

PuraShield™

Technical Installation Guide



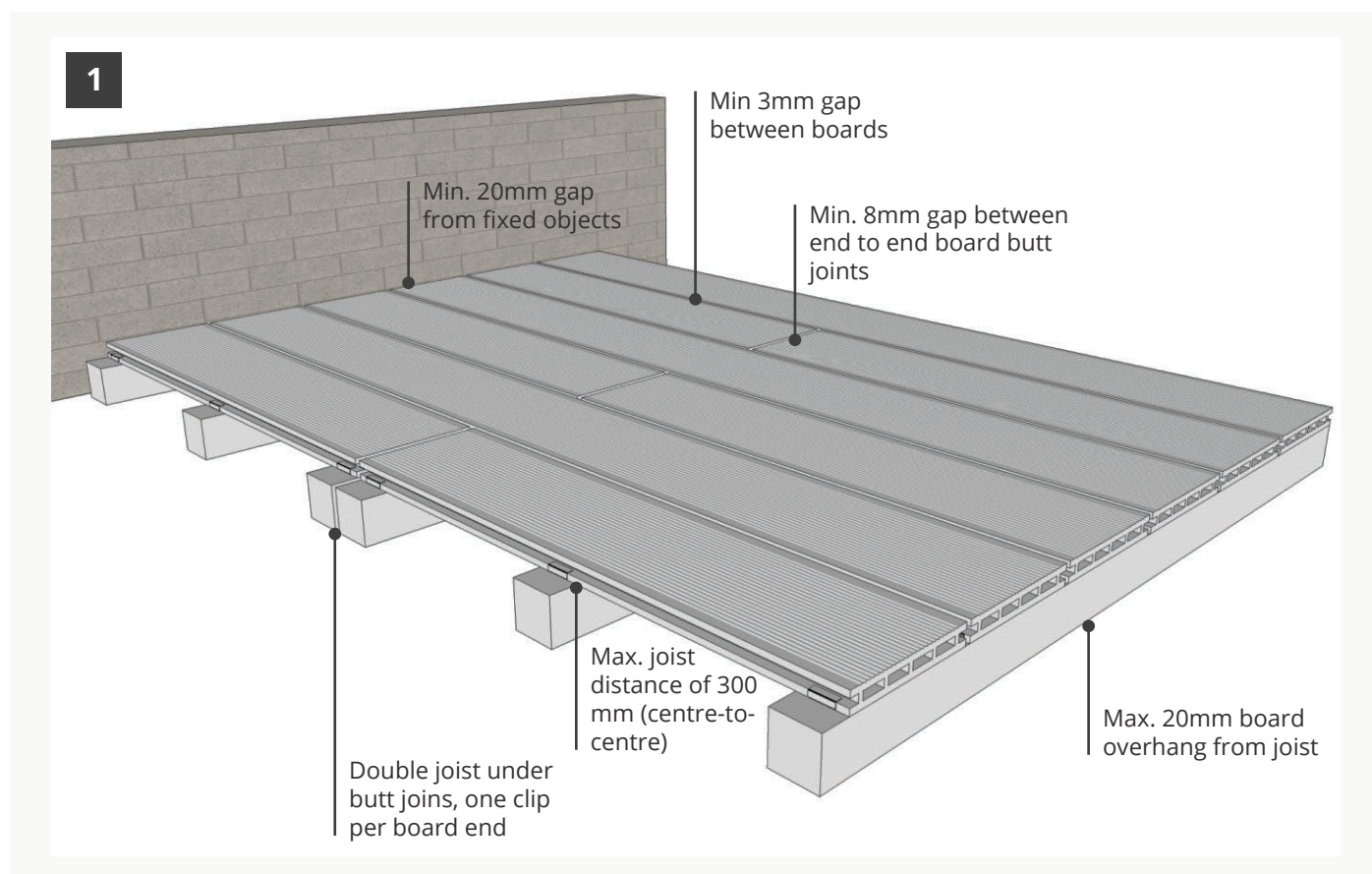
Spacing Composite Materials

Please ensure the correct sized 3 mm pilot holes (when using PuraFix™ secure screws) are pre-drilled before screwing into all composite products to avoid splitting. The length of the hole must be at least the same length of the screw.

Spacing the Boards & Sub-Frame

Due to natural expansion and contraction of material with changes in temperature, please ensure the following gapping requirements for all PuraShield™ Decking products:

- PuraShield™ Decking boards should have a min. 3 mm gap side to side
- PuraShield™ Decking board butt joint should have a min. 8mm gap end to end
- Plastic lumber joist butt joint should have a min. 20 mm gap end to end
- A min. 20 mm gap is required when abutting walls or other fixed objects
- PuraShield® Decking boards should not overhang joists by more than 20mm
- To ensure sufficient water run-off a drainage slope of 0.5% (5 mm per meter) should be incorporated

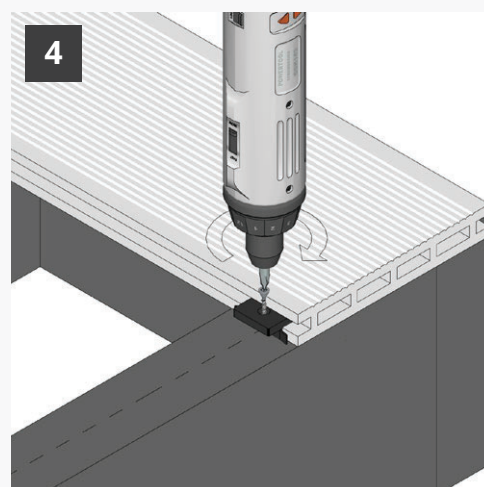
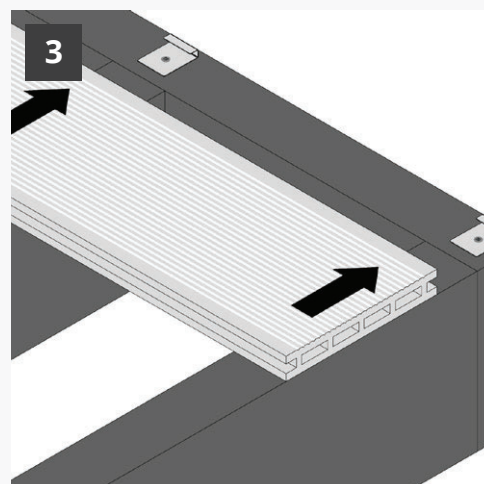
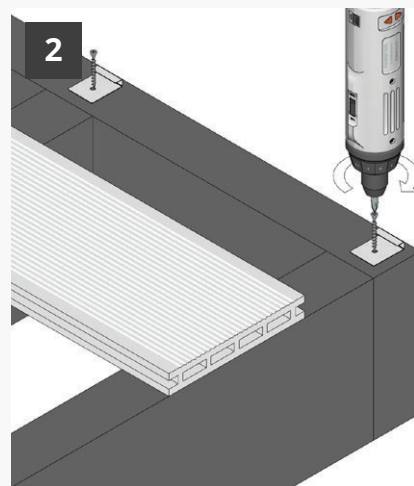


Decking Installation

With your sub frame levelled and stable, you can now start installing your deck boards. If you are installing PuraShield™ Edge board (p. 09-10) or PuraShield™ Edge board (p. 12), it is recommended to install the corner trimmings before installing the deck boards.

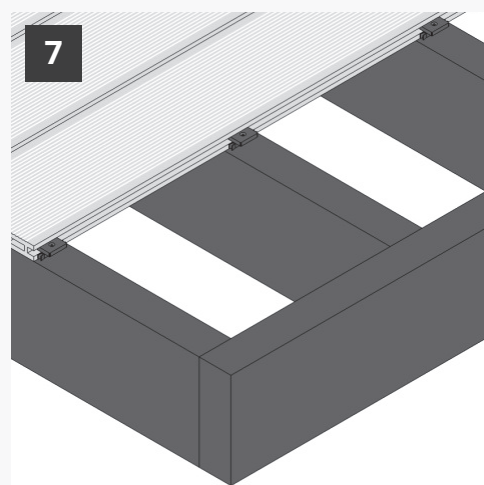
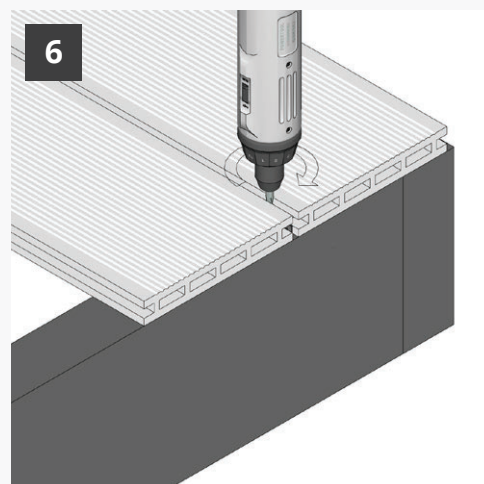
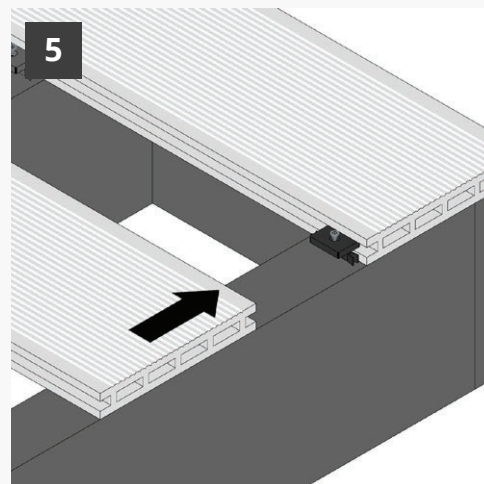
Installing the Deck Boards

- 1** The first board must be fixed with PuraFix™ hidden starter fasteners that will clip to the side groove of the board (fig. 2):
 - Align the starter fasteners along the first joist, every 300 mm along the joist length
 - Securely screw each clip to the joist
 - Simply clip the first decking board to the starter fasteners (fig. 3)
- 2** To fix adjacent boards, place PuraFix™ hidden fasteners (3 mm or 6 mm) into the grooved edge of the fixed board and insert the secure screw into the hidden fasteners (fig. 3)
 - Screw holes should be lined up with joist centres
 - Ensure the counter sunk section of the hidden secure clip is facing up
 - Install 1 hidden clip on each joist
 - Always use hidden clips at board ends
 - Use 1 clip per board end at butt joints (never share a clip across 2 board ends)
- 3** For 6 mm hidden clips, lightly screw in place, do not tighten at this point (fig. 4).
 - For 3 mm hidden clips, fully tighten the screw at this point



Decking Installation

- 4** Place the next board into position against the hidden clips (**fig. 5**)
 - Slightly raise the outer edge of the board being installed and slide it onto the hidden clip
 - Ensure the decking board edge contacts the spacer tab
 - Lightly tap into position if required
- 5** Fully tighten the hidden clips, between the last boards installed, down to the joists (**fig. 6**)
 - Apply sideward pressure on the decking to ensure that the tabs are hard up against the inside of the decking groove
- 6** Repeat steps 2 - 5 until you have reached the last 2 boards (**fig. 7**). The last board can be fixed in 1 of 2 ways outlined on the next page
- 7** If you plan on using Edge Boards to finish your project skip to **p. 9**, or if you plan on installing a 'picture-frame' border then consult **p. 8**.



Last Deck Board Installation

PuraFix™ Hidden 6 mm Clip Method

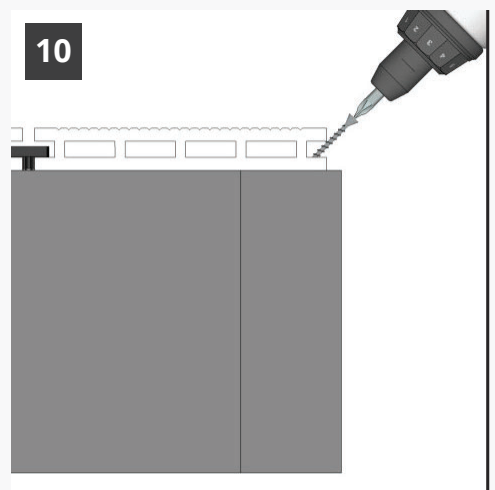
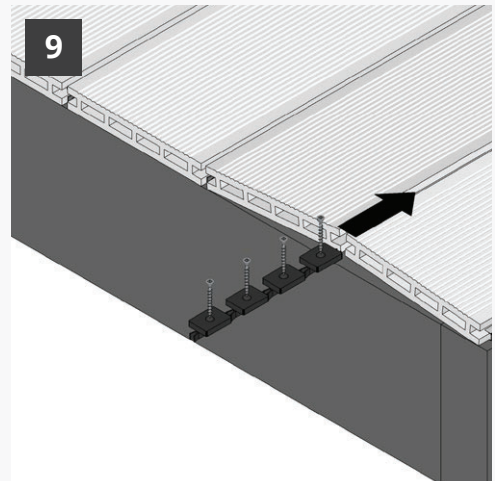
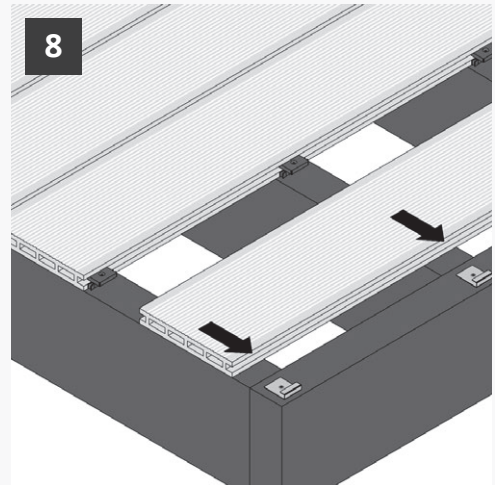
Knowing the width of the last 2 boards including the 6 mm spacing gap between them, mark on the last joist where the outer edge of the final board would lie.

- Using these marks, install the hidden starter clips securely in place for the outer edge of the last board
- Clip the last decking board to these starter clips (**fig. 8**)
- With the final board in place, insert the penultimate board
- With the 2 boards in place and at least a 6 mm gap between them, slide down the require number of 6 mm hidden clips (**fig. 9**)
- Secure the clips to the joists in between the last boards
- This option will only work with the 6 mm hidden clips. If you are planning on using the 3 mm clips, you must use the below method

PuraFix™ Hidden 3 mm Clip Method

With the last board in place after securing all other boards, screw through the bottom edge of the last board at an angle, securing it to the joist at 300 mm intervals (**fig. 10**)

- Pre-drill pilot holes in the deck boards 2 mm wider than the width as the screw shank
- Do not over drive screws into the deck boards to avoid the material splitting



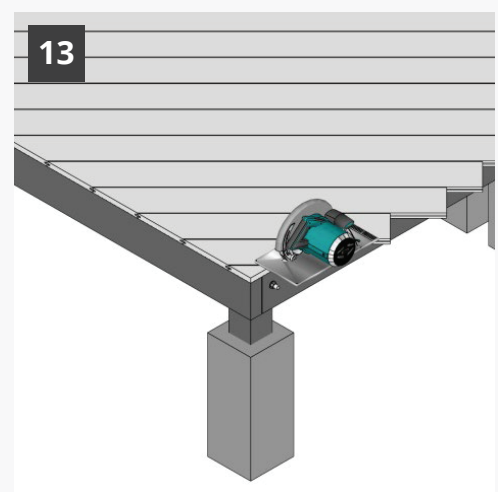
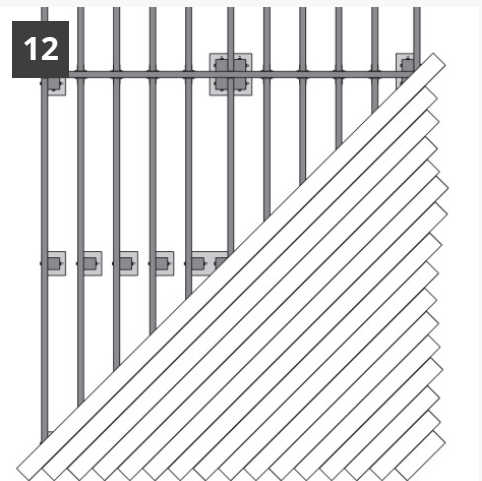
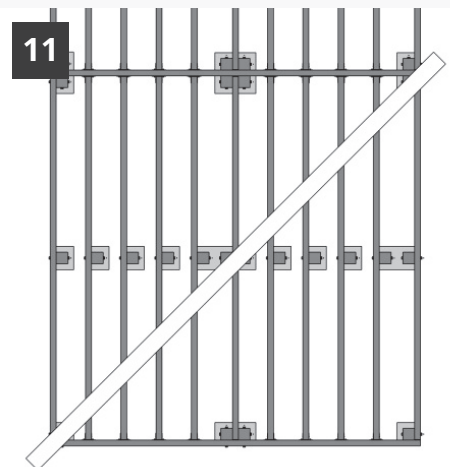
Diagonal Decking Installation

Before You Start

- Recommended joist centres for diagonal installation are 250 mm
- It is recommended that you add 15% extra material as you will generate more scrap from cutting

Diagonal Decking Installation

- 1** Place the central board first; ensuring to place the board at a 45° angle (**fig. 12**)
 - Install 1 hidden clip each time the board crosses a joist
 - Always use hidden fasteners to secure board ends
 - Use 1 clip per board end at butt joints (never share a clip across 2 board ends)
 - Use a mitre square to ensure an exact 45° angle
- 2** After laying the central board, progressively place each board outward toward the subframe corners (**fig. 12**)
 - Boards offcuts can be kept and used for finishing the corners
 - Allow a slight overhang over the edge of the substructure
- 3** Once all boards have been fixed in placed, trim the deck board overhang with a circular saw (**fig. 13**)
 - Complete the deck with finishing as per **p. 8-12**

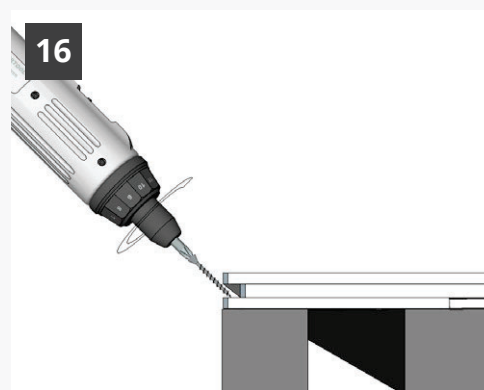
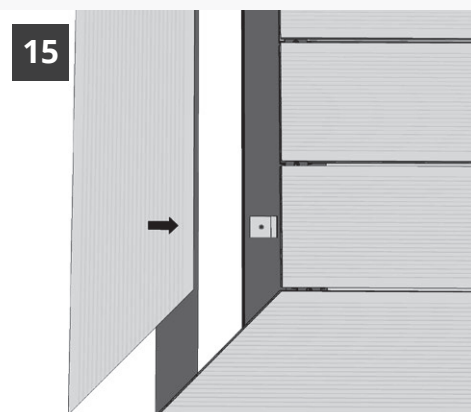
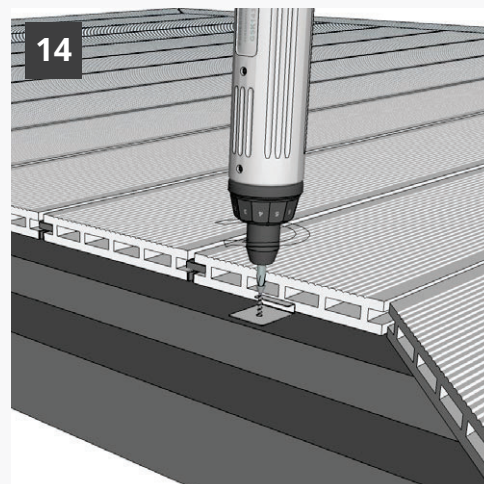


Picture Frame Border Installation

If you are planning a picture frame border design (a board that runs around the perimeter of the deck) using either deck boards or PuraShield™ Edge board you need to ensure you install the correct substructure layout.

Picture Frame Using Deck Boards

- 1** A full joist width must be used under each deck board end, thus where the picture frame board runs perpendicular to the main deck, you must have a double joist structure (**fig. 16**)
- 2** Where the picture frame runs parallel you can install the board as per steps 1-6 (p. 3-4) with a 45° mitred end (**fig. 15**)
- 3** For the boards that run perpendicular to the main deck, place starter clips on the inner joist to hold the inner board edge in place (**fig. 14**)
 - A clip should be installed every 300mm along the length of the joist
- 4** Slide the picture frame board into the starter clips (**fig. 15**)
 - You must leave the standard expansion gap between the mitred ends of the picture frame border
- 5** With the picture frame board in place, screw through it's outer bottom edge at an angle, securing it to the joist (**fig. 16**)
 - Pre-drill pilot holes in the deck boards 2mm wider than the screw shank
 - Do not over drive screws into the deck boards to avoid the material splitting



Edge Border Installation

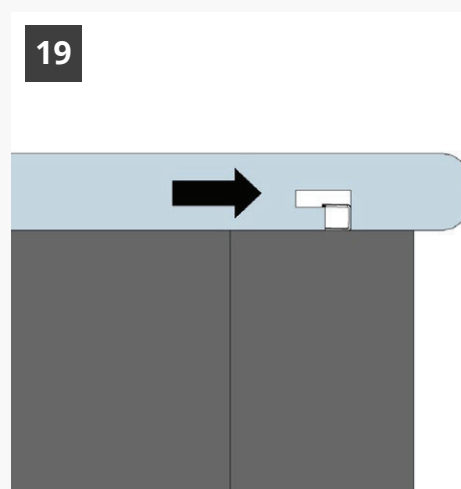
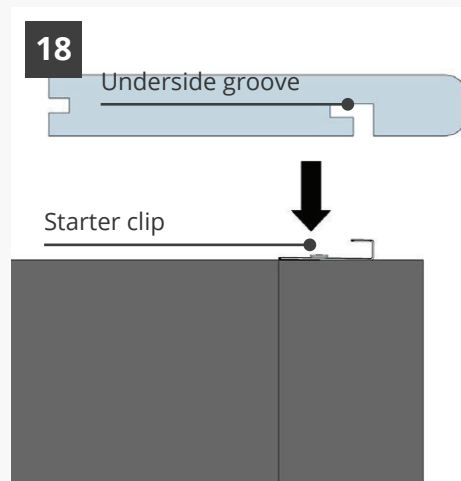
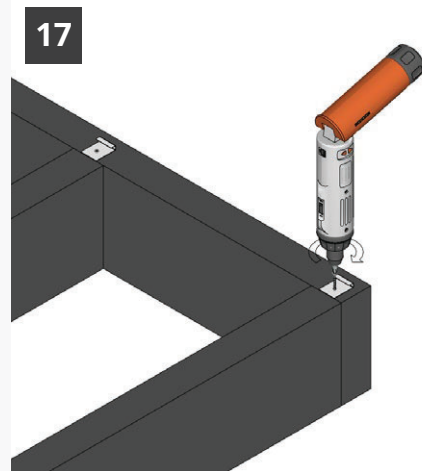
Picture Frame: Edge Boards

PuraShield™ Edge boards can be used with the hidden clip system to create a flush finish for steps and deck board edges. There are two methods for installing the edge board, parallel and perpendicular to the decking

- Ensure to keep a 6mm expansion gap between edge board butt joints (min. 0.2% of the boards length)
- The edge board must be installed before laying down the decking
- This option is only available in the Frontier range

Parallel Board Installation

- 1** Where fixing the edge boards around a corner, mitre the ends at 45° angles
- 2** Secure starter fasteners onto the outer joist (fig. 17) at 400mm intervals
- 3** Line up the edge board and lay the underside groove directly on top of the starter fasteners (fig. 18)
- 4** Push the board forward to lock the board (fig. 19)
- 5** Secure the remaining side of the edge board with hidden fasteners following steps 1-6 (p. 3-4)

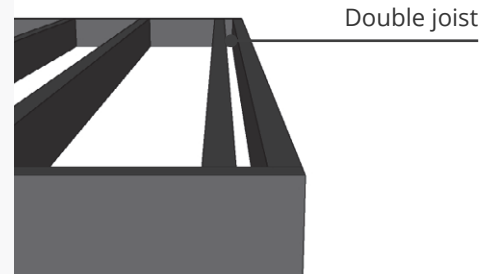


Edge Border Installation

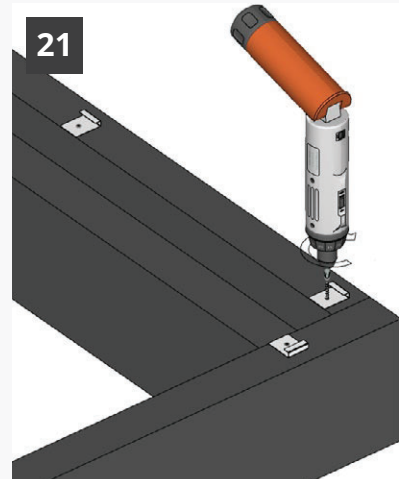
Perpendicular Board Installation

- 1** A full joist width must be used under each deck board end, thus where the edge board runs perpendicular to the main deck, you must have a double joist structure (**fig. 20**)
- 2** Secure starter fasteners onto the outer joist (**fig. 21**) at 400mm intervals
- 3** With the edge board in place, screw through the hidden clip groove at a 45° angle, securing it to the joist (**fig. 22**)
 - Pre-drill pilot holes in the deck boards 2mm wider than the screw shank
 - Do not over drive screws into the deck boards to avoid the material splitting

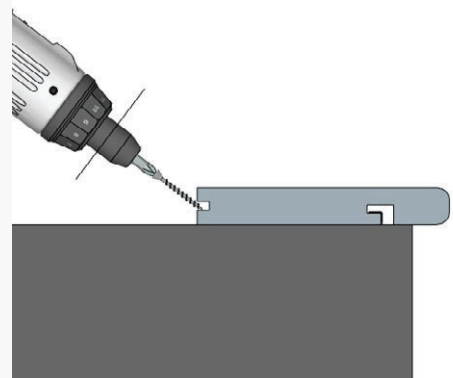
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Fascia Board Installation

Before You Start

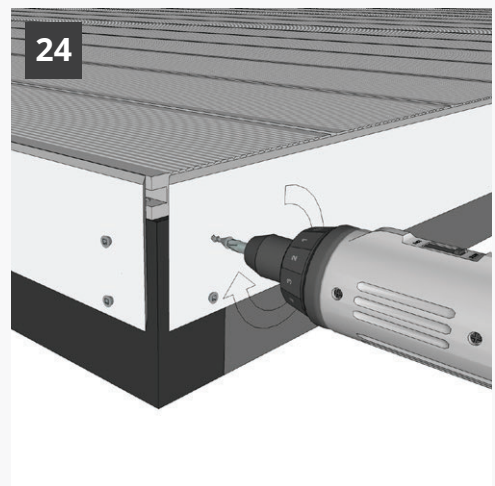
You must ensure a suitable ventilation gap is left around the base of a deck allowing air flow:

- Hard / concrete foundations: min. 20mm gap
- Soft / non-concrete foundations: min. 40mm gap

Option 1: Fascia Board

PuraShield™ fascia boards can be used to skirt visible deck edges. This option will result in visible (although colour-matching) screws.

- 1** Line up the top fascia board edge with the top of the decking to hide the grooved decking edge (fig. 25)
- 2** Pre-drill 4mm countersunk pilot holes through the fascia board to avoid material splitting (fig. 24)
- 3** Fix in place with 60mm PuraFix™ screws:
 - Fascia boarding should only be screwed in place
 - It is not recommended to attach the boards using adhesive glue
- 4** Ensure you have left appropriate expansion gaps where fascia board ends meet, min. 0.2% the board length



Rip Cut Deck Boards

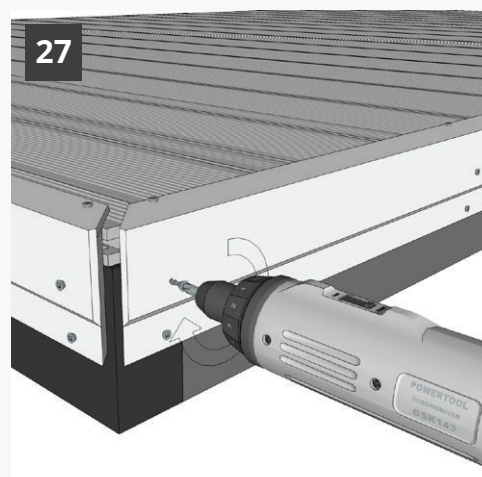
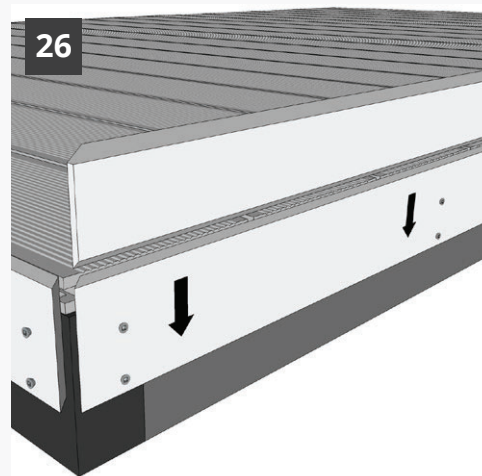
To skirt visible edges on PuraShield™ decking, we recommend rip cutting a deck board, cutting along the grain (lengthwise), and installing it as you would fascia boards.

Corner Trim Installation

Option 2: Corner Trim

PuraShield™ corner trim can be used with PuraShield™ fascia and deck boards to cover exposed board sides and substructure. This option will result in visible (although colour-matching) screws.

- 1** Measure the required amount of PuraShield™ corner trim and cut down to size, mitre down the ends at 45° angles if installing around corners (fig. 26)
- 2** Cover the deck edge with corner trim and attach with screws
- 3** Pre-drill 4mm countersunk pilot holes (fig. 27)
- 4** Fix with 50mm countersunk screws (fig. 27)
 - Do not overdrive screws when through composite products, finish tightening by hand
 - Corner trims should only be screwed into the deck.
 - It is not recommended to attach the trim using glue.
- 5** Ensure you have left appropriate expansion gaps where corner trim ends meet, min. 0.2% the board length (fig. 27)



Steps & Stairs Installation

Before You Start

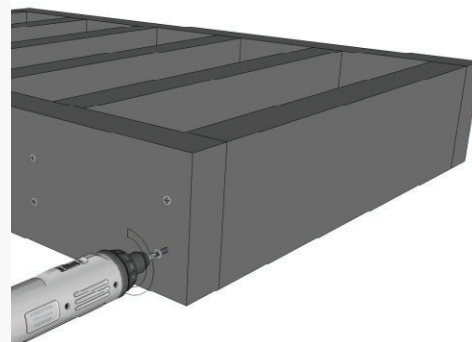
Steps must be min. 2 boards deep and max. 190 mm high per step rise (220 mm in private installations)

Installing Deck Steps & Stairs

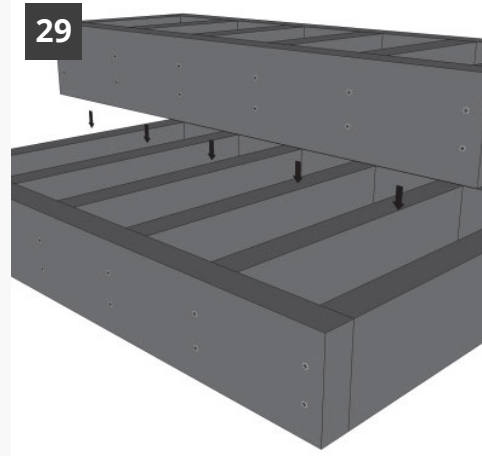
If creating the step support frame using Manticore plastic lumber, it is recommended that you use 50 x 150 mm profile bearers and only in a box frame structure (fig. 30)

- 1 Plan your step area, taking into account the decking board and riser width, when designing the tread and rise dimensions
- 2 Create a box frame to support your step area (fig. 28):
 - Ensure that the boards are supported at the appropriate joist centres
 - If you are creating multiple steps, ensure the base box is large enough to stack all steps on top (fig. 28)
- 3 For multiple steps create additional smaller box frames and place on top (fig. 29)
- 4 You can secure the separate box frames by inserting a post into the inner corner of the box frame and screwing in place (fig. 29)

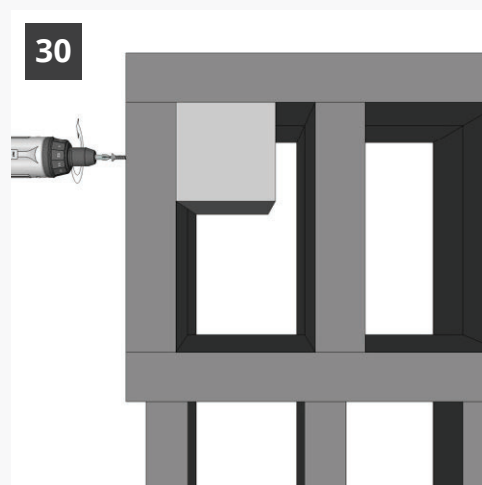
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Steps & Stairs Installation

Alternatively you can create step stringers using appropriate width treated timber

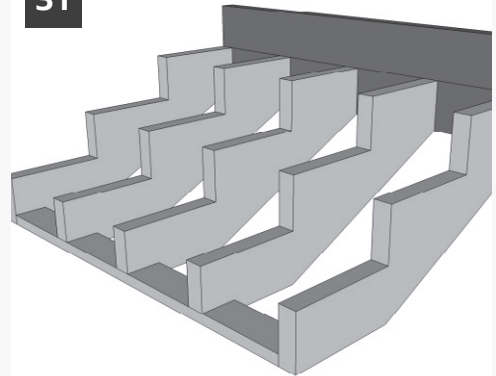
- You must use min. 3 stringers, at max. 300mm centres (**fig. 31**)

Step Nosing: Fascia Boards

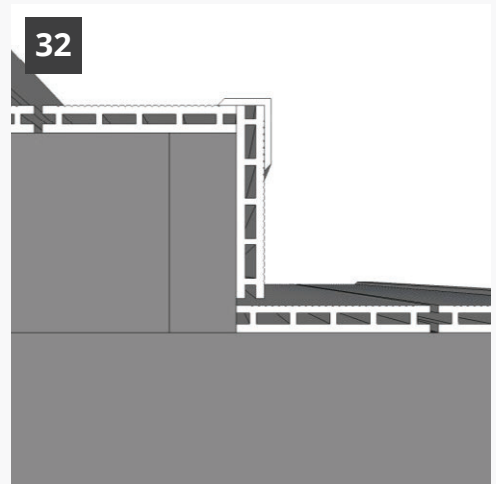
For the step riser, attach PuraShield™ fascia boards by screwing directly through into the step frame

- Ensure to pre-drill 4mm countersunk pilot holes and do not overdrive screw
- Install the first and second step tread boards as per steps 1-6 (**p. 4-6**)

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PuraComposite™ products are low maintenance, however with a little cleaning you can help keep your outside space looking beautiful for longer. Please note that although PuraComposite™ products are relatively colour stable, there may be some initial lightening of the PuraShield™ range products as the product naturally weathers over the first 8-10 weeks.

Dirt & Grime

Maintaining a clean, dry surface is the best method for combating dirt, grime and mildew build up, where a periodic cleaning is all that may be required. Even though PuraComposite™ products are formulated to inhibit mildew growth and staining, mildew stains can occur where moisture and dirt or pollen is present.

Scrapes & Scratches

Surface scratches and abrasions will fade after weathering. However, scrape and scratch marks can be eliminated by using a wire brush or coarse 60-80 grit sandpaper. Simply brush / sand in the direction of the grain on the product until the mark has gone. The treated area will weather back in approximately 8-10 weeks.

Painting & Staining

PuraComposite™ does not guarantee or recommend anything applied to PuraShield™ products, however it is still possible for PuraShield™ products to be painted or stained. Wait until the product has completed its weathering process and ensure you have a clean and dry surface prior to applying any paint or stain. Always apply products in accordance with the manufacturer's application instructions.

Spot Stains

Many stains can be cleaned with soap or household de-greasing agent and warm water. Scrub and soak the affected area as soon as the stain occurs to

ensure best results, then rinse off with warm water. For more stubborn stains we recommend using a composite specific cleaner for more effective stain removal. Only with very set stains, you may want to use coarse sandpaper (60-80 grit) and sand lightly, always in the direction of the grain of the product.

Cleaned or sanded areas may lighten, which can require 8-10 weeks exposure to the sun to match the remaining product, depending on location and specific application. Due to the wood content, composite products, like any wood-based product, may experience a naturally occurring process called extractive bleeding (known as tea staining). This process can cause a temporary discoloration that will fade with time.

Cleaning

With the proper safety precautions PuraShield™ products can be washed with either soapy water and a soft bristled brush or with a power washer (recommended max. 1500 psi pressure). You should ensure to spray in the direction of the grain of the boards and use a fan tip nozzle (min. 6 inches from surface) along with the proper cleaning product.