TIMBER PLAN

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SPECIES UNICA

BORN IN VENICE

2020

TECHNICAL BROCHURE

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VERSATILIS/

- sunscreen - louvers
- pergolas - fences

WOODN VERSATILIS: VERTICAL BEAUTY

LOUVERS: VARIOUS PROPOSALS FOR COUNTLESS SOLUTIONS. IT IS A SUNSCREEN FOR POSITIVE ENERGY BUILDINGS, GUARANTEEING REDUCED CONSUMPTION AND LIVING COMFORT.

ASSEMBLED WINDOWS AND SCREENS:
AS YOU LIKE, SEVERAL COMPOSITIONS AND DESIGNS.

FENCES AND PERGOLAS:
A READY-MADE SOLUTION, EASY TO ASSEMBLE AND SAFE.

GREENDECK/

- outdoor decking

GREENWOOD GREENDECK

AN ULTIMATE SOLUTION FOR OUTDOOR ENVIRONMENTS, IT LEAVES NO SPLINTERS.
IT IS CERTIFIED SLIP-RESISTANT, DOES NOT REQUIRE WOOD MAINTENANCE, AND IT IS DIMENSIONALLY STABLE.

MODULATUS/

- outdoor cladding -
- outdoor/indoor ceilings

WOODN MODULATUS: TOTAL LOOK

CLADDING: A SIDING FOR EXTERIORS, WHICH QUALIFIES THE BUILDING IN TERMS OF BEAUTY AND FUNCTIONALITY. WITH ITS CERTIFIED PROPERTIES, SUCH AS RESISTANCE TO FIRE AND WIND STRENGTH, IT ENSURES HIGH SAFETY STANDARDS.

CEILING: A COMPLETE SYSTEM, EASY TO INSTALL AND MODULAR, WHICH ALLOWS THE COMPLETION AND RENEWAL OF RESIDENTIAL AND COMMERCIAL ENVIRONMENTS.

ORNANS/

- indoor cladding mosaic

WOODN ORNANS

IT IS THE TWO-FACED TECHICAL COVERING CONCEIVED TO BEST MEET THE DEMANDS OF CONTEMPORARY ARCHITECTURE AND INTERIOR DESIGN. LIGHTNESS, THICKNESS AND EASY INSTALLATION MAKE THIS PRODUCT APPLICABLE ON ANY SURFACE.

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WOODN VERSATILIS

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REV.00-2020

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MATERIAL'S FEATURES

Mechanical properties

Elasticity (bending)	UNI EN ISO 178	@23 °C @65 °C
Yield strenght (flexural)	UNI EN ISO 178	@23 °C @65 °C
Water absorbption and humidity	ASTM D1037	absorption 0,07%
Dynamic- Mechanical analysis of transition temperature	ASTM D4065/95	78.8 °C
Linear thermal expansion coefficient (from -10 °C to 70 °C)	TMA ASTM E 831/2006	longitudinal 46,9 x10^{-6} m/(m°C) trasversal 48 x10^{-6} m/(m°C)
Tensile strenght and tensile strenght after accelerated weathering (exposure to xenon lights)	ASTM D638-10 (tensile test) ASTM G155-050	difference after 2 months of exposure ~5,21% difference after 3 months of exposure ~6,9% *(meet the requirements to comply with Miami Dade and Florida Building Code 2014)*

Reaction to fire

Flammability	UL94 AS 3959-2009	V-0 Class BAL-29
Flame spread index Smoke developed index	ASTM E84	Class A
Ignition temperature	ASTM D1929	476 °C
Average critical radiant flux of floor	AS ISO 9239 ASTM E648	≥ 11 kW/m^2 > 1,03 W/cm^2 *(class I as per NFPA 101)*
Ignitability, flame propagation, heat release and smoke release	AS/NZS 1530.3:1999	Ignitability (0-20) = 8 Spread of Flame (0-10) = 0 Heat Evolved (0-10) = 0 Smoke Developed (0-10) = 7

Chemical and biological features

Evaluation of the action of microorganisms (scale from 0 to 5)	EN ISO 846:97	Test result: 1
Heavy metal content (Pb, Ge, Cr, Hg)	GB18584-2001 GB18580-2001	< 0,5 ppm
Formaldehyde emission	EN 717-2:1994	0,1 mg HCHO/(m^2h)

The values shown are indicative and not binding. Test reports available upon request.
The natural aging of the material and temperature variations may cause deviations from the values indicated above.
The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com

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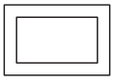
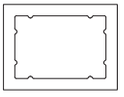
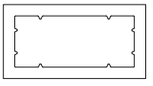
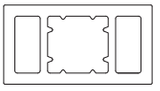
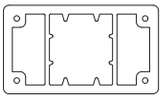
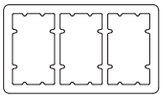
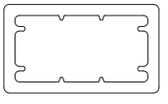
PROFILES SECTION

profile	cross-section	nominal dimensions [mm]	reinforcement external nominal dimensions [mm]	weight of the plank [kg/m]
LG3020		section 30 x 20 standard length 2000	20 x 10	0.46
JF4030-30x20		section 40 x 30 standard length 2000	30 x 20	0.66
JF5026-40x15		section 50 x 26 standard length 2000	40 x 15	0.73
JF6032		section 60 x 32 standard length 2000	20 x 20	1.20
JF7040-25x25		section 70 x 40 standard length 2000	25 x 25	1.45
JF7040-30x15		section 70 x 40 standard length 2000	30 x 15	1.27
JF7040-50x25		section 70 x 40 standard length 2000	50 x 25	1.16

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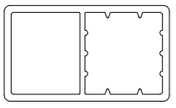
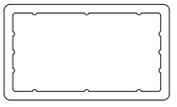
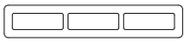
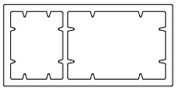
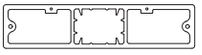
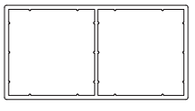
profile	cross-section	nominal dimensions [mm]	reinforcement external nominal dimensions [mm]	weight of the plank [kg/m]
TZ9555-R		section 95 x 55 standard length 2000	40 x 40	1.80
TZ9555		section 95 x 55 standard length 2000	80 x 40	2.04
JF11020		section 110 x 20 standard length 2000	Profilo a L 30 x 10	1.62
JF12058-A		section 120 x 58 standard length 2000	30 x 40 60 x 40	2.17
JF18041		section 180 x 41 standard length 2000	30 x 30 40 x 20	2.82
JF18041-165x30		section 180 x 41 standard length 2000	165 x 30	2.32
JF222114		section 222 x 114 standard length 2000	100 x 100	4.26

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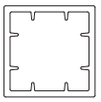
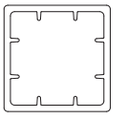
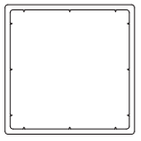
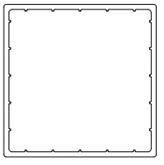
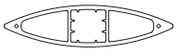
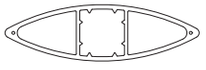
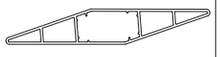
profile	cross-section	nominal dimensions [mm]	reinforcement external nominal dimensions [mm]	weight of the plank [kg/m]
TZ6060		section 60 x 60 standard length 2000	40 x 40	1.21
JF7070		section 70 x 70 standard length 2000	50 x 50	1.53
TZ113113		section 113 x 113 standard length 2000	100 x 100	2.40
TZ180180		section 180 x 180 standard length 2000	163 x 163	5.64
JF15238		section 152 x 38 standard length 2000	25 x 25	1.84
JF20058		section 200 x 58 standard length 2000	40 x 40	3.08
JF35068		section 350 x 68 standard length 2000	100 x 40	4.36

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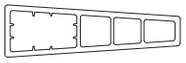
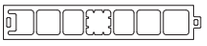
profile	cross-section	nominal dimensions [mm]	reinforcement external nominal dimensions [mm]	weight of the plank [kg/m]
JF15045-25		section 150 x 45 x 25 standard length 2000	50 x 25	2.31
DT20936		section 209 x 36 standard length 2000	20 x 20	3.92
C50R		section Ø 50 standard length 2000	Ø 38	0.64

The external dimensions listed are nominal values. The weights of the planks indicated in the tables are indicative and not binding.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.
Refer to Woodn Technical Department or on website www.woodn.com for cad blocks and manufacturing tolerances.

GENERAL INSTALLATION INSTRUCTIONS

Key points to be followed before and during the installation process:

- Store the material on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and direct sun light.
- Before starting the installation, carefully check the material and notify immediately of any manufacturing issues. Complaints will not be accepted after installation.
- Before starting the installation, check project's drawings (or shop drawings if provided) and the correspondence of the received material against the packing list.
- Acclimate the material in stock to the temperature of the jobsite for at least 48 hours prior to installation.
- The installation temperature must be higher than 0 °C.
- Do not cover the product with sheets made with non-breathable material (nylon, polyethylene and similar materials). For this purpose it is advisable to use breathable material such as painter felt sheets.
- The accumulation of electrostatic charges is a natural phenomenon commonly found in plastic materials, and under exceptional environmental conditions this may also occur in Woodn™'s products.
- Profiles shall be handled with care in order to prevent damages. It is recommended to lift the profiles on the whole length during displacement and not make them slide on top of each other. Always use clean fabric gloves when handling profiles.
- Prevent the formation of dirt on and between profiles; in particular, make sure that mechanical processes carried out on other materials, near Woodn products, do not determine the accumulation of chips or dust of any kinds. During the installation/assembly phase do not apply any label or sticker; if already applied, please remove immediatly after installation. Immediately remove major stains such as paint, concrete or tar residues.
- For cleaning and maintenance instructions refer to page 109. The WoodN warranty will be rendered null and void in the event of incorrect or improper handling, cleaning and maintenance.

ASSEMBLY CENTRE-TO-CENTRE DISTANCE

The assembly centre-to-centre distance must be adequately sized to meet the loads specified in current regulations.
The following pages show the maximum centre-to-centre application distance for each Versatilis profile, according to the visible side, the horizontal or vertical installation of the profiles and the type of metal reinforcement used. The values in the tables have been calculated considering a wind load of 150 kg/m^2.

The profiles must be mounted using mechanical systems that join the substructure to the metal reinforcement.

IN ORDER TO ALLOW A NORMAL EXPANSION, NO FIXING MUST BE DONE DIRECTLY ON THE WPC PROFILE.

FIXED POINT AND FLOATING POINT

When applying the profiles and fixing them to the substructure, consider making a FIXED POINT, which blocks the profile in a precise position during expansion due to thermal variations.
In all the other fixing points, FLOATING POINTS must be created to let the profile expand freely. The floating points can be made by drilling suitably sized holes or slots depending on the distance between the fixed point and the floating points based on the calculation below:

floating point hole diameter = floating point slot length = 2 x L x 0.003 + Ø

where *L = centre-to-centre distance between the fixed point and the floating point*
and *Ø = diameter of the fixing screw*

For example:

L = 2000 mm, Ø = 4 mm
floating point hole diameter = floating point slot length = 2 x 2000 x 0.003 + 4 = 16 mm

WARNING: it has to be noted that the failure to comply strictly with the criteria for the application of fixed points and floating points, causes the deformation of the materials and the misalignment of all the expansion joints.

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EXPANSION GAP BETWEEN ADJACENT PROFILES

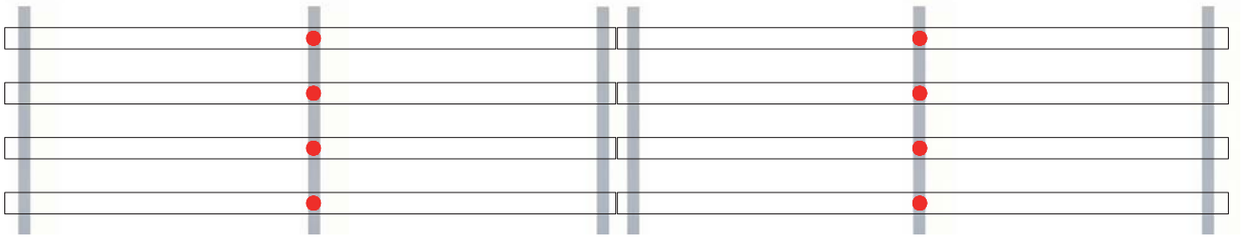
WoodN, due to material's composition's features and extrusion technology, undergoes after the first exposure an initial dimensional shrinkage less than 0.4% of the profile length (max value established according to EN 479: 1995) and presents a linear contraction / dilatation due to temperature variations.
At the end of the profile, leave a gap according to the relative size in the table below:

Laying temperature	Expansion gap
< 20 °C	2 mm/m
> 20 °C	1 mm/m

To make sure that the expansion spaces will remain over time, we recommend strictly adhering to the FIXED POINT positioning diagram.

LAYING PATTERN - PARALLEL

● = fixed point for expansion



WARNING: if the application requires corners with planks cut at 45°, the fixed point must be in the corner.

WARNING: when mounting planks vertically, we recommend making the fixed point at the top end.

WARNING CONCERNING INSTALLATION: due to the peculiarities of the materials supplied, Woodn Industries expressly declines any liability related to its products if laying and installation are not carried out by specialized personnel, in accordance with the specific instructions, including those related to adhesives and accessories reported in the technical data sheets that come with the products.

WARNING: the structures shown in the drawings in the following pages only represent rough construction guidelines and all their components must be adequately sized by the customer in accordance with current regulations. For any special needs, please contact our technical department: ufficiotecnico@woodn.com

INTERNAL REINFORCEMENT

For all applications, an internal metal (aluminum/steel) reinforcement MUST be inserted according to the features of each Woodn profile as described in the technical book.
The metal reinforcement profile must be 40 mm shorter than the WPC profile. When centered in the WPC profile, there must be 20 mm at each end. In the specific case of profiles which have the WoodN closing cap, the reinforcement profile must be 90 mm shorter, leaving 45 mm at the ends of the WPC profile.

WARNING: the lack of using the metal reinforcement inside the louver profiles causes the deformation of the material.

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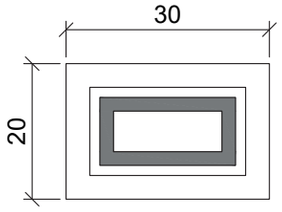
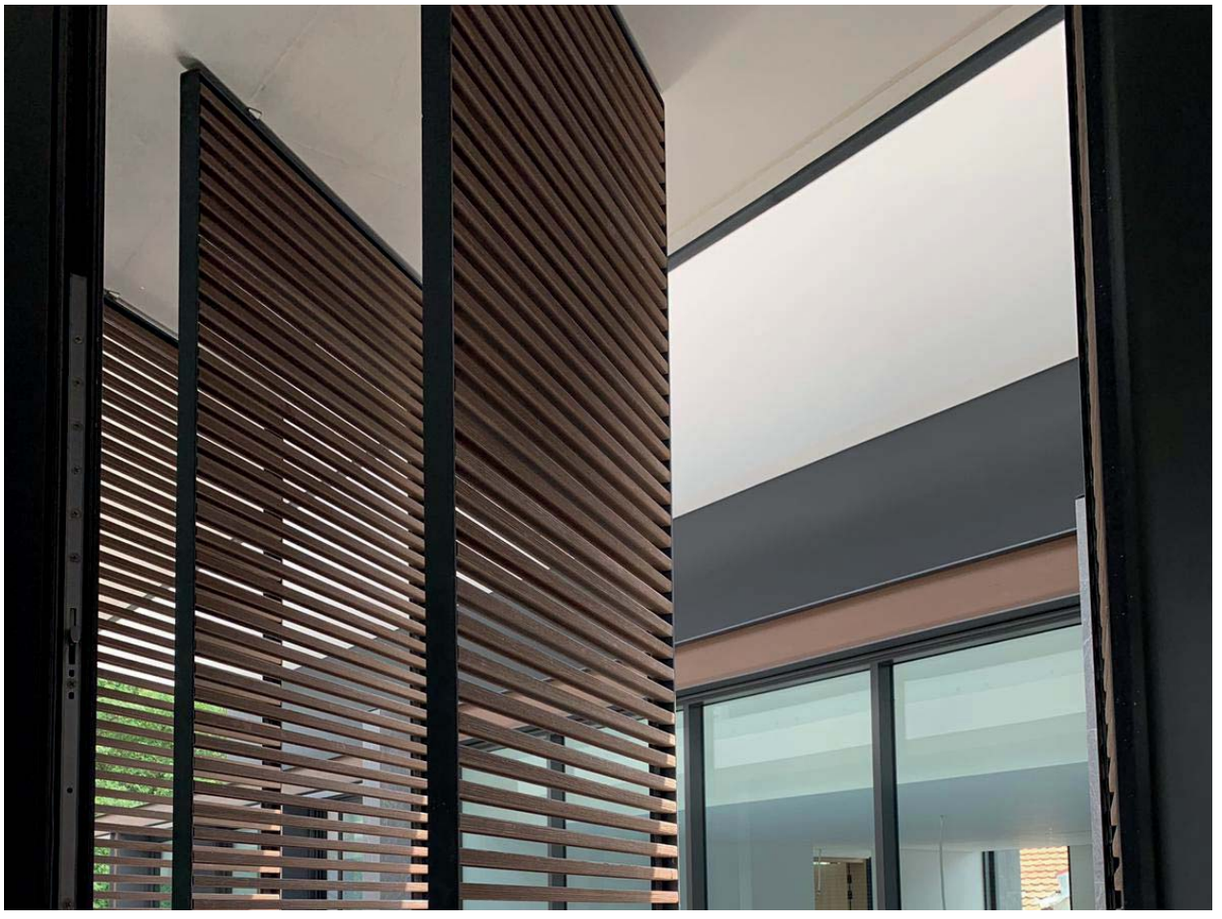
LG3020





profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
LG3020	**LG3020**	20 x 10 x 2	30	1200	1600	1500	1900
			20	1000	1200		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

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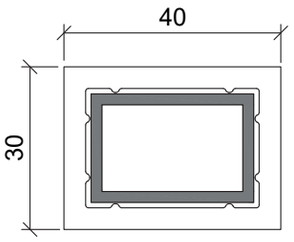
JF4030



profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF4030	**JF4030-30x20**	30 x 20 x 2	40	1800	2200	2200	2900
			30	1600	1900		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

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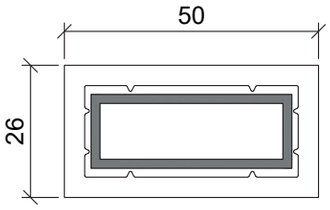
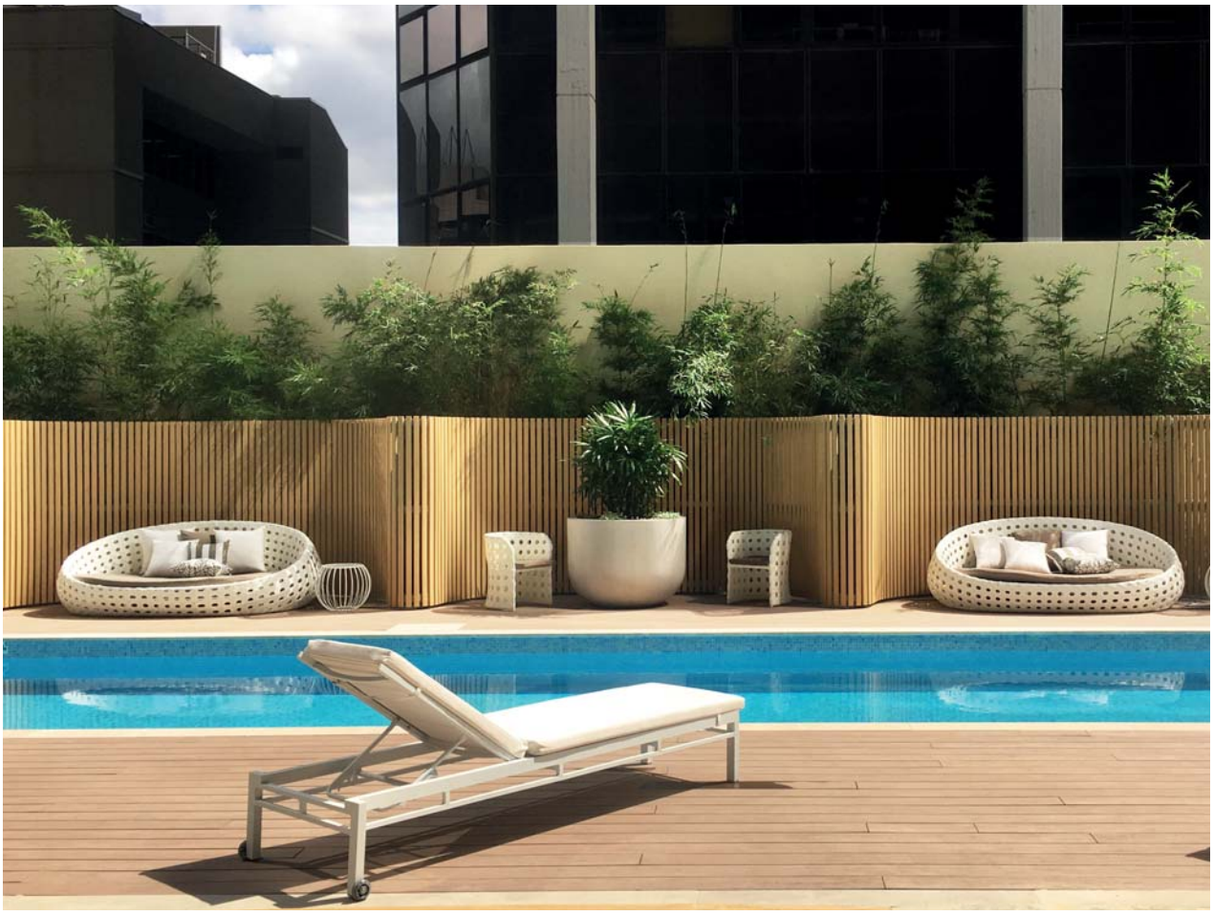
JF5026



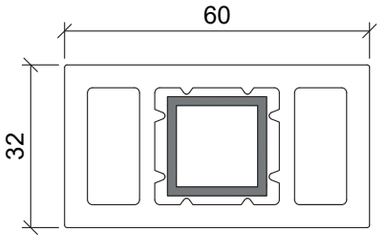


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF5026	**JF5026-40x15**	40 x 15 x 2	50	1700	2400	1900	2500
			26	1400	1700		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

JF6032

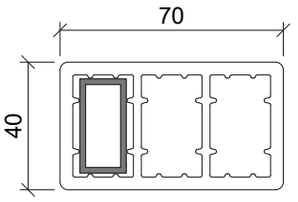


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF6032	**JF6032**	20 x 20 x 2	60	1600	1800	1900	2400
			32	1400	1700		

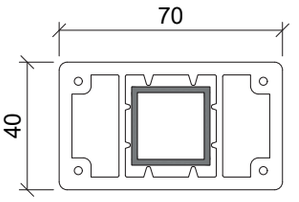
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

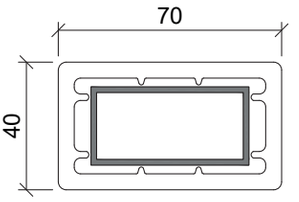
JF7040



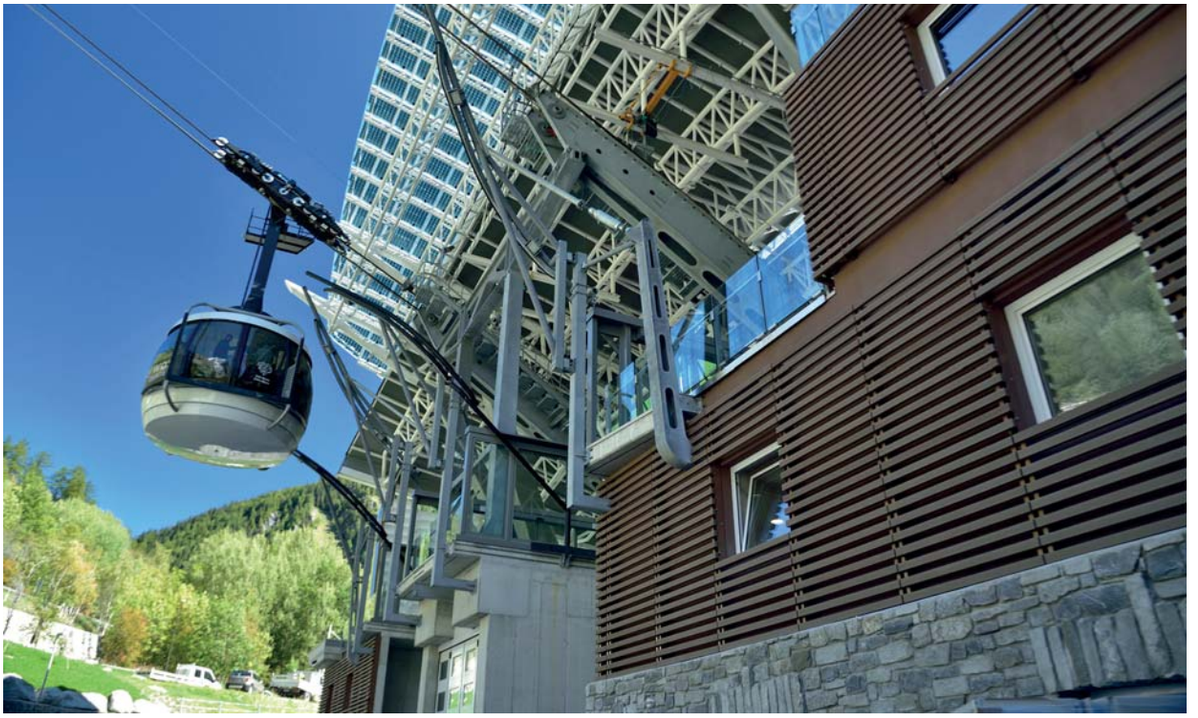
JF7040-30x15



JF7040-25x25



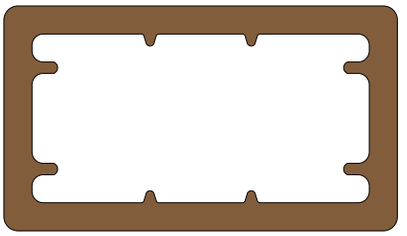
JF7040-50x25



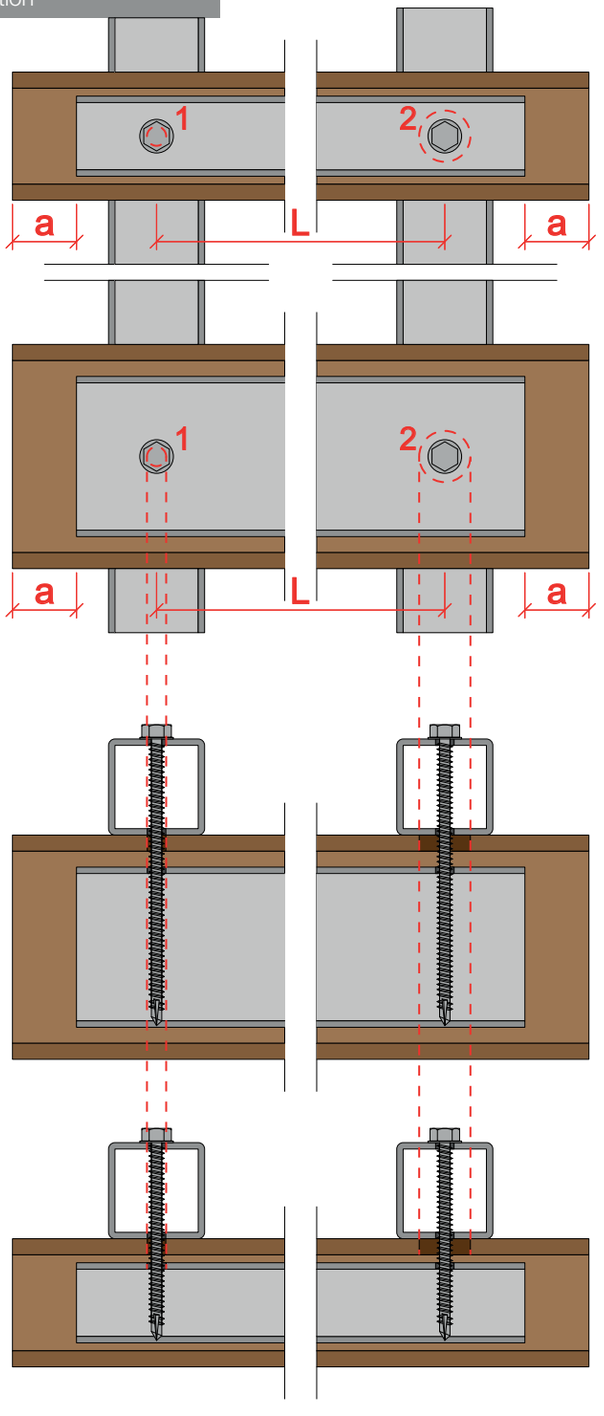
profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF7040	**JF7040-30x15**	30 x 15 x 2	70	1500	1700	2100	2600
			40	1700	2000		
	JF7040-25x25	25 x 25 x 2	70	1800	2100	2200	2900
			40	1700	2000		
	JF7040-50x25	50 x 25 x 2	70	2400	3000	2600	3300
			40	1900	2300		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

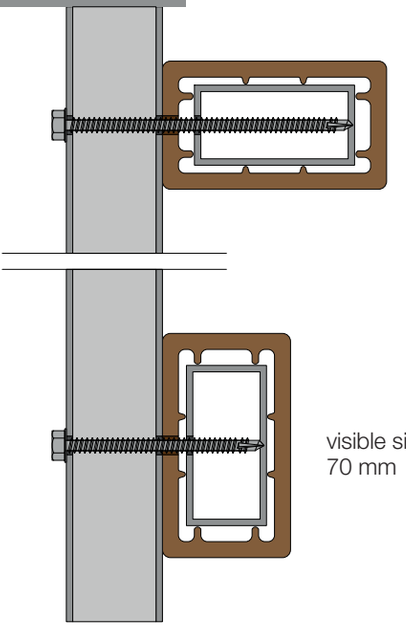
SPECIES UNICA
BORN IN VENICE



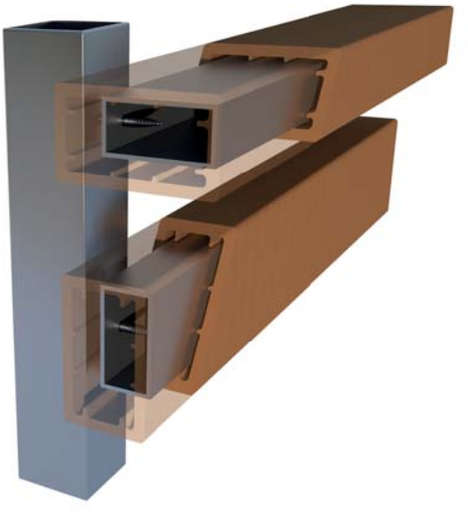
front section



vertical section



a = 20 mm
a = 45 mm in case of installation of the WAJF7040C_WM cap
1= FIXED POINT - Ø hole = Ø screw
2= FLOATING POINT - Ø hole = 2L x 0.003 + Ø screw [mm]

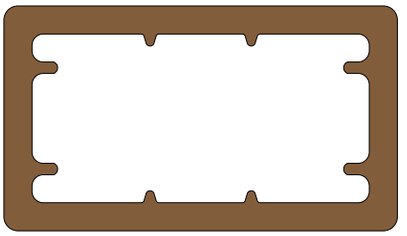


horizontal section

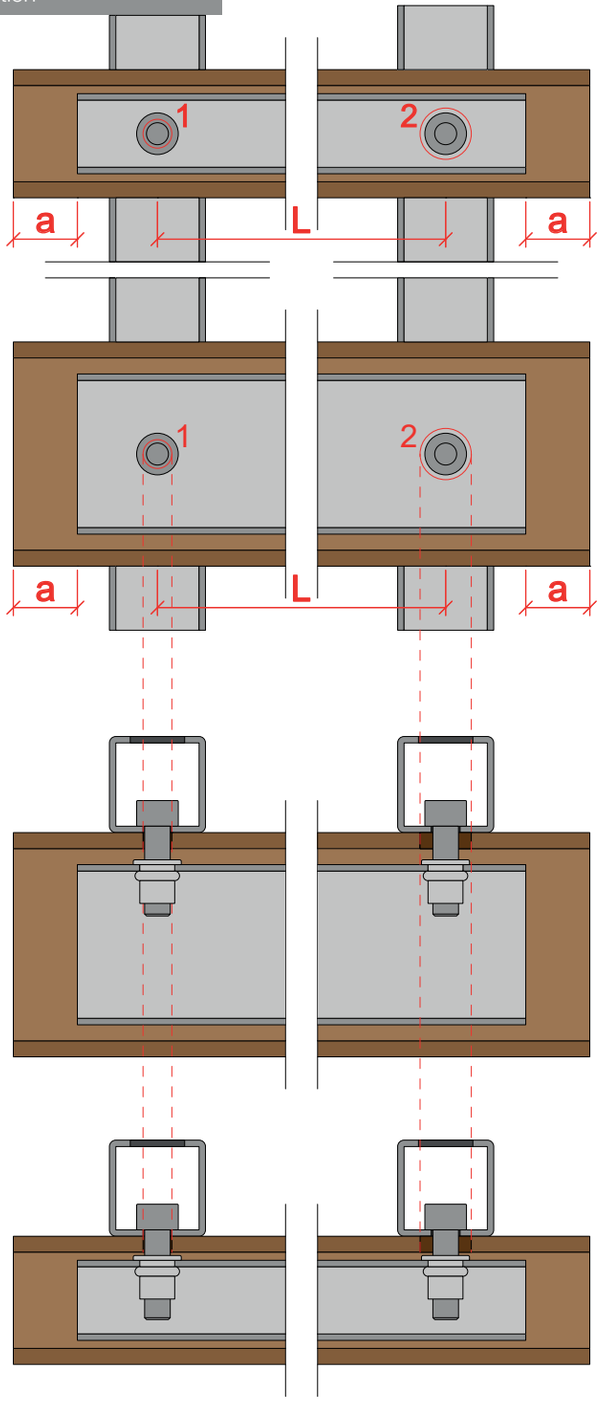
axonometric view

The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.

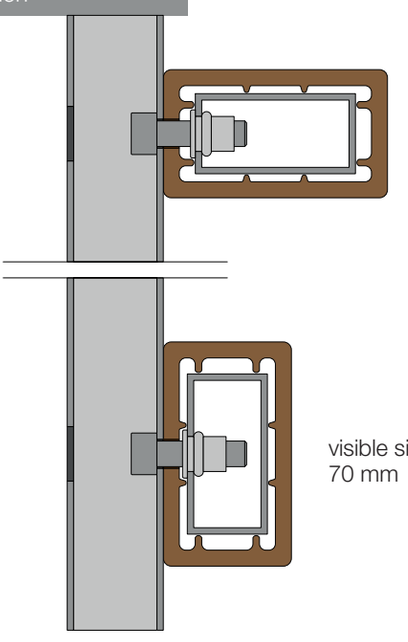
SPECIES UNICA
BORN IN VENICE



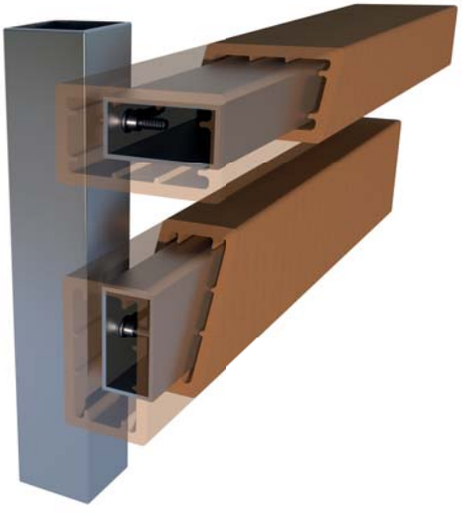
front section



vertical section



a = 20 mm
a = 45 mm in case of installation of the WAJF7040C_WM cap
1= FIXED POINT - Ø hole = Ø screw
2= FLOATING POINT - Ø hole = 2L x 0.003 + Ø screw [mm]



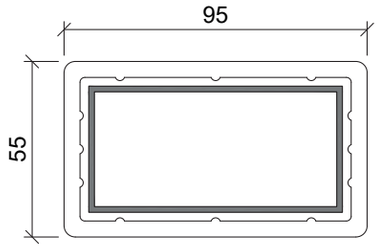
horizontal section

axonometric view

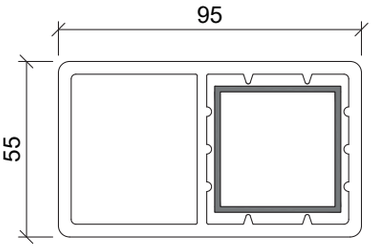
The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.

SPECIES UNICA
BORN IN VENICE

TZ9555



TZ9555



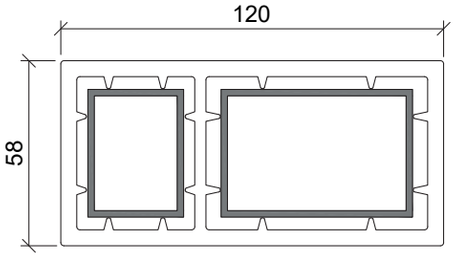
TZ9555-R

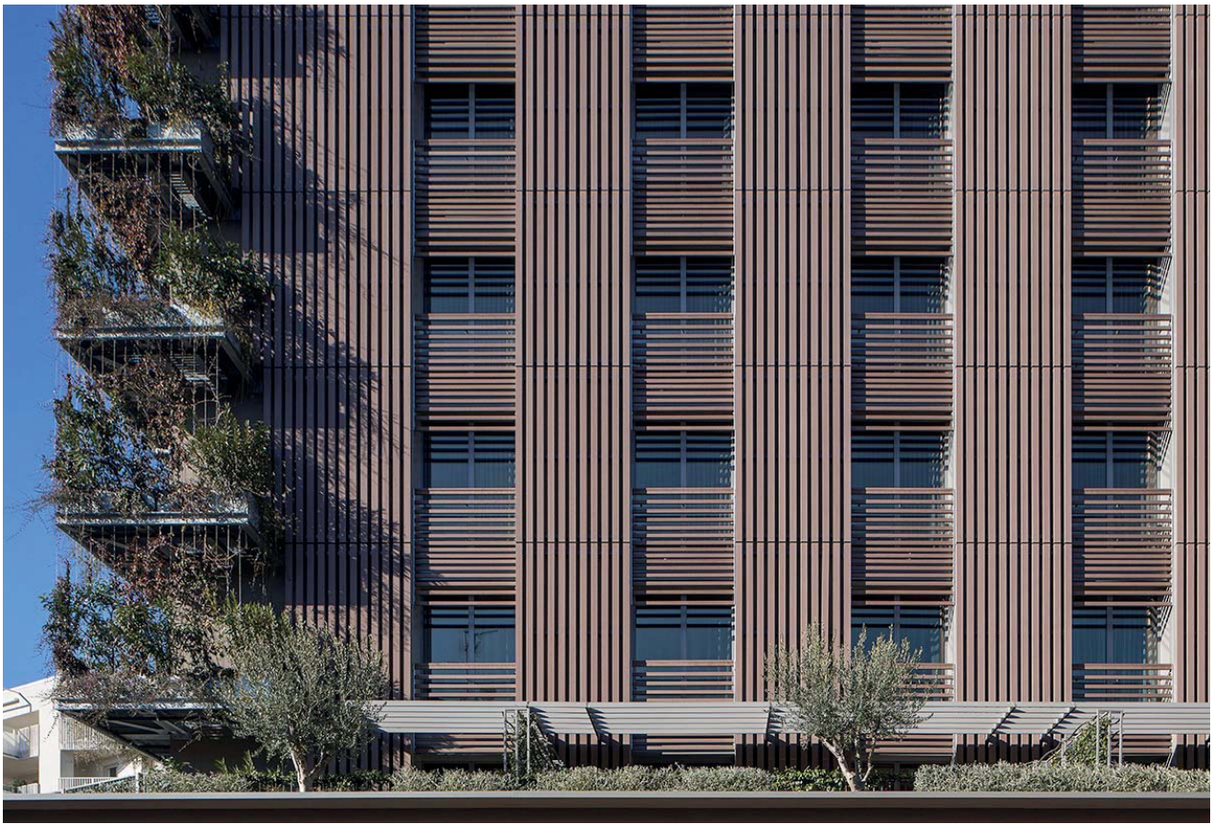
profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
TZ9555	**TZ9555**	80 x 40 x 2	95	3400	4000	3400	4400
			55	2600	3000		
	TZ9555-R	40 x 40 x 2	95	2500	2900	3000	3900
			55	2400	2800		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

JF12058-A



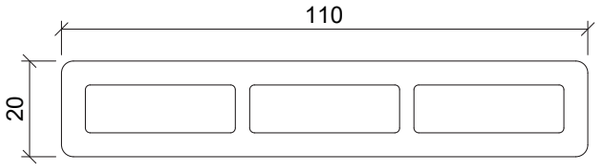


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF12058	**JF12058-A**	30 x 40 x 2	120	1900	2500	2700	3500
			58	2100	2800		
		60 x 40 x 2	120	2800	3700	3100	4000
			58	2400	3200		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

JF11020



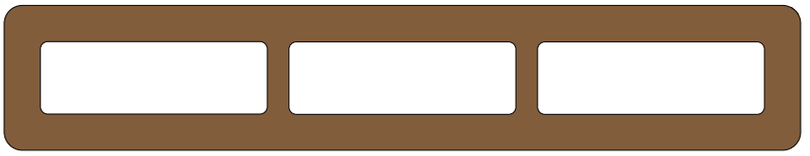
PROFILE WITHOUT REINFORCEMENT

profile	code	side [mm]	maximum horizontal span [mm]	maximum vertical span [mm]
JF11020	**JF11020**	110	750	750

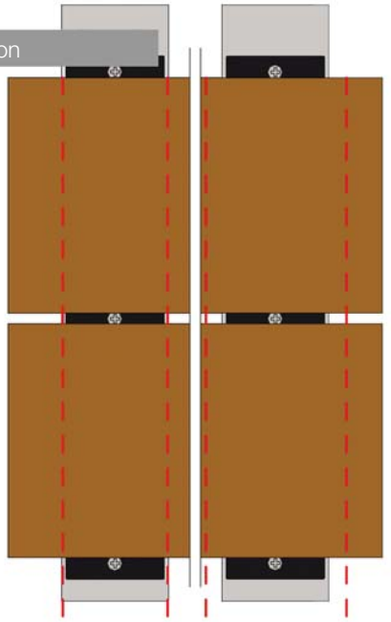
PROFILE WITH REINFORCEMENT

profile	code	reinforcement dim. [mm]	side [mm]	maximum horizontal span [mm]	maximum vertical span [mm]
JF11020	**JF11020-WA**	"L" profile 30 x 10 x 2	110	900	900

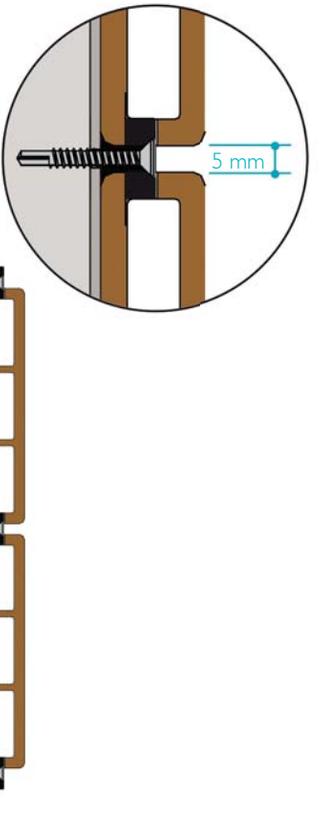
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²



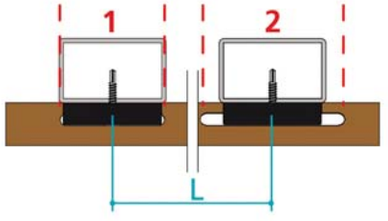
front section



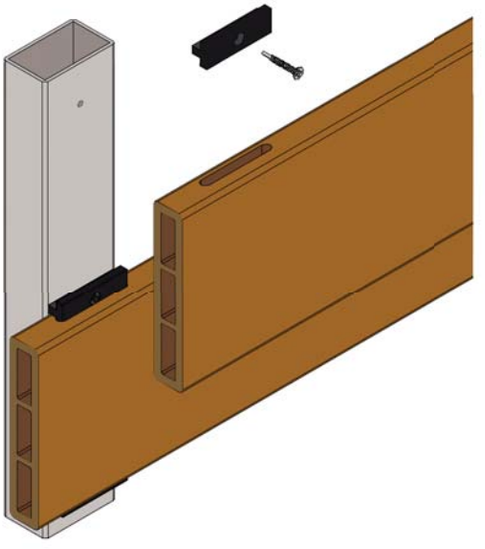
vertical section



horizontal section

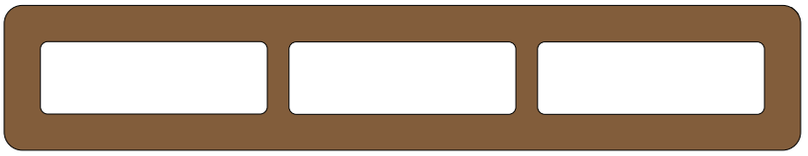


axonometric view

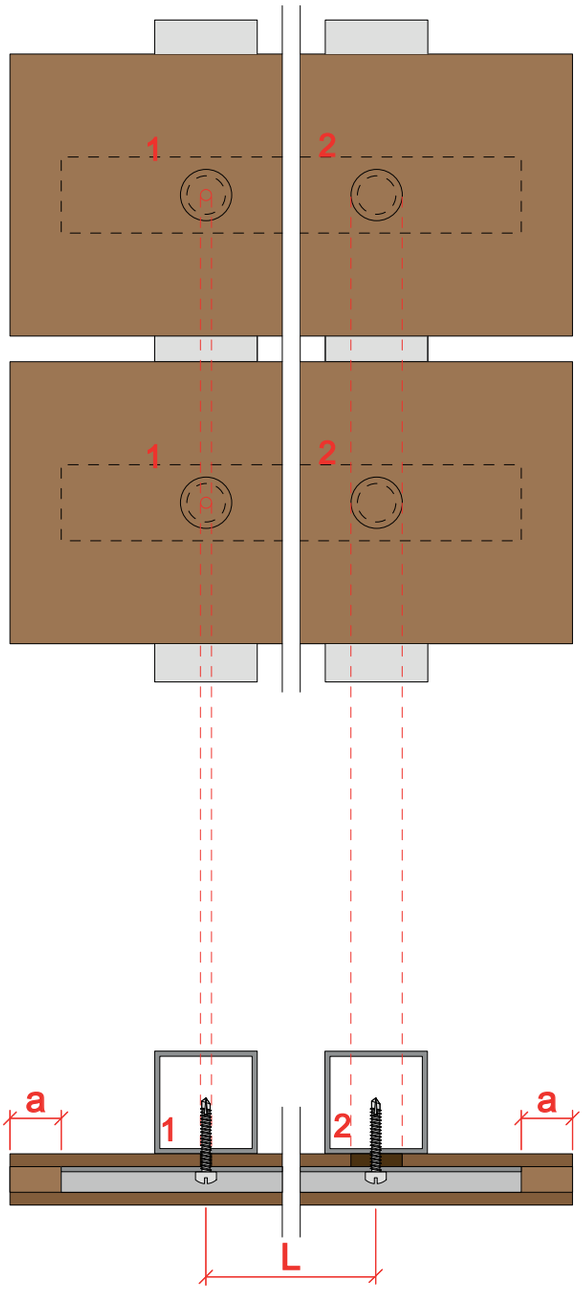


1= FIXED POINT = 49 mm
2= FLOATING POINT = 49 mm + 2L x 0.003 [mm]

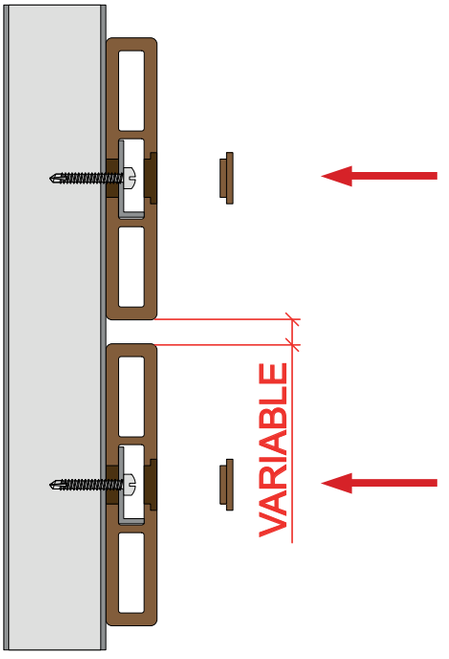
SPECIES UNICA
BORN IN VENICE



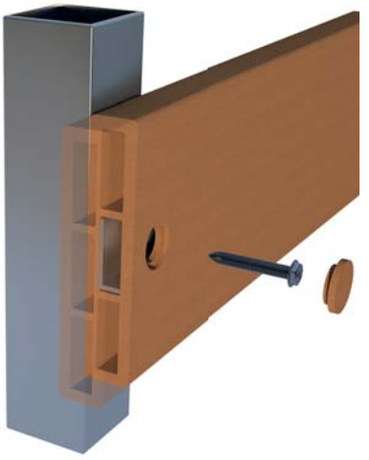
front section



vertical section



a = 20 mm
a = 45 mm in case of installation of the WAJF11020C-WM cap
1= FIXED POINT - Ø hole = Ø screw
2= FLOATING POINT - Ø hole = 2L x 0.003 + Ø screw [mm]



horizontal section

axonometric view

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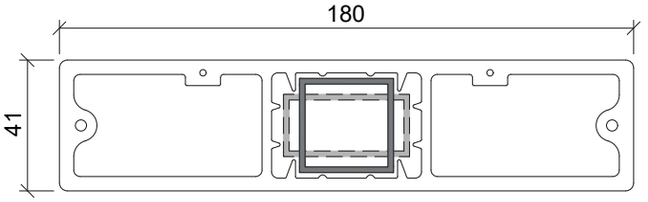
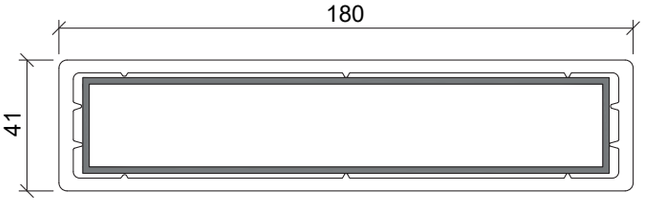
SPECIES UNICA
BORN IN VENICE

JF18041



JF18041

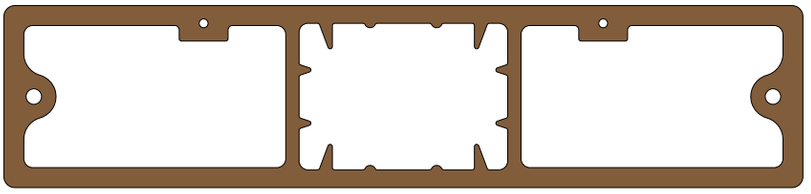


JF18041-165x30

profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF18041	**JF18041**	40 x 20 x 2	180	1700	2100	1800	2200
			41	1600	1800		
		30 x 30 x 2	180	1900	2500	2100	2500
			41	1800	2200		
	JF18041-165x30	165 x 30 x 2	180	3000	-	3000	-
			41	2300	-		

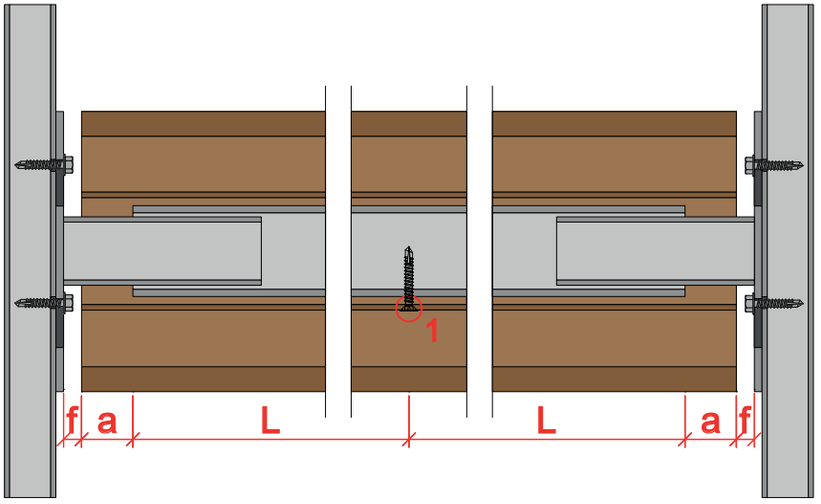
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

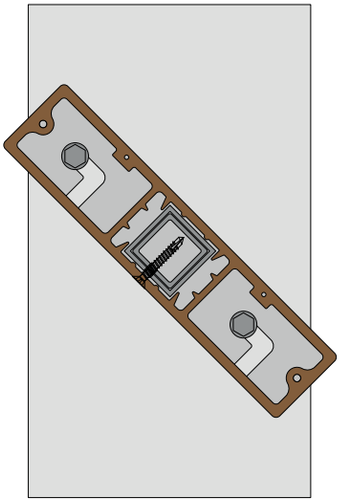
SPECIES UNICA
BORN IN VENICE



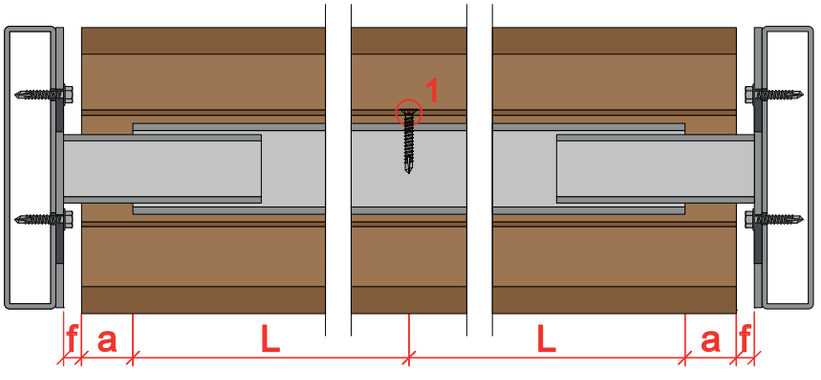
front section

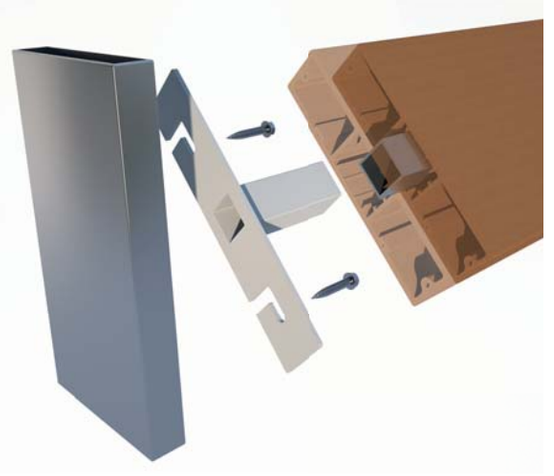
vertical section





a = 20 mm
1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]





*brackets available on request

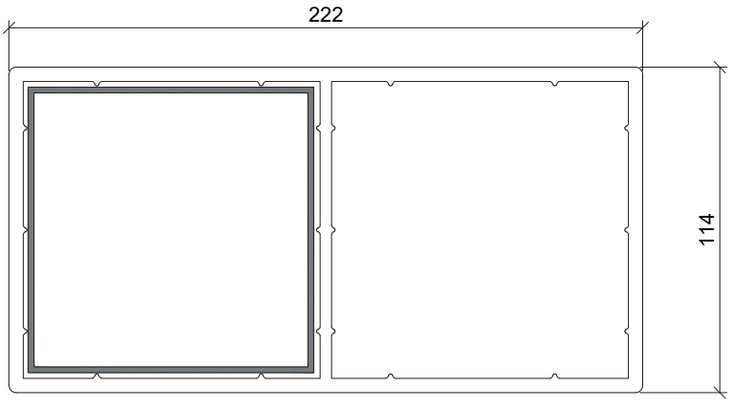
horizontal section

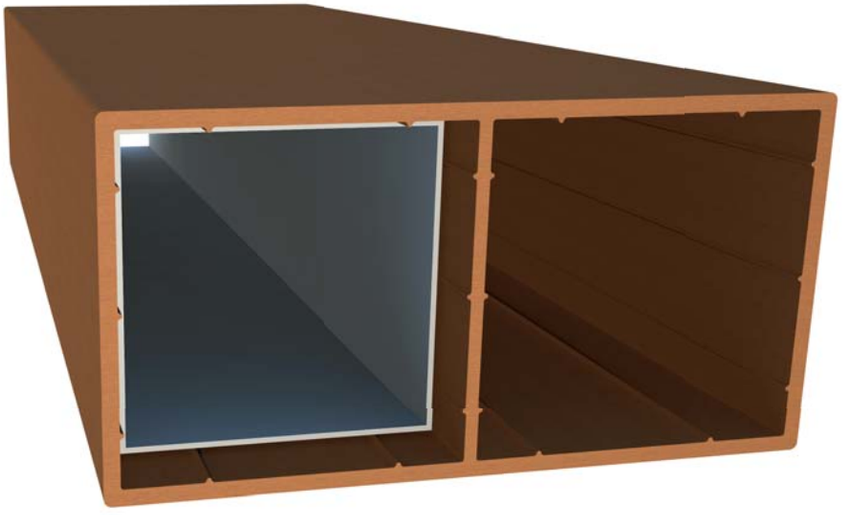
axonometric view

The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.

SPECIES UNICA
BORN IN VENICE

JF222114



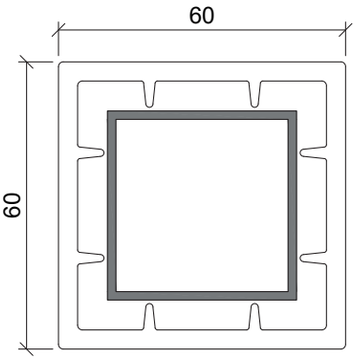


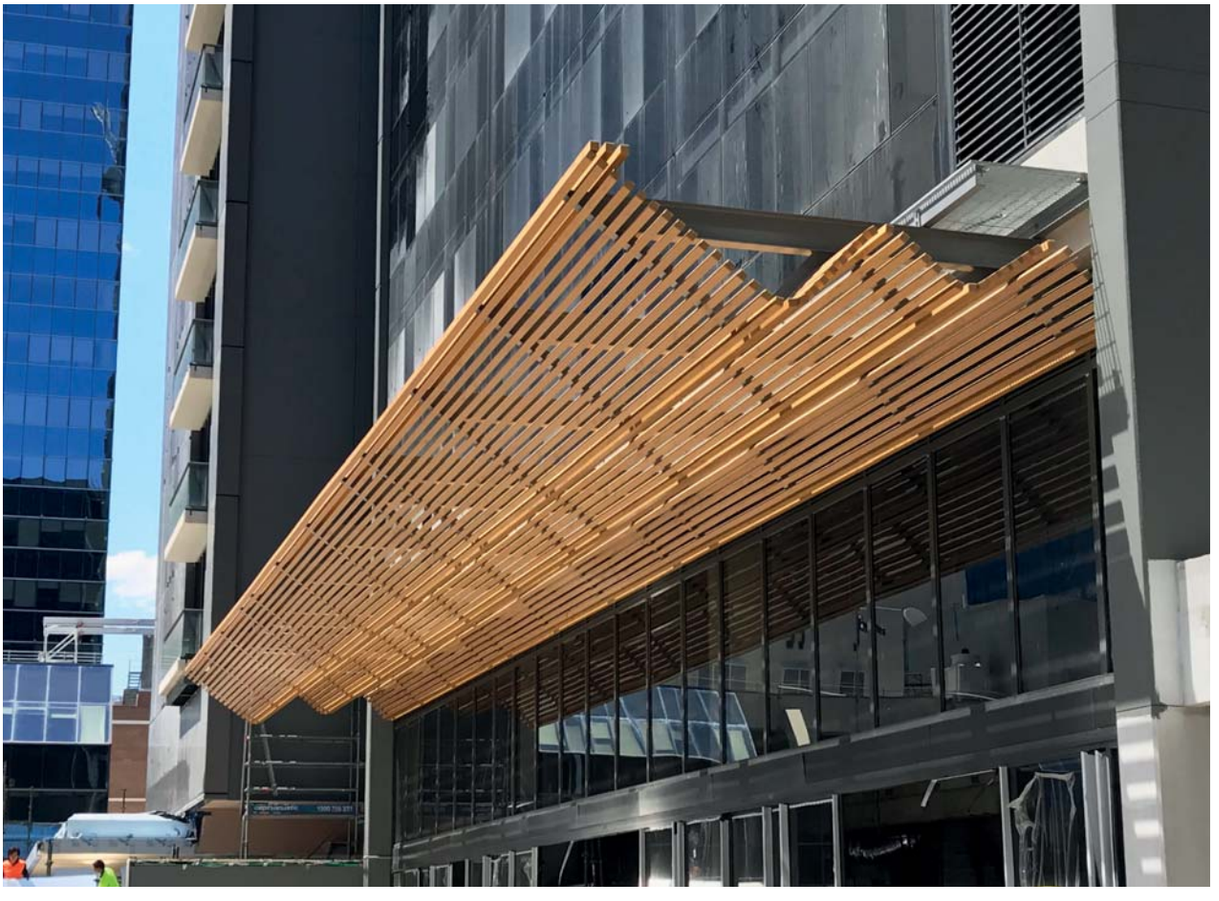
profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF222114	**JF222114**	100 x 100 x 2	222	4200	5500	4900	6500
			114	4200	5500		

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

TZ6060



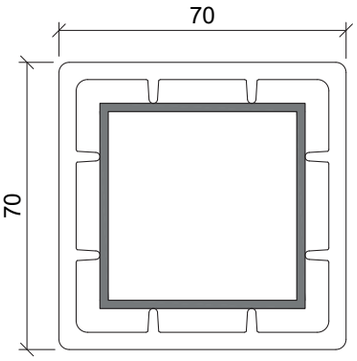


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
TZ6060	**TZ6060**	40 x 40 x 2	60	2400	2800	3200	4300

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

JF7070

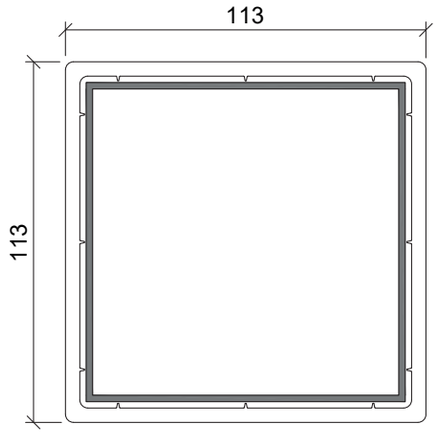


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF7070	**JF7070**	50 x 50 x 2	70	2500	3000	3500	4600

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

TZ113113

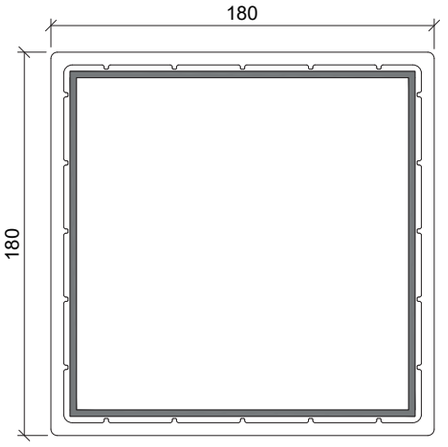


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
TZ113113	**TZ113113**	100 x 100 x 2	113	4100	4700	5700	7500

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

TZ180180

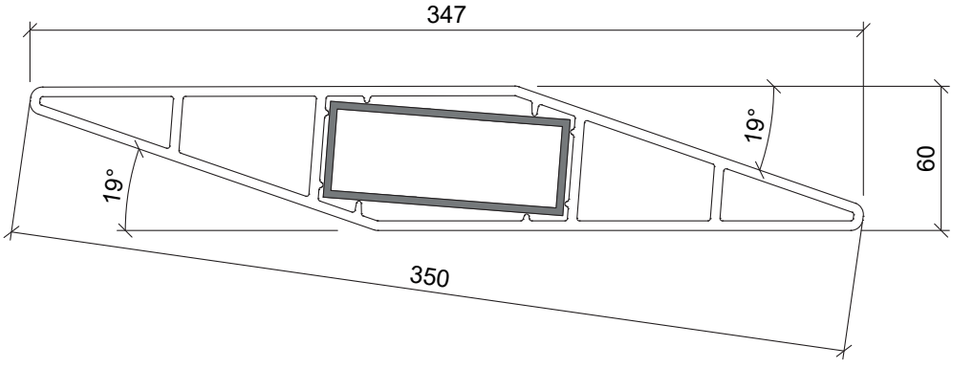


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
TZ180180	**TZ180180**	163 x 163 x 3	180	5600	-	8200	-

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

Design by Jacopo Della Fontana, David Hirsch - D2U

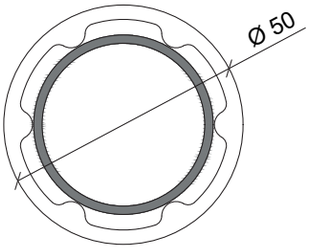


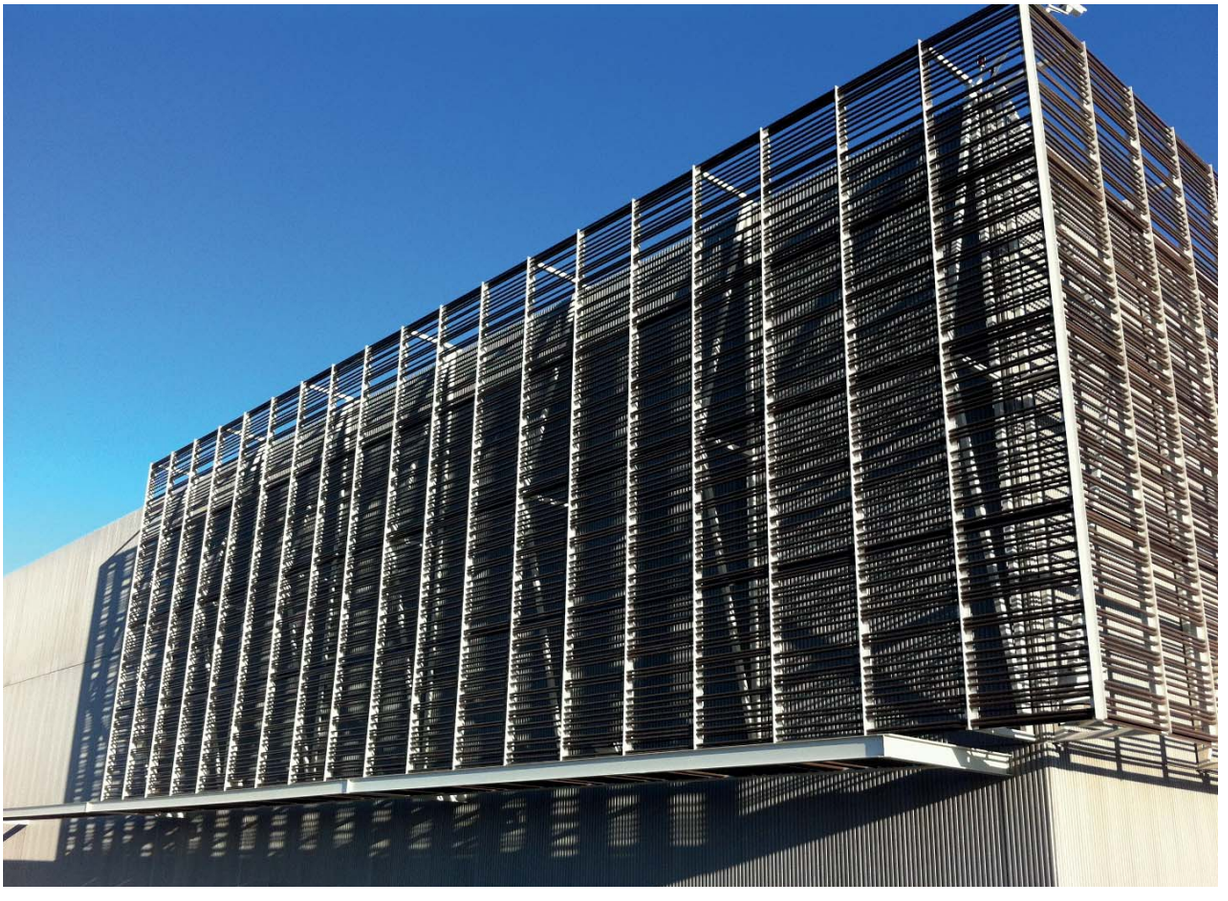
profile	code	reinforcement dimensions [mm]	side [mm]	maximum vertical span [mm]	
				aluminum	steel
JF35068	**JF35068**	100 x 40 x 4	350	3600	-

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

C50R



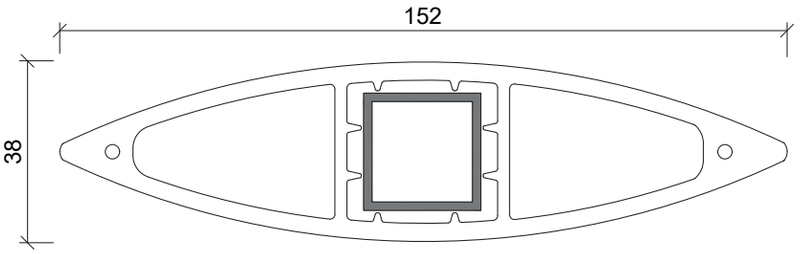


profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
C50R	**C50R**	Ø 38 x 1,5	50	2100	-	2900	-

Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

SPECIES UNICA
BORN IN VENICE

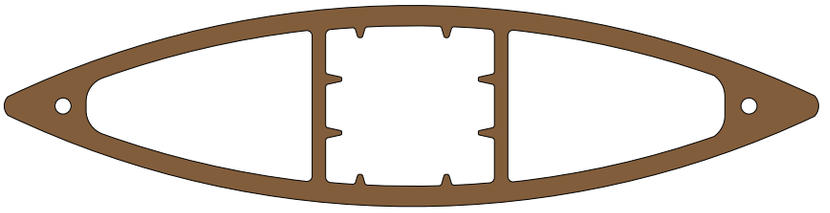
JF15238



profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF15238	**JF15238**	25 x 25 x 2	152	1500	2100	1800	2100
			38	1600	2000		

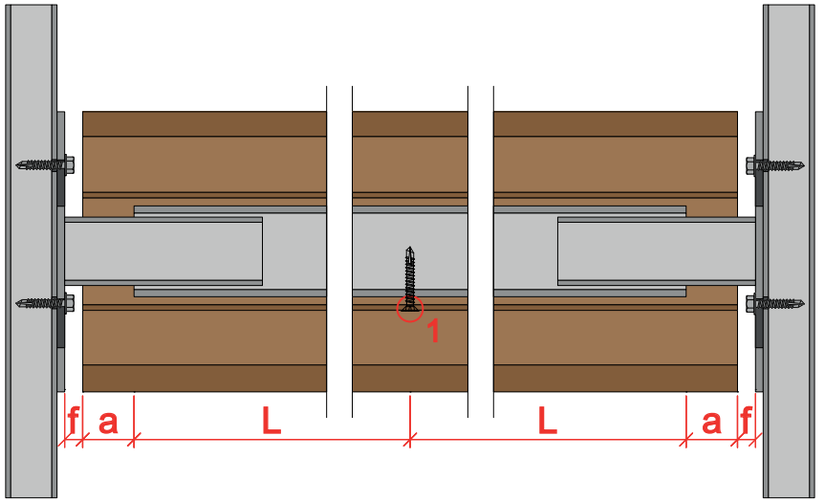
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

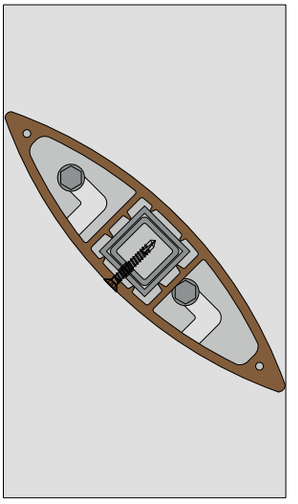
SPECIES UNICA
BORN IN VENICE



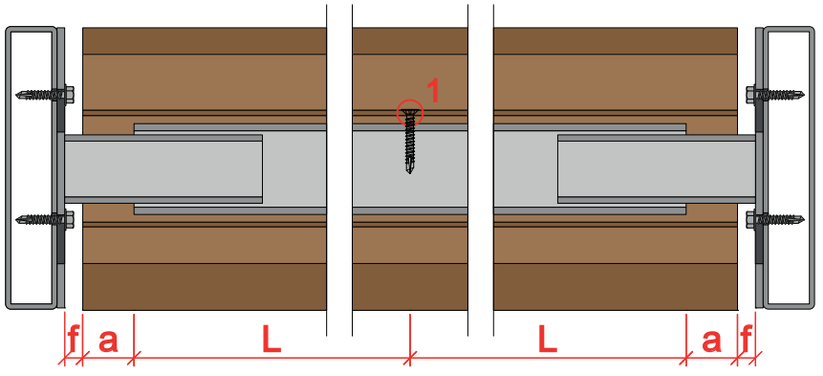
front section

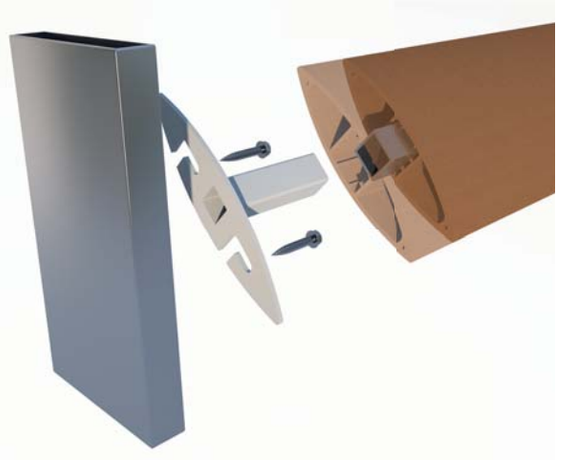
vertical section





a = 20 mm
1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]





*brackets available on request

horizontal section

axonometric view

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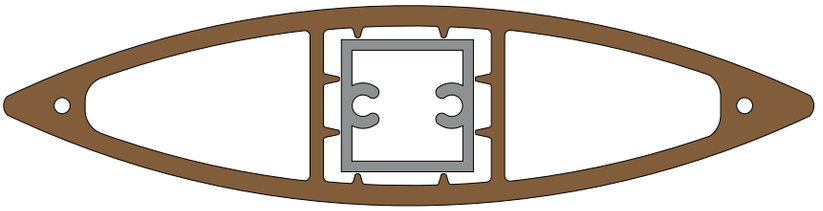
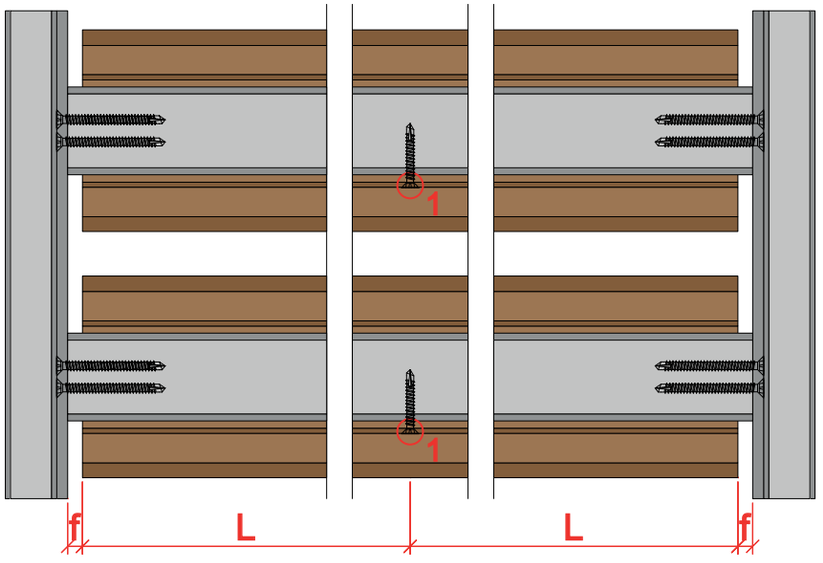
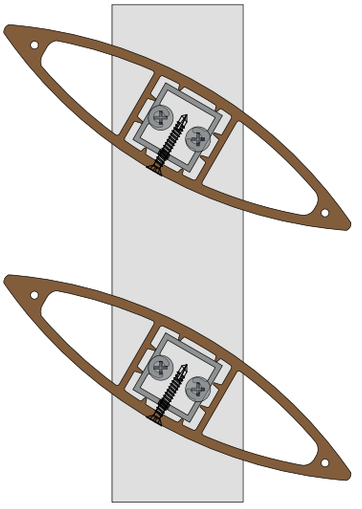
SPECIES UNICA
BORN IN VENICE



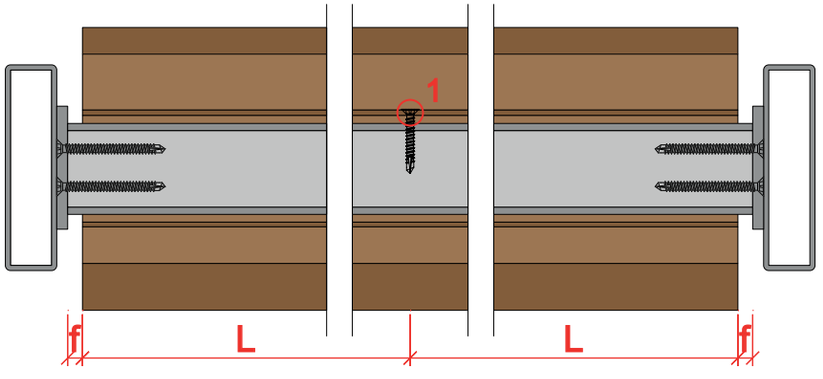
front section

vertical section





1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]



horizontal section

axonometric view

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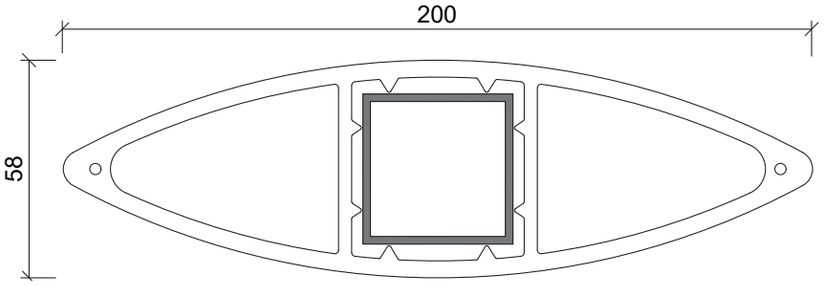
SPECIES UNICA
BORN IN VENICE

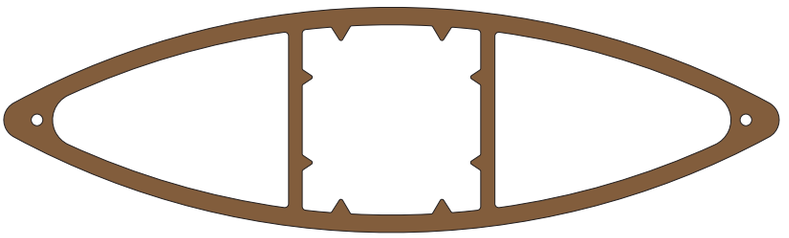
JF20058



profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF20058	**JF20058**	40 x 40 x 2	200	2400	2800	2500	3200
			58	2200	2600		

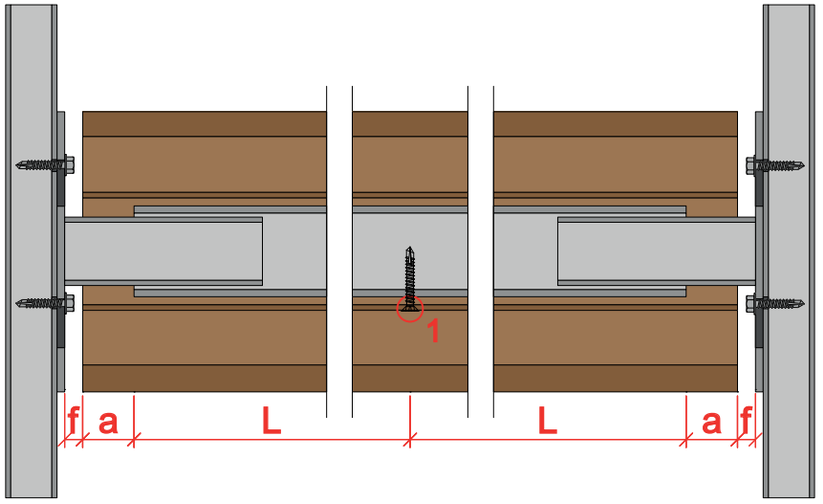
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

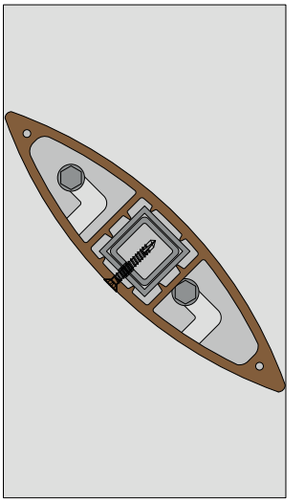
SPECIES UNICA
BORN IN VENICE



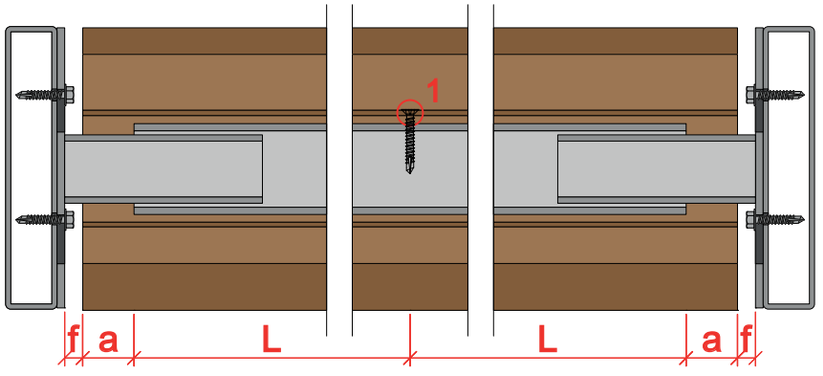
front section

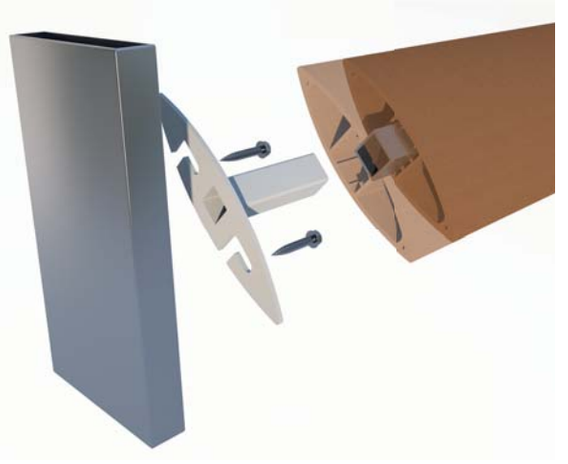
vertical section





a = 20 mm
1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]





*brackets available on request

horizontal section

axonometric view

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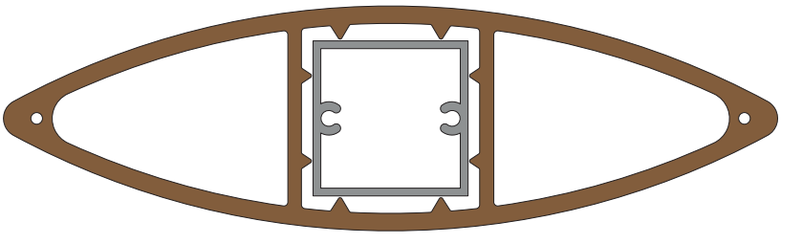
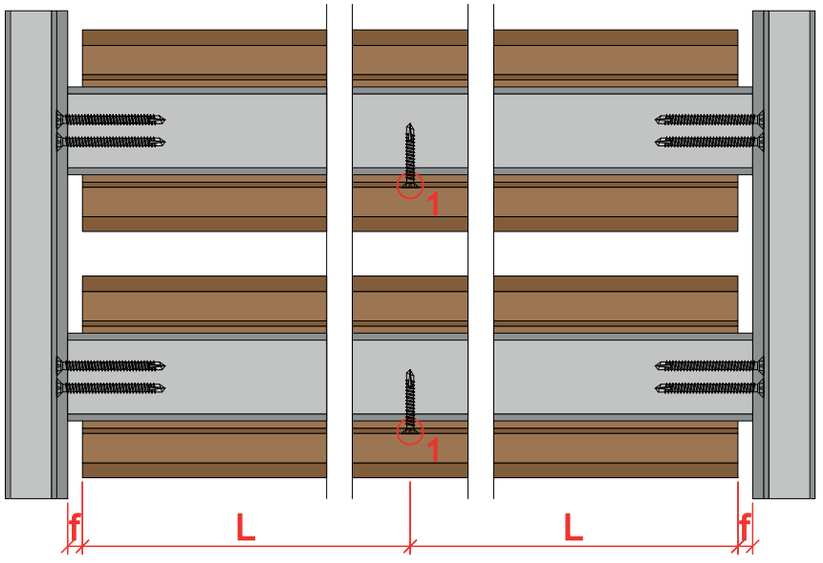
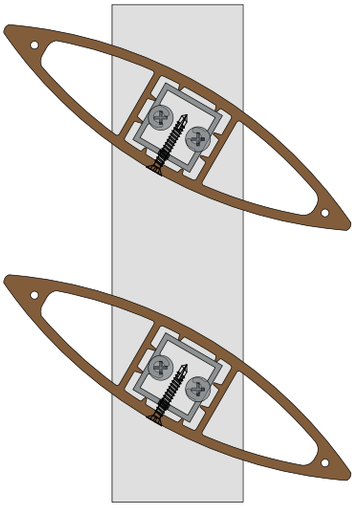
SPECIES UNICA
BORN IN VENICE



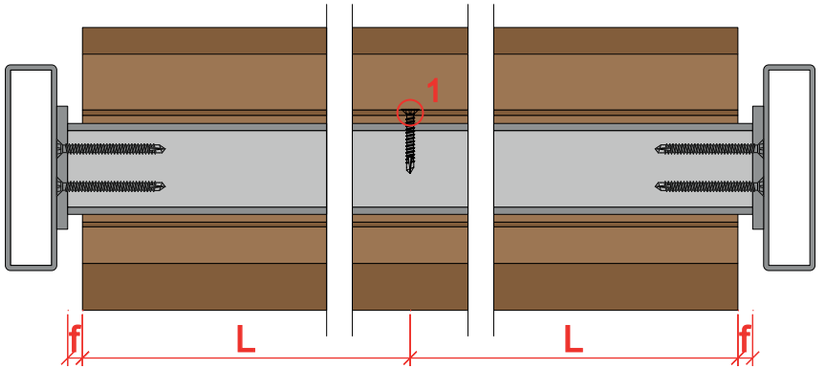
front section

vertical section





1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]



horizontal section

axonometric view

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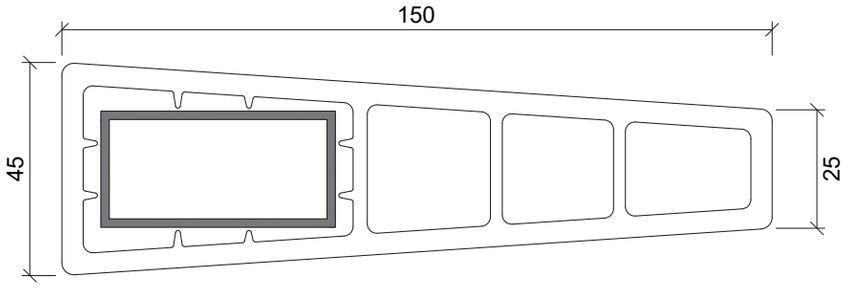
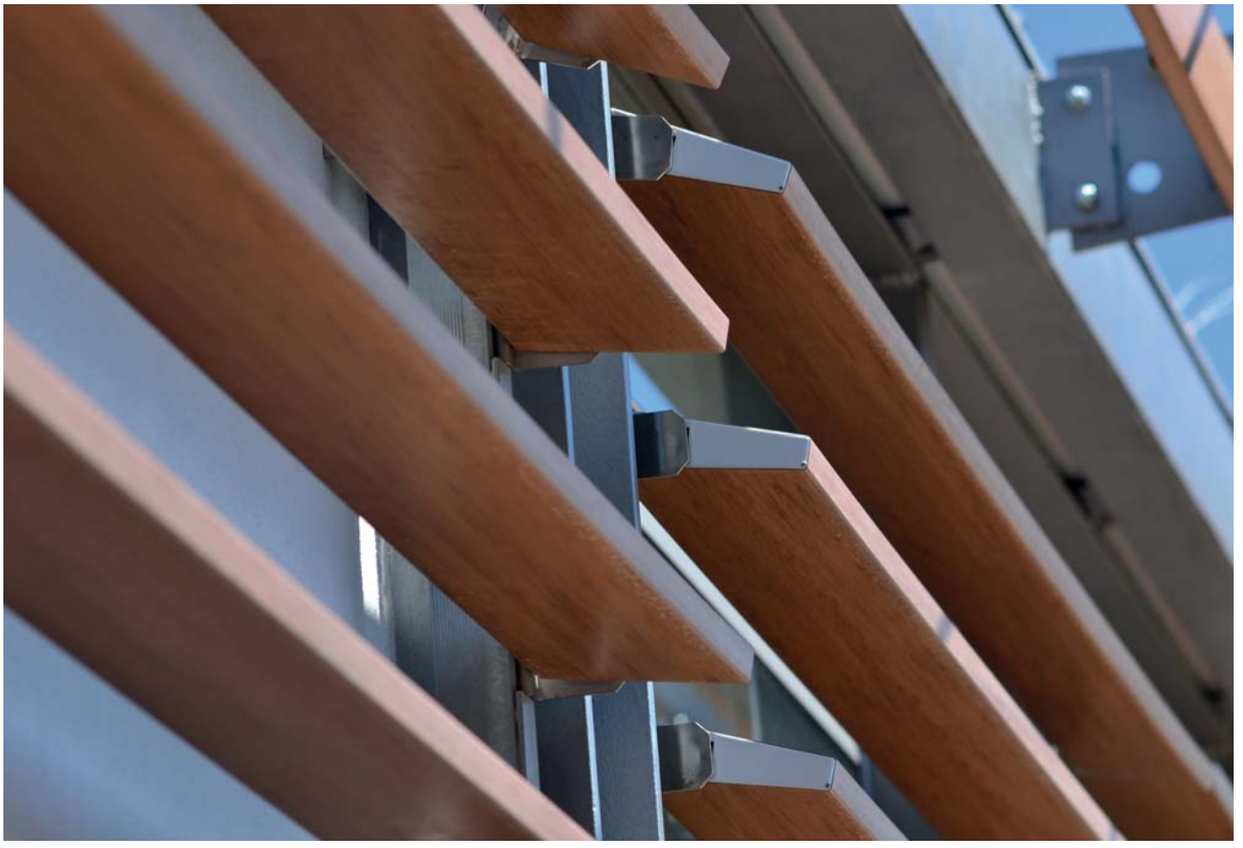
SPECIES UNICA
BORN IN VENICE

JF15045-25

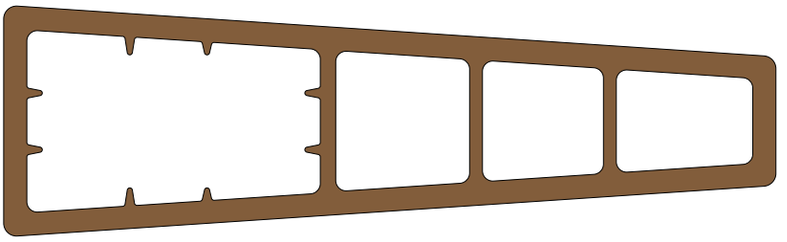




profile	code	reinforcement dimensions [mm]	side [mm]	maximum horizontal span [mm]		maximum vertical span [mm]	
				aluminum	steel	aluminum	steel
JF15045	**JF15045-25**	50 x 25 x 2	150	1900	2700	2200	2800
			45	1800	2200		

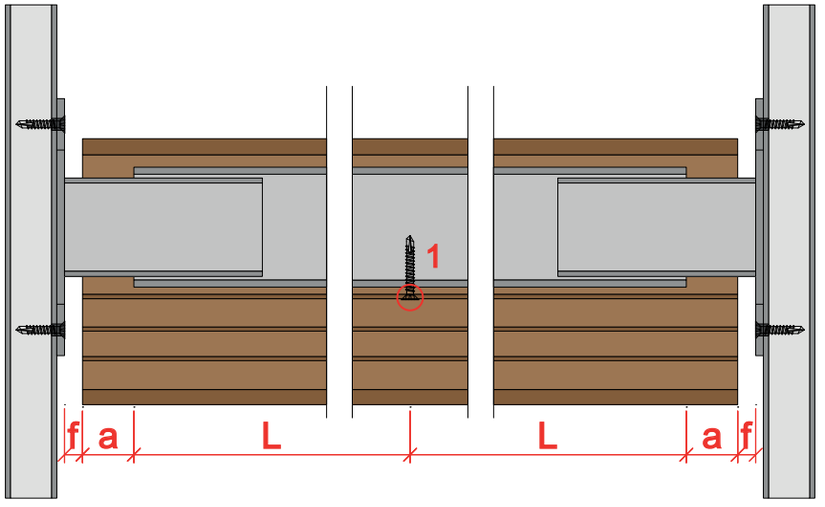
Maximum spans calculated considering:
- maximum permanent deformation due to own weight 2,5 mm
- maximum non-permanent deformation 30 mm considering a standard wind load of 150 kg/m²

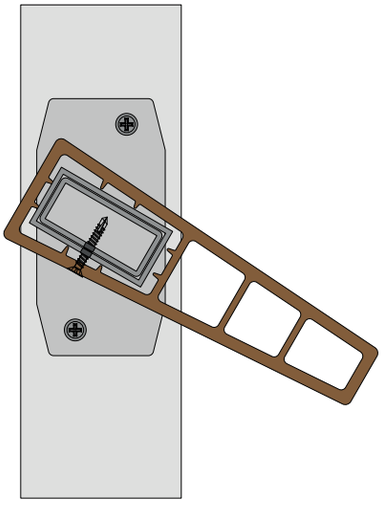
SPECIES UNICA
BORN IN VENICE



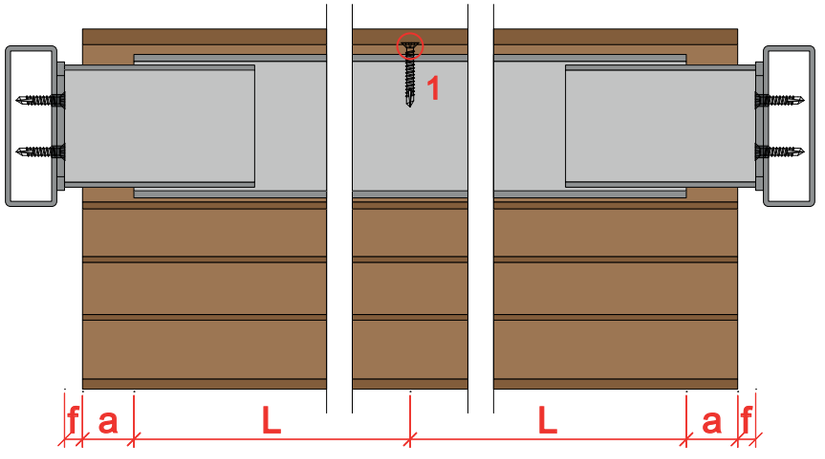
front section

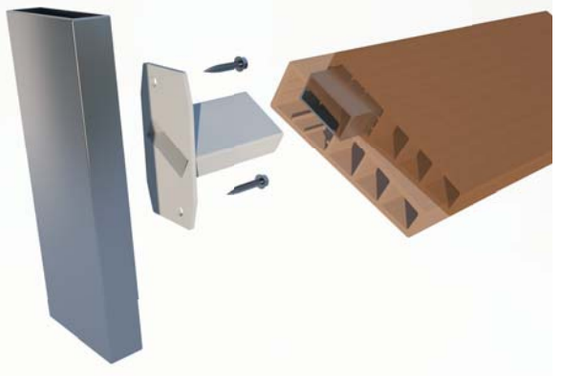
vertical section





a = 20 mm
1= FIXED POINT - Ø hole = Ø screw
f = L x 0.003 [mm]





*brackets available on request

horizontal section

axonometric view

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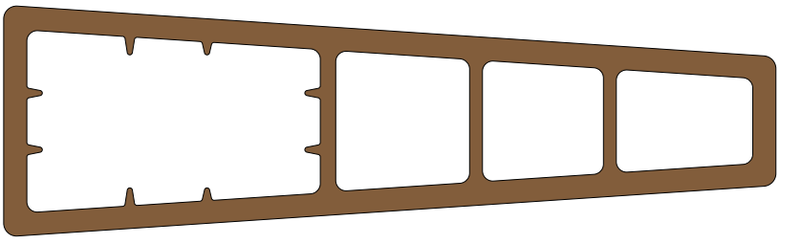
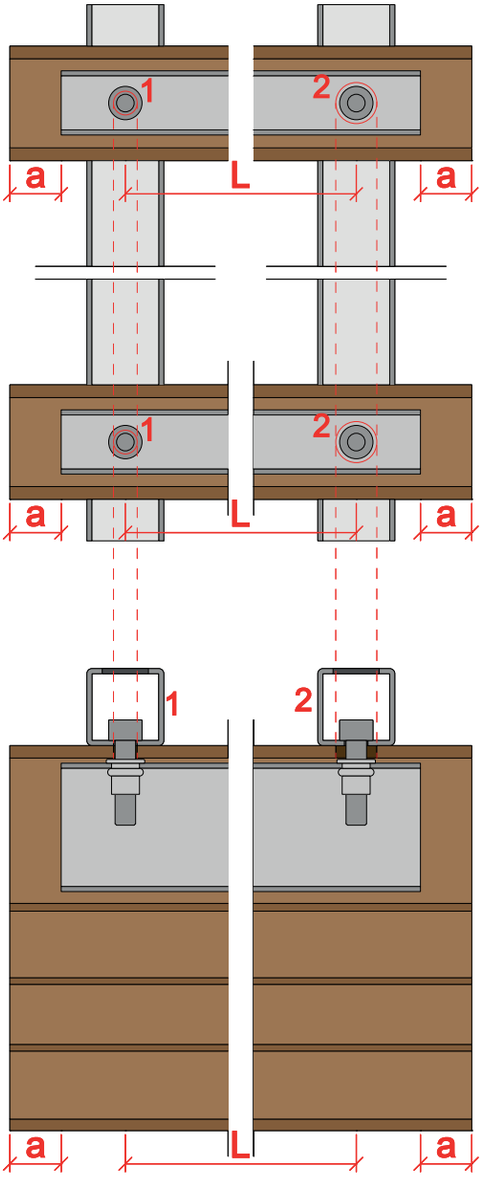
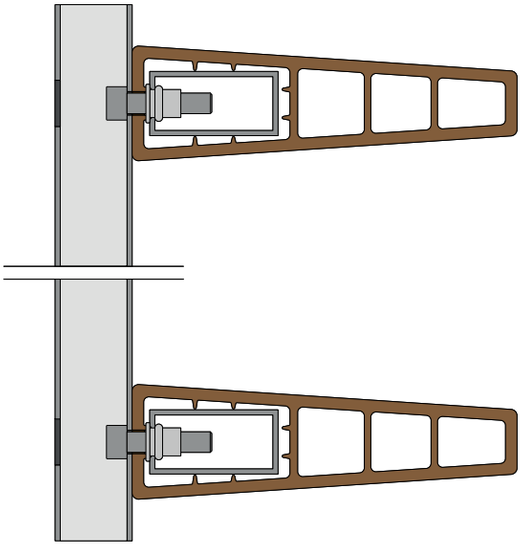
SPECIES UNICA
BORN IN VENICE



front section

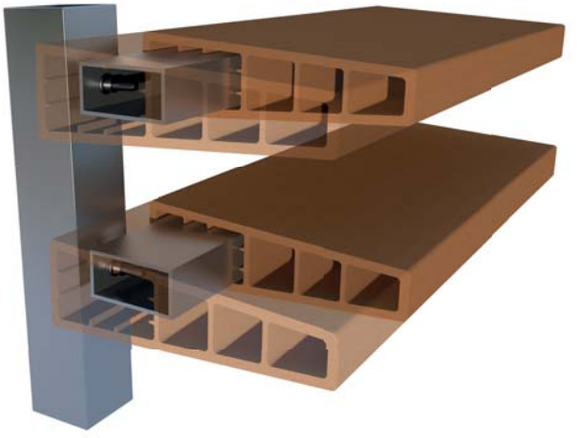


vertical section



a = 20 mm
a = 45 mm in case of installation of the WAJF15045C-WM cap
1= FIXED POINT - Ø hole = Ø screw
2= FLOATING POINT - Ø hole = 2L x 0.003 + Ø screw [mm]

horizontal section



axonometric view

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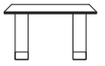
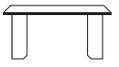
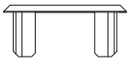
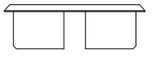
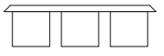
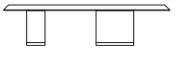
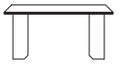
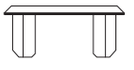
SPECIES UNICA
BORN IN VENICE

CAPS

accessory code	design	compatible profiles	material	colour
WALG3020C-WM		LG3020	Woodn	All
WAJF4030C-WM		JF4030	Woodn	All
WAJF5026C-WM		JF5026	Woodn	All
WAJF6032C-WM		JF6032	Woodn	All
WAJF7040C-WM		JF7040-25x25 JF7040-30x15 JF7040-50x25	Woodn	All
WATZ9555C-WM		TZ9555 TZ9555-R	Woodn	All
WAJF11020C-WM		JF11020	Woodn	All
WAJF12058C-WM		JF12058	Woodn	All
WAJF18041C-WM		JF18041	Woodn	All
WAJF18041-165C-WM		JF18041-165x30	Woodn	All
WATZ6060C-WM		TZ6060	Woodn	All
WAJF7070C-WM		JF7070	Woodn	All
WATZ113113C-WM		TZ113113	Woodn	All
WATZ180180C-WM		TZ180180	Woodn	All
WAJF15045C-WM		JF15045-25	Woodn	All
WAC50C-WM		C50	Woodn	All

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accessory code	design	nominal dimensions [mm]	material	colour
ROUND CAP RC20-25		Ø 20-25	Woodn	All
ROUND CAP RC25-30		Ø 25-30	Woodn	All
ROUND CAP RC30-35		Ø 30-35	Woodn	All
ROUND CAP RC35-40		Ø 35-40	Woodn	All
ROUND CAP RC40-45		Ø 40-45	Woodn	All
ROUND CAP RC45-50		Ø 45-50	Woodn	All

NOTE: If end caps of different sizes are needed, they will be evaluated according to project's needs.

INSTALLATION OF THE END CAPS

Woodn interlocking caps (WAJF7040C-WM and similar)

All caps made of Woodn are supplied in sanded finish/surface, regardless the surface finish of the Versatilis profile surface. Remove any residual material from the profile due to cutting and with a dry cloth remove any remaining dust. Remove the protective film from the adhesive strips placed under the cap. Insert the cap into the profile, make sure it is centered. Apply light pressure with your hand to ensure the adhesive strips adhere well. If possibile, mechanically fasten the caps on both sides of the profile with staples. For a better fixing, we recommend the use of WEISS CHEMIE COSMO SL-660.130 glue.

Follow the reported instructions to install end caps with a structure similar to the ones reported here above.
If you have any doubts, please contact Woodn Industries' technical office at ufficiotecnico@woodn.com.

Bank of America

GREENWOOD GREENDECK

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The information provided by WoodN Industries in this document are solely indicative, they are based on the present state of knowledge and must be considered only as a description of our products and their possible application. Such information must not be interpreted as a guarantee of specific features, performances or warranties of the product. Material's colors and finishes represented in this document are the result of printing techniques so they may slightly differ from the original colors. Original samples are available upon request and constitute only a general indication of the dimensions and the aesthetic appearance of Woodn™ profiles. WoodN Industries may change the information included in this document at any time and without further notice. WoodN Industries does not warrant the accuracy and completeness of the information in this document and furthermore their suitability for the purpose which it is consulted for by the other parties. WoodN's customers or third parties must ascertain they have the most recent version of this document, avaiable at www.woodn.com. It is advised that customers and third parties have a professional adviser to inform them about the suitability of the products for all desired applications and about applicable laws and regulations. WoodN Industries reserves the right to modify products and concerning features without prior notice. WoodN Industries is not liable for any damage arising from, or related to, the use of this document. Woodn™ material does not have structural characteristics and therefore WoodN Industries declines all responsibilities for improper use of the material. No sections of this publication can be reproduced, stored in database, or transmitted in any form or by any other mean without the explicit approval of WoodN Industries. For more information please contact WoodN Industries.

Mechanical properties

Flexural elastic modulus	UNI EN ISO 178:2003	3300 Mpa
Flexural strength	UNI EN ISO 178:2003	25 Mpa
Elastic tensile modulus	EN ISO 527:1996	3300 Mpa
Tensile strength	EN ISO 527:1996	12 Mpa
Elongation at break	EN ISO 527:1996	0,78 %
Charpy impact resistance	EN ISO 179-1:2007	5,65 KJ/m^2
Coefficient of linear thermal expansion longitudinal (from -10 °C to 45 °C)	TMA ASTM E 831/2005	33,3 x10^{-6} m/(m°C)

Reaction to fire

Reaction to fire (critical flux)	UNI EN 9239-1:2006	2,24 kW/ m^2

Chemical and biological features

Mold/mildew resistance	ASTM G21:2009	Fungal growth: no visible growth

Surface characteristics

Slip resistance, USRV coefficient	UNI ENV 12633:2006	> 52
Friction coefficient	B.C.R.A. Rep. CEC. 6/81	> 0.4

The values shown are indicative and not binding. Test reports available upon request.
The natural aging of the material and temperature variations may cause deviations from the values indicated above.
The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com

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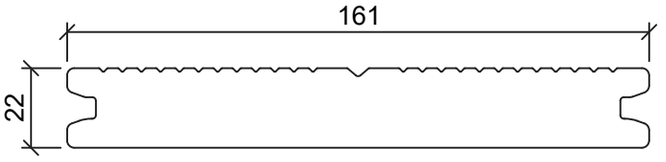
GREENDECK - outdoor decking



PLANKS DIMENSION AND LOGISTIC

Code	TV01
Dimensions of the plank	161 x 22 x 2000 mm
Incidence	6,10 m/m^2
Weight of a plank	~ 3,90 kg/m

The external dimensions listed are nominal values.
The weights of the planks indicated in the tables are indicative and not binding.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.

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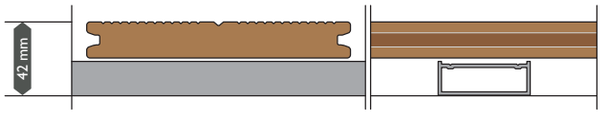
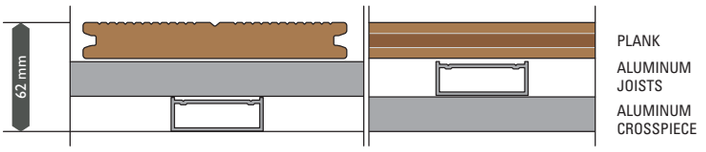
System height

LAYING ON ALUMINUM JOISTS 55 x 20 mm (W x H)



LAYING ON ALUMINUM JOISTS AND CROSSPIECES 55 x 20 mm (W x H)
WITH SUPERIMPOSED FRAME

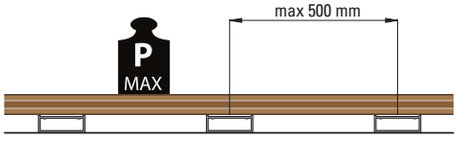


Size of the joints

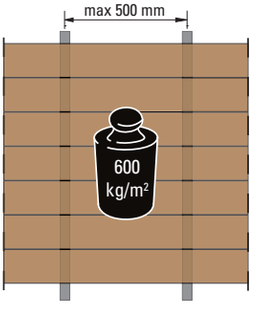
Clip model	Joint size [mm]
Stainless steel clip (code ZCLG-AC001)	Approximately 5 *

*IMPORTANT: The dimensions shown are approximate and may vary depending on the accuracy, tolerance and method of installation.

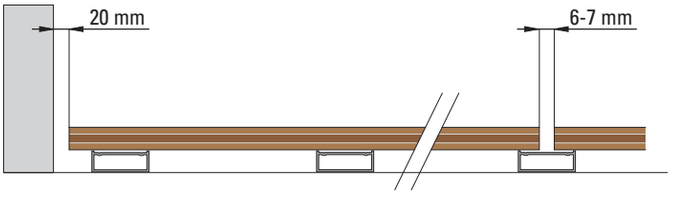
Laying instructions



The Greendeck floor is suitable for foot traffic, but not vehicle traffic.

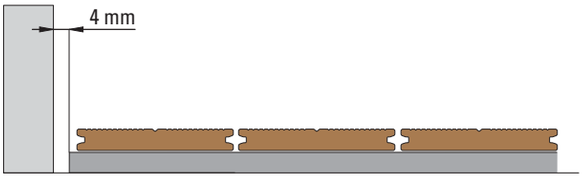


Load distributed over 1 m^2

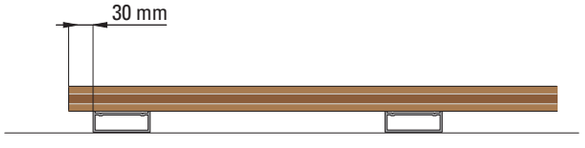


The minimum distance between the ends of the plank and the wall must be at least 20 mm.

The minimum distance between the ends of two consecutive planks must be 6-7 mm (for planks 2000 mm long)



The distance between the joist and the wall must be at least 4 mm regardless of the width of the surface.



Position the joist no more than 30 mm from the end of the plank.

WARNING: it has to be noted that the failure to comply strictly with the criteria for a correct installation, causes the deformation of the materials and the misalignment of all the expansion joints.

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GENERAL INSTALLATION INSTRUCTIONS

Key points to be followed before and during the installation process:

- Store the material on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and direct sun light.
- Before starting the installation, carefully check the material and notify immediately of any manufacturing issues. Complaints will not be accepted after installation.
- Before starting the installation, check project's drawings (or shop drawings if provided) and the correspondence of the received material against the packing list.
- Acclimate the material in stock to the temperature of the jobsite for at least 48 hours prior to installation.
- The installation temperature must be higher than 0 °C.
- Do not cover the product with sheets made with non-breathable material (nylon, polyethylene and similar materials). For this purpose it is advisable to use breathable material such as painter felt sheets.
- The accumulation of electrostatic charges is a natural phenomenon commonly found in plastic materials, and under exceptional environmental conditions this may also occur in Greenwood products.
- Profiles shall be handled with care in order to prevent damages. It is recommended to lift the profiles on the whole length during displacement and not make them slide on top of each other. Always use clean fabric gloves when handling profiles.
- Prevent the formation of dirt on and between profiles; in particular, make sure that mechanical processes carried out on other materials, near Greenwood products, do not determine the accumulation of chips or dust of any kinds. During the installation/ assembly phase do not apply any label or sticker; if already applied, please remove immediatly after installation. Immediately remove major stains such as paint, concrete or tar residues.
- For cleaning and maintenance instructions refer to page 109. The WoodN Industries warranty will be rendered null and void in the event of incorrect or improper handling, cleaning and maintenance.

EXPANSION GAP BETWEEN ADJACENT PROFILES AND WALLS

The composite wood being subject to limited expansion, due to temperature changes and limited water absorption, there must be maintained a lateral distance of around 5 mm between individual boards. This distance is provided automatically by the use of the clip which at the same time carries out the functions of template and spacer during fixing operations.

The heads of the boards must always rest on a substructure. The clips should be positioned in line with the substructure profile to fix both ends of the boards.
Maintain distances of 20-30 mm from the rigid structures present in the vicinity of the decking. In the head joints there must be a distance between the boards of 6-7 mm (for 2000 mm long pieces). A distance of 11 mm must also be maintained for direction changes.

WARNING: For correct installation, every piece of board (including those shorter than 500 mm) must always be supported and fixed to the substructure in at least 3 points. This is to ensure durability over time.

TOOLS REQUIRED FOR INSTALLATION:

- Impact drill
- Electric screwer
- Electric saw
- Rubber mallet
- Various materials for tracing purpose

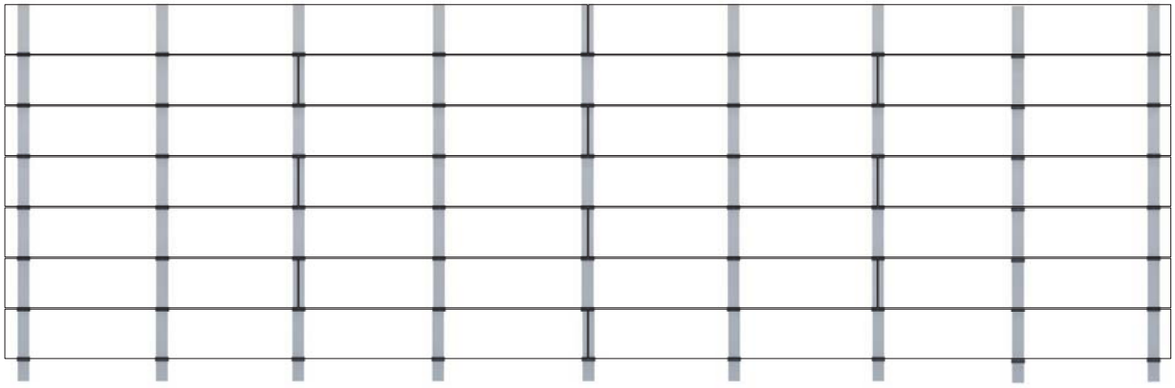
LAYING METHOD 1 - SINGLE FRAME

LAYING ON STABLE GROUND

Installation on aluminum joists involves mechanical fixing them to the ground and is suitable for installation on stable and drillable floors such as: concrete sub-bases, existing stone floors and industrial decking.
In the presence of concrete screeds laid to protect waterproofing membrane, check the actual available thickness to choose the size of the plug to fix the joists, so as not to damage the underlying membrane.

For installation in circumstances and on grounds that differ from the above, contact the Woodn Industries' technical department at the following e-mail address: ufficiotecnico@woodn.com

LAYING PATTERN - RUNNING BOND



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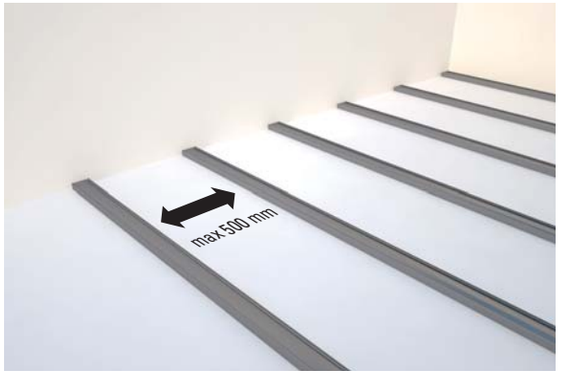
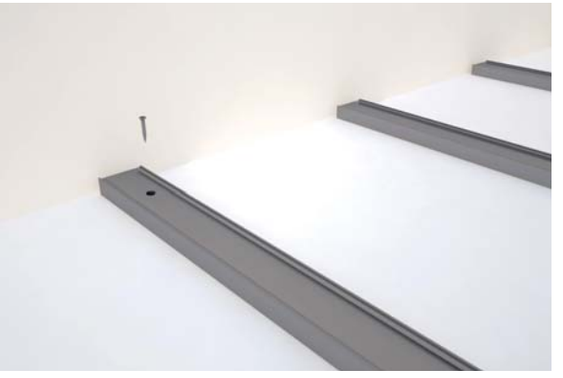
LAYING AND FIXING OF ALUMINUM JOISTS (standard 55 x 20 mm)

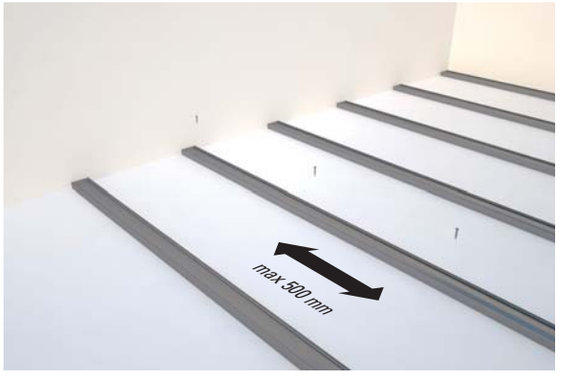
Arrange the joists on the ground in a position perpendicular to the plank laying direction, with a maximum centre-to-centre distance equal to **500 mm** from each other. The positioning of the joists is closely connected to the laying surface of the planks. We recommend laying out the planks on the ground to locate the exact positions of the joists, their centre-to-centre distance may vary depending on the laying surface and the cut of the floor planks.



1. Arrange the joists on the ground with a maximum centre-to-centre distance of **500 mm**, and take into account the floor laying pattern.

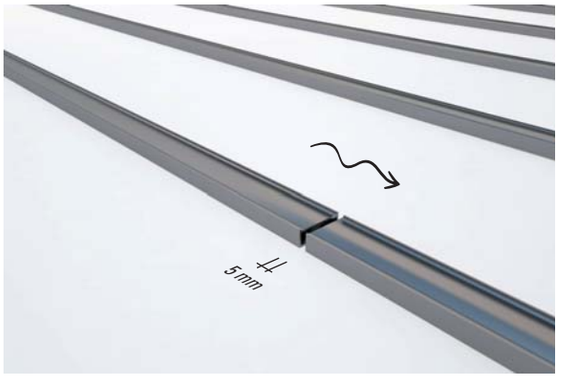


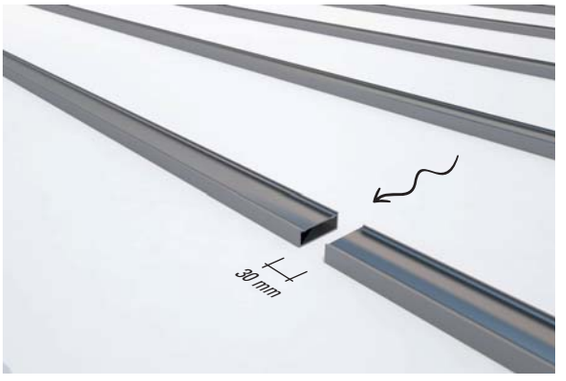
2. Drill a through hole with a diameter 1-2 mm greater than the diameter of the screw shank and another of a diameter greater than the diameter of the screw head on with the upper surface of the joist.



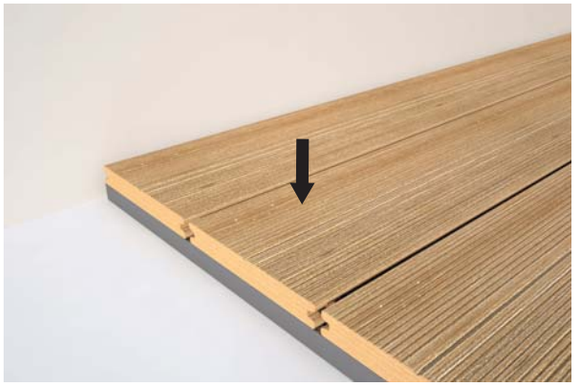
3. Attach the joists to the ground using suitable screw plugs, the centre-to-centre distance of the fixing points must not exceed 500 mm.

4. If the ground is uneven, and shimming is therefore required, ensure support to the aluminium joists at least every 500 mm.





5. The distance between the ends of adjacent joists must be at least 5 mm in the case of installation of the joists along the sloping side of the floor and 30 mm in case of installation perpendicular to the slope to allow for the outflow of rainwater.

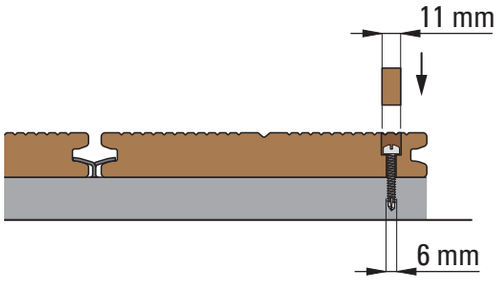


1. The brushed side must be installed facing upwards as it is treated to give it the characteristic aesthetic effect desired.

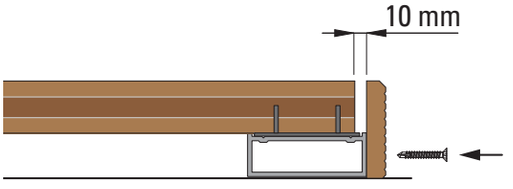
2. Apply starting clip ZCLG-AC003, by screwing it to the joist and make sure the clips are all aligned.

3. Insert the clip ZCLG-AC001 in the appropriate on the joist and fix it with self-drilling screws 3.5x19 mm.

4. Repeat the above steps until completion of the decking.



5. Where boards have to be fixed using screws, the fixing can be done with a recessed screw and the special dowel provided.
• Make a Ø 6 mm hole on the board in order to create the site for the screw 4.8x25 mm. Increasing the diameter is necessary to allow the natural movement of the board.
• Enlarge the hole in the upper 2/3 of the board to Ø 11 mm.
• Fix the board to the pilot hole in the aluminium with the screw 4.8x25 mm.
• Plug the hole with the dowel and sand the surface so as to recreate the finish of the board.



6. The edging is used to close off the ends of the boards. The fixing, with pre-hole, is made on the joist and a gap of 10 mm must be left between the two items. The distance between the screws with which the edging is attached should be about 200 mm.

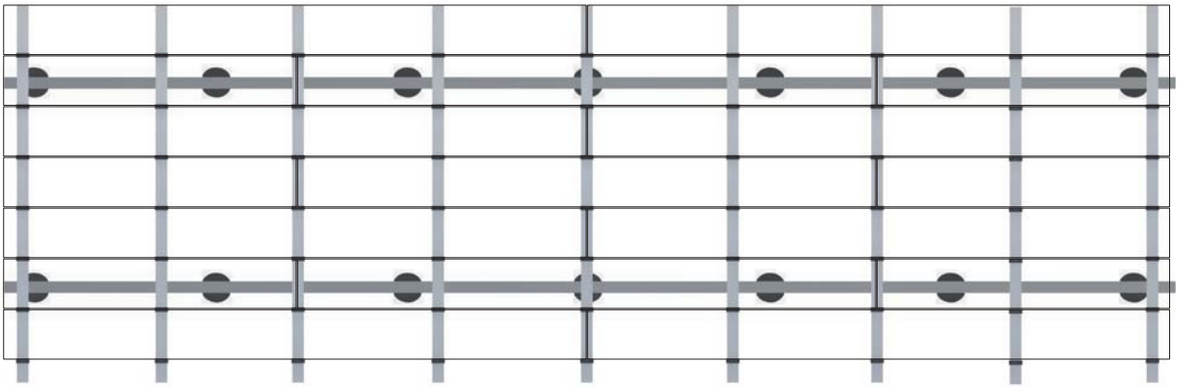
LAYING METHOD 2 - DOUBLE FRAME

LAYING ON UNSTABLE OR ELEVATED GROUND

The laying system involves the creation of a frame consisting of aluminum joists and crosspieces and does not require fixing to the ground; it is suitable for laying on unstable or not drillable grounds such as: soil with vegetation, stabilized gravel, sand, waterproofed floors with a sheath or in general for raised floors.

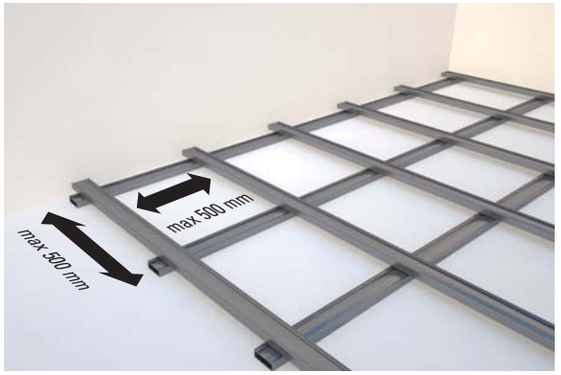
For installation in circumstances and on grounds that differ from the above, contact the Woodn Industries' technical department at the following e-mail address: ufficiotecnico@woodn.com

LAYING PATTERN - RUNNING BOND

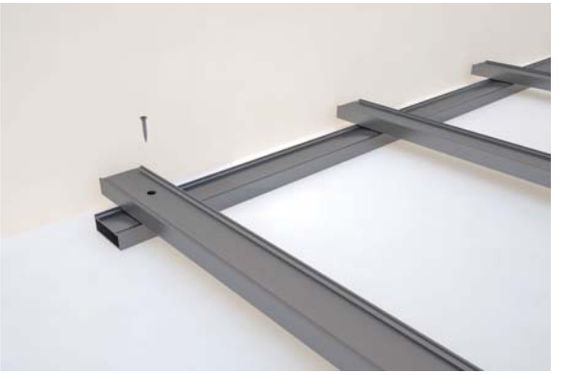


CREATING THE ALUMINIUM FRAME and LAYING OF RAISING SUPPORTS (standard 55 x 20 mm)

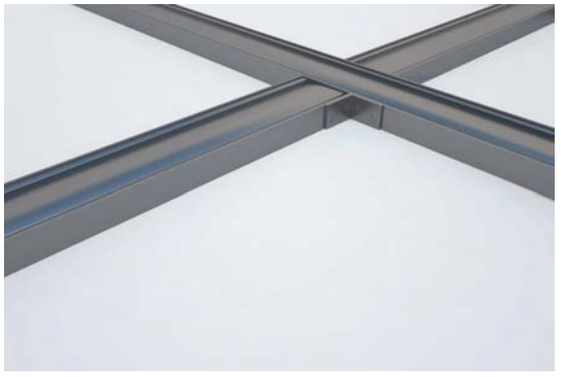
Place on crosspieces and joists in accordance with the chosen laying pattern, maintaining a maximum centre-to-centre distance of 500 mm between the joists and 500 mm between the crosspieces. In the case of raised floors, place the supports in accordance with the laying pattern. In any case, the distance between the supports must be maximum 500 mm in the direction parallel to the length of the planks and 500 mm in the direction perpendicular to the length of the planks.



1. Place crosspieces and joists as shown in the figure. The joists must be firmy fixed to the crosspieces.



2. In the case of a superimposed frame, drill through holes with a Ø 5 mm on the joist and widen them to Ø 12 mm on the upper surface. Then, fix it with the self-drilling screw.



3. In the case of a coplanar frame, for a proper system rigidity the stringers should be fitted whole, interrupting the spars instead at the intersections. Common L-brackets, which can be found in any hardware store, can be used for fixing.

4. In the case of raised floors, place the supports as shown in the figure.

5. Then create the frame as indicated in the following paragraph. Mechanically fix crosspieces and joists to the supports.

ALUMINIUM CAPACITY (centre-to-centre distance crosspieces)

Joists	I_{max}
55 x 20 mm (W x H)	500 mm
55 x 30 mm (W x H)	650 mm
55 x 40 mm (W x H)	800 mm

INSTALLATION OF THE PLANKS

Proceed with the installation of the planks as described in paragraph “Laying method 2”.

HEIGHT OF THE ELEVATED SYSTEM

The total height of the decking system is obtained by adding the overall size of the joist, crosspiece, plank and support. Here are the possible combinations:

Woodn™ Greendeck

Support code	Support height	Height of the finished surface*	Frame configuration
ZPSC-AC010#2235	22 - 35 mm	84 - 97 mm	Overlapped
ZPSC-AC010#3555	35 - 55 mm	97 - 117 mm	Overlapped
ZPSC-AC010#5595	55 - 95 mm	117 - 157 mm	Overlapped
ZPSC-AC010#95165	95 - 165 mm	157 - 227 mm	Overlapped
ZPSC-AC010#165235	165 - 235 mm	227 - 297 mm	Overlapped

The heights reported above are calculated considering aluminum joists and crosspieces 55 x 20 mm (W x H)

To the ZPSC-AC010#95165 and ZPSC-AC010#165235 supports (and only to them) the extension code ZPSC-AC010#PROL can be applied, up to a maximum of 3 extensions. Each extension applied increases the height of the system by 100 mm.

For example:
System composed of: ZPSC-AC010#95165 overlapped frame + 2 extensions finished floor height = (157 - 227) + (2 x 100) = 357 - 427 mm (357 mm minimum height, 427 mm maximum height).

THEORETICAL SUPPORT INCIDENCES FOR RAISED DECKING

	stacked bond	running bond
Woodn™ Greendeck	5 pcs/sqm	5 pcs/sqm

The actual calculation of the number of supports needed must be defined based on the chosen laying surface.

ACCESSORIES

accessory code	design
Aluminum Joist ZPCM-55X20-6060-T6 55 x 20 (W x H)	
Aluminum Joist ZPCM-55X30-6060-T6 55 x 30 (W x H)	
Aluminum Joist ZPCM-55X40-6060-T6 55 x 40 (W x H)	
Stainless steel clip ZCLG-AC001	
Stainless steel clip (starting clip) ZCLG-AC003	
Jolly plastic clip ZCLG-AC002	
Screw hole dowel AC008	
Edging GW007	
Smooth board for bullnose GW001	
Raised floor supports ZPSC-AC010#SPESS / ZPSC-AC010#H15 ZPSC-AC010#2235 / ZPSC-AC010#3555 ZPSC-AC010#5595 / ZPSC-AC010#95165 ZPSC-AC010#165235 / ZPSC-AC010#PROL	

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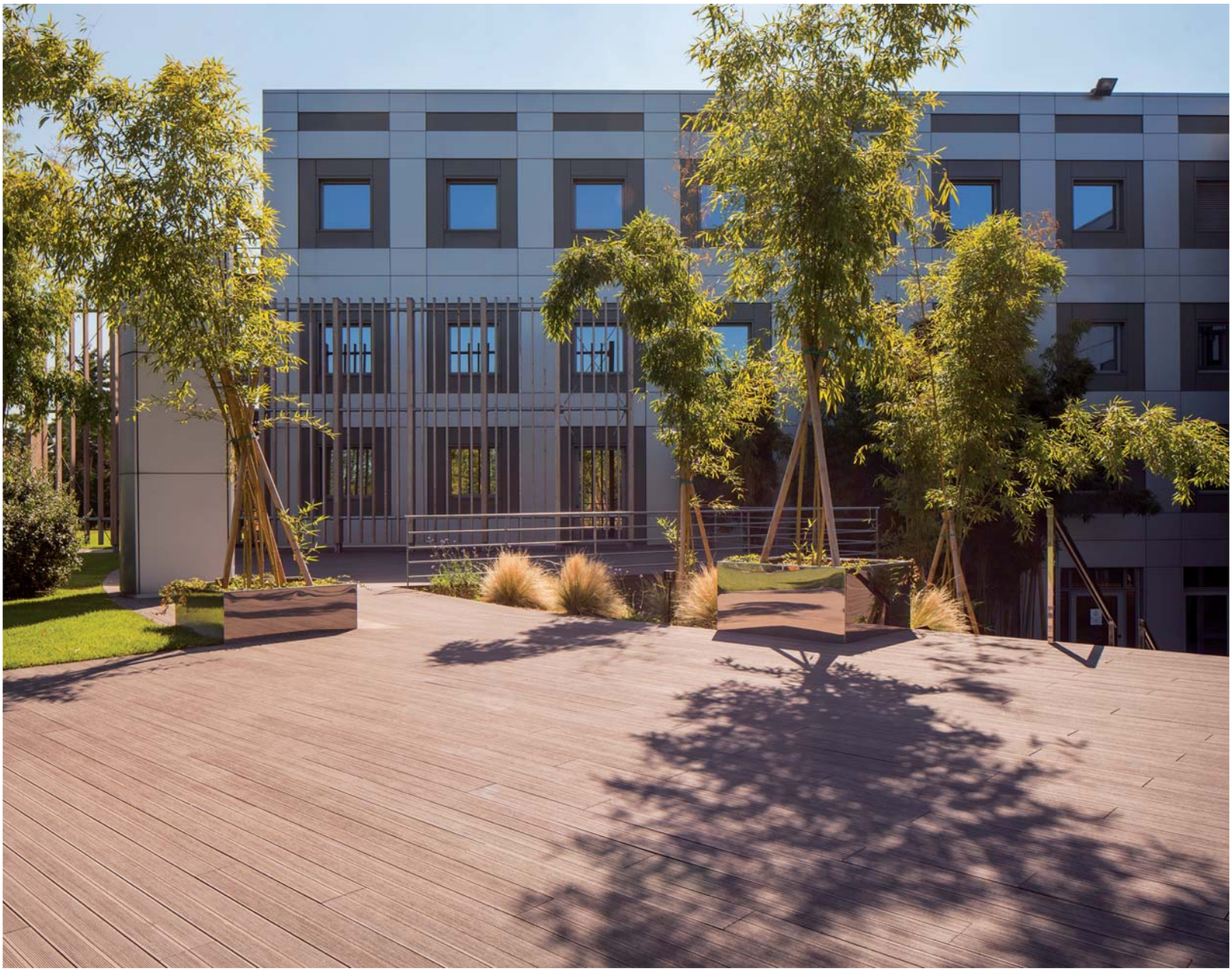

WOODN MODULATUS

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Mechanical properties

Elasticity (bending)	UNI EN ISO 178	@23 °C @65 °C
Yield strenght (flexural)	UNI EN ISO 178	@23 °C @65 °C
Water absorbption and humidity	ASTM D1037	absorption 0,07%
Dynamic- Mechanical analysis of transition temperature	ASTM D4065/95	78.8 °C
Linear thermal expansion coefficient (from -10 °C to 70 °C)	TMA ASTM E 831/2006	longitudinal 46,9 x10^{-6} m/(m°C) trasversal 48 x10^{-6} m/(m°C)
Tensile strenght and tensile strenght after accelerated weathering (exposure to xenon lights)	ASTM D638-10 (tensile test) ASTM G155-050	difference after 2 months of exposure ~5,21% difference after 3 months of exposure ~6,9% *(meet the requirements to comply with Miami Dade and Florida Building Code 2014)*

Reaction to fire

Flammability	UL94 AS 3959-2009	V-0 Class BAL-29
Flame spread index Smoke developed index	ASTM E84	Class A
Ignition temperature	ASTM D1929	476 °C
Average critical radiant flux of floor	AS ISO 9239 ASTM E648	≥ 11 kW/m^2 > 1,03 W/cm^2 *(class I as per NFPA 101)*
Ignitability, flame propagation, heat release and smoke release	AS/NZS 1530.3:1999	Ignitability (0-20) = 8 Spread of Flame (0-10) = 0 Heat Evolved (0-10) = 0 Smoke Developed (0-10) = 7

Chemical and biological features

Evaluation of the action of microorganisms (scale from 0 to 5)	EN ISO 846:97	Test result: 1
Heavy metal content (Pb, Ge, Cr, Hg)	GB18584-2001 GB18580-2001	< 0,5 ppm
Formaldehyde emission	EN 717-2:1994	0,1 mg HCHO/(m^2h)

The values shown are indicative and not binding. Test reports available upon request.
The natural aging of the material and temperature variations may cause deviations from the values indicated above.
The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com

SPECIES UNICA
BORN IN VENICE

GENERAL INSTALLATION INSTRUCTIONS

Key points to be followed before and during the installation process:

- Store the material on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and direct sun light.
- Before starting the installation, carefully check the material and notify immediately of any manufacturing issues. Complaints will not be accepted after installation.
- Before starting the installation, check project's drawings (or shop drawings if provided) and the correspondence of the received material against the packing list.
- Acclimate the material in stock to the temperature of the jobsite for at least 48 hours prior to installation.
- The installation temperature must be higher than 0 °C.
- Do not cover the product with sheets made with non-breathable material (nylon, polyethylene and similar materials). For this purpose it is advisable to use breathable material such as painter felt sheets.
- The accumulation of electrostatic charges is a natural phenomenon commonly found in plastic materials, and under exceptional environmental conditions this may also occur in Woodn™'s products.
- Profiles shall be handled with care in order to prevent damages. It is recommended to lift the profiles on the whole length during displacement and not make them slide on top of each other. Always use clean fabric gloves when handling profiles.
- Prevent the formation of dirt on and between profiles; in particular, make sure that mechanical processes carried out on other materials, near Woodn products, do not determine the accumulation of chips or dust of any kinds. During the installation/assembly phase do not apply any label or sticker; if already applied, please remove immediatly after installation. Immediately remove major stains such as paint, concrete or tar residues.
- For cleaning and maintenance instructions refer to page 109. The WoodN warranty will be rendered null and void in the event of incorrect or improper handling, cleaning and maintenance.

EXPANSION GAP BETWEEN ADJACENT PROFILES AND WALLS

WoodN, due to material's composition's features and extrusion technology, undergoes after the first exposure an initial dimensional shrinkage less than 0.4% of the profile length (max value established according to EN 479: 1995) and presents a linear contraction / dilatation due to temperature variations. In outdoor applications, leave a gap at the end of the profile according to the relative size in the table below:

Laying temperature	Expansion gap
< 20 °C	2 mm/m
> 20 °C	1 mm/m

For example:

For laying conditions with a temperature around 30 °C and a plank length of 2000 mm, it should be left gaps measuring 2000 x 1 mm/m = 2 mm.

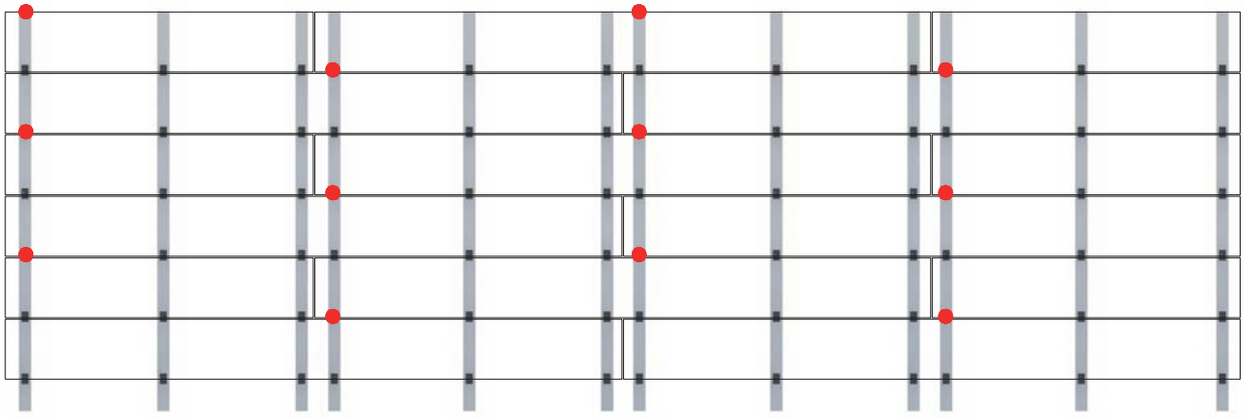
WARNING: it has to be noted that the failure to comply strictly with the criteria for the application of fixed points and floating points, causes the deformation of the materials and the misalignment of all the expansion joints.

FIXED POINT

To make sure that the expansion gap will remain over time, in outdoor applications a FIXED POINT should be made on each plank.
We also recommend strictly adhering to the positioning pattern of the fixed point.

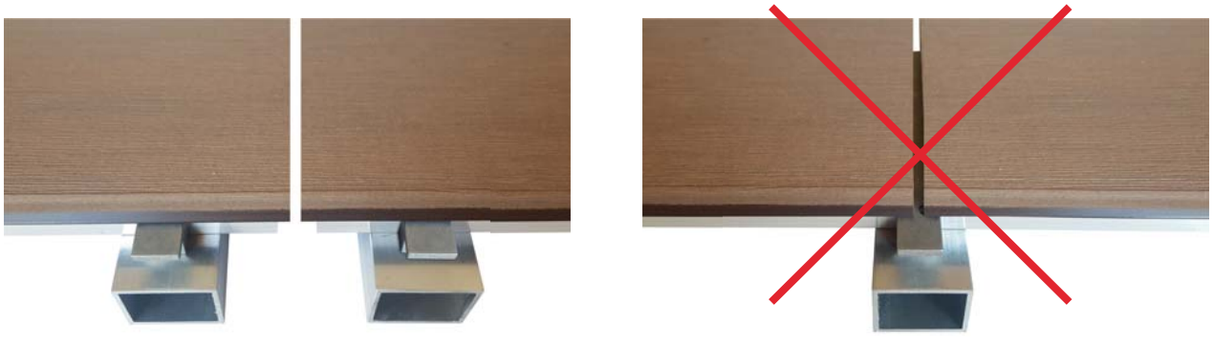
LAYING PATTERN - RUNNING BOND

● = fixed point for expansion



ALIGNMENTS

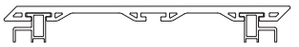
We recommend to align and plumb the substructure before you starting the installation.
We recommend leaving an expansion joint between the heads of the substructure profiles in correspondence with the floors slabs for possible settling of the building.



In correspondence of the heads of two consecutive planks, the aluminum joists must be doubled as shown in the photo.

PROFILES SECTION

outdoor cladding

profile	cross-section	nominal dimensions [mm]	weight of the plank [kg/m]
Q9510		section 95 x 10 standard length 2000	0.59
Q13010HD		section 130 x 10 standard length 2000	1.18
Q20410		section 204 x 10 standard length 2000	2.32
TH14830HD-4		section 148 x 30 standard length 2000	1.03
TH6050HD		section 54 x 60 standard length 2000	0.80

The external dimensions listed are nominal values.
The weights of the planks indicated in the tables are indicative and not binding.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.

SPECIES UNICA
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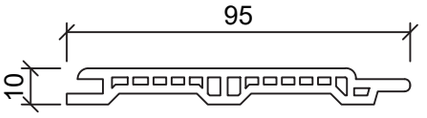
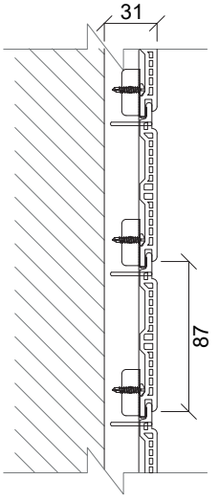
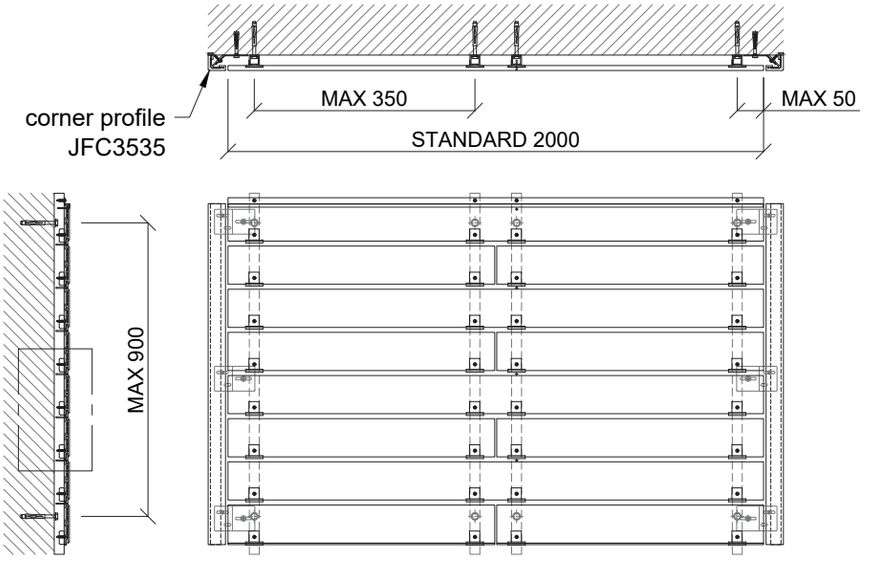
Q9510 - outdoor cladding



MOUNTING SYSTEM





WEIGHT OF THE SYSTEM ≈ 8.50 kg/sqm
- Measures in millimeters
- Dimensions considering a standard wind load of 120 kg/m²

SPECIES UNICA
BORN IN VENICE

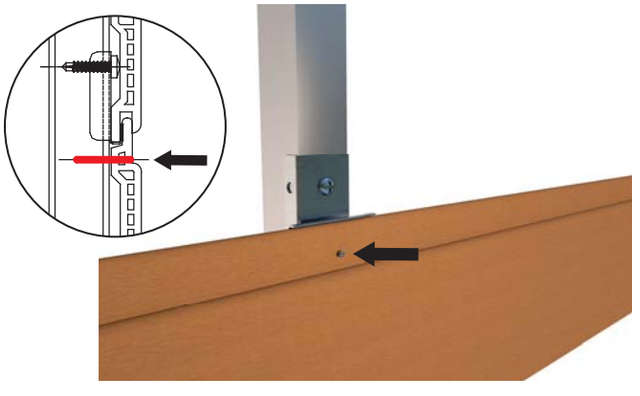
ASSEMBLY INSTRUCTIONS

1. Screw the aluminum joist profiles to support with suitable screws and wall plugs (*).

2. Apply the first row of ZCLW-KK2826 clips at the bottom with self-drilling screws.

3. Fit the plank in the respective clip slot.

4. Insert the second row of clips to lock the plank.



5. Install a cylindrical pin ZCPW-D2X24-A2 for the fixed point (make a pre-hole Ø 1.8 mm).

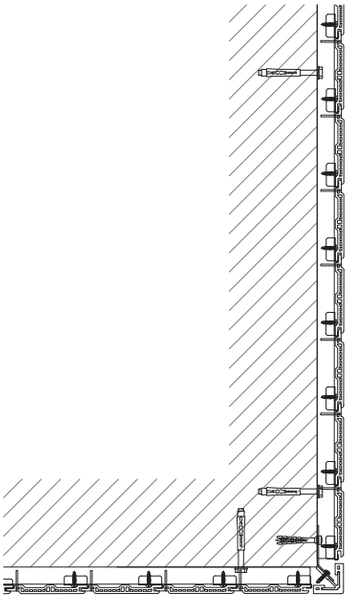
6. Repeat as described from step 3 up to the top to complete the cladding.

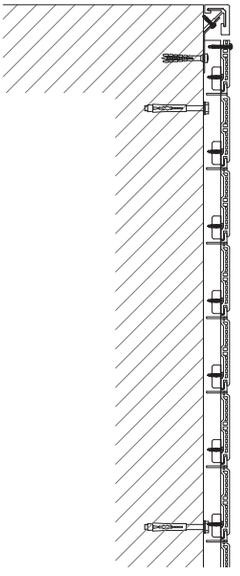
*Screws and wall plugs must be chosen according to the type of wall support

SPECIES UNICA
BORN IN VENICE

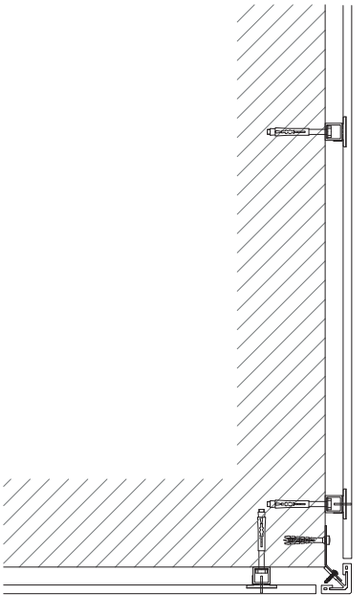
DETAILS FOR CORNERS

VERTICAL PLANKS

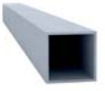




HORIZONTAL PLANKS



SYSTEM COMPONENTS

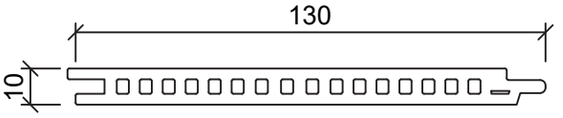
Profile **Q9510**		11.50 m/sqm	Substructure profile **ZTQM-20X20X2-6060-T6**		3.40 m/sqm (stacked bond) 3.90 m/sqm (running bond)
Fixing clip **ZCLW-KK2826**		40 pz/sqm (stacked bond) 45 pz/sqm (running bond)	Screw **ZRHW-3.5X16-A2-7504N**		40 pz/sqm (stacked bond) 45 pz/sqm (running bond)
Dowel pin **ZCPW-D2X24-A2**		6 pz/sqm (stacked bond) 6 pz/sqm (running bond)			

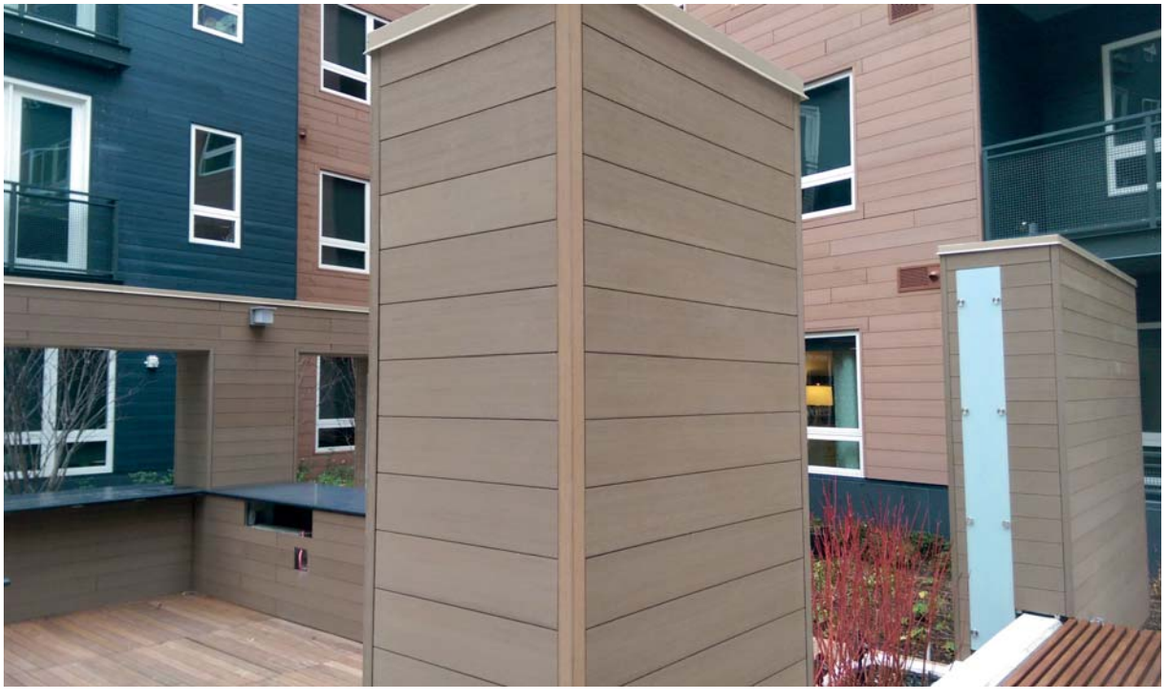
CORNERS COMPONENTS

Profile **JFC3535**		Fixing bracket **ZCLW-WAJFC3535_6050**		Screw **ZRHW-3.5X16-A2-7504N**	

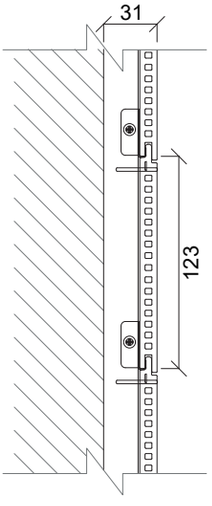
WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 350 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

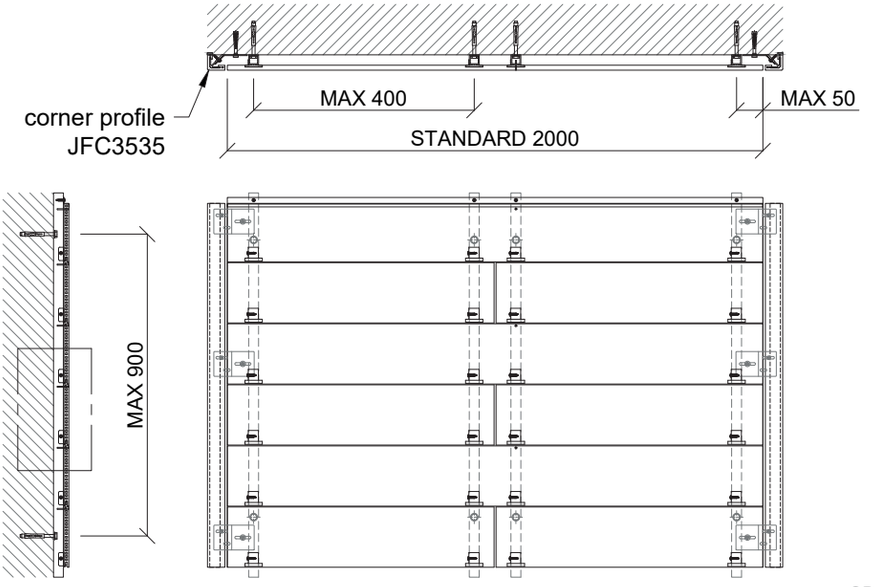
Q13010HD - outdoor cladding





MOUNTING SYSTEM





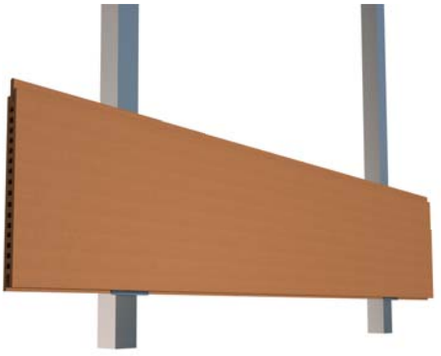
WEIGHT OF THE SYSTEM ≈ 11.00 kg/sqm
- Measures in millimeters
- Dimensions considering a standard wind load of 120 kg/m²

SPECIES UNICA
BORN IN VENICE

ASSEMBLY INSTRUCTIONS

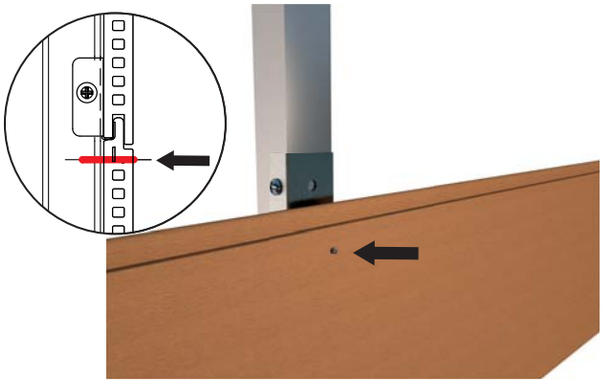
1. Screw the aluminum joist profiles to support with suitable screws and wall plugs (*).

2. Apply the first row of ZCLW-KK2826 clips at the bottom with self-drilling screws.



3. Fit the plank in the respective clip slot.

4. Insert the second row of clips to lock the plank.



5. Install a cylindrical pin ZCPW-D2X24-A2 for the fixed point (make a pre-hole Ø 1.8 mm).

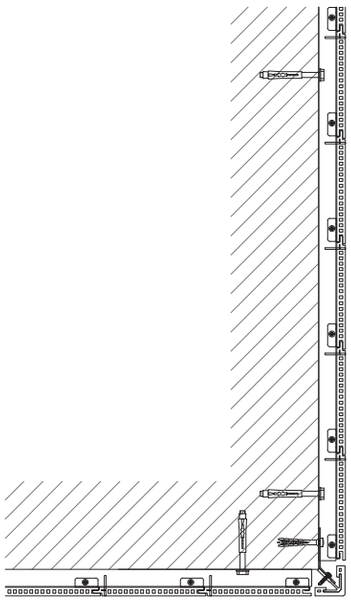
6. Repeat as described from step 3 up to the top to complete the cladding.

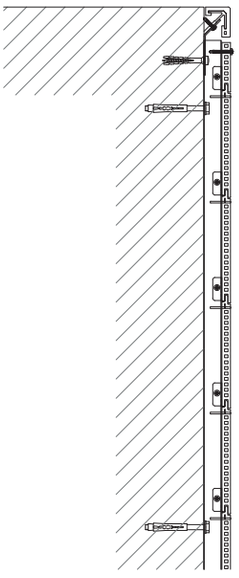
*Screws and wall plugs must be chosen according to the type of wall support

SPECIES UNICA
BORN IN VENICE

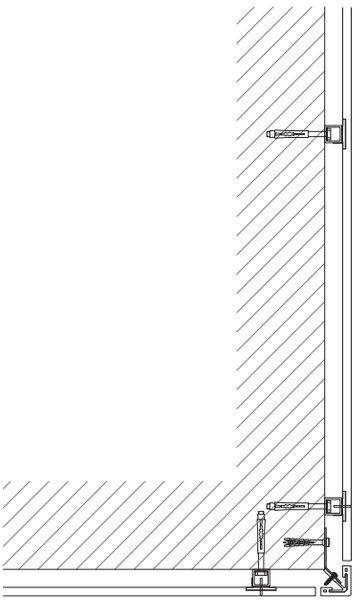
DETAILS FOR CORNERS

VERTICAL PLANKS

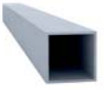




HORIZONTAL PLANKS



SYSTEM COMPONENTS

Profile **Q13010HD**		8.20 m/sqm	Substructure profile **ZTQM-20X20X2-6060-T6**		3.00 m/sqm (stacked bond) 3.50 m/sqm (running bond)
Fixing clip **ZCLW-KK2826**		25 pz/sqm (stacked bond) 29 pz/sqm (running bond)	Screw **ZRHW-3.5X16-A2-7504N**		25 pz/sqm (stacked bond) 29 pz/sqm (running bond)
Dowel pin **ZCPW-D2X24-A2**		5 pz/sqm (stacked bond) 5 pz/sqm (running bond)			

CORNERS COMPONENTS

Profile **JFC3535**		Fixing bracket **ZCLW-WAJFC3535_6050**		Screw **ZRHW-3.5X16-A2-7504N**	

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

SPECIES UNICA
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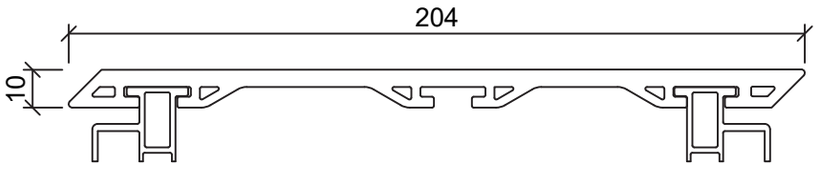
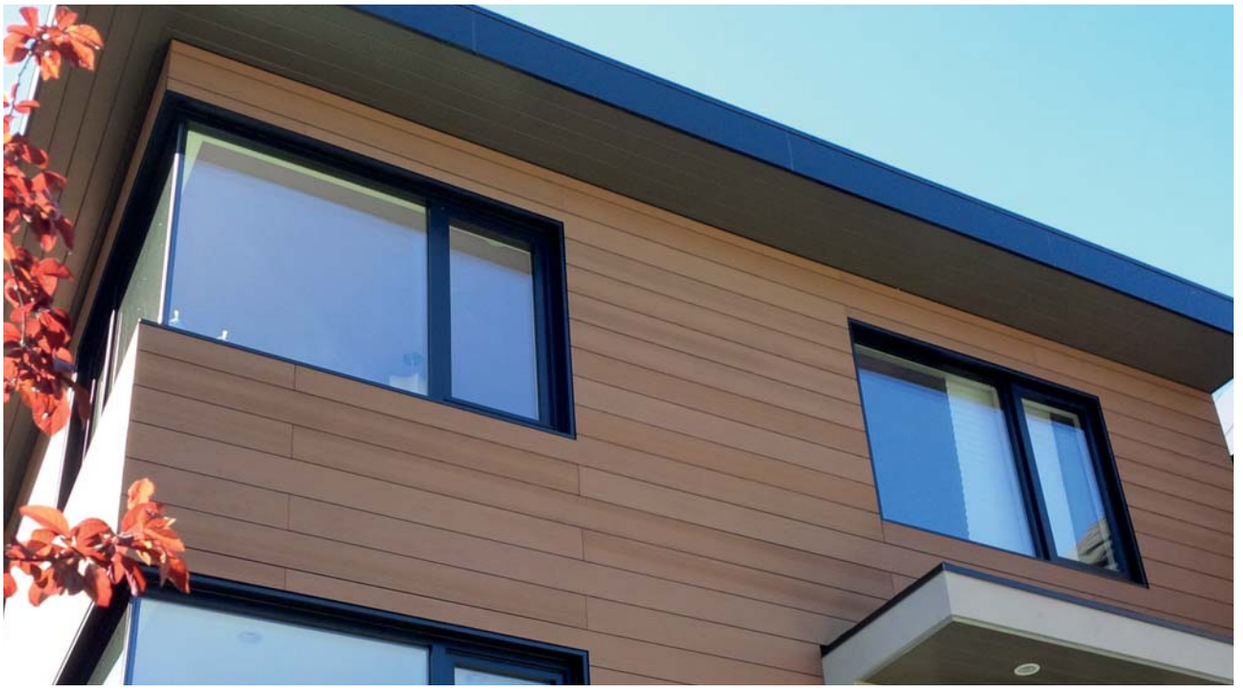
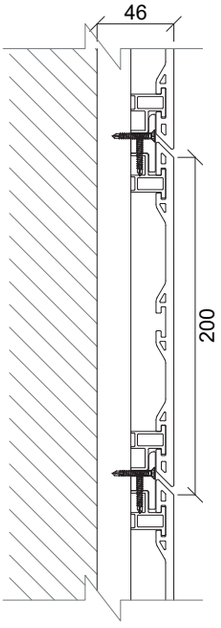
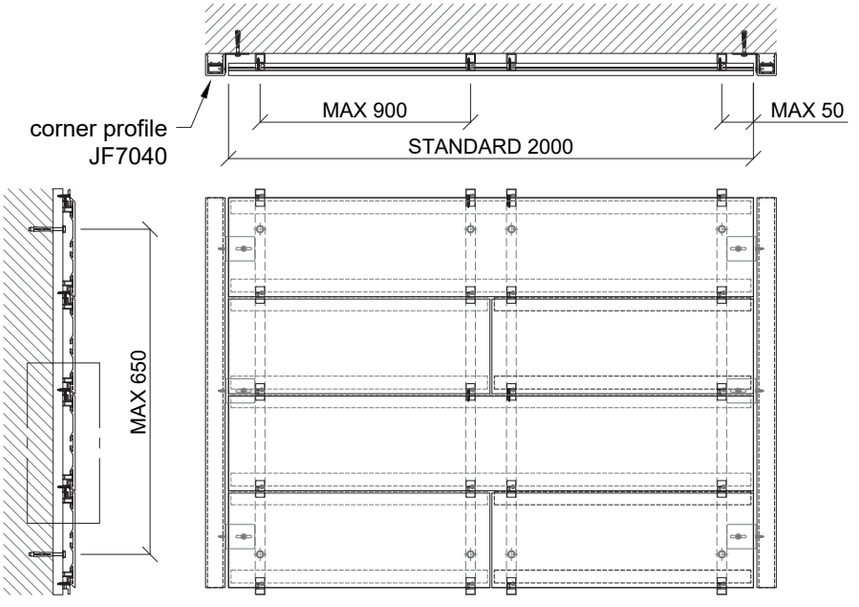
Q20410 - outdoor cladding





MOUNTING SYSTEM





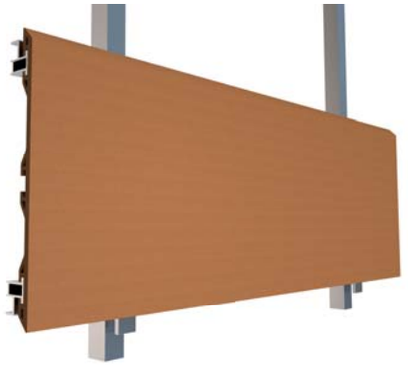
WEIGHT OF THE SYSTEM ≈ 12.40 kg/sqm
- Measures in millimeters
- Dimensions considering a standard wind load of 120 kg/m²

SPECIES UNICA
BORN IN VENICE

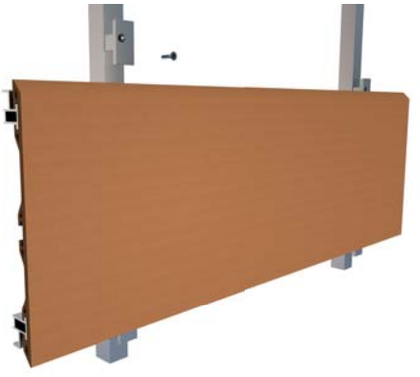
ASSEMBLY INSTRUCTIONS

1. Screw the aluminum joist profiles to support with suitable screws and wall plugs (*).

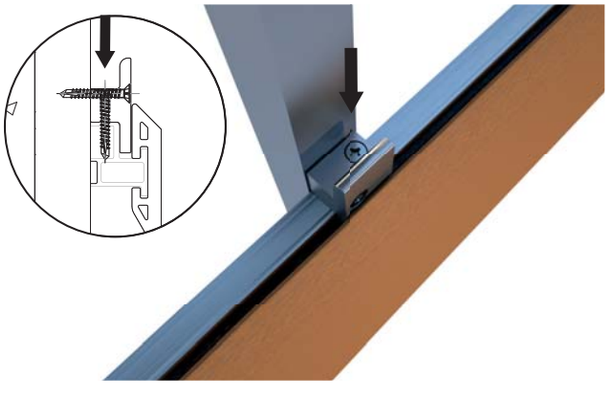
2. Apply the first row of ZCLW-KK3418 clips at the bottom with self-drilling screws.



3. Insert the first plank into the respective clip slot matching the aluminium reinforcements at the back.



4. Insert the second row of clips to lock the plank.



5. Install the screw to form the fixed point (make a pilot hole to make the step easier). Only apply 1 fixed point for each plank.

6. Repeat as described from step 3 up to the top to complete the cladding.

*Screws and wall plugs must be chosen according to the type of wall support.

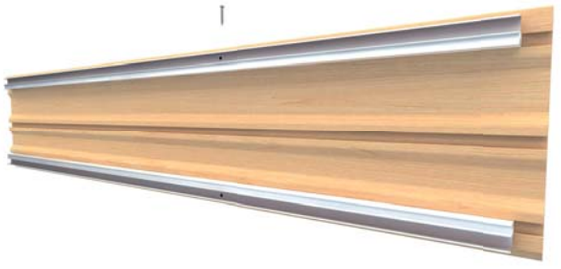
SPECIES UNICA
BORN IN VENICE

ALTRNATIVE - STARTING WITH “Z” PROFILE

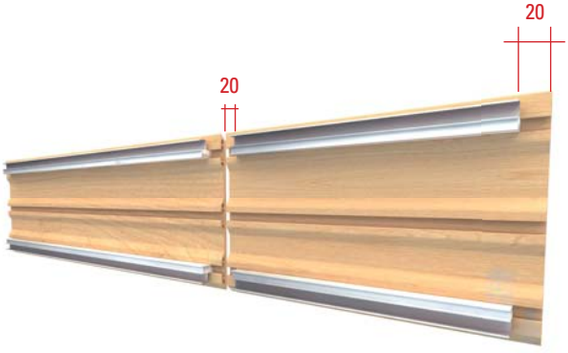
1. Screw the aluminum joist profiles to support with suitable screws and wall plugs (*).

2. Install the Z starting profile in the lower part using self drilling screws. Continue with points 3 to 6 of the previous page.

CUTTING THE PROFILES



1. Remove the screws from the fixed points.



2. Cut the profiles to the required length. The aluminum profiles must be cut 40 mm shorter than the Woodn profile.

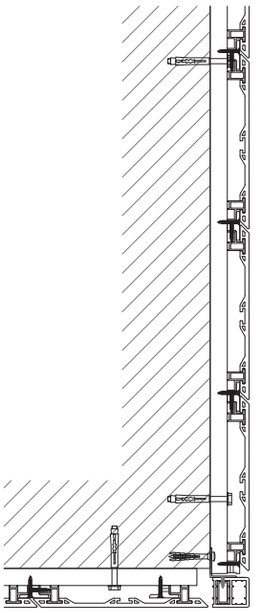
3. Insert the screws into the fixed points (ZRHW-3.5X13-A2-7504N).

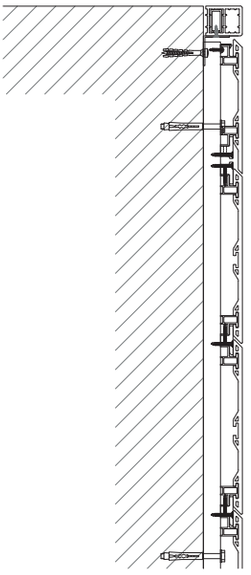
NOTE: on each profile Q20410-WA 2 fixed point screws must be applied.

SPECIES UNICA
BORN IN VENICE

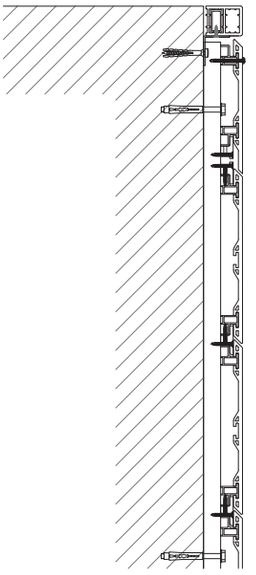
DETAILS FOR CORNERS

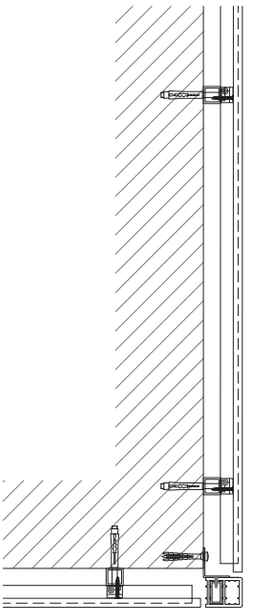
VERTICAL PLANKS



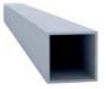


HORIZONTAL PLANKS





SYSTEM COMPONENTS

Profile **Q20410**		5.0 m/sqm	Substructure profile **ZTQM-20X20X2-6060-T6**		1.70 m/sqm (stacked bond) 2.20 m/sqm (running bond)
Fixing clip **ZCLW-KK3418 (Alloy ZAMAK 3)**		9 pz/sqm (stacked bond) 11 pz/sqm (running bond)	Screw **ZFHC-3.5X25-A2-7504P**		12 pz/sqm (stacked bond) 14 pz/sqm (running bond)
Fixing clip **ZCLW-KK1515**		**available upon request**	Z starting profile **ZTQW-10X10X13X1.5-6060-T6**		**available upon request**

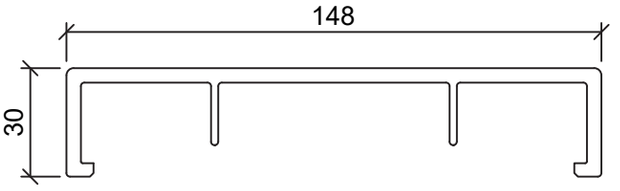
CORNERS COMPONENTS

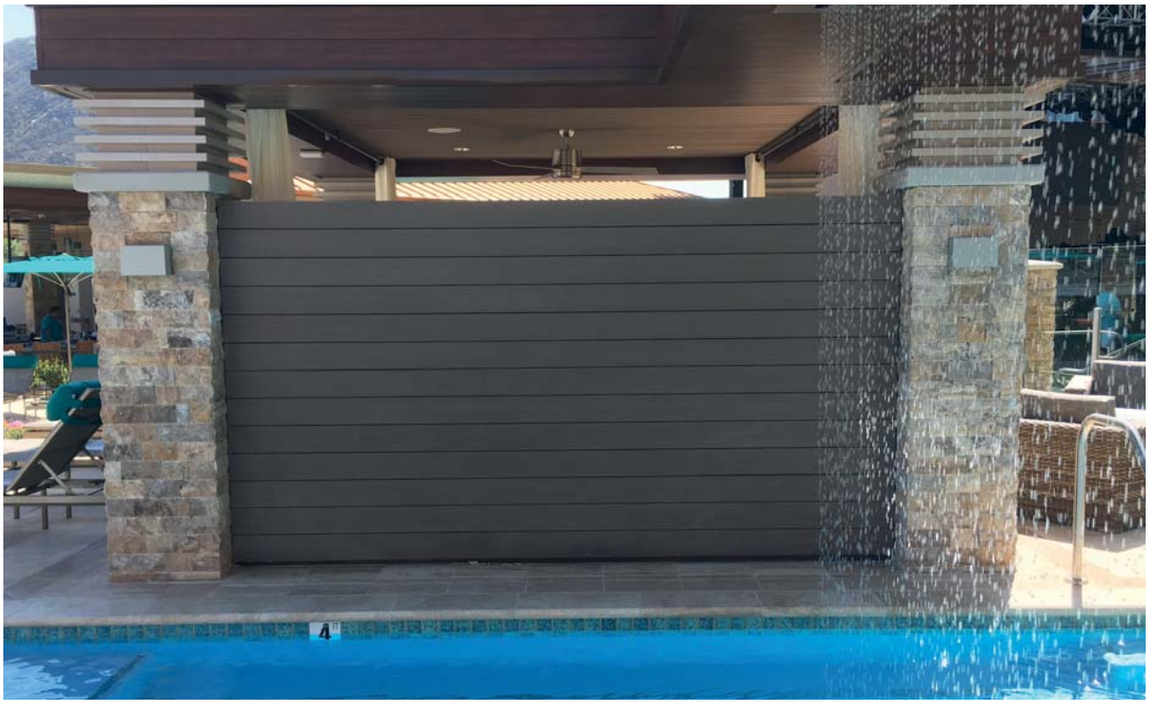
Profile **JF7040-30x15**		Fixing bracket **ZCLW-WAQ20410_6040**		Screw **ZRHW-3.5X16-A2-7504N**	

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 900 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

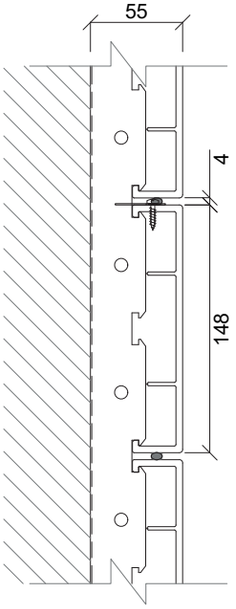
SPECIES UNICA
BORN IN VENICE

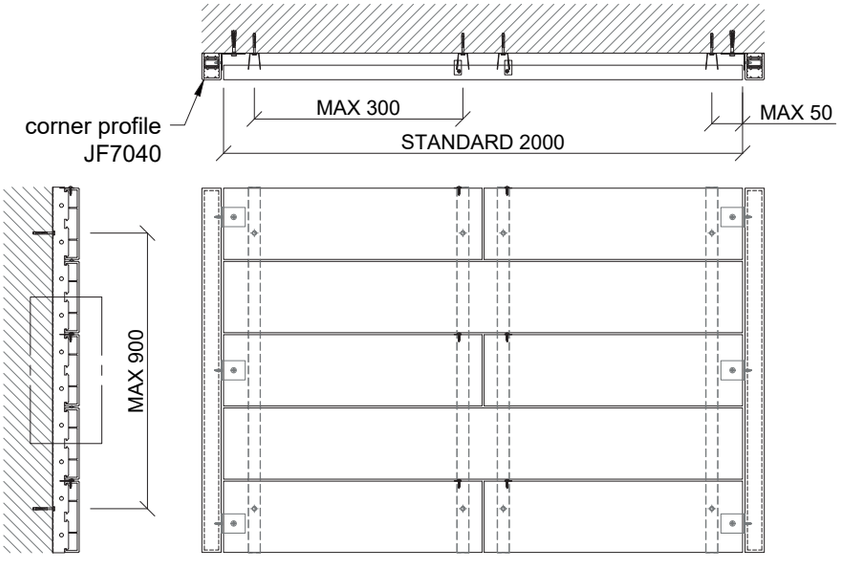
TH14830HD-4 - outdoor cladding





MOUNTING SYSTEM





WEIGHT OF THE SYSTEM ≈ 9.60 kg/sqm
- Measures in millimeters
- Dimensions considering a standard wind load of 120 kg/m²

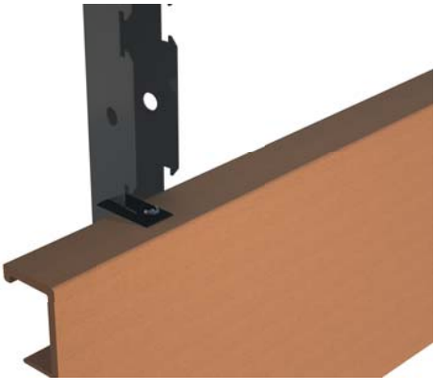
SPECIES UNICA
BORN IN VENICE

ASSEMBLY INSTRUCTIONS

1. Screw the ZSSW-LG3326V profiles to support with suitable screws and wall plugs (*).

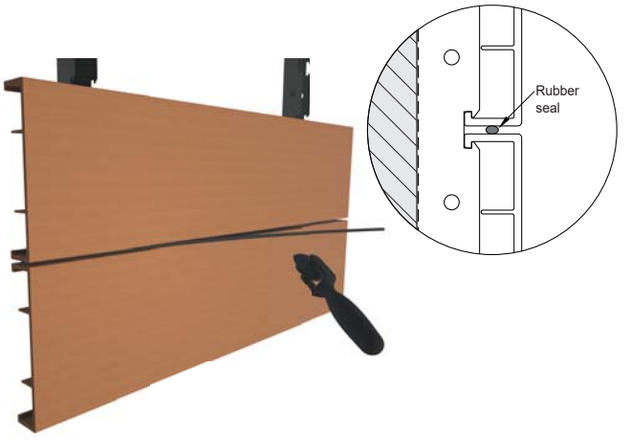
2. Install the first TH14830HD-4 profile.

3. Apply the clip for the FIXED POINT with self-drilling screws to the profile.



4. NOTE: the clip has to slot in the substructure.

5. Repeat as described from step 2 up to the top to complete the cladding.



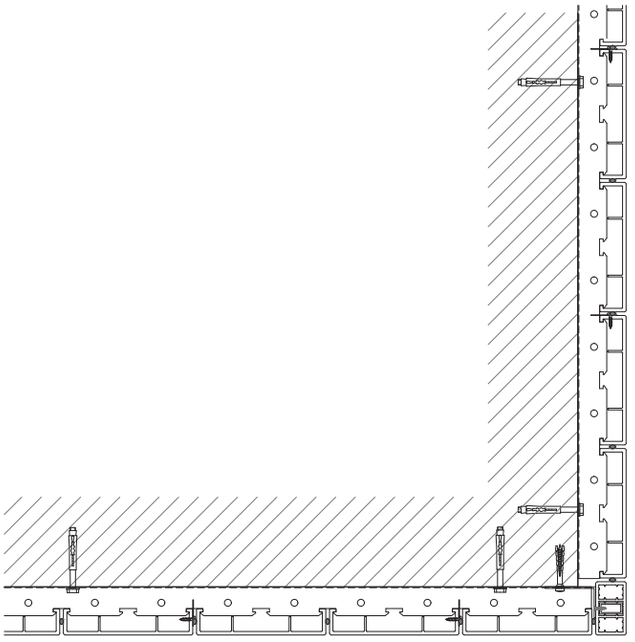
6. Insert the rubber seal into the joist using the supplied tool.

*Screws and wall plugs must be chosen according to the type of wall support.

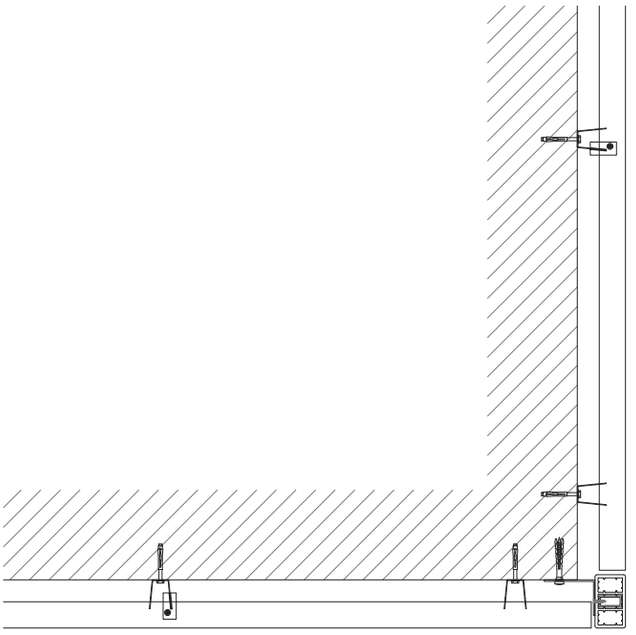
SPECIES UNICA
BORN IN VENICE

DETAILS FOR CORNERS

VERTICAL PLANKS



HORIZONTAL PLANKS



SYSTEM COMPONENTS

Profile **TH14830HD-4**		6.60 m/sqm
Clip for fixed point **ZCLW-KK3015**		4 pz/sqm
Rubber seal **ZAMW-RS-TH14830**		6.60 m/sqm

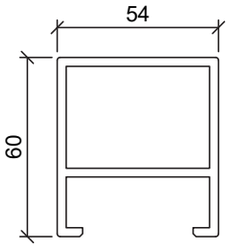
Substructure profile **ZSSW-LG3326V joint 4 mm**		5.00 m/sqm (stacked bond) 5.70 m/sqm (running bond)
Screw **ZRHW-3.5X16-A2-7504N**		4 pz/sqm
Insertion tool **ZAMW-IT-TH14830**		1 pz

CORNERS COMPONENTS

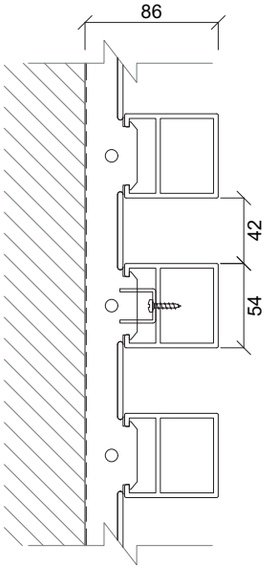
Profile **JF7040-30x15**	

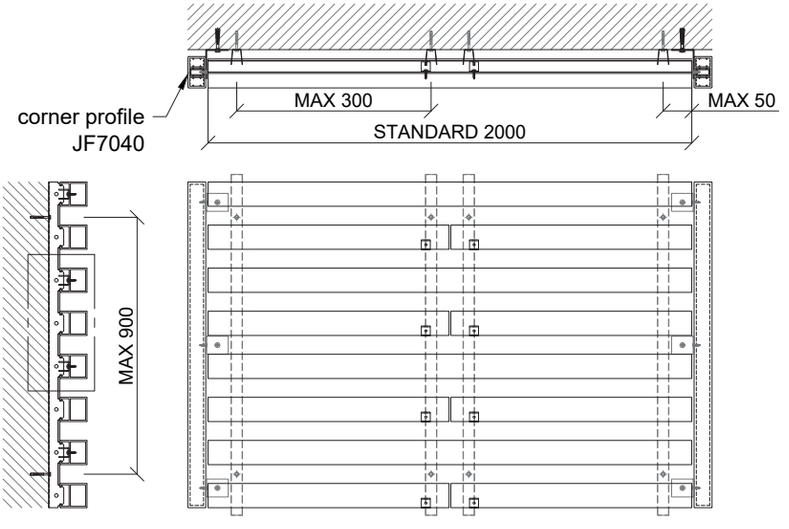
WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 300 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

TH6050HD - outdoor cladding



MOUNTING SYSTEM



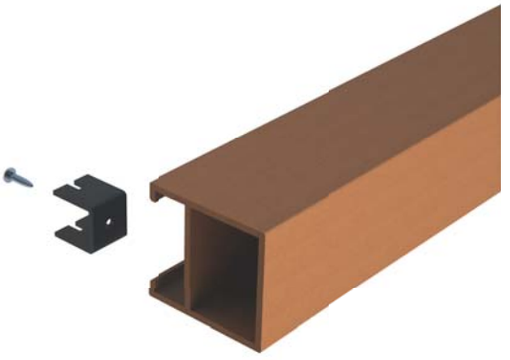


WEIGHT OF THE SYSTEM ≈ 14.30 kg/sqm
- Measures in millimeters
- Dimensions considering a standard wind load of 120 kg/m²

SPECIES UNICA
BORN IN VENICE

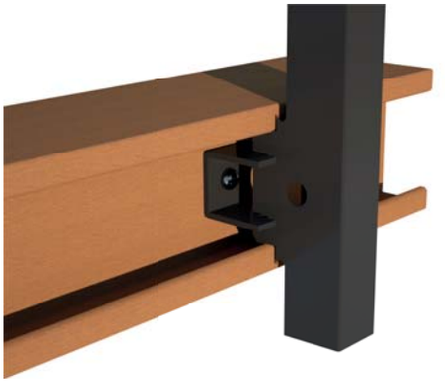
ASSEMBLY INSTRUCTIONS

1. Screw the ZSSW-LG9637V profiles to support with suitable screws and wall plugs (*).



2. Apply the clip for the FIXED POINT with self-drilling screws to the profile.

3. Install the first TH6050HD profile.



4. NOTE: the clip has to slot in the substructure.

5. Install, if expected, the accessory THZ5004HD profile.

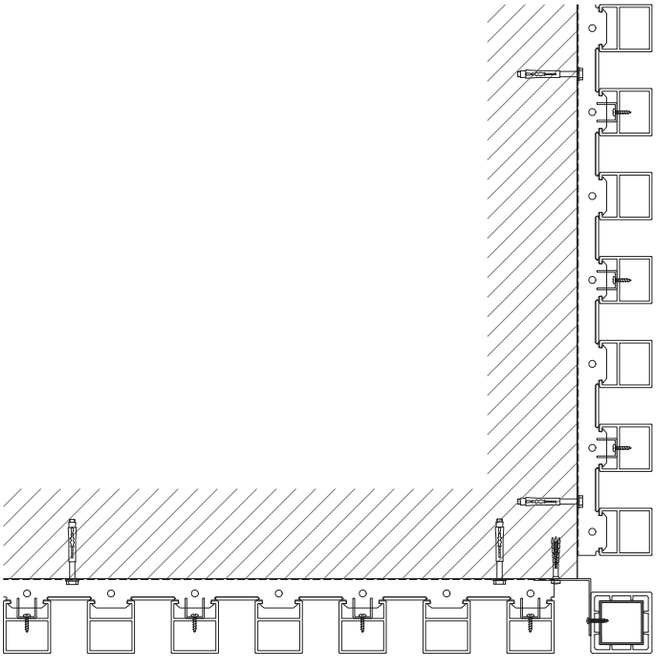
6. Repeat as described from step 2 up to the top to complete the cladding.

*Screws and wall plugs must be chosen according to the type of wall support.

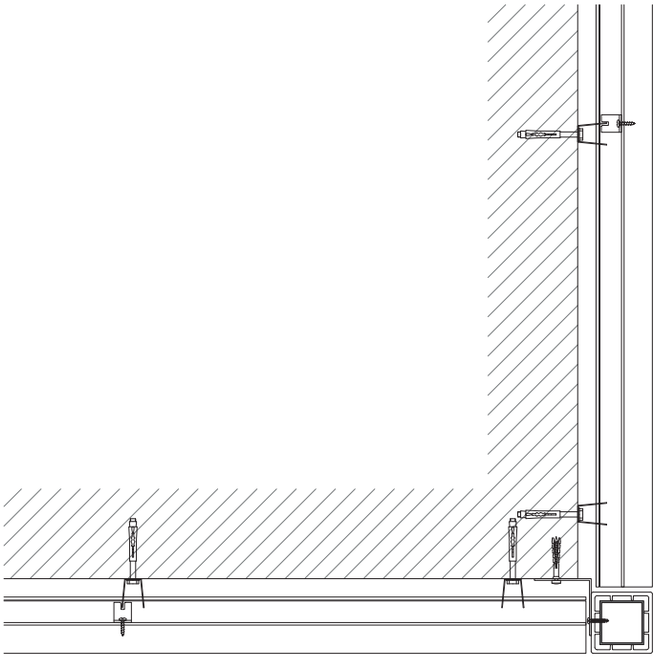
SPECIES UNICA
BORN IN VENICE

DETAILS FOR CORNERS

VERTICAL PLANKS



HORIZONTAL PLANKS



SYSTEM COMPONENTS

Profile **TH6050HD**		10.50 m/sqm	Substructure profile **ZSSW-LG9637V**		5.00 m/sqm (stacked bond) 5.70 m/sqm (running bond)
Clip for fixed point **ZCLW-KK2722**		6 pz/sqm	Screw **ZRHW-3.5X16-A2-7504N**		6 pz/sqm
Accessory closing piece **THZ5004HD**		10.50 m/sqm			

CORNERS COMPONENTS

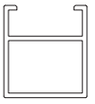
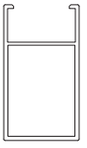
Profile **JF7040-30x15**		Profile **JF7070**	

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c up to 300 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

SPECIES UNICA
BORN IN VENICE

PROFILES SECTION

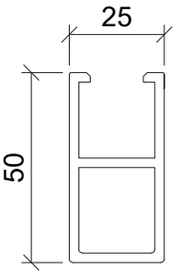
indoor ceiling/outdoor soffit

profile	cross-section	nominal dimensions [mm]	weight of the plank [kg/m]
TH5025HD		section 25 x 50 standard length 2000	0.36
TH3050HD		section 50 x 30 standard length 2000	0.46
TH6050HD		section 54 x 60 standard length 2000	0.80
TH9050HD		section 50 x 90 standard length 2000	0.83
TH14830HD-4		section 148 x 30 standard length 2000	1.03

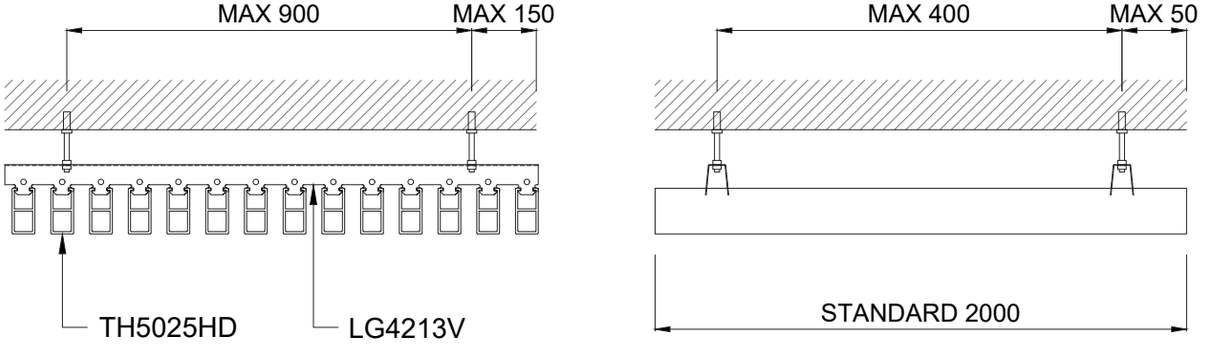
The external dimensions listed are nominal values.
The weights of the planks indicated in the tables are indicative and not binding.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.

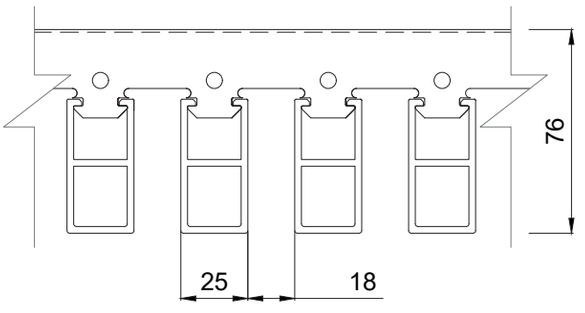
SPECIES UNICA
BORN IN VENICE

TH5025HD - indoor ceiling/outdoor soffit



MOUNTING SYSTEM

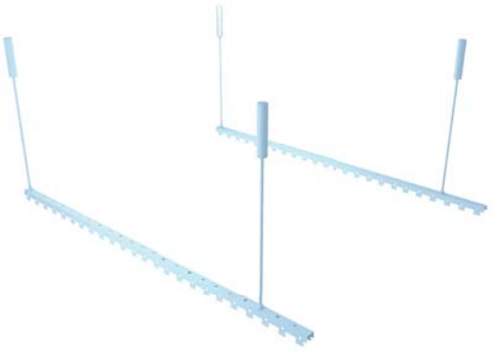




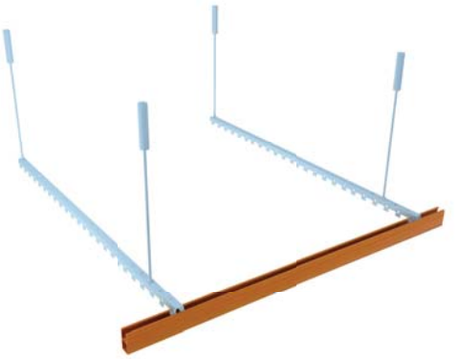
WEIGHT OF THE SYSTEM ≈ 10.55 kg/sqm
• Measures in millimeters

SPECIES UNICA
BORN IN VENICE

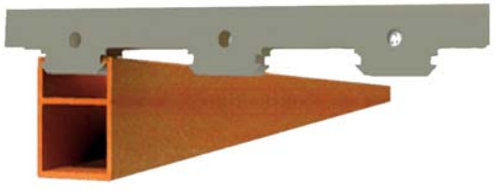
ASSEMBLY INSTRUCTIONS



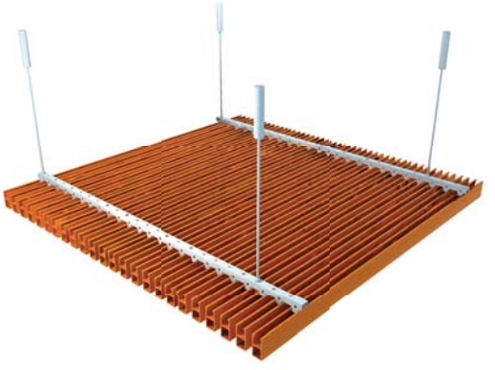
1. Fix the ZSSW-LG4213V bars directly to the ceiling using screws and wall plugs suitable for the type of support, or lower the structure with suitable hangers.



2. Install the first TH5025HD profile.



3. Attach the plank to the substructure.



4. Complete the work by repeating the steps described in 2 and 3.

NOTE: Hangers, screws and wall plugs not included. For outdoor installation, the perimeter of the ceiling must be closed on all sides.

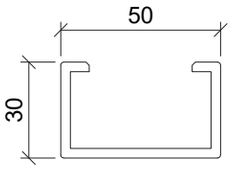
SYSTEM COMPONENTS

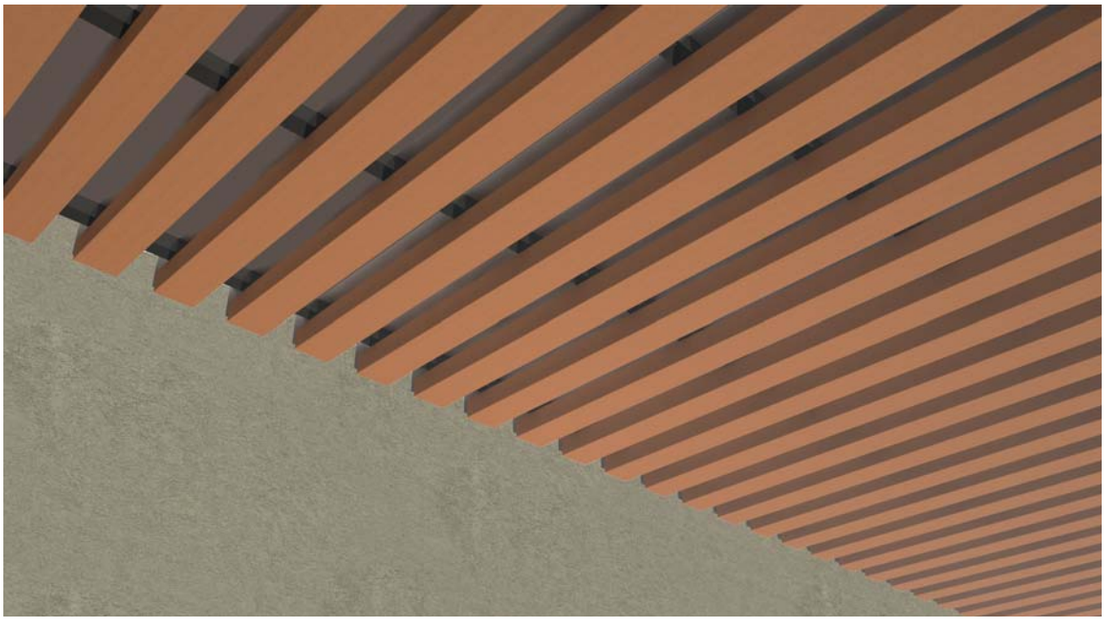
Profile **TH5025HD**		23.30 m/sqm	Substructure profile **ZSSW-LG4213V**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

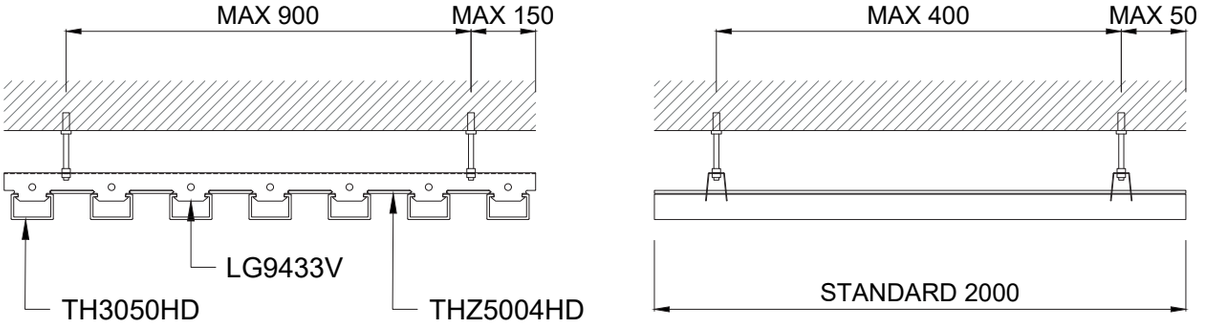
SPECIES UNICA
BORN IN VENICE

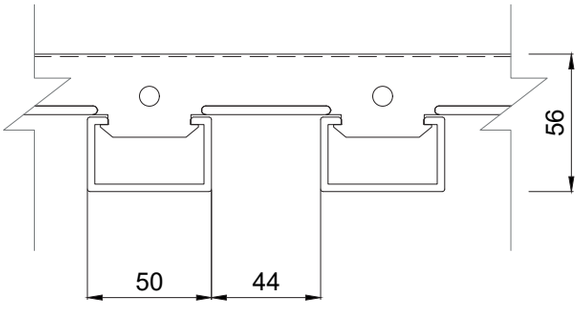
TH3050HD - indoor ceiling/outdoor soffit





MOUNTING SYSTEM

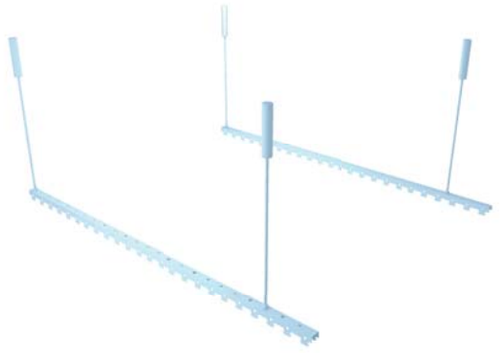




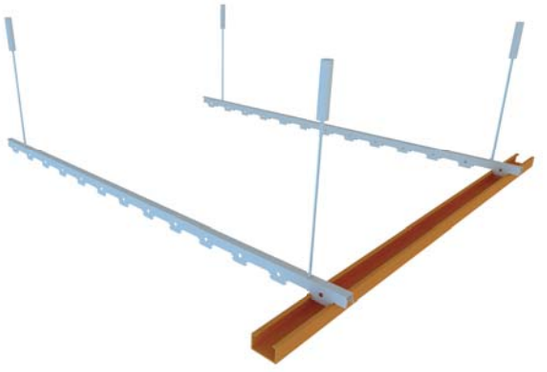
WEIGHT OF THE SYSTEM (without THZ5004HD) ≈ 7.00 kg/sqm
WEIGHT OF THE SYSTEM (with THZ5004HD) ≈ 9.90 kg/sqm
• Measures in millimeters

SPECIES UNICA
BORN IN VENICE

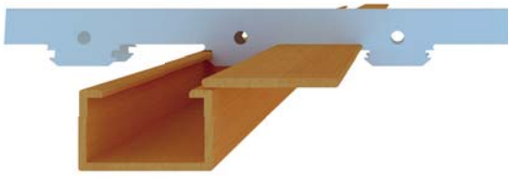
ASSEMBLY INSTRUCTIONS



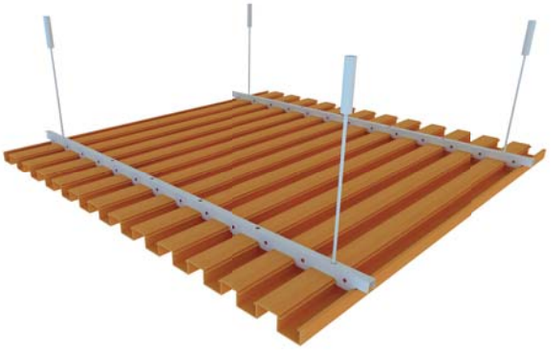
1. Fix the ZSSW-LG9433V bars directly to the ceiling using screws and wall plugs suitable for the type of support, or lower the structure with suitable hangers.



2. Install the first TH3050HD profile to the substructure.



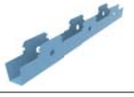
3. Install, if provided, the accessory profile THZ5004HD.



4. Complete the work by repeating the steps described in 2 and 3.

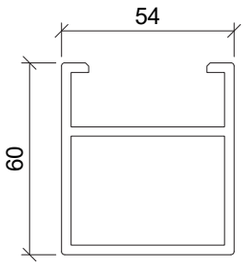
NOTE: Hangers, screws and wall plugs not included. For outdoor installation, the perimeter of the ceiling must be closed on all sides.

SYSTEM COMPONENTS

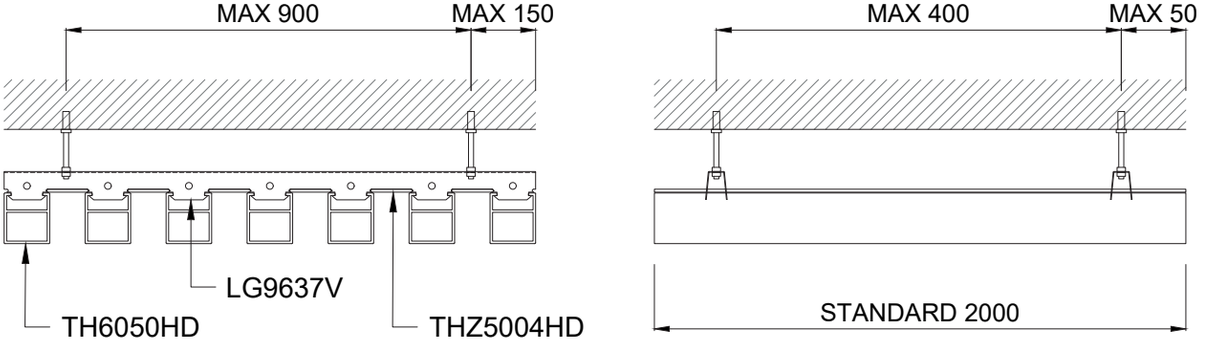
Profile **TH3050HD**		10.50 m/sqm	Substructure profile **ZSSW-LG9433V**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)
Accessory closing piece **THZ5004HD**		10.50 m/sqm optional element for closing the false ceiling			

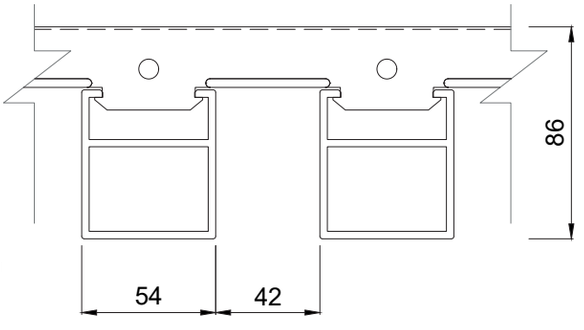
WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

TH6050HD - indoor ceiling/outdoor soffit



MOUNTING SYSTEM

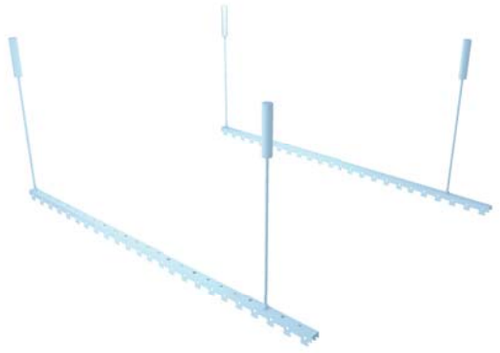




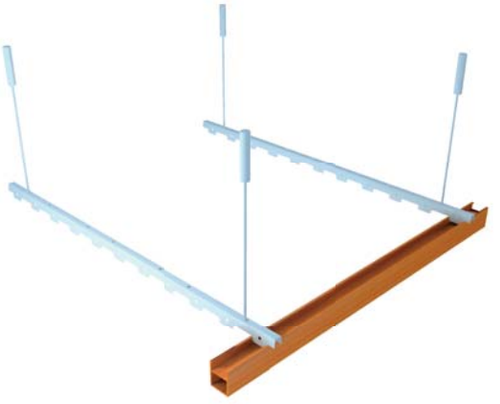
WEIGHT OF THE SYSTEM (without THZ5004HD) ≈ 10.55 kg/sqm
WEIGHT OF THE SYSTEM (with THZ5004HD) ≈ 13.50 kg/sqm
• Measures in millimeters

SPECIES UNICA
BORN IN VENICE

ASSEMBLY INSTRUCTIONS

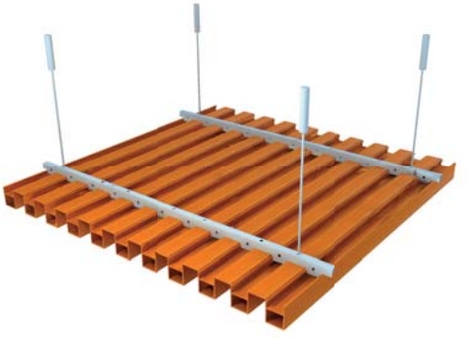


1. Fix the ZSSW-LG9637V bars directly to the ceiling using screws and wall plugs suitable for the type of support, or lower the structure with suitable hangers.



2. Install the first TH6050HD profile to the substructure.

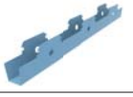
3. Install, if provided, the accessory profile THZ5004HD.



4. Complete the work by repeating the steps described in 2 and 3.

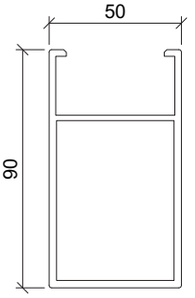
NOTE: Hangers, screws and wall plugs not included. For outdoor installation, the perimeter of the ceiling must be closed on all sides.

SYSTEM COMPONENTS

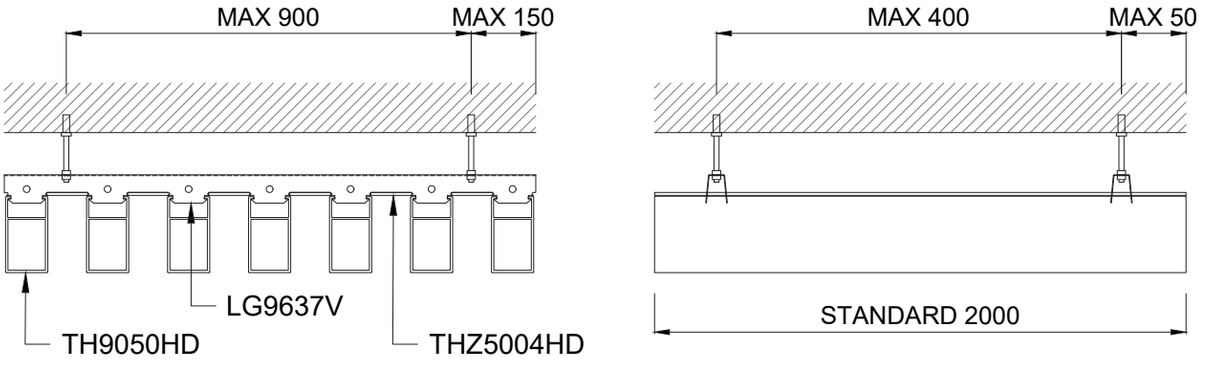
Profile **TH6050HD**		10.50 m/sqm	Substructure profile **ZSSW-LG9637V**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)
Accessory closing piece **THZ5004HD**		10.50 m/sqm optional element for closing the false ceiling			

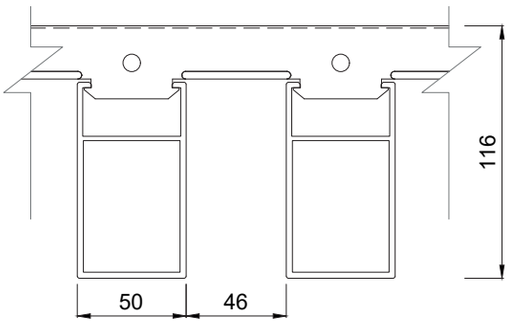
WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

TH9050HD - indoor ceiling/outdoor soffit



MOUNTING SYSTEM

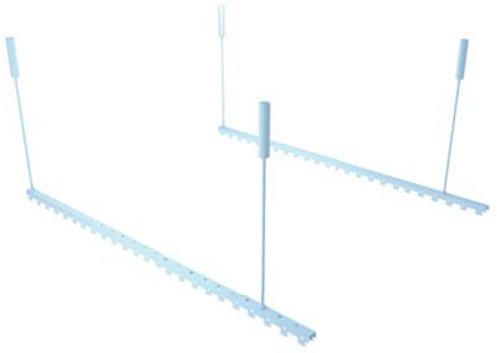




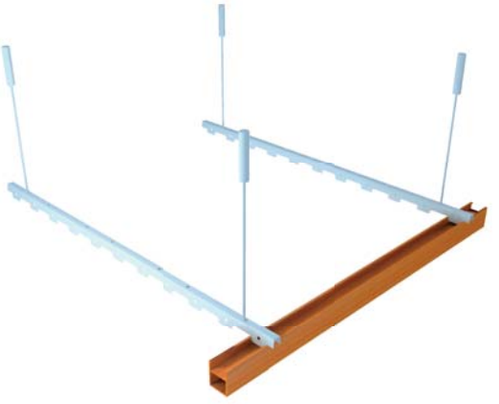
WEIGHT OF THE SYSTEM (without THZ5004HD) ≈ 10.90 kg/sqm
WEIGHT OF THE SYSTEM (with THZ5004HD) ≈ 13.80 kg/sqm
• Measures in millimeters

SPECIES UNICA
BORN IN VENICE

ASSEMBLY INSTRUCTIONS

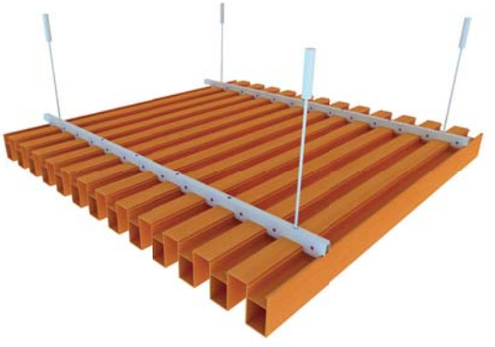


1. Fix the ZSSW-LG9637V bars directly to the ceiling using screws and wall plugs suitable for the type of support, or lower the structure with suitable hangers.



2. Install the first TH9050HD profile to the substructure.

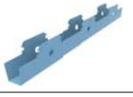
3. Install, if provided, the accessory profile THZ5004HD.



4. Complete the work by repeating the steps described in 2 and 3.

NOTE: Hangers, screws and wall plugs not included. For outdoor installation, the perimeter of the ceiling must be closed on all sides.

SYSTEM COMPONENTS

Profile **TH9050HD**		10.50 m/sqm	Substructure profile **ZSSW-LG9637V**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)
Accessory closing piece **THZ5004HD**		10.50 m/sqm optional element for closing the false ceiling			

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

SPECIES UNICA
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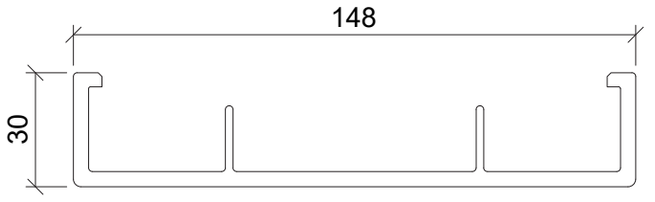
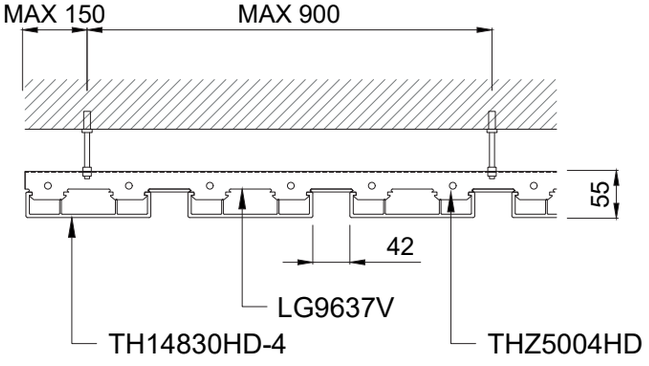
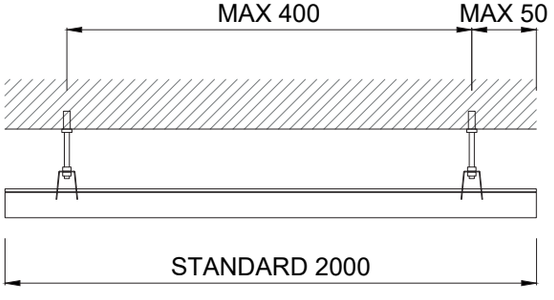
TH14830HD-4 - indoor ceiling/outdoor soffit



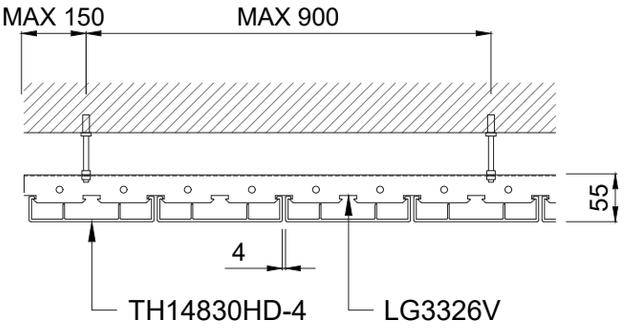
MOUNTING SYSTEM

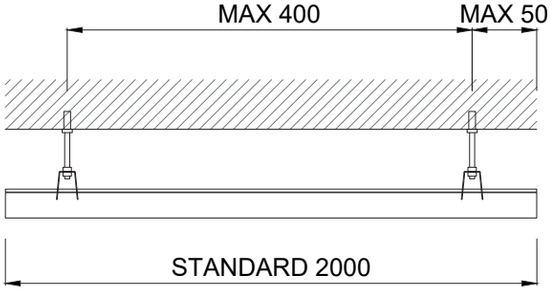
JOINT 40 mm





JOINT 4 mm



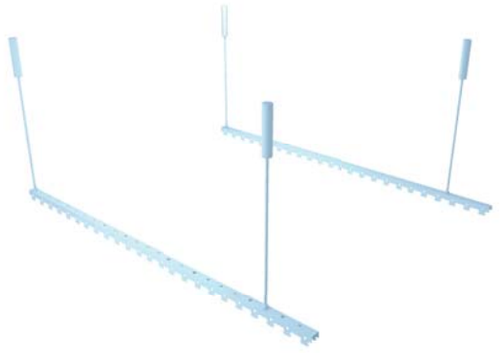


WEIGHT OF THE SYSTEM (without THZ5004HD) ≈ 7.70 kg/sqm
WEIGHT OF THE SYSTEM (with THZ5004HD) ≈ 9.25 kg/sqm
• Measures in millimeters

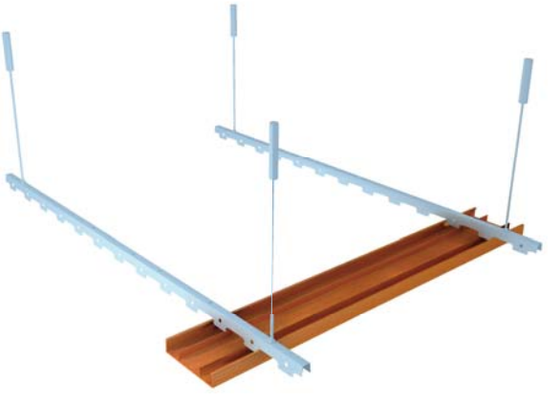
WEIGHT OF THE SYSTEM (joint 4 mm) ≈ 9.00 kg/sqm

SPECIES UNICA
BORN IN VENICE

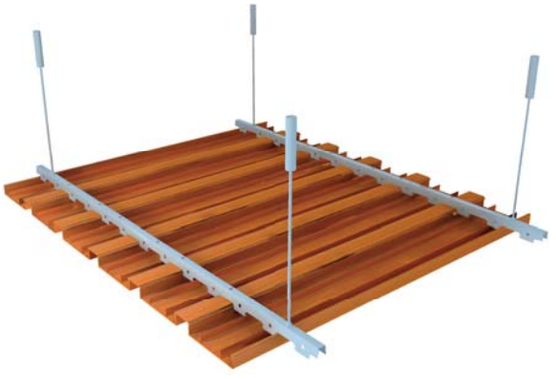
ASSEMBLY INSTRUCTIONS



1. Fix the ZSSW-LG9637V or ZSSW-LG3326V bars directly to the ceiling using screws and wall plugs suitable for the type of support, or lower the structure with suitable hangers.



2. Install the first TH14830HD-4 profile, fitting the planks to the substructure, alternating them with the THZ5004HD profiles if applicable.

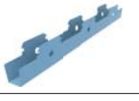


3. Complete the work by repeating the steps described in 2.

NOTE: Hangers, screws and wall plugs not included. For outdoor installation, the perimeter of the ceiling must be closed on all sides.

SYSTEM COMPONENTS

Profile **TH14830HD-4**		5.40 m/sqm (joint 40 mm) 6.60 m/sqm (joint 4 mm)
Accessory closing piece **THZ5004HD**		5.40 m/sqm (joint 40 mm)

Substructure profile **ZSSW-LG9637V joint 40 mm**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)
Substructure profile **ZSSW-LG3326V joint 4 mm**		3.90 m/sqm (stacked bond) 4.60 m/sqm (running bond)

WARNING: the incidences of accessory material indicated refer to application according to the European standards, which provides for planks 2000 mm long and slats/substructure with maximum distance o.c. up to 400 mm. For any installation that differs from the standard a cutting plan must be designed; it shall calculate precisely the number of points of intersection between the planks and the substructure, allowing the correct identification of the number of clips and screws required for each type of application.

SPECIES UNICA
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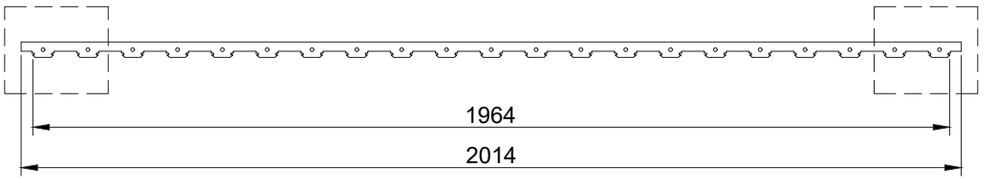
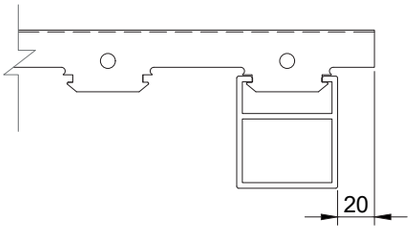
Ceiling/soffit substructures

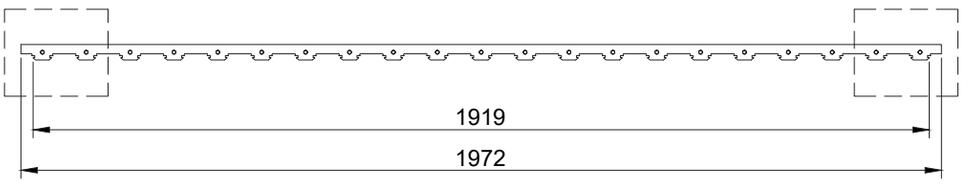
(lengths and details of the supplied items)

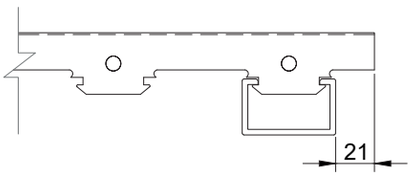
LG9637V *for TH6050HD, TH9050HD, TH14830HD-4 (joint 40 mm)*



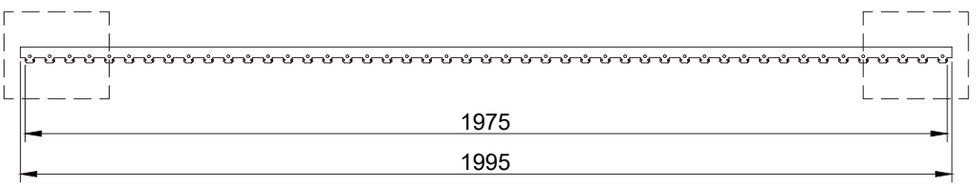


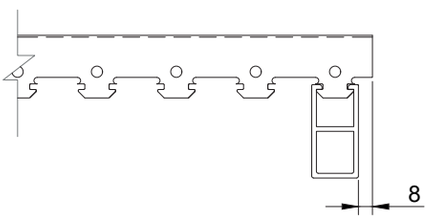
LG9433V *for TH3050HD*



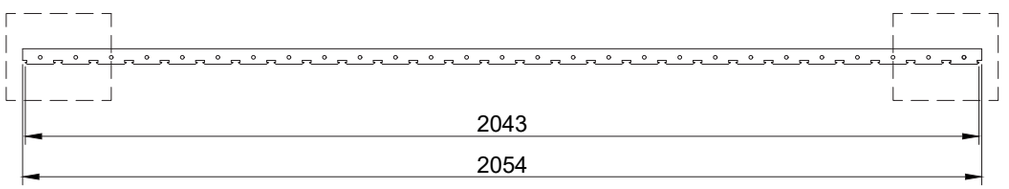


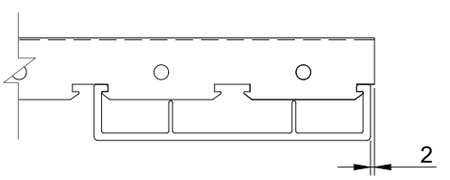
LG4213V *for TH5025HD*





LG3326V *for TH14830HD-4 (joint 4 mm)*





The dimensions listed are nominal values.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.

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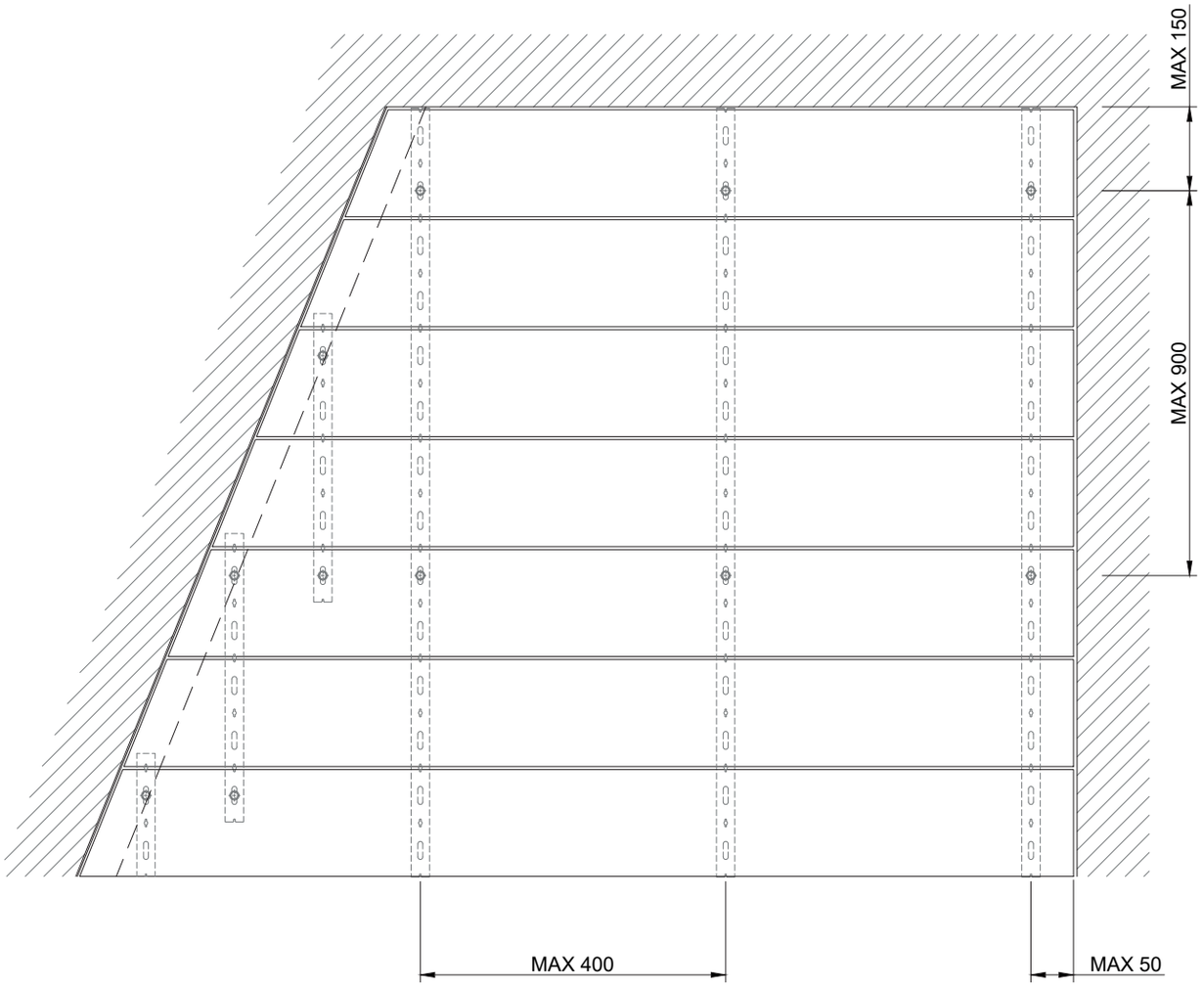
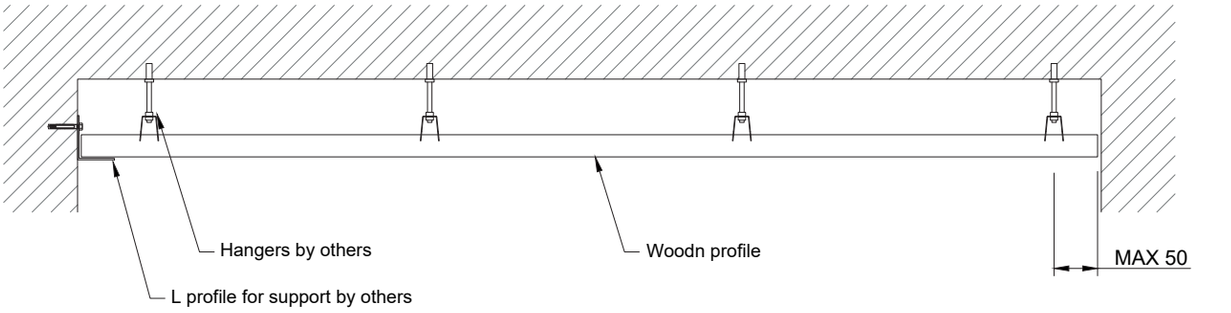
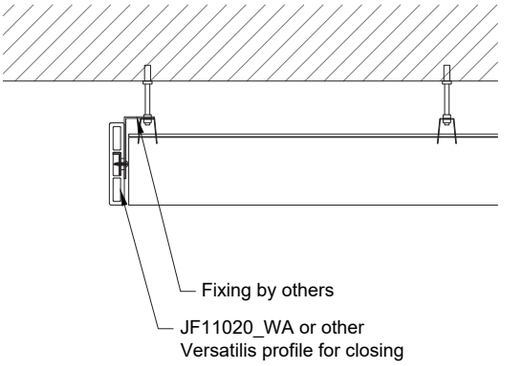
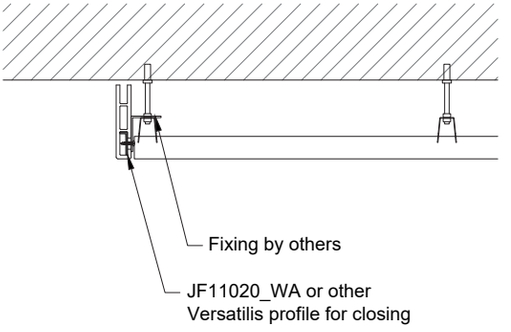
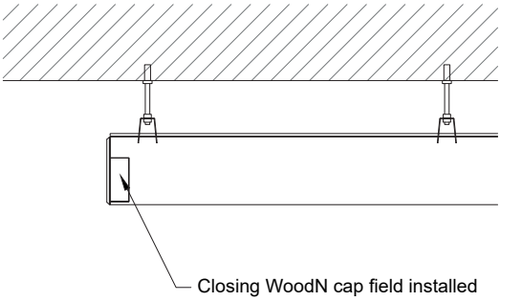
Solutions for the ceiling/soffit closure

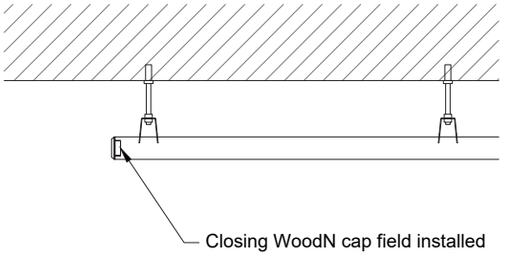


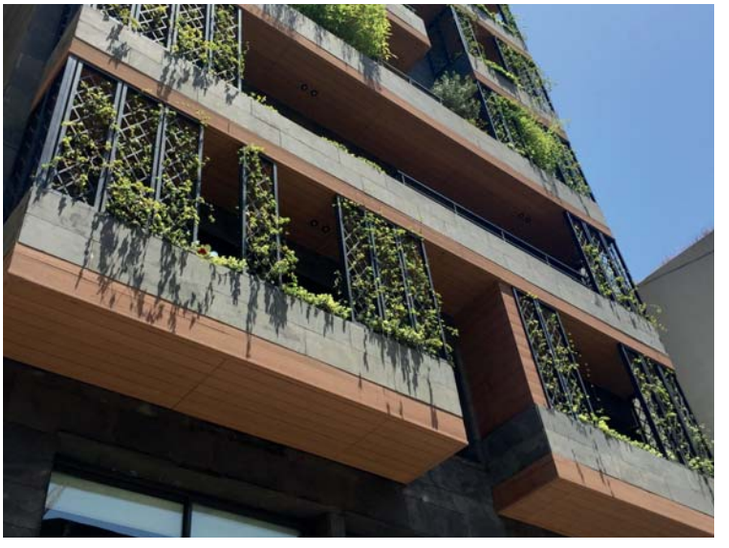



Fixing by others
JF11020_WA or other
Versatilis profile for closing

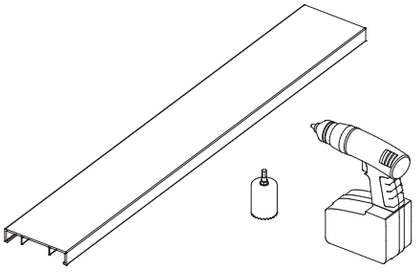

Fixing by others
JF11020_WA or other
Versatilis profile for closing

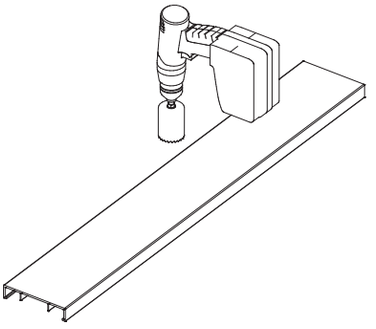

Closing WoodN cap field installed

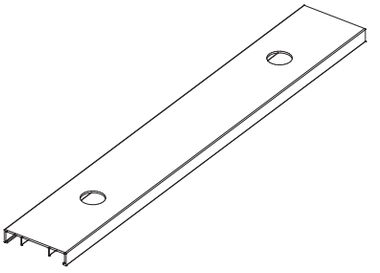

Closing WoodN cap field installed



Drill to position lights and other recessed elements







WARNING: any lights and other recessed elements must be fixed to a support structure and not directly on the plank.

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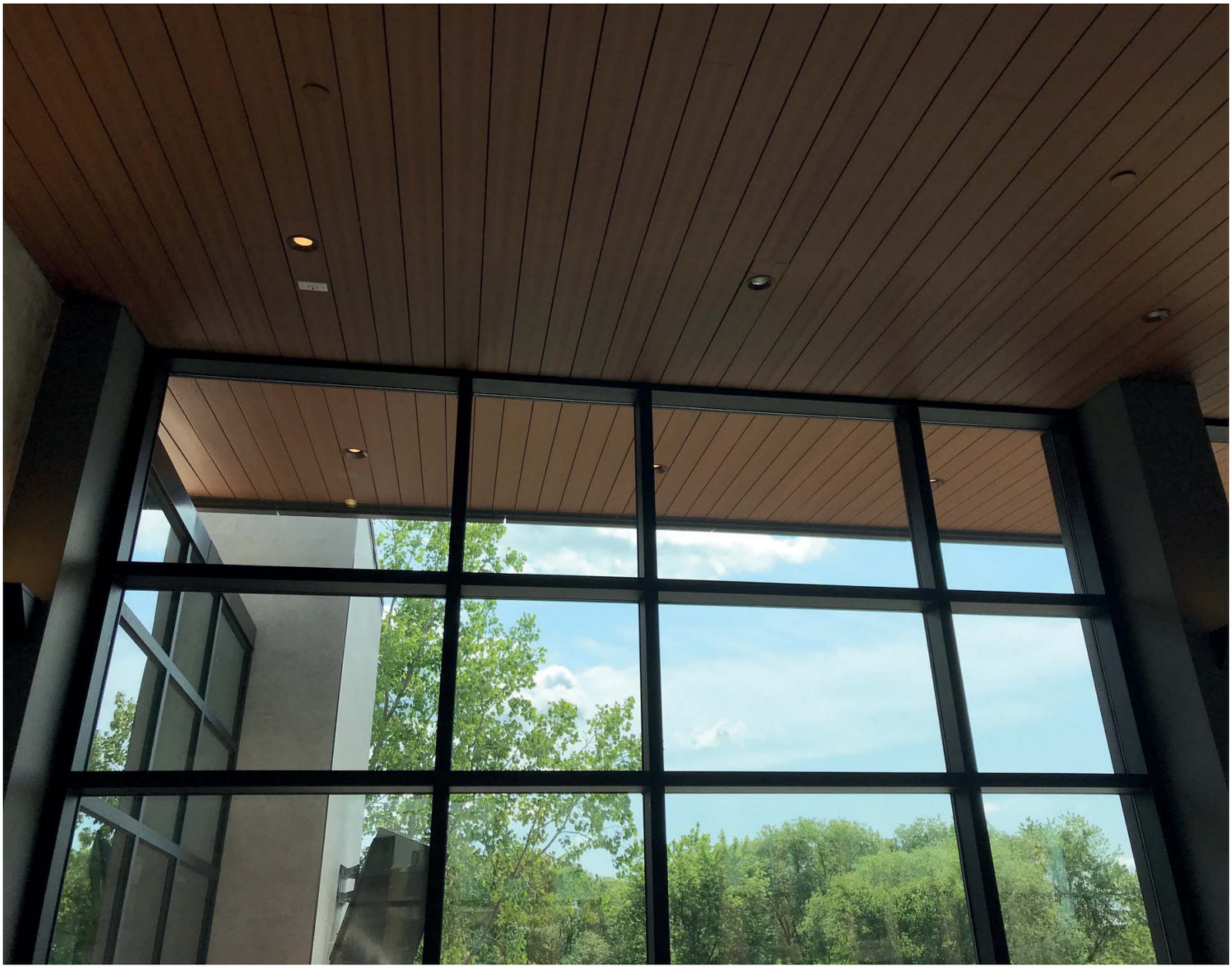

WOODN ORNANS

SPECIES UNICA

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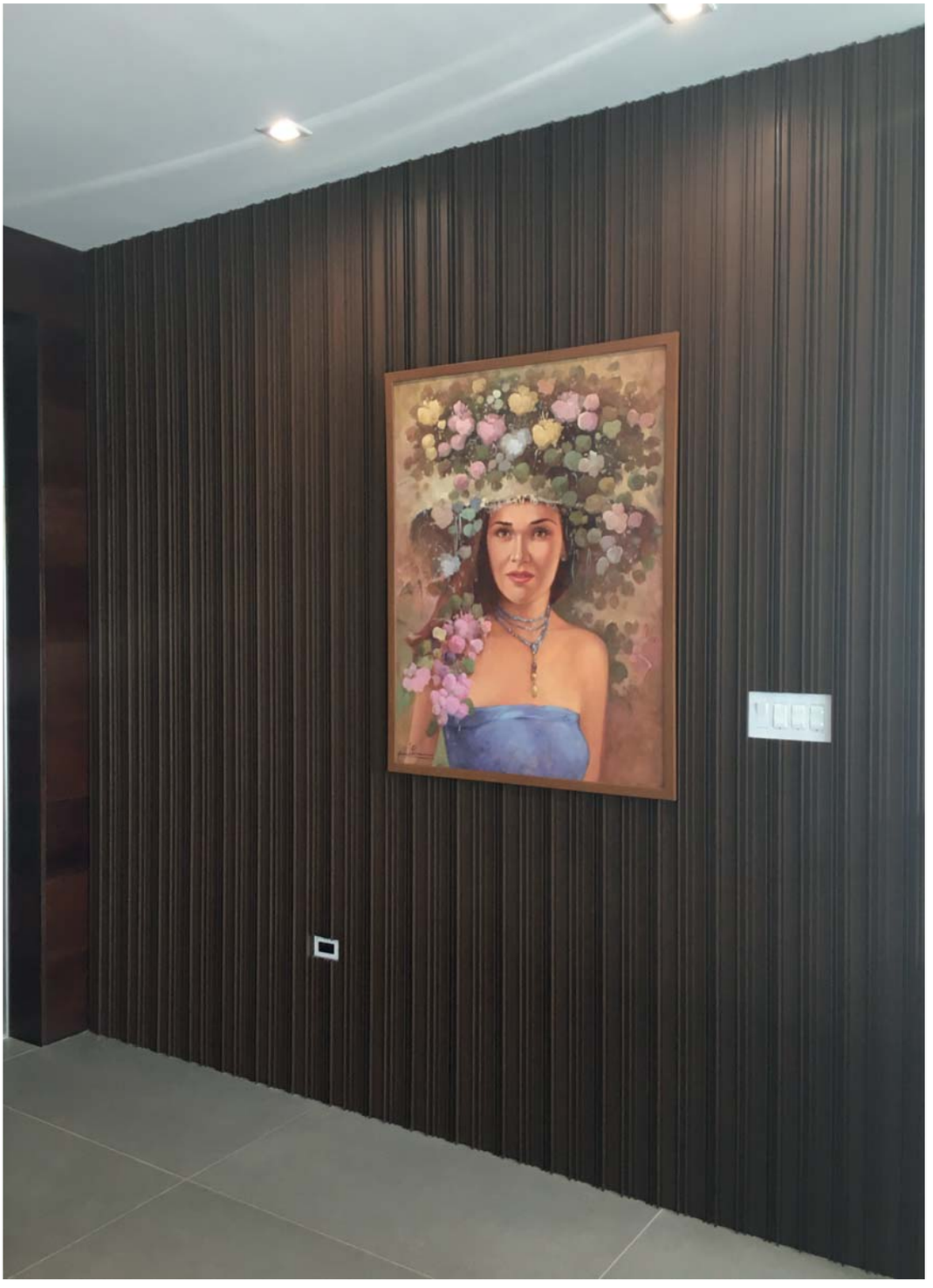
REV.00-2020



DISCLAIMER - GENERAL NOTES
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Mechanical properties

Elasticity (bending)	UNI EN ISO 178	@23 °C @65 °C
Yield strenght (flexural)	UNI EN ISO 178	@23 °C @65 °C
Water absorbption and humidity	ASTM D1037	absorption 0,07%
Dynamic- Mechanical analysis of transition temperature	ASTM D4065/95	78.8 °C
Linear thermal expansion coefficient (from -10 °C to 70 °C)	TMA ASTM E 831/2006	longitudinal 46,9 x10^{-6} m/(m°C) trasversal 48 x10^{-6} m/(m°C)
Tensile strenght and tensile strenght after accelerated weathering (exposure to xenon lights)	ASTM D638-10 (tensile test) ASTM G155-050	difference after 2 months of exposure ~5,21% difference after 3 months of exposure ~6,9% *(meet the requirements to comply with Miami Dade and Florida Building Code 2014)*

Reaction to fire

Flammability	UL94 AS 3959-2009	V-0 Class BAL-29
Flame spread index Smoke developed index	ASTM E84	Class A
Ignition temperature	ASTM D1929	476 °C
Average critical radiant flux of floor	AS ISO 9239 ASTM E648	≥ 11 kW/m^2 > 1,03 W/cm^2 *(class I as per NFPA 101)*
Ignitability, flame propagation, heat release and smoke release	AS/NZS 1530.3:1999	Ignitability (0-20) = 8 Spread of Flame (0-10) = 0 Heat Evolved (0-10) = 0 Smoke Developed (0-10) = 7

Chemical and biological features

Evaluation of the action of microorganisms (scale from 0 to 5)	EN ISO 846:97	Test result: 1
Heavy metal content (Pb, Ge, Cr, Hg)	GB18584-2001 GB18580-2001	< 0,5 ppm
Formaldehyde emission	EN 717-2:1994	0,1 mg HCHO/(m^2h)

The values shown are indicative and not binding. Test reports available upon request.
The natural aging of the material and temperature variations may cause deviations from the values indicated above.
The product is protected by a warranty in line with legal requirements: for more information see the SPECS on www.woodn.com

SPECIES UNICA
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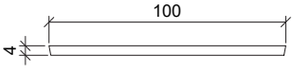
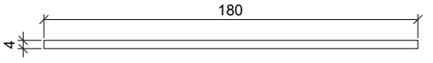
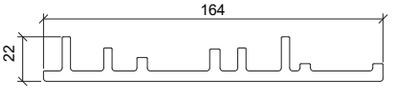
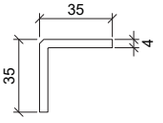
PROFILES SECTION

profile	cross-section	nominal dimensions [mm]	weight of the plank [kg]	number of planks per m²
WIT10004R		section 100 x 4 standard length 2000	≈ 0.96	5
WIT18004R		section 180 x 4 standard length 2000	≈ 1.88	2.78
Q16422		section 164 x 22 standard length 2000	≈ 2.92	3.10

The Woodn Ornans cladding is brushed on the backside to allow a proper fixing with the adhesive.

CORNERS COMPONENTS

Profile **WITK3535A**			section 35 x 35 standard length 2000	inner and outer corner

The external dimensions listed are nominal values.
The weights of the planks indicated in the tables are indicative and not binding.
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.

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GENERAL INSTALLATION INSTRUCTIONS

Key points to be followed before and during the installation process:

- Store the material on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and direct sun light.
- Before starting the installation, carefully check the material and notify immediately of any manufacturing issues. Complaints will not be accepted after installation.
- Before starting the installation, check project's drawings (or shop drawings if provided) and the correspondence of the received material against the packing list.
- Acclimate the material in stock to the temperature of the jobsite for at least 48 hours prior to installation.
- The installation temperature must be higher than 0 °C.
- Do not cover the product with sheets made with non-breathable material (nylon, polyethylene and similar materials). For this purpose it is advisable to use breathable material such as painter felt sheets.
- The accumulation of electrostatic charges is a natural phenomenon commonly found in plastic materials, and under exceptional environmental conditions this may also occur in Woodn™'s products.
- Profiles shall be handled with care in order to prevent damages. It is recommended to lift the profiles on the whole length during displacement and not make them slide on top of each other. Always use clean fabric gloves when handling profiles.
- Prevent the formation of dirt on and between profiles; in particular, make sure that mechanical processes carried out on other materials, near Woodn products, do not determine the accumulation of chips or dust of any kinds. During the installation/assembly phase do not apply any label or sticker; if already applied, please remove immediatly after installation. Immediately remove major stains such as paint, concrete or tar residues.
- For cleaning and maintenance instructions refer to page 109. The WoodN warranty will be rendered null and void in the event of incorrect or improper handling, cleaning and maintenance.

PREPARATION OF THE BASE

Check the stability of the support on which the installation will be carried out: a surface subject to expansion and movements of any kind can compromise the success of the installation. For an easy, fast and safe installation of Woodn™ Ornans, a properly levelled substrate is required. Any irregularities of the floor and wall will affect the surface of the cladding.
Before applying the adhesive to the substrate, check the following:
- cleanliness (namely: the absence of oily or greasy substances in general, which may jeopardise the adhesion of the adhesive to the substrate; absence of debris, which may seriously compromise the aesthetic result of the installation);
- absence of surface and rising moisture.

ADHESIVE

Installation may be carried out correctly using different types of adhesive among those available on the market. We recommend using the following products depending on the substrate on which you perform the application.

WoodN Industries does not take responsibility for the bonding and laying methods.

The amount of adhesive to be prepared depends on the experience and skill of the installer, on the "open time" of the adhesive (catalysis rate) and on the ambient temperature (heat accelerates the catalysis while a low temperature can slow down the process): we recommend carefully reading the instructions for use.
To apply the adhesive properly, use a trowel with triangular teeth (2 mm is ideal). Then prepare a uniform base of adhesive on an appropriate portion of the surface you need to cover (size varies depending on the dexterity of the installer).
It may happen that for every 20 mq to 30 mq of laying, the teeth of the trowel become worn to the point of not allowing for an ideal application. In this case, we recommend promptly replacing the trowel.

products	cured and consolidated plaster*	dusty plaster*	plaster*	plasterboard*	cured and consolidated screed	dusty screed*	plastics**	metals**	ceramics**	cured and consolidated screed***
MAPEI KERALASTIC two-component polyurethane					●		●	●	●	●
MAPEI KERALASTIC T two-component polyurethane	●	●	●	●	●	●	●	●	●	●
SLC-KERAKOLL SLCPU31 PRIMER polyurethane single-component solvent (to use before the adhesive)		●				●				
SLC-KERAKOLL SLCEP21 PRIMER epoxy single-component (to use before the adhesive)		●				●				
SLC-KERAKOLL L34 two-component epoxy-polyurethane	●	●	●	●	●	●				
TOVER PRIMERFIX (to use before the adhesive)		●				●				
TOVER TOVCOL PU 2C two-component polyurethane	●	●	●	●	●	●	●	●	●	●
TOVER TOVCOL T91 two-component epoxy-polyurethane					●	●	●	●	●	●
TOVER TOVCOL T91-V two-component epoxy-polyurethane	●	●	●	●	●	●	●	●	●	●

* Absorbent floors (indoors) ** Non-absorbent floors *** Outdoor applications

WALL APPLICATION

A smooth wall free from surface irregularities is required for the laying stage, as described above. For application on a wall, we recommend proceeding from the bottom up. It is important to gradually check the correct positioning of the planks so you can correct any irregularities before the adhesive catalyses. Apply an even layer of adhesive on the portion of surface you need to cover and then apply the planks; until you complete the cladding. To prevent downwards slippage of the planks, fix them using pins or small nails that can later be removed once the adhesive catalyses.
For outdoor applications, the surface must be made with a hydraulic binder, have high mechanical strength and be compact and cured at the time of installation. We also recommend using planks less than or equal to 500 mm length.

FLOOR APPLICATION

The Woodn™ Ornans planks can also be applied on the floor: for example, in bathrooms or rooms of private homes, shop windows and in general areas with foot traffic (equivalent to class 21 according to EN 685:2007). Installation on the floor must be carried out without stepping on freshly-laid planks, therefore it must be done by moving backwards across the room towards the exit. Do not walk on the floor for at least 24 hours after completing the installation.
Once the installation is done, to limit surface abrasions and scratches on the planks we recommend creating a 'buffer zone', using loose-laid mats according to standard EN14041. Please make sure that the mechanical properties of the product (see p.107) are compatible with the intended use of the floored premises.

TIPS FOR LAYING

The plank should be laid with a movement perpendicular to the application surface, make sure you do not slide it parallel to the substrate. Every 3 mq to 4 mq laid, apply pressure on the widest possible surface to make the planks adhere evenly to the substrate, using square trowels with a rubber base. For this step, we do not recommend using your fingers or the palm of your hand. Any excess adhesive should be eliminated as you go, to keep the adhesive from adhering to the visible surfaces. The adhesive may harden long after the laying itself (for instance, when the laying is done in low temperature environments). In these cases we recommend passing the square trowel a second time, if necessary. We recommend until the hardening is completed, using adhesive tape from a body shop (made of paper and with low adhesiveness) to hold the planks together, in order to avoid cracks forming between them.

ROUTINE MAINTENANCE

The material is water resistant and can be washed with traditional liquids such as water, neutral soap, alcohol, etc. Carefully avoid using solvents (especially acetone) that could damage the surface of the planks. For example, the cladding can be washed with neutral soap and/or a capful of ammonia per each 5 L bucket of water. To remove dust, we recommended avoiding the use of abrasive tools, such as sorghum brooms. We recommend checking the level of wear of the brushes in your vacuum cleaner, in order to avoid scratches.

For special applications please contact our Woodn Industries' technical department. As part of a normal technological evolution, there may be changes in colour/appearance of the product; we recommend requesting recently-made samples when you order. We will not accept claims involving differences in colour or appearance outside commercial tolerances, if choices have been made based on old samples. We reserve the right to terminate, update, make technical changes to improve the quality and appearance of the material, without prior notice.

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El Bajío

HANDLING, CLEANING AND MAINTENANCE NOTES

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DISCLAIMER - GENERAL NOTES

The information provided by WoodN Industries in this document are solely indicative, they are based on the present state of knowledge and must be considered only as a description of our products and their possible application. Such information must not be interpreted as a guarantee of specific features, performances or warranties of the product. Material's colors and finishes represented in this document are the result of printing techniques so they may slightly differ from the original colors. Original samples are available upon request and constitute only a general indication of the dimensions and the aesthetic appearance of Woodn™ profiles. WoodN Industries may change the information included in this document at any time and without further notice. WoodN Industries does not warrant the accuracy and completeness of the information in this document and furthermore their suitability for the purpose which it is consulted for by the other parties. WoodN's customers or third parties must ascertain they have the most recent version of this document, avaiable at www.woodn.com. It is advised that customers and third parties have a professional adviser to inform them about the suitability of the products for all desired applications and about applicable laws and regulations. WoodN Industries reserves the right to modify products and concerning features without prior notice. WoodN Industries is not liable for any damage arising from, or related to, the use of this document. Woodn™ material does not have structural characteristics and therefore WoodN Industries declines all responsibilities for improper use of the material. No sections of this publication can be reproduced, stored in database, or transmitted in any form or by any other mean without the explicit approval of WoodN Industries. For more information please contact WoodN Industries.

HANDLING, CLEANING AND MAINTENANCE

This document is intended to provide general recommendations only.

HANDLING AND STORAGE

Key points to be followed before and during the installation process:

- Store the material on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and direct sun light.
- Before starting the installation, carefully check the material and notify immediately of any manufacturing issues. Complaints will not be accepted after installation.
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- Prevent the formation of dirt on and between profiles; in particular, make sure that mechanical processes carried out on other materials, near Woodn products, do not determine the accumulation of chips or dust of any kinds. During the installation/assembly phase do not apply any label or sticker; if already applied, please remove immediatly after installation. Immediately remove major stains such as paint, concrete or tar residues.

CLEANING AND MAINTENANCE

Although WoodN requires minimum maintenance, as all the exterior building materials it's recommended to clean the material upon completion of installation, then regularly under normal conditions of use. As ordinary maintenance it is advised to carry out periodical cleaning, as needed, using pressure water and, possibly, neutral detergent (upon completion, it is advised to remove excess water). The frequency may vary depending on the area, type of application and the care taken with processing and assembly. The appearance and the consequent effect of dirt on WoodN material vary depending on the cause.
For examples, rain or moisture drops flowing on a surface may concentrate a more visible deposit of dust and dirt. Such residues shall be quickly removed, as they may cause non-homogeneous discoloration of the material.
In outdoor applications, brushed products may present surface rings after being exposed to rainfall and humidity.
This phenomenon, caused by a rising on the surface of tannin, a natural component of any wood fibre, is to be considered normal and will disappear after a few washes with water or after rain. In case of staining, it is advised to remove the stain as soon as possible using water and a neutral detergent (absolutely avoid using abrasive products or solvents, especially acetone).
Do not use cleaning agents with abrasive or polishing components. Only use sponges, nylon brushes or cloths. If there is a more serious cleaning issue, it is important to identify the problem before trying to solve it.
After cleaning, rinse very well the residues of any detergent used; the residues may cause an uneven discoloration of the surface.
WoodN's warranty do not apply in case of improper or incorrect cleaning or handling.

Dirt cleaning

Dirt can easily be removed with pressure water. Apply neutral detergent and brush the interested area using a soft nylon brush (or cloth). Rinse plentifully with water paying attention to remove all the residues of detergent from the surface.

COLOR'S ACCELERATED AGING TEST

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ACCELERATED AGING RESISTANCE TEST

COLOUR STABILITY

Colour stability has been tested in compliance with accelerated weathering tests (UNI EN ISO 4892-2:2009 and UNI EN ISO 2105-A02:1996); the result of the test is expressed by assigning a numerical value to colour variation according to the international greyscale, which is a useful method to measure colors differences.

PURPOSE OF THE TEST

Resistance to accelerated aging on Woodn profiles according to UNI norms EN ISO 4892-2:2009 and EN 20105-A02:1996.

TEST METHOD

The equipment used is fitted with a 6500 watt water-cooled Xenon lamp.
The equipment is set according to the following parameters:
- exposure to continuous light
- light source on the samples: 0.50 W/m^2 at 340 nm, corresponding to 580 W/m^2
- total power exposed to the sample: 2.50 GJ/m^2 and 7.5 GJ/m^2
- exposure program: 102 min. of light exposure and 18 min. of light exposure + sprayed deionized water.

sample	color	Greyscale degree* after 3600h of exposure against original samples	Greyscale degree** after 3600h of exposure compared to samples aged for 1200 h
1	Bianco Carrara	3	4/5
2	Lagorai	3	4/5
6	Marrakech	3/4	4/5
9	Cuba	3/4	4/5
10	Caffè Bogotà	4	4
12	Segovia	3	4/5
13	Myanmar	4	4
14	Grigio Silverstone	4	4/5
27	Grigio Lavaredo	2/3	4/5
28	Grigio Londra	3	4/5
33	Beige Sahara	3/4	5

(*) The international greyscale goes from Grade 1 (maximum colour difference) to Grade 5 (minimum colour difference).

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FINISHES AND COLORS WOODN

Brushed (for Indoor and Outdoor applications)

01 Bianco Carrara

01-PW Avorio

02 Lagorai

28 Grigio Londra

14 Grigio Silverstone

48 Black

99 Cuba

13 Myanmar

10 Caffè Bogotà

33 Beige Sahara

77 CocoWalk

73 Sinai

80 Terracotta

Smooth (only for Indoor applications)

01 Bianco Carrara

01-PW Avorio

02 Lagorai

28 Grigio Londra

14 Grigio Silverstone

48 Black

99 Cuba

13 Myanmar

10 Caffè Bogotà

33 Beige Sahara

77 CocoWalk

73 Sinai

80 Terracotta

Colors and textures shown are purely indicative. Check every time a real sample for approval.
Considering the presence of natural wood fibers, colors may vary from batch to batch.

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FINISHES AND COLORS GREENWOOD

Solarium (for Indoor and Outdoor applications)

14S Bianco

12S Miele

21S Tabacco

23S Terra di Siena

31S Ebano

32S Wengè

16S Taupe

33S Aubergine

10S Caffè Bogotà

13S Myanmar

Loft (for Indoor and Outdoor applications)

14L Bianco

12L Miele

21L Tabacco

23L Terra di Siena

31L Ebano

32L Wengè

16L Taupe

33L Aubergine

10L Caffè Bogotà

13L Myanmar

Colors and textures shown are purely indicative. Check every time a real sample for approval.
Considering the presence of natural wood fibers, colors may vary from batch to batch.

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