

## Installation Guide

V062022



## BEFORE INSTALLING

Please consult and comply with local building codes and special requirements or restrictions when undertaking an outdoor decking installation. Please consult a structural engineer before placing significant loading such as a pool spa on your deck.

Breaker Boards: The best way to install composites is by using a Breaker Board configuration. In addition to providing the best visual layout, breaker boards help mitigate any contraction due to variations in temperature. BriteDeck does not encourage the user of staggered joists or Butt Joints. Please refer to page 3 for more information.

The guidelines outlined below are for illustration purposes only and are not meant or implied to replace a licensed professional. The customer assumes all risks and liability associated with the construction and use of this product. It is important to read and understand the guidelines in its entirety before starting on the project.

## Understanding Wood Plastic Composite (WPC)

### RAW MATERIAL

BriteDeck® Composites are a blend of reclaimed timber (45%) and a mix of used and virgin HDPE (40%) with the balance comprising of colour additives. Our ASA board is made of cellular PVC, featuring dual capped ASA.

### BAL BOARDS

BriteDeck® also has a range of BAL-29 composites featuring high-quality fire-retardant properties. For more information please ask our sales staff.

### STORAGE

Before installation at location, composite boards should be stored on a flat and ventilated surface with the unbrushed side up to be covered from sunlight in order to prevent uneven colour change.

Boards not intended for immediate use should be kept in a flat and dry location with adequate shade and cover. If storage area is prone to moisture, boards should be removed from protective packaging and covered with a tarp designed for outdoor use.

Please ensure the storage area is flat with adequate support spread equally to distribute the load.

## **WEIGHT**

BriteDeck® composite boards are heavier than most timbers. Please follow safe work practices.

## **USAGE**

BriteDeck® Composites are not a structural construction material and cannot be used as a supporting structure.

## **TOOLS**

Standard woodworking tools (drills, saws, sanders, tape measure, level, cordless screwdriver with bits, countersink bit, etc.) and self-protective equipment are all that is required during installation.

# Characteristics of Composites

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## **BOARD DIMENSIONS**

Though our quality control ensures all the boards supplied are identical width and length, there may be slight variations of  $\pm 5$ mm. This is inherent in all WPC boards. In rare instances, board edges may not be cut perpendicular due to manufacturing inconsistencies. Inspect boards before commencing installation.

## **ACCLIMATISATION**

Acclimating at least 2 days prior to installation at the job site is recommended, especially for larger decks. Acclimating the boards will assist in uneven shrinkage seen during and after installation. Boards must be kept level and adequately supported during this process – If put on an uneven surface the boards could warp to the shape of the terrain.

## **VENTILATION**

Composite boards **MUST** be installed onto a substructure to allow for ventilation and airflow. Failure to do so may result in rot or corrosion. Avoid boxing or sealing the deck completely. The board should not be installed directly onto the ground.

## **GROUND CLEARANCE**

The area under the deck should be dry and clear of vegetation. Please ensure there is at least 30cm ground clearance (beneath the deck) for normal ground. Please refer to the table on page 4.

## **EXPANSION & GAP**

WPC products will expand and contract due to sunlight and temperature changes. Therefore, keep the required expansion gaps as specified. Refer to expansion and gap table on page 5.

## **PAINT & STAIN**

Do not paint BriteDeck® products with stains, paint, wax, oil, varnish or other similar products. Use of these products will void the warranty.

## **COLOUR:**

BriteDeck® is a natural product and may have slight differences in colour and shadows that evoke the natural look of wood, but do not detract from the quality of the product and its durability. Please assess the colour of the boards and mix the boards before the installation to achieve a natural blend of colour and textures. It is also advisable to purchase all required boards for your project in the same order to ensure consistency in tone and finish.

## **COLOUR FADE:**

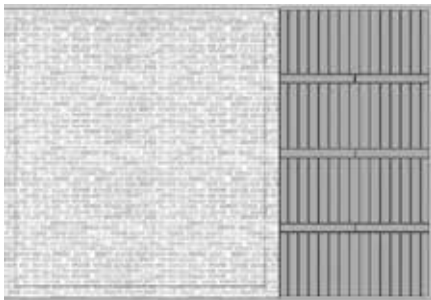
Maturation of the wood component – during the first weeks or months after installation, depending on the intensity of sunlight, rainfall and the season, there is a maturation of colour in the surface of the deck boards. It is the leaching of tannin from the wood component in WPC material. This process over time, with exposure to sunlight and rain, will return to the original shade.

# Deck Designs and Breaker Boards

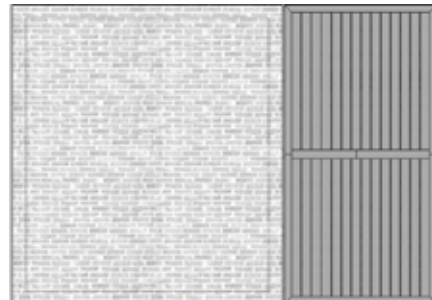
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## DECKING LAYOUTS:

For a stunning and long lasting deck, BriteDeck recommends the use of **Breaker Boards**.



Breaker Board



Breaker Board + Picture Frame

## PLANNING YOUR DECK:

Plan the layout of the deck before commencing the project to minimise wastage and avoid errors. It is strongly recommended you adjust your frame span to fit the full width of multiple boards including gap between the boards depending on the fastening system. Allow 5 mm for BriteDeck® concealed fastening system.

If the deck span is not multiples of the board width (including gaps between the board) it is recommended you trim the starter board to cater for the deck span.

Breaker boards run vertically across and split the deck into sections if the deck is too long. Apart from being aesthetically pleasing, breaker boards assist in managing and minimising expansion. Prior planning will avoid waste.

## GROUND CLEARANCE AND OVERHANG

Joist Span/Ground Clearance & Overhang						
Product	Dimension	Optimal Span (Residential)	Optimal Span (Commercial)	Min Ground Clearance (soil)	Min Concrete Clearance	Overhang
<b>HD Urban X</b>	138mm x 23mm x 5.4m	350mm	300mm	30cm	3cm	20mm
<b>NextGen Titanium</b>	140mm x 24mm x 5.8m	350mm	300mm	30cm	3cm	20mm
	210mm x 24mm x 5.8m	400mm	350mm			
<b>HD PRO</b>	138mm x 23mm x 5.4m	450mm	400mm	30cm	3cm	20mm

\* This applies for installation over normal ground. For installation over concrete/hard surfaces, please refer to page 19

If the boards are laid at an angle, ensure the furthest support joint does not exceed the span as above.

## EXPANSION & GAP

All WPC/Composite boards contain HDPE material and expand or contract with temperature variations. The table below shows the gap required where all boards intersect (including butt joints and breaker boards).

Rule of thumb – based on the temperature at time of installation:

- The higher the temperature the narrower the gap between butt joints
- The lower the temperature, the greater the gap (maximum 5mm).

### Recommended Minimum End to End Gap (Total) for Varying Board Length

Installation Temperature	1m Board	2m Board	3m Board	4m Board	5.4M Board	5.8M Board
<b>10C</b>	1.5mm	3.0mm	4.5mm	6.0mm	8.1mm	8.4mm
<b>20C</b>	1.0mm	2.0mm	3.0mm	4.0mm	5.4mm	5.6mm
<b>30C</b>	0.5mm	1.0mm	1.5mm	2.0mm	2.7mm	2.8mm
<b>40C</b>	0.2mm	0.4mm	0.6mm	0.8mm	1.0mm	1.1mm

#### Example 1:

- Max temperature of installation location is 40c
- Temperature at time of installation is 10c
- Length of board is 5.4 metres
- **End to End Gap should be 8.1mm**

#### Example 2:

- Max temperature of installation location is 40c
- Temperature at time of installation is 20c
- Length of board is 4 metres
- **End to End Gap should be 4.0mm**



## ALL FIXINGS SUPPLIED – FREE OF CHARGE

Your BriteDeck® purchase comes with everything needed to complete your decking project. If your joist sizes are non-standard or you require specific types of fixings please notify our sales consultants in advance.



*All fixtures you require  
for wood or metal  
frames will be supplied  
free of charge.*



## Installation Guide Video

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Watch our videos for more information you need on installation, including how to prepare your project area and tools: [BriteDeck Composite Decking Installation Videos](#)

# An overview

## CROSS SECTION OF A SUBFRAME



## STANDARD DECKING





# Step by step instructions

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## FIRST BOARD INSTALLATION

**For best results:** Commence installation from the outer edge, working back to the wall/house. All final adjustments can then be made close to the house.



1. Fit the starter clip to the end of the joist edge using a minimum of 4 clips per 5.8m board
2. The first board will easily slide into position – ensure it is firmly in place and straight across the length
3. Place deck clips on every joist but do not fix tightly – this will allow flexibility when installing second board



## SECOND BOARD INSTALLATION



1. Slide the second board in and place clips on ALL joists. Do not fix tightly
2. Adjust and check that the boards are straight before proceeding
3. The clips are designed to both hold the boards in position AND to assist in spacing the boards apart uniformly. Ensure boards are fully embedded in the clips
4. Return to the first board and fully drive the screw into the deck clip

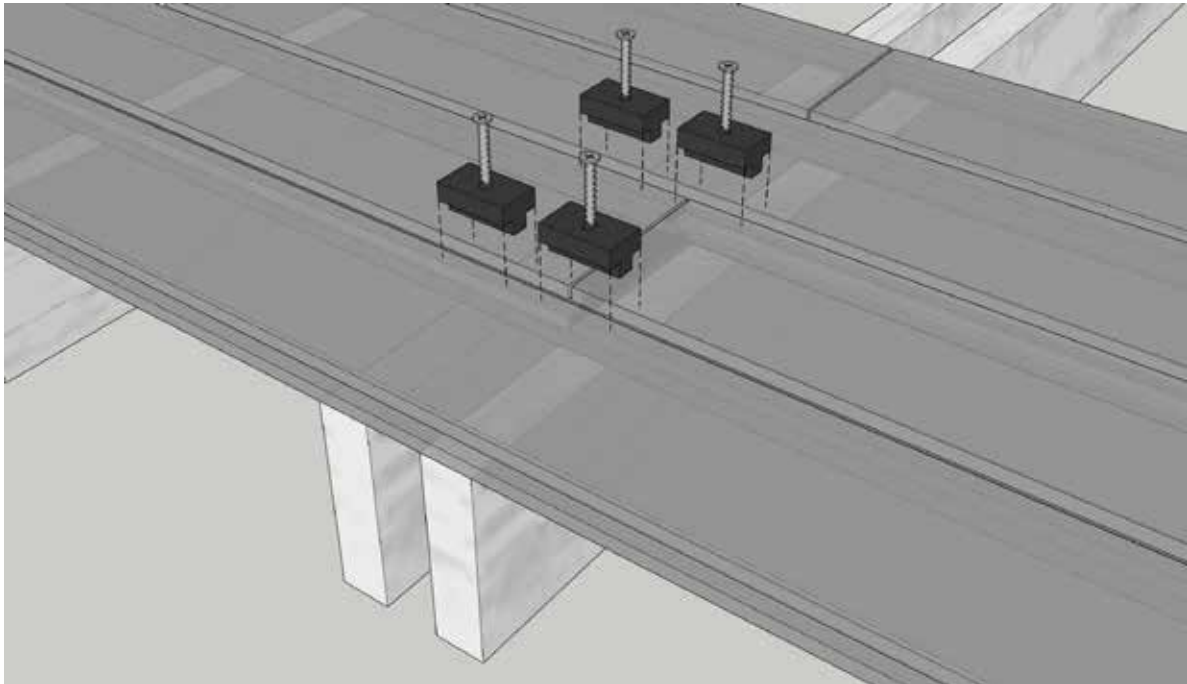
## REMAINING BOARDS

Once the first two boards are correctly positioned, multiple boards can be prepared and pushed together.



1. Place more boards alongside the first two without fixing these boards
2. Now slide the clips (with screws embedded) along from one end into place at the junction of each joist
3. Use a clamp (or timber block) to push all the boards together – ensure all boards are parallel
4. Drive the screws into place for all boards except the final board. The final board will act like a guide and should be loosely fitted (like the 2<sup>nd</sup> board) until the remaining boards are fixed
5. Continue installing boards towards the house/wall

## BUTT JOINTS



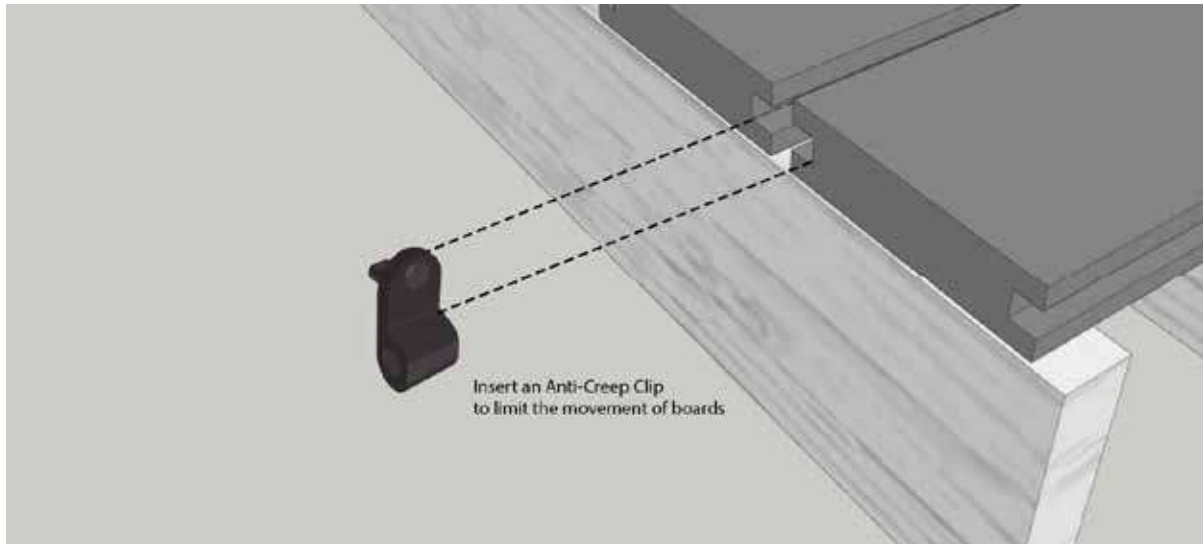
1. If a butt-joint is required, ensure the joints are “staggered” and butted over a double joist (one for each board end)
2. Deck clips should be placed on the edge of each board – NOT in the middle of both boards
3. Butt joints must be secured with 4 clips – 2 clips on either side as per above
4. Cut the boards oversize and trim to length when all boards have been laid

## PLEASE NOTE

Due to thermal expansion of composite decking, **BriteDeck highly recommends using a Breaker Board instead of Butt Joints.**

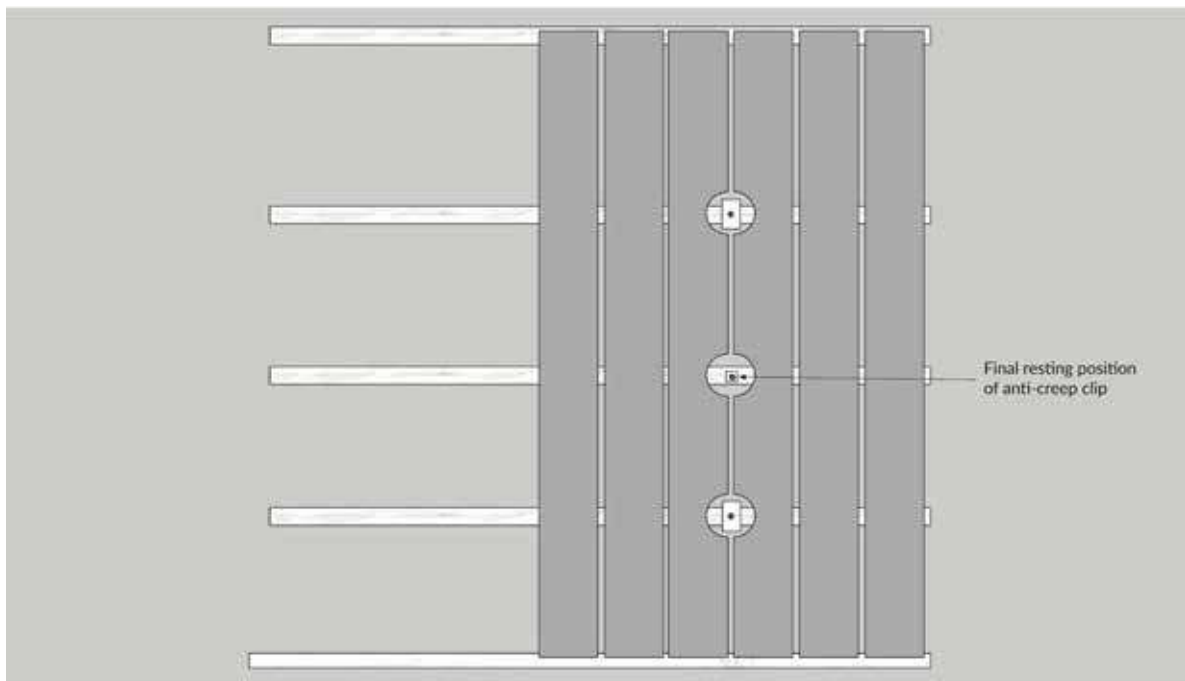
### ANTI CREEP CLIP — HOW TO INSERT

Anti-Creep Clips should be installed for lengths over 4m.

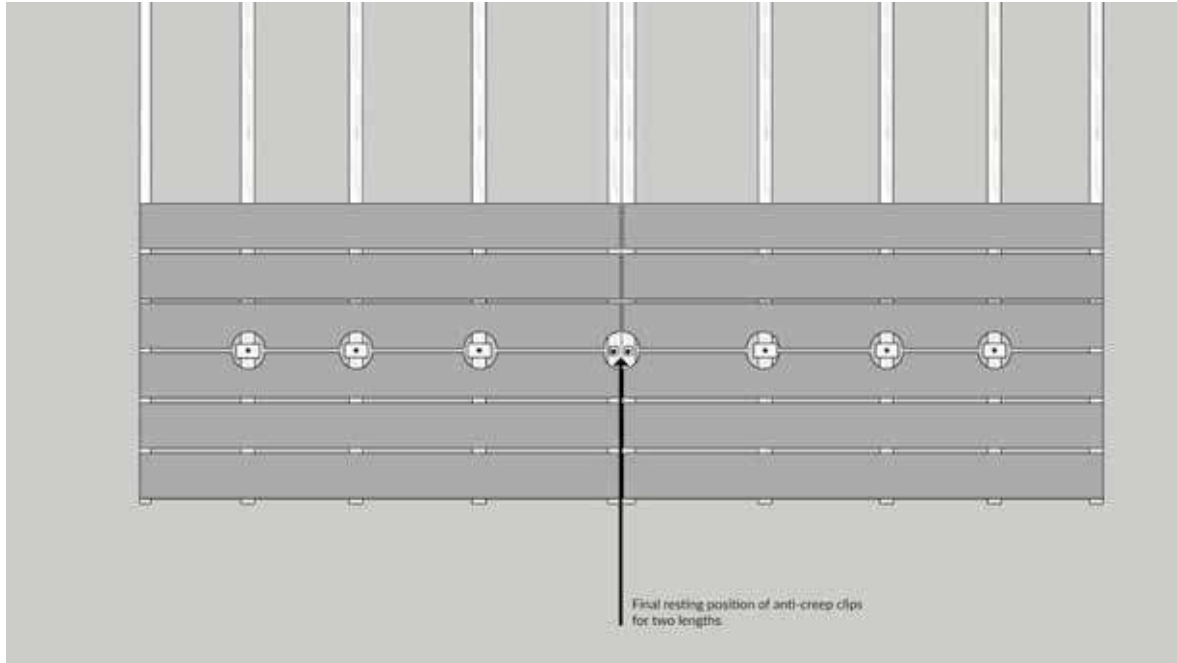


### ANTI CREEP CLIP — FINAL POSITION (ONE LENGTH)

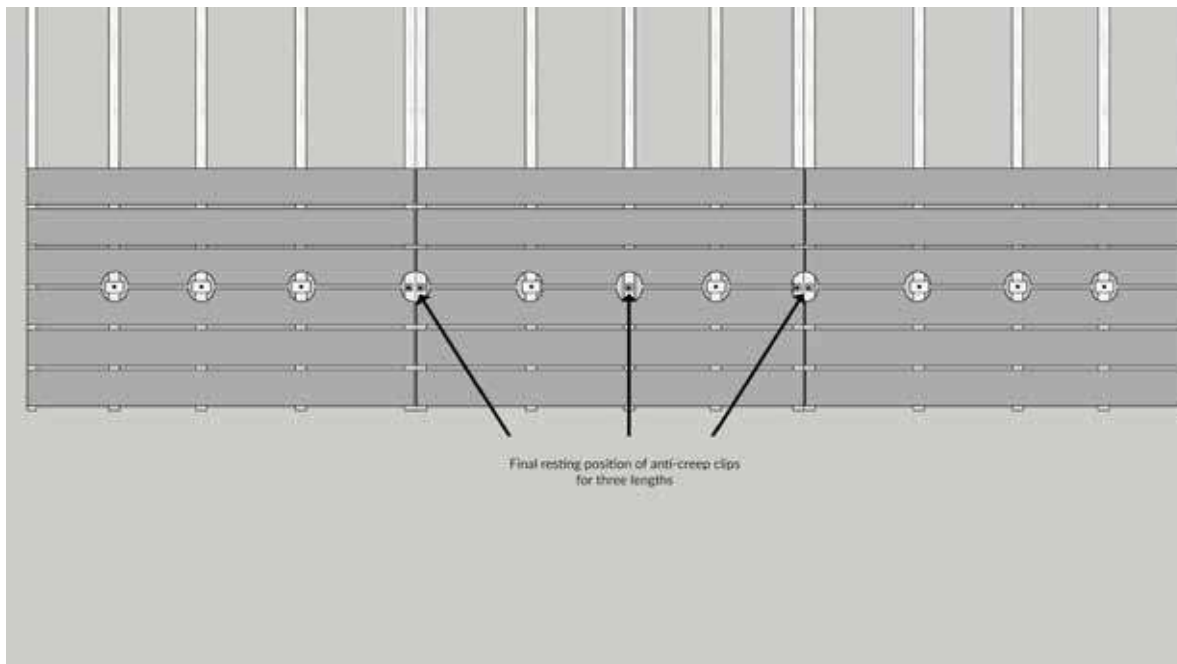
Anti-Creep Clips must be placed in the middle of the board. Install Anti-Creep Clips in place of normal decking clips



## ANTI CREEP CLIP — FINAL POSITION (TWO LENGTHS)



## ANTI CREEP CLIP — FINAL POSITION (THREE LENGTHS)

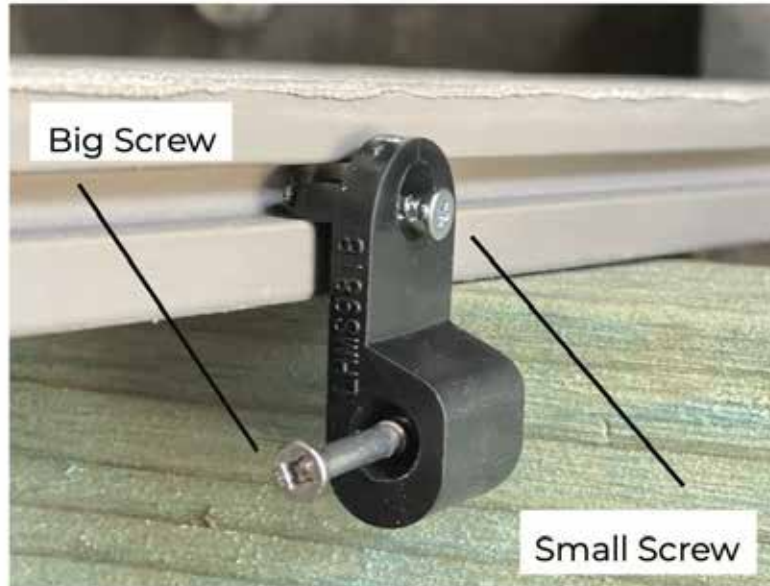






## HOW TO USE THE ANTI-CREEP CLIP

Anti Creep Clip prevents the board from creeping side to side along the joist.



### ***Step by Step***

- 01** Align your decking board in its final position.
- 02** Fix an Anti Creep Clip to middle of the board adjacent to a bearer.
- 03** Use one Anti Creep Clip per board.

## **BREAKER BOARDS — CROSS SECTION**

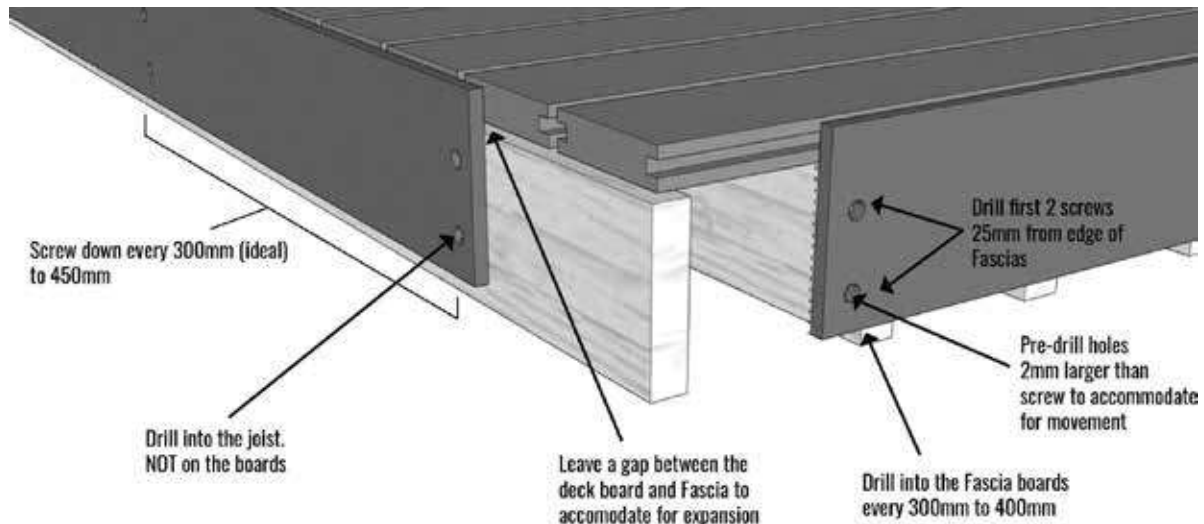
**Breaker Boards are strongly recommended for deck lengths over 4m instead of multiple Butt Joints.**



- Breaker boards are a more elegant solution to Butt Joints
- Breaker boards are placed perpendicular to the other boards and should be installed with support on both edges – i.e. 4 joists in total:
  - 1 on each edge
  - 1 to hold the end of the parallel board
  - 1 to support the breaker board on each side
- **Breaker boards should be installed before the other boards**

## FINISHING YOUR DECK - FASCIA BOARD (OPTIONAL)

Fascias are available in a variety of colours and are a great way to finish off your deck.



- Install the fascia boards into the sub frame and joist – NEVER directly into the decking board
- Install the fascia “face fitted” below the deck edge to avoid any expansion issues
- The following best practices should be employed when installing decking materials vertically:
  - Ensure the support structure can support the load
  - The maximum distance between supporting beams/battens should be 450mm
  - Pre-drill holes 2mm larger than the screw head to accommodate for expansion
  - If installing multiple fascia in a row, leave a +/- 2mm butt joints expansion on either side to accommodate for expansion (slightly larger if installed in temperatures of 15 degrees or less)



## PLEASE NOTE

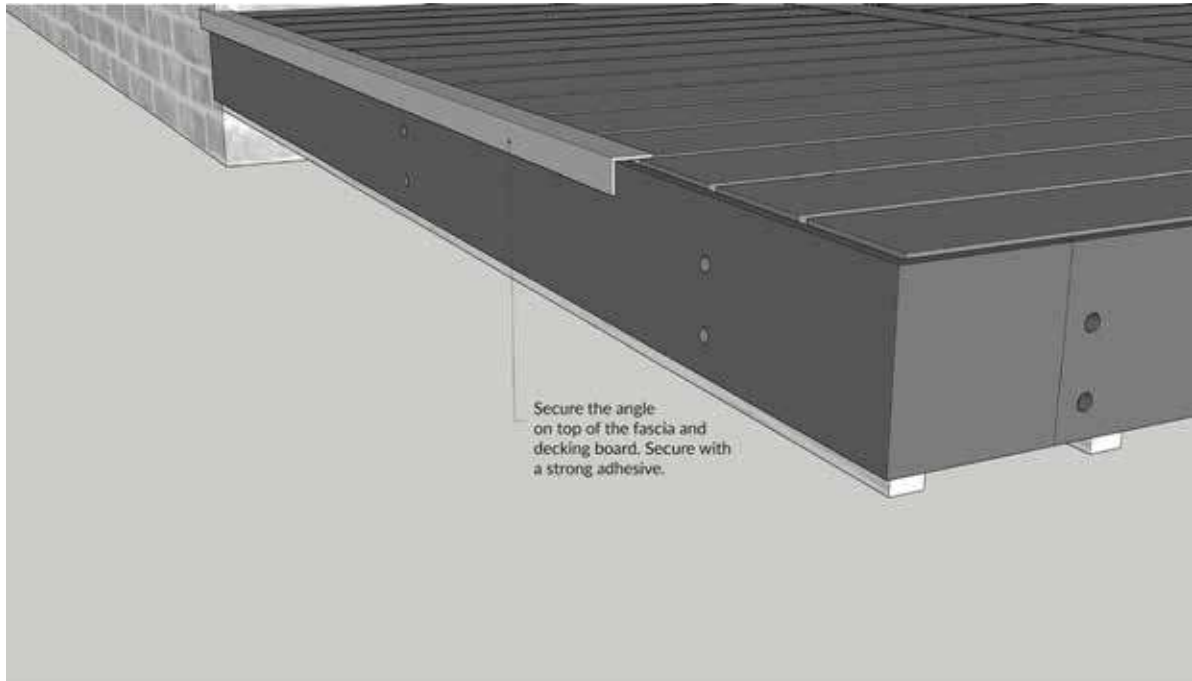
DO NOT use fascia boards for vertical areas 60cm or higher. This accessory is lightweight and thin to allow for easy vertical installation and should not be used to create or clad a large vertical area.

- Ensure the starting 2 screws are installed 25mm from the edge and work forward securing screws at every 300mm to 450mm intervals



## **FINISHING YOUR DECK - ANGLES (OPTIONAL)**

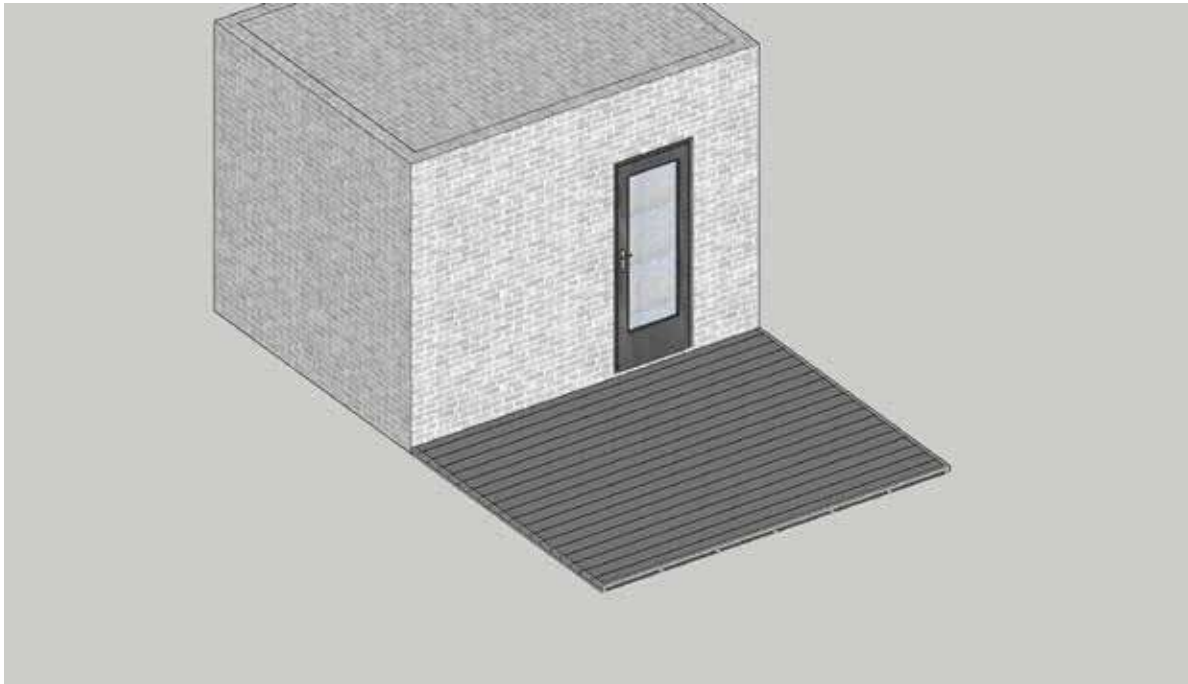
Our Angles are available in selected colours



- Angles can be fixed onto fascia or directly onto decking boards
- Use either adhesive or counter sunk screws when fixing

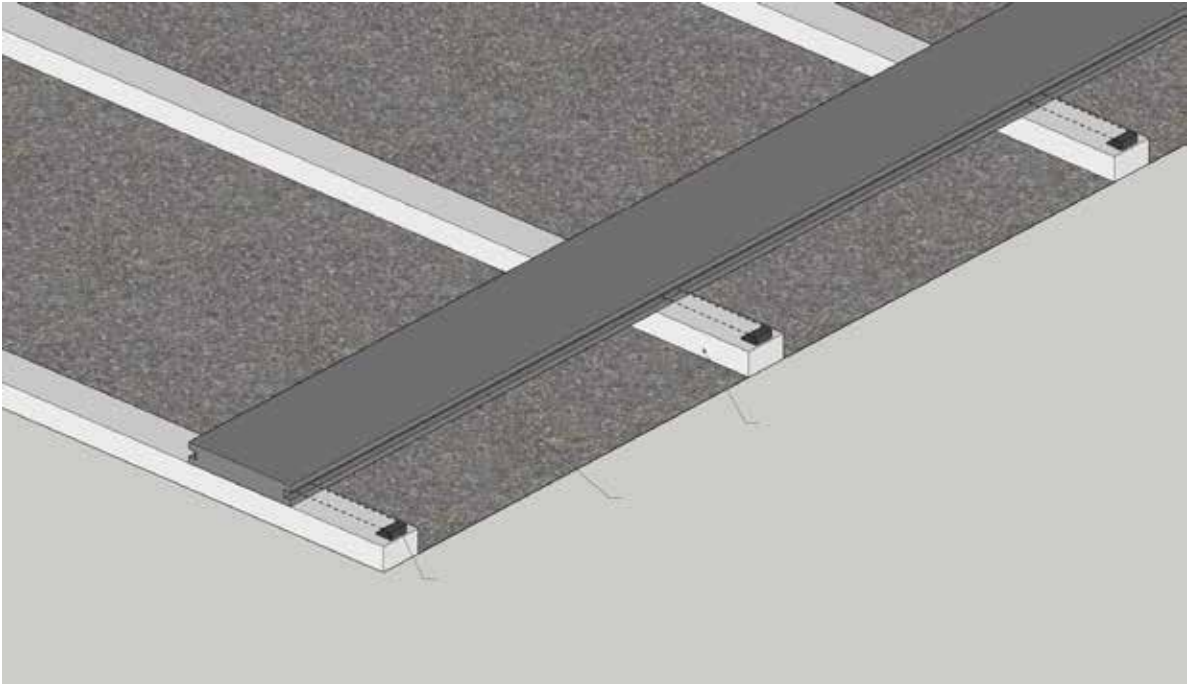
## DECKING OVER CONCRETE

BriteDeck® works with minimal clearance requirements and can be fitted onto concrete using our high-quality composite battens (2.9m OR 2.2m X 57mm X 32mm).



- BriteDeck® battens can be laid with either side vertical (57mm or 32mm) depending on your preference. Use a maximum spacing of 450mm.
- **57mm:** If 57mm is horizontal, use a Dynabolt to affix the battens to concrete. On a 2.9m batten length 3 bolts will be adequate
- **32mm:** If 32mm is horizontal, a 90-degree right angle bracket should be fitted to both the batten and into the concrete

## FIRST BOARD INSTALLATION (OVER CONCRETE)

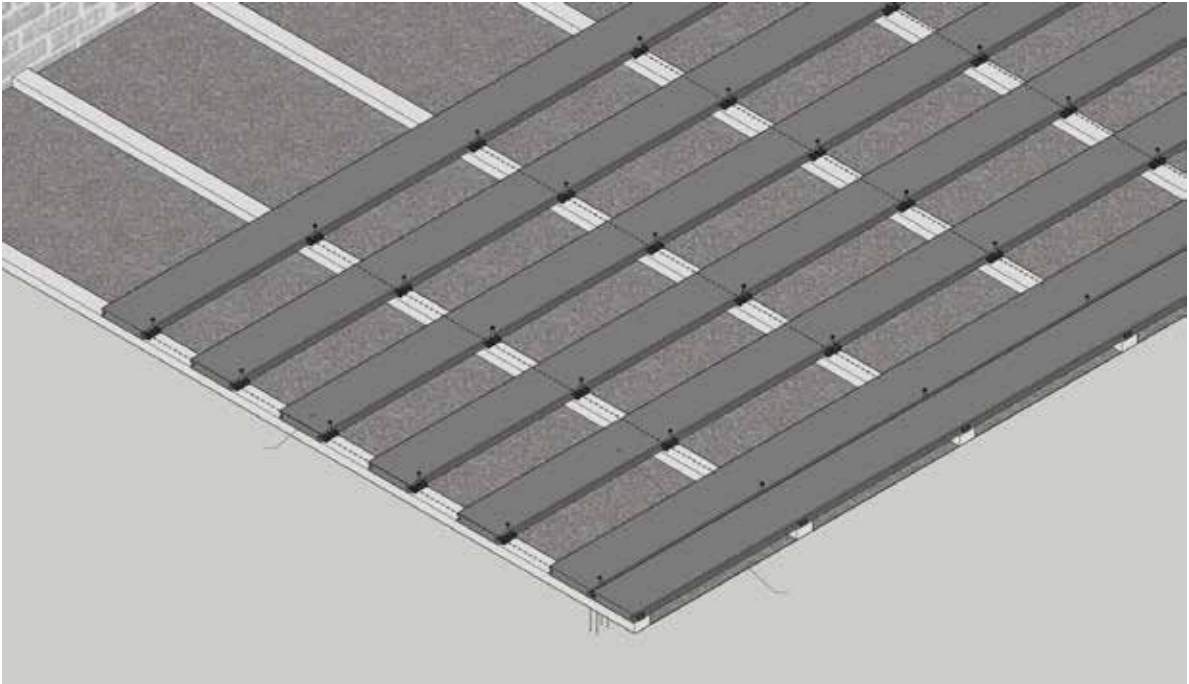


Fit the decking to the batten using starter clips and timber concealed fastening system as outlined on pages 9 and 10.



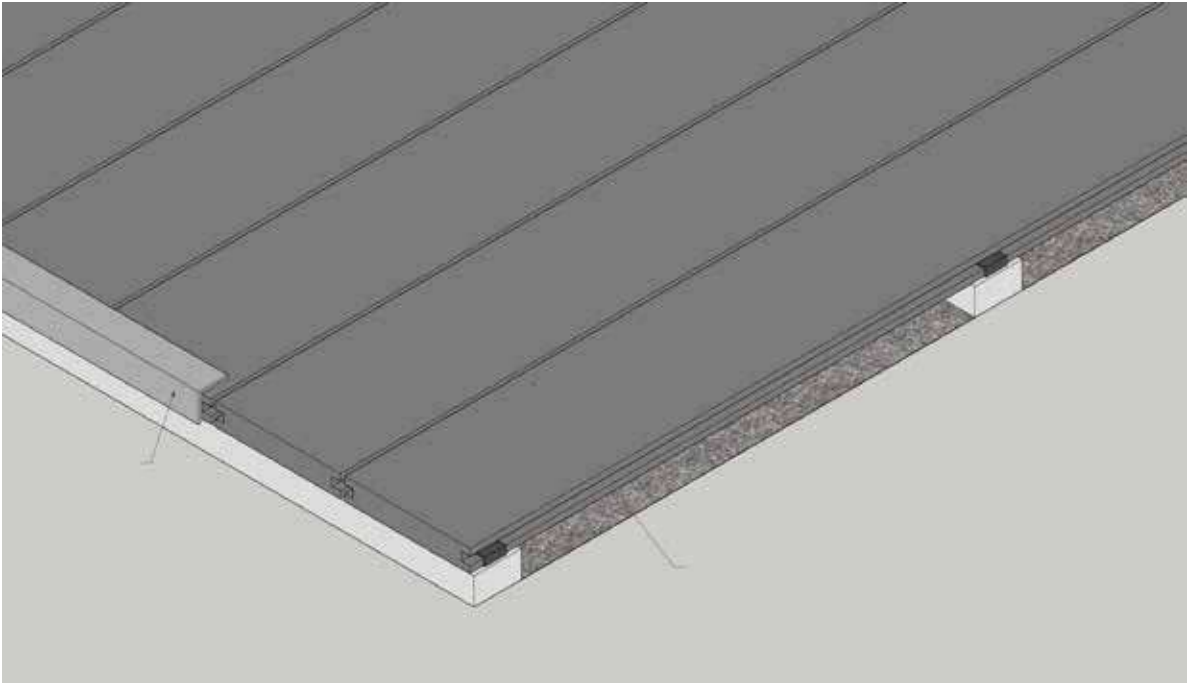
### **REMAINING BOARDS (OVER CONCRETE)**

Battens can be sawn or drilled as if timber, no special tools required.



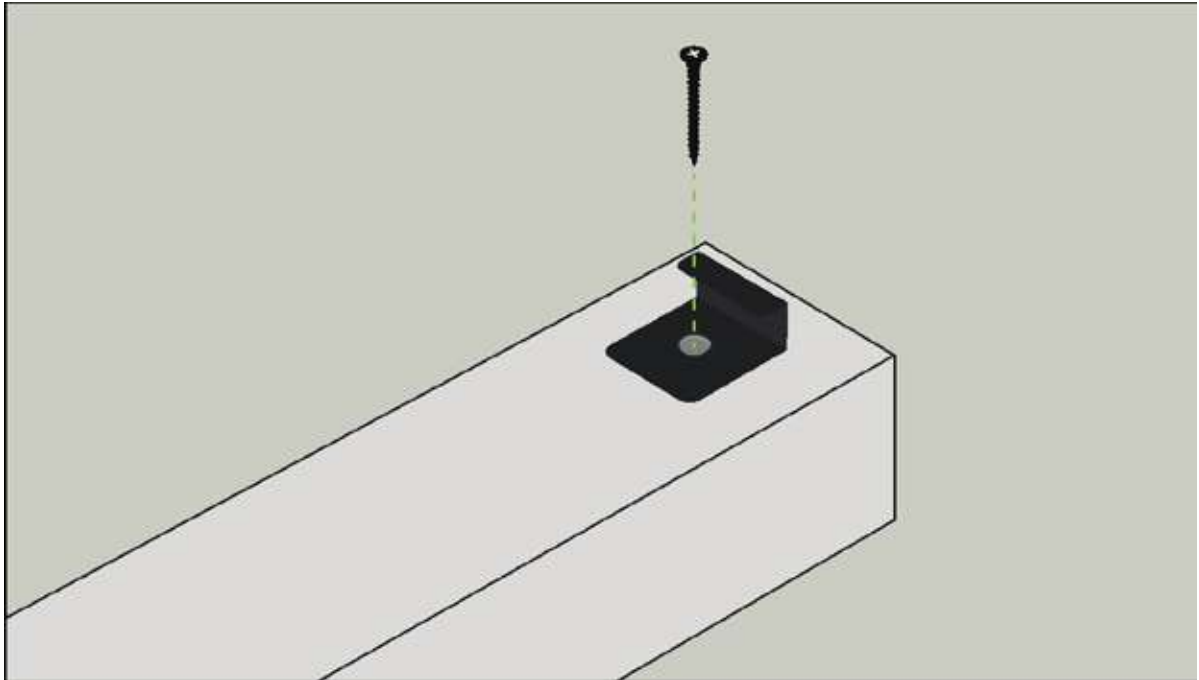
### **FINISHING YOUR DECK (OVER CONCRETE)**

Install angles directly onto boards using an adhesive or counter sunk screw.



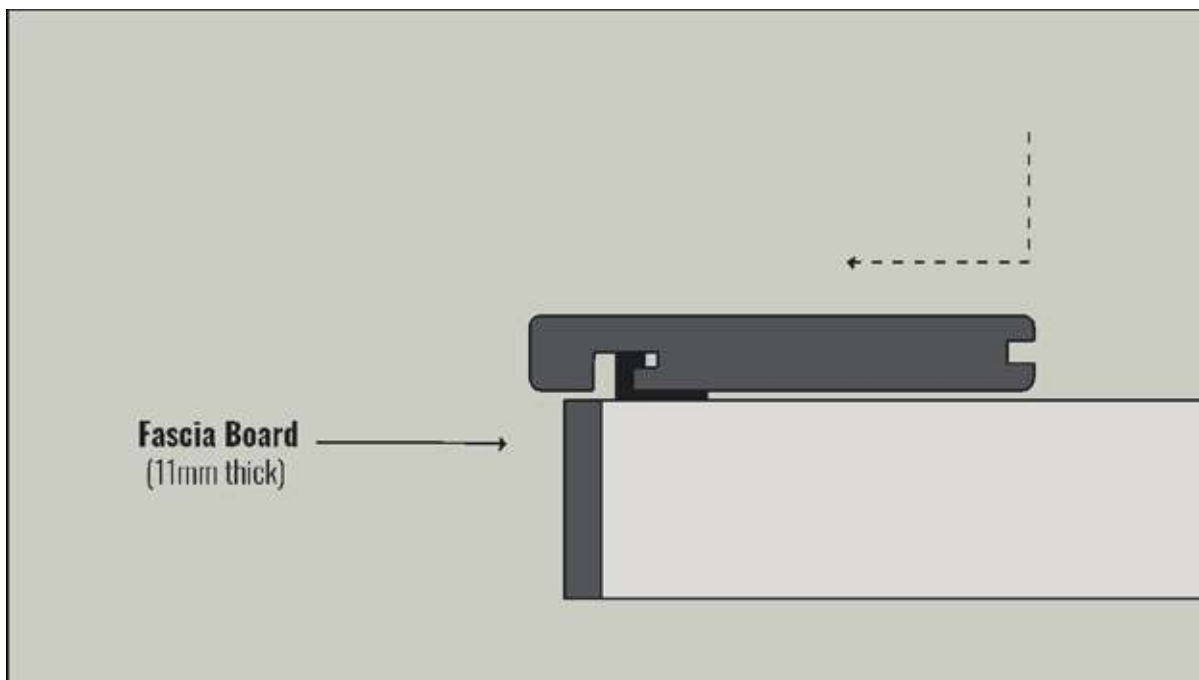
### INSTALLING BULLNOSE (OVERHANG)

Place the starter clips. Secure in place with the respective screws. Ensure the spacing measurements are correct.



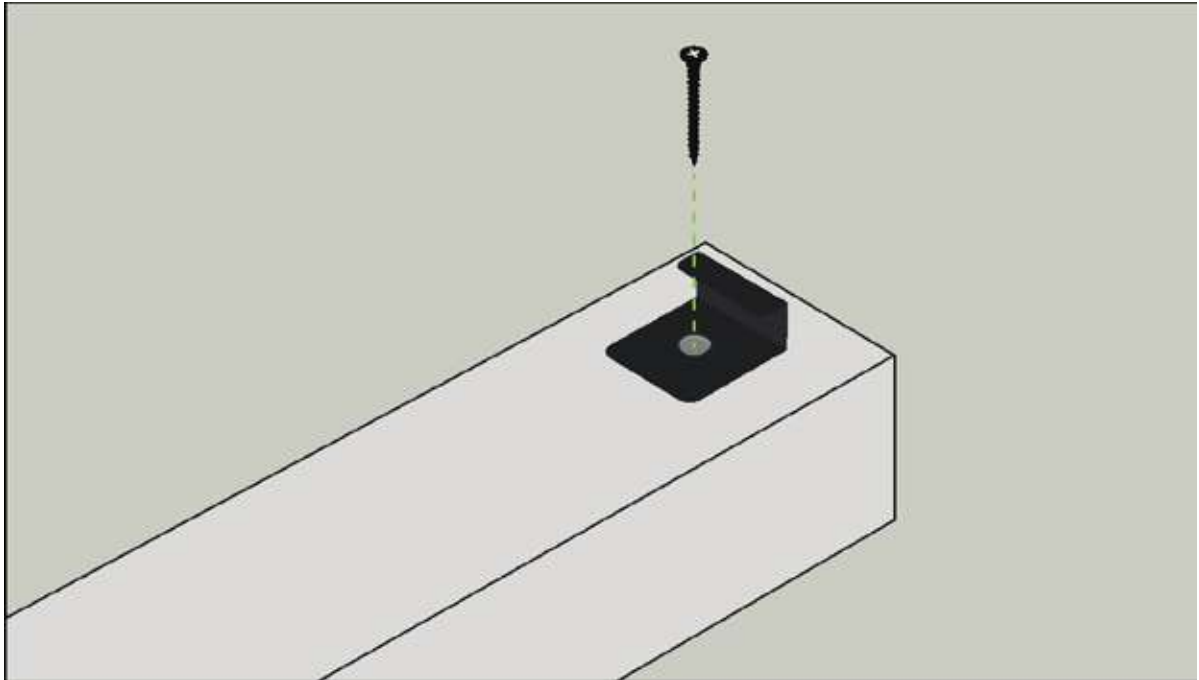
### INSERT BRITEDECK BULLNOSE BOARD

Insert Britedek Bullnose deck board over the clips and push it forward. Secure in place with Universal Clips as require.



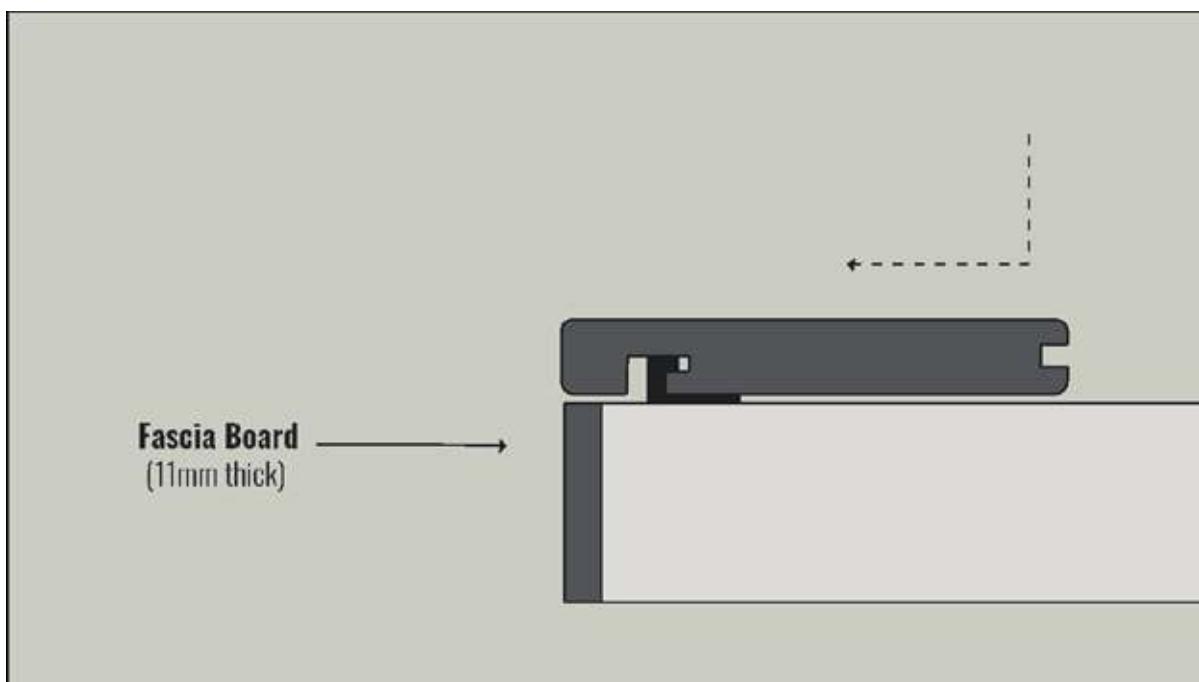
## INSTALLING BULLNOSE (FLUSH FINISH)

Place the starter clips. Secure in place with the respective screws. Ensure the spacing measurements are correct.



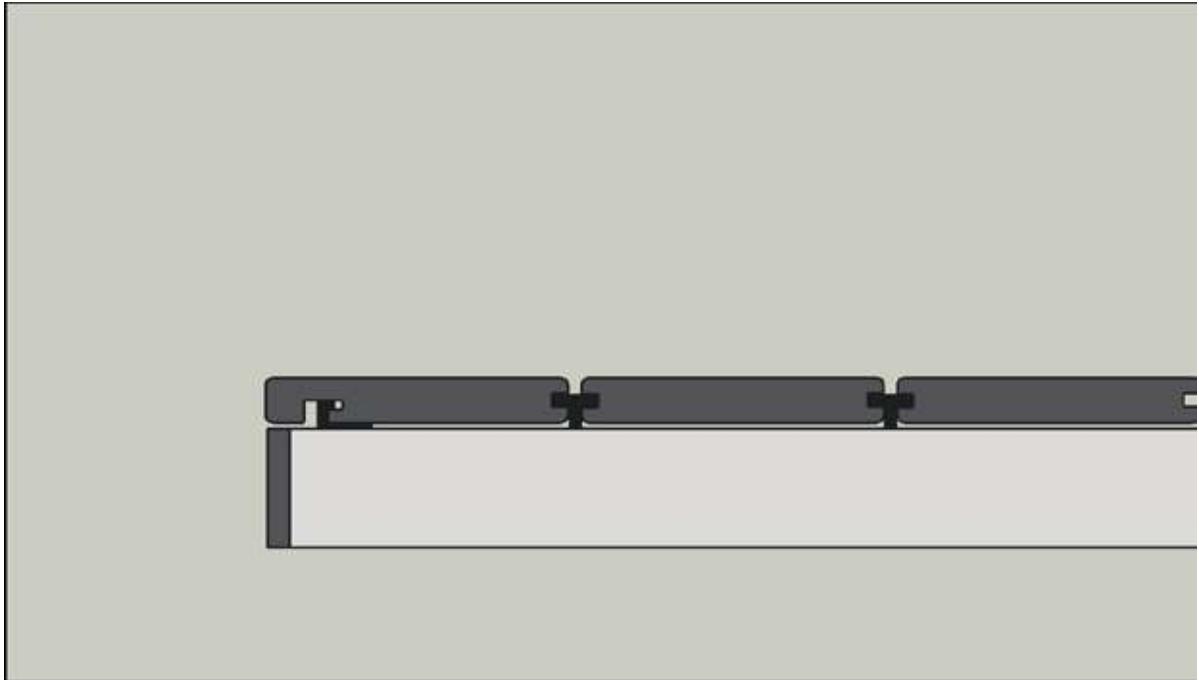
## INSERT BRITEDECK BULLNOSE BOARD

Insert Britedek Bullnose deck board over the clips and push it forward. Secure in place with Universal Clips as require.



### INSERT BRITEDECK BULLNOSE (BOARDERS)

After installing BriteDeck's Bullnose board, as per instructions, use the Universal Clip to secure the rest of the deck. See **Using the Universal Clip** overleaf.



### INSERT BRITEDECK BULLNOSE (STEPS)

Install the BriteDeck's Bullnose board as per the illustration below. Leave a gap behind the board to enable to fit the Fascia boards

