

DESIGNBOARD

COMPOSITE DECKING PRODUCT GUIDE



Product Guide Introduction

The perfect combination of nature and technology, DesignBoard is a brand-new range of exterior decking that combines all the attractive qualities of timber with the reliability and low maintenance of composite. DesignBoard is supplied in a range of nine colours with a lightly grooved and brushed surface finish for a stylish and contemporary look.

This guide has been designed to provide the information you need to install DesignBoard composite decking in a variety of different site conditions, with ease. You will find detailed information on all the tools that you will need along with top tips to ensure a seamless installation and finished deck.

This guide is intended for installing DesignBoard in a domestic setting only and is NOT suitable for commercial applications. For further information and commercial installation advice please contact: info@designboarduk.com.

The Tools You Need	04
Installation Top Tips	05
Board Storage and Expansion	05
Sub-frame Construction	06
Spacing the Decking	07
Choosing an Edge Profile	08
Installing the First Board and Fascia	09
Clip System	13
Installing the Remaining Deck Boards	14
Installing a Side Fascia	15
Cleaning and Maintenance	16
Frequently Asked Questions	18
Technical Information	19

The Tools You Need

DesignBoard Composite Decking is straightforward to install using the same tools that you would use to construct a standard timber deck. Here is the list of all the tools that you will need to build your DesignBoard deck.

Tools List

- Tape measure
- Pencil
- Long spirit level
- Bench mounted drop saw
- Battery Drill with spare battery
- Countersink
- Set square
- Plastic spacers
- Dust mask
- Eye protection
- Ear protection
- Extension cable
- Gloves

Installation Top Tips

Always leave a minimum 4mm expansion gap at the end of all boards. This includes where two boards meet and where two fascia boards meet.

Double joists should be used where two boards meet together and a separate clip should be used at the end of each board.

The end of a board against a boundary, brickwork, door frames etc. should have a 10mm gap.

No edge or end should be touching any other surface. This allows for possible expansion and contraction due to varying temperature and possible flexing of the frame.

Although we recommend a composite sub-frame is used for installation, we understand not all budgets stretch to this. If you are using a treated timber sub-frame consider using a timber paint/stain such as Cuprinol on the timber prior to installing the DesignBoard. Not only will it protect the sub-frame and improve longevity, if you use a colour similar to the colour of your chosen DesignBoard it will help hide the sub-frame from being seen through the joints. Please ensure you follow the paint manufacturer's guide as it will be necessary for the pressure-treated wood to be completely dry before applying a paint or staining treatment.

Whether using a composite or timber subframe, we would always recommend using composite posts. This will ensure that no timber is in direct contact with the ground and improve the longevity of your frame.

Plastic packers can be used where required to aid installation. Composite and timber frames are not always dimensionally perfect, and if for any reason you require packing-out a fascia or deck board, be sure to use a weatherproof packer. You can purchase packs of mixed size plastic packers from all good DIY stores.

Before fixing any decking boards, use a metal square to check that the frame is square. Joist Centres should be a maximum of 400mm for a domestic garden application. For a commercial application contact us for further information.

The length (long edge) of DesignBoard will expand in heat and contract in colder temperatures. The width (short edge) will not expand or contract.

Prior to the installation of DesignBoard, we recommend that boards are stored in a cool/shaded area for 24 – 48 hours to allow the boards to be at their normal size during installation. A garage or well-shaded area is an ideal place to store the boards prior to beginning the installation process.

Before cutting boards to length - We advise checking each end of the deck boards prior to cutting. If there are any small chips or defects, simply trim 4 – 10mm from the end to create a more precise finish. Due to the manufacturing process of DesignBoard, the ends of some of the boards may have small chips. Although not considered a defect, taking time to even the ends of the boards prior to cutting will improve the overall finish of the installation.

DesignBoard should be installed with a recommended slope of 1.5cm per metre to facilitate water drainage.

Due to DesignBoard being manufactured from 50% natural fibres there will be an element of colour variation. We advise to mix the boards on site prior to installation to spread any possible variation throughout the project and give a more natural appearance.

Sub-frame Construction

Plan the positions of your posts and joists prior to beginning. Planning ahead takes time but will pay dividends during the construction. The sub-frame can be constructed from composite or timber but we would always recommend composite for reasons of longevity.

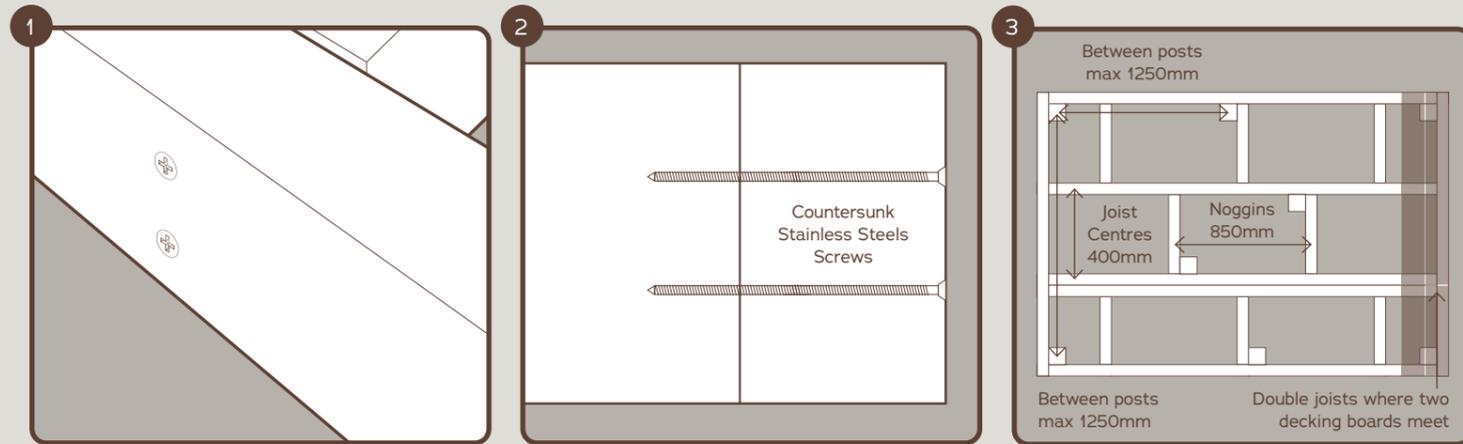
The sub-frame can sit on a full concrete base, intermittent concrete pads/blocks or be fixed to posts (the posts can either be concreted in the ground or sit upon concrete pads). Posts should be concreted into the ground by a minimum of 400mm or 1/3 of the length of the post if greater than this.

If you intend to fit a fascia to the front or side of the deck, the screws used to build the sub-frame will need to be countersunk. Countersink bits are available from any good DIY store (**see illustrations 1 & 2**).

When using composite, be sure to pilot hole all fixings with a drill bit approximately 1.5mm smaller than the screw you are fixing to approximately 2/3 of the depth of the screw. We recommend using 6.3mm x 90mm – 100mm Hex Head Timber Screws or Hex Head Coach Screws.

The spacing between posts, joists and noggins must not exceed the recommended spacing as detailed below (**see illustration 3**). Please note - Inner joists should not span greater than 1500mm without an additional post being installed, as shown in the centre of illustration 3.

Top tip – You can't over support your decking, but you can under support, be sure not to cut corners and stretch the spacings further than recommended.



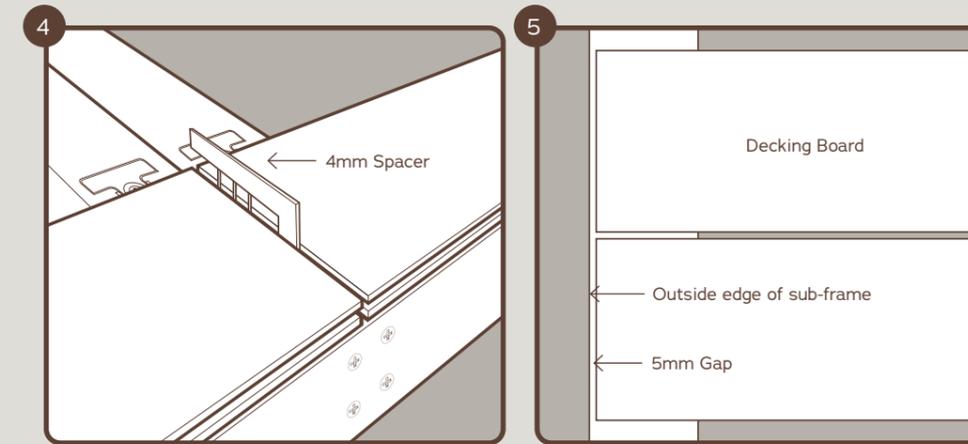
Spacing The Decking

Plan the position of where two deck boards meet. Planning ahead takes time but will pay dividends during the construction.

Double joists should be used where two boards meet, and a sperate clip should be used at the end of each board (**see illustration 4**). You can create full double joists or simply fix an additional section of joist to an existing joist at the position where the two boards meet together.

Use a 4mm spacer between boards. This allows for any expansion in the material and is an ESSENTIAL step (**see illustration 4**).

Note, if you are planning to install a side fascia, the decking boards should finish 5mm inside the outside edge of the sub frame (**see illustration 5**).



Choosing an Edge Profile

Closed Face Edge Profile

Where the top of the fascia finishes flush with the surface of the decking and encloses the subframe, aluminium edging strip and side of the decking (see illustration 6). Turn to page 9 for install guide.

Open Face Edge Profile

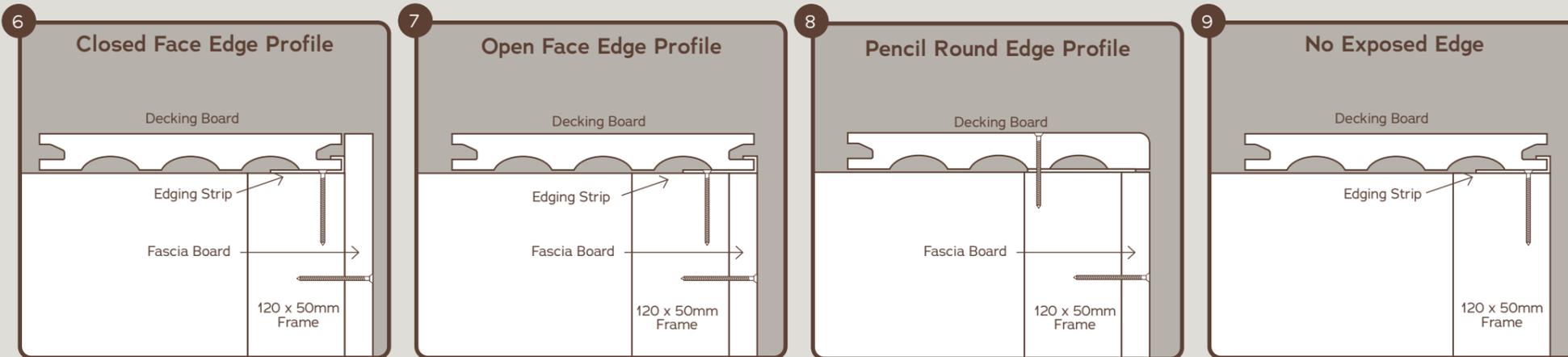
Where the fascia is installed under the aluminium edging strip, leaving the aluminium edging strip exposed as a feature (see illustration 7). Turn to page 10 for install guide.

Pencil Round Edge Profile

This incorporates a bespoke profiled board designed to be exposed, with the fascia installed to the underside (see illustration 8). Turn to page 11 for install guide.

No Exposed Edge

Where the deck frame and side of the deck will not be exposed, therefore not requiring a fascia (see illustration 9). Turn to page 12 for install guide.



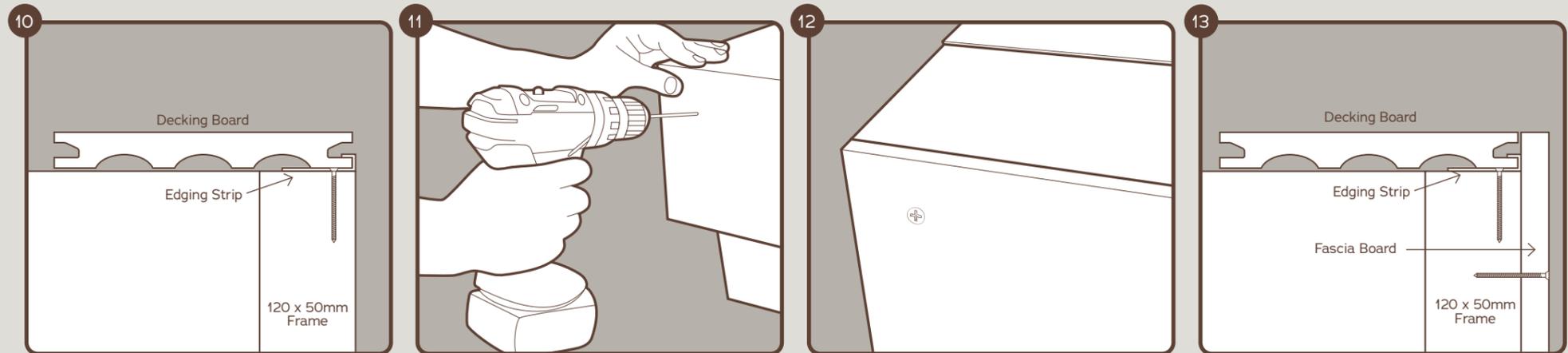
Installing First Board and Fascia (Closed Face Edge Profile)

Closed Face Edge Profile

If you are fixing your first board down with an aluminium edging strip and intending to use a fascia with a closed edge profile, simply line the aluminium edging strip up with the edge of the sub-frame and screw to the sub-frame. Pre-drill and countersink the aluminium edging strip to ensure the screw head sits flush with the top surface of the edging strip. Then screw the fascia to the sub-frame using pre-drilled and countersunk DesignBoard Colour Match Screws. Where possible, use a screw at the top and bottom of the fascia, coming in a minimum of 25mm in from the edge. If this is not possible, fix in the centre of the fascia. The Fascia must be fixed a minimum of every 500mm. (see illustrations 10, 11, 12 & 13).

Installing DesignBoard Colour Match Screws

For more information on installing DesignBoard Colour Match Screws please watch our simple installation [video](#)



Installing First Board and Fascia (Open Face Edge Profile)

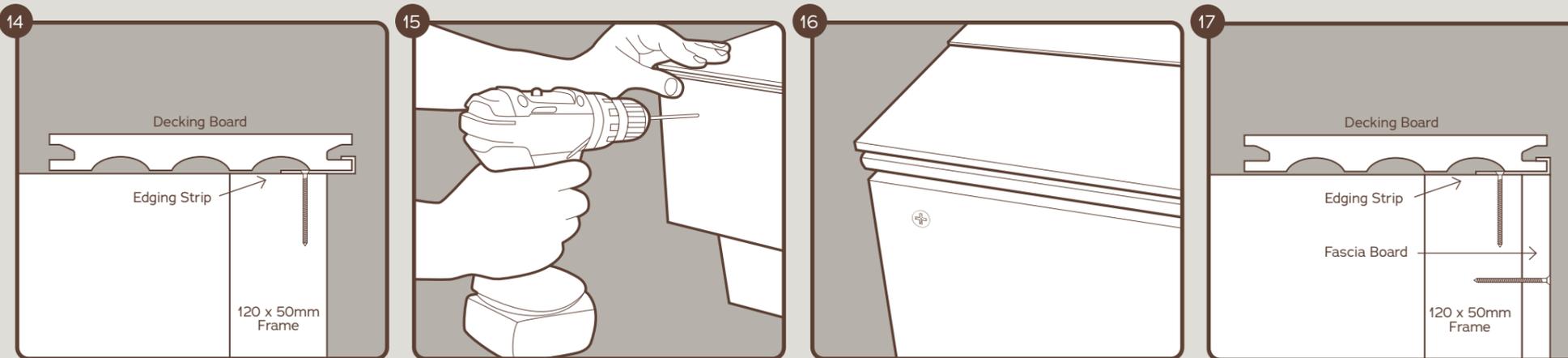
Open Face Edge Profile

If you are fixing your first board down with a aluminium edging strip and intending to use a fascia with an open face edge profile, simply overhang the aluminium edging strip 10mm (the thickness of the fascia) over the edge of the sub-frame for a flush finish, or approximately 13mm for a small overhang and screw to the sub-frame. Pre-drill and countersink the aluminium edging strip to ensure the screw head sits flush with the top surface of the edging strip. This will ensure the first decking board slides neatly into the edging strip.

Then screw the fascia to the sub-frame using pre-drilled and countersunk DesignBoard Colour Match Screws. Where possible, use a screw at the top and bottom of the fascia, coming in a minimum of 25mm in from the edge. If this is not possible, fix in the centre of the fascia. The Fascia must be fixed a minimum of every 500mm. (see illustrations 14, 15, 16 & 17).

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Installing First Board and Fascia (Pencil Round Profile)

Pencil Round Edge Profile

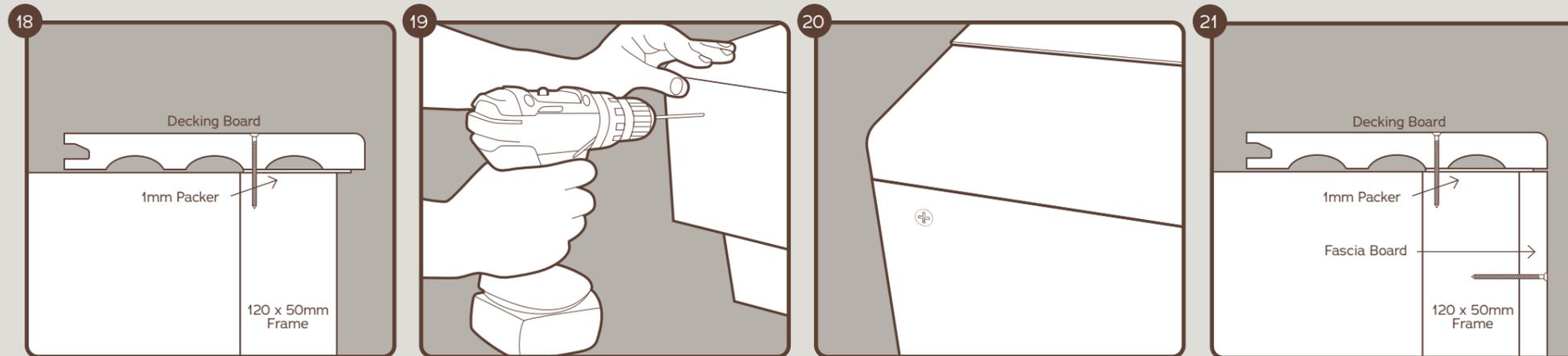
If you have opted for the first board to have a pencil round edge profile and are intending to use a fascia, simply overhang the decking board 10mm (the thickness of the fascia) over the edge of the sub-frame for a flush finish, or approximately 13mm for a small overhang and screw to the subframe using pre-drilled and countersunk DesignBoard Colour Match Screws.

Due to not using the aluminium edging strip, we recommend placing a 1mm plastic packer on each joist towards the front of the frame, ensuring that the underside of the board is touching the packers before fixing (see illustrations 18 & 21).

Then screw the fascia to the sub-frame using pre-drilled and countersunk DesignBoard Colour Match Screws. Where possible, use a screw at the top and bottom of the fascia, coming in a minimum of 25mm in from the edge. If this is not possible, fix in the centre of the fascia. The Fascia must be fixed a minimum of every 500mm. (see illustrations 18, 19, 20 & 21).

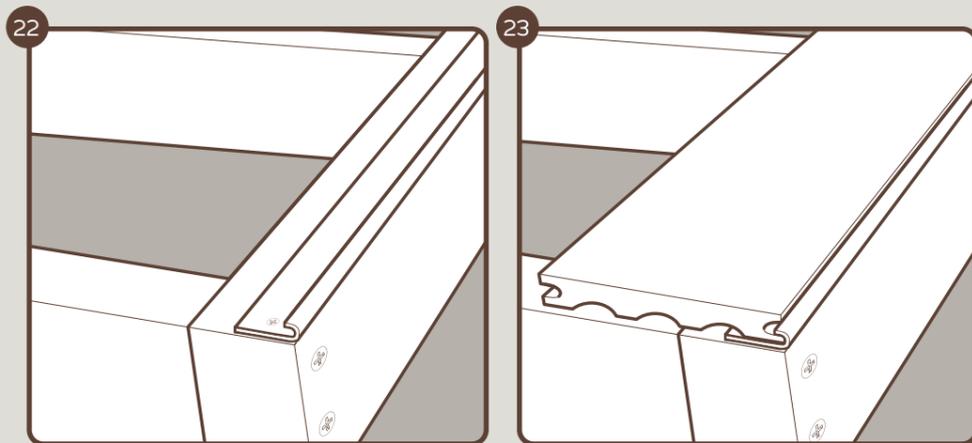
Installing DesignBoard Colour Match Screws

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Installing First Board If Front Fascia Not Required (No Exposed Edge)

If the frame of your decking is not exposed and a fascia is not required, simply line the aluminium edging strip up with the edge of the sub-frame and screw to the sub-frame. Pre-drill and countersink the aluminium edging strip to ensure the screw head sits flush with the top surface of the aluminium edging strip. This will ensure the first decking board slides neatly into the edging strip (see illustrations 22 & 23).



Installing The Hidden Clips On The First Board

It's now time to install the second run of decking boards. DesignBoard Composite Decking is designed to be fitted using an invisible clip system that gives an automatic 4mm gap between the long edge of the boards.

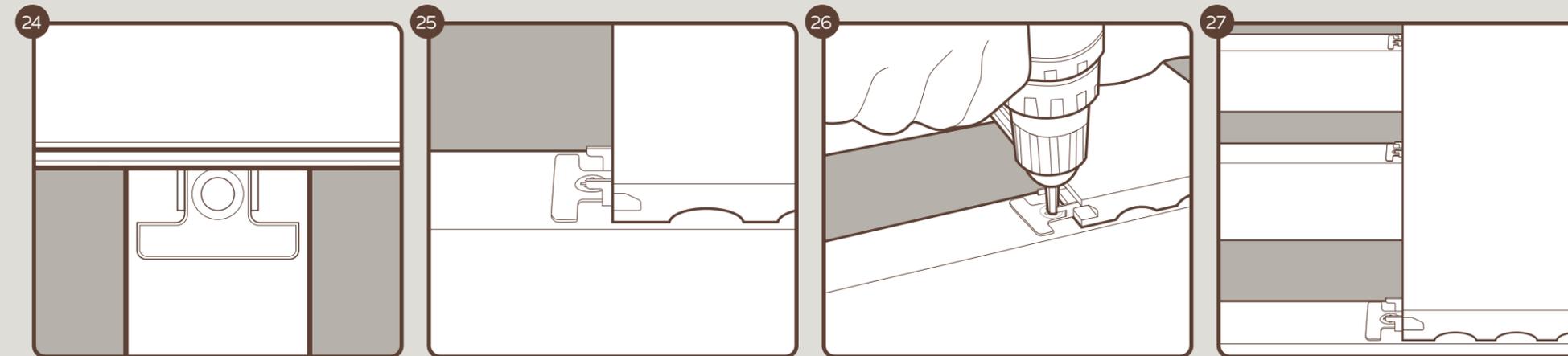
Slide your first row of clips into position in the centre of each joist until they sit snugly into the groove on the underside of the decking boards (see illustration 24).

The wider side of the clips should face outwards so that the clip screw hole is fully exposed (see illustration 25).

If using an aluminium edging strip, apply pressure with your hand or knee (or get someone else to), ensuring the decking board is pushed up firmly against the aluminium edging strip with no movement. Screw the clip into position using a DesignBoard screw (see illustration 26).

If you have opted to screw your first board into position (pencil round profile), push the clips firmly into the board and screw into place.

Complete this step on every joist until the whole first run of decking boards is clipped into position (see illustration 27).



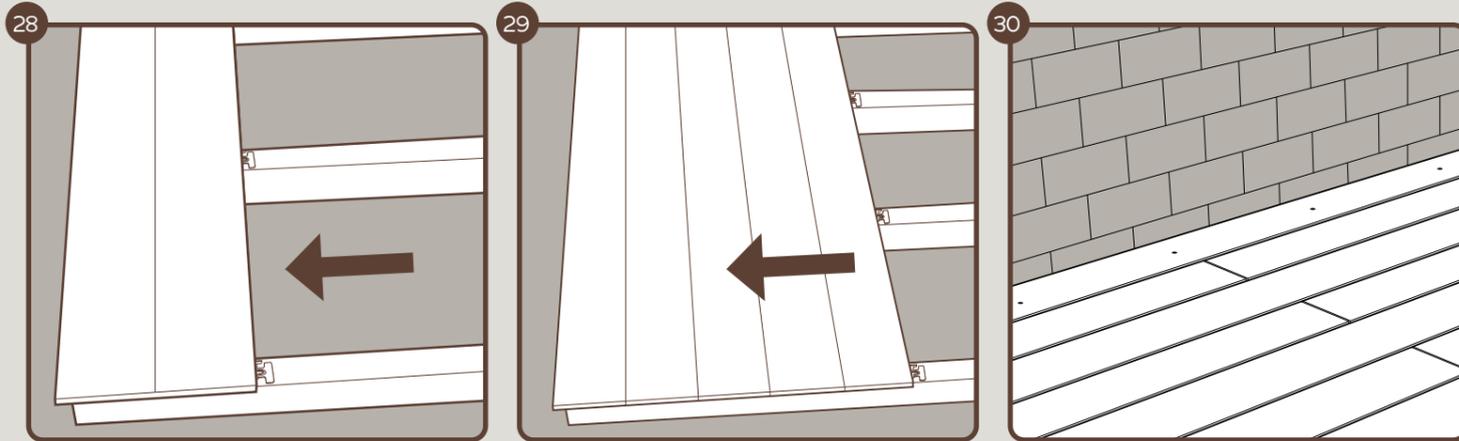
Installing The Remaining Deck Boards

Slide your next run of decking boards into the clips and then insert the next run of clips into position. Apply pressure with your hand or knee (or get someone else to), ensuring the decking board is pushed up firmly against the clips and then screw the clips into position. Complete this until all the boards are in position (see illustrations 28 & 29).

The final deck board will need to be screwed into place, one side of the final board is held in position with the final run of clips. The other 'open side' which is usually against the property will need manual fixing using pre-drilled and countersunk DesignBoard Colour Match Screws (see illustration 30).

Installing DesignBoard Colour Match Screws

For more information on installing DesignBoard Colour Match Screws please watch our simple installation [video](#)



Installing a Side Fascia

The side of the DesignBoard features profiled ridges. These ridges allow air to flow through the sub-frame and are integral to the long term durability of the product (see illustration 31).

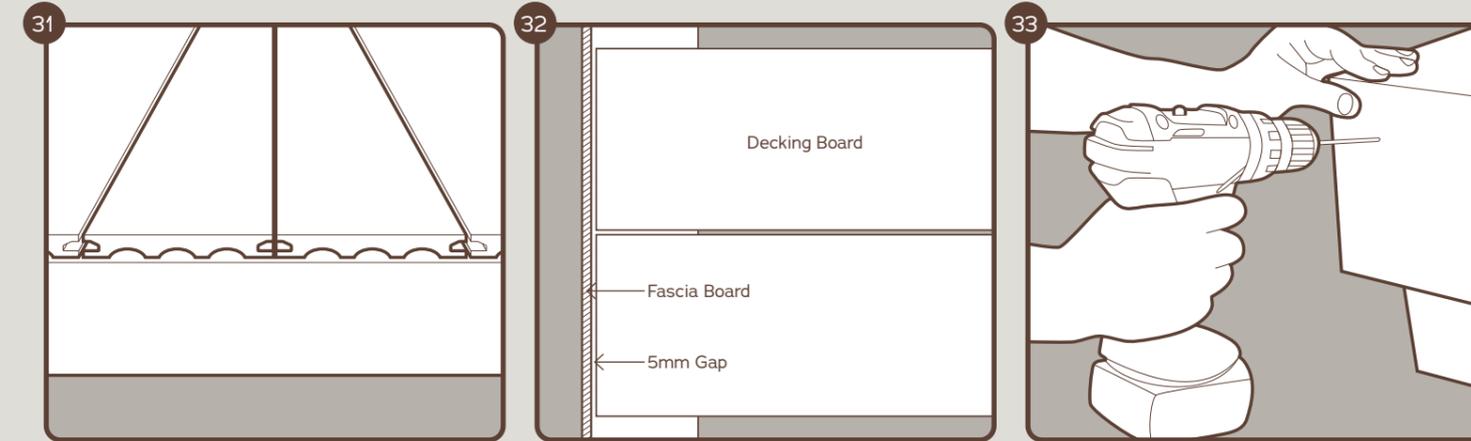
If the side of the deck is on display, these ridges and the sub-frame should be covered up with a side fascia.

When a side fascia is required, the decking boards should finish 5mm inside the outside edge of the sub frame. This allows for a side fascia to be fitted to the edge of the sub-frame while still leaving an expansion gap between the inside edge of the fascia and the outside edge of the decking board (see illustration 32).

Then screw the fascia to the sub-frame using pre-drilled and countersunk DesignBoard Colour Match Screws. Where possible, use a screw at the top and bottom of the fascia, coming in a minimum of 25mm in from the edge. If this is not possible, fix in the centre of the fascia. The Fascia must be fixed a minimum of every 500mm. (see illustration 33).

Installing DesignBoard Colour Match Screws

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Cleaning and Maintenance

Although DesignBoard is low maintenance compared to a natural wood deck which will require cleaning and treating to preserve the life of the material, it does still require cleaning in order to keep it looking at its best.

There is nothing special in the way DesignBoard should be cleaned and the use of a deck brush and a hose or alternatively a jet wash will remove most marks and dirt.

You can clean your DesignBoard deck as often as you like but as a guide every 3 – 4 months is what we expect to be the average, depending on location, usage and how clean you would like to keep your deck.

Cleaning Methods – for general maintenance

Using a jet wash on DesignBoard

Using a regular fan spray attachment, clean in the same direction as the grooves on the decking surface, avoiding circular movements. This will help to remove embedded dirt. Hold the jet wash lance at an angle of 45 degrees at least 300mm from the surface of the DesignBoard. Please Note - Do not use heated jet washers on DesignBoard.

Using a brush and soapy water

Apply the soapy water onto the deck and leave the solution to work for 5 – 10 minutes, but do not allow to dry. Then agitate with a bristle brush/deck brush in the same direction as the grooves on the decking. Then thoroughly rinse with a hose and allow to dry.

Cleaning Methods – for more specific marks

Water Stains

Surface water can pool and then evaporate, leaving marks and spots on the surface of the DesignBoard. These marks are normal and not a deficiency. Use clean water and a deck brush to remove in the first instance or if more persistent, then the use of a jet wash is recommended (see the ‘Cleaning Methods’ section for advice on using a jet wash on DesignBoard). Ensure any excess water is swept off and then allow the area to dry.

Spots of soda, wine, coffee

Soda stains, wine or coffee are removed using a brush and soapy water as per the directions in the ‘Cleaning Methods’ section. If these persist, repeat the operation using a diluted bleach solution; thick clear bleach, diluted 1 to 5 with water. Do not leave bleach to stand on the deck surface, apply, agitate and then rinse thoroughly.

Grease stains, sun cream, oil, etc...

We recommend cleaning any grease, fat or oil as soon as possible. Remove the excess by dabbing with a dry cloth being sure not to spread the mark further. Then use washing up liquid diluted with warm water and scrub the area in the direction of the grooves on the decking with a bristle brush/deck brush and rinse with clean water. If the mark remains repeat the process. If grease, oil or fats are not removed using the above method please use – Lithofin Oil-Ex. Although this product is designed to be used on stone it works adequately on DesignBoard following the manufacturer’s instructions – apply a 2 - 3mm layer over the oil mark and leave to work for 8 - 10 hours. Then simply brush off and rinse with clean water.

Cleaning and Maintenance

Spots of tree resin

For stains caused by tree resin, clean using a cloth moistened with Ethyl alcohol (rubbing alcohol). Do not apply ethyl directly as it can stain the deck. Rinse with clean water once the mark has been removed.

For unknown marks

Always start by trying a general maintenance cleaning method. If the marks remain then please use a diluted bleach solution; thick clear bleach, diluted 1 to 5 with water. Do not leave the bleach to stand on the deck surface, apply, agitate with a bristle brush/deck brush and then rinse thoroughly.

If the marks still remain then please contact your distributor for further advice.

Removing Ice

Ice can be removed from DesignBoard using white rock salt. It is important that it is not Grit Salt as this will possibly mark the surface due to it’s coarse texture. Only salt an area big enough to create a path across the decking as required. Salt can Affect the finish of materials such as limestone and polished granite if walked indoors. If you need to remove snow, this is best to be swept off using a soft broom and then apply salt to break down any ice underneath.

Please note – If you have pets, the salt can irritate their paws, so avoid letting pets onto salted areas if possible and rinse their paws if required.

Frequently Asked Questions

What is DesignBoard manufactured from?

50% PVC and 50% natural fibers the majority of which are rice husks. Rice husks are low in porosity and therefore degrade much slower when compared to timber which you will find in most other composite products. Rice husks are also a bi-product of grain manufacturing and would otherwise be incinerated.

How long will it last? Does it fade?

As long as it is installed correctly you should expect a lifespan of over 25 years. DesignBoard fades at an average of 1% per year, so, after 25 – 30 years you may start to see the effects of this. This is normal. However, it is worth noting that it will be more apparent on the darker colours such as Charcoal and to a lesser extent, on Silver.

Is every piece the same or is there a range of pattern variations?

The base colour of the material is the same but there is a range of different patterns to provide variation to the surface finish.

Does DesignBoard come with a guarantee?

Yes, we offer a 10-year guarantee against structure and surface finish of the material.

Can DesignBoard be used to build furniture? e.g. a bench, bin store etc.

DesignBoard can be used in many ways provided it has the benefit of support every 400mm and the 4mm gap between boards (as set out in the installation guide) is adhered to. Ideally, you would still use the clip system, but the boards can be screwed from the face or the underside if necessary. We would not advise using it as either a countertop or in the construction of any furniture which is likely to have a burner installed.

Can I put a fire pit or fire bowl onto my DesignBoard?

This depends upon the heat exposure and type of firepit that you are intending on installing.

— Wood burning fire pit or chiminea

No, as the heat exposure is too great and there is a potential risk of embers landing onto the deck causing damage.

— Ethanol fire bowls / tables

As these tend to have minimal heat output they should be fine providing that they are raised by a minimum of 300mm and are not constructed entirely of metal.

— Gas fire bowls / tables

Again, these should be fine providing burners are raised a minimum of 350mm from the deck and that their construction not be made solely of metal.

We would always recommend there is a gap to the underside allowing for a good airflow to prevent a build up of heat under the burners.

Please note – we are unable to provide any guarantees of compatibility and customers should always seek advice from the manufacturer of their chosen fire pit, bowl or table.

Technical Information

Options Available	Size Available	
Decking	3600 x 150 x 20mm	
Fascia Board	3000 x 180 x 10mm	
Dimensions	Tolerance	
Weight	13.32 kg/piece	± 100 g/m
Length	3600mm	± 10mm
Width	150mm	± 0.6mm
Thickness	20mm	± 0.6mm
Technical Test	According to the norm	Value
Linear Extension Coefficient	UNE 53126	2,81 10-5
Flexural Modulus	UNE-EN ISO 178	4660 Mpa
Bending Resistance	UNE-EN ISO 178	46.4 Mpa
Maximum Deflection at Break	UNE-EN ISO 178	5.1 Mpa
Shore Hardness	UNE-EN ISO 868	65
Water Absorption (24 hours in water at 23°C)	UNE-EN ISO 62	0.48%
Water Absorption (7 days in water at 23°C)	UNE-EN ISO 62	1.88%
Vicat Softening Point	UNE-EN ISO 306	87.4°C
Density	UNE-EN ISO 1183-1	1.44 g/cm ³
Impact Resistance	UNE-EN ISO 477	> 20J
Slip Resistance	BS EN 7976 (Ruber Slider Type '96')	Dry Along the Grain: 48 Dry 90 degrees to the Grain: 66 Wet Along the Grain: 37 Wet 90 degrees to the Grain: 52
Slip Resistance	BS EN 7676 (Ruber Slider Type '55')* * Formerly TRL	Wet Along the Grain: 44 Wet 90 degrees to the Grain: 64
Reaction to Fire	UNE-EN 13501-1 :2007	Bfl, s1

