

C purlin instruction

1. General introduction:



Steel C Purlins are one excellent product,which could offer long spans between portal frames on commercial buildings.Lipped channel purlins are available in different sizes and material strengths,which is to match the design computations of buildings.

Our C sections are made from galvanized quality steel and is cold roll formed to length and holes punched, which could be according to customer's design request.

2. Advantages of using our C steel frames

- Designed in accordance with GB/T6725-2002 standards,which is strict complying to requirements for China national standards.At the same time,we could also follow your required standards,such as ASTM,AS,EN standards;
- A full range of sections from 80mm to 350mm for your choices,even it's special size,please let us know the size in

details, we will check if our equipment could be adjusted and make as per your request, we will do our best to make for you;

- Our C purlins and girts can be supplied plain, or punched using standard hole punching, spaced to your requirement or specifications. You could offer us the punching holes design, then we could offer you exact price;
- Our C section frames and girts are manufactured from high tensile steel for increased strength and lightweight. The material brand could be appointed, like Bao steel brand, Shougang brand, Tanggang brand, etc.
- Coating mass range is from 60-275g/m², which could offer long life under normal circumstances. The max zinc coating is 450g/m², please tell us, when you have the special requirement on zinc coating.

3. Cold rolled purlins product process:

Material preparation



Hot dipped galvanized steel strips: it has steel standards and thickness could be customized. The zinc coating can be anti-corrosion, so it's suitable for area with high humidity.

Equipment preparation



C purlins forming equipment: there is digital controller, and can satisfied the C purlins' accurate production.



Material loading preparation >>>



Hole pre-punched >>>



Cutting >>>



Quality inspection

C purlin production process has three stages,material preparation and equipment preparation and processing.

Material preparation:The related specs of GI steel strips will be prepared and loaded on equipment;

Equipment preparation:Our workshop manager will check and adjust the equipment to make sure the C steel purlin equipment is in correct status for production;

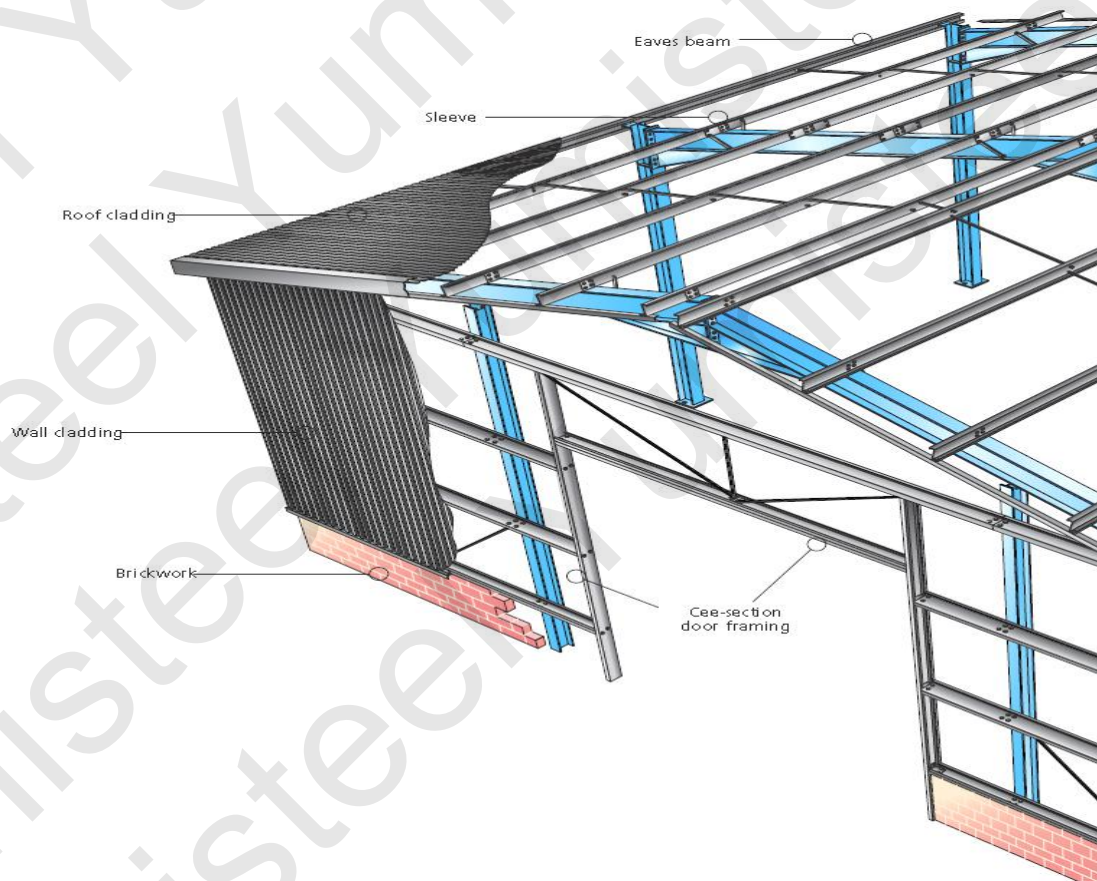
Processing:This is including holes pre-punching,cold rolled,cutting as per required length,and stack in proper position and well protected,then finally quality inspection by our QC people.

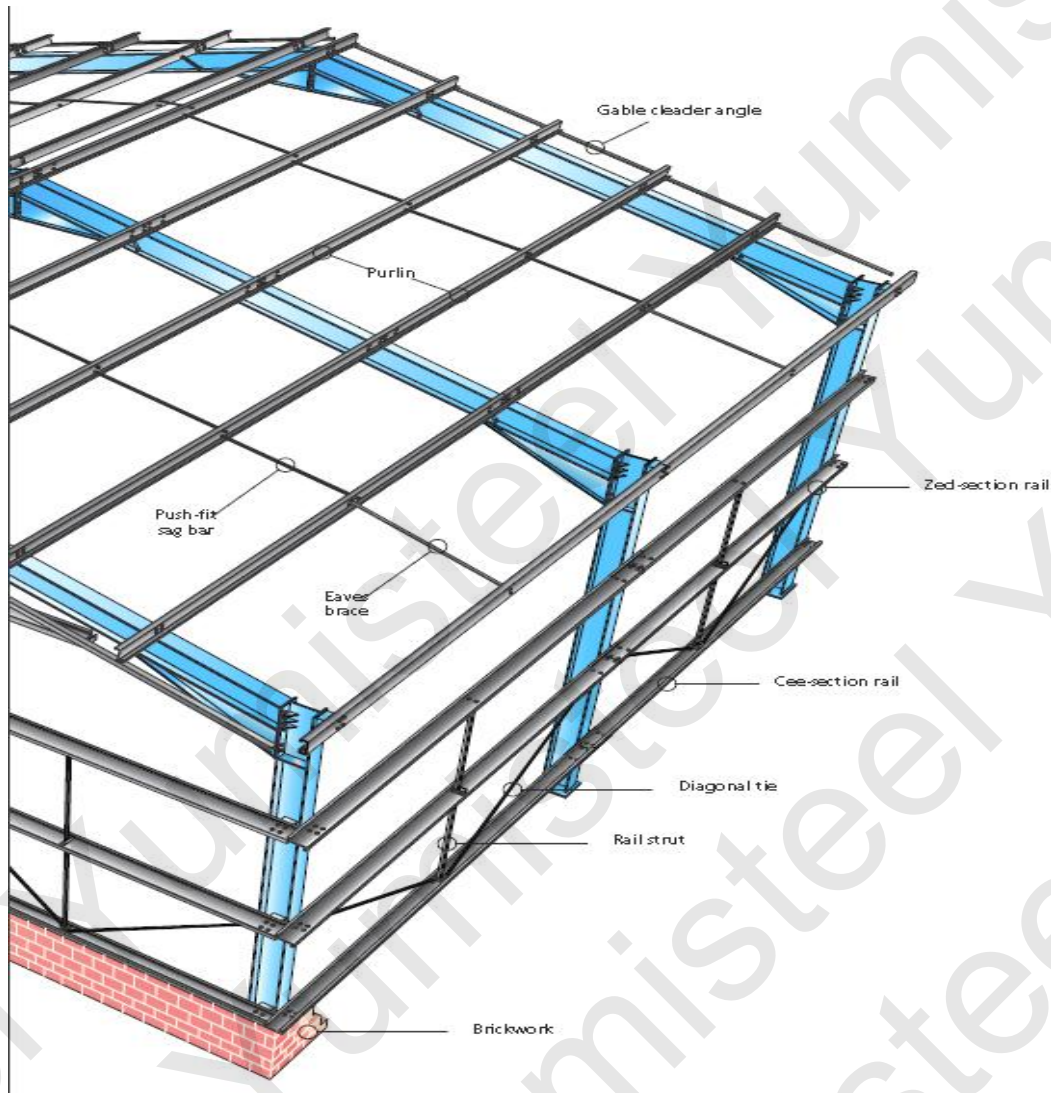
4. C purlin size chart:

Product name	Size details				Thickness(mm)	Punching Holes
	h	b-1	b-2	c		
C purlin	80	50		20	1.5-3.0	Could be punched,as per customer's requirement
C purlin	100	40		20	1.5-3.0	
C purlin	100	50		20	1.5-3.0	
C purlin	120	40		20	1.5-3.0	
C purlin	120	50		20	1.5-3.0	
C purlin	120	60		20	1.5-3.0	
C purlin	140	40		20	1.5-3.0	
C purlin	140	50		20	1.5-3.0	
C purlin	140	60		20	1.5-3.0	
C purlin	160	40		20	1.5-3.0	
C purlin	160	50		20	1.5-3.0	
C purlin	160	60		20	1.5-3.0	
C purlin	180	60		20	1.5-3.0	
C purlin	180	70		20	1.5-3.0	
C purlin	200	50		20	1.5-3.0	

C purlin	200	60		20	1.5-3.0
C purlin	200	70		20	1.5-3.0
C purlin	220	60		20	1.5-3.0
C purlin	220	70		20	1.5-3.0
C purlin	220	75		20	1.5-3.0
C purlin	220	80		20	1.5-3.0
C purlin	240	80		20	1.5-3.0
C purlin	250	70		20	1.5-3.0
C purlin	250	75		20	1.5-3.0
C purlin	250	80		20	1.5-3.0
C purlin	260	80		20	1.5-3.0
C purlin	280	70		20	1.5-3.0
C purlin	280	80		20	1.5-3.0
C purlin	300	80		20	1.5-3.0
C purlin	300	100		20	1.5-3.0

5. C section structural purlins applications:





Lipped channel purlins are mainly used for buildings' applications, but also just as cost effective to be used for small type of buildings, like garages, carports, shed, etc. C section frames can also be used as part of columns or rafters in steel buildings.

6. Safe roof purlins span:

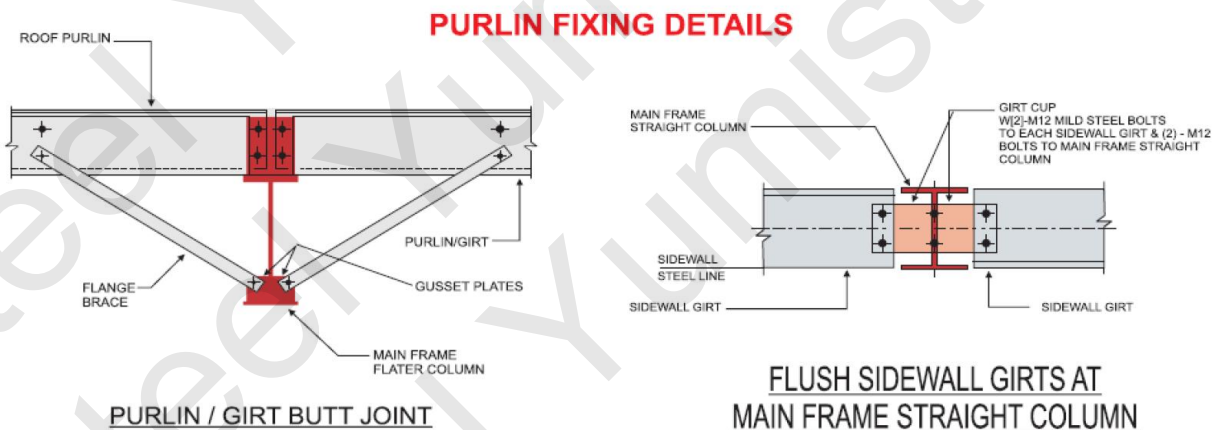
The safe spans below are suitable for sheds and class 1 structures with the following assumptions:

SAFE ALLOWABLE ROOF PURLIN SPANS (MM)

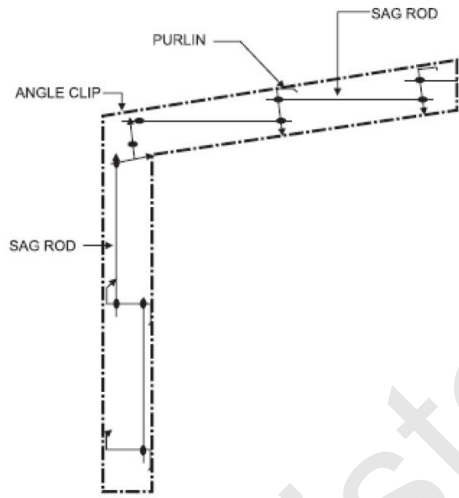
SECTION	WIND SPEED 33M/S			WIND SPEED 41M/S			WIND SPEED 50M/S		
	900	1200	1500	900	1200	1500	900	1200	1500
C 10010	4000	3500	3000	3250	2850	2450	2650	2400	2000
C 10012	4500	3900	3500	3650	3150	2850	3000	2600	2300
C 10015	4800	4350	4000	3900	3550	3250	3200	2900	2650
C 10019	5200	4700	4350	4250	3800	3550	3450	3100	2900
C 15012	6300	5500	4800	5100	4450	3900	4200	3650	3200
C 15015	7200	6500	6000	5850	5300	4900	4800	4300	4000
C 15019	8750	7300	6600	6800	6000	5350	5800	4850	4400
C 15024	10300	8700	7600	7200	7100	6200	6800	5800	5050
C 20015	8900	7600	6600	7200	6200	5350	6000	5050	4400
C 20019	11500	9800	8600	7800	7800	7000	7650	6500	5700
C 20024	13500	11500	10200	9000	9000	8300	9000	7600	6800
C 25019	12600	10800	9500	10000	8800	7700	8400	7200	6300
C 25024	16000	13700	12000	12000	11000	9800	10600	9100	8000

Note: For sizes greater than 250mm or other special size, please check with us.

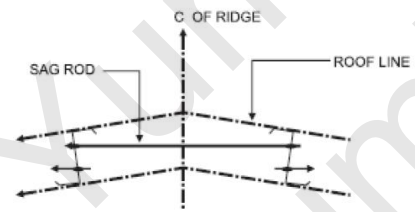
7. C purlins installation drawing:



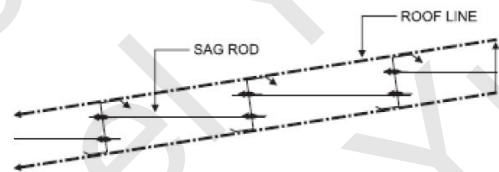
SAG ROD INSTALLATIONS



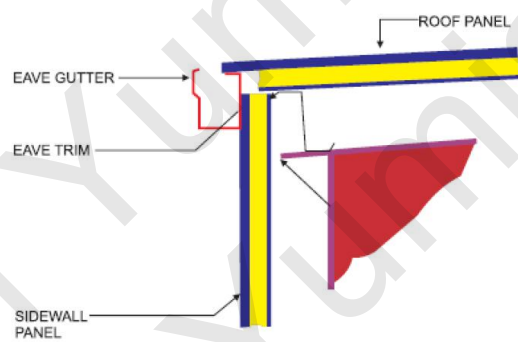
SAG ROD AT WALL



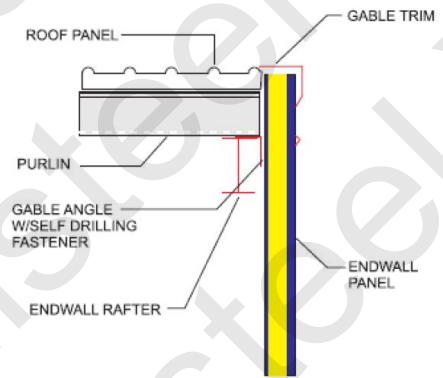
SAG ROD AT RIDGE



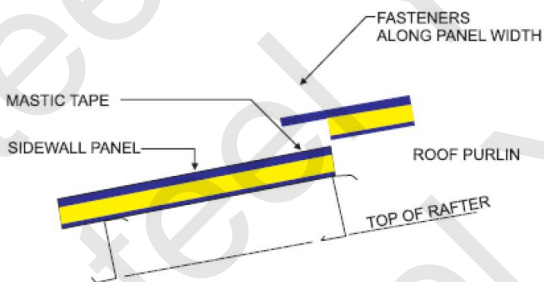
SAG ROD AT ROOF



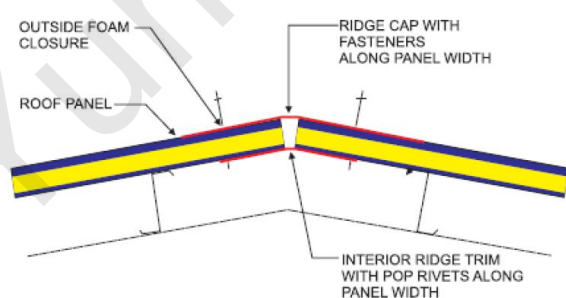
ROOF AND WALL PANEL AT EAVE



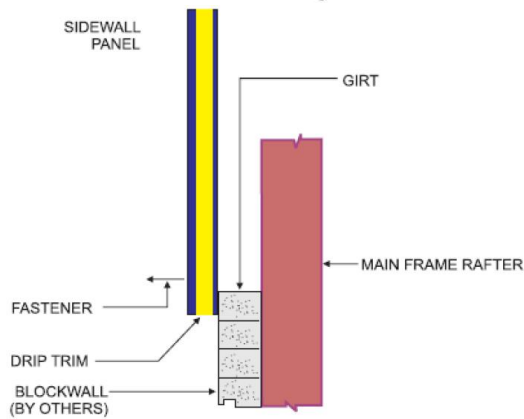
ROOF AND WALL PANEL AT GABLE



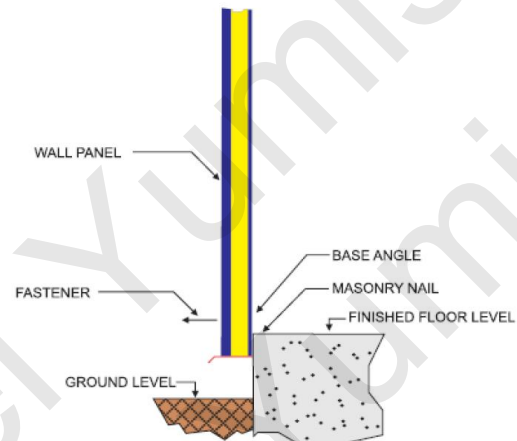
ROOF PANEL AT END LAP



ROOF PANEL AT RIDGE



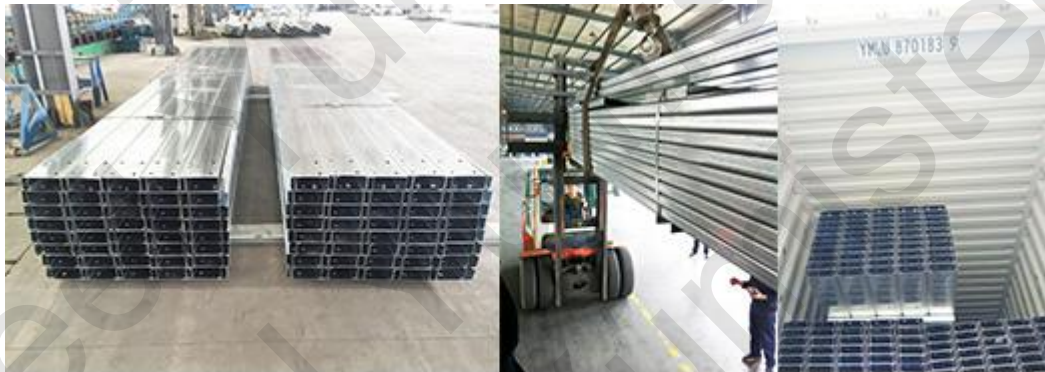
WALL PANEL ABOVE BLOCKWALL



WALL PANEL AT FINISHED FLOOR

8. Packing & loading reference:

C purlins are usually packed in bundles with straps fasten on it, and loaded by forklift. If you have any other special packing loading for Cee purlins, please indicate this requirement, when you make inquiry, so we could consider all the cost in.



Packing in strapped bundles → Loading by Forklift → Loading in container.

9. Storage at site

This storage note is for the Cee steel frames are not for immediate use. If steel purlins are not required for immediate use, steel sections should be neatly stacked off the ground and on a slight

slope,so that water could be drained away.All the C&Z purlins and related accessories should not be left exposed in the open for extended periods,in order to keep all the purlins are in good quality status.