STRATON™
Composites

FLOOR
DECKING

FACADE
CLADDING

LOUVERS
SUNSHADE

PERGOLA
PATIO

WOOD POLYMER COMPOSITE

While many outdoor enthusiasts appreciate the look and feel of wood, more and more people are turning to wood-alternative decking materials like high-performance composite. The reason is clear: wood-alternative decks last longer with minimum maintenance in contrast to wood decking which could rot, warp and develop splinters if not preserved appropriately.

COMPOSITION

Our planks are manufactured primarily from a blend of recycled organic [Wasted Wood fibres] and plastic materials [post commercial recycled HDPE-High Density Polyethylene].

The organic material in these boards is recycled and reclaimed wood; the polyethylene is principally recycled shrink wrap and grocery bags - all of which would otherwise end up in a landfill.

With the sentiment of helping minimize environmental pollution, we've bought something that will withstand years of sun, rain, snow and big gatherings. These High-performance composite planks hold sturdy against natural elements; they resist fading from the sun and won't get mouldy after a rainstorm or give you splinters.

REWARDS

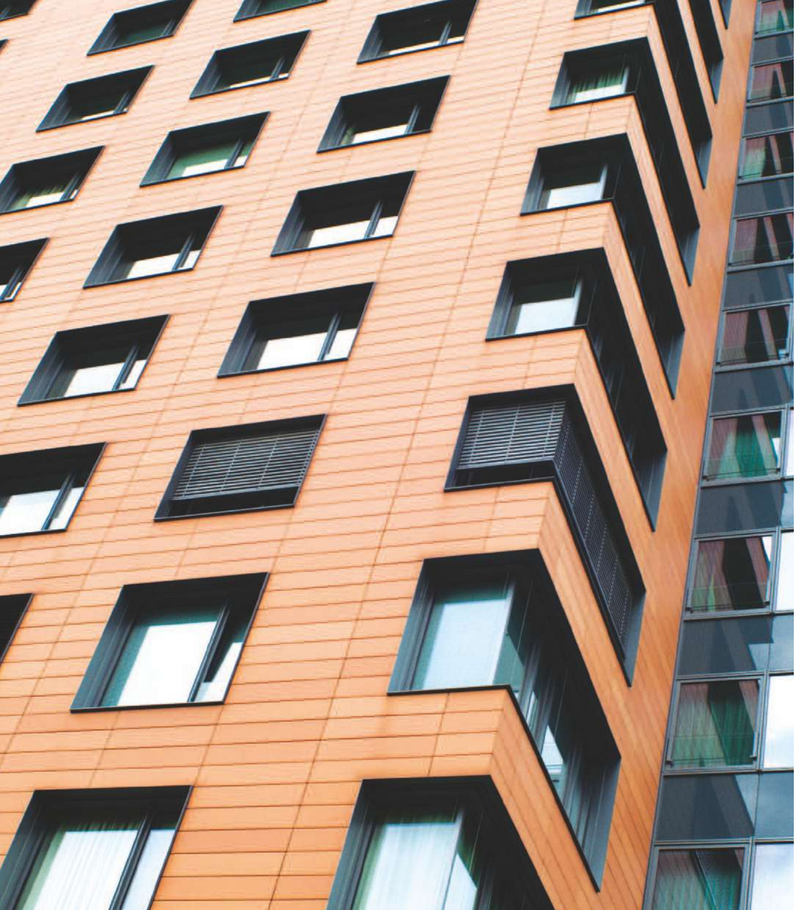
- High impact resistant and less susceptible to scratches
- Impervious to Oxidizing; preventing chalkiness
- Uniform shade/texture throughout batch
- Superior beauty and comfort; Low maintenance
- No warping, rotting or splinters
- Environmentally friendly & less polluting
- Highly affordable; very minute projections of price fluctuations

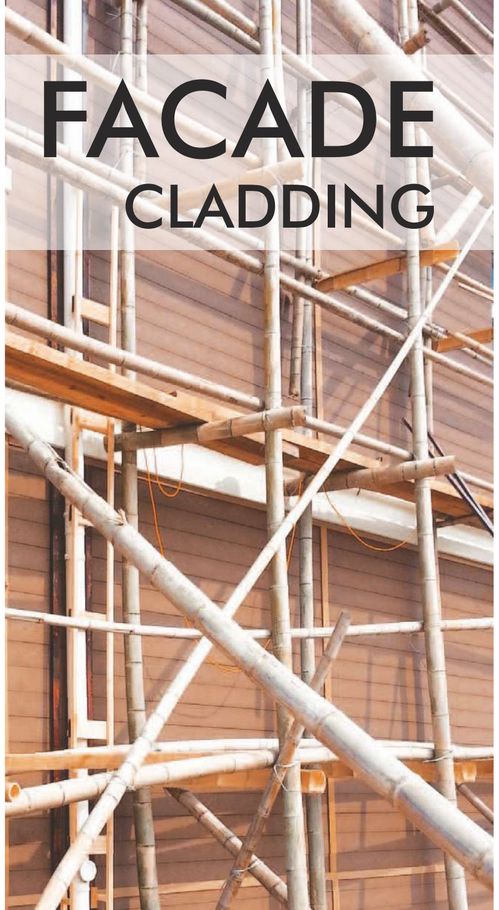
Made of 50% recycled saw dust, 30% HDPE, 15% additives and 5% pigment

FLOOR
DECKING

FINISH	COLORS			
	Brown	Chocolate	Walnut	Grey
SN150W25 Narrow Groove 25mm 150mm				
SN150W25 Wide Groove 25mm 150mm				
SN148W25 Wood Grain 25mm 148mm				

*Available in 2.9m length only





FACADE
CLADDING

SN156W21

COLORS

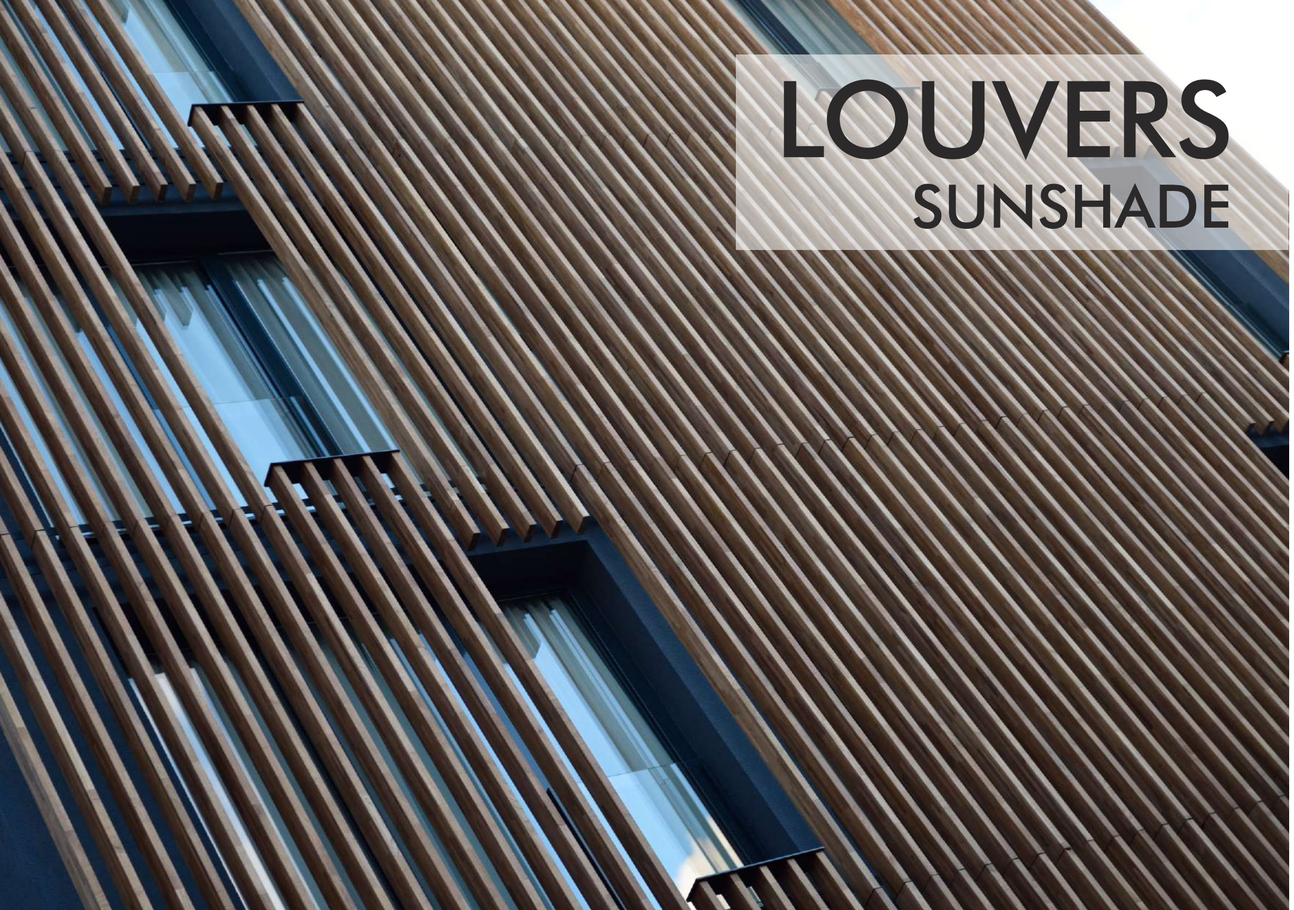
Brown

Chocolate

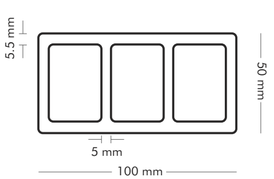
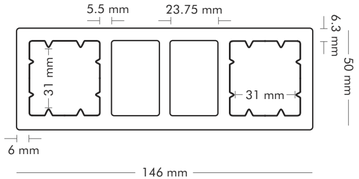
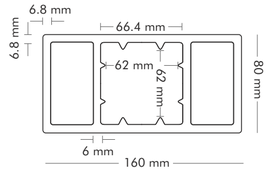
Walnut

Grey

*Available in 2.9m length only

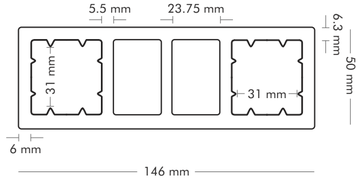
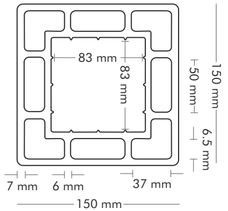
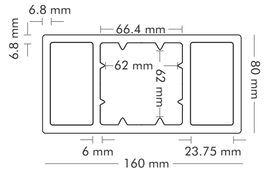


LOUVERS
SUNSHADE

	SN100W50	SN146W50	SN160W80
			
Mahogany			
Walnut			

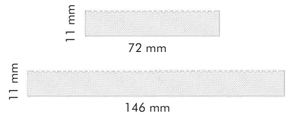
*Available in 2.9m length; subject to order upto 5.2m.

PERGOLA
PATIO

SN146W50	SN150W150	SN160W80
		
Mahogany  2.9m length	 2.8m length	 2.9m length

SOLID STRIPS
FASCIA

SN146W72

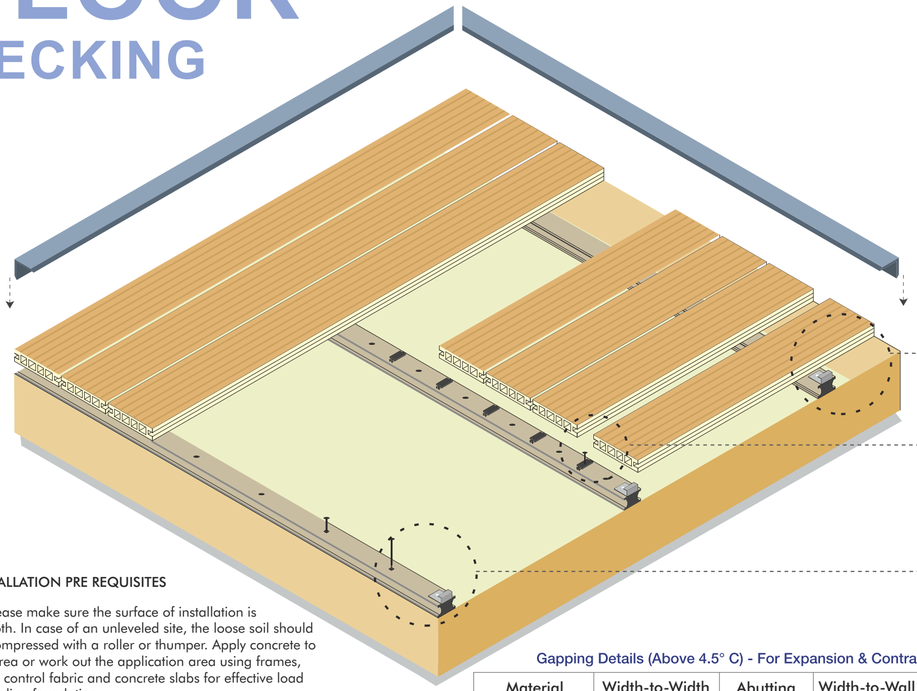


*Available in 2.9m length only

Brown	Chocolate	Walnut	Grey
			

FIXING DETAILS

FLOOR
DECKING



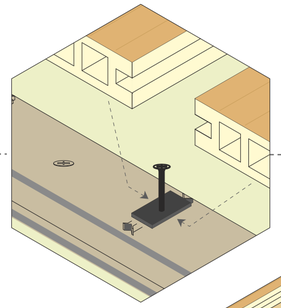
INSTALLATION PRE REQUISITES

1. Please make sure the surface of installation is smooth. In case of an unleveled site, the loose soil should be compressed with a roller or thumper. Apply concrete to the area or work out the application area using frames, weed control fabric and concrete slabs for effective load spreading foundation.

2. Plan ahead in regards to the inclination details to facilitate rain escape/drainage.

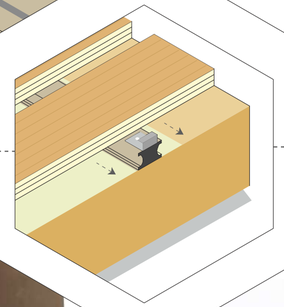
Gapping Details (Above 4.5° C) - For Expansion & Contraction

Material	Width-to-Width	Abutting	Width-to-Wall End
Joist/Runner	18" [458mm]	6mm	10mm
Decking Planks	4mm - 6mm	3mm - 5mm	6mm - 12mm



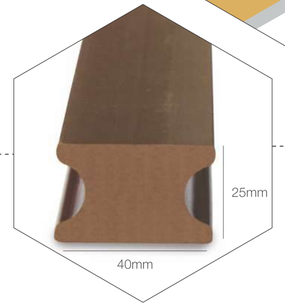
Floor Decking Plastic Clips

Slide the next plank into place, making sure the clip fits into the groove. Install the next clip on the other side of the plank in the same manner. DO NOT fully screw the clips until the next plank is in place, tightening down each row after the plank that follows is in place.
Inset the decking clip or fastener into the grooved edge of the plank and lightly screw it.



Floor Decking Starter Clips

Insert starter clips on edge of the joists and secure them with screws. Important: The first plank MUST be straight and well secured.

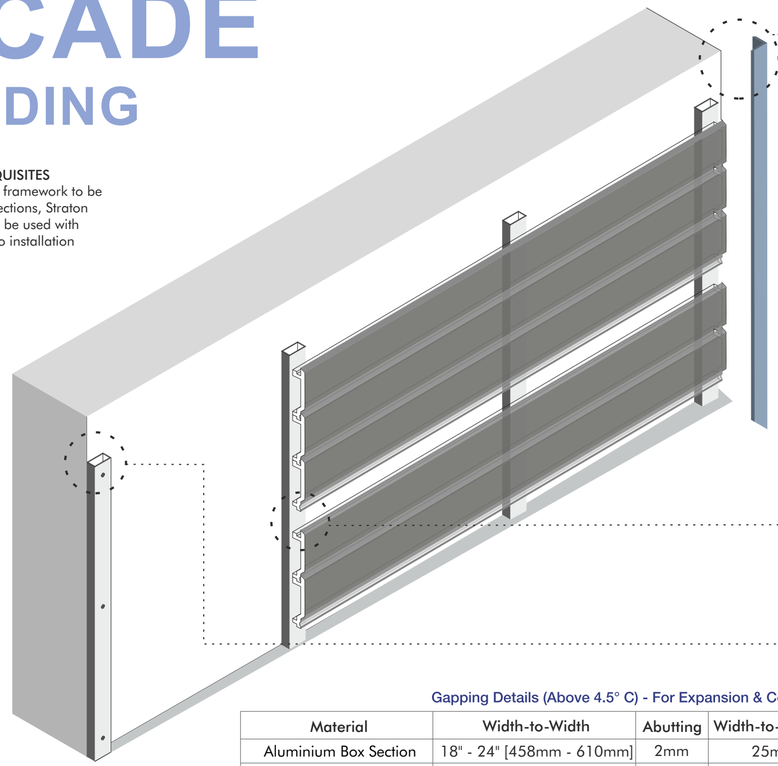


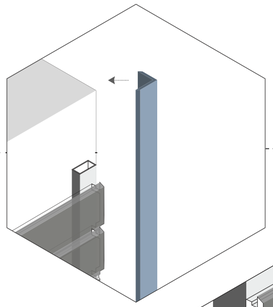
Joists / Runner

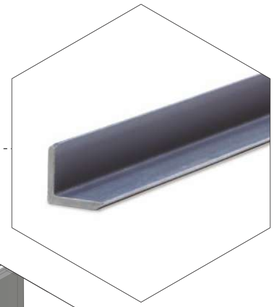
Drill & secure the joists to the plain concrete slab surface of the desired decking area using the expansion screws.

FACADE
CLADDING

INSTALLATION PRE REQUISITES
While the recommended framework to be used is aluminium box sections, Straton WPC dual joists can also be used with appropriate adherence to installation guidelines.

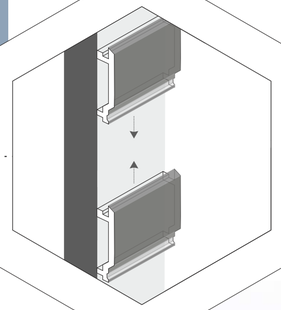




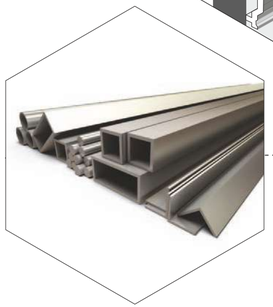


Corner Profile

Attach corner profiles as illustrated.



Fasten the screws as shown, on the surface of the aluminium section methodically with the planks, making sure the screw heads do not protrude from the surface of the section.
Start the installation bottom to top, ensuring fastening of the arched side of the plank contacts the other end of successive planks.



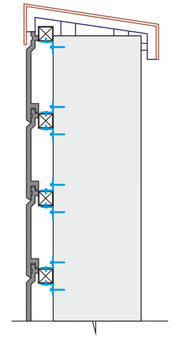
Aluminium Section

Start by fixing aluminium box sections along the edges and marked vertical sections of the wall adapting with the expansion screws, as shown in the graphic.

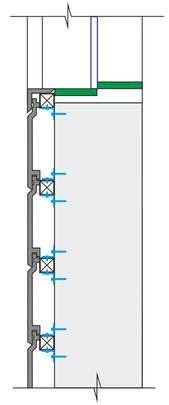
Gapping Details (Above 4.5° C) - For Expansion & Contraction

Material	Width-to-Width	Abutting	Width-to-Wall End
Aluminium Box Section	18" - 24" [458mm - 610mm]	2mm	25mm
Cladding Planks	N.A.	6mm	8mm

Parapet termination



Window termination



LOUVERS
SUNSHADE

VERTICAL

WITHOUT PROVISION

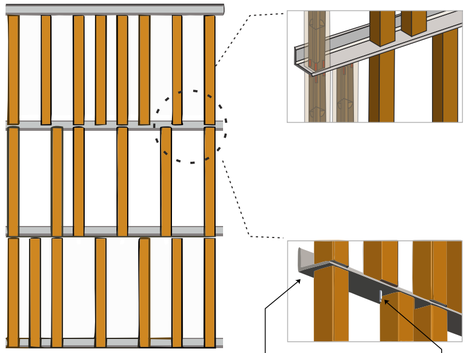
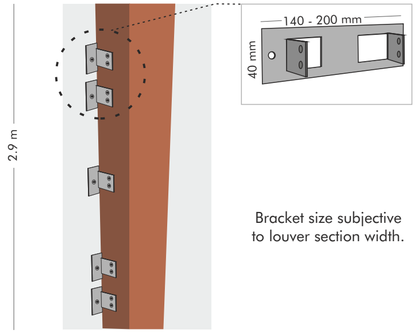


Plate thickness and dimensions subjective to structural engineering and louver section specifications, respectively.

SS Nut; SS Washer

WITH PROVISION



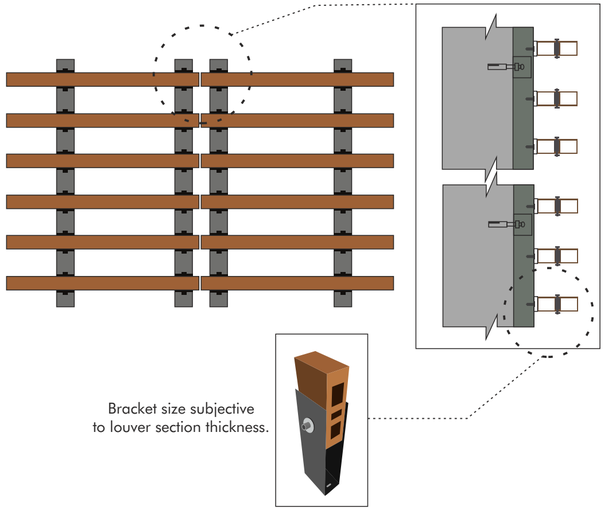
Bracket size subjective to louver section width.

Gapping Details (Above 4.5° C) - For Expansion & Contraction

Material	Width-to-Width	Abutting	Width-to-Wall End
Backframe	18" - 24" [458mm - 610mm]	2mm	25mm
Louver Section	N.A.	3mm	4mm

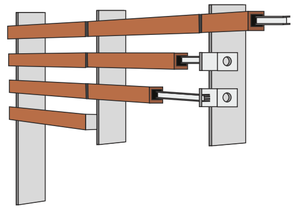
HORIZONTAL

WITH PROVISION



Bracket size subjective to louver section thickness.

WITHOUT PROVISION



Note:
The above guideline is a general framework for installing Straton wpc louvers in alternate scenarios and hence no specific measurements are mentioned in terms of the tube section, bracket or the frame and will be subjective to the dimensions of the louver section used.

Accessories

Metal Tube

Expansion Bolt

Screw Bolt

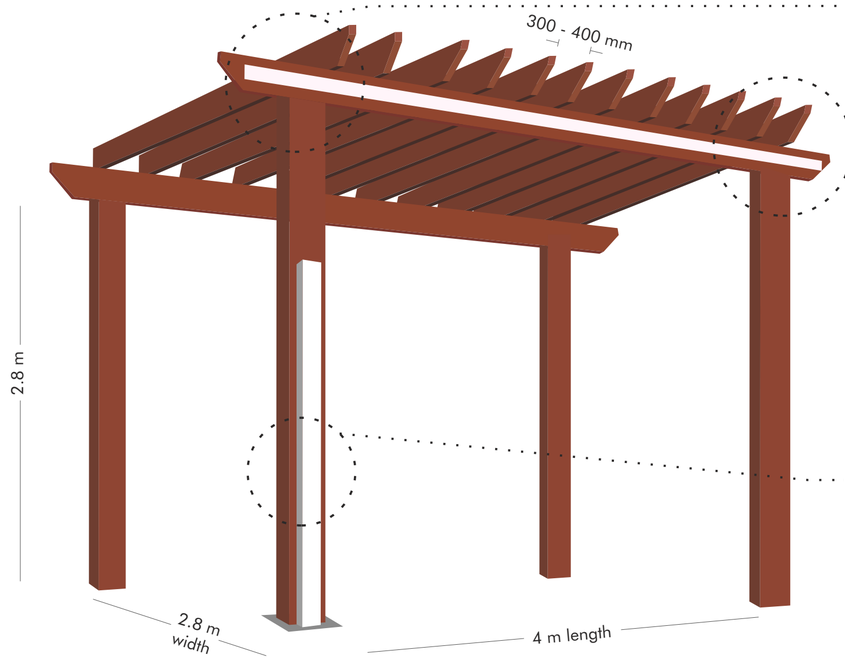
L Bracket

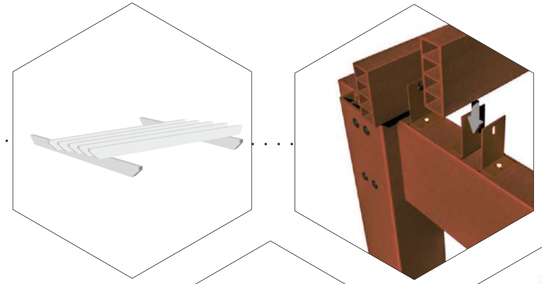
U-shape Bracket

Two-way U-shape Bracket

PERGOLA

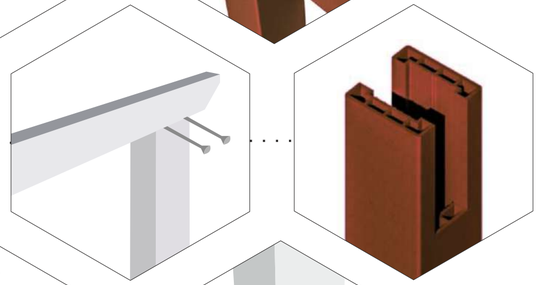
PATIO





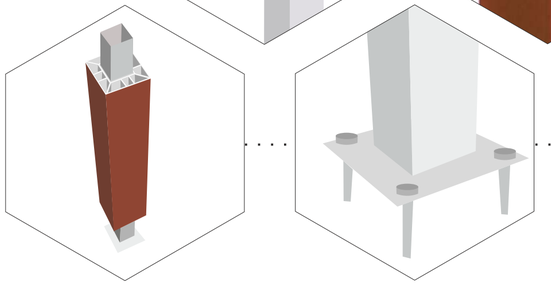
RAFTERS / FINS

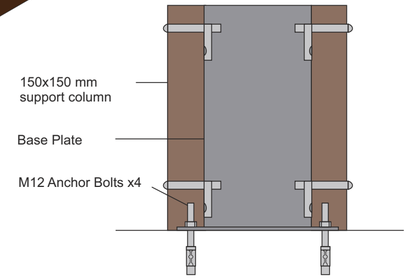
Place the fins as per the marked positions with the steel tube inserted for better strength and rigidity.



BEAMS

Clamp the beams in place and check if they're level with the all the post's length and width support. Make appropriate cut-outs for the fin-placement.



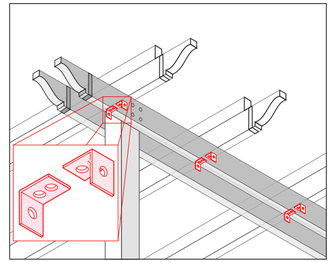


COLUMN / POSTS

Lay out the post positions and secure the posts on to the concrete pad with steel post-base anchors. Use a Base plate cap if required.

OPTIONAL

These clips, when mounted appropriately radically increase your pergola's uplift and sideways sway resistance under hefty wind loads.



TEST REPORTS

Intertek

Report Number: 160524006SHF-BP-1R1

TEST ITEM	TEST METHOD	TEST RESULTS	TEST REQUIREMENT
Appearance	EN 15534-1 6.1	No visible color difference compared to the control sample, no crack, blister and some other visible defects	/
Linear mass	EN 15534-1 6.5	Mean value: 2870 g/m Minimum value: 2866 g/m	Individual values ≥ 95% declared value by the manufacturer. No declared value.
Thickness, width and length	EN 15534-1 6.6.2	Thickness: 24.28 mm Width: 148.08 mm Length: 1005 mm	No declared value
Deviation from straightness	EN 15534-1 6.6.3	Flatwise Max value: 0.30 mm Edgewise Max value:0.45 mm	No declared value
Cupping	EN 15534-1 6.6.4	Max value: 0.30 mm	No declared value
Pendulum test	EN 15534-1 6.4.2	fig.2 Longitudinal Mean value: 78; Min. value: 74 Horizontal Mean value: 94; Min. value: 92	Pendulum test: Pendulum value ≥ 36
Falling mass impact resistance	EN 15534-1 7.1.2.1	Hollow profiles fig.2 Depth of residual indentation: Max Value: 0.20 mm No crack	Hollow profiles: None of 10 test specimens shall show a failure with a crack length ≥ 10 mm or a depth of residual indentation ≥ 0.5 mm. In case of one failure, 10 additional test specimens shall be tested and no failure with a crack length ≥ 10 mm or a depth of residual indentation ≥ 0.5
Flexural properties	EN 15534-1:2014 ANNEX A	Bending Strength: 20.3 MPa Modulus of elasticity: 2129 Mpa Mean value of maximum load: 4048 N Minimum value of maximum load: 3644 N Deflection at 500 N Mean value: 0.93 mm Maximum value: 1.03 mm	Flexural properties: - F'max ≥ 3300 N (arithmetic mean value) - F'max ≥ 3000 N (individual values) - Deflection under a load of 500 N ≤ 2.0 mm (arithmetic mean value) - Deflection under a load of 500 N ≤ 2.5 mm (individual values)
Resistance to artificial weathering	EN 15534-1 8.1 ISO 4892-2	After 1000 hours exposure EN ISO 4892-2, No declared value	Value Range: △E*=5.57 Grey Scale 2~3
Boiling test	EN 15534-1 8.3.3	Water absorption Mean value: 2.98% Max. value: 3.07%	1) Mean value of water absorption ≤ 7 % in weight 2) Individual values of water absorption ≤ 9 % in weight
Linear thermal expansion coefficient (-20° C~80°C)[2]	EN 15534-1 9.2 ISO 11359-2	Mean value: 37.0× 10 -6 K-1	≤ 50× 10-6 K-1
Heat reversion	EN 15534-1 9.3	Mean value: 0.42%	/
Creep behavior [1]	EN 15534-1 7.4.1	Mean value: ΔS=1.58 mm ΔSr=1.58 mm Max value: ΔS=1.74 mm	Known span in use ΔS ≤ 10 mm for arithmetic mean value ΔS ≤ 13 mm for individual values ΔSr ≤ 5 mm for arithmetic mean value
Moisture resistance under cyclic test coditions 1	EN 15534-1 8.3.2 and 7.3.2	Bending strength Original sample: 20.3 MPa After moisture condition: 18.5 MPa Mean decrease: 9% Max. individual decrease: 15%	Mean of decrease of bending strength ≤ 20 % - Individual decrease of bending strength ≤ 30 %
Swelling and water absorption(28 days immersion)	EN 15534-1 8.3.1	Means swelling 1.55% in thickness 0.02% in width 0.02% in length Max. value 1.85% in thickness 0.02% in width 0.02% in length Water absorption Mean value: 3.51% Max. value: 3.59%	1) Means swelling ≤ 4 % in thickness ≤ 0.8 % in width ≤ 0.4 % in length 2) Individual swelling ≤ 5 % in thickness ≤ 1.2 % in width ≤ 0.6 % in length 3) Mean water absorption ≤ 7 % in weight 4) Individual water absorption ≤ 9 % in weight
Heat build-up	EN 15534-1 9.4	Black specimen: 50.3°C Composite: 47.0°C Gap: -3.3°C	/
Resistance to indentation	EN 15534-1 7.5	Brinell hardness: 82 HB Rate of elastic recovery: 58 %	/

Note:

For Intertek

1. The test span was 300mm offered by applicant.
2. The test was conducted at external approved facility at Shanghai.

For SGS

1. All the test specimens were cut from the sample.
2. The result was for reference only.
3. Water Absorption, % = (Mass after immersion - Mass before immersion)/ Mass after immersion and after drying x 100.
4. The Abrasion Resistance, Specific Gravity and Water absorption were carried out by a SGS laboratory.

SGS

Report Number: XMCCM150600575

TEST ITEM	TEST METHOD	TEST CONDITION	RESULT
Flexural strength	ASTM D7031-11 Section 5.5 and ASTM D6109-13 Method A	Specimen: 420x145x22mm Testing speed: 10.78mm/min Load span: 119mm Support span: 358mm	47.0 Mpa
Flexural modulus			7380 Mpa
Abrasion Resistance	ASTM D7031-11 Section 5.17 & ASTM D4060-14	Wheel: CS-17 Load: 500g/wheel (total 1000g) Cycles: 5000	Weight loss: 369.5mg
			Wear Index: 73.9 (1000 mg/cycles)
Specific Gravity	ASTM D7031-11 Section 5.14 & ASTM D792-13 Method B	Absolute alcohol, 23 ± 0.5 °C	1.346
Water adsorption	Refer to ASTM D7031-11 Section 5.19 & ASTM D1037-12 Section 23 Method B and client's requirement	Specimen: 145 mm x 100 mm Precondition: 20±1 °C, 65 %RH to constant mass Immersion condition: 23±2 °C, 24 h Drying condition: 103 °C to constant mass	0.74%
Impact resistance	ASTM D7031-11 Section 5.12 & ASTM D4495-12	Specimen: 152x145x22mm Mass of the falling weight: 10±0.5lb	Mean failure height: 104.7cm Mean failure energy: 4.59 J Estimate standard deviation: 22cm
Modulus of rupture	Quality and testing specifications for terrace decking made from wood-polymer composite section3.1	Specimen: 420x145x22mm Testing speed: 10.78mm/min Support span: 358mm	3196 N
Deflection at load of 500N			1.07 mm