



Ayrshire Metal Products Detailer Guide

Advance Steel

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The performance of any CAD system software is the full responsibility of the CAD system vendor. Any information offered by Ayrshire Metal Products must always be verified with the CAD system vendor.

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Preface

This guide is intended for experienced users who require a detailed reference showing Ayrshire section modelling, connections and file-transfer.

The overview section of the guide explains standard and non-standard parts. It also explains the preferred method of order placement, and using **Ayrsuite Plus 3** CAM files to manage the order. **Ayrsuite Plus 3** has these benefits:

- 1) You can review drawings that are generated by the CAM data from Advance Steel.
- 2) Complete projects can be managed with a single file.
- 3) Order processing is faster than can be achieved by sending drawings.

Ayrsuite Plus 3 is available on request.

The modelling section illustrates the direction of various pieces. It is important to understand that the modelled direction of the part has to be correct so that the connections work properly.

The connections are shown, and the various parameter settings explained along with any relevant information that may help the detailer.

We hope you find this guide useful and informative.

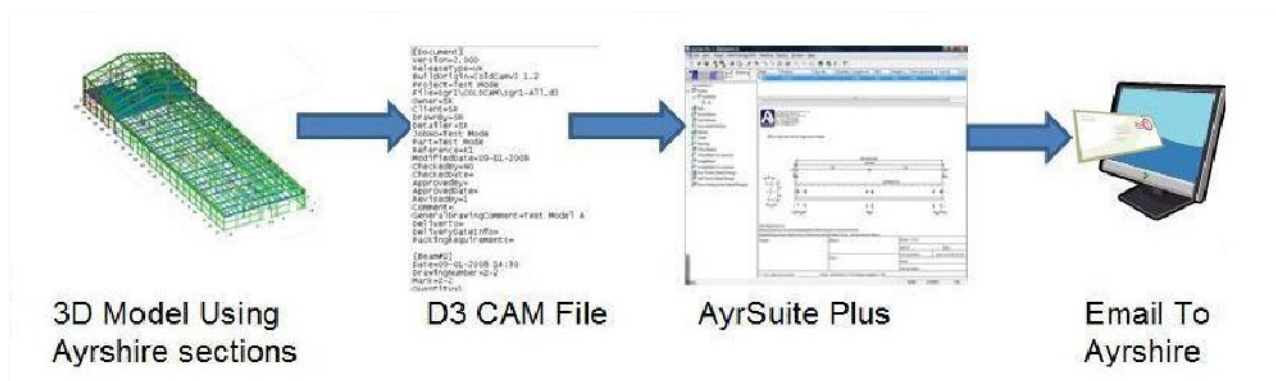
Introduction

This detailers guide demonstrates the use of Ayrshire Sections and Accessories in 3D models, how to use the connection macros, and how to produce CAM outputs.

3D Modelling Systems

The Advance Steel 3D modelling system software from Graitec includes the Ayrshire product range. It is possible to produce a CAM (Computer Aided Manufacturing) file that can be reviewed in Ayrsuite Plus 3 and saved to an **AMP** file that is used by Ayrshire's production machinery to cut, punch and piece mark sections.

Overall Concept



The CAM File

The Ayrshire CAM file produced by any of the 3D modelling packages uses the **D3** file format. This file can be reviewed using Ayrshire's Ayrsuite Plus detailing software. After reviewing the details of the sections and accessories the file is then saved as an **AMP** format file and sent to Ayrshire for manufacture.

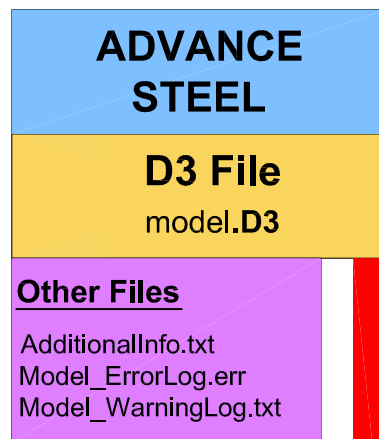
Non-Standard items.

Some items are considered 'non-standard' and are not included in the CAM file output because they require special attention by Ayrshire. Non-standard details will be explained later in this guide. Ayrshire requires manufacturing drawings for all non-standard items.

Processing the Order

The sections and accessories are manufactured exactly as specified by the information provided to Ayrshire in the **AMP** file.

The details of the Ayrshire components in the model are exported to a **D3** CAM file that is opened by Ayrshire's Ayrsuite Plus 3 software and saved as an **AMP** file.



AYRSUITE PLUS 3

AyrSuite Plus 3 - [blue1-All.d3]

File View Design Steel Framing (ASF) Detailing Reports Window Help

Mark	Product	Drq. No.	Quantity	Length (m)	SPC	Weight (kg)	Unit cost (£/m)	Cost (£)	Comments
Z-21	Z/17020	Z-21	5	5.281	145	122.26	8.78	231.84	
Z-11	Z/17020	Z-11	6	4.994	125	138.73	8.78	263.08	
Z-13	Z/17020	Z-13	5	5.281	135	122.26	8.78	231.84	
Z-24	Z/17020	Z-24	1	5.244	145	24.28	8.78	46.04	
Z-25	Z/17020	Z-25	1	5.244	135	24.28	8.78	46.04	

AYRSHIRE
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PO Box 100, Ayr, South Ayrshire, North Ayrshire, North Ayrshire, UK
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Fax: +44 (0) 1292 300 505
e-mail: sales@ayrshire.co.uk
web: www.ayrshire.co.uk

ZED Single Span Sleaved: Single Right Gable Extension

Third Angle Projection.
Running dimensions of all holes are measured from L.H. End of section to the centre of the hole.
Standard fixing holes are 14mm dia web (x 25 for fire holes) for M12 Grade 8.8 bolts. Bracing holes are 14mm sq.

Comment:	Detailer:	Product: Z/17020
		Mark: Z-21 Qty: 5
	Client:	File: blue1-All.d3 Date: 27-05-2008 15:44
		Project:
		Drawing Number: Z-21

Version: AyrSuite Plus 2.3.100, Database: Integrated 3.100R

Ready AYRIDD REL

The Detailing Tab in Ayrsuite Plus 3 displays the manufacturing details used by Ayrshire to make each part. The detailer uses this to check that the details and quantities are correct. The specific procedures for creating the D3 file from the modelling package are covered later in this guide.

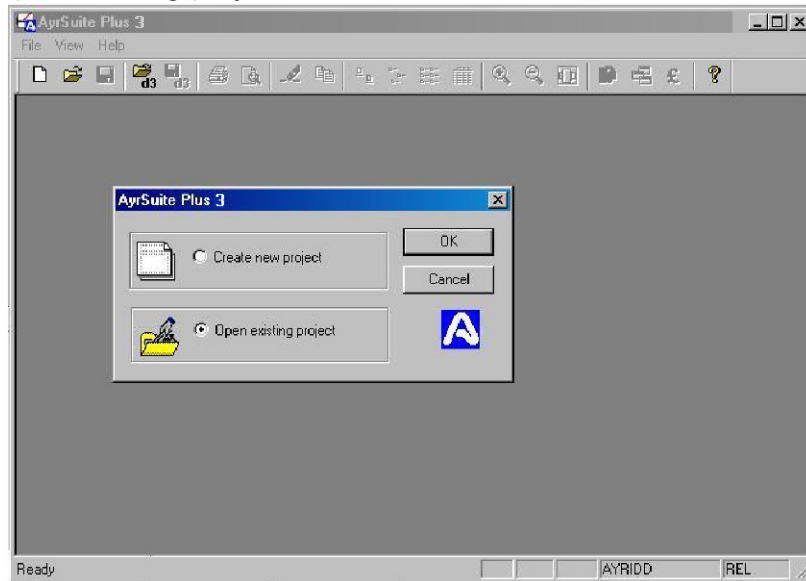
Ayrsuite Plus 3

How to open the **D3** file in Ayrsuite Plus 3:

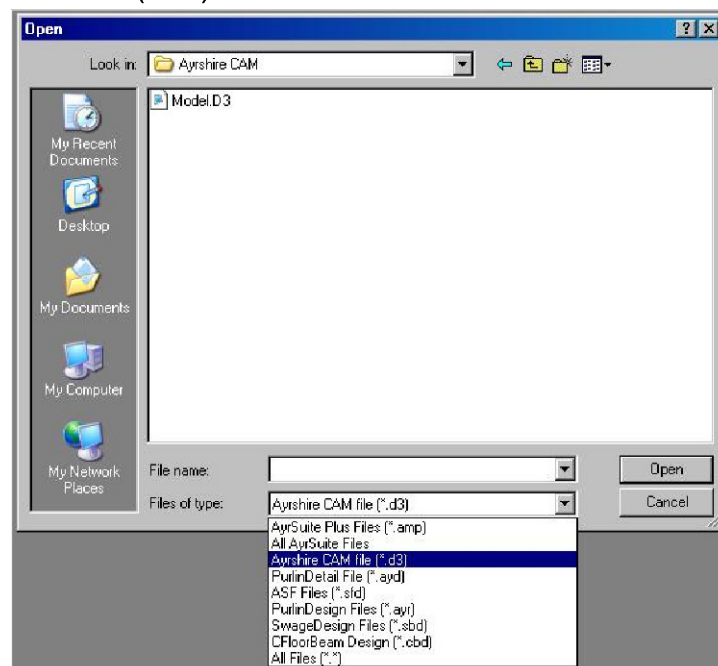
1. Start Ayrsuite Plus 3



2. Choose 'Open existing project'



3. Navigate to the model folder, and from the drop down list select Ayrshire CAM file (*.d3)

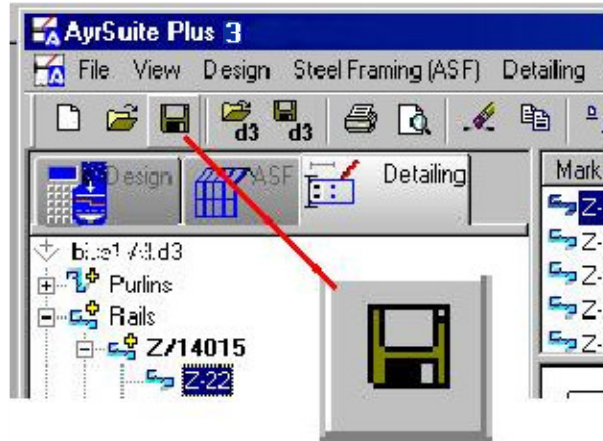


D3 files are normally in C:\AdvanceSteel Projects\JobName\Model\Ayrshire CAM\

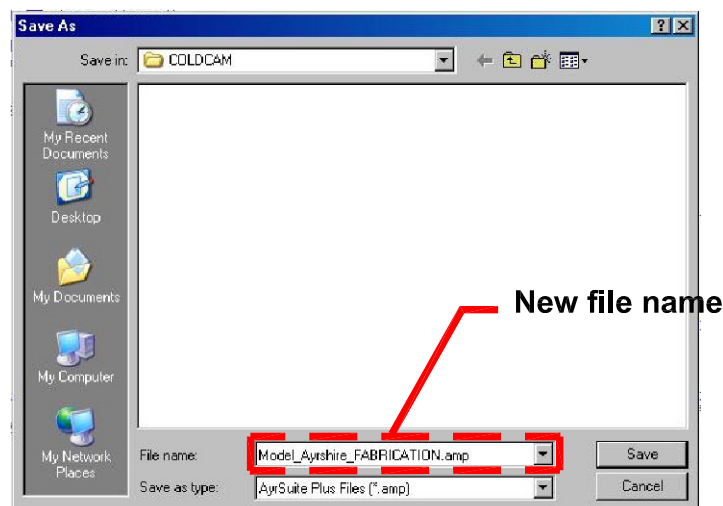
Ayrsuite Plus 3

The Detailer makes sure that the manufacturing drawings are correct and then saves the file in **AMP** format as shown below:

1. From the main toolbar select Save.



2. Save the manufacturing details into an **AMP** file.



Non-Standard Items - Overview

Some items in the model may be non-standard. This can be for a variety of reasons including non-standard holes, the length of the piece being too long or too short, mitre cuts, notches or errors in the model. See the standard parts section of this guide for more information.

Ayrshire require manufacturing drawings in DXF or DWG format for any items that are required by the contract, but that are not included in the **AMP** file.

Placing the order

The preferred method of ordering is to email an **AMP** file detailing all parts to sales@ayrshire.co.uk. If non-standard parts are required then these should be shown on separate DXF or DWG drawings and included in the email.

Ayrshire can also accept D3 files and drawings, but these may be slower to process



Standard Parts

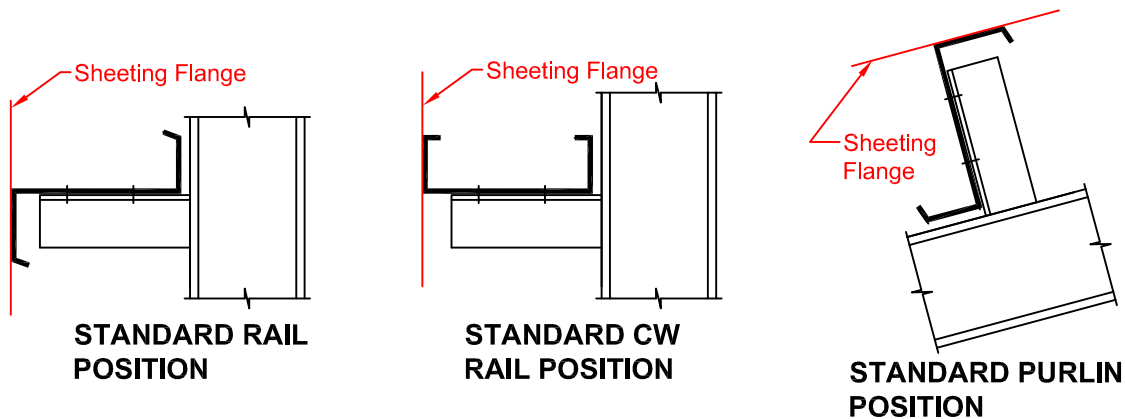
Standard parts are items that have standard hole punchings and that can be included in an Ayrsuite Plus 3 **AMP** file. All other items are considered non-standard.

CAD programs

All CAD programs require the user to correctly model the parts and add standard connection details, usually with the assistance of connection macros.

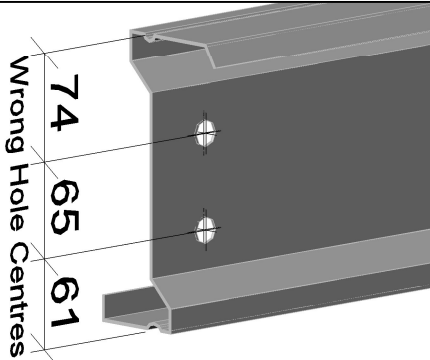
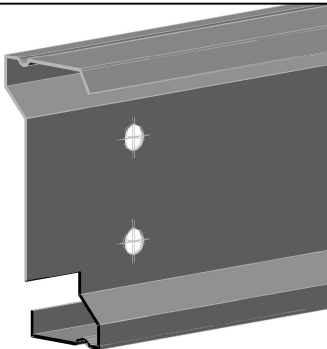
Section Orientations

Using the standard rail and purlin section orientations will assist with correct part modelling. Note that the sheeting flange is the widest flange on Zeta, Zetall and Zed sections.

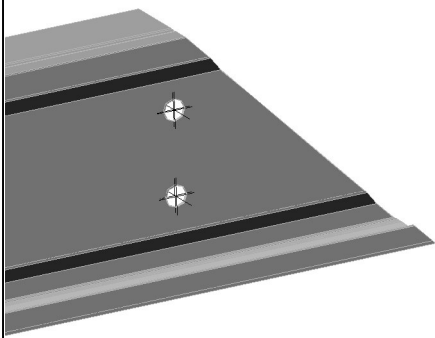
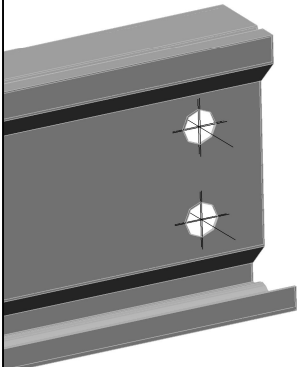
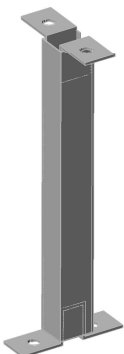
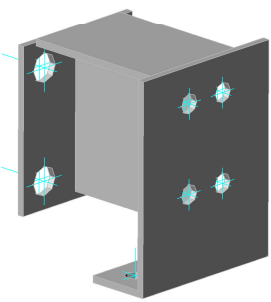


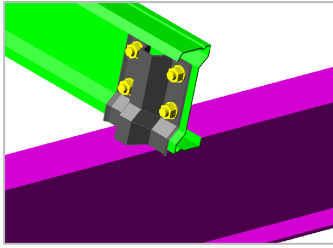
Non-Standard Parts

The table below illustrates some non-standard parts.

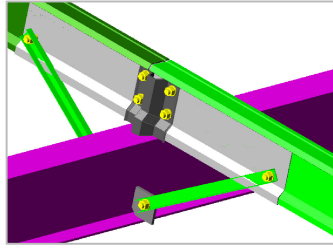
Description	Illustration	Notes
Holes not on standard gauge line		May be caused by using unsuitable fabricated cleats or by using the wrong section orientation.
Notched Section		The standard specification excludes notches.

Non-Standard Parts

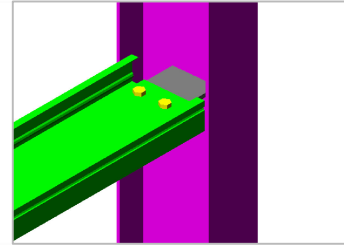
Description	Illustration	Notes
Mitre Cuts		The standard specification excludes mitres.
Wrong Diameter holes.		Holes that are larger or smaller than those stated in the standard specification make the section non-standard.
Dissimilar Strut Ends		Standard struts have identical ends.
Edited Accessories		The standard accessories should not be edited for hole size, hole positions etc. This would make the part non-standard. The CAM output from CAD programs may not detect edited accessories.
Lengths The section length can make a piece non-standard. The upper and lower limits for Ayrshire sections are published in the design manuals. It may be possible for Ayrshire to supply very long or very short sections. More information is available from Ayrshire technical services.		



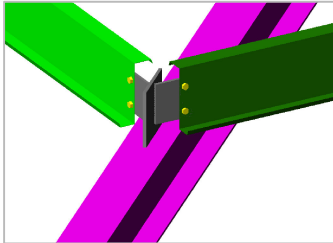
Single Purlin



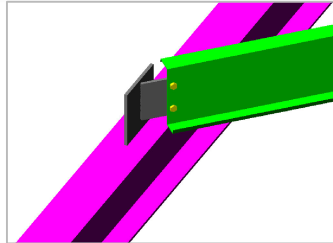
Double Purlin



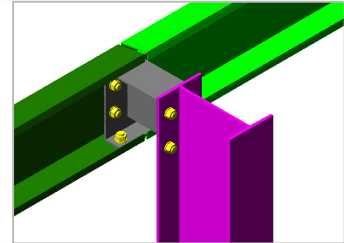
Non-Continuous Purlin



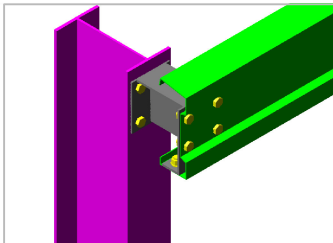
Double Purlin Hip



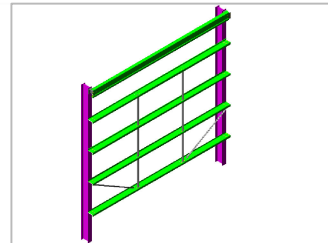
Single Purlin Hip



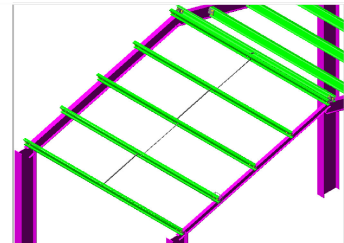
Double Eaves Beam



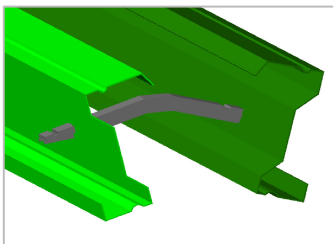
Single Eaves Beam



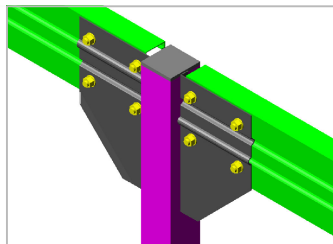
Side Rail Anti-Sag



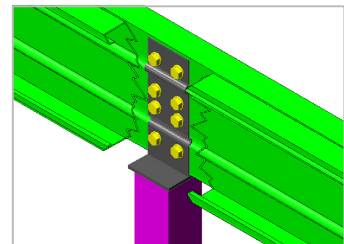
Roof Anti-Sag



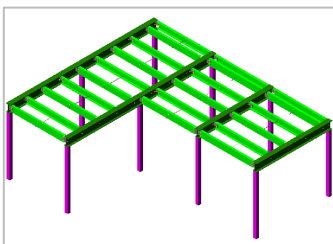
Apex Tie



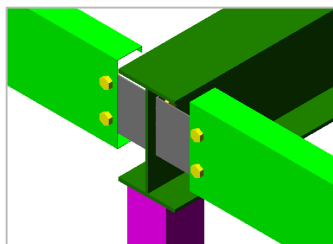
Swagebeam 220 Bracket



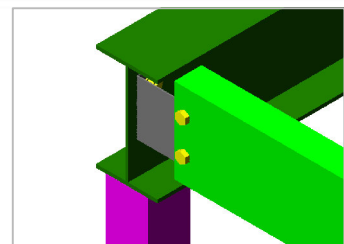
Swagebeam 300 Bracket



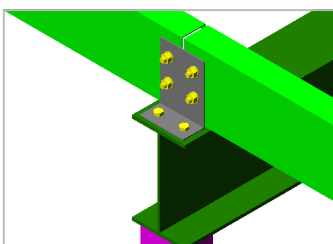
Mezzanine Floor



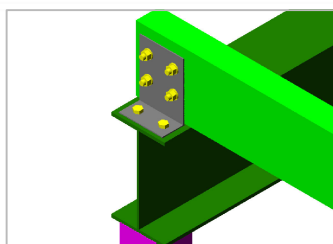
Double Inset Floor Beam



Single Inset Floor Beam



Double Oversail Floor Beam



Single Oversail Floor Beam



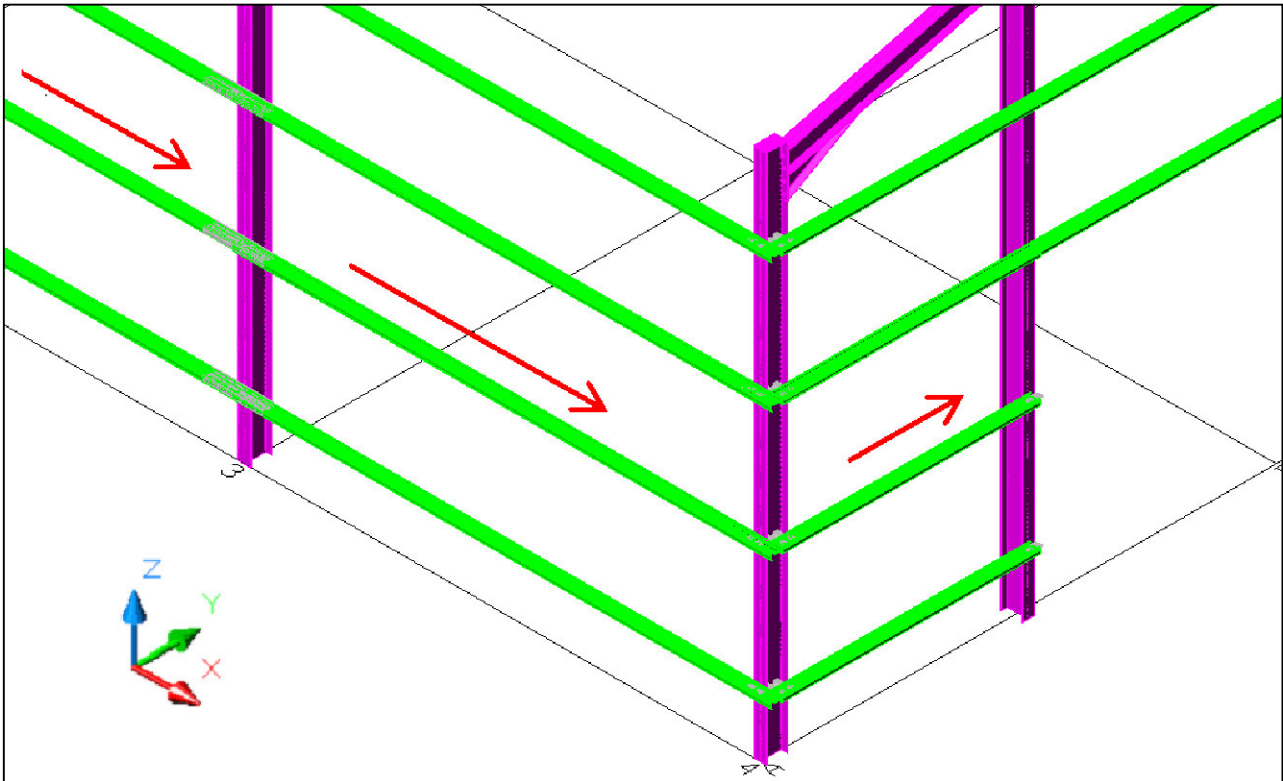
**AYRSHIRE METAL PRODUCTS
ADVANCE STEEL CONNECTIONS**

Rails

Rails can be modelled either interactively or by using the automatic Side Rail macro.

Interactively Modelled Rails

Zeta, Zetall & Zed sections are normally modelled in an anti-clockwise direction, relative to the world UCS position.



The following settings are applied to a Rail. For the 'Position' tab use centre-bottom and 90° angle. Apply the local Z offset - The standard offset is 7mm, see Fig. 1

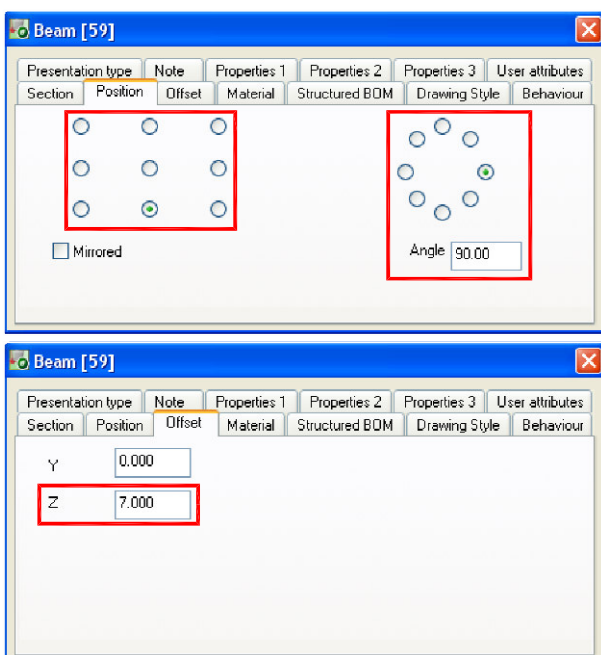
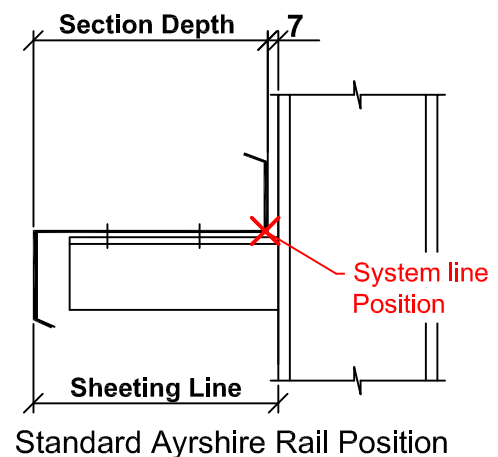


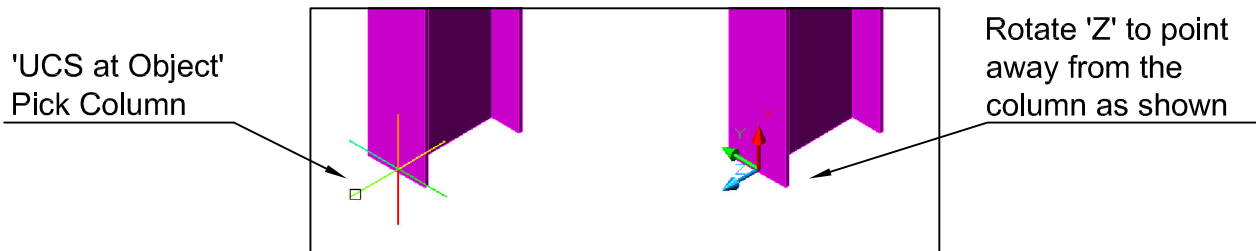
Fig. 1



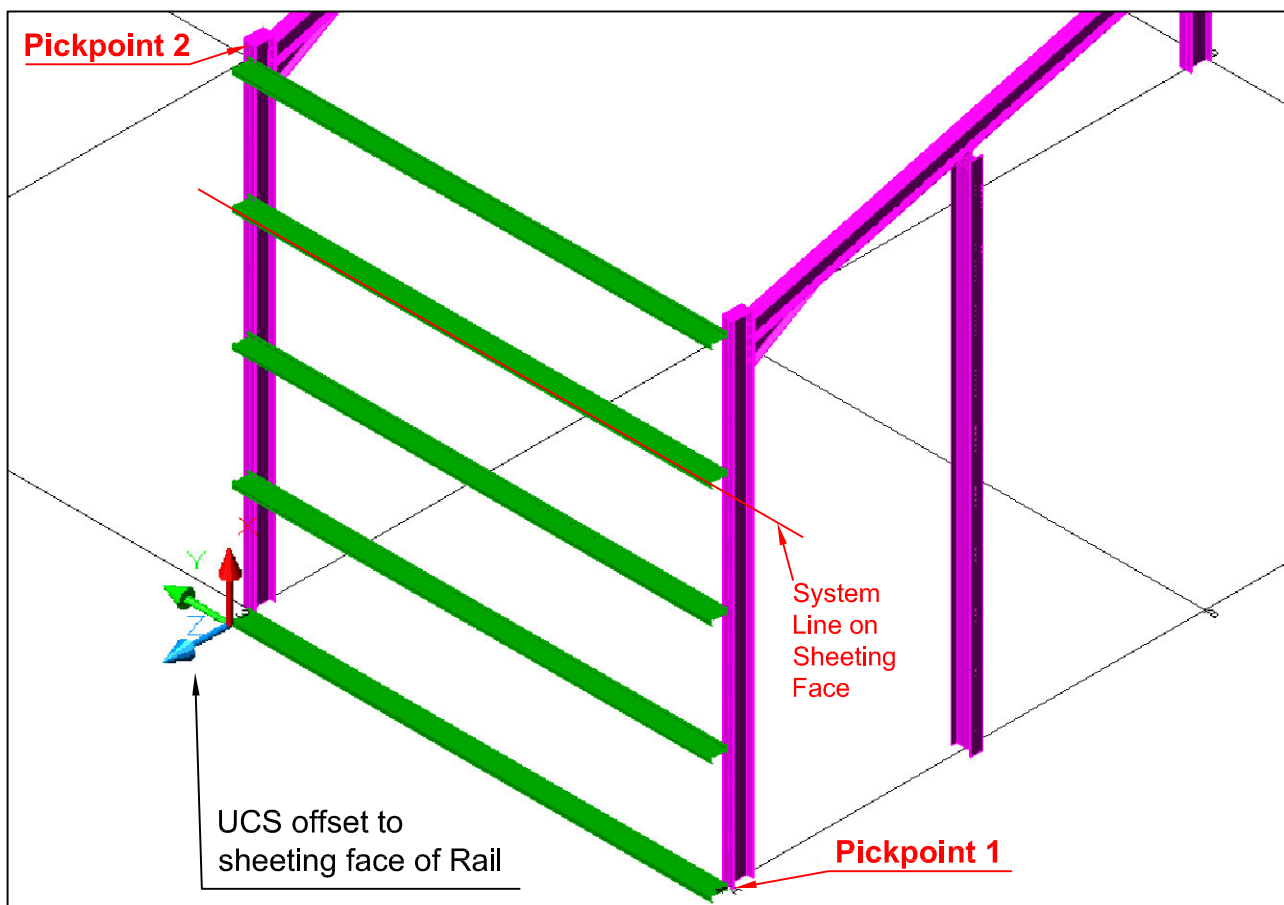
Rails

Automatically Modelled Rails Using Macro

Zeta, Zetall & Zed sections are automatically modelled by selecting 2 points. The side rail macro requires the UCS to be set relative to the columns, see illustration.

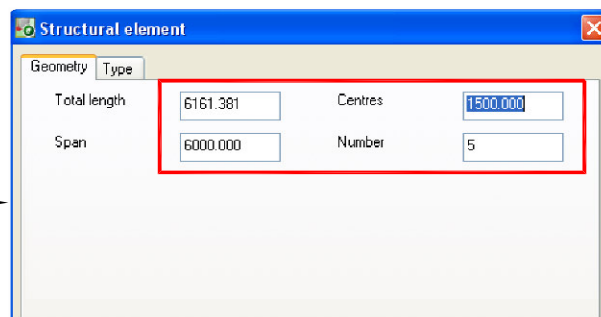
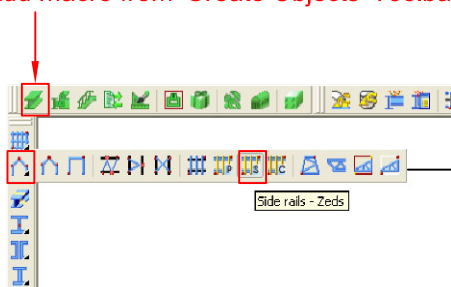


Move the UCS origin point to the plane of the Rail sheeting face, e.g. for a Zed 200 Rail, the UCS origin will be offset 207mm from the column face (200mm + 7mm offset).



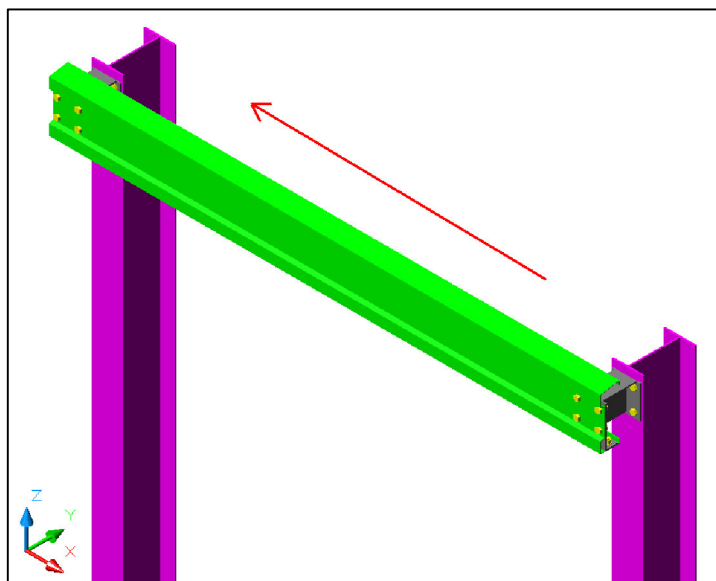
Use the 'Side rails - Zeds' macro to model the rails. Pick the lower right hand extreme then the top left hand extreme points. Edit the rail spacing to match.

Add macro from 'Create Objects' Toolbar

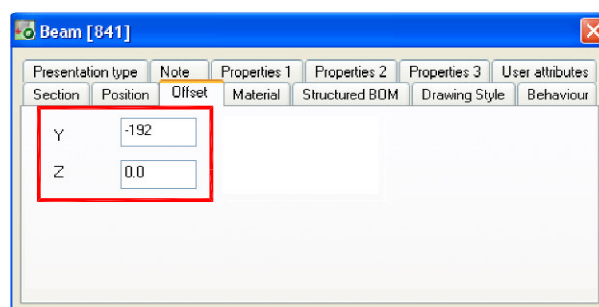
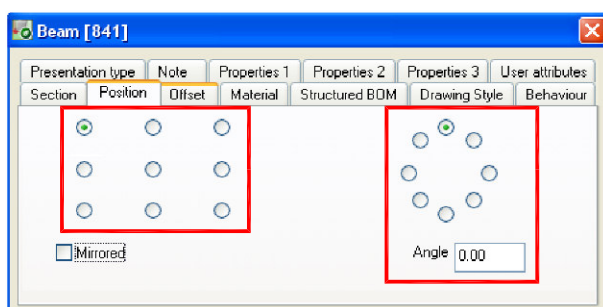


Eaves Beams

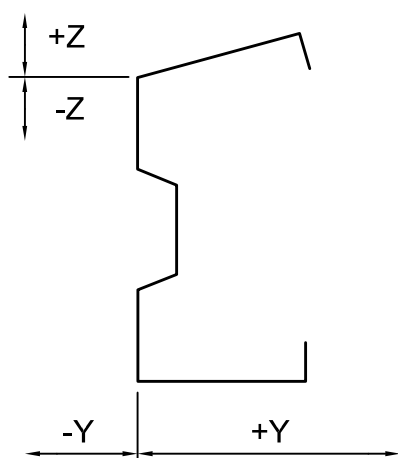
Eaves Beam sections are modelled in a clockwise direction.



Positions



Directions



The table below shows the standard sheeting lines for Ayrshire rail systems. The Eaves Beam 'Y' dimension matches the sheeting line.

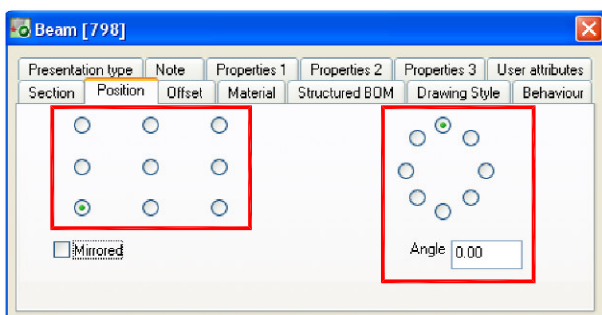
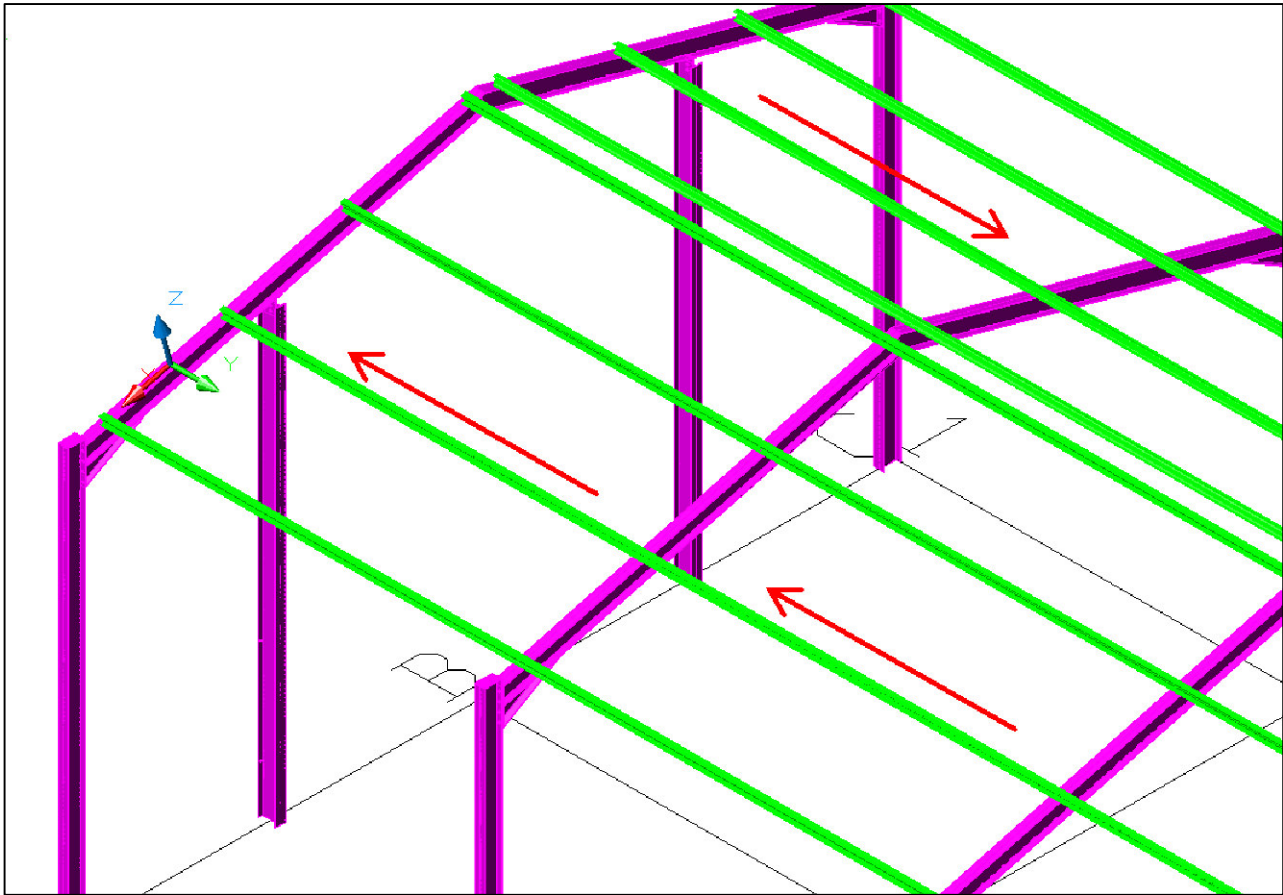
Ayrshire Rail Size	Standard Sheeting Line
125	132
140	147
150	157
155	162
170	177
175	182
185	192
200	207
225	232
245	252
265	272
285	292

Purlins

Purlins can be modelled interactively or by using the Purlin macros.

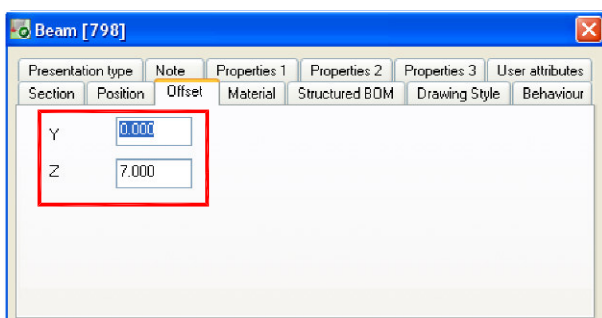
Interactively Modelled Purlins

Zeta, Zetall & Zed sections are normally modelled in a clockwise direction, relative to the world UCS position. The UCS is set to the pitch of the rafters, see illustration.



The beam properties are adjusted after the first Purlin has been modelled.

On the 'Position' tab use bottom-left and 0° angle, on the 'Offset' tab use 7mm local Z offset.



Note that the properties differ from the Rail properties.

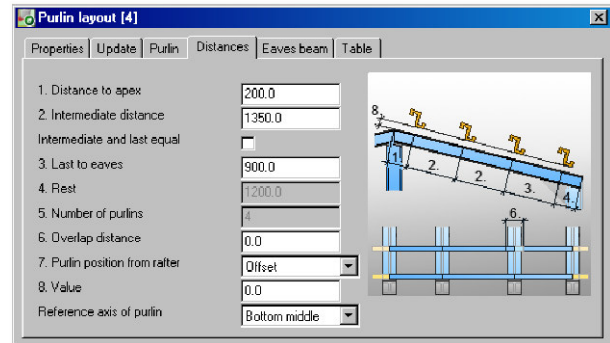
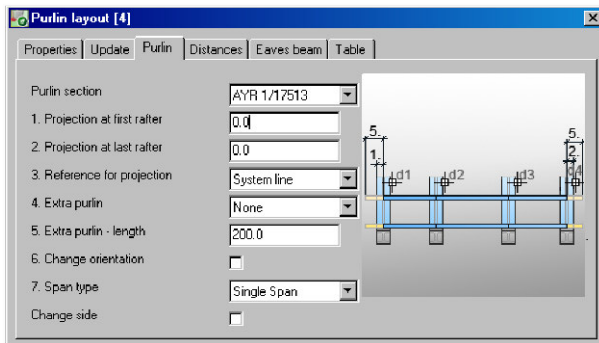
Purlins

Two Purlin layout macros are available from the "Create Objects" toolbar.



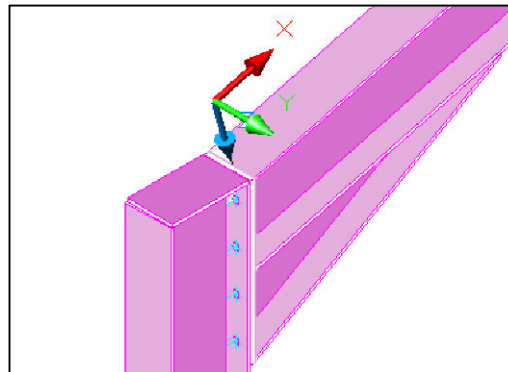
Purlin Macro Steps

- 1) With UCS set to "World" pick Purlin support Rafters.
- 2) Adjust the Purlin settings using the Purlin layout dialogue.

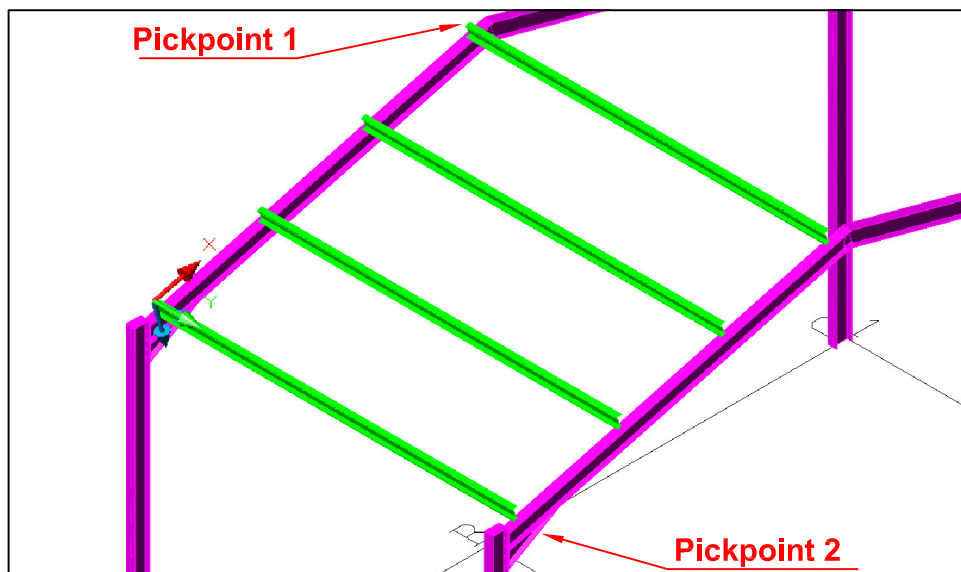


Purlin Macro Steps

- 1) Orientate the UCS and move it to the sheeting face.



- 2) Pick the corner points.



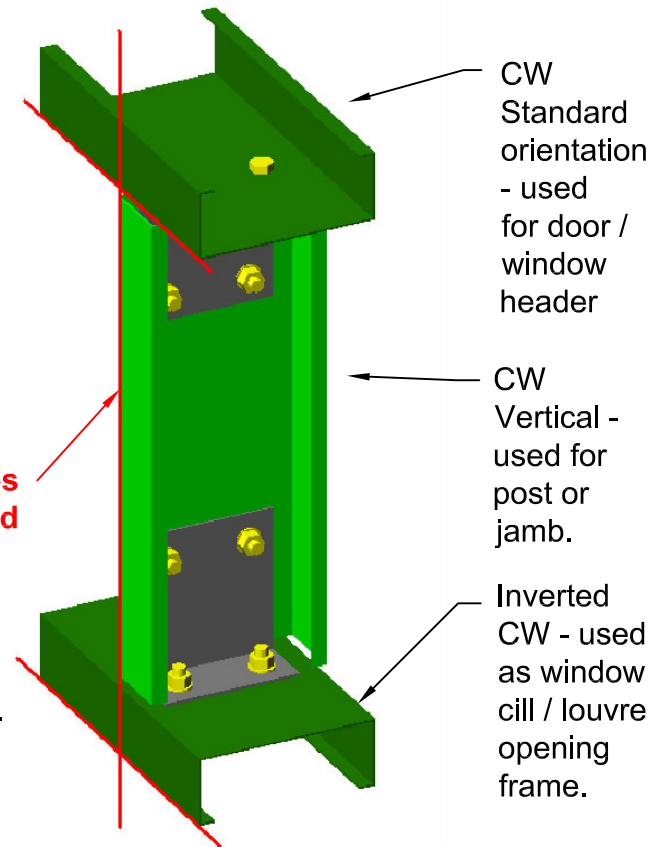
CWs

CW section gauge lines are not symmetrical about the centreline for section sizes below 220mm. This is to match the Zed gaugelines and enables the integration of door, window and parapet framing into the Zed system.

The standard CW orientation is with the open face pointing upward. The system line for all CW sections must be aligned within a rail system.

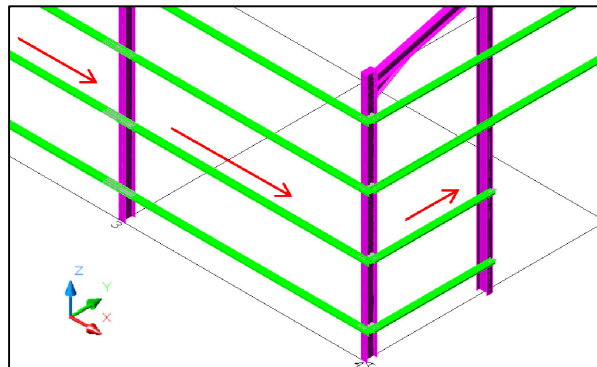
Window and door CW section can be connected using the inset floor beam macros.

All system lines must be aligned



Modelling direction

CW sections are normally modelled in an anti-clockwise direction, relative to the world UCS position.



The following settings are applied to a Rail. For the 'Position' tab use cente-bottom and 90° angle. Apply the local Z offset - the standard offset is 7mm, see Fig. 1

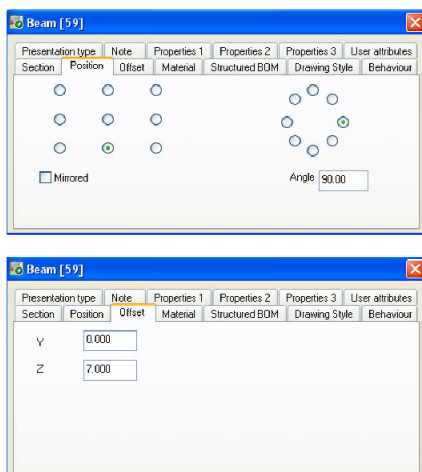
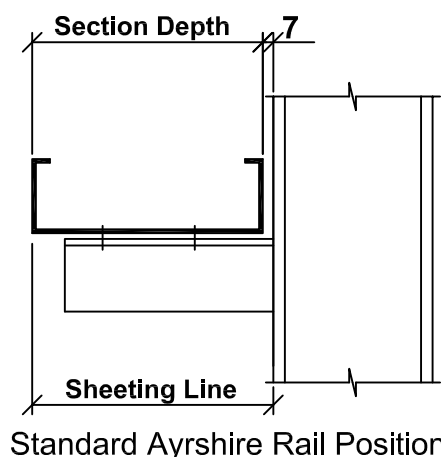


Fig. 1



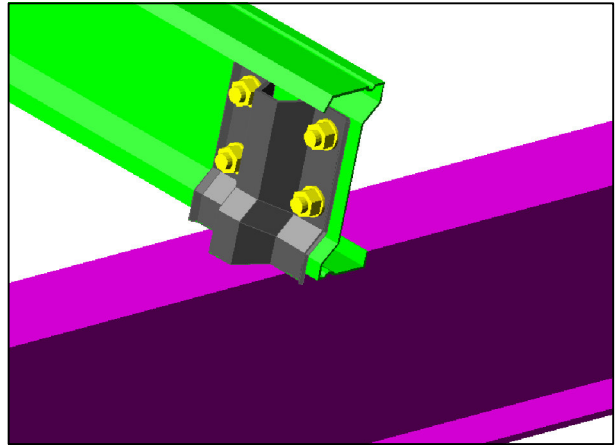
Single Purlin

Usage

- Connects a single Rail or Purlin to a Hot-Rolled Beam flange.

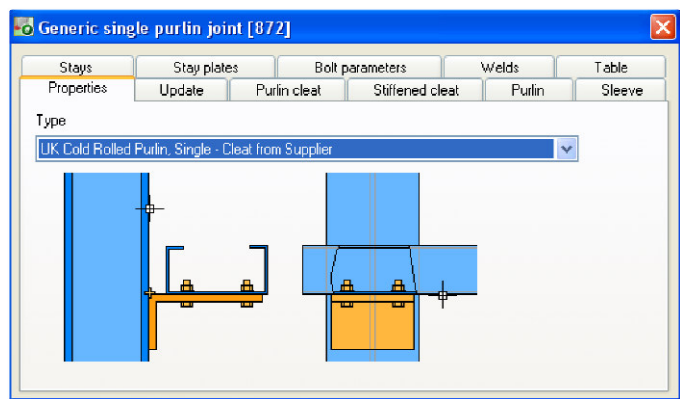
Setting Out

- Requires a single Side Rail or a Purlin and a Hot Rolled Beam
- Side Rails must have the correct orientation.



Settings

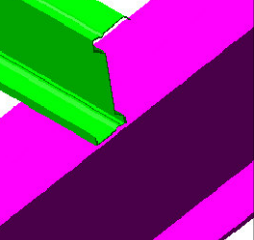
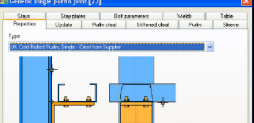
- Adjust settings for cleat type, bolts, overhang, stays etc.
- Ayrshire bolt-on or weld-on cleats are available



Note

- To use galvanised bolt-on cleats use Ayrsuite Plus 3 to edit the AMP file.

Steps

 Single purlin	Select single purlin macro
	Select Rafter, enter. Select Purlin.
	To use Ayrshire cleats choose 'Cleave from supplier'.

Double Purlin

Usage

- Connects two Rails or Purlins to a Hot-Rolled beam flange.

Setting Out

- Rails must be parallel
- Rails must have the correct orientation.

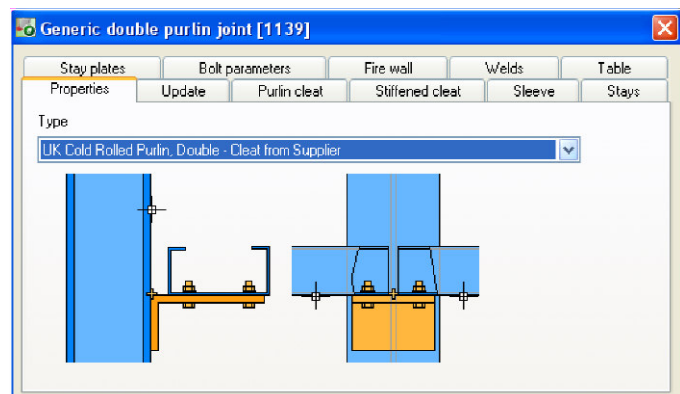
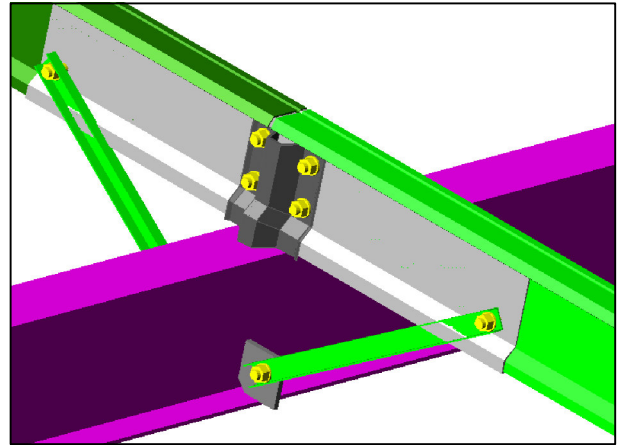
Settings

- Adjust settings for cleat type, bolts, overhang, stays etc.
- Ayrshire bolt-on or weld-on cleats are available.

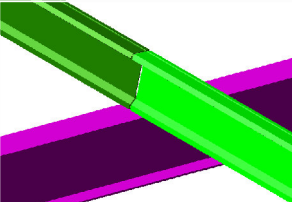
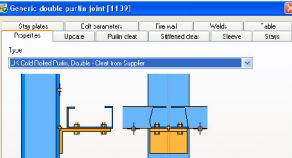
Notes

1) To use galvanised bolt-on cleats use Ayrsuite Plus 3 to edit the AMP file.

2) If using a heavy end bay sleeved connection then use the 'standard' sleeve not the 'heavy end bay sleeve'. The correct sleeve is automatically set.



Steps

 Double purlin	Select double purlin macro
	Select Rafter, enter. Select Purlin 1, enter. Select Purlin 2, enter.
	To use Ayrshire cleats, select 'Cleat from supplier'.

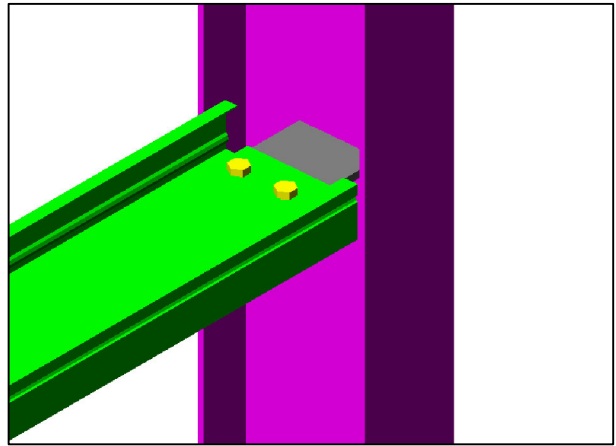
Non-continuous Purlin

Usage

- Connects a single Rail or Purlin to a Hot-Rolled Beam web.

Setting Out

- Requires a Side Rail or a Purlin and a Hot Rolled Beam
- Rails must have the correct orientation.

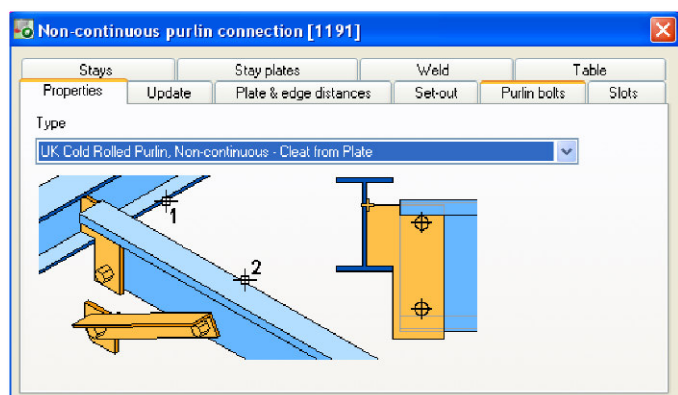


Settings

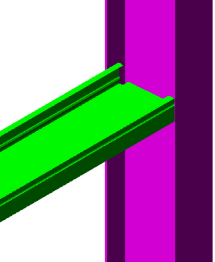
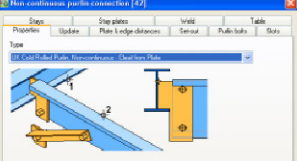
Adjust settings for cut-backs, bolts and stays.

Note

Hot Rolled cleats are not supplied by Ayrshire.



Steps

 Non-continuous purlin	Select Non-continuous Purlin Macro.
	Select Column, enter. Select Side rail, enter.
	Adjust Settings.

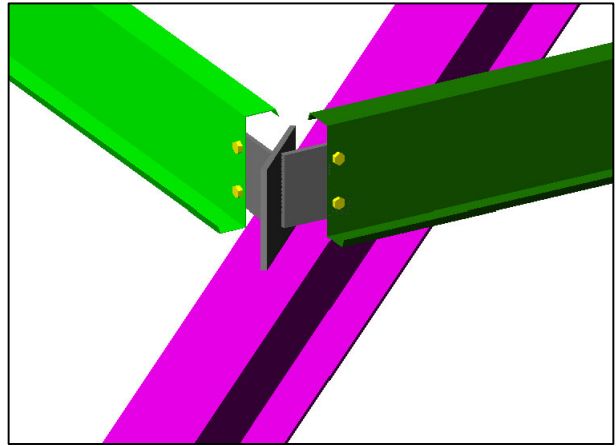
Double Purlin Hip

Usage

- Connects two Purlins to a Hip Rafter.

Setting Out

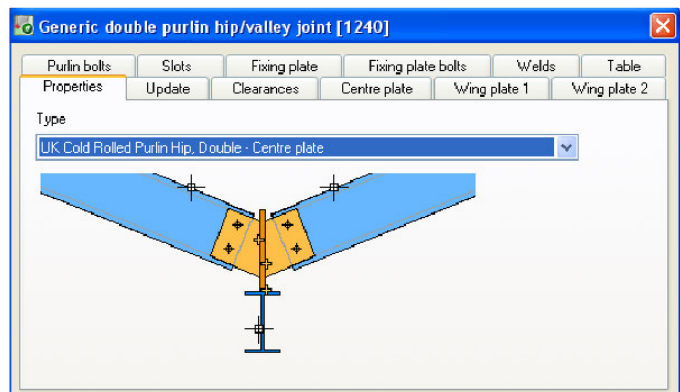
- Requires two Purlins and a Hot Rolled Rafter
- Purlins must have the correct orientation.
- Rafter must be lowered to avoid the top flange clashing with the bottom Purlin flanges.



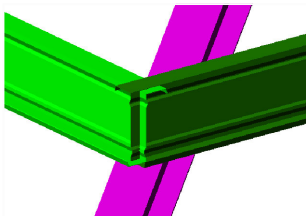
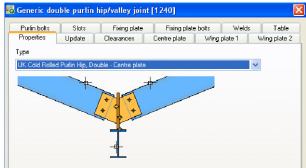
Note

Ensure that bolt diameters are M16 with 18Ø holes for Zeta/Zeta II and M12 with 14Ø holes for Zed.

Hip cleats are not supplied by Ayrshire.



Steps

 Double purlin hip joint	Select 'Double Purlin Hip Joint' Macro
	Select Rafter, enter. Select first Purlin, enter. Select second Purlin, enter.
	Adjust settings.

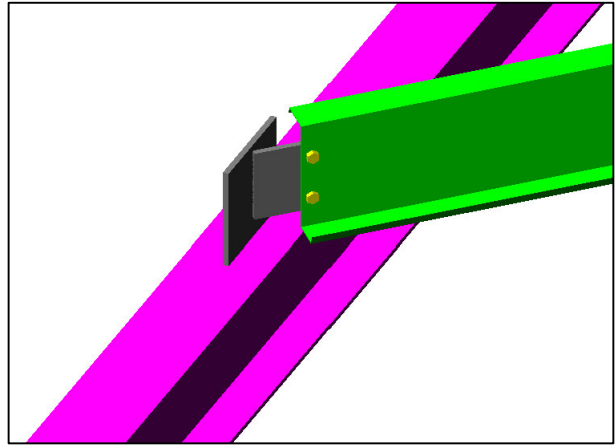
Single Purlin Hip

Usage

- Connects a single Purlin to a Hip Rafter

Setting Out

- Requires a single Purlin and a Hot Rolled Rafter.
- Rafter must be lowered to avoid the top flange clashing with the bottom Purlin flange.

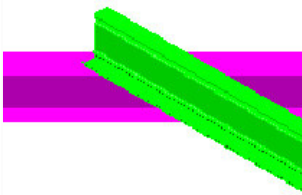


Note

Ensure that bolt dimensions are M16 with 18Ø holes for Zeta/Zeta II and M12 with 14Ø holes for Zed.

Hip cleats are not supplied by Ayrshire.

Steps

 Single purlin hip joint	Select 'Single Purlin Hip Joint' Macro
	Select Rafter, enter. Select Purlin, enter.
	Adjust settings.

Double Eaves Beam

Usage

- Connects two Eaves Beams to a Column.

Setting Out

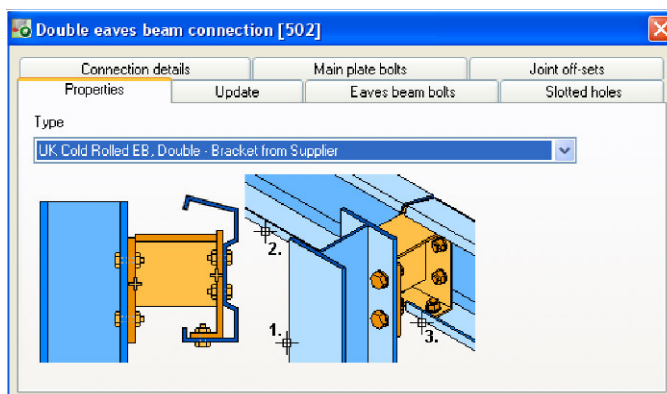
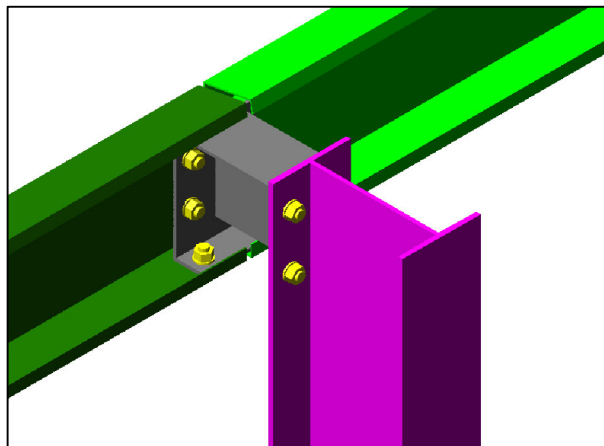
- Eaves Beams must be parallel with the Column flange.

Notes

1) If you are not using Ayrshire brackets then check that the connection uses 18mm Ø holes punched on the correct gauge lines.

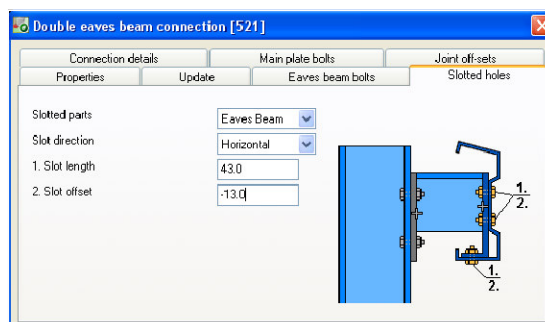
2) Do not edit the standard Ayrshire bracket. It is only supplied as a standard part with pre-drilled holes.

3) Ayrshire Eaves Beam brackets are bolt-fixed and galvanised.

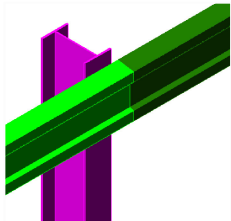
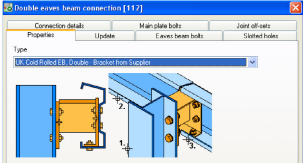


For a Firescreen situation:

- On the slotted holes tab of the dialogue box, set the slot length to 43 and the slot offset to -13.00.
- Use the 'Shorten' tool from the 'Create objects' toolbar to apply a shortening of 25mm to the ends of each fire-slotted Eaves Beam.



Steps

 Double eaves beam	Select 'Double Eaves Beam' Connection Macro.
	Select Column, enter. Select first Eaves Beam, enter. Select second Eaves Beam, enter.
	Adjust settings.

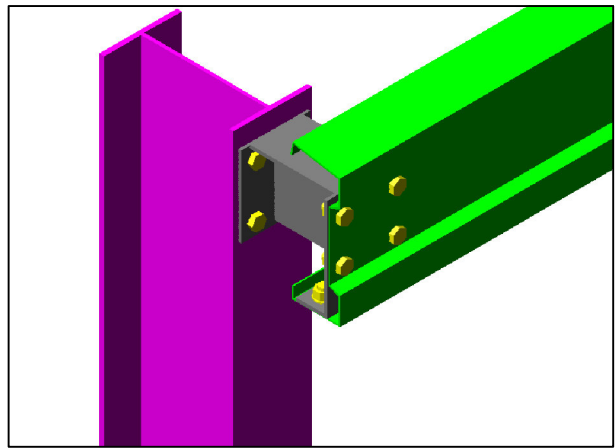
Single Eaves Beam

Usage

- Connects a single Eaves Beam to a Column

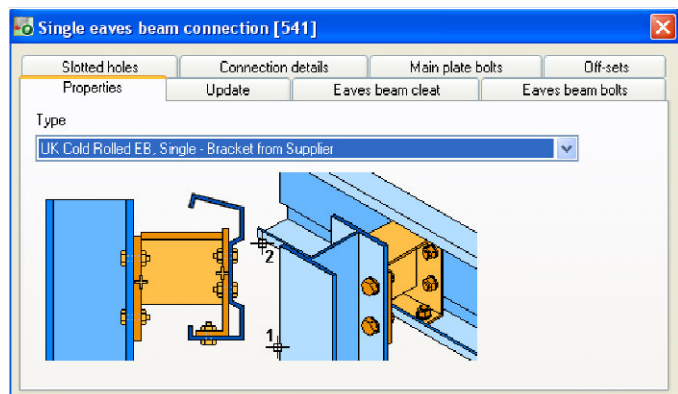
Setting Out

- Eaves beam must have the correct orientation and be parallel with the Column flange.

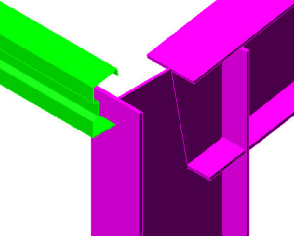
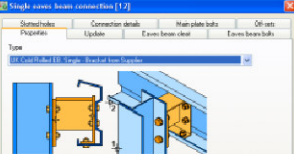


Notes

- If you are not using Ayrshire brackets, then check that the connection uses 18mm Ø holes punched on the correct gauge lines.
- Do not edit the standard Ayrshire bracket. It is only supplied as a standard part with pre-drilled holes.
- Ayrshire Eaves Beam brackets are bolt-fixed and galvanised.



Steps

 Single eaves beam	Select 'Single Eaves Beam' Connection Macro.
	Select Column, enter. Select Eaves Beam, enter.
	Adjust settings.

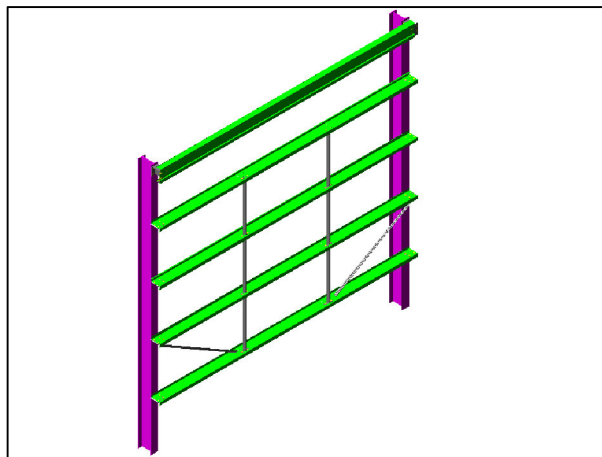
Side Rail Anti-Sag

Usage

- Adds Vertical struts and diagonal braces between side rails.

Setting Out

- See the Ayrshire Purlin manual for recommended Vertical Strut and Diagonal Brace arrangements.
- All side rails must be the same section depth.

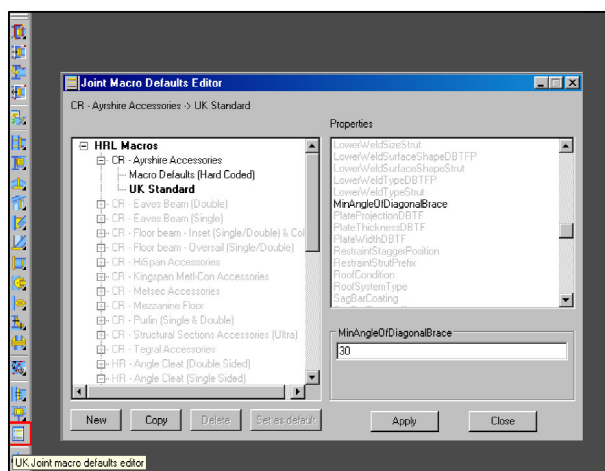


Notes

- 1) If the Diagonal Brace angle < 30 then a warning is displayed.
- 2) If the joint macro defaults editor is required then it can be found on the joints toolbar.
- 3) Edit the HRL macros/CR-Ayrshire/UK Standard/Min Angle Of Diagonal Brace.

Default Settings

- 1) Ensure all the side rails are the same depth and section



Steps

	Select 'Side Rail Anti-Sag' Macro
	Select LHS Column, enter. Select RHS Column, enter. Select all Rails, enter
	Adjust settings.

Roof Anti-Sag

Usage

- Adds anti-sag bars between Purlins and also adds Eaves Ties.

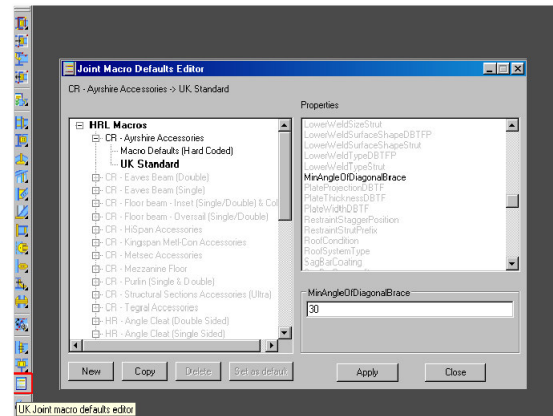
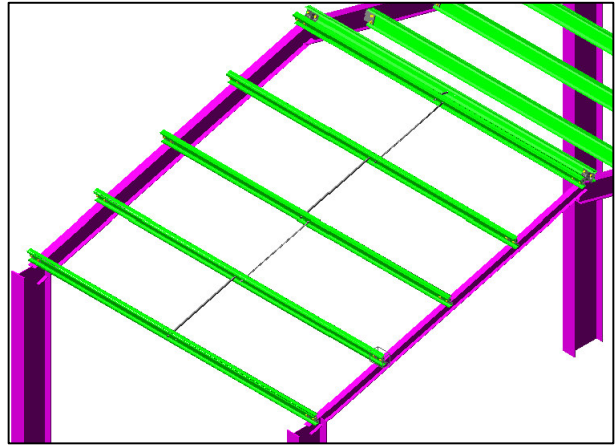
Setting Out

- Requires two Rafters and existing Purlins with optional Eaves Beam.

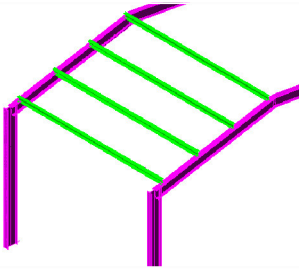
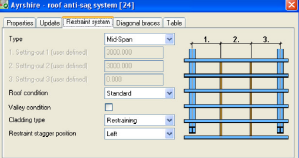
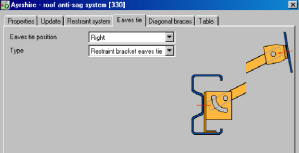
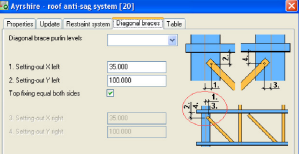
Notes

1) Anti-Sag bars are spring loaded and clip into Purlins through 14mm sq. holes.

2) If the joint macro defaults editor is required then it can be found on the joints toolbar under 'Min Angle Of Diagonal Brace'.



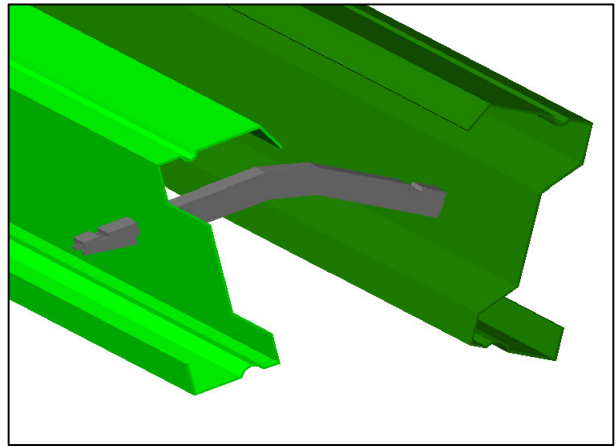
Steps

 Ayrshire - Roof anti sag 	Select 'Roof Anti-Sag' Macro
	Adjust restraint system.
	Adjust Eaves Tie.
	Adjust Diagonal Brace.

Apex Tie

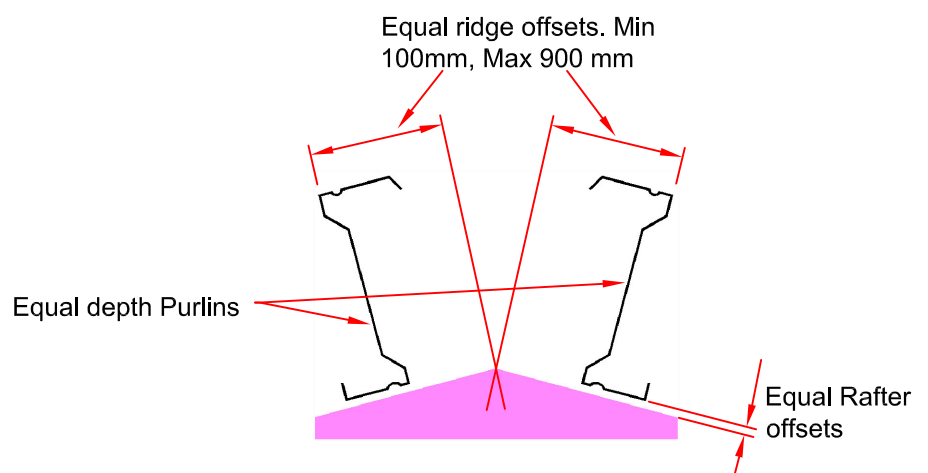
Usage

- Adds a connection between two Apex purlins.
- Apex Ties are spring loaded and clip into the Apex purlins through 14mm square holes

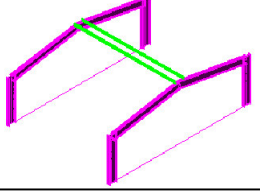
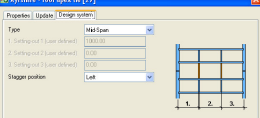


Setting Out

- Requires two Purlins and two Rafters
- Purlins must have the correct orientation, equal offset from the ridge, and equal offsets from the Rafter.
- The apex purlins should be no less than 100mm away from the ridge.
- The apex purlins should be no more than 900mm from the ridge.



Steps

 Ayrshire - Apex tie	Select 'Apex Tie' macro
	Select an Apex purlin, enter. Select the opposite Apex purlin, enter. Enter to select Rafters. Select Rafter, enter. Select Rafter on opposite side, enter.
	Use the 'Design System' tab to choose the position and type of bracing. Close dialogue box.

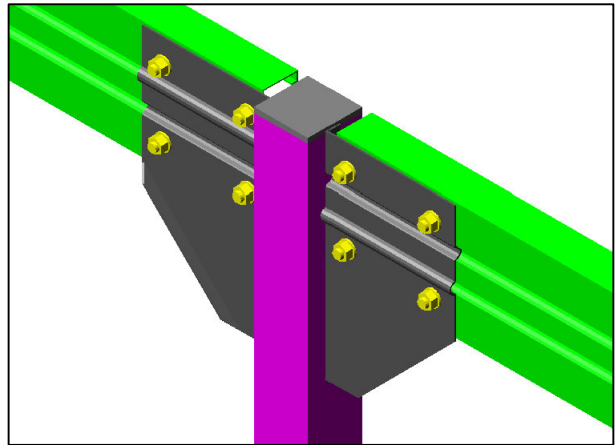
Single SwageBeam Column

Usage

- Connects a single Swagebeam section to a Hot-Rolled post

Setting Out

- Requires a single Swagebeam section (ie. not back to back) and a Hot-Rolled Post (not supplied by Ayrshire)

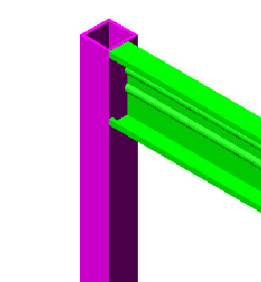
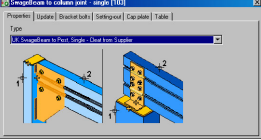


Settings

The macro detects the Swagebeam size and adds the correct bracket

Settings for cutbacks and bolt types are controlled by the macro.

Steps

	Select 'Single Swagebeam Column joint' macro.
	Select Column, enter. Select Beam, enter.
	Adjust settings

Swagebeam 300 Bracket**Usage**

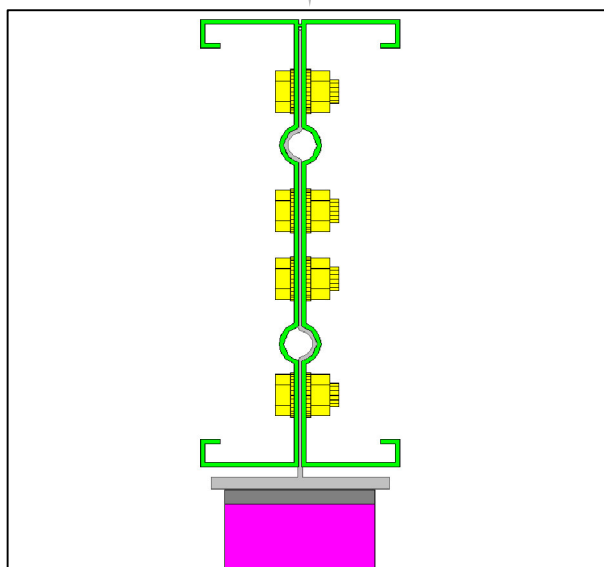
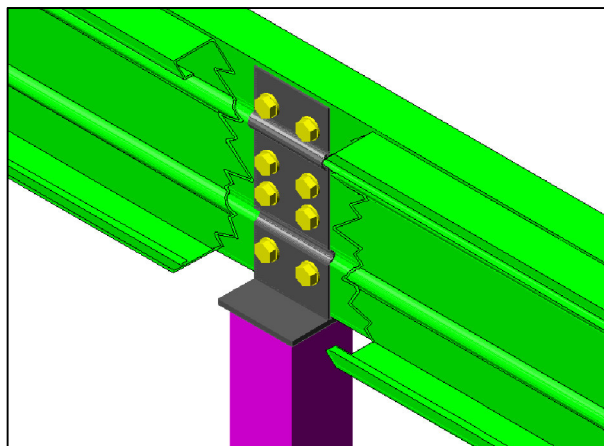
- Connects a pair of 300 Swagebeams to the top of a post.

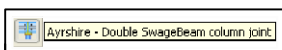
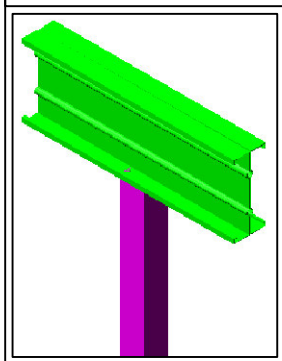
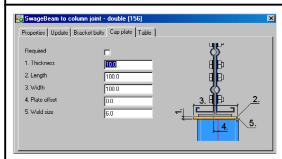
Setting Out

- Requires a SwageBeam 300 back to back section and a Hot Rolled Post (not supplied by Ayrshire)
- The column bracket sits on top of the Hot Rolled Post and fits in between the back-to-back section. The back to back Swagebeams have a 6mm gap.

Settings

- 1) User controls bolt grades and welds

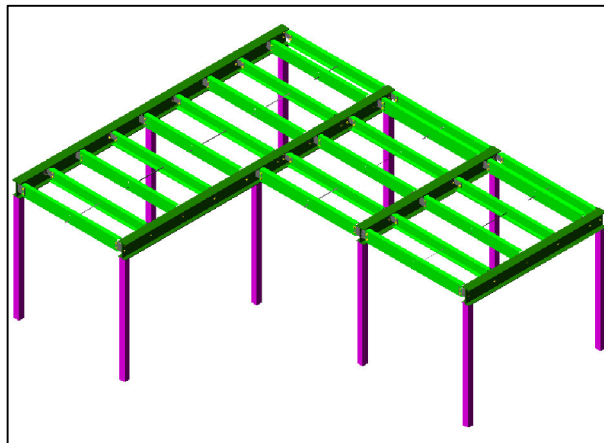
**Steps**

	Select 'Double Swagebeam Column joint' macro.
	Select Column, enter. Select Beam 1, enter. Select Beam 2, enter.
	Adjust settings.

Mezzanine Floor

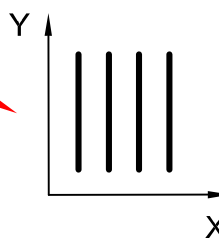
Usage

- Creates a Swagebeam Mezzanine floor area with ties



Setting Out

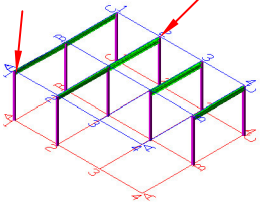
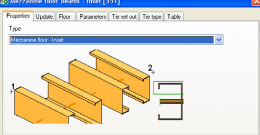
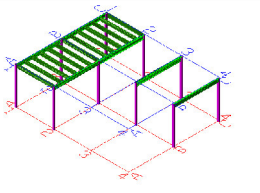
- Mezzanine floor area is defined by diagonal corners with the beam centres in the 'X' direction and the span in the 'Y' direction



Settings

- Section sizes and centres are defined in the macro.

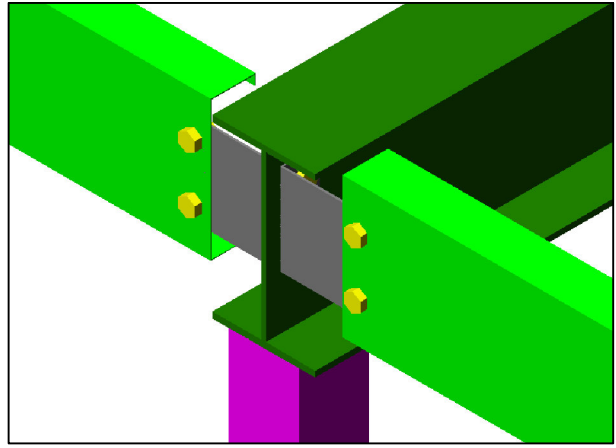
Steps

	Select 'Mezzanine floor' macro, from the 'UK Cold Rolled Sections' toolbar.
	Select diagonal corners of floor area.
	Adjust settings to include AYR TR Ties.
	Mezzanine floor is added with beam centres in the 'X' direction.

Double Inset Floor beam

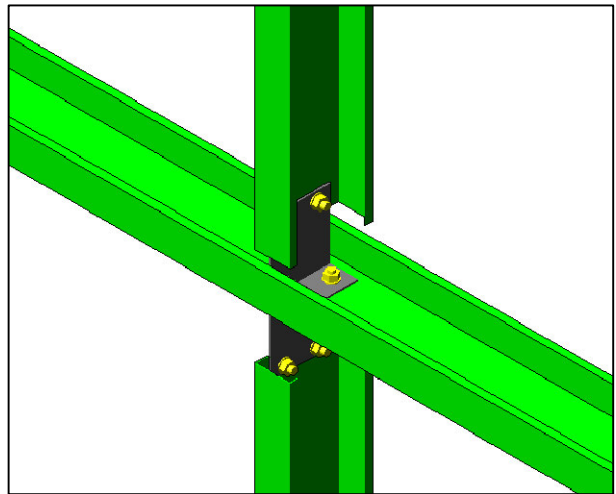
Usage

- Connects two C section secondary floor beams to primary beam
- This connection is usually used in a floor system but it can also be used to frame a door or window opening



Setting Out

- Requires two secondary C-section beams and a primary beam or Rail
- The top flange of the C-section should be in line with the top flange of the primary beam
- The two secondary floor beams must be toeing the same way
- For window openings the sheeting face for the vertical rails must align with the rail sheeting face.

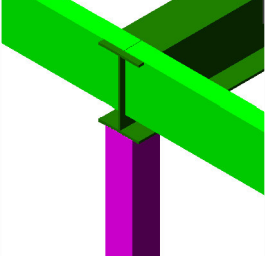
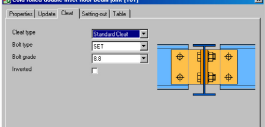


Double inset floor beam macro used in a window situation

Settings

Cut backs and bolt grades are defined in the macro

Steps

 Double inset floor beam	Select 'Double Inset Floorbeam' macro.
	Select primary beam, enter. Select first secondary beam, enter. Select the other secondary beam, enter.
	Adjust settings. 'Cleave from supplier' uses Ayrshire 'I' cleats

Single Inset Floor Beam

Usage

- Connects a single secondary C section floor beam to a primary beam
- This connection is usually used in a floor system but it can also be used to frame a door or window opening (see Fig. 1)

Setting Out

- Requires one secondary C-Section beam and a primary beam or Rail
- The top flange of the C-section should be in line with the top flange of the primary beam
- For window openings the sheeting face of the vertical rails must align with the sheeting face of the horizontal rails.

Settings

- 1) Cut backs and bolt grades are defined in the macro

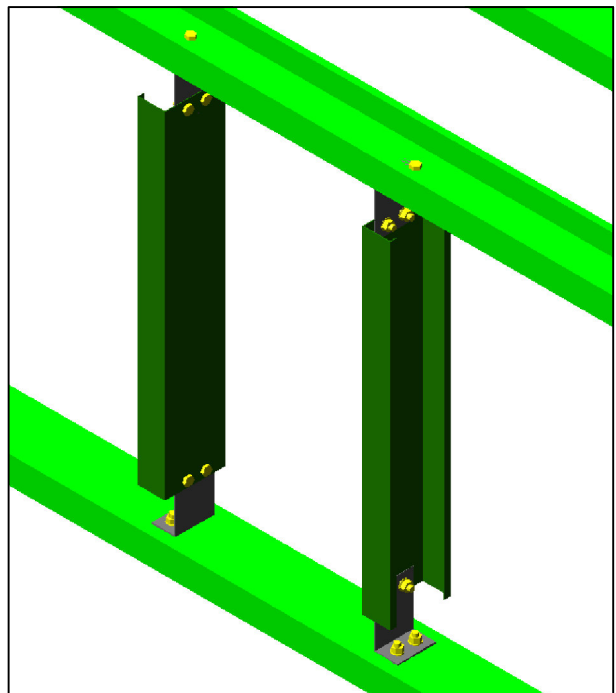
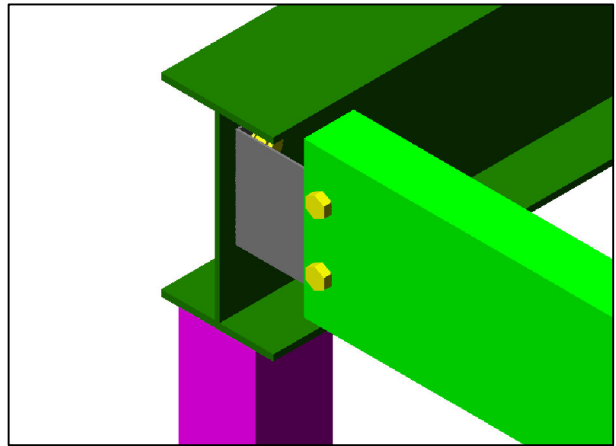
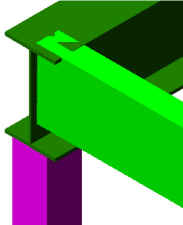
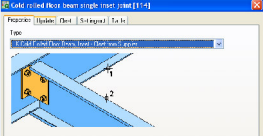


Fig. 1 - Single inset floor beam macro used in a window situation

Steps

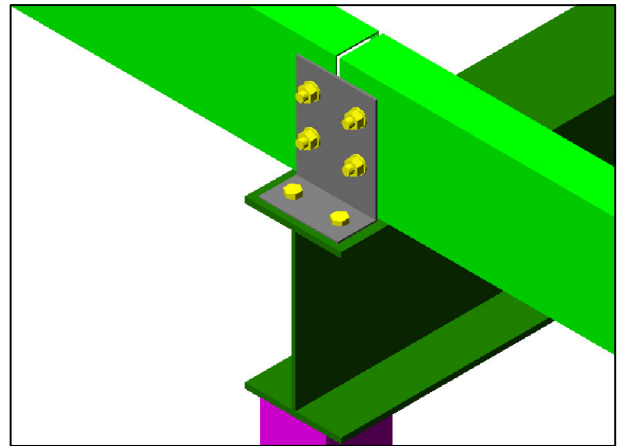
 Single inset floor beam	Select 'Single Inset Floor beam' macro.
	Select primary beam, enter. Select secondary beam, enter.
	Adjust settings. "Cleave from Supplier" uses Ayrshire 'I' cleats

Double Oversail Floor beam**Usage**

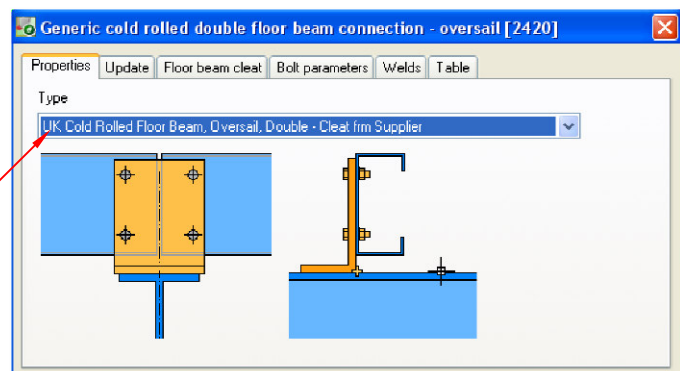
- Connects two oversail floor beams to a Hot-Rolled primary using Oversail Cleats

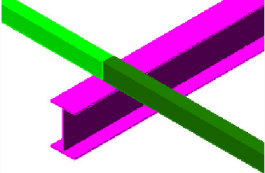
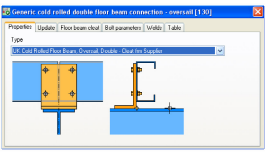
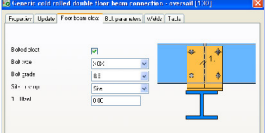
Setting Out

- Requires two secondary C-Section beams and a primary hot rolled beam
- The two secondary beams must be toeing the same way
- Both the secondary beams should be the same distance from the top flange of the primary beam

**Settings**

- 1) To use Ayrshire standard cleats choose 'Cleat from Supplier'
- 2) Ayrshire standard cleats are bolted, check the 'Bolted Cleat' box on the 'Floor Beam Cleat' tab

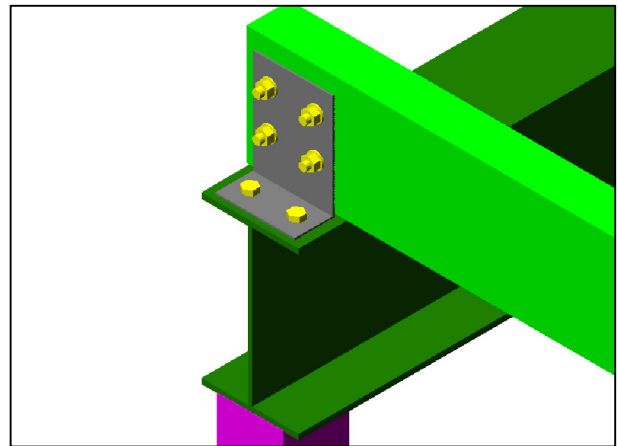
**Steps**

	Select 'Double Oversail Floor beam' macro.
	Select Hot-Rolled Beam, enter. Select first C-Section, enter. Select second C-Section, enter.
	To use Ayrshire standard cleats choose 'Cleat from supplier'
	Ayrshire standard cleats are bolted. Navigate to the 'Floor beam cleat' tab and check the 'Bolted cleat' box.

Single Oversail Floor beam

Usage

- Connects a single Oversail floor beam to a Hot-Rolled primary using Oversail Cleats.

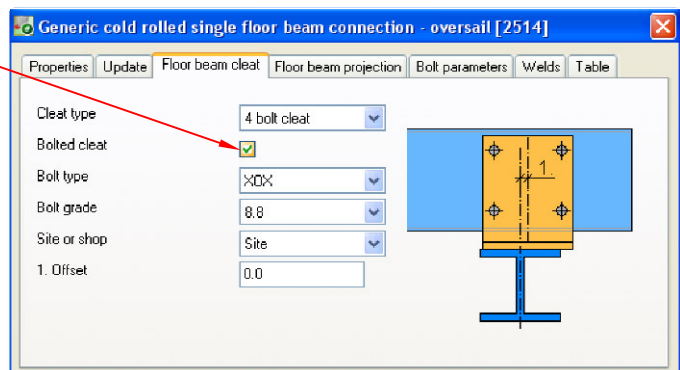
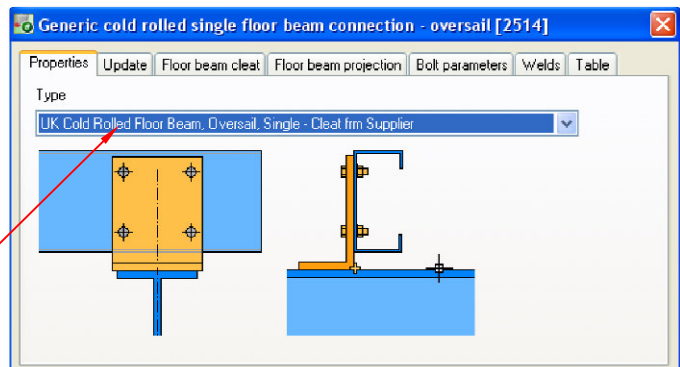


Setting Out

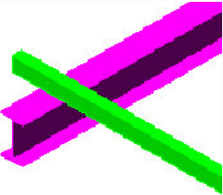
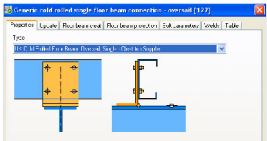
- Requires one secondary C-Section beam and a hot rolled primary beam

Default Settings

- To use Ayrshire standard cleats choose 'Cleat from supplier'
- Ayrshire standard cleats are bolted, check the 'Bolted cleat' box on the 'Floor Beam Cleat' tab

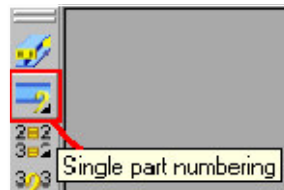


Steps

	Select 'Single Oversail Floor beam' macro.
	Select Hot-Rolled Beam, enter. Select C-Section, enter.
	To use Ayrshire standard cleat choose 'Cleat from supplier'.

How to produce a CAM file

1. Number the model.

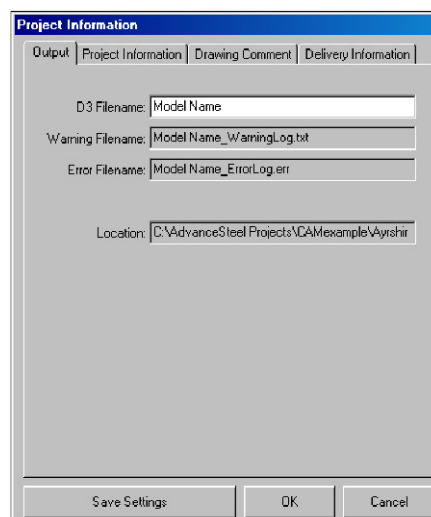


2. Select the items to include in the CAM file. If nothing is selected then all the Ayrshire parts in the model will be included in the CAM.

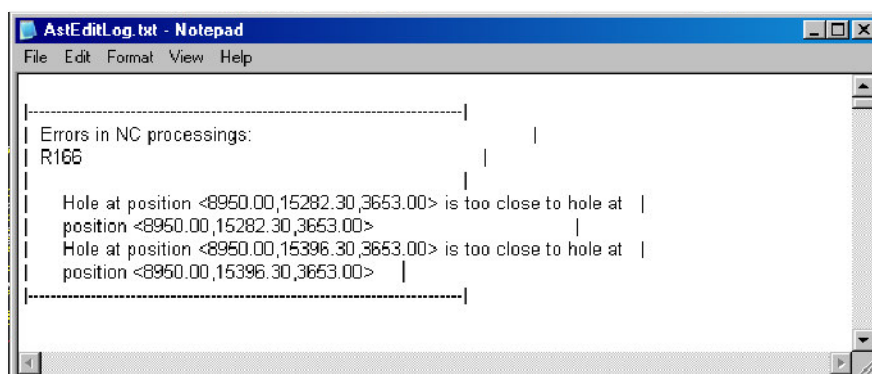
3. Choose CAM from the Ayrshire Toolbar



4. Review the file name and click OK.

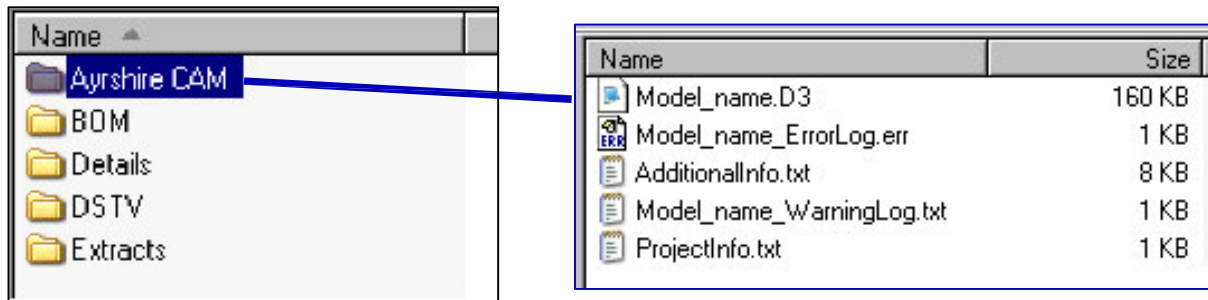


5. The EditLog displays any warnings.



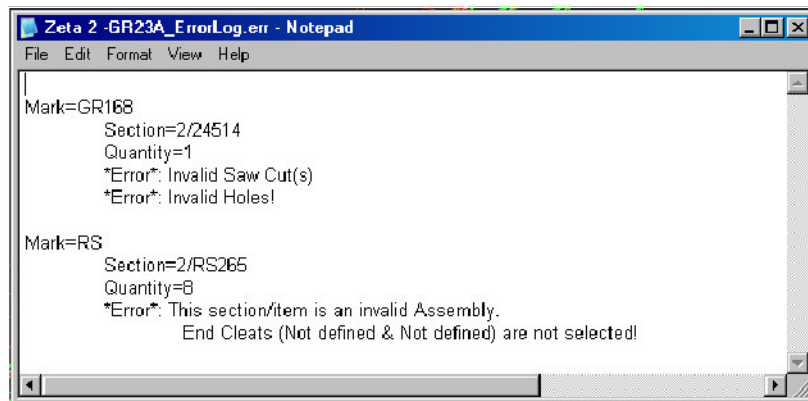
CAM file production

6. Navigate to the AyrshireCAM folder



7. The D3 file can be reviewed in Ayrsuite Plus 3 and converted into the **AMP** file for Ayrshire order processing.

8. The ErrorLog shows any items that have been excluded from the CAM output. Fix the model to resolve any issues, or produce DXF/DWG drawings of the excluded parts.



9. Other files

	Contents
AdditionalInfo.txt	Lists parts that are included in the D3 file.
WarningLog.txt	Lists any additional holes.
ProjectInfo.txt	Project information that was included in the D3 file.

The **D3** file is opened using Ayrsuite Plus 3 and saved as an **AMP** file per the order processing section of this guide. The other files, warnings and error logs are not used by Ayrshire.