



American Hard Maple – *Acer saccharum/nigrum*

Other Names: Rock Maple, Sugar Maple, Black Maple

Region of Origin: United States, Canada

SPECIES OVERVIEW:

American Hard Maple colouring is cream-white with a pinkish tinge. Usually straight grain but sometimes curly or wavy and the texture is fine and even. Fine brown lines give an attractive growth ring figure. Large trees may have dark brown heart. The timber has high resistance to abrasion and wear and finishes very well.

MAIN USES:

Furniture, cabinet making, interior joinery, boatbuilding, flooring and musical instruments.

WORKING PROPERTIES:

A moderately difficult wood to work with a slight blunting effect. Takes glue, stain and polish very well.

MECHANICAL PROPERTIES:

High in all strength properties except stiffness which is medium. It has a very good steam bending classification.

AVAILABILITY:

Specifications stocked at Rosenfeld Kidson are:
Sawn 25mm, 40mm, 50mm and 75mm thicknesses in varying mixed widths.

GRADING:

Prime (FAS).

DENSITY (kg/m ³)*:	720
DURABILITY:	Non-durable

STRENGTH GROUP:	SD4
MOR (MPa):	117
MOE(GPa):	12.6
JANKA(kN):	6.0

SHRINKAGE GREEN TO 12% M.C.	Tangential	Radial
	9.0	3.0

*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