

# LifePlus® Decking System Essentials

The **LifePlus® Decking System** is an integrated system of best practices in design; construction and finishing materials; and construction, installation, finishing and maintenance practices developed to deliver a satisfying decking project which performs well over a long life. The following is intended to provide information on the minimum requirements of the **LifePlus® Decking System** to raise awareness of the most important issues. For additional information, please refer to the **LifePlus® Decking Guide**.

➤ The decking project shall comply in all respects with the Building Code of Australia (BCA). In addition the following good practices shall be implemented.

➤ **Subframe Timber:** Design for and use only good quality subframe timber – low shrinkage timber of appropriate strength, durability and quality for your application. Where a decking structure is to match the levels of another structure such as concrete path or pool coping use seasoned timber for the subframe. High shrinkage timbers are available but are not to be used.

Joist width shall be 50mm unseasoned hardwood, 42mm seasoned hardwood or 45mm seasoned softwood to allow staggered nailing and for fixing of decking ends at the joist.

Seal all cut ends, checked joints and timber-to-timber interfaces in structural timber or detailed timberwork during construction to reduce the absorption of trapped moisture, which may lead to accelerated deterioration of the timber.

Timber posts shall be installed on commercial quality brackets cast into engineered concrete footings or, if necessary, extended into the footings. Timber posts extending into the footings shall be of appropriate durability, appropriately treated and set into “no-fines” concrete to allow water to drain away, in accordance with the engineering design.

We recommend the use of timber for bracing columns.

➤ **Subframe Area:** The area which will be under a completed deck shall be adequately graded, drained and ventilated so that the area is dry in normal conditions and dries quickly after wet weather without water pooling.

➤ **Fixings:** All fixings in exposed conditions shall be hot-dipped galvanized or stainless steel (depending on severity of conditions). In corrosive environments such as in coastal areas or around pools, all fixings, including connector nails, shall be stainless steel.

➤ **Decking Timber:** Use **LifePlus® Decking** in natural or classic finish as preferred and as suitable for the application.

If using decking of standard moisture content, in areas of low or high humidity, make suitable allowance for the corresponding shrinkage or expansion which will occur. Decking to be installed in areas of consistent extreme low or high humidity shall be ordered with an appropriate moisture content, or standard decking acclimatised to the local EMC by strip-stacking before installation.

Provide protection for decking, from both moisture and excessive heat, while stored on site prior to use.

➤ **Pre-treatment of decking:** We recommend using penetrating oil or stain finishes to protect decking from weathering. Apply one coat of the intended finish, as a sealer, to all surfaces, before laying. Apply the finish, or alternative sealer, *liberally* to the end grain of cut ends before laying the decking.

Clear film building decking finishes may require a period of seasoning or surface preparation before applying the finish. Refer to the manufacturer’s recommendations to determine if pre-treatment is suggested before laying.

Raw linseed oil, or mixtures containing raw linseed oil, shall not be used as a natural finish unless contained in a commercial product containing mould inhibitors

➤ **Fixing Decking:** Before fixing the decking, seal the top edge of each joist with either CN emulsion (may show on exposed surface over time), a primer plus finish coat or, *as we strongly recommend*, a waterproof membrane (such as Malthoid, a bituminous dampcourse), for a more effective seal which will also reduce water entry around the fixing and shed water from the joist.

Lay the decking boards, *using spacer blocks* (not nails) to create a 3 to 5 mm gap between adjacent boards to allow for swelling and shrinking.

Butt joints shall be staggered so that they do not occur on adjacent boards. Butt ends should be cut with a slight backward undercut to assist in achieving a tight fit and to reduce water absorption into the end grain.

In weather exposed domestic applications subject to light foot traffic, **LifePlus® Decking** shall be hand nailed or screwed, with two fixings per board at each joist. Nails shall be domed head (DH), twist shank (TS) type in stainless steel (SS) (preferred) or hot-dipped galvanized, (HDG) depending on severity of exposure conditions.

For hardwood joists, use 50x2.8mm DHTS nails (as above)

For softwood joists, use 65x3.15mm DHTS nails (as above)

Alternatively, use 50x10G LifePlus Decking Screws for improved hold down and corrosion and working out resistance.

Fixings shall be placed in a formal staggered alignment. Fix nails with 10 to 12mm stagger, minimum 12mm edge clearance. Fix screws as per recommendations. Fixings placed in a straight line are likely to split the joist.

T-Nails (50x2.2 Finishing Nails or 50x2.5 Flooring Nails), plain steel or zinc plated nails shall *not* be used to fix decking or in any external application.

Where boards terminate or are joined at a joist, nails should be 12mm from the end of each board (nail slightly skewed to achieve edge clearance), with the board predrilled to 80% of the nail diameter to avoid splitting.

Drive nails only so that the head pulls the board down tight onto the joist – do not punch below the decking surface.

➤ **Finishing:** Once the decking has been laid, apply another liberal coat of the oil or stain finish to the exposed surface (unless otherwise recommended by the manufacturer). Remove excess finish from surface after absorption. Clear film building decking finishes, properly prepared, applied and maintained, as a system, can give good service over a long life although are likely to be more slippery in both dry conditions and exposed conditions when the surface is wet. Understand and put into practice the preparation, application and maintenance instructions provided by the manufacturer.

Decking shall not be coated with any finish which leaves a slippery gloss coating on the surface.

➤ **Maintenance:** Re-apply decking finish regularly and while the timber retains some water repellency. In “average” conditions, protection should be expected for 9 to 12 months from oils and 12 to 18 months from stains. In severe conditions, such as around pools, recoating is likely to be necessary at shorter intervals.

Some raising of the timber grain may be experienced on the exposed face from weather exposure. Remove any raised grain by moderate hand or machine sand in affected areas.