BEFORE YOU START

As with any building project, installing RIGHTWOOD DECKING turns out best when you think through the entire process in advance and familiarize yourself with the materials and their application. Please review the following tips before starting work on a RIGHTWOOD DECKING project. Prior to construction, check with your local council for any special building requirements in your area. For best results, follow these simple installation instructions, paying close attention to gapping, spacing and fastener requirements. Also note any relevant information contained in the Blue Chip Group Pty Ltd / Rightwood Pty Ltd terms of trading.

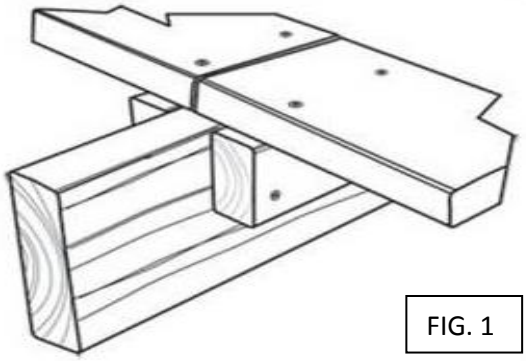

FIG. 1

Board end to end gapping requirements (mm)

Temperature C° on day of installation	Warmest annual temperature C° expected in region										
C°	-1	4	10	16	21	27	32	38	43	49
-1	3	3	3	3	3	5	5	6	6	8
4		3	3	3	3	3	5	5	6	6
10			3	3	3	3	3	5	5	6
16				3	3	3	3	3	5	5
21					3	3	3	3	3	5
27						3	3	3	3	3
32							3	3	3	3
38								3	3	3
43										
49										

FIG. 2

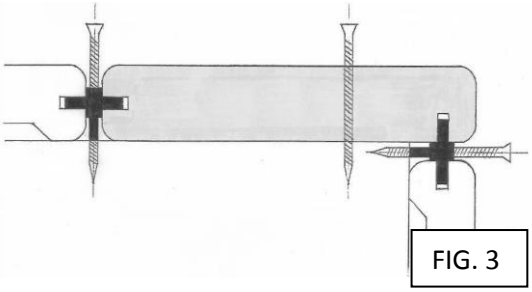

FIG. 3

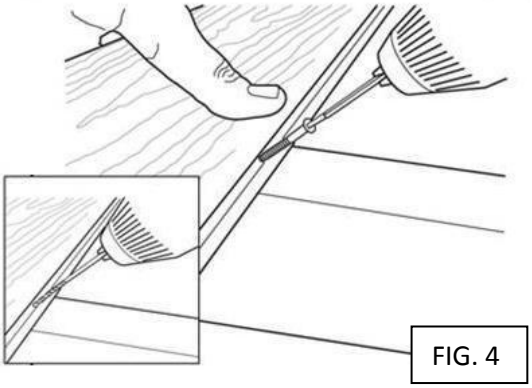

FIG. 4

(A) FACE-FIXING WITH SCREWS

We recommend using 50x10g for CAPTURA & DURODECK and 65x14g for MARINE BOARD, all stainless steel or class 3 galvanised screws. Always pre-drill and countersink prior to driving screws. Screws should be a minimum 20mm from the end or edge of the board and driven flush with the decking surface. Do not over-tighten. Use two fasteners per deck board at each joist. For any decking where two boards meet end-to-end over a joist, add additional blocking (figure 1).

(B) JOIST SPANS

Maximum span is 400mm on-centre for CAPTURA & DURODECK 24mm decking in residential perpendicular applications and 600mm on-centre for 32mm MARINE BOARD in perpendicular applications.

(C) SPACING FOR VENTILATION

Allow 5-6mm distance between all decking material and any permanent structure or post. RIGHTWOOD DECKING like all wood and composite decking products requires proper ventilation and drainage in order to ensure its longevity. There should be a 50mm clear space between the bottom edge of the joists and the finished ground level in order to allow for proper ventilation. Adequate drainage is also needed to prevent water pooling under the deck.

(D) SPACING BETWEEN BUTT JOINTS

Allow minimum of 2mm gap between board ends for every 10°C of difference between installation temperature and the hottest temperature expected (figure 2). Additional blocking is recommended for support (figure 1).

(E) PENCIL ROUND EDGE-BOARD INSTALLATION

Cut pencil round edge-boards to length, mitre as required for corners and then fasten the outside edge to the rim joist with screws. Although not critical, it is recommended to overhang the edge-board past the sub-frame to allow for running decking fascia boards vertically down the sides of the deck (figure 3). Pre-drill and countersink all deck screws as per (A). On the other side of the board, insert RIGHTWOOD™ secret-fixing clip into the slot and center on the joist (figure 3). Install a 50x7g 'black-head' stainless steel screw at a 90° angle through the secret-fixing clip and drive flush. Do not over tighten. The clip wings must remain level with the joist for the next board to fit correctly (figure 5 overleaf). Install one secret-fixing clip at each joist location. Slide the next board into place so the wings on the previous clips fit into the slot on the side of the board. Make sure the side gap between the boards is minimum 5-6mm. ***Edge Board Grooves to be Done Onsite if Required. Otherwise Face Fix as Described in (A) Above.***

(F) DECKING INSTALLATION & DECKLOCK SCREWS

To keep the decking boards from moving over time, we recommend screwing the boards at the center of their length using a 50x7g 'black-head' stainless steel screw. This holds the deck board in place at the center of each board and allows the decking to expand/contract at the ends of the boards. Pre-drill in the slot of the deck board with a 3mm drill bit (inset of figure 4). Drive screw into the slot so it's flush with the bottom of the groove (figure 4). This will allow you to properly fit a secret-fixing clip into the slot. Install clip over the screw and centered over the joist. Fasten using a 'black-head' stainless steel screw at a 90° angle through the clip and drive flush with the clip (figure 7 overleaf). The fastener wings must remain level for the next board to fit correctly (figure 5 overleaf). – ***Continued overleaf***

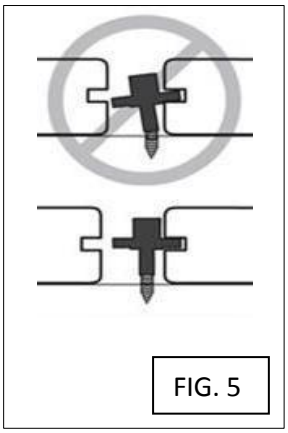
FIG. 5

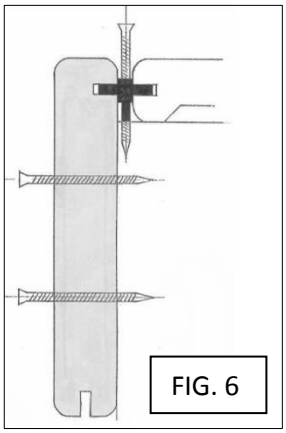
FIG. 6

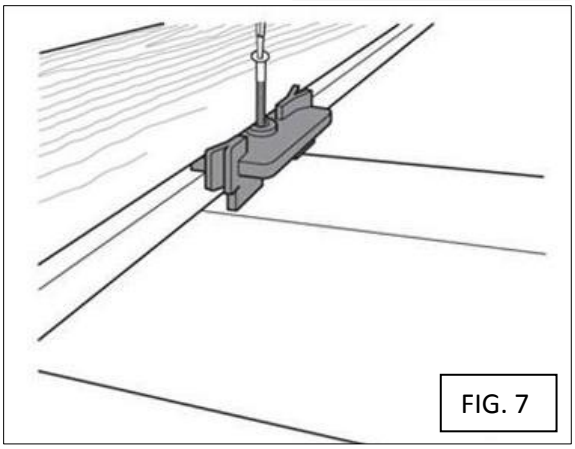
FIG. 7

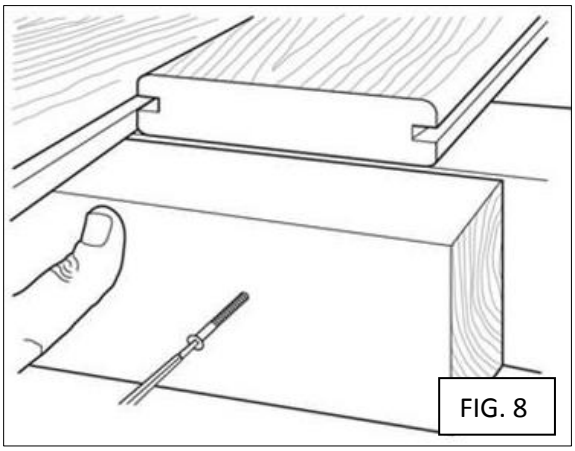
FIG. 8

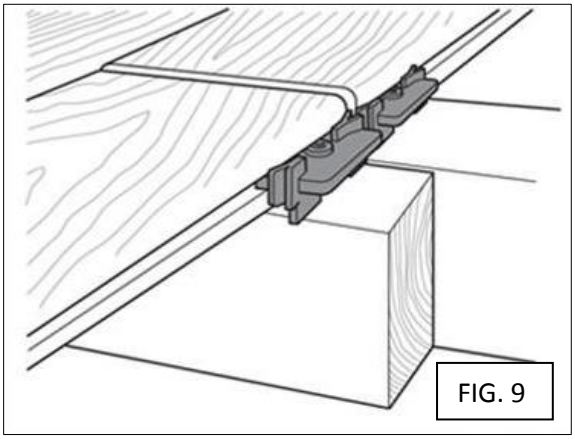
FIG. 9

(F) DECKING INSTALLATION CONTINUED
Install one secret-fixing clip at each joist location along the length of the board. For installations where deck boards are butted end-to-end at the joist, we recommend adding a 200mm block and using a secret-fixing clip at the end of each board (figures 8 and 9). Be sure to gap the boards as previously described. Repeat the process for each board until the final board is cut to size to fit between the edge-board or building and fastened through the non-grooved edge with screws as described in (A).

(G) FASCIA BOARD INSTALLATION
An alternative to using a pencil round edge-board (as per Figure 3) is to use the same profile but as a fascia board (see Figure 6) and fix into rim joist as described in (A). If no edge-board or fascia is being used, the entire perimeter of the deck should be fastened to the rim joist with screws as described in (A). ***Fascia Board Grooves to be Done Onsite if Required. Otherwise Face Fix as Described in (A) Above.***

(H) CAPTURA COLOUR VARIATION & FADING
As with all composite products, CAPTURA DECKING will exhibit colour variations from piece to piece. This results from naturally occurring variations in raw materials and combines to create a more realistic appearance. We recommend purchasing all required materials simultaneously and inspecting material for colour acceptance before installing as manufacturing runs may produce slightly different colours. Simulated tests have shown that CAPTURA DECKING displays virtually no signs of fading and will remain at or near its original color throughout its service life.

(I) DURODECK & MARINE BOARD FINISH VARIATION
DURODECK & MARINE BOARD will lighten over time. This color tone shift is dependent upon exposure to sunlight and other environmental factors and is generally completed within 60 to 90 days. Slight colour variation is not covered by the warranty. The appearance of this product will also change when viewed from different ends and/or angles. To achieve the most consistent colour, install all of the boards in the same direction using the product end tags as a point of reference. Alternatively to achieve subtle variation and possibly a more realistic appearance, install the boards in random directions to create contrasting light and dark shades of the deck board colour.

(J) CAPTURA END-SEALING
All CAPTURA DECKING board ends and ripped / exposed core (e.g. for boards cut down to smaller width) need to be sealed using End Board Sealer for full warranty coverage. Sealer must be applied thick enough to exposed area to provide even coat. Proof of purchase must accompany any warranty claims filed for excessive swelling or cracking of board ends. DURODECK or MARINE BOARD do not need sealing.

(K) OTHER IMPORTANT INFORMATION
RIGHTWOOD materials are not suitable for structural use. It should not be used for primary load bearing members such as posts, beams, joists or stringers. The same common sense precautions should be taken when handling as with wood or other building materials. Dust masks and eye protection are recommended to avoid possible irritation from sawdust and chips. Gloves will help to protect the hands. Hands should be washed after doing construction work. The diagrams and instructions in this brochure are for illustration purposes only and are not meant to replace a licensed professional. Any construction or use of the product must be carried out by a qualified installer in accordance with good commercial practice and any relevant codes or standards such as but not limited to local zoning and / or building codes. The consumer assumes all risks and liability associated with the construction or use of this product. The consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. All information contained in the brochure and all sales and transactions are subject to Blue Chip Group Pty Ltd & Rightwood Pty Ltd terms of trading which are available on request.

(L) MAINTENANCE RECOMENDATIONS

RIGHTWOOD DECKING is virtually maintenance free, needing only periodic cleaning to keep it looking great however like any floor or surface in your home it looks best when the surface is kept clean. Normal cleaning is as simple as using a broom or mop with a mild detergent. Please read and follow these instructions to keep your deck looking its best.

(M) CLEANING RECOMMENDATIONS

Periodic washing with soap / detergent and water will help remove surface dirt. This will also help prevent the build-up of pollen, debris and spores that can cause and accelerate mould / mildew growth. A pressure washer should not be used to "blast" mould / mildew or soils from a deck surface. The abrasive nature of the water stream can potentially damage the material by driving the spores into the material, which may create a more challenging problem to remediate. A pressure washer with a fan tipped nozzle should be used only to lightly wet or rinse wood or composite deck surfaces. There are many deck wash and exterior cleaning products available at retail stores. It is important to make sure you use a cleaner specifically intended for your application. After selecting a product, be certain to read, understand and follow all instructions supplied by the manufacturer. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck is subjected to. Additionally it is always a good idea to test the cleaner in a small inconspicuous area prior to applying it to the entire deck.

(N) BASIC CLEANING AGENTS

1. Deck wash / cleaners usually contain sodium per carbonate and a detergent, which is effective on normal dirt and grime and bleaches out mould and mildew stains.
2. Oxalic acid cleaners are effective on rust stains from metal furniture.
3. Commercial degreasers contain propylene glycol, sodium hydroxide, and various detergents for removing grease and oil stains.
4. Spot removers / thinners can be used sparingly on particularly stubborn grease or oil stains, but should be washed off quickly with water as they will attack the grain pattern. These normally include petroleum distillates, xylene, methanol, acetone, or other organic solvents.

(O) PREVENTING MOULD & MILDEW ON COMPOSITE DECKING

Mould and mildew can be a nuisance on any exterior building surface, regardless of the material. If conditions are right they will spawn on wood, plastic, concrete, metal and other surfaces. Mould formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on deck surfaces. It is important to note that the appearance of mould/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

(P) INHIBITORS

As with deck washers, there are several mould inhibitor products available from paint stores, hardware stores, online outlets and home centres to help prevent long term mould/mildew growth. For any product selected, be certain to read, understand and follow all instructions supplied by the manufacturer. Depending on the environmental factors affecting your deck some preventative cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventative maintenance, follow the manufacturer's recommendation.

(Q) MOULD REMOVAL

Mould may form on any surface where moisture is prevalent, where there is heavy shading, or where pollen and debris are allowed to collect. To eliminate mould, use conventional deck washers or cleaners that contain sodium per carbonate and detergent. These cleaners can be found at most home centres.

(R) STAINS

CAPTURA DECKING is virtually impervious to stains due to its durable cap-stock layer. DURODECK & MARINE BOARD resist accidental staining better than regular wood decking because it is a plastic and wood composite however it is not stain-proof. Many stains can be removed with household cleaners and degreasers. Best results are achieved if you act quickly after staining occurs. Don't allow stains to penetrate the deck's surface or to bake on under direct sunlight. If you use a barbecue grill on your deck, keep a splatter guard underneath it; grills are a major source of grease stains and burns. To prevent water from pooling on the deck surface and staining it, make sure the deck boards have gaps between them to allow standing water to drain. Alternatively to protect DURODECK & MARINE BOARD decks from staining they should be sealed with CHEMYSIS Composite Sealer from Rightwood.

(S) SCRATCHES

Just as wood decking materials can get marked or gouged, the surface of RIGHTWOOD DECKING can become scratched. With DURODECK & MARINE BOARD we recommend allowing normal wear marks to fade, as they will blend in with the weathered colour. If the surface of the deck board gets scratched, you can use a wire brush and brush in the same direction as the original grain. In doing so, you will expose non-weathered decking and will experience a colour difference however this will blend in over time. With CAPTURA DECKING, fixing scratches with a wire brush is not possible due to the cap-stock layer and as such replace severely damaged pieces as you would with normal timber decking.

(T) GRIME, RUST & GROUND-IN DIRT
In most cases, soap and water will maintain the appearance of RIGHTWOOD DECKING products. If grime, ground-in dirt or rust marks become a problem, use a cleaning product with an oxalic acid base. Do not use bleach, abrasive cleansers or pads when cleaning.

(U) USING TIMBER COATINGS OR TIMBER STAINS
RIGHTWOOD DECKING requires only periodic cleaning with soap and water. While not recommended, DURODECK & MARINE BOARD can be stained with quality timber stains after three months of exposure to various weather conditions. When staining DURODECK & MARINE BOARD, ensure that the stain is intended for use on composite wood products. By choosing to stain DURODECK & MARINE BOARD, a relatively low-maintenance product changes to one that will require more upkeep. Always test a small, hidden portion of the deck before staining the entire deck. Durability of stain products varies by manufacturer. Exposure to ultraviolet light and surface traffic will also affect the stain's performance. Most manufacturers' literature indicates re-staining about every two years. Composite wood products do not accept paint or stain as well as wood; therefore, they will not have the same appearance as painted or stained wood. CAPTURA DECKING is co-extruded with the cap-stock layer which is impervious and cannot be painted or stained over.

(V) PAINTING
Painting RIGHTWOOD DECKING is not recommended as paints will not adhere to the surface well and will rapidly begin to peel. Composite wood products do not accept paint as well as wood and it will not have the same appearance as painted or stained wood.

(W) OTHER IMPORTANT INFORMATION
As with any exposed exterior surface RIGHTWOOD DECKING needs cleaning and maintenance to look its best and accordingly it is ultimately the client's responsibility to clean and maintain the product as required to maintain the desired performance and appearance. RIGHTWOOD DECKING is not suitable for structural use. It should not be used for primary load bearing members such as posts, beams, joists or stringers. The same common sense precautions should be taken when handling as with wood or other building materials. Dust masks and eye protection are recommended to avoid possible irritation from sawdust and chips. Gloves will help to protect the hands. Hands should be washed after doing construction work. Always follow all safety precautions and instructions when using and cleaning or other chemical products. Any construction or use of the product must be carried out by a qualified installer in accordance with good commercial practice and any relevant codes or standards such as but not limited to local zoning and / or building codes. The consumer assumes all risks and liability associated with the construction or use of this product. The consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. All information contained in the brochure and all sales and transactions are subject to Blue Chip Group's & Rightwood Pty Ltd terms of trading which are available on request.

DURODECK TECHNICAL DATA

The DURODECK composite material (Formerly Rightwood Latitudes) is made in USA using a minimum 30% virgin plastic and patented Strandex® technology (every timber fibre is totally encased in plastic) to produce a much higher density composite with very minimal water absorption and as a result better stability, greater strength and superior long-term durability with low maintenance.

HIGH QUALITY COMPOSITE

DURODECK is made in USA using a minimum 30% virgin plastic and patented Strandex® technology (every timber fibre is totally encased in plastic) to produce a much higher density composite with very minimal water absorption and as a result better stability, greater strength and superior long-term durability with low maintenance.

- DURODECK Composite Decking

PRODUCT COMPOSITION

CORE MATERIAL	PERCENTAGE
Recycled Timber Fibre (STRANDEX®)	50%
Recycled High-density Polyethylene (HDPE)	20%
Virgin High-density Polyethylene (HDPE)	30%

MATERIAL PROPERTIES & TESTING

ITEM	TEST STANDARD	UNIT	RESULT
Unit Weight (Density)	Metric	Kg/m3	1065
Unit Weight (135x24mm Decking)	Metric	Kg/lm	3.42
Allowable Decking Span (485kg/m2)	Metric	mm	400 (on centre)
Coefficient of Thermal Expansion	ASTM D-696	-	1.6x10-5
Flexural Modulus MOE	ASTM D-6109	psi	554,985
Flexural Strength MOR	ASTM D-6109	psi	3,467
Tensile Modulus MOE	ASTM D-790	psi	450,000
Tensile Strength	ASTM D-638	psi	1,200
Compressive Strength	ASTM D-143	psi	2,350
Specific Gravity	ASTM D-2395	gm/cc	1.2
Coefficient of Friction ▪ Dry ▪ Wet	 ASTM F-1679-96 ASTM F-1679-96	 - -	 0.53 0.53
Screw Withdraw (#10 Wood-screw)	ASTM D-1761	lbs	880
Screw Head Pull-through (#9 Screw)	ASTM D-1761	lbs	909
Fungus Resistance (Brown & White Rot)	AWPA E7-93	-	Pass
Termite Resistance (Formosan Sub.)	AWPA E7-93	-	Pass
UV Exposure ▪ MOR Degrade ▪ MOE Degrade	 ASTM D-6662 ASTM D-6662	 - -	 -4.3% -7.5%
Moisture Absorption	ASTM D-1037	%	1.7
Hardness	ASTM D-143	lbs	1,390
Thermal Conductivity	ASTM C-177	Btu/hr/ft2/°F	2.03
Concentrated Static Load (50°C) ▪ Ultimate Load ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 kN mm	 3.03 3.23
Impact Load of 100Nm (50°C) ▪ Load of 1.78kN after Impact ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 No Break mm	 Pass 2.42
Ignitability Index	AS/NZS 1530.3	-	10
Spread of Flame Index	AS/NZS 1530.3	-	6
Heat Evolved Index	AS/NZS 1530.3	-	5
Smoke Developed Index	AS/NZS 1530.3	-	4

MARINE BOARD TECHNICAL DATA

The MARINE BOARD has a reversible serrated finish which is available in four colours Cedar, Grey, Redwood & Walnut and because it is 33% thicker it spans 600mm centres whilst maintaining commercial load ratings. Ideal for jetties, boardwalks, pedestrian bridges and viewing platforms, MARINE BOARD offers outstanding performance with low maintenance in even the harshest environments.

HIGH QUALITY COMPOSITE

MARINE BOARD is made in USA using a minimum 30% virgin plastic and patented Strandex® technology (every timber fibre is totally encased in plastic) to produce a much higher density composite with very minimal water absorption and as a result better stability, greater strength and superior long-term durability with low maintenance.

- MARINE BOARD Composite Decking

PRODUCT COMPOSITION

CORE MATERIAL	PERCENTAGE
Recycled Timber Fibre (STRANDEX®)	50%
Recycled High-density Polyethylene (HDPE)	20%
Virgin High-density Polyethylene (HDPE)	30%

MATERIAL PROPERTIES & TESTING

ITEM	TEST STANDARD	UNIT	RESULT
Unit Weight (Density)	Metric	Kg/m3	1065
Unit Weight (135x32mm Decking)	Metric	Kg/lm	4.56
Allowable Span (485kg/m2)	Metric	mm	600 (on centre)
Coefficient of Thermal Expansion	ASTM D-696	-	1.6x10-5
Flexural Modulus MOE	ASTM D-6109	psi	554,985
Flexural Strength MOR	ASTM D-6109	psi	3,467
Tensile Modulus MOE	ASTM D-790	psi	450,000
Tensile Strength	ASTM D-638	psi	1,200
Compressive Strength	ASTM D-143	psi	2,350
Specific Gravity	ASTM D-2395	gm/cc	1.2
Coefficient of Friction ▪ Dry ▪ Wet	 ASTM F-1679-96 ASTM F-1679-96	 - -	 0.53 0.53
Screw Withdraw (#10 Wood-screw)	ASTM D-1761	lbs	880
Screw Head Pull-through (#9 Screw)	ASTM D-1761	lbs	909
Fungus Resistance (Brown & White Rot)	AWPA E7-93	-	Pass
Termite Resistance (Formosan Sub.)	AWPA E7-93	-	Pass
UV Exposure ▪ MOR Degrade ▪ MOE Degrade	 ASTM D-6662 ASTM D-6662	 - -	 -4.3% -7.5%
Moisture Absorption	ASTM D-1037	%	1.7
Hardness	ASTM D-143	lbs	1,390
Thermal Conductivity	ASTM C-177	Btu/hr/ft2/°F	2.03
Concentrated Static Load (50°C) ▪ Ultimate Load ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 kN mm	 3.03 3.23
Impact Load of 100Nm (50°C) ▪ Load of 1.78kN after Impact ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 No Break mm	 Pass 2.42
Ignitability Index	AS/NZS 1530.3	-	10
Spread of Flame Index	AS/NZS 1530.3	-	6
Heat Evolved Index	AS/NZS 1530.3	-	5
Smoke Developed Index	AS/NZS 1530.3	-	4

CAPTURA TECHNICAL DATA

The CAPTURA Decking uses the latest technology to encase the composite core with a highly durable cap-stock layer which results in beautiful realistic colours with the unrivalled richness and warmth of real timber. Available in Burnt Ash, Jarrah & Spotted Gum, CAPTURA offers excellent resistance to staining and is absolutely ideal for areas where spillages are likely to occur.

100% RECYCLED & LOW MAINTENANCE

CAPTURA really is the green choice offering a product which is produced from 100% recycled materials using approximately 500 million plastic bottles and saving 700 truckloads from landfill annually. On top of this the highly impervious cap-stock finish is extremely stain resistant meaning it is easy to keep the surface clean and looking 'brand-new' for many years with very minimal maintenance.

- CAPTURA Composite Decking

PRODUCT COMPOSITION

CORE MATERIAL	PERCENTAGE
Recycled Timber Fibre	50%
Recycled High-density Polyethylene (HDPE)	50%

MATERIAL PROPERTIES & TESTING

ITEM	TEST STANDARD	UNIT	RESULT
Unit Weight (Density)	Metric	Kg/m3	1065
Unit Weight (135x24mm Decking)	Metric	Kg/lm	3.42
Allowable Span (485kg/m2)	Metric	mm	400 (on centre)
Coefficient of Thermal Expansion	ASTM D-696	-	3x10-5
Flexural Modulus MOE	ASTM D-198	kN	1964
Flexural Strength MOR	ASTM D-198	kN	28.2
Tensile Peak Stress ▪ Length ▪ Width	 ASTM D-638 ASTM D-638	 - -	 Pass Pass
Compressive Strength ▪ Length ▪ Width	 ASTM D-198 ASTM D-143	 - -	 3,419 2,163
Specific Gravity	ASTM D-2395	gm/cc	1.08
Coefficient of Friction ▪ Dry ▪ Wet	 ASTM D-2394 ASTM D-2394	 - -	 0.23 0.56
Screw Withdraw (#10 Wood-screw)	ASTM D-1761	lbs	648
Nail Withdraw	ASTM D-1761	lbs	108
Fungus Resistance (Brown & White Rot)	ASTM D-2017	No decay	Pass
Termite Resistance (Formosan Sub.)	ASTM D-3345-74	-	Pass
UV Exposure ▪ Xenon Arc Exposure ▪ Ultraviolet Exposure	 ASTM G-26 ASTM D-2565	 No deterioration No deterioration	 Pass Pass
Moisture Absorption	ASTM D-1037	%	0 (Cap-stock)
Hardness	ASTM D-143	kN	8.1
Concentrated Static Load (50°C) ▪ Ultimate Load ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 kN mm	 3.03 3.23
Impact Load of 100Nm (50°C) ▪ Load of 1.78kN after Impact ▪ Deflection at 0.89kN Load	 ASTM E-661 ASTM E-661	 No Break mm	 Pass 2.42
Flame Spread	ASTM E-84	N/a	70
Smoke Development	ASTM E-84	N/a	200