

[outdoor cladding | **Modulatus**]

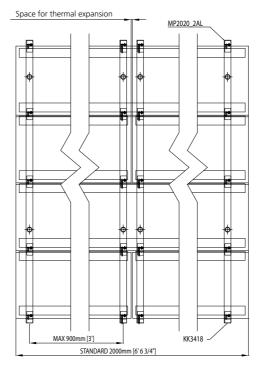
Q20410

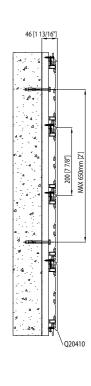
[system components]	necessary pieces per ft ²		
Profile Q20410	Substructure profile MP2020_2AL		4'11"1/16 (parallel laying) 6'6"3/4 (alternate laying)
	Fixing clip KK3418	4	0.74 pcs (parallel laying) 0.93 pcs (alternate laying)
Note: unless specifically requested, the profiles are supplied with a fixed point in a central position in relation to their length.	Screw SDFH3.5x25A2	- Deminion	1.02 pcs (parallel laying) 1.21 pcs (alternate laying)
	Starting clip WAQ20410_3018	0	(according to project)
	Screw STRH4x20,5A2		(according to project)

[assembly diagram]

Space for thermal expansion MP2020 2AL MAX 900mm [3] STANDARD 2000mm [6' 6 3/4"]

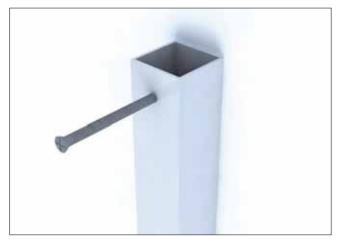
ALTERNATE LAYING



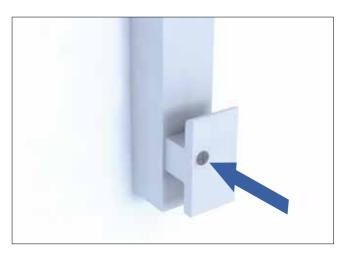


The dimensions shown refer to a design with a wind load of 24.59 pound/sqft.

[assembly instructions]



1. Screw the LG2418V profiles to the support with the suitable screws and wall plugs (*).



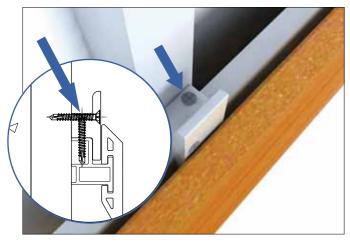
2. Insert the first row of KK3418 clips and fix them with self-perforating screws.



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 onwards to complete the cladding.

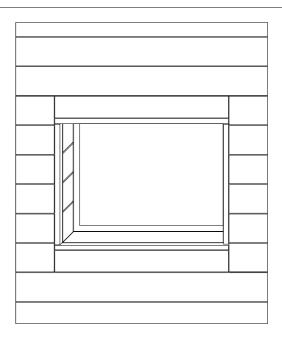
(*) Screws and wall plugs must be chosen according to the type of wall support.

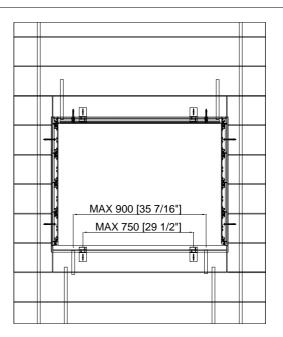
[details for corners]



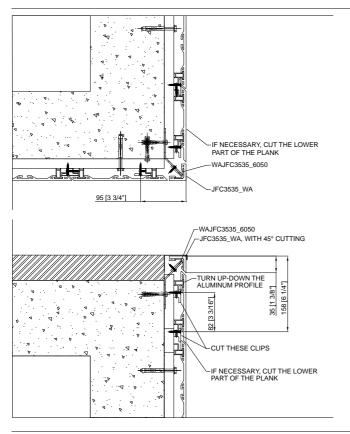
VERTICAL ANGLE

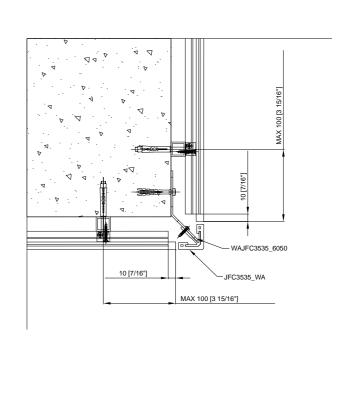
FRONT VIEW





ANGLE HORIZONTAL





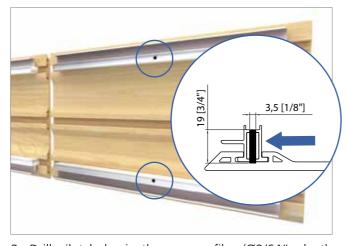
[cutting the profiles]



1. Remove the screws from the fixed points.



2. Cut the profiles to the required length. The aluminium profiles must be cut 13/16" shorter than the Woodn profile.

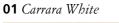


3. Drill pilot holes in the rear profiles (\emptyset 9/64", depth 3/4").



4. Insert the screws into the fixed points (STRH4X20.5).

[Colours]









Marostica



Cuba



Bogota Coffee



Myanmar



Silverstone Grey



Lido Light Blue



28 London Grey



Bamboo Green



The images shown in this catalogue are only meant as a guide of the grain and colour of the product. As the product contains natural fibres, there may be slight variations in colour/appearance depending on the production lot. The shipping and/or delivery of any samples is only general indication of the dimensions and appearance of Woodn™ products. For more accurate and detailed information about their characteristics, please refer solely to the technical information by visiting our website www.woodn.com.

Woodn Industries reserves the right to discontinue or update the product or make technical changes to improve the quality and appearance of the material, without prior notice. Woodn Industries assumes no responsibility for product applications that are not specifically mentioned for its own products.

Tests

• Mechanical tests •

1	viccisarricar rest.	,	
		@ 73,4°F	287175 lbf/sqin
Elasticity (bending)	UNI EN ISO 178	@ 149°F	79771 lbf/sqin
	13 U FN 100 470	@ 73,4°F	5091 lbf/sqin
Yield strength (flexural)	UNI EN ISO 178	@ 149°F	104036 lbf/sqin
Moisture content	EN 322:93		3.13 %
Dynamic-mechanical analysis	ASTM D4065/95		17366°F
Resistance to temperature fluctuations (after 15 cycles, from -68° to +122°F)	UNI 9429:89		Level 5: there are no surface defects
Dimensional variations associated	UNI 9429:89 modified	After 24h at +122°F	Longitudinal 0.07% Transversal -0.15%
with changes in temperature		After 24h at -68°F	Longitudinal -0.03% Transversal -0.30%
Dimensional variations associated with water absorption (after 7-days' immersion, 68°F)	/		Longitudinal 0.07% Transversal 0.23% Thickness 1.22% Weight 2.89%
Dimensional variations associated with changes in humidity (tested at 68°F)	EN 318:2002	From 65% RH to 85% RH - Longitudinal 0.004 in/ft - Thickness 0.1 % From 65% RH to 30% RH - Longitudinal -0.002 in/ft - Thickness -0.1%	
Linear thermal expansion coefficient (from -50° to +158°F)	TMA ASTM E 831/2006	Longitudinal: 26.1 x 10 ⁶ in/in °F Transversal: 27.2 x 10 ⁶ in/in °F	

• Reaction to fire •

Fire classification	UL94	V-0 Class
---------------------	------	-----------

[General notes]

• Design •

It is recommended to have installation requirements checked according to local regulations by a qualified professional.

• Protection during installation •

It is recommended not to partially cover profiles and/or coated surfaces in order to avoid differences in sun exposure and thus a (though temporary) non-homogeneous colour change.

• Handling and storage •

Profiles shall be handled with care in order to prevent damages to the surface.

It is recommended to lift the profiles during displacement and not to slide the profiles on top of one another. Always use clean fabric gloves when handling profiles.

Prevent the formation of dirt on profiles and between them, in particular, ensure that mechanical processing carried out on other materials near Woodn products do not determine the accumulation of chips or dust of various kinds.

Store the packages on a flat surface providing for a stable support on the whole surface, in a dry, clean area, protected from frost and from direct exposure from sunlight.

• Cleaning and maintenance •

It is advised to clean the profiles upon completion of site installation and, subsequently, whenever it is deemed appropriate according to environmental conditions and to the type of application.

It is advised to carry out periodical cleaning, as needed, using pressurised water (pressure washer) and, possibly, neutral detergent (upon completion, it is advised to remove excess water).

Dirt may show in different ways, based on the installation conditions.

For examples, raindrops flowing on a surface may cause dirt to accumulate in certain areas and make it more visible (for example by forming drippings and/or localised soling). Such residues shall be quickly removed, as they may cause scratching due to non-homogeneous discoloration of the material. Immediately remove major stains such as paint, concrete or tar residues.

In case of profile 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).

In outdoor applications, brushed products may present surface rings after being exposed to adverse weather conditions. This phenomenon, caused by the natural fibres in the product, is to be considered normal and will disappear after a few washes with water or after rain.

The following table shows the most common types of stain and the possible remedy:

Type of stain	Solution to adopt
Rust	Rub the stain with neutral detergent. Rinse thoroughly.
Grease - oil	Rub the stain with neutral detergent. Rinse thoroughly.
Coffee	Rub the stain with neutral detergent. Rinse thoroughly.
Tea	Rub the stain with diluted bleach. Rinse thoroughly.

Type of stain	Solution to adopt
Soft drinks (e.g. Coca Cola)	Rub the stain with neutral detergent. Rinse thoroughly.
Alcoholic drinks	Rub the stain with neutral detergent. Rinse thoroughly.
Red wine	Rub the stain with neutral detergent. Rinse thoroughly.
Fruit juice	Rub the stain with neutral detergent. Rinse thoroughly.
Ink	Rub the stain with diluted bleach. Rinse thoroughly.
Burn (e.g. cigarette)	Scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Organic solvent	Scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Paint	Remove the excess paint with the blade of a cutter and then scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Silicone	Remove the excess silicone with the blade of a cutter then scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Glue	Remove the excess glue with the blade of a cutter then scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Candle wax	Remove the excess wax with the blade of a cutter then scuff lightly with fine sandpaper (or with steel brush) in the direction of the brushing (*).
Shoe smears	Wipe with diluted bleach and rinse thoroughly. To remove any scratches scuff lightly with fine sandpaper (or with a steel brush) in the direction of the brushing. To remove any residual rubber that have ended up inside the brushed surface, use a cutter (*).
Mortar	If the mortar has not taken hold yet, wash with water and rinse thoroughly. If the mortar is dry, gently remove the excess mortar; then scuff with a steel brush in the direction of the brushing (*).

^(*) Only for sanded or brushed finishes.

In the case of a brushed finish, stubborn stains can be removed by scraping the surface with a steel brush. Follow the direction of the brushing.

For an optimal result, we recommend taking action on the stain as soon as possible. As the material is slightly absorbent, some kinds of stain cannot be completely removed, as with similar wooden products.

Woodn warranty will be rendered null and void in the event of incorrect or improper cleaning. Only refer to cleaning instructions in this catalogue.

• Surface treatment •

FILAMP90 ECO Plus produced by Fila Industria Chimica spa can be used to apply a protective coating to reduce staining.

This water and oil-repellent protective coating helps preserve the aesthetic properties of the product and makes it easier to remove any stains. We recommend applying the product on the entire surface of the profiles to create a uniform coating.

The coating should preferably be applied by a qualified worker. Use a brush to apply a coat of FILAMP90ECO PLUS on a dry surface. Wait 2-3 minutes before using a clean cloth or kitchen paper to remove any traces of the product that have not been absorbed.

If you have any doubts or would like further information, please contact the Woodn technical office at: **ufficiotecnico@woodn.com**.

• Disposal •

All processing residues and profile trimmings must be disposed of in accordance with the local laws and regulations in force. It is advisable not to burn the product.

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.

• Purpose of the test •

Resistance to accelerated aging on wooden 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/m² at 340 nm, corresponding to 580 W/ft²
- total power exposed to the sample: 2.50 GJ/m² and 7.5 GJ/m²
- exposure program: 102 min. of light exposure and 18 min. of light exposure + sprayed deionized water.

Test results

Sample	Colour	Greyscale degree* after 3600h of exposure against original samples	Greyscale degree* after 3600h of exposure compared to samples aged for 1200h
1	Carrara White**	3	4/5
2	Lagorai**	3	4/5
3	Folegandros	2/3	4/5
4	Esterel	3	4/5
5	Marostica**	3/4	4/5
6	Marrakech	3/4	4/5
8	Piemonte	3	4/5
9	Cuba**	3/4	4/5
10	Bogota Coffee**	4	4
11	Posillipo	2/3	4/5
12	Segovia	3	4/5
13	Myanmar**	4	4
14	Silverstone Grey**	4	4/5
15	Mediterraneo Light Blue	2/3	4/5
16	Maranello Red	2/3	4/5
17	Tundra	3	4/5
18	Lanzarote	3/4	4/5
26	Lido Light Blue**	3	4/5
27	Lavaredo Grey	2/3	4/5
28	London Grey**	3	4/5
33	Sahara Beige	3/4	5
34	Bamboo Green**	3/4	4/5

^(*) The international greyscale goes from Grade 1 (maximum colour difference) to Grade 5 (minimum colour difference). (**) Colour recommended for outdoor applications.

Hereunder are the photos of samples used for the test.

Sample	Colour	Original colour	Aged colour (1200 hours)	Aged colour (3600 hours)
2	Lagorai		2 4 -	
9	Cuba			
14	Silverstone Grey			

The above photos are an approximate indication of the change in the shade of colour of the product after being exposed to atmospheric agents. Effective ageing of the product depends on its exposure to atmospheric agents, which, in turn, depends on multiple factors (for example, the geographic position and orientation of the application). Woodn Industries shall not be held responsible for any difference between the actual ageing and what is reported above.