Bighands Building Supply Australia Pty Ltd 60-68 Hampstead Road Auburn NSW 2144 p: 1300 242 799 e:info@bighandsbuildingsupplies.com.au w: bighandsbuildingsupplies.com.au

# Installation Guide





Bighands Building Supply provides quality decking boards branded "Smart Wood" which is easily installed and maintained.

## **Storage & handling**

"Smart Wood" Decking boards must be:

- Supported at least every 600mm on a level plane.
- Laid flat especially during transportation and never at an angle.
- Never be dropped or 'dumped' when unloading.
- Stored on a flat, dry surface.
- Covered until it is time to use them for installation.

## **Before Installation**

#### 1. Common Rules

Smart Wood Decking must be installed with proper drainage and ventilation. To ensure that, it is recommended that:

- The site must have free drainage or a gradient of 1 in 40 to allow water run-off.
- Remove turf 100mm minimum of topsoil where the deck will be placed.
- Replace topsoil with gravel or hardcore.
- Lay weed barrier covered with a light stopping layer of pea shingle on top.
- The substructure must allow 50mm minimum drainage gap all around.
- There shall be slight slant of the deck (2mm per meter minimum) for drainage.

#### 2. Thermal expansion & contraction

Smart Wood decking expands and contracts in length with changes in temperature. It is most important to take this into consideration during installation of your Smart Wood Decking.

For decks up to 5.4m in length we recommend running full length board.



### 3. Expansion gaps

It is important to take Thermal Expansion & Contraction into account when gapping your boards.

The table below can be used as a guide when discerning the appropriate gap (in mm) to leave at each end of your board, depending on board length and ambient temperature during installation.

		Ambient temperature during installation (°C			
		10°C	20°C	30°C	40°C
Board length (m)	1m	2mm	1mm	1mm	1mm
	2m	2mm	1mm	1mm	1mm
	3m	2mm	1mm	1mm	1mm
	4m	3mm	2mm	1mm	1mm
	5.4m	3mm	2mm	1mm	1mm

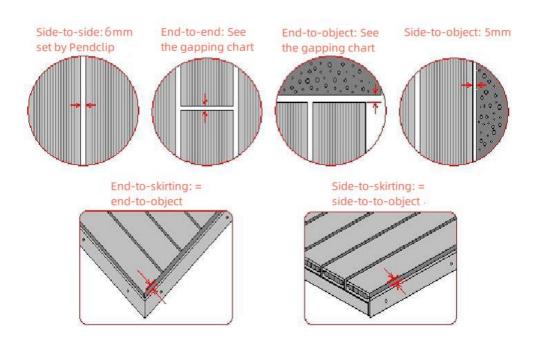
e.g. If temperature during installation is 20°C, the recommended end gap for a 5.4m board is 2mm.

# **Decking Board Installation**

### 1. Deck board Gapping

Gaps between deck boards must be allowed, either end to end or side to side. This is for proper drainage and for the slight thermal expansion and contraction of the boards.

- Side-to-side: The gap between board sides is fixed at 6mm by clips. Our clips anticipate expansion and contraction of the boards.
- End-to-end: The gap between board end depends on three factors: the length of the board, the temperature when installing and the local highest temperature.
- End-to-object: The gap between board end and solid object, like wall or skirting, is also required, normally 3mm minimum.
- Side-to-object: The gap of board side to solid object shall be 5mm minimum.

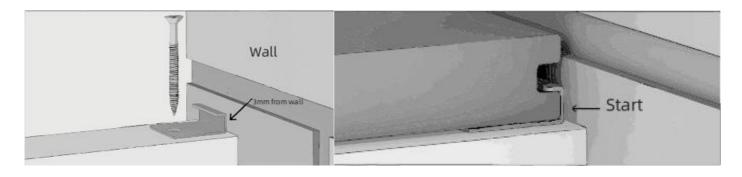


#### 2. Board Trimming

Deck boards need cut off to fit the designed size of your deck. The allowable overhang of board end is 30mm maximum. The allowable overhang of board side is 9mm maximum.

### 3. Stainless Steel Start

- Position Start on top of the first joist a minimum of 3mm from the wall and screw into place. Repeat on last joist Aluminum Start can be placed on every second joist.
- Gently push the first "Smart Wood" Decking board into the Start. You may need to angle the board slightly to push into the Start.
- Next, fasten the boards using plastic and metal brackets. For detailed steps, refer to the 'Plastic and Metal Bracket' section.

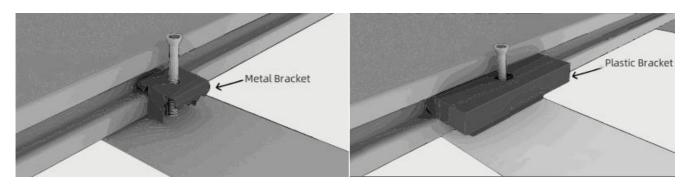


#### 4. 6mm Spacing Plastic and Metal Bracket

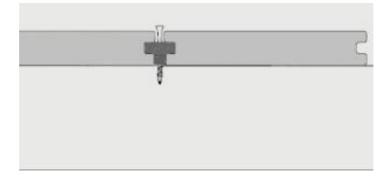
Bracket is a hidden fastener system that is specially designed for installation of Smart Wood decking. The designed Gap of the bracket is 6mm.

1. Insert Plastic Bracket and Metal Bracket into the groove of the board. Note:

- You must use 1 (one) Metal Bracket only per board, which is placed nearest the center of each board. Screw down approximately 2mm to hold the clips in place.
- Ensure you have at least 1 (one) Metal Bracket per board.
- Failing to install a Metal Bracket will allow your boards to shift and come out of alignment.



2. Push the next board into position.



3. Repeat these steps and lay approximately 6-10 boards before screwing down properly (this is a guide only). Measure out from the first board to the last board to ensure that the boards are square.

4. Screw down this section of decking. Do not overtighten screws. If the screws are pulling through the clip, you are over tightening the screws.

5. When securing the Metal Bracket, ensure that the screw is tightened sufficiently so the teeth bite into the groove of the Smart Wood Decking boards.

6. Repeat steps 1-5 until complete.

7. Once you reach the end of your deck, you will likely need to rip the last board down to fit. Secure the last edge of your board by top fixing. Be sure to pre-drill and countersink the board and fasten every 450mm.

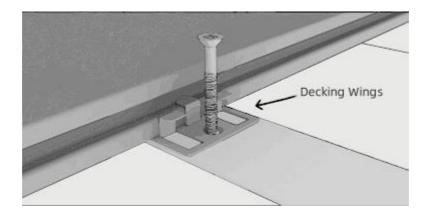


#### 5. 4mm Spacing Decking Wings

Decking Wings is a hidden fastener system that is designed for installation of Smart Wood decking. The designed Gap of the bracket is 4mm.

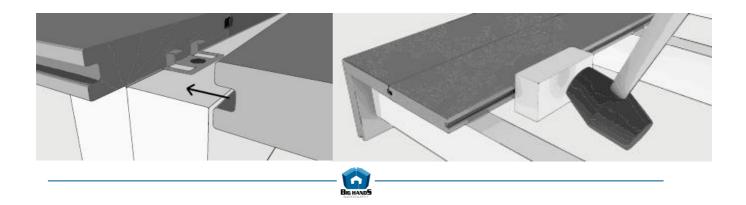
Note: Using Metal Bracket same as with Plastic Bracket.

1. Insert Decking Wings into the groove of the board.



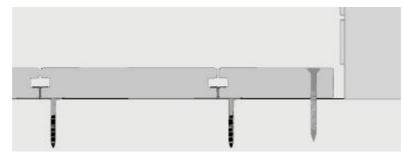
2. Screw down the Decking Wings ensuring they are tight and secure.

3. Push the next Smart Decking board into the clips. You may need to use a rubber mallet and block to seat the boards firmly in the clips.



4. Repeat steps 1-3 until complete, periodically measuring out from the first board to ensure your deck is square.

5. Once you reach the end of your deck, you will likely need to rip the last board down to fit.



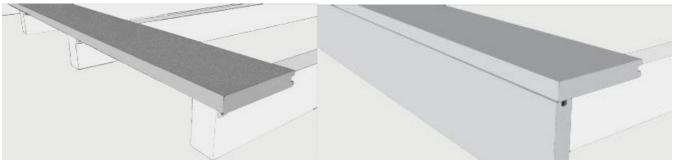
6. Secure the last edge of your board by top fixing. Be sure to pre-drill and countersink the board and fasten every 450mm.

## 6. Finishing

#### Option1.

1. Finish the leading edge of your board appropriately to ensure a fascia can be installed for a clean finish

2. Using decking screws to side-fix the Edge Board.



#### Option2.

Cut the panel edge at a 45° angle and secure it to the edge board.

