

Before you get started

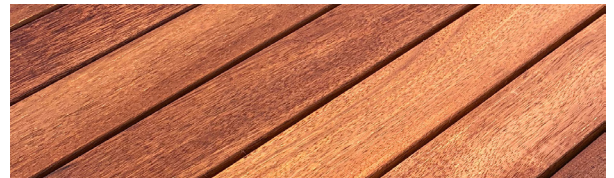
This guide is based on manufacturer recommendations. However, it is the homeowner's or installer's responsibility to ensure the chosen decking product and installation method are suitable for the intended application. All installation work must be carried out in accordance with the New Zealand Building Code.

Before you begin, check for any legal or safety requirements that may apply to your project, such as handrails, steps, or structural supports and refer to the [Tannin Information](#) section of this document.

Colour variances

Kwila is a natural product and its colour can vary from yellow brown, to deep reddish brown. This variation is considered a feature of the timber.

Our kwila decking is select grade and kiln dried for a long-lasting, high-quality appearance.



Safety

Always use adequate protective clothing and safety equipment.

Use care when handling decking boards. Timber varies in weight and density from board to board. For example, a 1.8m 90x19mm kwila decking board weighs around 2.6kg, and a 5.7m 140 x19mm board can weigh up to 13kg.

How much decking do I need?

To work out how many lineal metres of decking you need, calculate the area of your deck and divide it by the width of your chosen board (in metres). It is standard to purchase 10% more decking than your deck size to factor in on-site docking and wastage from offcuts.

$$\text{Deck Width (m)} \times \text{Deck Length (m)} \div \text{Board Width (m)} = \text{Linear Metres (+ 10\%)}$$

Example calculation for a 5 by 6 metre deck:

140x19mm Boards: $5\text{m} \times 6\text{m} \div 0.14\text{m} = \sim 215 \text{ linear metres (+ 10\%)}$

90x19mm Boards: $5\text{m} \times 6\text{m} \div 0.09\text{m} = \sim 334 \text{ linear metres (+ 10\%)}$

Handling and storage

Use care when storing, handling and installing SpecRite decking to avoid damage.

SpecRite decking is packaged using recycled plastic wrapping, which is designed to help protect the timber during transport only. Once delivered, timber should be stored in a cool, dry, non-exposed area, 100mm off the ground, either undercover or tarped, prior to installation.

Decking boards should be inspected prior to installation to ensure the product is suitable for use, as it may have been compromised during transportation or storage.



Cutting

Tungsten carbide tipped cutting tools and high-quality drill bits are recommended for best results. Always apply decking oil to cut ends to maximise the life of your deck. Ensure appropriate eye, ear and breathing protection is used when cutting timber.

Installation considerations

The majority of decking issues occur when moisture is allowed to build up below the deck. The underside of the decking boards absorb this moisture causing the timber to expand, while the top of the decking boards dry out and the timber contracts. This can cause cupping, splitting, twisting and warping.

While kwila is the most stable timber on the market and movement is minimal, it is still important to allow drainage and sufficient subfloor and surface ventilation to help avoid moisture build up below the deck.

SpecRite kwila decking is designed to be installed onto bearers and joists. Please follow the standards outlined in NZS 3604: 2011 (Timber-framed buildings) and NZS 3602: 2003 (Timber and wood-based products for use in building). The guidelines in this installation guide refer to residential applications. SpecRite 19mm decking is not designed for commercial applications.

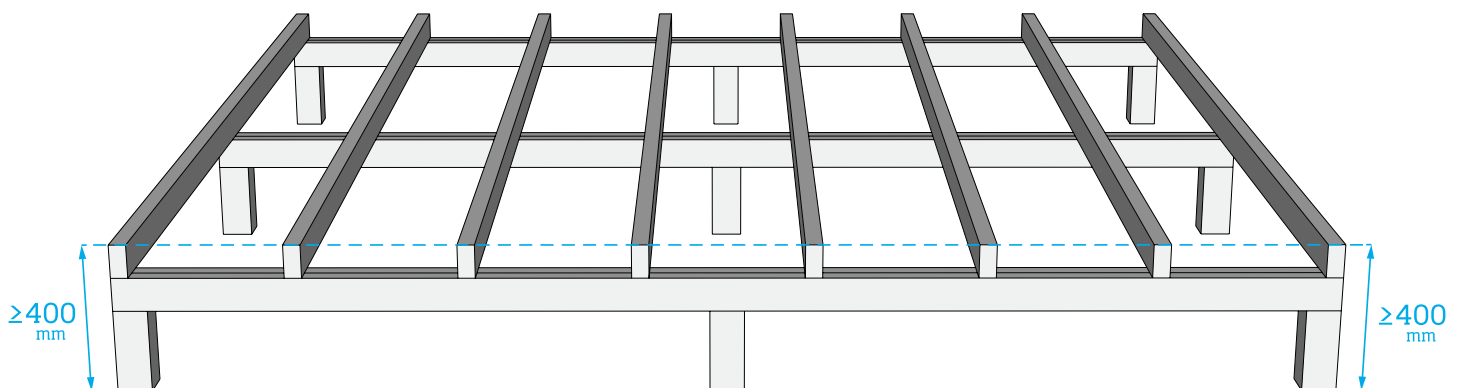
The surface below the deck should be clear of weeds, debris and excessive moisture, with suitable ventilation and drainage factored in.

Key Measurement Checklist

- Maximum joist spacing - **450mm centres**
- Minimum recommended ground clearance - **400mm**
- Minimum distance from side or end to fixed structures - **7mm**
- Minimum distance from board edge for fixings - **12mm**
- Minimum distance from board end for fixings - **12mm**

Ground clearance

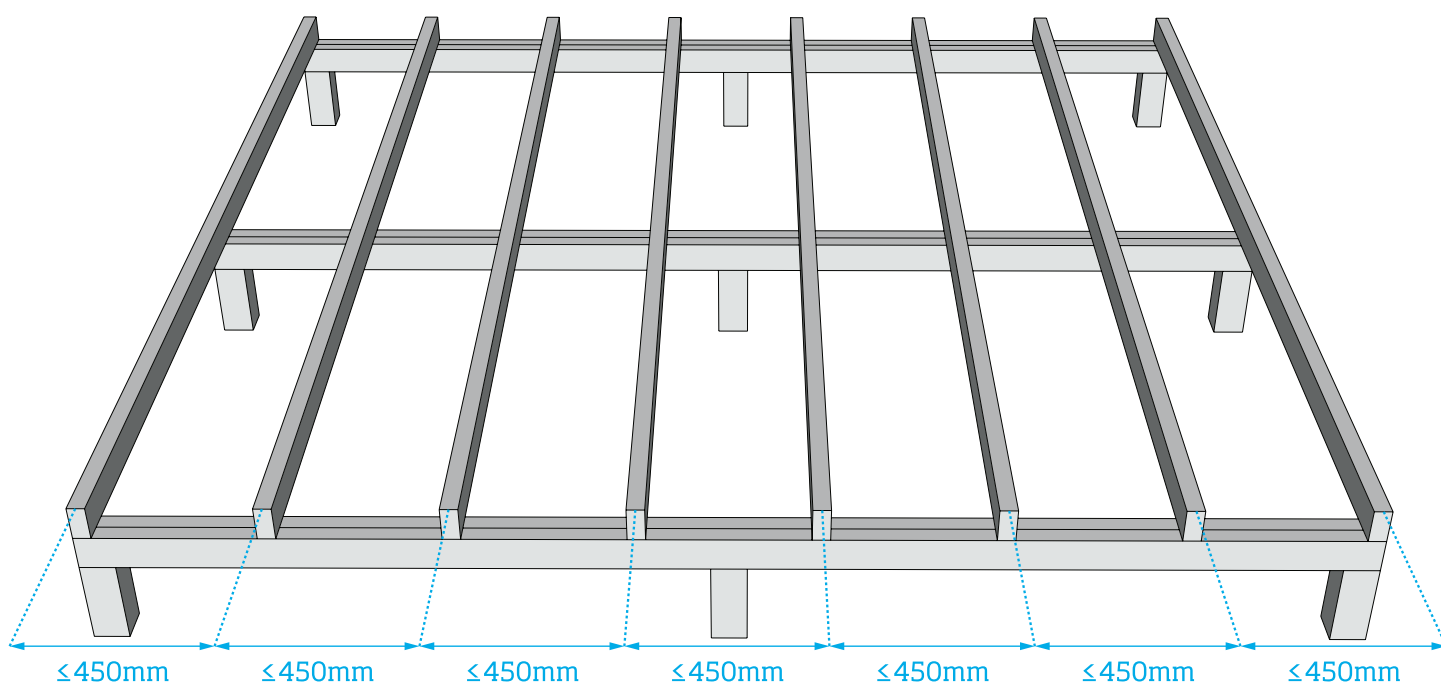
We recommend allowing 400mm of clearance below your deck to allow for adequate ventilation. In exposed areas prone to moisture build up, sub-floor drainage is recommended. Inadequate ventilation and moisture build up can cause cupping, warping and other irregularities.



It is recommended to factor in future access to the underside of your deck to aid with maintenance and inspection.

Joist spacing

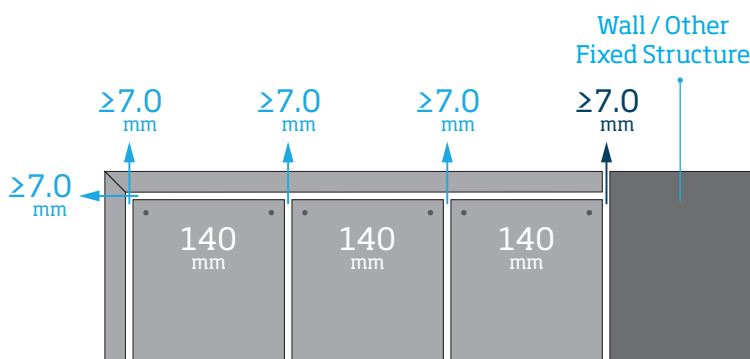
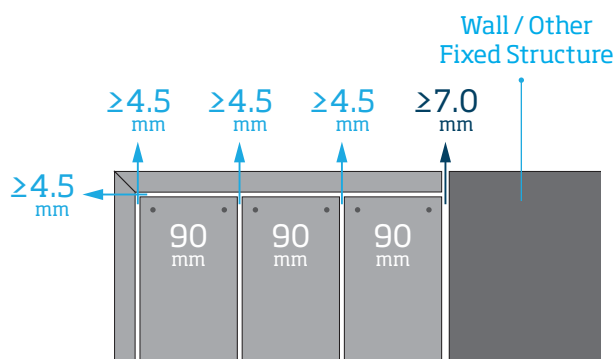
The maximum distance between joists must be 450mm from centre to centre.



Gapping (surface ventilation)

The gapping should be a minimum of 5% of the width of the boards. For 90mm boards allow at least 4.5mm gapping, and for 140mm boards gaps should be at least 7mm. Allow a minimum 7mm gap from fixed structures such as walls.

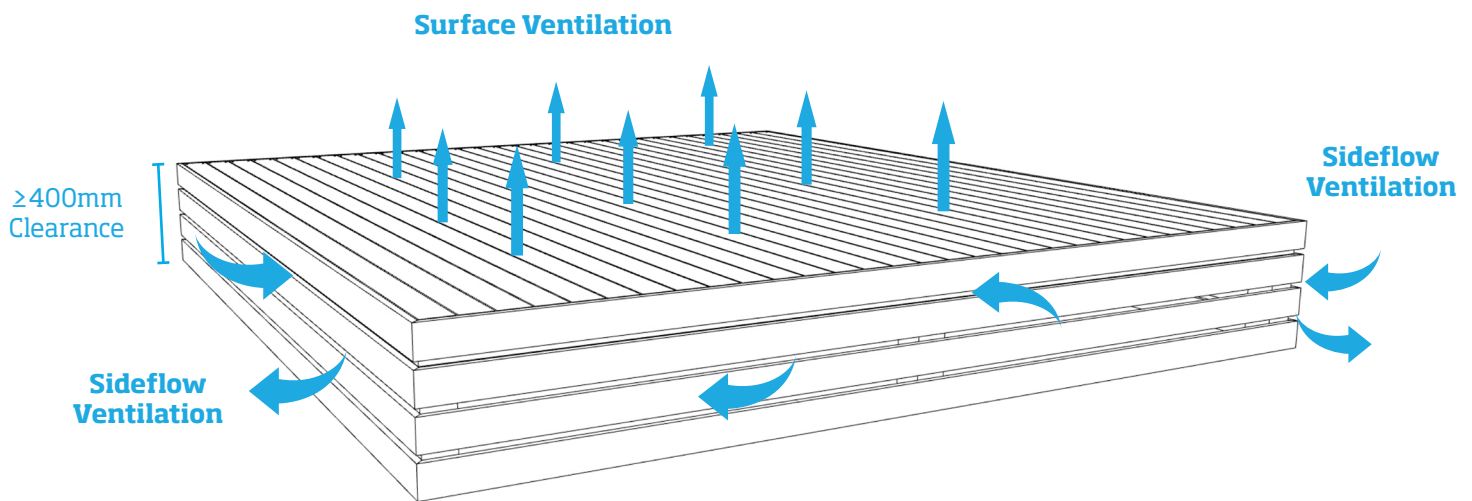
Timber naturally expands and contracts with changes in temperature and humidity, and leaving gaps allows room for this movement as well as helping with water drainage, preventing pooling, mold, or mildew. Adequate spacing also improves air circulation beneath the deck, preventing wood rot.



Gapping (sideflow ventilation)

Designing your deck with adequate sideflow ventilation helps reduce trapped moisture under the deck by allowing fresh air to circulate. Without it, moisture from rain, ground humidity, or condensation can build up, leading to deterioration of both the decking boards and the subfloor structure.

If your deck is lower than 400mm from the ground, you will need to increase both the side and surface gapping between decking boards, and consider installing a drainage system.



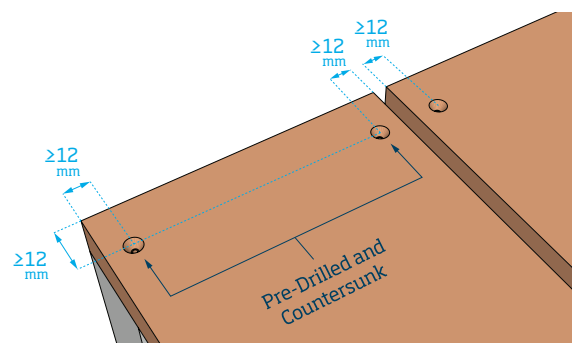
Drainage

Decks should be built with a slight slope away from the house to direct water runoff. For fully exposed decks, decks that are low to the ground, or built over heavy, poorly draining soil/clay, additional sub-deck drainage systems should also be considered.

Fixings

Decking should be fixed using hot dipped galvanised or stainless steel screws
- two 10g 65mm screws per joist.

Holes should be pre-drilled and countersunk to avoid splitting the timber and to provide the best possible finish. Stainless steel fixings are recommended for coastal or poolside applications. We do not recommend nailing for your SpecRite kwila decking, especially when installed close to the ground.



Low level decks, installed less than 400mm above ground

For low level deck design, it's essential to:

- > Allow additional drainage beneath the deck for moisture removal.
- > Ensure adequate gapping between boards for surface and side ventilation.

We also recommend the following:

- > Choose our narrow 90mm profile for low level installations as narrower boards offer greater stability in higher moisture areas.
- > Pre-oiling your boards to protect the timber against excessive moisture uptake. Two coats on all faces/edges/ends of your decking boards, followed by an additional top coat once installed.

Protecting your deck

To prolong the life of your deck and maintain its premium look, decking oil with a UV stabiliser should be applied within 2 weeks of installation. Cut ends and the underside of the deck should be oiled prior to installation.

When choosing a topcoat, the most suitable product is best determined by the preferred finish. To maintain or highlight the natural appearance of the timber, a transparent, lightly pigmented oil is recommended. For longer lasting protection, a high quality water-based finish can be used. To transform the colour of the timber, a semi-transparent stain will impart a deeper colour whilst allowing the timber grain to show through. Timber will naturally grey off if left unfinished.

To ensure you are completely satisfied with your chosen coating and colour, we recommend you first test the coating on a small inconspicuous area.

Step 1 - To prepare timber for topcoating, ensure the surface is clean. If required, thoroughly scrub with an oxalic acid-based timber cleaner. A high strength timber cleaner removes dirt, grease, tannin stains and other contaminants to optimise topcoat performance.

Step 2 - Allow the timber to dry and apply two coats of your chosen finish following label instructions. The coating can usually be walked on after 48 hours, but make sure your deck has dried fully before replacing furniture.

Slip rating

This product does not have a slip resistance rating. If slip resistance is required (e.g. decking adjacent to a pool), apply a specialised slip resistant finish.

Maintenance

Re-oiling requirements can vary and are heavily influenced by the level of exposure of the deck and your chosen coating product (please follow the recommendations from the coating manufacturer). We recommend regularly monitoring the coated timber for signs of colour loss, dryness and weathering. Recoat the timber when it begins to show signs of dryness to help maintain its natural beauty and protection.

When required, clean the surface using an oxalic acid-based timber cleaner, allow the surface to dry and recoat with one coat of your original coating, following label instructions. For a longer lasting finish, apply a second coat.

It is recommended to avoid storing pot plants and landscape structures directly on the deck as moisture can linger affecting the longevity of your deck. Trays and stands that allow airflow to circulate are recommended.

Tannin information

Kwila's superior strength and stability are attributable to its tannin-rich properties, resulting in low shrinkage and minimal surface and end splitting. Tannin is a naturally occurring substance in timber which will leach the first few times it is exposed to moisture, staining timber, paved areas and other nearby surfaces. Objects left on the timber surface will also draw tannin out, creating surface marks. A thorough and regular hose down during the first few days will assist in flushing excess tannin away and will help minimise subsequent staining.

To speed up this process, apply a tannin and oil remover product such as Intergrain UltraPrep Tannin And Oil Remover prior to final topcoating, following the manufacturer's instructions.

Avoid cutting and grinding metal objects on or near your kwila deck. Iron traces from various sources such as metal shavings, or garden fertiliser on footwear, can react with the tannins in the first few days, causing iron stain, a black spotting on the timber. Iron stain is a natural occurrence and is not considered a product fault.