

Timber Decking Preparation & Maintenance

Enjoy A Longer Lasting Deck & Store The Carbon...

Preparation, good building practices and maintenance will ensure that your deck not only looks great but will last for many years. Extending the life span of your deck will save on replacement costs and also help our environment by storing the carbon for a longer period of time. Timber the environmentally friendly choice.

Timber a Natural Product...

Timber decking is an organic product produced from a once living tree, its individual fibres take up and release moisture during the life cycle of the tree. After the logs are cut into boards at the sawmill the drying process commences. The porous fibres of the timber boards release 50 – 60% of the moisture contained within the timber during the air drying process. Finally the boards are Kiln Dried in a controlled environment that provides the necessary heat and ventilation to stabilise the timber at a moisture content between 12% and 16%. The wood fibres that have released the water during the drying procedure remain open until a time that a satisfactory seal and deck finish is applied.

It is important to note that when timber is exposed to the weather it will absorb and lose moisture as the environment around the timber changes on a daily and seasonal basis. The timber will expand and contract both laterally and vertically as it absorbs and loses moisture. Moisture gain occurs by the timber being exposed to water liquid and water vapours. Moisture loss occurs during sunny dry sunny periods especially during seasons with low humidity. The effects of moisture gain and loss increase the likelihood of surface checking (cracking), twisting, cupping, raised grain and splitting. Proper sealing and adequate ventilation will greatly minimise this effect by stabilising the moisture content within the decking board.



Ventilation, Drainage & Cupping...

Providing decking with adequate ventilation and drainage is essential. The closer the deck is to the ground the greater the challenge as timber will absorb moisture from the ground beneath the deck. A deck that is exposed to the weather and does not have adequate ventilation and drainage will cause the bottom of the decking board to take up more moisture than the top of the decking board and the timber will then swell on the underside and begin to cup and or bow. A minimum of 400mm ground clearance is recommended. Take extra care and precautions around pools and in damp environments.

Make sure that satisfactory drainage is in place underneath the deck and that all water will run away from the deck and adjacent buildings so that water cannot pool underneath. Cross flow ventilation is also very important so make certain to keep the sides of your deck as open as possible. A minimum of 50mm gap on sides and ends is recommended between or under fascias for sufficient cross airflow. Decks closer than 400mm off the ground require a sloped plastic membrane and gravel base as ground absorption will expose the deck to unnecessary moisture during the evaporation process. When building a deck close to ground be sure to choose a stable species and it is advised not to choose a board width over 90mm.

Good ventilation, drainage and oiling the board all around including the end grain will promote equal moisture content and dimensional stability.

Timber Decks Must Be PRE-OILED Prior To Installation...

Timber decking **MUST BE PRE-OILED** prior to installation. The boards need to be coated on all faces, edges and ends with a quality penetrating oil such as Feast Watson Traditional Timber Oil. Be sure that all side and end grooves are well oiled. Any cuts made during installation need to be oiled while fixing. Decks that will not be accessible from underneath after completion should be coated with a minimum two coats of penetrating oil prior to installation. All other decks can be oiled with a second coat after installation. Penetrating oils are recommended rather than water based products that sit on the surface and deteriorate to a point where sanding is required before another coat is applied. The oil will penetrate the timber and protect the structure of the board long after the surface has lost its colour.

Storage...

Timber decking should be stored at all times in dry area protected from the sun and rain. Store on dry ground supported by level gluts spaced at a maximum of 1200mm apart at least 100mm off the ground. If a tarp is being used be sure to keep the timber as well ventilated as possible.

Hardwoods with a High Tannin Content...

Some hardwoods such as Merbau (Kwila) have a high content of tannin. The tannin can leach out causing staining not only on your timber but also on surrounding surfaces i.e. concrete, painted surfaces etc. To reduce tannin deposits it is advised to wash the decking with a quality deck wash such as Feast Watson WoodClean prior to oiling and installation.

Timber Bearers & Joists Protection...

A longer lasting deck requires the sub frame to also be longer lasting giving the deck fasteners a solid and stable fixing point. This can be achieved by first choosing to use durable timbers and pre-oiling or painting your sub frame to protect the timber from weathering. Two coats of penetrating oil (Feast Watson Traditional Timber Oil) or good quality external acrylic paint is recommended to prevent the timber from deteriorating. Additional coats are recommended as per the manufacturers' recommendations.

In addition it is also advisable to install a rubber weather strip on top of the joists. Rubber is preferable as it will seal around the deck fasteners and eliminate water tracking down the fasteners into the timber joists.

Gapping Between Your Deck Boards...

It would be advisable for Decks closer to the ground to install the decking with larger gaps between the boards. The standard gaps set by the Deck Master TCG CLIP are 3.5mm for 85mm – 90mm wide boards and 4.5mm for 135mm – 140mm wide boards. With each of these products the gaps can be further increased by a maximum of 2.0mm. For instance if you want to create a 5.0mm gap with a 90mm wide board simply use a 5mm packer between the boards during installation. Furthermore keep your deck gaps free of debris so that a moisture trap is not created and air flow is then restricted.

Decking that is adjacent to a building or wall requires a minimum 6mm clearance. Decking around a pool should be installed with a minimum of 15mm clearance from pool surfaces.

Bushfire prone areas are subject to specific gaps between deck boards. As different regulations apply around Australia please contact your local building authority to acquire a copy of your relevant standard and prepare your project accordingly.

Oil Immediately After Project Completion...

The application of a good quality decking oil will minimise the effects of weathering of any timber in an exposed situation. The purpose of the protective coating is to slow down the rate at which the timber will take up or lose moisture therefore reducing expansion, contraction, checking & loss of colour.

Once the pre-oiled deck is installed and the surrounding project is completed the deck needs to be cleaned and given its final coating. All timber will require additional coats within the first 12 months.

The easiest way to apply oil is with a decking oil applicator (pad) as shown above. Brushes are required for edges and end grain.



Please Note: New external timber decking should not be left to weather before coating. Once exposed to the elements for even a few weeks without protection new timber may develop cracks, checks (small surface cracks) as well as lose colour. If a coating product suggests weathering prior to coating seek another product.

Maintenance... Recoating is made easy if done on a regular basis...

A maintenance programme will need to be implemented to ensure a great look and a long lasting product for you to enjoy for years to come. Maintenance is simplified if recoating takes place before the deterioration of the coating allows weathering of the timber to occur.

Frequent inspections are necessary to look for patchy, faded, uneven appearances or eroded coatings that all indicate the need for recoating.

- As long as the timber and coating are in good condition a basic wash down with a pressure cleaner or soapy water and brush would be adequate. If using a pressure cleaner take care not to use too much pressure.
- If a deck has been left to go grey or is discoloured after initially coating and the timber colour needs to be restored, WAO Stain Remover & Brightener can be used.
- If the timber surface is degraded a light sand will be necessary before recoating.

Depending on the exposure of the deck, physical abrasion, timber species and the product applied to the deck will depend on the frequency of coatings. With the use of Feast Watson decking oils, as more oil penetrates the board over a period of time the frequency of re coating will diminish. Also adding more colour tone will help resist and slow the UV breaking down the coating therefore increasing time between recoats. In the first year after installation expect to recoat a minimum of two times.

One of the many advantages with the Deck Master system is that being secret fixed deck it gives the deck owner the ability to sand the deck if it is required.



STAPYLTON: PH 3386 1055
WOODRIDGE: PH 3386 0595
EMAIL: SALES@5STARTIMBERS.COM.AU
Anything Is Possible
www.5startimbers.com.au



www.5stardecking.com.au