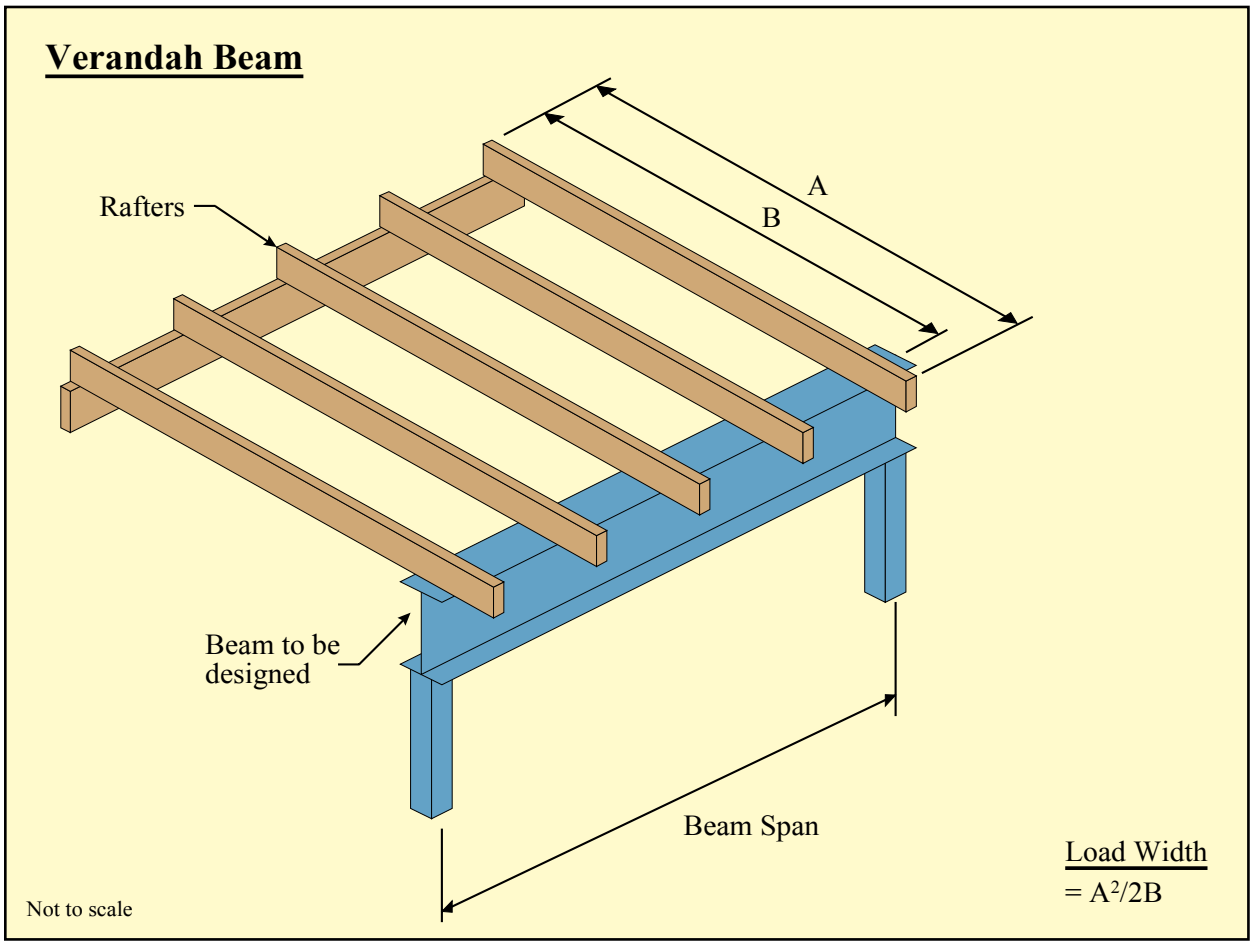
VERANDAH BEAMS

	Load (kg/m²)		Deflection Limit (mm)	
	Dead Load	Live Load	Dead & Live Load	Live Load
Beams supporting a steel sheet verandah roof or carport	40	25 (or ≥ 180/Area + 12)	span/240 to 15	span/360 to 10
Beams supporting a tiled verandah roof or carport	90	25 (or ≥ 180/Area + 12)	span/240 to 15	span/360 to 10



Notes:

1. The top flange of the Beam is assumed to be continuously laterally supported by rafters at 900mm maximum centres.

BEAM SUPPORTING A STEEL SHEET VERANDAH OR CARPORT ROOF - NORMAL WIND N3

Section Designation	Load Width (m) 1.2	1.8	2.4	3.0	3.6	4.2	4.8
	MAXIMUM SPAN OF BEAM (m)						
100TFB	3.2	2.8*	2.5*	2.3*	2.1*	2.0*	1.9*
125TFB	5.0*	4.3*	3.9*	3.6*	3.4*	3.2*	3.0*
150UB14.0	5.2*	4.5*	4.0*	3.7*	3.5*	3.3*	3.2*
• 150UB18.0	6.1*	5.3*	4.8*	4.4*	4.1*	3.9*	3.7*
180UB16.1	5.8*	5.1*	4.6*	4.2*	4.0*	3.8*	3.6*
180UB18.1		5.5*	4.9*	4.6*	4.3*	4.1*	3.9+
• 180UB22.2		6.2*	5.6*	5.2*	4.8*	4.6+	4.4+
200UB18.2		5.6*	5.0*	4.7*	4.4*	4.2*	4.0+
200UB22.3		6.7*	6.1*	5.6*	5.3+	5.0+	4.8+
200UB25.4		7.1*	6.5*	6.0*	5.6+	5.3+	5.1+
• 200UB29.8		8.0*	7.2*	6.7+	6.3+	5.9+	5.6^
250UB25.7		7.1*	6.4*	6.0*	5.6+	5.3+	5.1+
250UB31.4			7.4*	6.9+	6.5+	6.2+	5.9^
• 250UB37.3			8.4+	7.7+	7.3+	6.9^	6.6^
310UB32.0			7.5*	7.0+	6.6+	6.3+	6.0^
310UB40.4				8.3+	7.9^	7.5^	7.1^
310UB46.2					8.5^	8.0^	7.7^
75PFC	3.1	2.6	2.4*	2.2*	2.0*	1.9*	1.8*
100PFC	3.9	3.4*	3.0*	2.8*	2.6*	2.5*	2.3*
125PFC	5.1*	4.4*	4.0*	3.7*	3.4*	3.2*	3.1*
150PFC		5.7*	5.2*	4.8*	4.4*	4.2*	4.0+
180PFC		6.4*	5.7*	5.3*	4.9*	4.7+	4.4+
200PFC		6.7*	6.1*	5.6*	5.2+	4.9+	4.7+
230PFC		7.0*	6.3*	5.8*	5.4+	5.1+	4.9+
250PFC				7.5+	7.0+	6.6^	6.3^
300PFC				8.0+	7.4+	7.0^	6.7^

Example:
Refer to Fig. page 18
Span=6.1m
A=7.0m, B=6.1m
Load width=$A^2/2B$
$=7.0^2/(2x6.1)$
=4.0m
Use a load width of 4.2
in the adjacent table
a 250UB31.4 will span 6.2m
and requires a M12 anchor rod.

BEAM SUPPORTING A TILED VERANDAH OR CARPORT ROOF - NORMAL WIND N3

Section Designation	Load Width (m) 1.2	1.8	2.4	3.0	3.6	4.2	4.8
	MAXIMUM SPAN OF BEAM (m)						
100TFB	3.8	3.4	3.2	3.0	2.8	2.6*	2.4*
125TFB	5.0	4.6	4.3	4.1*	3.9*	3.8*	3.7*
150UB14.0	5.6	5.1	4.8*	4.6*	4.4*	4.2*	4.1*
• 150UB18.0	6.0	5.5	5.2*	4.9*	4.7*	4.5*	4.4*
180UB16.1	6.3	5.8	5.4*	5.1*	4.9*	4.7*	4.6*
180UB18.1	6.5	5.9	5.6*	5.3*	5.1*	4.9*	4.7*
• 180UB22.2	6.8	6.3	5.9*	5.6*	5.4*	5.2*	5.0*
200UB18.2	6.9	6.4	6.0*	5.7*	5.4*	5.2*	5.1*
200UB22.3	7.4	6.8*	6.4*	6.1*	5.8*	5.6*	5.4*
200UB25.4	7.6	7.0*	6.6*	6.2*	6.0*	5.8*	5.6*
• 200UB29.8	8.0	7.4*	6.9*	6.6*	6.3*	6.1*	5.9*
250UB25.7	8.4	7.8*	7.3*	6.9*	6.6*	6.4*	6.2*
250UB31.4		8.2*	7.7*	7.3*	7.0*	6.7*	6.5*
• 250UB37.3		8.6*	8.1*	7.7*	7.4*	7.1*	6.9*
310UB32.0		8.9*	8.4*	8.0*	7.6*	7.4*	7.1*
310UB40.4			9.0*	8.6*	8.2*	7.9*	7.7*
310UB46.2			9.3*	8.8*	8.5*	8.2*	8.0*
75PFC	2.9	2.6	2.4	2.3	2.1	2.0	2.0
100PFC	3.9	3.6	3.4	3.1	3.0	2.8*	2.7*
125PFC	4.9	4.5	4.2	4.0*	3.8*	3.7*	3.6*
150PFC	5.9	5.4	5.1*	4.8*	4.6*	4.4*	4.3*
180PFC	6.7	6.2	5.8*	5.5*	5.3*	5.1*	4.9*
200PFC	7.2	6.6*	6.2*	5.9*	5.7*	5.5*	5.3*
230PFC	7.8	7.2*	6.8*	6.4*	6.2*	6.0*	5.8*
250PFC		8.2*	7.7*	7.3*	7.0*	6.7*	6.5*
300PFC			8.6*	8.2*	7.9*	7.6*	7.4*

Example:
Refer to Fig. page 18
Required beam span=4.0m
A=6.0m
B=5.1m
Load width=$A^2/2B$
$=6.0^2/(2x5.1)$
=3.5m
Use a load width of 3.6
in the adjacent table
a 150UB14.0 will span 4.4m
and requires a M10 anchor rod.

Notes on Tables:

1. The Tables apply for 300PLUS® steel only. For details of your nearest 300PLUS® structural steel supplier, call OneSteel Direct toll free on 1800 1 STEEL (1800 1 78335),or visit our website at www.onesteel.com
2. For sections marked '•' the next largest size may be more economical.
3. No symbol next to the span indicates that only nominal holding down is required (uplift is less than 5 kN). A "*" indicates a M10 holding down rod is required (uplift is between 5 and 19 kN). A "+" indicates a M12 holding down bolt is required (uplift is between 19 & 27 kN). A "^" indicates a M16 holding down bolt is required (uplift is between 27 and 50 kN).
4. For a steel sheet roof in high wind load areas refer to table on page 21.

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