



Up and Running with Advance Steel

Deepak Maini

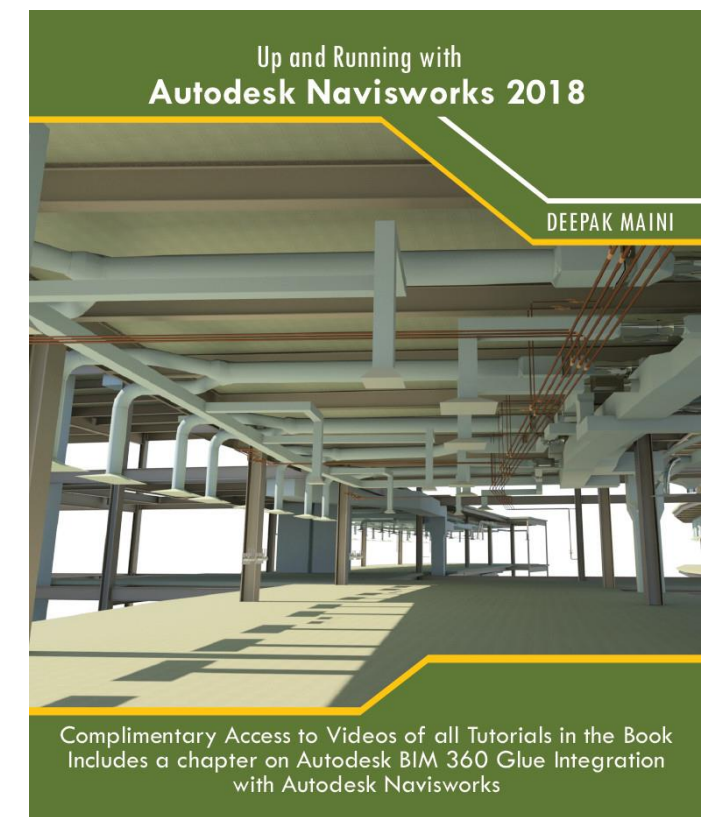
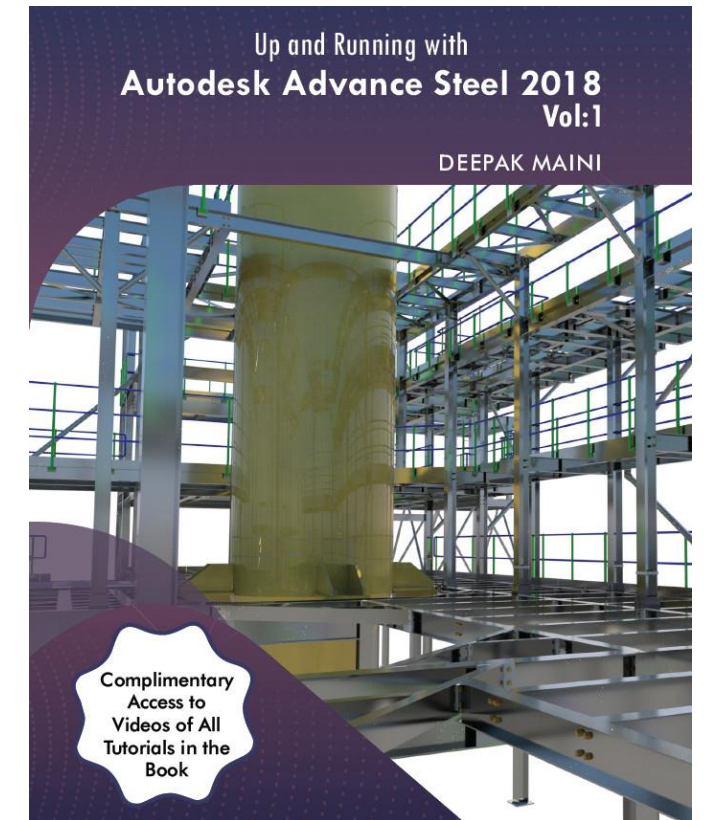
National Technical Manager – Named Accounts
Cadgroup Australia

MEP & Structural Fabricators (MSF) Forum at AU Las Vegas 2017

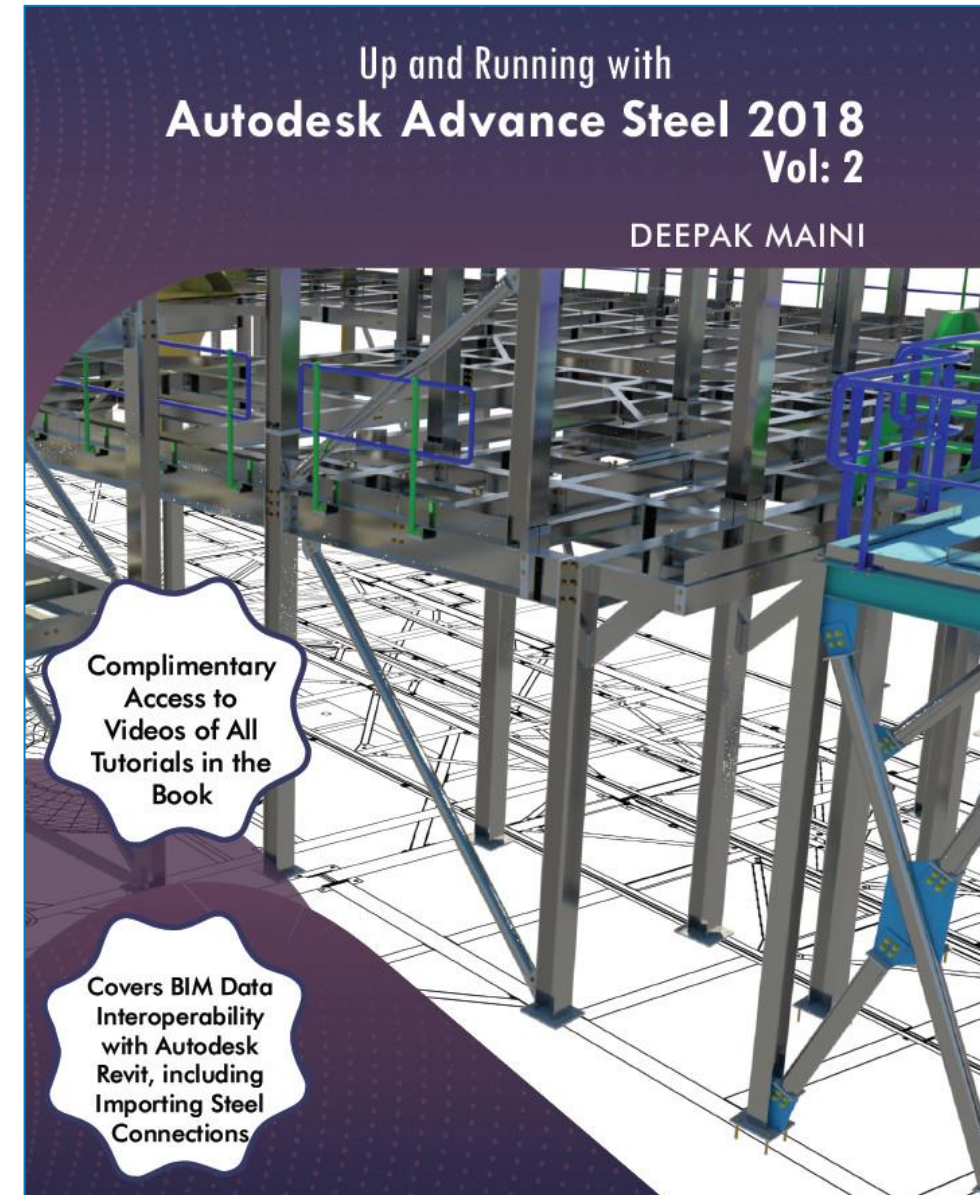
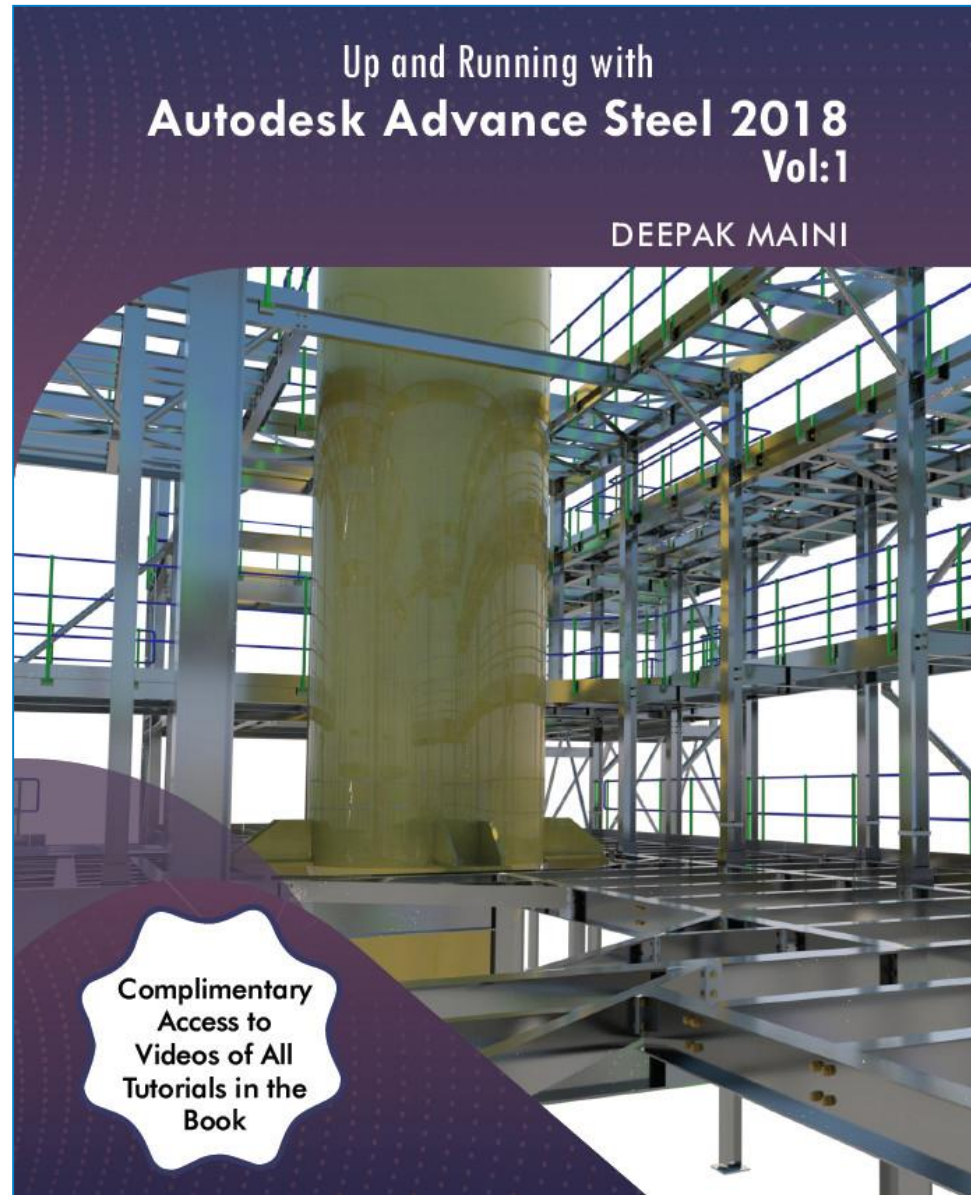
Welcome
to the
MSF Conference

My Introduction

- Qualified Mechanical Engineer
- More than 18 Years of experience in the industry
- Autodesk Expert Elite
- Guest lecturer at the University of Technology Sydney (UTS) and University of New South Wales (UNSW)
- Top rated speaker at Autodesk University in Las Vegas for last 3 years in a row
- Among the Top 3 speakers at BILT ANZ and Top 6 speakers at BILT Asia
- Author of the *Up and Running with Autodesk Advance Steel* and *Up and Running with Autodesk Navisworks* series of books



Give Away 1 Set of the Advance Steel Books



A lot more Goodies...



The background features abstract, flowing blue and white geometric shapes. On the left, a series of white, horizontal, overlapping rectangular blocks form a vertical column. To the right, a large, translucent blue shape curves and loops, resembling a ribbon or a stylized wave. The overall composition is clean and modern, with a light blue and white color palette.

Let's Take a Pledge

Please stand up...



Rules of Engagement

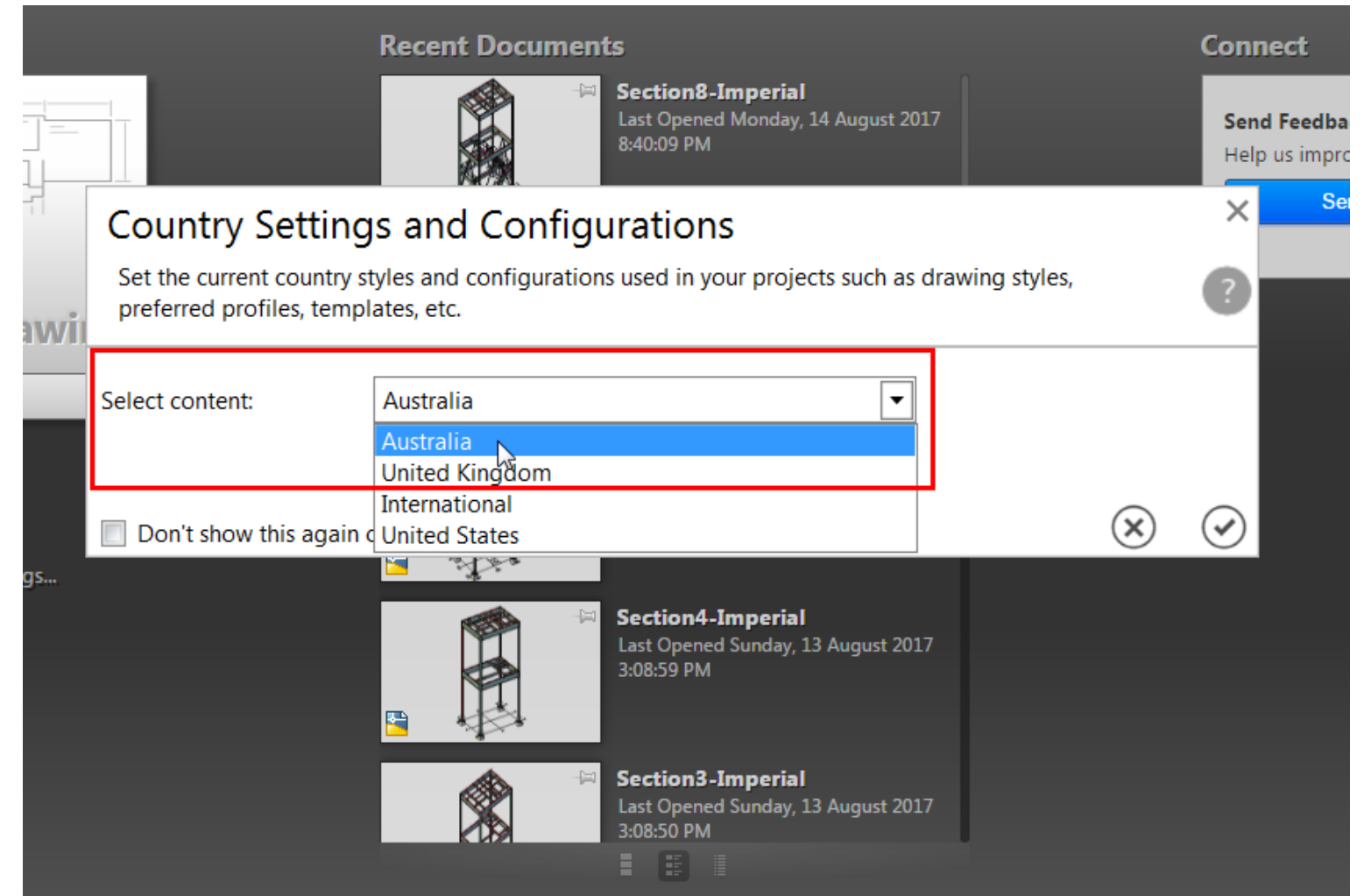
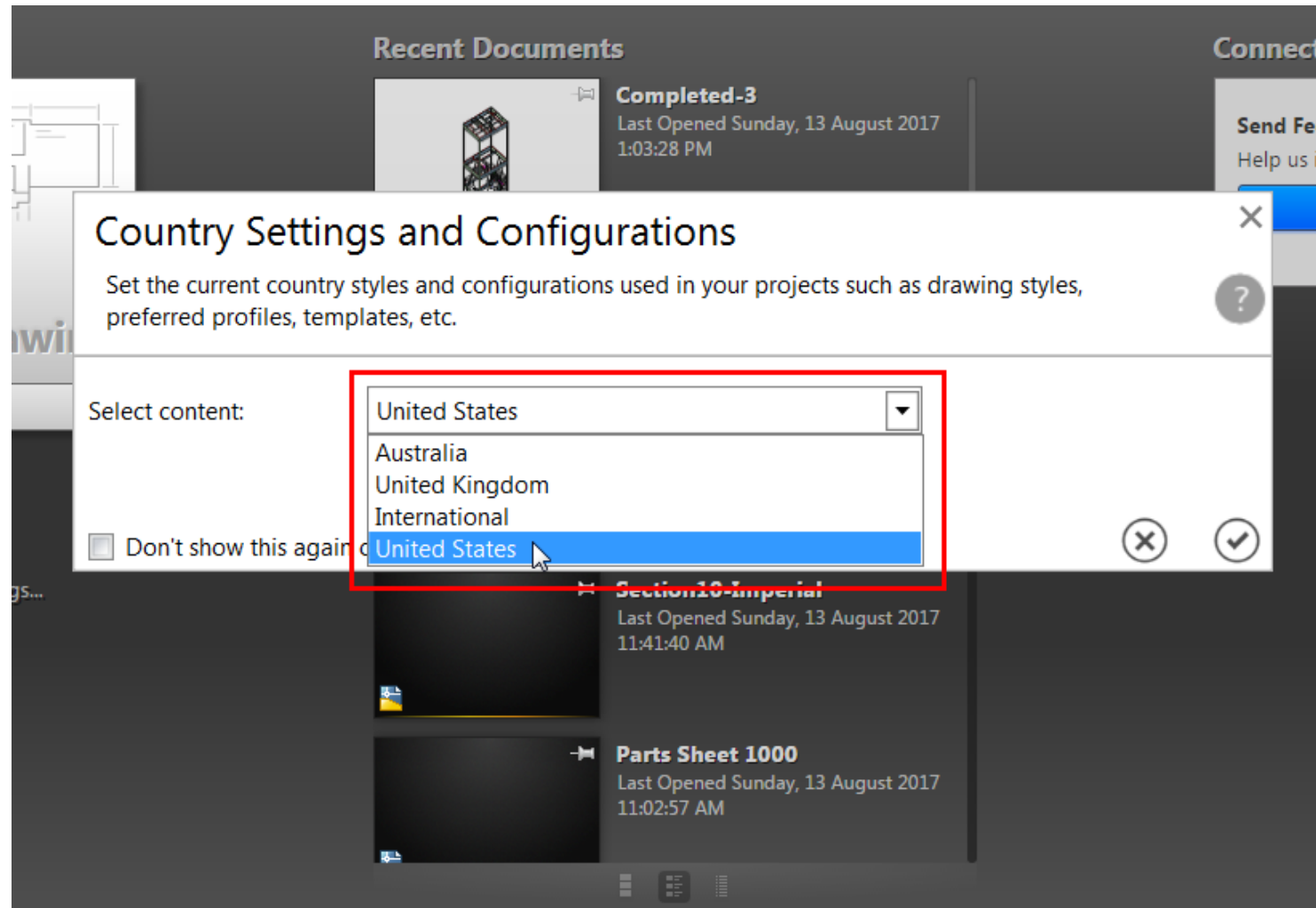
- 11 Sections to be Completed in this lab + 2 Extra Sections (in the Handout)
- Only have 60 Minutes (~50) to Complete All Sections
- I will Show you the Steps in Each Section First and then Let you Work on that Section
- All Required Exercise Files are in the [Imperial Units \(US Settings\)](#) and [Metric \(Australia Settings\)](#) and are saved in a Folder called C:\Dataset\Deepak Maini
- Imperial Handouts under [Class Handout](#) and Metric are under [Additional Class Material](#)
- Great “Lab Buddies” [Here to Help You](#), if needed ([Thank You Guys](#))

Challenge for You as well as Me

Hence the Pledge...

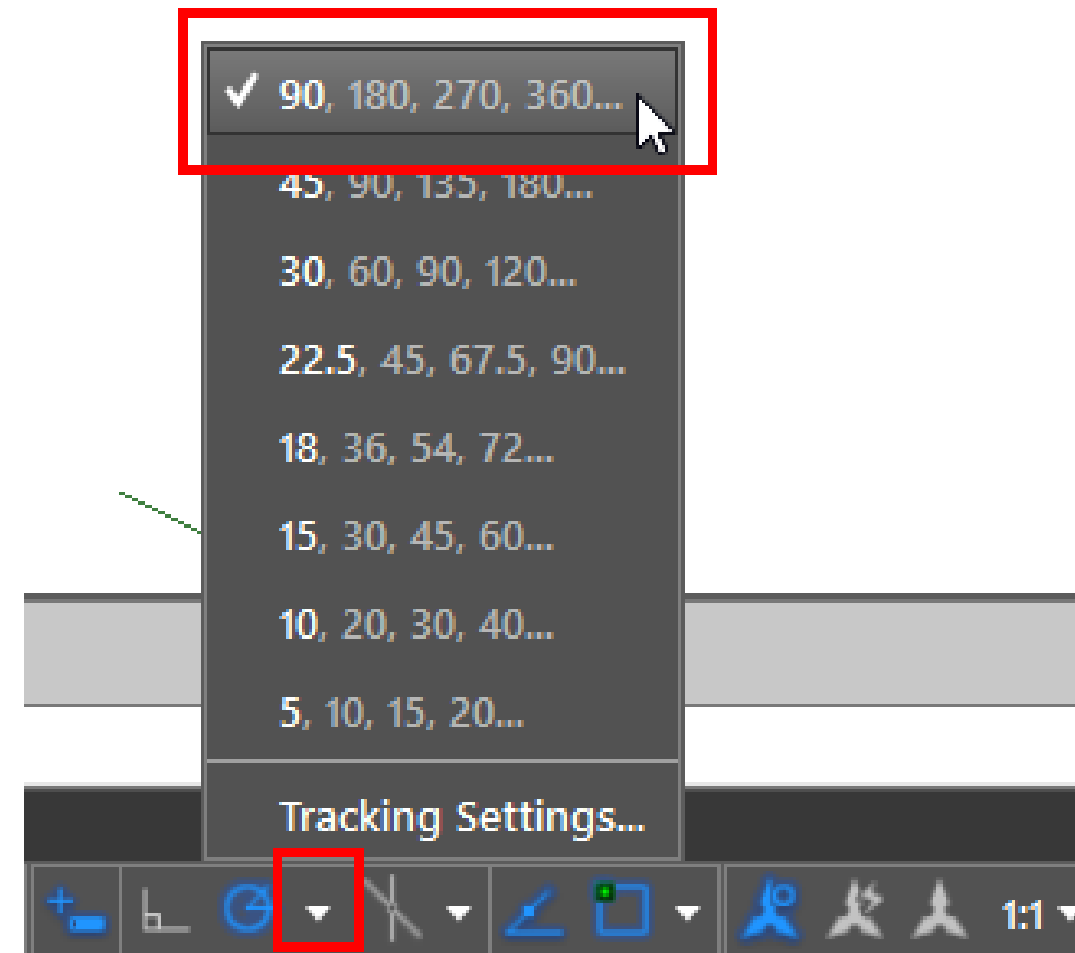
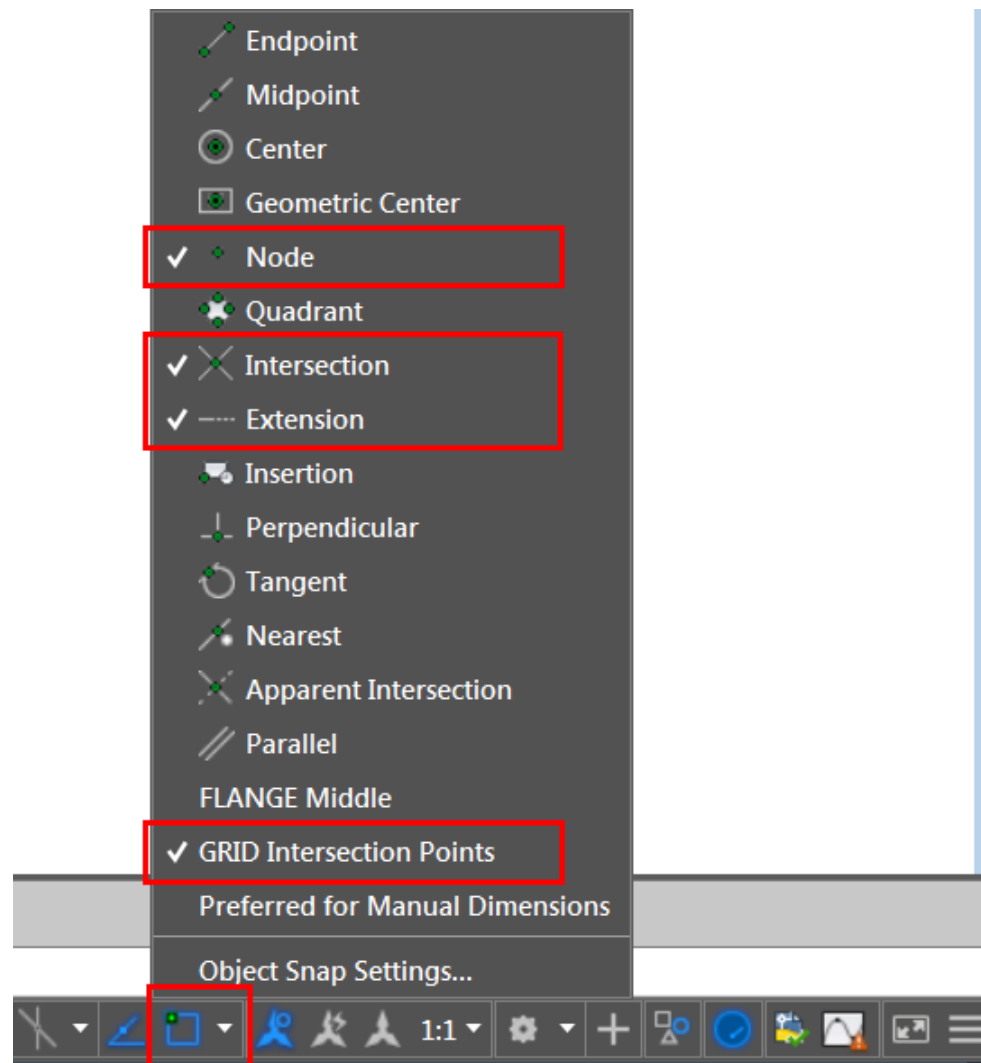
Section 1: Starting Advance Steel

- Selecting the Country Settings to start Advance Steel



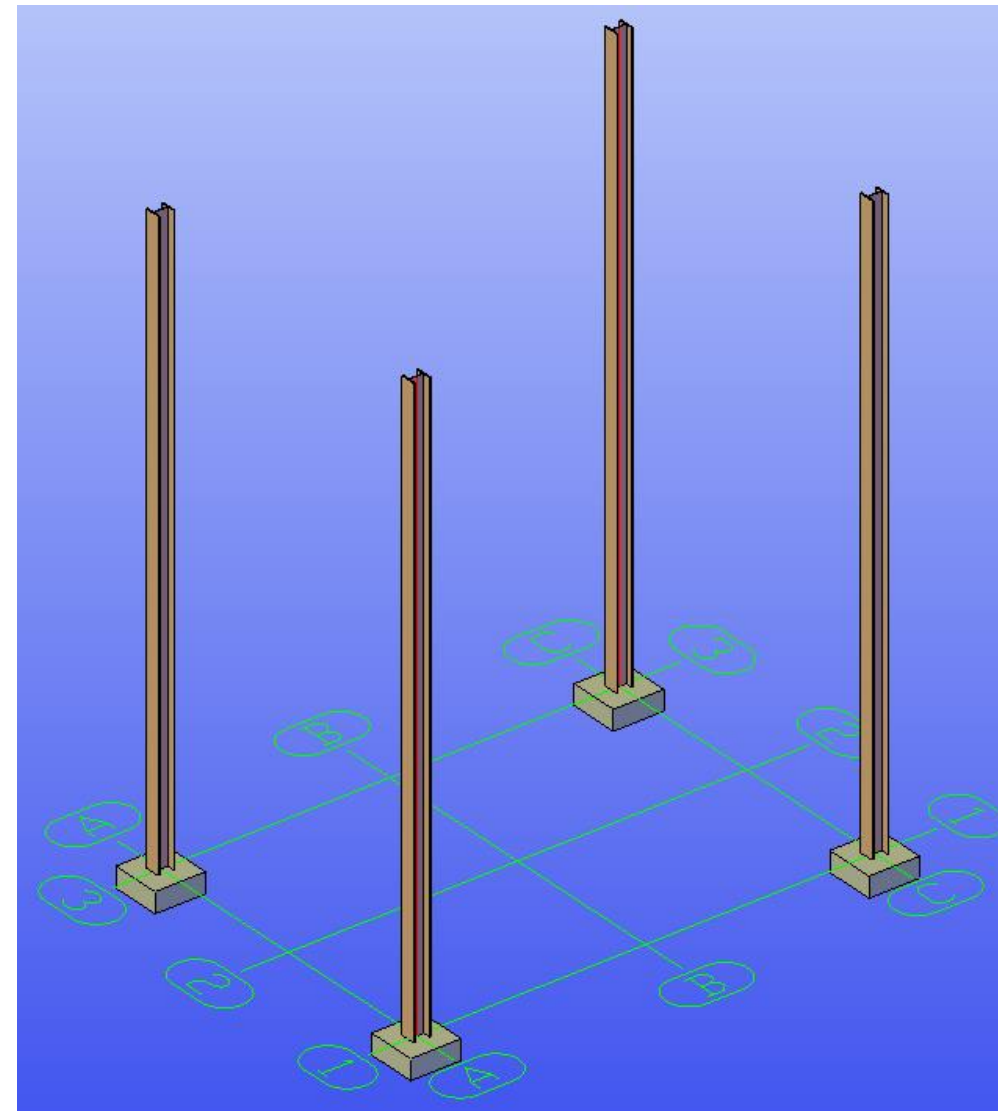
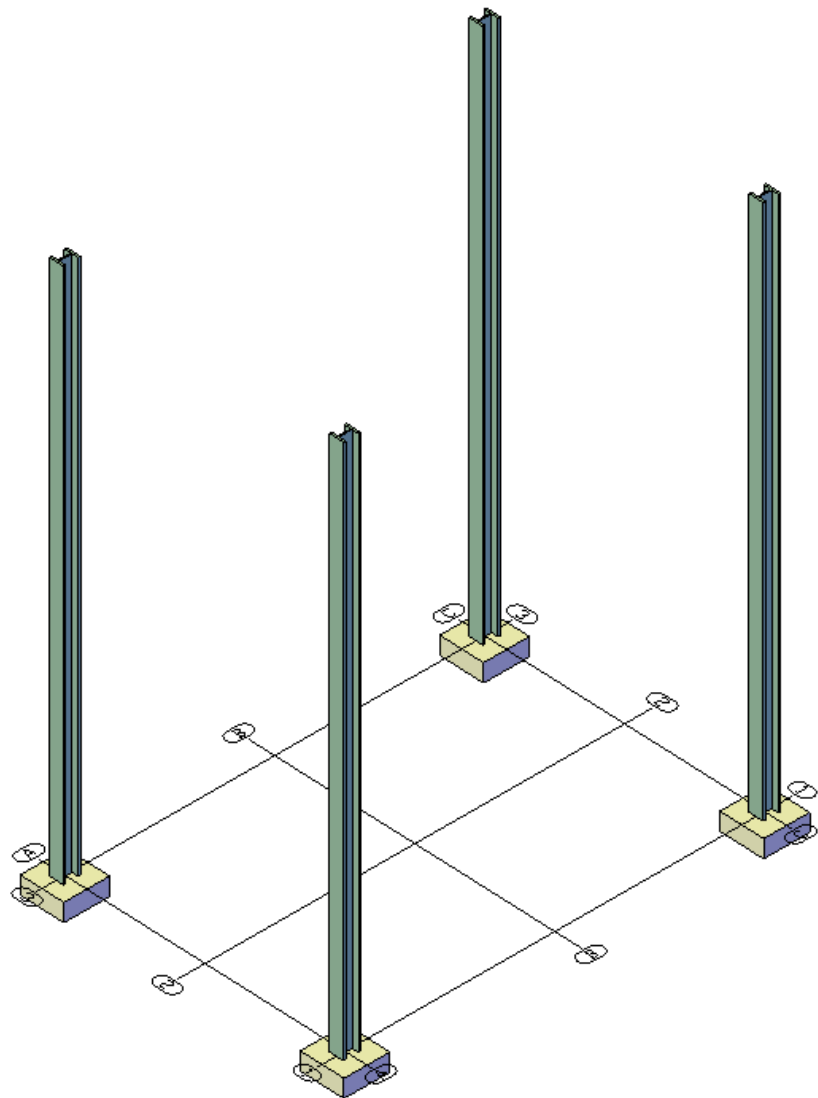
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Step 1-4 and Stop)*

- Open the [Section2-Imperial.dwg](#) or [Section2-Metric.dwg](#) file
- Select the following Object Snap Types and configure the Polar Tracking settings



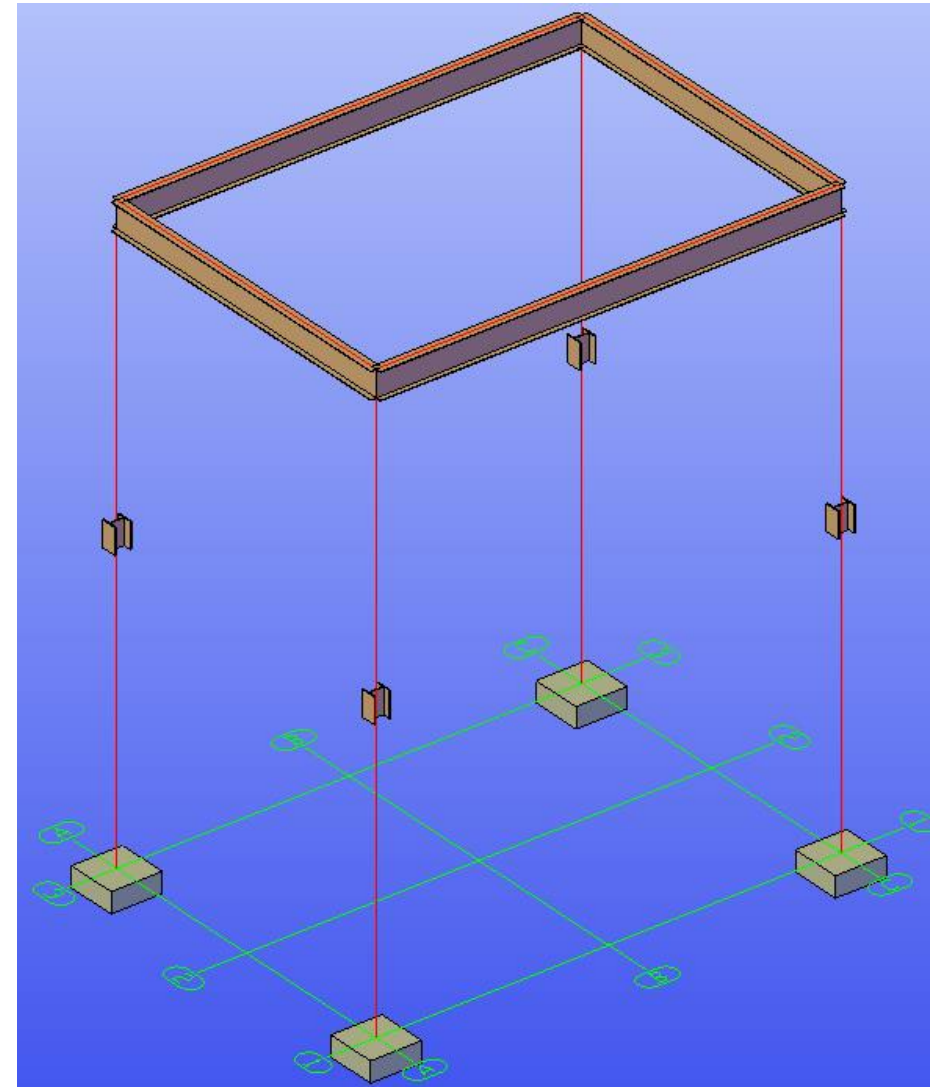
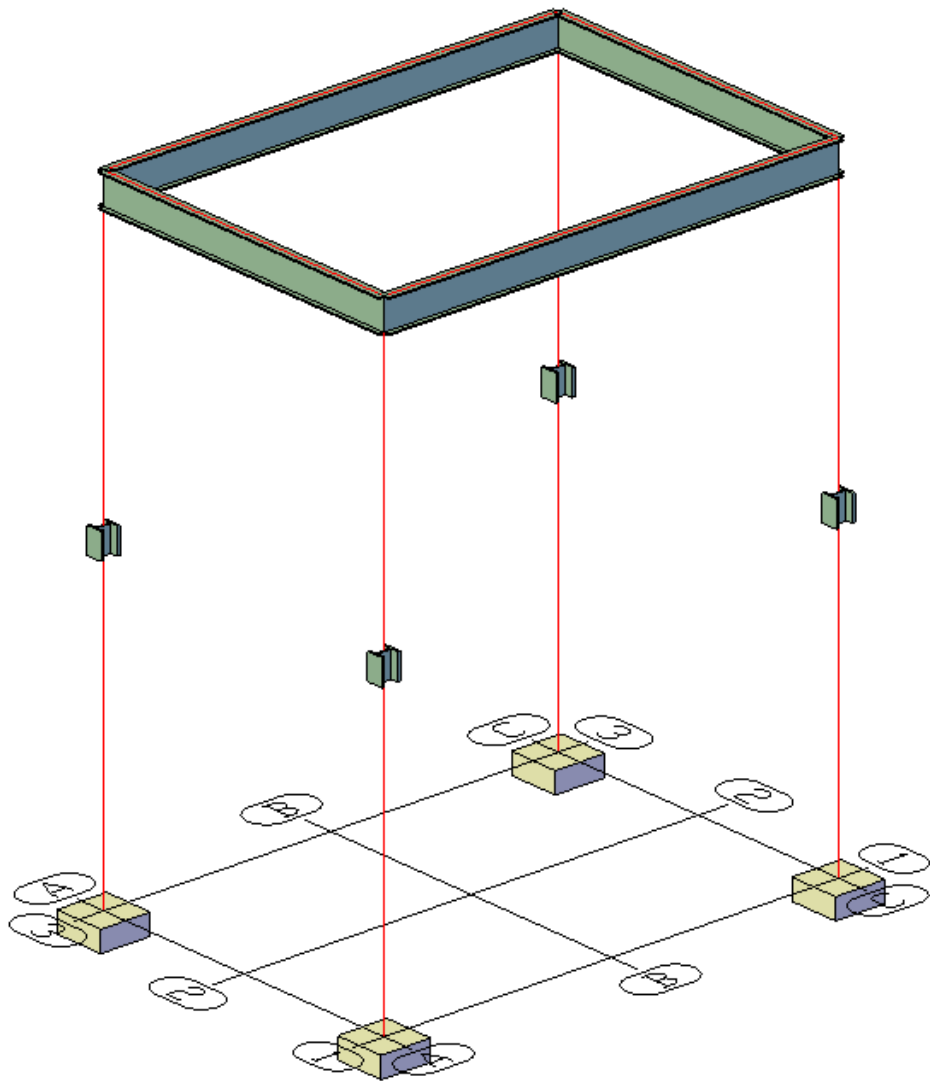
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 5-14 and Stop)*

- Insert a **Rolled I Section** at A1 Grid Intersection Point (40' or 12000mm). Section Type is **AISC 14.1 W > W12x210** or **Australian Universal Column > 310 UC 158**
- Copy the section to the A2, C1 and C3 Grid Intersection Points



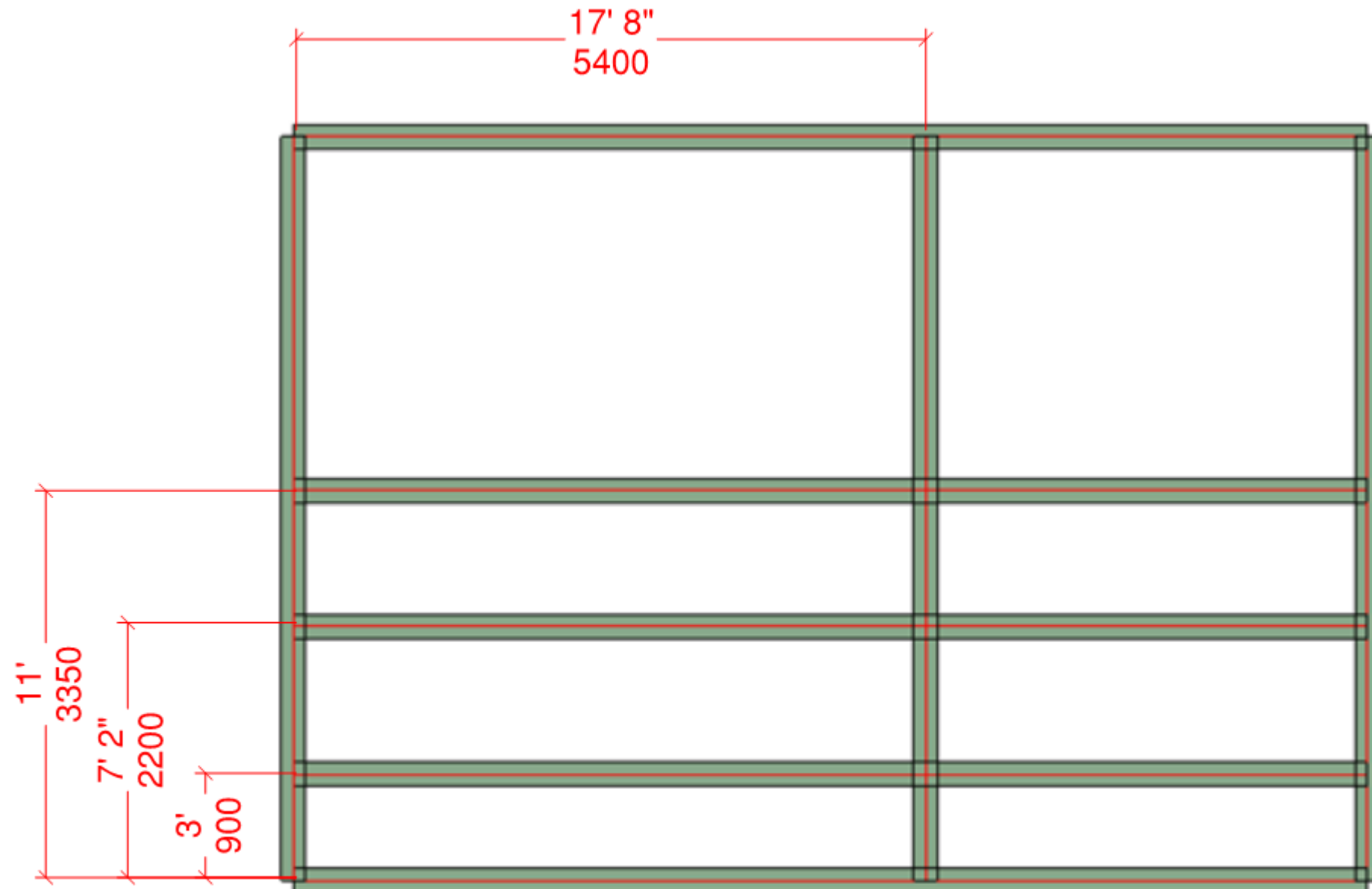
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 15-30 Only)*

- Change the display of columns to Symbol
- Insert Perimeter Beams. Section Type is **AISC 14.1 S > S24X121** or **Australian Universal Beam > 530 UB 82.0** with **Top Center Positioning**



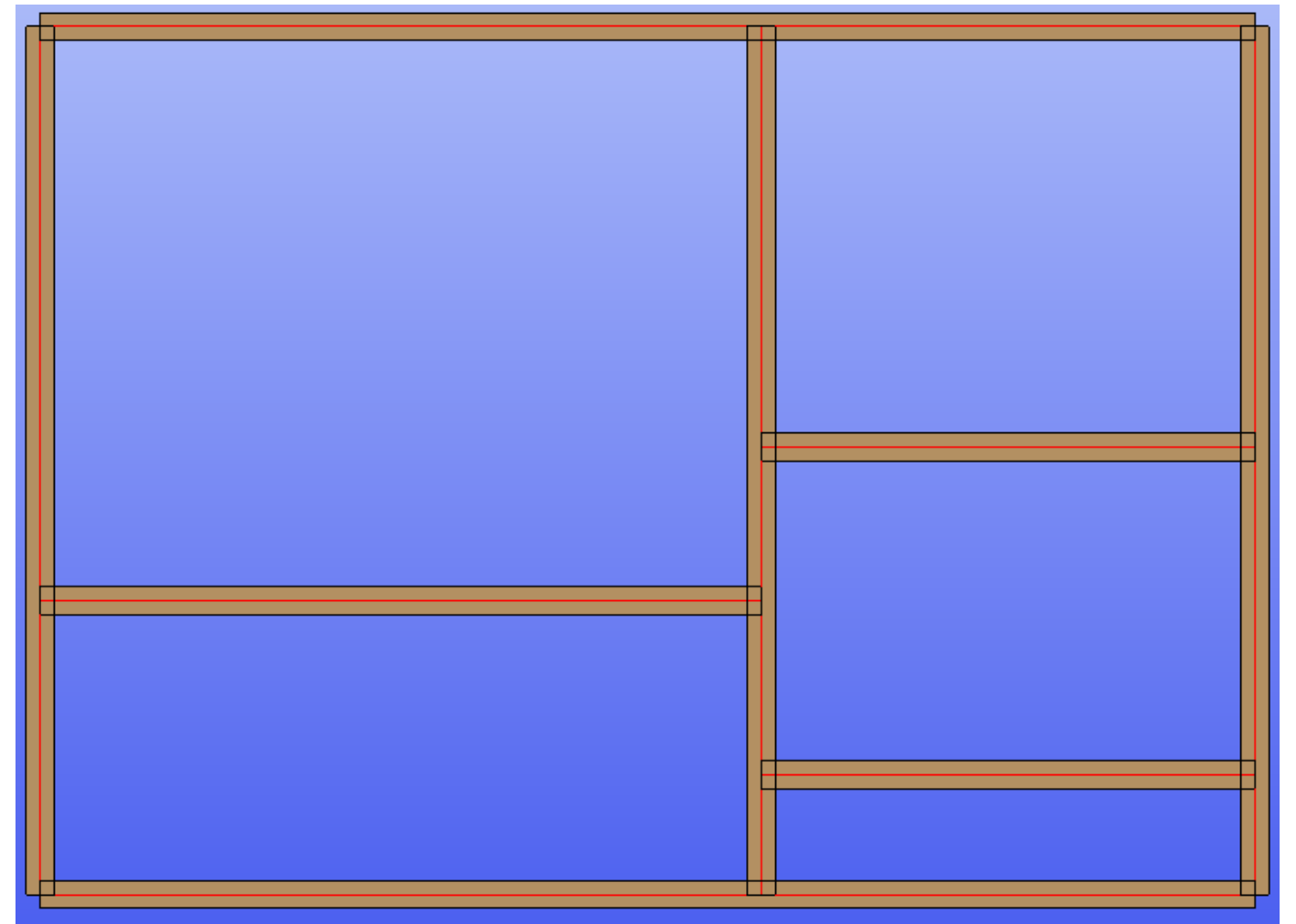
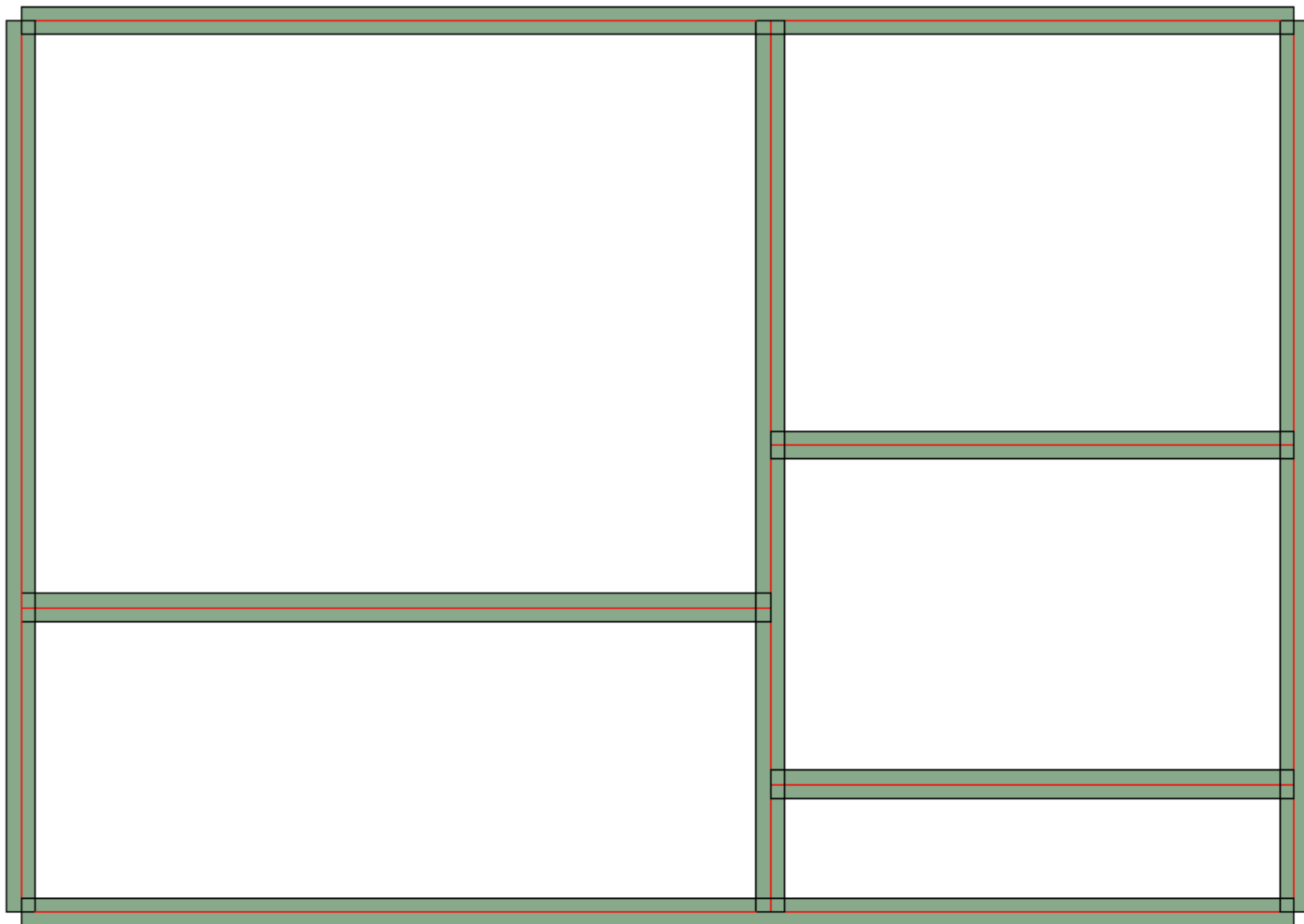
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams

- Isolate Beams and Change the view to Top View
- Copy Perimeter Beams



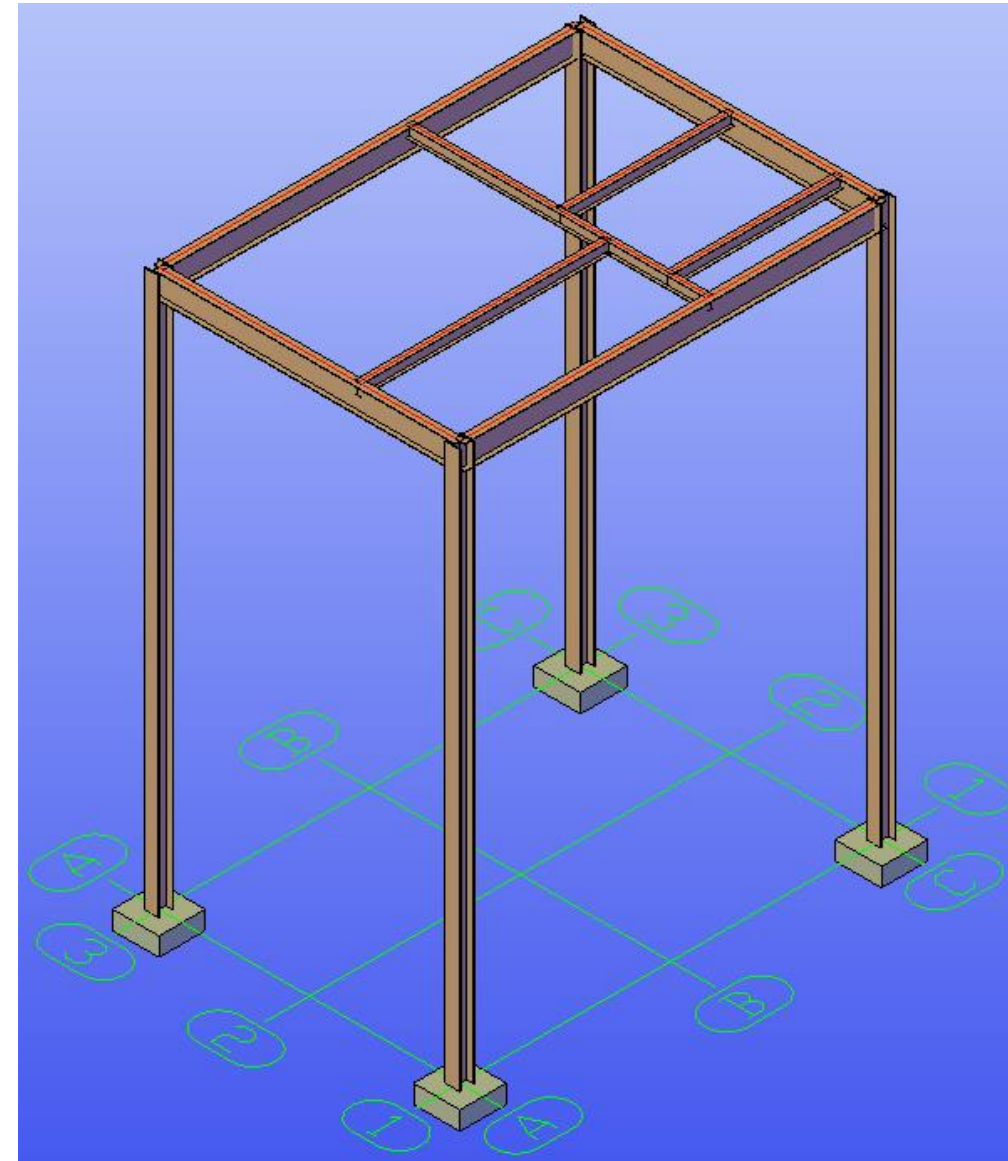
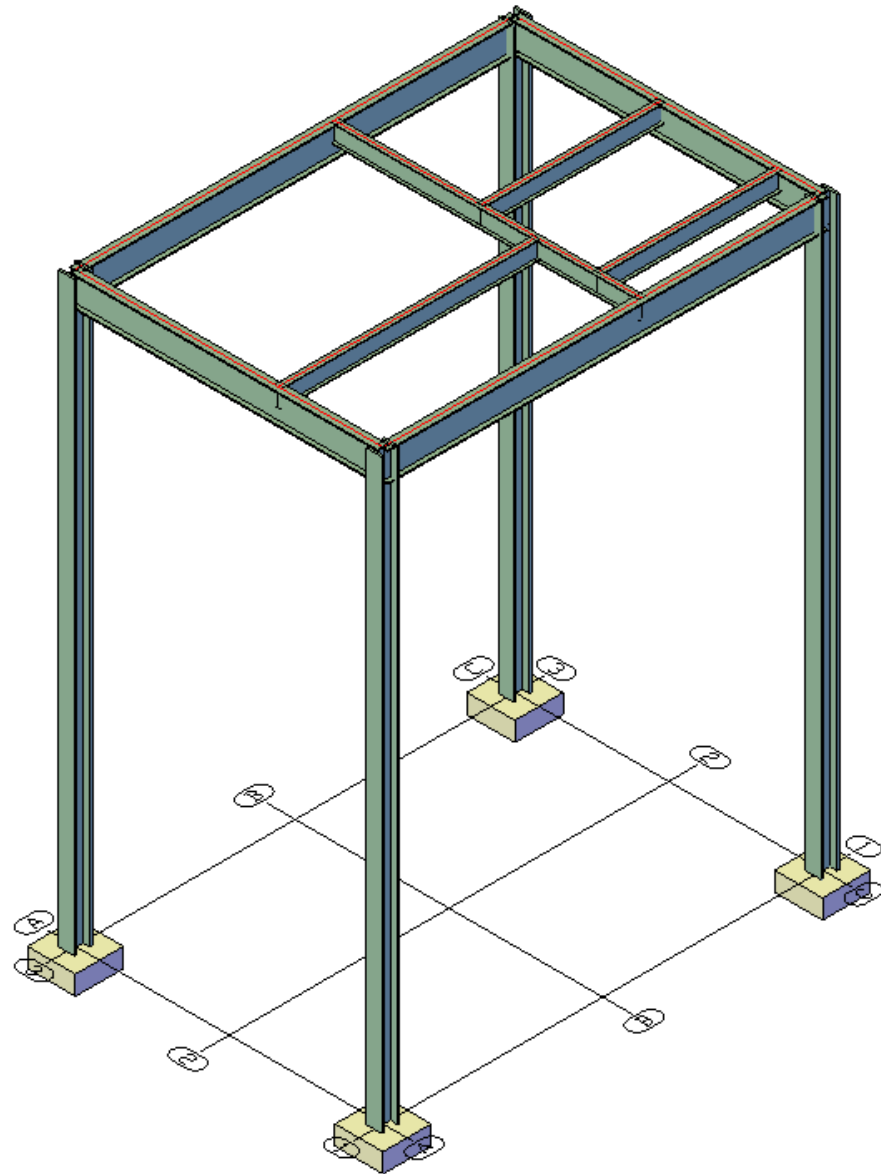
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams

- Split Beams
- Change the sizes to [AISC 14.1 S > S12X50](#) or [Australian Universal Beam > 250 UB 31.4](#)



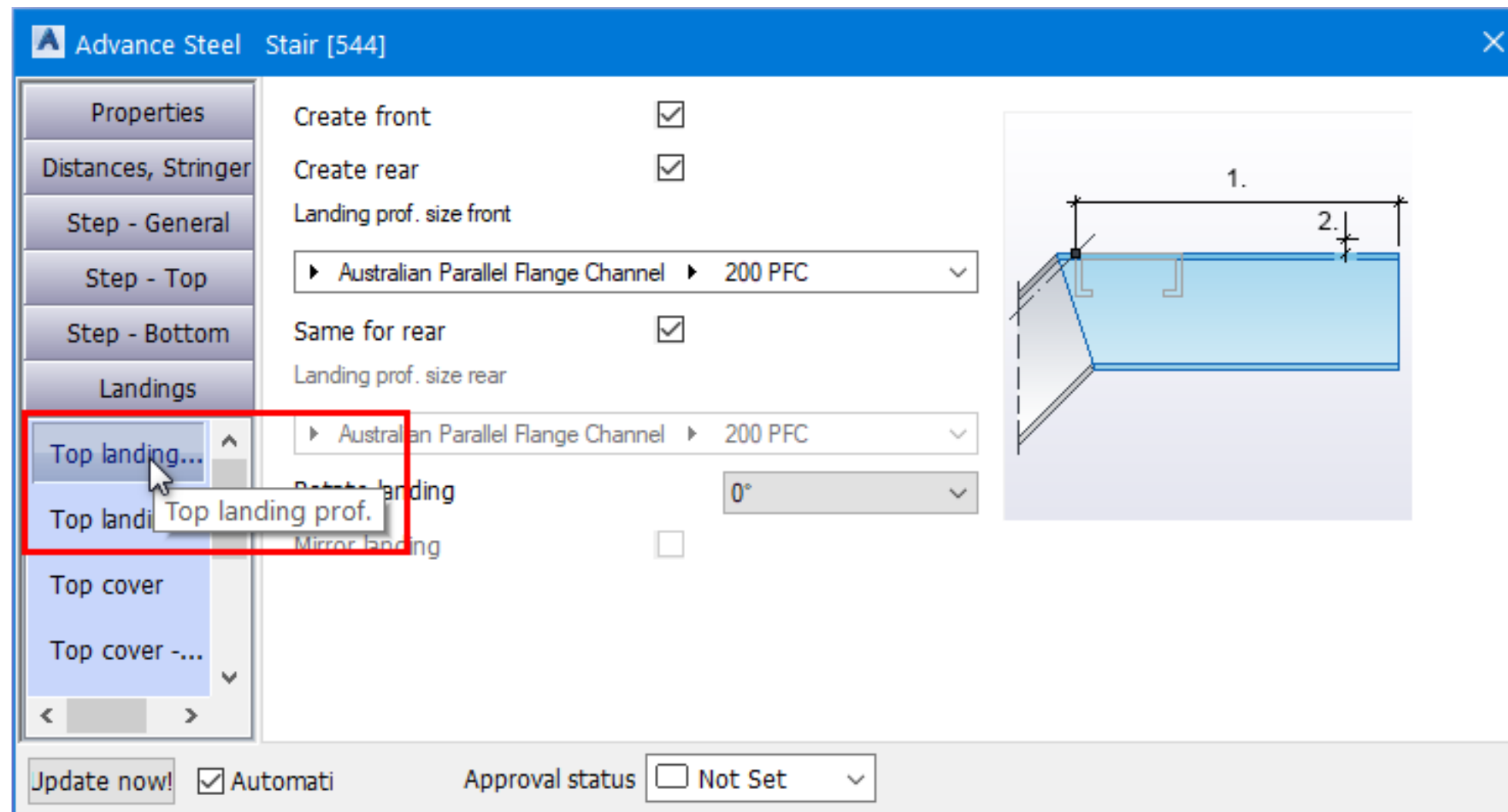
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Remaining Steps)*

- Change the view to Home view with Parallel Projection
- Unisolate all objects



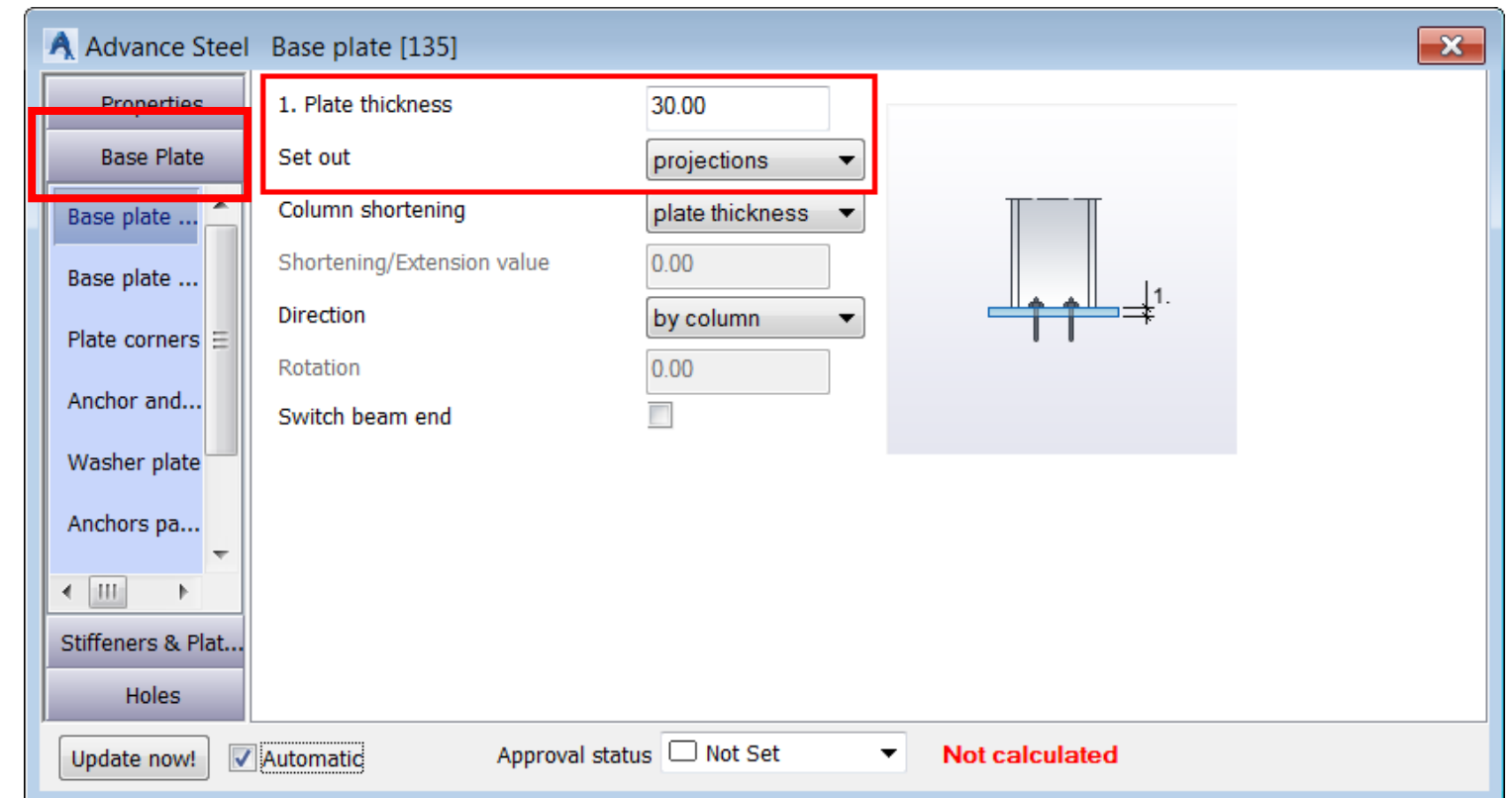
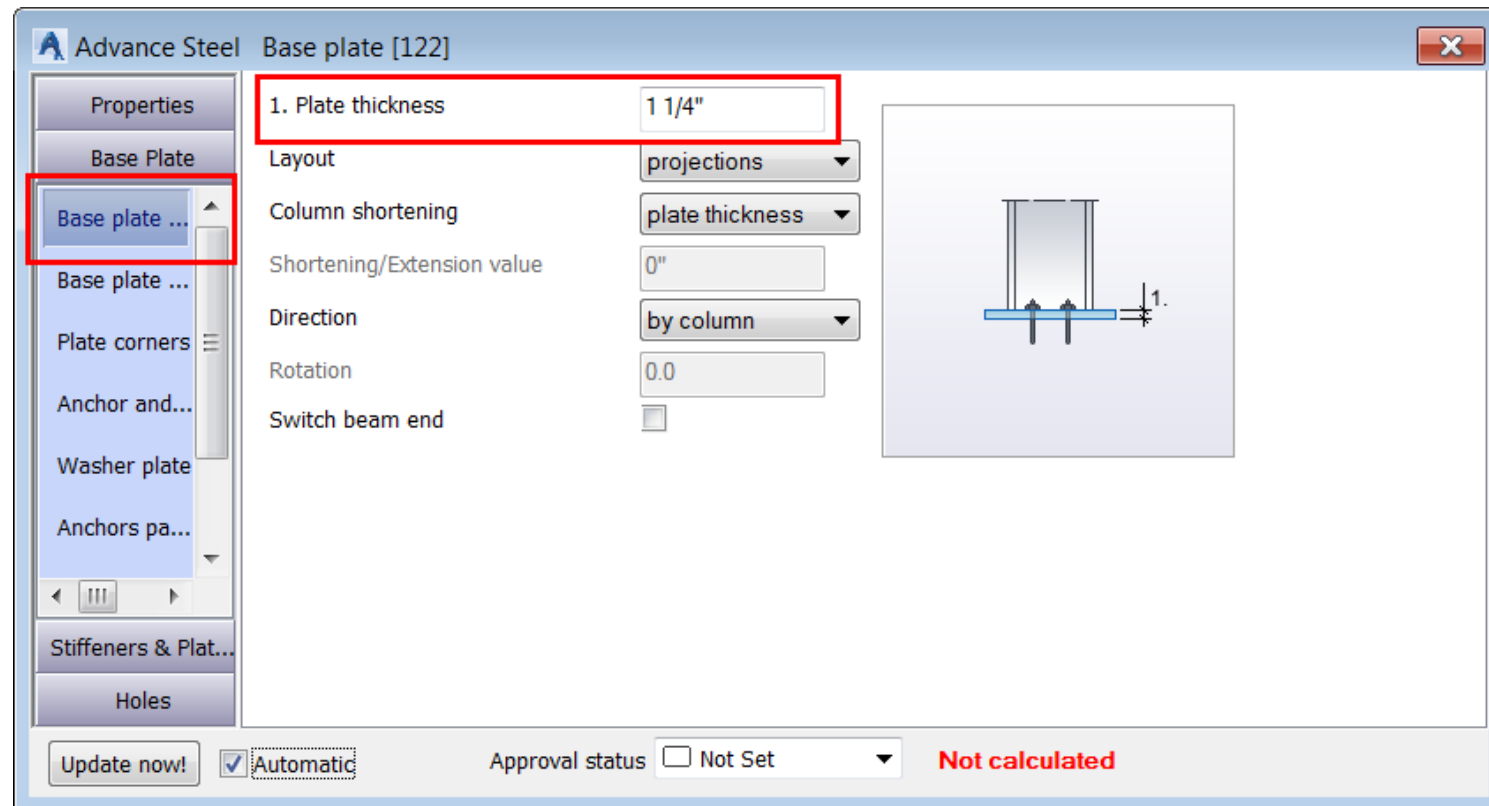
Section 3: Inserting and Copying the Base Plate Joints *(Important thing about the Dialog box Tab Names)*

- Hover the cursor over the tab name to display the full name of the tab



Section 3: Inserting and Copying the Base Plate Joints (Steps 1-23 Only)

- Open the [Section3-Imperial.dwg](#) or [Section3-Metric.dwg](#) file
- Turn on [Connection vault](#)
- Invoke the [Base plate](#) Joint and select the column at [A1](#) grid intersection point
- [Base Plate](#) > [Base plate layout](#) tab:



Section 3: Inserting and Copying the Base Plate Joints

- Base Plate > Base plate dimensions tab:

Advance Steel Base plate [122]

Properties

Base Plate

Base plate ...

Base plate ...

Plate corners

Anchor and...

Washer plate

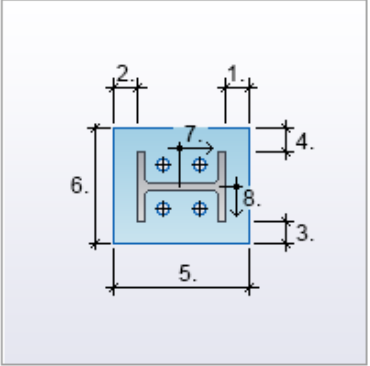
Anchors pa...

Stiffeners & Plat...

Holes

All projections equal ☒

1. Projection 1	6"
2. Projection 2	6"
3. Projection 3	6"
4. Projection 4	6"
5. Plate length	2' 2 11/16"
6. Plate width	2' 13/16"
7. Offset parallel web	0"
8. Offset parallel flange	0"



Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**

Advance Steel Base plate [135]

Properties

Base Plate

Base plate ...

Base plate ...

Plate corners

Anchor and...

Washer plate

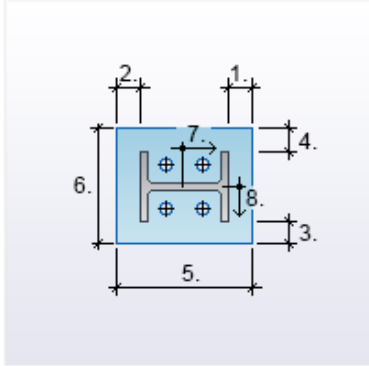
Anchors pa...

Stiffeners & Plat...

Holes

All projections equal ☒

1. Projection 1	150.00
2. Projection 2	150.00
3. Projection 3	150.00
4. Projection 4	150.00
5. Plate length	627.20
6. Plate width	611.00
7. Offset parallel web	0.00
8. Offset parallel flange	0.00



Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**

Section 3: Inserting and Copying the Base Plate Joints

- Base Plate > Anchor parallel web tab:

Advance Steel Base plate [122]

Properties

Base Plate

Base plate ...

Base plate ...

Plate corners

Anchor and...

Washer plate

Anchors pa...

Stiffeners & Plat...

Holes

1. Number 4

2. Intermediate distance 6"

3. Offset from center 0"

Remove center bolts ☒

Group 2 none

4. Number group 2 0

5. Distance 3"

6. Intermediate distance 3"

Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**

Advance Steel Base plate [135]

Properties

Base Plate

Base plate ...

Base plate ...

Plate corners

Anchor and...

Washer plate

Anchors pa...

Stiffeners & Plat...

Holes

1. Number 4

2. Intermediate distance 150.00

3. Offset from centre 0.00

Remove center bolts ☒

Group 2 none

4. Number group 2 0

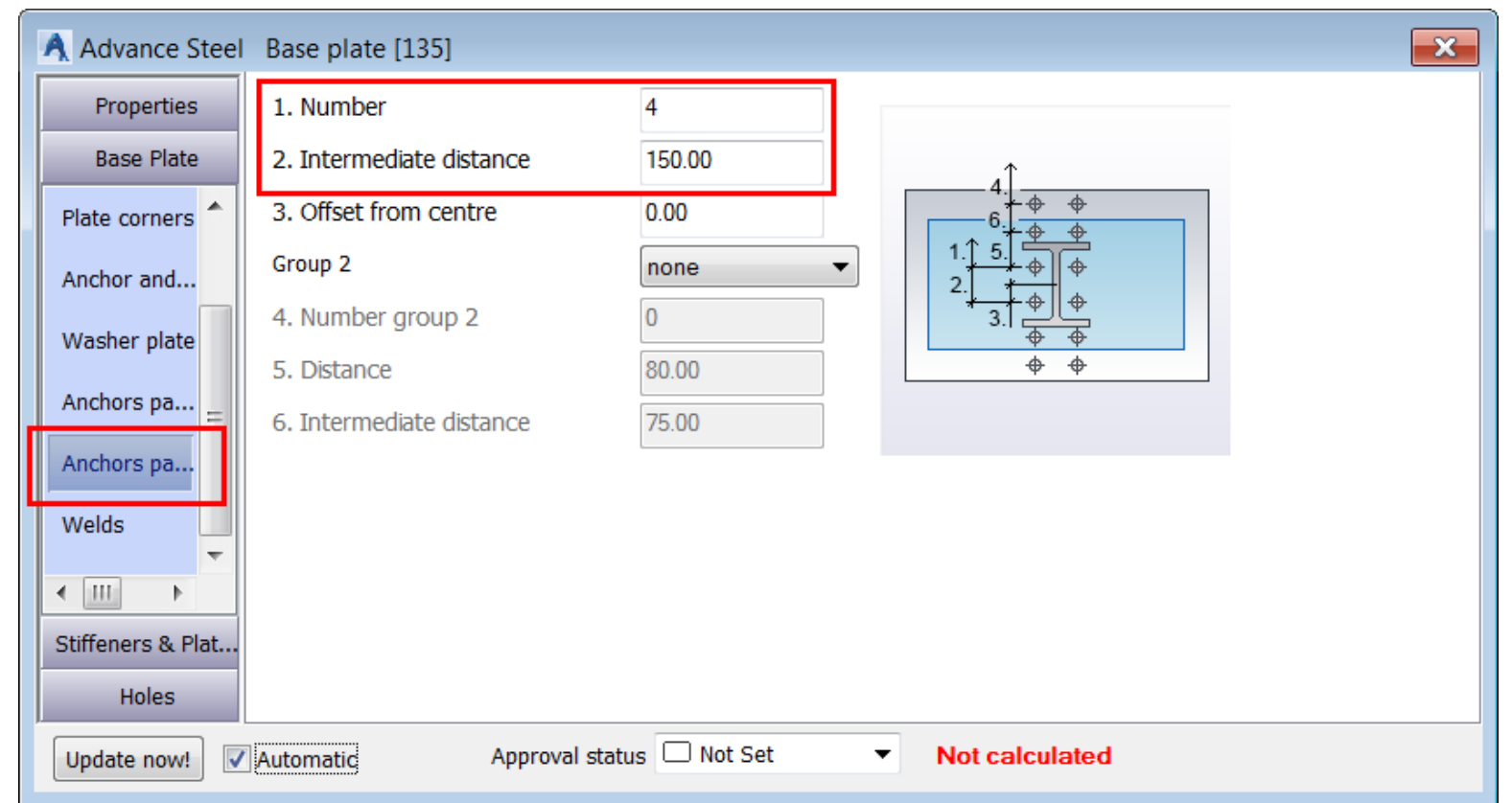
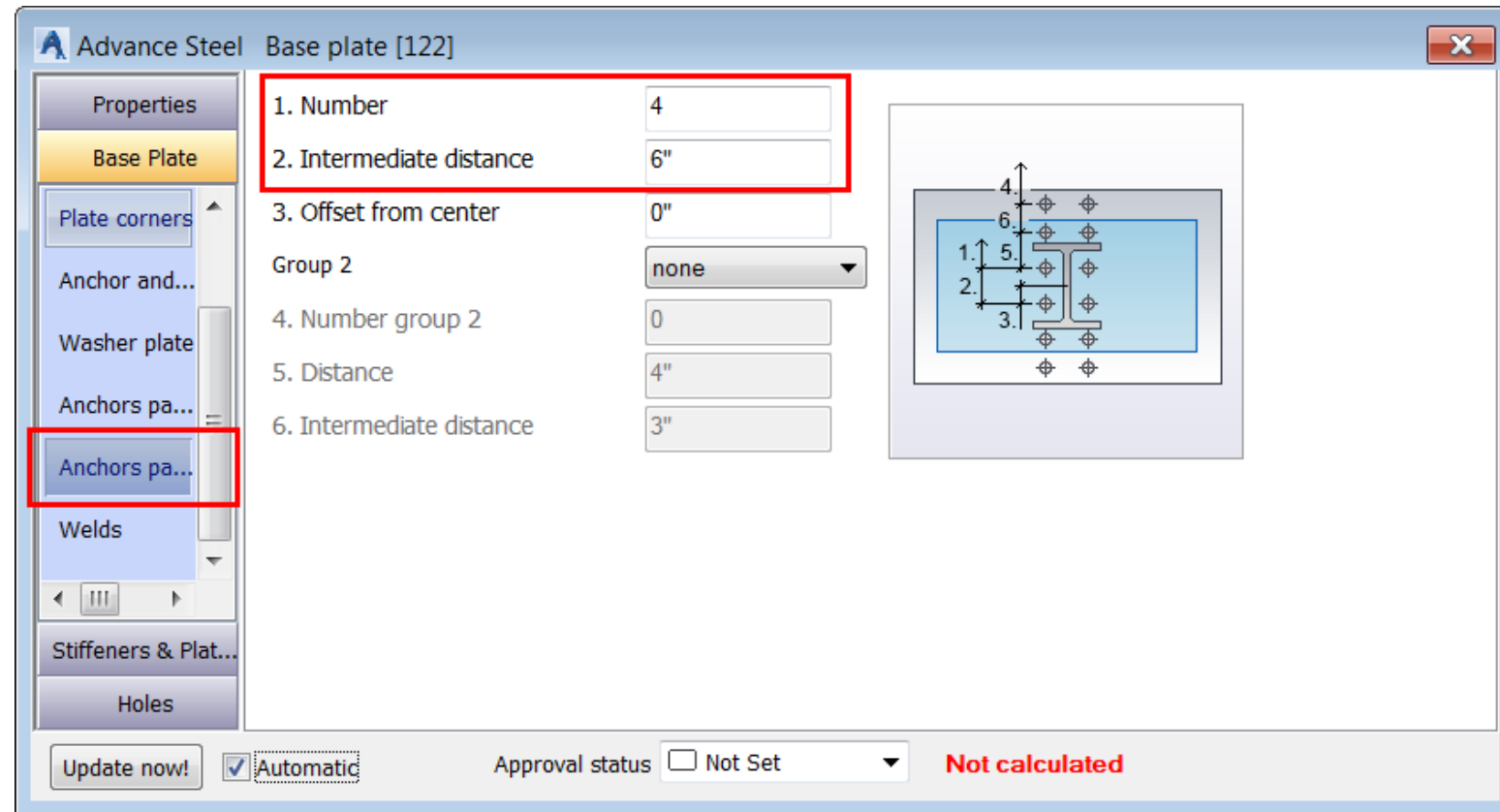
5. Distance 75.00

6. Intermediate distance 75.00

Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**

Section 3: Inserting and Copying the Base Plate Joints

- Base Plate > Anchor parallel flange tab:



Section 3: Inserting and Copying the Base Plate Joints

- Stiffeners & Plates > Web stiffener tab:

Advance Steel Base plate [122]

Properties

Base Plate

Stiffeners & Plates

Leveling plates

Shim Plates

Shear anchor

Shear anchor...

Web stiffener

Flange stiff...

Holes

Create stiffener both sides

Location per side at web

1. Stiffener thickness 1"

2. Stiffener width 6"

3. Stiffener height 1' 4"

Corner finish inside straight

4. Size inside 3/4"

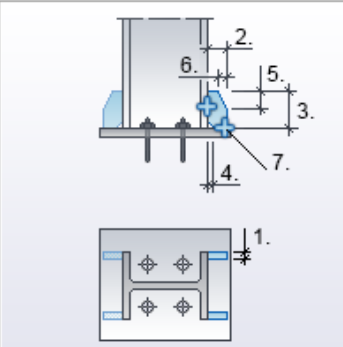
5. Outside chamfer height 10"

6. Outside chamfer width 4"

Outside vertical ☐

7. Weld thickness 1/4" Double fillet weld

Update now! ☒ Automatic Approval status ☐ Not Set Not calculated



Advance Steel Base plate [135]

Properties

Base Plate

Stiffeners & Plates

Leveling plates

Shim plates

Shear anchor

Shear anchor...

Web stiffener

Flange stiff...

Holes

Create stiffener both sides

Location per side at web

1. Stiffener thickness 25.00

2. Stiffener width 150.00

3. Stiffener height 400.00

Corner finish inside straight

4. Size inside 20.00

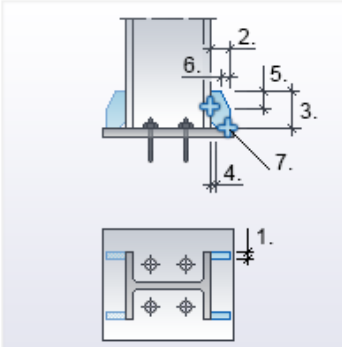
5. Outside chamfer height 250.00

6. Outside chamfer width 100.00

Outside vertical ☐

7. Weld thickness 6.00 Double fillet weld

Update now! ☒ Automatic Approval status ☐ Not Set Not calculated



Section 3: Inserting and Copying the Base Plate Joints

- Stiffeners & Plates > Middle stiffener tab:

Advance Steel Base plate [122]

Properties

Base Plate

Stiffeners & Plat...

Shear anch...

Web stiffener

Flange stiff...

Outside stif...

Stiffener w...

Middle stiff...

Holes

Create stiffener both sides

Quantity/Distance 1 3 15/16"

1. Stiffener thickness 1"

2. Stiffener width 8"

3. Stiffener height 1' 4"

Corner finish inside straight

4. Size inside 13/16"

5. Outside chamfer height 10"

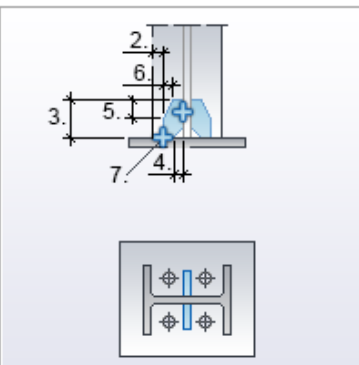
6. Outside chamfer width 5"

Outside vertical ☐

7. Weld thickness 3/16" Double fillet weld

8. Stiffener offset 0"

Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**



Advance Steel Base plate [135]

Properties

Base Plate

Stiffeners & Plat...

Shear anch...

Web stiffener

Flange stiff...

Outside stif...

Stiffener w...

Middle stiff...

Holes

Create stiffener both sides

Quantity/Distance 1 100.00

1. Stiffener thickness 25.00

2. Stiffener width 200.00

3. Stiffener height 400.00

Corner finish inside straight

4. Size inside 20.00

5. Outside chamfer height 250.00

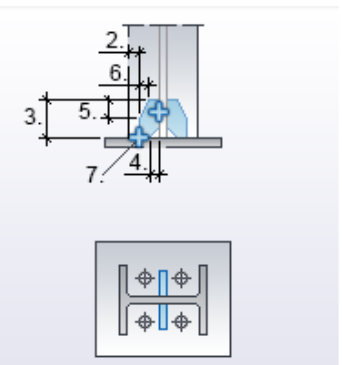
6. Outside chamfer width 125.00

Outside vertical ☐

7. Weld thickness 4.00 Double fillet weld

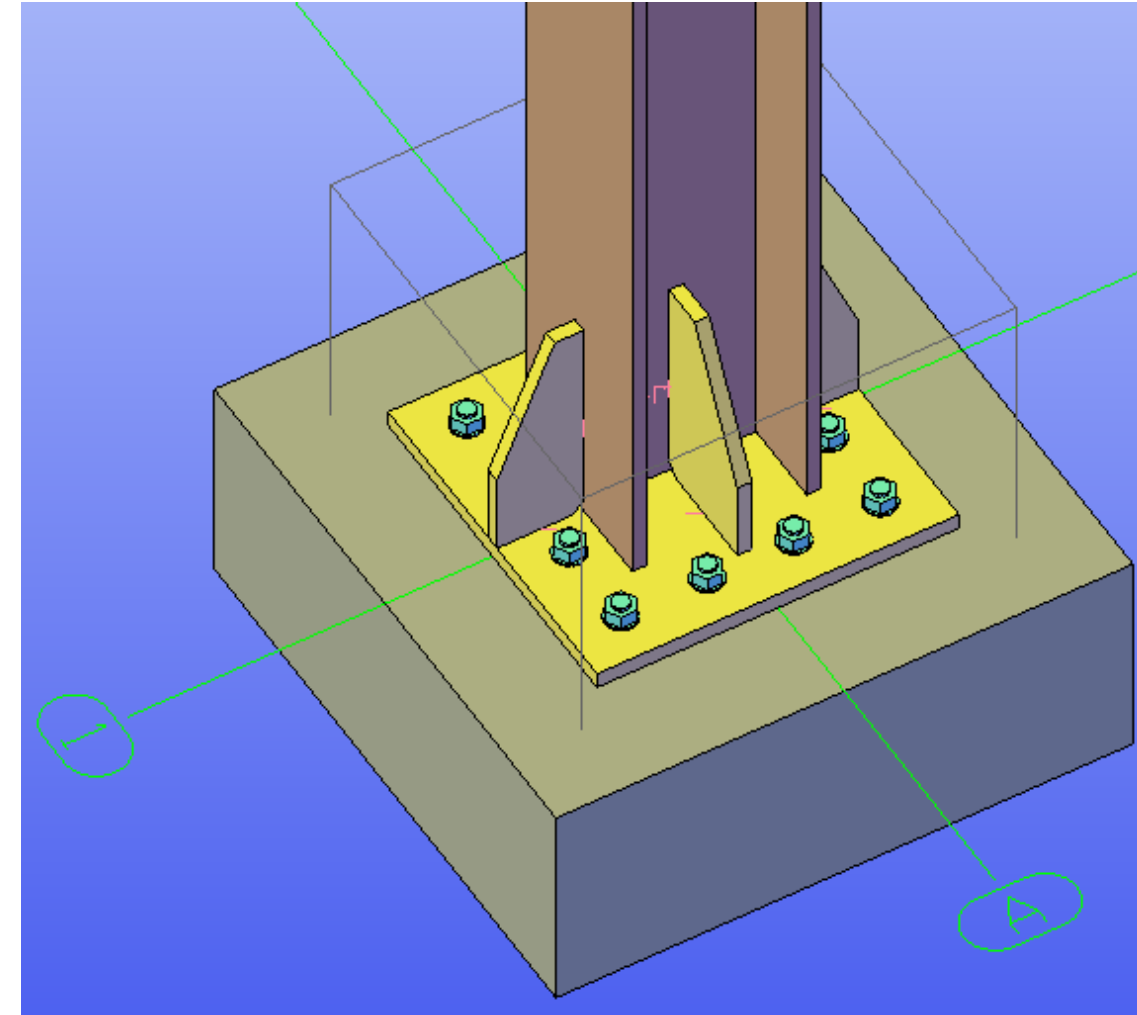
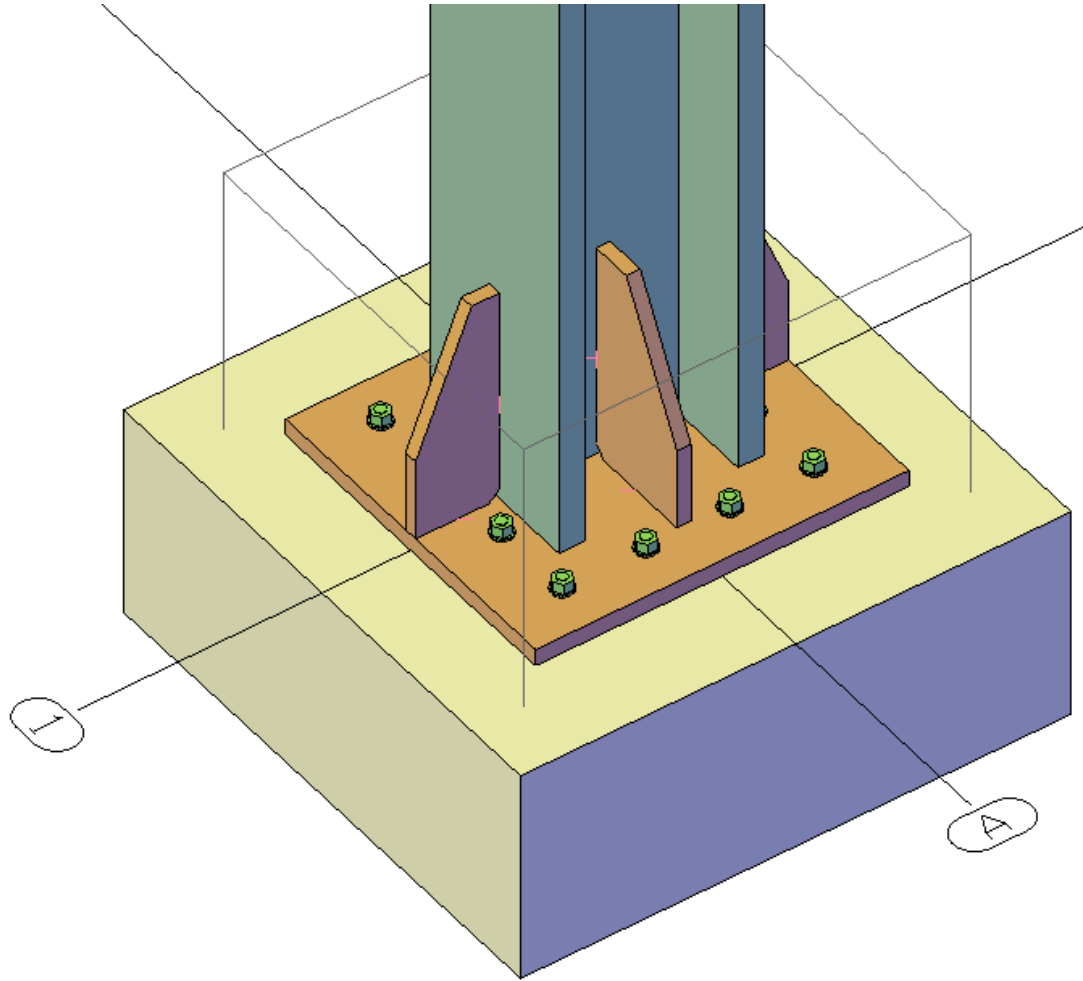
8. Stiffener offset 0.00

Update now! ☒ Automatic Approval status ☐ Not Set **Not calculated**



Section 3: Inserting and Copying the Base Plate Joints

- Close the dialog box.



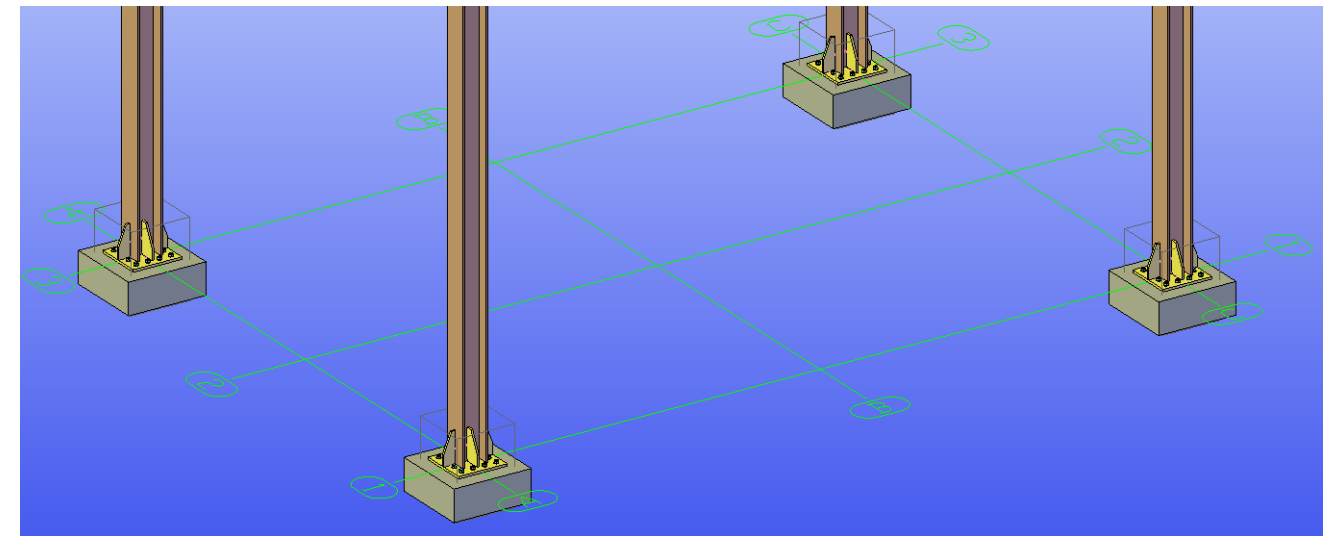
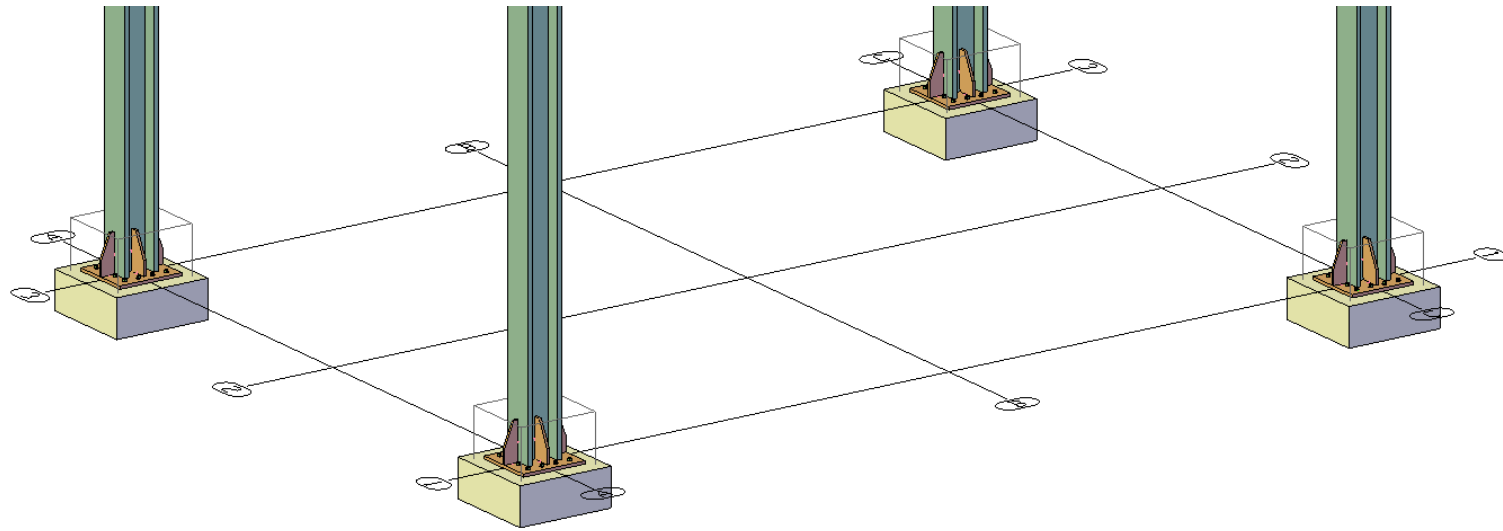
Section 3: Inserting and Copying the Base Plate Joints

- From the [Advance Steel Palette > Tools](#) tab, invoke the [Create by template, multiple](#) tool.



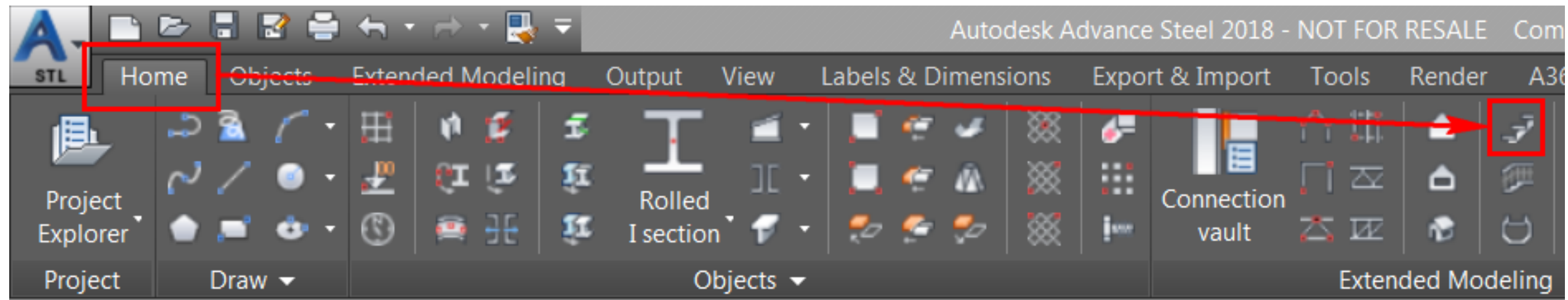
Section 3: Inserting and Copying the Base Plate Joints *(Remaining Steps)*

- Copy the joint to the remaining columns.



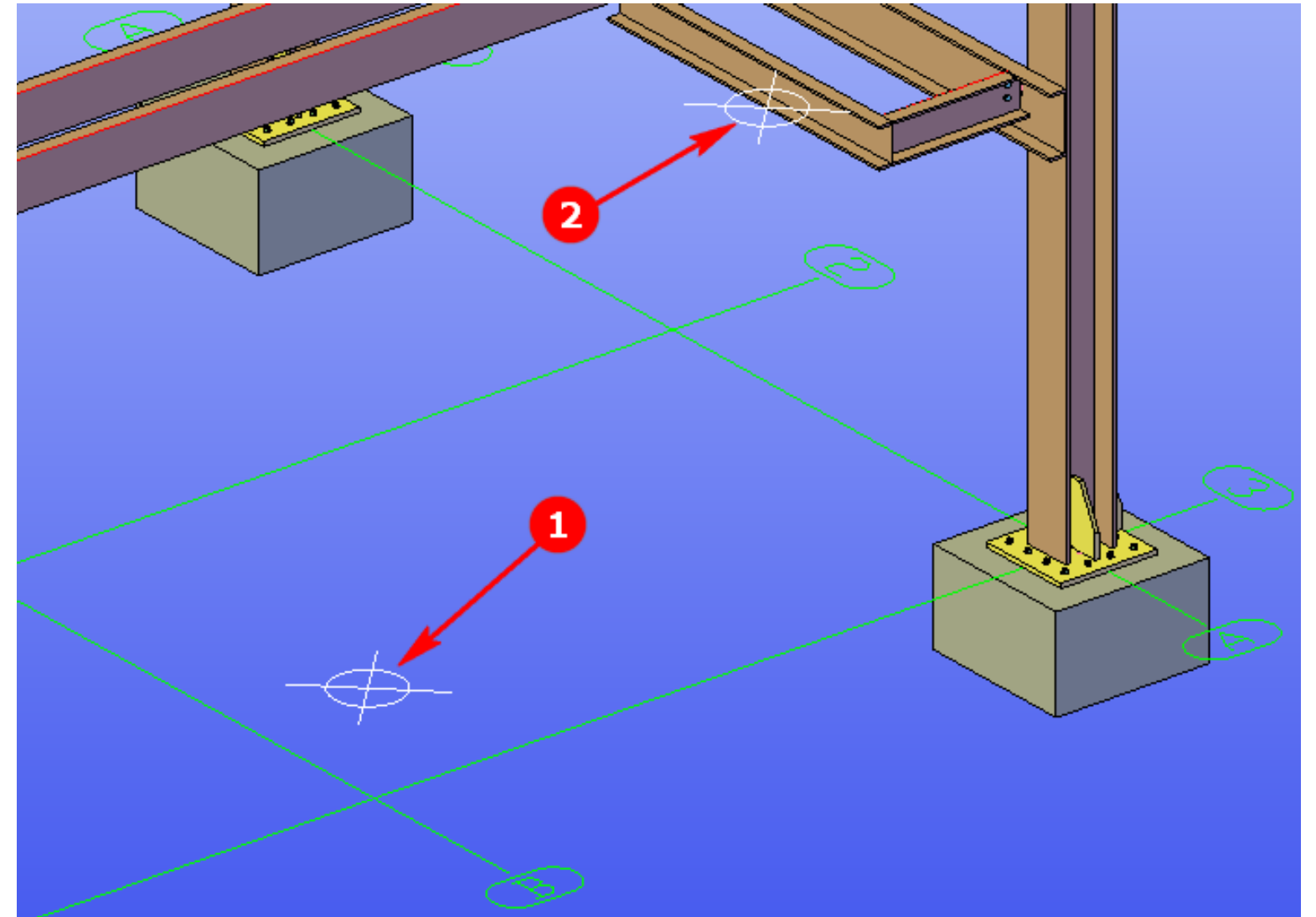
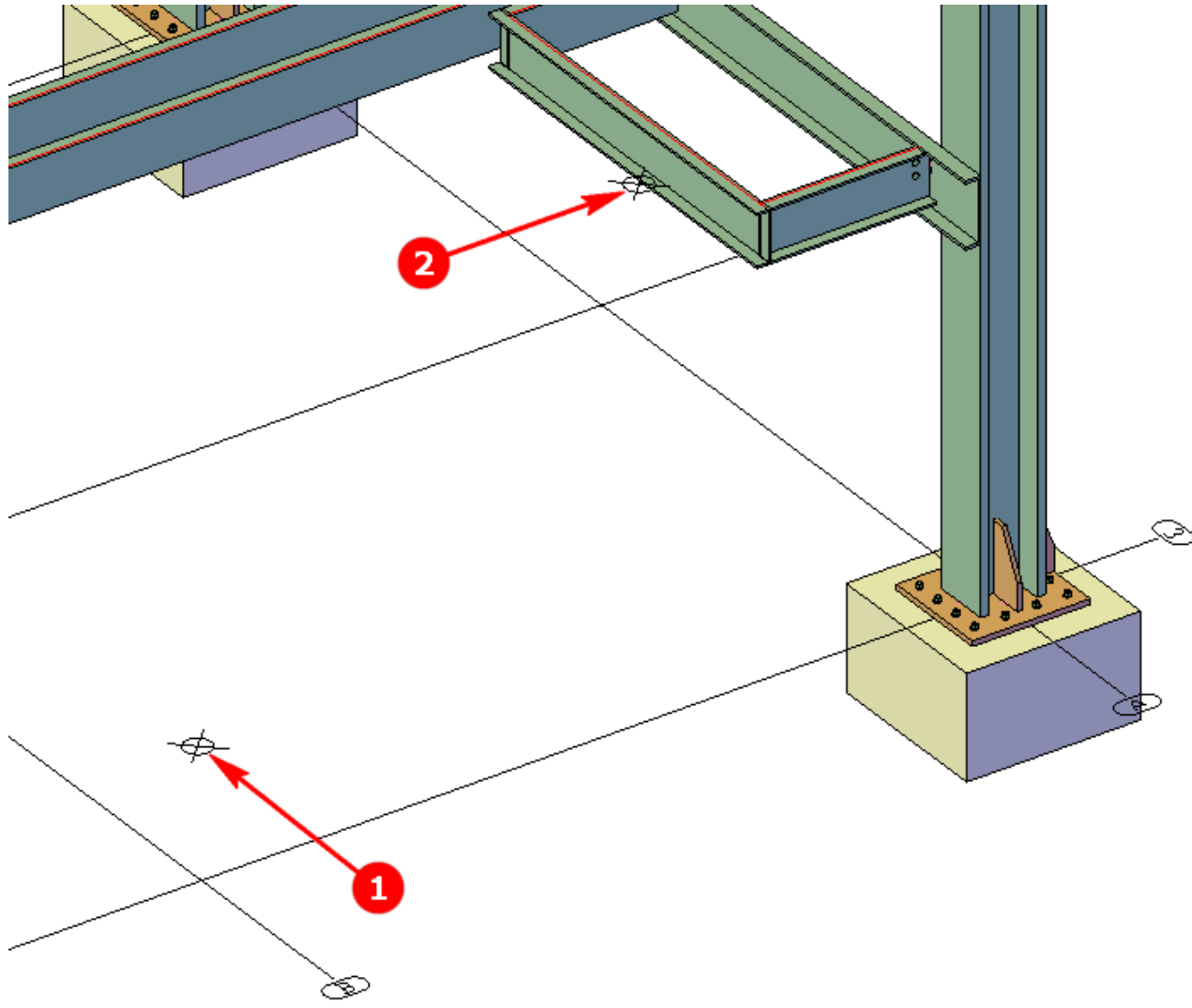
Section 4: Inserting Stairs (*Do with me*)

- Open the Section4-Imperial.dwg or Section4-Metric.dwg file
- Invoke the Straight stairs tool



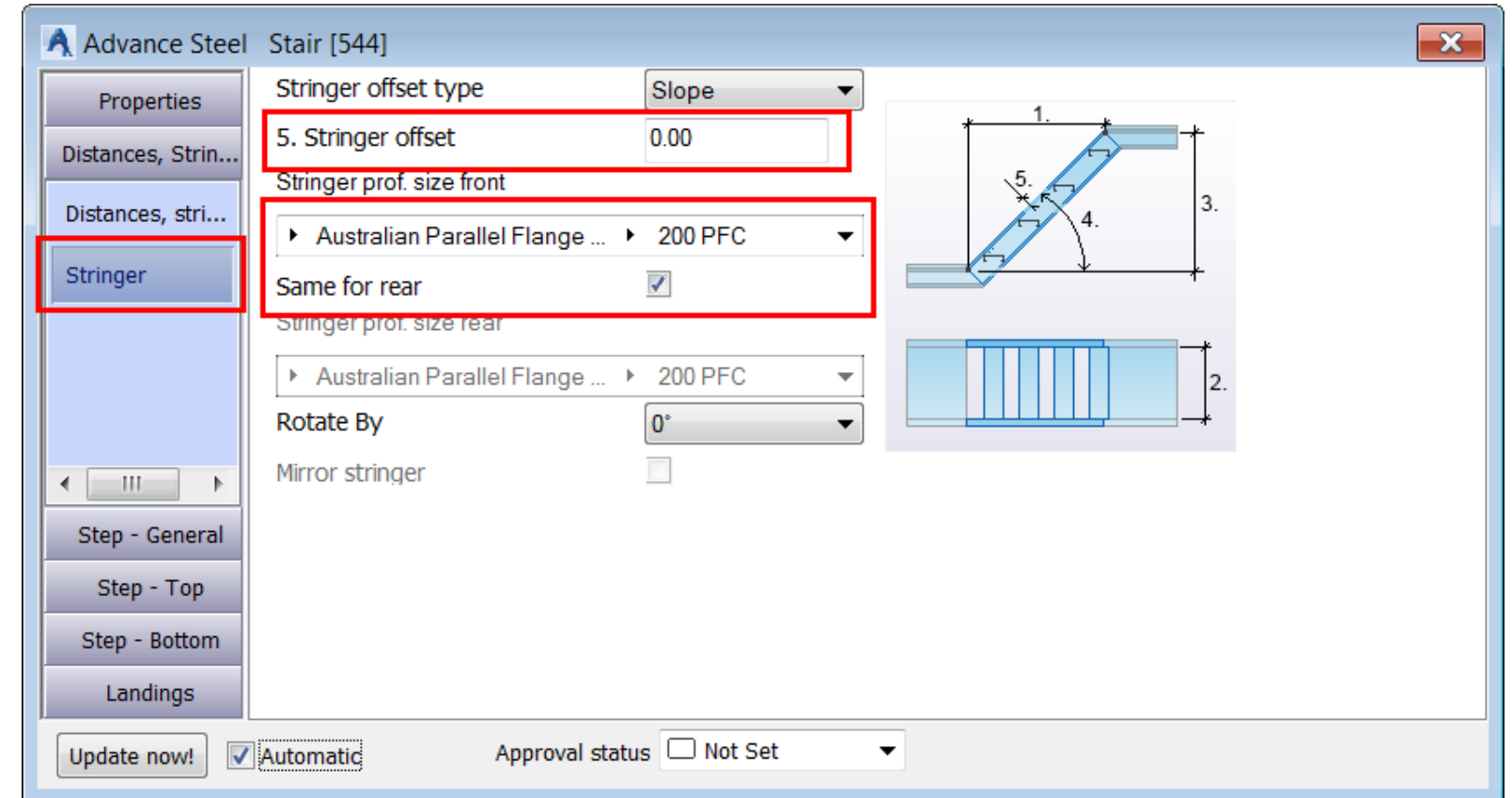
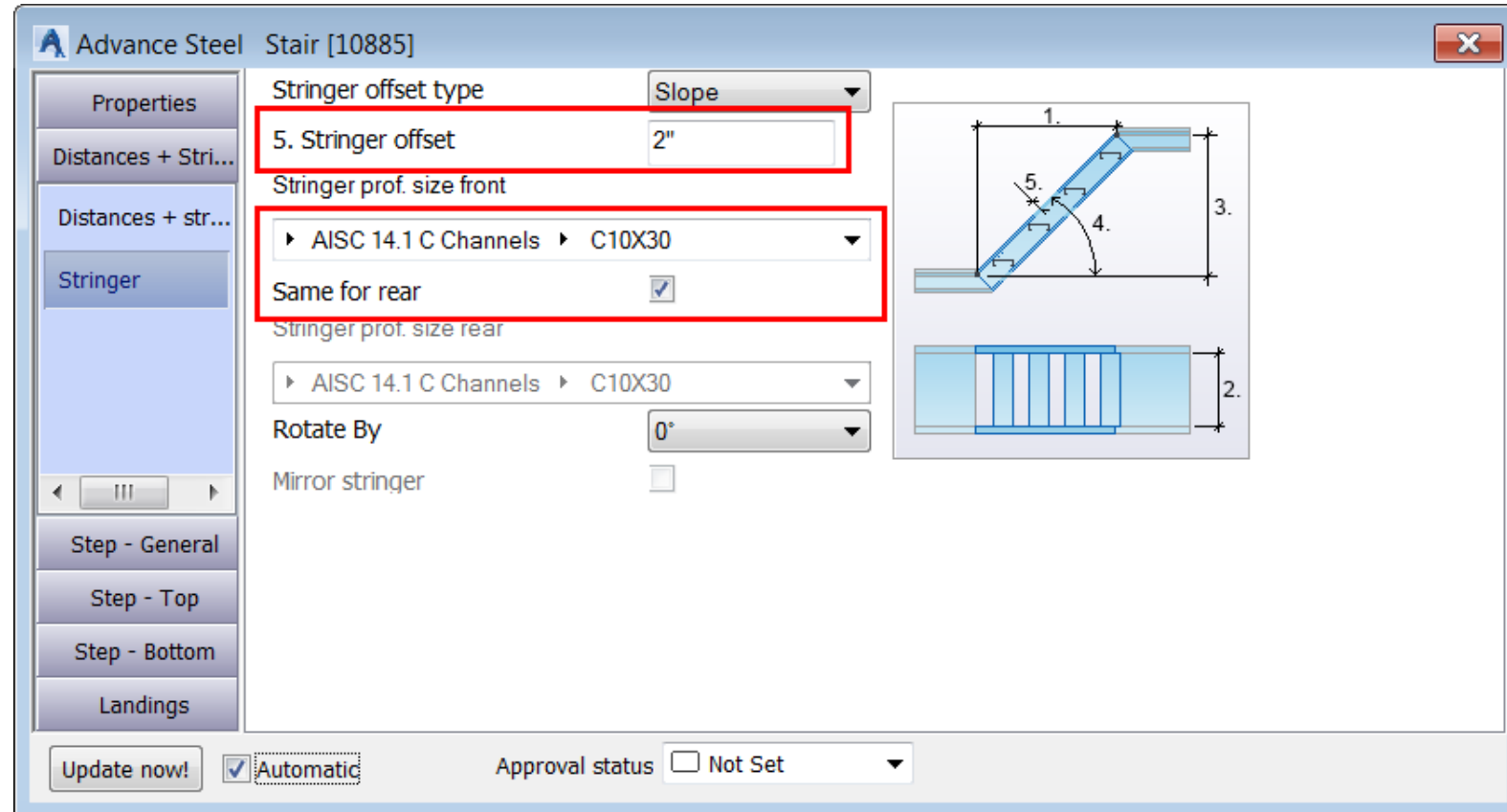
Section 4: Inserting Stairs (*Do with me*)

- Press ENTER and click the following two points.
- Press ENTER again.



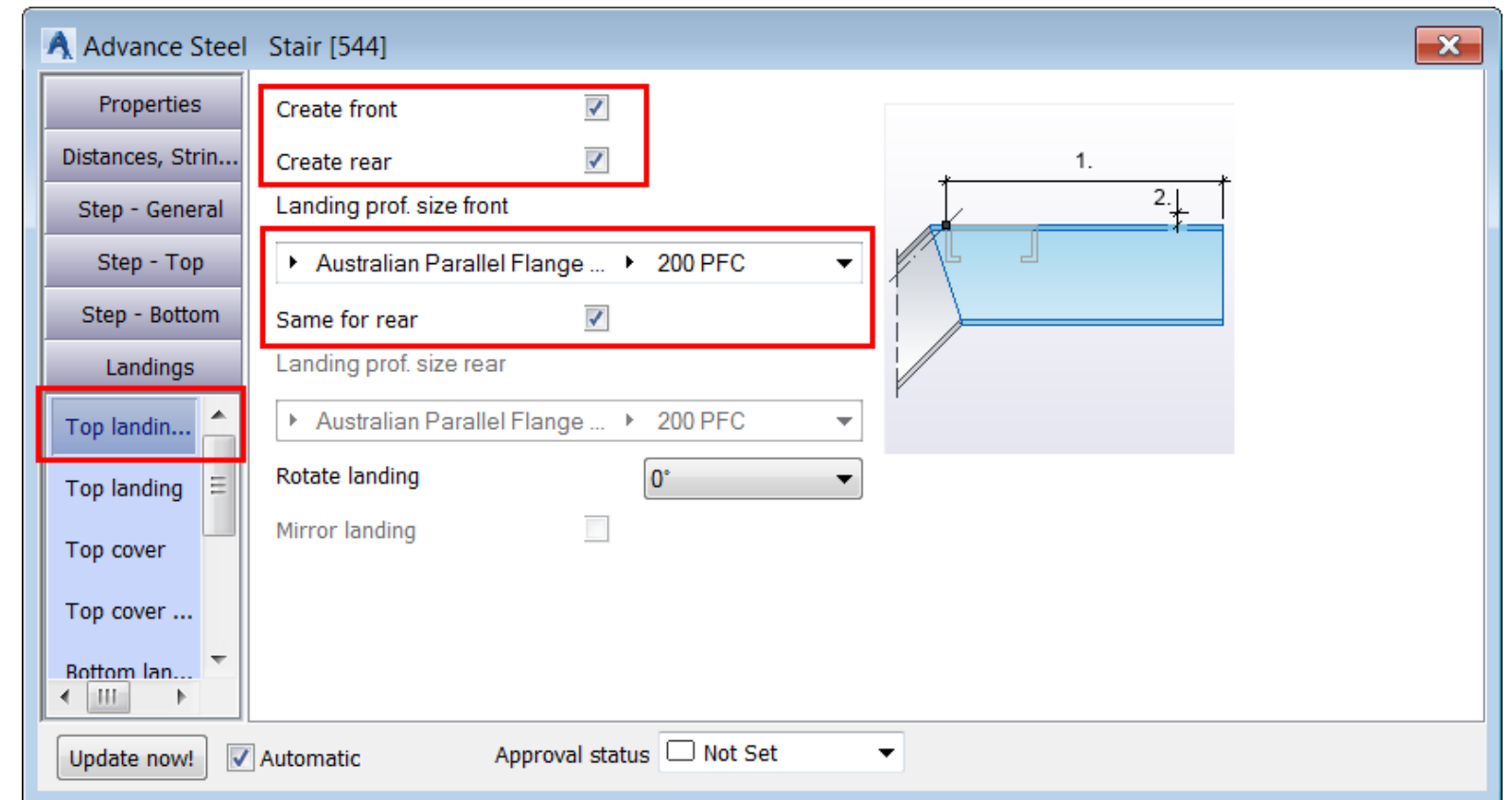
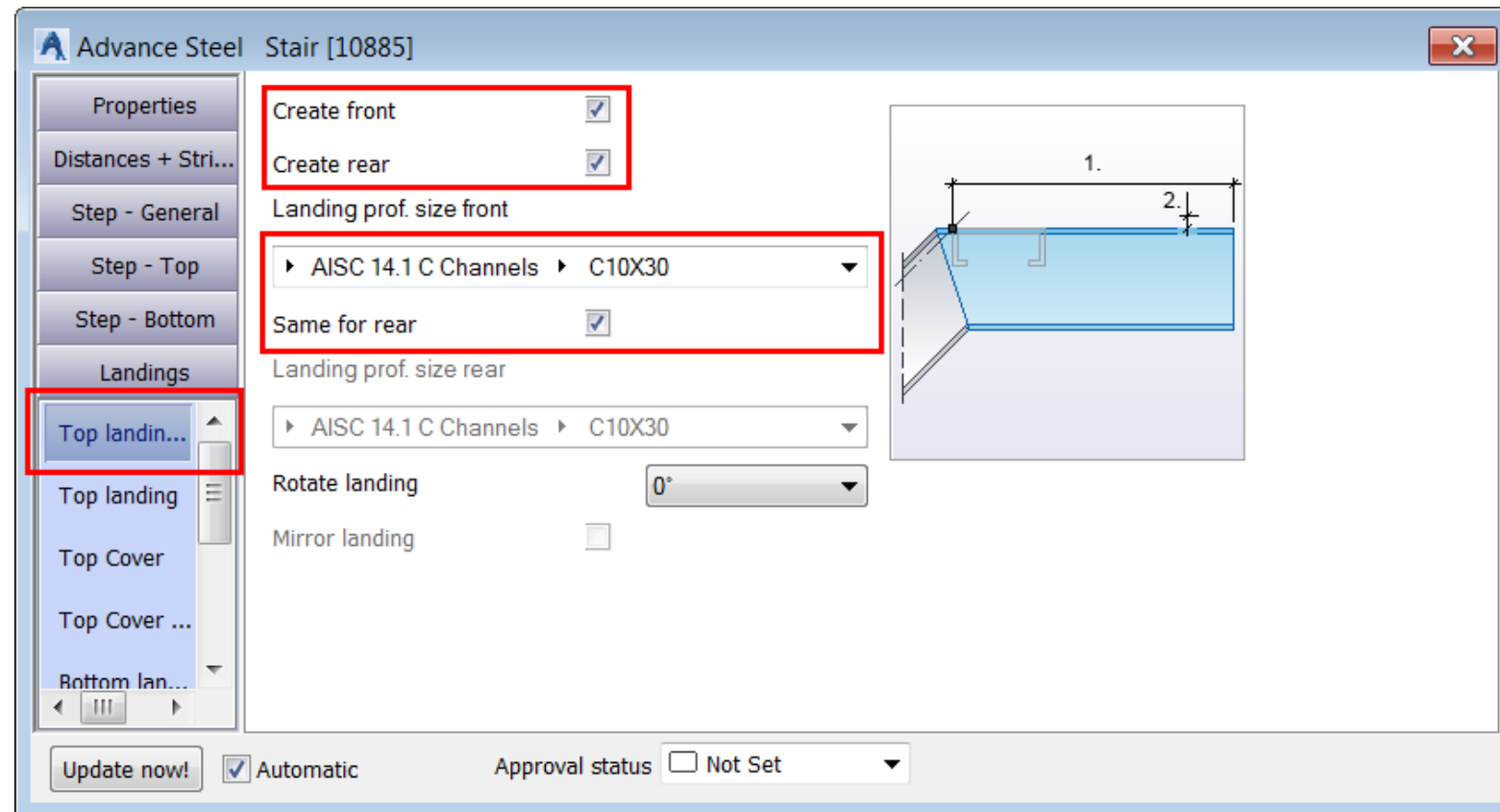
Section 4: Inserting Stairs (*Step 8 Onwards*)

- Distances + Stringer > Stringer tab:



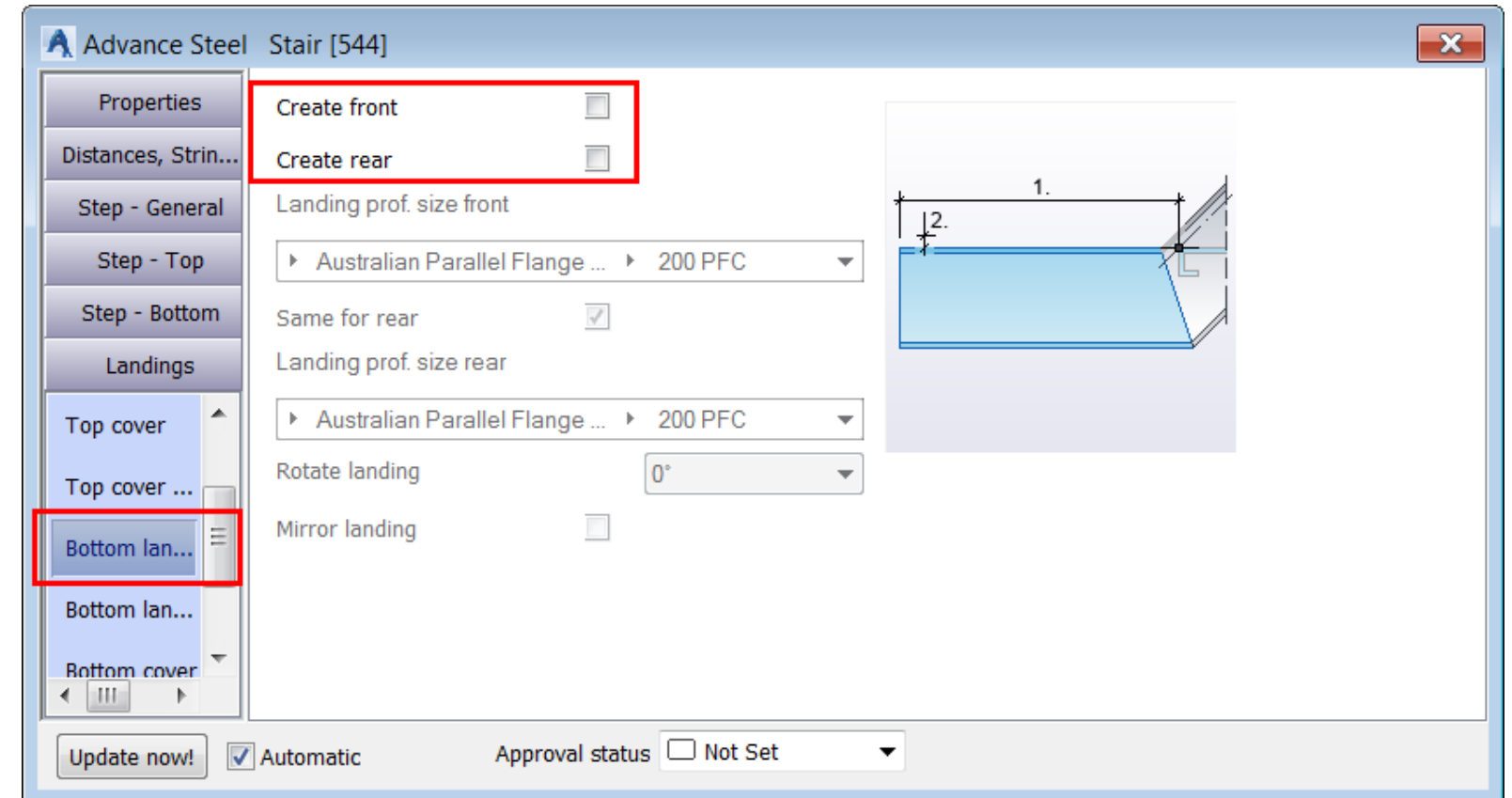
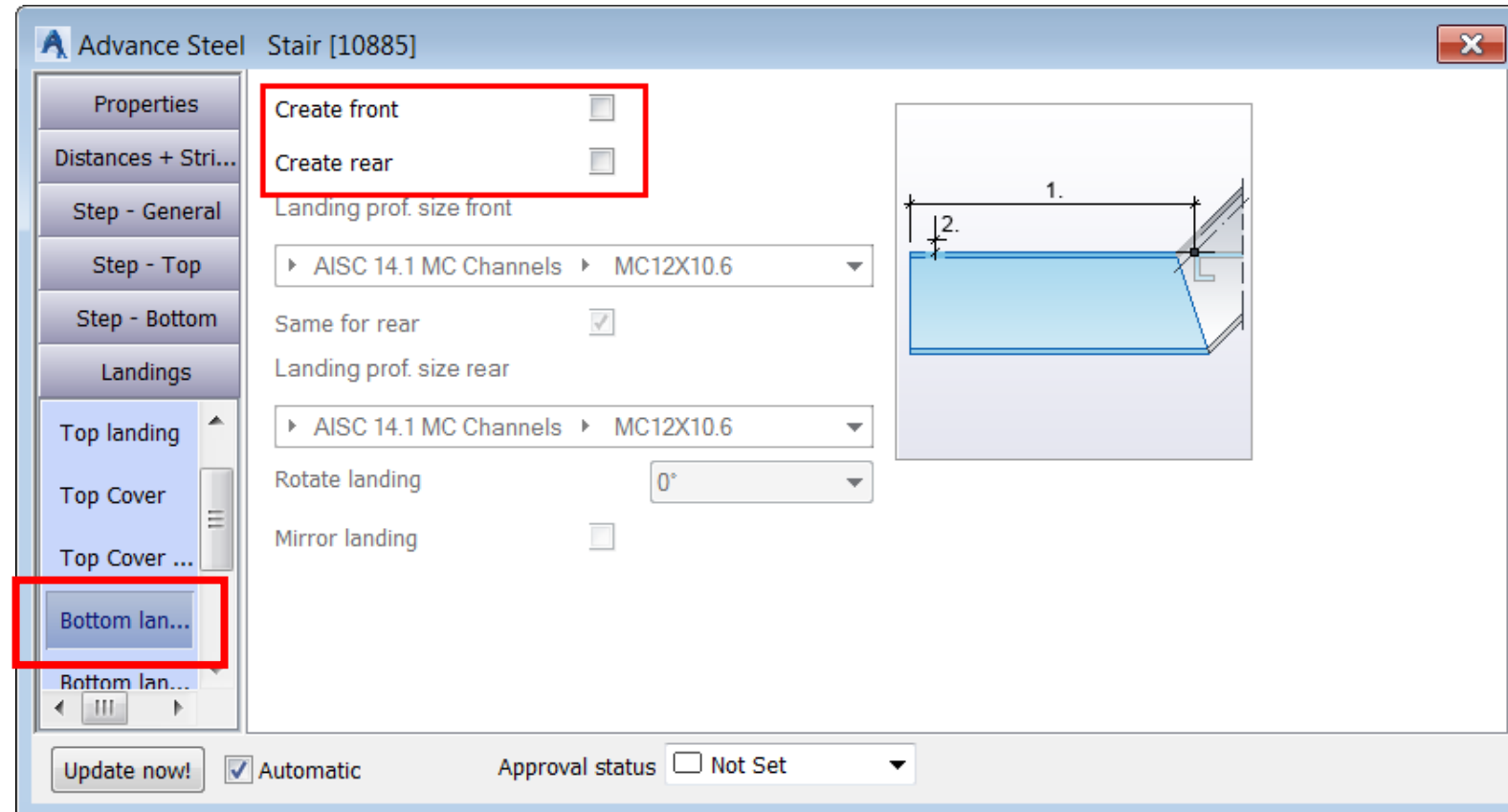
Section 4: Inserting Stairs

- Landings > Top landing prof. tab:



Section 4: Inserting Stairs

- Landings > Bottom landing prof. tab:



Section 4: Inserting Stairs

- Step - General > Tread type tab:

Advance Steel Stair [10885]

Properties

Distances + Stri...

Step - General

Step size

Tread type

Tread dimensi...

Tread dimensi...

Step - Top

Step - Bottom

Landings

Tread type: Type 1

Tread size: Lichtgitter SP-ste

Connection tread to stringer: welded-bolted

Offset by stair width: 0"

Weld thickness: 3/16"

Bolt diameter: 1/2 inch

Bolt type: A325

Bolt grade: 10.9

Bolt assembly: NaW

Bolts/welds location: site/shop

Save Save As ... Rename

Update now! ☒ Automatic Approval status ☐ Not Set

Fourth option from the list

Advance Steel Stair [544]

Properties

Distances, Strin...

Step - General

Tread size

Tread type

Tread dimensi...

Tread dimensi...

Step - Top

Step - Bottom

Landings

Tread type: Type 1

Tread size: 240-330-34/38-3

Connection tread - stringer: Welded-bolted

Offset by stair width: 0.00

Weld thickness: 6.00

Bolt diameter: 12.00 mm

Bolt type: AS 1252

Bolt grade: 8.8

Bolt assembly: NaW

Bolt/weld location: Site/shop

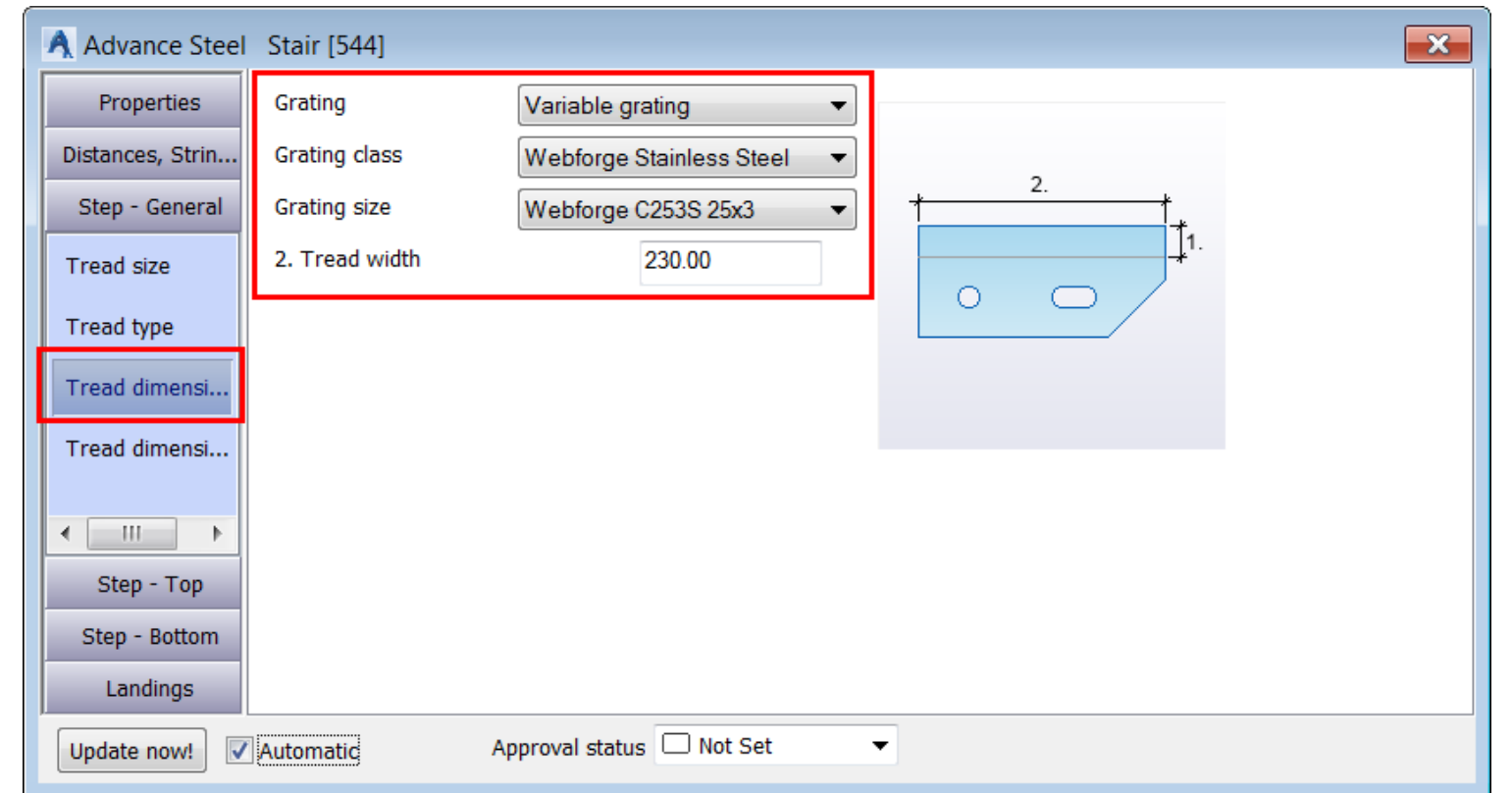
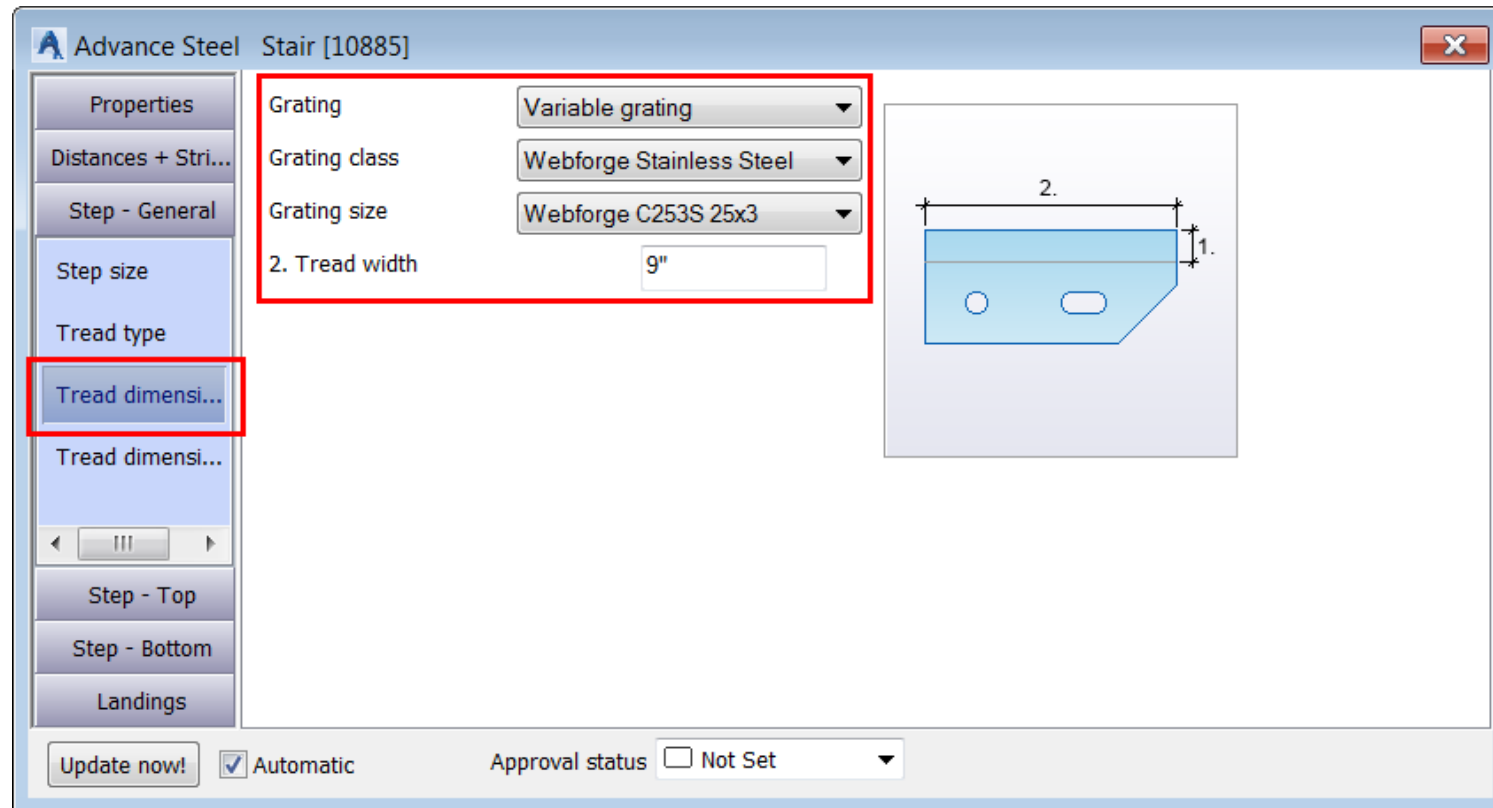
Save Save As ... Rename

Update now! ☒ Automatic Approval status ☐ Not Set

Select fourth option from the list

Section 4: Inserting Stairs

- Step - General > Tread dimensions 1 tab:



Section 4: Inserting Stairs

- Step - General > Tread dimensions 2 tab:

Advance Steel Stair [10885]

Properties

Distances + Stri...

Step - General

Step size

Tread type

Tread dimensi...

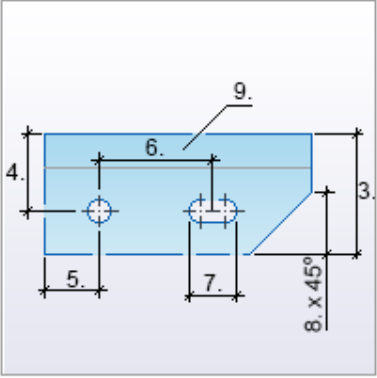
Tread dimensi...

Step - Top

Step - Bottom

Landings

3. Side height	3 1/4"
4. Top distance	2 3/16"
5. Side distance	1 1/2"
6. Bolts groups distance	5"
7. Slot length	1 5/16"
8. Corner finish	1 3/16"
9. Side thickness	1/8"



Update now! ☒ Automatic Approval status ☐ Not Set

Advance Steel Stair [544]

Properties

Distances, Strin...

Step - General

Tread size

Tread type

Tread dimensi...

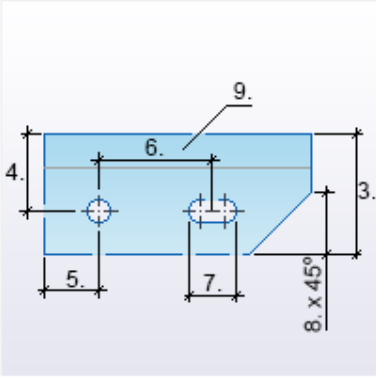
Tread dimensi...

Step - Top

Step - Bottom

Landings

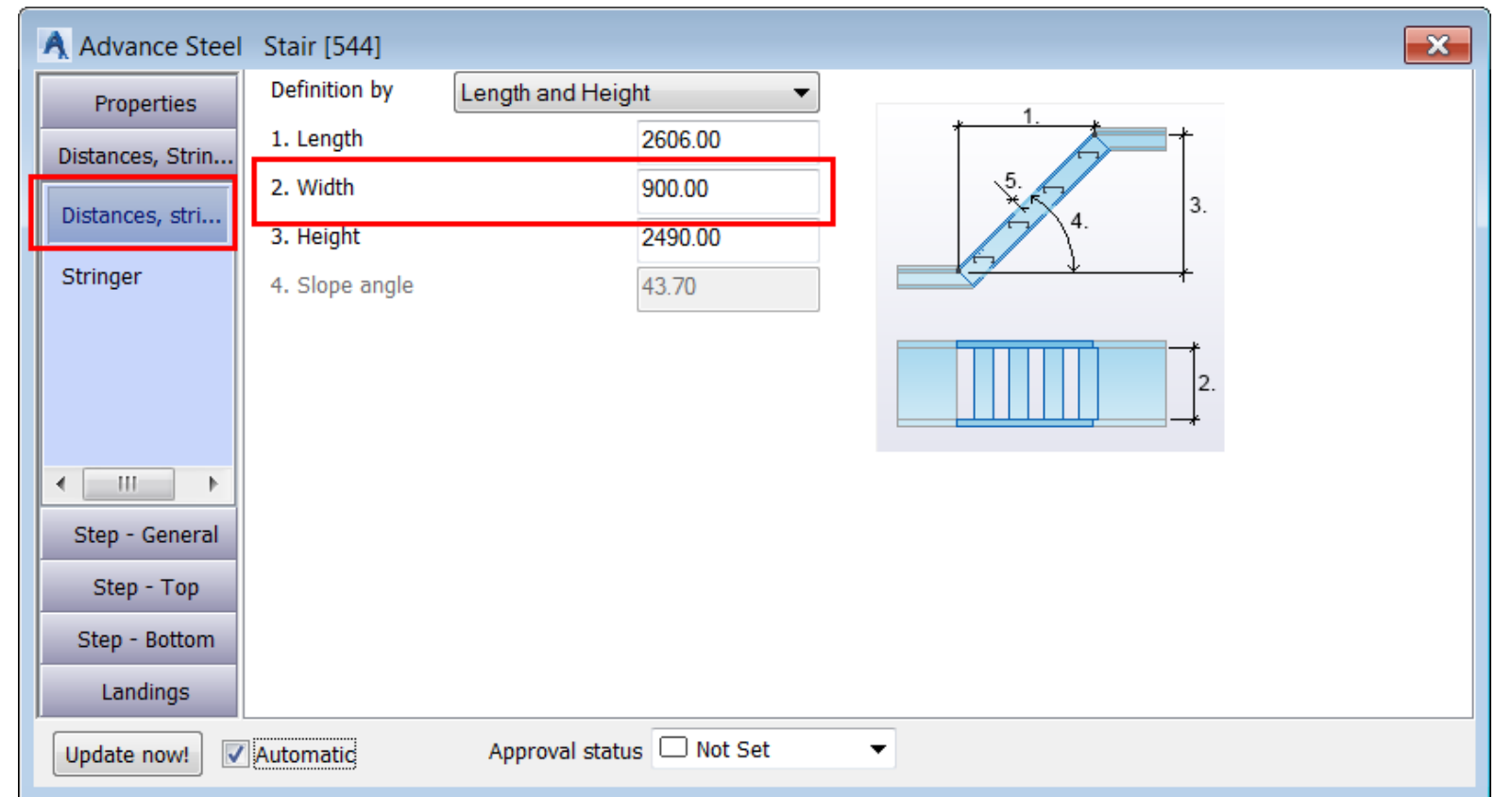
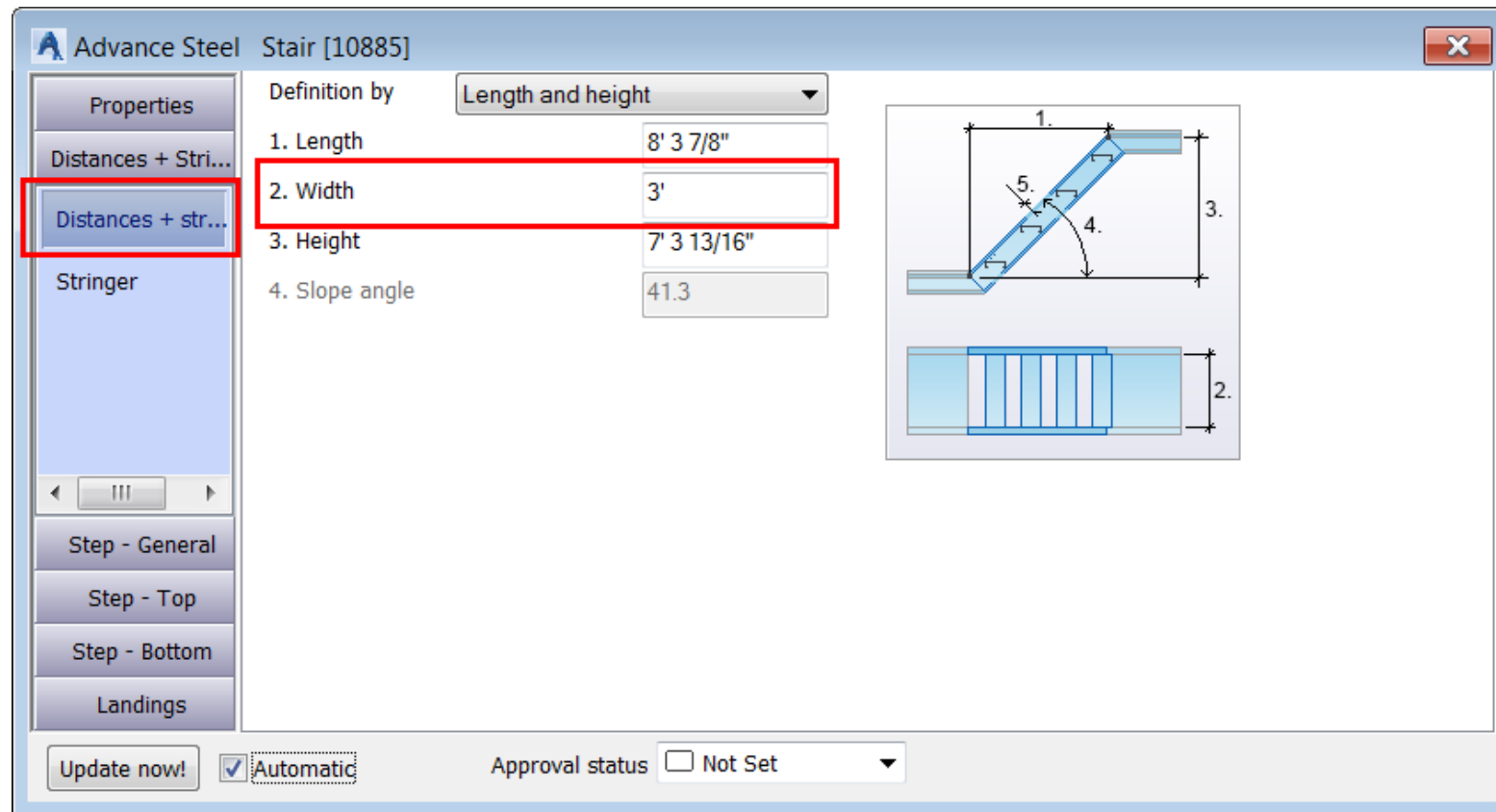
3. Side height	75.00
4. Top distance	55.00
5. Side distance	35.00
6. Bolt group distance	125.00
7. Slot length	33.00
8. Corner finish	30.00
9. Side thickness	3.00



Update now! ☒ Automatic Approval status ☐ Not Set

Section 4: Inserting Stairs

- Distances + Stringer > Distances + stringer tab:



Section 4: Inserting Stairs

- Landings > Top landing tab:

Advance Steel Stair [10885]

Properties

Distances + Stri...

Step - General

Step - Top

Step - Bottom

Landings

Top landin...

Top landing

Top Cover

Top Cover ...

Bottom lan...

Distance from nosing point ☒

1. Landing length (front) 1'

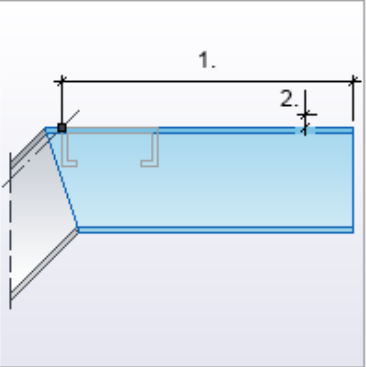
1. Landing length (rear) 1'

Weld thickness 3/16"

Create last tread ☐

2. Landing offset 0"

Update now! ☒ Automatic Approval status ☐ Not Set



Advance Steel Stair [544]

Properties

Distances, Strin...

Step - General

Step - Top

Step - Bottom

Landings

Top landin...

Top landing

Top cover

Top cover ...

Bottom lan...

Distance from nosing point ☒

1. Landing length (front) 310.00

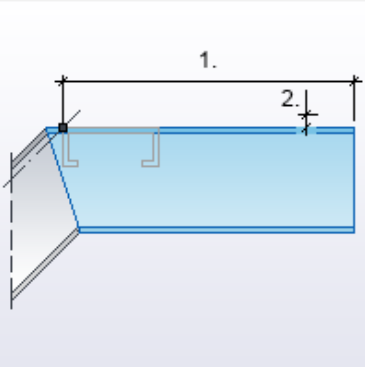
1. Landing length (rear) 310.00

Weld thickness 6.00

Create last tread ☐

2. Landing offset 0.00

Update now! ☒ Automatic Approval status ☐ Not Set



Section 4: Inserting Stairs

- Landings > Top Cover tab:

Advance Steel Stair [10885]

Properties

Distances + Strin...

Step - General

Step - Top

Step - Bottom

Landings

Top landin...

Top landing

Top Cover

Top Cover ...

Bottom lan...

Cover made from: Grate

1. Cover thickness: 3/8"

Grating class: Webforge Stainless Steel

Grating size: Webforge C253S 25x3

Name of Grate: TopCover

Cover on top of stringer: ☐

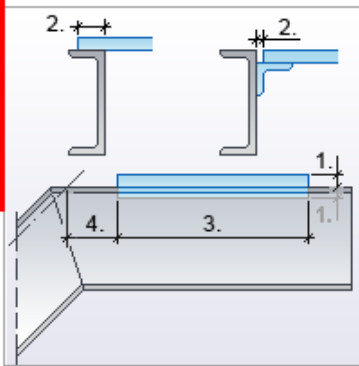
2. Offset from stringer: 1/4"

3. Cover length: 1'

4. Offset from axis end: 0"

Stay on top of landing: ☐

Update now! ☒ Automatic Approval status: ☐ Not Set



Advance Steel Stair [544]

Properties

Distances, Strin...

Step - General

Step - Top

Step - Bottom

Landings

Top landin...

Top landing

Top cover

Top cover ...

Bottom lan...

Cover made from: Grate

1. Cover thickness: 10.00

Grating class: Webforge Stainless Steel

Grating size: Webforge C253S 25x3

Name of grate: GRATING

Cover on top of stringer: ☐

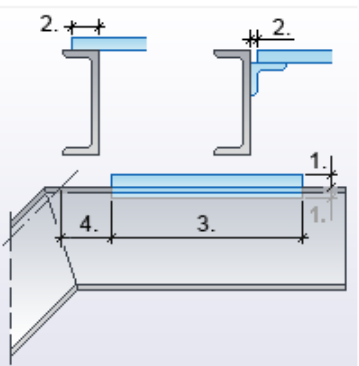
2. Offset from stringer: 5.00

3. Cover length: 310.00

4. Offset from axis end: 0.00

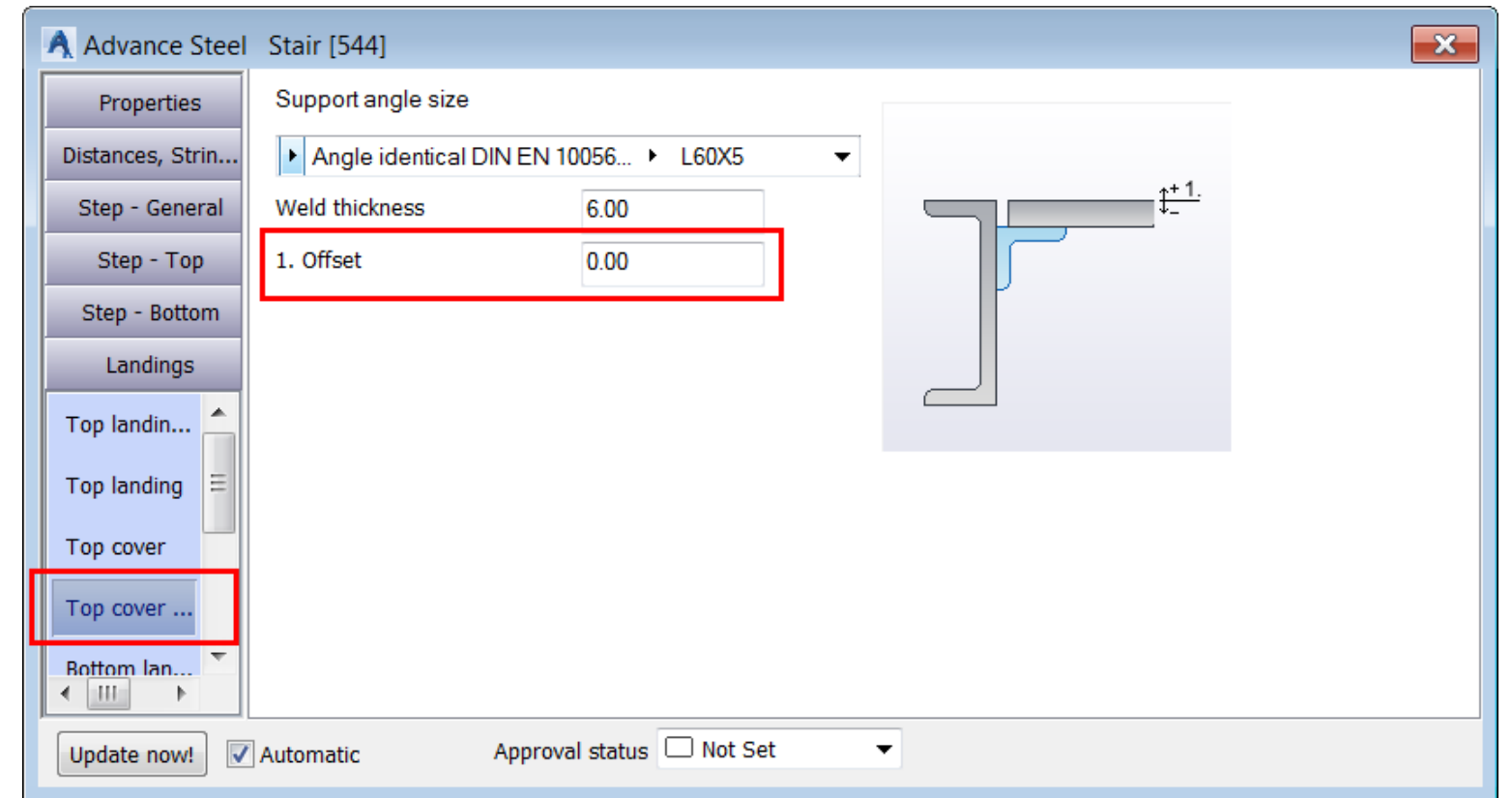
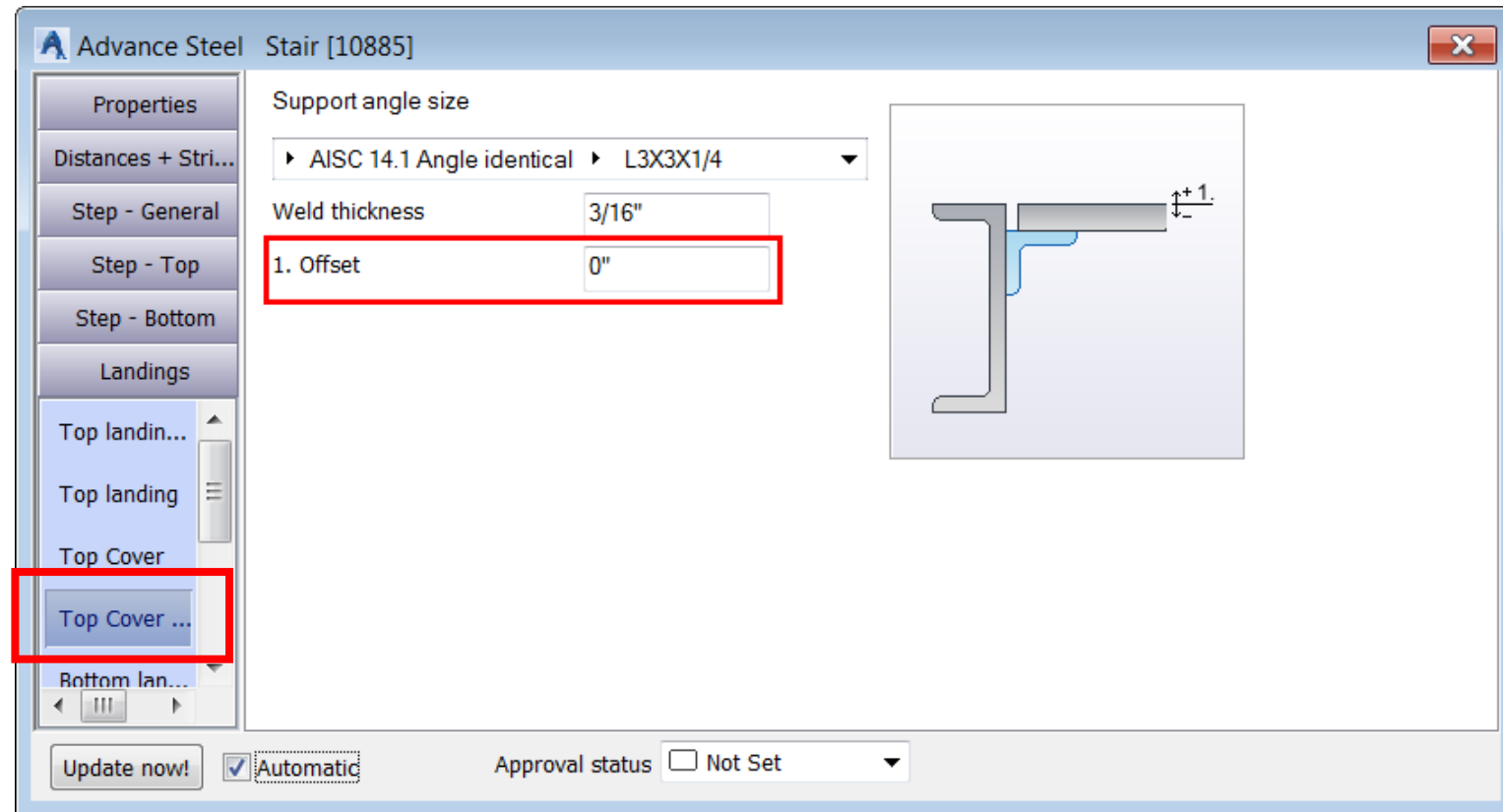
Stay on top of landing: ☐

Update now! ☒ Automatic Approval status: ☐ Not Set



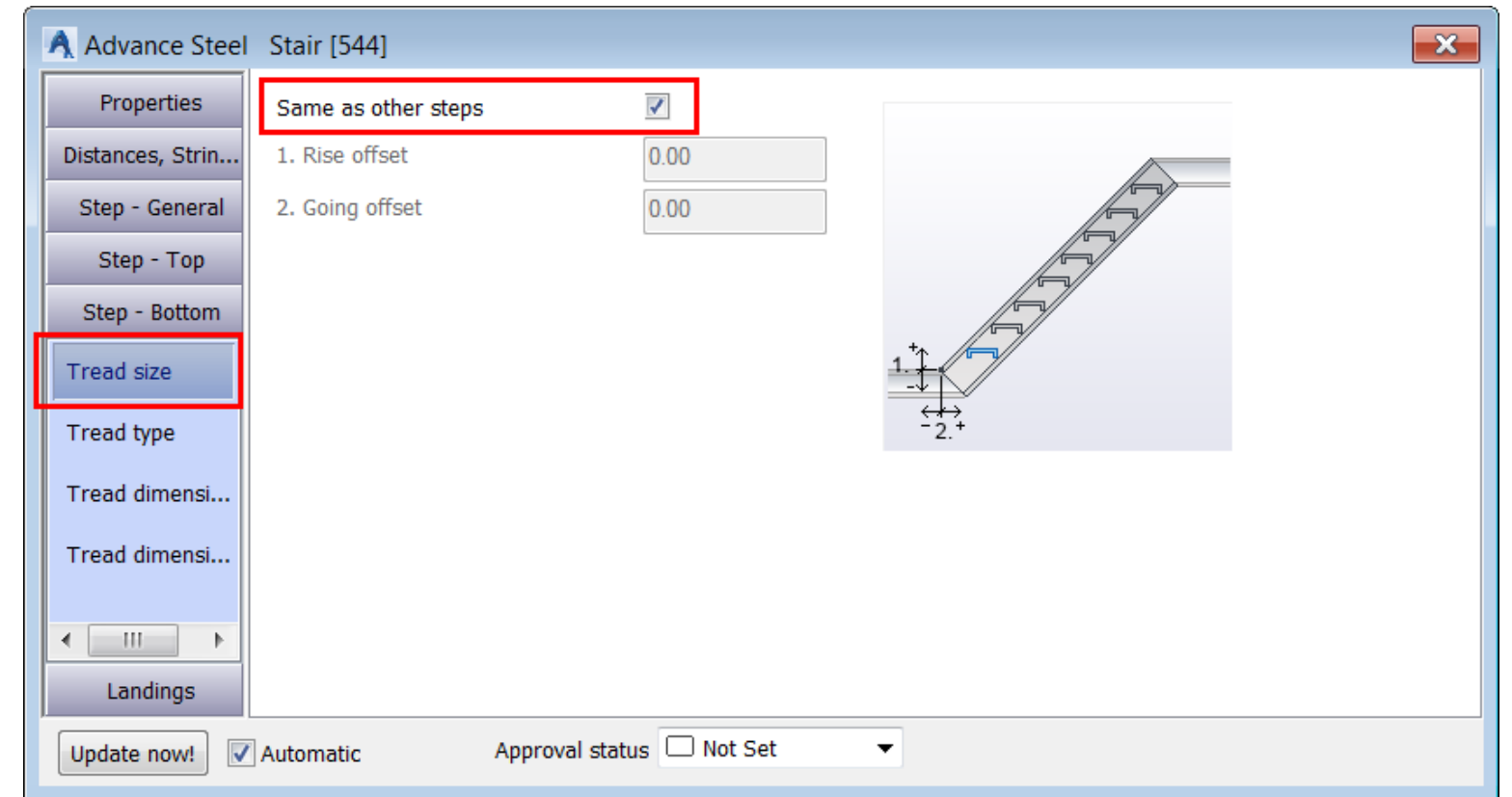
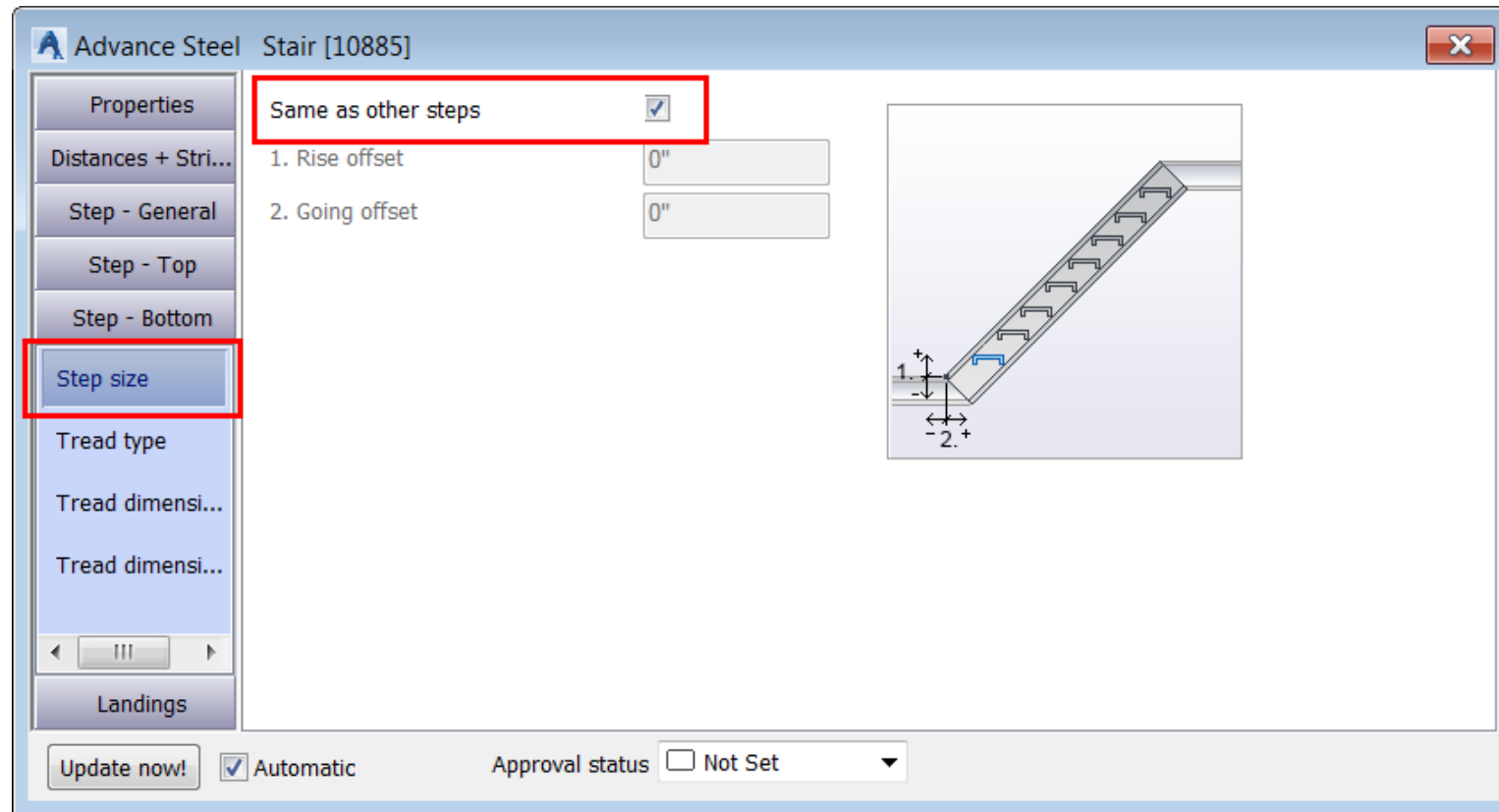
Section 4: Inserting Stairs

- Landings > Top Cover - Angle tab:



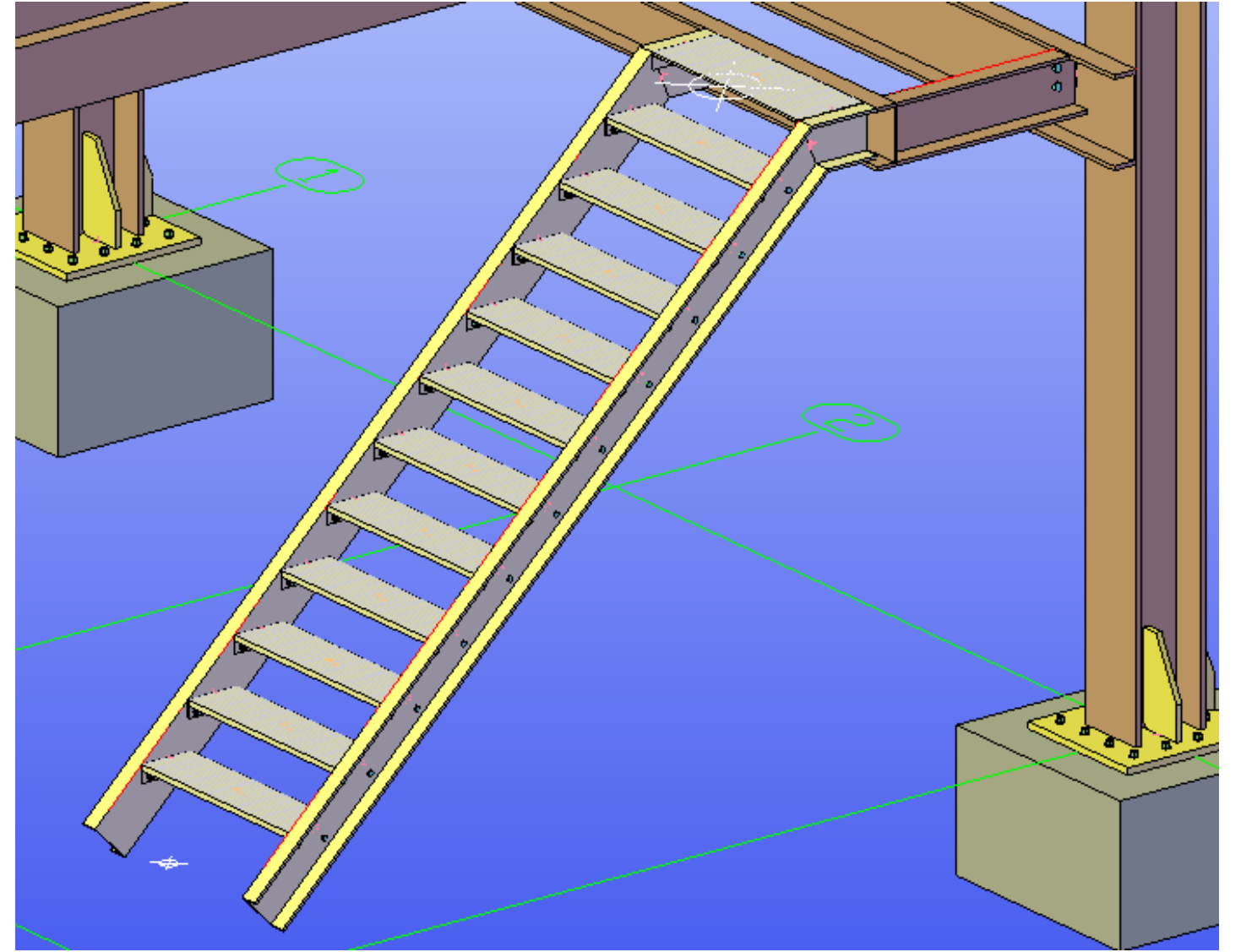
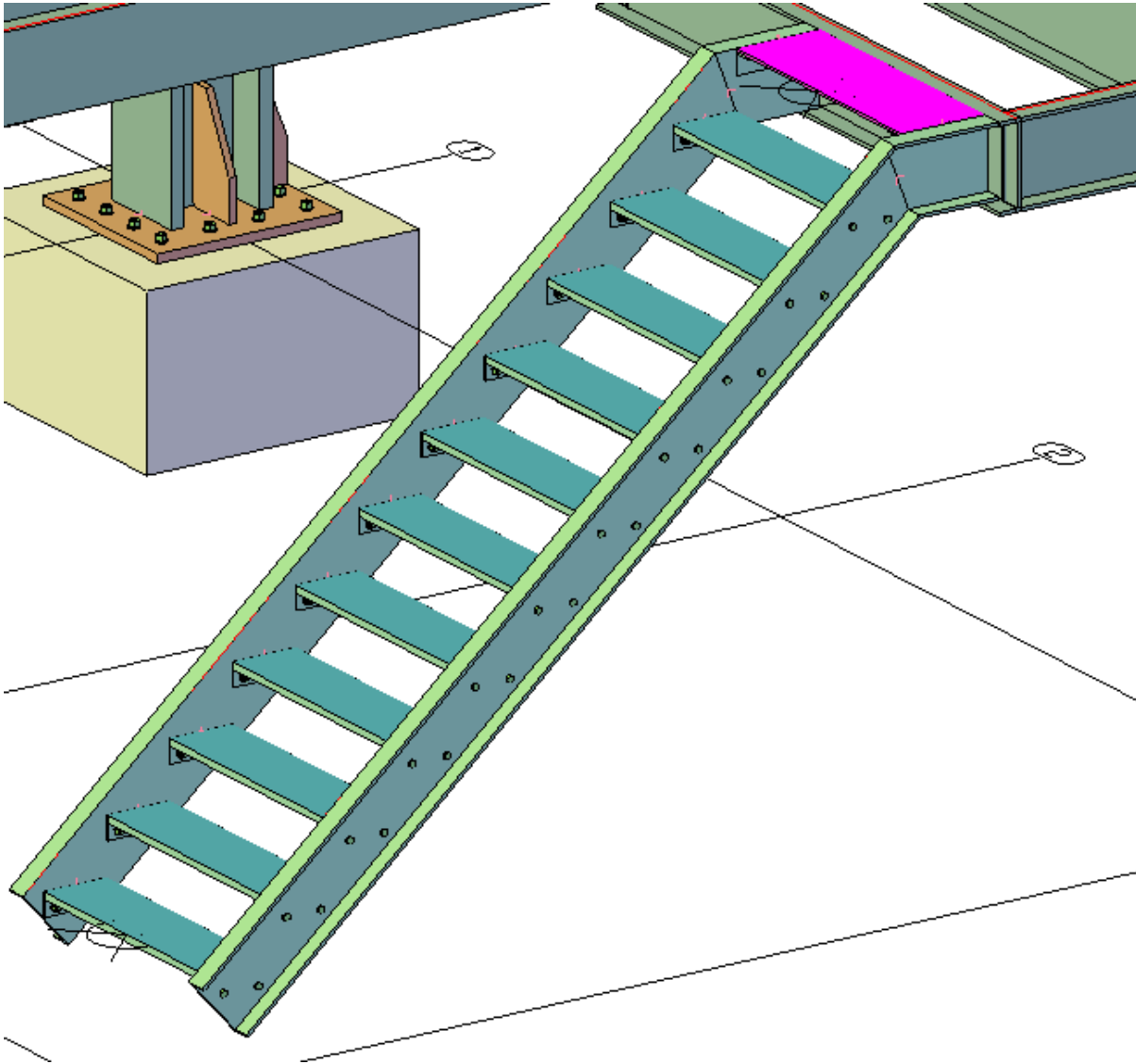
Section 4: Inserting Stairs

- Step - Bottom > Step size tab:
- Navigate to the bottom of the stairs



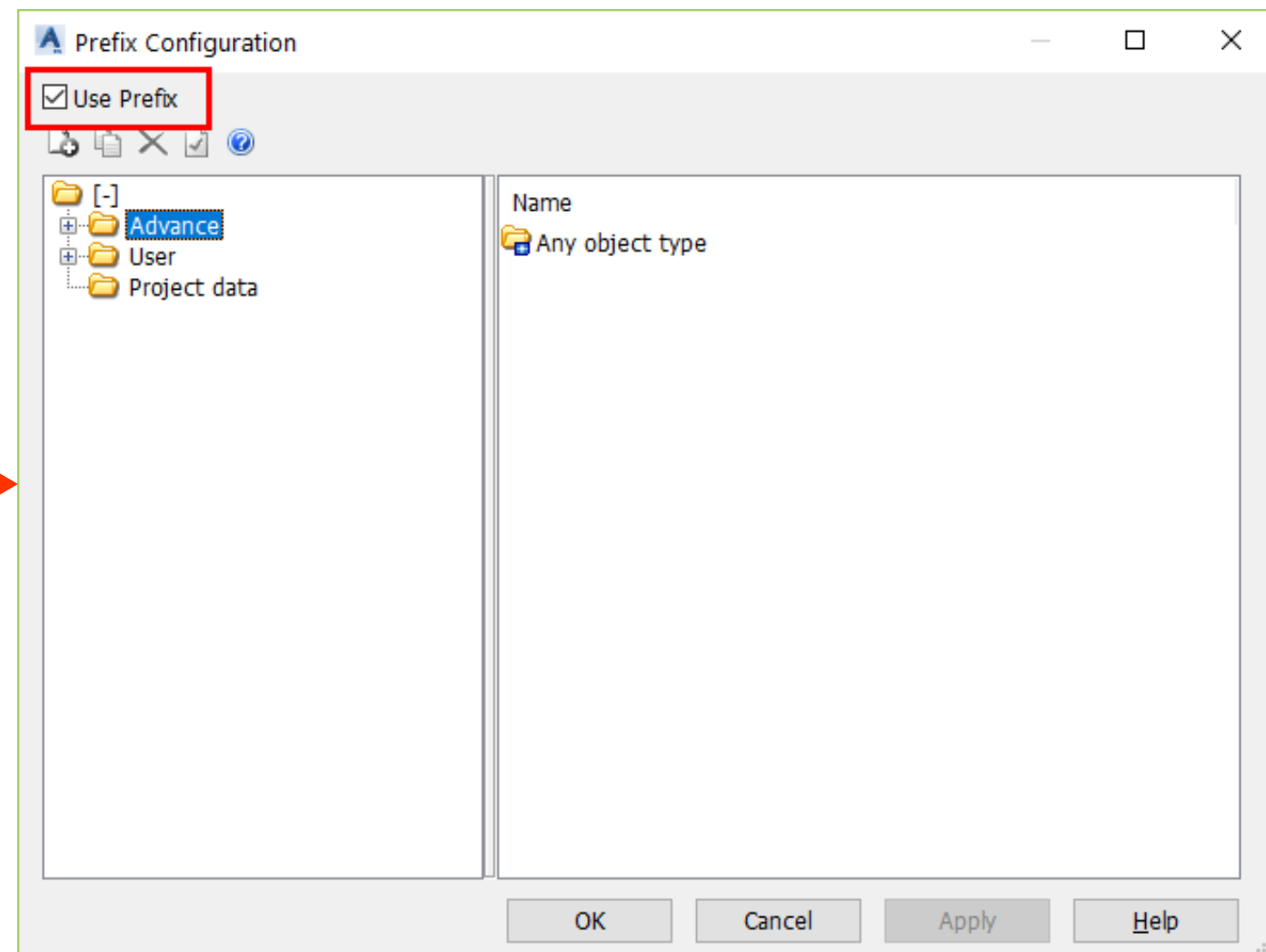
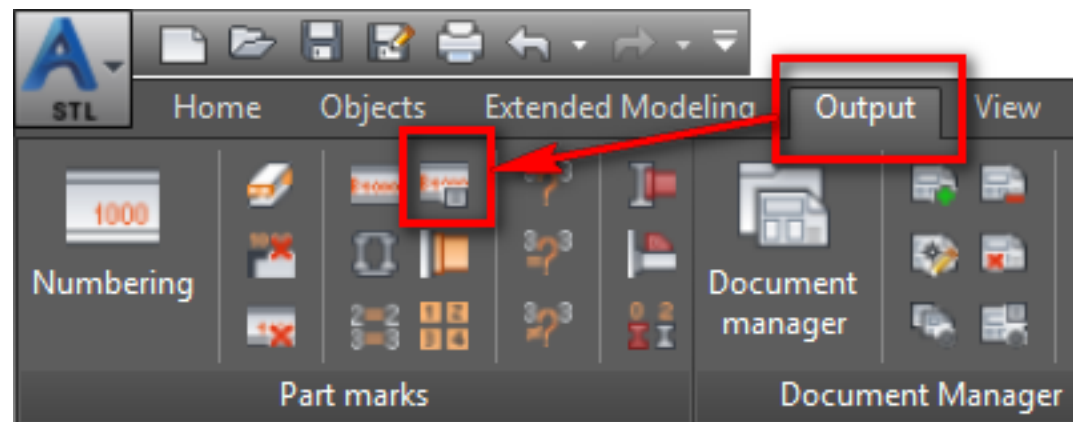
Section 4: Inserting Stairs

- Close the dialog box



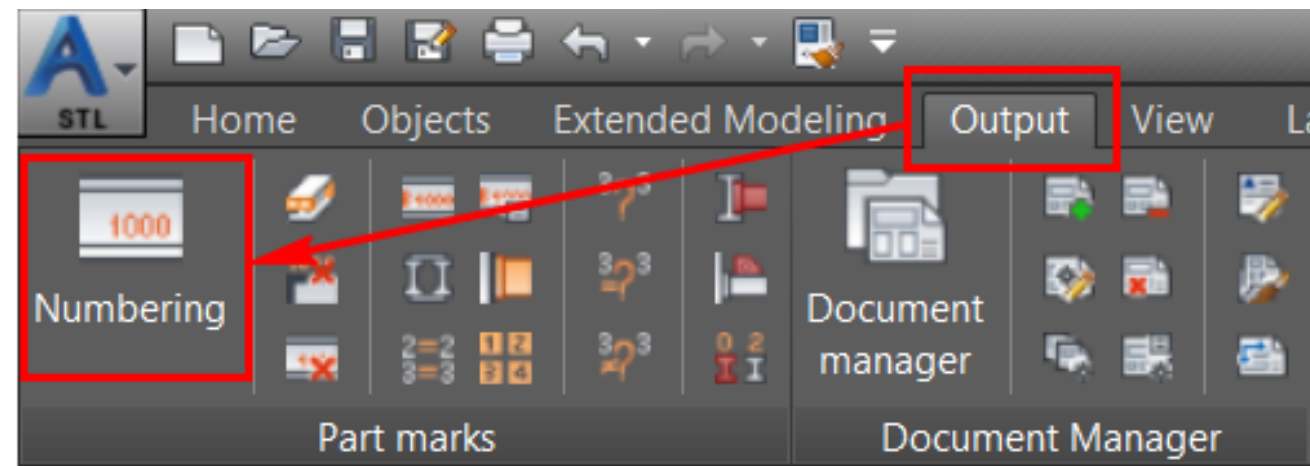
Section 5: Numbering Single Parts and Assemblies *(Work with me)*

- Open the Section5-Imperial.dwg or Section5-Metric.dwg file
- In METRIC Settings only



Section 5: Numbering Single Parts and Assemblies

- Invoke the **Numbering** tool



Section 5: Numbering Single Parts and Assemblies

- Configure the settings in the dialog box, as shown below:

The screenshot shows the 'Numbering - Identical part detection' dialog box with the 'General' tab selected. The dialog is divided into three main sections: Preliminary mark, Single part, and Assembly. Red boxes and arrows highlight specific settings.

General | Special | Standard Part Template

Post number method: None

Preliminary mark

☐ Process Preliminary mark

Start: 1
Increment: 1

Single part

☒ Process single parts

Start: 1000 (indicated by a red arrow)
Increment: 1

Method: With Drawing Number (indicated by a red box)
Counter: Small letter (dropdown) ☒ Start with first counter
Format: %Prefix%Counter%MethodNumber

Assembly

☒ Process assemblies (indicated by a red box)

Start: 100 (indicated by a red arrow)
Increment: 1

Method: With Drawing Number (indicated by a red box)
Counter: Small letter (dropdown) ☒ Start with first counter
Format: %Prefix%Counter%MethodNumber

Buttons: OK, Cancel, Apply, Help

Section 5: Numbering Single Parts and Assemblies

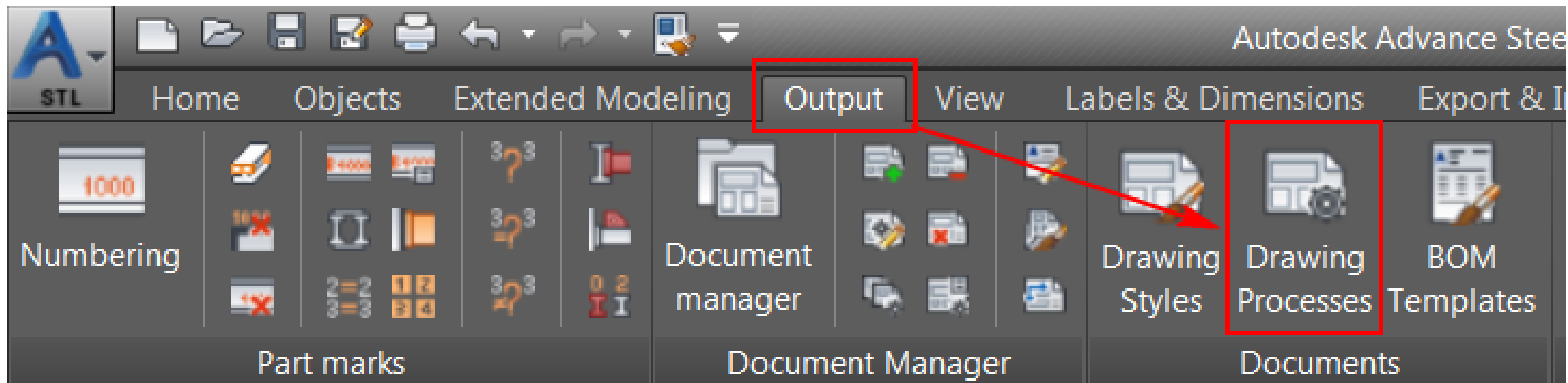
- Click **OK** in the dialog box

Numbering MP					
ID	Object(s)	Name	Part Mark	Old Part Mark	
1	4	HSSRound 6.625x0.250	D#internal1		
2	4	HSSRound 6.625x0.250	D#internal101		
3	2	C12X30	B#internal1		
4	2	C9X20	B#internal101		
5	2	C9X20	B#internal201		
6	2	S12X50	B#internal301		
7	2	W12x210	C#internal1		
8	2	RO42.4X4	M#internal1		
9	2	RO42.4X4	M#internal101		
10	1	C9X20	B#internal1001		
11	1	C9X20	B#internal1101		
12	1	C9X20	B#internal1201		
13	1	C9X20	B#internal1301		
14	1	C9X20	B#internal1401		

Numbering MP					
ID	Object(s)	Name	Part Mark	Old Part Mark	
1	4	165.1x3.0 CHS	BR#internal100		
2	4	165.1x3.0 CHS	BR#internal101		
3	2	200 PFC	B#internal102		
4	2	200 PFC	B#internal103		
5	2	250 UB 31.4	B#internal104		
6	2	300 PFC	B#internal105		
7	2	310 UC 158	C#internal106		
8	2	RO42.4X3.2	RL#internal107		
9	1	200 PFC	B#internal108		
10	1	200 PFC	B#internal109		
11	1	200 PFC	B#internal110		
12	1	200 PFC	B#internal111		
13	1	200 PFC	B#internal112		
14	1	200 PFC	B#internal113		
15	1	200 PFC	B#internal114		
16	1	200 PFC	B#internal115		
17	1	200 PFC	B#internal116		

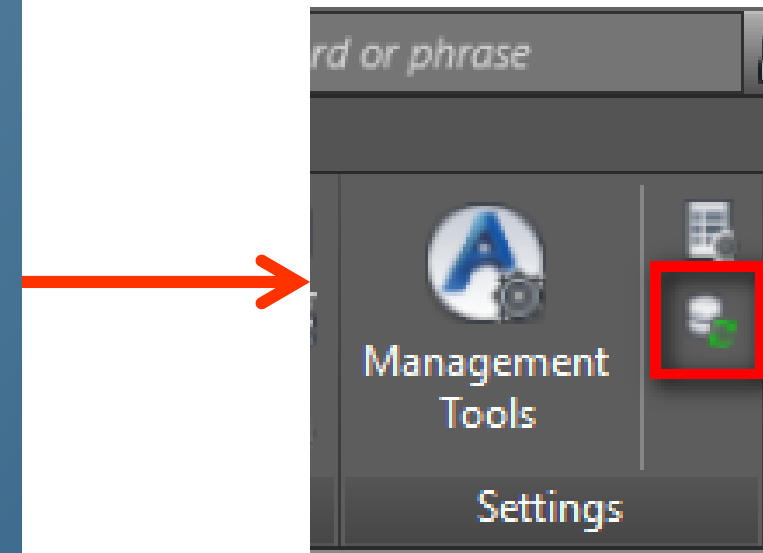
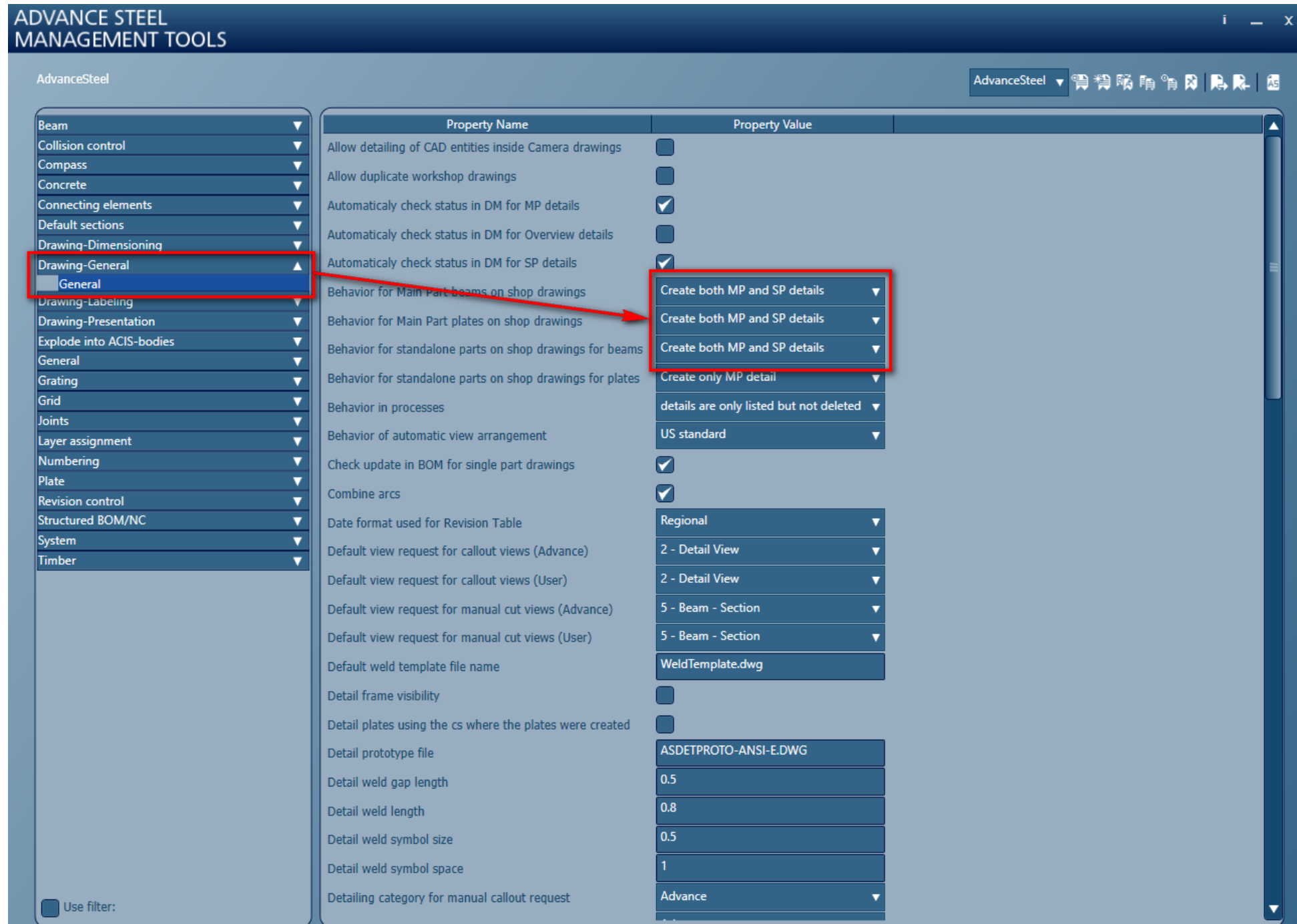
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Do with me)*

- Invoke the Drawing Processes tool



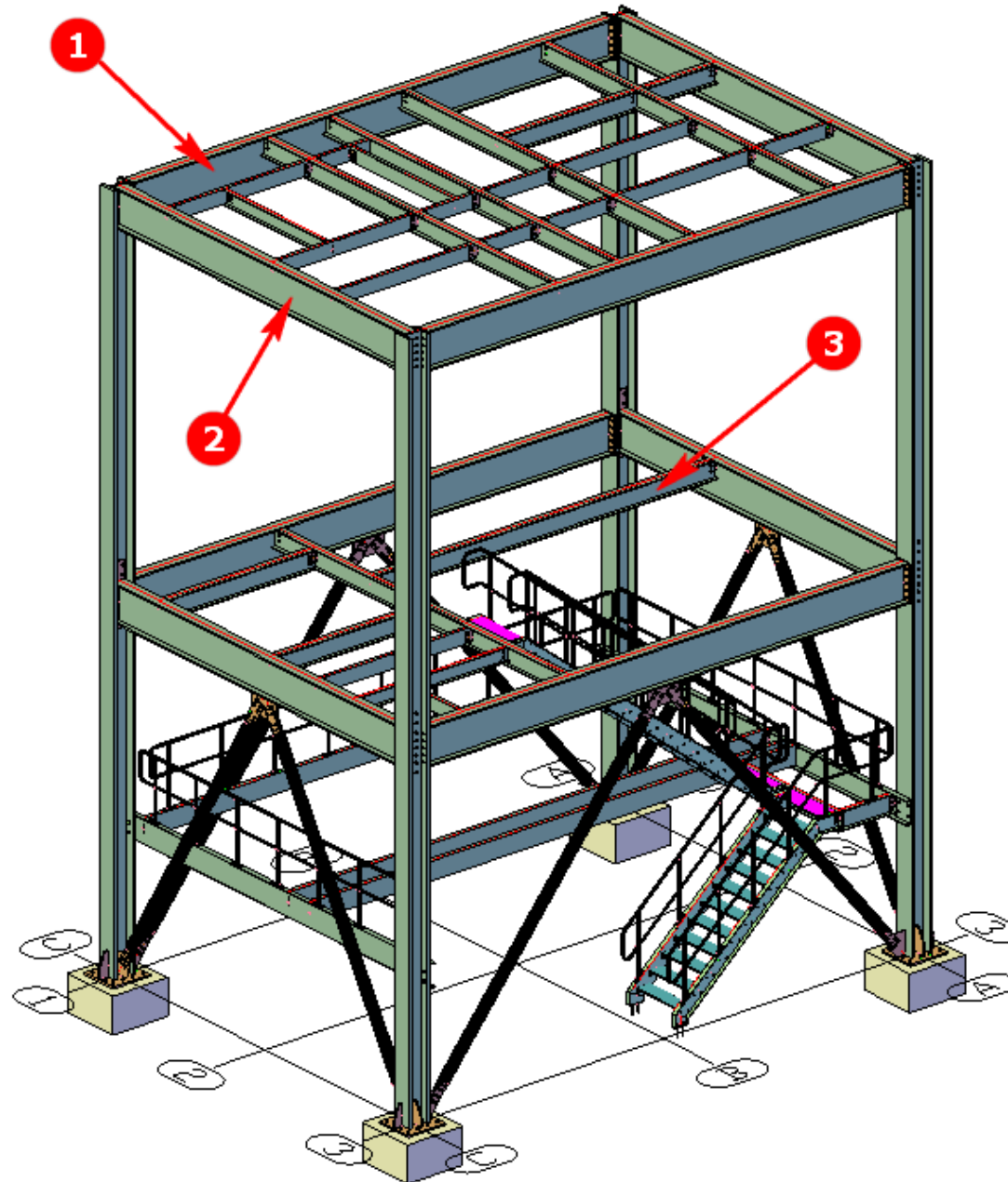
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Stop here)*

- For IMPERIAL ONLY



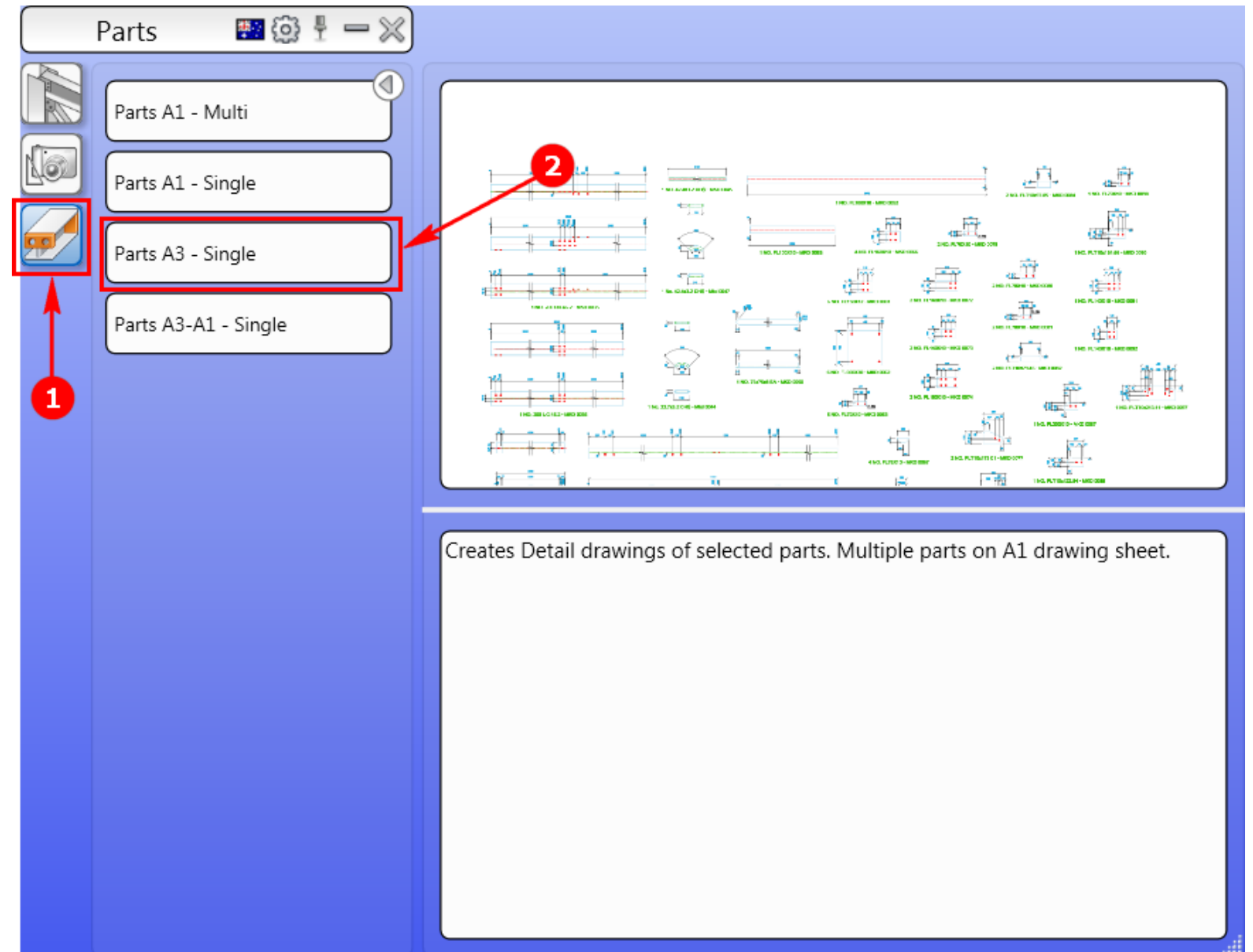
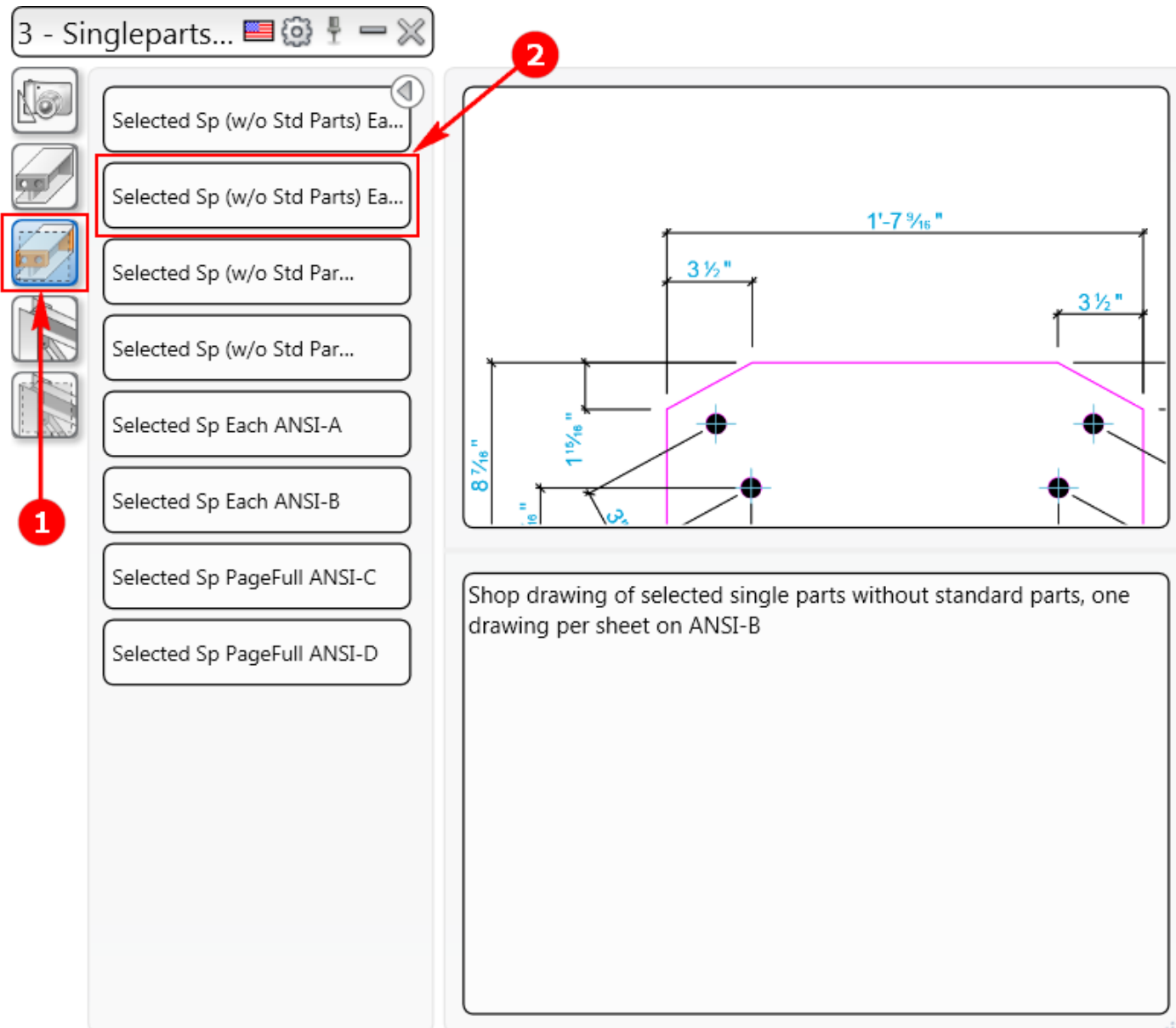
Section 6: Generating Single Part Drawings Using the Default Drawing Processes

- Select the sections labeled as 1, 2, and 3 in the figure below



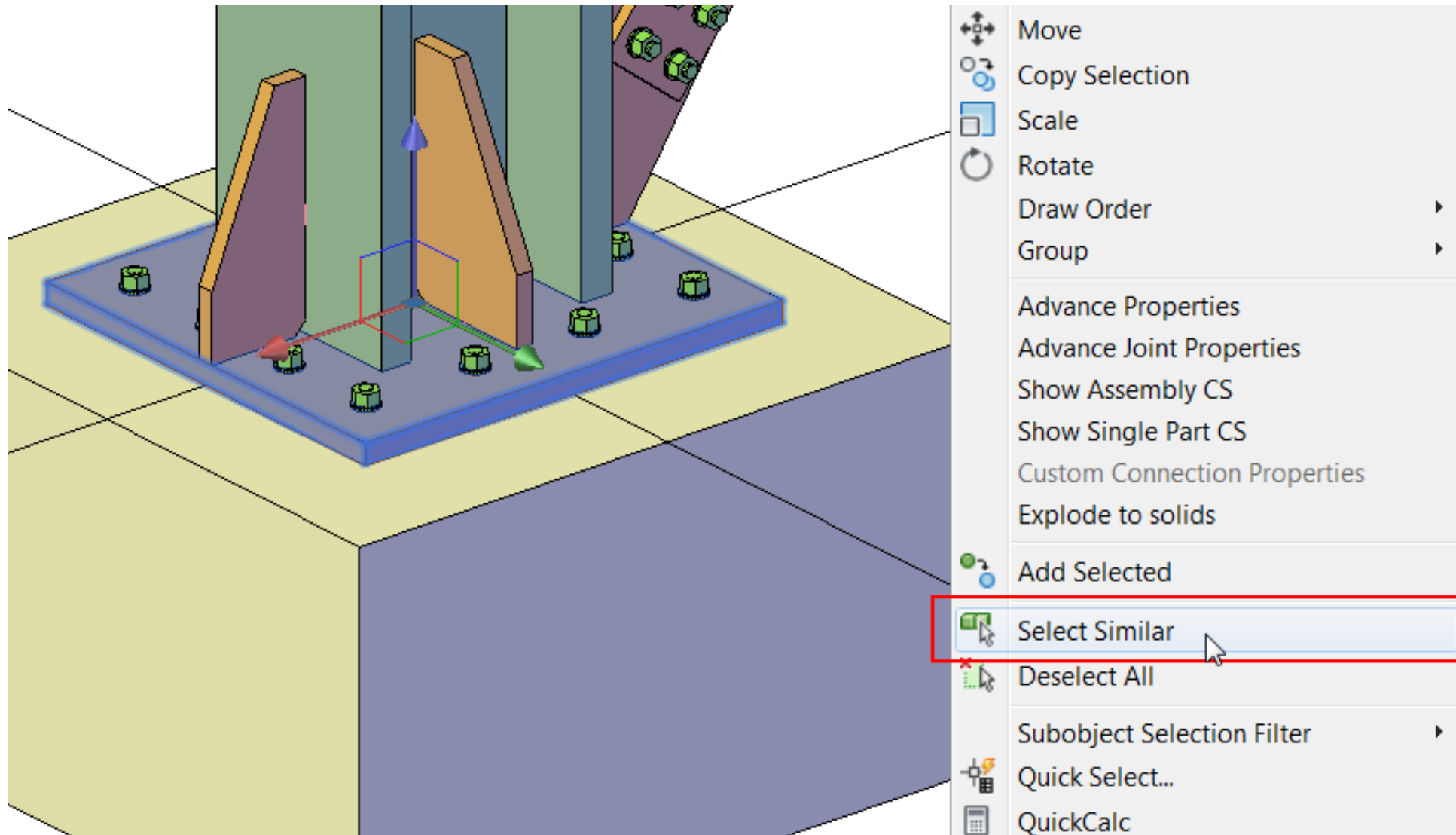
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Steps 7-10 Imperial or 2-5 Metric)*

- Select the tool to generate single part drawings



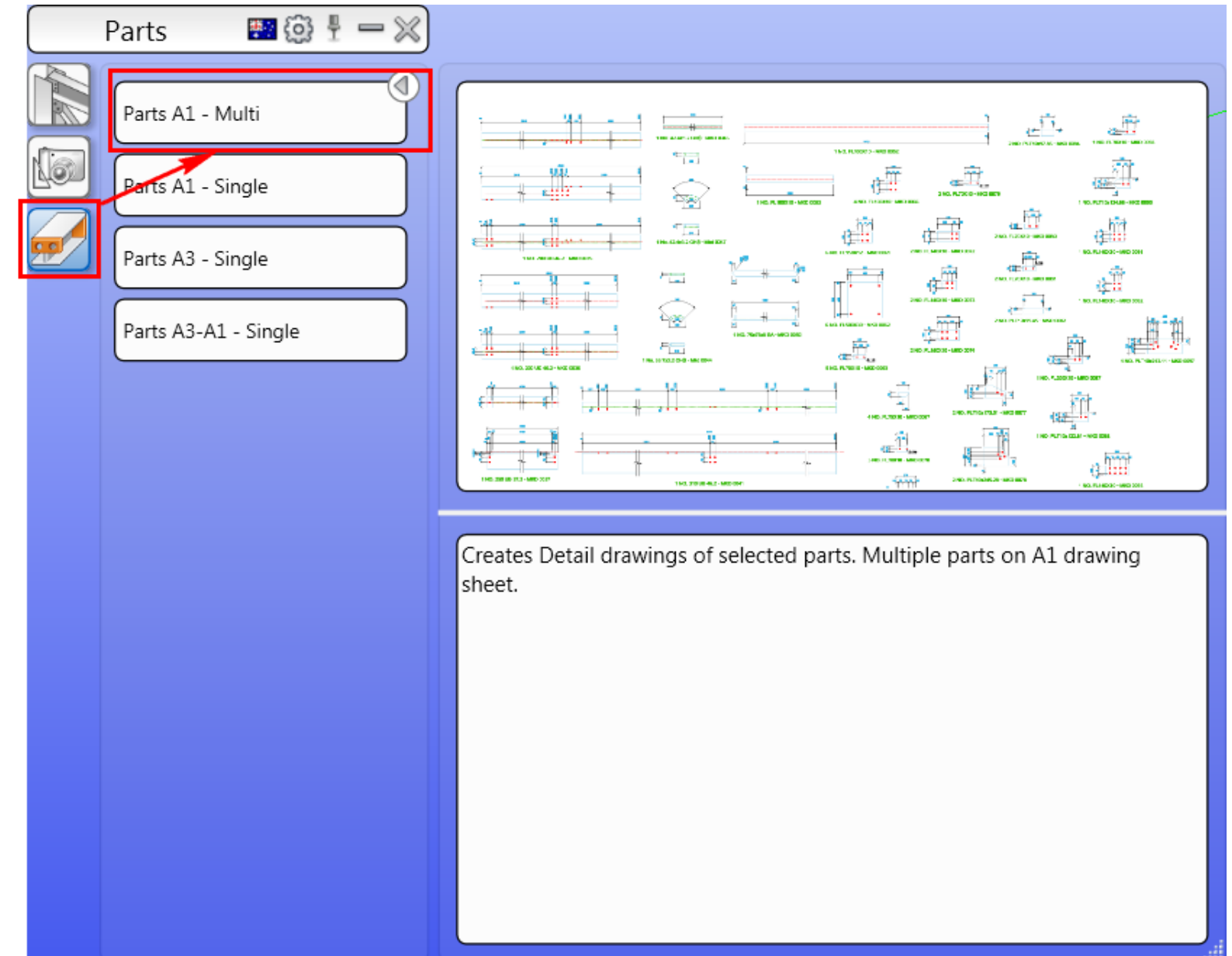
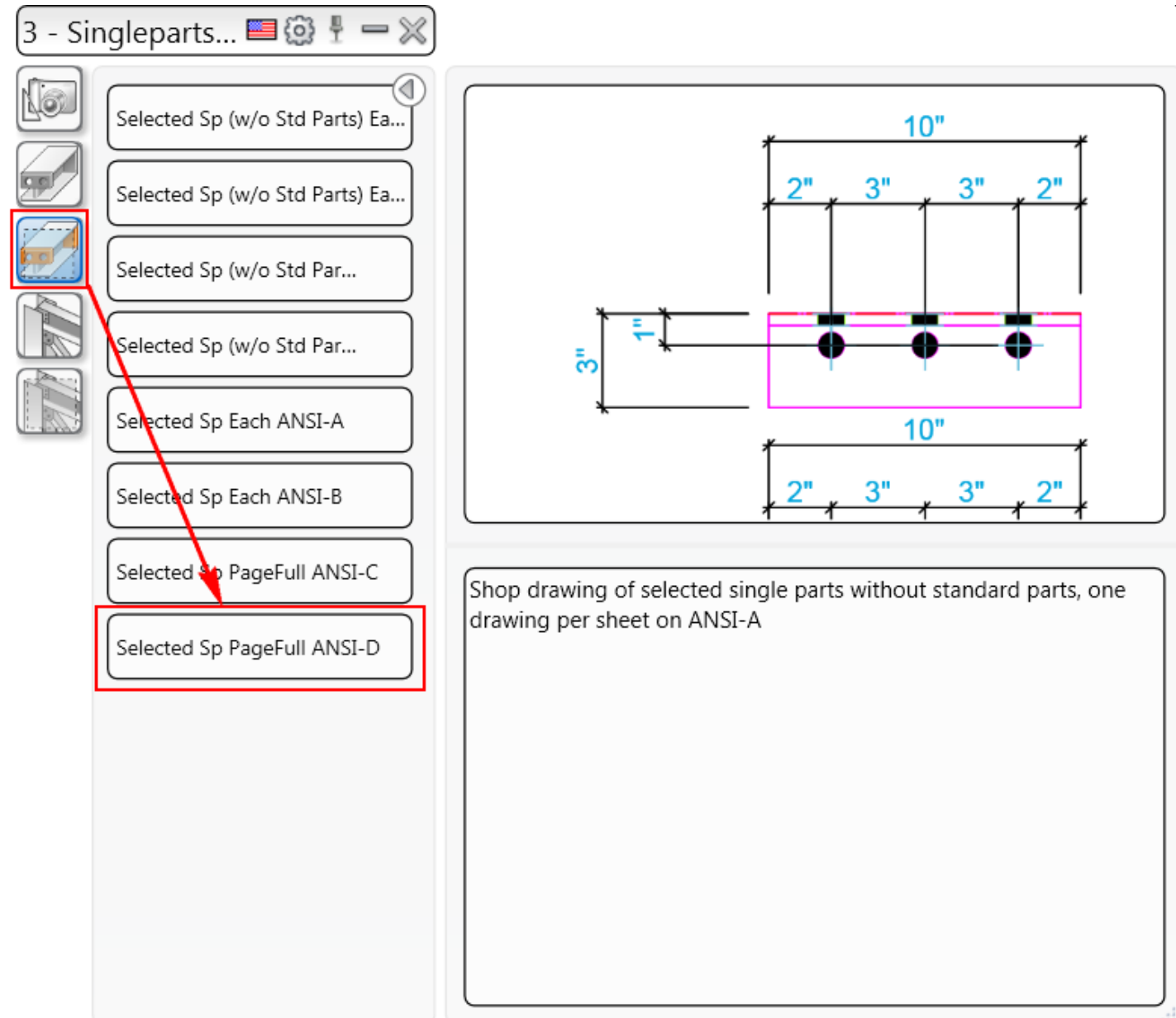
Section 6: Generating Single Part Drawings Using the Default Drawing Processes

- Select one of the plates of the base plate joint and then select similar



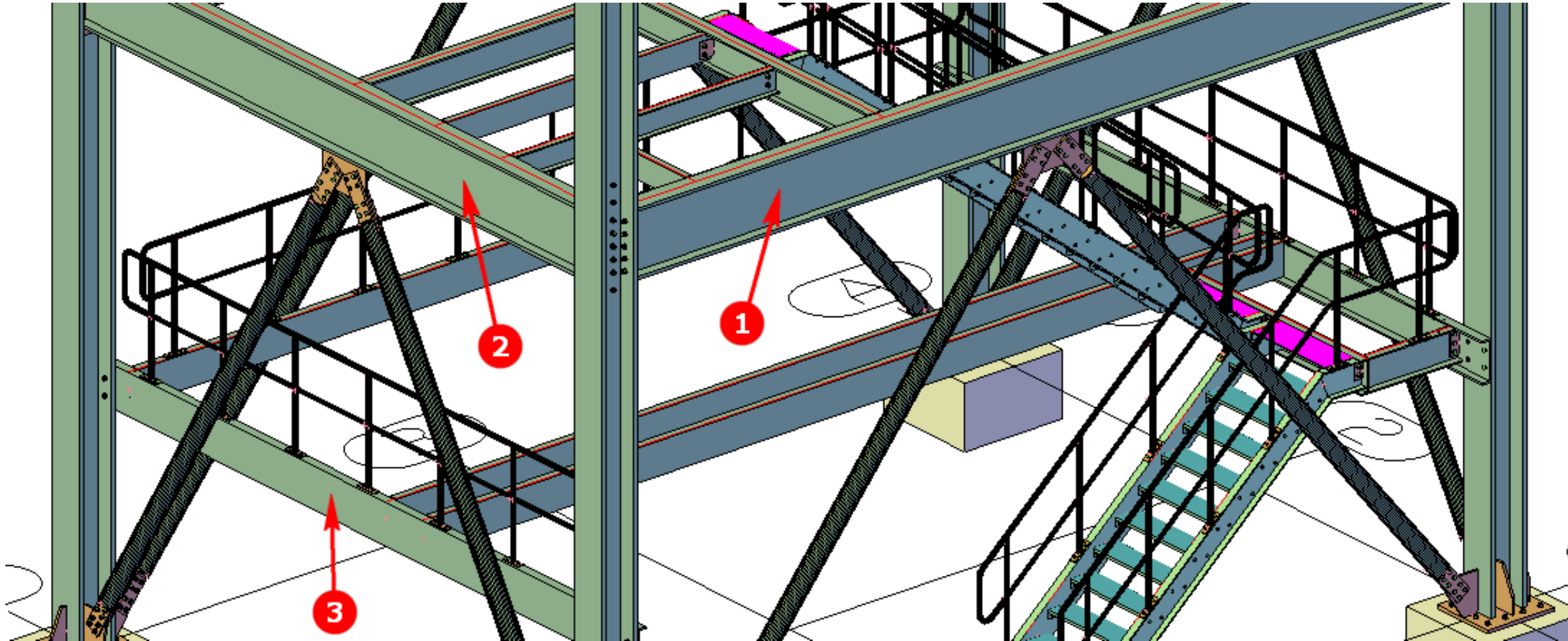
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Remaining Steps)*

- Select the tool to generate Plate drawings on a single sheet



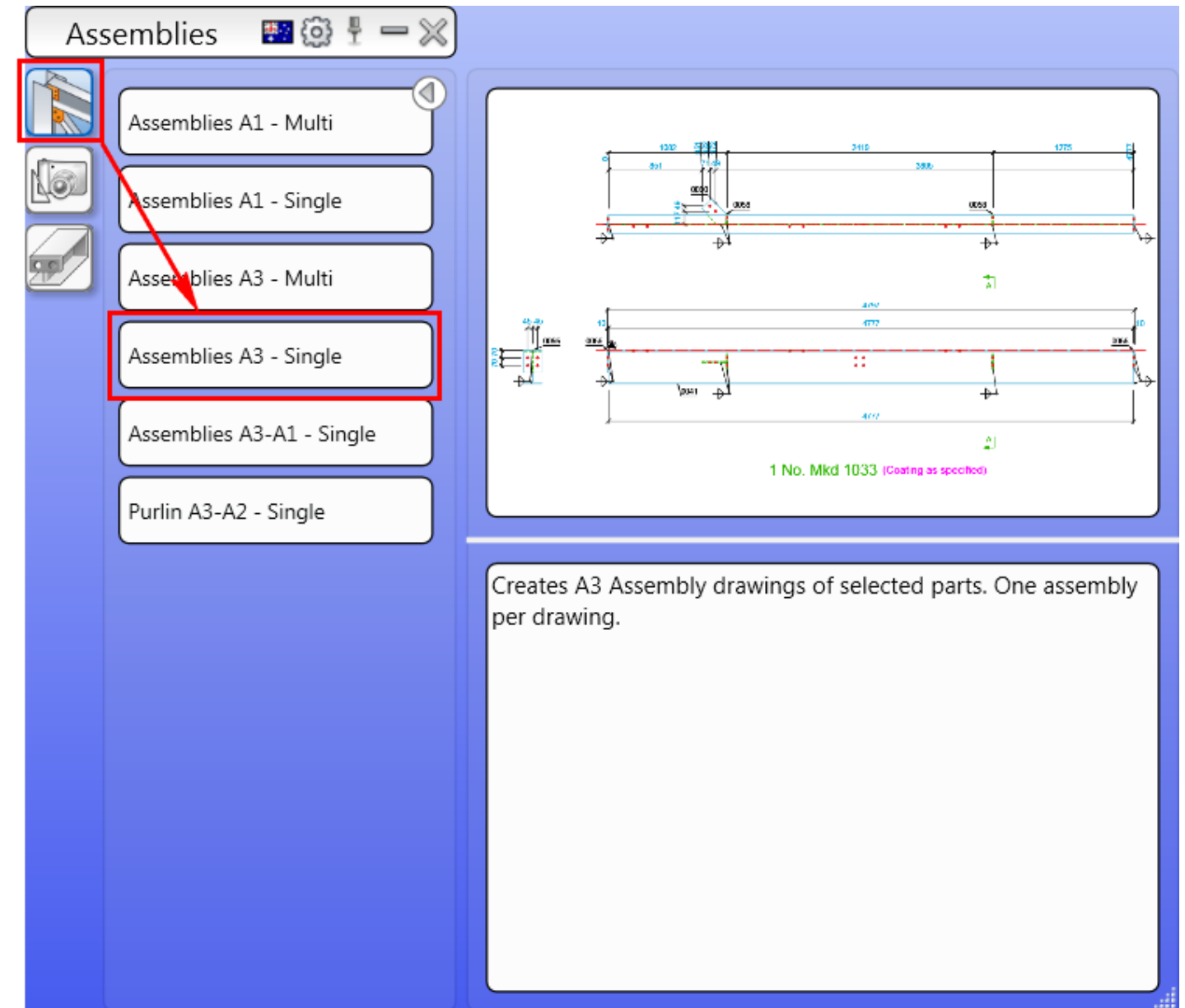
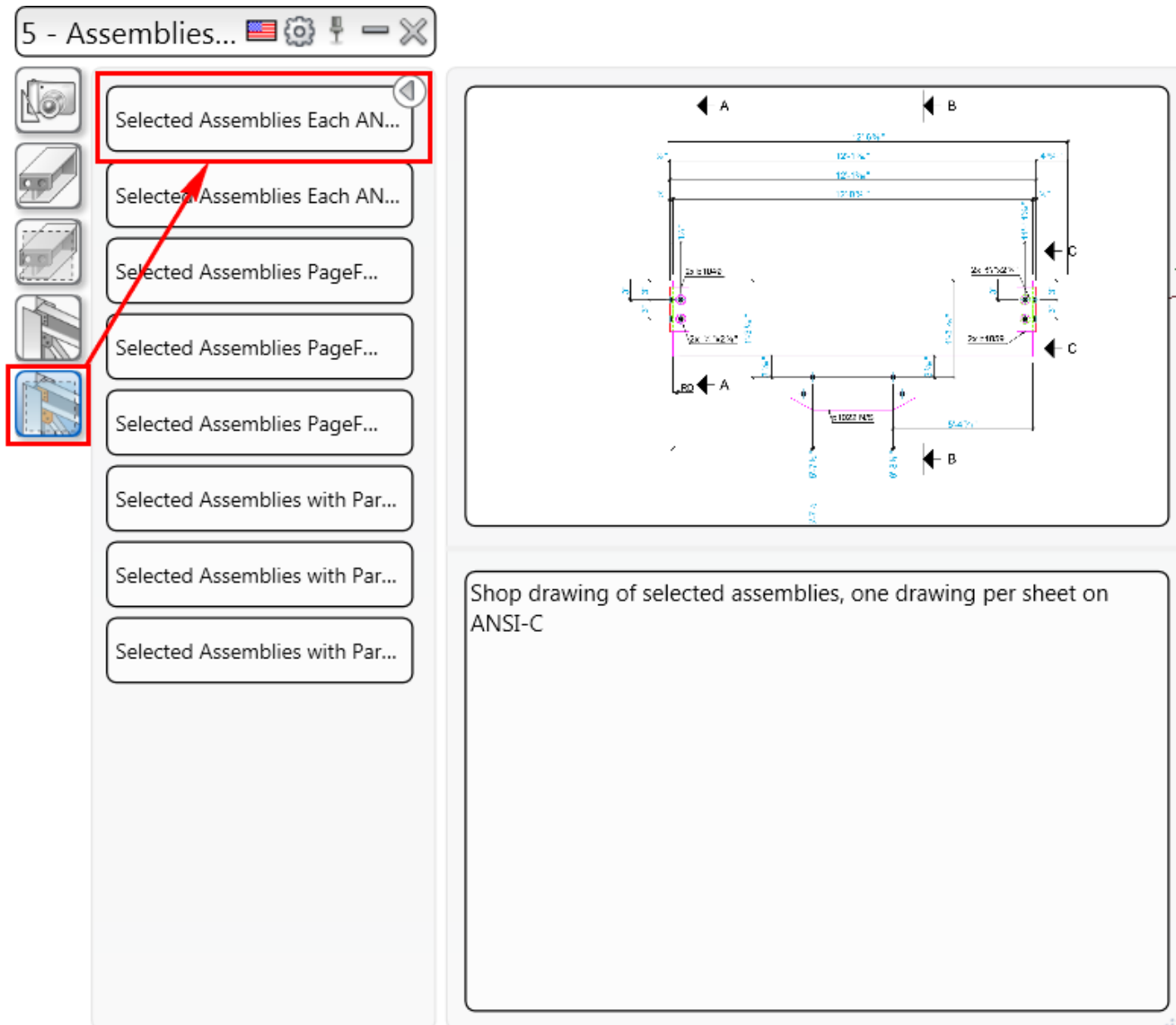
Section 7: Generating Assembly Drawings Using the Default Drawing Processes

- Select the sections labelled as 1, 2, and 3

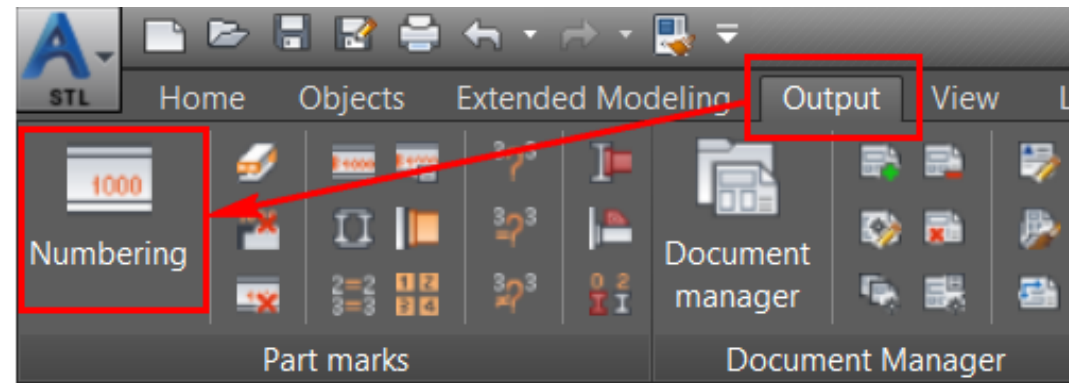


Section 7: Generating Assembly Drawings Using the Default Drawing Processes *(All Steps)*

- Select the tool to generate Assembly drawings



Section 8: Running the Numbering Again

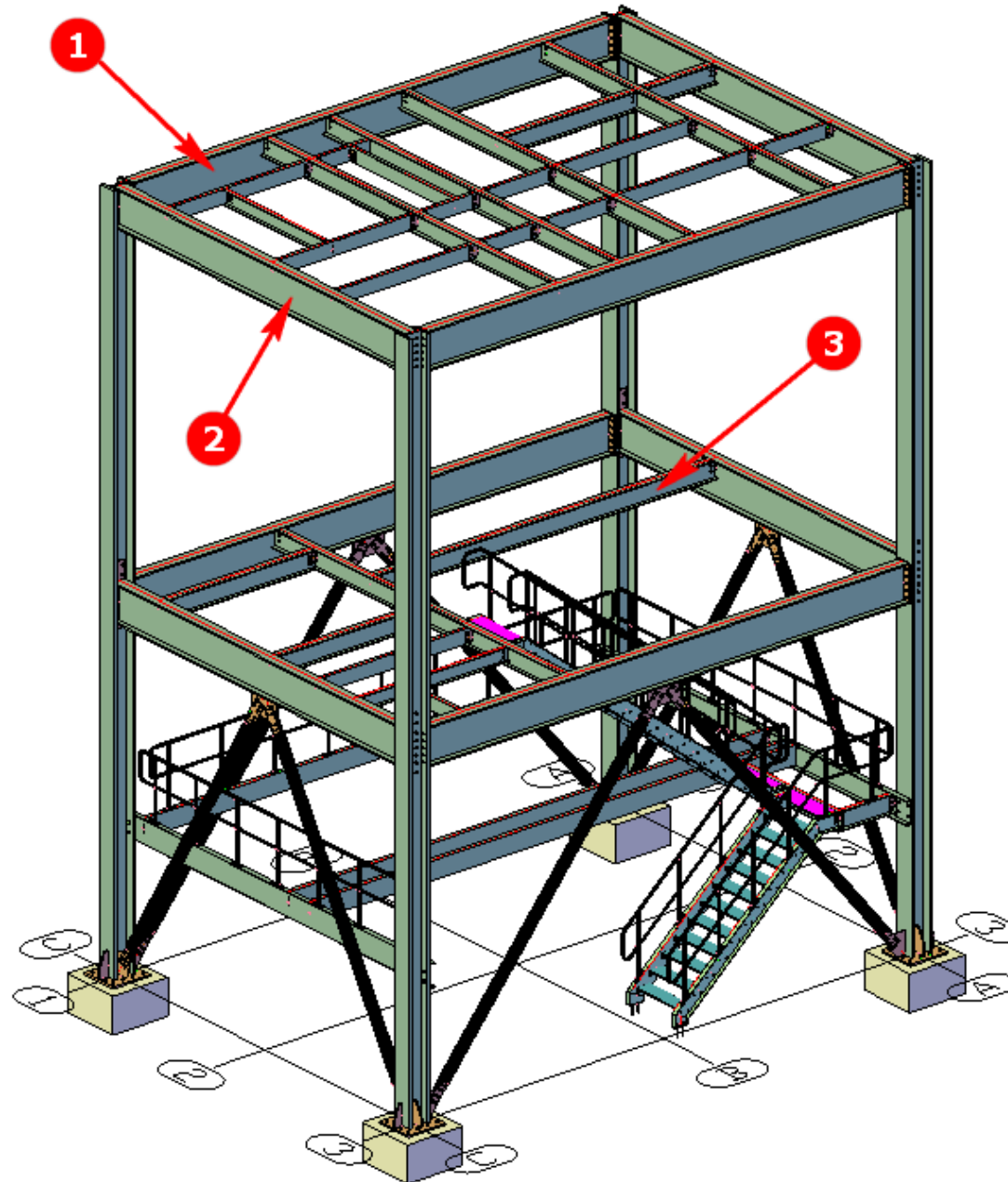


ID	Object(s)	Name	Part Mark	Old Part Mark
34	1	S24X121	B#internal131	
35	1	S24X121	B#internal132	
36	1	S24X121	B#internal133	
37	1	S24X121	B#internal134	
38	1	S24X121	B#internal135	
39	1	C15X33.9	Ba100	
40	1	S24X121	Ba102	
41	1	S24X121	Bb100	
42	1	W12x210	C#internal101	
43	1	W12x210	C#internal102	
44	1	RO33.7X3.2	M#internal102	
45	1	RO42.4X4	M#internal103	
46	1	RO42.4X4	M#internal104	
47	1	RO42.4X4	M#internal105	

ID	Object(s)	Name	Part Mark	Old Part Mark
34	1	530 UB 82.0	B#internal138	
35	1	530 UB 82.0	B#internal139	
36	1	530 UB 82.0	B#internal142	
37	1	530 UB 82.0	B#internal143	
38	1	530 UB 82.0	B#internal144	
39	1	530 UB 82.0	B#internal145	
40	1	380 PFC	B0005	
41	1	530 UB 82.0	B0006	
42	1	530 UB 82.0	B0007	
43	1	310 UC 158	C#internal134	
44	1	310 UC 158	C#internal135	
45	1	RO33.7X2.6	RL#internal146	
46	1	RO42.4X3.2	RL#internal147	
47	1	RO42.4X3.2	RL#internal148	
48	1	RO42.4X3.2	RL#internal149	
49	1	RO42.4X3.2	RL#internal150	
50	1	RO42.4X3.2	RL#internal151	

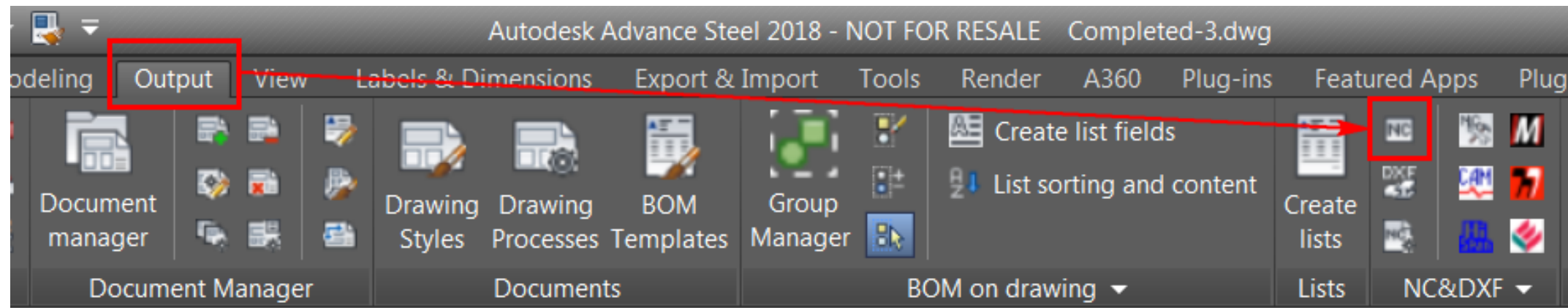
Section 9: Generating NC Files for Beams and DXF Files for Plates

- Select the sections labeled as 1, 2, and 3 in the figure below



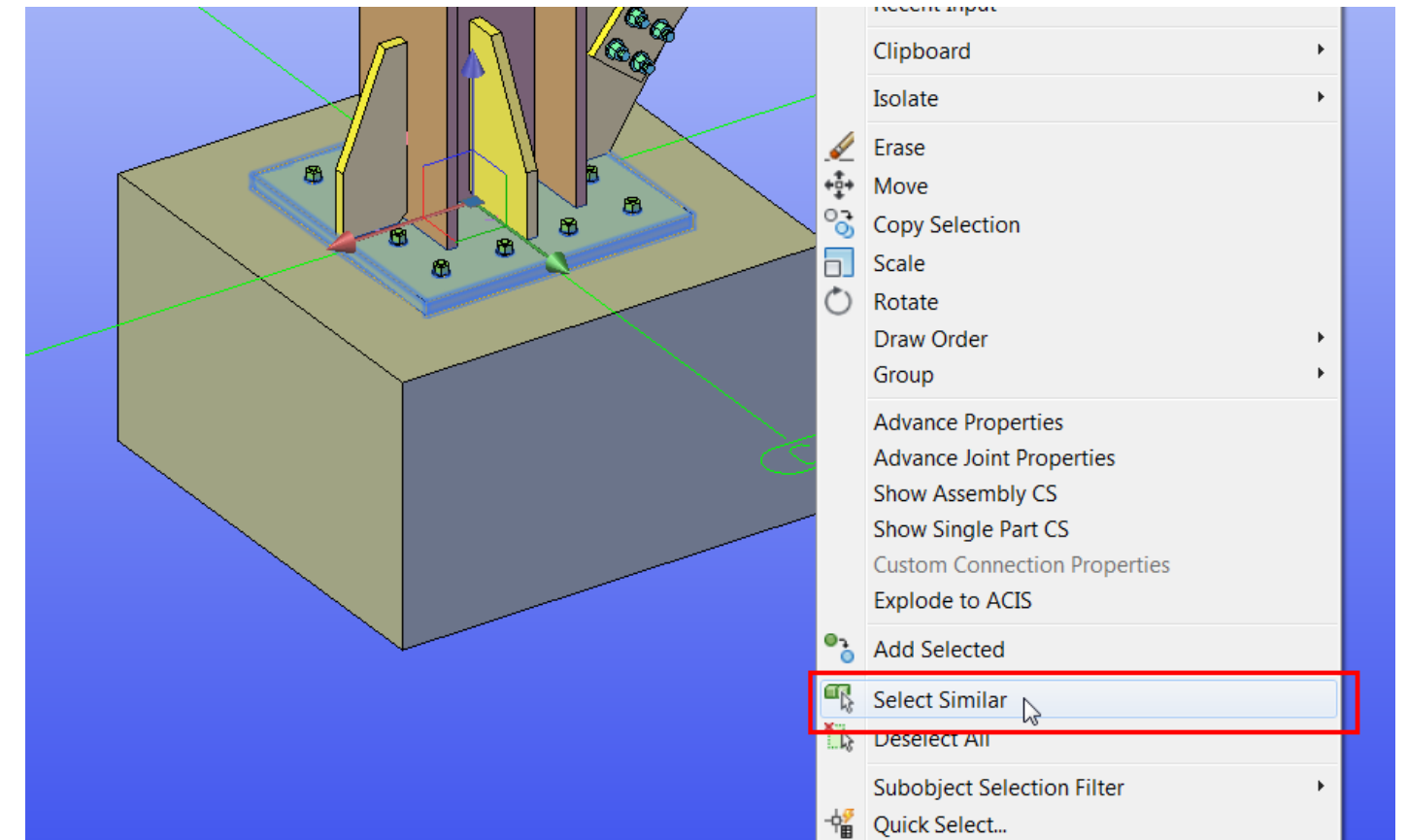
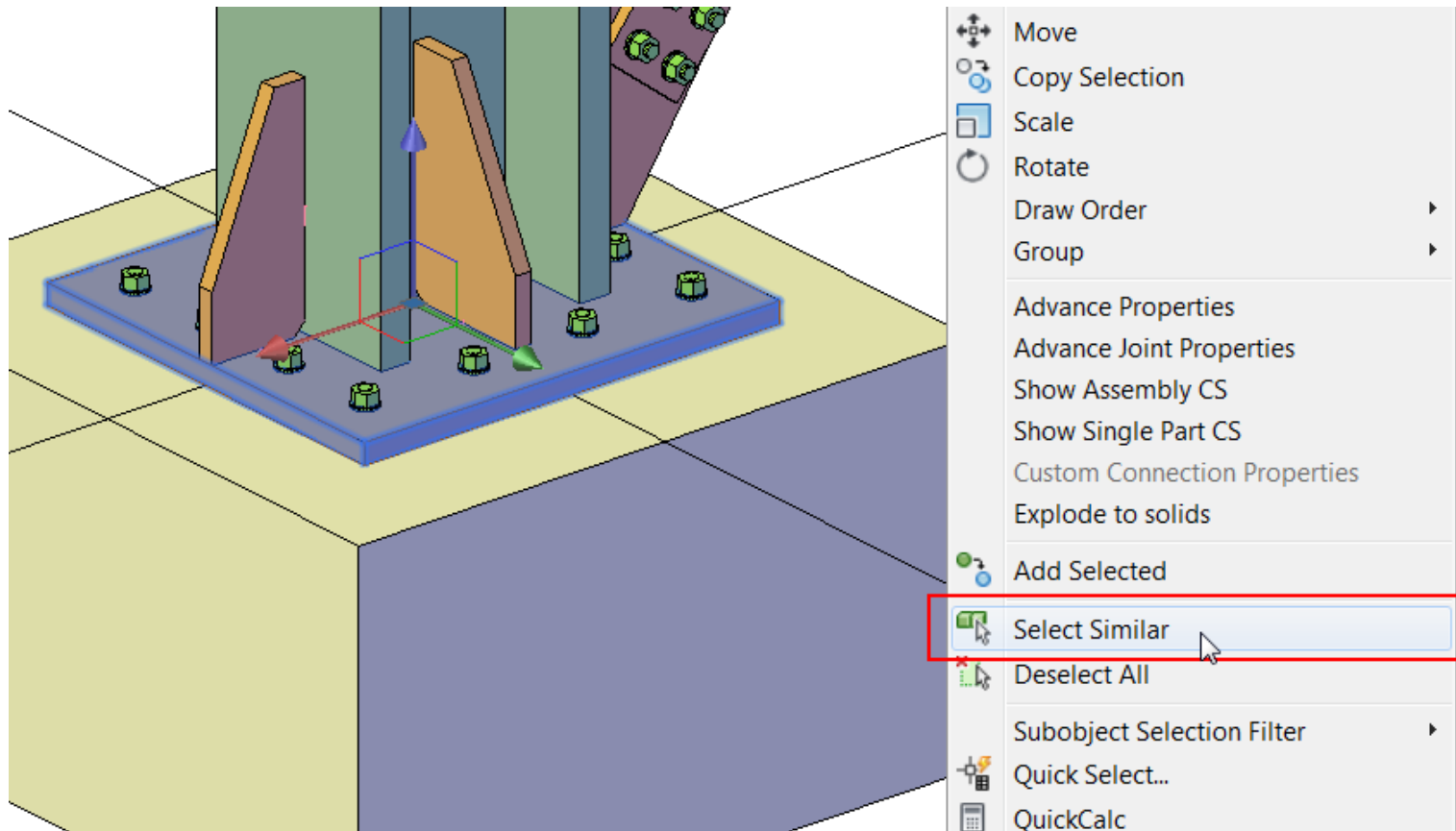
Section 9: Generating NC Files for Beams and DXF Files for Plates (*Up to Step 3*)

- Select the NC tool



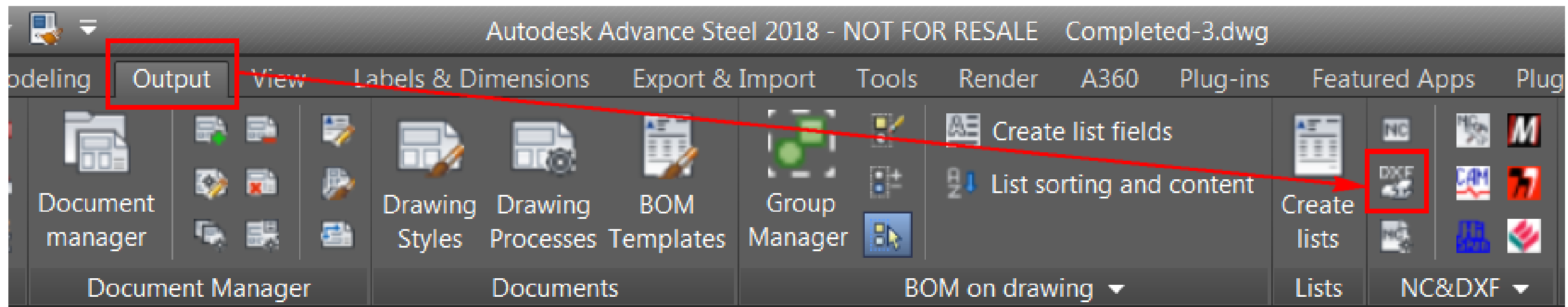
Section 9: Generating NC Files for Beams and DXF Files for Plates

- Press ESC to deselect everything
- Right-click on the base plate of one of the base plate joints and click **Select Similar** from the shortcut menu



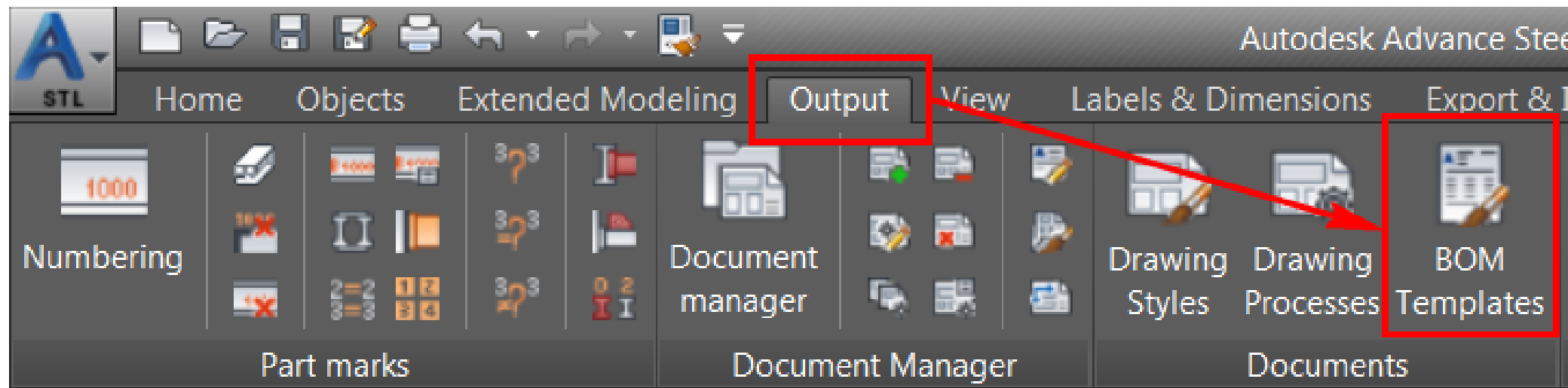
Section 9: Generating NC Files for Beams and DXF Files for Plates (Remaining Steps)

- Invoke the DXF tool



Section 10: Generating Bill of Materials (BOMs)

- Invoke the BOM Templates tool



Section 10: Generating Bill of Materials (BOMs)

- Press ESC to deselect everything
- Select **Assembly list – exploded bolts**

Assembly lists

Assemblies approval status list

Assembly list

Assembly list - bolts

Assembly list - exploded bolts

Assembly summary list

Assembly with parts reference

Compound section list

Loading list

Shipping list

AUTODESK ADVANCE STEEL

Quantity	Mark	Description	Length (inch)	Quantity	Part weight pound	Total weight pound	Surface area sq ft
12	B1	W12x16	8' 10 1/2"				
12	B1	W12x16	8' 10 1/2"	A262	94.25	1,131.00	16.14
					70.74	1,131.00	
10	B3	L3X3X3/8	8' 10 7/8"				
10	B3	L3X3X3/8	8' 10 7/8"	A26	45.75	457.27	6.02
					70.74	457.27	
2	B43	W12x26	11' 10 1/2"				
2	B43	W12x26	11' 10 1/2"	A262	362.11	618.21	48.04
12		A295 BR x 1.34	1.34"	10.0	3.30	4.23	
12		A395 NL 1/2 x 8		10.0	0.12	1.43	
12		Washer 1/2 x 8 - 30		10.0	0.04	0.47	
					70.74	618.21	

List with all assemblies (beams, plates, special parts, gratings, bolts, shear studs) and their attached parts, grouped by assembly number and sorted by weight (descending)

Assembly list

Assemblies approval status list

Assembly list

Assembly list - bolts

Assembly list - exploded bolts

Assembly summary list

Assembly with parts reference

Compound section list

Loading list

Point to point bolt list

Shipping list

AUTODESK ADVANCE STEEL

Mark	Quantity	Name	Quality	Length (mm)	Width (mm)	Weight of piece (kg/piece)	Total weight (kg)	Surface (m2/piece)	Total Surface (m2)
A10	4	C120X2.5							
P1041	1	C120X2.5	S275	4200	16740.0	71880.0	0.000	0.000	0.000
						71880.0			
A11	4	RD20							

List with all assemblies (beams, plates, special parts, gratings, bolts, shear studs) and their attached parts, grouped by assembly number and sorted by weight (descending)


Section 10: Generating Bill of Materials (BOMs)

- Save the BOM

Assembly list - exploded bolts

Open Save Export


100% 1/19 Backward Forward

		AUTODESK® ADVANCE STEEL		Company				
		Client:		Job No:				
		Project:						
		Detailer:		Date:		13-Aug-17		
Quantity	Mark	Description	Length	Coating	Part weight	Total weight	Part surface	Total surface
			(inch)	Grade	pound	pound	(ft²)	(ft²)
2	B#internal100	C12X30	28' 5 1/4"					
2	B#internal100	C12X30	28' 5 1/4"	A36	853.17	1,706.34	84.51 ²	169.02 ²
					TOTAL	1,706.34		169.02 ²
1	B#internal101	C9X20	0"					
1	B#internal101	C9X20	8' 1 13/16"	A36	163.02	163.02	18.82 ²	18.82 ²
					TOTAL	163.02		18.82 ²
1	B#internal101	C9X20	8' 1 13/16"					
1	B#internal101	C9X20	8' 1 13/16"	A36	163.02	163.02	18.82 ²	18.82 ²
2		A325 3/4 x 2	2"	10.9	0.58	1.17		
2		A563 Nut M 3/4		10.9	0.19	0.39		
2		Washer F436 - 3/4		10.9	0.04	0.09		
					TOTAL	164.67		18.82 ²
1	B#internal102	C9X20	0"					
1	B#internal102	C9X20	4' 3 13/16"	A36	86.35	86.35	9.97 ²	9.97 ²
					TOTAL	86.35		9.97 ²
1	B#internal102	C9X20	4' 3 13/16"					
1	B#internal102	C9X20	4' 3 13/16"	A36	86.35	86.35	9.97 ²	9.97 ²
2		A325 3/4 x 2	2"	10.9	0.58	1.17		

Assembly list - exploded bolts

Open Save Export

100% 1/20 Backward Forward

		AUTODESK® ADVANCE STEEL		Company				
		Client:		Job No:				
		Project:						
		Detailer:		Date:		17-Aug-17		
Quantity	Mark	Description	Length	Coating	Part weight	Total weight	Part surface	Total surface
			(mm)	Grade	(kg)	(kg)	(m²)	(m²)
4	#internal100	165.1x3.0 CHS	5,625	Coating as specified				
4	#internal100	165.1x3.0 CHS	5,005	C350L0	60.0	240.1	2.60	10.0
8	4027	175x20 PL	435	250	12.0	95.6	0.18	1.0
4	11027	175x20 PL	325	250	8.9	35.7	0.13	0.0
4	10027	145x20 PL	285	250	6.5	26.0	0.10	0.0
8	6027	72.32x20 PL	164	250	1.4	11.3	0.03	0.0
8	5027	52.55x20 PL	152	250	0.9	7.4	0.02	0.0
32		Hexagon bolt AS1252 20x100 - 8.8	100	8.8	0.3	9.9		
32		Hexagon nut AS 1252 8.8 - M20		8.8	0.1	2.9		
32		Washer AS 1252 8.8 - M20		8.8	0.0	0.6		
					TOTAL	429.5		13.0
4	#internal101	165.1x3.0 CHS	6,436	Coating as specified				
4	#internal101	165.1x3.0 CHS	5,815	C350L0	69.7	279.0	3.02	12.0
8	4027	175x20 PL	435	250	12.0	95.6	0.18	1.0
4	11027	175x20 PL	325	250	8.9	35.7	0.13	0.0
4	10027	145x20 PL	285	250	6.5	26.0	0.10	0.0
8	6027	72.32x20 PL	164	250	1.4	11.3	0.03	0.0
8	5027	52.55x20 PL	152	250	0.9	7.4	0.02	0.0

Section 10: Generating Bill of Materials (BOMs) *(All Steps)*

- Select **Parts list > Beam list** and then save the BOM

Part lists

- Article list
- Beam list**
- Beam take-off list
- Cladding list
- Curved beam list
- Grating list
- Material list
- Material list summary
- Plate list
- Preliminary list
- Saw list
- Saw list pictures

AUTODESK ADVANCE STEEL

Company

Client: Job No:
Project: Date:
User: Location:

Quantity	Mark	Description	Length (mm)	Grade	Part weight (kg)	Total weight (kg)	Remark
2	D1	AISC (3) 1 1/4" RE 11/12 Pm 2509.037	7 5 510"	A25	39.71	61.42	
2	D2	AISC (3) 1 1/4" RE 11/12 Pm 2509.036	9 2 710"	A25	37.71	75.42	
2	D3	AISC (3) 1 1/4" RE 11/12 Pm 29 5 205	8'6" 510"	A25	38.23	76.39	
2	D4	AISC (3) 1 1/4" RE 11/12 Pm 3509.273	10' 11 510"	A25	49.84	97.05	
4	D6	AISC (3) 1 1/4" RE 11/12 Pm 89 495	3 3 140"	A25	11.02	47.29	
1	D7	AISC (2) 3/4" RE 11/12 Pm 509.706	11 6 140"	A25	16.05	67.25	
4	D8	AISC (3) 1 1/4" RE 11/12 Pm 850.495	3'2" 510"	A25	11.74	46.95	
TOTAL QUANTITY			20				
TOTAL WEIGHT					402.09	kg	

List with special parts (articles), sorted by part number

Part list

- Anchor list
- Article list
- Beam list**
- Beam take-off list
- Bolt exploded list
- Bolt list
- Bolt on shop list
- Bolt on site list
- Cladding list
- Concrete list summary
- Curved beam list
- Grating list

AUTODESK ADVANCE STEEL

Company

Date: 11-Feb-2014
Project:
Author:

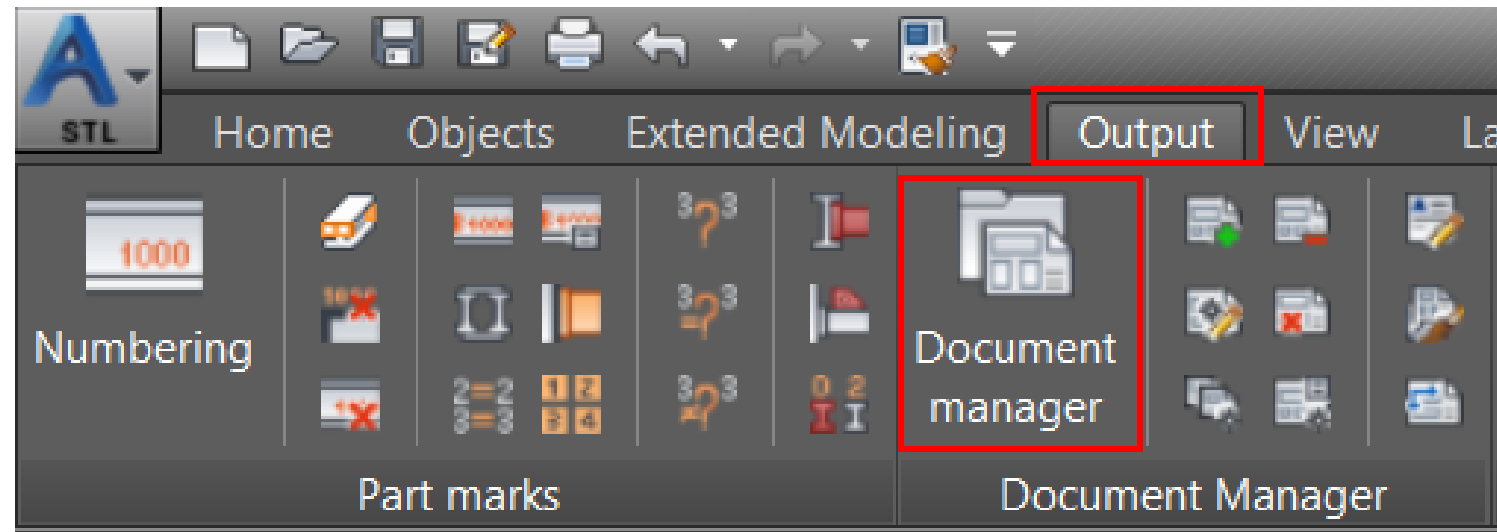
BEAM LIST - STRAIGHT

Mark	Size	Grade	Length (mm)	Quantity	Weight per meter (kg/m)	Weight each (kg)	Total Weight (kg)	Surface Area (m²)	Total Surface (m²)	Description
A1	H-NOEROD 3.333.96 T	S235	1250	512	5878.5	7948.2	2292829.0	2079310.	227831814.	[?][None][None]
A3	C120X2.0	S235	853	40	4700.0	4068.1	184418.6	0.000	0.000	
A4	8x180	S235	8075	26	15000.0	172500.0	3886854.4	50301724	141861006	
A5	CHANTELLY 540.900 B	S235	920	20	1570.0	1419.0	42077.0	61455.778	1782217.904	[S][Name][Name]
A6	IN6190	S235	9075	20	15800.0	80185.0	2325384.4	3181724.	01890008.901	
A7	H-NOEROD 3.333.96 T	S235	101	26	5878.5	691.2	15370.7	239270.416	6220510.616	[?][None][None]
A8	H-NOEROD 3.333.96 T	S235	1250	24	5878.5	7040.2	175338.1	2873315	21371870.858	[S][Name][Name]
A9	H-NOEROD 3.333.96 T	S235	858	13	5878.5	4042.3	82540.8	1836025.	21287008.908	[S][Name][Name]
A10	H-NOEROD 3.333.96 T	S235	650	13	5878.5	3609.6	61940.8	1617153.	21022050.007	[?][None][None]
A11	H-NOEROD 3.333.96 T	S235	118	13	5878.5	691.6	8930.0	273826.315	3038602.005	[?][None][None]
A12	H-NOEROD 3.333.96 T	S235	115	13	5878.5	675.4	8713.6	273340.401	3353528.863	[S][Name][Name]

List with straight beams, sorted by part number

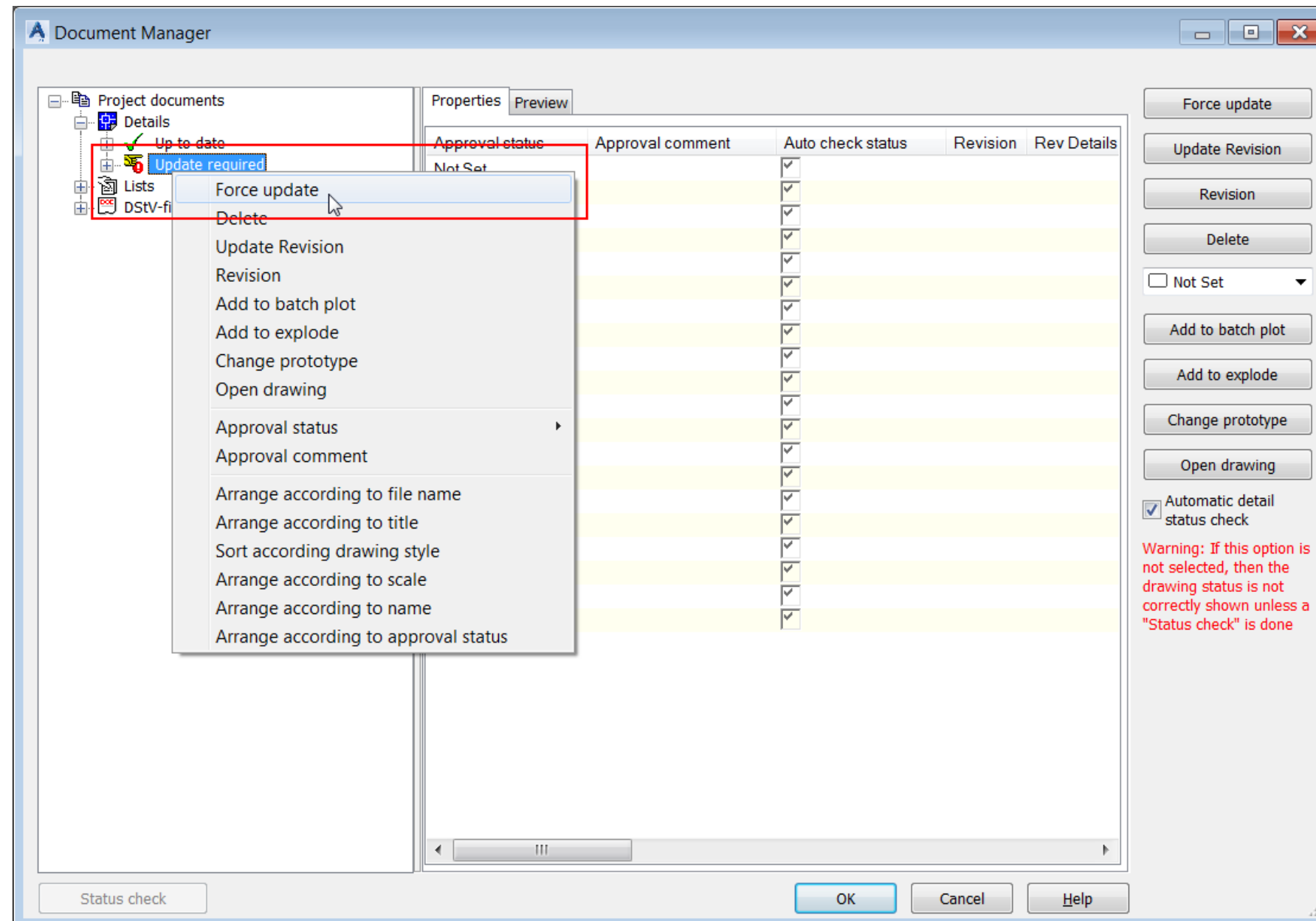
Section 11: Reviewing the Generated Documentation *(Do with me)*

- Invoke the Document manager tool



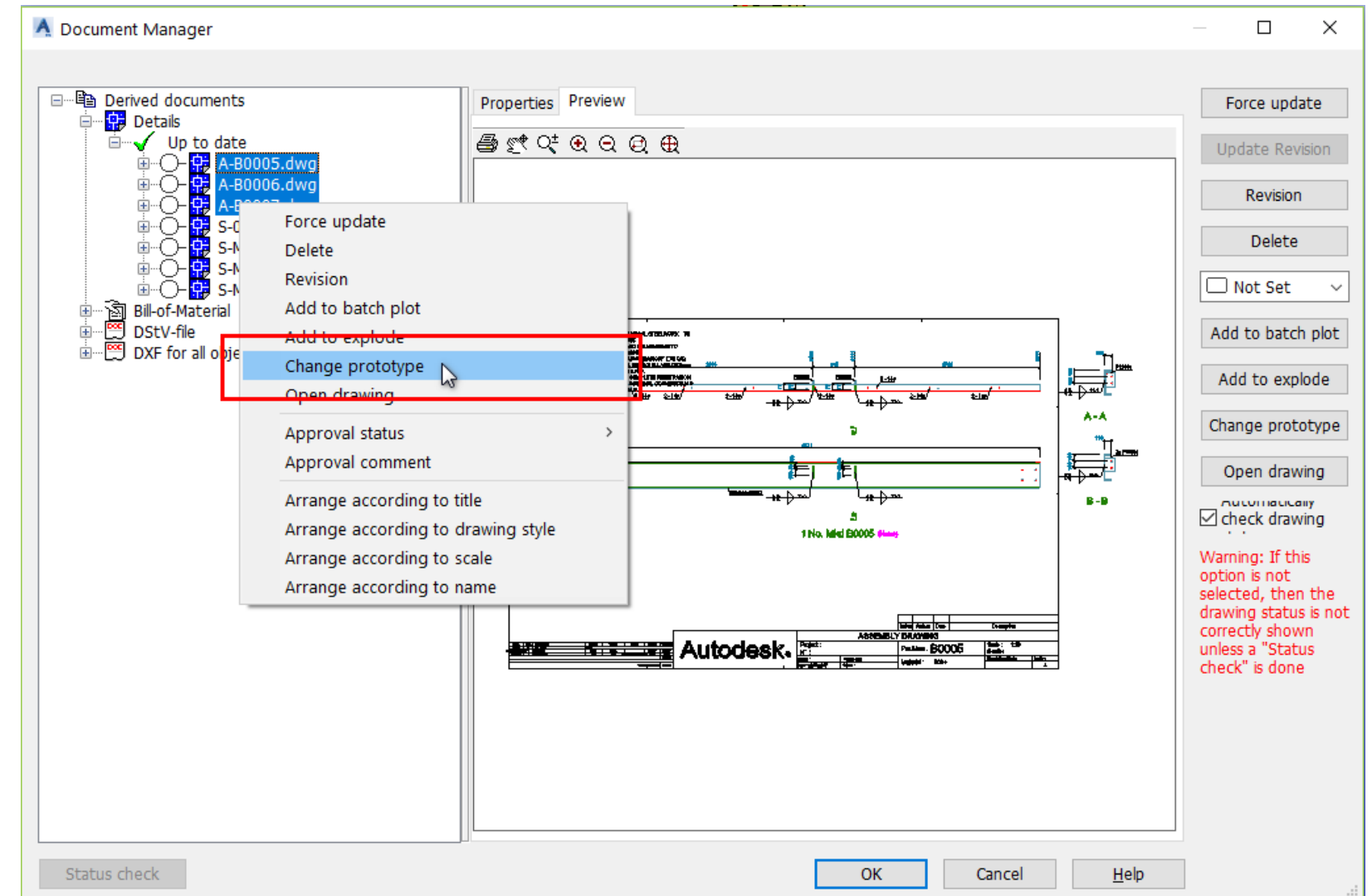
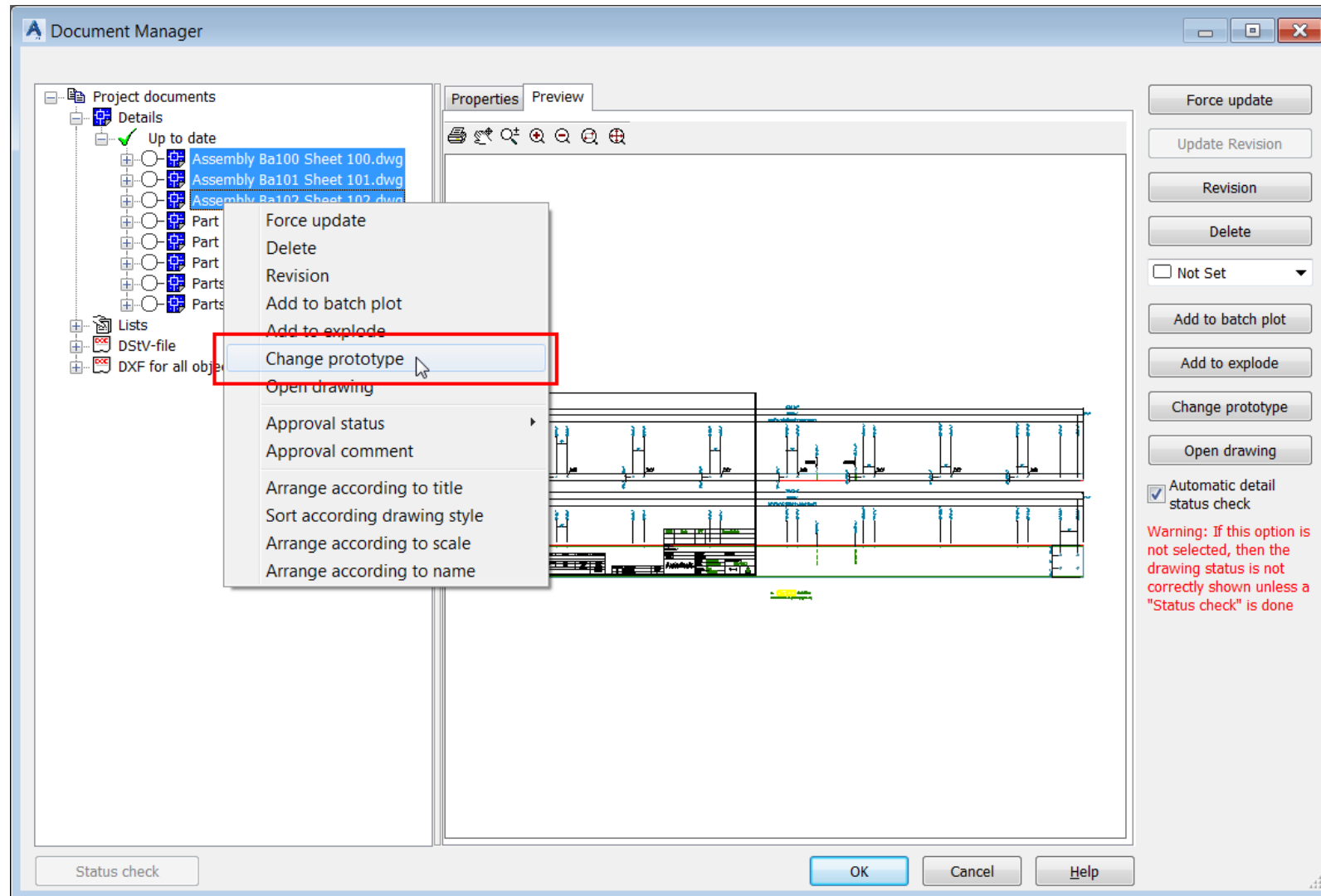
Section 11: Reviewing the Generated Documentation (*Do with me*)

- Right-click on the **Update required** category and select **Force update** from the shortcut menu, as shown below:



Section 11: Reviewing the Generated Documentation

- Change the prototype of the assembly drawings to **ASDETPROTO-Assembly-ANSI-E.dwg** or **ASDETPROTO-ASSEMBLY-A1.dwg**



Section 11: Reviewing the Generated Documentation *(Step 4 to the end)*

- Review other drawings, BOMs, NC files, and DXF files

