

## FORM 130 & FORM 140 Installation Guide



### Measurements

PROFILE	SOLID (mm)	FINISH
FORM 130	130 x 19 x 4850	Solid - Smooth & Grooved
FORM 140	140 x 19 x 4850	Solid - Smooth & Grooved

### Specifications

SPECIFICATION	FORM 130	FORM 140
Substructure	Timber/ Aluminium	Timber/ Aluminium
Board Coverage	135mm	145mm
Maximum Joist Spacings	400mm	450mm
Maximum Board Overhang	10mm	20mm
Minimum Ground Clearance	300mm	300mm
Minimum Ground Clearance Over Membrane	50mm	50mm
Minimum Gap between Each Board	5mm	5mm
Minimum Screw Distance From Board Edge	30mm	30mm
Expansion Gap	0-4mm	0-4mm
Hidden Clip & Screw	Every Joist	Every Joist
Composite Deck Screw 304 or 316 Stainless Steel	50mm	65mm
Perimeter & Breaker Board	Surface Fix	Surface Fix
Windy Exposure (Wind Break Use)	Windbreak Plus	Windbreak Plus

o Lengths are 4850mm however up to 5mm variation can occur. Please dock to uniform length on site.

o For timber joists, we recommend uniform height and thickness SG8 joists

It is the responsibility of the installer to comply with all local regulatory body rules.

### Safety Equipment

Be safe. Always use appropriate safety equipment. We highly recommend using the following:

- Safety Glasses
- Safety Gloves
- Dust Mask
- Ear Muffs/Plugs
- Safety Shoes/Boots
- Long Sleeves

It is the responsibility of the purchaser, contractor, builder or installer to comply with normal safety practice standards in regards to any application or use of any BiForm Decking products.

### Tool List

Ensure that you have the correct tools before you start, this will make installing your BiForm deck an enjoyable experience.

- Square
- Tape Measure
- Spirit Level
- Rubber Hammer/Mallet
- Cordless/Electric Drill
- Circular Saw/Drop Saw - recommend 80 teeth blade.
- #1 Square Drive Head Bit - min 50mm
- #2 Square Drive Head Bit
- Builders Pencil

### Note

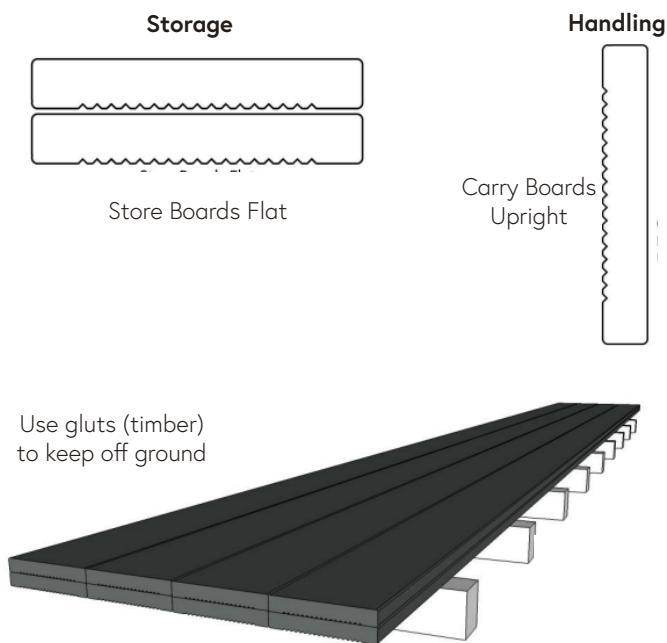
Please ensure you read all subsequent pages for important instructions on storage, handling, care etc.



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## Storage and Handling

- Boards should be transported flat (eg. not angled on the back of a ute).
- Carry the boards vertically, as shown below.
- Store the boards on a dry, level surface preferably sheltered area.
- Lay the boards flat (as per picture below), and not at an angle.
- Keep the boards off the ground using gluts underneath.
- Gluts to be used to support decking every 500mm.
- Be careful when stacking boards - do not drop, dump or throw.
- Cover the boards until required for installation.



## Cornering Options



- See our CAD Drawings online at <https://biform.co.nz/resources-cad-drawings> for a more detailed view of our recommended cornering options.
- While these diagrams accurately depict how best to use our composite decking, we would still strongly suggest consulting with our friendly staff who are more than happy to assist you with your decking layout.

## Layout Options

### Breaker Boards:

Composite decking can expand and contract with a rise and fall in temperature. Depending on the environment, there can be up to 5mm per full length board (approximately 1mm per metre).

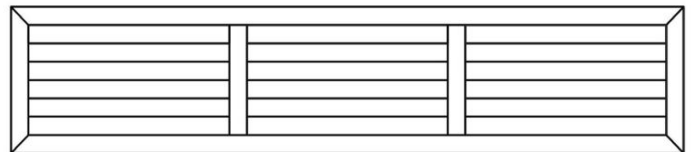
Due to this thermal movement, composite decking should be installed with the use of a picture frame and/or breaker boards.

A breaker board is a board that runs perpendicular to the main run of decking and helps to minimise thermal movement.

\*Butt joints are NOT appropriate with FORM decking due to the expansion and contraction.

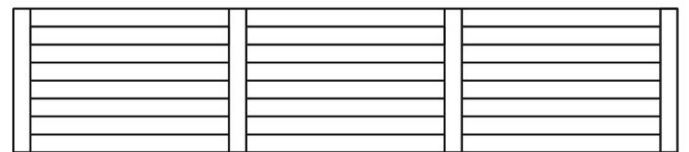
See diagrams below for layout examples:

### Picture Frame and Breaker Board



While mitred corners are a popular option, due to the expansion and contraction, they work best when lengths are 2.4m or less, surface fixed and installed while cool and contracted.

### Breaker Board Only



Breaker boards can be placed wherever you feel suits your outdoor area.

While some customers will prefer the symmetry of the designs above, others can choose where to position their breaker boards, lining them up with doorways, windows, or steps.

Factoring in wastage, getting the most out of our 4850mm boards, is also a very important consideration.

If we haven't already, we can draw up a recommended layout for your deck - please phone 0800 449 272 or visit our website at [www.BiForm.co.nz](http://www.BiForm.co.nz).

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## Facing Boards

The same decking boards can be used vertically as a facing board. As with the surface decking, butt joints are not recommended.

It is best to install facing when boards have been in the sun and are expanded to its maximum. Surface fixing should be every 300mm to prevent bowing. When fixing through the surface predrilling is recommended.

## Stop Clips

### Centre of Long Boards:

Stop clips are to be used in the centre joist of each board over 3.5m to balance the thermal movement at either end.

### Either Side of Butt Joints:

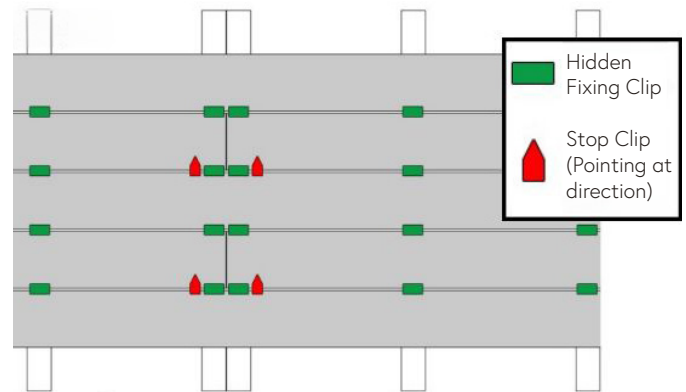
Traditional hardwood decking is often installed using random butt joints. Due to the thermal movement that occurs in composite decking, butt joints are often not appropriate as the impact of this movement is effectively doubled. We strongly discourage the use of butt joints when using our decking.

However, if butt joining is appropriate because of excessive wastage, then we can offer a compromised solution through the use of 'Stop Clips'.

These clips help to stop the thermal movement at the ends of the boards, meaning alternate butt joints are a feasible option in certain situations.

See diagram below to understand how the stop clips work:

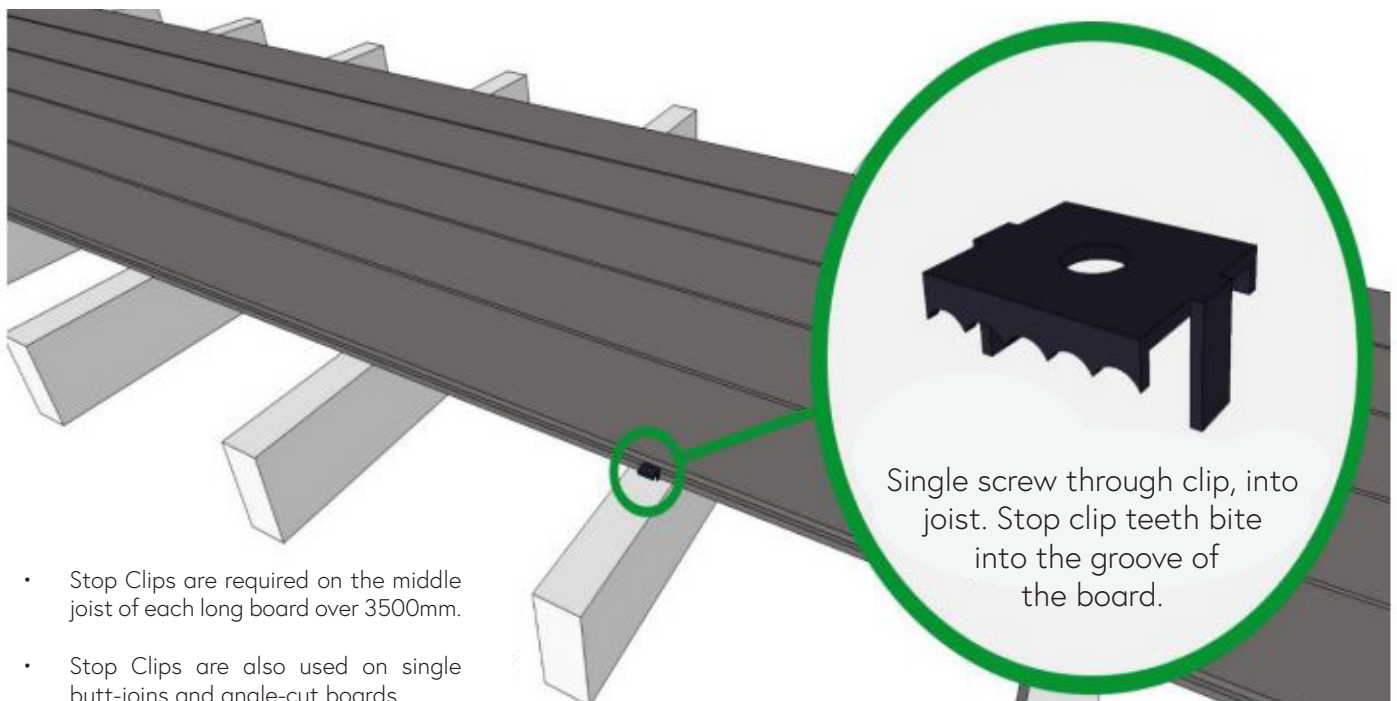
See diagram below, showing where to fix using stop clips:



Only one stop is to be used per board, creating a maximum of one butt joint per run of decking. The screw going into the decking board must be predrilled.

## Key Installation Points

- Use a picture frame design
- Use a breaker board at the ends of boards where necessary
- Avoid butt joints
- Joists at 400mm centres for FORM 130 Profile
- Joists at 450mm centres for FORM 140 Profile
- In windy exposures, use Windbreak Plus cloth - contact us for information on this custom solution.



- Stop Clips are required on the middle joist of each long board over 3500mm.
- Stop Clips are also used on single butt-joints and angle-cut boards.

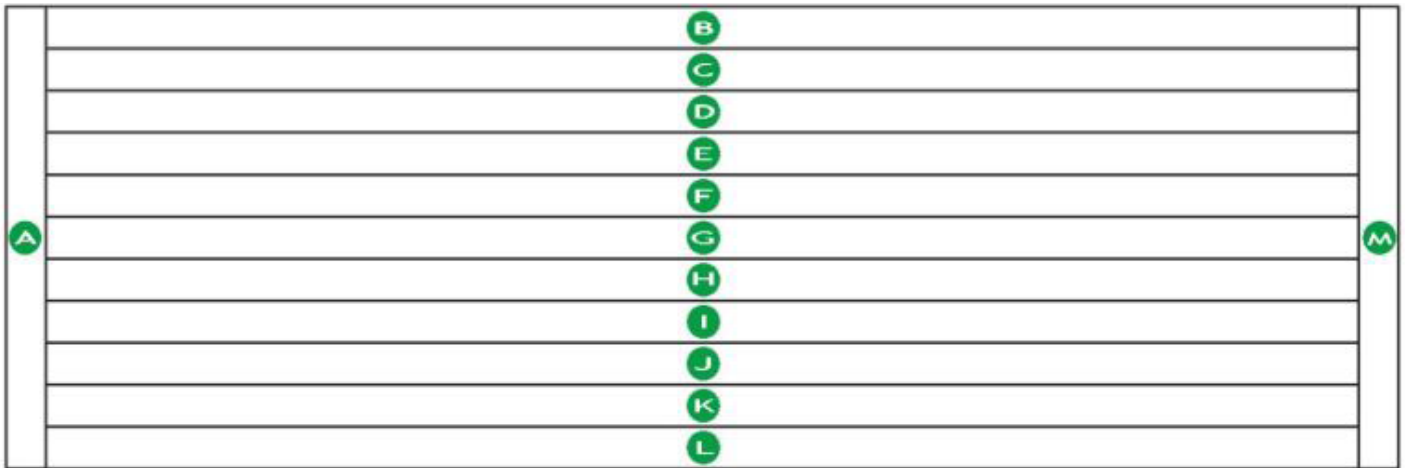
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## Installation Guide

Refer to this example of a typical 5m x 148m Form 130 deck (using timber substructure installed with reference to NZS 3604):



- Once you have installed your substructure with joists at 400mm centres, you are now ready to lay your boards.
- For help with substructure requirements please see our CAD drawings online at [www.biform.co.nz](http://www.biform.co.nz)
- Double joists are required for Boards B and L.

## Step By Step Guide

1. Cut your first perimeter Board A to size and lay. Surface fix a pair of screws at every joist with Winged Composite Deck Screws 316 Stainless Steel. Do not cut Boards B-M to size at this stage.

2. Lay your second perimeter Board B. Make sure the end of the board is butted hard up against Board A.

Surface fix with Winged Composite Deck Screws 316 Stainless Steel at every joist. Once this board is fixed into place, take your Fixing Clip & Screw and slide this into the edge groove of the board at every joist and screw into place.

Do not over-tighten these Black Screws as this can make the next board difficult to slide into place.

3. Lay Board C. Make sure that the end of the board is 0 to 2mm away from Board A. Slide this into place so that the Fixing Clip also slides into the edge groove of this board. You may need to use a rubber hammer to lightly tap the board into place, then tighten the Black Screw at every joist. Once again, do not over-tighten Black Screws. The Fixing Clip will hold these two boards down into place.

One "stop clip" per board may be used on a central joist to equalise thermal movement at each end of the board

Once this board is fixed into place, take a Fixing Clip & Screw and slide this into the edge groove of the board at every joist and screw down, ready for your next board.

4. Repeat Step 3 until you have laid Board D-K. Ensure that the boards are butted hard up against Board A.
5. Lay your third perimeter board, Board L, making sure that the end of the board is butted hard up against your first perimeter Board A. Tighten the Fixing Clip & Screw down, then surface fix this board with the Winged Composite Deck Screws.
6. Now that you have laid your boards you are now ready to cut Boards B-L to size. Make sure your boards are all at a similar temperature.
7. Time to lay your last perimeter board, M, which can now be cut to size. Depending on the time of day, leave a 0 to 2mm gap from the ends of the newly cut board, B-L, and surface fix a pair of screws at every joist using Winged Composite Deck Screws.

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## Installation Notes

- Install perimeter board first. Surface fix it with Torx Composite Screws. The board must be predrilled.
- In-fill with deck boards using concealed Black Fixing Clip & Black Screw on every joist and one stop clip per board on a central joist
- Install the last perimeter/breaker board by surface fixing with Torx composite screws, leaving the appropriate expansion gap.
- The decking expands and contracts lengthways due to the temperature changes throughout the day. BEFORE CUTTING, the temperature of each board should be assessed. Hot boards will shrink as they cool, and cool boards will expand as they heat up.
- Control of this longitudinal expansion can be achieved by laying the boards and then docking when they are all the same temperature. Use of a central stop clip can equalise the movement at both ends of the board. Install the perimeter board or breaker board at this time without leaving expansion gaps.



## After Installation

### Cleaning

It is important to clean your deck immediately after installation.

A scrub with warm water and BiForm Deck Cleaner will help to speed up the weathering process of your BiForm deck.

Hose down with a garden hose. Use a sponge mop or a broom with the end wrapped in a towel to remove excess water.

### Care & Maintenance

Please forward the Care & Maintenance Guide, along with the Warranty, to the home owner/maintenance department.

### Registration

Please register your deck for warranty at our website:  
<https://BiForm.co.nz/warranty-registration/>

Alternatively, scan the QR code to access the warranty registration page.

### Warranty Registration QR Code

