

# PRODUCT DATA SHEET 142/22/2400 SOLID CO-EXTRUSION WPC DECKING



# GENERAL DESCRIPTION

WPC (Wood Plastic Composite) is a unique composition to replicate wood without the maintenance and hazards of traditional timber decking. 60% timber fibres + 35% HDPE and additives.

PHYSICAL DATA	REQUIREMENTS	TEST RESULT
Hardness	>58HRR	65HRR
Moisture Content	<2%	0.3%
Modulus of Rupture	>20 Mpa	31Mpa
Modulus of Elasticity	>1800 Mpa	3750Mpa
Thickness of Swelling	>1%	0.4%
Size Change – Calefaction	+2.5%	0.10%
Resistance to Wear	<0.08g/100r	0.077g/100r
Size Change H/L Temp.	+0.2%	-0.10%
Screw Holding Capability	>1000N	3120N
Standard — GB/T 24508-2 1993,GB/T24508-2009,IS 2006 Wood Plastic Compo Load		,
Resistance to Freeze Thaw	>80%	92%
Bending Load	>2500N	4587N

# **B1** Fire Rating

OVERALL TEST RESULTS	
Mean PTV or PTV corr (Dry)	86
Mean PTV or PTV corr (Wet)	42
Slip Potential (Dry)	Low
Slip Potential (Wet)	Low



## Warranty

The WPC Deck boards are covered by a 15-year Warranty against the following deformations: Splitting, Cracking, Rotting and Decay as a result of manufacturing defects when subjected to normal use. The Warranty **does not** cover installation.

#### IMPORTANT INSTALLATION NOTES

- Slight colour and surface differences many occur due to slight differences in raw materials or surface treatment. The Deck boards will fade by 10% of the colour over the first 12-month period of being installed. At the end of this period the surface colour will stabilise.
- It is advisable to place the Deck boards 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 20°.
- We advise to use original accessories and to ensure warranty remains valid.
- There must be a space of at least 25mm between the ground and the substructure. In case of insufficient ventilation any warranty 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 0.1% to 0.5%)
- A strong and compacted base such as concrete is recommended.
- WPC product is not suitable for closed and moist environments such as sauna rooms etc.

## INSTALLATION

## Prepare the substructure

- Ensure there is sufficient 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 25-30cm.
- To ensure each deck board has a full bearing each end, for runs lower than 5m, the subframe 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.



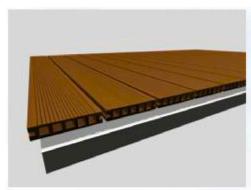
The WPC products' expansion rate is around 0.3% to 0.5% depends on different weather condition in different places, based on this expansion rate, there must be a gap always between two WPC products, as follows:

- The distance of at least 10mm from walls or other obstacles to allow for expansion of the deck boards.
- Allow at least a 30mm gap on butt joints.
- Important: when fixing the starting clips or the connecting clips, we recommend pre-drilling with a 2.5mm bit to prevent cracking or breaking the sub structure as WPC products have a high density.

## FINISHING

- 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.







#### **EXPANSION AND FADING**

The deck area can be finished with the angle trim product around the perimeter. This provides a neat finish to the deck. Allow the same expansion tolerances as the decking.

## **MAINTENANCE**

### **Stains**

Water stain marks can show on any composite decking boards. There are 2 main types of water stains; both of which will generally disappear with exposure to general weathering.

- Water stains from wood tannins will occur in the early life of your deck as the natural tannins come
  out of the wood fibres at the surface of the composite decking. This will happen in the early weeks of
  your deck, and will depend on how exposed to the elements your deck is before the weathering
  process is complete. This type of stain can be more prominent when new decking is exposed to direct
  sunshine in the first few months of its life.
- 2. Water stains from water pooling or dripping can happen on composite decking just like it can with many other materials/surfaces such as timber decking, glass, laminated floors etc. This can leave a "shoreline" effect. The visibility of the stain will be governed by factors such as how dirty the deck is and how quickly the water dries from the water pooling, clean as mentioned below. Again, this can be exaggerated in hotter weather.
- 3. Oil and cigarette stains etc can be very difficult to remove from the surface, avoid contact at all times.
- 4. It is safe to use salt when melting ice on your deck area <u>provided</u> the user washes the boards with water once the ice has melted. This should occur within a few hours after the salt has been applied and should then be washed off with water. Please be aware that salt may leave a residue mark, whilst this in no way will damage the decking, it may look unsightly for a time.

Both types of marks/stains will disappear naturally over time unless, of course, you have a recurring problem that allows water to continually land on to the composite decking. I.E. a drip from a gutter will continue to make marks until the water is stopped from landing onto the water stained area.

We advise is to let the composite decking weather naturally over time. However, we understand you want to be proud of your new deck once installed and if you feel the need to try and remove the marks yourself then wash with clean, hot water, this should wash away. Do not wash your decking whilst it is still hot from a day's sunshine.

- 1. Pour clean, hot water on the deck and let it sit for 5-10 minutes
- 2. Work in with a soft bristle brush
- 3. Pressure wash (at low pressure and wide fan) / rinse down in hot water (preferred)
- 4. Squegee water off the deck with a squegee brush
- 5. Mop up any wet areas with a clean sponge mop

If water marks have been long standing they may require more hot water or repeated procedure.

*IMPORTANT:* Only use a neutral soap. Never use strong detergent of bleach based products.