



# **C** purlin

Our pre-punched purlins are quick to install and suitable for both insulated and uninsulated roofs and walls.

The thickness and height of the purlin selected depend on span length and loads. To optimise the design, use our PurCalc software.

#### Applications:

- · Industrial construction
- · Hall and warehouse construction
- · Extension construction and renovation
- Agricultural projects

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## **Properties**

Section type: C-sections

**Height:** 100, 120, 150, 200, 250, 300, 350 mm

Thickness: 1.0–3.0 mm

Minimum length 1600 mm Maximum length 18500 mm

Material: Hot galvanised steel sheet

Steel quality S350GD+Z275 according to EN 10346

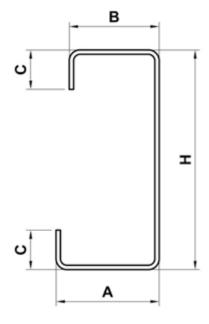
**Tolerances:** Roll formed products EN 10162

Press-braked products EN 1090-2

Material EN 10143

Dimensioning: It is advisable to use PurCalc software when dimensioning

lightweight purlins. Dimensioning curves are also available.



# Lightweight purlins C – cross-section geometries

## C Purlin

Type of purlin	Thickness	strip width	Height	of wide f	Width of narrow flange		Weight	Cross- section area, gross	Cross- sectionCross- section area, effective *	Bress brake		Max / Min length	Steel grade
	tnom	W	Н	Α	В	С	g	Agross	Aeff				
	mm	mm	mm	mm	mm	mm	kg/m	cm2	cm2				
LP- C100	1	207	100	45	39	>=15.50	1.63	199.4	120.6		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.2			45.4	39.4	>=15.90	1.96	240.8	167.7		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.5			46	40	>=16.50	2.45	302.8	236.2		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
LP- C120	1	230 (228)	120	45	39	>=16.00	1.81	219.6	120.8		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.2			45.4	39.4	>=16.40	2.17	265.2	168.8		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.5			46	40	>=17.00	2.71	333.4	238.6		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	2			47	41	>=18.00	3.61	447	363.2		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
LP- C150	1	260 (258)	150	45	39	>=16.00	2.04	248.4	120		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.2			45.4	39.4	>=16.40	2.45	300	167.6		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	1.5			46	40	>=17.00	3.06	377.2	238.3		I	1600mm / 18000mm	Plain galvanized S350GD +Z275
	2			47	41	>=18.00	4.08	505.8	366.1		I	1600mm / 18000mm	Plain galvanized S350GD +Z275

#### **Services**

Purlins can be pre-punched in our factory. This makes construction on-site faster and easier. The standardised sizes and locations of holes for fixing screws are presented below. Please contact us for additional information about the pre-punching possibilities.

Holes are made during production at continuous line – information:

- max. material thickness 3mm (for ø 60mm max. material thickness 2mm),
- · holes can be made in a row,
- · oval and rectangular holes can be rotated by 90°.

Type of hole	Diameter (mm)	Rotation (°)				
8	7	-				
10	10	-				
	12	-				
	14	-				
	16	-				
	18	-				
	20	-				
	22	-				
	26	-				
	60	-				
	12×24	90				
	14×24	90				
	16×35	90				
	18×31.7	90				
	18×35	90				
	20×35	90				
	5×25	90				

#### **Design tools**

Our PurCalc software is constantly improved and updated to easily design and optimise Ruukki's lightweight purlin sections.

Choosing the right filters will help you to select the right product characteristics. The software enables the calculation of various roof purlin systems, whether the purlins are restrained by trapezoidal sheeting or roof sandwich panels. Download PurCalc

#### **Order & delivery**

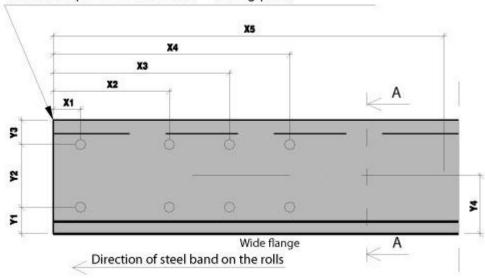
Use Ruukki's optimisation software PurCalc to design the purlin structure.

Please provide the following information in the order:

- Type of purlin
- Thickness
- Length
- Number

In case of pre-punched purlins, please send us purlin drawings showing the location of the holes.

## Reference point for distances = cutting point



Note! Our standard raw material for purlins is S350GD+Z275.

**Declaration of Performance**