Prior to construction, check with your local regulatory agency for special code requirements in your area.

As with any building project, installing Urbanline Latitudes will have the best result when you think through the entire process in advance, familiarizing yourself with the materials and their application. Think of how you want the project to finish – i.e. a picture frame border around the deck makes a huge difference to the end result! Please review the following tips before starting work on a Latitudes composite deck.

For additional installation support, call Urbanline Architectural 1300 658 638

The appearance of this product changes when viewed from different ends. To achieve the most consistent colour, install all

of the boards in the same direction. Installing boards in opposing directions will create contrasting light and dark shades of the deck board colour and is not covered under warranty.

Storage

Urbanline Latitudes Duro composite decking should be stored covered, flat and off the ground. Standard 5800 mm long packs of Urbanline Latitude require a minimum of eight gluts (supports) under the pack for proper storage.

Safety & Tools

Standard safe practices should, of course, be employed when using any tools during installation. Urbanline Latitudes™ composite decking can be drilled, sawn, fastened or routed with normal woodworking tools.

Foundation & Sub-Structure

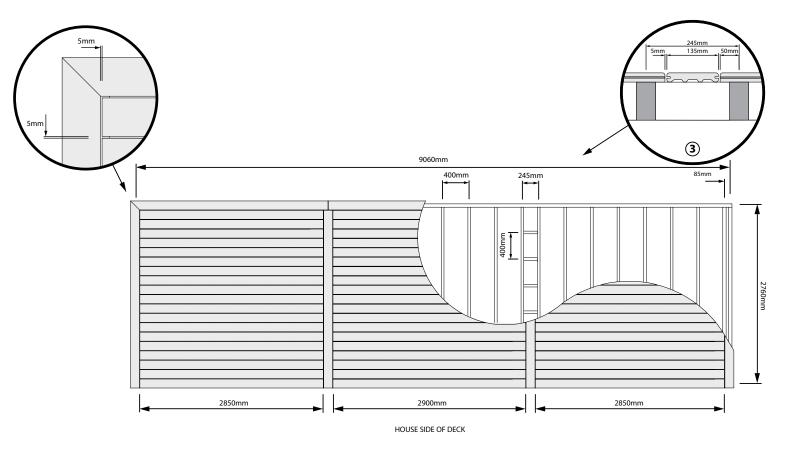
Urbanline Latitudes™ composite decking is not for use as a component of the foundation or substructure. When constructing the substructure care must be taken to ensure that the joists are level, straight and square as Urbanline Latitudes™ decking will conform to the joists. As a general rule the closer the joists the better the deck. Do not exceed the maximum joist spacing specific for each profile. Residential applications: maximum 400 mm joist spacing's & for diagonal or herringbone designs, 300 mm joist spacing's. Commercial applications: joist spacing's must be approved by registered designer and comply with local building codes. Any overhang of decking boards at the ends or sides of the deck should be kept to a maximum of 50 mm. Breaker boards and all board ends must be positioned above and secured to a joist. A fall of 3-4 mm per metre away from the house should be planned for water runoff. Urbanline Latitudes™ composite decking should not be attached directly to any solid surface or watertight flooring system. For adequate airflow and drainage 5 mm between each Urbanline Latitudes™ composite decking board and a minimum of a 300 mm ground clearance is recommended. Deck board ends should not be occluded and any moisture should be able to drain away freely.

Expansion, Contraction & Breaker Boards

All products with a plastic component will expand when temperatures increase and this must be allowed for when planning a deck using composite material. Urbanline boards will elongate approximately 1 mm per metre when heated from cold. We strongly recommend the use of Breaker boards on any deck longer than 6 metres to limit the expansion/contraction gaps to 6 mm. The traditional butt joining of boards is strongly advised against. The preferred method of deck design incorporates the use of breaker boards that are run across the deck at 90 degrees to the ends of the long boards so that the maximum gap possible is 6 mm. This gap can be halved if the board is fixed in the middle with the gap evenly distributed to either end of the board. Additional joists/support is required in the substructure wherever a breaker board is being used. The breaker boards can be screwed directly into the timber joists.

Colour & Orientation

We recommend that wherever possible you purchase all of the boards required for your project at the same time in order to avoid any possible colour variation that may occur between different manufacturing runs. The natural fibres used in the manufacture of Urbanline Latitudes™ composite decking may mean some colour variation between boards and initially in full sun the colour will lighten a little. This will stabilise after 8-12 weeks of full sun exposure. The grain of Urbanline Latitudes™ composite decking will reflect light differently depending on the orientation of the boards. To ensure an even look across the deck it is advisable to lay out the deck boards before fixing to allow you to check your colour mix and grain orientation, this also ensures that each board is the same temperature prior to any cutting.



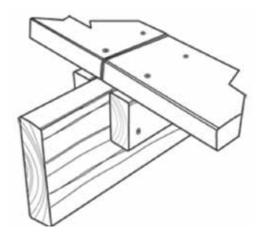
End-to-End Spacing

Allow a minimum of 1.5 mm gap between board ends for every 6.6 degrees Celsius of difference between installation temperature and the hottest temperature expected [figure 1]. For any decking where two boards meet end-to-end over a joist, add additional blocking [figure 2]. Allow 6 mm distance between all decking material and any permanent structure or post.

Figure 1: Temperature table.

	Board End to End Gapping Requirements												
	Warmest annual temperature °C expected in region												
Temperature °C on day of installation	°C	-5	0	5	10	15	20	25	30	35	40	45	
	-5	3mm	3mm	3mm	3mm	3mm	5mm	5mm	6mm	6mm	8mm	8mm	
	0		3mm	3mm	3mm	3mm	3mm	5mm	5mm	6mm	6mm	8mm	
	5			3mm	3mm	3mm	3mm	3mm	5mm	5mm	6mm	6mm	
	10				3mm	3mm	3mm	3mm	3mm	5mm	5mm	6mm	
	15					3mm	3mm	3mm	3mm	3mm	5mm	5mm	
	20						3mm	3mm	3mm	3mm	3mm	5mm	
	25							3mm	3mm	3mm	3mm	3mm	
	30								3mm	3mm	3mm	3mm	
	35									3mm	3mm	3mm	
	40										3mm	3mm	
	45											3mm	

Figure 2: Pre-drill and countersink all deck screws, regardless of type, that are within 25 mm of the end of the deck board.



Starting & Finishing Boards

The first board laid on your deck is referred to as the starter board and will normally be installed with one "free" edge either gapped against the side of a wall or freestanding at the edge of your deck. The starter board can only be fixed via the Hidden Fasteners on the inner edge. The outer edge can be fixed by screwing through the starter board. Before tightening the screw on the deck clips on your starter board, make sure you place your next deck board over the deck clips so that both edges of the Hidden Fasteners are located. The finishing or last board should be treated in the same way as the starter board.

Fastening the boards to the joists

It is recommended that Urbanline Latitudes™ Hidden Fasteners and 305 Stainless Steel Screws are used when installing Urbanline Latitudes™ composite decking. Standard 60 mm screws with the applicable coating or stainless steel decking screws can be used, however the screw heads will be visible and the added value of the concealed fixing option will be lost. Nailing is not recommended.

Breaker boards, starter boards and finishing boards can be screwed directly through the board into timber joists.

Screw Fixings

Pre-drilling and countersinking is recommended in order to reduce the risk of splitting when screwing directly in to the face of the Urbanline Latitudes™ composite decking. A minimum screw length of 60 mm is required. Drivers should be adjusted to a low or medium torque setting when fixing screws in to Urbanline Latitudes™ composite decking. Screws should not be over tightened into the decking. Screw fixing directly through the Urbanline Latitudes™ board is not recommended on steel joists due to the different expansion and contraction characteristics of the two materials.

Gapping

Urbanline Latitudes™ boards are designed to be installed with adequate gapping around the boards to aid air flow. Using Hidden Fastener deck clips to fix the boards to the joists sets a gap between the sides of each board and is the preferred fixing method.

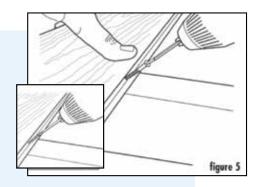
Urbanline Latitudes™ composite decking expands when warm and contracts when cold. It is important to be cognisant of the board temperature prior to cutting in order to determine the gap requirements when installing the decking

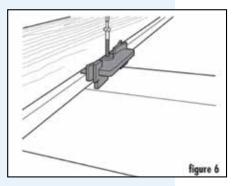
It is advisable to have all of the boards at the same temperature by spreading them evenly over the deck surface prior to installation. In hot conditions, keep the boards in a shaded area before cutting and fixing.

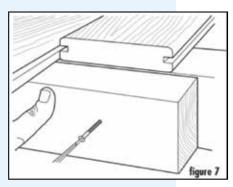
Equator Hidden Fastener Installation

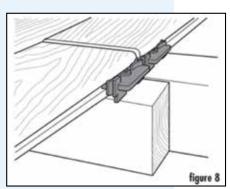
Fourteen Equator Hidden Fasteners are required per 5800 mm board if mounted on 400 mm centre joists. Equator Hidden Fasteners can be installed in just four easy steps:

- Place an Equator fastener in the slot of the composite deck board at each support joist.
- 2. Insert a stainless steel screw through each fastener into the joist.
- 3. Slide the next deck board into place so that the wings fit into the slot on the deck board side.
- 4. Repeat this process until the deck is complete.









Apply these same principles when installing stair treads.

To keep the interior boards from moving over time, we recommend pinning the boards at the centre of their length using a stainless steel screw. This holds the deck board in place at the centre 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 1/8" drill bit (inset of figure 5). Drive screw into the slot so it's flush with the bottom of the groove (figure 5). This will allow you to properly fit an Equator hidden fastener into the slot. Install Equator hidden fastener clip over the screw and centred over the joist. Fasten using the stainless steel screw at a 90° angle through the Equator hidden fastener and drive flush with the clip (figure 6). The fastener wings must remain level with the joist for the next board to fit correctly.

Install one Equator fastener 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 an timber block and using an Equator hidden fastener clip at the end of each board (figures 7 and 8). Be sure to gap the boards as previously described. Repeat the process for each board until the outside edge of the final board is fastened with screws. Use fascia to conceal the board profile and inhibit board movement over time. If no fascia is being used, the entire perimeter of the deck should be fastened to the rim joist with screws. Use two fasteners at the end of each board.

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 in accordance with all 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.

Except as contained in the written limited warranty, the warrantor does not provide any other warranty, either express or implied, and shall not be liable for any damages, including consequential damages.