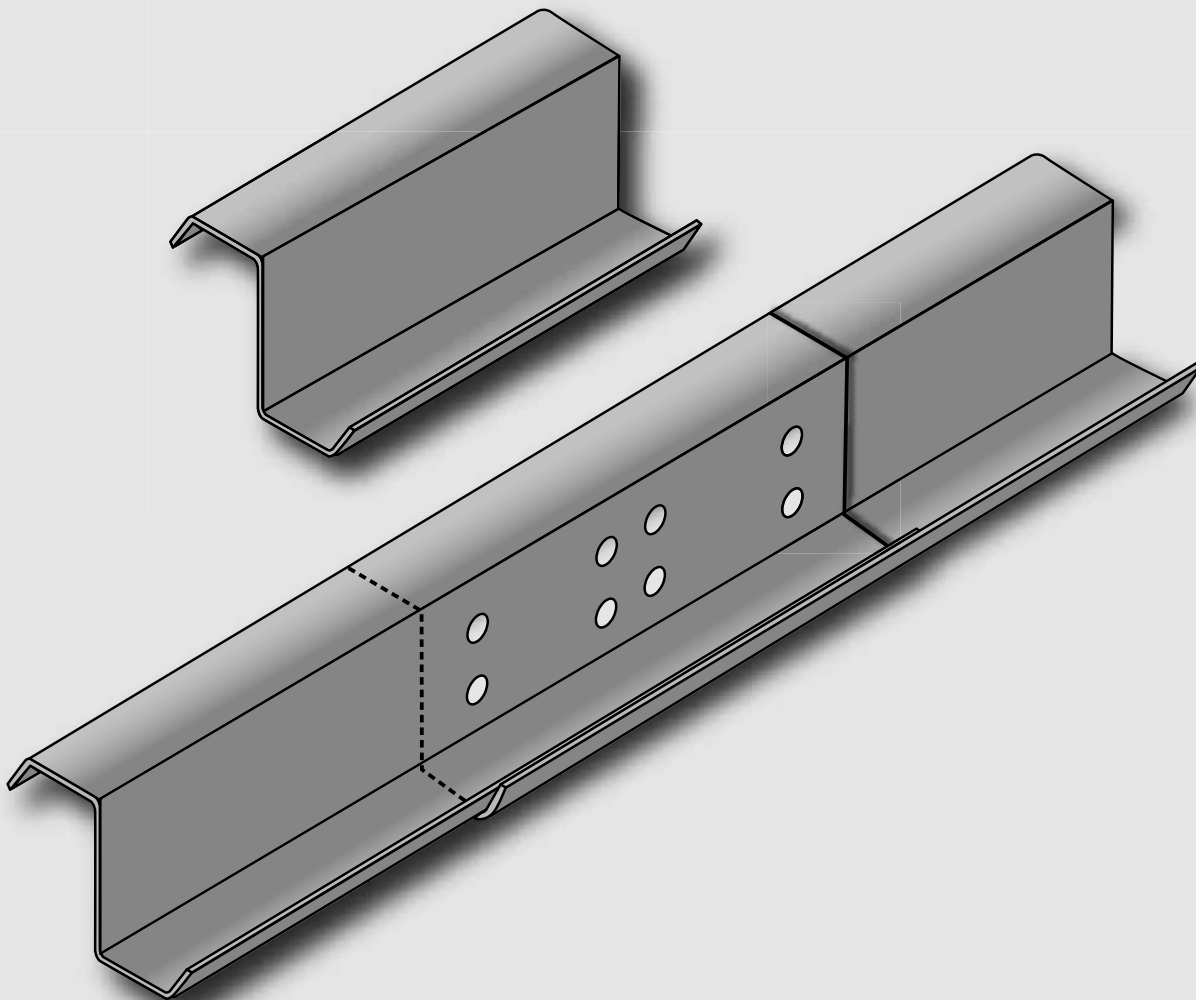




STEEL BUILDINGS, INC.

Purlin Load Tables

ZEE SECTIONS



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WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

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Purlin Load Tables

Notes

1. Properties were computed in accordance with the 2001 edition of the AISI specifications, ASD provisions. When selecting sections for specific applications, applying additional checks may be required. Responsibility for designing and specifying materials for building and building components to comply with applicable state and local codes and specifications and safety considerations is with the designer and/or material specifier.
2. For special conditions not covered in the tables, or for selecting sections for a specific application, contact your supplier.
3. A yield point of 57 ksi (Fy) was used in determining the values in these tables.

Symbols

Ae	in. ²	Effective area of the section for axial loading
Area	in. ²	Full unreduced cross-section area of the section
B	in.	Flange width
B1	in.	Top flange width of non-symmetrical section
B2	in.	Bottom flange width of non-symmetrical section
Cw	in. ⁶	Torsional warping constant of the cross-section
D	in.	Depth of section
d	in.	Lip length
Ix	in. ⁴	Moment of inertia about the x-axis
Ixd	in. ⁴	Deflection moment of inertia about the x-axis
Ixy	in. ⁴	Product of inertia of full section about major and minor centroidal axes
Iy	in. ⁴	Moment of inertia about the y-axis
J	in. ⁴	St. Venant torsion constant
KLx	ft.	Effective length for buckling about the x-axis
M	kip-in.	Allowable bending strength under simultaneous shear or axial load
Ma	kip-in.	Allowable bending strength
Ptf	kips	Allowable compressive axial strength for through-fastened condition
R	in.	Inside bend radius
rx	in.	Radius of gyration of the full cross-section about the x-axis
ry	in.	Radius of gyration of the full cross-section about the y-axis
Se	in. ³	Elastic section modulus of the effective section calculated with extreme compression or tension fiber at Fy (yield point)
Se Pos	in. ³	Elastic section modulus of the effective section calculated with extreme compression or tension fiber at Fy (yield point), for positive bending
Se Neg	in. ³	Elastic section modulus of the effective section calculated with extreme compression or tension fiber at Fy (yield point) for negative bending
Sx	in. ³	Section modulus for the full section (x-axis)
Sy	in. ³	Section modulus for the full section (y-axis)
V	kips	Allowable shear strength under simultaneous bending load
Va	kips	Allowable shear strength
Wt/ft	lb	Weight of section, in pounds per foot of length
x bar	in.	Distance from extreme fiber to the neutral axis along the x-axis
x0	in.	Distance from the shear center to centroid along the principal x-axis
y bar	in.	Distance from the extreme fiber to the neutral axis along the y-axis



Purlin Load Tables

Notes

Torsional Properties

1. These properties are used to compute the laterally braced strength of sections. (Reference AISI C3.1.2)

Bending and Axial Properties

1. Effective section modulus S_e is computed using effective widths of elements. (Reference AISI B2, B3 and B4).
2. P_{tf} is the compressive axial strength for section having one flange attached to a qualifying deck or sheathing with qualifying fasteners. (Reference AISI C4.6)
3. Appropriate factors of safety have been applied.

Combined and Shear Bending

1. Listed values are the allowable combined shear and bending in the absence of axial load.
2. For a section to qualify, the applied shear force and bending must each be no greater than the values for a paired V and M in the table.
3. Appropriate factors of safety have been applied.
4. Allowable values were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the shear force must not exceed the allowable web crippling value and the section must be checked for crippling/bending interaction.
5. Allowable values listed in the "Unbraced" columns are for cases where no lateral bracing of any type is present for the full span length.
6. Allowable values listed in the "Through-Fastened" columns are for cases where the tension flange is through-fastened to deck or sheathing and the compression flange is unbraced. Allowable values for sections not qualifying for the through-fastened geometric requirements are listed as zero. Allowable values for sections meeting some of the geometric requirements of AISI 2001 Section C3.1.3 but failing others by a narrow margin are listed with an asterisk (*) next to the value (please see the through fastened qualification table). It is up to the engineer of record to decide whether or not the allowable values for partially qualifying sections may be utilized for a given project. The additional requirements of AISI 2001 Section C3.1.3 regarding support conditions, panel type, allowable insulation thickness, and panel fasteners must be met in order to utilize the listed values.



Purlin Load Tables

Notes

Web Crippling

1. One-flange loading or reaction occurs when the clear distance between the bearing edges of adjacent opposite concentrated loads or reactions is greater than 1.5 times the flat dimension of the section's web depth.
2. Two-flange loading or reaction occurs when the clear distance between the bearing edges of adjacent opposite concentrated loads or reactions is equal to or less than 1.5 times the flat dimension of the section's web depth
3. End loading or reaction occurs when the distance from the edge of the bearing to the end of the member is equal to or less than 1.5 times the flat dimension of the section's web depth.
4. Interior loading or reaction typically occurs when the distance from the edge of the bearing to the end of the member is greater than 1.5 times the flat dimension of the section's web depth.
5. Appropriate factors of safety have been applied.

Axial Capacities

1. Axial capacities are allowable concentric loads (kips) in the absence of bending moment.
2. Axial capacities are for sections supported laterally at the distances specified in the table. Axial capacities in the column labeled "Unbraced" are for sections without any lateral supports.
3. Distance between major axis supports must not exceed KL_x .
4. Appropriate factors of safety have been applied.
5. Consult General Information for definitions of symbols used in these tables.



Purlin Load Tables

Notes

Simple Span Capacities

1. Capacities are total uniformly distributed load which can be supported by the section in the absence of axial load. The weight of the section has not been subtracted from these values.
2. Capacities listed in the “Fully Braced” column are the allowable load for cases where the compression flange is fully braced laterally (gravity load capacity for top flange fully braced or for through-fastened; uplift capacity for bottom flange fully braced).
3. Capacities listed in the “Laterally Braced” column are the allowable load for cases where the compression flange is laterally braced at intermediate points (gravity capacity for top flange laterally braced; uplift capacity for bottom flange laterally braced). The distance between lateral supports (L_y) utilized for determining the capacities is:

Distance Between Lateral Supports			
Section Depth 3” – 6”		Section Depth 8” – 14”	
Span (ft) L	v (in)	Span (ft) L	v (in)
8	48 1	5	60
10 6	0 2	0 8	0
12 7	2	25	75
15 6	0 3	0	72

4. Capacities listed in the “Through-Fastened” column are the allowable load for cases where one flange is through-fastened to deck or sheathing and the opposite flange is unbraced (uplift capacity for top flange through-fastened). Capacities for sections not qualifying for the through-fastened geometric requirements are listed as “N/A”. Capacities for sections meeting some of the geometric requirements of AISI 2001 Section C3.1.3 but failing others by a narrow margin are listed with an asterisk (*) next to the value (please see the through-fastened qualification table). It is up to the engineer of record to decide whether or not the capacities for partially qualifying sections may be utilized for a given project. The additional requirements of AISI 2001 Section C3.1.3 regarding support conditions, panel type, allowable insulation thickness, and panel fasteners must be met in order to utilize the listed capacities.
5. Capacities listed in the “Unbraced” column are the allowable load for cases where the compression flange has no lateral braces (gravity capacity for top flange completely unbraced; uplift capacity for bottom flange completely unbraced without a through-fastened top flange).
6. Appropriate factors of safety have been applied.
7. Capacities were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the sections must be checked for web crippling.
8. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to adjust the allowable capacities.
9. Consult General Information for definitions of symbols used in these tables.



Purlin Load Tables

Notes

Continuously Braced Outside Flange, Laterally Braced Inside Flange Capacities

1. Capacities are total uniformly distributed load which can be supported by the section in the absence of axial load. The weight of the section has not been subtracted from these values.
2. Capacities are for sections supported laterally at the top flange for their full length and at a distance no greater than L_y for the bottom flange. In the region between the interior support and the inflection point, the bending strength for gravity loading is computed using a lateral brace distance equal to the smaller of L_y and the distance from the support to the inflection point.
3. Appropriate factors of safety have been applied.
4. Capacities are computed assuming the sections are continuous over the designated number of spans, with laps as specified at all interior supports. The lap length given is the total length of the lapped region at each interior support. The same lap length is used at all interior supports.
5. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to adjust the allowable capacities.
6. Capacities were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the sections must be checked for web crippling at all supports and for crippling/bending interaction at interior supports.
7. Consult General Information for definitions of symbols used in these tables.

Laterally Braced both Flanges Capacities

1. Capacities are total uniformly distributed load which can be supported by the section in the absence of axial load. The weight of the section has not been subtracted from these values.
2. Capacities are for sections supported laterally at both flanges at a distance no greater than L_y . In the region between the interior support and the inflection point, the bending strength for gravity loading is computed using a lateral brace distance equal to the smaller of L_y and the distance from the support to the inflection point.
3. Appropriate factors of safety have been applied.
4. Capacities are computed assuming the sections are continuous over the designated number of spans, with laps as specified at all interior supports. The lap length given is the total length of the lapped region at each interior support. The same lap length is used at all interior supports.
5. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to adjust the allowable capacities.



Purlin Load Tables

Notes

Laterally Braced both Flanges Capacities (continued)

6. Capacities were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the sections must be checked for web crippling at all supports and for crippling/bending interaction at interior supports.
7. Consult General Information for definitions of symbols used in these tables.

Through-Fastened Capacities (Qualifying and Partially Qualifying)

1. Capacities are total uniformly distributed load which can be supported by the section in the absence of axial load. The weight of the section has not been subtracted from these values.
2. Sections listed as "Section Qualifies" fully meet the geometric requirements of AISI 2001 Section C3.1.3. Sections listed as "Section Partially Qualifies" meet some of the geometric requirements of AISI 2001 Section C3.1.3 but fail others by a narrow margin (please see the through-fastened qualification table). It is up to the engineer of record to decide whether or not the capacities for partially qualifying sections may be utilized for a given project.
3. The additional requirements of AISI 2001 Section C3.1.3 regarding support conditions, panel type, allowable insulation thickness, and panel fasteners must be met in order to utilize the listed capacities.
4. Capacities are for sections with the top flange through-fastened to deck or sheathing and no lateral bracing for the bottom flange. In the region between the end of the lap and the inflection point, the bending strength for gravity loading is computed using a lateral brace distance equal the distance from the end of the lap to the inflection point. The lapped region is considered to be continuously braced at both flanges.
5. Appropriate factors of safety have been applied.
6. Capacities are computed assuming the sections are continuous over the designated number of spans, with laps as specified at all interior supports. The lap length given is the total length of the lapped region at each interior support. The same lap length is used at all interior supports.
7. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to adjust the allowable capacities.
8. Capacities were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the sections must be checked for web crippling at all supports and for crippling/bending interaction at interior supports. Please note that AISI 2001 Section C3.1.3 requires that both flanges be prevented from moving laterally at the supports.
9. Consult General Information for definitions of symbols used in these tables.



Purlin Load Tables

Notes

One Section Continuous over Supports Capacities

1. Capacities are total uniformly distributed load which can be supported by the section in the absence of axial load. The weight of the section has not been subtracted from these values.
2. Capacities are computed assuming a single section continuous over the designated number of spans.
3. Capacities listed in the "Fully Braced" column are the allowable load for sections supported laterally at both flanges for their full length.
4. Capacities listed in the "Fully Braced / Laterally Braced" column are the allowable load for sections supported laterally at the top flange for their full length and at a distance no greater than L_y for the bottom flange. In the region between the interior support and the inflection point, the bending strength for gravity loading is computed using a lateral brace distance equal to the smaller of L_y and the distance from the support to the inflection point. The distance between lateral supports (L_y) utilized for determining the capacities is:

Distance Between Lateral Supports	
Span (ft) L	y (in)
8	48
10	60
12	72
15	60

5. Capacities listed in the "Through-Fastened" column are the allowable load for cases where one flange is through-fastened to deck or sheathing and the opposite flange is unbraced. In the region between the interior support and the inflection point, the bending strength for gravity loading is computed using a lateral brace distance equal to the distance from the support to the inflection point. Capacities for sections not qualifying for the through-fastened geometric requirements are listed as zero. Capacities for sections meeting some of the geometric requirements of AISI 2001 Section C3.1.3 but failing others by a narrow margin are listed with an asterisk (*) next to the value (please see the through-fastened qualification table). It is up to the engineer of record to decide whether or not the capacities for partially qualifying sections may be utilized for a given project. The additional requirements of AISI 2001 Section C3.1.3 regarding support conditions, panel type, allowable insulation thickness, and panel fasteners must be met in order to utilize the listed capacities.
6. Capacities listed in the "Unbraced" column are the allowable load for cases where no lateral bracing of any type is present for either flange for the full span length.
7. Appropriate factors of safety have been applied.
8. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to adjust the allowable capacities.



Purlin Load Tables

Notes

One Section Continuous over Supports Capacities (continued)

9. Capacities were computed assuming the use of plates or clips at supports which will effectively transfer loads directly to the web of the member. If sections are to bear directly on the supports, the sections must be checked for web crippling at all supports and for crippling/bending interaction at interior supports.
10. Consult General Information for definitions of symbols used in these tables.



Purlin Load Tables

Notes

Through-Fastened Qualification ^{1,2}

Section	Qualifies? ³	Failure Condition ⁴	Comments
14 X 4 Z 14 G	N	1	Depth exceeds 11.5
14 X 3.75 Z 12 G	N	1	Depth exceeds 11.5
14 X 3.5 Z 12 G	N	1	Depth exceeds 11.5
12 X 3.5 Z 12 G	N	1	Depth exceeds 11.5
12 X 3.5 Z 14 G	N	1	Depth exceeds 11.5
12 X 2.5 Z 12 G	N	1	Depth exceeds 11.5
12 X 2.5 Z 14 G	N	1	Depth exceeds 11.5
10 X 3.5 Z 12 G	Y		
10 X 3.5 Z 14 G	Y		
10 X 2.5 Z 12 G	P	4, 5	Web depth to flange width constraint exceeded but within 5%; Flange width to thickness constraint exceeded but within 5%
10 X 2.5 Z 14 G	P	4	Web depth to flange width constraint exceeded but within 5%
10 X 2.5 Z 16 G	P	4	Web depth to flange width constraint exceeded but within 5%
8 X 3.5 Z 12 G	N	4	Web depth to flange width constraint exceeded
8 X 3.5 Z 14 G	N	4	Web depth to flange width constraint exceeded
8 X 3.5 Z 16 G	N	4, 5	Web depth to flange width constraint exceeded Flange width to thickness constraint exceeded
8 X 2.5 Z 12 G	P	5	Flange width to thickness constraint exceeded but within 5%
8 X 2.5 Z 14 G	Y		
8 X 2.5 Z 16 G	Y		
6 X 2.5 Z 12 G	P	4	Web depth to flange width constraint exceeded but within 10%
6 X 2.5 Z 14 G	P	4	Web depth to flange width constraint exceeded but within 10%
6 X 2.5 Z 16 G	N	3, 4	Web depth to thickness constraint exceeded Web depth to flange width constraint exceeded
4 X 2.5 Z 14 G	N	3, 4	Web depth to thickness constraint exceeded Web depth to flange width constraint exceeded
4 X 2.5 Z 16 G	N	4	Web depth to flange width constraint exceeded
4 X 2 Z 14 G	N	3, 4	Web depth to thickness constraint exceeded Web depth to flange width constraint exceeded
4 X 2 Z 16 G	N	4	Web depth to flange width constraint exceeded
3 X 1.5 Z 14 G	N	3, 4	Web depth to thickness constraint exceeded Web depth to flange width constraint exceeded
3 X 1.5 Z 16 G	N	3, 4	Web depth to thickness constraint exceeded Web depth to flange width constraint exceeded

Notes:

1. It is up to the engineer of record to decide whether or not the capacities for partially qualifying sections may be utilized for a given project.
2. The additional requirements of AISI 2001 Section C3.1.3 regarding support conditions, panel type, allowable insulation thickness, and panel fasteners must also be met.
3. Y = section meets all geometric constraints
P = section fails one or more geometric constraints but is within 10% of qualifying
N = section fails one or more geometric constraints by more than 10%
4. All conditions reference AISI 2001 Section C3.1.3 pages 65-66.



Purlin Load Tables

Gross Section Properties

Section	Dimensions								Properties of Full Section							
	D in.	B ₁ in.	B ₂ in.	d in.	Lip Angle deg.	R in.	Area in. ²	Wt/ft lb.	Axis x-x			Axis y-y			y bar in.	I _{xy} in. ⁴
									I _x in. ⁴	S _x in. ³	r _x in.	I _y in. ⁴	S _y in. ³	r _y in.		
14 x 4 Z 12 G	14	3.875	3.625	0.951	50	0.1875	2.400	8.160	67.951	9.814	5.321	6.510	1.538	1.647	6.924	14.854
14 x 3.75 Z 12 G	14	3.625	3.375	1.229	50	0.1940	2.405	8.179	67.583	9.760	5.301	6.466	1.553	1.640	6.924	14.716
14 x 3.5 Z 12 G	14	3.5	3.25	0.916	50	0.2500	2.308	7.847	63.551	9.182	5.248	4.891	1.276	1.456	6.921	12.286
12 x 3.5 Z 12 G	12	3.375	3.125	0.951	50	0.1875	2.085	7.089	43.495	7.341	4.567	4.563	1.222	1.479	5.925	10.003
12 x 3.5 Z 14 G	12	3.375	3.125	0.930	50	0.2500	1.401	4.764	29.368	4.957	4.578	3.093	0.827	1.486	5.925	6.782
12 x 2.5 Z 12 G	12	2.375	2.125	0.981	50	0.2500	1.875	6.375	36.005	6.085	4.382	1.950	0.710	1.020	5.917	5.681
12 x 2.5 Z 14 G	12	2.375	2.125	0.930	50	0.2500	1.260	4.285	24.350	4.116	4.396	1.296	0.475	1.014	5.917	3.805
10 x 3.5 Z 12 G	10	3.375	3.125	0.981	50	0.2500	1.875	6.375	28.229	5.725	3.880	4.645	1.235	1.574	4.931	8.370
10 x 3.5 Z 14 G	10	3.375	3.125	0.931	50	0.2500	1.260	4.285	19.117	3.877	3.895	3.093	0.826	1.567	4.931	5.617
10 x 2.5 Z 12 G	10	2.375	2.125	0.856	50	0.2500	1.638	5.572	22.610	4.595	3.714	1.751	0.656	1.034	4.921	4.386
10 x 2.5 Z 14 G	10	2.375	2.125	0.931	50	0.2500	1.119	3.805	15.640	3.178	3.738	1.296	0.474	1.076	4.922	3.147
10 x 2.5 Z 16 G	10	2.375	2.125	0.911	50	0.2500	0.935	3.179	13.099	2.662	3.743	1.076	0.394	1.073	4.922	2.623
8 x 3.5 Z 12 G	8	3.375	3.125	0.981	50	0.2500	1.665	5.661	16.773	4.260	3.174	4.644	1.233	1.670	3.938	6.624
8 x 3.5 Z 14 G	8	3.375	3.125	0.911	50	0.2500	1.116	3.796	11.356	2.884	3.189	3.052	0.816	1.654	3.937	4.418
8 x 3.5 Z 16 G	8	3.375	3.125	0.911	50	0.2500	0.935	3.179	9.544	2.424	3.195	2.571	0.687	1.658	3.938	3.717
8 x 2.5 Z 12 G	8	2.375	2.125	0.981	50	0.2500	1.455	4.947	13.499	3.436	3.046	1.948	0.706	1.157	3.929	3.705
8 x 2.5 Z 14 G	8	2.375	2.125	0.931	50	0.2500	0.978	3.326	9.169	2.334	3.062	1.295	0.472	1.151	3.929	2.489
8 x 2.5 Z 16 G	8	2.375	2.125	0.911	50	0.2500	0.817	2.779	7.686	1.957	3.067	1.076	0.393	1.147	3.929	2.076
6 X 2.5 Z 14 G	6	2.375	2.125	0.931	50	0.2500	0.837	2.847	4.654	1.584	2.358	1.295	0.470	1.244	2.938	1.831
6 X 2.5 Z 16 G	6	2.375	2.125	0.911	50	0.2500	0.699	2.378	3.907	1.330	2.364	1.076	0.392	1.240	2.938	1.529
4 X 2.5 Z 14 G	4	2.375	2.125	0.900	50	0.1875	0.696	2.367	1.824	0.935	1.619	1.264	0.460	1.347	1.950	1.160
4 X 2.5 Z 16 G	4	2.375	2.125	0.900	50	0.1875	0.584	1.986	1.540	0.790	1.624	1.067	0.388	1.352	1.950	0.979
4 X 2 Z 14 G	4	2.000	2.000	0.682	50	0.1875	0.630	2.143	1.632	0.816	1.609	0.781	0.325	1.113	2.000	0.864
4 X 2 Z 16 G	4	2.000	2.000	0.675	50	0.1875	0.528	1.795	1.377	0.688	1.615	0.656	0.273	1.115	2.000	0.728
3 X 1.5 Z 14 G	3.5	1.500	1.500	0.930	50	0.1875	0.559	1.902	1.036	0.592	1.361	0.533	0.259	0.976	1.750	0.551
3 X 1.5 Z 16 G	3.5	1.500	1.500	0.910	50	0.1875	0.467	1.589	0.874	0.499	1.367	0.443	0.215	0.973	1.750	0.462



WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

Torsional Properties

Section	J	C _w	X ₀
	in. ⁴	in. ⁶	in.
14 x 4 Z 12 G	0.00882	228.320	0.020
14 x 3.75 Z 12 G	0.00884	231.880	0.021
14 x 3.5 Z 12 G	0.00848	174.880	0.020
12 x 3.5 Z 12 G	0.00766	117.150	0.021
12 x 3.5 Z 14 G	0.00232	79.646	0.021
12 x 2.5 Z 12 G	0.00689	53.494	0.021
12 x 2.5 Z 14 G	0.00209	35.722	0.021
10 x 3.5 Z 12 G	0.00689	79.355	0.023
10 x 3.5 Z 14 G	0.00209	53.092	0.023
10 x 2.5 Z 12 G	0.00602	32.049	0.021
10 x 2.5 Z 14 G	0.00185	23.981	0.022
10 x 2.5 Z 16 G	0.00108	19.948	0.022
8 x 3.5 Z 12 G	0.00612	48.199	0.024
8 x 3.5 Z 14 G	0.00185	31.801	0.024
8 x 3.5 Z 16 G	0.00108	26.876	0.024
8 x 2.5 Z 12 G	0.00535	21.972	0.025
8 x 2.5 Z 14 G	0.00162	14.695	0.024
8 x 2.5 Z 16 G	0.00095	12.227	0.024
6 X 2.5 Z 14 G	0.00139	7.815	0.026
6 X 2.5 Z 16 G	0.00081	6.503	0.026
4 X 2.5 Z 14 G	0.00115	3.176	0.025
4 X 2.5 Z 16 G	0.00068	2.701	0.025
4 X 2 Z 14 G	0.00104	1.958	0.000
4 X 2 Z 16 G	0.00061	1.654	0.000
3 X 1.5 Z 14 G	0.00093	1.135	0.000
3 X 1.5 Z 16 G	0.00054	0.945	0.000



WHIRLWIND BUILDING COMPONENTS

8234 Hansen Rd. | Houston, TX 77075 | (Phone) 713.946.7140 | (US Wats) 800.324.9992

Purlin Load Tables

Bending & Axial Properties

Section	V _a	M _a	S _e Pos	S _e Neg	I _{xd}	A _e	P _{tf}
	kip	kip-in.	in. ³	in. ³	in. ⁴	in. ²	kip
14 x 4 Z 12 G	7.679	268.100	7.972	7.855	59.679	1.156	0.000
14 x 3.75 Z 12 G	7.686	262.900	8.524	7.703	62.142	1.244	0.000
14 x 3.5 Z 12 G	7.751	243.410	7.956	7.131	58.052	1.159	0.000
12 x 3.5 Z 12 G	9.024	220.270	6.454	6.560	40.112	1.144	10.825
12 x 3.5 Z 14 G	2.745	121.340	3.586	3.555	24.182	0.629	0.000
12 x 2.5 Z 12 G	9.124	186.700	5.697	5.470	34.913	1.124	0.000
12 x 2.5 Z 14 G	2.745	112.630	3.300	3.316	21.663	0.629	0.000
10 x 3.5 Z 12 G	11.088	173.150	5.073	5.170	26.212	1.170	12.606
10 x 3.5 Z 14 G	3.332	101.640	3.011	2.978	16.382	0.626	8.148
10 x 2.5 Z 12 G	11.088	146.980	4.461	4.306	22.381	1.089	0.000
10 x 2.5 Z 14 G	3.332	92.107	2.699	2.709	14.358	0.627	5.972
10 x 2.5 Z 16 G	1.938	70.450	2.064	2.072	11.402	0.471	4.922
8 x 3.5 Z 12 G	12.389	127.930	3.748	3.822	15.539	1.156	0.000
8 x 3.5 Z 14 G	4.237	79.028	2.315	2.320	9.916	0.617	0.000
8 x 3.5 Z 16 G	2.463	61.749	1.823	1.809	8.019	0.478	0.000
8 x 2.5 Z 12 G	12.389	113.170	3.316	3.316	13.499	1.101	0.000
8 x 2.5 Z 14 G	4.237	75.281	2.206	2.223	8.861	0.623	6.660
8 x 2.5 Z 16 G	2.463	60.330	1.768	1.778	7.219	0.468	5.490
6 X 2.5 Z 14 G	5.59	50.99	1.494	1.500	4.497	0.615	0.000
6 X 2.5 Z 16 G	3.38	40.67	1.192	1.200	3.658	0.464	0.000
4 X 2.5 Z 14 G	5.25	29.09	0.852	0.877	1.732	0.580	0.000
4 X 2.5 Z 16 G	3.90	23.59	0.695	0.691	1.431	0.443	0.000
4 X 2 Z 14 G	5.25	26.87	0.787	0.787	1.600	0.529	0.000
4 X 2 Z 16 G	3.90	21.01	0.616	0.616	1.290	0.390	0.000
3 X 1.5 Z 14 G	4.50	19.89	0.583	0.583	1.027	0.501	0.000
3 X 1.5 Z 16 G	3.79	16.11	0.472	0.472	0.846	0.382	0.000



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
14 x 4 Z 12 G	15	7.68	0.00	0.00	0.00
		7.66	16.35	0.00	0.00
		7.62	32.71	0.00	0.00
		7.55	49.06	0.00	0.00
		7.45	65.42	0.00	0.00
		7.31	81.77	0.00	0.00
		7.15	98.13	0.00	0.00
14 x 4 Z 12 G	20	7.68	0.00	0.00	0.00
		7.67	9.20	0.00	0.00
		7.66	18.40	0.00	0.00
		7.64	27.60	0.00	0.00
		7.61	36.80	0.00	0.00
		7.57	46.00	0.00	0.00
		7.51	55.20	0.00	0.00
14 x 4 Z 12 G	25	7.68	0.00	0.00	0.00
		7.68	5.89	0.00	0.00
		7.67	11.78	0.00	0.00
		7.66	17.66	0.00	0.00
		7.65	23.55	0.00	0.00
		7.63	29.44	0.00	0.00
		7.61	35.33	0.00	0.00
14 x 4 Z 12 G	30	7.68	0.00	0.00	0.00
		7.68	4.09	0.00	0.00
		7.68	8.18	0.00	0.00
		7.67	12.27	0.00	0.00
		7.66	16.35	0.00	0.00
		7.66	20.44	0.00	0.00
		7.65	24.53	0.00	0.00
14 x 3.5 Z 12 G	15	7.75	0.00	0.00	0.00
		7.74	11.92	0.00	0.00
		7.71	23.85	0.00	0.00
		7.67	35.77	0.00	0.00
		7.60	47.69	0.00	0.00
		7.51	59.62	0.00	0.00
		7.41	71.54	0.00	0.00
14 x 3.5 Z 12 G	20	7.75	0.00	0.00	0.00
		7.75	6.71	0.00	0.00
		7.74	13.41	0.00	0.00
		7.72	20.12	0.00	0.00
		7.70	26.83	0.00	0.00
		7.68	33.53	0.00	0.00
		7.64	40.24	0.00	0.00
14 x 3.5 Z 12 G	25	7.75	0.00	0.00	0.00
		7.75	4.29	0.00	0.00
		7.75	8.58	0.00	0.00
		7.74	12.88	0.00	0.00
		7.73	17.17	0.00	0.00
		7.72	21.46	0.00	0.00
		7.71	25.75	0.00	0.00
14 x 3.5 Z 12 G	30	7.75	0.00	0.00	0.00
		7.75	2.98	0.00	0.00
		7.75	5.96	0.00	0.00
		7.75	8.94	0.00	0.00
		7.74	11.92	0.00	0.00
		7.74	14.90	0.00	0.00
		7.73	17.88	0.00	0.00
14 x 3.75 Z 12 G	15	7.69	0.00	0.00	0.00
		7.67	16.02	0.00	0.00
		7.63	32.03	0.00	0.00
		7.56	48.05	0.00	0.00
		7.45	64.07	0.00	0.00
		7.32	80.08	0.00	0.00
		7.15	96.10	0.00	0.00
14 x 3.75 Z 12 G	20	7.69	0.00	0.00	0.00
		7.68	9.01	0.00	0.00
		7.67	18.02	0.00	0.00
		7.65	27.03	0.00	0.00
		7.61	36.04	0.00	0.00
		7.57	45.05	0.00	0.00
		7.52	54.06	0.00	0.00
14 x 3.75 Z 12 G	25	7.69	0.00	0.00	0.00
		7.68	5.77	0.00	0.00
		7.68	11.53	0.00	0.00
		7.67	17.30	0.00	0.00
		7.66	23.06	0.00	0.00
		7.64	28.83	0.00	0.00
		7.62	34.60	0.00	0.00
14 x 3.75 Z 12 G	30	7.69	0.00	0.00	0.00
		7.69	4.00	0.00	0.00
		7.68	8.01	0.00	0.00
		7.68	12.01	0.00	0.00
		7.67	16.02	0.00	0.00
		7.66	20.02	0.00	0.00
		7.65	24.03	0.00	0.00
12 x 3.5 Z 12 G	15	9.02	0.00	0.00	0.00
		9.01	10.79	0.00	0.00
		8.98	21.59	0.00	0.00
		8.93	32.38	0.00	0.00
		8.85	43.17	0.00	0.00
		8.75	53.96	0.00	0.00
		8.63	64.76	0.00	0.00
12 x 3.5 Z 12 G	20	9.02	0.00	0.00	0.00
		9.02	6.07	0.00	0.00
		9.01	12.14	0.00	0.00
		8.99	18.21	0.00	0.00
		8.97	24.28	0.00	0.00
		8.94	30.35	0.00	0.00
		8.90	36.43	0.00	0.00
12 x 3.5 Z 12 G	25	9.02	0.00	0.00	0.00
		9.02	3.89	0.00	0.00
		9.02	7.77	0.00	0.00
		9.01	11.66	0.00	0.00
		9.00	15.54	0.00	0.00
		8.99	19.43	0.00	0.00
		8.97	23.31	0.00	0.00
12 x 3.5 Z 12 G	30	9.02	0.00	0.00	0.00
		9.02	2.70	0.00	0.00
		9.02	5.40	0.00	0.00
		9.02	8.09	0.00	0.00
		9.01	10.79	0.00	0.00
		9.01	13.49	0.00	0.00
		9.00	16.19	0.00	0.00



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
12 x 3.5 Z 14 G	15	2.74	0.00	0.00	0.00
		2.74	5.97	0.00	0.00
		2.73	11.94	0.00	0.00
		2.71	17.91	0.00	0.00
		2.69	23.87	0.00	0.00
		2.66	29.84	0.00	0.00
		2.62	35.81	0.00	0.00
12 x 3.5 Z 14 G	20	2.74	0.00	0.00	0.00
		2.74	3.36	0.00	0.00
		2.74	6.71	0.00	0.00
		2.74	10.07	0.00	0.00
		2.73	13.43	0.00	0.00
		2.72	16.79	0.00	0.00
		2.71	20.14	0.00	0.00
12 x 3.5 Z 14 G	25	2.74	0.00	0.00	0.00
		2.74	2.15	0.00	0.00
		2.74	4.30	0.00	0.00
		2.74	6.45	0.00	0.00
		2.74	8.59	0.00	0.00
		2.73	10.74	0.00	0.00
		2.73	12.89	0.00	0.00
12 x 3.5 Z 14 G	30	2.74	0.00	0.00	0.00
		2.74	1.49	0.00	0.00
		2.74	2.98	0.00	0.00
		2.74	4.48	0.00	0.00
		2.74	5.97	0.00	0.00
		2.74	7.46	0.00	0.00
		2.74	8.95	0.00	0.00
12 x 2.5 Z 14 G	15	2.74	0.00	0.00	0.00
		2.74	2.80	0.00	0.00
		2.74	5.59	0.00	0.00
		2.74	8.39	0.00	0.00
		2.73	11.18	0.00	0.00
		2.72	13.98	0.00	0.00
		2.71	16.78	0.00	0.00
12 x 2.5 Z 14 G	20	2.74	0.00	0.00	0.00
		2.74	1.57	0.00	0.00
		2.74	3.15	0.00	0.00
		2.74	4.72	0.00	0.00
		2.74	6.29	0.00	0.00
		2.74	7.86	0.00	0.00
		2.74	9.44	0.00	0.00
12 x 2.5 Z 14 G	25	2.74	0.00	0.00	0.00
		2.74	1.01	0.00	0.00
		2.74	2.01	0.00	0.00
		2.74	3.02	0.00	0.00
		2.74	4.03	0.00	0.00
		2.74	5.03	0.00	0.00
		2.74	6.04	0.00	0.00
12 x 2.5 Z 14 G	30	2.74	0.00	0.00	0.00
		2.74	0.70	0.00	0.00
		2.74	1.40	0.00	0.00
		2.74	2.10	0.00	0.00
		2.74	2.80	0.00	0.00
		2.74	3.49	0.00	0.00
		2.74	4.19	0.00	0.00
12 x 2.5 Z 12 G	15	9.12	0.00	0.00	0.00
		9.12	4.72	0.00	0.00
		9.11	9.43	0.00	0.00
		9.10	14.15	0.00	0.00
		9.08	18.86	0.00	0.00
		9.05	25.38	0.00	0.00
		9.02	28.30	0.00	0.00
12 x 2.5 Z 12 G	20	9.12	0.00	0.00	0.00
		9.12	2.65	0.00	0.00
		9.12	5.31	0.00	0.00
		9.12	7.96	0.00	0.00
		9.11	10.61	0.00	0.00
		9.10	13.26	0.00	0.00
		9.09	15.92	0.00	0.00
12 x 2.5 Z 12 G	25	9.12	0.00	0.00	0.00
		9.12	1.70	0.00	0.00
		9.12	3.40	0.00	0.00
		9.12	5.09	0.00	0.00
		9.12	6.79	0.00	0.00
		9.11	8.49	0.00	0.00
		9.11	10.19	0.00	0.00
12 x 2.5 Z 12 G	30	9.12	0.00	0.00	0.00
		9.12	1.18	0.00	0.00
		9.12	2.36	0.00	0.00
		9.12	3.54	0.00	0.00
		9.12	4.72	0.00	0.00
		9.12	5.89	0.00	0.00
		9.12	7.07	0.00	0.00
10 x 3.5 Z 12 G	15	11.09	0.00	11.09	0.00
		11.07	9.23	11.05	14.43
		11.02	18.46	10.93	28.86
		10.95	27.68	10.74	43.29
		10.83	36.91	10.45	57.72
		10.69	46.14	10.08	72.14
		10.51	55.37	9.60	86.57
10 x 3.5 Z 12 G	20	11.09	0.00	11.09	0.00
		11.08	5.19	11.05	14.43
		11.07	10.38	10.93	28.86
		11.04	15.57	10.74	43.29
		11.01	20.76	10.45	57.72
		10.96	25.95	10.08	72.14
		10.91	31.14	9.60	86.57
10 x 3.5 Z 12 G	25	11.09	0.00	11.09	0.00
		11.09	3.32	11.05	14.43
		11.08	6.64	10.93	28.86
		11.07	9.97	10.74	43.29
		11.06	13.29	10.45	57.72
		11.04	16.61	10.08	72.14
		11.01	19.93	9.60	86.57
10 x 3.5 Z 12 G	30	11.09	0.00	11.09	0.00
		11.09	2.31	11.05	14.43
		11.08	4.61	10.93	28.86
		11.08	6.92	10.74	43.29
		11.07	9.23	10.45	57.72
		11.06	11.54	10.08	72.14
		11.05	13.84	9.60	86.57



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
10 x 3.5 Z 14 G	15	3.33	0.00	3.33	0.00
		3.33	5.33	3.32	8.47
		3.31	10.65	3.29	16.94
		3.29	15.98	3.23	25.41
		3.26	21.31	3.14	33.88
		3.22	26.63	3.03	42.35
		3.16	31.96	2.89	50.82
10 x 3.5 Z 14 G	20	3.33	0.00	3.33	0.00
		3.33	3.00	3.32	8.47
		3.33	5.99	3.29	16.94
		3.32	8.99	3.23	25.41
		3.31	11.98	3.14	33.88
		3.30	14.98	3.03	42.35
		3.28	17.98	2.89	50.82
10 x 3.5 Z 14 G	25	3.33	0.00	3.33	0.00
		3.33	1.92	3.32	8.47
		3.33	3.84	3.29	16.94
		3.33	5.75	3.23	25.41
		3.32	7.67	3.14	33.88
		3.32	9.59	3.03	42.35
		3.31	11.51	2.89	50.82
10 x 3.5 Z 14 G	30	3.33	0.00	3.33	0.00
		3.33	1.33	3.32	8.47
		3.33	2.66	3.29	16.94
		3.33	3.99	3.23	25.41
		3.33	5.33	3.14	33.88
		3.32	6.66	3.03	42.35
		3.32	7.99	2.89	50.82
10 x 2.5 Z 14 G	15	3.33	0.00	3.33	0.00 *
		3.33	2.47	3.32	7.68 *
		3.33	4.94	3.29	15.35 *
		3.32	7.40	3.23	23.03 *
		3.31	9.87	3.14	30.70 *
		3.30	12.34	3.03	38.38 *
		3.29	14.81	2.89	46.05 *
10 x 2.5 Z 14 G	20	3.33	0.00	3.33	0.00 *
		3.33	1.39	3.32	7.68 *
		3.33	2.78	3.29	15.35 *
		3.33	4.16	3.23	23.03 *
		3.33	5.55	3.14	30.70 *
		3.32	6.94	3.03	38.38 *
		3.32	8.33	2.89	46.05 *
10 x 2.5 Z 14 G	25	3.33	0.00	3.33	0.00 *
		3.33	0.89	3.32	7.68 *
		3.33	1.78	3.29	15.35 *
		3.33	2.66	3.23	23.03 *
		3.33	3.55	3.14	30.70 *
		3.33	4.44	3.03	38.38 *
		3.33	5.33	2.89	46.05 *
10 x 2.5 Z 14 G	30	3.33	0.00	3.33	0.00 *
		3.33	0.62	3.32	7.68 *
		3.33	1.23	3.29	15.35 *
		3.33	1.85	3.23	23.03 *
		3.33	2.47	3.14	30.70 *
		3.33	3.08	3.03	38.38 *
		3.33	3.70	2.89	46.05 *
10 x 2.5 Z 12 G	15	11.09	0.00	11.09	0.00 *
		11.08	3.68	11.05	12.25 *
		11.07	7.36	10.93	24.50 *
		11.06	11.04	10.74	36.75 *
		11.03	14.72	10.45	48.99 *
		11.00	18.40	10.08	61.24 *
		10.96	22.08	9.60	73.49 *
10 x 2.5 Z 12 G	20	11.09	0.00	11.09	0.00 *
		11.09	2.07	11.05	12.25 *
		11.08	4.14	10.93	24.50 *
		11.08	6.21	10.74	36.75 *
		11.07	8.28	10.45	48.99 *
		11.06	10.35	10.08	61.24 *
		11.05	12.42	9.60	73.49 *
10 x 2.5 Z 12 G	25	11.09	0.00	11.09	0.00 *
		11.09	1.32	11.05	12.25 *
		11.09	2.65	10.93	24.50 *
		11.08	3.97	10.74	36.75 *
		11.08	5.30	10.45	48.99 *
		11.08	6.62	10.08	61.24 *
		11.07	7.95	9.60	73.49 *
10 x 2.5 Z 12 G	30	11.09	0.00	11.09	0.00 *
		11.09	0.92	11.05	12.25 *
		11.09	1.84	10.93	24.50 *
		11.09	2.76	10.74	36.75 *
		11.08	3.68	10.45	48.99 *
		11.08	4.60	10.08	61.24 *
		11.08	5.52	9.60	73.49 *
10 x 2.5 Z 16 G	15	1.94	0.00	1.94	0.00 *
		1.94	1.87	1.93	5.87 *
		1.94	3.74	1.91	11.74 *
		1.93	5.61	1.88	17.61 *
		1.93	7.48	1.83	23.48 *
		1.92	9.35	1.76	29.35 *
		1.91	11.23	1.68	35.23 *
10 x 2.5 Z 16 G	20	1.94	0.00	1.94	0.00 *
		1.94	1.05	1.93	5.87 *
		1.94	2.10	1.91	11.74 *
		1.94	3.16	1.88	17.61 *
		1.93	4.21	1.83	23.48 *
		1.93	5.26	1.76	29.35 *
		1.93	6.31	1.68	35.23 *
10 x 2.5 Z 16 G	25	1.94	0.00	1.94	0.00 *
		1.94	0.67	1.93	5.87 *
		1.94	1.35	1.91	11.74 *
		1.94	2.02	1.88	17.61 *
		1.94	2.69	1.83	23.48 *
		1.94	3.37	1.76	29.35 *
		1.93	4.04	1.68	35.23 *
10 x 2.5 Z 16 G	30	1.94	0.00	1.94	0.00 *
		1.94	0.47	1.93	5.87 *
		1.94	0.94	1.91	11.74 *
		1.94	1.40	1.88	17.61 *
		1.94	1.87	1.83	23.48 *
		1.94	2.34	1.76	29.35 *
		1.94	2.81	1.68	35.23 *



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
8 x 3.5 Z 12 G	15	12.39	0.00	0.00	0.00
		12.37	7.33	0.00	0.00
		12.31	14.66	0.00	0.00
		12.20	21.99	0.00	0.00
		12.06	29.32	0.00	0.00
		11.87	36.65	0.00	0.00
		11.63	43.98	0.00	0.00
8 x 3.5 Z 12 G	20	12.39	0.00	0.00	0.00
		12.38	4.12	0.00	0.00
		12.36	8.25	0.00	0.00
		12.33	12.37	0.00	0.00
		12.29	16.49	0.00	0.00
		12.23	20.61	0.00	0.00
		12.16	24.74	0.00	0.00
8 x 3.5 Z 12 G	25	12.39	0.00	0.00	0.00
		12.39	2.64	0.00	0.00
		12.38	5.28	0.00	0.00
		12.37	7.92	0.00	0.00
		12.35	10.55	0.00	0.00
		12.32	13.19	0.00	0.00
		12.29	15.83	0.00	0.00
8 x 3.5 Z 12 G	30	12.39	0.00	0.00	0.00
		12.39	1.83	0.00	0.00
		12.38	3.66	0.00	0.00
		12.38	5.50	0.00	0.00
		12.37	7.33	0.00	0.00
		12.36	9.16	0.00	0.00
		12.34	10.99	0.00	0.00
8 x 3.5 Z 16 G	15	2.46	0.00	0.00	0.00
		2.46	3.44	0.00	0.00
		2.45	6.88	0.00	0.00
		2.43	10.33	0.00	0.00
		2.40	13.77	0.00	0.00
		2.37	17.21	0.00	0.00
		2.32	20.65	0.00	0.00
8 x 3.5 Z 16 G	20	2.46	0.00	0.00	0.00
		2.46	1.94	0.00	0.00
		2.46	3.87	0.00	0.00
		2.45	5.81	0.00	0.00
		2.44	7.74	0.00	0.00
		2.43	9.68	0.00	0.00
		2.42	11.62	0.00	0.00
8 x 3.5 Z 16 G	25	2.46	0.00	0.00	0.00
		2.46	1.24	0.00	0.00
		2.46	2.48	0.00	0.00
		2.46	3.72	0.00	0.00
		2.46	4.96	0.00	0.00
		2.45	6.20	0.00	0.00
		2.45	7.43	0.00	0.00
8 x 3.5 Z 16 G	30	2.46	0.00	0.00	0.00
		2.46	0.86	0.00	0.00
		2.46	1.72	0.00	0.00
		2.46	2.58	0.00	0.00
		2.46	3.44	0.00	0.00
		2.46	4.30	0.00	0.00
		2.45	5.16	0.00	0.00
8 x 2.5 Z 12 G	15	12.39	0.00	12.39	0.00 *
		12.38	3.37	12.32	12.26 *
		12.37	6.74	12.09	24.52 *
		12.34	10.12	11.72	36.78 *
		12.30	13.49	11.17	49.04 *
		12.25	16.68	10.41	61.30 *
		12.19	20.23	9.41	73.56 *
8 x 2.5 Z 12 G	20	12.39	0.00	12.39	0.00 *
		12.39	1.90	12.32	12.26 *
		12.38	3.79	12.09	24.52 *
		12.37	5.69	11.72	36.78 *
		12.36	7.59	11.17	49.04 *
		12.35	9.48	10.41	61.30 *
		12.33	11.38	9.41	73.56 *
8 x 2.5 Z 12 G	25	12.39	0.00	12.39	0.00 *
		12.39	1.21	12.32	12.26 *
		12.39	2.43	12.09	24.52 *
		12.38	3.64	11.72	36.78 *
		12.38	4.86	11.17	49.04 *
		12.37	6.07	10.41	61.30 *
		12.36	7.28	9.41	73.56 *
8 x 2.5 Z 12 G	30	12.39	0.00	12.39	0.00 *
		12.39	0.84	12.32	12.26 *
		12.39	1.69	12.09	24.52 *
		12.39	2.53	11.72	36.78 *
		12.38	3.37	11.17	49.04 *
		12.38	4.21	10.41	61.30 *
		12.38	5.06	9.41	73.56 *



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
8 x 2.5 Z 14 G	15	4.24	0.00	4.24	0.00
		4.24	2.20	4.21	8.16
		4.23	4.39	4.14	16.31
		4.22	6.59	4.01	24.47
		4.21	8.78	3.82	32.62
		4.19	10.98	3.56	40.78
		4.17	13.17	3.22	48.93
8 x 2.5 Z 14 G	20	4.24	0.00	4.24	0.00
		4.24	1.23	4.21	8.16
		4.23	2.47	4.14	16.31
		4.23	3.70	4.01	24.47
		4.23	4.94	3.82	32.62
		4.22	6.17	3.56	40.78
		4.22	7.41	3.22	48.93
8 x 2.5 Z 14 G	25	4.24	0.00	4.24	0.00
		4.24	0.79	4.21	8.16
		4.24	1.58	4.14	16.31
		4.23	2.37	4.01	24.47
		4.23	3.16	3.82	32.62
		4.23	3.95	3.56	40.78
		4.23	4.74	3.22	48.93
8 x 2.5 Z 14 G	30	4.24	0.00	4.24	0.00
		4.24	0.55	4.21	8.16
		4.24	1.10	4.14	16.31
		4.24	1.65	4.01	24.47
		4.24	2.20	3.82	32.62
		4.23	2.74	3.56	40.78
		4.23	3.29	3.22	48.93
6 X 2.5 Z 14 G	8	5.59	0.00	5.59	0.00 *
		5.55	5.58	5.55	5.95 *
		5.45	11.16	5.43	11.90 *
		5.28	16.75	5.23	17.85 *
		5.02	22.33	4.94	23.79 *
		4.67	27.91	4.54	29.74 *
		4.21	33.49	3.99	35.69 *
6 X 2.5 Z 14 G	10	5.59	0.00	5.59	0.00 *
		5.57	3.70	5.55	5.95 *
		5.53	7.39	5.43	11.90 *
		5.45	11.09	5.23	17.85 *
		5.35	14.78	4.94	23.79 *
		5.21	18.48	4.54	29.74 *
		5.03	22.17	3.99	35.69 *
6 X 2.5 Z 14 G	12	5.59	0.00	5.59	0.00 *
		5.58	2.57	5.55	5.95 *
		5.56	5.13	5.43	11.90 *
		5.52	7.70	5.23	17.85 *
		5.47	10.27	4.94	23.79 *
		5.41	12.83	4.54	29.74 *
		5.32	15.40	3.99	35.69 *
6 X 2.5 Z 14 G	15	5.59	0.00	5.59	0.00 *
		5.58	1.64	5.55	5.95 *
		5.57	3.28	5.43	11.90 *
		5.56	4.93	5.23	17.85 *
		5.54	6.57	4.94	23.79 *
		5.51	8.21	4.54	29.74 *
		5.48	9.85	3.99	35.69 *
8 x 2.5 Z 16 G	15	2.46	0.00	2.46	0.00
		2.46	1.74	2.45	6.54
		2.46	3.49	2.40	13.07
		2.45	5.23	2.33	19.61
		2.45	6.97	2.22	26.14
		2.44	8.72	2.07	32.68
		2.43	10.46	1.87	39.22
8 x 2.5 Z 16 G	20	2.46	0.00	2.46	0.00
		2.46	0.98	2.45	6.54
		2.46	1.96	2.40	13.07
		2.46	2.94	2.33	19.61
		2.46	3.92	2.22	26.14
		2.45	4.90	2.07	32.68
		2.45	5.88	1.87	39.22
8 x 2.5 Z 16 G	25	2.46	0.00	2.46	0.00
		2.46	0.63	2.45	6.54
		2.46	1.26	2.40	13.07
		2.46	1.88	2.33	19.61
		2.46	2.51	2.22	26.14
		2.46	3.14	2.07	32.68
		2.46	3.77	1.87	39.22
8 x 2.5 Z 16 G	30	2.46	0.00	2.46	0.00
		2.46	0.44	2.45	6.54
		2.46	0.87	2.40	13.07
		2.46	1.31	2.33	19.61
		2.46	1.74	2.22	26.14
		2.46	2.18	2.07	32.68
		2.46	2.62	1.87	39.22
6 X 2.5 Z 16 G	8	3.38	0.00	3.38	0.00 *
		3.36	4.42	3.35	4.74 *
		3.30	8.84	3.28	9.49 *
		3.19	13.26	3.16	14.23 *
		3.04	17.68	2.99	18.98 *
		2.84	22.10	2.74	23.72 *
		2.56	26.52	2.41	28.47 *
6 X 2.5 Z 16 G	10	3.38	0.00	3.38	0.00 *
		3.37	2.92	3.35	4.74 *
		3.34	5.83	3.28	9.49 *
		3.30	8.75	3.16	14.23 *
		3.24	11.67	2.99	18.98 *
		3.15	14.58	2.74	23.72 *
		3.05	17.50	2.41	28.47 *
6 X 2.5 Z 16 G	12	3.38	0.00	3.38	0.00 *
		3.37	2.03	3.35	4.74 *
		3.36	4.05	3.28	9.49 *
		3.34	6.08	3.16	14.23 *
		3.31	8.10	2.99	18.98 *
		3.27	10.13	2.74	23.72 *
		3.22	12.15	2.41	28.47 *
6 X 2.5 Z 16 G	15	3.38	0.00	3.38	0.00 *
		3.38	1.30	3.35	4.74 *
		3.37	2.59	3.28	9.49 *
		3.36	3.89	3.16	14.23 *
		3.35	5.18	2.99	18.98 *
		3.33	6.48	2.74	23.72 *
		3.32	7.78	2.41	28.47 *



Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
4 X 2.5 Z 14 G	8	5.25	0.00	0.00	0.00
		5.21	3.39	0.00	0.00
		5.11	6.78	0.00	0.00
		4.92	10.16	0.00	0.00
		4.65	13.55	0.00	0.00
		4.27	16.94	0.00	0.00
		3.76	20.33	0.00	0.00
4 X 2.5 Z 14 G	10	5.25	0.00	0.00	0.00
		5.23	2.32	0.00	0.00
		5.18	4.65	0.00	0.00
		5.10	6.97	0.00	0.00
		4.97	9.29	0.00	0.00
		4.81	11.61	0.00	0.00
		4.61	13.94	0.00	0.00
4 X 2.5 Z 14 G	12	5.25	0.00	0.00	0.00
		5.24	1.61	0.00	0.00
		5.22	3.23	0.00	0.00
		5.18	4.84	0.00	0.00
		5.12	6.45	0.00	0.00
		5.04	8.07	0.00	0.00
		4.95	9.68	0.00	0.00
4 X 2.5 Z 14 G	15	5.25	0.00	0.00	0.00
		5.25	1.03	0.00	0.00
		5.24	2.06	0.00	0.00
		5.22	3.10	0.00	0.00
		5.20	4.13	0.00	0.00
		5.17	5.16	0.00	0.00
		5.13	6.19	0.00	0.00
4 X 2 Z 14 G	8	5.25	0.00	0.00	0.00
		5.23	2.37	0.00	0.00
		5.17	4.75	0.00	0.00
		5.06	7.12	0.00	0.00
		4.91	9.50	0.00	0.00
		4.71	11.87	0.00	0.00
		4.45	14.25	0.00	0.00
4 X 2 Z 14 G	10	5.25	0.00	0.00	0.00
		5.24	1.52	0.00	0.00
		5.22	3.04	0.00	0.00
		5.17	4.56	0.00	0.00
		5.11	6.08	0.00	0.00
		5.04	7.60	0.00	0.00
		4.94	9.12	0.00	0.00
4 X 2 Z 14 G	12	5.25	0.00	0.00	0.00
		5.25	1.06	0.00	0.00
		5.23	2.11	0.00	0.00
		5.21	3.17	0.00	0.00
		5.18	4.22	0.00	0.00
		5.15	5.28	0.00	0.00
		5.10	6.33	0.00	0.00
4 X 2 Z 14 G	15	5.25	0.00	0.00	0.00
		5.25	0.68	0.00	0.00
		5.24	1.35	0.00	0.00
		5.24	2.03	0.00	0.00
		5.22	2.70	0.00	0.00
		5.21	3.38	0.00	0.00
		5.19	4.05	0.00	0.00
4 X 2.5 Z 16 G	8	3.90	0.00	0.00	0.00
		3.87	2.75	0.00	0.00
		3.79	5.50	0.00	0.00
		3.65	8.25	0.00	0.00
		3.45	10.99	0.00	0.00
		3.17	13.74	0.00	0.00
		2.79	16.49	0.00	0.00
4 X 2.5 Z 16 G	10	3.90	0.00	0.00	0.00
		3.89	1.89	0.00	0.00
		3.85	3.77	0.00	0.00
		3.78	5.66	0.00	0.00
		3.69	7.55	0.00	0.00
		3.57	9.43	0.00	0.00
		3.42	11.31	0.00	0.00
4 X 2.5 Z 16 G	12	3.90	0.00	0.00	0.00
		3.89	1.31	0.00	0.00
		3.87	2.62	0.00	0.00
		3.84	3.93	0.00	0.00
		3.80	5.24	0.00	0.00
		3.74	6.55	0.00	0.00
		3.68	7.85	0.00	0.00
4 X 2.5 Z 16 G	15	3.90	0.00	0.00	0.00
		3.90	0.84	0.00	0.00
		3.89	1.68	0.00	0.00
		3.88	2.51	0.00	0.00
		3.86	3.35	0.00	0.00
		3.84	4.19	0.00	0.00
		3.81	5.03	0.00	0.00
4 X 2 Z 16 G	8	3.90	0.00	0.00	0.00
		3.88	1.85	0.00	0.00
		3.84	3.70	0.00	0.00
		3.76	5.55	0.00	0.00
		3.65	7.40	0.00	0.00
		3.50	9.25	0.00	0.00
		3.31	11.10	0.00	0.00
4 X 2 Z 16 G	10	3.90	0.00	0.00	0.00
		3.89	1.18	0.00	0.00
		3.87	2.37	0.00	0.00
		3.84	3.55	0.00	0.00
		3.80	4.73	0.00	0.00
		3.74	5.92	0.00	0.00
		3.67	7.10	0.00	0.00
4 X 2 Z 16 G	12	3.90	0.00	0.00	0.00
		3.90	0.82	0.00	0.00
		3.89	1.64	0.00	0.00
		3.87	2.47	0.00	0.00
		3.85	3.29	0.00	0.00
		3.82	4.11	0.00	0.00
		3.79	4.93	0.00	0.00
4 X 2 Z 16 G	15	3.90	0.00	0.00	0.00
		3.90	0.53	0.00	0.00
		3.89	1.05	0.00	0.00
		3.89	1.58	0.00	0.00
		3.88	2.10	0.00	0.00
		3.87	2.63	0.00	0.00
		3.85	3.16	0.00	0.00



WHIRLWIND BUILDING COMPONENTS

8234 Hansen Rd. | Houston, TX 77075 | (Phone) 713.946.7140 | (US Wats) 800.324.9992

Purlin Load Tables

Combined Shear & Bending

Section	Span ft.	Unbraced		Through-fastened	
		V kips	M kip-in.	V kips	M kip-in.
3 X 1.5 Z 14 G	8	4.50	0.00	0.00	0.00
		4.49	1.45	0.00	0.00
		4.45	2.90	0.00	0.00
		4.39	4.35	0.00	0.00
		4.30	5.80	0.00	0.00
		4.19	7.24	0.00	0.00
		4.04	8.69	0.00	0.00
3 X 1.5 Z 14 G	10	4.50	0.00	0.00	0.00
		4.49	0.93	0.00	0.00
		4.48	1.85	0.00	0.00
		4.45	2.78	0.00	0.00
		4.42	3.71	0.00	0.00
		4.37	4.64	0.00	0.00
		4.32	5.56	0.00	0.00
3 X 1.5 Z 14 G	12	4.50	0.00	0.00	0.00
		4.49	0.64	0.00	0.00
		4.49	1.29	0.00	0.00
		4.48	1.93	0.00	0.00
		4.46	2.58	0.00	0.00
		4.44	3.22	0.00	0.00
		4.41	3.86	0.00	0.00
3 X 1.5 Z 14 G	15	4.50	0.00	0.00	0.00
		4.50	0.41	0.00	0.00
		4.49	0.82	0.00	0.00
		4.49	1.24	0.00	0.00
		4.48	1.65	0.00	0.00
		4.47	2.06	0.00	0.00
		4.46	2.47	0.00	0.00
3 X 1.5 Z 16 G	8	3.79	0.00	0.00	0.00
		3.78	1.15	0.00	0.00
		3.75	2.31	0.00	0.00
		3.70	3.46	0.00	0.00
		3.63	4.62	0.00	0.00
		3.53	5.77	0.00	0.00
		3.42	6.92	0.00	0.00
3 X 1.5 Z 16 G	10	3.79	0.00	0.00	0.00
		3.78	0.74	0.00	0.00
		3.77	1.48	0.00	0.00
		3.75	2.22	0.00	0.00
		3.72	2.95	0.00	0.00
		3.69	3.69	0.00	0.00
		3.64	4.43	0.00	0.00
3 X 1.5 Z 16 G	12	3.79	0.00	0.00	0.00
		3.78	0.51	0.00	0.00
		3.78	1.03	0.00	0.00
		3.77	1.54	0.00	0.00
		3.76	2.05	0.00	0.00
		3.74	2.56	0.00	0.00
		3.72	3.08	0.00	0.00
3 X 1.5 Z 16 G	15	3.79	0.00	0.00	0.00
		3.79	0.33	0.00	0.00
		3.78	0.66	0.00	0.00
		3.78	0.98	0.00	0.00
		3.77	1.31	0.00	0.00
		3.77	1.64	0.00	0.00
		3.76	1.97	0.00	0.00



Purlin Load Tables

Web Crippling

Section	One-Flange End Bearing				One-Flange Interior Bearing					Two-Flange End Bearing				Two-Flange Interior Bearing				
	Bearing Length (in.)				Bearing Length (in.)					Bearing Length (in.)				Bearing Length (in.)				
	3	4	5	6	4	5	6	8	10	3	4	5	6	4	5	6	8	10
14 x 4 Z 12 G	2594	2856	3086	3295	5670	5981	6261	6759	7198	2307	2471	2616	2747	5798	6004	6191	6523	6815
14 x 3.75 Z 12 G	2584	2845	3075	3282	5627	5935	6214	6708	7143	2305	2470	2615	2746	5790	5996	6183	6514	6805
14 x 3.5 Z 12 G	2505	2758	2981	3182	5284	5573	5835	6299	6708	2296	2460	2604	2735	5727	5931	6116	6443	6732
12 x 3.5 Z 12 G	2653	2921	3156	3369	5726	6040	6323	6826	7269	2562	2744	2905	3051	6169	6389	6587	6940	7251
12 x 3.5 Z 14 G	1168	1294	1404	1505	2270	2407	2532	2752	2947	917	989	1053	1111	2399	2497	2585	2742	2880
12 x 2.5 Z 12 G	2562	2821	3048	3254	5337	5629	5893	6361	6774	2550	2732	2892	3037	6094	6311	6508	6856	7163
12 x 2.5 Z 14 G	1168	1294	1404	1505	2270	2407	2532	2752	2947	917	989	1053	1111	2399	2497	2585	2742	2880
10 x 3.5 Z 12 G	2625	2889	3122	3333	5394	5689	5956	6430	6847	2827	3028	3206	3367	6496	6727	6936	7307	7635
10 x 3.5 Z 14 G	1205	1334	1449	1552	2300	2440	2565	2789	2986	1081	1167	1242	1310	2627	2734	2831	3003	3154
10 x 2.5 Z 12 G	2625	2889	3122	3333	5394	5689	5956	6430	6847	2827	3028	3206	3367	6496	6727	6936	7307	7635
10 x 2.5 Z 14 G	1205	1334	1449	1552	2300	2440	2565	2789	2986	1081	1167	1242	1310	2627	2734	2831	3003	3154
10 x 2.5 Z 16 G	841	934	1016	1090	1543	1640	1728	1885	2023	672	727	776	820	1714	1788	1855	1974	2079
8 x 3.5 Z 12 G	2694	2966	3205	3421	5458	5757	6027	6506	6928	3136	3359	3556	3735	6943	7190	7414	7811	8160
8 x 3.5 Z 14 G	1246	1380	1498	1604	2334	2475	2603	2830	3030	1264	1364	1452	1532	2882	2999	3105	3294	3460
8 x 3.5 Z 16 G	873	970	1055	1131	1568	1667	1757	1916	2056	816	884	943	997	1912	1994	2069	2201	2318
8 x 2.5 Z 12 G	2694	2966	3205	3421	5458	5757	6027	6506	6928	3136	3359	3556	3735	6943	7190	7414	7811	8160
8 x 2.5 Z 14 G	1246	1380	1498	1604	2334	2475	2603	2830	3030	1264	1364	1452	1532	2882	2999	3105	3294	3460
8 x 2.5 Z 16 G	873	970	1055	1131	1568	1667	1757	1916	2056	816	884	943	997	1912	1994	2069	2201	2318

Section	One-Flange End Bearing				One-Flange Interior Bearing				Two-Flange End Bearing				Two-Flange Interior Bearing			
	Bearing Length (in.)				Bearing Length (in.)				Bearing Length (in.)				Bearing Length (in.)			
	2	2.5	3	4	2	2.5	3	4	2	2.5	3	4	2	2.5	3	4
6 X 2.5 Z 14 G	1127	1214	1292	1431	2016	2117	2209	2373	1336	1408	1474	1590	2852	2944	3026	3173
6 X 2.5 Z 16 G	790	853	909	1010	1346	1417	1482	1596	886	936	982	1063	1909	1974	2033	2138
4 X 2.5 Z 14 G	1230	1324	1409	1561	2263	2377	2481	2664	1572	1657	1735	1872	3212	3315	3408	3574
4 X 2.5 Z 16 G	871	940	1003	1113	1539	1620	1694	1825	1071	1132	1187	1285	2185	2259	2327	2447
4 X 2 Z 14 G	1230	1324	1409	1561	2263	2377	2481	2664	1572	1657	1735	1872	3212	3315	3408	3574
4 X 2 Z 16 G	871	940	1003	1113	1539	1620	1694	1825	1071	1132	1187	1285	2185	2259	2327	2447
3 X 1.5 Z 14 G	1245	1340	1427	1580	2276	2391	2495	2679	1640	1729	1809	1952	3306	3412	3508	3678
3 X 1.5 Z 16 G	883	953	1016	1128	1548	1631	1705	1837	1124	1188	1246	1349	2257	2334	2404	2528



Purlin Load Tables

Axial Capacities (KIPS)

Section	KL ft.	Lateral Support Distances (ft.)							
		2	3	4	5	6	7	8	Unbraced
14 x 4 Z 12 G	15	33.32	33.32	31.63	29.14	26.36	23.42	20.42	6.55
	20	30.98	30.98	30.98	29.14	26.36	23.42	20.42	0.00
	25	28.20	28.20	28.20	28.20	26.36	23.42	20.42	0.00
	30	25.15	25.15	25.15	25.15	25.15	23.42	20.42	0.00
14 x 3.75 Z 12 G	15	35.85	35.85	34.05	31.36	28.36	25.19	21.96	7.04
	20	33.31	33.31	33.31	31.36	28.36	25.19	21.96	0.00
	25	30.31	30.31	30.31	30.31	28.36	25.19	21.96	0.00
	30	27.00	27.00	27.00	27.00	27.00	25.19	21.96	0.00
14 x 3.5 Z 12 G	15	33.33	33.17	30.66	27.71	24.48	21.15	17.87	5.32
	20	30.92	30.92	30.66	27.71	24.48	21.15	17.87	0.00
	25	28.08	28.08	28.08	27.71	24.48	21.15	17.87	0.00
	30	24.96	24.96	24.96	24.96	24.48	21.15	17.87	0.00
12 x 3.5 Z 12 G	15	31.89	31.89	30.15	27.19	23.96	20.64	17.38	5.15
	20	28.89	28.89	28.89	27.19	23.96	20.64	17.38	0.00
	25	25.44	25.44	25.44	25.44	23.96	20.64	17.38	0.00
	30	21.77	21.77	21.77	21.77	21.77	20.64	17.38	0.00
12 x 3.5 Z 14 G	15	17.54	17.54	16.58	14.96	13.19	11.37	9.58	2.84
	20	15.90	15.90	15.90	14.96	13.19	11.37	9.58	0.00
	25	14.01	14.01	14.01	14.01	13.19	11.37	9.58	0.00
	30	12.00	12.00	12.00	12.00	12.00	11.37	9.58	0.00
12 x 2.5 Z 12 G	15	31.01	29.33	25.22	20.78	16.40	12.38	9.48	0.00
	20	27.84	27.84	25.22	20.78	16.40	12.38	9.48	0.00
	25	24.25	24.25	24.25	20.78	16.40	12.38	9.48	0.00
	30	20.48	20.48	20.48	20.48	16.40	12.38	9.48	0.00
12 x 2.5 Z 14 G	15	17.37	16.39	14.08	11.58	9.12	6.87	5.26	0.00
	20	15.61	15.61	14.08	11.58	9.12	6.87	5.26	0.00
	25	13.61	13.61	13.61	11.58	9.12	6.87	5.26	0.00
	30	11.50	11.50	11.50	11.50	9.12	6.87	5.26	0.00
10 x 3.5 Z 12 G	15	31.05	31.05	30.96	28.00	24.75	21.40	18.09	5.40
	20	27.07	27.07	27.07	27.07	24.75	21.40	18.09	0.00
	25	22.69	22.69	22.69	22.69	22.69	21.40	18.09	0.00
	30	18.29	18.29	18.29	18.29	18.29	18.29	18.09	0.00
10 x 3.5 Z 14 G	15	16.64	16.64	16.56	14.96	13.22	11.42	9.64	2.87
	20	14.53	14.53	14.53	14.53	13.22	11.42	9.64	0.00
	25	12.19	12.19	12.19	12.19	12.19	11.42	9.64	0.00
	30	9.85	9.85	9.85	9.85	9.85	9.85	9.64	0.00
10 x 2.5 Z 12 G	15	28.45	28.21	24.13	19.74	15.44	11.57	8.86	0.00
	20	24.49	24.49	24.13	19.74	15.44	11.57	8.86	0.00
	25	20.21	20.21	20.21	19.74	15.44	11.57	8.86	0.00
	30	15.97	15.97	15.97	15.97	15.44	11.57	8.86	0.00
10 x 2.5 Z 14 G	15	16.41	16.41	14.23	11.81	9.40	7.16	5.48	0.00
	20	14.16	14.16	14.16	11.81	9.40	7.16	5.48	0.00
	25	11.71	11.71	11.71	11.71	9.40	7.16	5.48	0.00
	30	9.28	9.28	9.28	9.28	9.28	7.16	5.48	0.00
10 x 2.5 Z 16 G	15	12.33	12.33	10.67	8.84	7.03	5.35	4.10	0.00
	20	10.64	10.64	10.64	8.84	7.03	5.35	4.10	0.00
	25	8.80	8.80	8.80	8.80	7.03	5.35	4.10	0.00
	30	6.98	6.98	6.98	6.98	6.98	5.35	4.10	0.00
8 x 3.5 Z 12 G	15	28.12	28.12	28.12	27.54	24.30	20.96	17.67	5.25
	20	22.90	22.90	22.90	22.90	22.90	20.96	17.67	0.00
	25	17.60	17.60	17.60	17.60	17.60	17.60	17.60	0.00
	30	12.74	12.74	12.74	12.74	12.74	12.74	12.74	0.00
8 x 3.5 Z 14 G	15	15.05	15.05	15.05	14.64	12.90	11.10	9.33	2.76
	20	12.29	12.29	12.29	12.29	12.29	11.10	9.33	0.00
	25	9.46	9.46	9.46	9.46	9.46	9.46	9.33	0.00
	30	6.87	6.87	6.87	6.87	6.87	6.87	6.87	0.00
8 x 3.5 Z 16 G	15	11.66	11.66	11.66	11.35	10.01	8.62	7.26	2.15
	20	9.53	9.53	9.53	9.53	9.53	8.62	7.26	0.00
	25	7.34	7.34	7.34	7.34	7.34	7.34	7.26	0.00
	30	5.34	5.34	5.34	5.34	5.34	5.34	5.34	0.00
8 x 2.5 Z 12 G	15	26.19	26.19	25.35	21.19	17.02	13.11	10.04	0.00
	20	20.96	20.96	20.96	20.96	17.02	13.11	10.04	0.00
	25	15.75	15.75	15.75	15.75	15.75	13.11	10.04	0.00
	30	11.18	11.18	11.18	11.18	11.18	11.18	10.04	0.00



WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

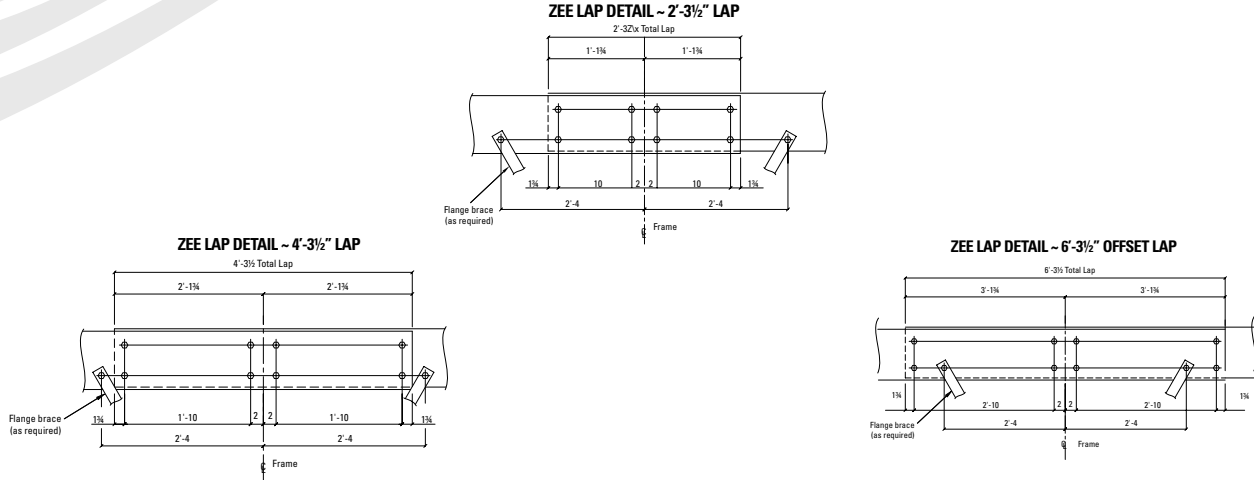
Axial Capacities (KIPS)

Section	KL ft.	Lateral Support Distances (ft.)							
		2	3	4	5	6	7	8	Unbraced
8 x 2.5 Z 14 G	15	14.85	14.85	14.29	11.93	9.56	7.35	5.62	0.00
	20	11.91	11.91	11.91	11.91	9.56	7.35	5.62	0.00
	25	8.98	8.98	8.98	8.98	8.98	7.35	5.62	0.00
	30	6.39	6.39	6.39	6.39	6.39	6.39	5.62	0.00
8 x 2.5 Z 16 G	15	11.18	11.18	10.73	8.95	7.17	5.50	4.21	0.00
	20	8.97	8.97	8.97	8.95	7.17	5.50	4.21	0.00
	25	6.77	6.77	6.77	6.77	6.77	5.50	4.21	0.00
	30	4.82	4.82	4.82	4.82	4.82	4.82	4.21	0.00
6 X 2.5 Z 14 G	8	17.01	16.25	14.11	11.77	9.43	7.24	5.54	5.54
	10	15.76	15.76	14.11	11.77	9.43	7.24	5.54	3.55
	12	14.35	14.35	14.11	11.77	9.43	7.24	5.54	2.46
	15	12.08	12.08	12.08	11.77	9.43	7.24	5.54	0.00
6 X 2.5 Z 16 G	8	12.83	12.24	10.62	8.85	7.08	5.43	4.16	4.16
	10	11.89	11.89	10.62	8.85	7.08	5.43	4.16	2.66
	12	10.84	10.84	10.62	8.85	7.08	5.43	4.16	1.85
	15	9.13	9.13	9.13	8.85	7.08	5.43	4.16	0.00
4 X 2.5 Z 14 G	8	13.76	13.76	12.61	10.21	7.89	5.87	4.49	4.49
	10	11.70	11.70	11.70	10.21	7.89	5.87	4.49	2.87
	12	9.60	9.60	9.60	9.60	7.89	5.87	4.49	0.00
	15	6.65	6.65	6.65	6.65	6.65	5.87	4.49	0.00
4 X 2.5 Z 16 G	8	10.53	10.53	9.67	7.84	6.07	4.52	3.46	3.46
	10	8.97	8.97	8.97	7.84	6.07	4.52	3.46	2.21
	12	7.36	7.36	7.36	7.36	6.07	4.52	3.46	0.00
	15	5.11	5.11	5.11	5.11	5.11	4.52	3.46	0.00
4 X 2 Z 14 G	8	12.52	12.52	10.27	7.80	5.58	4.10	3.14	3.14
	10	10.63	10.63	10.27	7.80	5.58	4.10	3.14	2.01
	12	8.70	8.70	8.70	7.80	5.58	4.10	3.14	0.00
	15	6.00	6.00	6.00	6.00	5.58	4.10	3.14	0.00
4 X 2 Z 16 G	8	9.24	9.24	7.58	5.76	4.13	3.03	2.32	2.32
	10	7.85	7.85	7.58	5.76	4.13	3.03	2.32	1.49
	12	6.43	6.43	6.43	5.76	4.13	3.03	2.32	0.00
	15	4.45	4.45	4.45	4.45	4.13	3.03	2.32	0.00
3 X 1.5 Z 14 G	8	10.55	10.55	8.79	6.31	4.38	3.22	2.47	2.47
	10	8.39	8.39	8.39	6.31	4.38	3.22	2.47	0.00
	12	6.34	6.34	6.34	6.31	4.38	3.22	2.47	0.00
	15	4.06	4.06	4.06	4.06	4.06	3.22	2.47	0.00
3 X 1.5 Z 16 G	8	8.08	8.08	6.68	4.78	3.32	2.44	1.87	1.87
	10	6.43	6.43	6.43	4.78	3.32	2.44	1.87	0.00
	12	4.87	4.87	4.87	4.78	3.32	2.44	1.87	0.00
	15	3.13	3.13	3.13	3.13	3.13	2.44	1.87	0.00



Purlin Load Tables

Zee Lap Detail



GRAVITY/UPLIFT LOAD CHART STANDING SEAM ROOF WITH BOTH FLANGES LATERALLY BRACED

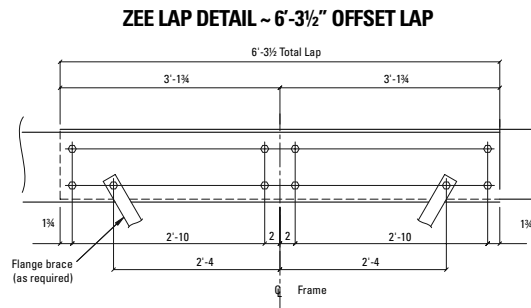
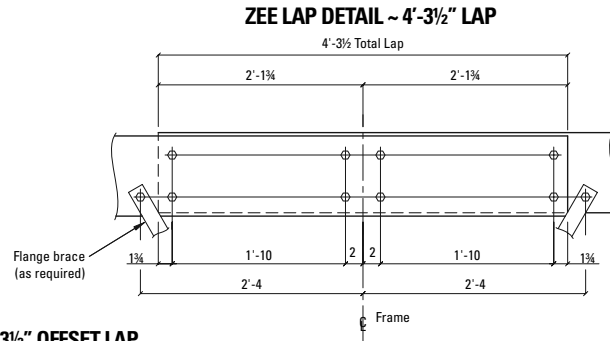
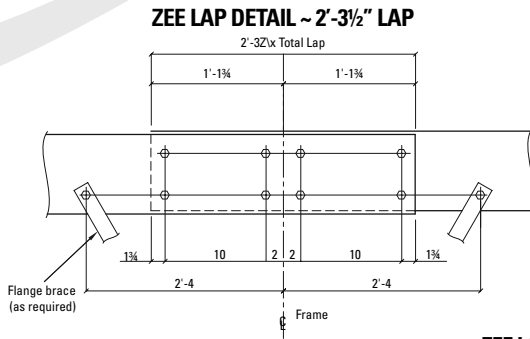
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2' lap	4' lap	6' lap	2' lap	4' lap	6' lap	2' lap	4' lap	6' lap
3 x 1 1/2	16 gage	1.6	8'-0"	282.4	268.4	268.4	305.4	315.4	315.4	300.4	313.4	311.4
			10'-0"	159.4	175.4	170.4	156.4	163.4	165.4	155.4	161.4	162.4
			12'-0"	100.4	106.4	109.4	91.4	95.4	97.4	90.4	93.4	95.4
			15'-0"	56.4	73.4	69.4	64.4	69.4	71.4	65.4	69.4	70.4
3 x 1 1/2	14 gage	1.9	8'-0"	347.1	332.1	332.1	378.1	388.1	390.1	372.1	388.1	386.1
			10'-0"	197.1	217.1	211.1	196.1	203.1	205.1	193.1	200.1	202.1
			12'-0"	124.1	132.1	136.1	114.1	119.1	121.1	113.1	117.1	119.1
			15'-0"	69.1	90.1	86.1	80.1	87.1	89.1	80.1	86.1	88.1
4 x 2	16 gage	1.8	8'-0"	357.2	348.2	349.2	412.2	406.2	410.2	405.2	416.2	418.2
			10'-0"	206.2	228.2	223.2	216.2	224.2	226.2	216.2	221.2	223.2
			12'-0"	133.2	152.2	155.2	132.2	137.2	140.2	131.2	136.2	138.2
			15'-0"	76.2	99.2	95.2	88.2	96.2	98.2	89.2	95.2	97.2
4 x 2	14 gage	2.1	8'-0"	459.9	447.9	445.9	527.9	521.9	526.9	518.9	533.9	536.9
			10'-0"	263.9	291.9	284.9	277.9	286.9	289.9	275.9	283.9	285.9
			12'-0"	169.9	193.9	198.9	169.9	175.9	178.9	168.9	173.9	176.9
			15'-0"	96.9	125.9	121.9	112.9	123.9	125.9	113.9	121.9	124.9
4 x 2 1/8 x 2 3/8	16 gage	2.0	8'-0"	394.0	388.0	389.0	459.0	452.0	456.0	465.0	459.0	465.0
			10'-0"	229.0	253.0	250.0	261.0	270.0	273.0	259.0	267.0	270.0
			12'-0"	148.0	181.0	174.0	167.0	171.0	175.0	165.0	170.0	173.0
			15'-0"	88.0	117.0	112.0	103.0	117.0	119.0	105.0	115.0	118.0
4 x 2 1/8 x 2 3/8	14 gage	2.4	8'-0"	492.6	481.6	482.6	574.6	561.6	566.6	580.6	573.6	578.6
			10'-0"	284.6	314.6	308.6	321.6	333.6	336.6	318.6	329.6	332.6
			12'-0"	183.6	223.6	215.6	206.6	210.6	215.6	203.6	209.6	213.6
			15'-0"	108.6	144.6	137.6	126.6	143.6	146.6	128.6	142.6	144.6
6 x 2 1/8 x 2 3/8	16 gage	2.4	8'-0"	551.6	609.6	610.6	649.6	695.6	700.6	664.6	707.6	712.6
			10'-0"	344.6	412.6	405.6	406.6	458.6	463.6	411.6	453.6	457.6
			12'-0"	233.6	298.6	287.6	274.6	291.6	293.6	275.6	288.6	291.6
			15'-0"	144.6	198.6	190.6	168.6	198.6	202.6	171.6	196.6	200.6
6 x 2 1/8 x 2 3/8	14 gage	2.8	8'-0"	770.2	806.2	807.2	903.2	923.2	938.2	923.2	948.2	956.2
			10'-0"	464.2	537.2	524.2	546.2	576.2	582.2	549.2	569.2	575.2
			12'-0"	309.2	384.2	372.2	353.2	366.2	369.2	351.2	362.2	366.2
			15'-0"	187.2	252.2	240.2	219.2	249.2	254.2	223.2	247.2	251.2

1. Capacities are total uniformly distributed loads without axial loading
2. The weight of the section HAS been subtracted from the loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



Purlin Load Tables

Zee Lap Detail



GRAVITY/UPLIFT LOAD CHART STANDING SEAM ROOF WITH BOTH FLANGES Laterally BRACED

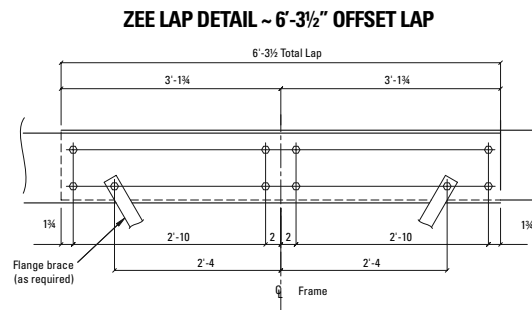
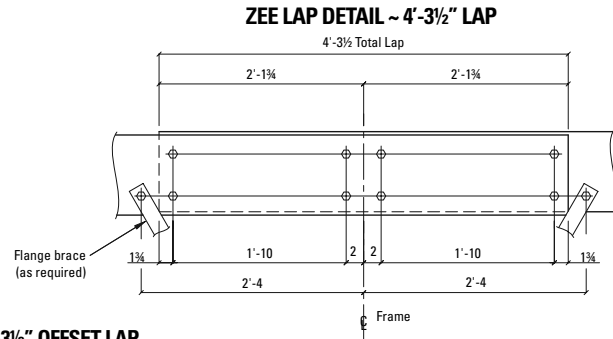
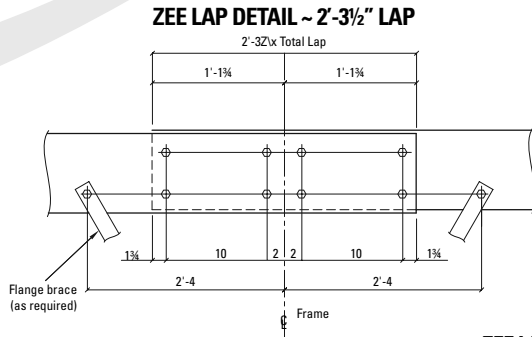
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
8 x 2 1/8 x 2 3/8	16 gage	2.8	15'-0"	185.2	237.2	253.2	213.2	280.2	288.2	216.2	283.2	291.2
		2.8	20'-0"	106.2	129.2	142.2	121.2	132.2	135.2	122.2	130.2	133.2
		2.8	25'-0"	58.2	71.2	88.2	69.2	84.2	89.2	70.2	85.2	88.2
		2.8	30'-0"	40.2	46.2	56.2	47.2	55.2	62.2	48.2	56.2	61.2
8 x 2 1/8 x 2 3/8	14 gage	3.3	15'-0"	257.7	345.7	337.7	302.7	361.7	370.7	308.7	357.7	365.7
		3.3	20'-0"	135.7	169.7	177.7	152.7	165.7	169.7	154.7	163.7	166.7
		3.3	25'-0"	73.7	89.7	110.7	87.7	105.7	111.7	88.7	106.7	110.7
		3.3	30'-0"	49.7	58.7	70.7	59.7	69.7	77.7	60.7	70.7	76.7
8 x 2 1/8 x 2 3/8	12 gage	4.9	15'-0"	434.1	550.1	524.1	507.1	549.1	560.1	515.1	540.1	553.1
		4.9	20'-0"	205.1	258.1	269.1	232.1	251.1	257.1	235.1	248.1	254.1
		4.9	25'-0"	112.1	136.1	167.1	133.1	160.1	169.1	135.1	162.1	167.1
		4.9	30'-0"	76.1	89.1	107.1	90.1	105.1	118.1	92.1	107.1	117.1
8 x 3 1/8 x 3 3/8	16 gage	3.2	15'-0"	186.8	240.8	256.8	214.8	280.8	291.8	218.8	286.8	295.8
		3.2	20'-0"	107.8	130.8	155.8	125.8	153.8	167.8	127.8	157.8	164.8
		3.2	25'-0"	67.8	79.8	96.8	80.8	94.8	106.8	81.8	96.8	105.8
		3.2	30'-0"	45.8	53.8	61.8	54.8	62.8	72.8	55.8	63.8	72.8
8 x 3 1/8 x 3 3/8	14 gage	3.8	15'-0"	267.2	355.2	352.2	314.2	413.2	405.2	319.2	412.2	409.2
		3.8	20'-0"	147.2	182.2	209.2	173.2	209.2	214.2	175.2	207.2	210.2
		3.8	25'-0"	91.2	108.2	132.2	107.2	127.2	137.2	109.2	130.2	136.2
		3.8	30'-0"	61.2	71.2	83.2	72.2	83.2	94.2	73.2	85.2	93.2
8 x 3 1/8 x 3 3/8	12 gage	5.7	15'-0"	483.3	627.3	604.3	567.3	675.3	688.3	573.3	667.3	680.3
		5.7	20'-0"	254.3	320.3	347.3	298.3	340.3	349.3	302.3	337.3	343.3
		5.7	25'-0"	150.3	180.3	221.3	175.3	210.3	224.3	178.3	214.3	221.3
		5.7	30'-0"	100.3	116.3	139.3	118.3	138.3	154.3	120.3	141.3	152.3

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Purlin Load Tables

Zee Lap Detail



GRAVITY/UPLIFT LOAD CHART STANDING SEAM ROOF WITH BOTH FLANGES Laterally BRACED

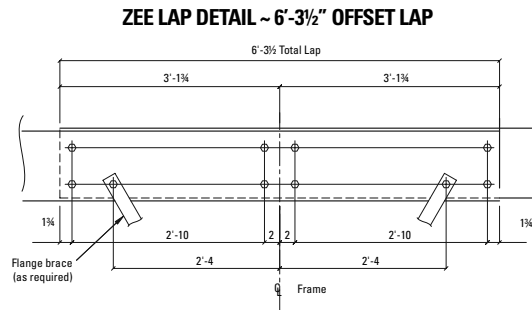
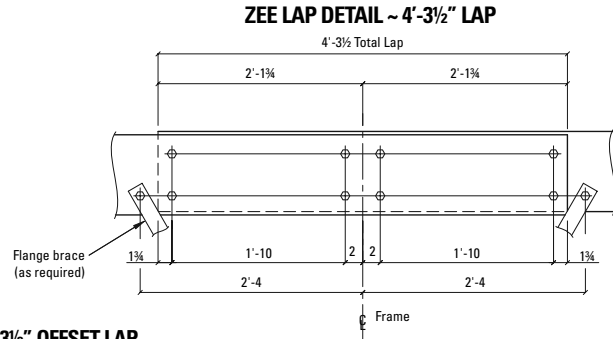
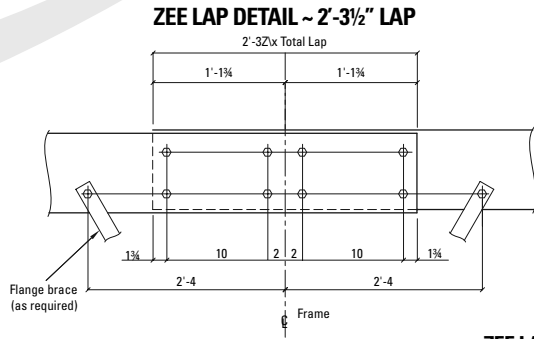
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
10 x 2 1/8 x 2 3/8	16 gage	3.2	15'-0"		215.8	257.8		242.8	285.8		244.8	289.8
			20'-0"		126.8	154.8		145.8	150.8		143.8	148.8
			25'-0"		79.8	95.8		93.8	100.8		94.8	99.8
			30'-0"		52.8	62.8		61.8	70.8		62.8	69.8
10 x 2 1/8 x 2 3/8	14 gage	3.8	15'-0"		340.2	373.2		392.2	422.2		400.2	429.2
			20'-0"		189.2	211.2		193.2	199.2		191.2	196.2
			25'-0"		105.2	130.2		125.2	132.2		127.2	131.2
			30'-0"		69.2	83.2		82.2	93.2		83.2	92.2
10 x 2 1/8 x 2 3/8	12 gage	5.6	15'-0"		694.4	667.4		682.4	697.4		674.4	690.4
			20'-0"		317.4	329.4		297.4	305.4		294.4	301.4
			25'-0"		165.4	202.4		192.4	205.4		195.4	203.4
			30'-0"		109.4	129.4		128.4	144.4		130.4	142.4
10 x 3 1/8 x 3 3/8	14 gage	4.3	15'-0"		351.7	398.7		400.7	448.7		406.7	454.7
			20'-0"		200.7	247.7		235.7	271.7		239.7	268.7
			25'-0"		125.7	149.7		148.7	175.7		151.7	172.7
			30'-0"		85.7	98.7		100.7	116.7		102.7	118.7
10 x 3 1/8 x 3 3/8	12 gage	6.4	15'-0"		816.6	790.6		914.6	916.6		904.6	920.6
			20'-0"		417.6	464.6		456.6	465.6		449.6	460.6
			25'-0"		242.6	295.6		282.6	301.6		288.6	295.6
			30'-0"		156.6	185.6		185.6	207.6		189.6	205.6

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Purlin Load Tables

Zee Lap Detail



GRAVITY/UPLIFT LOAD CHART STANDING SEAM ROOF WITH BOTH FLANGES Laterally BRACED

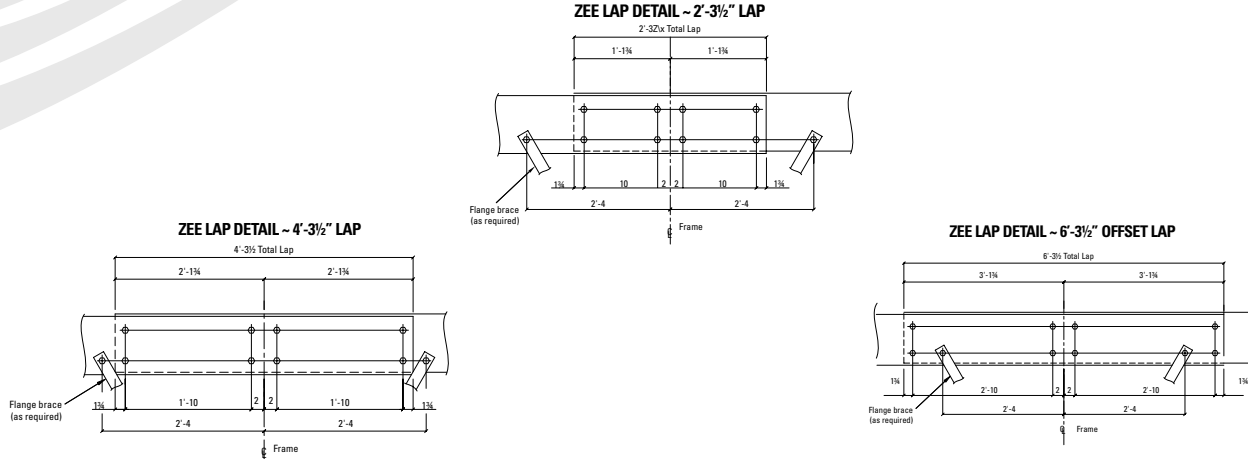
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
12 x 2 1/8 x 2 3/8	14 gage	4.3	15'-0"		315.7	386.7		349.7	427.7		353.7	431.7
			20'-0"		190.7	227.7		216.7	232.7		220.7	229.7
			25'-0"		124.7	145.7		145.7	156.7		147.7	154.7
			30'-0"		82.7	97.7		96.7	110.7		98.7	108.7
12 x 2 1/8 x 2 3/8	12 gage	6.4	15'-0"		810.6	820.6		868.6	888.6		857.6	878.6
			20'-0"		400.6	420.6		380.6	390.6		376.6	384.6
			25'-0"		210.6	259.6		246.6	262.6		250.6	259.6
			30'-0"		139.6	165.6		163.6	185.6		166.6	182.6
12 x 3 1/8 x 3 3/8	14 gage	4.8	15'-0"		321.2	390.2		350.2	428.2		356.2	432.2
			20'-0"		197.2	232.2		221.2	263.2		224.2	266.2
			25'-0"		131.2	151.2		150.2	175.2		152.2	178.2
			30'-0"		91.2	104.2		107.2	123.2		109.2	125.2
12 x 3 1/8 x 3 3/8	12 gage	7.1	15'-0"		871.9	926.9		1028.9	1052.9		1044.9	1069.9
			20'-0"		476.9	563.9		557.9	583.9		566.9	573.9
			25'-0"		292.9	351.9		343.9	376.9		349.9	372.9
			30'-0"		194.9	226.9		228.9	259.9		233.9	257.9

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Purlin Load Tables

Zee Lap Detail



GRAVITY LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

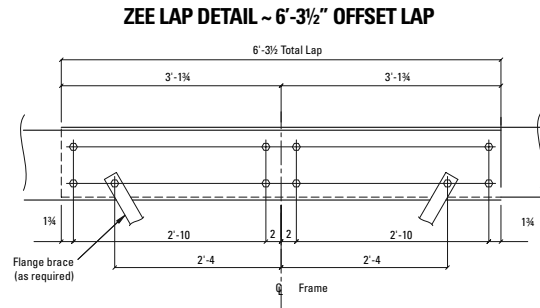
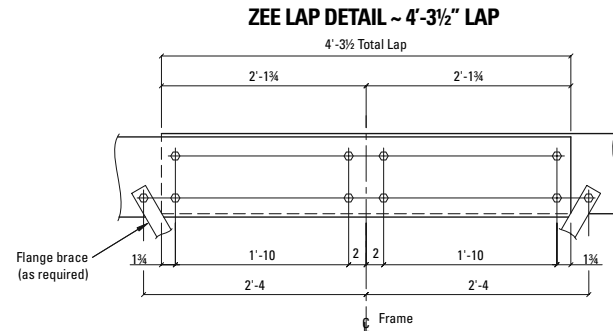
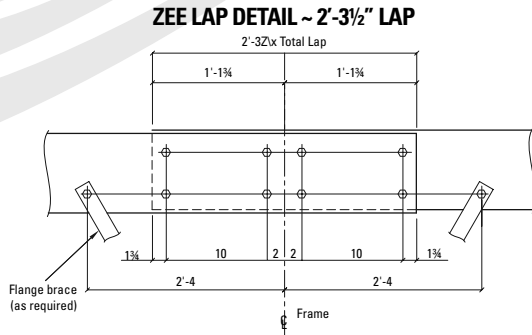
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2' lap	4' lap	6' lap	2' lap	4' lap	6' lap	2' lap	4' lap	6' lap
3 x 1 1/2	16 gage	1.6	8'-0"	282.4	268.4	268.4	326.4	316.4	319.4	321.4	321.4	326.4
			10'-0"	159.4	175.4	170.4	186.4	194.4	196.4	185.4	192.4	194.4
			12'-0"	102.4	119.4	115.4	116.4	133.4	132.4	118.4	132.4	134.4
			15'-0"	55.4	72.4	68.4	64.4	81.4	76.4	65.4	83.4	77.4
3 x 1 1/2	14 gage	1.9	8'-0"	347.1	332.1	332.1	402.1	389.1	394.1	397.1	398.1	400.1
			10'-0"	197.1	217.1	211.1	229.1	240.1	243.1	228.1	237.1	240.1
			12'-0"	126.1	149.1	143.1	145.1	165.1	164.1	146.1	163.1	166.1
			15'-0"	69.1	90.1	86.1	80.1	101.1	95.1	80.1	102.1	96.1
4 x 2	16 gage	1.8	8'-0"	357.2	348.2	349.2	416.2	406.2	410.2	419.2	415.2	419.2
			10'-0"	206.2	228.2	223.2	238.2	254.2	257.2	241.2	251.2	253.2
			12'-0"	132.2	160.2	155.2	154.2	174.2	177.2	157.2	172.2	175.2
			15'-0"	76.2	99.2	95.2	88.2	109.2	106.2	89.2	108.2	107.2
4 x 2	14 gage	2.1	8'-0"	459.9	447.9	445.9	535.9	521.9	526.9	536.9	532.9	537.9
			10'-0"	264.9	291.9	284.9	307.9	324.9	328.9	308.9	320.9	323.9
			12'-0"	169.9	205.9	198.9	197.9	222.9	226.9	201.9	220.9	223.9
			15'-0"	96.9	126.9	121.9	112.9	139.9	135.9	113.9	138.9	138.9
4 x 2 1/8 x 2 3/8	16 gage	2.0	8'-0"	394.0	388.0	389.0	459.0	452.0	456.0	465.0	459.0	465.0
			10'-0"	229.0	253.0	250.0	267.0	285.0	288.0	271.0	282.0	285.0
			12'-0"	148.0	181.0	174.0	173.0	196.0	199.0	176.0	193.0	197.0
			15'-0"	88.0	117.0	112.0	103.0	123.0	126.0	105.0	122.0	124.0
4 x 2 1/8 x 2 3/8	14 gage	2.4	8'-0"	492.6	481.6	482.6	574.6	561.6	566.6	580.6	573.6	578.6
			10'-0"	284.6	314.6	308.6	329.6	351.6	355.6	334.6	347.6	350.6
			12'-0"	183.6	223.6	215.6	213.6	241.6	245.6	216.6	238.6	242.6
			15'-0"	108.6	144.6	137.6	126.6	151.6	155.6	128.6	150.6	153.6
6 x 2 1/8 x 2 3/8	16 gage	2.4	8'-0"	551.6	609.6	610.6	649.6	695.6	700.6	664.6	707.6	712.6
			10'-0"	344.6	412.6	405.6	406.6	473.6	467.6	411.6	483.6	475.6
			12'-0"	233.6	298.6	287.6	275.6	338.6	334.6	279.6	334.6	340.6
			15'-0"	144.6	198.6	190.6	168.6	213.6	217.6	171.6	210.6	215.6
6 x 2 1/8 x 2 3/8	14 gage	2.8	8'-0"	770.2	806.2	807.2	903.2	923.2	938.2	924.2	948.2	956.2
			10'-0"	464.2	537.2	524.2	544.2	618.2	611.2	553.2	611.2	616.2
			12'-0"	309.2	384.2	372.2	359.2	424.2	432.2	366.2	419.2	426.2
			15'-0"	187.2	252.2	240.2	219.2	267.2	273.2	223.2	264.2	270.2

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Purlin Load Tables

Zee Lap Detail



GRAVITY LOAD CHART SCREWDOWN ROOF WITH LATERALLY BRACED INSIDE FLANGE

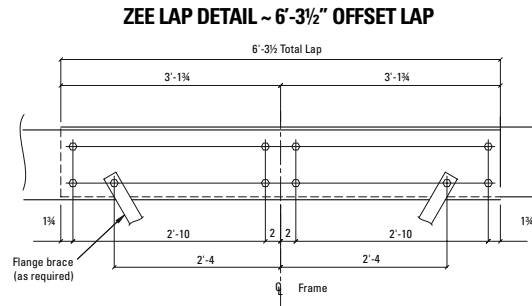
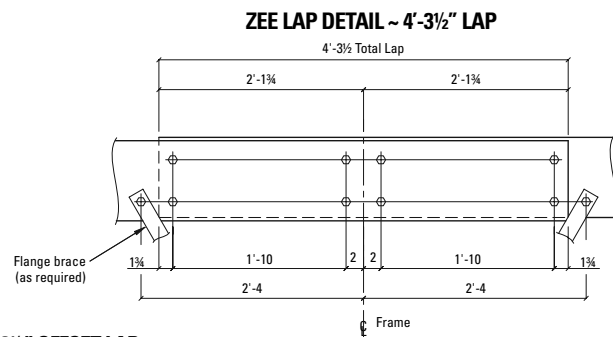
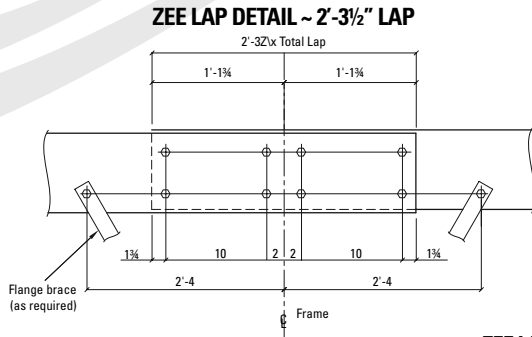
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
8 x 2 1/8 x 2 3/8	16 gage	2.8	15'-0"	185.2	237.2	253.2	213.2	280.2	287.2	216.2	284.2	292.2
		2.8	20'-0"	106.2	129.2	142.2	121.2	150.2	155.2	122.2	151.2	156.2
		2.8	25'-0"	58.2	71.2	88.2	69.2	84.2	102.2	70.2	85.2	104.2
		2.8	30'-0"	40.2	46.2	56.2	47.2	55.2	65.2	48.2	56.2	66.2
8 x 2 1/8 x 2 3/8	14 gage	3.3	15'-0"	257.7	345.7	337.7	302.7	397.7	387.7	308.7	392.7	396.7
		3.3	20'-0"	135.7	169.7	177.7	152.7	187.7	194.7	154.7	188.7	195.7
		3.3	25'-0"	73.7	89.7	110.7	87.7	105.7	127.7	88.7	106.7	130.7
		3.3	30'-0"	49.7	58.7	70.7	59.7	69.7	81.7	60.7	70.7	83.7
8 x 2 1/8 x 2 3/8	12 gage	4.9	15'-0"	434.1	550.1	524.1	507.1	597.1	599.1	515.1	591.1	602.1
		4.9	20'-0"	205.1	258.1	269.1	232.1	284.1	294.1	235.1	287.1	298.1
		4.9	25'-0"	112.1	136.1	167.1	133.1	160.1	195.1	135.1	162.1	198.1
		4.9	30'-0"	76.1	89.1	107.1	90.1	105.1	124.1	92.1	107.1	126.1
8 x 3 1/8 x 3 3/8	16 gage	3.2	15'-0"	186.8	240.8	256.8	214.8	280.8	291.8	218.8	286.8	295.8
		3.2	20'-0"	107.8	130.8	155.8	125.8	153.8	178.8	127.8	157.8	176.8
		3.2	25'-0"	67.8	79.8	96.8	80.8	94.8	112.8	81.8	96.8	110.8
		3.2	30'-0"	45.8	53.8	61.8	54.8	62.8	72.8	55.8	63.8	74.8
8 x 3 1/8 x 3 3/8	14 gage	3.8	15'-0"	267.2	355.2	352.2	314.2	414.2	405.2	319.2	412.2	409.2
		3.8	20'-0"	147.2	182.2	209.2	173.2	213.2	231.2	175.2	218.2	227.2
		3.8	25'-0"	91.2	108.2	132.2	107.2	127.2	144.2	109.2	130.2	142.2
		3.8	30'-0"	61.2	71.2	83.2	72.2	83.2	98.2	73.2	85.2	97.2
8 x 3 1/8 x 3 3/8	12 gage	5.7	15'-0"	483.3	627.3	604.3	567.3	675.3	688.3	573.3	667.3	680.3
		5.7	20'-0"	254.3	320.3	347.3	298.3	364.3	374.3	302.3	360.3	367.3
		5.7	25'-0"	150.3	180.3	221.3	175.3	210.3	234.3	178.3	214.3	231.3
		5.7	30'-0"	100.3	116.3	139.3	118.3	138.3	158.3	120.3	141.3	157.3

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Purlin Load Tables

Zee Lap Detail



GRAVITY LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	6'-3 1/2" lap	
10 x 2 1/8 x 2 3/8	16 gage	3.2	15'-0"		215.8	257.8		242.8	285.8		244.8	289.8
			20'-0"		127.8	154.8		146.8	176.8		148.8	177.8
			25'-0"		79.8	95.8		93.8	113.8		94.8	116.8
			30'-0"		52.8	62.8		61.8	73.8		62.8	74.8
10 x 2 1/8 x 2 3/8	14 gage	3.8	15'-0"		340.2	373.2		392.2	422.2		400.2	429.2
			20'-0"		189.2	211.2		220.2	232.2		224.2	234.2
			25'-0"		105.2	130.2		125.2	151.2		127.2	154.2
			30'-0"		69.2	83.2		82.2	97.2		83.2	99.2
10 x 2 1/8 x 2 3/8	12 gage	5.6	15'-0"		694.4	668.4		776.4	746.4		767.4	755.4
			20'-0"		317.4	329.4		345.4	360.4		347.4	361.4
			25'-0"		165.4	202.4		192.4	237.4		195.4	239.4
			30'-0"		109.4	129.4		128.4	151.4		130.4	153.4
10 x 3 1/8 x 3 3/8	14 gage	4.3	15'-0"		351.7	398.7		400.7	448.7		406.7	454.7
			20'-0"		200.7	247.7		235.7	280.7		238.7	285.7
			25'-0"		125.7	149.7		148.7	177.7		151.7	181.7
			30'-0"		85.7	98.7		100.7	116.7		102.7	118.7
10 x 3 1/8 x 3 3/8	12 gage	6.4	15'-0"		816.6	790.6		914.6	916.6		904.6	921.6
			20'-0"		417.6	464.6		487.6	508.6		489.6	498.6
			25'-0"		242.6	295.6		282.6	317.6		288.6	314.6
			30'-0"		156.6	185.6		185.6	216.6		189.6	213.6

1. Capacities are total uniformly distributed loads without axial loading
2. The weight of the section HAS been subtracted from the loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



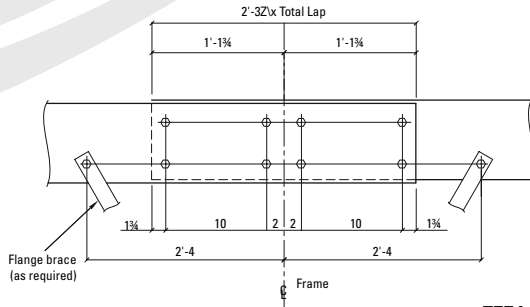
WHIRLWIND BUILDING COMPONENTS

8234 Hansen Rd. | Houston, TX 77075 | (Phone) 713.946.7140 | (US Wats) 800.324.9992

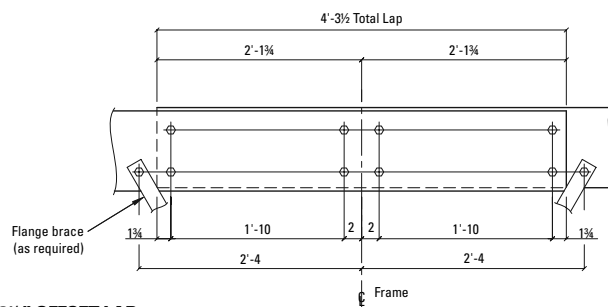
Purlin Load Tables

Zee Lap Detail

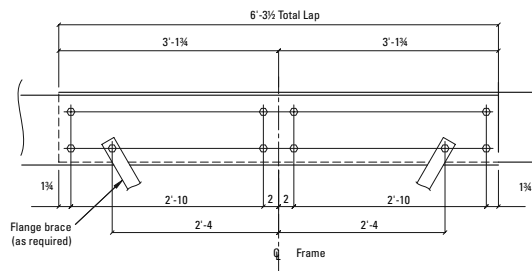
ZEE LAP DETAIL ~ 2'-3 1/2" LAP



ZEE LAP DETAIL ~ 4'-3 1/2" LAP



ZEE LAP DETAIL ~ 6'-3 1/2" OFFSET LAP



GRAVITY LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

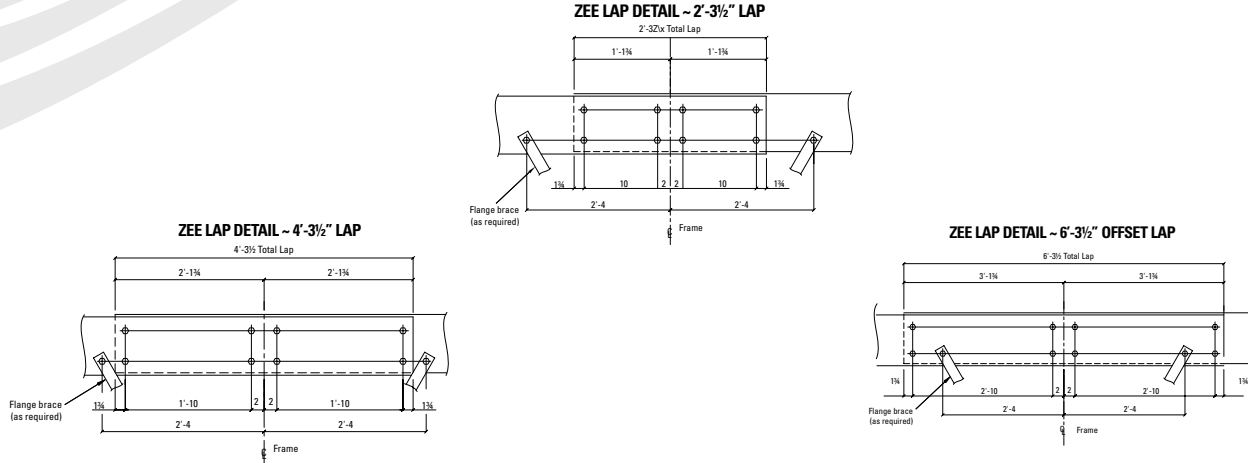
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
12 x 2 1/8 x 2 3/8	14 gage	4.3	15'-0"		315.7	386.7		349.7	427.7		353.7	431.7
			20'-0"		190.7	227.7		217.7	259.7		219.7	263.7
			25'-0"		124.7	145.7		145.7	172.7		147.7	174.7
			30'-0"		82.7	97.7		96.7	115.7		98.7	117.7
12 x 2 1/8 x 2 3/8	12 gage	6.4	15'-0"		810.6	820.6		952.6	939.6		969.6	948.6
			20'-0"		400.6	420.6		440.6	459.6		443.6	462.6
			25'-0"		210.6	259.6		246.6	304.6		250.6	306.6
			30'-0"		139.6	165.6		163.6	193.6		166.6	196.6
12 x 3 1/8 x 3 3/8	14 gage	4.8	15'-0"		321.2	390.2		350.2	428.2		356.2	432.2
			20'-0"		197.2	232.2		221.2	263.2		224.2	266.2
			25'-0"		131.2	151.2		150.2	175.2		152.2	178.2
			30'-0"		91.2	104.2		107.2	123.2		109.2	125.2
12 x 3 1/8 x 3 3/8	12 gage	7.1	15'-0"		871.9	927.9		1028.9	1052.9		1044.9	1069.9
			20'-0"		476.9	563.9		557.9	647.9		570.9	635.9
			25'-0"		292.9	351.9		343.9	405.9		349.9	400.9
			30'-0"		194.9	226.9		228.9	265.9		233.9	269.9

1. Capacities are total uniformly distributed loads without axial loading
2. The weight of the section HAS been subtracted from the loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



Purlin Load Tables

Zee Lap Detail



UPLIFT LOAD CHART SCREWDOWN ROOF WITH LATERALLY BRACED INSIDE FLANGE

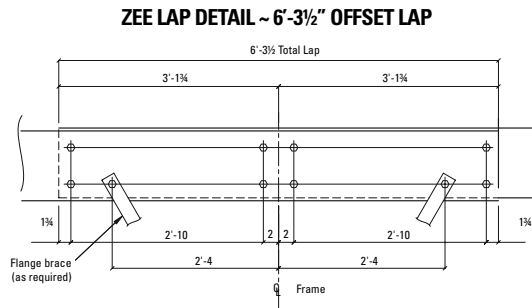
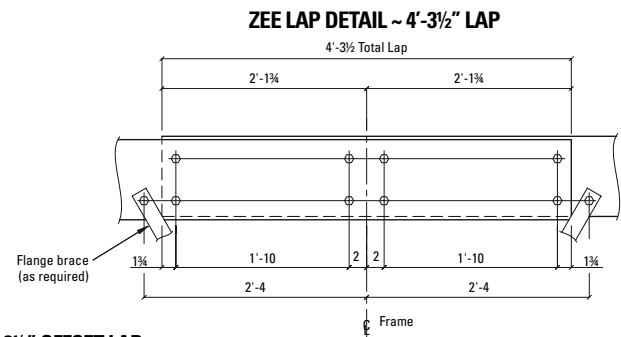
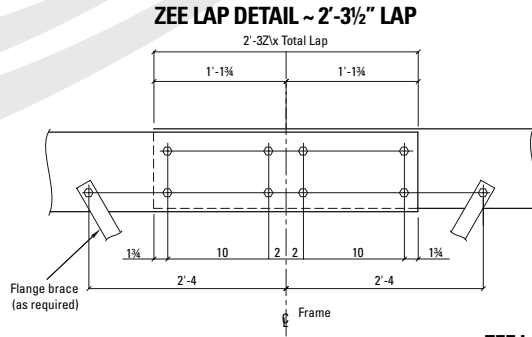
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2' lap	4' lap	6' lap	2' lap	4' lap	6' lap	2' lap	4' lap	6' lap
3 x 1 1/2	16 gage	1.6	8'-0"	282.4	268.4	268.4	305.4	315.4	315.4	300.4	313.4	311.4
			10'-0"	160.4	175.4	170.4	156.4	163.4	165.4	155.4	161.4	162.4
			12'-0"	100.4	106.4	109.4	91.4	95.4	97.4	90.4	93.4	95.4
			15'-0"	60.4	77.4	77.4	67.4	70.4	71.4	67.4	69.4	70.4
3 x 1 1/2	14 gage	1.9	8'-0"	347.1	332.1	332.1	378.1	388.1	390.1	372.1	388.1	386.1
			10'-0"	197.1	217.1	210.1	196.1	203.1	205.1	193.1	200.1	202.1
			12'-0"	124.1	132.1	136.1	114.1	119.1	121.1	113.1	117.1	119.1
			15'-0"	75.1	96.1	95.1	84.1	87.1	89.1	83.1	86.1	88.1
4 x 2	16 gage	1.8	8'-0"	357.2	348.2	349.2	412.2	406.2	410.2	405.2	416.2	418.2
			10'-0"	206.2	228.2	223.2	217.2	224.2	226.2	216.2	221.2	223.2
			12'-0"	132.2	152.2	156.2	132.2	137.2	140.2	131.2	136.2	138.2
			15'-0"	78.2	105.2	101.2	92.2	96.2	98.2	93.2	95.2	97.2
4 x 2	14 gage	2.1	8'-0"	459.9	447.9	445.9	527.9	521.9	526.9	518.9	533.9	537.9
			10'-0"	263.9	291.9	284.9	277.9	286.9	289.9	275.9	283.9	285.9
			12'-0"	169.9	194.9	199.9	169.9	175.9	178.9	168.9	173.9	176.9
			15'-0"	100.9	134.9	129.9	117.9	123.9	125.9	118.9	121.9	124.9
4 x 2 1/8 x 2 3/8	16 gage	2.0	8'-0"	394.0	388.0	389.0	459.0	452.0	456.0	465.0	459.0	465.0
			10'-0"	229.0	253.0	250.0	261.0	270.0	273.0	259.0	267.0	270.0
			12'-0"	148.0	181.0	174.0	167.0	171.0	175.0	165.0	170.0	173.0
			15'-0"	88.0	118.0	113.0	103.0	117.0	119.0	105.0	115.0	118.0
4 x 2 1/8 x 2 3/8	14 gage	2.4	8'-0"	492.6	481.6	482.6	574.6	561.6	566.6	580.6	573.6	578.6
			10'-0"	284.6	314.6	308.6	321.6	333.6	336.6	318.6	329.6	332.6
			12'-0"	183.6	223.6	215.6	206.6	210.6	215.6	203.6	209.6	213.6
			15'-0"	108.6	145.6	139.6	127.6	143.6	146.6	129.6	142.6	144.6
6 x 2 1/8 x 2 3/8	16 gage	2.4	8'-0"	551.6	609.6	610.6	649.6	695.6	700.6	664.6	707.6	712.6
			10'-0"	344.6	412.6	405.6	406.6	458.6	463.6	411.6	453.6	457.6
			12'-0"	233.6	298.6	287.6	274.6	291.6	293.6	275.6	288.6	291.6
			15'-0"	143.6	197.6	190.6	168.6	198.6	202.6	171.6	196.6	200.6
6 x 2 1/8 x 2 3/8	14 gage	2.8	8'-0"	770.2	806.2	807.2	903.2	923.2	938.2	923.2	948.2	956.2
			10'-0"	464.2	537.2	524.2	545.2	576.2	582.2	549.2	569.2	575.2
			12'-0"	309.2	384.2	372.2	353.2	366.2	369.2	351.2	362.2	366.2
			15'-0"	186.2	253.2	242.2	219.2	249.2	254.2	223.2	247.2	251.2

1. Capacities are total uniformly distributed loads without axial loading
2. The weight of the section HAS been subtracted from the loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



Purlin Load Tables

Zee Lap Detail



UPLIFT LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
8 x 2 1/8 x 2 3/8	16 gage	2.8	15'-0"	185.2	237.2	253.2	213.2	280.2	288.2	216.2	283.2	291.2
			20'-0"	106.2	129.2	153.2	124.2	132.2	135.2	125.2	130.2	133.2
			25'-0"	67.2	79.2	95.2	79.2	87.2	89.2	80.2	86.2	88.2
			30'-0"	45.2	52.2	61.2	54.2	60.2	62.2	55.2	60.2	61.2
8 x 2 1/8 x 2 3/8	14 gage	3.3	15'-0"	257.7	345.7	337.7	302.7	361.7	370.7	308.7	357.7	365.7
			20'-0"	141.7	175.7	191.7	158.7	165.7	169.7	157.7	163.7	166.7
			25'-0"	87.7	104.7	125.7	103.7	109.7	111.7	103.7	107.7	110.7
			30'-0"	59.7	67.7	80.7	69.7	76.7	77.7	70.7	75.7	76.7
8 x 2 1/8 x 2 3/8	12 gage	4.9	15'-0"	433.1	560.1	538.1	508.1	549.1	560.1	515.1	540.1	553.1
			20'-0"	227.1	282.1	290.1	244.1	251.1	257.1	241.1	248.1	254.1
			25'-0"	138.1	165.1	191.1	160.1	166.1	169.1	157.1	164.1	167.1
			30'-0"	91.1	106.1	125.1	108.1	116.1	118.1	109.1	115.1	117.1
8 x 3 1/8 x 3 3/8	16 gage	3.2	15'-0"	186.8	240.8	256.8	214.8	280.8	291.8	218.8	286.8	295.8
			20'-0"	107.8	130.8	155.8	125.8	153.8	167.8	127.8	157.8	164.8
			25'-0"	67.8	79.8	96.8	79.8	94.8	106.8	81.8	96.8	105.8
			30'-0"	45.8	52.8	61.8	54.8	62.8	72.8	55.8	63.8	72.8
8 x 3 1/8 x 3 3/8	14 gage	3.8	15'-0"	267.2	355.2	352.2	314.2	414.2	405.2	319.2	412.2	409.2
			20'-0"	147.2	182.2	208.2	172.2	209.2	214.2	175.2	207.2	210.2
			25'-0"	91.2	108.2	132.2	108.2	127.2	137.2	109.2	130.2	136.2
			30'-0"	61.2	71.2	83.2	72.2	83.2	94.2	73.2	85.2	93.2
8 x 3 1/8 x 3 3/8	12 gage	5.7	15'-0"	483.3	627.3	604.3	567.3	675.3	688.3	573.3	667.3	680.3
			20'-0"	254.3	320.3	352.3	298.3	340.3	349.3	302.3	337.3	343.3
			25'-0"	155.3	185.3	229.3	182.3	217.3	224.3	185.3	216.3	221.3
			30'-0"	103.3	119.3	140.3	121.3	139.3	154.3	122.3	142.3	152.3

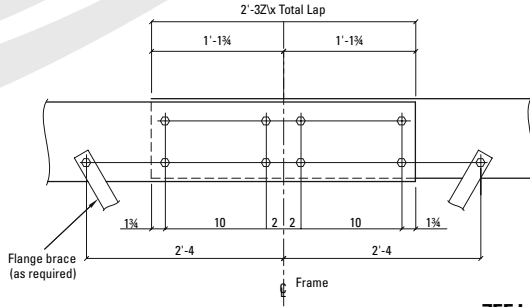
1. Capacities are total uniformly distributed loads without axial loading
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3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



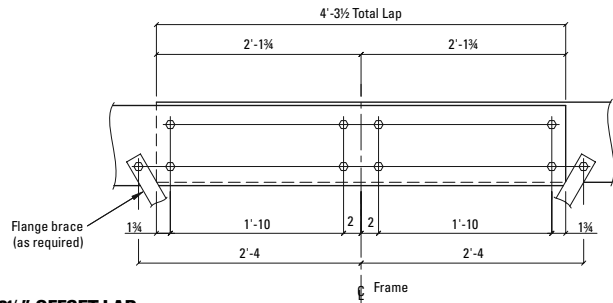
Purlin Load Tables

Zee Lap Detail

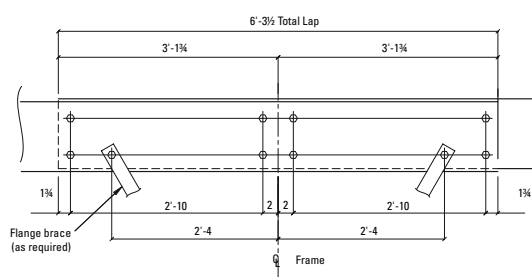
ZEE LAP DETAIL ~ 2'-3 1/2" LAP



ZEE LAP DETAIL ~ 4'-3 1/2" LAP



ZEE LAP DETAIL ~ 6'-3 1/2" OFFSET LAP



UPLIFT LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	6'-3 1/2" lap	
10 x 2 1/8 x 2 3/8	16 gage	3.2	15'-0"		215.8	257.8		242.8	285.8		244.8	289.8
			20'-0"		127.8	153.8		145.8	150.8		143.8	148.8
			25'-0"		82.8	96.8		96.8	100.8		95.8	99.8
			30'-0"		56.8	64.8		66.8	70.8		67.8	69.8
10 x 2 1/8 x 2 3/8	14 gage	3.8	15'-0"		340.2	373.2		392.2	422.2		400.2	429.2
			20'-0"		189.2	225.2		193.2	199.2		191.2	196.2
			25'-0"		117.2	141.2		129.2	132.2		128.2	131.2
			30'-0"		79.2	91.2		90.2	93.2		90.2	92.2
10 x 2 1/8 x 2 3/8	12 gage	5.6	15'-0"		706.4	685.4		682.4	697.4		674.4	690.4
			20'-0"		335.4	346.4		297.4	305.4		294.4	301.4
			25'-0"		210.4	233.4		201.4	205.4		198.4	203.4
			30'-0"		136.4	161.4		141.4	144.4		140.4	143.4
10 x 3 1/8 x 3 3/8	14 gage	4.3	15'-0"		351.7	398.7		400.7	448.7		406.7	454.7
			20'-0"		200.7	247.7		235.7	271.7		239.7	268.7
			25'-0"		125.7	149.7		148.7	175.7		151.7	172.7
			30'-0"		85.7	98.7		100.7	116.7		102.7	118.7
10 x 3 1/8 x 3 3/8	12 gage	6.4	15'-0"		816.6	790.6		914.6	916.6		904.6	921.6
			20'-0"		417.6	467.6		456.6	465.6		449.6	460.6
			25'-0"		243.6	300.6		287.6	301.6		290.6	295.6
			30'-0"		159.6	187.6		187.6	207.6		189.6	205.6

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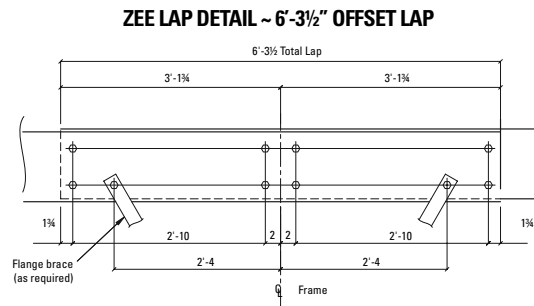
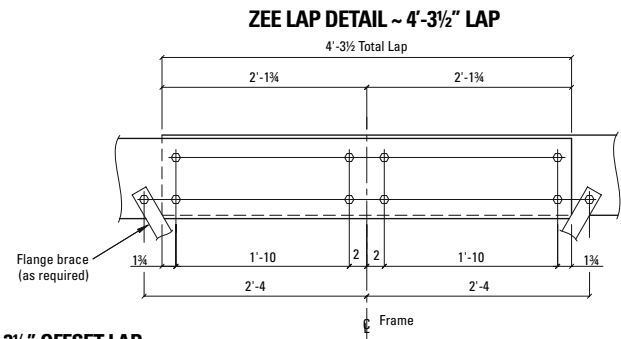
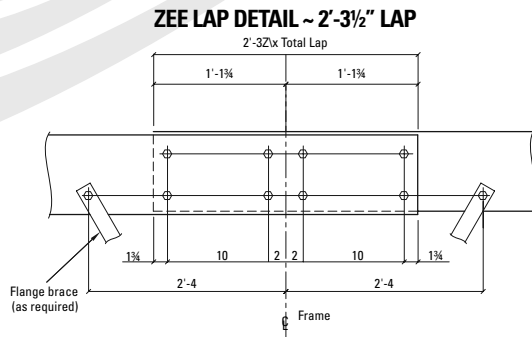


WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

Zee Lap Detail



UPLIFT LOAD CHART SCREWDOWN ROOF WITH Laterally BRACED INSIDE FLANGE

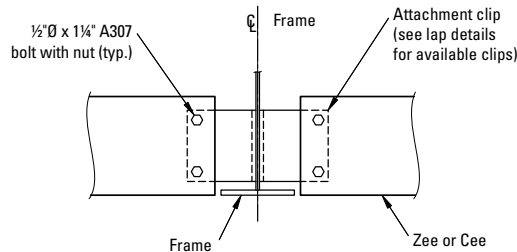
Zee size	Gage	wt./ft.	span	2 span			4 span			6' span		
				2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap	2'-3 1/2" lap	4'-3 1/2" lap	6'-3 1/2" lap
12 x 2 1/8 x 2 3/8	14 gage	4.3	15'-0"		315.7	386.7		349.7	426.7		353.7	431.7
		4.3	20'-0"		190.7	227.7		216.7	232.7		220.7	229.7
		4.3	25'-0"		125.7	146.7		145.7	156.7		147.7	154.7
		4.3	30'-0"		87.7	100.7		102.7	110.7		104.7	108.7
12 x 2 1/8 x 2 3/8	12 gage	6.4	15'-0"		810.6	820.6		868.6	888.6		857.6	878.6
		6.4	20'-0"		424.6	442.6		380.6	390.6		376.6	384.6
		6.4	25'-0"		255.6	298.6		256.6	262.6		254.6	259.6
		6.4	30'-0"		168.6	197.6		181.6	185.6		179.6	182.6
12 x 3 1/8 x 3 3/8	14 gage	4.8	15'-0"		321.2	390.2		350.2	427.2		356.2	432.2
		4.8	20'-0"		197.2	232.2		221.2	263.2		224.2	266.2
		4.8	25'-0"		131.2	151.2		150.2	175.2		152.2	178.2
		4.8	30'-0"		91.2	104.2		107.2	123.2		109.2	125.2
12 x 3 1/8 x 3 3/8	12 gage	7.1	15'-0"		871.9	927.9		1028.9	1051.9		1044.9	1069.9
		7.1	20'-0"		476.9	563.9		557.9	583.9		566.9	573.9
		7.1	25'-0"		292.9	351.9		343.9	376.9		349.9	372.9
		7.1	30'-0"		194.9	226.9		228.9	259.9		233.9	257.9

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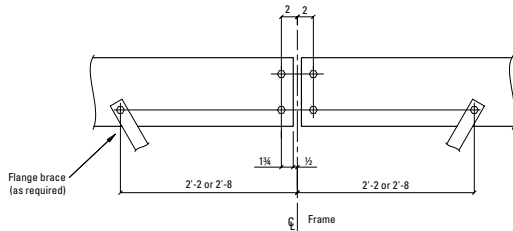


Purlin Load Tables Zee Connection Detail Simple Span Condition

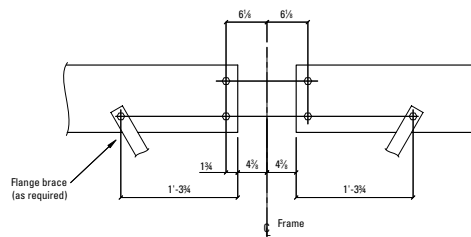
TYPICAL FLUSH ZEE OR CEE CONNECTION DETAIL



ZEE CONNECTION DETAIL ~ SIMPLE SPAN BY-PASS CONDITION



ZEE CONNECTION DETAIL ~ SIMPLE SPAN FLUSH CONDITION



ZEE SECTION SIMPLE SPAN LOAD TABLES CAPACITIES ARE FOR SECTIONS FULLY BRACED

Loads are in pounds per linear foot

Zee Size	Gage	weight lbs/ft	Span 8'-0"	Span 10'-0"	Span 12'-0"	Span 15'-0"	Span 20'-0"	Span 25'-0"	Span 30'-0"
3 x 1 1/2	16	1.6	166.4	105.4	73.4	46.4			
3 x 1 1/2	14	1.9	205.1	131.1	90.1	57.1			
4 x 2	16	1.8	217.2	138.2	95.2	60.2			
4 x 2	14	2.1	277.9	176.9	121.9	77.9			
4 x 2 1/8 x 2 3/8	16	2	244	155	107	68			
4 x 2 1/8 x 2 3/8	14	2.4	300.6	191.6	132.6	83.6			
6 x 2 1/8 x 2 3/8	16	2.4	421.6	268.6	185.6	118.6			
6 x 2 1/ x 2 3/8	14	2.8	528.2	337.2	233.2	148.2			
8 x 2 1/8 x 2 3/8	16	2.8				176.2	98.2	61.2	42.2
8x 2 1/8 x 2 3/8	14	3.3				219.7	121.7	76.7	52.7
8 x 2 1/8 x 2 3/8	12	4.9				330.1	182.1	116.1	79.1
8 x 3 1/8 x 3 3/8	16	3.2				179.8	99.8	62.8	42.8
8 x 3 1/8 x 3 3/8	14	3.8				230.2	128.2	80.2	55.2
8 x 3 1/8 x 3 3/8	12	5.7				373.3	207.3	130.3	89.3
10 x 2 1/8 x 2 3/8	16	3.2				205.8	113.8	71.8	48.8
10 x 2 1/8 x 2 3/8	14	3.8				269.2	150.2	94.2	64.2
10 x 2 1/8 x 2 3/8	12	5.6				430.4	239.4	151.4	103.4
10 x 3 1/8 x 3 3/8	14	4.3				296.7	164.7	103.7	70.7
10 x 3 1/8 x 3 3/8	12	6.4				506.6	282.6	178.6	121.6
12 x 2 1/8 x 2 3/8	14	4.3				329.7	183.7	115.7	78.7
12 x 2 1/8 x 2 3/8	12	6.4				546.6	304.6	192.6	131.6
12 x 3 1/8 x 3 3/8	14	4.8				355.2	197.2	124.2	85.2
12 x 3 1/8 x 3 3/8	12	7.1				645.9	359.9	227.9	155.9

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling

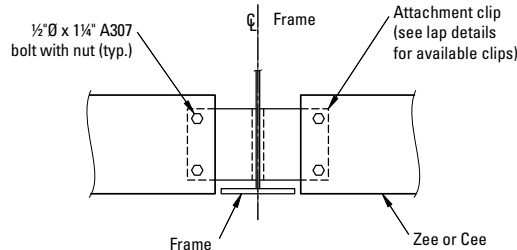


WHIRLWIND BUILDING COMPONENTS

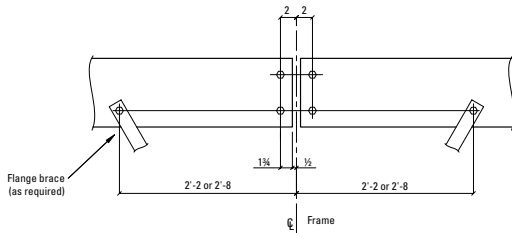
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Purlin Load Tables Zee Connection Detail Simple Span Condition

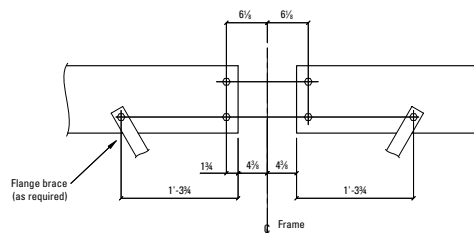
TYPICAL FLUSH ZEE OR CEE CONNECTION DETAIL



ZEE CONNECTION DETAIL ~ SIMPLE SPAN BY-PASS CONDITION



ZEE CONNECTION DETAIL ~ SIMPLE SPAN FLUSH CONDITION



ZEE SECTION SIMPLE SPAN LOAD TABLES CAPACITIES ARE FOR SECTIONS WITH LATERAL SUPPORT

Loads are in pounds per linear foot

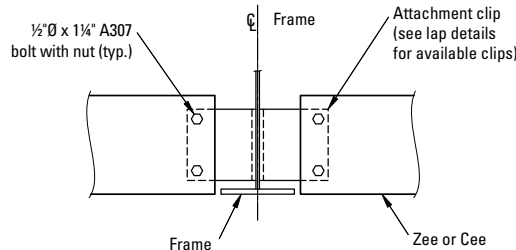
Zee Size	Gage	weight lbs/ft	Span 8'-0"	Span 10'-0"	Span 12'-0"	Span 15'-0"	Span 20'-0"	Span 25'-0"	Span 30'-0"
3 x 1 1/2	16	1.6	154.4	87.4	51.4	38.4			
3 x 1 1/2	14	1.9	192.1	109.1	64.1	47.1			
4 x 2	16	1.8	209.2	122.2	74.2	53.2			
4 x 2	14	2.1	267.9	155.9	94.9	67.9			
4 x 2 1/8 x 2 3/8	16	2	301	192	133	84			
4 x 2 1/8 x 2 3/8	14	2.4	243.6	154.6	106.6	67.6			
6 x 2 1/8 x 2 3/8	16	2.4	421.6	268.6	185.6	118.6			
6 x 2 1/ x 2 3/8	14	2.8	528.2	337.2	233.2	148.2			
8 x 2 1/8 x 2 3/8	16	2.8				160.2	73.2	49.2	34.2
8x 2 1/8 x 2 3/8	14	3.3				200.7	92.7	61.7	42.7
8 x 2 1/8 x 2 3/8	12	4.9				303.1	140.1	93.1	65.1
8 x 3 1/8 x 2 3/8	16	3.2				179.8	92.8	59.8	40.8
8 x 3 1/8 x 2 3/8	14	3.8				230.2	118.2	76.2	52.2
8 x 3 1/8 x 2 3/8	12	5.7				373.3	193.3	124.3	86.3
10 x 2 1/8 x 2 3/8	16	3.2				183.8	82.8	54.8	38.8
10 x 2 1/8 x 2 3/8	14	3.8				241.2	108.2	72.2	51.2
10 x 2 1/8 x 2 3/8	12	5.6				378.4	167.4	112.4	79.4
10 x 3 1/8 x 3 3/8	14	4.3				296.7	150.7	97.7	67.7
10 x 3 1/8 x 3 3/8	12	6.4				506.6	259.6	167.6	116.6
12 x 2 1/8 x 2 3/8	14	4.3				289.7	127.7	85.7	60.7
12 x 2 1/8 x 2 3/8	12	6.4				482.6	214.6	144.6	102.6
12 x 3 1/8 x 3 3/8	14	4.8				353.2	175.2	115.2	80.2
12 x 3 1/8 x 3 3/8	12	7.1				641.9	324.9	210.9	146.9

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling

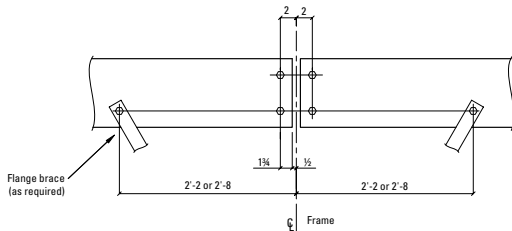


Purlin Load Tables Zee Connection Detail Simple Span Condition

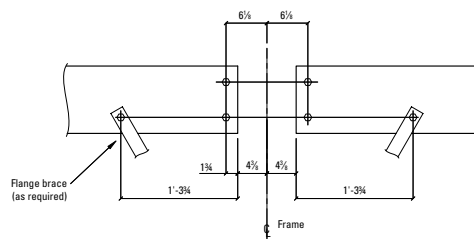
TYPICAL FLUSH ZEE OR CEE CONNECTION DETAIL



ZEE CONNECTION DETAIL ~ SIMPLE SPAN BY-PASS CONDITION



ZEE CONNECTION DETAIL ~ SIMPLE SPAN FLUSH CONDITION



ZEE SECTION SIMPLE SPAN LOAD TABLES CAPACITIES ARE FOR SECTIONS WITHOUT ANY SUPPORT

Loads are in pounds per linear foot

Zee Size	Gage	weight lbs/ft	Span 8'-0"	Span 10'-0"	Span 12'-0"	Span 15'-0"	Span 20'-0"	Span 25'-0"	Span 30'-0"
3 x 1 1/2	16	1.6	70.4	28.4	12.4	4.4			
3 x 1 1/2	14	1.9	89.1	35.1	16.1	5.1			
4 x 2	16	1.8	114.2	45.2	21.2	7.2			
4 x 2	14	2.1	145.9	58.9	26.9	9.9			
4 x 2 1/8 x 2 3/8	16	2	170	73	34	13			
4 x 2 1/8 x 2 3/8	14	2.4	209.6	90.6	42.6	15.6			
6 x 2 1/8 x 2 3/8	16	2.4	273.6	114.6	53.6	20.6			
6 x 2 1/8 x 2 3/8	14	2.8	346.2	145.2	68.2	26.2			
8 x 2 1/8 x 2 3/8	16	2.8				28.2	7.2	1.2	-0.8
8x 2 1/8 x 2 3/8	14	3.3				35.7	8.7	1.7	-1.3
8 x 2 1/8 x 2 3/8	12	4.9				55.1	14.1	3.1	-0.9
8 x 3 1/8 x 3 3/8	16	3.2				57.8	15.8	4.8	0.8
8 x 3 1/8 x 3 3/8	14	3.8				74.2	21.2	6.2	1.2
8 x 3 1/8 x 3 3/8	12	5.7				124.3	35.3	11.3	2.3
10 x 2 1/8 x 2 3/8	16	3.2				29.8	7.8	0.8	-1.2
10 x 2 1/8 x 2 3/8	14	3.8				40.2	10.2	2.2	-0.8
10 x 2 1/8 x 2 3/8	12	5.6				59.4	15.4	2.4	-1.6
10 x 3 1/8 x 3 3/8	14	4.3				90.7	25.7	7.7	1.7
10 x 3 1/8 x 3 3/8	12	6.4				157.6	45.6	14.6	3.6
12 x 2 1/8 x 2 3/8	14	4.3				45.7	11.7	1.7	-1.3
12 x 2 1/8 x 2 3/8	12	6.4				77.6	20.6	4.6	-1.4
12 x 3 1/8 x 3 3/8	14	4.8				101.2	29.2	9.2	2.2
12 x 3 1/8 x 3 3/8	12	7.1				184.9	53.9	17.9	4.9

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. All published loads are allowable and have the AISI appropriate safety factors.
4. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling

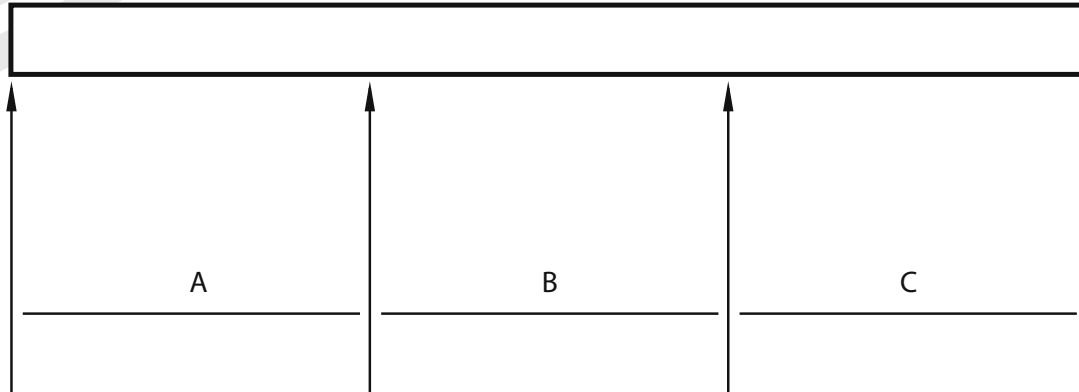


WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

One Section Over Continuous Supports



The values for A, B & C are all equal.

ZEE SECTION THREE SPAN CAPACITIES (ONE SECTION CONTINUOUS OVER SUPPORT) GRAVITY LOADING

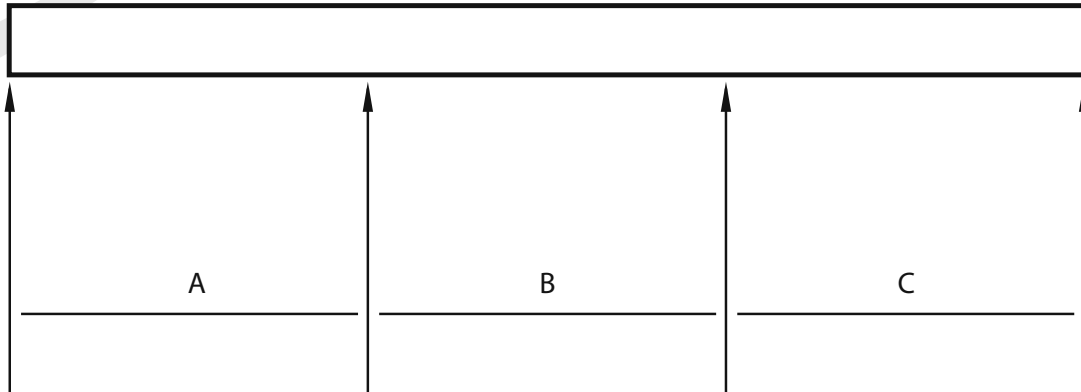
Zee Size	Gage	weight lbs/ft	Loads are in pounds per linear foot							
			braced* 8'-0"	unbraced 8'-0"	braced* 10'-0"	unbraced 10'-0"	braced* 12'-0"	unbraced 12'-0"	braced* 15'-0"	unbraced 15'-0"
3 x 1 1/2	16	1.6	201.4	88.4	129.4	35.4				
3 x 1 1/2	14	1.9	248.1	111.1	160.1	44.1				
4 x 2	16	1.8	257.2	142.2	167.2	57.2				
4 x 2	14	2.1	330.9	183.9	214.9	73.9				
4 x 2 1/8 x 2 3/8	16	2	285	213	186	92				
4 x 2 1/8 x 2 3/8	14	2.4	355.6	262.6	231.6	113.6				
6 x 2 1/8 x 2 3/8	16	2.4	420.6	342.6	288.6	143.6				
6 x 2 1/8 x 2 3/8	14	2.8	574.2	433.2	384.2	182.2				

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. Loads labeled "braced" are for sections supported laterally at both flanges for their full length
4. Loads labeled "unbraced" are for sections without any lateral support
5. All published loads are allowable and have the AISI appropriate safety factors.
6. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



Purlin Load Tables

One Section Over Continuous Supports



The values for A, B & C are all equal.

ZEE SECTION THREE SPAN CAPACITIES (ONE SECTION CONTINUOUS OVER SUPPORT) UPLIFT LOADING

Zee Size	Gage	weight lbs/ft	Loads are in pounds per linear foot							
			braced* 8'-0"	unbraced 8'-0"	braced* 10'-0"	unbraced 10'-0"	braced* 12'-0"	unbraced 12'-0"	braced* 15'-0"	unbraced 15'-0"
3 x 1 1/2	16	1.6	201.4	88.4	129.4	35.4				
3 x 1 1/2	14	1.9	248.1	111.1	160.1	44.1				
4 x 2	16	1.8	257.2	142.2	167.2	57.2				
4 x 2	14	2.1	330.9	183.9	214.9	73.9				
4 x 2 1/8 x 2 3/8	16	2	285	213	186	92				
4 x 2 1/8 x 2 3/8	14	2.4	355.6	262.6	231.6	113.6				
6 x 2 1/8 x 2 3/8	16	2.4	420.6	342.6	288.6	143.6				
6 x 2 1/8 x 2 3/8	14	2.8	574.2	433.2	384.2	182.2				

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. Loads labeled "braced" are for sections supported laterally at both flanges for their full length
4. Loads labeled "unbraced" are for sections without any lateral support
5. All published loads are allowable and have the AISI appropriate safety factors.
6. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling

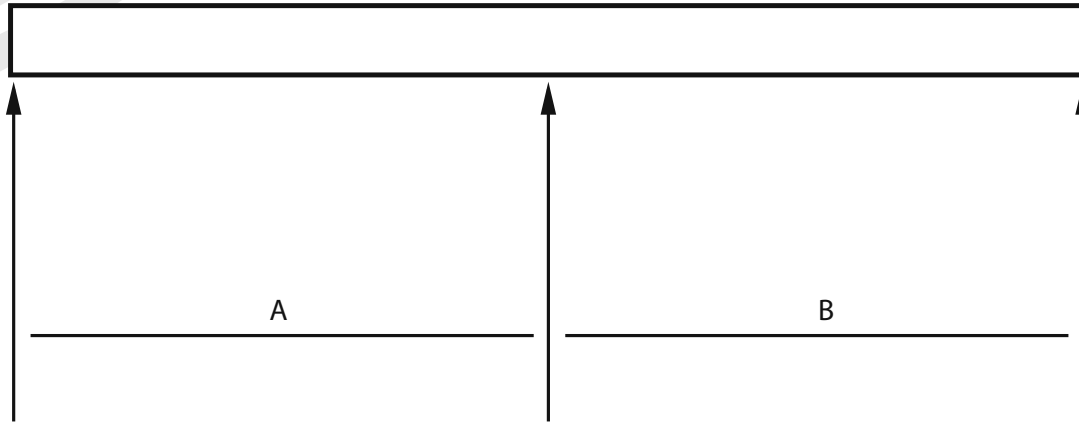


WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

One Section Over Continuous Supports



The values for A & B are equal.

ZEE SECTION TWO SPAN CAPACITIES (ONE SECTION CONTINUOUS OVER SUPPORT) GRAVITY LOADING

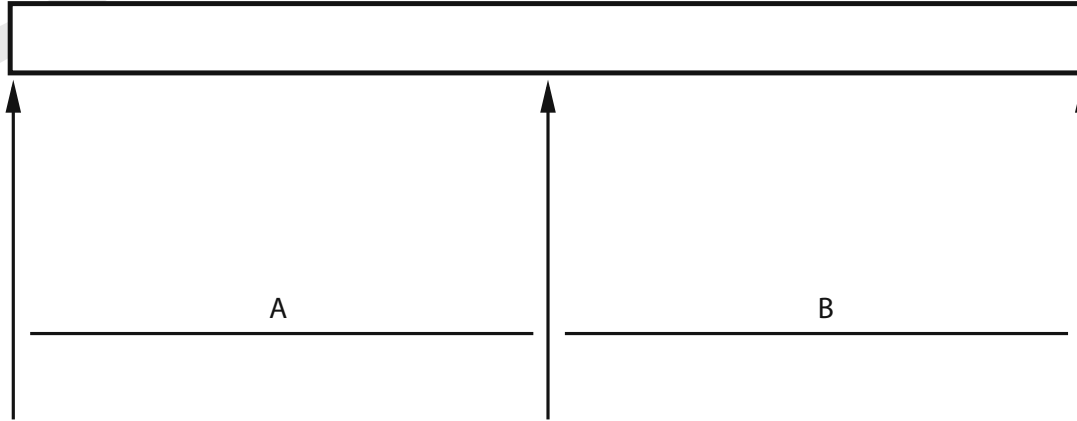
Zee Size	Gage	weight lbs/ft	Loads are in pounds per linear foot							
			braced* 8'-0"	unbraced 8'-0"	braced* 10'-0"	unbraced 10'-0"	braced* 12'-0"	unbraced 12'-0"	braced* 15'-0"	unbraced 15'-0"
3 x 1 1/2	16	1.6	162.4	70.4	104.4	28.4	72.4	12.4	44.4	4.4
3 x 1 1/2	14	1.9	200.1	89.1	128.1	35.1	89.1	16.1	54.1	5.1
4 x 2	16	1.8	209.2	114.2	135.2	45.2	94.2	21.2	59.2	7.2
4 x 2	14	2.1	268.9	145.9	172.9	58.9	120.9	26.9	75.9	9.9
4 x 2 1/8 x 2 3/8	16	2	233	170	151	73	105	34	67	13
4 x 2 1/8 x 2 3/8	14	2.4	288.6	209.6	186.6	90.6	129.6	42.6	82.6	15.6
6 x 2 1/8 x 2 3/8	16	2.4	356.6	273.6	239.6	114.6	171.6	53.6	111.6	20.6
6 x 2 1/8 x 2 3/8	14	2.8	477.2	346.2	315.2	145.2	222.2	68.2	144.2	26.2

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. * Loads labeled "braced" are for sections supported laterally at both flanges for their full length
4. Loads labeled "unbraced" are for sections without any lateral support
5. All published loads are allowable and have the AISI appropriate safety factors.
6. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



Purlin Load Tables

One Section Over Continuous Supports



The values for A & B are equal.

ZEE SECTION TWO SPAN CAPACITIES (ONE SECTION CONTINUOUS OVER SUPPORT) UPLIFT LOADING

Zee Size	Gage	weight lbs/ft	Loads are in pounds per linear foot							
			braced* 8'-0"	unbraced 8'-0"	braced* 10'-0"	unbraced 10'-0"	braced* 12'-0"	unbraced 12'-0"	braced* 15'-0"	unbraced 15'-0"
3 x 1 1/2	16	1.6	162.4	70.4	104.4	28.4	72.4	12.4	45.4	4.4
3 x 1 1/2	14	1.9	200.1	89.1	128.1	35.1	89.1	16.1	57.1	5.1
4 x 2	16	1.8	209.2	114.2	135.2	45.2	94.2	21.2	60.2	7.2
4 x 2	14	2.1	268.9	145.9	172.9	58.9	120.9	26.9	76.9	9.9
4 x 2 1/8 x 2 3/8	16	2	232	170	151	73	105	34	67	13
4 x 2 1/8 x 2 3/8	14	2.4	288.6	209.6	186.6	90.6	129.6	42.6	82.6	15.6
6 x 2 1/8 x 2 3/8	16	2.4	356.6	273.6	239.6	114.6	171.6	53.6	111.6	20.6
6 x 2 1/8 x 2 3/8	14	2.8	477.2	346.2	315.2	145.2	222.2	68.2	144.2	26.2

1. Capacities are total uniformly distributed loads without axial loading.
2. The weight of the section HAS been subtracted from loads
3. Loads labeled "braced" are for sections supported laterally at both flanges for their full length
4. Loads labeled "unbraced" are for sections without any lateral support
5. All published loads are allowable and have the AISI appropriate safety factors.
6. If the sections bear directly on the supports, without any web clips or plates, then the section must be checked for web crippling



WHIRLWIND BUILDING COMPONENTS

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Purlin Load Tables

Notes



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(800) 324-9992 U.S. Wats
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WHIRLWIND BUILDING COMPONENTS:

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8234 HANSEN ROAD
HOUSTON, TX 77075
(713) 946-7140 Houston
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(770) 739-8339 Lithia Springs
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(866) 922-2216 U.S. Wats
(209) 858-6799 Fax

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