# **Decking Installation Guide**

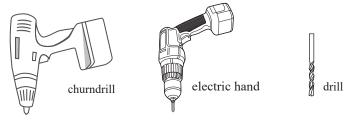
According to the properties of WPC material, we work out a professional and standard installation instruction so as to facilitate the calculation of engineering materials, as well as save installation time and engineering cost.

The machine operated methods to WPC material are including cutting, sawing, drilling, tenoning, etc.

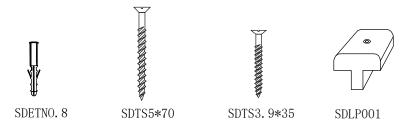
Step by step introduction as following.

1.Material required for installation

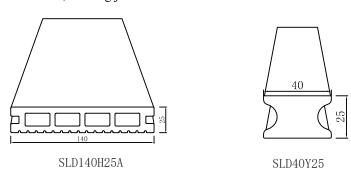
Tool:electric hand drill,drill



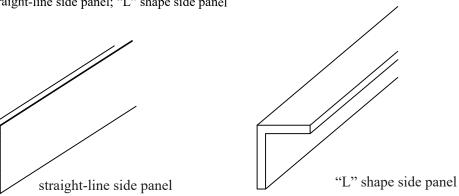
Accessories: inflation pipe, self-tapping screw(5\*70mm), stainless steel self-tapping screw(3.9\*35mm), clip



WPC profile:decking-SLD140H25A, decking joist-SLD40Y25



WPC side panel: straight-line side panel; "L" shape side panel

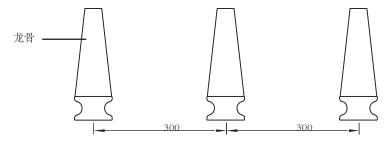


## 2.Decking Joist Installation

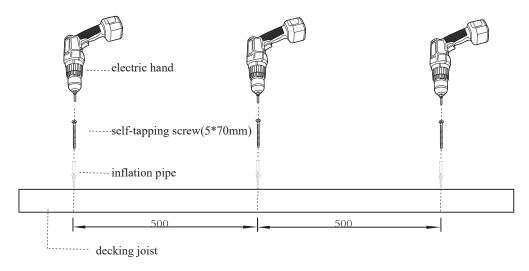
# Using the churndrill dig a hole on the hard ground before install the decking joist.

In terms of the different ground condition, we have developed two set of plans to instal the joist as follows:

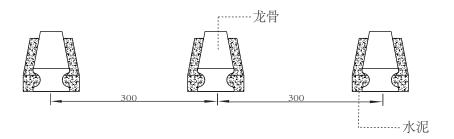
**Method 1**: The joist shall be placed on a rigid level ground first, and we suggest there is 300~350mm space between each joist.



First-drill holes which should be punched through the joist with electric drill;next-put the inflation pipe into those holes, then drive into self-tapping screws to make it fixed, for the screw which used for fixing the joist, the space between each is around 500mm. And then fix the joist with screw one by one, please make sure that the left and right of joist should be on the same level.

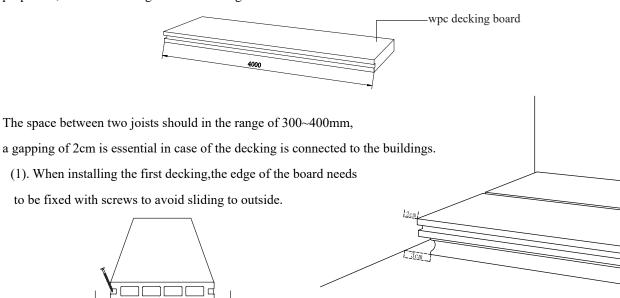


**Method 2**: Place the joist on a rigid level ground first, the spacing in two joist should between 300~350mm. Then fill the joist to the ground with cement, we suggest that the volume of the cement should reach the 2/3 height of the

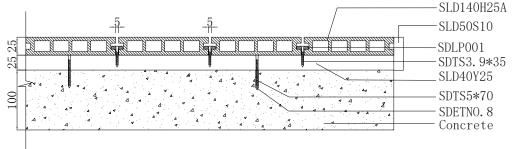


### 3. Grooved Decking Installation Guide

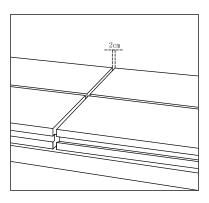
Due to the certain expansion coefficient of WPC material itself,so considering its expansion and contraction properties, the maximal length of the decking board should be around 4m.



(2). Using clips to joint the decking.



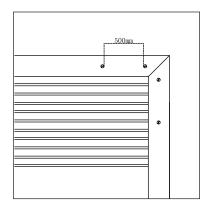
(3). There should be 5mm gapping left between two decking. While if the construction area is relatively large, you must ensure a 2~5mm spacing is left at the jointing place along the length direction of the decking so as to prevent from arching caused by expansion/contraction when there is large temperature difference.



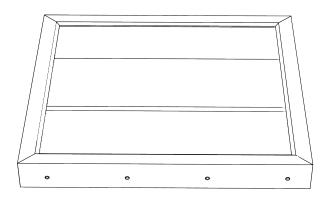
(4). Closing edge: When the decking can't be jointed by clips, you just need to follow the same way as installing the first decking and screwing in stainless steel selt-tapping screws at the groove of decking directly.

(5). Cover the side: "L" shape side panel and straight-line side panel are up to your option.

### "L" shape side panel

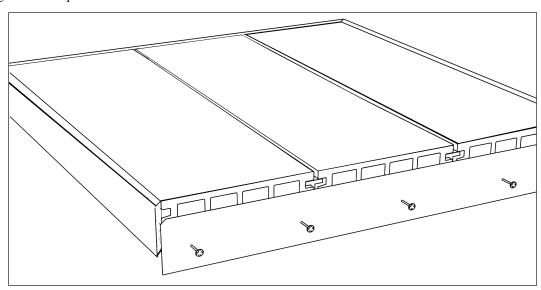


"L" shape side panel plane graph



"L" shape side panelperspective

### straight-line side panel

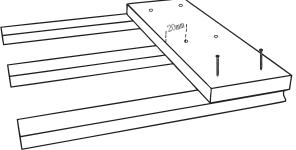


Using stainless steel screws to fasten the chosen side panel to the decking according to the size of the board and joist profile after construction ends, the space between every two screws is around 500mm. When fixing the screws, please note that all the screws should be in a straight line, don't leave the screw heads on the surface and never make it skewed so as to keep a nice overall effect.

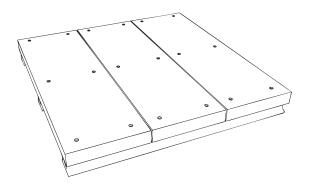
### 4. Non-grooved Decking Installation Guide

Due to the certain expansion coefficient of WPC material itself,so considering its expansion and contraction properties,the maximal length of the decking board should be around 4m and the space between two joists should in the range of 300~400mm, a gapping of 2cm is essential in case of the decking is connected to the buildings(the same way as grooved decking).

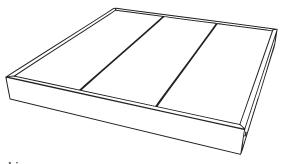
(1). The exposed nails need to be used when installing the Non-grooved decking, and there is a 20mm gap from the position of the nail to the edge of the decking.



(2).Instal them one by one.



(3). "L" shape side panel and straight-line side panel are available. Choose the side panel which is fit for the decking according to the size of the board and joist after construction ends.



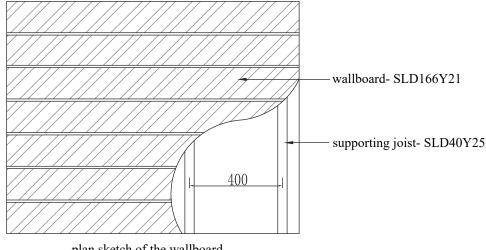
The installation method is the same as grooved decking.

Using stainless steel screws to fasten the chosen side panel to the decking according to the size of the board and joist after construction ends, the space between every two screws is around 500mm. When fixing the screws, please note that all the screws should be in a straight line, don't leave the screw heads on the surface and never make it skewed so as to keep a nice overall effect.

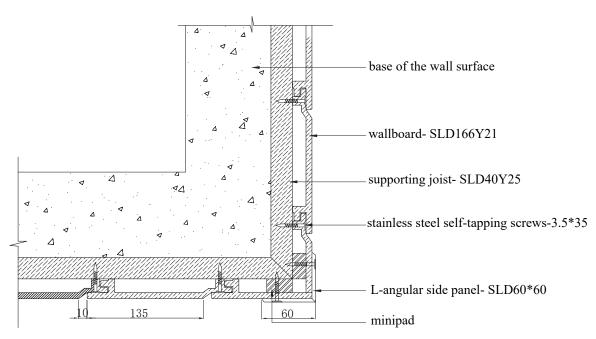
### Wallboard Installation Guide

The installation method of wallboard is similar with the decking, both of them are fixing the joist first, and then instal the wallboard one by one. Below are some brief introduction to the installation steps:

1. Fix the joist, the space between the joist is around 400~500mm.



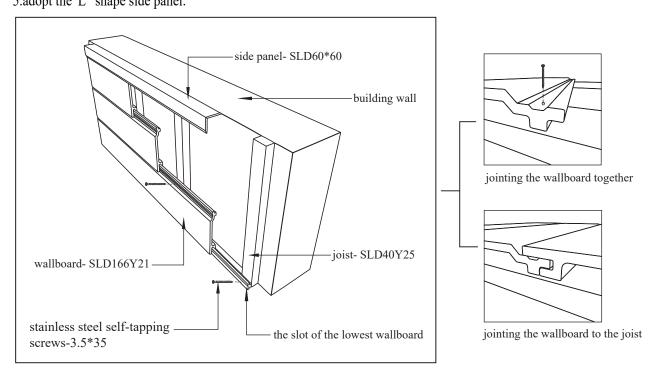
plan sketch of the wallboard



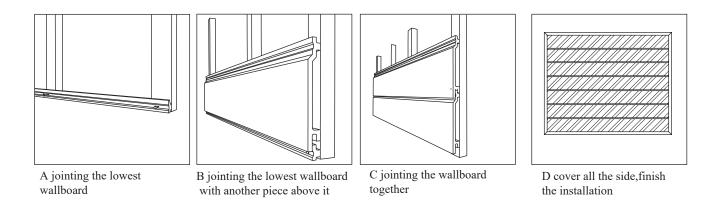
The installation detail drawing of wallboard

The necessary components required when installation are including:wallboard- SLD166Y21,supporting joist-SLD40Y25, side panel-SLD60\*60, stainless steel self-tapping screws-3.5\*35, minipad. The basic requirement for the wall surface is that it should has hard finish, good flatness, and has no obvious holes, so as to instal the joist smoothly. The WPC wallboard can be installed to the joist directly, there is a 10mm gap between two adjacent wallboard, and the width of the wallboard should be 135mm.

- 2. Cut out the grooved part of the wallboard and fix it on the wall with stainless steel self-tapping screw.
- 3. Get the wallboard, fix the bayoneted part to the position of the installed wallboard groove, then continue to fix the grooved part with stainless steel self-tapping screws.
- 4. Follow the same way as fixing the first wallboard and instal them one by one. 5.adopt the "L" shape side panel.



The installation method of our WPC wallboard and other wallboard are interlinked, so it isn't only restricted to the above way. You also can make some special design according to the related building walls to meet different construction conditions. Moreover, the surface paving work of our wallboard can do diverse splicing and collocation in terms of the design proposal, and both the colour and pattern of splice can make our wallboard looks more well-designed.



### 6.Railing Installation Guide

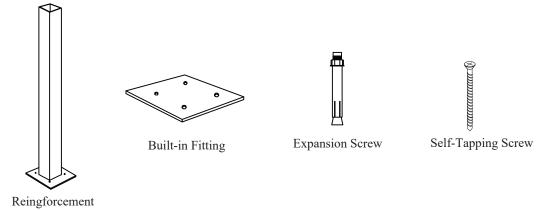
In accordance with many of the problems and difficulties existing in practice of the installation,we summarize a set of more convenient installation procedures, which can save time and ensure construction technology. We have a variety of styles for your choice, take the following one for example.

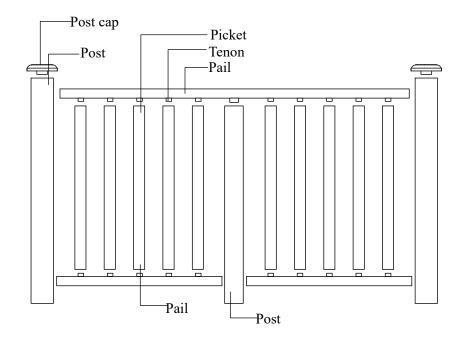
#### 1.Need material

structural section:post,handrail,vertical bar,post cap,post skirt,end cap



Complementary material:square tube, built-in fitting, tainless steel inflation screw, stainless steel self-tapping screws, antirusting paint.



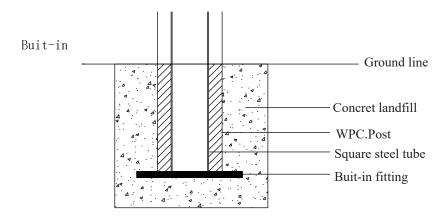


### **Installation Steps**

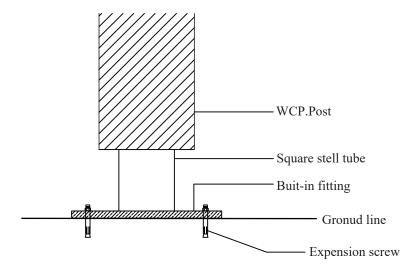
According to the properties of WPC material, the inside of railing need to use lining steel. The size of the steel liner is 2/3 of post itself. The size of steel liner is determined by the size of post's inner hole. Take the safety elements into consideration, we suggest the safety height for the post is  $\ge 120$ cm, the distance from handrail to ground is  $\ge 110$ cm, and the appropriate space between vertical bar is  $\le 11$ cm. Please note that the height of lining steel is flexibly depending on different circumstance.

1.There are two ways to connect the post to the ground:A and  $B_{\,{\mbox{\tiny o}}}$ 

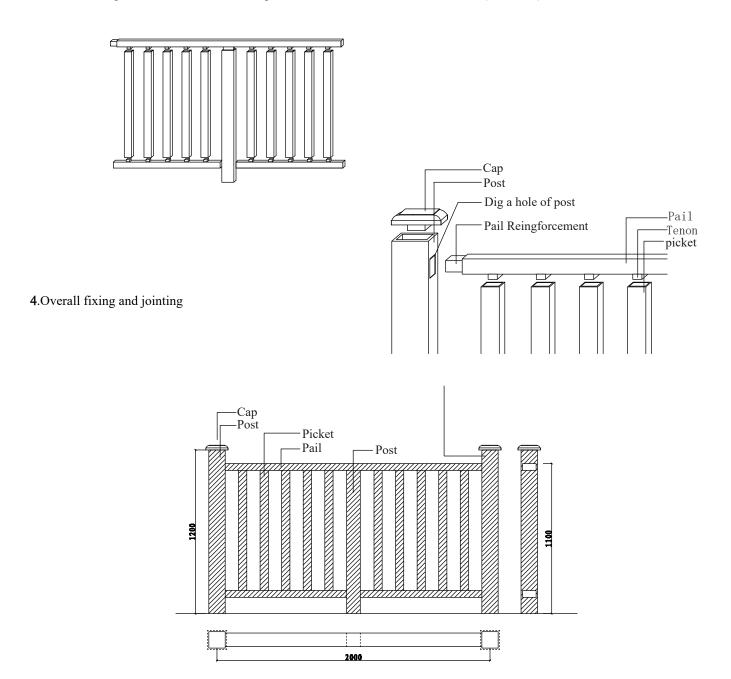
A embedded. Dig a hole which diameter is greater than 1/2 of the post, and put the post into the hole (with lining steel), then fill it up with concrete sand. The interval between the holes should be decided by the design of the railing.



B non-embedded. Welding the lining steel with built-in fitting, and fix it on cement ground with 4 inflation screws, and then instal the post.



3.the assembling of handrail and baluster .square tube should insert into the handrail.(see detail)



Because of the various styles of railing and different ways of installing and jointing them. We can offer relevant installation instruction for specific projects as per the design drawing provided.

### 7 The installation of gazebo

#### The installation of gazebo

The gazebo series is a typical style of our products, it can not only be applied to the courtyard of pricate house, but also can be used on large-scale landscape in public places. The gazebo has multiple design, such as double-beam gazebo, single-beam gazebo, double-blade gazebo, etc. We choose one style to give a brief introduction.

The installation steps are as following:

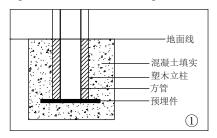
1. There are two ways to connect the post to the ground:

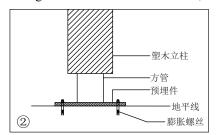
#### 1)embedded

Dig a hole on the ground, the size of which is greater than the diameter of the post, and the depth is ≥300mm.

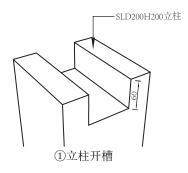
#### 2non-embedded

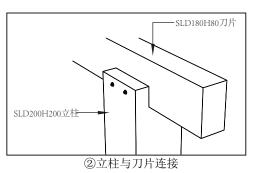
Welding the lining steel with built-in fitting, and fix it on cement ground with 4 inflation screws, and then instal the post.

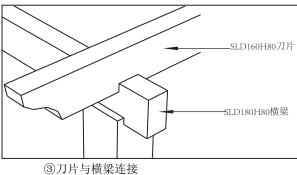




- 2. Fix the post to the ground. Insert the welded square tube and built-in fitting into the cavity of post, and put them together into the hole, then fill it up with concrete sand.
- 3. The connection of post and beam. Open slot on the top of the post, and the depth of which is about: 60mm-100mm. Then insert the beam into the slot and fix it with the adapter lug.

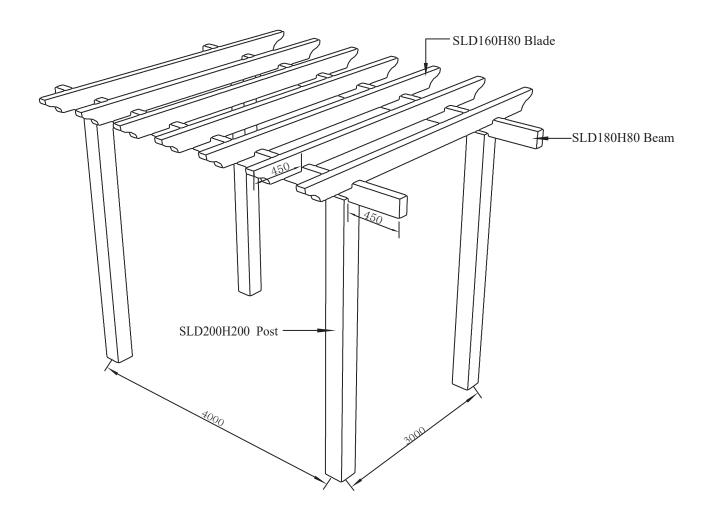






4. The connection of beam and blade. Open slot (40mm-60mm) at the jointing place of the beam and blade, then pin the blade to the beam, and then use the self drilling screw to fix the jointing place of them from the top.

5. Tail- in work. When the whole installation work is finished, what you should do is to check if they are in the same horizontal level, deal with the surface defect, etc.



Attentions: the dimension of the the general gazebo is:length-4000mm, width-3000mm.

- ① post:the heigth is around 2800mm,
- ② beam: the span is around 4500mm, and leave 450mm at both ends.
- ③ blade: the whole span is around 3500mm, and the space between them is  $\ge$ 350mm.