

**GENERAL DESCRIPTION**

WPC (Wood Plastic Composite) is a unique composition to replicate wood without the maintenance and hazards of traditional timber decking. 55% timber fibres + 45% HDPE and additives.

<b>PHYSICAL DATA</b>	<b>REQUIREMENTS</b>	<b>TEST RESULT</b>
<b>Hardness</b>	>58HRR	61HRR
<b>Moisture Content</b>	<2%	0.3%
<b>Modulus of Rupture</b>	>20 Mpa	40Mpa
<b>Modulus of Elasticity</b>	>1800 Mpa	3818Mpa
<b>Thickness Swelling</b>	>1%	0.4%
<b>Size Change – Calefaction</b>	±2.5%	-0.10%
<b>Resistance to Wear</b>	<0.08g/100r	0.077g/100r
<b>Size change H/L Temp.</b>	±0.2%	-0.10%
<b>Screw Holding capability</b>	>1000N	3120N
<b>Standard – GB/T 24508-2009 Wood-plastic composite Freeze Thaw and Bending Load</b>		
<b>Resistance to Freeze Thaw</b>	>80%	92%
<b>Bending Load</b>	>2500N	3258N

**B1 FIRE RATING****IMPORTANT INSTALLATION NOTES**

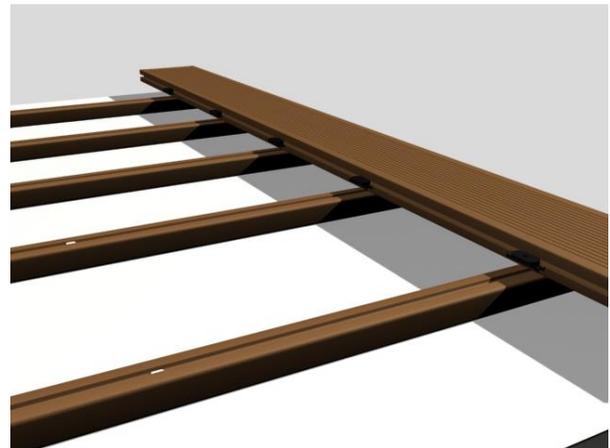
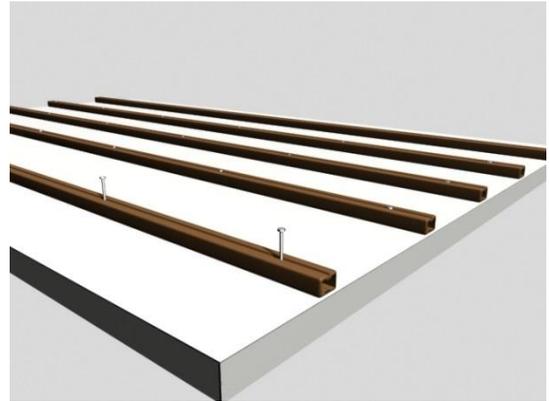
- Slight colour and surface differences may occur due to slight differences in raw materials or surface treatment. \*Decking products will fade by approx. 10% of its colour during the first 12-month period of being installed.
- It is advisable to place the terrace sections in the required installation site for 72 hours before you start the installation for them to acclimatize. The decking should not be installed in temperatures below 0°.
- We advise you to use original accessories and parts from Southgate Plastics Ltd
- There must be a space of at least 25mm between the ground and the substructure. In case of insufficient ventilation any guarantee will be invalidated. There should not be direct contact between the decking structure and the ground (grass, soil etc.)
- Variations in temperature and moisture uptake will result in expansion (about 0.3% to 0.5%) of the sufficient distance expansion between the terrace sections.
- A strong and compacted base such as concrete is recommended.
- WPC product is not suitable for closed and wet places without air ventilation and/or environment with significant difference temperature change (e.g. sauna room).

\*this can vary or be affected by location and installation application.

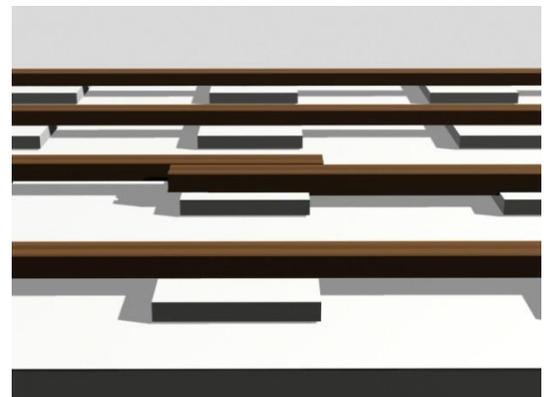
## INSTALLATION

Prepare the substructure

- Ensure there is good drainage below the deck area.
- Lay the sub frame with a slight gradient of 1% to 1.5% away from the walls, laid lengthwise. Keep the sub frame set of any surrounding walls or other obstacles to allow for slight expansion.
- Keep the Substructure at maximum 400mm centres.
- The Substructure should be fixed by expansion screws to the concrete at a distance of 30-40cm.



- If the support joists are required to be longer than 5m, they should overlap by a minimum of 100mm.
- If deck boards have to be joined on the length, a second section of Joist should be added.



The WPC products' expansion rate is around 0.3% to 0.5% depends on different weather condition in different places, based on this expansion rate, there must be a gap always between two WPC products, following there is some examples:

The distance of at least 30mm from walls or other obstacles to allow for expansion of the WPC products is necessary during the installation

At least 10mm between the cross cut ends is necessary

If you are using terrace sections with a length of 400cm, the distance between the crosscut ends must be at least 15mm based on calculation.

WOOD PLASTIC COMPOSITE OUTDOOR DECK offers starting clip / starters for the first deck board during installation

For this, firstly fix the entire starting clip on the joist on line, and then push the first terrace deck board to the starting clip to fix Important: when fixing the starting clips or the connecting clips, pre-drilling with a 2.5mm bit is necessary to prevent cracking or breaking the sub structure because WPC products has high density which does not allow directly nail or screw.

## Finishing

Fix the L shape corner cover against the wall and not to the terrace sections to allow for movement of the WPC. To determine the right positions on the wall, proceed as follows:

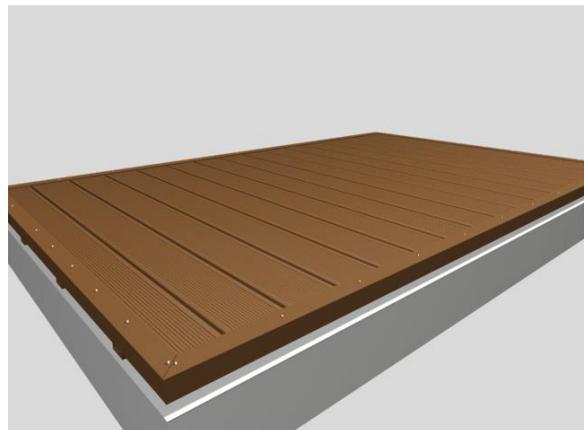
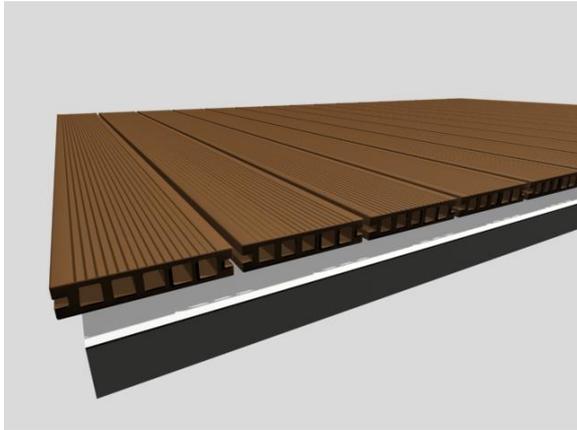
Lay the L shape corner cover on the terrace sections. Put a mark on the wall at the top edge of the L shape corner cover.

Then remove the terrace sections from under L shape corner cover and fix the L shape corner cover against the wall;

always ensure that there is sufficient space at least 20mm between the L shape corner cover and the terrace section.

There must be a gap at the joint between two corner covers, calculated based on the expansion rate 0.3-0.5% of the length.

The distance between the fixing screws have to be maximum 30cm.



## Maintenance

The terrace can be cleaned with a brush/ sanding paper, or with a high pressure cleaner. If you clean the terrace with a high pressure cleaner, you must keep a distance of at least 30cm from the terrace sections. If necessary, you can use a neutral soap. Make sure that the detergent doesn't attack plastic. Following is some recommendations in details:

### 1. Water stains

There will be some water stains on the surface of the newly installed terrace when the water evaporates after rain. It is temporary phenomenon which will disappear in about 1-2 months by itself. It can be cleaned by wiping the surface with steel wool

### 2. Mud, dust, etc.

Clean decking to remove dirt by using hot water with soap. Sand it with stiff bristle if needed.

3. Scratch, oil stains, alcohol stains, and cigarette stains etc. which are hard to be removed from the surface Use steel wool or sandpaper carefully to try to remove the stain. Then sand surface and clean with hot water with soap.

## IMPORTANT NOTICE

Data contained in this document is for information only and is believed to be reliable. Southgate Plastics cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability of the product for any specific purpose and we are pleased to provide a sample upon request.