

ROOF HIP MEMBERS GL8

Roof Type and pitch	Wind Speed	Span (m) on plan							
		3	4	5	6	7	8	9	10
Heavy	L	180x65	225x90	270x115	360x115	450x90	540x90	630x90	675x135
	M	180x65	225x90	270x115	360x115	450x90	540x90	630x90	675x135
	H	180x65	225x90	270x115	360x115	450x115	540x115	630x115	675x135
	VH	180x65	225x90	315x90	360x115	450x115	540x115	630x115	675x135
Light	L	135x65	225x65	225x115	315x90	360x115	450x115	540x90	585x115
	M	135x65	225x65	225x115	315x90	360x115	450x115	540x90	585x115
	H	180x65	225x65	270x90	315x115	405x90	450x115	540x115	630x90
	VH	180x65	225x90	270x115	360x90	405x115	495x115	585x115	675x135

Wind speed zones in accordance with NZS 3604:1999
 Deflection limited to span / 300
Glulam Grade = GL8

Instructions

To use this table you will need to know:

- The Span of the Hip on plan.
- The Wind Speed (Light, Medium or Heavy).
- Type of Roof Load (Light or Heavy).

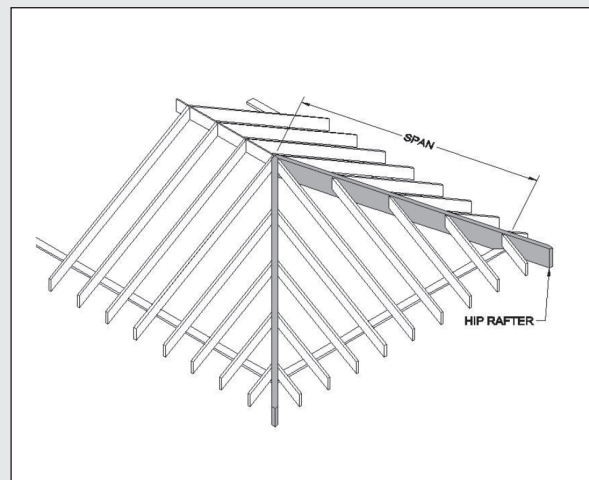
1. Select the Roof Type in the left hand column (Heavy or Light).
2. Within this block, locate the row of the required Wind Speed (L, M, H or VH).
3. Under the 'Span on Plan' heading, locate the column that meets or exceeds the required span.
4. Locate the beam dimensions in the cell where the row in step 2 and the column in step 3 meet.

Example:

For a Rafter Lintel spanning 5m carrying a light roof in a medium wind speed, Roof Pitch <math><20^\circ</math>

Span of Glulam Beam = 5
 Wind Speed = M
 Therefore Section Size = 225 x 115 GL8
 or = 225 x 90 GL8
 12mm Precamber

Alternative using GL10
 Therefore Section Size = 225 x 90 GL10



ROOF HIP MEMBERS GL10

Roof Type and pitch	Wind Speed	Span (m) on plan							
		3	4	5	6	7	8	9	10
Heavy	L	180x65	225x65	270x90	315x115	405x115	495x115	585x90	630x115
	M	180x65	225x65	270x90	315x115	405x115	495x115	585x90	630x115
	H	180x65	225x65	270x90	360x90	405x115	495x115	585x115	675x135
	VH	180x65	225x65	270x115	360x90	405x115	495x115	585x115	675x135
Light	L	135x65	225x65	225x90	270x115	360x90	405x115	495x90	540x115
	M	135x65	225x65	225x90	270x115	360x90	405x115	495x90	540x115
	H	135x65	225x65	225x115	315x90	360x115	450x90	495x115	585x90
	VH	180x65	225x65	270x90	315x115	405x90	450x115	585x90	630x115

Wind speed zones in accordance with NZS 3604:1999
 Deflection limited to span / 300
Glulam Grade = GL10

Roof Type and pitch	Wind Speed	Span (m) on plan							
		3	4	5	6	7	8	9	10
Heavy	L	225x65	270x90	360x90	450x115	540x115	675x135	720x135	855x135
	M	225x65	270x90	360x115	450x115	585x90	675x135	720x135	855x135
	H	225x65	270x115	360x115	450x115	585x115	675x135	765x135	855x135
	VH	225x65	315x90	405x90	495x115	630x115	675x135	810x135	945x135
Light	L	180x65	225x115	315x90	405x90	495x90	585x90	675x135	720x135
	M	225x65	270x90	315x115	405x115	495x115	630x115	675x135	765x135
	H	225x65	270x115	360x115	495x90	585x90	675x135	765x135	855x135
	VH	225x65	315x90	405x90	495x115	630x115	675x135	810x135	945x135

Wind speed zones in accordance with NZS 3604:1999
 Deflection limited to span / 300
Glulam Grade = GL10



ROOF HIP MEMBERS – PRECAMBERED BEAMS GL8

Roof Type < 20°	Wind Speed	Span (m)							
		3	4	5	6	7	8	9	10
Heavy	L	135x65	225x65	225x115	315x90	360x115	450x90	495x115	585x115
	precamber (mm)	7	10	12	15	17	20	22	25
	M	135x65	225x65	225x115	315x90	360x115	450x90	495x115	585x115
	precamber (mm)	7	10	12	15	17	20	22	25
	H	180x65	225x65	270x90	315x115	405x90	450x115	585x90	630x90
	precamber (mm)	N/A	10	12	15	17	20	22	25
	VH	180x65	225x90	270x115	360x90	405x115	495x115	585x115	675x135
precamber (mm)	N/A	N/A	12	15	17	20	22	N/A	
Light	L	135x65	180x65	225x90	270x90	315x115	360x115	450x90	495x115
	precamber (mm)	N/A	10	12	15	17	20	22	25
	M	135x65	225x65	225x90	270x115	360x90	405x115	450x115	540x115
	precamber (mm)	N/A	N/A	12	15	17	20	22	25
	H	180x65	225x65	270x90	315x115	405x90	450x115	540x115	585x115
	precamber (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25
	VH	180x65	225x90	270x115	360x90	405x115	495x115	585x115	675x135
precamber (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Precamber = 1.5 x Dead Load Deflection or Span / 400, whichever is the least
 Wind speed zones in accordance with NZS 3604:1999
 Deflection limited to span / 300
Glulam Grade = GL8

Tip:

*Avoid cutouts, rebating or drilling holes in top and bottom flanges of Glulam Beams.
 Consult manufacturer or designer if in doubt.*

*If non-galvanised steel connections are used dark staining may result from exposure
 to moisture. Use rustproof fixings in external areas.*



ROOF HIP MEMBERS – PRECAMBERED BEAMS GL10

Roof Type	Wind Speed	Span (m)							
		3	4	5	6	7	8	9	10
Heavy	L	135x65	180x65	225x90	270x115	360x90	405x115	495x90	540x115
	<i>precamber (mm)</i>	7	10	12	15	17	20	22	25
	M	135x65	180x65	225x90	270x115	360x90	405x115	450x115	540x115
	<i>precamber (mm)</i>	7	10	12	15	17	20	22	25
	H	135x65	225x65	225x115	315x90	360x115	450x90	495x115	585x90
	<i>precamber (mm)</i>	7	N/A	12	15	17	20	22	25
Light	VH	180x65	225x65	270x90	315x115	405x90	450x115	540x115	630x115
	<i>precamber (mm)</i>	N/A	N/A	12	15	17	20	22	25
	L	135x65	180x65	225x65	225x115	315x90	360x90	405x115	450x115
	<i>precamber (mm)</i>	N/A	10	12	15	17	20	22	25
	M	135x65	180x65	225x90	270x90	315x115	360x115	450x115	540x90
	<i>precamber (mm)</i>	N/A	10	N/A	15	17	20	22	25
Light	H	135x65	225x65	225x115	315x90	360x115	405x115	495x115	585x90
	<i>precamber (mm)</i>	N/A	N/A	N/A	N/A	N/A	20	N/A	N/A
	VH	180x65	225x65	270x90	315x115	405x90	450x115	540x115	630x115
	<i>precamber (mm)</i>	N/A	N/A	N/A	N/A	N/A	N/A	16	N/A

Precamber = 1.5 x Dead Load Deflection or Span / 400, whichever is the least
 Wind speed zones in accordance with NZS 3604:1999
 Deflection limited to span / 300
Glulam Grade = GL10

Roof Type	Wind Speed	Span (m)							
		3	4	5	6	7	8	9	10
Heavy	L	180x65	225x115	315x90	405x90	495x90	585x115	675x135	720x135
	<i>precamber (mm)</i>	7	10	12	15	17	20	22	25
	M	180x65	225x115	315x115	405x115	495x115	585x115	675x135	720x135
	<i>precamber (mm)</i>	7	10	12	15	17	20	22	25
	H	225x65	270x90	360x90	450x115	540x115	630x115	720x135	810x135
	<i>precamber (mm)</i>	N/A	10	12	N/A	17	20	22	25
Light	VH	225x65	270x115	360x115	495x90	585x115	675x115	765x135	855x135
	<i>precamber (mm)</i>	N/A	10	12	15	17	20	22	25
	L	180x65	225x90	270x115	360x115	450x90	540x90	630x90	675x135
	<i>precamber (mm)</i>	N/A	10	12	15	17	20	22	25
	M	180x65	225x115	315x115	405x90	495x115	585x115	675x135	720x135
	<i>precamber (mm)</i>	7	10	N/A	15	N/A	20	N/A	25
Light	H		270x90	360x90	450x115	540x115	630x115	720x135	810x135
	<i>precamber (mm)</i>	7	10	12	15	17	20	22	25
	VH	225x65	270x115	360x115	495x90	585x115	675x135	765x135	900x135
	<i>precamber (mm)</i>	N/A	10	12	15	17	N/A	22	25

Precamber = 1.5 x Dead Load Deflection or Span / 400, whichever is the least
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