



Structural properties of DMS 'C' Purlin Sections							
Depth in mm	Thick-ness mm	Weight Kgs/ Mtrs.	Area MM ²	I _{xx}	I _{yy}	Z _{xx}	Z _{yy₂}
80	2.00	3.193	4.068	41.232	15.088	10.308	5.077
80	2.30	3.646	4.645	46.668	16.984	11.667	5.714
80	2.50	3.944	5.024	50.188	18.198	12.547	6.122
100	2.00	3.507	4.468	69.608	16.442	13.922	5.229
100	2.30	4.007	5.105	78.944	18.515	15.789	5.888
100	2.50	4.337	5.524	85.013	19.844	17.003	6.310
125	2.00	3.900	4.968	117.737	17.827	18.838	5.368
125	2.30	4.459	5.680	133.753	20.080	21.400	6.047
125	2.50	4.827	6.149	144.198	21.524	23.072	6.482
140	2.00	4.135	5.268	153.967	18.532	21.995	5.433
140	2.30	4.729	6.025	175.043	20.876	25.006	6.121
140	2.50	5.122	6.524	188.808	22.378	26.973	6.562
150	2.00	4.292	5.468	181.392	18.960	24.186	5.471
150	2.30	4.910	6.255	206.311	21.357	27.508	6.164
150	2.50	5.318	6.774	222.599	22.895	29.680	6.609
165	2.00	4.528	5.768	227.687	19.545	27.598	5.521
165	2.30	5.181	6.600	259.113	22.017	31.408	6.221
165	2.50	5.612	7.149	279.676	23.602	33.900	6.671
175	2.00	4.685	5.968	262.134	19.902	29.958	5.550
175	2.30	5.361	6.830	298.415	22.420	34.105	6.255
175	2.50	5.808	7.399	322.170	24.034	36.819	6.707
200	2.00	5.077	6.468	361.527	20.699	36.153	5.613
200	2.30	5.813	7.405	411.862	23.317	41.186	6.327
200	2.50	6.299	8.024	444.864	24.995	44.486	6.785
220	2.00	5.391	6.868	455.518	21.253	41.411	5.655
220	2.30	6.175	7.865	519.193	23.940	47.199	6.375
220	2.50	6.692	8.524	560.979	25.663	50.998	6.837
240	2.00	5.705	7.268	563.246	21.746	46.937	5.691
240	2.30	6.535	8.325	642.254	24.495	53.521	6.416
240	2.50	7.084	9.024	694.144	26.257	57.845	6.881



DMS - 'C' Purlin



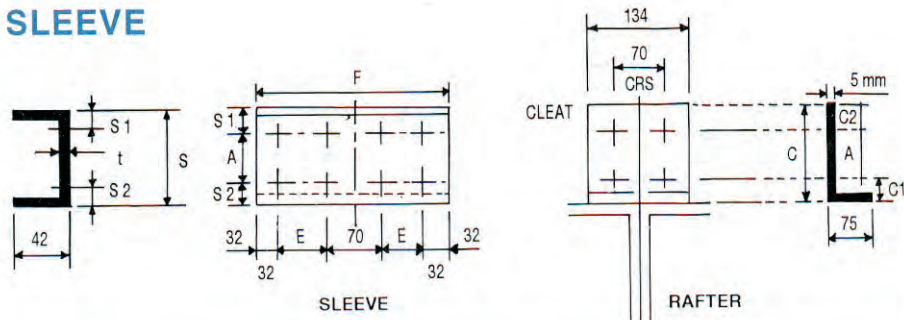
- Stronger
- Economical
- More durable
- 40% Saving in Steel

The main advantages of DMS 'C' Purlin are :

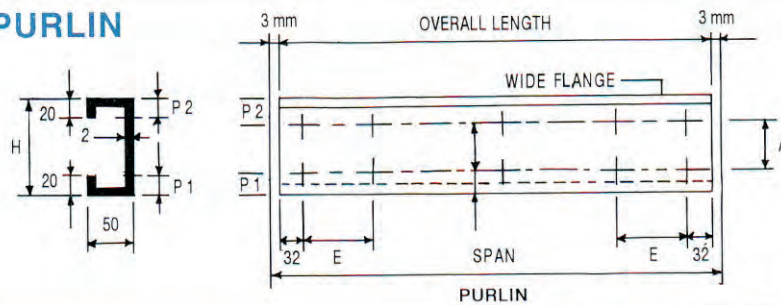
- Saving in weight of structural steel used for a shed compared to hot rolled angles, channels or tubular sections.
- Truss spacings can be increased hence less number of trusses, columns and foundation resulting in further economy.
- Dead load transferred by purlin to trusses is reduced resulting in lighter members for trusses resulting into overall economy such as economy in transportation, erection etc.
- The purlin may be supplied in required lengths & with predrilled holes hence fabrication & erection cost is reduced. It also makes erection & fabrication faster hence saving in time.
- The lip size has been kept to give a better grip for the sheet fixing crook bolts. It also gives additional safety against wind loads.
- The surface of the purlin is degreased, phosphated and suitably painted to cater for all kind of atmospheric corrosion.
- The sections have been proportioned to get best use of the material.
- We give a wide range of sections so that a better and economical selection of the section can be done.
- Channel sections are recommended where uplift due to wind is very high as these provide better grip with crook bolts.



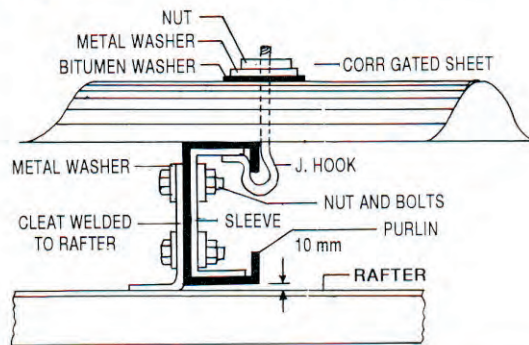
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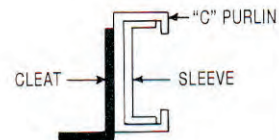
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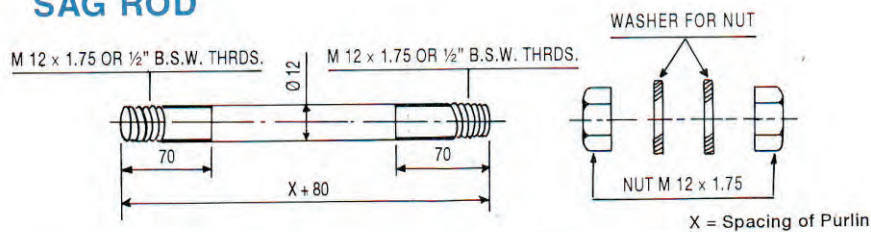
Fixing details of Sheet and Purline with Crook Bolt.



Fixing arrangement of "C" Purlin with Sleeve and Cleat.



SAG ROD



Guide to fabricate Sleeve and Cleat

H	A	E	P ₁	P ₂	F	S	S ₁	S ₂	C	C ₁	C ₂
100	40	190	30	30	514	92	26	26	97	32	25
125	45	190	40	40	514	117	36	36	117	42	30
140	60	190	40	40	514	132	36	36	132	42	30
150	70	200	40	40	534	142	36	36	142	42	30
165	85	210	40	40	554	157	36	36	157	42	30
175	95	210	40	40	554	168	36	36	168	42	30
200	120	240	40	40	614	192	36	36	192	42	30
220	140	250	40	40	634	212	36	36	212	42	30
240	160	250	40	40	634	232	36	36	232	42	30
260	180	270	40	40	674	252	36	36	252	42	30



Load Carrying Capacity of DMS 'C' Purlins in kgs/m² (Excluding self weight at $\theta = 15^\circ$)

Span in Meters	Purline-Size		Weight Kgs./Metre	Spacing of Purline-1.2 M			Spacing of Purline-1.4 M			Spacing of Purline-1.6 M		
	Depth mm.	Thickness mm.		No Sag rod	One Sag rod	Two Sag rod	No Sag rod	One Sag rod	Two Sag rod	No Sag rod	One Sag rod	Two Sag rod
3.00	80	2.0	3.19	104.58	-	-	89.64	-	-	78.44	-	-
	80	2.3	3.65	118.10	-	-	101.23	-	-	88.58	-	-
	100	2.0	3.51	127.60	-	-	109.37	-	-	95.7	-	-
	100	2.3	4.01	144.24	-	-	123.64	-	-	108.18	-	-
3.50	80	2.0	3.19	76.13	-	-	65.25	89.51	-	57.10	78.32	-
	80	2.3	3.65	85.96	-	-	73.68	101.22	-	64.47	88.57	-
	100	2.0	3.51	92.97	-	-	79.69	117.01	-	69.73	102.38	-
	100	2.3	4.01	105.09	-	-	90.08	132.54	-	78.82	115.97	-
4.00	100	2.0	3.51	70.49	103.83	-	60.42	89.0	-	52.87	77.87	-
	100	2.3	4.01	79.68	117.60	-	68.29	100.8	-	59.76	88.20	-
	125	2.0	3.90	84.48	134.57	-	72.41	115.35	-	63.36	100.93	-
	125	2.3	4.46	95.54	152.60	-	81.89	130.80	-	71.65	114.45	-
	140	2.0	4.14	91.89	152.90	-	78.76	131.06	-	68.91	114.68	-
	140	2.3	4.73	103.93	173.47	-	89.08	148.68	-	77.95	130.10	-
4.50	100	2.0	3.51	55.09	81.43	-	47.22	69.79	-	41.31	61.07	-
	100	2.3	4.01	62.25	92.22	-	53.36	79.05	-	46.69	69.16	-
	125	2.0	3.90	66.06	105.64	-	56.63	90.55	-	49.55	79.23	-
	125	2.3	4.46	74.70	119.79	-	64.03	102.68	-	56.03	89.84	-
	140	2.0	4.14	71.88	120.09	-	61.61	102.93	-	53.91	90.07	-
	140	2.3	4.73	81.29	136.23	-	69.68	116.77	-	60.97	102.17	-
5.00	100	2.30	4.01	49.79	74.06	-	42.68	63.48	-	37.34	55.55	-
	125	2.00	3.90	52.89	84.95	-	45.34	72.82	-	39.36	63.72	-
	125	2.30	4.46	59.80	96.33	-	51.26	82.57	-	44.85	72.24	-
	140	2.00	4.14	57.57	96.62	-	49.34	82.81	-	43.18	72.46	-
	140	2.30	4.73	65.10	109.60	-	55.80	93.94	-	48.82	82.20	-
	150	2.00	4.29	60.45	104.33	-	51.81	89.43	-	45.34	78.25	-
	150	2.30	4.91	68.36	118.38	-	58.59	101.47	-	51.27	88.78	-
	170	2.00	4.14	46.98	79.25	-	40.27	67.93	-	35.23	59.44	-
5.50	140	2.30	4.73	53.12	89.89	-	45.53	77.05	-	39.84	67.42	-
	150	2.00	4.29	49.34	85.60	-	42.29	73.38	-	37.00	64.20	-
	150	2.30	4.91	55.78	97.12	-	47.82	83.25	-	41.84	72.84	-
	160	2.00	4.53	52.61	95.04	-	45.09	81.46	-	39.46	71.28	-
	160	2.30	5.18	59.49	107.86	-	50.99	92.45	-	44.61	80.89	-
	170	2.00	4.68	54.63	101.26	-	46.82	86.79	-	40.97	75.94	-
	170	2.30	5.36	61.77	114.92	-	52.94	98.51	-	46.32	86.19	-
	190	2.00	4.53	-	79.26	92.70	-	67.94	79.46	-	59.44	69.53
6.00	160	2.30	5.18	-	89.94	105.34	-	77.09	90.29	-	67.46	79.00
	175	2.00	4.68	-	84.46	99.75	-	72.39	85.50	-	63.34	74.81
	175	2.30	5.36	-	95.85	113.37	-	82.16	97.17	-	71.89	85.03
	200	2.00	5.08	-	97.20	117.60	-	83.31	100.80	-	72.90	88.20
	200	2.30	5.81	-	110.34	133.71	-	94.57	114.61	-	82.57	100.28
	220	2.00	5.39	-	107.08	132.05	-	91.79	113.18	-	80.31	99.04
	220	2.30	6.17	-	121.56	150.17	-	104.20	128.72	-	91.17	112.63
	240	2.00	5.08	-	79.26	89.11	-	65.14	76.38	-	57.00	66.84
6.50	175	2.00	4.68	-	71.39	84.42	-	61.19	72.36	-	53.54	63.31
	175	2.30	5.36	-	81.01	95.94	-	69.44	82.23	-	60.76	71.95
	200	2.00	5.08	-	82.19	99.58	-	70.45	85.35	-	61.65	74.68
	200	2.30	5.81	-	93.30	113.21	-	79.97	97.04	-	69.97	84.91
	220	2.00	5.39	-	90.58	111.85	-	77.64	95.87	-	67.93	83.89
	220	2.30	6.17	-	102.82	127.20	-	88.13	109.02	-	77.11	95.40
	240	2.00	4.68	-	61.02	72.25	-	52.30	61.93	-	45.76	54.19
	7.00	175	2.30	5.36	-	69.24	82.11	-	59.35	70.38	-	51.93
200		2.00	5.08	-	70.29	85.28	-	60.25	73.09	-	52.72	63.96
200		2.30	5.81	-	79.78	96.95	-	68.38	83.10	-	59.83	72.71
220		2.00	5.39	-	77.48	95.83	-	66.41	82.13	-	58.11	71.87
220		2.30	6.17	-	87.95	108.96	-	75.38	93.40	-	65.96	81.72
240		2.00	5.08	-	60.68	73.74	-	52.01	63.21	-	45.51	55.30
7.50	200	2.30	5.81	-	68.87	83.83	-	59.03	71.85	-	51.65	62.87
	220	2.00	5.39	-	66.92	82.89	-	57.36	71.05	-	50.19	62.17
	220	2.30	6.17	-	75.95	94.26	-	65.10	80.79	-	56.95	70.69
	240	2.00	5.17	-	72.95	92.10	-	62.53	78.95	-	54.72	69.08
	240	2.30	6.53	-	82.80	104.75	-	70.97	89.78	-	62.10	78.56