

Acoustic Calculator

Specify your slat width and gap manually below to calculate open area...

Slat Width (mm)	Gap (mm)	Open Area (%)
19	13	41%

Use this calculator for multiple widths, specify the width and ratio for each slat...

Slat Widths (mm)	No. of slats per module	Gap (mm)	Open Area (%)
19		19	22%
44	1		
69			
94	1		

Slat Widths Explained

Timber is sawn at the mill into boards measured in imperial inches, 1"x4", 2"x4" etc. 1" = 25.4mm so these roughly correspond to 25x100mm, 50x100mm etc. These boards have a rough finish to them, usually only used for structural timber, eg partition studs, joists. In order to get a smooth finish, the timber is planed smooth reducing each dimension by 6mm. For more information see the table below.

Sawn Dimension (inches)	Sawn Dimension (mm)	Planed Smooth Dimension (mm)
1"	25	19
2"	50	44
3"	75	69
4"	100	94
5"	125	119
6"	150	144
8"	200	194
10"	250	244

**It is most cost-efficient to choose timber sizes that are the same as the dimensions in the table.
144mm --> 0% timber waste**

Finished sizes that are marginally smaller than the dimensions above are also reasonably coast-

efficient and result in minimal waste, eg. 140mm --> $144 - 140 / 144 = 2.7\%$ timber waste

Finished sizes that are fractionally larger than the sizes above are NOT cost-efficient and produce large amounts of waste, eg. 150mm --> $194 - 150 / 194 = 22\%$ timber waste

Open Area	Acoustic Class*
40% +	A
30-40%	B
20-30%	C
10-20%	D

** Approximation based upon benchmark testing*

