

# 30mm RESIDENTIAL ROOF PURLINS







### PRODUCT DESCRIPTION

DS30 Roof Purlins are a direct replacement for timber purlins. They are designed to be a structural element of the building for use with light weight steel tile roofs, light weight steel roofs and wall profiles.

### **PRODUCT FEATURES**

- Spans up to 900mm at 900mm spacing or 1200mm at 370mm spacing.
- Can be used in extra high wind and in snow load situations.
- Light weight 0.836 KG per metre.
- Dimensionally stable, they expand and contract at 0.1% the same rate as the roof in extreme temperature changes.
- They don't absorb moisture.
- No more buckling ridge line flashings.
- Available cut to length or from stock.
- Lengths can be lapped reducing cut time and wastage.
- They can be fitted to both timber and steel trusses or rafters.
- Made from NZ Steels Axxis Steel, the sustainable choice.
- 100% recyclable.

# DURABILITY

Purlins are manufactured from hot dipped galvanized steel with a coating weight of 275gram/sqm, in line with other common lightweight steel structural building products. This gives good protection in most exposed internal environments. Run off from, or contact with, materials which are incompatible with zinc should be avoided.

The product is finished to meet the requirements of durability as per the attached durability statement. The E2 requirement stated on the PS1 for fifty year life is based on their use within the building envelop for non-exposed environment.

# HANDLING AND STORAGE

Roof Purlins must be kept dry during storage as water present between close stacked sections will cause premature corrosion. If they become wet they should be separated and stacked openly to allow for ventilation to dry the surface.



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# EX LIGHT GAUGE STEEL COLD ROLLED SECTIONS AS PURLINS 30 TOP HAT AS SUPPLIED BY ROLLFORMING SERVICES SPAN PURLIN CONTINUOUS OVER MINIMUM TWO SUPPORTS MAX CANTILEVER OVERHANG FOR SOFFIT TAKE 40% MAX SUPPORTED SPAN

# Battens for Roof and Wall Claddings 30x74x0.75 Top Hat Section

### Profiled Metal Roofings with wind loads Table of max span vs spacings

as noted or 0.25 LL whichever worst case Pressure Factor Combinations kCpmax = + or - 2.0

For connections to wood subsrate	Section	Spacings										
Refer NZS3604:2011 for wind loadings.	(mm)											
For connections to min 0.75 ga steel	300 Spacings			600 Spacings			900 Spacings			1200 Spacings		
Connect with min 1-10 gauge screw	Max Span	Span Fixing to Truss/Rafter		Max Span	Fixing to Truss/Rafter		Max Span	Fixing to Truss/Rafter		Max Span	Fixing to Truss/Rafter	
for up to 0.50 kN/m, 2 per 1.0kN/m,	(m)	Timber	Steel	(m)	Timber	Steel	(m)	Timber	Steel	(m)	Timber	Steel
3 per 1.5kN/m, and 4 per 2.0kN/m	Note: Point loads control span											
Medium wind 37m/s 0.821KpA	1.2	Type A	Type A	1.0	Type A	Type B	0.9	Type A	Type B	0.9	Type A	Type B
High wind 44m/s 1.160KpA	1.2	Type A	Type A	0.9	Type A	Type B	0.8	Type A	Type B	0.8	Type A	Type C
Very high wind 50m/s 1.500KpA	1.2	Type A	Type A	0.9	Type A	Type B	0.8	Type A	Type B	0.7	Type B	Type C
Extra high wind 55m/s 1.815KpA	1.2	Type A	Туре В	0.8	Type A	Туре В	0.7	Type B	Туре С	0.6	Туре В	Type D

NOTE All fixing types are determined as required for the higher uplift loads at the periphery of the roof (based on local pressure factors in AS/NZS 1170.2).

### FASTENERS:

Fixing the Steel Roof Purlin to Trusses - For fasteners use a Type A, B, C, D fixing as noted below

- Type A 1 Screw or 2 nails
- Type B 2 Screws or 4 nails
- Type C 3 Screws Being minimum number of fasteners required to fix batten to the rafter or truss at truss/batten location
- Type D 4 Screws Refer Buildex Products Technical Data sheets
- Recommended Screw Type Buildex 12 11 x 40 Hex Head BattenZips® Climaseal® 3, Konnect 12 gauge universal tek screws or equivalent from another supplier
- Recommended Nail Type To Timber only 90 x 3.15 Gun nail

Fixing Roofing to the Steel Roof Purlin - Refer the roof supplier for the best screw to fix roofing to Steel Roof Purlins.

#### **DESIGN NOTES:**

The tables are based on section properties for Top Hat Sections outlined in the data provided by Roll Forming Services. These tables and associated documents demonstrate compliance with the provisions of the Nash Standards for low rise steel framing. Battens are specifically designed to meet the loadings as stated in NZ Building Code NZS3604:2011. For wind loadings the pressure factor combinations comply with a local pressure factor kCp=+-2.0

#### **CERTIFICATION:**

The tables are based on the provisions of the Engineers PS1 for work to meet the NZ Building Code for design. A Generic PS1 for the product is available upon request. If required our engineer can provide job specific PS1's at your cost.

#### **ROOFING CODE OF PRACTICE:**

The product is currently under review by the MRM Roofing Association, this includes the Engineering Span Table and screw pull out tests. Once the review is completed it is expected that this product will be added to the Code of Practice.

#### INSTALLATION:

- Connection details are available upon request.
- Training can also be arranged for your team.
- Synthetic Roofing underlays are recommended.
- We have supply install partners for those wanting this option.

Rollforming Services have unsurpassed knowledge and passion for producing roll formed steel profiles. Set up in 1996 as a contract roll forming company with the technical design and build backing of Howick Ltd, one of New Zealands most innovative roll forming machine producers. We continue to provide fast, friendly service to all our customers.

### **ROLLFORMING SERVICES ALSO SUPPLY**

Speedfloor: Concrete flooring system

**Steel Joist, Truss, Framing and Battens:** For commercial and domestic use

Tophat Purlins: Used in light gauge commercial steel buildings

**Custom Profiles:** For all steel fabrication uses including and not limited too HVAC, Truck bodies, Fencing, Roller/Sliding/Tilt/ Sectional doors, Packaging, Roading and Agriculture.



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