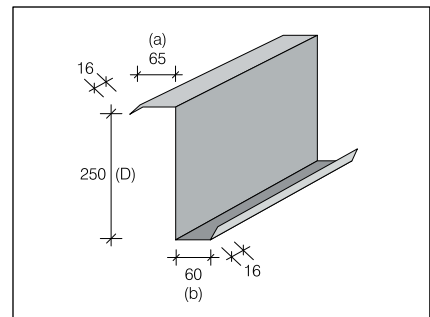
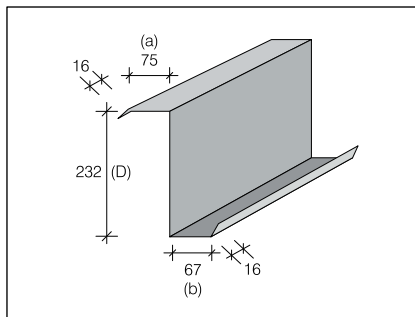
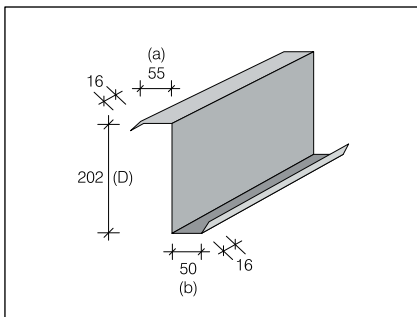
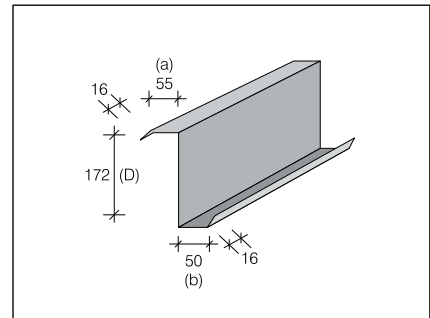
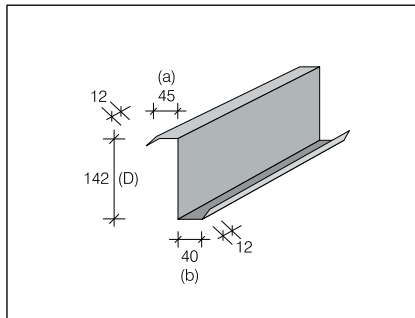
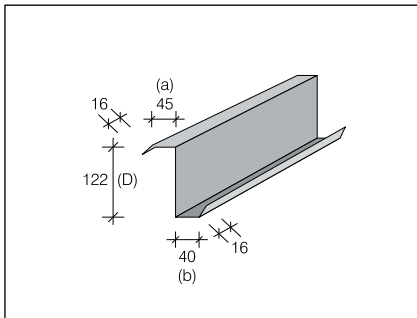


PURLINS ~ SECTIONAL DETAILS



Cold Formed "Z" Purlins Properties

Nominal Dimensions								Section Properties			
Purlins	Depth	Thickness	Top Flange	Bottom Flange	Lip	Weight	Area	Ixx	Zxx (top)	Zxx (bot)	ryy
	" D " mm	" t " mm	" a " mm	" b " mm	mm	Kgs / mtr	mm ²	cm ⁴	cm ³	cm ³	mm
EK122Z15	122	1.50	45	40	16	2.685	342	71	11.85	11.33	19.64
EK122Z20	122	2.00	45	40	16	3.580	456	92	15.44	14.75	19.31
EK122Z25	122	2.50	45	40	16	4.475	570	112	18.85	18.00	18.97
EK142Z15	142	1.50	45	40	12	2.814	359	102	14.64	14.04	18.81
EK142Z20	142	2.00	45	40	12	3.752	478	133	19.10	18.32	18.47
EK142Z25	142	2.50	45	40	12	4.690	598	162	23.37	22.40	18.14
EK172Z15	172	1.50	55	50	16	3.497	446	184	21.74	21.01	22.64
EK172Z20	172	2.00	55	50	16	4.663	594	241	28.49	27.52	22.31
EK172Z25	172	2.50	55	50	16	5.829	743	296	34.98	33.79	21.97
EK202Z15	202	1.50	55	50	16	3.850	491	270	27.20	26.36	21.55
EK202Z20	202	2.00	55	50	16	5.134	654	355	35.69	34.59	21.22
EK202Z25	202	2.50	55	50	16	6.417	818	436	43.89	42.53	20.89
EK232Z15	232	1.50	75	67	16	4.639	591	452	39.80	38.56	29.50
EK232Z20	232	2.00	75	67	16	6.186	788	595	52.30	50.68	29.10
EK232Z25	232	2.50	75	67	16	7.732	985	735	63.90	61.92	28.70
EK250Z15	250	1.50	65	60	16	4.639	591	501	40.59	39.56	24.74
EK250Z20	250	2.00	65	60	16	6.186	788	659	53.41	52.05	24.41
EK250Z25	250	2.50	65	60	16	7.732	985	813	65.87	64.18	24.08

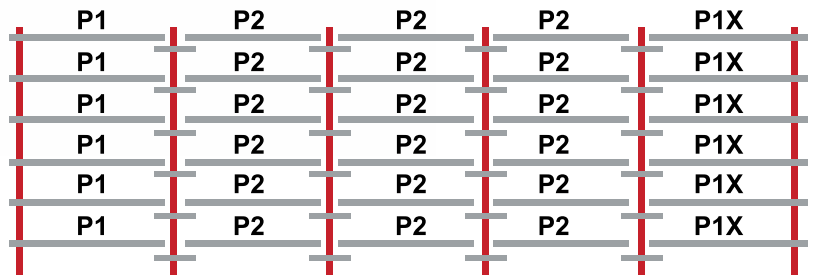
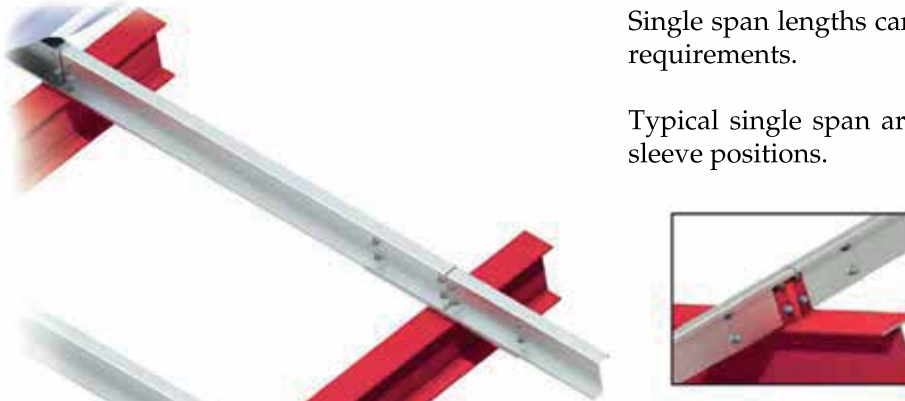
Hot Dip Galvanised Steel Coils Confirming to ASTM A653 is used for cold formed " Z " Purlins

PURLINS ~ DETAILS OF SLEEVES & CLEATS

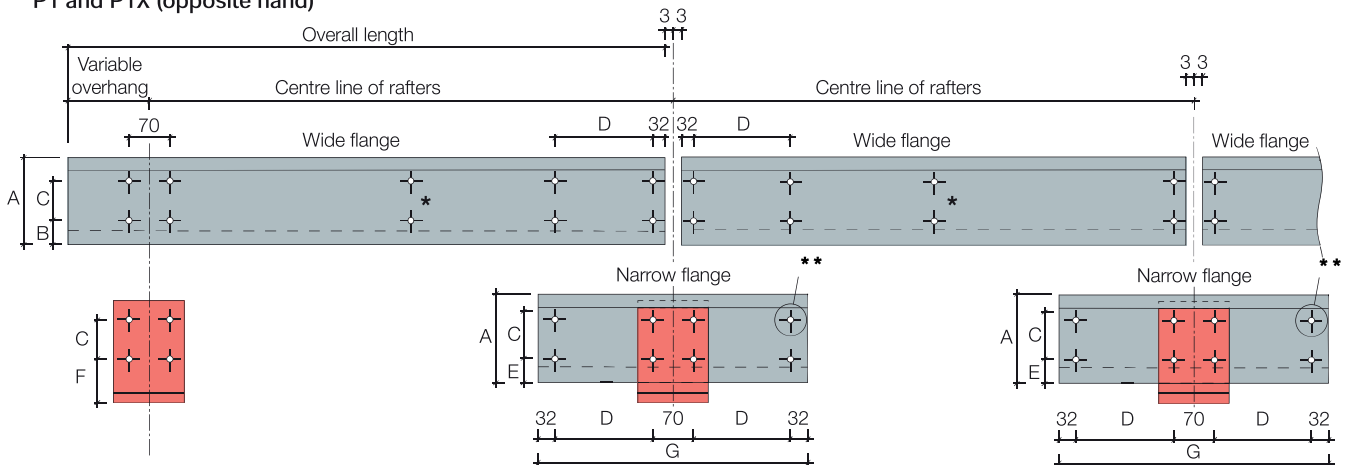
Single Span System

Single span lengths can be supplied to suit individual requirements.

Typical single span arrangement indicating purlin & sleeve positions.



P1 and P1X (opposite hand)



Sleeve Details (mm)

A	B	C	D	E	F	G
142	42	56	240	44	50	614
172	42	86	290	44	50	714
202	42	116	350	44	50	834
232	42	146	410	44	50	954
250	42	164	460	44	50	1054

Unless otherwise stated, all required holes are 14 X 20 slot for M12 bolts and are normally punched in pairs on standard gauge lines.

* Anti-sag rod holes wherever required.
** 8 hole sleeve for all size purlin.

PURLINS ~ LOAD CHART

(Dead + Wind) Loads in Working Stress

KN/m²

Purlin Span	Purlin Centre Distance	"Z" Purlin Sections									
		in Mtrs	in Mtrs	EK122Z 15	EK122Z 20	EK142Z 15	EK142Z 20	EK172Z 15	EK172Z 20	EK202Z 15	EK 202Z 20
4.00	1.00	1.495	1.768	1.687	2.199	2.455	3.305	3.083	4.154	3.898	6.039
	1.25	1.196	1.414	1.350	1.759	1.964	2.644	2.466	3.323	3.118	4.831
	1.50	0.997	1.179	1.125	1.466	1.637	2.203	2.055	2.769	2.599	4.026
	1.75	0.854	1.010	0.964	1.257	1.403	1.889	1.762	2.374	2.227	3.451
4.50	1.00	1.181	1.397	1.333	1.737	1.940	2.611	2.436	3.282	3.080	4.772
	1.25	0.945	1.118	1.066	1.390	1.552	2.089	1.949	2.626	2.464	3.818
	1.50		0.931	0.889	1.158	1.293	1.741	1.624	2.188	2.053	3.181
	1.75		0.798	0.762	0.993	1.109	1.492	1.392	1.875	1.760	2.727
5.00	1.00	0.957	1.132	1.080	1.407	1.571	2.115	1.973	2.658	2.495	3.865
	1.25		0.906	0.864	1.126	1.257	1.692	1.578	2.126	1.996	3.092
	1.50			0.720	0.938	1.047	1.410	1.315	1.772	1.663	2.577
	1.75				0.804	0.898	1.209	1.127	1.519	1.426	2.209
5.50	1.00	0.791	0.935	0.892	1.163	1.298	1.748	1.631	2.197	2.062	3.194
	1.25				0.930	1.038	1.398	1.305	1.758	1.650	2.555
	1.50				0.775	0.865	1.165	1.087	1.465	1.375	2.129
	1.75					0.742	0.999	0.932	1.255	1.178	1.825
6.00	1.00				0.977	1.091	1.468	1.370	1.846	1.732	2.684
	1.25				0.782	0.873	1.174	1.096	1.477	1.386	2.147
	1.50					0.727	0.979	0.913	1.231	1.155	1.789
	1.75						0.839	0.783	1.055	0.990	1.534
6.50	1.00				0.832	0.929	1.251	1.167	1.573	1.476	2.287
	1.25					0.743	1.001	0.934	1.258	1.181	1.830
	1.50						0.834	0.778	1.049	0.984	1.525
	1.75							0.667	0.899	0.843	1.307
7.00	1.00					0.801	1.079	1.007	1.356	1.273	1.972
	1.25						0.863	0.806	1.085	1.018	1.578
	1.50								0.904	0.849	1.315
	1.75								0.775	0.727	1.127
7.50	1.00						0.940	0.877	1.181	1.108	1.718
	1.25								0.945	0.886	1.374
	1.50								0.787	0.739	1.145
	1.75										0.982
8.00	1.00						0.826	0.771	1.038	0.974	1.510
	1.25								0.830	0.779	1.208
	1.50										1.007
	1.75										0.863
8.50	1.00								0.920	0.863	1.337
	1.25										1.070
	1.50										0.891
	1.75										0.764
9.00	1.00								0.820	0.770	1.193
	1.25										0.954
	1.50										0.795
9.50	1.00										1.070
	1.25										0.856
	1.50										0.713
10.00	1.00										0.966
	1.25										0.773

PURLINS ~ LOAD CHART

Purlins Sleeved System Allowable (Dead + Live + Collateral) Loads KN/m²

Purlin Span	Purlin Centre Distance	"Z" Purlin Sections									
		in Mtrs	EK122Z 15	EK122Z 20	EK142Z 15	EK142Z 20	EK172Z 15	EK172Z 20	EK202Z 15	EK202Z 20	EK250Z 15
4.00	1.00	1.606	1.900	1.812	2.362	2.637	3.550	3.312	4.462	4.187	6.487
	1.25	1.285	1.520	1.450	1.890	2.110	2.840	2.650	3.570	3.350	5.190
	1.50	1.071	1.267	1.208	1.575	1.758	2.367	2.208	2.975	2.791	4.325
4.50	1.75	0.918	1.086	1.035	1.350	1.507	2.029	1.893	2.550	2.393	3.707
	1.00	1.144	1.357	1.432	1.866	2.084	2.804	2.617	3.525	3.308	5.125
	1.25	0.915	1.086	1.146	1.493	1.667	2.243	2.094	2.820	2.646	4.100
5.00	1.50	0.763	0.905	0.955	1.244	1.389	1.869	1.745	2.450	2.205	3.417
	1.75	0.654	0.775	0.818	1.066	1.191	1.602	1.495	2.014	1.890	2.929
	1.00	0.834	0.989	1.094	1.426	1.688	2.272	2.120	2.856	2.680	4.152
5.50	1.25	0.667	0.791	0.875	1.141	1.350	1.818	1.696	2.285	2.144	3.322
	1.50		0.659	0.729	0.951	1.125	1.515	1.413	1.904	1.787	2.768
	1.75			0.625	0.815	0.965	1.298	1.211	1.632	1.531	2.373
6.00	1.00	0.626	0.743	0.822	1.072	1.395	1.877	1.752	2.360	2.214	3.431
	1.25			0.658	0.858	1.116	1.502	1.402	1.888	1.771	2.745
	1.50				0.715	0.930	1.251	1.168	1.573	1.476	2.287
6.50	1.75				0.613	0.797	1.073	1.001	1.349	1.265	1.961
	1.00			0.633	0.825	1.143	1.497	1.472	1.983	1.861	2.883
	1.25				0.660	0.914	1.198	1.178	1.586	1.489	2.306
7.00	1.50					0.762	0.998	0.981	1.322	1.241	1.922
	1.75					0.653	0.855	0.841	1.133	1.063	1.647
	1.00				0.649	0.899	1.178	1.254	1.689	1.585	2.456
7.50	1.25					0.719	0.942	1.003	1.351	1.268	1.965
	1.50						0.785	0.836	1.126	1.057	1.637
	1.75						0.673	0.717	0.965	0.906	1.403
8.00	1.00					0.719	0.943	1.059	1.390	1.367	2.118
	1.25						0.754	0.847	1.112	1.094	1.694
	1.50						0.629	0.706	0.927	0.911	1.412
8.50	1.75							0.605	0.794	0.781	1.210
	1.00						766.000	0.861	1.130	1.191	1.845
	1.25							0.689	0.904	0.953	1.476
9.00	1.50								0.753	0.794	1.230
	1.75								0.646	0.681	1.054
	1.00							0.709	0.931	1.046	1.621
9.50	1.25								0.745	0.837	1.297
	1.50								0.621	0.697	1.081
	1.75										0.926
10.00	1.00								0.776	0.927	1.436
	1.25									0.742	1.149
	1.50									0.618	0.957
10.00	1.75										0.821
	1.00									0.827	1.214
	1.25									0.662	0.971
10.00	1.50										0.809
	1.75										0.694
	1.00									0.742	1.032
10.00	1.25										0.826
	1.50										0.688
	1.00										0.885
											0.708