

Product Range

Zed Purlin

Purlin Sleeve System

Anti-Sag Rods

Eaves Beam

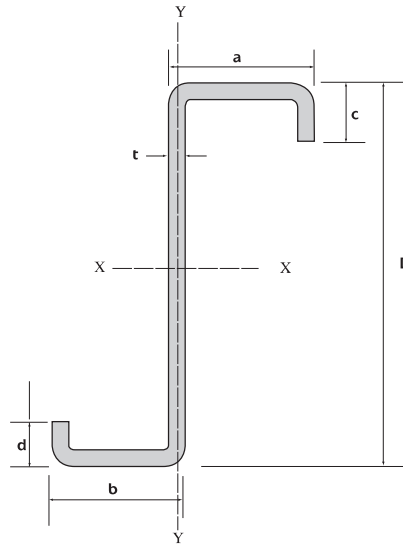
Tie Wires and Side Rail Support

Cee Side Rail

Side Rail Butt System

Zed Purlin Side Rail

Zed Section Properties

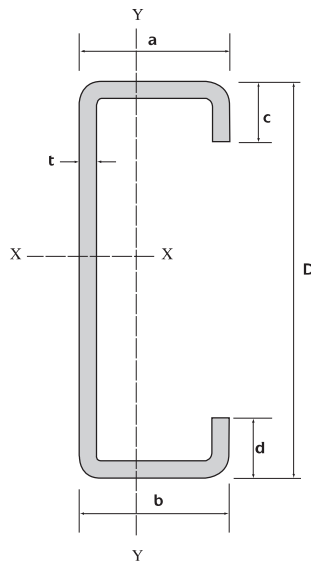


Section Dimensions and Properties - Metric

Section Ref	Depth	Thick-ness	Top Flange	Bottom Flange	Top Lip	Bottom Lip	Wt/m.	Area	Second Moment of Area		Section Modulus		Radius of Gyration		Moment Capacity	
									Major Axis I _{xx}	Minor Axis I _{yy}	Major Axis Z _{xx}	Minor Axis Z _{yy}	Major Axis r _{gx}	Minor Axis r _{gy}	Major Axis M _{cx}	Minor Axis M _{cy}
	D mm	t mm	a mm	b mm	c mm	d mm	Kg/m	cm ²	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm	kNm	kNm
PI21-16	121	1.6	55	50	18	16	3.19	4.06	94.56	27.59	15.25	5.26	4.83	2.61	6.68	2.24
PI40-14	140	1.4	55	50	18	16	3.00	3.83	116.82	24.46	16.3	4.64	5.3	2.54	6.7	2.11
PI40-16	140	1.6	55	50	18	16	3.42	4.36	132.67	27.6	18.51	5.25	5.52	2.52	7.85	2.17
PI40-18	140	1.8	55	50	18	16	3.84	4.89	148.32	30.65	20.7	5.84	5.51	2.50	9.19	2.48
PI40-20	140	2	55	50	18	16	4.25	5.42	163.75	33.62	22.85	6.42	5.50	2.49	10.45	2.78
PI40-25	140	2.5	55	50	18	16	5.28	6.73	201.45	40.68	28.11	7.8	5.47	2.46	13.44	3.49
PI77-14	177	1.4	55	50	18	16	3.41	4.35	202.35	24.47	22.39	4.63	6.82	2.37	8.30	1.72
PI77-16	177	1.6	55	50	18	16	3.89	4.95	229.99	27.61	25.45	5.23	6.81	2.36	10.15	2.03
PI77-18	177	1.8	55	50	18	16	4.36	5.56	257.31	30.67	28.47	5.82	6.80	2.35	11.93	2.34
PI77-20	177	2	55	50	18	16	4.84	6.16	284.32	33.64	31.46	6.4	6.79	2.34	13.63	2.64
PI77-25	177	2.5	55	50	18	16	6.01	7.65	350.48	40.7	38.77	7.77	6.77	2.31	17.72	3.36
P200-14	200	1.4	61	55	17	17	3.78	4.82	285.53	31.65	28.07	5.36	7.70	2.56	9.59	1.89
P200-16	200	1.6	61	55	17	17	4.32	5.5	324.7	35.75	31.92	6.07	7.69	2.55	11.91	2.26
P200-18	200	1.8	61	55	17	17	4.84	6.17	363.47	39.74	35.73	6.75	7.68	2.54	14.17	2.62
P200-20	200	2	61	55	17	17	5.37	6.84	401.84	43.64	39.5	7.43	7.66	2.53	16.35	2.97
P200-25	200	2.5	61	55	17	17	6.67	8.5	496.04	52.94	48.75	9.05	7.64	2.50	21.54	3.82
P235-14	235	1.4	65	60	20	18	4.31	5.49	441.39	40.55	36.94	6.44	8.96	2.72	11.52	2.10
P235-16	235	1.6	65	60	20	18	4.92	6.27	502.24	45.84	42.03	7.29	8.95	2.70	14.54	2.55
P235-18	235	1.8	65	60	20	18	5.52	7.03	562.55	51.01	47.08	8.13	8.94	2.69	17.51	2.98
P235-20	235	2	65	60	20	18	6.12	7.8	622.32	56.06	52.08	8.94	8.93	2.68	20.41	3.41
P235-25	235	2.5	65	60	20	18	7.61	9.7	769.37	68.18	64.38	10.92	8.91	2.65	27.32	4.44
P265-14	265	1.4	65	60	20	18	4.64	5.91	587.81	40.55	43.67	6.43	9.97	2.62	12.82	1.94
P265-16	265	1.6	65	60	20	18	5.3	6.75	669.04	45.85	49.71	7.28	9.96	2.61	16.30	2.39
P265-18	265	1.8	65	60	20	18	5.95	7.57	749.6	51.02	55.69	8.11	9.95	2.60	19.74	2.83
P265-20	265	2	65	60	20	18	6.59	8.4	829.48	56.07	61.62	8.93	9.94	2.58	23.11	3.26
P265-25	265	2.5	65	60	20	18	8.2	10.45	1026.25	68.19	76.24	10.9	9.91	2.55	31.22	4.29

All sections are manufactured from pre-hot dipped galvanised steel coil to BS EN 10346 with a minimum yield strength of 450 N/mm² and Z275 coating.

Cee Section Properties



Section Dimensions and Properties - Metric

Section Ref	Depth	Thick-ness	Top Flange	Bottom Flange	Top Lip	Bottom Lip	Wt/m.	Area	Second Moment of Area		Section Modulus		Radius of Gyration		Moment Capacity	
									Major Axis I _{xx}	Minor Axis I _{yy}	Major Axis Z _{xx}	Minor Axis Z _{yy}	Major Axis r _{gx}	Minor Axis r _{gy}	Major Axis M _{cx}	Minor Axis M _{cy}
	D mm	t mm	a mm	b mm	c mm	d mm	Kg/m	cm ²	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm	kNm	kNm
CI40-14	140	1.4	65	65	15	15	3.24	4.12	132.12	23.86	18.87	5.37	5.66	2.41	6.61	2.40
CI40-16	140	1.6	65	65	15	15	3.69	4.70	150.10	26.99	21.44	6.08	5.65	2.40	8.20	2.73
CI40-18	140	1.8	65	65	15	15	4.14	5.27	167.86	30.05	23.98	6.77	5.64	2.39	9.77	3.05
CI40-20	140	2	65	65	15	15	4.58	5.84	185.40	33.05	26.49	7.45	5.63	2.38	11.27	3.35
CI40-25	140	2.5	65	65	15	15	5.69	7.25	228.29	40.27	32.61	9.08	5.61	2.36	14.74	4.09
CI77-14	177	1.4	65	65	15	15	3.64	4.64	226.56	25.68	25.60	5.51	6.99	2.35	8.50	2.47
CI77-16	177	1.6	65	65	15	15	4.15	5.29	257.59	29.05	29.11	6.24	6.98	2.34	10.59	2.80
CI77-18	177	1.8	65	65	15	15	4.66	5.94	288.28	32.36	32.57	6.95	6.97	2.33	12.65	3.13
CI77-20	177	2	65	65	15	15	5.17	6.58	318.64	35.59	36.00	7.64	6.96	2.33	14.65	3.44
CI77-25	177	2.5	65	65	15	15	6.42	8.18	393.11	43.36	44.42	9.31	6.93	2.30	19.32	4.19
C200-14	200	1.4	65	65	15	15	3.89	4.96	301.05	26.62	30.11	5.58	7.79	2.32	9.66	2.50
C200-16	200	1.6	65	65	15	15	4.44	5.66	342.39	30.12	34.24	6.31	7.78	2.31	12.07	2.84
C200-18	200	1.8	65	65	15	15	4.99	6.35	383.33	33.54	38.33	7.03	7.77	2.30	14.45	3.16
C200-20	200	2	65	65	15	15	5.53	7.04	423.85	36.89	42.38	7.73	7.76	2.29	16.76	3.48
C200-25	200	2.5	65	65	15	15	6.87	8.75	523.37	44.95	52.34	9.43	7.73	2.27	22.23	4.24
C235-14	235	1.4	65	65	15	15	4.28	5.45	439.87	27.84	37.44	5.65	8.98	2.26	11.31	2.53
C235-16	235	1.6	65	65	15	15	4.88	6.22	500.49	31.50	42.59	6.40	8.97	2.25	14.23	2.88
C235-18	235	1.8	65	65	15	15	5.48	6.98	560.56	35.08	47.71	7.13	8.96	2.24	17.12	3.21
C235-20	235	2	65	65	15	15	6.08	7.74	620.08	38.58	52.77	7.84	8.95	2.23	19.95	3.53
C235-25	235	2.5	65	65	15	15	7.56	9.63	766.50	47.00	65.23	9.56	8.92	2.21	26.69	4.30
C265-14	265	1.4	65	65	15	15	4.61	5.87	585.32	28.73	44.17	5.71	9.98	2.21	12.58	2.56
C265-16	265	1.6	65	65	15	15	5.26	6.70	666.18	32.50	50.28	6.46	9.97	2.20	15.96	2.91
C265-18	265	1.8	65	65	15	15	5.90	7.52	746.35	36.19	56.33	7.20	9.96	2.19	19.32	3.24
C265-20	265	2	65	65	15	15	6.55	8.34	825.85	39.80	62.33	7.92	9.95	2.18	22.61	3.56
C265-25	265	2.5	65	65	15	15	8.14	10.38	1021.62	48.48	77.10	9.66	9.92	2.16	30.53	4.35

All sections are manufactured from pre-hot dipped galvanised steel coil to BS EN 10346 with a minimum yield strength of 450 N/mm² and Z275 coating.

Zed/Cee Systems

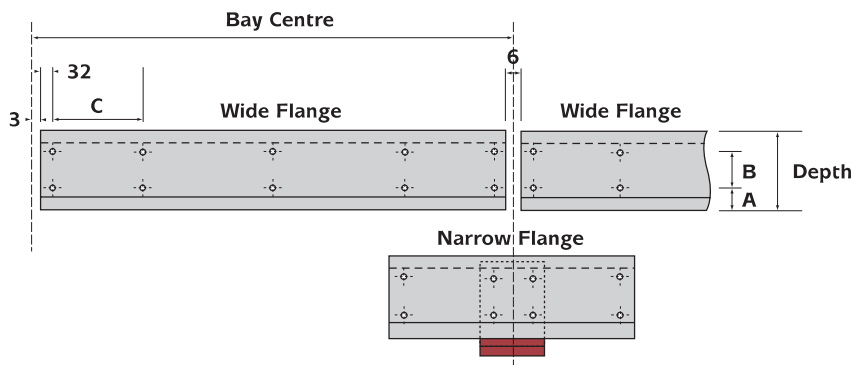
Details and Dimension

Holes and dimensions are for roof purlins and side rails, all dimensions in millimetres.

All holes 18mm for 16mm dia. bolts. Clearance joint between purlins/side rails 6mm.

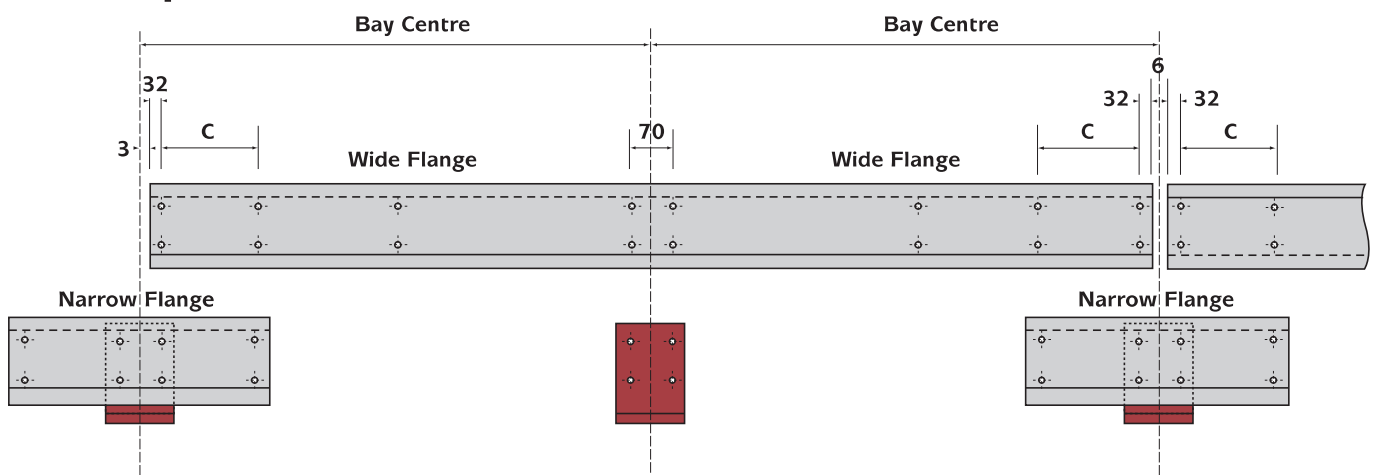
'Easy fix' anti-sag rods may be required to give additional stability for spans over 4.5 metres.

Single Span

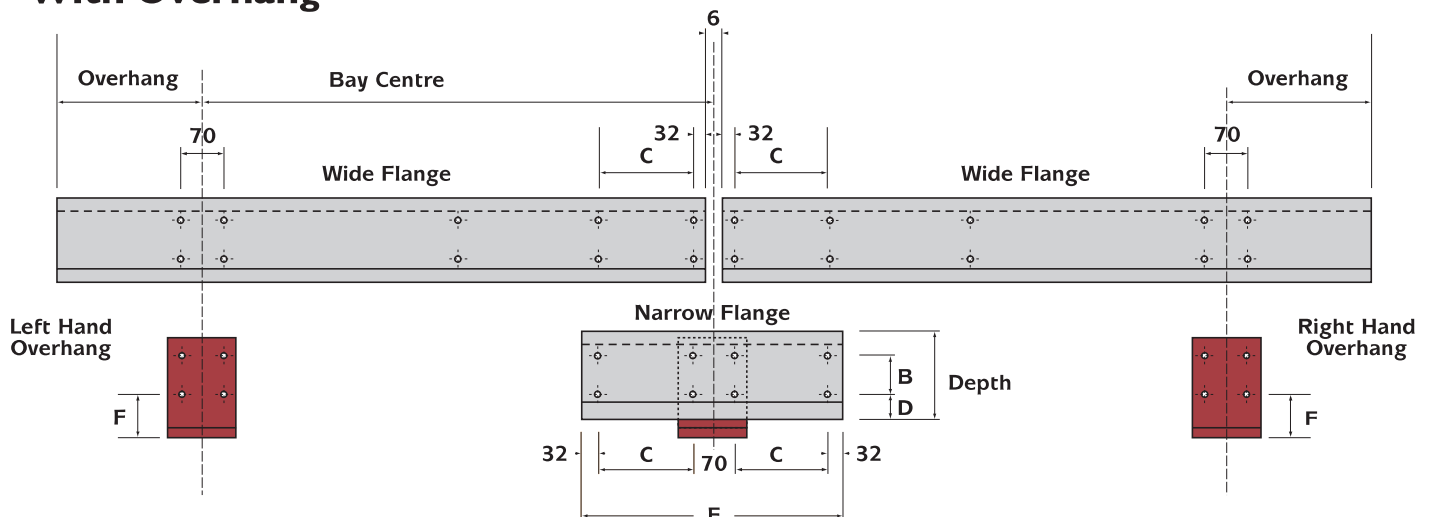


Sleeved System Detailing Dimensions in mm						
Depth	A	B	C	D	E	F
121	40	40	150	43	434	50
140	40	60	208	43	550	50
177	40	80	208	43	550	50
200	40	116	208	43	550	50
235	43	146	410	46	954	50
265	43	176	461	46	1054	50

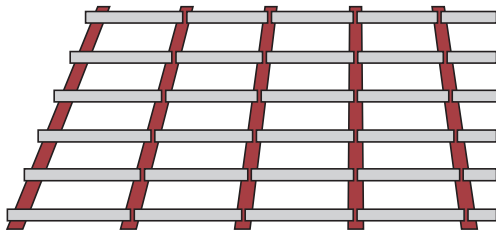
Double Span



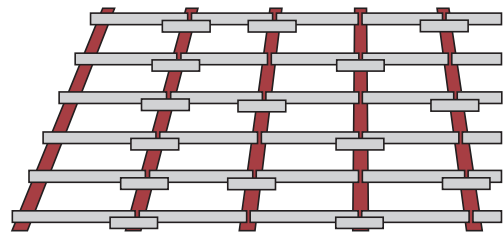
With Overhang



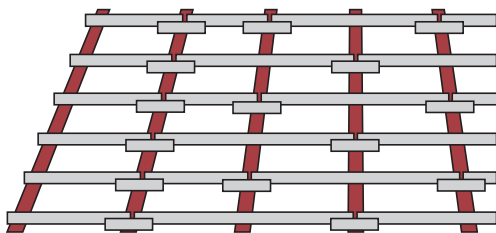
Typical Purlin Layouts



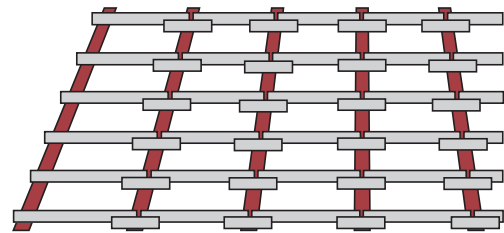
Butt purlin arrangement



Staggered sleeve arrangement



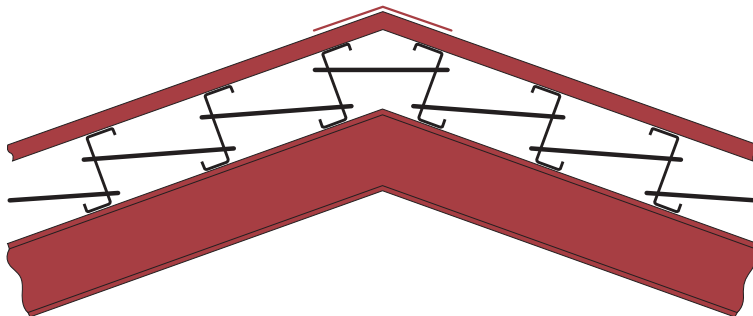
Double span with sleeves



Fully sleeved arrangement

Anti-Sag Rod Fixings

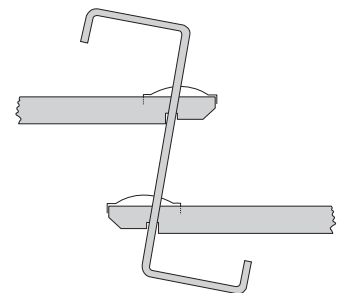
'Easy Fix' anti-sag rods form an integral part of the roofing system and fulfil important functions in stabilising the purlins during erection and fixing of the roof cladding and subsequently under loading, particularly wind suction.



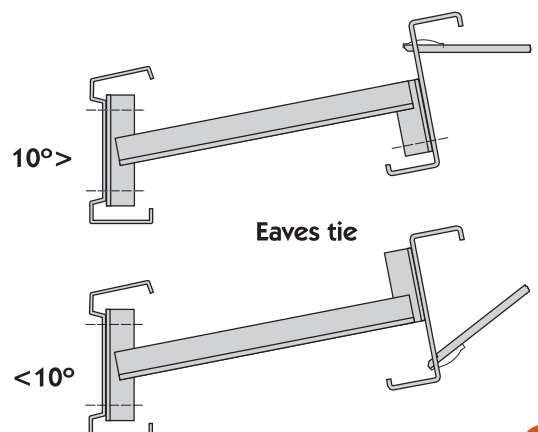
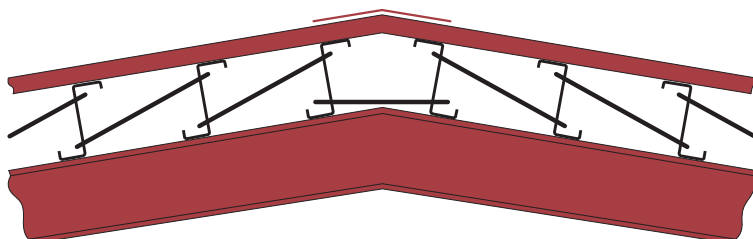
For roof slopes of 10° or more: – Sag rods should be fixed continuously over the apex and fixed from the bottom hole to top hole down the slope.

Below 10° pitch fixing is reversed: – Where the slope is below 10° then the sag rods are fixed as shown below.

We also recommend that the lowest purlin is connected to the eaves structural member.

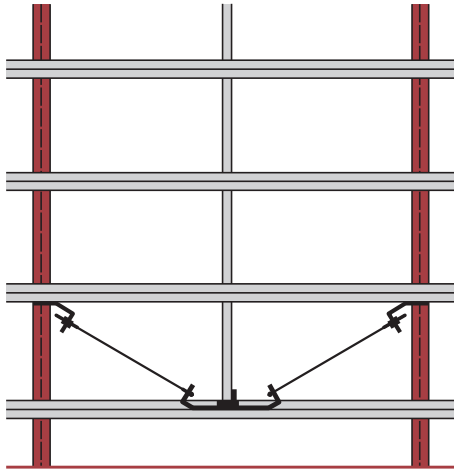


Easy-fix anti-sag rods

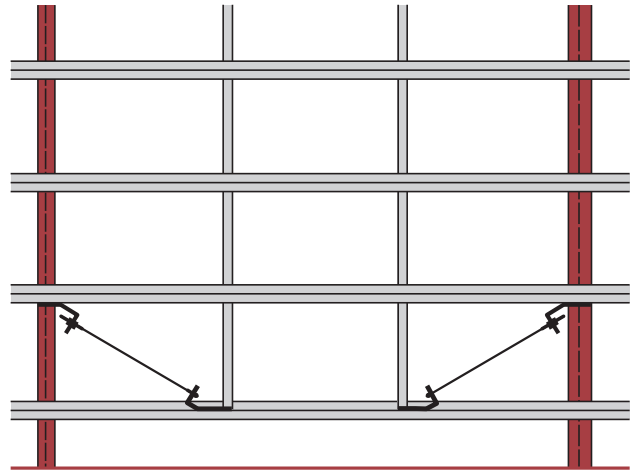


Eaves tie

Side Rail Restraint Systems

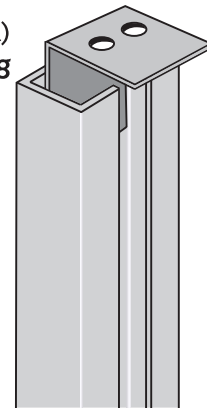


Spans up to 6.1 metres
Single side rail support arrangement

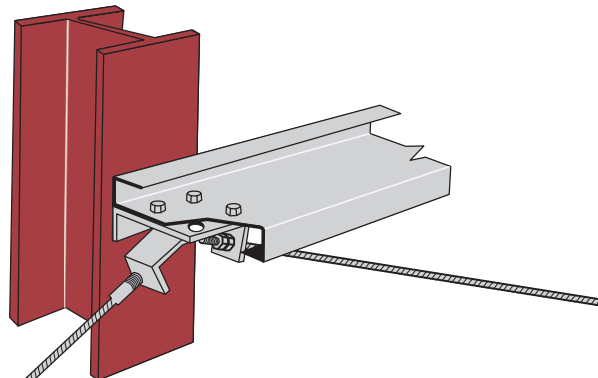


Spans over 6.1 metres
Double side rail support arrangement

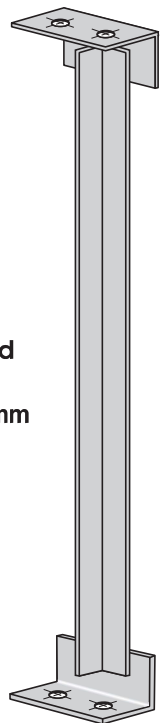
Panel Jointing Rail (PJR)
for Horizontal Cladding
Support System



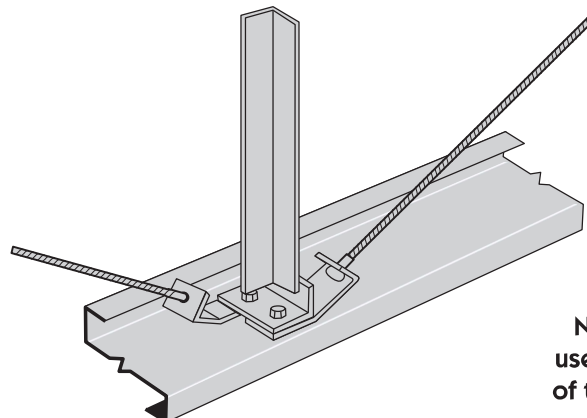
Diagonal tie wires
fixings arrangement



Side rail
support
constructed
from
45 x 45 x 2mm
angle



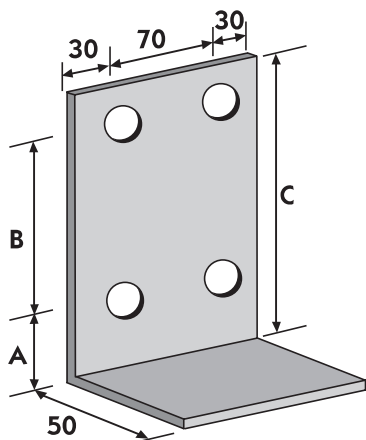
Designed with a 75mm
adjustment on length
and an angular
movement from 20° up
to a maximum of 60°



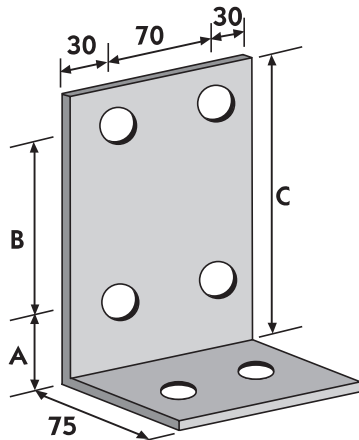
NOTE: When side rail supports are
used at a mid point the overall length
of the rail should be reduced by 6mm
(Brackets fitted under side rail)

Cleider Rails: Available in 45x45x2mm, 50x50x16mm, 50x50x2mm, 70x70x2mm and 100x100x2mm.
Supplied in 6 metre lengths as standard

Cleats



Weld On Cleat

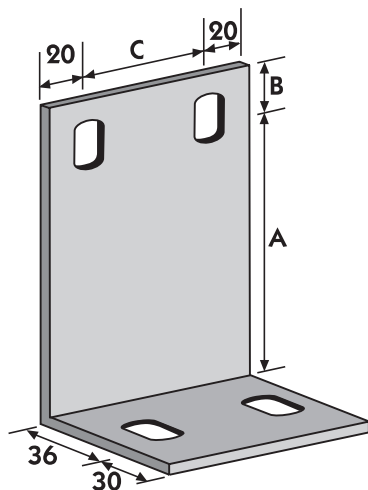
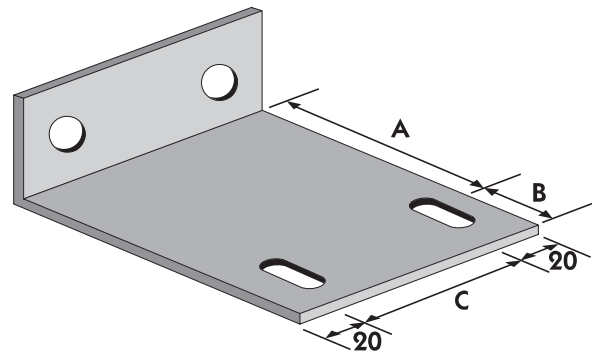


Bolt On Cleat

	Bolt-On Cleat Prefix: BC			Weld-On Cleat Prefix: WC		
Reference:	121	140	177	200	235	265
Thickness	6	6	6	6	8	8
Dimension A	50	50	50	50	50	50
Dimension B	40	60	80	116	146	176
Dimension C	120	140	160	196	226	256
Hole Diameter	18	18	18	18	18	18

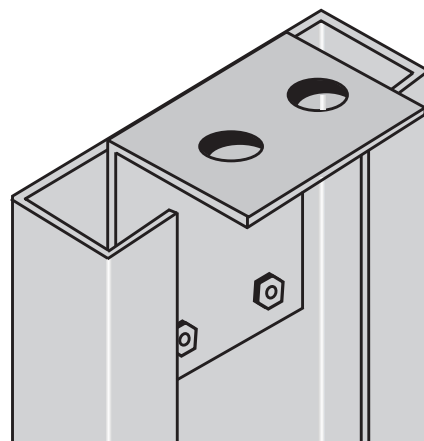
Weld on cleats are supplied plain finish
Bolt on cleats are supplied Hot Dipped Galvanised

Inset Cleat Prefix: IC			Finish: HDG			
Reference:	121	140	177	200	235	265
Thickness	6	6	6	6	6	6
Dimension A	120	120	120	120	120	120
Dimension B	40	40	40	40	40	40
Dimension C	40	60	80	116	146	176
Hole Diameter	18	18	18	18	18	18



Trimmer Cleat Prefix: TC			Finish: Pre Galv			
Reference:	121	140	177	200	235	265
Thickness	3	3	3	3	3	3
Dimension A	110	110	110	110	110	110
Dimension B	30	30	30	30	30	30
Dimension C	40	60	80	116	146	176
Hole Diameter	18	18	18	18	18	18

Non-standard cleats available on request.



Zed Purlin Sleeved Systems

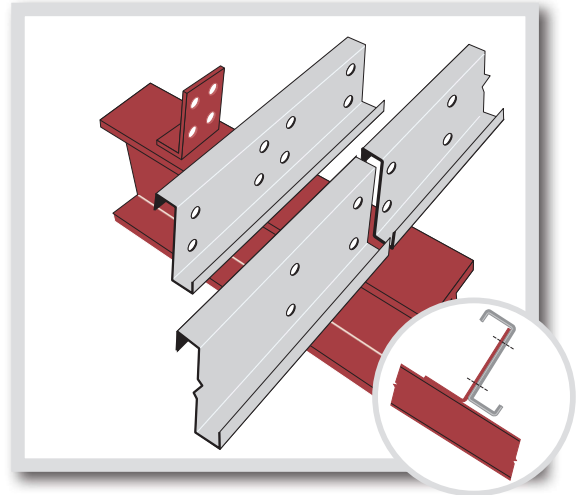
Grade S450

Performance

The performance of the systems shown in the tables below have been derived by calculation in accordance with BS EN 1993-1-3:2006. Purlin load tables are valid up to and including 25° roof slopes.

Load Factors

Loading	Factor
Dead load	1.40
Dead load restraining uplift or overturning	1.00
Dead load acting with wind and imposed loads combined	1.20
Imposed load	1.60
Imposed load acting with wind load	1.20
Wind load	1.40
Wind load acting with imposed load	1.20
Forces due to temperature effects	1.20
Drifting Snow	1.05



Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	PI21-16	12.36	3.53	2.94	2.57	2.35	2.11	1.96	1.77	1.41
	PI40-14	13.07	3.73	3.11	2.72	2.49	2.23	2.07	1.87	1.49
	PI40-16	15.91	4.55	3.79	3.31	3.03	2.71	2.53	2.27	1.82
	PI40-18	18.62	5.32	4.43	3.87	3.55	3.18	2.95	2.66	2.13
	PI77-14	16.82	4.81	4.00	3.50	3.20	2.87	2.67	2.40	1.92
	PI77-16	20.58	5.88	4.90	4.28	3.92	3.51	3.27	2.94	2.35
4.0m	PI21-16	9.42	2.36	1.96	1.71	1.57	1.41	1.31	1.18	0.94
	PI40-14	11.41	2.85	2.38	2.07	1.90	1.70	1.58	1.43	1.14
	PI40-16	13.26	3.32	2.76	2.41	2.21	1.98	1.84	1.66	1.33
	PI40-18	14.83	3.71	3.09	2.70	2.47	2.21	2.06	1.85	1.48
	PI40-20	16.37	4.09	3.41	2.98	2.73	2.44	2.27	2.05	1.64
	PI77-14	14.69	3.67	3.06	2.67	2.45	2.19	2.04	1.84	1.47
4.5m	PI77-16	17.97	4.49	3.74	3.27	2.99	2.68	2.50	2.25	1.80
	PI21-16	7.40	1.65	1.37	1.20	1.10	0.98	0.91	0.82	0.66
	PI40-14	9.19	2.04	1.70	1.49	1.36	1.22	1.13	1.02	0.82
	PI40-16	10.44	2.32	1.93	1.69	1.55	1.38	1.29	1.16	0.93
	PI40-18	11.66	2.59	2.16	1.89	1.73	1.55	1.44	1.30	1.04
	PI40-20	12.88	2.86	2.38	2.08	1.91	1.71	1.59	1.43	1.14
5.0m	PI77-14	13.02	2.89	2.41	2.10	1.93	1.73	1.61	1.45	1.16
	PI77-16	15.94	3.54	2.95	2.58	2.36	2.11	1.97	1.77	1.42
	PI21-16	5.96	1.19	0.99	0.87	0.79	0.71	0.66	0.60	0.48
	PI40-14	7.40	1.48	1.23	1.08	0.99	0.88	0.82	0.74	0.59
	PI40-16	8.41	1.68	1.40	1.22	1.12	1.00	0.93	0.84	0.67
	PI40-18	9.40	1.88	1.57	1.37	1.25	1.12	1.04	0.94	0.75
5.5m	PI40-20	10.37	2.07	1.73	1.51	1.38	1.24	1.15	1.04	0.83
	PI77-14	11.69	2.34	1.95	1.70	1.56	1.40	1.30	1.17	0.94
	PI77-16	14.31	2.86	2.38	2.08	1.91	1.71	1.59	1.43	1.14
	PI77-18	16.42	3.28	2.74	2.39	2.19	1.96	1.82	1.64	1.31
	PI77-20	18.14	3.63	3.02	2.64	2.42	2.17	2.02	1.81	1.45
	P200-18	20.00	4.00	3.33	2.91	2.67	2.39	2.22	2.00	1.60
6.0m	P200-20	23.10	4.62	3.85	3.36	3.08	2.76	2.57	2.31	1.85
	PI40-16	6.90	1.25	1.05	0.91	0.84	0.75	0.70	0.63	0.50
	PI40-18	7.71	1.40	1.17	1.02	0.94	0.84	0.78	0.70	0.56
	PI40-20	8.52	1.55	1.29	1.13	1.03	0.92	0.86	0.77	0.62
	PI40-25	10.48	1.90	1.59	1.39	1.27	1.14	1.06	0.95	0.76
	PI77-14	10.59	1.93	1.61	1.40	1.28	1.15	1.07	0.96	0.77
6.5m	PI77-16	12.07	2.20	1.83	1.60	1.46	1.31	1.22	1.10	0.88
	PI77-18	13.51	2.46	2.05	1.79	1.64	1.47	1.36	1.23	0.98
	PI77-20	14.93	2.71	2.26	1.97	1.81	1.62	1.51	1.36	1.09
	P200-16	15.23	2.77	2.31	2.01	1.85	1.65	1.54	1.38	1.11
	P200-18	18.14	3.30	2.75	2.40	2.20	1.97	1.83	1.65	1.32
	P200-20	20.95	3.81	3.17	2.77	2.54	2.27	2.12	1.90	1.52
7.0m	PI40-20	7.10	1.18	0.99	0.86	0.79	0.71	0.66	0.59	0.47
	PI40-25	8.73	1.46	1.21	1.06	0.97	0.87	0.81	0.73	0.58
	PI77-14	8.88	1.48	1.23	1.08	0.99	0.88	0.82	0.74	0.59
	PI77-16	10.09	1.68	1.40	1.22	1.12	1.00	0.93	0.84	0.67
	PI77-18	11.29	1.88	1.57	1.37	1.25	1.12	1.05	0.94	0.75
	PI77-20	12.48	2.08	1.73	1.51	1.39	1.24	1.16	1.04	0.83
7.5m	PI77-25	15.38	2.56	2.14	1.86	1.71	1.53	1.42	1.28	1.03

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Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
6.0m cont'd	P200-16	13.92	2.32	1.93	1.69	1.55	1.39	1.29	1.16	0.93
	P200-18	16.03	2.67	2.23	1.94	1.78	1.59	1.48	1.34	1.07
	P200-20	17.72	2.95	2.46	2.15	1.97	1.76	1.64	1.48	1.18
	P235-16	17.02	2.84	2.36	2.06	1.89	1.69	1.58	1.42	1.13
	P235-18	20.52	3.42	2.85	2.49	2.28	2.04	1.90	1.71	1.37
6.5m	P177-18	9.56	1.47	1.23	1.07	0.98	0.88	0.82	0.74	0.59
	P177-20	10.56	1.63	1.35	1.18	1.08	0.97	0.90	0.81	0.65
	P177-25	13.02	2.00	1.67	1.46	1.34	1.20	1.11	1.00	0.80
	P200-16	12.14	1.87	1.56	1.36	1.25	1.12	1.04	0.93	0.75
	P200-18	13.59	2.09	1.74	1.52	1.39	1.25	1.16	1.05	0.84
	P200-20	15.03	2.31	1.93	1.68	1.54	1.38	1.28	1.16	0.92
	P200-25	18.54	2.85	2.38	2.07	1.90	1.70	1.59	1.43	1.14
	P235-16	15.66	2.41	2.01	1.75	1.61	1.44	1.34	1.20	0.96
	P235-18	18.89	2.91	2.42	2.11	1.94	1.74	1.61	1.45	1.16
	P235-20	22.04	3.39	2.83	2.47	2.26	2.02	1.88	1.70	1.36
	P265-16	17.57	2.70	2.25	1.97	1.80	1.61	1.50	1.35	1.08
	P265-18	21.31	3.28	2.73	2.38	2.19	1.96	1.82	1.64	1.31
7.0m	P200-16	10.41	1.49	1.24	1.08	0.99	0.89	0.83	0.74	0.59
	P200-18	11.65	1.66	1.39	1.21	1.11	0.99	0.92	0.83	0.67
	P200-20	12.88	1.84	1.53	1.34	1.23	1.10	1.02	0.92	0.74
	P200-25	15.90	2.27	1.89	1.65	1.51	1.36	1.26	1.14	0.91
	P235-16	14.49	2.07	1.73	1.51	1.38	1.24	1.15	1.04	0.83
	P235-18	17.49	2.50	2.08	1.82	1.67	1.49	1.39	1.25	1.00
	P235-20	20.10	2.87	2.39	2.09	1.91	1.71	1.60	1.44	1.15
	P235-25	24.85	3.55	2.96	2.58	2.37	2.12	1.97	1.77	1.42
	P265-16	16.26	2.32	1.94	1.69	1.55	1.39	1.29	1.16	0.93
	P265-18	19.74	2.82	2.35	2.05	1.88	1.68	1.57	1.41	1.13
7.5m	P265-20	23.13	3.30	2.75	2.40	2.20	1.97	1.84	1.65	1.32
	P200-18	10.08	1.34	1.12	0.98	0.90	0.80	0.75	0.67	0.54
	P200-20	11.15	1.49	1.24	1.08	0.99	0.89	0.83	0.74	0.59
	P200-25	13.76	1.83	1.53	1.33	1.22	1.10	1.02	0.92	0.73
	P235-16	13.48	1.80	1.50	1.31	1.20	1.07	1.00	0.90	0.72
	P235-18	15.75	2.10	1.75	1.53	1.40	1.25	1.17	1.05	0.84
	P235-20	17.43	2.32	1.94	1.69	1.55	1.39	1.29	1.16	0.93
	P235-25	21.54	2.87	2.39	2.09	1.91	1.71	1.60	1.44	1.14
	P265-16	15.13	2.02	1.68	1.47	1.34	1.20	1.12	1.01	0.81
	P265-18	18.36	2.45	2.04	1.78	1.63	1.46	1.36	1.22	0.98
8.0m	P265-20	21.53	2.87	2.39	2.09	1.91	1.71	1.59	1.44	1.15
	P200-25	12.00	1.50	1.25	1.09	1.00	0.90	0.83	0.75	0.60
	P235-16	12.29	1.54	1.28	1.12	1.02	0.92	0.85	0.77	0.61
	P235-18	13.77	1.72	1.43	1.25	1.15	1.03	0.96	0.86	0.69
	P235-20	15.23	1.90	1.59	1.38	1.27	1.14	1.06	0.95	0.76
	P235-25	18.83	2.35	1.96	1.71	1.57	1.40	1.31	1.18	0.94
	P265-16	14.13	1.77	1.47	1.28	1.18	1.05	0.98	0.88	0.71
	P265-18	17.16	2.14	1.79	1.56	1.43	1.28	1.19	1.07	0.86
	P265-20	20.12	2.51	2.10	1.83	1.68	1.50	1.40	1.26	1.01
	P265-23	23.34	2.92	2.43	2.12	1.95	1.74	1.62	1.46	1.17
8.5m	P265-25	25.27	3.16	2.63	2.30	2.11	1.89	1.75	1.58	1.26
	P235-18	12.12	1.43	1.19	1.04	0.95	0.85	0.79	0.71	0.57
	P235-20	13.41	1.58	1.31	1.15	1.05	0.94	0.88	0.79	0.63
	P235-25	16.57	1.95	1.62	1.42	1.30	1.16	1.08	0.97	0.78
	P265-16	13.25	1.56	1.30	1.13	1.04	0.93	0.87	0.78	0.62
	P265-18	16.09	1.89	1.58	1.38	1.26	1.13	1.05	0.95	0.76
	P265-20	18.00	2.12	1.76	1.54	1.41	1.26	1.18	1.06	0.85
9.0m	P265-25	22.27	2.62	2.18	1.91	1.75	1.56	1.46	1.31	1.05
	P235-20	11.87	1.32	1.10	0.96	0.88	0.79	0.73	0.66	0.53
	P235-25	14.68	1.63	1.36	1.19	1.09	0.97	0.91	0.82	0.65
	P265-16	12.47	1.39	1.15	1.01	0.92	0.83	0.77	0.69	0.55
	P265-18	14.43	1.60	1.34	1.17	1.07	0.96	0.89	0.80	0.64
	P265-20	15.96	1.77	1.48	1.29	1.18	1.06	0.99	0.89	0.71
9.5m	P265-25	19.75	2.19	1.83	1.60	1.46	1.31	1.22	1.10	0.88
	P265-18	12.87	1.35	1.13	0.98	0.90	0.81	0.75	0.68	0.54
	P265-20	14.24	1.50	1.25	1.09	1.00	0.89	0.83	0.75	0.60
10.0m	P265-25	17.61	1.85	1.54	1.35	1.24	1.11	1.03	0.93	0.74
	P265-20	12.76	1.28	1.06	0.93	0.85	0.76	0.71	0.64	0.51
	P265-25	15.78	1.58	1.31	1.15	1.05	0.94	0.88	0.79	0.63

Zed Purlin Butt Systems

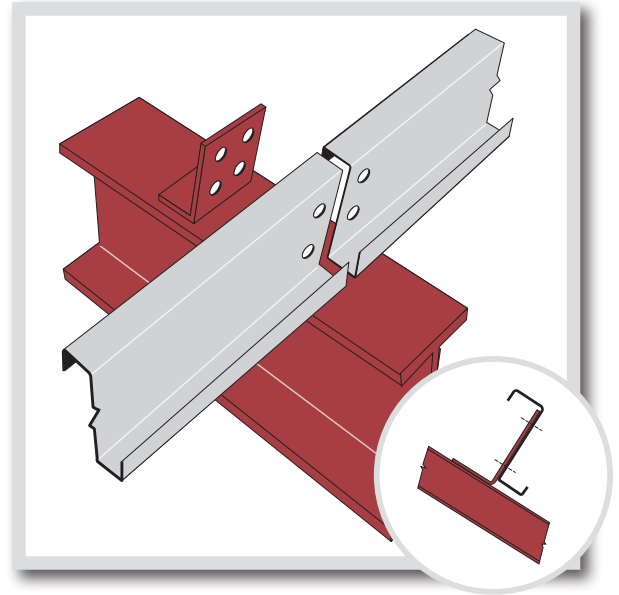
Grade S450

Performance

The performance of the systems shown in the table below have been derived by calculation in accordance with BS EN 1993-1-3:2006. Purlin load tables are valid up to and including 25° roof slopes.

Load Factors

Loading	Factor
Dead load	1.40
Dead load restraining uplift or overturning	1.00
Dead load acting with wind and imposed loads combined	1.20
Imposed load	1.60
Imposed load acting with wind load	1.20
Wind load	1.40
Wind load acting with imposed load	1.20
Forces due to temperature effects	1.20
Drifting Snow	1.05



Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	PI21-16	6.64	1.90	1.58	1.38	1.27	1.13	1.05	0.95	0.76
	PI40-14	8.24	2.35	1.96	1.71	1.57	1.41	1.31	1.18	0.94
	PI40-16	9.36	2.67	2.23	1.94	1.78	1.60	1.49	1.34	1.07
	PI40-18	10.46	2.99	2.49	2.17	1.99	1.78	1.66	1.49	1.20
	PI40-20	11.55	3.30	2.75	2.40	2.20	1.97	1.83	1.65	1.32
	PI77-14	13.43	3.84	3.20	2.79	2.56	2.29	2.13	1.92	1.54
	PI77-16	16.29	4.65	3.88	3.38	3.10	2.78	2.59	2.33	1.86
	PI77-18	16.29	4.65	3.88	3.38	3.10	2.78	2.59	2.33	1.86
4.0m	PI21-16	5.04	1.26	1.05	0.92	0.84	0.75	0.70	0.63	0.50
	PI40-14	6.27	1.57	1.31	1.14	1.04	0.94	0.87	0.78	0.63
	PI40-16	7.12	1.78	1.48	1.29	1.19	1.06	0.99	0.89	0.71
	PI40-18	7.96	1.99	1.66	1.45	1.33	1.19	1.11	0.99	0.80
	PI40-20	8.78	2.20	1.83	1.60	1.46	1.31	1.22	1.10	0.88
	PI77-14	10.93	2.73	2.28	1.99	1.82	1.63	1.52	1.37	1.09
	PI77-16	12.42	3.11	2.59	2.26	2.07	1.85	1.73	1.55	1.24
	PI77-18	13.90	3.47	2.89	2.53	2.32	2.07	1.93	1.74	1.39
4.5m	P200-14	13.55	3.39	2.82	2.46	2.26	2.02	1.88	1.69	1.35
	P200-16	16.84	4.21	3.51	3.06	2.81	2.51	2.34	2.11	1.68
	PI40-16	5.58	1.24	1.03	0.90	0.83	0.74	0.69	0.62	0.50
	PI40-18	6.24	1.39	1.15	1.01	0.92	0.83	0.77	0.69	0.55
	PI40-20	6.89	1.53	1.28	1.11	1.02	0.91	0.85	0.77	0.61
	PI40-25	8.47	1.88	1.57	1.37	1.25	1.12	1.05	0.94	0.75
	PI77-14	8.59	1.91	1.59	1.39	1.27	1.14	1.06	0.95	0.76
	PI77-16	9.76	2.17	1.81	1.58	1.45	1.30	1.21	1.08	0.87
5.0m	PI77-18	10.92	2.43	2.02	1.77	1.62	1.45	1.35	1.21	0.97
	PI77-20	12.07	2.68	2.23	1.95	1.79	1.60	1.49	1.34	1.07
	PI77-25	14.87	3.31	2.75	2.40	2.20	1.97	1.84	1.65	1.32
	P200-14	12.01	2.67	2.22	1.94	1.78	1.59	1.48	1.33	1.07
	P200-16	13.83	3.07	2.56	2.24	2.05	1.84	1.71	1.54	1.23
	P200-18	15.49	3.44	2.87	2.50	2.29	2.05	1.91	1.72	1.38
	P200-20	17.12	3.80	3.17	2.77	2.54	2.27	2.11	1.90	1.52
	PI40-20	5.52	1.10	0.92	0.80	0.74	0.66	0.61	0.55	0.44
5.0m	PI40-25	6.79	1.36	1.13	0.99	0.91	0.81	0.75	0.68	0.54
	PI77-14	6.91	1.38	1.15	1.01	0.92	0.83	0.77	0.69	0.55
	PI77-16	7.86	1.57	1.31	1.14	1.05	0.94	0.87	0.79	0.63
	PI77-18	8.79	1.76	1.46	1.28	1.17	1.05	0.98	0.88	0.70
	PI77-20	9.71	1.94	1.62	1.41	1.29	1.16	1.08	0.97	0.78
	PI77-25	11.97	2.39	1.99	1.74	1.60	1.43	1.33	1.20	0.96
	P200-16	11.15	2.23	1.86	1.62	1.49	1.33	1.24	1.11	0.89
	P200-18	12.48	2.50	2.08	1.82	1.66	1.49	1.39	1.25	1.00
	P200-20	13.80	2.76	2.30	2.01	1.84	1.65	1.53	1.38	1.10

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Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
5.5m	P140-25	5.54	1.01	0.84	0.73	0.67	0.60	0.56	0.50	0.40
	P177-16	6.44	1.17	0.98	0.85	0.78	0.70	0.65	0.59	0.47
	P177-18	7.20	1.31	1.09	0.95	0.87	0.78	0.73	0.65	0.52
	P177-20	7.96	1.45	1.21	1.05	0.96	0.86	0.80	0.72	0.58
	P177-25	9.81	1.78	1.49	1.30	1.19	1.06	0.99	0.89	0.71
	P200-16	9.16	1.66	1.39	1.21	1.11	0.99	0.92	0.83	0.67
	P200-18	10.25	1.86	1.55	1.36	1.24	1.11	1.04	0.93	0.75
	P200-20	11.33	2.06	1.72	1.50	1.37	1.23	1.14	1.03	0.82
	P200-25	13.98	2.54	2.12	1.85	1.69	1.52	1.41	1.27	1.02
6.0m	P177-20	6.62	1.10	0.92	0.80	0.74	0.66	0.61	0.55	0.44
	P177-25	8.16	1.36	1.13	0.99	0.91	0.81	0.76	0.68	0.54
	P200-16	7.64	1.27	1.06	0.93	0.85	0.76	0.71	0.64	0.51
	P200-18	8.55	1.42	1.19	1.04	0.95	0.85	0.79	0.71	0.57
	P200-20	9.45	1.57	1.31	1.15	1.05	0.94	0.87	0.79	0.63
	P200-25	11.66	1.94	1.62	1.41	1.30	1.16	1.08	0.97	0.78
	P235-14	10.47	1.75	1.45	1.27	1.16	1.04	0.97	0.87	0.70
	P235-16	11.91	1.99	1.65	1.44	1.32	1.19	1.10	0.99	0.79
	P235-18	13.34	2.22	1.85	1.62	1.48	1.33	1.24	1.11	0.89
6.5m	P200-18	7.22	1.11	0.93	0.81	0.74	0.66	0.62	0.56	0.44
	P200-20	7.98	1.23	1.02	0.89	0.82	0.73	0.68	0.61	0.49
	P200-25	9.84	1.51	1.26	1.10	1.01	0.90	0.84	0.76	0.61
	P235-14	8.86	1.36	1.14	0.99	0.91	0.81	0.76	0.68	0.55
	P235-16	10.08	1.55	1.29	1.13	1.03	0.93	0.86	0.78	0.62
	P235-18	11.29	1.74	1.45	1.26	1.16	1.04	0.97	0.87	0.70
	P235-20	12.49	1.92	1.60	1.40	1.28	1.15	1.07	0.96	0.77
	P265-16	13.51	2.08	1.73	1.51	1.39	1.24	1.15	1.04	0.83
	P265-18	15.14	2.33	1.94	1.69	1.55	1.39	1.29	1.16	0.93
7.0m	P200-25	8.40	1.20	1.00	0.87	0.80	0.72	0.67	0.60	0.48
	P235-16	8.63	1.23	1.03	0.90	0.82	0.74	0.68	0.62	0.49
	P235-18	9.66	1.38	1.15	1.00	0.92	0.82	0.77	0.69	0.55
	P235-20	10.69	1.53	1.27	1.11	1.02	0.91	0.85	0.76	0.61
	P265-16	11.58	1.65	1.38	1.20	1.10	0.99	0.92	0.83	0.66
	P265-18	12.97	1.85	1.54	1.35	1.24	1.11	1.03	0.93	0.74
	P265-20	14.35	2.05	1.71	1.49	1.37	1.22	1.14	1.03	0.82
7.5m	P235-16	7.45	0.99	0.83	0.72	0.66	0.59	0.55	0.50	0.40
	P235-18	8.34	1.11	0.93	0.81	0.74	0.66	0.62	0.56	0.44
	P235-20	9.23	1.23	1.03	0.89	0.82	0.73	0.68	0.62	0.49
	P235-25	11.40	1.52	1.27	1.11	1.01	0.91	0.84	0.76	0.61
	P265-16	10.01	1.34	1.11	0.97	0.89	0.80	0.74	0.67	0.53
	P265-18	11.22	1.50	1.25	1.09	1.00	0.89	0.83	0.75	0.60
	P265-20	12.41	1.66	1.38	1.20	1.10	0.99	0.92	0.83	0.66
	P265-25	15.35	2.05	1.71	1.49	1.36	1.22	1.14	1.02	0.82
8.0m	P235-25	9.92	1.24	1.03	0.9	0.83	0.74	0.69	0.62	0.50
	P265-16	8.73	1.09	0.91	0.79	0.73	0.65	0.61	0.55	0.44
	P265-18	9.78	1.22	1.02	0.89	0.81	0.73	0.68	0.61	0.49
	P265-20	10.82	1.35	1.13	0.98	0.90	0.81	0.75	0.68	0.54
	P265-25	13.38	1.67	1.39	1.22	1.12	1.00	0.93	0.84	0.67
8.5m	P235-25	8.68	1.02	0.85	0.74	0.68	0.61	0.57	0.51	0.41
	P265-16	7.66	0.90	0.75	0.66	0.60	0.54	0.50	0.45	0.36
	P265-18	8.58	1.01	0.84	0.73	0.67	0.60	0.56	0.50	0.40
	P265-20	9.49	1.12	0.93	0.81	0.74	0.67	0.62	0.56	0.45
	P265-25	11.74	1.38	1.15	1.00	0.92	0.82	0.77	0.69	0.55
9.0m	P265-18	7.57	0.84	0.70	0.61	0.56	0.50	0.47	0.42	0.34
	P265-20	8.37	0.93	0.78	0.68	0.62	0.56	0.52	0.47	0.37
	P265-25	10.36	1.15	0.96	0.84	0.77	0.69	0.64	0.58	0.46
9.5m	P265-20	7.42	0.78	0.65	0.57	0.52	0.47	0.43	0.39	0.31
	P265-25	9.18	0.97	0.81	0.70	0.64	0.58	0.54	0.48	0.39
10.0m	P265-20	6.61	0.66	0.55	0.48	0.44	0.39	0.37	0.33	0.26
	P265-25	8.17	0.82	0.68	0.59	0.54	0.49	0.45	0.41	0.33

Zed Side Rail Sleeve Systems

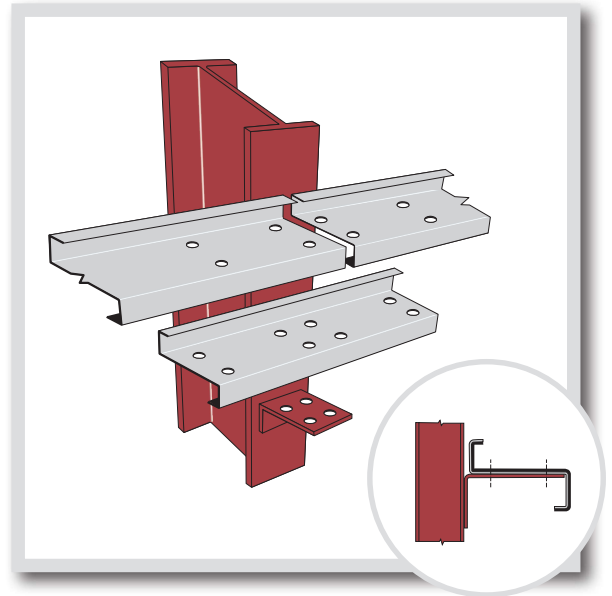
Grade S450

Metric load tables for sleeved side rails for spans up to 10 metres.

Types of Cladding

The loads shown relate directly to metal cladding and allowance for its weight has been made. Figures shown are for horizontal wind pressure and assume 1 row of side rail supports at mid span up to 6 metres and 2 rows for larger spans.

For suction multiply values by a factor of 0.8.



Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	PI21-16	15.72	4.49	3.74	3.27	2.99	2.68	2.49	2.25	1.80
	PI40-14	18.01	5.15	4.29	3.74	3.43	3.07	2.86	2.57	2.06
	PI40-16	21.97	6.28	5.23	4.56	4.18	3.75	3.49	3.14	2.51
	PI40-18	24.69	7.05	5.88	5.13	4.70	4.21	3.92	3.53	2.82
4.0m	PI21-16	11.99	3.00	2.50	2.18	2.00	1.79	1.67	1.50	1.20
	PI40-14	14.85	3.71	3.09	2.70	2.48	2.22	2.06	1.86	1.49
	PI40-16	16.87	4.22	3.51	3.07	2.81	2.52	2.34	2.11	1.69
	PI40-18	18.85	4.71	3.93	3.43	3.14	2.81	2.62	2.36	1.89
4.5m	PI21-16	9.43	2.10	1.75	1.52	1.40	1.25	1.16	1.05	0.84
	PI40-16	13.28	2.95	2.46	2.15	1.97	1.76	1.64	1.48	1.18
	PI40-18	14.85	3.30	2.75	2.40	2.20	1.97	1.83	1.65	1.32
	PI40-20	16.39	3.64	3.04	2.65	2.43	2.17	2.02	1.82	1.46
	PI77-14	17.75	3.94	3.29	2.87	2.63	2.35	2.19	1.97	1.58
	PI77-16	21.79	4.84	4.03	3.52	3.23	2.89	2.69	2.42	1.94
5.0m	PI40-14	9.44	1.89	1.57	1.37	1.26	1.13	1.05	0.94	0.75
	PI40-16	10.71	2.14	1.79	1.56	1.43	1.28	1.19	1.07	0.86
	PI40-18	11.97	2.39	2.00	1.74	1.60	1.43	1.33	1.20	0.96
	PI40-20	13.22	2.64	2.20	1.92	1.76	1.58	1.47	1.32	1.06
	PI77-14	15.82	3.16	2.64	2.30	2.11	1.89	1.76	1.58	1.27
	PI77-16	18.67	3.73	3.11	2.72	2.49	2.23	2.07	1.87	1.49
5.5m	PI40-14	7.76	1.41	1.18	1.03	0.94	0.84	0.78	0.71	0.56
	PI40-16	8.81	1.60	1.33	1.16	1.07	0.96	0.89	0.80	0.64
	PI40-18	9.85	1.79	1.49	1.30	1.19	1.07	0.99	0.90	0.72
	PI40-20	10.87	1.98	1.65	1.44	1.32	1.18	1.10	0.99	0.79
	PI77-14	13.53	2.46	2.05	1.79	1.64	1.47	1.37	1.23	0.98
	PI77-16	15.38	2.80	2.33	2.03	1.86	1.67	1.55	1.40	1.12
	PI77-18	17.20	3.13	2.61	2.27	2.09	1.87	1.74	1.56	1.25
6.0m	PI40-16	7.36	1.23	1.02	0.89	0.82	0.73	0.68	0.61	0.49
	PI40-18	8.22	1.37	1.14	1.00	0.91	0.82	0.76	0.69	0.55
	PI40-20	9.08	1.51	1.26	1.10	1.01	0.90	0.84	0.76	0.61
	PI77-14	11.33	1.89	1.57	1.37	1.26	1.13	1.05	0.94	0.76
	PI77-16	12.87	2.14	1.79	1.56	1.43	1.28	1.19	1.07	0.86
	PI77-18	14.40	2.40	2.00	1.75	1.60	1.43	1.33	1.20	0.96
	P200-14	15.03	2.50	2.09	1.82	1.67	1.50	1.39	1.25	1.00
	P200-16	18.24	3.04	2.53	2.21	2.03	1.81	1.69	1.52	1.22
6.5m	PI77-14	9.61	1.48	1.23	1.07	0.99	0.88	0.82	0.74	0.59
	PI77-16	10.91	1.68	1.40	1.22	1.12	1.00	0.93	0.84	0.67
	PI77-18	12.21	1.88	1.57	1.37	1.25	1.12	1.04	0.94	0.75
	PI77-20	13.49	2.08	1.73	1.51	1.38	1.24	1.15	1.04	0.83
	P200-14	13.62	2.10	1.75	1.52	1.40	1.25	1.16	1.05	0.84
	P200-16	15.48	2.38	1.99	1.73	1.59	1.42	1.32	1.19	0.95
	P200-18	17.33	2.67	2.22	1.94	1.78	1.59	1.48	1.33	1.07
	P200-20	19.16	2.95	2.46	2.14	1.96	1.76	1.64	1.47	1.18

Zed Side Rail Sleeve Systems

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Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
7.0m	PI77-16	9.36	1.34	1.11	0.97	0.89	0.80	0.74	0.67	0.53
	PI77-18	10.47	1.50	1.25	1.09	1.00	0.89	0.83	0.75	0.60
	PI77-20	11.56	1.65	1.38	1.20	1.10	0.99	0.92	0.83	0.66
	P200-16	13.29	1.90	1.58	1.38	1.27	1.13	1.05	0.95	0.76
	P200-18	14.88	2.13	1.77	1.55	1.42	1.27	1.18	1.06	0.85
	P200-20	16.44	2.35	1.96	1.71	1.57	1.40	1.31	1.17	0.94
	P235-14	15.61	2.23	1.86	1.62	1.49	1.33	1.24	1.11	0.89
7.5m	P235-16	19.76	2.82	2.35	2.05	1.88	1.69	1.57	1.41	1.13
	PI77-18	9.06	1.21	1.01	0.88	0.81	0.72	0.67	0.60	0.48
	PI77-20	10.01	1.33	1.11	0.97	0.89	0.80	0.74	0.67	0.53
	P200-16	11.52	1.54	1.28	1.12	1.02	0.92	0.85	0.77	0.61
	P200-18	12.89	1.72	1.43	1.25	1.15	1.03	0.96	0.86	0.69
	P200-20	14.25	1.90	1.58	1.38	1.27	1.13	1.06	0.95	0.76
	P200-25	17.59	2.34	1.95	1.71	1.56	1.40	1.30	1.17	0.94
8.0m	P235-16	17.40	2.32	1.93	1.69	1.55	1.39	1.29	1.16	0.93
	P235-18	19.49	2.60	2.17	1.89	1.73	1.55	1.44	1.30	1.04
	P200-16	10.07	1.26	1.05	0.92	0.84	0.75	0.70	0.63	0.50
	P200-18	11.27	1.41	1.17	1.02	0.94	0.84	0.78	0.70	0.56
	P200-20	12.45	1.56	1.30	1.13	1.04	0.93	0.86	0.78	0.62
	P200-25	15.37	1.92	1.60	1.40	1.28	1.15	1.07	0.96	0.77
	P235-16	15.23	1.90	1.59	1.38	1.27	1.14	1.06	0.95	0.76
8.5m	P235-18	17.05	2.13	1.78	1.55	1.42	1.27	1.18	1.07	0.85
	P265-14	15.18	1.90	1.58	1.38	1.27	1.13	1.05	0.95	0.76
	P265-16	19.42	2.43	2.02	1.77	1.62	1.45	1.35	1.21	0.97
	P200-18	9.91	1.17	0.97	0.85	0.78	0.70	0.65	0.58	0.47
	P200-20	10.96	1.29	1.07	0.94	0.86	0.77	0.72	0.64	0.52
	P200-25	13.52	1.59	1.33	1.16	1.06	0.95	0.88	0.80	0.64
	P235-16	13.42	1.58	1.32	1.15	1.05	0.94	0.88	0.79	0.63
9.0m	P235-18	15.03	1.77	1.47	1.29	1.18	1.06	0.98	0.88	0.71
	P235-20	16.62	1.96	1.63	1.42	1.30	1.17	1.09	0.98	0.78
	P235-25	20.54	2.42	2.01	1.76	1.61	1.44	1.34	1.21	0.97
	P265-16	18.16	2.14	1.78	1.55	1.42	1.28	1.19	1.07	0.85
	P265-18	20.78	2.44	2.04	1.78	1.63	1.46	1.36	1.22	0.98
	P265-20	22.99	2.70	2.25	1.97	1.80	1.61	1.50	1.35	1.08
	P200-20	9.70	1.08	0.90	0.78	0.72	0.64	0.60	0.54	0.43
9.5m	P235-16	11.91	1.32	1.10	0.96	0.88	0.79	0.73	0.66	0.53
	P235-18	13.33	1.48	1.23	1.08	0.99	0.88	0.82	0.74	0.59
	P235-20	14.74	1.64	1.37	1.19	1.09	0.98	0.91	0.82	0.66
	P235-25	18.22	2.02	1.69	1.47	1.35	1.21	1.12	1.01	0.81
	P265-16	16.47	1.83	1.53	1.33	1.22	1.09	1.02	0.92	0.73
	P265-18	18.45	2.05	1.71	1.49	1.37	1.22	1.14	1.03	0.82
	P265-20	20.41	2.27	1.89	1.65	1.51	1.35	1.26	1.13	0.91
10.0m	P265-25	25.25	2.81	2.34	2.04	1.87	1.67	1.56	1.40	1.12
	P235-18	11.89	1.25	1.04	0.91	0.83	0.75	0.70	0.63	0.50
	P235-20	13.15	1.38	1.15	1.01	0.92	0.83	0.77	0.69	0.55
	P235-25	16.24	1.71	1.42	1.24	1.14	1.02	0.95	0.85	0.68
	P265-16	14.71	1.55	1.29	1.13	1.03	0.92	0.86	0.77	0.62
	P265-18	16.48	1.73	1.45	1.26	1.16	1.04	0.96	0.87	0.69
	P265-20	18.23	1.92	1.60	1.40	1.28	1.15	1.07	0.96	0.77
10.0m	P265-25	22.55	2.37	1.98	1.73	1.58	1.42	1.32	1.19	0.95
	P235-20	11.78	1.18	0.98	0.86	0.79	0.70	0.65	0.59	0.47
	P235-25	14.56	1.46	1.21	1.06	0.97	0.87	0.81	0.73	0.58
	P265-16	13.20	1.32	1.10	0.96	0.88	0.79	0.73	0.66	0.53
	P265-18	14.79	1.48	1.23	1.08	0.99	0.88	0.82	0.74	0.59
10.0m	P265-20	16.36	1.64	1.36	1.19	1.09	0.98	0.91	0.82	0.65
	P265-25	20.23	2.02	1.69	1.47	1.35	1.21	1.12	1.01	0.81

Zed Side Rail Butt System

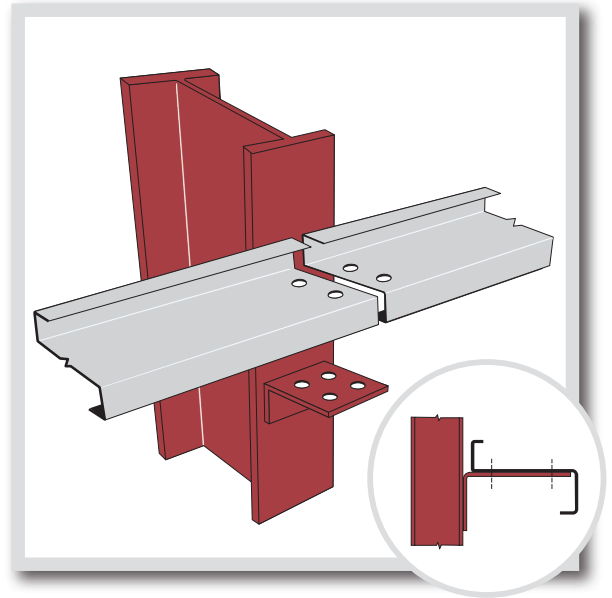
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Side Rail Butt System suitable for buildings with single bays or more.

Types of Cladding

The loads shown relate directly to metal cladding and allowance for its weight has been made. Figures shown are for horizontal wind pressure and assume 1 row of side rail supports at mid span up to 6 metres and 2 rows for larger spans.

For suction multiply values by a factor of 0.8.



Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	PI21-16	7.99	2.28	1.90	1.66	1.52	1.14	0.92	0.76	0.45
	PI40-14	9.91	2.83	2.36	2.06	1.89	1.41	1.14	0.94	0.56
	PI40-16	11.25	3.21	2.68	2.34	2.14	1.60	1.30	1.07	0.64
	PI40-18	12.58	3.59	2.99	2.61	2.40	1.79	1.45	1.20	0.72
	PI77-14	17.14	4.90	4.08	3.56	3.27	2.44	1.98	1.63	0.97
	PI77-16	19.57	5.59	4.66	4.07	3.73	2.78	2.26	1.86	1.11
4.0m	PI21-16	6.08	1.52	1.27	1.11	1.01	0.76	0.61	0.51	0.30
	PI40-16	8.57	2.14	1.79	1.56	1.43	1.07	0.87	0.71	0.43
	PI40-18	9.58	2.39	2.00	1.74	1.60	1.19	0.97	0.80	0.48
	PI40-20	10.58	2.64	2.20	1.92	1.76	1.32	1.07	0.88	0.53
	PI77-14	13.14	3.29	2.74	2.39	2.19	1.63	1.33	1.10	0.65
	PI77-16	14.94	3.73	3.11	2.72	2.49	1.86	1.51	1.24	0.74
4.5m	PI77-18	16.71	4.18	3.48	3.04	2.78	2.08	1.69	1.39	0.83
	PI40-14	5.93	1.32	1.10	0.96	0.88	0.66	0.53	0.44	0.26
	PI40-16	6.73	1.50	1.25	1.09	1.00	0.74	0.60	0.50	0.30
	PI40-18	7.52	1.67	1.39	1.22	1.11	0.83	0.68	0.56	0.33
	PI40-20	8.30	1.84	1.54	1.34	1.23	0.92	0.75	0.61	0.37
	PI77-14	10.34	2.30	1.91	1.67	1.53	1.14	0.93	0.77	0.46
5.0m	PI77-16	11.75	2.61	2.18	1.90	1.74	1.30	1.06	0.87	0.52
	PI77-18	13.15	2.92	2.43	2.12	1.95	1.45	1.18	0.97	0.58
	PI77-20	14.52	3.23	2.69	2.35	2.15	1.61	1.30	1.08	0.64
	P200-16	16.64	3.70	3.08	2.69	2.47	1.84	1.49	1.23	0.74
	PI40-16	5.40	1.08	0.90	0.79	0.72	0.54	0.44	0.36	0.22
	PI40-18	6.04	1.21	1.01	0.88	0.81	0.60	0.49	0.40	0.24
5.5m	PI40-20	6.67	1.33	1.11	0.97	0.89	0.66	0.54	0.44	0.27
	PI40-25	8.20	1.64	1.37	1.19	1.09	0.82	0.66	0.55	0.33
	PI77-14	8.33	1.67	1.39	1.21	1.11	0.83	0.67	0.56	0.33
	PI77-16	9.47	1.89	1.58	1.38	1.26	0.94	0.77	0.63	0.38
	PI77-18	10.59	2.12	1.76	1.54	1.41	1.05	0.86	0.71	0.42
	PI77-20	11.70	2.34	1.95	1.70	1.56	1.16	0.95	0.78	0.47
5.5m	P200-14	11.81	2.36	1.97	1.72	1.57	1.17	0.95	0.79	0.47
	P200-16	13.42	2.68	2.24	1.95	1.79	1.34	1.08	0.89	0.53
	P200-18	15.02	3.00	2.50	2.19	2.00	1.49	1.21	1.00	0.60
	PI40-20	5.45	0.99	0.83	0.72	0.66	0.49	0.40	0.33	0.20
	PI40-25	6.71	1.22	1.02	0.89	0.81	0.61	0.49	0.41	0.24
	PI77-14	6.84	1.24	1.04	0.90	0.83	0.62	0.50	0.41	0.25
5.5m	PI77-16	7.77	1.41	1.18	1.03	0.94	0.70	0.57	0.47	0.28
	PI77-18	8.69	1.58	1.32	1.15	1.05	0.79	0.64	0.53	0.31
	P200-14	9.71	1.77	1.47	1.28	1.18	0.88	0.71	0.59	0.35
	P200-16	11.04	2.01	1.67	1.46	1.34	1.00	0.81	0.67	0.40
	P200-18	12.35	2.25	1.87	1.63	1.50	1.12	0.91	0.75	0.45
	P200-20	13.65	2.48	2.07	1.81	1.66	1.24	1.00	0.83	0.49

Zed Side Rail Butt System

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Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
6.0m	P177-18	7.25	1.21	1.01	0.88	0.81	0.60	0.49	0.40	0.24
	P177-20	8.01	1.33	1.11	0.97	0.89	0.66	0.54	0.44	0.27
	P177-25	9.87	1.64	1.37	1.20	1.10	0.82	0.66	0.55	0.33
	P200-16	9.22	1.54	1.28	1.12	1.02	0.76	0.62	0.51	0.31
	P200-18	10.31	1.72	1.43	1.25	1.15	0.86	0.69	0.57	0.34
	P200-20	11.40	1.90	1.58	1.38	1.27	0.95	0.77	0.63	0.38
	P235-14	12.18	2.03	1.69	1.48	1.35	1.01	0.82	0.68	0.40
	P235-16	14.36	2.39	1.99	1.74	1.60	1.19	0.97	0.80	0.48
6.5m	P235-18	16.08	2.68	2.23	1.95	1.79	1.33	1.08	0.89	0.53
	P177-20	6.76	1.04	0.87	0.76	0.69	0.52	0.42	0.35	0.21
	P177-25	8.32	1.28	1.07	0.93	0.85	0.64	0.52	0.43	0.25
	P200-16	7.80	1.20	1.00	0.87	0.80	0.60	0.48	0.40	0.24
	P200-18	8.72	1.34	1.12	0.98	0.89	0.67	0.54	0.45	0.27
	P200-20	9.64	1.48	1.24	1.08	0.99	0.74	0.60	0.49	0.30
	P235-14	10.70	1.65	1.37	1.20	1.10	0.82	0.67	0.55	0.33
	P235-16	12.17	1.87	1.56	1.36	1.25	0.93	0.76	0.62	0.37
7.0m	P235-18	13.63	2.10	1.75	1.52	1.40	1.04	0.85	0.70	0.42
	P235-20	15.07	2.32	1.93	1.69	1.55	1.15	0.94	0.77	0.46
	P177-25	7.10	1.01	0.84	0.74	0.68	0.50	0.41	0.34	0.20
	P200-18	7.46	1.07	0.89	0.77	0.71	0.53	0.43	0.36	0.21
	P200-20	8.24	1.18	0.98	0.86	0.78	0.59	0.48	0.39	0.23
	P200-25	10.17	1.45	1.21	1.06	0.97	0.72	0.59	0.48	0.29
	P235-14	9.17	1.31	1.09	0.95	0.87	0.65	0.53	0.44	0.26
	P235-16	10.43	1.49	1.24	1.08	0.99	0.74	0.60	0.50	0.30
7.5m	P235-18	11.67	1.67	1.39	1.21	1.11	0.83	0.67	0.56	0.33
	P235-20	12.91	1.84	1.54	1.34	1.23	0.92	0.75	0.61	0.37
	P265-14	10.52	1.50	1.25	1.09	1.00	0.75	0.61	0.50	0.30
	P265-16	13.97	2.00	1.66	1.45	1.33	0.99	0.81	0.67	0.40
	P235-16	9.02	1.20	1.00	0.87	0.80	0.60	0.49	0.40	0.24
	P235-18	10.10	1.35	1.12	0.98	0.90	0.67	0.54	0.45	0.27
	P235-20	11.16	1.49	1.24	1.08	0.99	0.74	0.60	0.50	0.30
	P235-25	13.80	1.84	1.53	1.34	1.23	0.92	0.74	0.61	0.37
8.0m	P265-16	12.10	1.61	1.34	1.17	1.08	0.80	0.65	0.54	0.32
	P265-18	13.55	1.81	1.51	1.31	1.20	0.90	0.73	0.60	0.36
	P265-20	14.99	2.00	1.67	1.45	1.33	0.99	0.81	0.67	0.40
	P265-25	18.55	2.47	2.06	1.80	1.65	1.23	1.00	0.82	0.49
	P235-18	8.80	1.10	0.92	0.80	0.73	0.55	0.44	0.37	0.22
	P235-20	9.73	1.22	1.01	0.88	0.81	0.60	0.49	0.41	0.24
	P235-25	12.02	1.50	1.25	1.09	1.00	0.75	0.61	0.50	0.30
	P265-16	10.56	1.32	1.10	0.96	0.88	0.66	0.53	0.44	0.26
8.5m	P265-18	11.83	1.48	1.23	1.08	0.99	0.74	0.60	0.49	0.29
	P265-20	13.09	1.64	1.36	1.19	1.09	0.81	0.66	0.55	0.33
	P265-25	16.19	2.02	1.69	1.47	1.35	1.01	0.82	0.67	0.40
	P265-16	9.28	1.09	0.91	0.79	0.73	0.54	0.44	0.36	0.22
	P265-18	10.40	1.22	1.02	0.89	0.82	0.61	0.49	0.41	0.24
	P265-20	11.50	1.35	1.13	0.98	0.90	0.67	0.55	0.45	0.27
	P265-25	14.23	1.67	1.39	1.22	1.12	0.83	0.68	0.56	0.33
	P265-16	8.21	0.91	0.76	0.66	0.61	0.45	0.37	0.30	0.18
9.0m	P265-18	9.19	1.02	0.85	0.74	0.68	0.51	0.41	0.34	0.20
	P265-20	10.17	1.13	0.94	0.82	0.75	0.56	0.46	0.38	0.22
	P265-25	12.57	1.40	1.16	1.02	0.93	0.70	0.56	0.47	0.28
	P265-20	9.04	0.95	0.79	0.69	0.63	0.47	0.38	0.32	0.19
9.5m	P265-25	11.17	1.18	0.98	0.86	0.78	0.59	0.48	0.39	0.23
	P265-20	8.06	0.81	0.67	0.59	0.54	0.40	0.33	0.27	0.16
10.0m	P265-25	9.97	1.00	0.83	0.72	0.66	0.50	0.40	0.33	0.20

Cee Side Rail Sleeved System

Grade S450

Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	CI40-14	18.49	5.28	4.40	3.84	3.52	3.15	2.93	2.64	2.11
	CI40-16	22.98	6.57	5.47	4.78	4.38	3.92	3.65	3.28	2.63
4.0m	CI40-14	16.07	4.02	3.35	2.92	2.68	2.40	2.23	2.01	1.61
	CI40-16	19.99	5.00	4.16	3.63	3.33	2.98	2.78	2.50	2.00
4.5m	CI40-14	13.23	2.94	2.45	2.14	1.96	1.76	1.63	1.47	1.18
	CI40-16	16.05	3.57	2.97	2.59	2.38	2.13	1.98	1.78	1.43
	CI40-18	17.94	3.99	3.32	2.90	2.66	2.38	2.22	1.99	1.59
	CI40-20	19.82	4.40	3.67	3.20	2.94	2.63	2.45	2.20	1.76
	CI77-14	18.26	4.06	3.38	2.95	2.71	2.42	2.25	2.03	1.62
	CI77-16	22.83	5.07	4.23	3.69	3.38	3.03	2.82	2.54	2.03
5.0m	CI40-14	10.68	2.14	1.78	1.55	1.42	1.27	1.19	1.07	0.85
	CI40-16	12.95	2.59	2.16	1.88	1.73	1.55	1.44	1.29	1.04
	CI77-14	16.30	3.26	2.72	2.37	2.17	1.95	1.81	1.63	1.30
	CI77-16	20.40	4.08	3.40	2.97	2.72	2.44	2.27	2.04	1.63
5.5m	CI40-14	8.78	1.60	1.33	1.16	1.06	0.95	0.89	0.80	0.64
	CI40-16	10.65	1.94	1.61	1.41	1.29	1.16	1.08	0.97	0.77
	CI40-18	11.91	2.17	1.80	1.57	1.44	1.29	1.20	1.08	0.87
	CI77-14	14.69	2.67	2.23	1.94	1.78	1.59	1.48	1.34	1.07
	CI77-16	18.40	3.34	2.79	2.43	2.23	2.00	1.86	1.67	1.34
	CI77-18	20.40	3.84	3.19	2.78	2.55	2.28	2.13	1.91	1.53
6.0m	CI40-16	8.90	1.48	1.24	1.08	0.99	0.89	0.82	0.74	0.59
	CI40-18	9.95	1.66	1.38	1.21	1.11	0.99	0.92	0.83	0.66
	CI40-20	10.99	1.83	1.53	1.33	1.22	1.09	1.02	0.92	0.73
	CI77-14	13.33	2.22	1.85	1.62	1.48	1.33	1.23	1.11	0.89
	CI77-16	15.40	2.57	2.14	1.87	1.71	1.53	1.43	1.28	1.03
	CI77-18	17.24	2.87	2.39	2.09	1.92	1.72	1.60	1.44	1.15
	CI77-20	19.05	3.18	2.65	2.31	2.12	1.90	1.76	1.59	1.27
	C200-16	19.07	3.18	2.65	2.31	2.12	1.90	1.77	1.59	1.27
	C200-18	22.95	3.83	3.19	2.78	2.55	2.28	2.13	1.91	1.53
	C200-20	26.83	4.68	3.94	3.43	3.10	2.79	2.59	2.31	1.87
6.5m	CI77-14	11.49	1.77	1.47	1.29	1.18	1.06	0.98	0.88	0.71
	CI77-16	13.07	2.01	1.68	1.46	1.34	1.20	1.12	1.01	0.80
	CI77-18	14.62	2.25	1.87	1.64	1.50	1.34	1.25	1.12	0.90
	C200-16	17.44	2.68	2.24	1.95	1.79	1.60	1.49	1.34	1.07
	C200-18	19.52	3.00	2.50	2.18	2.00	1.79	1.67	1.50	1.20
	C200-20	22.95	3.83	3.19	2.78	2.55	2.28	2.13	1.91	1.53
7.0m	CI77-18	12.54	1.79	1.49	1.30	1.19	1.07	1.00	0.90	0.72
	CI77-20	13.86	1.98	1.65	1.44	1.32	1.18	1.10	0.99	0.79
	C200-16	14.97	2.14	1.78	1.56	1.43	1.28	1.19	1.07	0.86
	C200-18	16.76	2.39	2.00	1.74	1.60	1.43	1.33	1.20	0.96
	C200-20	18.54	2.65	2.21	1.93	1.77	1.58	1.47	1.32	1.06
	C235-16	19.52	2.79	2.32	2.03	1.86	1.67	1.55	1.39	1.12
	C235-18	23.58	3.37	2.81	2.45	2.25	2.01	1.87	1.68	1.35
	C235-20	27.64	3.95	3.30	2.88	2.58	2.28	2.04	1.80	1.44
7.5m	C200-16	12.98	1.73	1.44	1.26	1.15	1.03	0.96	0.87	0.69
	C200-18	14.53	1.94	1.61	1.41	1.29	1.16	1.08	0.97	0.78
	C200-20	16.07	2.14	1.79	1.56	1.43	1.28	1.19	1.07	0.86
	C235-16	18.11	2.41	2.01	1.76	1.61	1.44	1.34	1.21	0.97
	C235-18	21.39	2.85	2.38	2.07	1.90	1.70	1.58	1.43	1.14
	C235-20	23.66	3.15	2.63	2.29	2.10	1.88	1.75	1.58	1.26
8.0m	C200-18	12.71	1.59	1.32	1.16	1.06	0.95	0.88	0.79	0.64
	C200-20	14.05	1.76	1.46	1.28	1.17	1.05	0.98	0.88	0.70
	C235-16	16.72	2.09	1.74	1.52	1.39	1.25	1.16	1.04	0.84
	C235-18	18.72	2.34	1.95	1.70	1.56	1.40	1.30	1.17	0.94
	C235-20	20.71	2.59	2.16	1.88	1.73	1.55	1.44	1.29	1.04
	C265-16	18.94	2.37	1.97	1.72	1.58	1.41	1.32	1.18	0.95
	C265-18	23.03	2.88	2.40	2.09	1.92	1.72	1.60	1.44	1.15
8.5m	C235-16	14.74	1.73	1.45	1.26	1.16	1.04	0.96	0.87	0.69
	C235-18	16.51	1.94	1.62	1.41	1.29	1.16	1.08	0.97	0.78
	C235-20	18.26	2.15	1.79	1.56	1.43	1.28	1.19	1.07	0.86
	C265-16	17.71	2.08	1.74	1.51	1.39	1.24	1.16	1.04	0.83
	C265-18	21.54	2.53	2.11	1.84	1.69	1.51	1.41	1.27	1.01
9.0m	C235-18	14.65	1.63	1.36	1.18	1.09	0.97	0.90	0.81	0.65
	C235-20	16.20	1.80	1.50	1.31	1.20	1.07	1.00	0.90	0.72
	C265-16	16.60	1.84	1.54	1.34	1.23	1.10	1.02	0.92	0.74
	C265-18	19.63	2.18	1.82	1.59	1.45	1.30	1.21	1.09	0.87
	C265-20	21.72	2.41	2.01	1.75	1.61	1.44	1.34	1.21	0.97
9.5m	C235-20	14.46	1.52	1.27	1.11	1.01	0.91	0.85	0.76	0.61
	C235-25	17.87	1.88	1.57	1.37	1.25	1.12	1.04	0.94	0.75
	C265-18	17.53	1.85	1.54	1.34	1.23	1.10	1.03	0.92	0.74
	C265-20	19.40	2.04	1.70	1.49	1.36	1.22	1.13	1.02	0.82
10m	C265-18	15.74	1.57	1.31	1.14	1.05	0.94	0.87	0.79	0.63
	C265-20	17.42	1.74	1.45	1.27	1.16	1.04	0.97	0.87	0.70
	C265-25	21.54	2.15	1.80	1.57	1.44	1.29	1.20	1.08	0.86

Cee Side Rail Butt System

Grade S450

Span Metres	Section	UDL kN	Allowable Loads (kN/sq.m) for Varying Purlin Centres (mm)							
			1000	1200	1375	1500	1675	1800	2000	2500
3.5m	C140-14	11.21	3.20	2.67	2.33	2.14	1.91	1.78	1.60	1.28
	C140-16	12.73	3.64	3.03	2.65	2.43	2.17	2.02	1.82	1.46
4.0m	C140-14	8.54	2.14	1.78	1.55	1.42	1.27	1.19	1.07	0.85
	C140-16	9.70	2.43	2.02	1.76	1.62	1.45	1.35	1.21	0.97
4.5m	C140-14	6.71	1.49	1.24	1.08	0.99	0.89	0.83	0.75	0.60
	C140-16	7.62	1.69	1.41	1.23	1.13	1.01	0.94	0.85	0.68
	C140-18	8.52	1.89	1.58	1.38	1.26	1.13	1.05	0.95	0.76
	C140-20	9.41	2.09	1.74	1.52	1.39	1.25	1.16	1.05	0.84
	C177-14	11.58	2.57	2.14	1.87	1.72	1.54	1.43	1.29	1.03
	C177-16	13.17	2.93	2.44	2.13	1.95	1.75	1.63	1.46	1.17
5.0m	C140-18	6.84	1.37	1.14	1.00	0.91	0.82	0.76	0.68	0.55
	C140-20	7.56	1.51	1.26	1.10	1.01	0.90	0.84	0.76	0.60
	C177-14	9.33	1.87	1.56	1.36	1.24	1.11	1.04	0.93	0.75
	C177-16	10.61	2.12	1.77	1.54	1.41	1.27	1.18	1.06	0.85
	C177-18	11.87	2.37	1.98	1.73	1.58	1.42	1.32	1.19	0.95
	C200-16	14.16	2.83	2.36	2.06	1.89	1.69	1.57	1.42	1.13
5.5m	C140-25	7.61	1.38	1.15	1.01	0.92	0.83	0.77	0.69	0.55
	C177-16	8.71	1.58	1.32	1.15	1.06	0.95	0.88	0.79	0.63
	C177-18	9.75	1.77	1.48	1.29	1.18	1.06	0.98	0.89	0.71
	C177-20	10.78	1.96	1.63	1.43	1.31	1.17	1.09	0.98	0.78
	C200-16	11.64	2.12	1.76	1.54	1.41	1.26	1.18	1.06	0.85
	C200-18	13.03	2.37	1.97	1.72	1.58	1.41	1.32	1.18	0.95
6.0m	C177-16	7.27	1.21	1.01	0.88	0.81	0.72	0.67	0.61	0.48
	C177-18	8.13	1.36	1.13	0.99	0.90	0.81	0.75	0.68	0.54
	C177-20	8.99	1.50	1.25	1.09	1.00	0.89	0.83	0.75	0.60
	C200-16	9.72	1.62	1.35	1.18	1.08	0.97	0.90	0.81	0.65
	C200-18	10.88	1.81	1.51	1.32	1.21	1.08	1.01	0.91	0.73
	C200-20	12.03	2.01	1.67	1.46	1.34	1.20	1.11	1.00	0.80
6.5m	C200-16	8.22	1.27	1.05	0.92	0.84	0.76	0.70	0.63	0.51
	C200-18	9.20	1.42	1.18	1.03	0.94	0.85	0.79	0.71	0.57
	C200-20	10.18	1.57	1.30	1.14	1.04	0.93	0.87	0.78	0.63
	C235-16	12.12	1.86	1.55	1.36	1.24	1.11	1.04	0.93	0.75
	C235-18	13.85	2.09	1.74	1.52	1.39	1.25	1.16	1.04	0.84
7.0m	C200-25	10.74	1.53	1.28	1.12	1.02	0.92	0.85	0.77	0.61
	C235-16	10.39	1.48	1.24	1.08	0.99	0.89	0.82	0.74	0.59
	C235-18	11.63	1.66	1.38	1.21	1.11	0.99	0.92	0.83	0.66
	C235-20	12.87	1.84	1.53	1.34	1.23	1.10	1.02	0.92	0.74
	C265-16	13.17	1.88	1.57	1.37	1.25	1.12	1.05	0.94	0.75
	C265-18	15.58	2.23	1.85	1.62	1.48	1.33	1.24	1.11	0.89
7.5m	C200-25	9.26	1.23	1.03	0.90	0.82	0.74	0.69	0.62	0.49
	C235-18	10.06	1.34	1.12	0.98	0.89	0.80	0.74	0.67	0.54
	C235-20	11.12	1.48	1.24	1.08	0.99	0.89	0.82	0.74	0.59
	C265-16	11.59	1.55	1.29	1.12	1.03	0.92	0.86	0.77	0.62
	C265-18	13.49	1.80	1.50	1.31	1.20	1.07	1.00	0.90	0.72
8.0m	C235-18	8.76	1.10	0.91	0.80	0.73	0.65	0.61	0.55	0.44
	C235-20	9.69	1.21	1.01	0.88	0.81	0.72	0.67	0.61	0.48
	C265-18	11.78	1.47	1.23	1.07	0.98	0.88	0.82	0.74	0.59
	C265-20	13.03	1.63	1.36	1.18	1.09	0.97	0.90	0.81	0.65
8.5m	C235-18	7.69	0.90	0.75	0.66	0.60	0.54	0.50	0.45	0.36
	C235-20	8.50	1.00	0.83	0.73	0.67	0.60	0.56	0.50	0.40
	C265-16	8.86	1.04	0.87	0.76	0.69	0.62	0.58	0.52	0.42
	C265-18	10.35	1.22	1.01	0.89	0.81	0.73	0.68	0.61	0.49
9.0m	C235-25	9.27	1.03	0.86	0.75	0.69	0.61	0.57	0.51	0.41
	C265-18	9.15	1.02	0.85	0.74	0.68	0.61	0.56	0.51	0.41
	C265-20	10.12	1.12	0.94	0.82	0.75	0.67	0.62	0.56	0.45
9.5m	C265-20	8.99	0.95	0.79	0.69	0.63	0.57	0.53	0.47	0.38
	C265-25	11.12	1.17	0.98	0.85	0.78	0.70	0.65	0.59	0.47
10.0m	C265-20	8.03	0.80	0.67	0.58	0.54	0.48	0.45	0.40	0.32
	C265-25	9.92	0.99	0.83	0.72	0.66	0.59	0.55	0.50	0.40

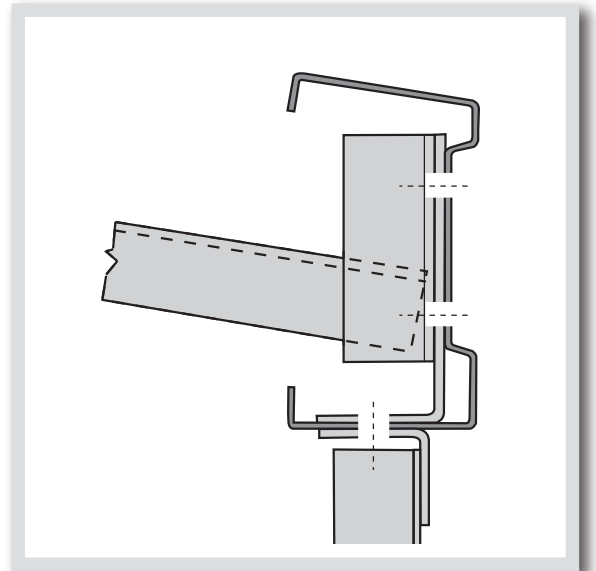
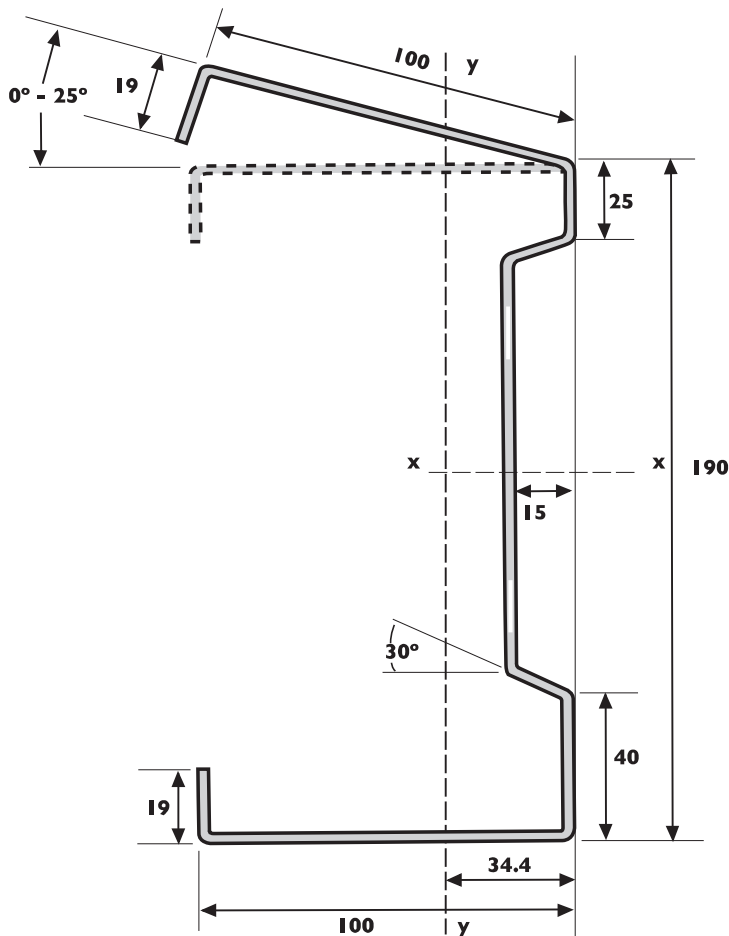
Eaves Beam

Grade S450

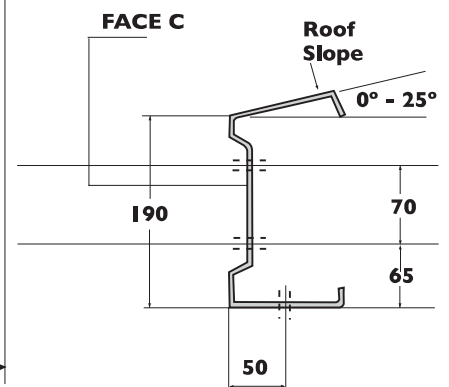
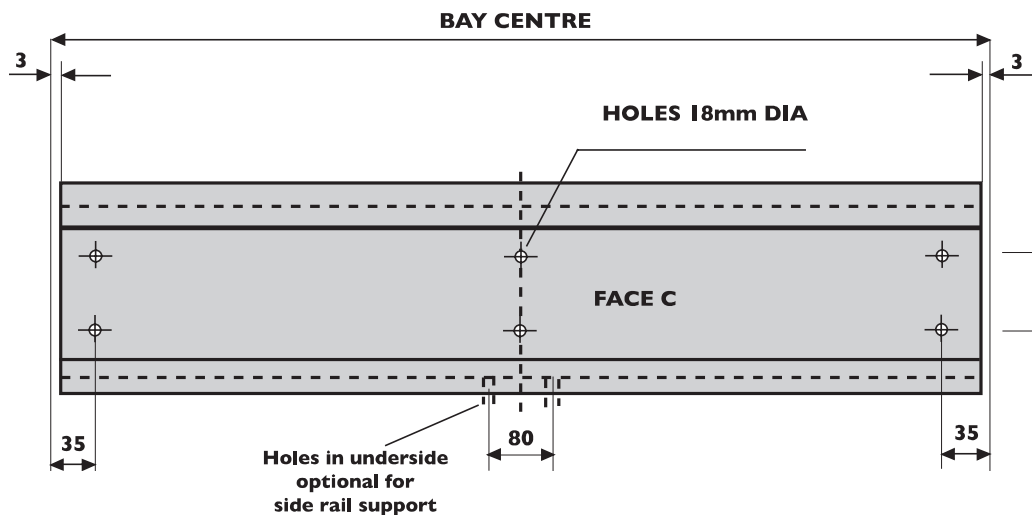
Steel Sections Eaves Beam is a purpose-designed profile for use as an eaves purlin, top sheeting rail and gutter support. We offer 2 profiles for our eaves beams, a recessed profile available in 190mm x 2.0mm thick and a flat faced range in various depths and thicknesses.

Recessed Eaves Beam

190mm deep x 2.0mm thick and has been designed to cater for spans up to 8m long, with an angled top flange from 0° to 25°

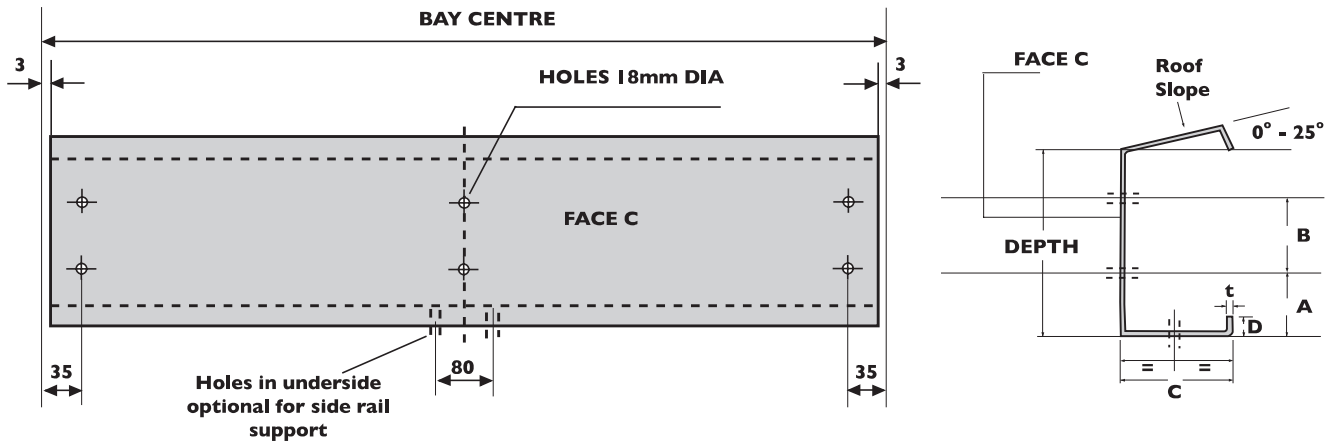


Section Ref:	EB19020
Weight kg/m	6.66
Second Moment of Area	
Major Axis I_{xx} cm ⁴	512
Minor Axis I_{yy} cm ⁴	94.6
Section Modulus	
Major Axis Z_{xx} cm ³	54
Minor Axis Z_{yy} cm ³	14.5
Radius of Gyration	
Major Axis R_{xx} cm	7.7
Minor Axis R_{yy} cm	3.3
Moment of Capacity	
Major Axis M_{cx} kNm	21.6
Minor Axis M_{cy} kNm	5.8



Flat Faced Eaves Beam

Steel Sections offer a range of flat faced Eaves beams available in 2.0mm and 2.5mm thickness. All Eaves beams have been designed to cater for spans up to 12m long, with angled top flange available from 0° to 25°. (Holes can be plain or counterformed to suit fixing requirement.)

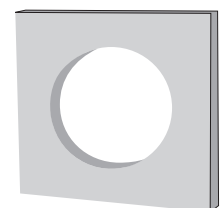
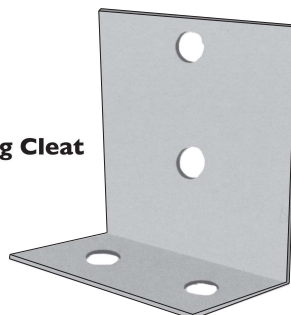


Section Ref:	EB19020 FF	EB23520 FF	EB26520 FF	EB26525 FF
Depth mm	190	235	265	265
A mm	65	43	43	43
B mm	70	146	176	176
C mm	100	85	100	100
D mm	19	17	19	19
t mm	2.0	2.0	2.0	2.5
Second Moment of Area Major Axis I _{xx} cm ⁴ Minor Axis I _{yy} cm ⁴	509 112.52	632 88.2	1070 122	1331 151
Section Modulus Major Axis Z _{xx} cm ³ Minor Axis Z _{yy} cm ³	53.61 16.4	66.5 12.85	80.8 16.9	110 20.8
Radius of Gyration Major Axis R _{xx} cm Minor Axis R _{yy} cm	7.8 3.7	8.7 3.2	10.5 3.5	10.5 3.5
Moment of Capacity Major Axis M _{cx} kNm Minor Axis M _{cy} kNm	21.7 6.2	25 5.0	29.2 6.1	42.6 8.1



Counterformed
holes are available

Stiffening Cleat



Packer Plates
available for use with
counterformed holes

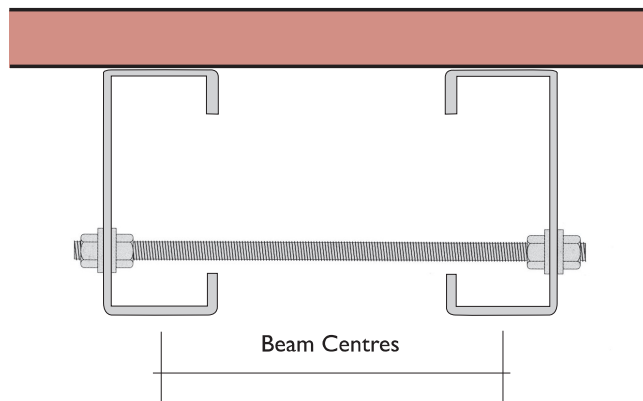
Mezzanine Floor Systems

Mezzanine Floor Beams

Steel Sections Cee Sections have a wide range of applications, primarily for use within mezzanine floors, our Cee sections can also be used for door framing, roof trimming, window trimming parapet rails and side rails. Our mezzanine floor beams are available in the following depths of 140, 177, 200, 235 and 265mm. Our sections are all punched with 18mm diameter holes as standard, with smaller hole sizes available on request along with the option of counterformed holes.

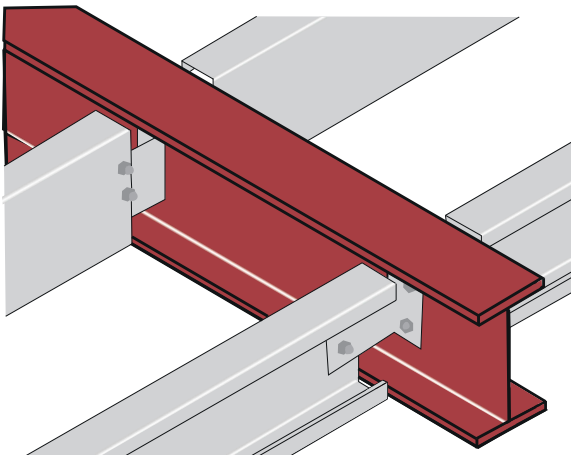
Restraint Requirements

As the bottom flange of the cee sections are usually unrestrained we recommend using a threaded bar to prevent the floor beam from twisting. Tie bars are fitted at mid span location to the lower gauge holes, with the channels facing toe to toe.



Single Span System

Single span cee sections are more commonly used due to the floor depth restrictions. The cee sections are fitted within the depth of the primary steelwork keeping the floor depth to a minimum. Our inset cleats are best used for this case, please ensure the cleat projects beyond the flange of the primary steelwork to allow an adequate fixing to our cee section.



Double Span System

Is used when floor depth isn't an issue, the benefits with this system is using a continuous spanning cee section will mean reduced deflections and in turn will lead to using a reduced section size. Standard cleats can be used with this system.

