

# WOODN VERSATILIS



Hotel Le Massif Courmayeur (TZ9555-R)

#### DISCLAIMER - GENERAL NOTES

Due to conversion from metric sizes and measurements, the US values provided are approximate.

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# MATERIAL'S FEATURES

## Mechanical properties

Elasticity (bending)	UNI EN ISO 178	2070 Mpa (@73 °F) 660 Mpa (@149 °F)
Yield strenght (flexural)	UNI EN ISO 178	31 Mpa (@73 °F)
Water absorbptn and humidity	ASTM D1037	absorption 0,07%
Dynamic- Mechanical analysis of transition temperature	ASTM D4065/95	173.8 °F
Linear thermal expansion coefficient (from 14 °F to 158 °F)	TMA ASTM E 831/2006	longitudinal $46,9 \times 10^{-6} \text{ m}/(\text{m}^{\circ}\text{C})$ trasversal $48 \times 10^{-6} \text{ m}/(\text{m}^{\circ}\text{C})$
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	890 °F
Average critical radiant flux of floor	AS ISO 9239 ASTM E648	$\geq 11 \text{ kW}/\text{m}^2$ $> 1,03 \text{ W}/\text{cm}^2$ (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 <sup>2</sup> h)




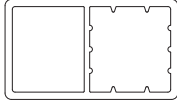

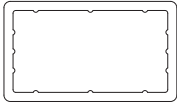

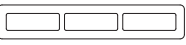

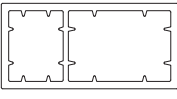

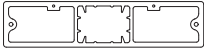

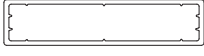

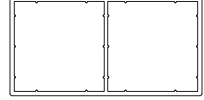
The values shown are indicative and not binding. Test reports available upon request.  
The natural aging of the material and temperature variations may cause deviations from the values indicated above.  
The product is protected by a warranty in line with legal requirements: for more information see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

# PROFILES SECTION

Woodn recommends to refer only to the values expressed in mm the US values are to be considered approximate).


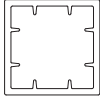

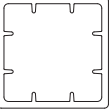

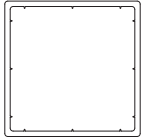

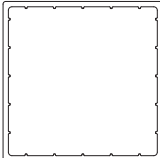



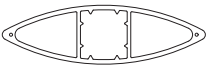


profile	cross-section	nominal dimensions [ft, in]	reinforcement external nominal dimensions [ft, in]	weight of the plank [lb/ft]
<b>LG3020</b> 		section 30 x 20 mm ( $\approx 1\frac{3}{16} \times 13/16$ ) standard length 1830 mm ( $\approx 6'$ )	20 x 10 mm ( $\approx 13/16 \times 7/16$ )	0.31
<b>JF4030-30x20</b> 		section 40 x 30 mm ( $\approx 1\frac{5}{8} \times 1\frac{3}{16}$ ) standard length 1830 mm ( $\approx 6'$ )	30 x 20 mm ( $\approx 1\frac{3}{16} \times 13/16$ )	0.44
<b>JF5026-40x15</b> 		section 50 x 26 mm ( $\approx 2 \times 1\frac{1}{16}$ ) standard length 1830 mm ( $\approx 6'$ )	40 x 15 mm ( $\approx 1\frac{5}{8} \times 5/8$ )	0.49
<b>JF6032</b> 		section 60 x 32 mm ( $\approx 2\frac{3}{8} \times 1\frac{5}{16}$ ) standard length 1830 mm ( $\approx 6'$ )	20 x 20 mm ( $\approx 13/16 \times 13/16$ )	0.81
<b>JF7040-25x25</b> 		section 70 x 40 mm ( $\approx 2\frac{13}{16} \times 1\frac{5}{8}$ ) standard length 1830 mm ( $\approx 6'$ )	25 x 25 mm ( $\approx 1 \times 1$ )	0.97
<b>JF7040-30x15</b> 		section 70 x 40 mm ( $\approx 2\frac{13}{16} \times 1\frac{5}{8}$ ) standard length 1830 mm ( $\approx 6'$ )	30 x 15 mm ( $\approx 1\frac{3}{16} \times 5/8$ )	0.85
<b>JF7040-50x25</b> 		section 70 x 40 mm ( $\approx 2\frac{13}{16} \times 1\frac{5}{8}$ ) standard length 1830 mm ( $\approx 6'$ )	50 x 25 mm ( $\approx 2 \times 1$ )	0.78

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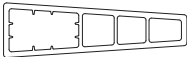


profile	cross-section	nominal dimensions [ft, in]	reinforcement external nominal dimensions [ft, in]	weight of the plank [lb/ft]
<b>TZ9555-R</b> 		section 95 x 55 mm (≈ 3"3/4 x 2"3/16) standard length 1830 mm (≈ 6')	40 x 40 mm (≈ 1"5/8 x 1"5/8)	1.21
<b>TZ9555</b> 		section 95 x 55 mm (≈ 3"3/4 x 2"3/16) standard length 1830 mm (≈ 6')	80 x 40 mm (≈ 3"3/16 x 1"5/8)	1.37
<b>JF11020</b> 		section 110 x 20 mm (≈ 4"3/8 x 13/16") standard length 1830 mm (≈ 6')	L Profile 30 x 10 mm (≈ 1"3/16 x 7/16")	1.09
<b>JF12058-A</b> 		section 120 x 58 mm (≈ 4"3/4 x 2"5/16) standard length 1830 mm (≈ 6')	30 x 40 mm (≈ 1"3/16 x 1"5/8)	1.46
			60 x 40 mm (≈ 2"3/8 x 1"5/8)	
<b>JF18041</b> 		section 180 x 41 mm (≈ 7"1/8 x 1"5/8) standard length 1830 mm (≈ 6')	30 x 30 mm (≈ 1"3/16 x 1"3/16)	1.89
			40 x 20 mm (≈ 1"5/8 x 13/16")	
<b>JF18041-165x30</b> 		section 180 x 41 mm (≈ 7"1/8 x 1"5/8) standard length 1830 mm (≈ 6')	165 x 30 mm (≈ 6"1/2 x 1"3/16)	1.56
<b>JF222114</b> 		section 222 x 114 mm (≈ 8"3/4 x 4"1/2) standard length 1830 mm (≈ 6')	100 x 100 mm (≈ 3"15/16 x 3"15/16)	2.86



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profile	cross-section	nominal dimensions [ft, in]	reinforcement external nominal dimensions [ft, in]	weight of the plank [lb/ft]
<b>TZ6060</b> 		section 60 x 60 mm (≈ 2"3/8 x 2"3/8) standard length 1830 mm (≈ 6')	40 x 40 mm (≈ 1"5/8 x 1"5/8)	0.81
<b>JF7070</b> 		section 70 x 70 mm (≈ 2"13/16 x 2"13/16) standard length 1830 mm (≈ 6')	50 x 50 mm (≈ 2" x 2")	1.03
<b>TZ113113</b> 		section 113 x 113 mm (≈ 4"1/2 x 4"1/2) standard length 1830 mm (≈ 6')	100 x 100 mm (≈ 3"15/16 x 3"15/16)	1.61
<b>TZ180180</b> 		section 180 x 180 mm (≈ 7"1/8 x 7"1/8) standard length 1830 mm (≈ 6')	163 x 163 mm (≈ 6"3/8 x 6"3/8)	3.79
<b>JF15238</b> 		section 152 x 38 mm (≈ 6" x 1"1/2) standard length 1830 mm (≈ 6')	25 x 25 mm (≈ 1" x 1")	1.24
<b>JF20058</b> 		section 200 x 58 mm (≈ 7"7/8 x 2"5/16) standard length 1830 mm (≈ 6')	40 x 40 mm (≈ 1"5/8 x 1"5/8)	2.07
<b>JF35068</b> 		section 350 x 68 mm (≈ 1' 1"3/4 x 2"11/16) standard length 1830 mm (≈ 6')	100 x 40 mm (≈ 3"15/16 x 1"5/8)	2.93

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profile	cross-section	nominal dimensions [ft, in]	reinforcement external nominal dimensions [ft, in]	weight of the plank [lb/ft]
<b>JF15045-25</b> 		section 150 x 45 x 25 mm (≈ 5"15/16 x 1"13/16 x 1") standard length 1830 mm (≈ 6')	50 x 25 mm (≈ 2" x 1")	1.55
<b>C50R</b> 		section Ø 50 mm (≈ Ø 2") standard length 1830 mm (≈ 6')	Ø 38 mm (≈ Ø 1"1/2)	0.43

The external dimensions listed are nominal values. The weights of the planks indicated in the tables are indicative and not binding. The final weight depends on the gauge and size of the internal reinforcement.  
Length tolerances according UNI EN-ISO 22768: class UNI EN-ISO 22768-vL.  
Refer to Woodn Technical Department or on website [www.woodn.com](http://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 32 °F.
- 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 immediately after installation. Immediately remove major stains such as paint, concrete or tar residues.
- For cleaning and maintenance instructions refer to page 129. 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 30.73 pound/sqft.

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:

$$\text{floating point hole diameter} = \text{floating point slot length} = 2 \times L \times 0.003 + \emptyset$$

where  $L$  = centre-to-centre distance between the fixed point and the floating point  
and  $\emptyset$  = diameter of the fixing screw

For example:

$$L = 6'6''3/4, \emptyset = 3/16''$$

$$\text{floating point hole diameter} = \text{floating point slot length} = 2 \times 6'6''3/4 \times 0.003 + 3/16'' = 11/16''$$

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.



## 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.

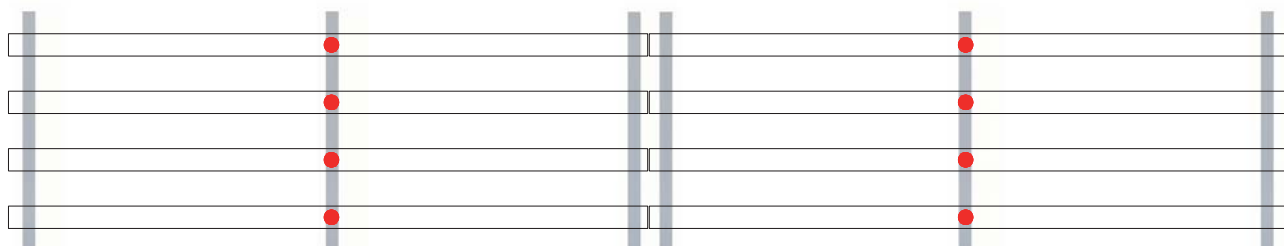
At the end of the profile, leave a gap according to the relative size in the table below:

Laying temperature	Expansion gap [in/ft]
< 68 °F	1/40" (2 mm/m)
> 68 °F	1/80" (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](mailto:ufficiotecnico@woodn.com)

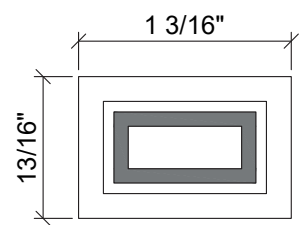
## INTERNAL REINFORCEMENT

For all Versatilis 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 1"5/8 (40 mm) shorter than the WPC profile. When centered in the WPC profile, there must be 13/16" (20 mm) at each end. In the specific case of profiles which have the WoodN closing cap, the reinforcement profile must be 3"9/16 (90 mm) shorter, leaving 1"3/4 (45 mm) at the ends of the WPC profile.

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

LG3020



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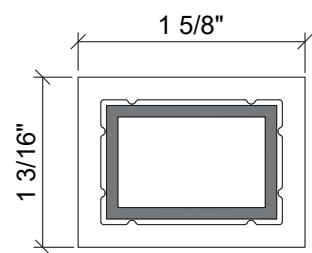


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
LG3020	20 x 10 x 2 mm (≈ 13/16" x 7/16" x 5/64")	≈ 1" 3/16	≈ 47"	≈ 59"
		≈ 13/16"	≈ 39"	

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF4030



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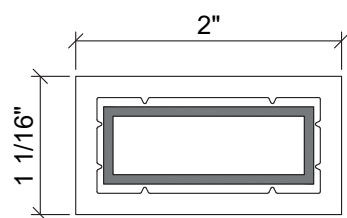
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF4030-30x20	30 x 20 x 2 mm (≈ 1"3/16 x 3/16" x 5/64")	≈ 1"5/8	≈ 71"	≈ 86"
		≈ 1"3/16	≈ 63"	

Maximum spans calculated considering:

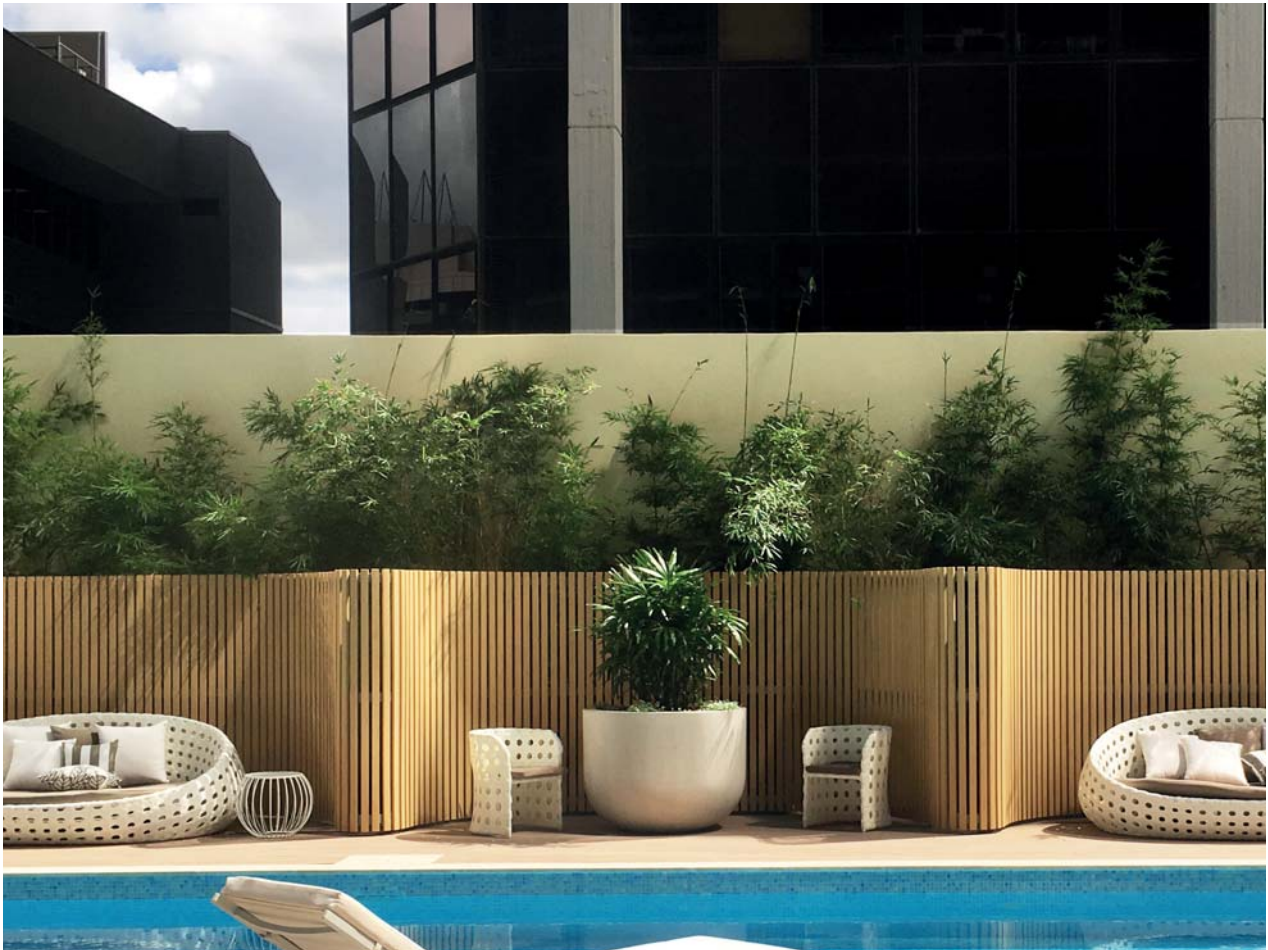
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



JF5026



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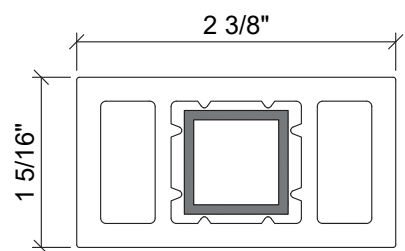


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF5026-40x15	40 x 15 x 2 mm (≈ 1"5/8 x 5/8" x 5/64")	≈ 2"	≈ 67"	≈ 75"
		≈ 1"1/16	≈ 55"	

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF6032



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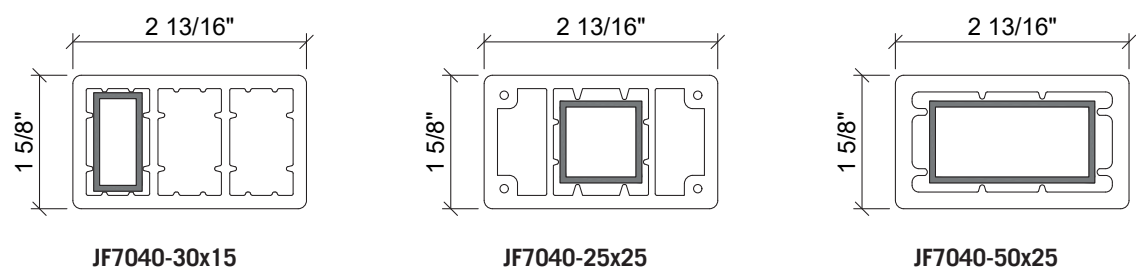
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF6032	20 x 20 x 2 mm (≈ 13/16" x 13/16" x 5/64")	≈ 2"3/8	≈ 63"	≈ 75"
		≈ 1"5/16	≈ 55"	

Maximum spans calculated considering:

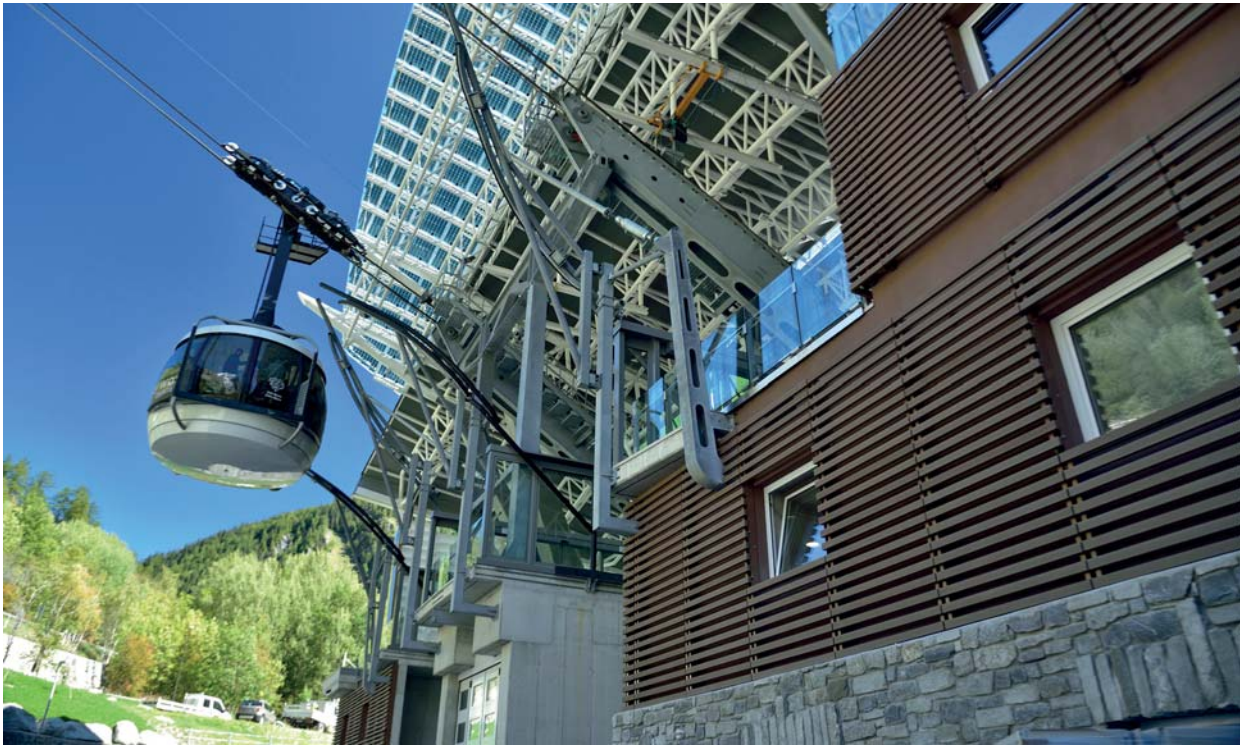
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



JF7040



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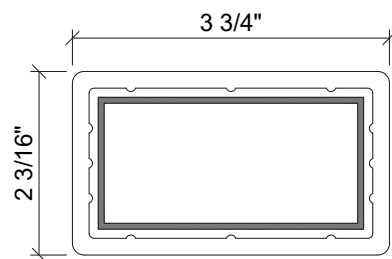
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF7040-30x15	30 x 15 x 2 mm (≈ 1"3/16 x 5/8" x 5/64")	≈ 2"13/16	≈ 59"	≈ 82"
		≈ 1"5/8	≈ 67"	
JF7040-25x25	25 x 25 x 2 mm (≈ 1" x 1" x 5/64")	≈ 2"13/16	≈ 71"	≈ 86"
		≈ 1"5/8	≈ 67"	
JF7040-50x25	50 x 25 x 2 mm (≈ 2" x 1" x 5/64")	≈ 2"13/16	≈ 94"	≈ 102"
		≈ 1"5/8	≈ 75"	

Maximum spans calculated considering:

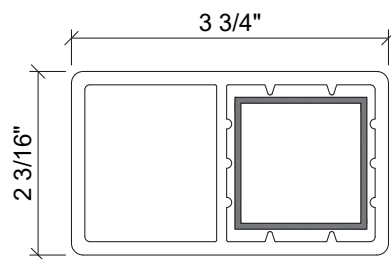
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



# TZ9555



TZ9555



TZ9555-R

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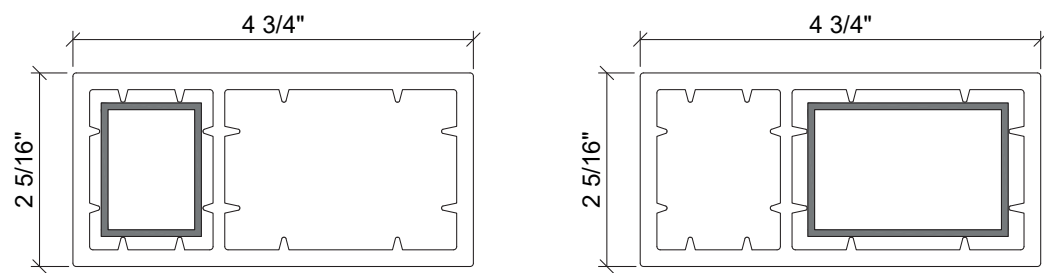


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
TZ9555	80 x 40 x 2 mm (≈ 3"3/16 x 1"5/8 x 5/64")	≈ 3"3/4	≈ 134"	≈ 134"
		≈ 2"3/16	≈ 102"	
TZ9555-R	40 x 40 x 2 mm (≈ 1"5/8 x 1"5/8 x 5/64")	≈ 3"3/4	≈ 98"	≈ 118"
		≈ 2"3/16	≈ 94"	

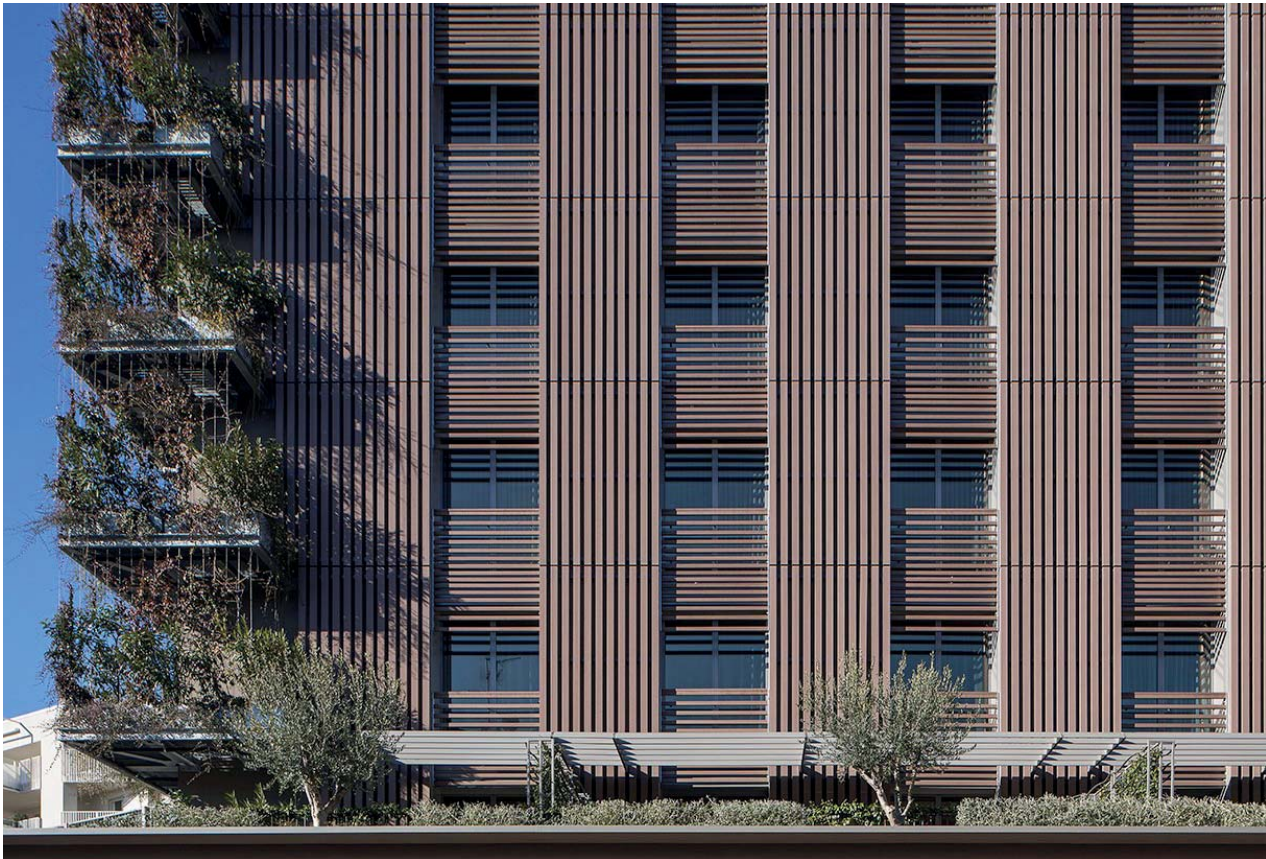
Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF12058-A



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

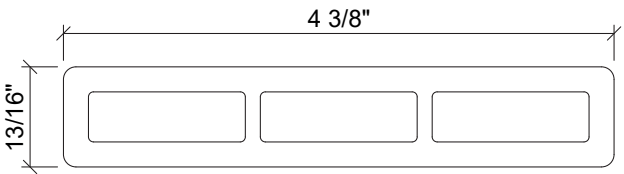


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF12058-A	30 x 40 x 2 mm (≈ 1"3/16 x 1"5/8 x 5/64")	≈ 4"3/4	≈ 75"	≈ 106"
		≈ 2"5/16	≈ 82"	
	60 x 40 x 2 mm (≈ 2"3/8 x 1"5/8 x 5/64")	≈ 4"3/4	≈ 110"	≈ 122"
		≈ 2"5/16	≈ 94"	

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF11020



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).



PROFILE WITHOUT REINFORCEMENT

profile code	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
<b>JF11020</b>	≈ 4"3/8	≈ 24"	≈ 24"

PROFILE WITH REINFORCEMENT

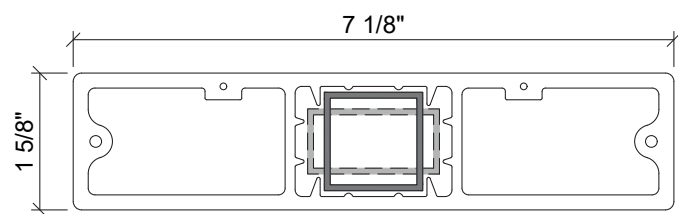
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
<b>JF11020-WA</b>	"L" profile 30 x 10 x 2 mm (≈ 1"3/16 x 7/16" x 5/64")	≈ 4"3/8	≈ 35"	≈ 35"

Maximum spans calculated considering:

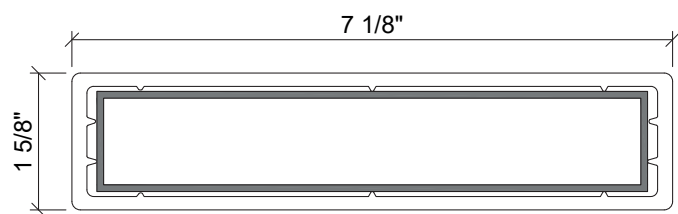
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



JF18041

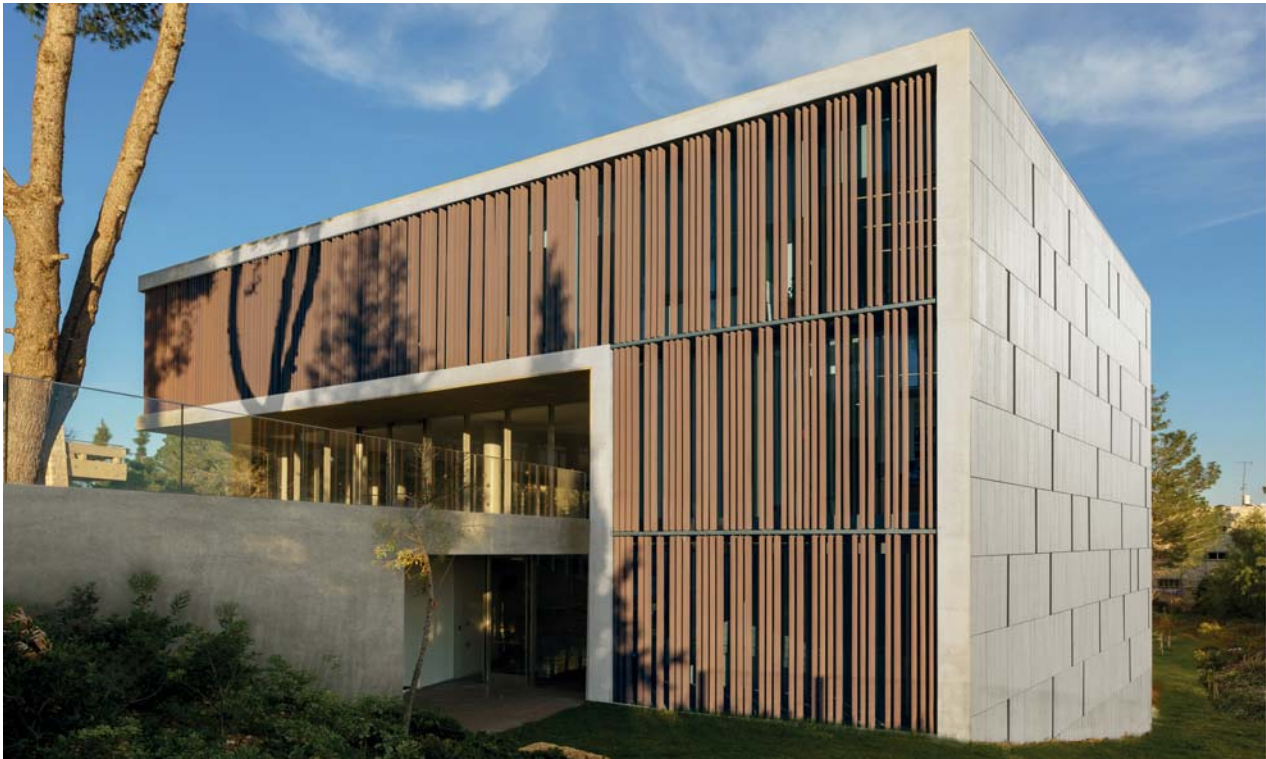


JF18041



JF18041-165x30

Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

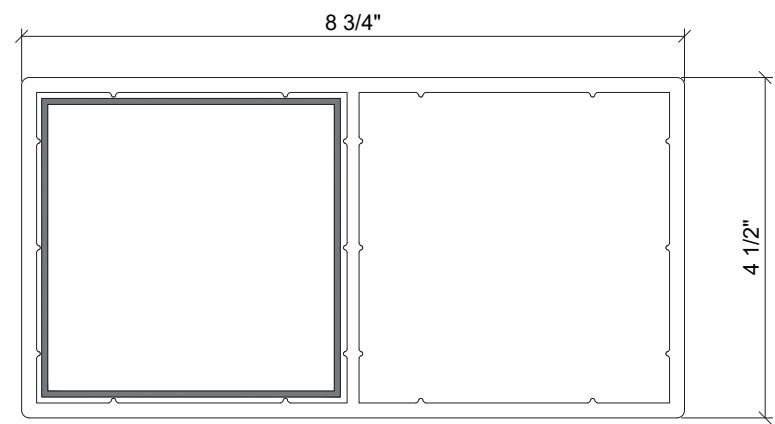


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF18041	40 x 20 x 2 mm (≈ 1"5/8 x 13/16" x 5/64")	≈ 7"1/8	≈ 67"	≈ 71"
		≈ 1"5/8	≈ 63"	
	30 x 30 x 2 mm (≈ 1"3/16 x 1"3/16 x 5/64")	≈ 7"1/8	≈ 75"	≈ 82"
		≈ 1"5/8	≈ 71"	
JF18041-165x30	165 x 30 x 2 mm (≈ 6"1/2 x 1"3/16 x 5/64")	≈ 7"1/8	≈ 118"	≈ 118"
		≈ 1"5/8	≈ 90"	

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF222114



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

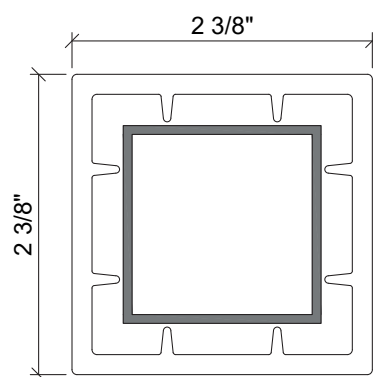


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF22214	100 x 100 x 2 mm (≈ 3"15/16 x 3"15/16 x 5/64")	≈ 8"3/4	≈ 165"	≈ 193"
		≈ 4"1/2	≈ 165"	

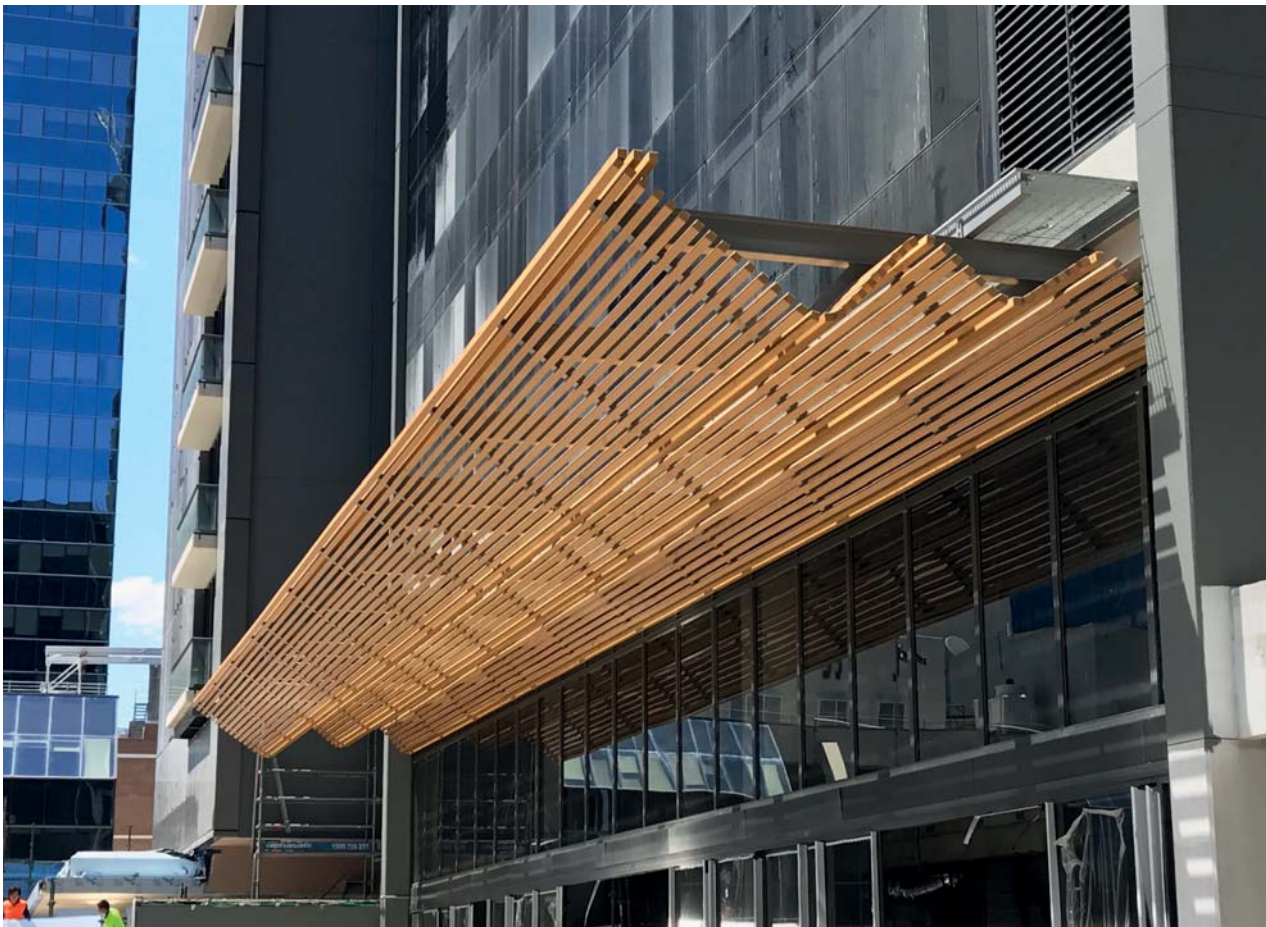
Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

# TZ6060



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).



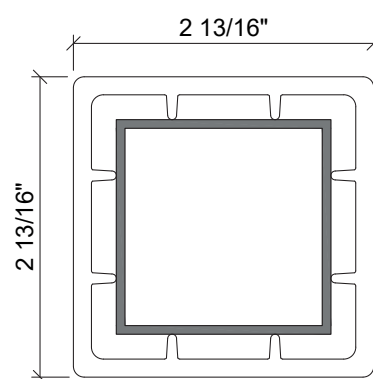
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
<b>TZ6060</b>	40 x 40 x 2 mm ( $\approx 1\frac{5}{8} \times 1\frac{5}{8} \times \frac{5}{64}$ )	$\approx 2\frac{3}{8}$	$\approx 94$ "	$\approx 126$ "

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft<sup>2</sup>
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



JF7070



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

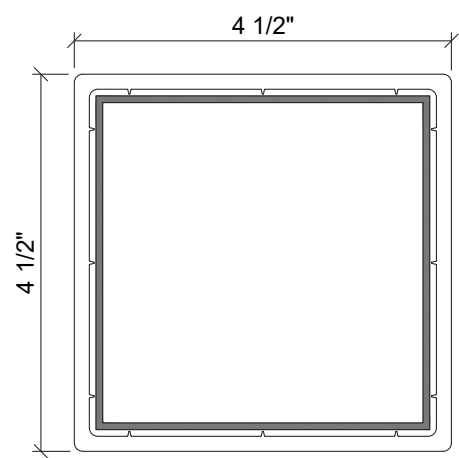


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF7070	50 x 50 x 2 mm (≈ 2" x 2"x 5/64")	≈ 2"13/16	≈ 98"	≈ 138"

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

TZ113113



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

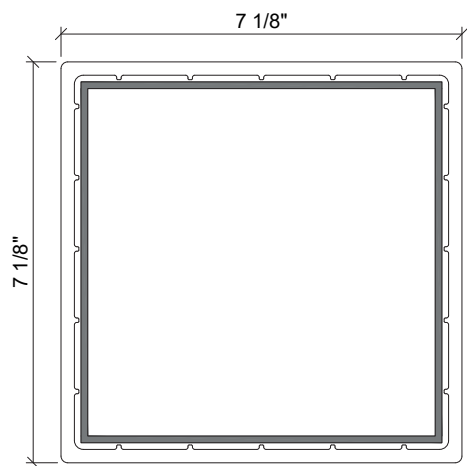


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
TZ113113	100 x 100 x 2 mm (≈ 3"15/16 x 3"15/16 x 5/64")	≈ 4"1/2	≈ 161"	≈ 224"

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

TZ180180



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

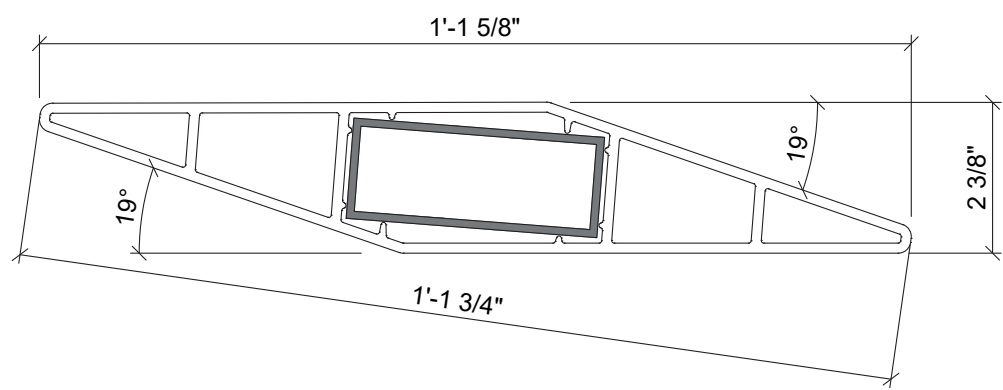


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
<b>TZ180180</b>	163 x 163 x 3 mm (≈ 6"3/8 x 6"3/8 x 1/8")	≈ 7"1/8	≈ 220"	≈ 323"

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 1/8" mm, with greater thicknesses it is possible to reach greater spans





Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

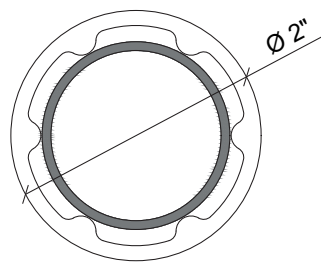


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum vertical span [inch]
			aluminum
JF35068	100 x 40 x 4 mm (≈ 3"15/16 x 1"5/8 x 5/32")	≈ 1' 1"3/4	≈ 142"

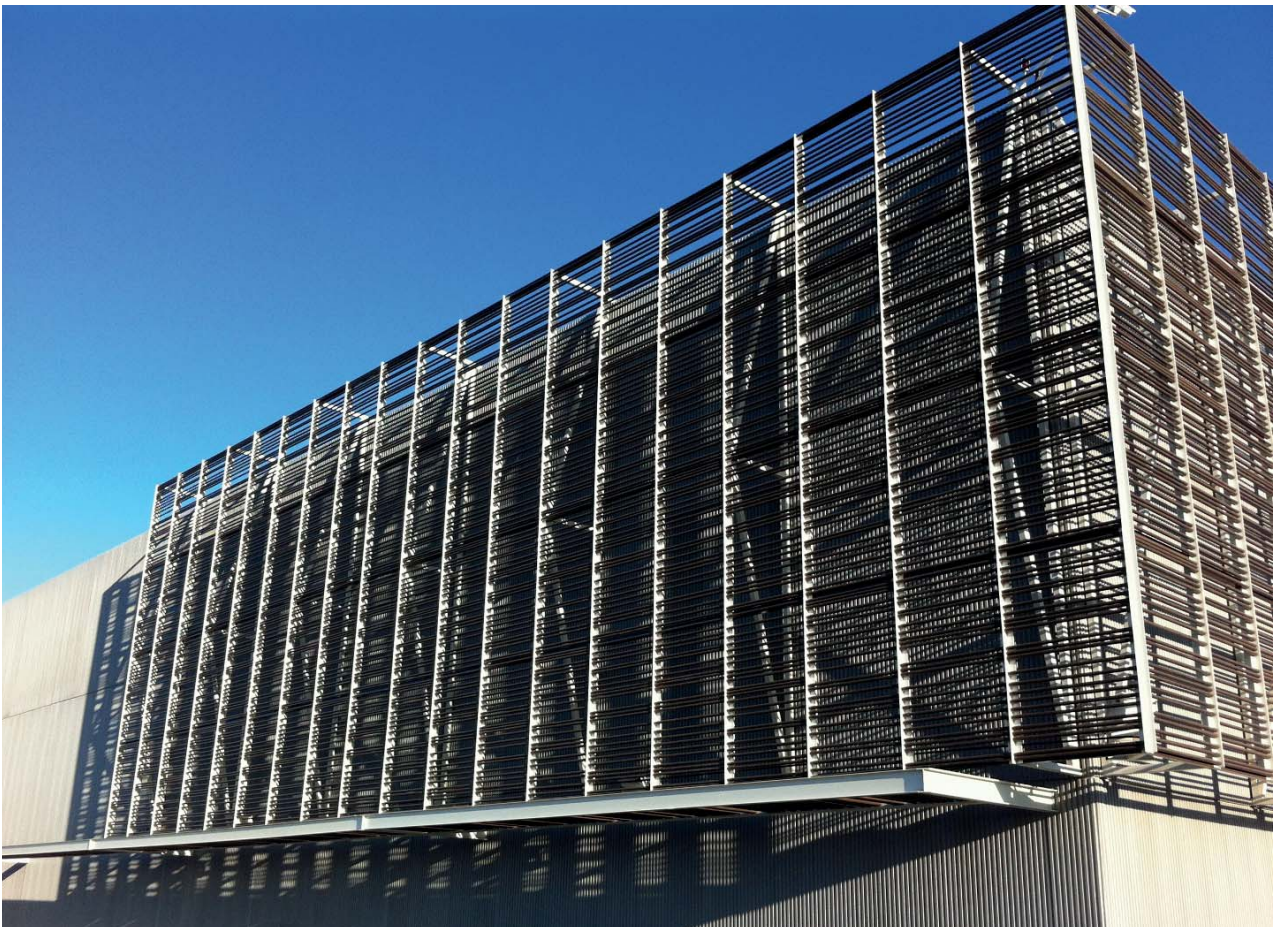
Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/32" mm, with greater thicknesses it is possible to reach greater spans

C50R



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).



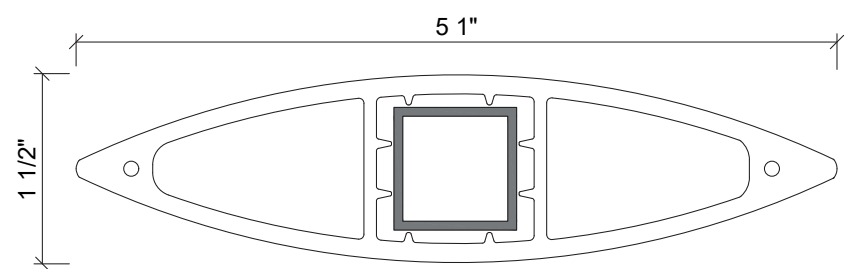
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
C50R	Ø 38 x 1,5 mm (≈ Ø 1 1/2 x 1/16")	≈ 2"	≈ 82"	≈ 114"

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 1/16" mm, with greater thicknesses it is possible to reach greater spans



JF15238



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).



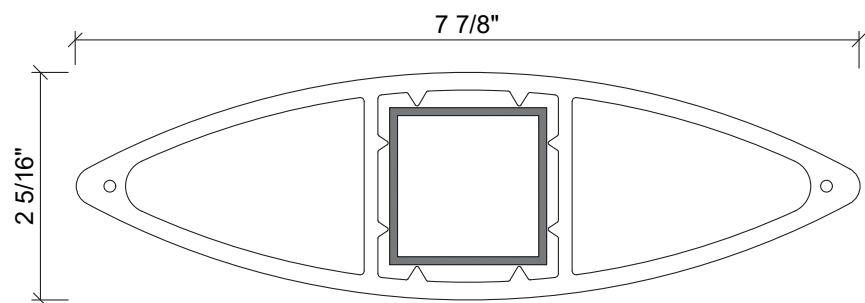
profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF15238	25 x 25 x 2 mm (≈ 1" x 1" x 5/64")	≈ 6"	≈ 59"	≈ 71"
		≈ 1"1/2	≈ 63"	

Maximum spans calculated considering:

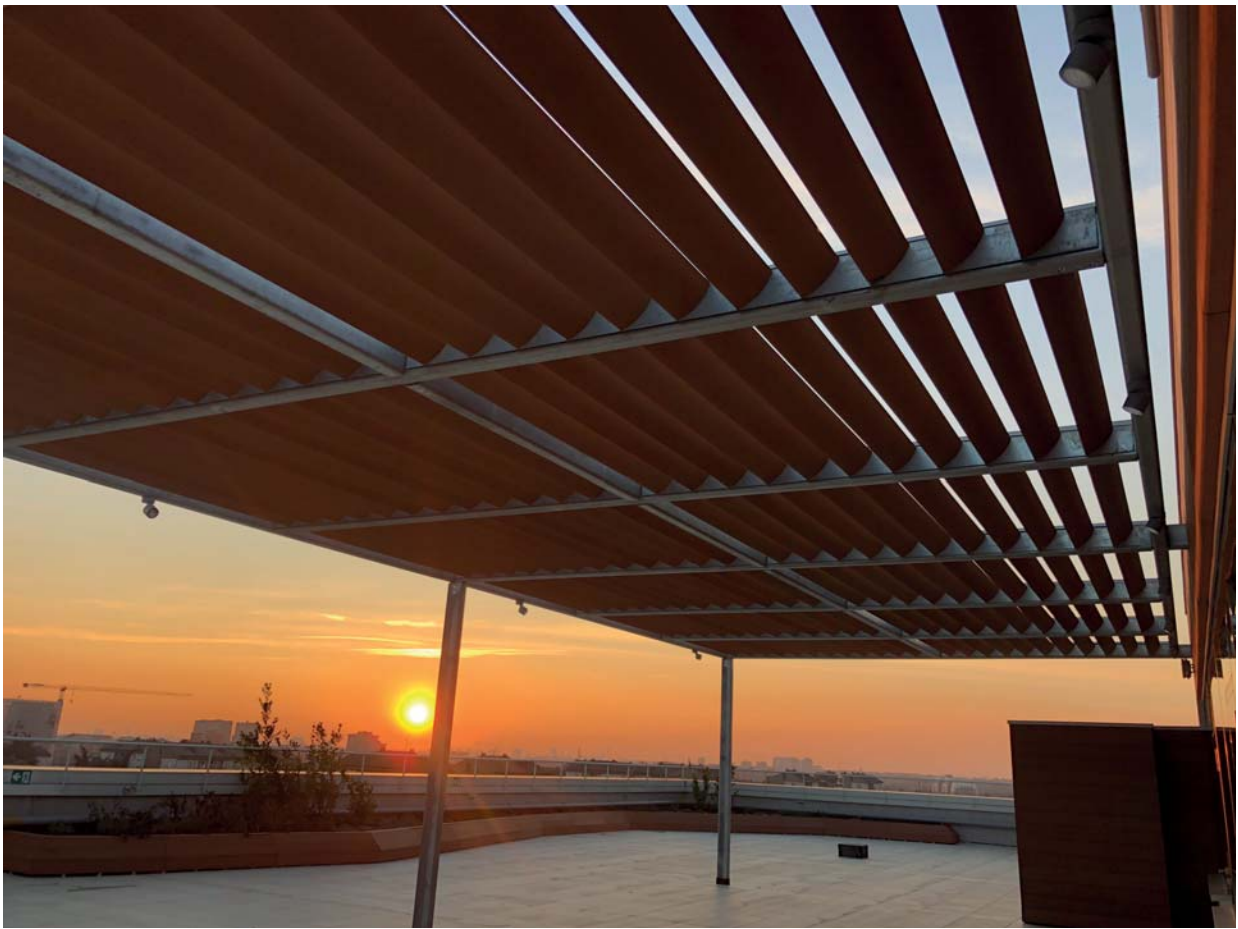
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans



JF20058



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

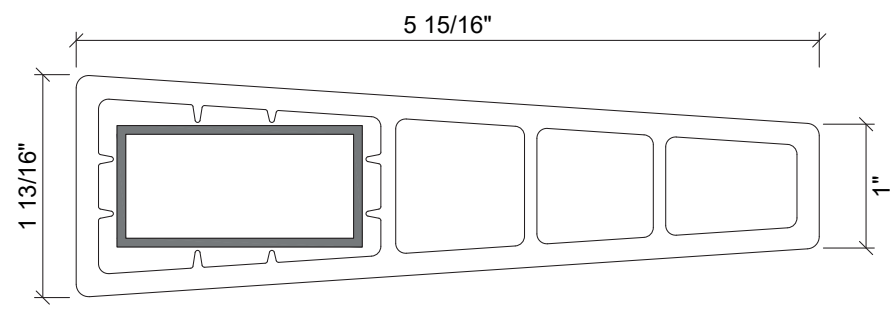


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
<b>JF20058</b>	40 x 40 x 2 mm (≈ 1"5/8 x 1"5/8 x 5/64")	≈ 7"7/8	≈ 94"	≈ 98"
		≈ 2"5/16	≈ 86"	

Maximum spans calculated considering:

- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

JF15045-25



Woodn recommends to refer only to the values expressed in mm - the US values are to be considered approximate).

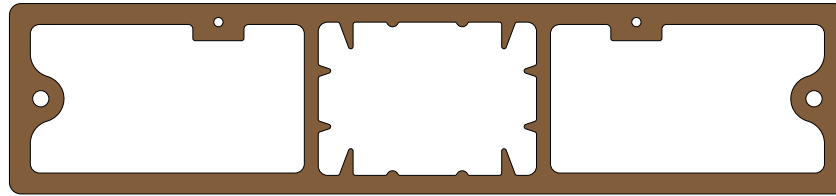


profile code	reinforcement dimensions [ft, in]	side [ft, in]	maximum horizontal span [inch]	maximum vertical span [inch]
			aluminum	aluminum
JF15045-25	50 x 25 x 2 mm (≈ 2" x 1" x 5/64")	≈ 5"15/16	≈ 75"	≈ 86"
		≈ 1"13/16	≈ 71"	

Maximum spans calculated considering:

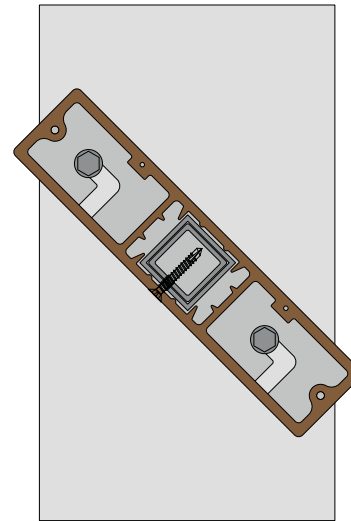
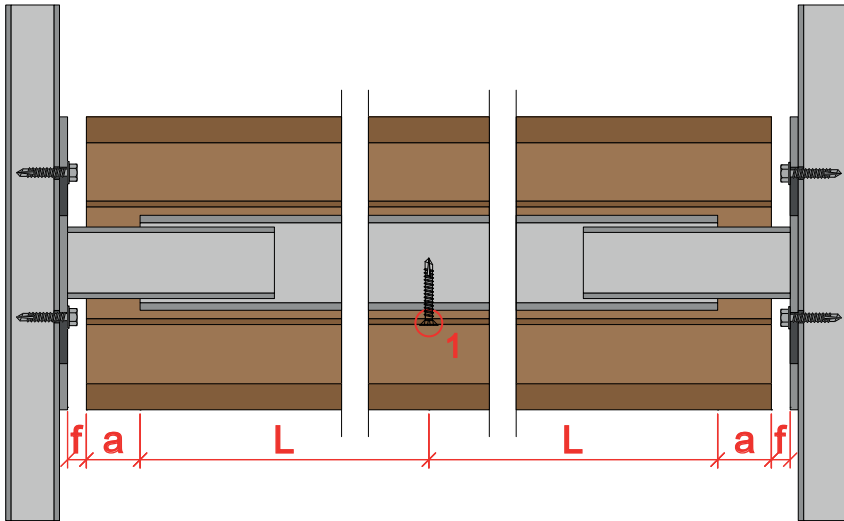
- maximum permanent deformation due to own weight 1/8"
- maximum non-permanent deformation 1" 3/16 considering a standard wind load of 30.73 pound/ft²
- aluminum reinforcement standard thickness 5/64" mm, with greater thicknesses it is possible to reach greater spans

## TYPES OF FIXING

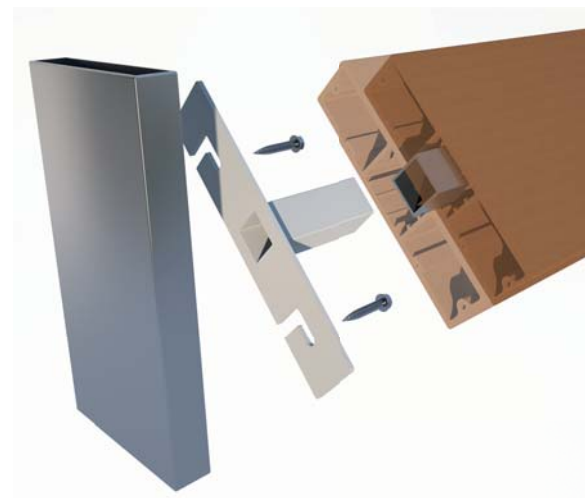
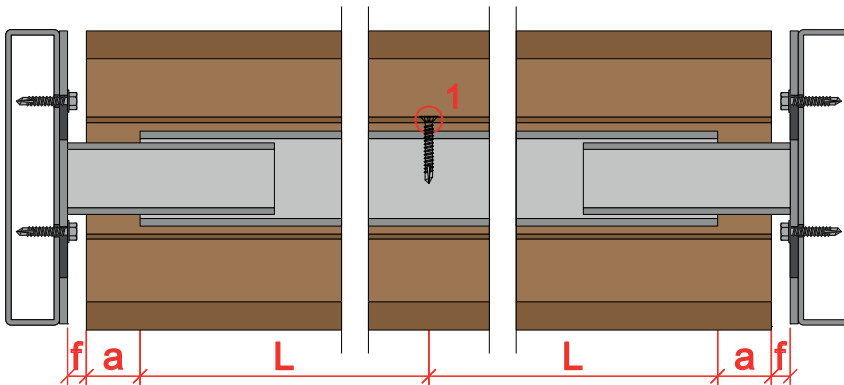


front section

vertical section



$a = 13/16''$   
 1= FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw  
 $f = L \times 0.003$  [ft, in]

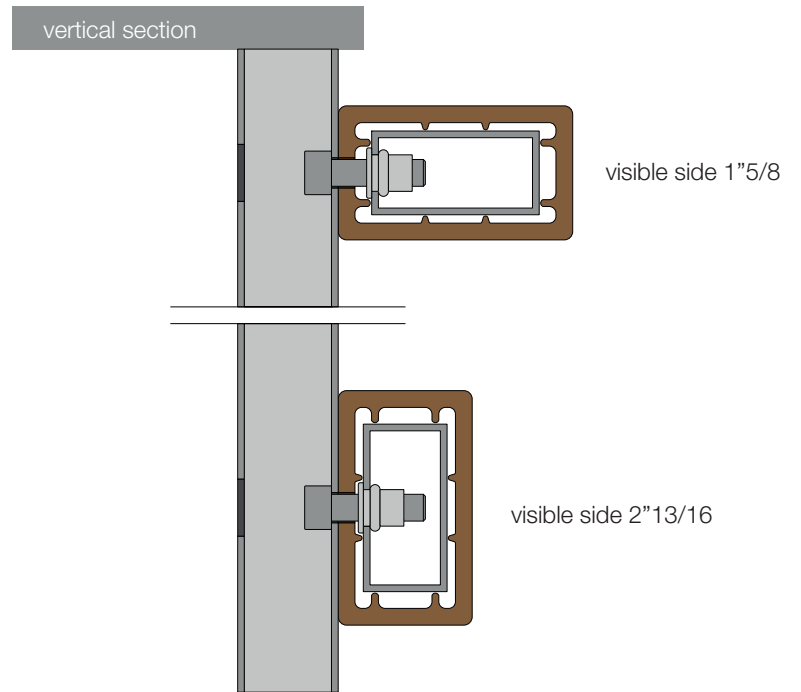
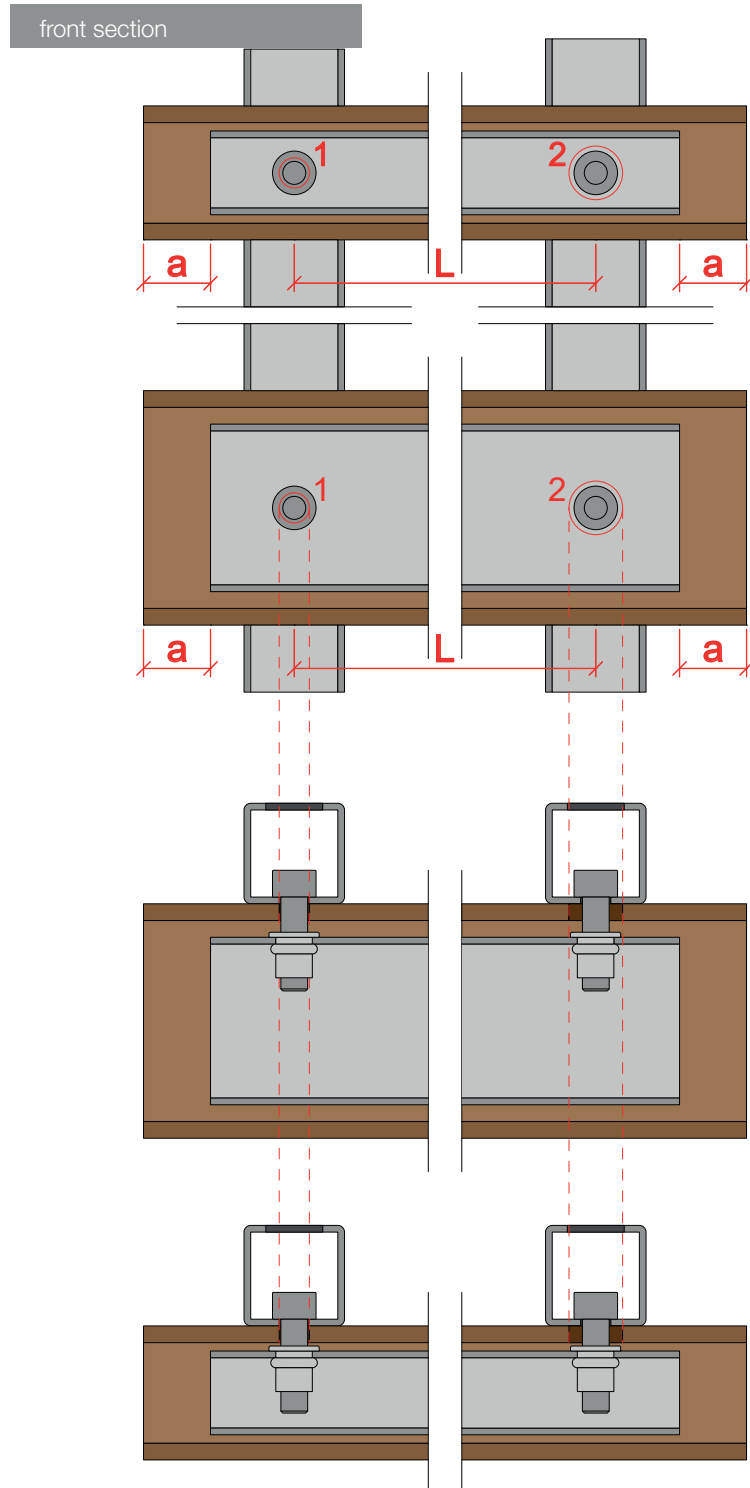
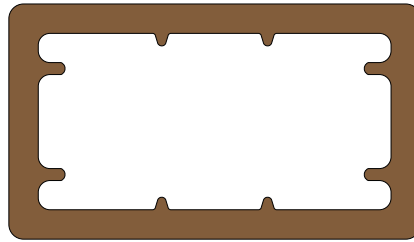


\*brackets available on request

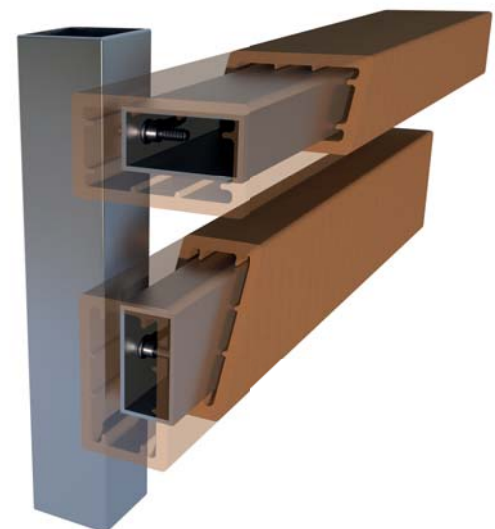
horizontal section

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.



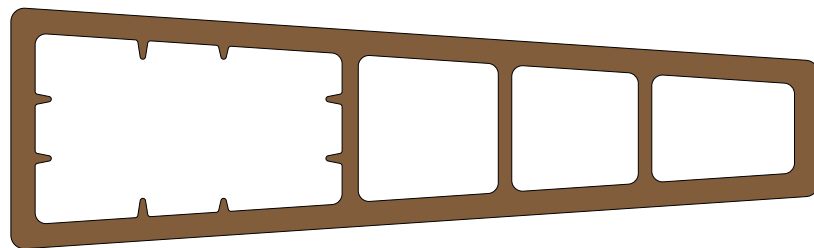
$a = 13/16''$   
 $a = 1 3/4$  in case of installation of the WAJF7040C\_WM cap  
 1= FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw  
 2= FLOATING POINT -  $\varnothing$  hole =  $2L \times 0.003 + \varnothing$  screw [ft, in]



horizontal section

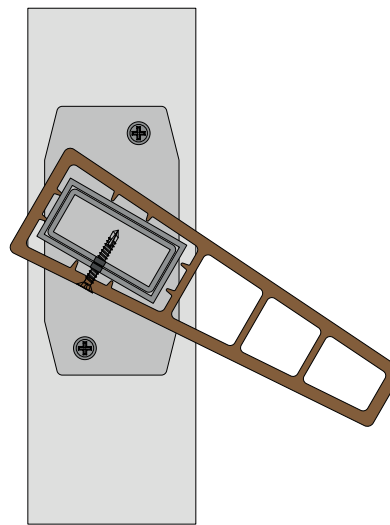
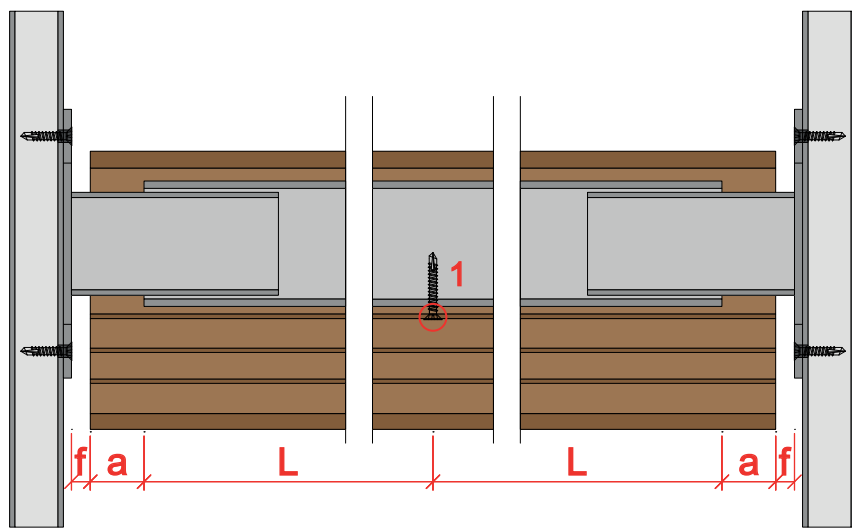
axonometric view

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.

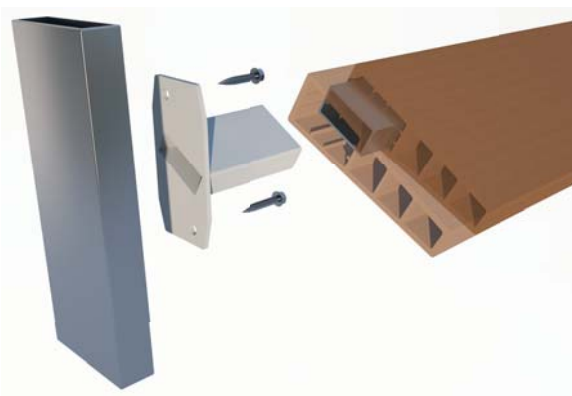
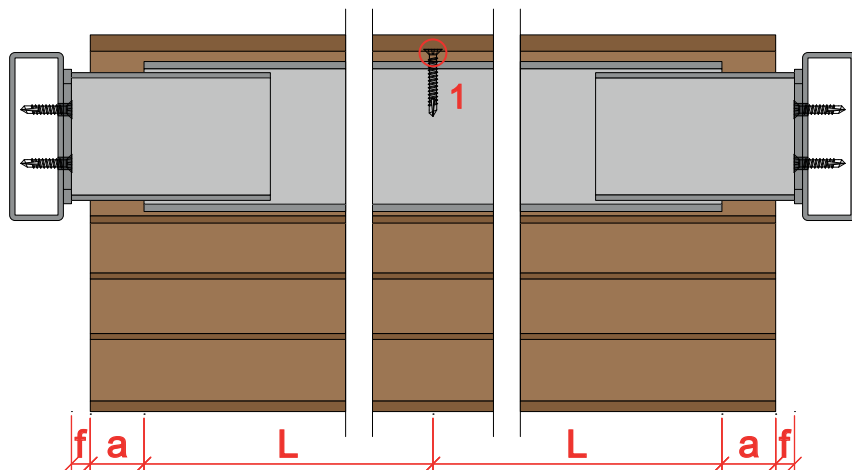


front section

vertical section



$a = 13/16''$   
 1= FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw  
 $f = L \times 0.003$  [ft, in]



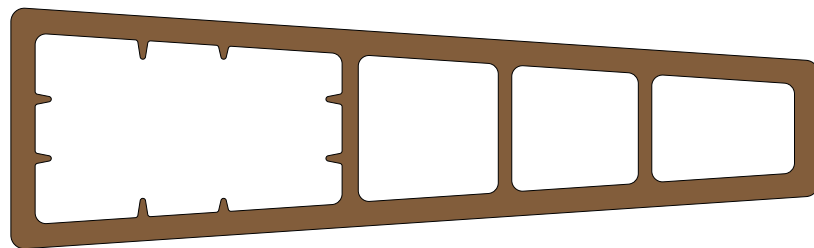
\*brackets available on request

horizontal section

axonometric view

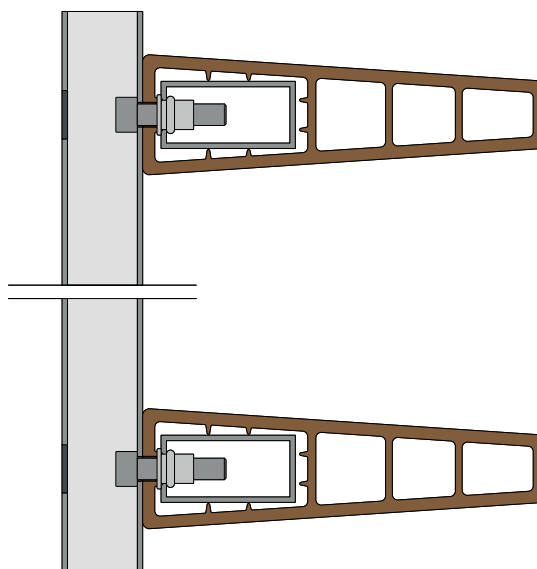
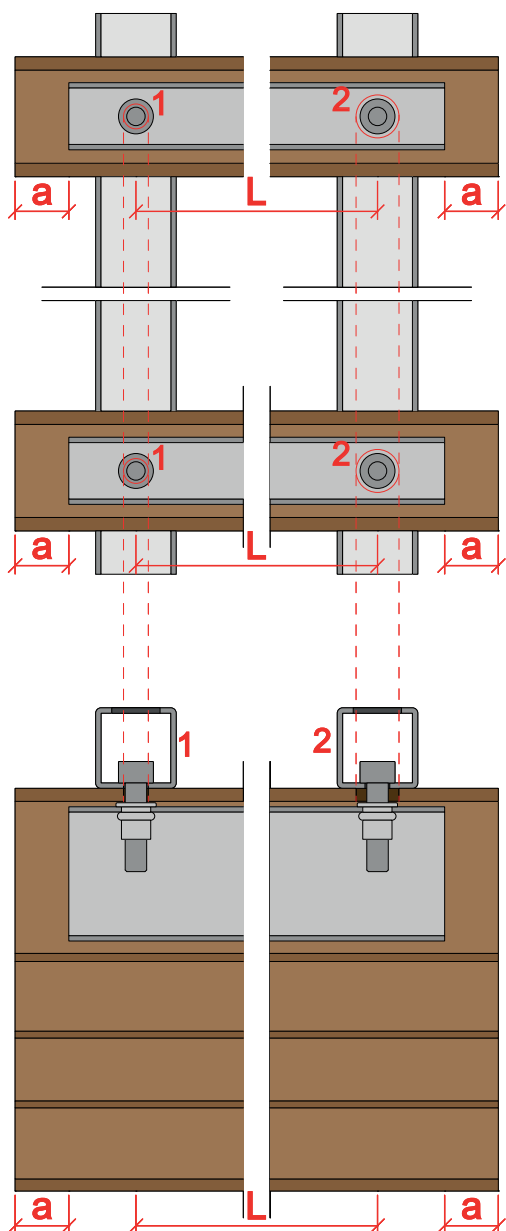
The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.





front section

vertical section

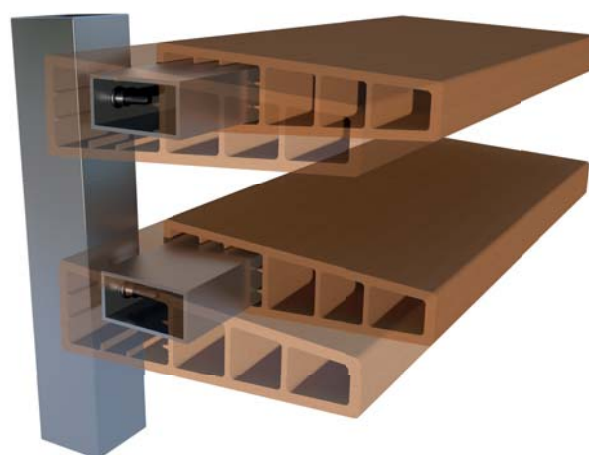


$a = 13/16''$

$a = 1\frac{3}{4}$  in case of installation of the WAJF15045C\_WM cap

1= FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw

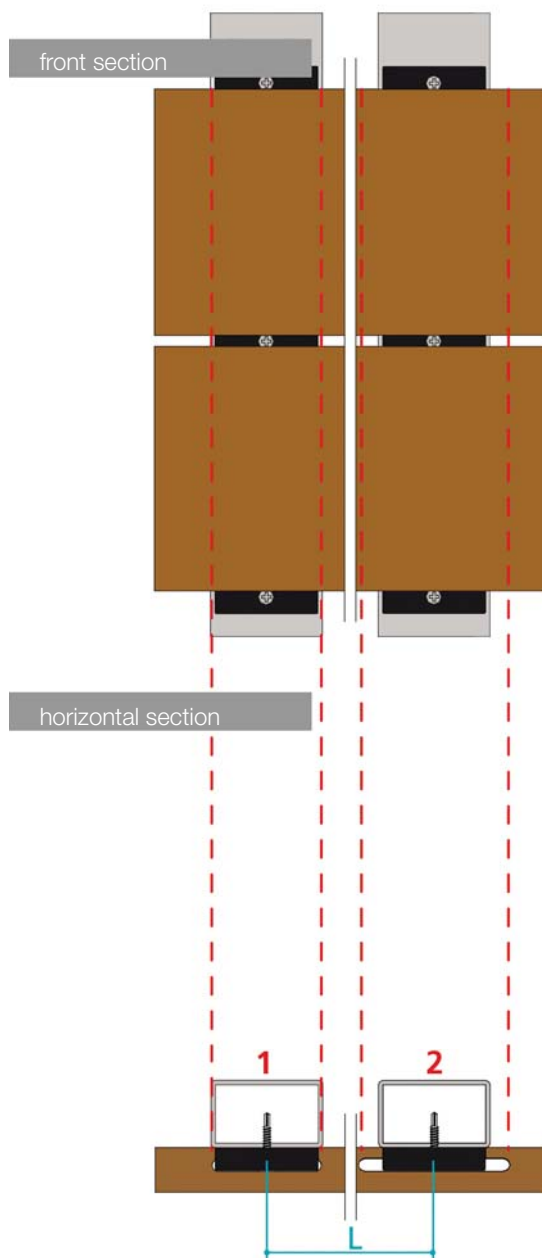
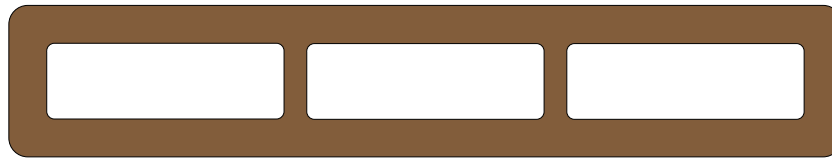
2= FLOATING POINT -  $\varnothing$  hole =  $2L \times 0.003 + \varnothing$  screw [ft, in]



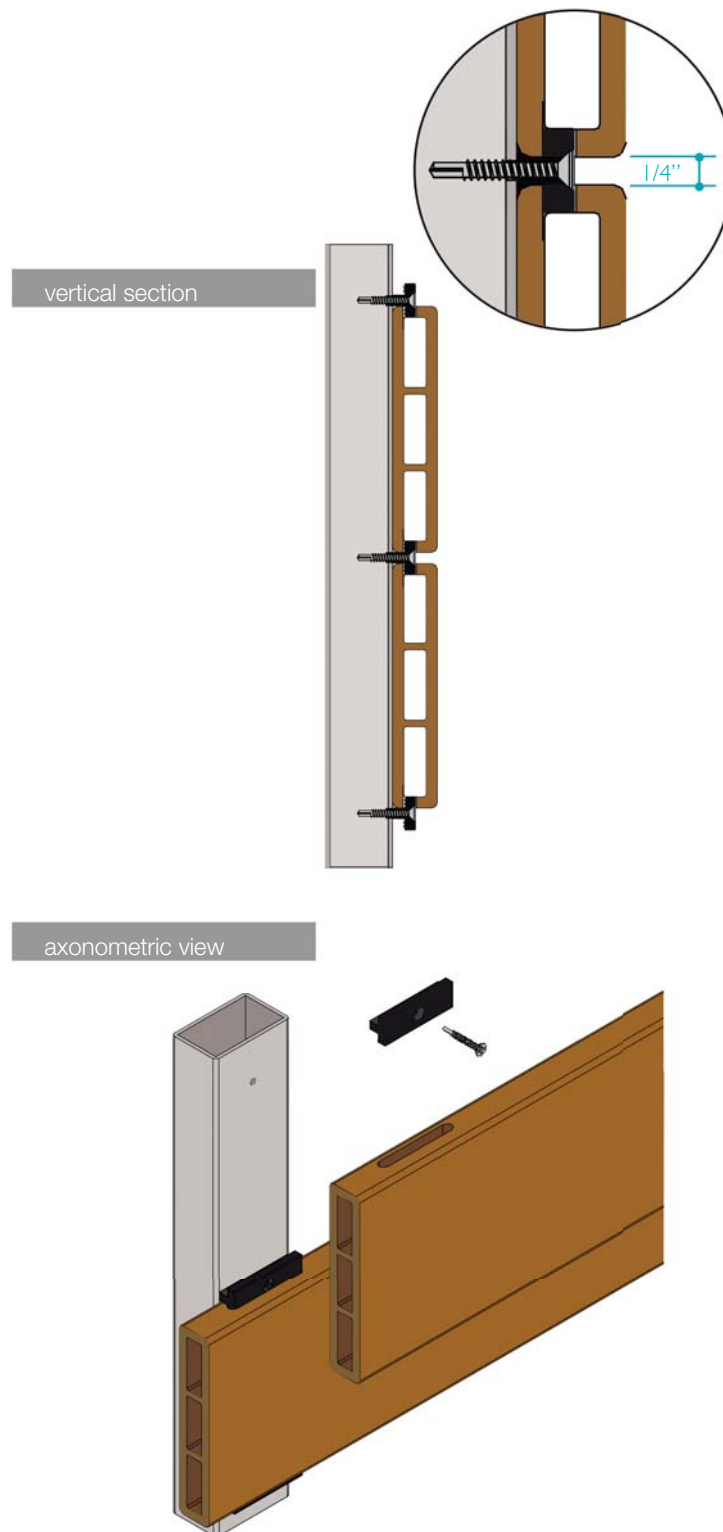
horizontal section

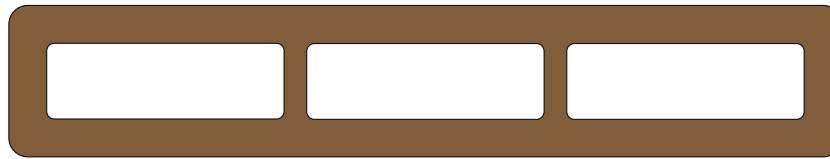
axonometric view

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.

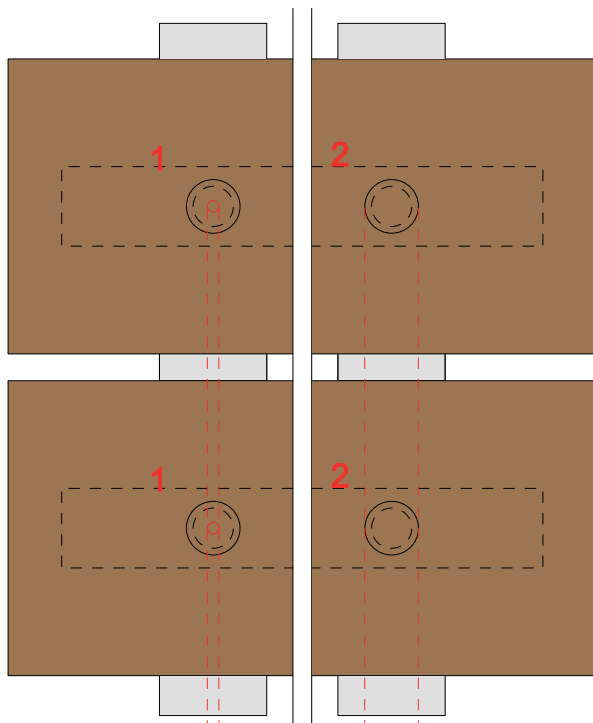


1= FIXED POINT = 1"15/16  
 2= FLOATING POINT = 1"15/16 + 2L x 0.003 [ft, in]

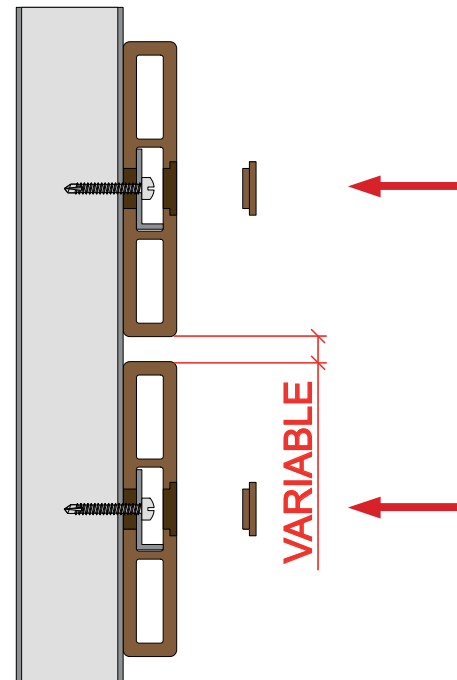




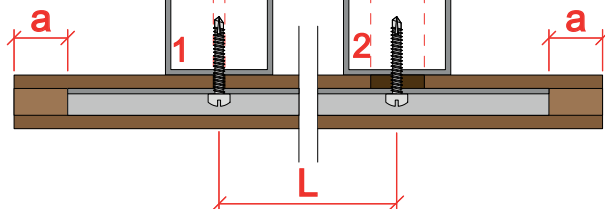
front section



vertical section

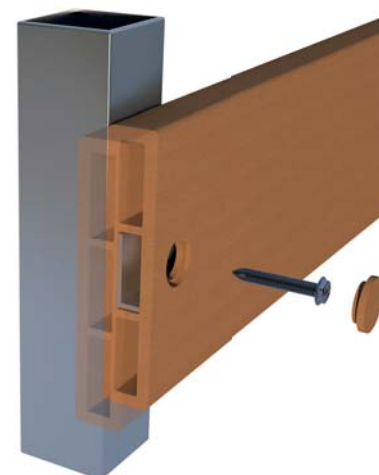


$a = 13/16"$   
 $a = 1\frac{3}{4}"$  in case of installation of the WAJF11020C\_WM cap  
 1= FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw  
 2= FLOATING POINT -  $\varnothing$  hole =  $2L \times 0.003 + \varnothing$  screw [ft, in]

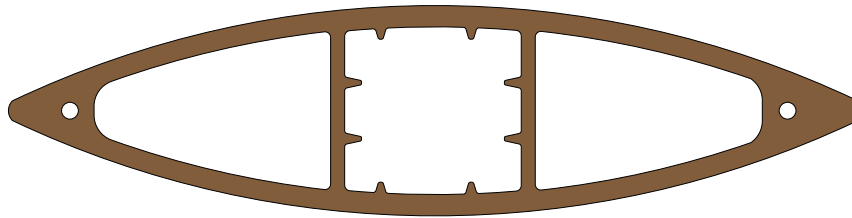


horizontal section

axonometric view

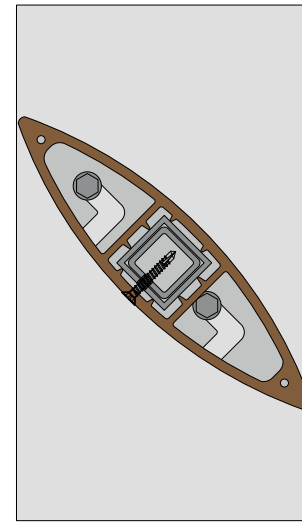
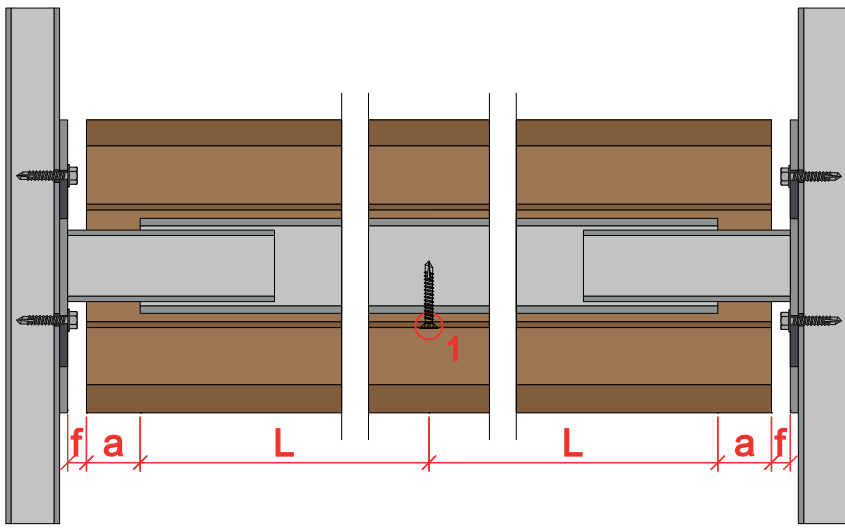


The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.

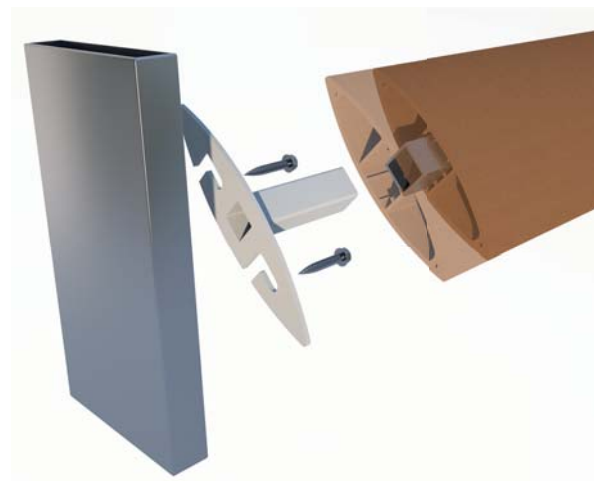
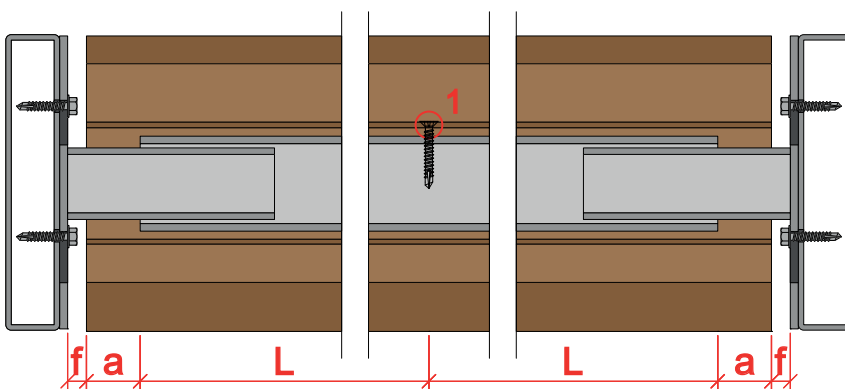


front section

vertical section



$a = 13/16''$   
 1 = FIXED POINT -  $\varnothing$  hole =  $\varnothing$  screw  
 $f = L \times 0.003$  [ft, in]



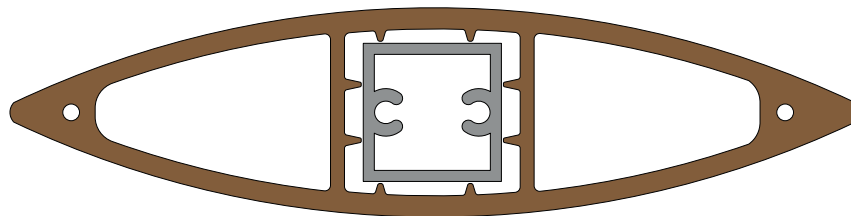
\*brackets available on request

horizontal section

axonometric view

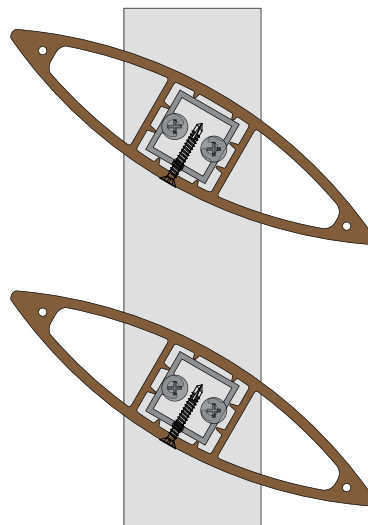
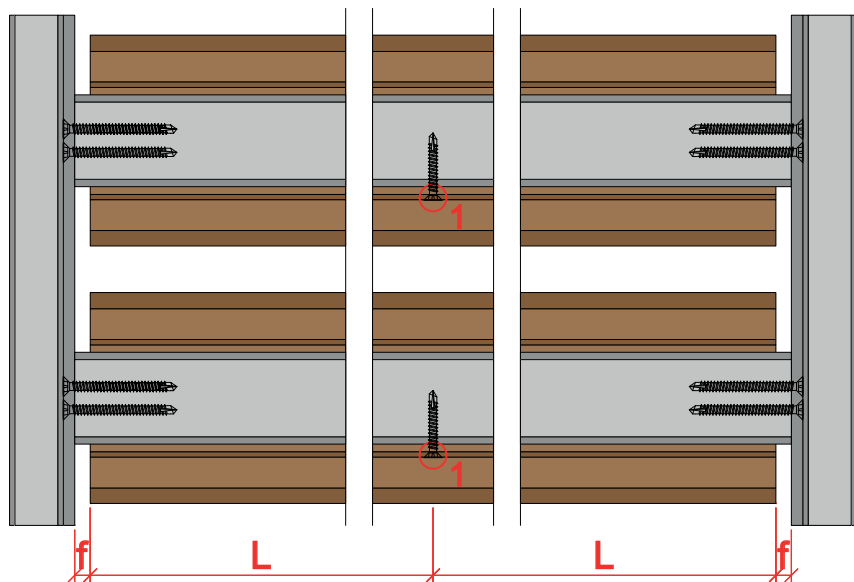
The systems shown are meant as a guide. The drawings show the key points for the design and mounting stages, such as metal reinforcements, fixed point and floating point. All components of the system must be adequately sized and verified by a qualified technician.



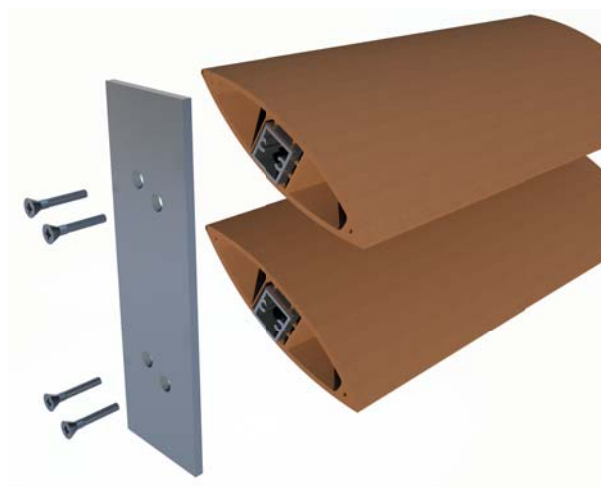
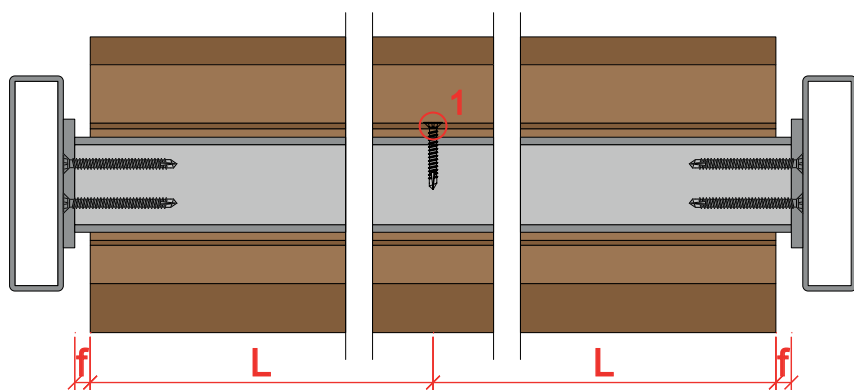


front section

vertical section



1 = FIXED POINT - Ø hole = Ø screw  
 $f = L \times 0.003$  [ft, in]



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.



1. Create the hole on the aluminum profile as per drawings specs.



2. Include the threaded insert using a pneumatic/electric riveting tool.




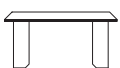
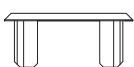
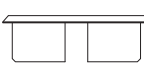
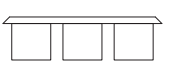
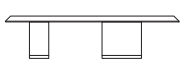






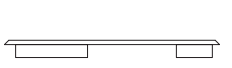



3. Pull the trigger, the machine will stop automatically.

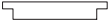


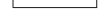




4. Well done!



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



accessory code	design	nominal dimensions [ft, in]	material	colour
<b>ROUND CAP RC20-25</b>		Ø 20 - 25 mm (≈ Ø 13/16" - 1")	Woodn	All
<b>ROUND CAP RC25-30</b>		Ø 25 - 30 mm (≈ Ø 1" - 1 3/16")	Woodn	All
<b>ROUND CAP RC30-35</b>		Ø 30 - 35 mm (≈ Ø 1 3/16" - 1 7/16")	Woodn	All
<b>ROUND CAP RC35-40</b>		Ø 35 - 40 mm (≈ Ø 1 7/16" - 1 9/16")	Woodn	All
<b>ROUND CAP RC40-45</b>		Ø 40 - 45 mm (≈ Ø 1 9/16" - 1 6/8")	Woodn	All
<b>ROUND CAP RC45-50</b>		Ø 45 - 50 mm (≈ Ø 1 6/8" - 2")	Woodn	All

NOTE: Woodn recommends to refer only to the values expressed in mm the US values are to be considered approximate.

## 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 possible, 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](mailto:ufficiotecnico@woodn.com).



Viale Testi Milano (JF35068)

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