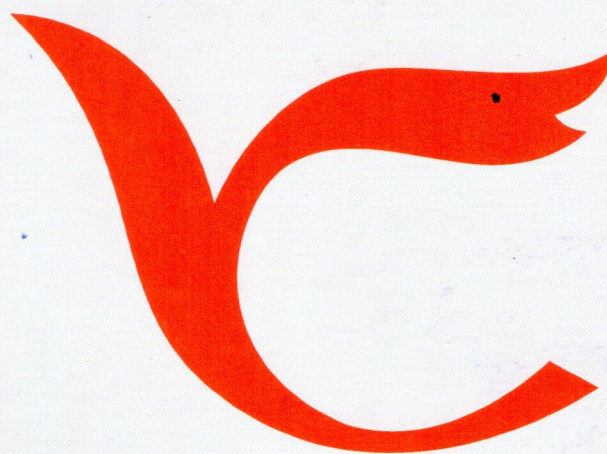


PRESTAR INTRODUCES

ZED-CEE Purlins

Ultimate in Roofing Solution



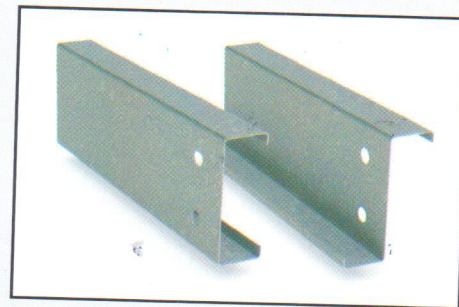
Leading the way
In Pre Engineered Buildings





ADVANTAGES OF ZED-CEE PURLINS

- 1 Saving upto 40-50% weight of the structural steel and 25-30% in cost when compared to hot rolled sections.
- 2 Saving upto 35-40% in weight and 20% in cost when compared to hot rolled purlins.
- 3 Truss spacing can be increased, hence less numbers of trusses columns and foundation work resulting in further economy.
- 4 The purlins are supplied in required lengths with pre-punched holes. Hence, reduction in construction time and cost in fabrication & erection and wastage.
- 5 Purlin erection is easier than others.
- 6 Close tolerances on sectional dimensions due to process of cold roll forming.
- 7 Low transportation cost due to reduced weight.
- 8 High versatility, durability and uniform quality.

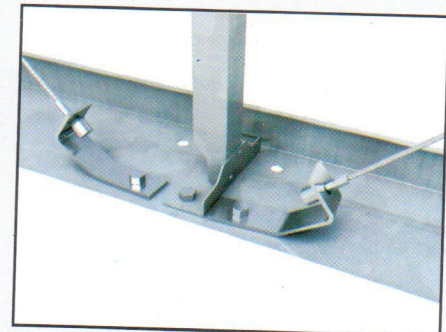


General data

The "Z" and "C" (Zed and Cee) shaped sections of PRESTAR are accurately roll-formed via cold forming from high-strength zinc-alloy coated steel in order to provide an efficient, lightweight and cost efficient roofing, cladding and walling support system for framed structures (Purlin and girt system).

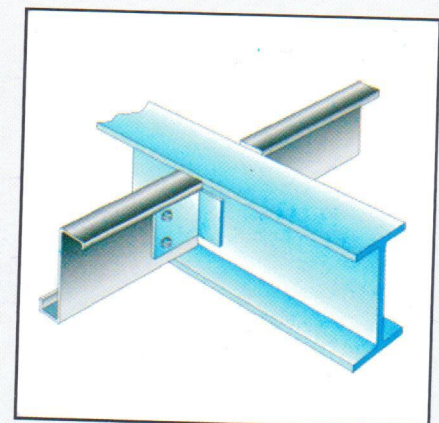
Applications

The PRESTAR "Z" shaped section may be used over single spans, un lapped continuous spans and lapped continuous spans in multi-bay buildings. Lapped spans result in a considerable load bearing capacity increase in the system. The PRESTAR "C" shaped section may be used over single spans and un lapped continuous spans in multi-bay buildings. They are ideal as cave purlins or where compact sections are required. The "C" shaped section cannot be used in overlapping structures.



Range of products and services

- The wide range of the services 'PRESTAR' offers includes:
- The full range of "Z" - "C"- shaped profiles.
 - Technical information for cleat less connections.
 - Bolting systems to suit all project requirements.
 - Corrosion protection warranty.
 - Technical advice on improving the life expectancy of purlin systems in corrosive environments.



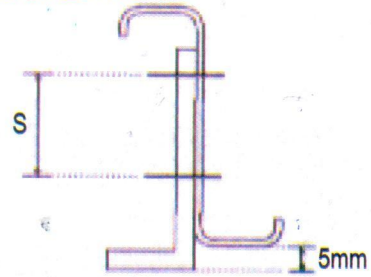


Dimension and technical characteristics

The PRESTAR "Z" and "C" shaped section are produced in standard dimension and length upon request from 2000 mm to 12000 mm according to the engineering design data. There are produced according to the desired hole punching with the following restriction: Minimum distance from the end section 35 mm Minimum center holes distance in perpendicular axe 65 mm.

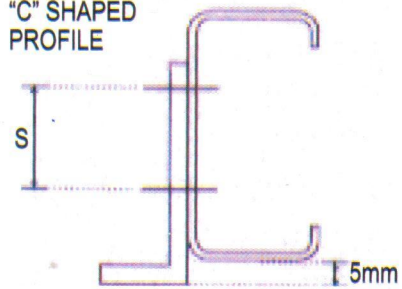
Hole and Bolt Specification (Tighten all bolts to SSNm torque)		
Nominal Section size D (mm)	Holes Diameter (mm)	Bolt Specification
100.140	O14	M 12 - 8.8
180.210 250.300	Φ16	M 16 - 8.8
All sections	Φ12	M 10 - 4.6

"Z" SHAPED PROFILE



Smin=65mm

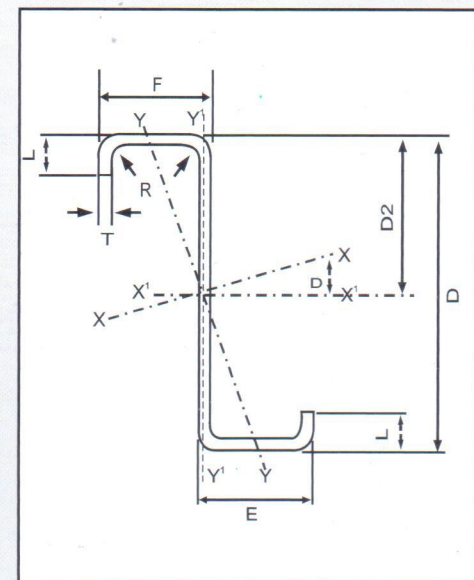
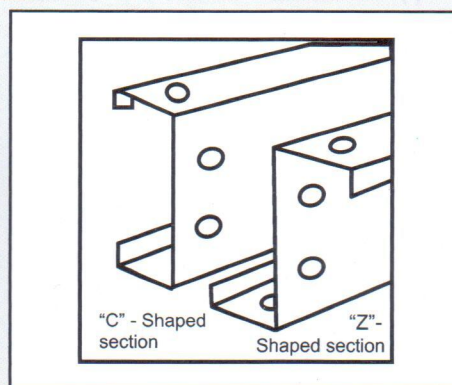
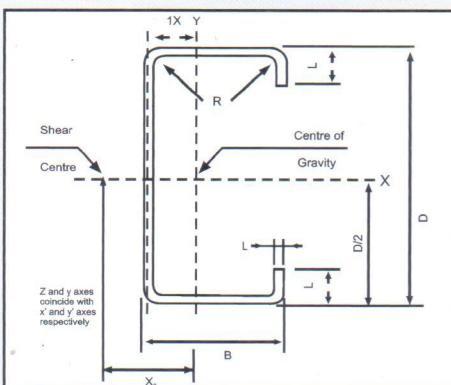
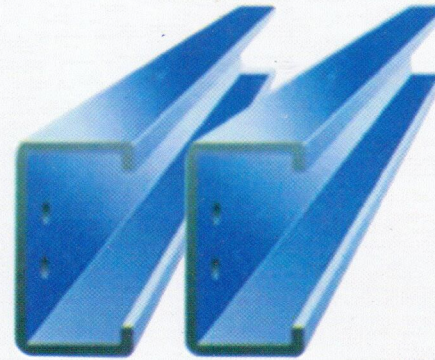
"C" SHAPED PROFILE



Smin=65mm

Dimension for C and Z shaped section purlins

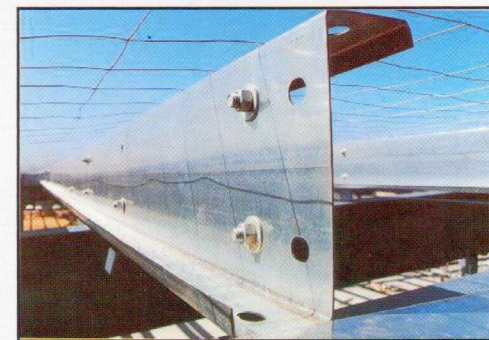
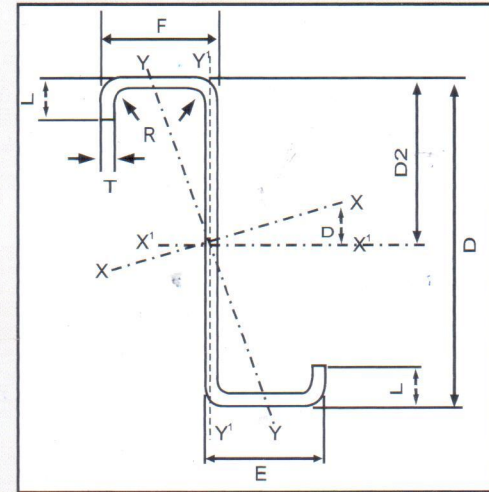
Purline Type	Section Thickness	Section Height	Radius	Mass per unit length	"Z" shaped		
					F	E	L
	t	D	R	kgm	mm	mm	mm
C/Z 140 15	1.50	140	2	3.40	57	65	20
C/Z 140 20	2.00	140	2	4.49	57	65	20
C/Z 180 15	1.50	180	2	3.87	57	65	20
C/Z 180 20	2.00	280	2	5.12	57	65	20
C/Z 180 25	2.50	280	2	6.32	57	65	20
C/Z 210 20	2.00	210	2	5.56	57	65	22
C/Z 210 25	2.50	210	2	6.99	57	65	22
C/Z 210 30	3.00	210	2	8.31	57	65	22
C/Z 250 25	2.50	250	2	8.30	71	79	22
C/Z 250 30	3.00	250	2	9.89	71	79	22





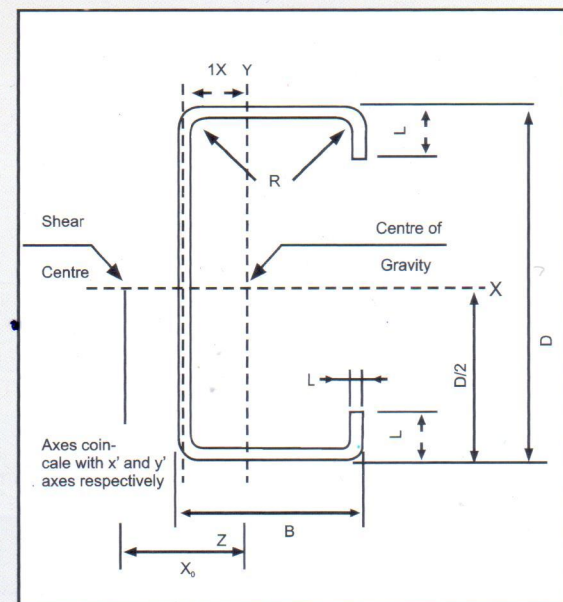
Static data for Z shaped section purlins

Purlin Type	Section area	Warping constant	Principal axes				
			Full section properties				
			Stop of principal axes	Second moment of area		Section modulus	
Z	A mm ²	I _w 10 ⁶ mm ⁶	a ^o	I _x 10 ⁶ mm ⁴	I _y 10 ⁶ mm ⁴	W _{xel} mm ³	W _{yel} mm ³
Z 140 15	436.80	1.377.00	24.99	1.6390	0.1491	18.550	4.256
Z 140 20	577.50	1.716.00	24.81	2.1420	0.1933	24.420	5.554
Z 180 15	496.80	2.326.00	18.01	2.7010	0.1734	26.000	4.615
Z 180 20	657.50	2.992.00	17.85	3.5410	0.2248	34.270	6.021
Z180 25	815.70	3.606.00	17.69	4.3520	0.2732	42.340	7.361
Z.210 20	710.60	4.318.00	14.70	4.9410	0.2471	42.680	6.444
Z 210 25	900.70	5.397.00	14.70	6.1760	0.3089	53.340	8.055
Z 210 30	1.074.00	6.254.00	14.56	7.3000	0.3604	63.320	9.458



Static data for C shaped section purlins

Purlin Type	Section area	Warping constant	Full section properties				
			Second moment of area		Centroid	Section modulus	
			I _x 10 ⁶ mm ⁴	I _y 10 ⁶ mm ⁴	x mm	W _{xel} mm ³	W _{yel} mm ³
C	A mm ²	I _w 10 ⁶ mm ⁶	I _x 10 ⁶ mm ⁴	I _y 10 ⁶ mm ⁴	x mm	W _{xel} mm ³	W _{yel} mm ³
C 140 15	436.80	1.007.00	1.3730	0.2445	19.78	19.550	5.592
C 140 20	577.50	1.289.00	1.7990	0.3167	19.53	25.710	7.286
C 180 15	496.80	1.709.00	2.4590	0.2651	17.39	27.230	5.750
C 180 20	657.50	2.196.00	3.2300	0.3435	17.15	35.850	7.493
C 180 25	815.70	2.644.00	3.9760	0.4172	16.91	44.260	9.152
C 210 20	720.60	3.173.00	4.6390	0.3655	15.99	44.220	7.589
C 210 25	900.70	3.966.00	5.7980	0.4589	15.99	55.280	9.823
C210 30	1.074.00	4.592.00	6.8619	0.5329	15.76	65.650	11.520
C 250 25	1.205.00	19.330.00	11.8300	1.5840	28.26	95.610	22.870
C 250 30	1.435.00	22.480.00	14.0400	1.8580	27.94	113.700	26.900



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