

GL17S Upper Story Lintels – Sheet/Tile N3

Size (mm)	Sheet Roof Lintels - Roof load Width (m)							
	1	2	3	4	5	6	7	8
140x42	4.0	3.2	2.8	2.5	4.9	4.3	3.8	3.5
190x42	5.0	4.3	3.8	3.4	6.3	5.4	4.8	4.5
240x42	5.9	5.0	4.6	4.2	7.4	6.4	5.8	5.4
290x42	6.7	5.8	5.3	4.9	8.4	7.3	6.6	6.2
140x65	4.4	3.7	3.2	2.9	5.5	4.7	4.3	4.0
190x65	5.4	4.7	4.3	4.0	6.8	5.9	5.4	5.0
240x65	6.4	5.5	5.1	4.7	8.0	7.0	6.4	5.9
290x65	7.2	6.3	5.8	5.4	9.1	8.0	7.3	6.8
240x80	6.6	5.8	5.3	4.9	8.3	7.3	6.7	6.2
Size (mm)	Tile Roof Lintels - Roof load Width (m)							
	1	2	3	4	5	6	7	8
140x42	3.0	2.4	2.1	1.9	1.7	1.6	1.5	1.4
190x42	3.7	3.1	2.8	2.6	2.4	2.2	2.1	2.0
240x42	4.4	3.8	3.4	3.2	3.0	2.8	2.7	2.5
290x42	5.1	4.3	3.9	3.6	3.5	3.3	3.2	3.0
140x65	3.3	2.7	2.4	2.2	2.0	1.9	1.8	1.7
190x65	4.1	3.5	3.2	3.0	2.7	2.6	2.5	2.3
240x65	4.9	4.2	3.8	3.5	3.3	3.2	3.1	3.0
290x65	5.6	4.8	4.4	4.1	3.8	3.7	3.5	3.4
240x80	5.1	4.4	4.0	3.7	3.5	3.4	3.2	3.1

Span values are in metres

Loading Data:

Dead Load of roof: Sheet roof + ceiling, maximum 40 kg/m², Tiled roof + ceiling, maximum 90 kg/m²

(Covers standard residential roof materials, for roof pitch maximum 35deg)

Wind Load taken as N3 in accordance with AS 4055 Wind Loads for Housing

ETH LAM GL beams are manufactured straight, without any camber built into the beams.

Deck Joist design criteria in accordance with methods presented in AS1684.1-1999, and structural timber design in accordance with AS1720.1-2010.

Notes:

- 1) Minimum bearing lengths for support of lintels: 35mm on end supports, and 45mm internal supports.
- 2) The span value shown is the distance between centrelines of supports.
- 3) Deflection criteria: for dead load, the lesser of Span/300, or 10mm, and for Roof Live Loads, Span/250, or 10mm.
- 4) For lintels the lateral restraint is assumed to be achieved via the fixing of trusses or rafters direct to the top plate of the wall. No restraint of the bottom edge of the lintel is assumed.
- 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.