

GARAPA & TONKA



Rosenfeld
Kidson

PREMIUM EXTERIOR HARDWOODS





Garapa is a preferred hardwood timber choice for smaller dimension applications such as exterior furniture and joinery, public boardwalks and domestic decking.

It has all the benefits of a stable and durable hardwood, with the added features of being from an environmentally responsible source and having negligible tannin release.

Garapa saws, nails, screws and also glues well.

Avoid contact with iron filings as this will discolour the timber black. If this does occur staining can be removed with a light scrub using oxalic acid.

Garapa is a hard and strong timber with high bending and crushing strengths.

DENSITY (kg/m3)*	900	
DURABILITY	Class 2 – Durable	

STRENGTH GROUP	SD2	
MOR (MPa)	Unseasoned 89	Seasoned 138
MOE (GPa)	Unseasoned 14.0	Seasoned 16.2
JANKA (kN)	7.4	

SHRINKAGE GREEN TO 12% M.C.	Tangential 6.5	Radial 3.5
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*Air Dry Density (kg/m3) is average indication only and actual value may vary. Refer to timber properties tables to the right for strength, shrinkage and durability classifications.

TIMBER PROPERTIES

STRENGTH GROUPINGS

Minimum values for strength groups (unseasoned timber)			
<i>(units are Mpa = 145 lb/sq.inch)</i>			
Strength group	Modulus of rupture	Modulus of elasticity	Maximum crushing strength
S1	103	16300	52
S2	76	14200	43
S3	73	12400	36
S4	62	10700	31
S5	52	9100	26
S6	43	7900	22
S7	36	6900	18

Minimum values for strength groups (seasoned timber)			
<i>(units are Mpa = 145 lb/sq.inch)</i>			
Strength group	Modulus of rupture	Modulus of elasticity	Maximum crushing strength
SD1	150	21500	80
SD2	130	18500	70
SD3	110	16000	61
SD4	94	14000	54
SD5	78	12500	47
SD6	65	10500	41
SD7	55	9100	36
SD8	45	7900	30

SHRINKAGE CLASSIFICATIONS

Description of shrinkage	Shrinkage from Green to Oven-dry (12% MC)	
	(%) before reconditioning	
	Tangential	Radial
Very Low	0 - 3.5	0 - 2
Low	3.5 - 5.0	2 - 3
Medium	5.0 - 6.5	3 - 4
High	6.5 - 8.0	4 - 5
Very High	> 8.0	> 5

DURABILITY CLASSIFICATIONS

Grade of durability	Approximate service life (years)		
	Fully Protected	Above ground, exposed	In-ground, exposed
Very Durable	> 50	> 40	> 25
Durable	> 50	15 - 40	15 - 25
Moderately Durable	> 50	7 - 15	5 - 15
Non-Durable	> 50	0 - 7	0 - 5

ENVIRONMENTAL

All RK stock of these species is sourced with full FSC® 100% certification and is supplied with specific documentation relating to each dispatch.



By choosing this product, you are supporting responsible management of the world's forests

FSC® C005741 • www.fsc.org

Rosenfeld Kidson, as timber merchants acknowledge the importance of conserving the world's greatest renewable resource.

FSC certified timber undergoes independent, third-party audited certification procedures at every step of the supply chain. This provides designers, specifiers, architects and consumers absolute assurance that those forest and wood products labelled as FSC certified originate from legal sources, which are managed to rigid social, economic and environmental standards.



TONKA hardwood is used in larger dimensions and has become the hardwood timber of choice for public space developments in applications such as boardwalks, wharfs, bridges and other structural end uses; as well as heavy exterior furniture and shelters.

Residentially it is increasingly being used for exposed beams and rafters, as well as for pergolas and posts.

In addition to its environmental credentials, it is favoured for its superior characteristics of strength and durability but also its attractive medium-brown colour and excellent weathering properties.

DENSITY (kg/m3)*	1140	
DURABILITY	Class 1 – Very Durable	

STRENGTH GROUP	S1	
MOR (MPa)	Unseasoned 132	Seasoned 188
MOE (GPa)	Unseasoned 18.3	Seasoned 21.0
JANKA (kN)	13.7	

SHRINKAGE GREEN TO 12% M.C.	Tangential 7.0	Radial 4.0
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*Air Dry Density (kg/m3) is average indication only and actual value may vary. Refer to timber properties tables to the right for strength, shrinkage and durability classifications.

protecting hardwood from within



Rosenfeld Kidson offers New Zealand's most comprehensive range of quality, environmentally certified hardwoods. These hardwoods are used extensively around the country for domestic decking, exterior joinery and furniture, pergolas and boardwalks.

To compliment these hardwood products and to counter the effects of climate and the often harsh conditions experienced in New Zealand, we have developed our FactoryOil coating service.

The wood oil used in this process is applied under controlled conditions to a strict quality assurance programme. This enables accurate coverage rates to be achieved providing deep protection and enhancing the natural properties and appearance of the timber.

FACTORYOIL CLEAR

- Clear coat of migrating wood oil
- Provides moisture barrier to all four sides of timber decking
- Slows seasoning process to avoid excessive movement
- Protects timber from elements
- Reduces checking and splitting
- Provides mould and fungal protection
- Weathers naturally and more evenly to a silver grey

FACTORYOIL COLOUR

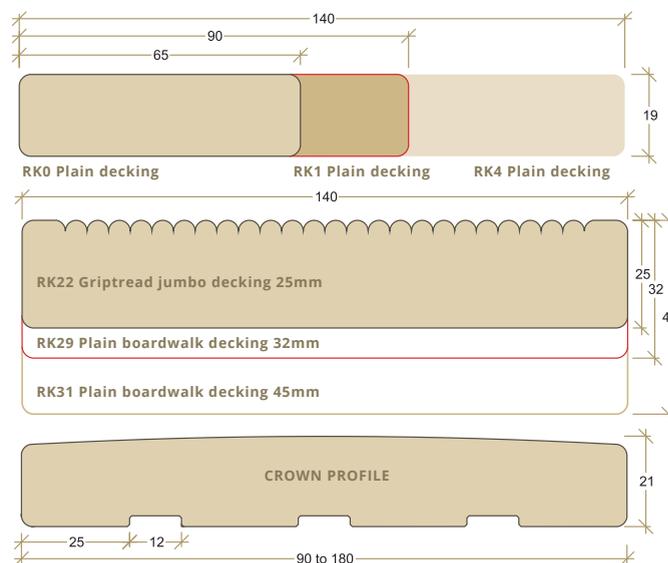
- Includes naturally coloured pigment to reduce UV discolouration of timber
- Retains new colour of timber, with regular maintenance
- Provides moisture barrier to all four sides of timber decking
- Slows seasoning process to avoid excessive movement
- Protects timber from elements
- Reduces checking and splitting
- Provides mould and fungal protection

HARDWOOD SIZE CHART

NOMINAL SIZE		FINISHED SIZE				
50x25	75x25	100x25	150x25	200x25	250x25	
45x19	65x19	90x19	140x19	180x19	230x19	
50x40	75x40	100x40	150x40	200x40	250x40	
45x32	65x32	90x32	140x32	180x32	230x32	
50x50	75x50	100x50	150x50	200x50	250x50	300x50
45x45	65x45	90x45	140x45	180x45	230x45	280x45
		100x75	150x75	200x75	250x75	300x75
		90x65	140x65	180x65	230x65	280x65
		100x100	150x100	200x100	250x100	300x100
		90x90	140x90	180x90	230x90	280x90
			150x150	200x200	250x250	300x300
			140x140	180x180	230x230	280x280

DECKING & EXTERIOR HARDWOOD

NOTE: All decking available in PLAIN, GRIPTREAD or CROWN profiles.



DECKING PROFILES

Profile	Size	Finish
RK0	65x19	Plain
RK1	90x19	Plain
RK2	90x19	Griptread
RK3	90x19	Cleantread
RK4	140x19	Plain
RK5	140x19	Griptread
RK20	90x19	Crown
RK21	140x19	Crown
RK22	140x25	Griptread
RK23	140x25	Plain
RK24	140x25	Crown
RK25	90x32	Griptread
RK26	90x32	Plain
RK27	90x32	Crown
RK28	140x32	Griptread
RK29	140x32	Plain
RK30	140x32	Crown
RK201	140x45	Plain
RK202	190x35	Plain
RK31	140x45	Plain
RK205	180x45	Plain
RK206	230x45	Plain

GUIDELINES FOR GARAPA DECKING INSTALLATION

HANDLING & INSTALLATION

All decking should be kept dry before installation. Storage of decking on site should be in a cool, dry place, out of direct sunlight and elevated on bearers approx 100mm from ground.

SPAN

The maximum suggested span for 19mm hardwood decking is for joists to be at 450mm centres.

BOARD SPACING

Board spacing should allow for air circulation and drainage and also take into account seasonal movement. All timber will shrink as the timber dries and swell as it takes on moisture. The degree to which this occurs will vary depending on timber species and site conditions, particularly relating to the degree of ventilation provided.

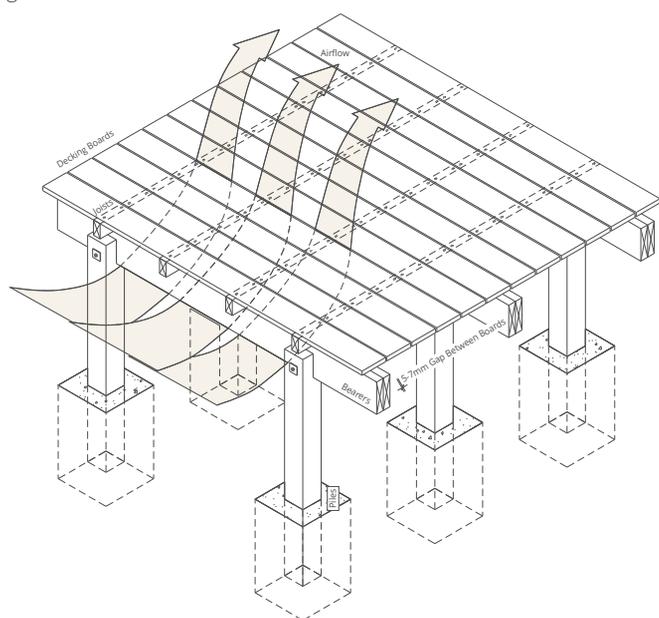
As a guide to allow for this movement, space boards as follows:

Board Width	Kiln-dried Spacing
65 & 90mm	Min 4mm
140mm	Min 6mm

VENTILATION & DRAINAGE

Adequate ventilation of the deck is essential for long term stability. Allowing air to freely circulate around the deck will reduce the moisture differential between the top and underneath of the boards, minimising the likelihood of cupping and distortion following installation.

To achieve proper ventilation the deck should have at least 450mm clearance from the ground. Adequate drainage of the ground is also essential.



FASTENING

All decking boards should have two pre-drilled pilot holes per joist. Pilot holes should penetrate through the decking and not the radiata joist.

For fastening 140x19mm decking it is recommended to use 10gx65mm stainless steel 316 grade decking screws. Pilot holes should be 15mm from the edge and ends.

For fastening 65mm or 90x19mm decking, 10gx50mm stainless steel 316 grade decking screws can be used or alternatively 65mm annular grooved stainless steel 316 grade decking nails. If nailing, pilot holes should be 12mm from board edge.

These appropriate fixings and pilot hole/countersinking tools are available from Rosenfeld Kidson. Screws are available with either square or star drive and decking nails are available with a countersunk or jolt head.

END SEALING

End checking and splitting can occur when decking boards are cut to length. After you cross cut the decking, it is recommended to re-seal the cut ends. Seal the ends immediately after cutting with a suitable end grain sealer.

COATING

Decking can be coated on all four sides prior to delivery with exterior wood oil using Rosenfeld Kidson's FactoryOil service. This can be provided as a clear 'sacrificial' coat to reduce the potential for movement and aid in the seasoning process; or as naturally pigmented oil to slow discolouration. Any coating used should be tested first on a small sample to ensure compatibility and always follow the manufacturer's application instructions.

MAINTENANCE

UNCOATED TIMBER

Maintenance of your hardwood deck will vary depending on the location of the deck, its construction and many other factors like aspect, drainage, coating, profile and usage. Your deck should be cleaned twice annually to remove debris, accumulated dirt and surface mould. A hard bristled brush or low pressure water blast will give best results. Chemical cleaning products that can be effective are also available.

COATED TIMBER

Maintenance is the same as for an uncoated deck but also inspect the deck annually for signs of peeling, discolouration or excessive wear to the coating. At least annually or as the coating shows signs of wear; apply a fresh coat or two of the last product used as per product manufacturer's application instructions.

NB. These guidelines should be read in conjunction with the New Zealand Building Code. When building a deck please refer to the following standards: NZS3602, NZS3604, NZS3605, NZS3640 and NZS4203. Other recommended references include BRANZ Bulletin Issue 489 (*Timber slat decks/balconies*).