

Deck-Max Technical Information Data

Deck-Max™ is a proprietary system and must be installed as per all manufacturers specifications, and are to be read in conjunction with your local building code and not to conflict with those guides or any other authority.

The sub-structure

This is underestimated by many. Construction should Prepared as per your engineer's specification and or building code. Note: some decking materials will set a different Joist spacing to building code – generally joist centers are 450mm and composite can be reduced to 350mm always follow manufacturers specifications.

Preparation of Joists:

- Seal all end cuts with an exterior primer
- Paint all faces of joists with a dark coloured exterior primer – this colour selection is so you not see the frame though the gaps.
- Roll a second coat over the top of the joists prior to fixing decking
- Deck-Max uses 50% less fixings therefore ½ the chance of any moisture seeping into the sub frame via the screws.
- Deck-Max specifies that Bostik Ultraset Polyurethane be applied to the top of the joists adds a new level of protection especially in and around the screw holes. This is an Acoustic membrane that stays flexible after curing – minimizing the rattle & squeak of the deck as it ages.

Deck-Max™ Timber

Deck-Max Actually sources its own logs specifically to deliver the ultimate finished product. A decking oil treatment and maintenance program is essential and should be applied and monitored for preservation of the decking. See Deck-Max Data Sheet on Maintenance.



KD kiln dried hardwood has an average moisture content of approximately 13%. With an industry standard of 18% maximum.

We take out timber down to CORE moisture (Not just surface moisture) to approx. 11% then bring it back to an ambient moisture level. In doing this we allow the timber to relax and therefore be more stable.

By taking the timber to a low CORE moisture measure it stabilizes the resins and minimizes the leaching after profiling.

The Average ambient moisture level across Australia is 60%. Subject to abnormal weather changes.

Timber can vary in its capacity to expand and contract as is its natural capacity – this is also governed by how the timber is cut example: [quarter sawn timber is less prone to cupping and distortion.

Timber is Hydroscopic for the rest of its life and this dictates that timber will do what you tell it do. example – install where poor ventilation or High ground moisture and decks close to ground will make the timber fail.

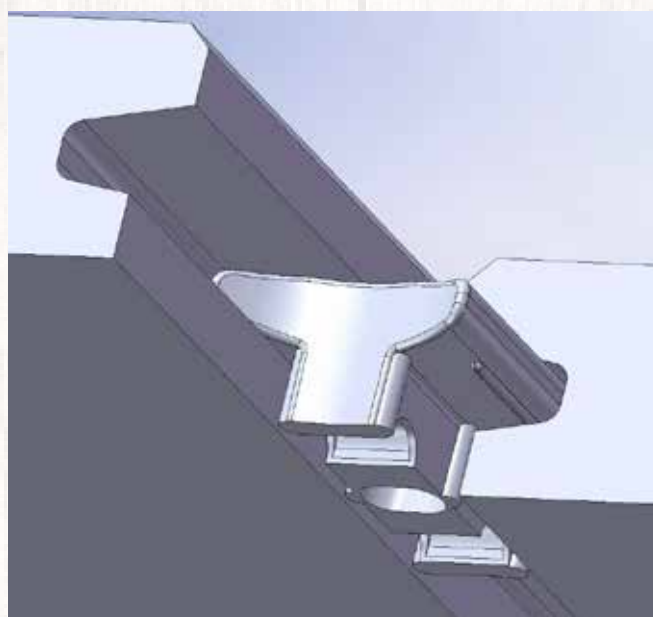
Critical to refer to our Decks Close to Ground data sheets.

Deck-Max decking has a Lateral cut inserted to the side of timber decking boards this will not hold water nor will it create rot from water retention. "Timber Queensland". Actually, the side of the board is the driest portion of the timber as the air flow passes through the gap as a natural air flow dictates.

Deck-Max™ biscuits

The material used in the manufacturing of the biscuits is a high-performance polymer mix providing unmatched performance and value across an amazing broad range of applications.

- Tensile Strength at break 20300 psi ISO 527-1/-2
- Tensile Modules 885 ksi ISO 527-1/-2
- UV stable
- Acid resistance to Oxalic acid as per specification used on the Australian standards table of available deck cleaners.
- Deck-Max produces a Fire Retarded Pro Clip for specific fire areas and sets a 5mm gap.



The Deck-Max™ biscuit fits to each board and to each joist – the Deck-Max™ biscuit provides a 3mm minimum and a 5mm option spacing for the boards.

Note: It is against building code to have no gap.

The screw is fixed into the eye of the Deck-Max clip at a slight angle, this fastens the board on the outside of the board and sets the gap at the same time.

Screws should be tightened so screw head is slightly recessed or flush with fastener. Do not over tighten.

The board is fixed by inserting the Deck-Max™ biscuit into the prepared kerf [lateral cut on both sides

Deck-Max Original Biscuit: In principal, they are the same efficient fastening process except this are used on timber that is not supplied by Deck-Max and is un-grooved.

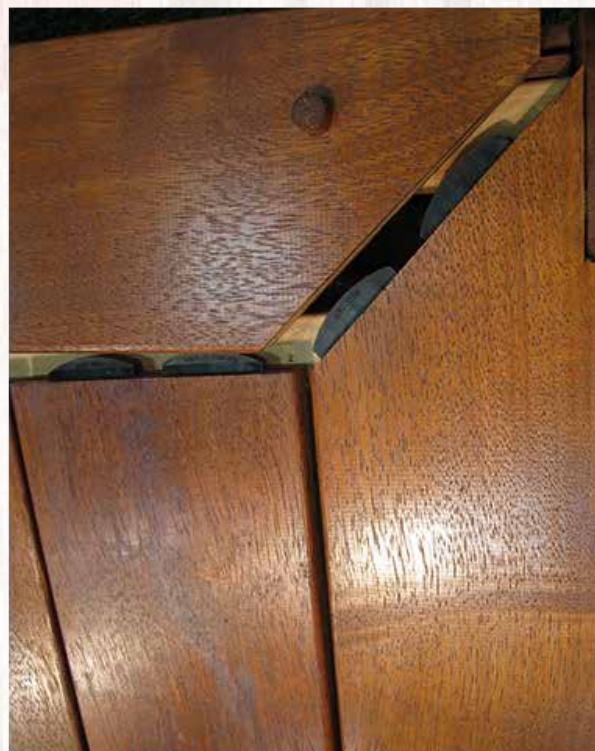
See specifications for The Original Clip.

See Biscuit cutting Data Sheet - The height is set of the bottom of the board – see specifications

Butt Joiners - Butt Joints [part # DM-J10]

These are a clip used same as a cabinet makers uses traditional biscuits except Deck-Max makes the biscuit from it's very specific material for ultimate Strength.

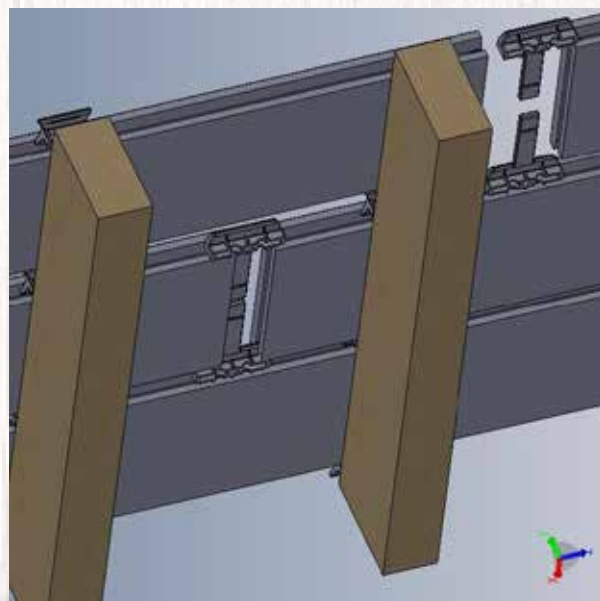
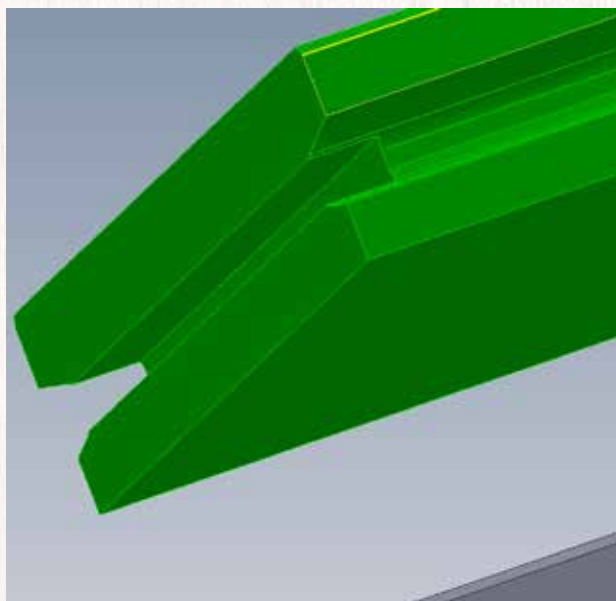
- See Data Sheet on Butt joints and Mitered corners.
- Also used when a deck board meets a picture frame board.



End Match Biscuits:

These are the patented biscuit that allows you to use the Deck-Max timber decking that is pre-grooved on both ends and you can join between joists.

Eliminating the task of measuring every board to cut and then join over the joist and traditional use 4 x nails or 4 screws.



Reduces waste by 70%. 30% faster to install therefore less labour.

Point load test Results:

Industry standard for flooring is 350 kg point load

Results were Deck-Max End Match clip and decking start to fail at over 700 kg. 100% stronger than traditional fixings.

All Deck-Max biscuits are Guaranteed for life when installed as per the manufacturers specifications.

Deck-Max™ screws

The selection of screws available allow you to choose a fixing that will suit your needs from fixing into steel joists, treated pine and hardwood joists. All the screws have a broad range of applications to suit your local council requirements and corrosion rating.

- Minimum corrosion rating is class 3
- Three heading
 1. Core hardness of screw
 2. Surface Hardness of screw
 3. Torsional strength of screw
- Class 4 rated screw would require you to use the 316 stainless steel screw and external head fixing not a rebated drive.



Measure	No.1.	No.2.	No.3.	No.4.
	304 SS	316 SS	Steel	Tek
Core Hardness	RC 92 n/a	RC 28-38	RC 32-40	
Surface Hardness	RC 92 min.	SS 316	RC 45 min.	RC 52 min.
Torsional Strength	39 lb/inch	SS 316	39 lb/inch	39 lb/inch
Tensile strength	~505 N/m	~550 N/m		
Corrosivity	ISO 3506/ A.1.		ISO 9223 / cC.3	

- Tensile Strength between ~540 N/m & ~560 N/m
- Rockwell hardness 885 ksi

304 stainless steel is the most common form of stainless steel used around the world, largely due to its excellent corrosion resistance and value. It contains between 16 and 24 percent chromium and up to 35 percent nickel, as well as small amounts of carbon and manganese.



Screw fixing will depend on what floor joist material you have chosen to use

Either; Hardwood, OR Treated Pine OR Metal

The Deck-Max™ screws have been engineered to self-drill into each floor joist material as listed.

The screw has a square drive recess for the most positive drive – you must retain pressure while driving so as to avoid any burring.

In some cases, you may find it necessary to run a pilot hole.

Please read all installation instructions and specifications prior to installation.

Do not over fasten and recommend do not use rattle gun as the drive goes too hard and does 2 things, Deflects the clip down and cannot engage the next board and or the screw breaks and you do not feel it therefore do not fix the unsecured screw.

Deck-Max TM secret fixing is the new way to invisibly fix timber decking. Finally doing away with ugly nail and screw heads that cheapen the finish and can work loose. The new Deck-Max TM system of secret fixing not only looks fantastic but also delivers a range of other benefits:



Deck-Max Original Clip:

If Selecting your own timber and using the Deck-Max Original clip - check list:

1. Ask for certification of core moisture
2. Ask for certificate of Kiln Drying
3. Ask for certificate of LEGAL wood and or FSC certification and or Certificate of Chain of Custody.
4. Refer to the Original Deck-Max Data sheet for installation details.



You should be sure to choose quality kiln dried boards [hardwood] Deck-Max™ can also be used for fixing solid composite floor decking

Test results for Deck-Max™ are available on our web site. www.deck-max.com.au

