

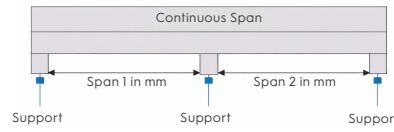
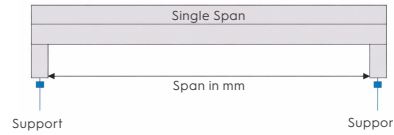
# NelsonPine LVL13: Span tables/charts

A Rafter is one of a number of parallel members required to support roofing loads, via an overlying set of battens or purlins. They are aligned at the roof and run perpendicular to the ridge and top plate.

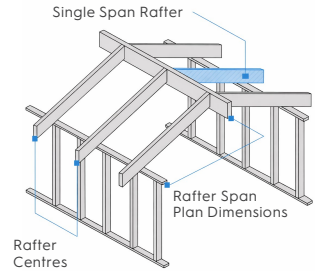
**BASIC LOAD DATA**

Snow Load = 0.9kPa  
Wind Area = V-High  
Roof Pitch = 15deg'

Wind Design Strength Pressure = 1.5 kPa  
Wind Serviceability Pressure = 1.1 kPa  
Min. End Bearing Length = 45 mm  
Min. Intermediate Bearing = 90 mm  
Service Class = Internal Protected



A member is considered continuous if it supported on three or more points (2 or more spans) and span 2 is at least 75% of span 1



Uplift Fixings	
FIXING	CAPACITY
B	0.8 kN
C	2.4 kN
D	3.5 kN
E	5.5 kN
F	9.0 kN
G	16.0 kN
SED	24.0 kN

**TABLE 1 & 2: LIGHT SHEET ROOF - WITH CEILING - 40KG/M2**

Roofing: Sheet (20kg/m<sup>2</sup>)  
Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 1		
NP Frame LVL13	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
150 x 45	3800	3300	3000
200 x 45	5000	4400	4100
240 x 45	6000	5300	4900
300 x 45	7200	6600	6100
360 x 45	8200	7600	7100
400 x 45	8800	8100	7700
460 x 45	9600	9000	8500
610 x 45	11600	10900	10400
150 x 63	4200	3700	3400
200 x 63	5500	4900	4500
240 x 63	6600	5900	5400
300 x 63	7600	7100	6700
360 x 63	8700	8100	7600
400 x 63	9300	8700	8200
460 x 63	10200	9500	9100
610 x 63		11500	11000

End supports

Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 2		
NP Frame LVL13	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
150 x 45	5200	4600	4200
200 x 45	6800	6100	5600
240 x 45	7800	7100	6700
300 x 45	9100	8400	7900
360 x 45	10300	9500	9000*
400 x 45	11100	10300	9700*
460 x 45		11300	10700*
610 x 45			
150 x 63	5700	5100	4600
200 x 63	7300	6700	6200
240 x 63	8300	7700	7200
300 x 63	9700	9000	8500
360 x 63	10900	10200	9600
400 x 63	11700	10900	10400
460 x 63			11400*
610 x 63			

Intermediate supports

End supports as per single span

**TABLE 3 & 4: HEAVY TILE ROOF - WITH CEILING - 90KG/M2**

Roofing: Terracotta Tiles (70kg/m<sup>2</sup>)  
Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 3		
NP Frame LVL13	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
150 x 45	3000	2700	2400
200 x 45	4100	3600	3200
240 x 45	4900	4300	3900
300 x 45	6100	5400	4900
360 x 45	6900	6300	5900
400 x 45	7500	6900	6400
460 x 45	8300	7600	7100
610 x 45	10100	9300	8800
150 x 63	3400	3000	2700
200 x 63	4500	4000	3600
240 x 63	5400	4800	4400
300 x 63	6500	6000	5500
360 x 63	7500	6800	6400
400 x 63	8000	7400	6900
460 x 63	8900	8200	7700
610 x 63	10800	10000	9400

End supports

Table values relate to Allowable Maximum Span in mm

\* Denotes member must have 135mm min bearing on intermediate support.

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 4		
NP Frame LVL13	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
150 x 45	4100	3600	3300
200 x 45	5500	4900	4400
240 x 45	6500	5900	5400
300 x 45	7700	7000	6500*
360 x 45	8800	8000	7500*
400 x 45	9500	8700*	8100*
460 x 45	10500	9600*	9000*
610 x 45		11700*	9800*
150 x 63	4600	4100	3700
200 x 63	6100	5400	4900
240 x 63	7000	6400	5900
300 x 63	8300	7600	7100
360 x 63	9400	8600	8100*
400 x 63	10100	9300	8800*
460 x 63	11200	10300*	9700*
610 x 63			11900*

Intermediate supports

End supports as per single span

Spans have been derived from Hyne Design Software. If you require additional span details or alternative configurations/solutions, please refer to the Hyne Design Software for comprehensive structural timber design information: <https://www.nelsonpine.co.nz/product/lvl-design-tool-hyne/>

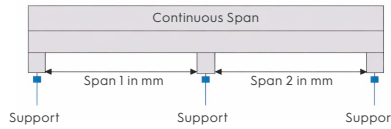
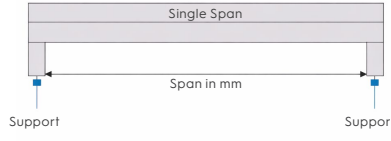
# NelsonPine LVL11: Span tables/charts

A Rafter is one of a number of parallel members required to support roofing loads, via an overlying set of battens or purlins. They are aligned at the roof and run perpendicular to the ridge and top plate.

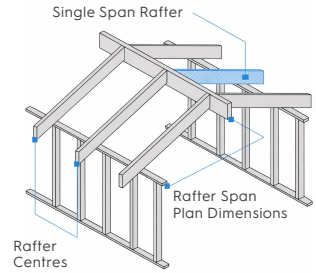
**BASIC LOAD DATA**

Snow Load = 0.9kPa  
 Wind Area = V-High  
 Roof Pitch = 15deg'

Wind Design Strength Pressure = 1.5 kPa  
 Wind Serviceability Pressure = 1.1 kPa  
 Min. End Bearing Length = 45 mm  
 Min. Intermediate Bearing = 90 mm  
 Service Class = Internal Protected



A member is considered continuous if it supported on three or more points (2 or more spans) and span 2 is at least 75% of span 1



Uplift Fixings	
FIXING	CAPACITY
B	0.8 kN
C	2.4 kN
D	3.5 kN
E	5.5 kN
F	9.0 kN
G	16.0 kN
SED	24.0 kN

**TABLE 1 & 2: LIGHT SHEET ROOF - WITH CEILING - 40KG/M2**

Roofing: Sheet (20kg/m<sup>2</sup>)  
 Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 1		
NP Frame LVL11	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
90 x 45	2100	1800	1700
140 x 45	3300	2900	2700
150 x 45	3600	3100	2900
190 x 45	4500	4000	3600
200 x 45	4700	4200	3800
240 x 45	5600	5000	4600
300 x 45	6900	6200	5700
360 x 45	7800	7200	6800
400 x 45	8400	7800	7400
460 x 45	9300	8600	8100
610 x 45	11200	10500	9900

End supports

Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 2		
NP Frame LVL11	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
90 x 45	2900	2600	2300
140 x 45	4600	4000	3700
150 x 45	4900	4300	3900
190 x 45	6200	5500	5000
200 x 45	6500	5800	5200
240 x 45	7400	6800	6300
300 x 45	8700	8000	7500
360 x 45	9900	9100	8600
400 x 45	10600	9800	9300*
460 x 45	11700	10900	10300*
610 x 45			

Intermediate supports  
 End supports as per single span

**TABLE 3 & 4: HEAVY TILE ROOF - WITH CEILING - 90KG/M2**

Roofing: Terracotta Tiles (70kg/m<sup>2</sup>)  
 Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 3		
NP Frame LVL11	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
90 x 45	1700	1400	1300
140 x 45	2600	2300	2100
150 x 45	2800	2500	2300
190 x 45	3600	3200	2900
200 x 45	3800	3400	3000
240 x 45	4600	4000	3700
300 x 45	5700	5100	4600
360 x 45	6600	6000	5500
400 x 45	7200	6600	6100
460 x 45	7900	7300	6800
610 x 45	9700	8900	8400

End supports

Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 4		
NP Frame LVL11	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
90 x 45	2300	2000	1800
140 x 45	3600	3200	2900
150 x 45	3900	3400	3100
190 x 45	5000	4400	4000
200 x 45	5200	4600	4200
240 x 45	6200	5500	5000
300 x 45	7300	6700	6300
360 x 45	8400	7700	7200*
400 x 45	9100	8300*	7800*
460 x 45	10000	9200*	8600*
610 x 45		11300*	9900*

Intermediate supports  
 End supports as per single span

\* Denotes member must have 135mm min bearing on intermediate support.

Spans have been derived from Hyne Design Software. If you require additional span details or alternative configurations/solutions, please refer to the Hyne Design Software for comprehensive structural timber design information: <https://www.nelsonpine.co.nz/product/lvl-design-tool-hyne/>

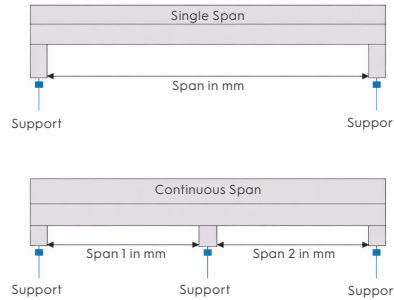
# NelsonPine LVL8: Span tables/charts

A Rafter is one of a number of parallel members required to support roofing loads, via an overlying set of battens or purlins. They are aligned at the roof and run perpendicular to the ridge and top plate.

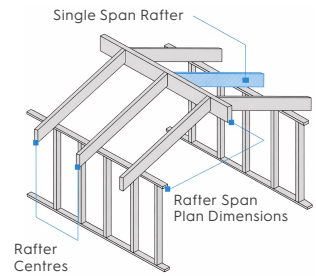
**BASIC LOAD DATA**

- Snow Load = 0.9kPa
- Wind Area = V-High
- Roof Pitch = 15deg'

- Wind Design Strength Pressure = 1.5 kPa
- Wind Serviceability Pressure = 1.1 kPa
- Min. End Bearing Length = 45 mm
- Min. Intermediate Bearing = 90 mm
- Service Class = Internal Protected



A member is considered continuous if it supported on three or more points (2 or more spans) and span 2 is at least 75% of span 1



Uplift Fixings	
FIXING	CAPACITY
B	0.8 kN
C	2.4 kN
D	3.5 kN
E	5.5 kN
F	9.0 kN
G	16.0 kN
SED	24.0 kN

**TABLE 1 & 2: LIGHT SHEET ROOF - WITH CEILING - 40KG/M2**

Roofing: Sheet (20kg/m<sup>2</sup>)  
Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 1		
NP Frame LVL8	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
90 x 45	1900	1600	1500
140 x 45	3000	2600	2400
190 x 45	4000	3600	3300
240 x 45	5100	4500	4100
290 x 45	6100	5400	5000
300 x 45	6400	5600	5200

End supports

Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 2		
NP Frame LVL8	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
90 x 45	2600	2300	2100
140 x 45	4100	3600	3300
190 x 45	5500	4900	4500
240 x 45	6900	6200	5700
290 x 45	7900	7200	6800
300 x 45	8100	7400	7000

Intermediate supports  
End supports as per single span

**TABLE 3 & 4: HEAVY TILE ROOF - WITH CEILING - 90KG/M2**

Roofing: Terracotta Tiles (70kg/m<sup>2</sup>)  
Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 3		
NP Frame LVL8	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
90 x 45	1500	1300	1200
140 x 45	2400	2100	1900
190 x 45	3200	2800	2600
240 x 45	4100	3600	3300
290 x 45	5000	4400	4000
300 x 45	5100	4500	4100

End supports

Table values relate to Allowable Maximum Span in mm

\* Denotes member must have 135mm min bearing on intermediate support.

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 4		
NP Frame LVL8	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
90 x 45	2100	1800	1600
140 x 45	3300	2900	2600
190 x 45	4500	3900	3600
240 x 45	5600	4900	4500
290 x 45	6600	6000	5500
300 x 45	6800	6200	5600

Intermediate supports  
End supports as per single span

Spans have been derived from Hyne Design Software. If you require additional span details or alternative configurations/solutions, please refer to the **Hyne Design Software** for comprehensive structural timber design information: <https://www.nelsonpine.co.nz/product/lvl-design-tool-hyne/>

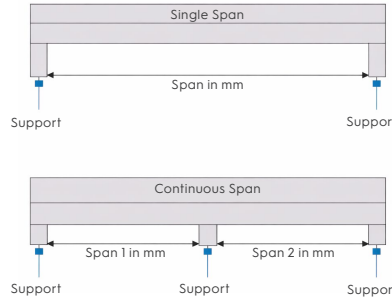
# NelsonPine LVL P11: Span tables/charts

A Rafter is one of a number of parallel members required to support roofing loads, via an overlying set of battens or purlins. They are aligned at the roof and run perpendicular to the ridge and top plate.

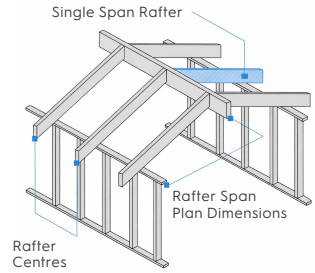
**BASIC LOAD DATA**

Snow Load = 0.9kPa  
 Wind Area = V-High  
 Roof Pitch = 15deg'

Wind Design Strength Pressure = 1.5 kPa  
 Wind Serviceability Pressure = 1.1 kPa  
 Min. End Bearing Length = 45 mm  
 Min. Intermediate Bearing = 90 mm  
 Service Class = Internal Protected



A member is considered continuous if it supported on three or more points (2 or more spans) and span 2 is at least 75% of span 1



Uplift Fixings	
FIXING	CAPACITY
B	0.8 kN
C	2.4 kN
D	3.5 kN
E	5.5 kN
F	9.0 kN
G	16.0 kN
SED	24.0 kN

**TABLE 1 & 2: LIGHT SHEET ROOF - WITH CEILING - 40KG/M2**

Roofing: Sheet (20kg/m<sup>2</sup>)  
 Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 1		
NP Frame LVL P11	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
150 x 90	4400	3900	3600
200 x 90	5700	5100	4700
240 x 90	6700	6100	5600
300 x 90	7800	7300	6900
360 x 90	8800	8200	7800
400 x 90	9400	8800	8400
610 x 90		11700	11200

End supports  
 Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 2		
NP Frame LVL P11	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
150 x 90	6000	5300	4900
200 x 90	7500	6900	6500
240 x 90	8500	7900	7400
300 x 90	9800	9200	8700
360 x 90	11000	10400	9900
400 x 90	11800	11100	10600
610 x 90			

Intermediate supports  
 End supports as per single span

**TABLE 3 & 4: HEAVY TILE ROOF - WITH CEILING - 90KG/M2**

Roofing: Terracotta Tiles (70kg/m<sup>2</sup>)  
 Ceiling: 13mm P'Board = (20kg/m<sup>2</sup>)

Version 2.0 - April 2026	Single Span: Hyne Design - Table 3		
NP Frame LVL P11	Rafter Spacing (m)		
Single Span	0.60	0.90	1.20
150 x 90	3500	3100	2800
200 x 90	4700	4200	3800
240 x 90	5600	5000	4600
300 x 90	6700	6200	5700
360 x 90	7700	7100	6600
400 x 90	8200	7600	7200
610 x 90	11000	10200	9700

End supports  
 Table values relate to Allowable Maximum Span in mm

Version 2.0 - April 2026	Continuous Span: Hyne Design - Table 4		
NP Frame LVL P11	Rafter Spacing (m)		
Continuous Span	0.60	0.90	1.20
150 x 90	4900	4300	3900
200 x 90	6400	5700	5200
240 x 90	7300	6600	6200
300 x 90	8500	7800	7300
360 x 90	9700	8900	8400
400 x 90	10400	9600	9100*
610 x 90			

Intermediate supports  
 End supports as per single span

\* Denotes member must have 135mm min bearing on intermediate support.

NelsonPine LVL P11 is an H1.2 treated engineered wood product consisting of radiata pine veneers laminated together to produce structural products. Feedstock is structural 45mm NelsonPine LVL subsequently secondary bonded into thicker 90mm product using PUR Polyurethane adhesive.

Spans have been derived from Hyne Design Software. If you require additional span details or alternative configurations/solutions, please refer to the **Hyne Design Software** for comprehensive structural timber design information: <https://www.nelsonpine.co.nz/product/lvl-design-tool-hyne/>

