



UNVOC[®]
优沃斯

WPC OUTDOOR DECK INSTALLATION GUIDE

Note: Installation notice

(Read before installation)

Safety Instruction:

Safety protective equipment such as a mask, labor suit and eye protector is necessary during carrying, cutting, and installation.

Installation Environment:

To avoid shrinking, decking should be stored at least two days to acclimatizing to the local temperature. Decking installation should on a flat, clean and stable foundation.

Make a draft before installation to reach flawless performance.

Tools needed:

Common woodworking tools.

Construction notice:

WPC product cannot be used separately for beams, columns and other load-bearing structures. It must be used with structural materials that conform to the specifications.

Drainage & Ventilation

Outdoor decking cannot be installed directly on the ground, keels structure is necessary to keep there is enough space for drainage and ventilation. If stay a long time in water or rains, where floor splicing without waterproof cover is easily expanded. To avoid this, please keep the foundation in a slope of 1-2%, the lowest height for ventilation should be higher than the maximum water depth.

Away from Heat

Fire and rest of heat producer should keep far away from decking.

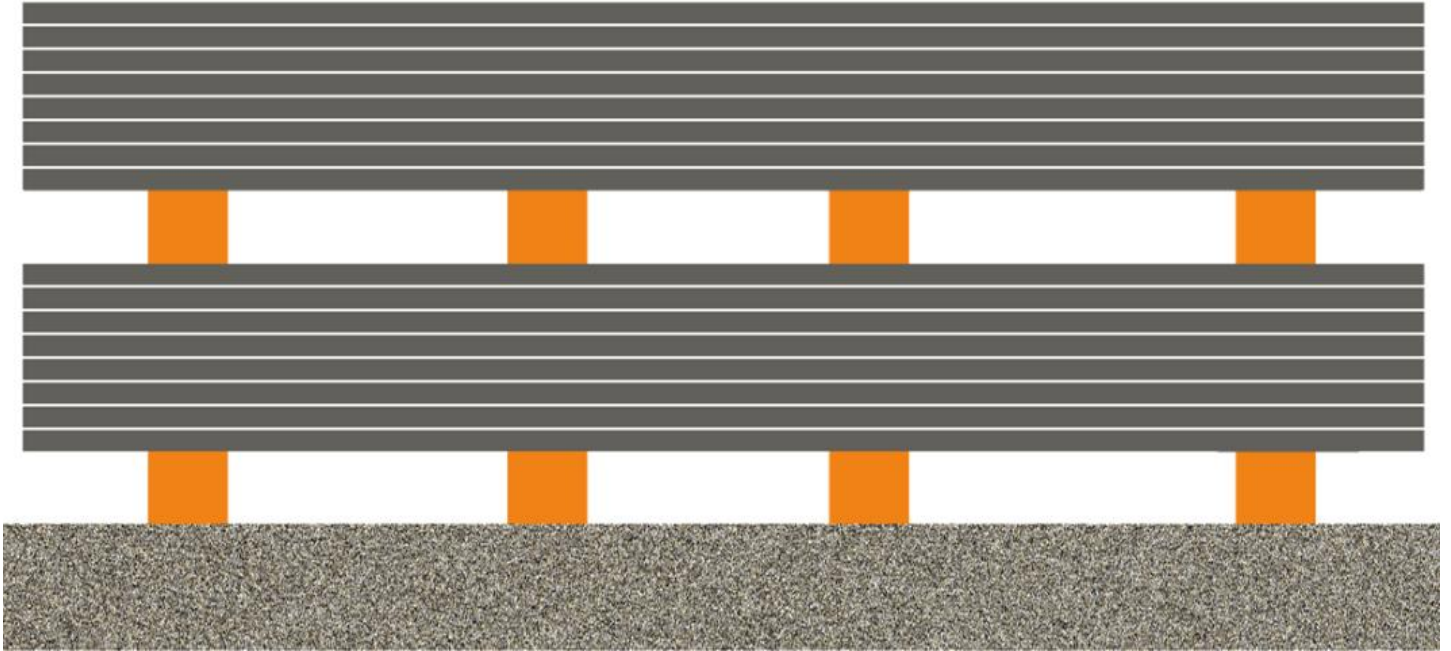
Gaps of Deck

During installation, inappropriate gap will cause deformation and warp. Please keep gap at 300-400mm (deck and the keel are at an angle of 90 degrees)

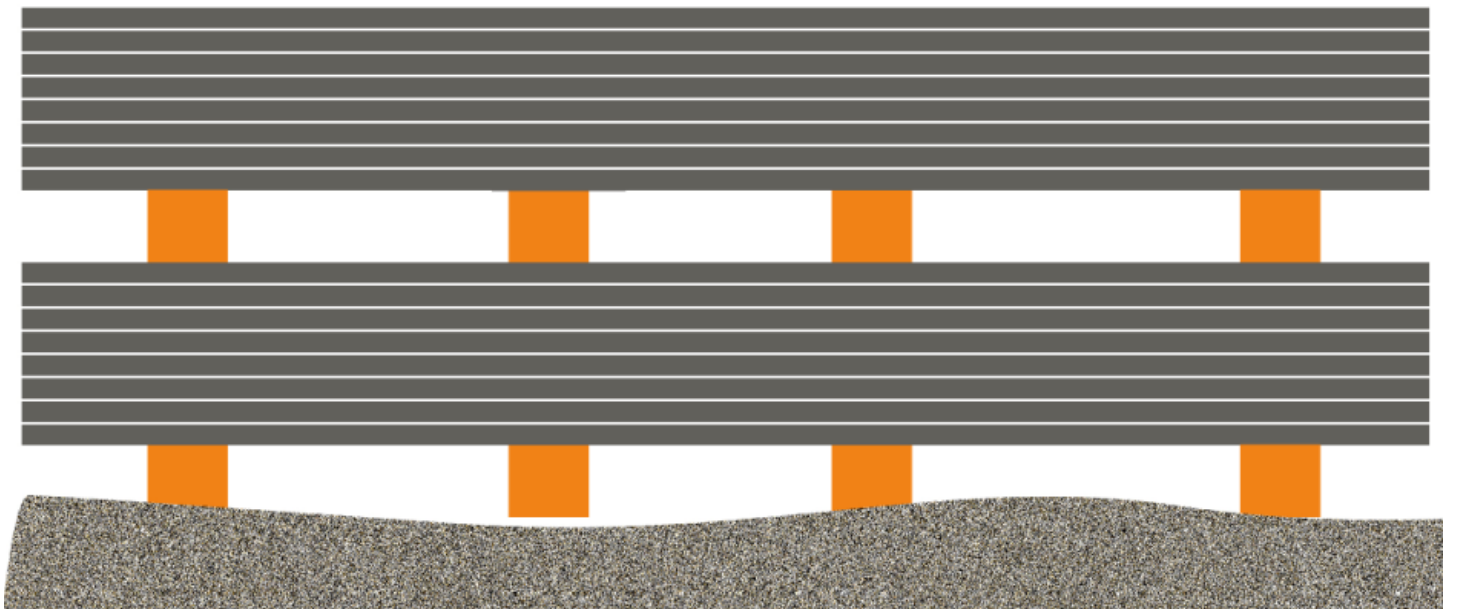
When deck and the keel are at an angle of 30-60 degrees, please keep gap at 250-350mm.

Storage

Please Store WPC decking boards in their original packaging, preferably in a well ventilated roofed place.



Stacking on the stable foundation and placing Keels between foundation and decking.



An inappropriate way of storage such as un-flat ground may cause the warp of deck.

Expansion Joint

In case of warping and deformation caused by expanding with heat and contract with cold, expansion joint must be reserved when installing WPC profiles.

The size of the expansion joint is depending on the length of decking, the temperature and temperature difference. Please according to the following sheet to reserved an expansion joint in right way.

Europe, Russia, and area within 40-20 degree north latitude (mostly of China located here)

Length of WPC files (measurement unit: meters)

	1	2.2	3	3.6	4	5.5	
-10°C	2.44	5.8	7.25	8.73	9.65	13.05	Reserved expansio n joint (mm)
-5°C	2.22	5.3	6.65	8.03	8.85	11.95	
0°C	2.0	4.8	6.05	7.33	8.05	10.85	
5°C	1.8	4.3	5.45	6.63	7.25	9.75	
10°C	1.6	3.8	4.85	5.83	6.45	8.65	
15°C	1.4	3.3	4.25	5.13	5.65	7.65	
20°C	1.2	2.8	3.65	4.33	4.85	6.55	
25°C	1.0	2.3	3.05	3.63	4.05	5.45	
30°C	0.8	1.8	2.45	2.83	3.25	4.35	
35°C	0.6	1.3	1.85	2.13	2.45	3.25	
40°C	0.4	0.8	1.25	1.47	1.65	2.25	

In the Area of North American, Canada, Australia, area from 20 degrees north latitude to 20 degrees south latitude.

Length of WPC files (measurement unit: meters)

	1	2.2	3	3.6	4	5.5	
0°C	1.4	3.3	4.2	4.9	5.5	7.52	Reserved expansio n joint (mm)
5°C	1.2	2.8	3.6	4.2	4.7	6.42	
10°C	1.0	2.3	3.0	3.5	3.9	5.32	
15°C	0.8	1.8	2.4	2.8	3.2	4.22	
20°C	0.6	1.3	1.8	2.1	2.2	3.12	
25°C	0.4	0.8	1.2	1.4	1.4	2.02	
30°C	0.2	0.3	0.6	0.7	0.6	1.12	

In the area of Africa, Middle East, Arabia (near to the gulf), South Africa, Latin America

Length of WPC files (measurement unit: meters)

	1	2.2	3	3.6	4	5.5	
10°C	1.2	3.4	4.9	5.9	6.4	8.8	Reserved expansion joint (mm)
15°C	1.4	2.9	4.3	5.2	5.6	7.8	
20°C	1.2	2.5	3.7	4.4	4.8	6.9	
25°C	1.0	2.1	3.1	3.6	4.0	5.8	
30°C	0.8	1.7	2.5	2.9	3.2	4.7	
35°C	0.6	1.3	1.9	2.2	2.4	3.6	
40°C	0.4	0.9	1.3	1.5	1.6	2.5	
45°C	0.2	0.5	0.7	0.8	0.8	1.4	

Clip

1. All screws should be screwed into pre-holed keel or other straight timber in perpendicular direction. Otherwise, keel or timber cracking might be caused.
2. Middle clip should be installed in the middle of the keel. As shown in figure 1.
3. Two keels should be used together in the connection of decking. The distance between two keels should be more than 5mm to facilitate rapid drainage and ventilation, and to avoid decking connection swelling after water absorption. As shown in figure 2.
4. Stainlesssteel screw should be used if screw is necessary for decking surface fixing. The distance between the screw hole and the decking edge should be more than 26mm.

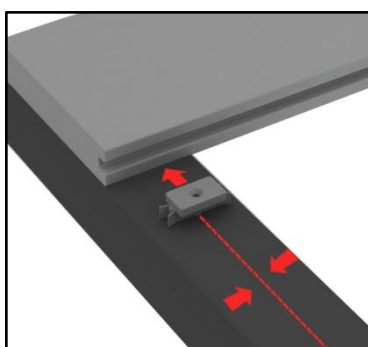


Figure 1

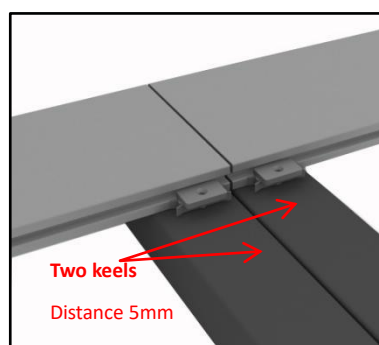


Figure 2

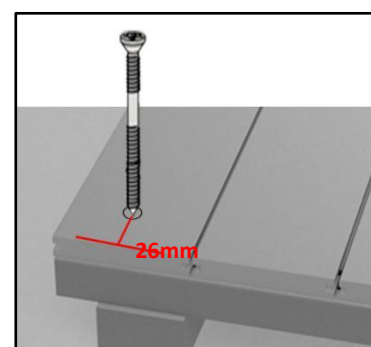
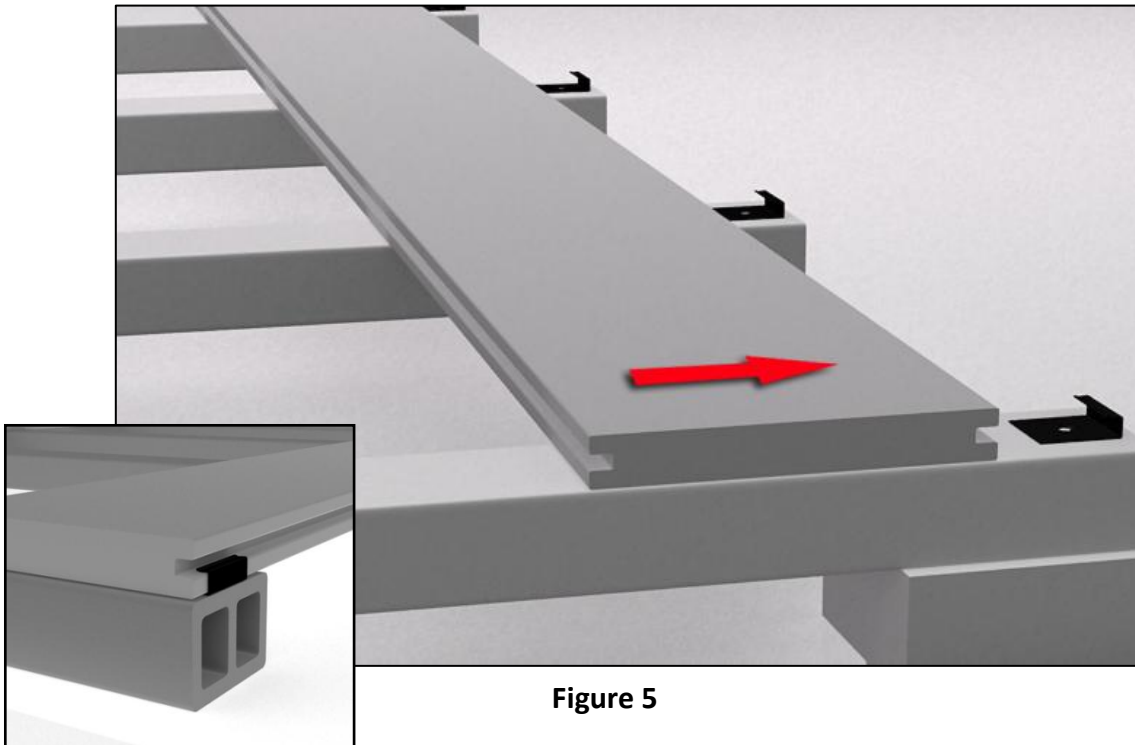


Figure 3

Decking Installation

- 1 Place the keels in accordance with keel distance requirement.
- 2 As shown in figure 4, fix the start-end clips with screws after pre-holed.

- 3 As shown in figure 5, push the decking into the start-end clip.



- 4 Middle clips installation, as shown in figure 6 and 7.
Place the clip at the middle of the keel, push it into the groove. The screws should be screwed half into the clip.

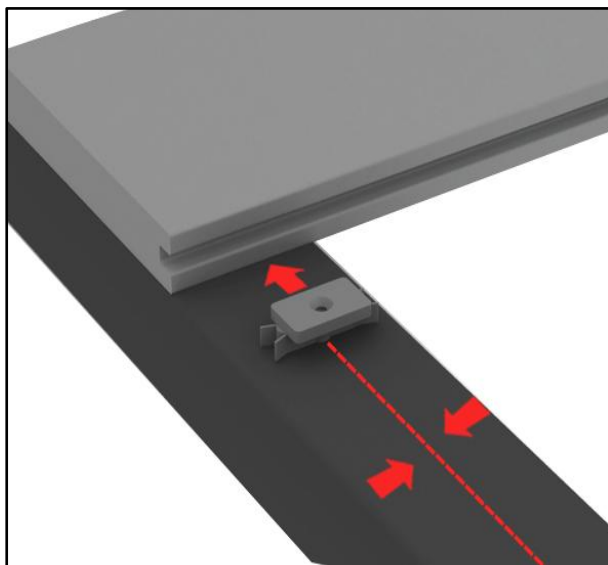


Figure 6

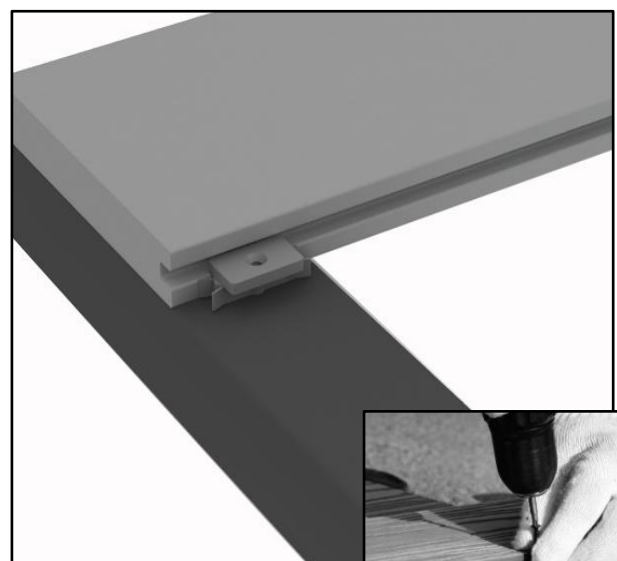


Figure 7



- 5 Push the next decking into the clip, meanwhile; beat the decking slightly into the clips to make sure the distance between the decking is the same. At last, screw the half into screws slightly to fix the decking. The distance between decking is 5-6mm, as show in figure 8.

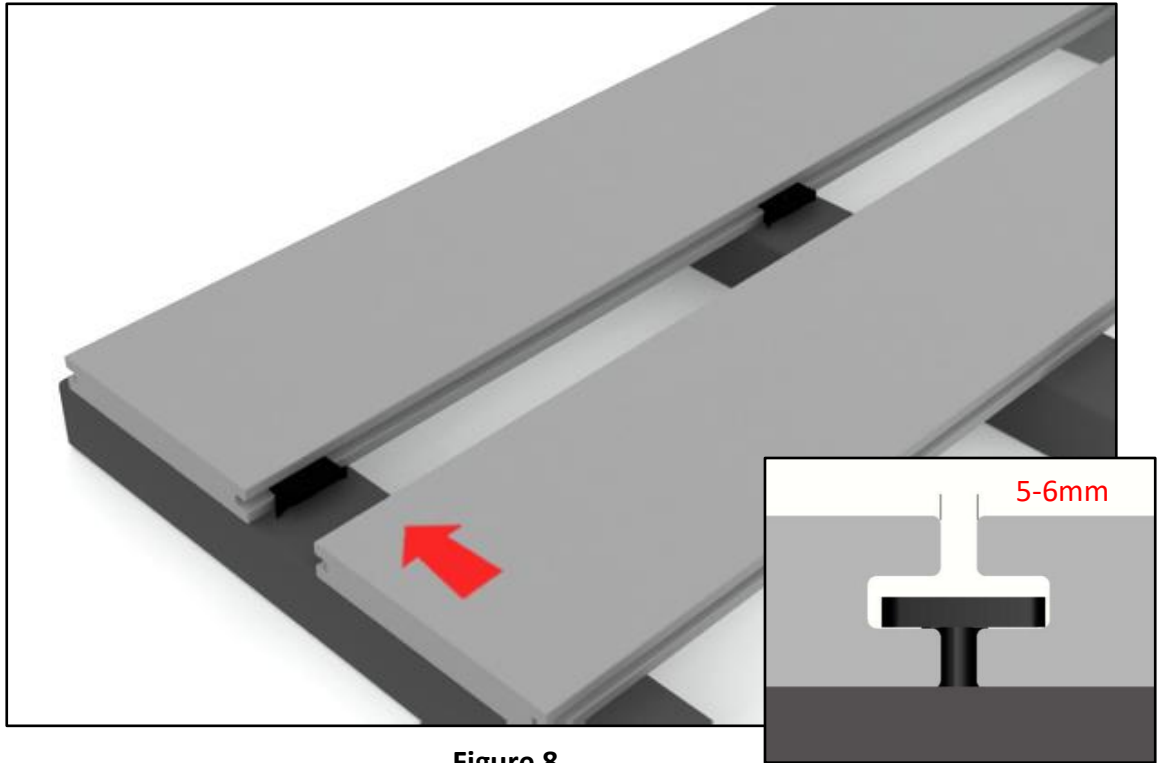


Figure 8

Fast Decking Installation:

Place the decking before clips, slip into the clips from side groove (the clip quantity should be in accordance with the keel , and then fix the clips with screws, as shown in figure 9 and 10.

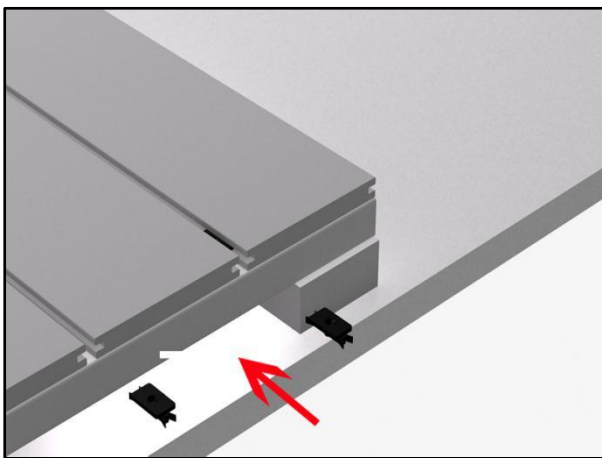


Figure 9

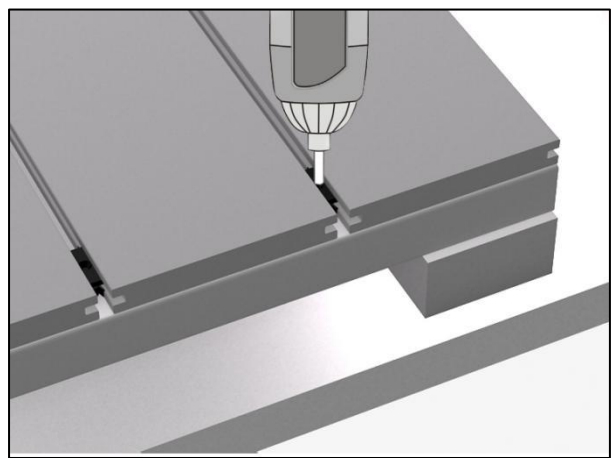


Figure 10

- ⑥ Metal clips installation: repeat step 1, 2, 3 to install start-end clip. Push the metal clip into the decking groove, fix the clips with screws. Push another decking into the clip, beat the decking slightly into the clips to make sure the decking is well positioned into the clip, as shown in figure 11.

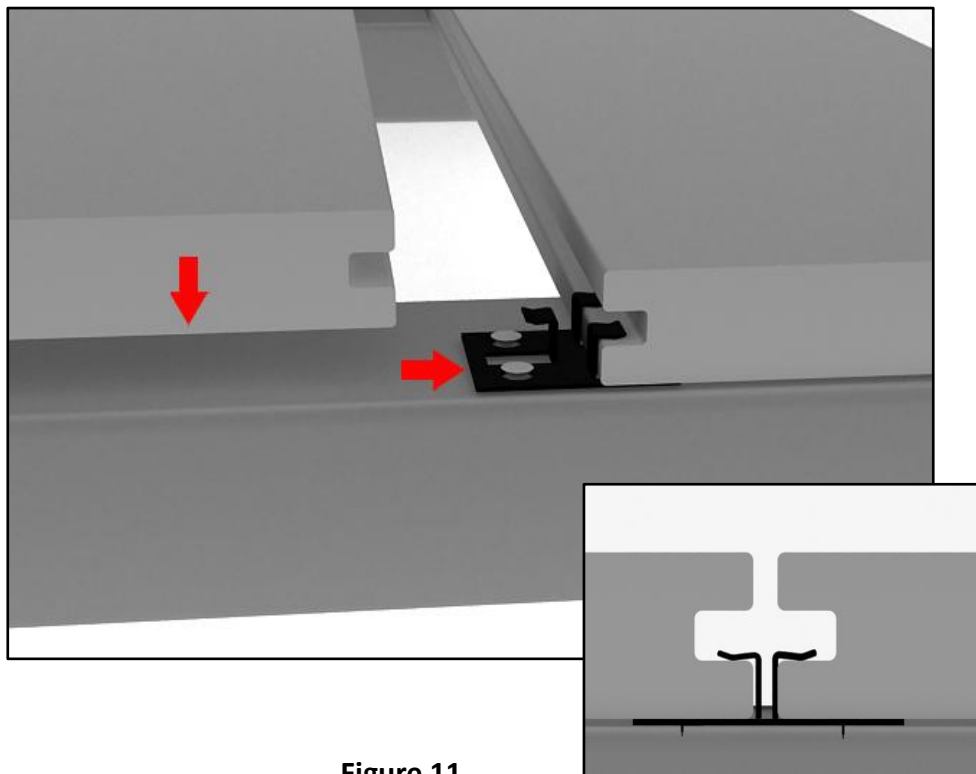
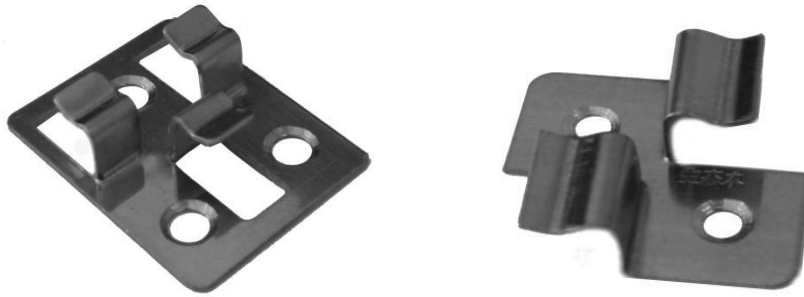


Figure 11

- 7 There are 2 kinds of edge cover optional. As shown in figure 12 and 13.

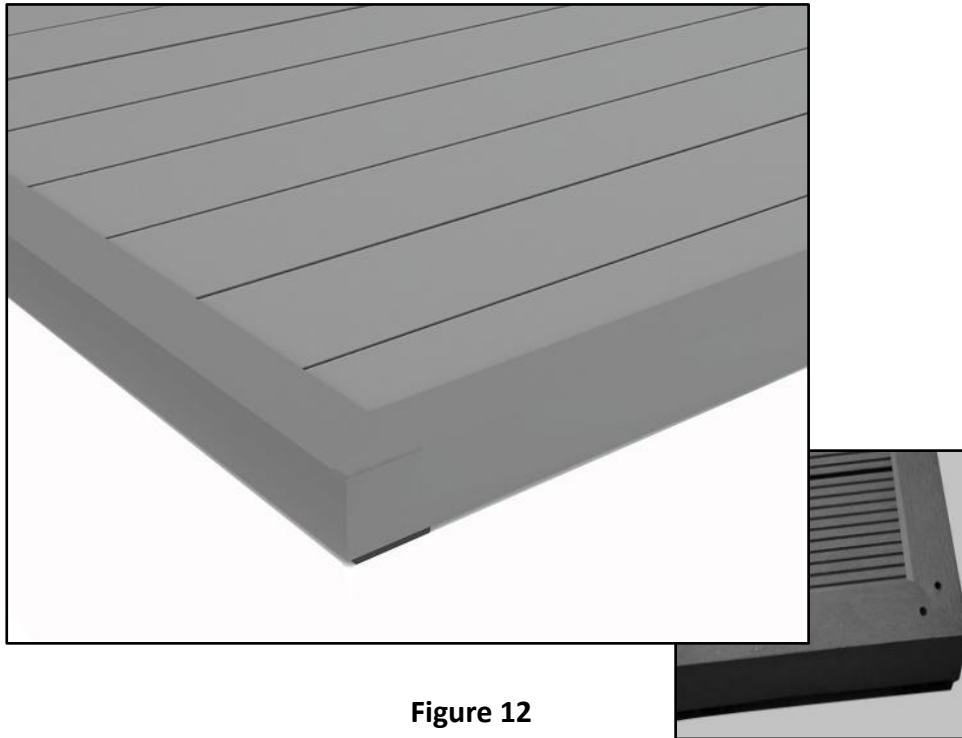


Figure 12

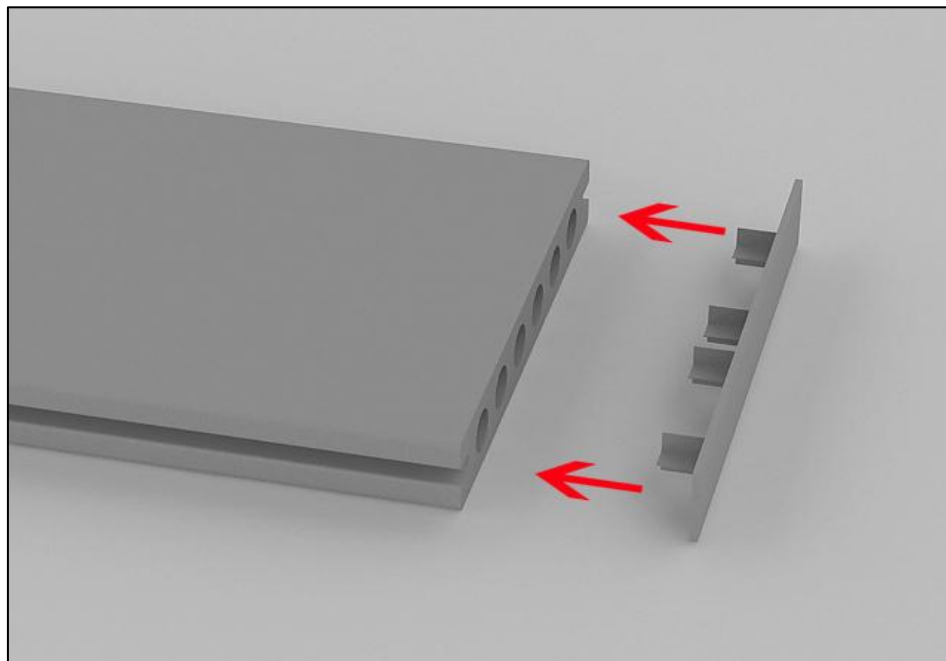


Figure 13

Maintenance and Notes

- Brush made of metal material like steel brush cannot be used in cleaning.
- If high pressure cleaning machine is used in cleaning, please adjust the water out coming end into flat style to make sure the water is out coming in scattered manner. The water pressure should be lower than 105.5kg /sqcm, and the distance between the tap and the decking should be more than 30.5cm.
- Debris in decking groove should be removed periodically to avoid water and mould accumulation.
- Metal shovel and similar tools cannot be used in decking maintenance.
- Oil, food, sauce, beverage stain should be cleaned in time.
- Mould may appear in suitable whether condition.
- Be careful when walking on the decking on barefoot. It is better to put on your shoes in decking cleaning and maintenance.

Problem	Solution
Stain and debris	Spray water with thin water pipe to clean the surface debris, and clean the surface stains in the direction of the embossing with detergent and soft brush.
Organics accumulation	Food and plant debris accumulation in the groove of the decking may form organics which may block the flow of water and air, offer suitable condition for mould. Remove the debris with thin water pipe rinsing, detergent, soft brush and wipes.
Ice and snow	Melt snow and ice on the surface of decking with calcium chloride or mineral salt. The white stain accumulate on the surface of the decking after calcium chloride or mineral salt using can be removed with detergent and soft brush.
Oil, food, sauce, beverage stain	Remove timely with detergent and soft brush. Oil detergent can be used if necessary.
Mould	Suitable moisture and temperature offers nice growth condition for mould. Mould also may appear after the degradation of wood chips, branches and pollen. The solution is remove the debris on the decking timely. Use detergent and soft brush for cleaning in case of mould appearance.
Heat source and fire	The decking might be damaged if it is quite close to hot source like fireplaces, barbeque, bonfires, etc. Please do not making fire on the decking. Enough distance should be kept between the barbeque and decking.
House construction and decoration	Construction and decoration material may damage the surface of the decking. Please install the decking after construction and decoration or cover the decking with oilcloth or engineering grade plastic film for protection. The debris on the surface of the decking should be removed and cleaned timely to avoid stain or scratching.



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吉林华邦新材料科技有限公司

JiLin Habod New Material Technology Co.,Ltd