



American White Ash – *Fraxinus americana*

Other Names: White Ash, American Ash

Region of Origin: United States

SPECIES OVERVIEW:

American White Ash heartwood is a grey-brown, sometimes tinged with red. Demand is usually for the lighter coloured white sapwood. Generally straight grained with a coarse but even texture. Ash is a non-durable timber prized for its use in sports equipment and tool handles.

MAIN USES:

Furniture, cabinetmaking, interior joinery, sporting equipment, tool handles, food and liquid containers.

WORKING PROPERTIES:

There is moderate blunting effect on tools, but can be worked satisfactorily with both hand and machine tools.

It glues, stains and polishes well. Has excellent bending properties.

MECHANICAL PROPERTIES:

Wood bending properties are variable but generally very good. The wood has good strength elasticity, toughness, stiffness and hardness qualities allied to its relatively light weight. Excellent shock resistance.

AVAILABILITY:

Specifications stocked at Rosenfeld Kidson are: Sawn 25mm, 40mm and 50mm thicknesses in mixed widths.

GRADING:

Prime (FAS).

DENSITY (kg/m ³)*:	660
DURABILITY:	Non-durable

STRENGTH GROUP:	SD5
MOR (MPa):	100
MOE(GPa):	11.9
JANKA(kN):	5.6

SHRINKAGE GREEN TO 12% M.C.	Tangential	Radial
	7.0	4.0

*Air Dry Density (kg/m³) is average indication only and actual value may vary. Refer to timber properties tables over page for strength, shrinkage and durability classifications.



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