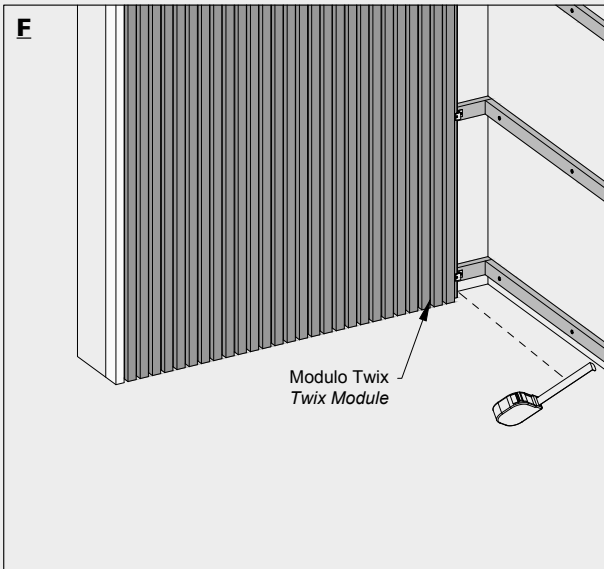


E-3



INSTALLING THE LAST TWIX MODULE

- 6** When you are at the last board, measure the distance between the trim or the adjacent installed cladding board and the clip to obtain the appropriate board's cutting dimension, as shown in diagram F.



Note:

Diagram F-1: outermost edge with Starting Trim.

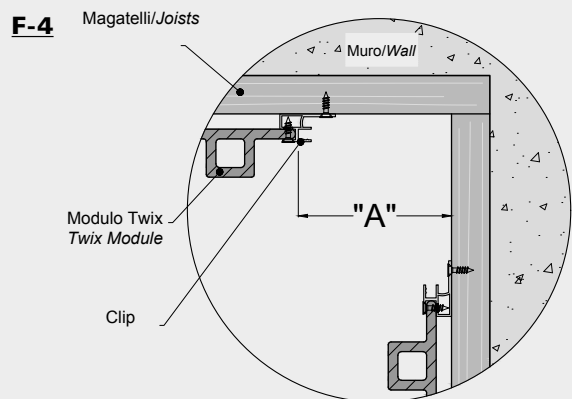
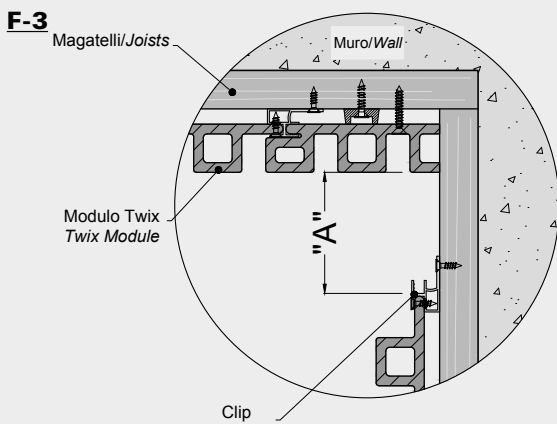
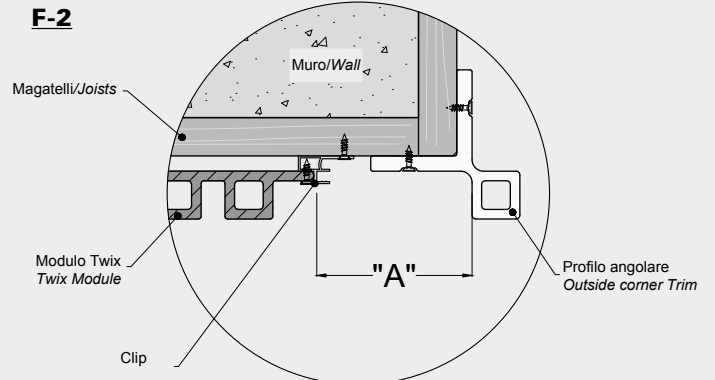
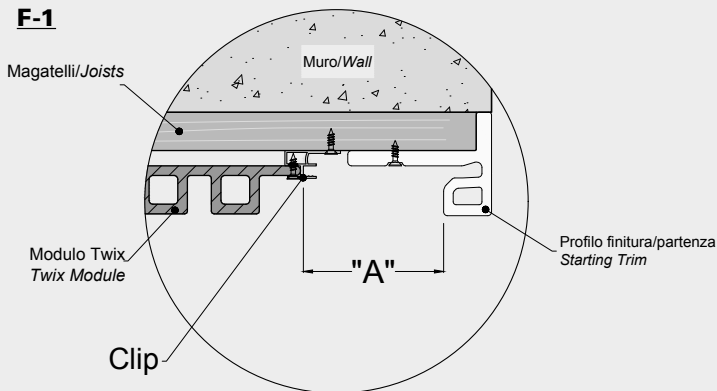
Diagram F-2: Outside corner with Outside Corner Trim.

Diagram F-3 F-4: Inside corner.

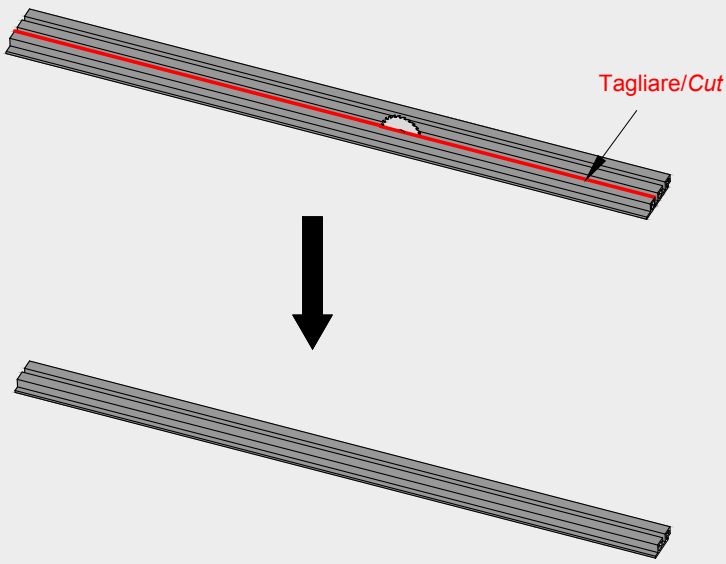
Cut the board according to the measured dimension, as shown in diagram F-5 e F-6.

Install the Rubber Pad for last board onto the joist in the Inside Corner to back up the last board, as shown in diagram F-7.

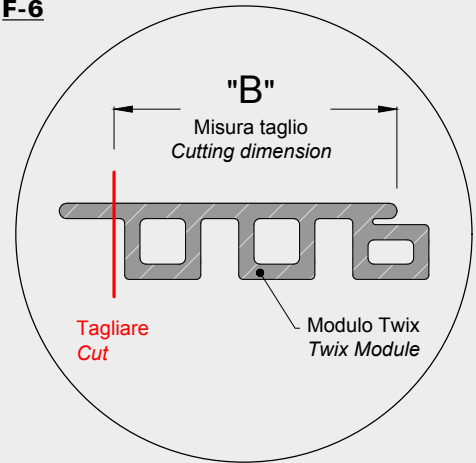
Put the cut Twix module over the clip in place and then face fix it onto the joist with screws, as shown in diagram F-8.



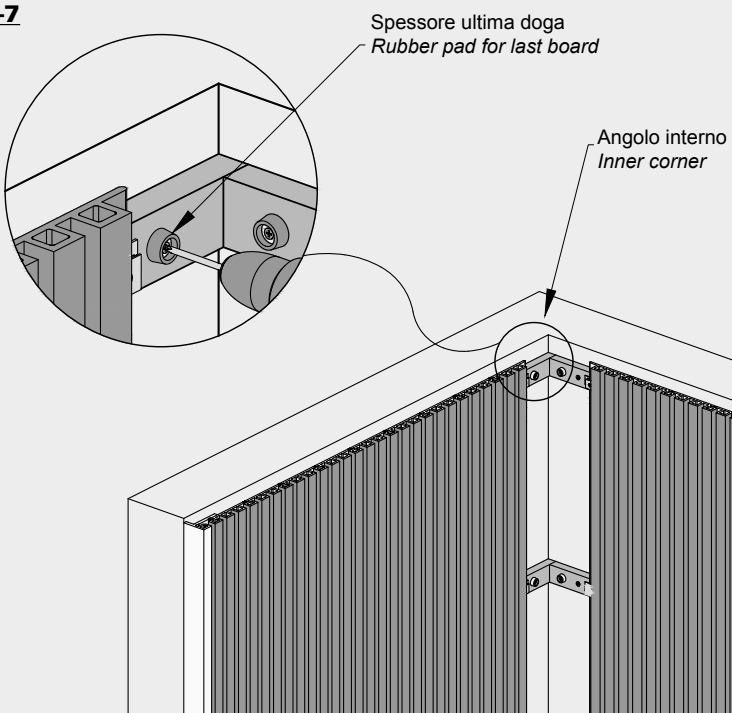
F-5



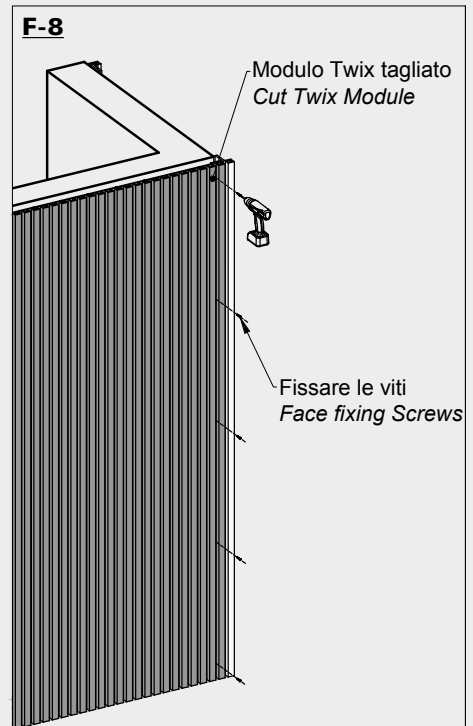
F-6



F-7



F-8

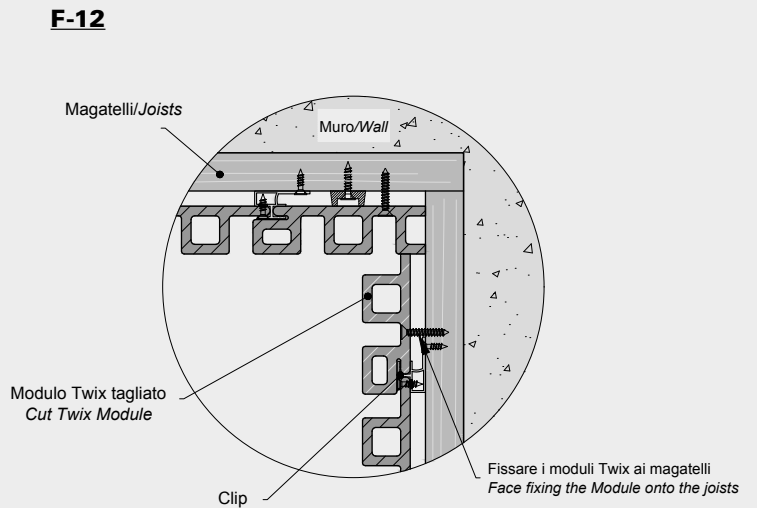
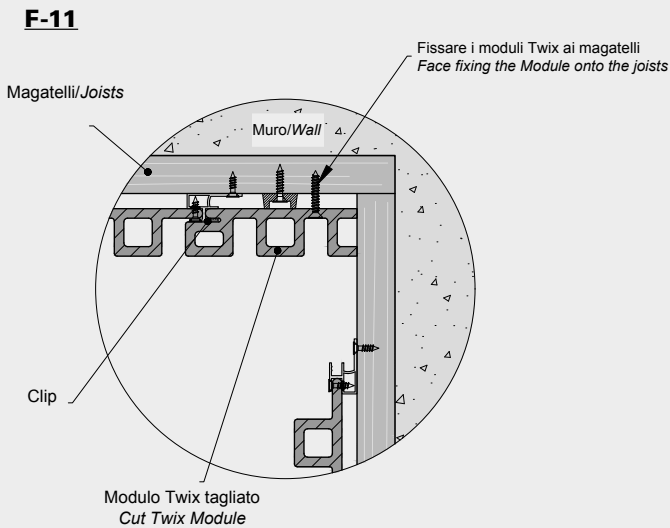
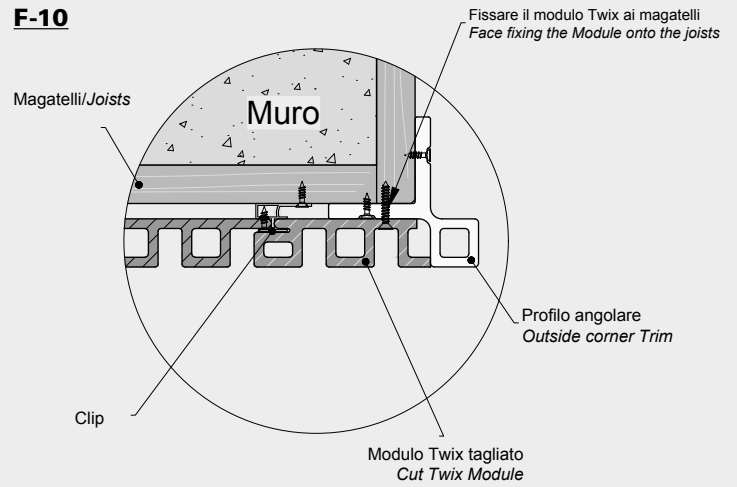
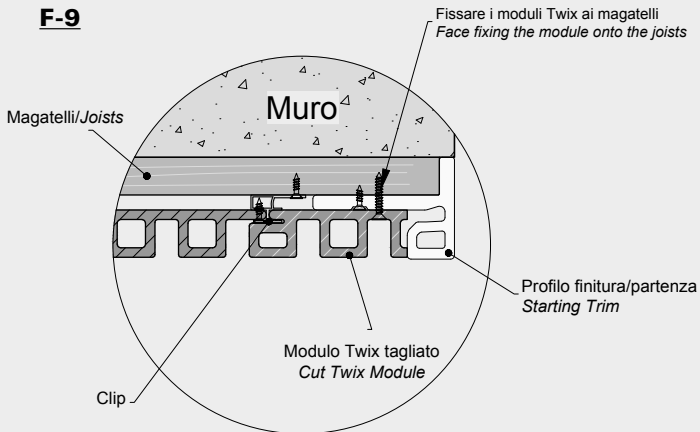


Pre-drill the face fixing holes on the last board before installation to allow for expansion and contraction.

Diagram F-9: shows the last board installation on the Outermost Edge with Starting Trim.

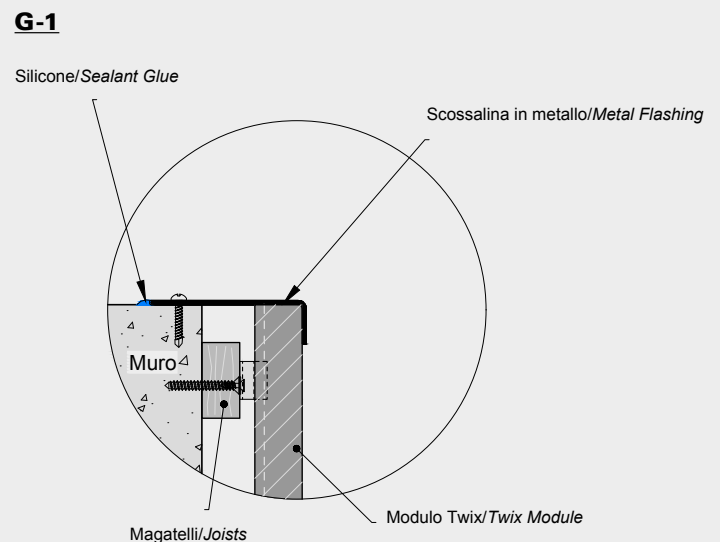
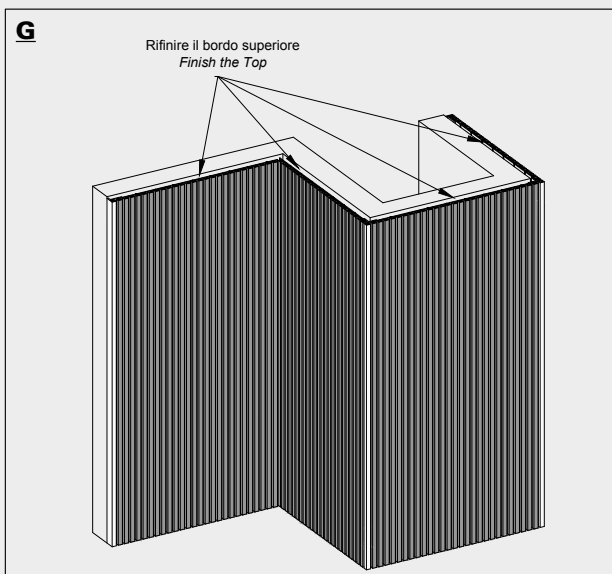
Diagram F-10: shows the last board installation on the Outside Corner with Outside Corner Trim.

Diagrams F-11 and F-12: show the last board installation in the Inside Corner.



FINISHING THE TOP

- Put metal flashing against the top of the cladding along the length of the installed cladding boards and secure it onto the wall with screws, as shown in diagram G-1.



ULTRASHIELD STILO SUNSHADES - INSTALLATION GUIDELINES

GUIDELINES FOR CORRECT INSTALLATION

In order to ensure durability over time, it is necessary to observe the following indications regarding the correct installation of sunscreen profiles in both outdoor and indoor applications.

It should be noted that sunscreen elements do not have a structural function, but are mere claddings; if they do cover structural portions, these must be suitably dimensioned and designed by a qualified technician.

STIFFENING CORE

For correct installation, each profile must necessarily be reinforced with one stiffening core, generally in aluminium alloy or other suitable metal and of suitable section and thickness depending on the profile selected and the intended use.

The length of the cores to allow for the installation of the end caps must be 50 mm less than that of the sunshade itself.

The stiffening core must be placed inside the central cavity (for profiles with chambers of different sections) or in the cavity closest to the substructure (for profiles with the same chambers) in order to guarantee fastening to the metal profile.

It is up to the designer to evaluate the correct positioning of the stiffening core.

MAXIMUM SPACING OF THE SUBSTRUCTURE

It is advisable to avoid bending of the sunshade by laying the substructure posts at the correct spacing.

As an example, the table below shows the estimated deflections for our barred profiles with appropriate aluminium cores:

		INTERAXLE SPACING (I)	
SECTION mm	ALUMINIUM CORE SUGGESTED BY DÉCO	HORIZONTAL INSTALLATION	VERTICAL INSTALALTION
60x42	20x30 sp.2mm	1500mm	2000mm
100x52	40x40 sp.2mm	2000mm	2500mm
120x62	50x50 sp.2mm	2000mm	3000mm
56x31	15x15 sp.1,5mm	1000mm	1000mm
108x31	15x15 sp.1,5mm	1000mm	1000mm

MAXIMUM LATERAL PROFILE OVERHANG

In order to avoid excessive deflection in the projecting part, it is recommended to maintain a maximum overhang equal to 10 times the largest dimension of the stiffening core (e.g. 60x42 barred profile with 20x30 core maximum overhang $30 \times 10 = 300\text{mm}$).

FASTENING THE SUNSHADE TO THE SUBSTRUCTURE

In order to allow for expansion of the composite wood, a pre-drilling 1mm larger than the size of the screw that will be threaded into the inner core must be made on the sunshade.

Fastening the sunshade directly to the substructure without the insertion of a core will invalidate the warranty.

DISTANCE BETWEEN HEADS

To allow for the expansion of the composite wood, it is necessary to leave a distance between the heads of the sunshades.

The distance between the two ends of the sunshade slats must be calculated according to the following formula: 0.04mm (coefficient of linear expansion) \times slat length \times temperature (max. or min. of its area - installation temperature).

E.g. the laying of 3.0 meter long planks at 20 degrees in Italy (max. temperature 40 degrees) $0.04 \times 3.0 \times (40-20) = 0.04 \times 3.0 \times 20 = 2.40\text{mm}$, rounded to 3mm.

VENTILATION OF SUNSHADES

Composite wood requires adequate ventilation, so it is advisable not to lay the sunshades in direct contact with damp or water-soaked surfaces. Keep the poles at least 2 cm above the ground.

INTERNAL CONDENSATION

The formation of condensation and water stagnation inside the profiles must be avoided.

For this reason, the use of wooden stiffening cores is only permitted in non-humid interior installations. Sunshades can be installed in wet rooms using aluminium cores.

END CAPS

Each cap must be applied to the profile using special glue; if it is removed, it must be reapplied. If the sunshade is installed vertically, it will be necessary to drill water drainage holes in the lower cap.

Note:

There may be differences in tone on different materials on different production batches.

The supply of steel cores is always to be quoted on an ad hoc basis.

The nominal dimensions of the staves are approximate and a tolerance of +/- 2% is acceptable.

For this reason, when laying, they should be cut to size and at 90 degrees to equalise lengths.

The possible presence of surface hair on the profiles is not to be considered a defect but is part of the surface processing aimed at guaranteeing greater realism to the profiles.

Particular environmental conditions or friction with other non-conductive materials may give rise to electrostatic phenomena, which are to be considered normal due to the polymeric nature of the material.

These phenomena are subject to reduction with normal product wear and can be contained with the use of specific anti-static sprays.

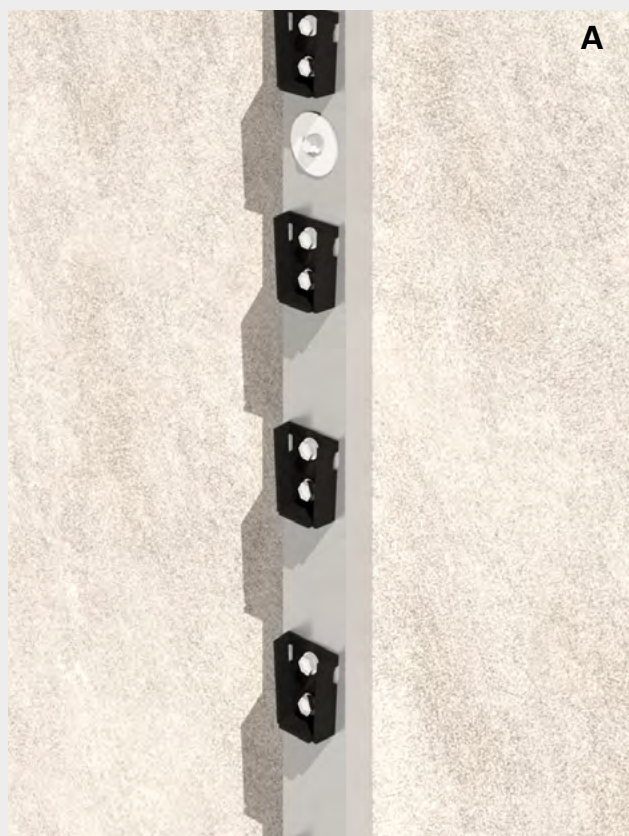
SUNSHADES - INTERLOCKING CLIPS

CLIP ASSEMBLY

A - Fix the joist to the wall with the clips already mounted.

B - Attach the clip directly to the internal core of the sunshade.

C - Install the interlocking sunshade by exerting appropriate pressure until the clip is fully engaged.



DÉCO RECOMMENDS

PREASSEMBLED PANEL ON THE GROUND

- 1 - Creation of a module "on the ground": screw the sunshades from the back onto a metal joist structure.
- 2 - Lift the panel and fix it to the wall / bearing structure.

Notes:

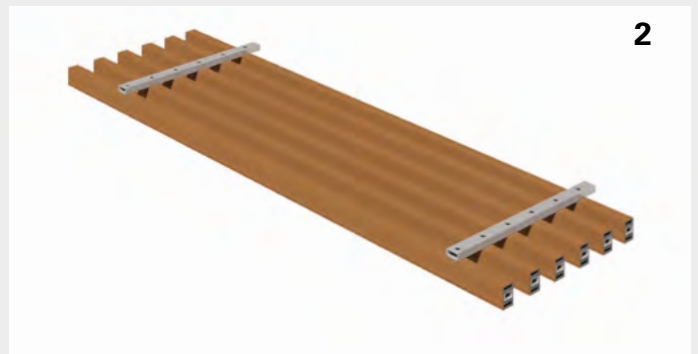
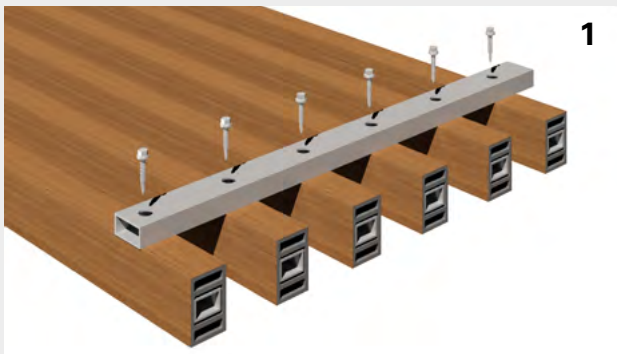
The sunshades supplied by Déco do not have a structural purpose but a coating.

The distance between the two ends of the sunshade profiles should be calculated according to the following formula: 0.04mm "coefficient of linear expansion" x sunshade length x (max. or min. temperature of the geographical area - installation temperature).

E.g. the installation of 2.2 meters long sunshades at 20 degrees in Italy (max. temperature 40 degrees): $0.04 \times 2.2 \times (40-20) = 0.04 \times 2.2 \times 20 = 1.76\text{mm}$, rounded to the nearest 2mm.

The nominal dimensions of Stilo profiles are approximate and a tolerance of 3% is acceptable.

Therefore, when laying, Stilo profiles should be cut to size and at 90 degrees to equalise lengths.



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