

Purpleheart Hardwood Decking

Purpleheart is an extremely dense and very strong South American hardwood. It has been used in New Zealand for a number of years and along with Pacific Jarrah (Massa) Purpleheart is one of the most durable exterior decking species available. Brown when freshly cut, it quickly turns a deep purple, maturing to a dark brown before silvering off.

Installation Notes

NB: These decking installation recommendations are not just specific to Purpleheart. They can equally be applied to most other medium and heavy hardwoods supplied by JSC Timber. It is essential to know if your decking is DRY or WET (green). Only then can you make the correct “gap” allowance.

Proper care and maintenance will ensure you get the best performance from your deck. These recommendations should be read in conjunction with NZS3602, NZS3604, BRANZ Bulletin 489 and any relevant Territorial Authority requirements.

Disclaimer

JSC's Hardwood Decking is manufactured with care and inspected to ensure quality, but it is a natural wood product and subject to variations in weight, density, colour, grain and performance. Care must be taken at installation and maintenance to allow for movement. Swelling, shrinkage, movement and checking are normal occurrences in wood decking.

Storage and Handling

Purpleheart decking should be kept dry and out of the weather until installation. On site each pack should be kept off the ground by placing it on bearers and covered with a tarp to protect from sun and rain.

Installation

Ventilation

Free air circulation under the decking is very important to help minimise cupping and warping. Proper ventilation ensures the potential difference in moisture levels between top face and the underside of the boards is reduced and extends the life and performance of the deck.

The sub deck should have at least 450mm clearance from the ground. This, in conjunction with suitable spacing, will allow for adequate ventilation. In wet areas or over water, additional clearance is recommended.

Other steps that can be taken to minimise moisture differential are - a ground level vapour barrier (with slit drainage) and a suitable surface coating on all four sides of the decking boards (see coating section). Failure to provide for suitable ventilation is a major cause of early decking failure.

Span

19mm decking should be installed at maximum 450mm joist centres; 32mm decking can be on up to 600mm joist centres. Given that Radiata pine joists are softwood and Purpleheart is a strong hardwood, the joists should be clean and sound and the screws should penetrate at least 40mm (for 19mm) and at least 60mm (for 32mm) into the joists to achieve good holding. Pre-drilling and counter-sinking is essential to avoid end splits.

End sealing

End sealing will help minimise splitting and checking at the ends of the boards. We recommend the boards be end-sealed as soon as possible after cutting, before final installation. Suitable end sealer may depend on finishing coats; many penetrating decking stains such as Dryden's wood oil are suitable for end sealing as well as coating the entire board.

Coating

In order to minimise surface checking, cupping and discolouration we often recommend the Purpleheart decking be coated on all four sides. Sealing all four sides of the boards will reduce potential cupping and checking by slowing moisture transference into and out of the wood, thus maintaining more even moisture content through the piece.

Boards should be free of all surface marks and stains before coating.

Spacing

In average New Zealand climatic conditions 90x19mm and 140x19 “ship dry” Purpleheart decking should be spaced with 2mm between boards. This is to allow for some minor shrinkage as the boards acclimatise, which will allow for drainage of surface water and air circulation.

NB: These are recommendations only. An allowance for regional climatic conditions should also be factored in.

Fastening

JSC Timber advocates that all hardwood decks are fixed with screws. For 140x19 and 140x32 decking SCREWS ARE ESSENTIAL. We recommend 60mm (140x19) and 75mm (140x32) stainless steel screws through the pre-drilled face of each board, two per joist. For 90x19 decking screws are also recommended. However, if you chose nails they should be of sufficient length (60mm) with annular grooves.

Maintenance

Cleaning & Washing

Hardwood decks should be cleaned with a stiff brush at least once a year to clear gaps and remove surface mould which can be a slip hazard in wet weather. Keeping the deck clear of leaf litter, moving pot plants or other large objects that may hold moisture to the top of the deck, is also important for the life of the deck.

Hardwood Decking can be water blasted BUT it is important to do so at a low pressure so as not to damage the fibres of the board by going too hard, too close. Care must be taken not to stop at the end of the stroke but to lift the nozzle away when changing direction.

Washing/brushing the deck down with a mild solution of janola (1 cup per 4 litres of water) will remove any build up of resin or extractives that may leach out of the timber as the pieces “season” in situ. There are also various chemical cleaning agents available, from detergents through to acids. Follow manufacturer’s instructions and be conscious of the run off. The amount of run-off will depend on the specie, how dry it is before the decking is laid and how exposed the deck is to the weather. Purpleheart can “bleed” a little, although this will stop altogether in time.

Re coating

Manufacturer’s specification for re-coating should be followed. We recommend clear or light colours as dark colours will heat up and put more stress on the decking.

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