GL17S Rafters – Light Sheet Roof N2/C2

Size (mm)	Light Sheet Roof N2 – Rafter Spacing (mm)					
	Single Span Rafters			Continuous Span Rafters		
	300	600	900	300	600	900
140x42	6.4	5.9	5.3	8.0	7.4	6.3
190x42	7.7	7.1	6.7	9.6	9.0	8.5
240x42	8.8	8.2	7.8	11.0	10.4	9.9
290x42	9.8	9.2	8.8	12.3	11.6	11.1
140x65	6.6	6.2	5.9	8.4	7.8	7.4
190x65	7.9	7.5	7.2	10.0	9.4	9.0
240x65	9.0	8.6	8.3	11.3	10.8	10.4
290x65	10.0	9.6	9.3	12.6	12.1	11.7
240x80	9.1	8.7	8.4	11.5	11.0	10.6
Size (mm)	**Light Sheet Roof C2 – Rafter Spacing (mm)**					
	Single Span Rafters			**Continuous Span Rafters**		
	300	**600**	**900**	**300**	**600**	**900**
140x42	5.8	4.0	3.3	5.8	4.0	3.3
190x42	7.7	5.5	4.5	7.9	5.5	4.5
240x42	8.8	6.8	5.5	9.8	6.8	5.5
290x42	9.8	8.1	6.5	11.6	8.1	6.5
140x65	6.6	5.0	4.1	7.3	5.0	4.1
190x65	7.9	6.9	5.6	10.0	6.9	5.6
240x65	9.0	8.6	7.1	11.3	8.8	7.1
290x65	10.0	9.6	8.6	12.6	10.7	8.6
240x80	9.1	8.7	7.9	11.5	9.8	7.9

Span values are in metres

Loading Data:

Dead Load of roof: Light Sheet Roof with no ceiling, maximum 20 kg/m_2
(Covers standard light sheet roofing materials, for roof pitch maximum 35deg)
Wind Load taken as N2/C2 in accordance with AS 4055 Wind Loads for Housing
ETH LAM GL beams are manufactured straight, without any camber built into the beams.

Notes:
1) Minimum bearing lengths for support of rafters: 35mm on end supports, and 45mm internal supports.
2) The span value shown is the distance between centrelines of supports.
3) For continuous spans, the adjacent rafter spans may be different, but look up the larger of the spans, and the shorter span must be more than 50% of the larger span. If this rule is not met, then consider the rafters are simply supported, and look up the larger span in the single span table.
4) Deflection criteria: for dead load, the lesser of Span/300, or 20mm, and for Roof Live Loads, Span/250.
5) Where there are conflicts in design between loading codes (AS/NZS1170 series), timber code (AS1720.1-2010) and AS1684.1-1999, the loading codes and timber codes take preference.

The above span table values have been designed in accordance with the following codes:
- AS1720.1-2010 Timber Design Code
- AS1170.0, .1, .2-2002 Loading Codes for Limit State design, Live Loads, and Wind Loads respectively.
- AS1684.1-1999 Design Criteria for Residential Timber Framing.