



Hempac
by ITI NZ

Residential Decking

hempac.co.nz

Species Purpleheart / **Profile** HP90 - 90 x 21 watershed



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Profiles

Watershed

Hermpac's Premier Decking Profile.

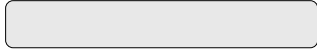
Crafted with a subtle curvature on the face to minimise cupping and water accumulation on the decking surface.



Pencil Round

Our traditional decking profile.

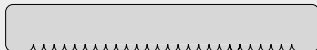
Features smooth, rounded corners, giving you the flexibility to choose the best face for your project. Beyond decking, this versatile profile can also be used for screens and fences.



Reeded 1 Face

A classic profile.

Typically linked with traditional imported Kwila decking. Offers the option to use the textured side facing up, which can be useful when necessary for stair treads or access paths as per council requirements.



Profile by Species

Width	x	Height	Profile type	Profile code	Kanda	Vitex	Purpleheart	Accoya	Accoya Grey	Kwila	Kanda Evolve	Vitex Evolve
65	x	19	Pencil round	HP169	✓	✓	✓				✓	✓
65	x	21	Watershed	HP89	✓	✓	✓				✓	✓
70	x	19	Pencil round	HP400				✓	✓			
70	x	21	Watershed	HP417				✓	✓			
90	x	19	Reeded 1 Face	HP98						✓		
90	x	19	Pencil round	HP170	✓	✓	✓			✓	✓	✓
90	x	21	Watershed	HP90	✓	✓	✓			✓	✓	✓
95	x	19	Pencil round	HP401				✓	✓			
95	x	21	Watershed	HP418				✓	✓			
115	x	19	Pencil round	HP179	✓	✓	✓				✓	
115	x	21	Watershed	HP91	✓	✓	✓				✓	
140	x	19	Reeded 1 Face	HP99						✓		
140	x	19	Pencil Round	HP171	✓	✓				✓	✓	✓
140	x	21	Watershed	HP92	✓	✓	✓			✓	✓	✓
145	x	19	Pencil round	HP402				✓	✓			
145	x	21	Watershed	HP419				✓	✓			

Width	x	Height	Profile type	Profile code	Kanda	Vitex	Purpleheart	Accoya	Accoya Grey	Kwila	Kanda Evolve	Vitex Evolve
195	x	19	Pencil round	HP403				✓				
195	x	21	Watershed	HP420				✓				
240	x	19	Pencil Round	HP404				✓				
90	x	30	Pencil round	HP172	✓	✓	✓					
90	x	30	Watershed	HP93	✓	✓	✓					
95	x	30	Pencil round	HP406				✓				
95	x	30	Watershed	HP422				✓				
140	x	30	Pencil round	HP173	✓	✓	✓					
140	x	30	Watershed	HP94	✓	✓	✓					
145	x	30	Pencil Round	HP407				✓				
145	x	30	Watershed	HP423				✓				
180	x	30	Pencil Round	HP174	✓	✓	✓					
180	x	30	Watershed	HP95	✓	✓	✓					
195	x	30	Pencil Round	HP408				✓				
195	x	30	Watershed	HP424				✓				

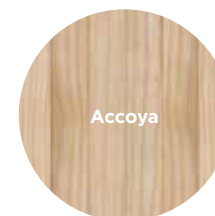
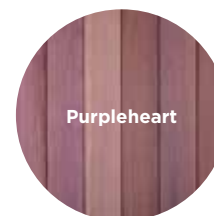
Species Kanda / **Profile** 140 x 21 HP92 watershed



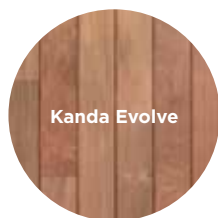


Species Comparison

Specie	Kanda	Vitex	Purpleheart	Accoya
Denisty (kg/m3)	730	705	865	512
Durability	Durable	Durable	Very Durable	Very Durable
Stability	3.3% radial / 5.6% tangential	2.5% radial / 5.0% tangential	3.0% radial / 6.0% tangential	0.4% radial / 0.8% tangential
Hardness (Janka/kN)	5.1	5.0	11	4.1
Finger Jointed board length				
Finger Joint orientation				
Random Length Spread*	0.9 - 4.8m (average 2.7-3.0m)	0.9 - 3.6/4.2m (average 2.1-2.4m)	0.9 - 5.4m (average 2.4-2.7m)	1.8 - 4.8m (average 3.0 - 3.3m)
Coatings	Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base
Sustainability/Legality	FSC Certified		FSC Certified (on request)	FSC Certified
Tannin Bleed	Colour - Light Brown Amount - Minimal to none	Colour - Light Brown/Yellow Amount - Minimal	Colour - Light Red Amount - Minimal	Colour - Light Brown Amount - Minimal to none
Pinhole	Minimal but small volumes acceptable	Minimal but small volumes acceptable	Minimal but small volumes acceptable	Not Allowable
Tight Bound Knots	Occasional	Occasional	Occasional	Occasional
Bark Encased Knots	Minimal	Occasional	Not allowable	Not allowable
Surface Checking	Minimal but may occur over time	Will occur either when timber is new or over time. Does not general exhibit raised grain	May occur over time with some boards exhibiting raised grain	Minimal but may occur over time
Black marking and spotting	Can occur as a reaction to lime and/or metal filings. Depending on severity it may be cleaned with deck cleaners	Can be inherent in the timber or as a reaction to site contamination. Depending on severity it may be cleaned with deck cleaners.	Can occur as a reaction to lime and/or metal filings. Depending on severity it may be cleaned with deck cleaners.	As part of the aging process and the light colour of Accoya, mould growth maybe visible over time. Depending on severity it may be cleaned with deck cleaners or can be left to age naturally.
Colour Consistency	Some variation	Variable * Grey heart streak may be present	Some variation	Minimal variation
Weathered Colour *** when exposed directly to the environment	Silver / Grey	Silver / Grey	Silver / Grey	Silver / Grey



Accoya Grey	Kwila	Kanda Evolve	Vitex Evolve	Specie
512	830	730	705	Denisty (kg/m3)
Very Durable	Durable	Durable	Durable	Durability
0.4% radial / 0.8% tangential	1.5% radial / 2.5% tangential	3.3% radial / 5.6% tangential	2.5% radial / 5.0% tangential	Stability
4.1	7.6	5.1	5.0	Hardness (Janka/kN)
		0.9 - 1.5 metre	0.9 - 1.5 metre	Finger Jointed board length
		micro zip on seen face	micro zip on seen face	Finger Joint orientation
1.8 - 4.8m (average 3.0 - 3.3m)	Watershed Profile 0.9 - 3.6/4.2 (average 2.1 - 2.4m) HP98 and HP99 profiles 1.8 - 5.7m (average 3.0m +)	5.7m lengths with 10% of volume as shorter lengths	5.7m lengths with 10% of volume as shorter lengths	Random Length Spread*
Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base	Wood-X Decking Wood Oil Clear Base	Coatings
FSC Certified	FSC Certified (on request)	FSC Certified		Sustainability/Legality
Colour - Light Grey Amount - Minimal to none	Colour - Red/ Brown Amount - Substantial	Colour - Light Brown Amount - Minimal to none	Colour - Light Brown/Yellow Amount - Minimal to none	Tannin Bleed
Not Allowable	Minimal but small volumes acceptable	Minimal but small volumes acceptable	Minimal but small volumes acceptable	Pinhole
Occasional	Occasional	Occasional	Occasional	Tight Bound Knots
Not allowable	Not allowable	Minimal	Occasional	Bark Encased Knots
Minimal but may occur over time	Minimal but may occur over time	Minimal but may occur over time	Will occur either when timber is new or over time. Does not general exhibit raised grain	Surface Checking
Can be inherent in the timber or as a reaction to site contamination. Depending on severity it may be cleaned with deck cleaners or can be left to age naturally.	Can be inherent in the grain of the timber or can occur as a reaction to site contamination. Depending on severity it may be cleaned with deck cleaners.	Can occur as a reaction to lime and/or metal filings. Depending on severity it may be cleaned with deck cleaners.	Can be inherent in the timber or as a reaction to site contamination. Depending on severity it may be cleaned with deck cleaners.	Black marking and spotting
Minimal variation	Some variation	Some variation	Some variation *Grey heart streak may be present	Colour Consistency
Mid Grey (minimal change from initial colour)	Silver / Grey	Silver / Grey	Silver / Grey	Weathered Colour *** when exposed directly to the environment



Installation Guide & Accessories

1 Pre-coating

Using a penetrating wood oil and following manufacturer's instructions, pre-coat decking on all four sides and cut ends to help protect the timber during construction and its initial acclimatisation period. We recommend Wood-X Deck Oil. www.wood-x.co.nz



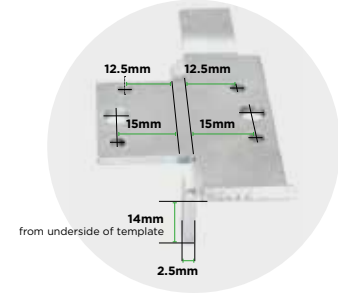
Time-tested decking species and systems crafted for enduring outdoor enjoyment

2 Hole Template

The Hermpac Hole Template allows for:

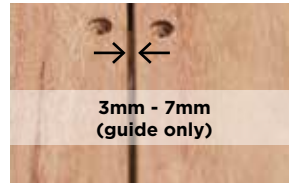
- 15mm from edge screw and nail holes

The length of the template's leg is a guide for fixing position from a cut end.



3 Deck Spacing

Very important: The New Zealand climate varies considerably between regions and seasons, so the decision on board spacing needs to take this into account. To be considered is the timber species and its movement characteristics, local climate, dryness at the time of laying (green, air-dried or kiln-dried); width of decking (wide or narrow boards); overlay over a waterproof membrane and proximity to ground. As a guide only, the wider the board, the more movement can be expected.



4 Drill and Countersink holes

Using the countersink drill bit, drill initial holes in the decking. The depth of the drill can be adjusted with an Allen Key. Ensure the hole depth is to the underside of the decking only. The screw head should sit approximately 0.5mm below the deck surface.

Note: when using lesser density timbers like Kanda, Accoya and Accoya Grey care needs to be taken to not over drive the screws or apply too much pressure when using the countersink drill bit.



5 Fixings

Refer to Hermpac's Accessories section (adjacent) for recommended screw fixings.



Accessories

HEX



Hermpac Hex Drive
Stainless Steel Screw

65 x 12g
suitable for 19-21mm
thick decking

75 x 12g
suitable for 30-32mm
thick decking

TORX



Hermpac Torx Drive
Stainless Steel Screw

60 x 10g
suitable for 60-115 x 19/21 decking or any size
Accoya/Accoya Grey decking

75 x 10g
suitable for 60 - 95 x 30/32 decking or any size
Accoya/Accoya Grey decking



Hermpac Deck
Hole Template



Countersink
Drill Bit



Wood-X Decking
Wood Oil

Species Vitex / Profile 140 x 21 HP92 watershed



Hermpac / Decking Timber / Residential

FAQ's & Best Practice

1. Can I store my decking outside prior to installation?

All of our residential decking products have been kiln dried to some extent. It is recommended to keep dry, under cover, elevated off the ground on a dry surface (minimum 75mm ground clearance). Keeping the packet strapped will also help minimise the amount of movement in the boards prior to installation. If moisture does enter the packet the decking timber may bleed its tannins onto the surface below.

2. Do I need to oil my decking?

Ideally yes. Your decking can be pre coated prior to delivery or if coating on site ensure your decking is clean and dry prior to coating. The use of a clear penetrating decking oil used all the way around (including cut ends) the decking boards will assist in minimising the uptake and release of moisture in the initial months. Coating the back of the board prior to installation will assist with minimising moisture uptake from the ground/membrane below the decking. If installing your decking over a membrane, it is important to check with the membrane supplier that the oil coating and membrane are compatible.

3. Can I use decking close to the ground or over a waterproof membrane?

Yes... but not a wide board (hardwood). Using decking boards that are 90mm wide or narrower when installing a decking that is within 600mm of ground level, or over a membrane, will minimise movement and cupping compared to that of wider boards. Wider boards aren't as dimensionally stable as narrower boards and will tend to move/cup more as they take up moisture from underneath. Alternatively, the use of Accoya or Accoya Grey wide board decking is also a great solution for decking close to ground or over a membrane due to its minimal expansion and contraction in service.

4. Do I need to use Joist Tape before installing my decking?

It is considered best practice to use joist tape under all decking timber but is essential to use under Accoya or Accoya Grey decking to reduce the transfer of the joist treatment into the decking timber, which can leave visible 'joist lines' on the surface of the decking boards. Joist tape can also assist in minimise moisture sitting between the joists and the bottom side of the timber decking.

5. How far in from the edge should I be screwing my decking boards?

15mm in from the edge and ends of the boards to the centre of the screw hole enables the boards to be held down tight whilst minimising cupping/curling on the edges of the boards which can occur when the screws are placed too far in from the edges.

As always there is an exception to the rule above. 65mm wide decking boards can be installed with one screw in the centre of the board. See our decking fixings guide for further information.

6. What gap should I leave between the decking boards?

There are so many variables, apart from the decking timber itself that contribute to answering this question.

When considering your deck spacing ask the following questions:

- What is the natural stability of the timber specie?
- What is the width of the decking board?
- Has the decking been pre coated all the way around the deck?
- Is the decking being installed at a warm, dry or wet, cool time of year?
- What is the aspect of the deck – North, South, East or West?
- Is the deck close to ground or elevated?
- Is there good air flow under the deck?
- What are the general weather conditions and variables in your part of the country?
- What is the deckings moisture content?

- As a general rule – The wider the decking board, the wider the spacing between boards.

7. Do I need to pre drill my decking boards?

Yes, pre drilling is essential for all of our decking boards. Pre drill will minimise splits and checks around the screws. Splits and checks around the screws can also occur when the screws have been installed with too much pressure. These checks may only be small at time of installation but can grow after the decking has been installed. This can be more visible at the ends of individual boards

8. Do I need to use the recommended Hermpac fixings?

There are numerous decking screws and hidden fix systems in the market but our recommendations are based on years of experience, testing and results that we think work best for our decking range.

9. Can I use timber decking around my pool or close to porous surfaces?

Care needs to be taken when choosing the right timber decking for around a pool or close to porous surfaces. All timbers will 'bleed tannins' to varying degrees when they come into contact with water. The tannins can then bleed into and stain the pool and porous surfaces. As a starting point it is best to choose a timber decking that has minimal bleeding of tannins (refer the 'Tannin Bleed' section of the Decking Comparison Chart). Once the timber is on site, refer to your building professional for the best course of action to minimise tannin bleed in the required areas.

10. Can I use my decking or other products on the vertical sides of my deck?

Decking or other products can be used around the sides of the deck but it is preferable to have good air flow underneath the deck. If there is no air flow and high moisture/humidity under the deck, it may cause more movement in the decking boards as it takes up moisture from the underside of the deck.

11. Will my decking timber move after installation?

The simple answer is – yes. Timber is a natural, 'living' product therefore your decking will move and acclimate to its surrounding environment and

seasons. Narrower decking boards will tend to show less visible movement compared to wider board decking. Check out the 'stability' section of the Decking Comparison Chart.

12. Do hardwood decks check/split over time?

Surface checks (fine lines in the timber) will occur, to varying degrees, in most of our decking species. These occur as the timber dries out so are generally more visible in the hot summer months. They can also occur prior to installation and are a result of the kiln drying process that the timber goes through prior to machining. Some splits/raised grain may become visible overtime in selected boards as a result of stresses placed on the decking. We always recommend having a few extra pieces of decking stored away under the house just in case the odd board needs replacement down the track. Coating the decking on all 6 sides before installation may assist to slow the rate of moisture uptake and release and may reduce the amount of checking and end-grain splits.

13. Why would I use Watershed decking over flat decking?

As decking naturally moves over time it is inevitable that some boards on a deck will cup. The aim of the watershed decking profile is to minimise the chance of cupping and to assist with water removal from the top of the decking boards.

14. Can I keep my decking the original colour?

Generally decking, when exposed to the elements, will turn silver grey. Adding a 'tinted/coloured' oil is the only way to try and hold some colour but this can be a time consuming, high maintenance option where the final result may not be exactly what was envisaged at the start.

15. Will I need to clean my deck?

Yes, generally you will find that after all the construction and landscaping is complete your decking will be needing a bit of TLC. Depending on the extent of the works, some decks may have been contaminated/reacted with other building and landscaping products resulting in black or dirty marks or spots. The best option is to try one of the many deck cleaning products available on the market.

Species Vitex / Profile 140 x 21 HP92 watershed



Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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Durability classes are based on Australian Standards AS5604-2005 and all the relevant information in the standard.

The heartwood of an individual piece of timber may vary from the species nominated classification.

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