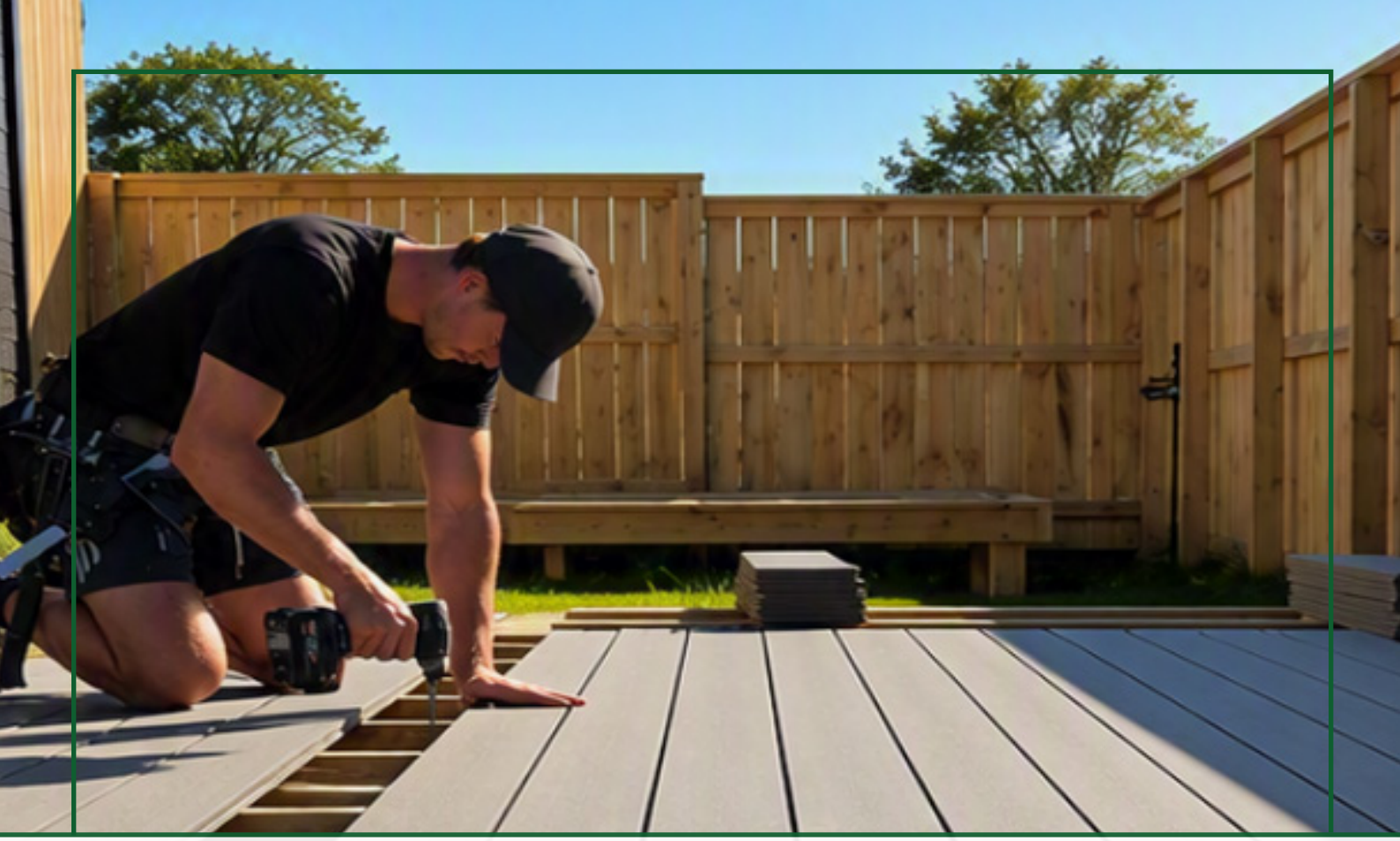

BIFORM

SUSTAINABLE BUILDING MATERIALS

FORM 130 & 140 | INSTALLATION GUIDE

Solid composite decking installation, care, and warranty reference for Form 130 and Form 140 profiles.

** This guide replaces all previous versions. Please read it in full before starting your installation.*

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01. Sustainability.

Here at BiForm we are serious about playing our part in protecting the environment, please help us by:

- Making use of our free recommended layout design service. This will help you to minimise waste and reduce the likelihood of mistakes. If you are at installation stage and don't have a bespoke layout design in your box of fixings – phone 0800 449 274 – give us your dimensions and we can usually provide one within 24 hours.
- Use a HEPA Vacuum attached to your cutting tools. Please use a separate bag for BiForm cuts and return the shavings to us in the recycling box – this minimises the likelihood of microplastics getting into the environment.
- Recycle the packaging by making use of the pre-paid courier label to send us back our buckles, strapping, plastic wrap & shavings.

Thank you!

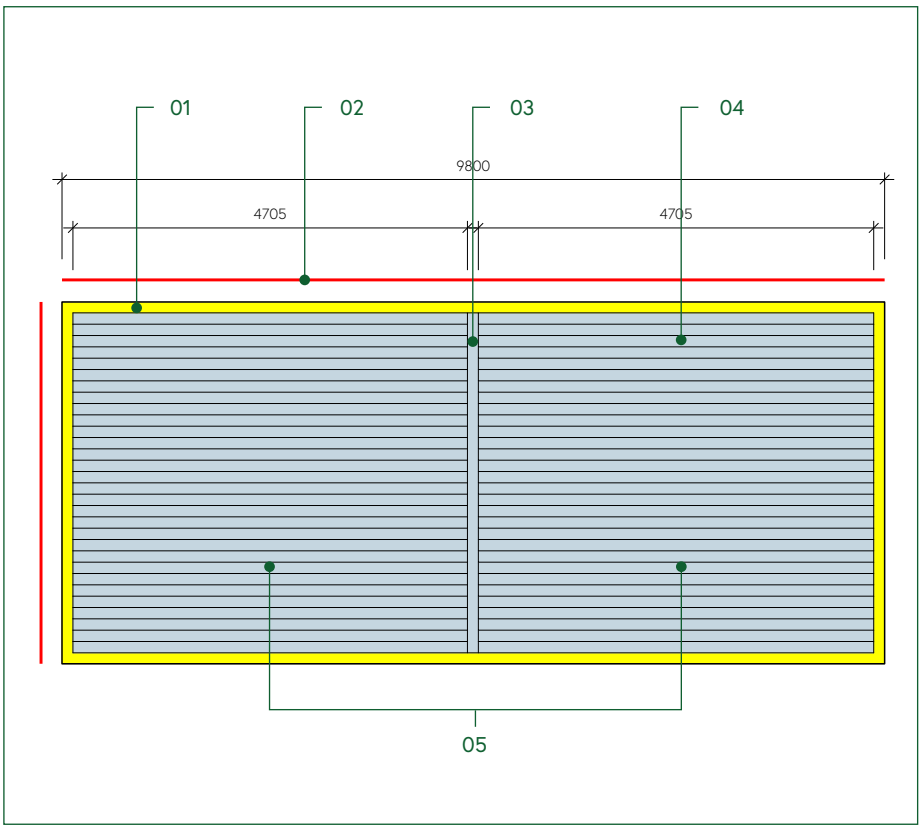
02. Product Overview

Measurements.

Profile	Solid (mm)	Finish
Form 130	130 x 19 x 4850 fixing channels on both edges	Solid - smooth & grooved
Form 130 Edge Board	130 x 19 x 4850 fixing channels on one edge	Solid - smooth & grooved
Form 140	140 x 25 x 4850 fixing channels on both edges	Solid - smooth & grooved

*** Edge boards are not available in Form 140 profile.*

- Lengths are 4850mm; up to 5mm variation can occur. Please dock boards to a uniform length on site.
- Decking can be installed over timber or aluminium framing. The fixings vary for each subframe type. If unsure phone 0800 449 274 for advice.
- For timber joists, we recommend uniform-height, uniform-thickness SG8 joists.
- Every board must be supported over at least two spans (a minimum of three joists/fixing points), and any unsupported overhang must not exceed the Maximum Board Overhang shown below.
- Edgeboards are supplied on request for the Form 130 Profile only. When installing Form 140 as a perimeter board the channel will need to be removed.



01. Edge Board

Edge boards have one concealed fixing channel and a straight outer edge, shown in yellow on all recommended layout designs and surface fixed with two Torx screws every 400mm.

02. Facing Boards

Facing boards (standard board) to cover the subframe are shown in red on all recommended layout designs. Top and Bottom facing boards are regular deck boards surface fixed with two Torx screws every 400mm.

03. Breaker Boards

Breaker boards (standard boards) are regular deck boards surface fixed with two Torx screws every 400mm.

04. Stop Clips

Stop clips are installed one per board on the centre joist of boards over 3500mm.

05. Standard Boards

Standard boards with fixing channels both sides and fixed down with concealed fixing clips.

Handy hint: If you haven't been supplied with a recommended layout design at quoting stage – phone your local franchisee or 0800 449 274.

It remains the installers responsibility to comply with all local regulatory and building consent authority requirements.

Specifications.

Specification	Form 130	Form 140
Substructure	Timber / Aluminium	Timber / Aluminium
Board Coverage	135 mm	145 mm
Maximum Joist Spacing	400 mm	450 mm
Maximum Board Overhang	10 mm	20 mm
Minimum Ground Clearance	200 mm	200 mm
Minimum Ground Clearance over Membrane	50 mm	50 mm
Minimum Gap between Boards	5 mm	5 mm
Minimum Screw Distance from Board Edge	30 mm	30 mm
Expansion Gap	0-4 mm	0-4 mm
Hidden Clip & Screw	Every Joist	Every Joist
Torx Deck Screw (304 or 316 Stainless Steel)	60 mm	60 mm
Perimeter & Breaker Board Fixing	Surface Fix	Surface Fix
Windy Exposure (wind-break use)	Windbreak Plus	Windbreak Plus

Handy hint: Good ventilation beneath the deck matters as much as ground clearance — make sure sub-floor airflow and drainage are not restricted, particularly over a waterproof membrane.

03. Safety Equipment & Tool List.

Be safe. Always use appropriate safety equipment. We recommend:

- Safety glasses
- Safety gloves
- Dust mask
- Hepa Vacuum + Bags
- 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 regarding any application or use of BiForm decking products.

Tool List.

Make sure you have the right tools before you start — it will make installing your BiForm deck a much smoother experience.

- Square
- Tape measure
- Spirit level
- Rubber hammer/mallet
- Cordless/electric drill
- Builder's pencil
- Circular saw/drop saw — an 80-tooth blade is recommended
- Tracksaw
- #1 torx driver for BiForm Clip + Screw (provided)
- #2 torx driver (not provided on small orders)
- 4mm drill bit
- 7mm drill bit & stop collar

Handy hint: Use a separate bag on your Hepa Vacuum to collect BiForm sawdust only – you can return this to us with your recycled packaging.

04. Storage & Handling.

- Transport boards flat — never angled, e.g. on the back of a ute.
- Carry boards vertically (on edge), not flat, to avoid bowing.
- Store boards on a dry, level surface, preferably in a sheltered area.
- Once at the storage location, lay boards flat — not on an angle.
- Keep boards off the ground using timber supports, spaced every 500mm.
- Handle with care when stacking — never drop, dump or throw boards.
- Keep boards covered until you're ready to install them.

Handy hint: Store boards in the shade until fixed down. Best practice is to cut with a track saw (or skill saw with a guide) first thing the following morning when boards are cooled.

Cornering Options.

Multiple Mitre Joins	Multiple mitre joins with breaker board	Herringbone design
Not recommended — thermal movement makes multiple mitres unreliable over time.	Recommended — a breaker board absorbs movement either side of the mitred corner.	Recommended — an attractive alternative that also helps manage expansion at corners.

- See our CAD drawings online at https://biform.co.nz/certification-documents for a detailed view of recommended cornering options.
- While these notes show best practice, we'd still recommend a quick call to our team to help plan your specific decking layout.

05. Layout Planning — Breaker Boards & Picture Framing.

Composite decking expands and contracts with rises and falls in temperature. Depending on the environment, a full-length board can move up to roughly 5mm (approximately 1mm per metre). Because of this thermal movement, we strongly recommend installing BiForm decking with a picture frame and/or breaker boards, rather than butt joints.

- A breaker board runs perpendicular to the main run of decking and helps minimise the effect of thermal movement.
- Butt joins are not recommended with BiForm decking due to expansion and contraction — see 'Stop Clips' on the next page for the rare situations where a joint cannot be avoided.
- Mitred corners are a popular finishing option. They perform best on lengths of 2.4m or less, surface-fixed while the boards are cool and contracted. Because two board ends meet in a single joint, consider a slightly tighter gap than a standard end gap to reduce the chance of the joint opening as the deck weathers.

Breaker board placement.

Breaker boards can be placed wherever suits your outdoor space. Some installations use a symmetrical picture-frame layout; others position breaker boards to line up with doorways, windows or steps.

Factor in wastage — getting the most out of each 4850mm board is an important part of planning your layout. If we haven't already, we're happy to draw up a recommended board layout for your deck — call 0800 449 274 or visit biform.co.nz.

06. Facing Boards & Stop Clips.

Facing Boards.

The same decking boards can be used vertically as facing boards. As with surface decking, butt joins are not recommended.

Surface-fix every 400mm to prevent bowing, and predrill before fixing through the face of the board.

Stop Clips.

Stop clips are designed for use three situations to stop the boards moving along the fixers:

1. Centre of long boards.

Use a stop clip on the centre joist of any board over 3.5m long, to balance thermal movement at each end of the board.

2. Either side of butt joins.

Traditional hardwood decking is often installed with random butt joins. With composite decking, the effect of thermal movement at a butt join is effectively doubled, so we strongly discourage butt joins with BiForm decking.

Where a butt join is unavoidable because of wastage, a Stop Clip offers a compromise: it restrains thermal movement at the board end, making an occasional butt join workable. Only one stop clip should be used per board, giving a maximum of one butt join per run of decking – install on the second joist back from the join.

3. On angle cuts.

Install on the second joist back from the angle cut to maintain a straight cut.

Handy hint: A stop clip is a single screw through the clip into the joist; the clip's teeth bite into the groove on the underside of the board to lock that end in place. TIGHTEN THESE CLIPS LAST as they can distort the board if tightened as you go.

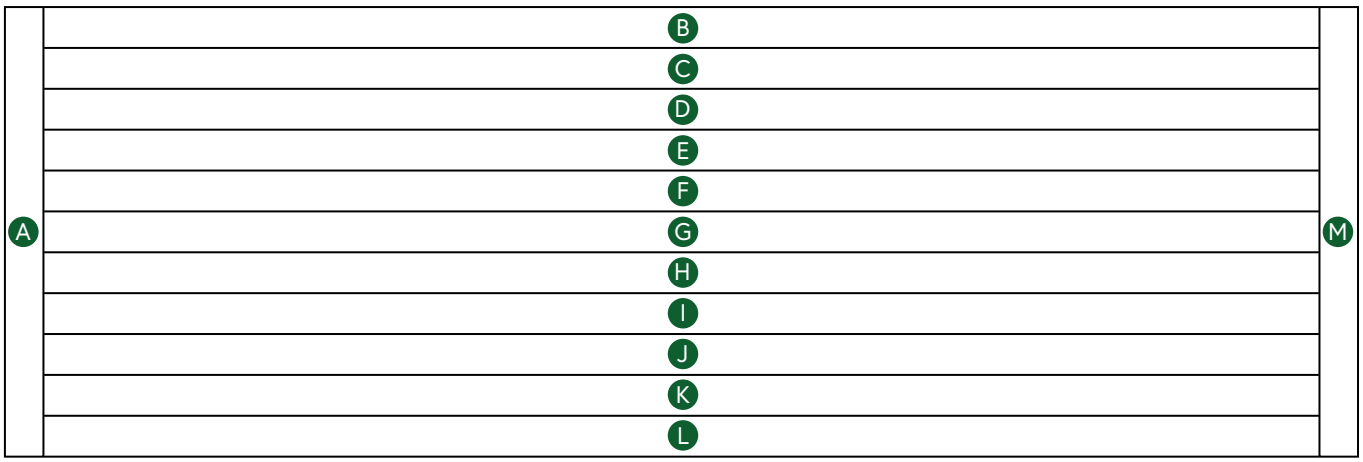
07. Key Installation Points.

- Store boards in the shade prior to cutting + installing.
- Use a picture-frame design.
- Use a breaker board at the ends of boards where necessary.
- Avoid butt joins wherever possible.
- Joists at 400mm centres for the Form 130 profile.
- Joists at 450mm centres for the Form 140 profile.
- In windy exposures, use Windbreak Plus cloth — contact us for details of this custom solution. In very rare circumstances a whistling noise can be heard due to wind vibration.
- Install and fix each regular deck board as you go. Allow each section to acclimatise and trim with a tracksaw all at one time, when cool.
- If installing over 30 degrees celsius allow the boards to cool overnight and trim first thing in the morning.
- Install the perimeter board first. Surface-fix it with Torx deck screws, predrilling the board first.
- When surface fixing perimeter, breaker + facing boards use two 60mm Torx screws per joist.
- Pre-drill these 60mm screws using a 4mm size bit. for the shank of the screw and and a 7mm size bit to predrill for the head of the coloured screw.
- A counter sink bit is not advised , for coloured screws. The silver screws are traditional type screws and can be used with a counter sink. Use a stop collar to control the depth of hole for the coloured heads.
- In-fill with deck boards using a concealed black Fixing Clip & black screw at every joist, plus one stop clip per board on a central joist where boards exceed 3.5m.
- Install the last perimeter/breaker board by surface-fixing with Torx deck screws, leaving the appropriate expansion gap.
- The decking expands and contracts length ways with temperature changes through the day. Before cutting, assess the temperature of each board — hot boards will shrink as they cool, and cool boards will expand as they warm up.
- Take care to avoid dust and mud on the deck. New decking has lubricant from the extrusion channel which means the dust and mud is initially unsightly and difficult to remove.

08. Step-by-Step Installation Guide.

The example below shows a typical 5m x 4.85m Form 130 deck, using a timber substructure installed with reference to NZS 3604, with joists at 400mm centres and boards labelled A (front perimeter) through M (rear perimeter).

- Once your substructure is installed at the correct joist centres, you're ready to lay your boards.
- For substructure requirements, see our CAD drawings at biform.co.nz.
- Double joists are required under perimeter Boards A and M.



Board:	Role in this example layout:
B then A	First perimeter board — cut to size and laid first.
C - K	Field boards, laid in sequence, cut to length only after all are fastened.
L, M	Final perimeter board — cut to size last.

Step by step.

1. Cut your first perimeter Board B to size and lay it. Surface-fix a pair of screws at every joist using 60mm stainless steel Torx deck screws. Do not cut Boards B–M to size at this stage.
2. Lay your second perimeter Board B, with the end butted hard up against Board A. Surface-fix with Torx deck screws at every joist. Once fixed, slide a Fixing Clip & Screw into the edge groove of the board at every joist and screw into place. Do not over-tighten these black screws — over-tightening can make the next board difficult to slide into place.
3. Lay Board C with the end approximately 2mm away from Board A. Slide it into place so the Fixing Clip also engages the edge groove of this board. A rubber hammer can be used to gently tap the board into position, then tighten the black screw at every joist (again, without over-tightening). Use one stop clip per board over 3.5m, on a central joist, to equalise thermal movement at each end. Once fixed, slide a Fixing Clip & Screw into the edge groove ready for the next board.
4. Repeat step 3 for Boards D through K, allowing a 2mm gap between each board.
5. Lay your third perimeter board, Board L, with the end butted hard up against Board A. Tighten the Fixing Clip & Screw, then surface-fix this board with Torx deck screws.
6. With all boards laid, you're ready to trim Boards B–L to size. Make sure all boards are at a similar cool temperature before cutting, so your expansion gaps stay consistent.
7. Lay your last perimeter board, M, cut to size. Depending on the time of day, leave a 0–2mm gap from the newly cut ends of Boards B–L, and surface-fix a pair of screws at every joist using Torx deck screws.

Points to Note.

Heat from Low-E glass doors and windows due to light reflection can affect the decking boards in proximity, causing more movement than other boards. To minimise this effect install and trim when cooled – usually first thing in the morning.

After Installation.

Cleaning.

Clean your deck immediately after installation to remove construction dust and residue. A scrub with warm water and BiForm Deck Cleaner will help speed up the natural weathering process.

Hose down with a garden hose, and use a sponge mop or a soft broom wrapped in a towel to remove excess water. Do not use a high-pressure washer, as this can damage the surface finish.

Care & Maintenance.

Please forward the Care & Maintenance Guide (page 8) and the Warranty (page 9) to the homeowner or building maintenance department.

Registration.

Please register the deck for warranty at biform.co.nz/warranty-registration/, or by scanning the QR code supplied with this guide.

09. Decking Care & Maintenance Guide.

General Cleaning.

Keep it clean, and your BiForm deck will reward you with years of low-maintenance enjoyment. A broom or mop is enough for most situations; for a deeper clean, use BiForm Deck Cleaner and a scrubbing brush at least once a year.

Weathering.

Initially the deck may appear to leach or water-stain — this is a normal weathering process that settles down over 6 to 12 months, depending on rainfall and environment. Scrubbing with BiForm Deck Cleaner after the first summer will speed this up; the colour typically lightens 10–20% before stabilising. As a recycled product, colour variation of up to 8% board to board can be expected.

Protecting.

Use a mat under your BBQ to protect against grease stains, and felt protectors under plastic or metal furniture to prevent scratching, gouging and potential rust marks. Avoid dragging heavy items across the deck, as this will scratch the surface — scratches can be treated with a light sand, following the grain of the board.

Mould & Mildew.

If damp leaves are allowed to build up, or the deck sits in a shaded, damp location, mould or mildew may develop. Treat with 30 Seconds Outdoor Cleaner — new generation (blue label) — following the manufacturer's instructions. For lighter colours in damp areas, a 6-monthly or annual spray with 30 Seconds Spray and Walk Away (green label) will help prevent surface mould forming.

Stains.

Like timber, BiForm decking is susceptible to staining from BBQ grease, oil and tannin from some plants. Treat stains immediately with absorbent cloths, then apply a degreaser per the manufacturer's instructions, followed by a general clean with BiForm Deck Cleaner or hot soapy water.

Scratches.

Light scratches can be removed with a light sand using 40-grit sandpaper, following the length of the plank. Colour and texture changes from sanding will recede with weathering over time.

Testing.

Always test any treatment, cleaning product or sanding on a spare or obscured piece of decking first, to check for any change before treating a visible area.

Rinse & Dry.

After any cleaning, hose off and use an old towel wrapped around a deck scrub, or a rubber scraper, to remove excess water. On a warm day, the deck should dry with no water marks within a few moments.

Further Advice.

- info@biform.co.nz
- 0800 449 274

10. 25 Year Limited Warranty.

Products Covered.

Form 130, Form 140, Forest Face Fix 138

Warranty Cover.

For purchases made on or after 1 December 2015, BiForm Ltd ("BiForm") warrants to the original consumer purchaser ("Purchaser") that, for twenty-five (25) years from the date of original consumer purchase, under normal use and service conditions, BiForm's decking products ("Products") will be free from material defects in workmanship and materials, and will not crack, split, splinter, rot or suffer structural damage.

This warranty does not cover the cost of installation, removal or reinstallation, including labour and freight, nor does it cover staining, colour variation, fading or wind noise. BiForm's sole responsibility is, at its option, to refund the percentage of the original purchase price listed in the Prorated Warranty Schedule below, or to replace the defective product.

This warranty is subject to the limitations and exclusions below.

Prorated Warranty Schedule.

Years since purchase:	Purchased price covered:
1 - 10 Years	100% Cover
11 - 15 Years	75% Cover
16 - 20 Years	50% Cover
21 - 25 Years	15% Cover

Limitations & Exclusives.

This 25-year limited warranty is void if any of the following occurs:

(a). improper installation and/or failure to follow BiForm's installation guidelines;

(b). movement, settling, distortion or collapse of the ground or supporting structure on which the product is installed;

(c). naturally occurring events including impact, earthquake, tornado, hurricane, lightning, flooding or other acts of God;

(d). improper handling or storage, neglect or misuse by the Purchaser, the transferee or a third party;

(e). improper application of paint or other surface chemicals not recommended in writing by BiForm;

(f). adverse effects of air pollution; or

(g). normal weathering, wear and tear of surfaces.

BiForm Liability.

BiForm's liability for defective products will in no event exceed the replacement of the defective product or a refund of the purchase price, as described above.

This warranty may be transferred once, within five years of original purchase, to a subsequent buyer of the property on which the BiForm products were originally installed. BiForm is not liable for incidental or consequential damages arising from the use or ownership of this product.

This warranty gives you specific legal rights; you may also have other rights under the Consumer Guarantees Act 1993.

Specifications.

To make a claim, notify BiForm in writing within the warranty period, including a description of the claimed defect and proof of purchase, to:

BiForm Limited, PO Box 13842, Onehunga, Auckland, New Zealand

Warranty Registration.

We recommend the final customer registers their BiForm decking product after installation, at biform.co.nz/warranty-registration/, or via the QR code supplied with this guide.