

Three depths of eaves beam are available. Folded indented sections with a maximum length of 10m are available in 200mm and 240mm depth. A 300mm deep Cee section eaves beam is available up to a span of 12.5m to complement the 300 series of purlin sections. These are available in the thicknesses indicated. Eaves beams are usually single spanning but the 200 and 240 series may be supplied as double-spanning up to a 5m span and the 300 series can be double-spanning up to a 7.5m span.

The 300mm deep eaves beams may be optionally used with counterformed holes and countersunk bolts, with either countersunk holes or spacer plates as indicated.

It is recommended that at least one row of eaves braces should be adopted, even where a zero row of sag bars is used with the purlins. Additionally the number of rows of eaves braces should not be less than the number of rows of sag bars for purlins, as in the table on page 4 of the Zed Purlin Systems PDF (click here to download the PDF), or as selected by the designer to suit any particular design. Removal of eaves braces should only be carried out if the roof designer is confident that the structural implications have been fully considered.

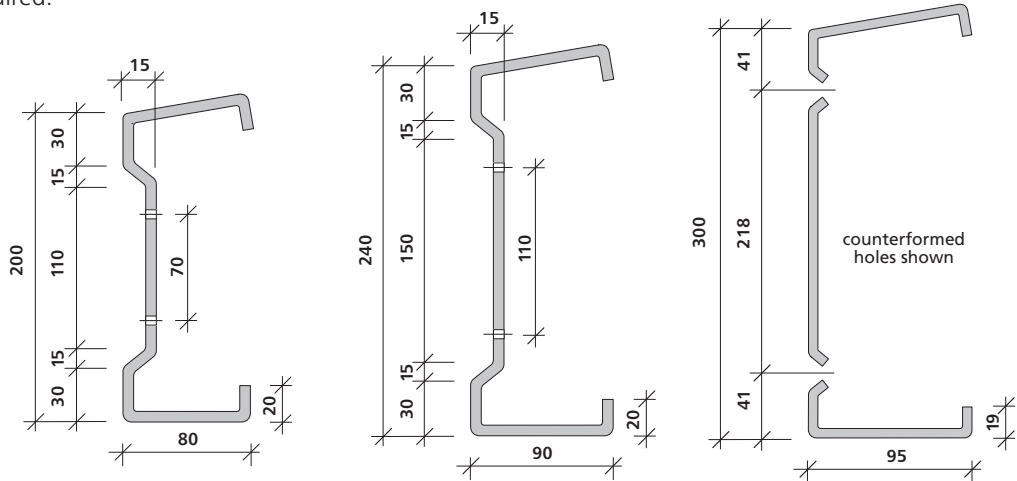
Eaves braces perform the following functions:

1. Reduce the horizontal design span for side wind.
2. Assist with dispersing horizontal wind loads into the roof diaphragm.
3. Reduce any twisting due to eaves gutters and with erection of roof cladding.

The eaves beam design tables and design disk are based on the assumption that the top flange is fully restrained by the roof cladding and care is required where this is not the case, for example where standing seam or clip-fixed cladding are used without a suitably stiff liner panel.

Most design situations can be handled using the design disk but due to the many conditions that may be met in practise, section properties are provided to assist the designer with any individual designs that may be required.

Rake to flanges available from 0° to 35° (above 35° contact Steadmans)



200 Eaves beam series

240 Eaves beam series

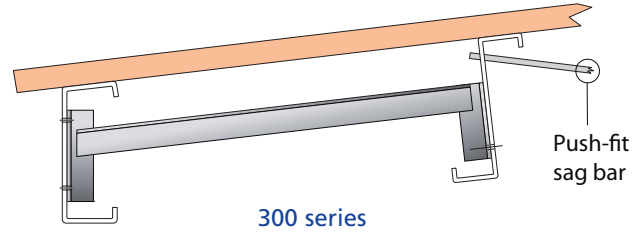
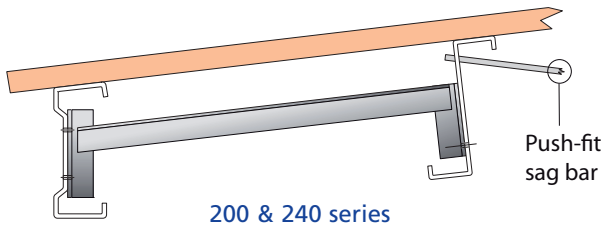
300 Eaves beam series

Section	Weight(kg/m)	Sxe(cm ³)	Ixx(cm ⁴)	Zyy(cm ³)	Iyy(cm ⁴)	Ryy(mm)	Poc(N/mm ²)
EB200/16	5.10	35.48	373.8	8.66	44.9	26.3	350
EB200/20	6.35	47.68	487.7	10.64	55.1	26.1	350
EB200/25	7.90	61.70	620.3	13.02	67.3	25.9	350
EB240/25	9.08	83.09	1009.3	15.80	94.1	28.5	350
EB240/30	10.84	101.18	1218.0	18.58	110.6	28.3	350
EB300/30	11.97	134.59	2026.0	22.32	159.0	32.3	329

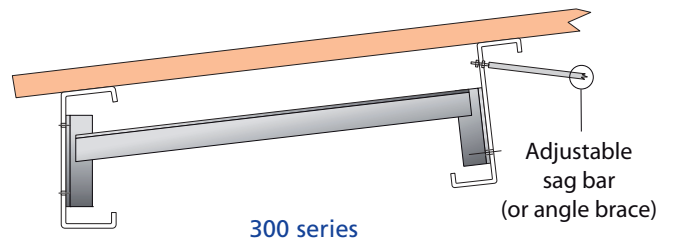
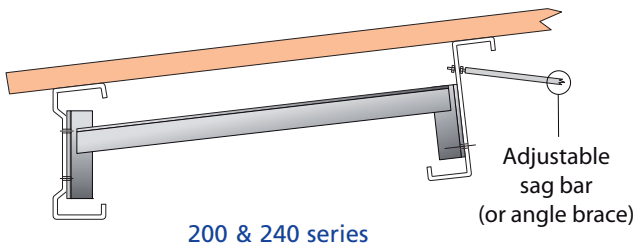


Typical eaves beam details

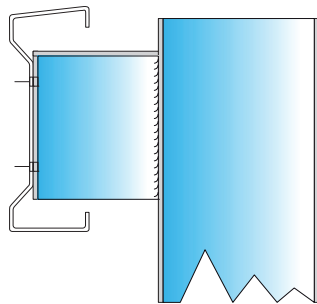
Eaves braces for roof slope length up to 18m



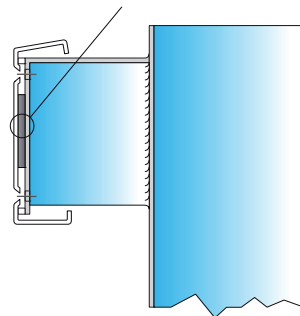
Eaves braces for roof slope length greater than 18m



Typical connections to column heads

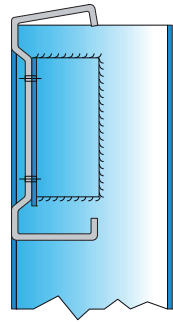


6mm thick packing plate with 28mm dia holes for M12 countersunk bolts

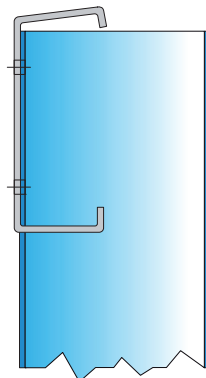


Outstand connections

Typical connections to column heads



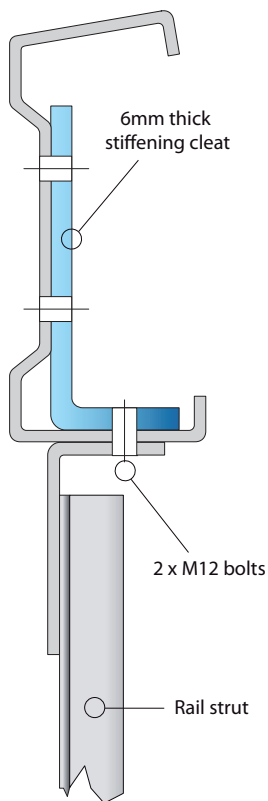
200 & 240 series



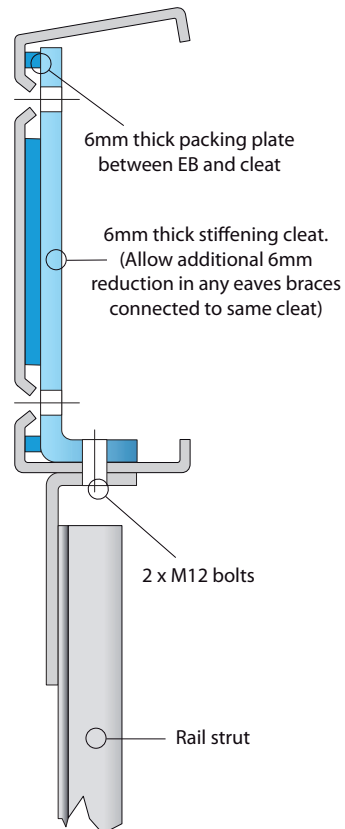
300 series

Flush column connections

Connections between eaves beams and rail struts



200 & 240 series



300 series



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