

Up and Running with Autodesk Advance Steel

Deepak Maini

National Technical Manager – Named Accounts

Cadgroup Australia

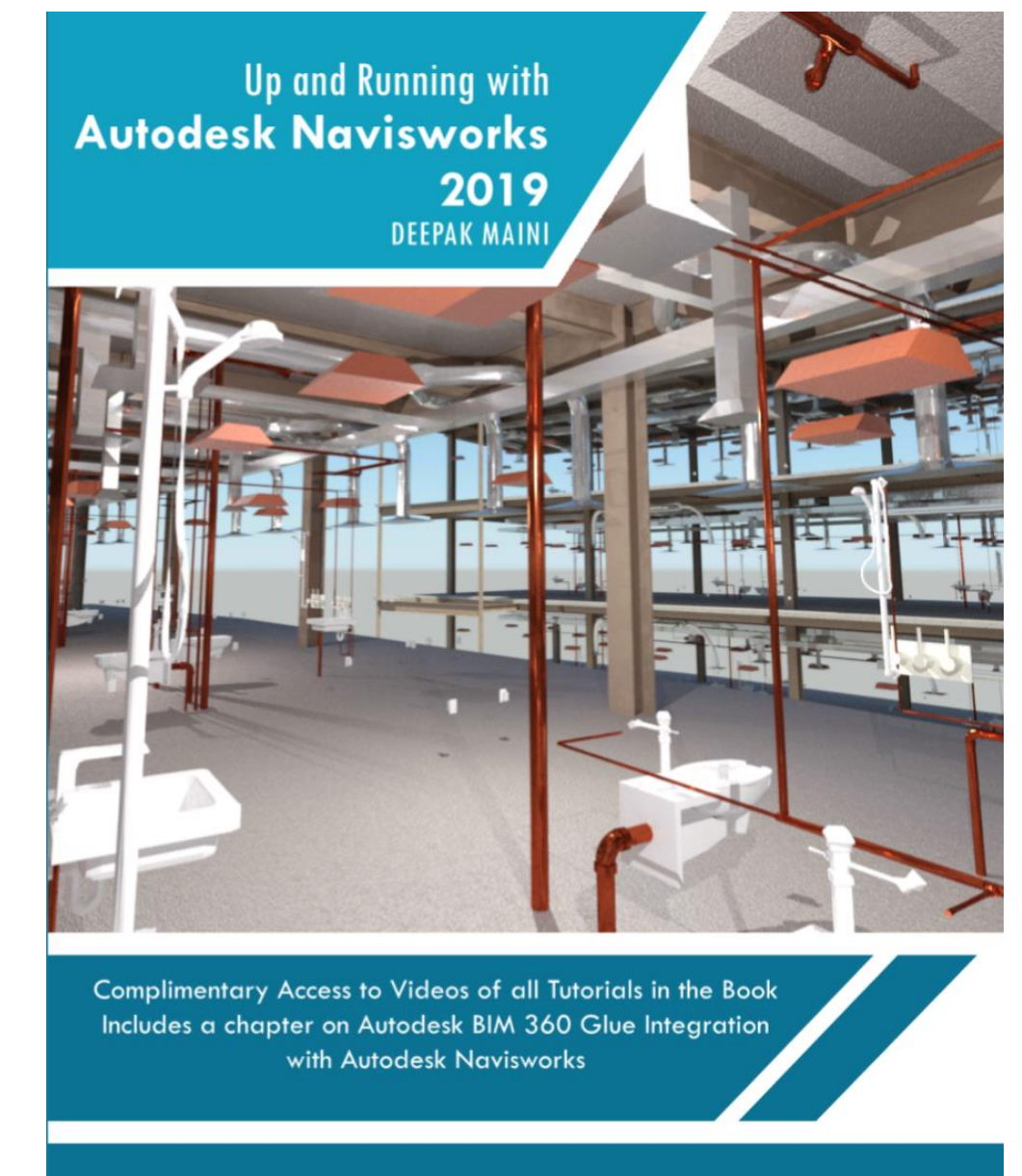
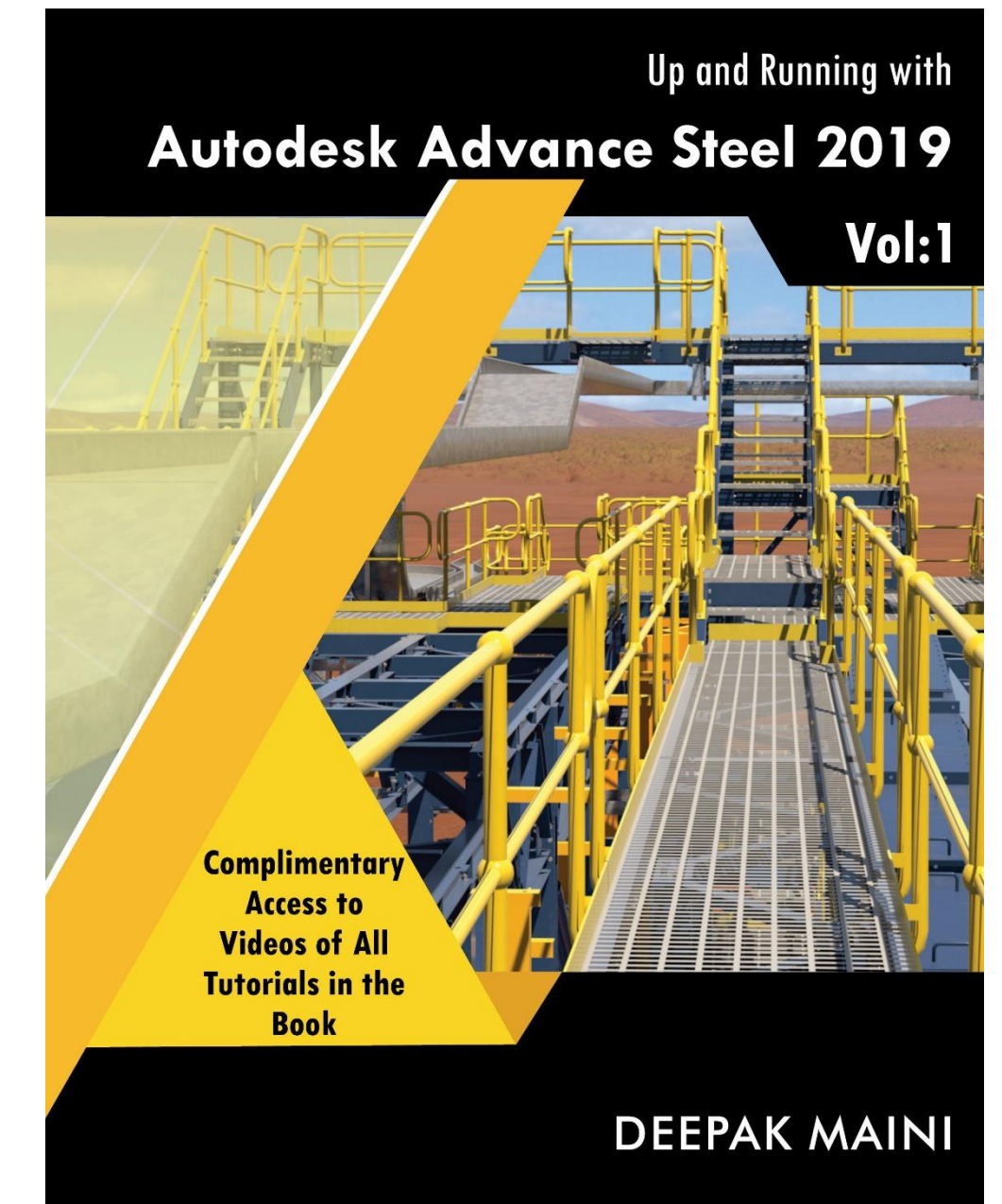


Welcome to AU2018



My Introduction

- Qualified Mechanical Engineer
- More than 19 Years of experience in the industry
- Autodesk Expert Elite
- Best Speaker at Autodesk University 2017 and Top Rated Speaker for last 5 years in a row
- Among the Top Rated speakers at BILT conferences in ANZ and Asia
- Author of the Up and Running with Autodesk Advance Steel and Up and Running with Autodesk Navisworks series of books
- Guest lecturer at the University of Technology Sydney (UTS) and University of New South Wales (UNSW)



Lab Buddies

Aaron Coats

National BIM/CAD Manager, Bates Smart Australia

Ian Coats

Technical Specialist: Structural BIM, Autodesk Inc.

Catalin Lang

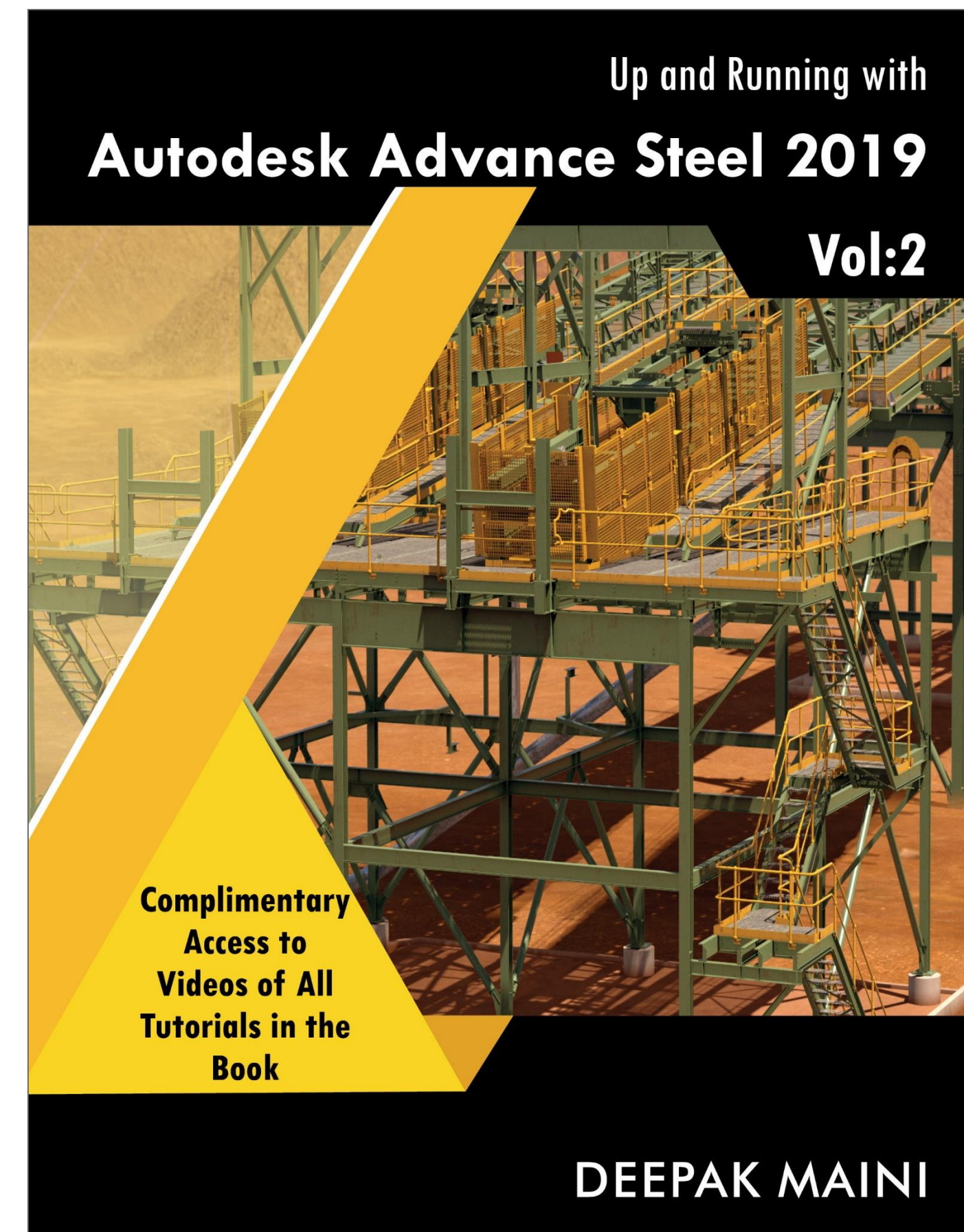
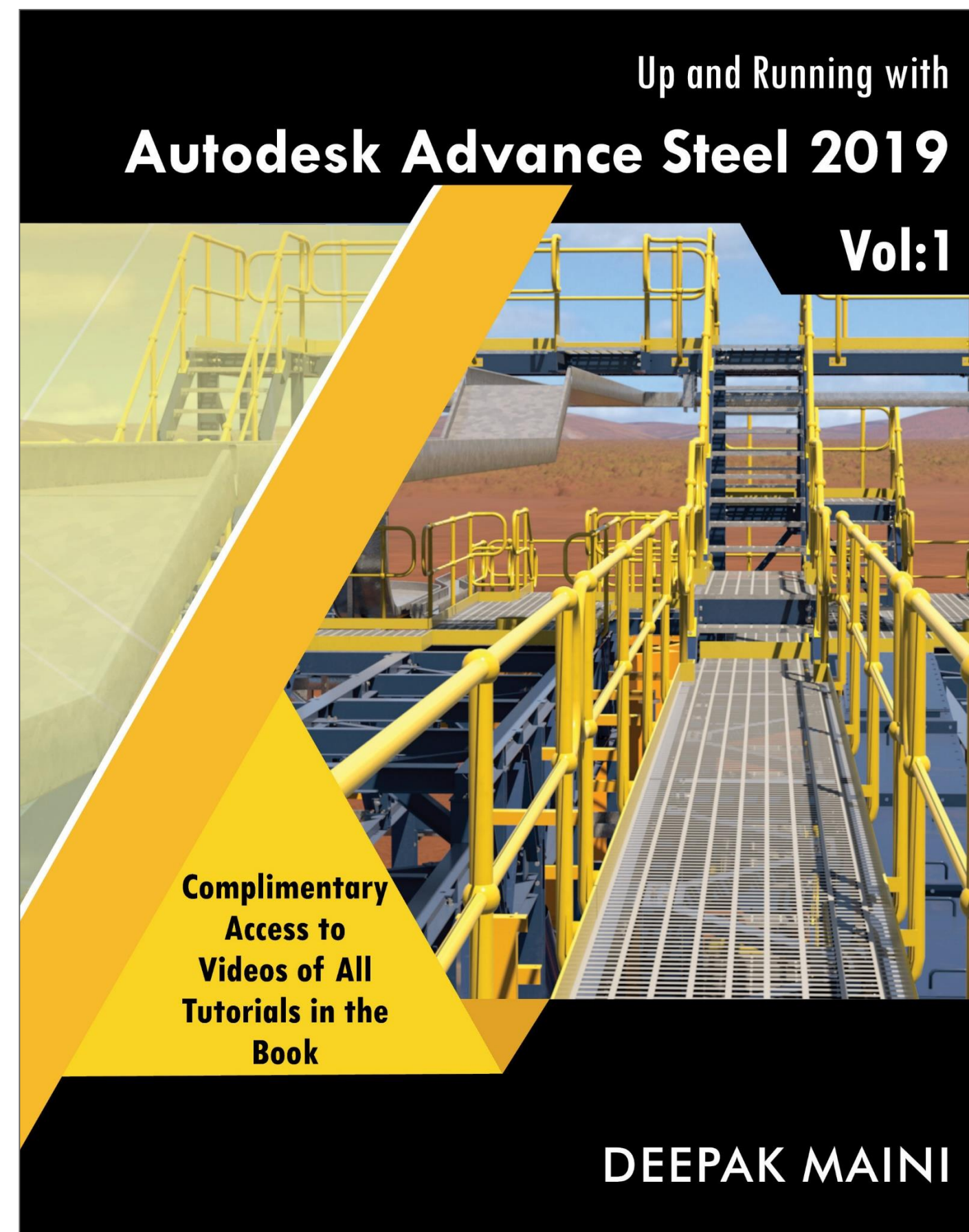
Product Owner, Autodesk, Bucharest, Romania

Swain Johnson

Territory Account Sales Executive, Autodesk Australia

My Aim: Have Lots of Fun as we Learn

(Lots of goodies to give away)



Thanks to Our Sponsors



Acknowledgements

- Patricia Lundberg and Sidney Shaola from the AU Speaker Management Team
- Janice Miller-Kellerman and Adam Sopko from the Content Management Team
- Joël St-Pierre and Autodesk Technical Crew

Rules of Engagement

- 11 Sections to be Completed in this lab + 2 Extra Sections
- Only have 90 Minutes (~75) 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...

Before we start with Advance Steel

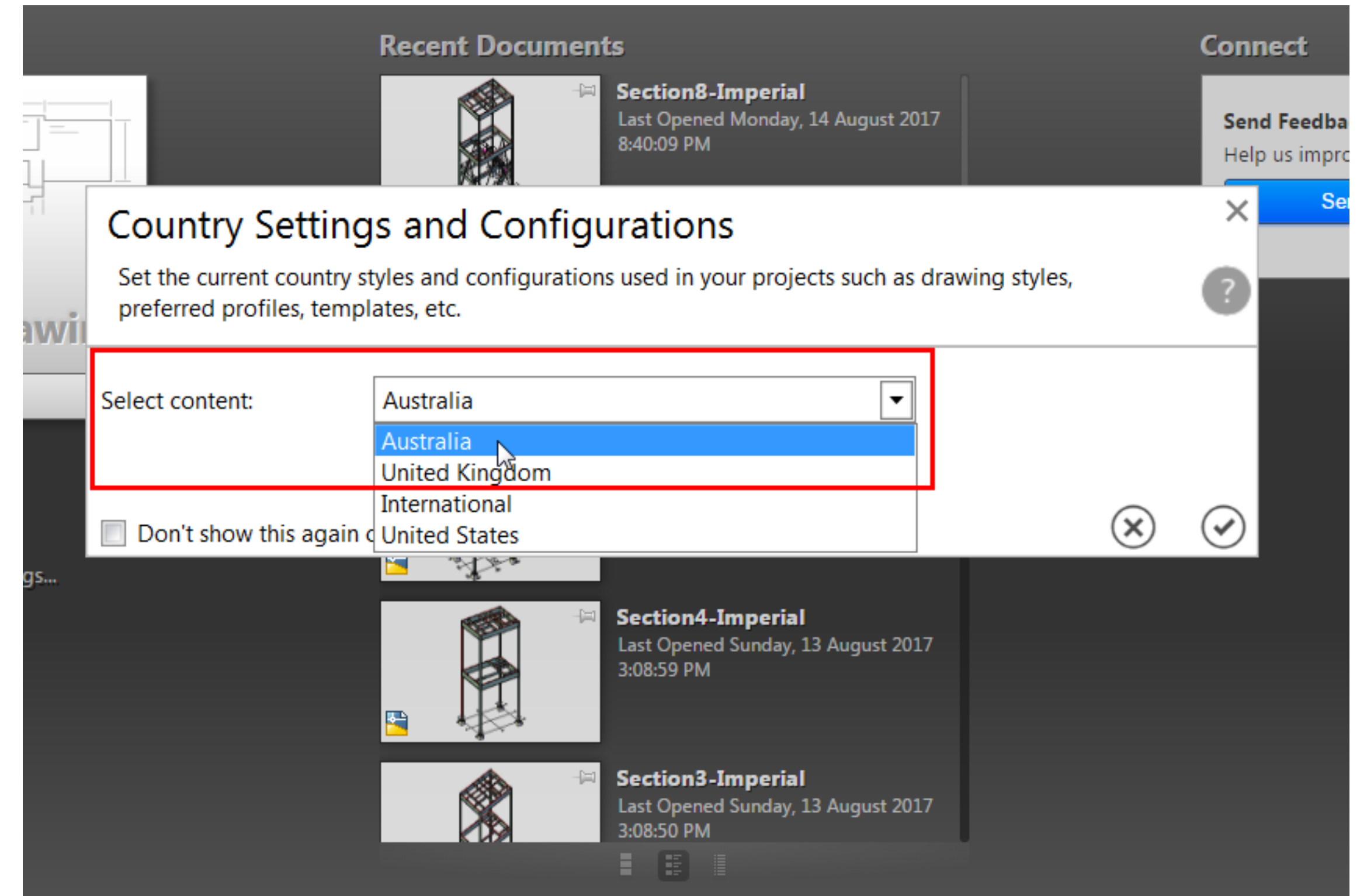
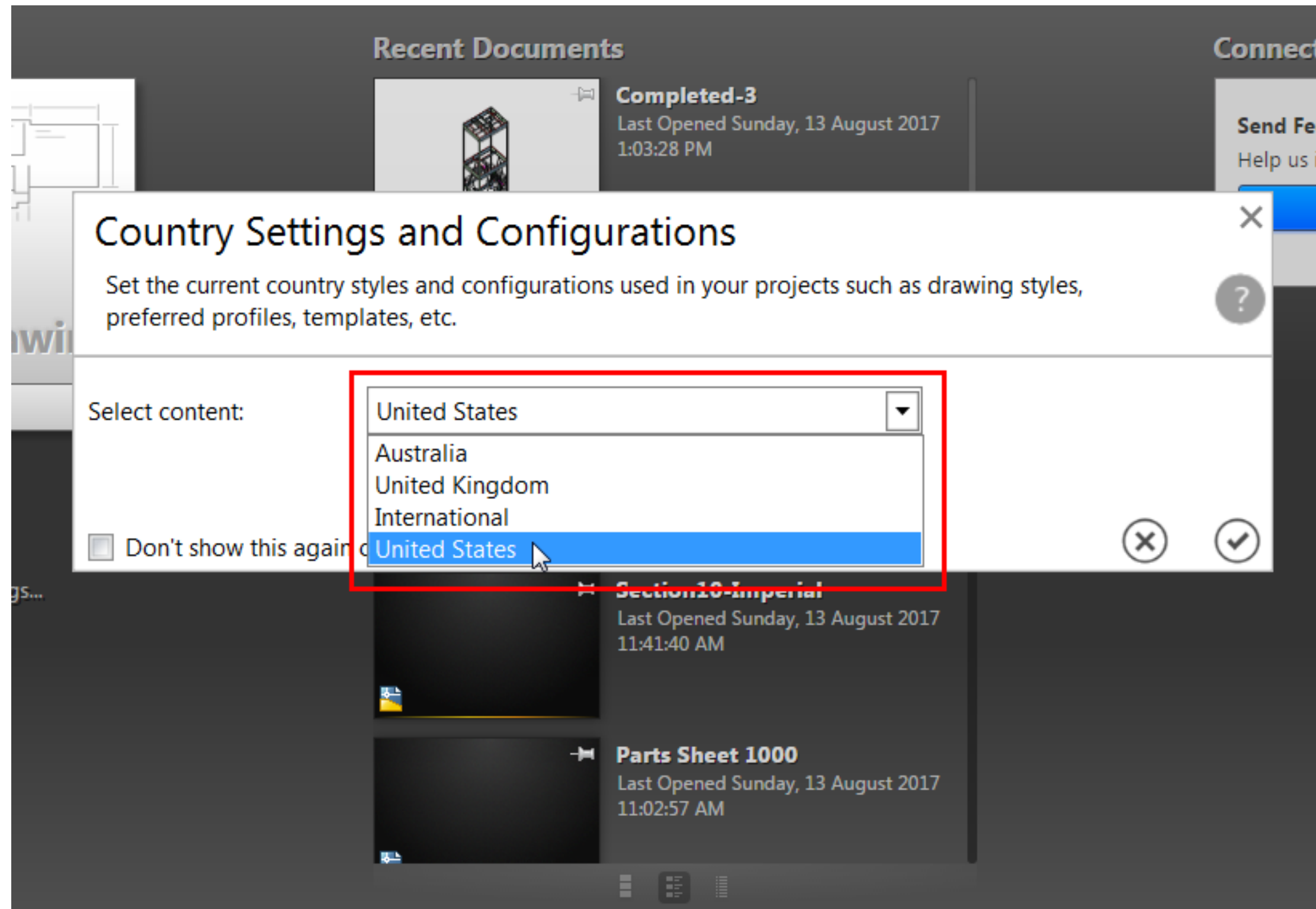
Very Very Very Important Rule to Follow

PLEASE PLEASE PLEASE

READ PROMPT SEQUENCES

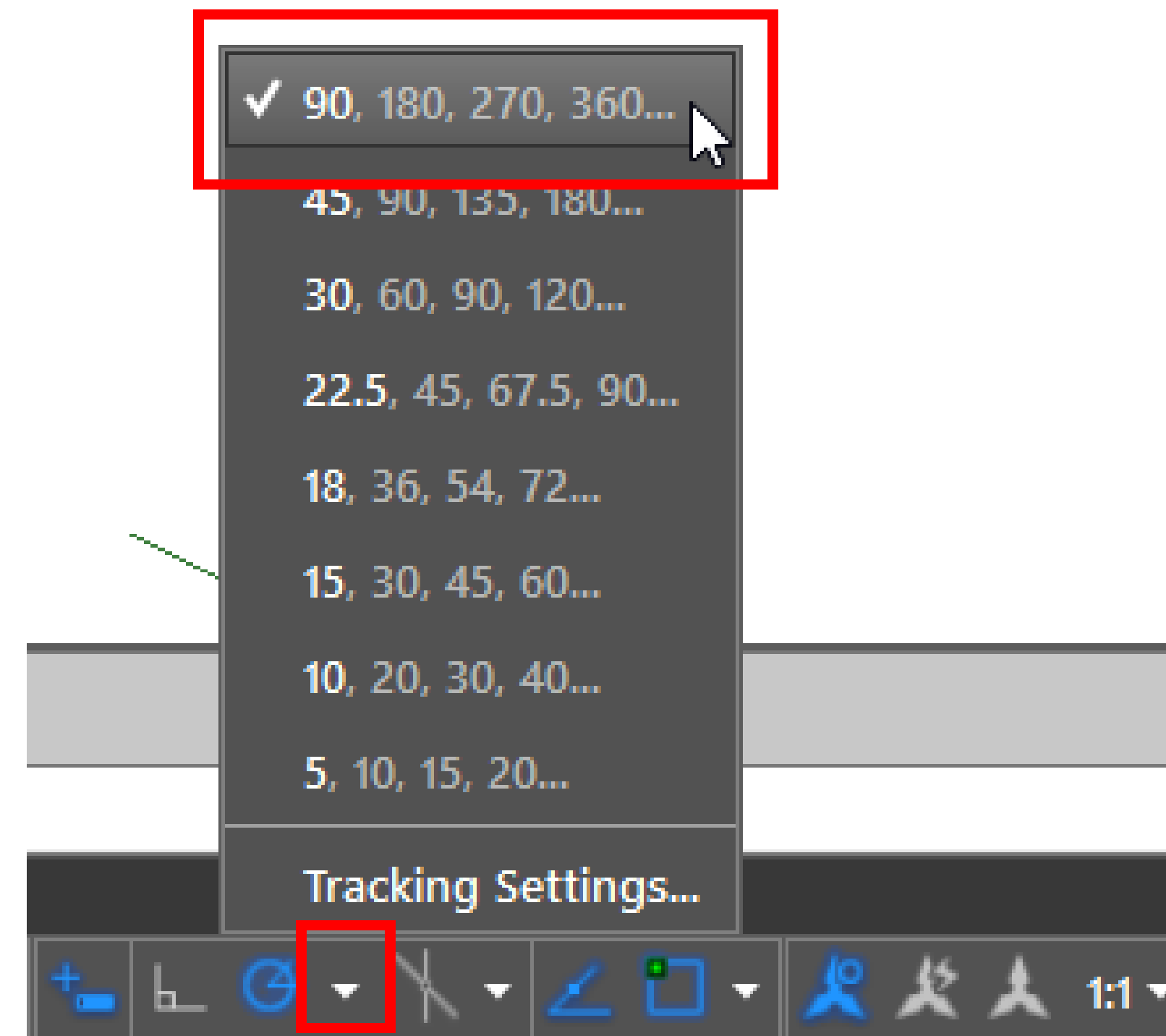
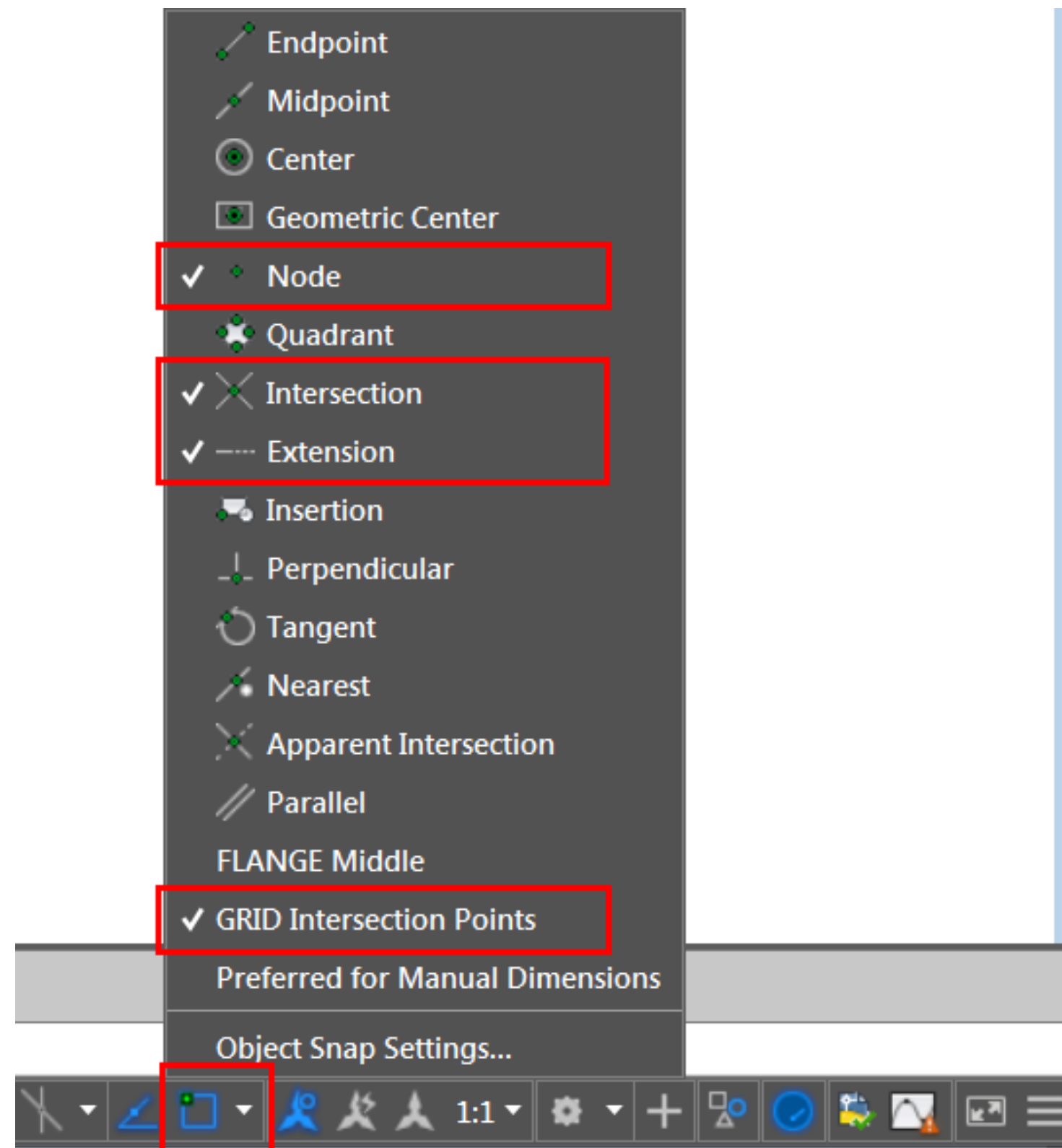
Section 1: Starting Advance Steel

- Selecting the Country Settings to start Advance Steel



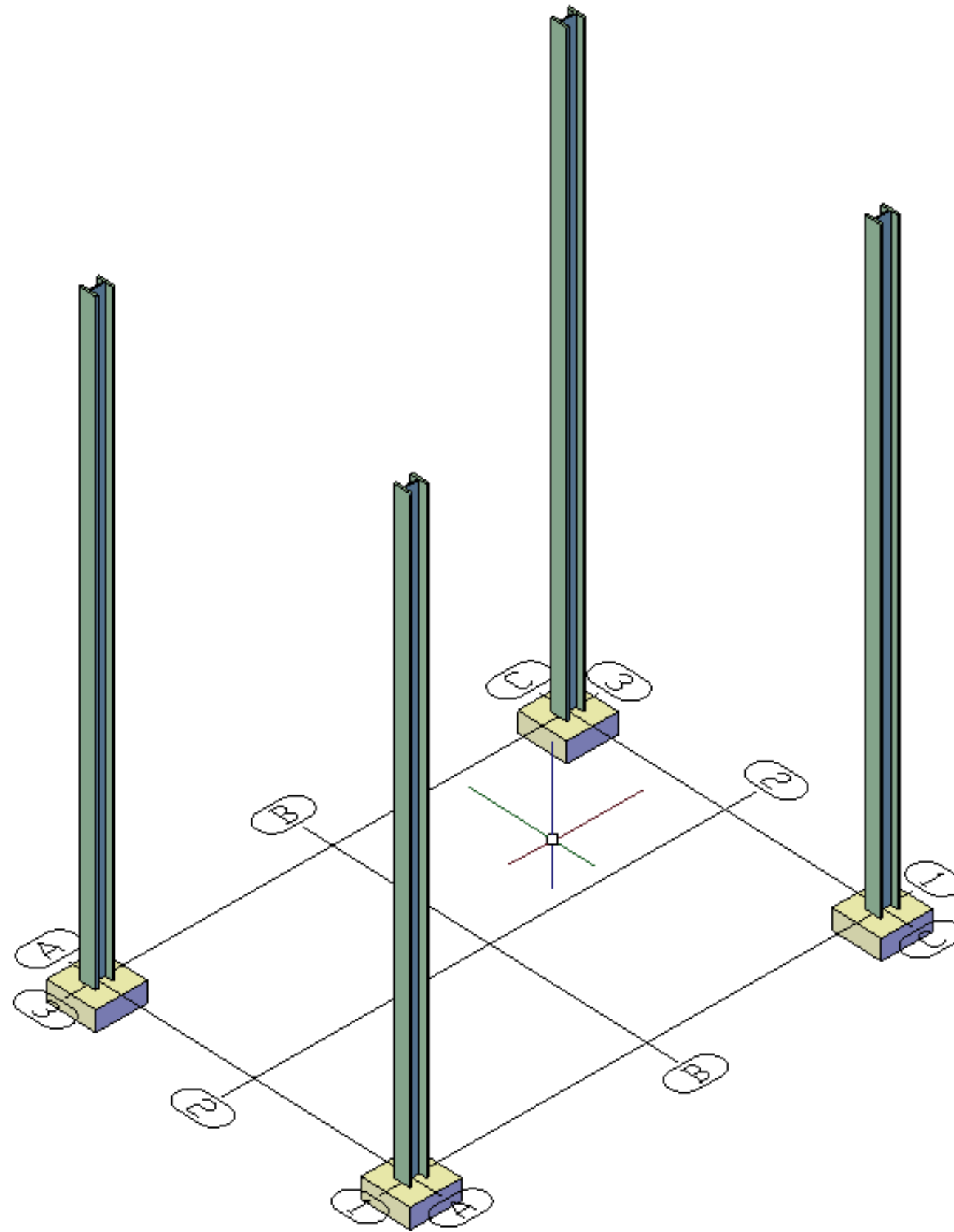
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Do this with me)*

- Open the Section2-Imperial.dwg or Section2-Metric.dwg file
- Selecting the Object Snap Types and configure the Polar Tracking settings



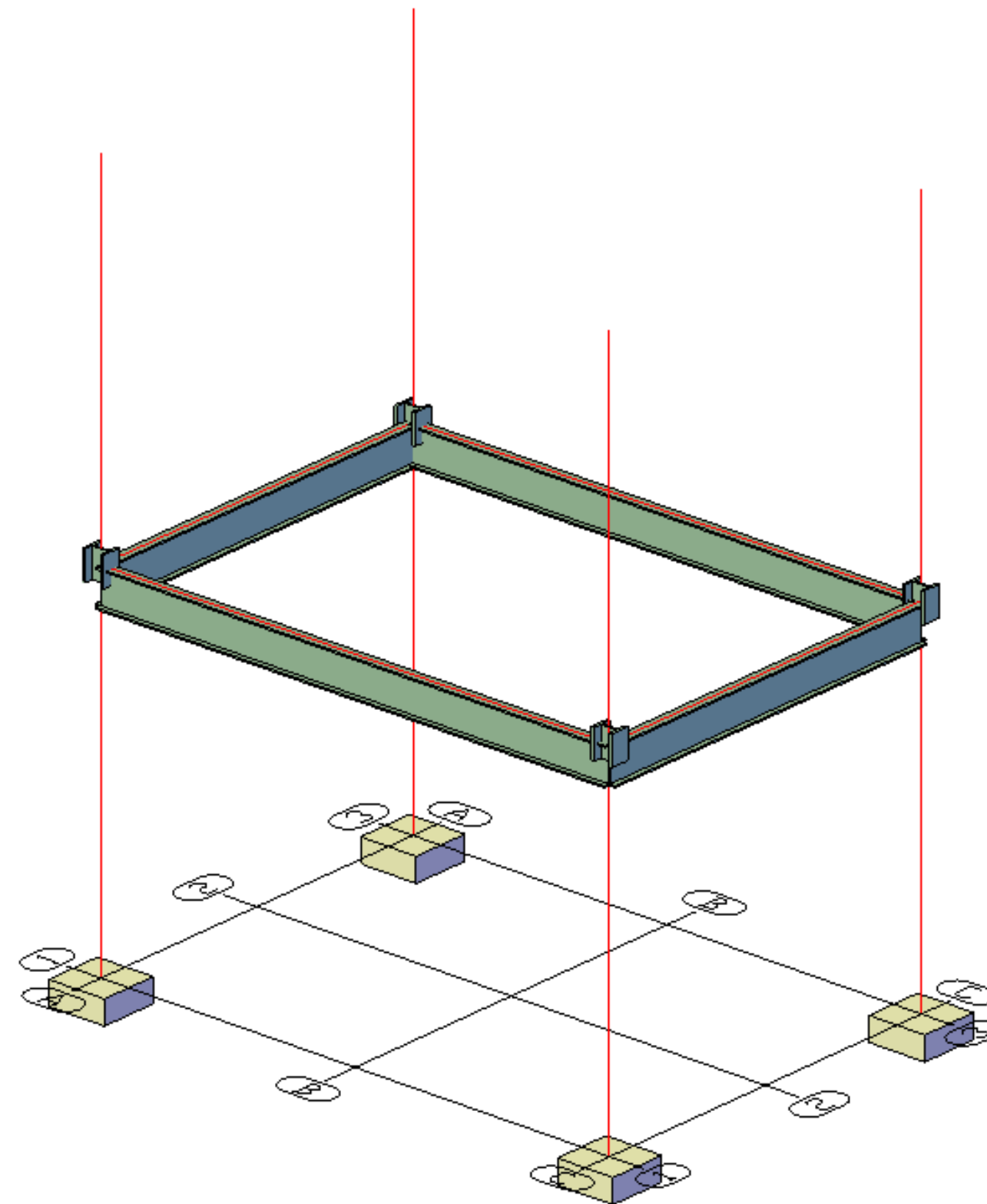
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 5-14 and Stop)*

- Insert a Rolled I Section at A1 Grid Intersection Point with the Height of 40' or 12m. 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



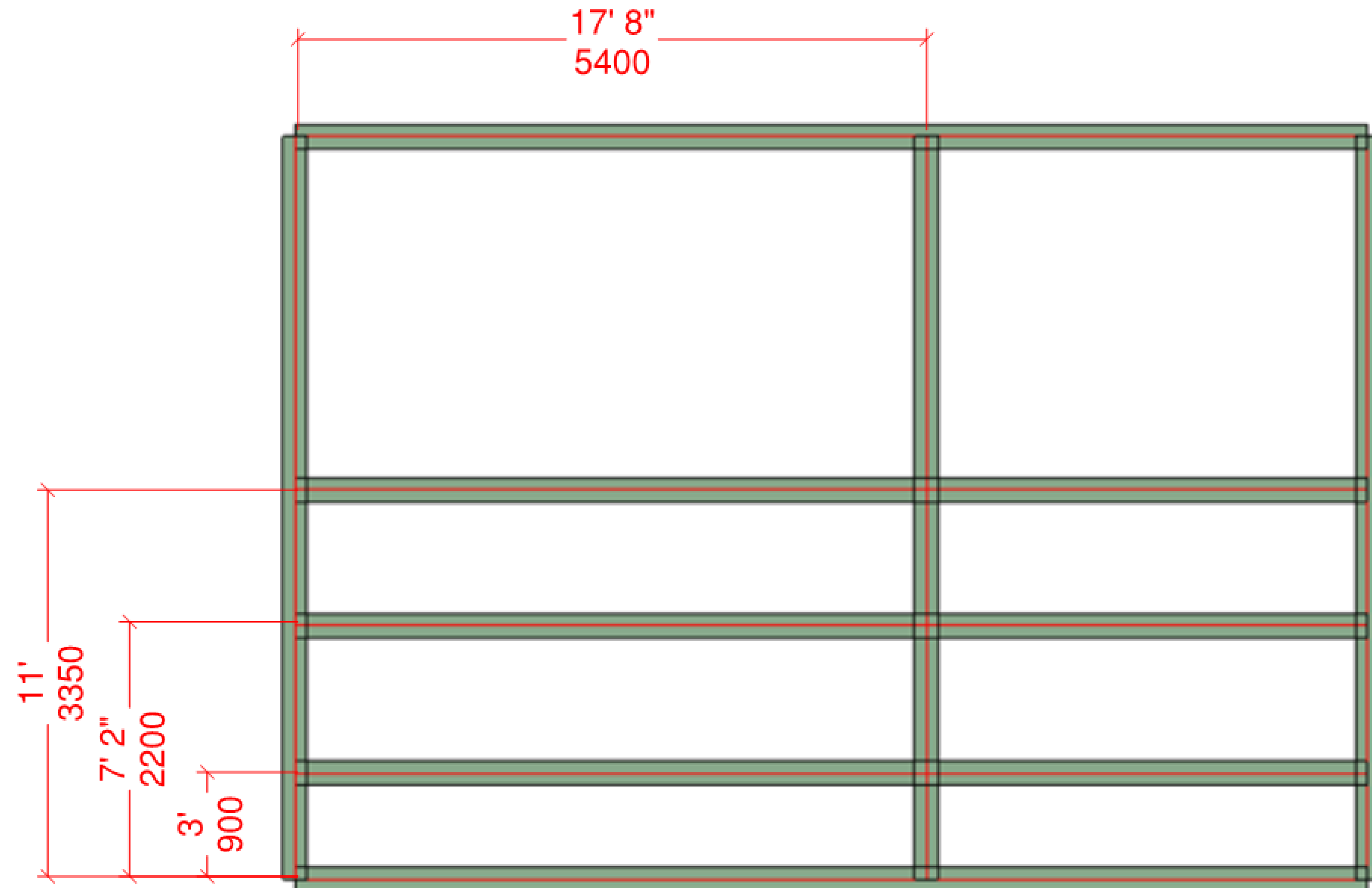
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 15-30 Only)*

- Change the display of columns to Symbol
- Insert Perimeter Beams at Midpoints. Section Type is AISC 14.1 S > S24X121 or Australian Universal Beam > 530 UB 82.0



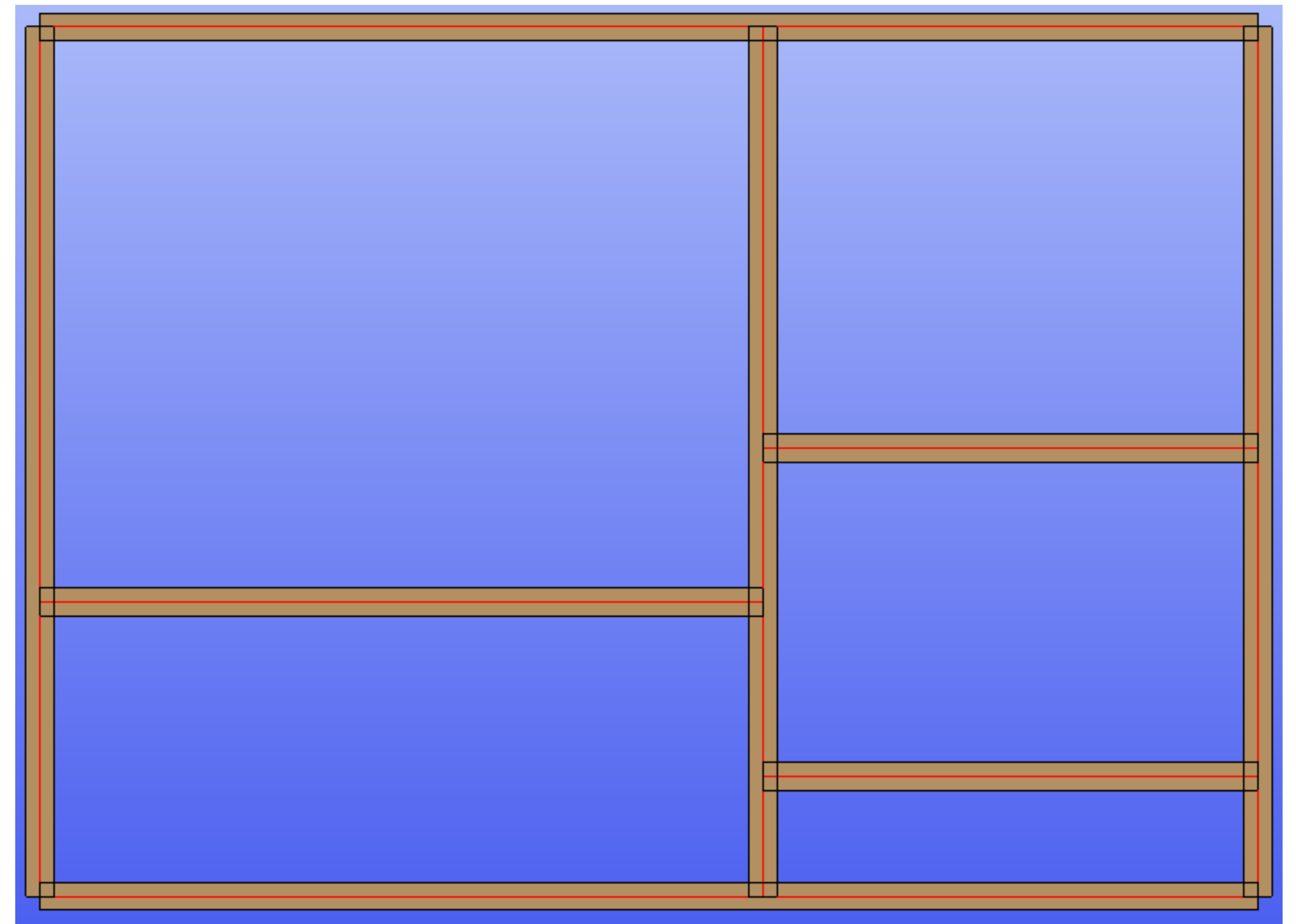
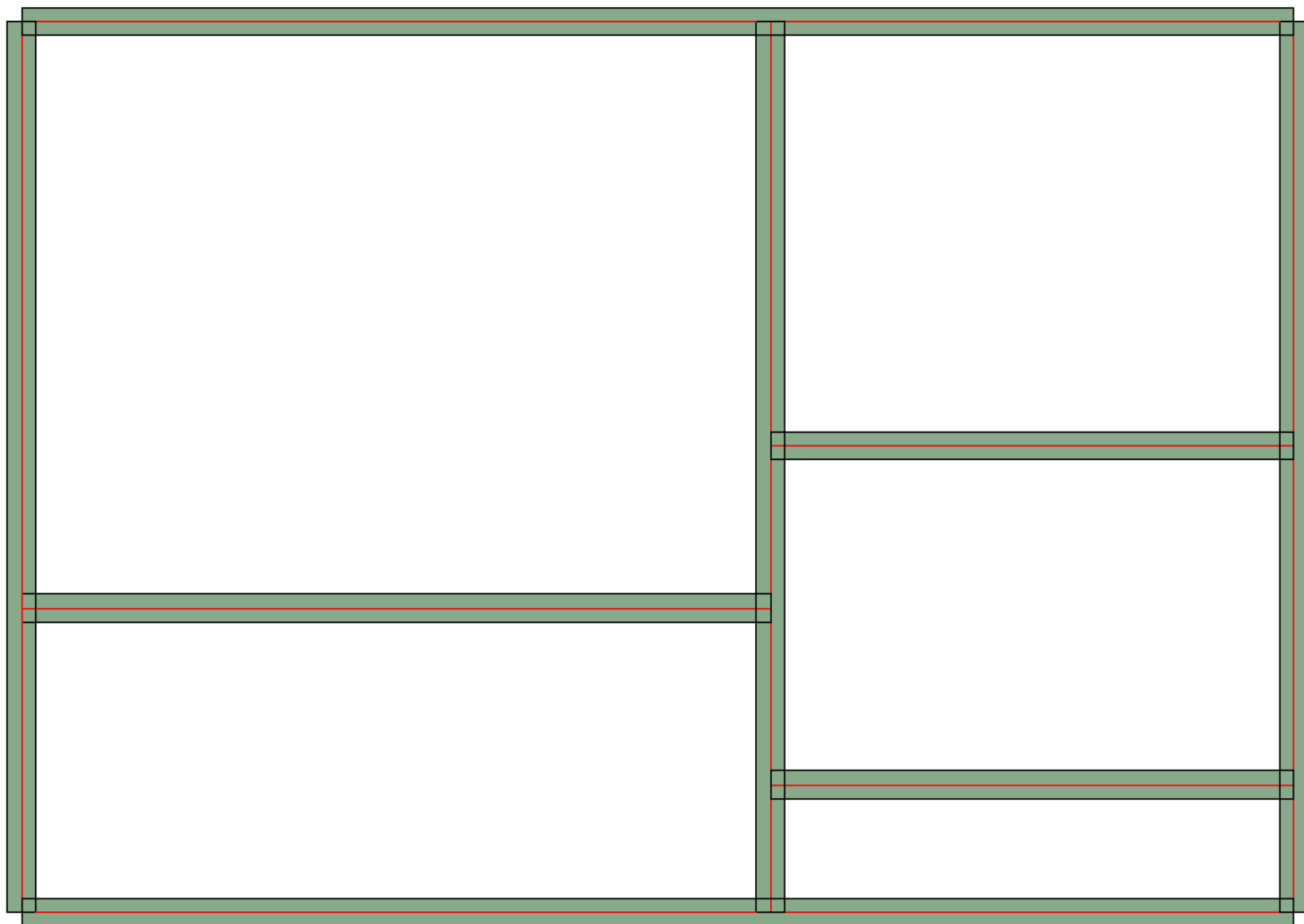
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 31-35 Only)*

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



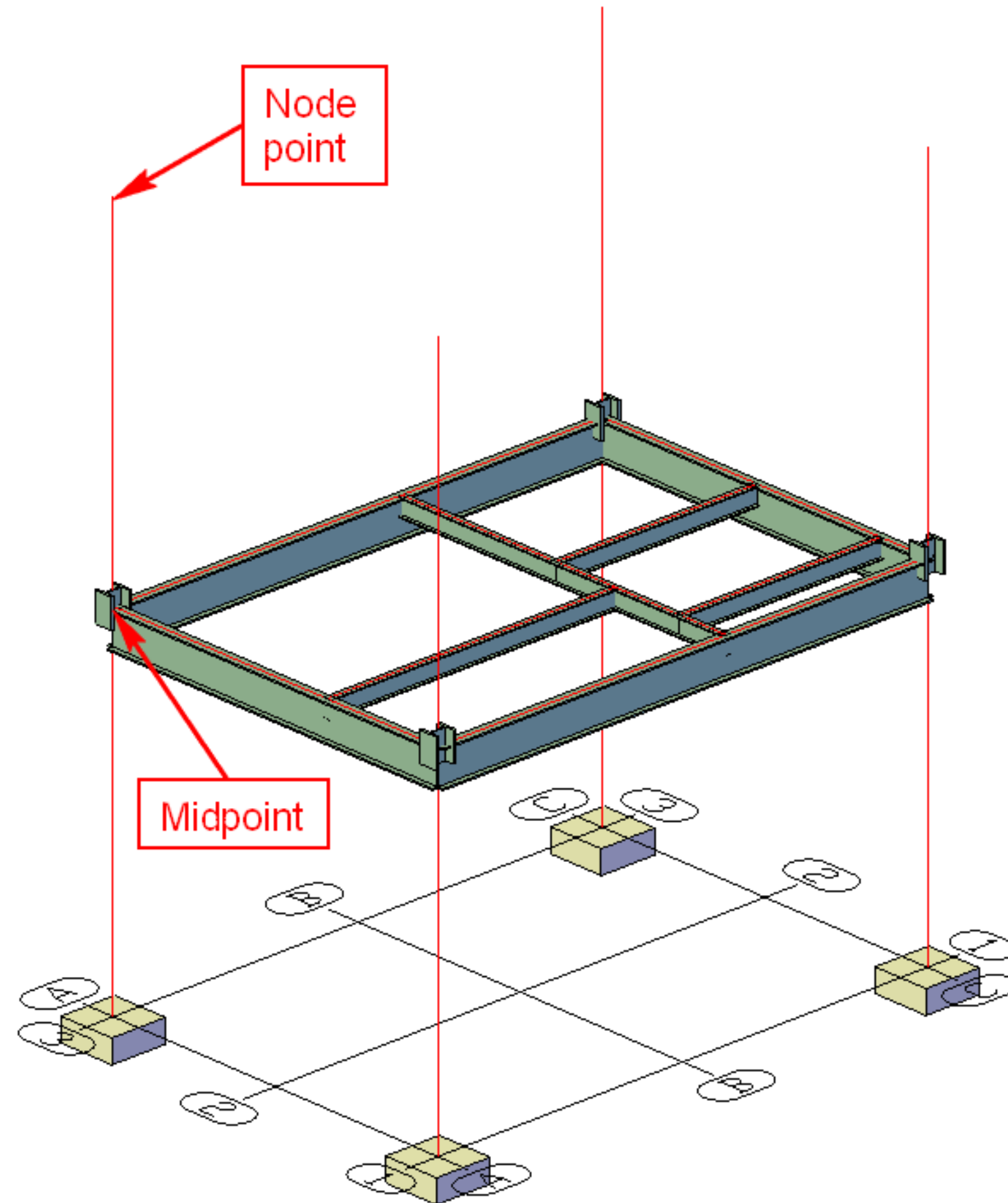
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Steps 36-43 Only)*

- Split Beams
- Change the sizes to AISC 14.1 S > S12X50 or Australian Universal Beam > 250 UB 31.4



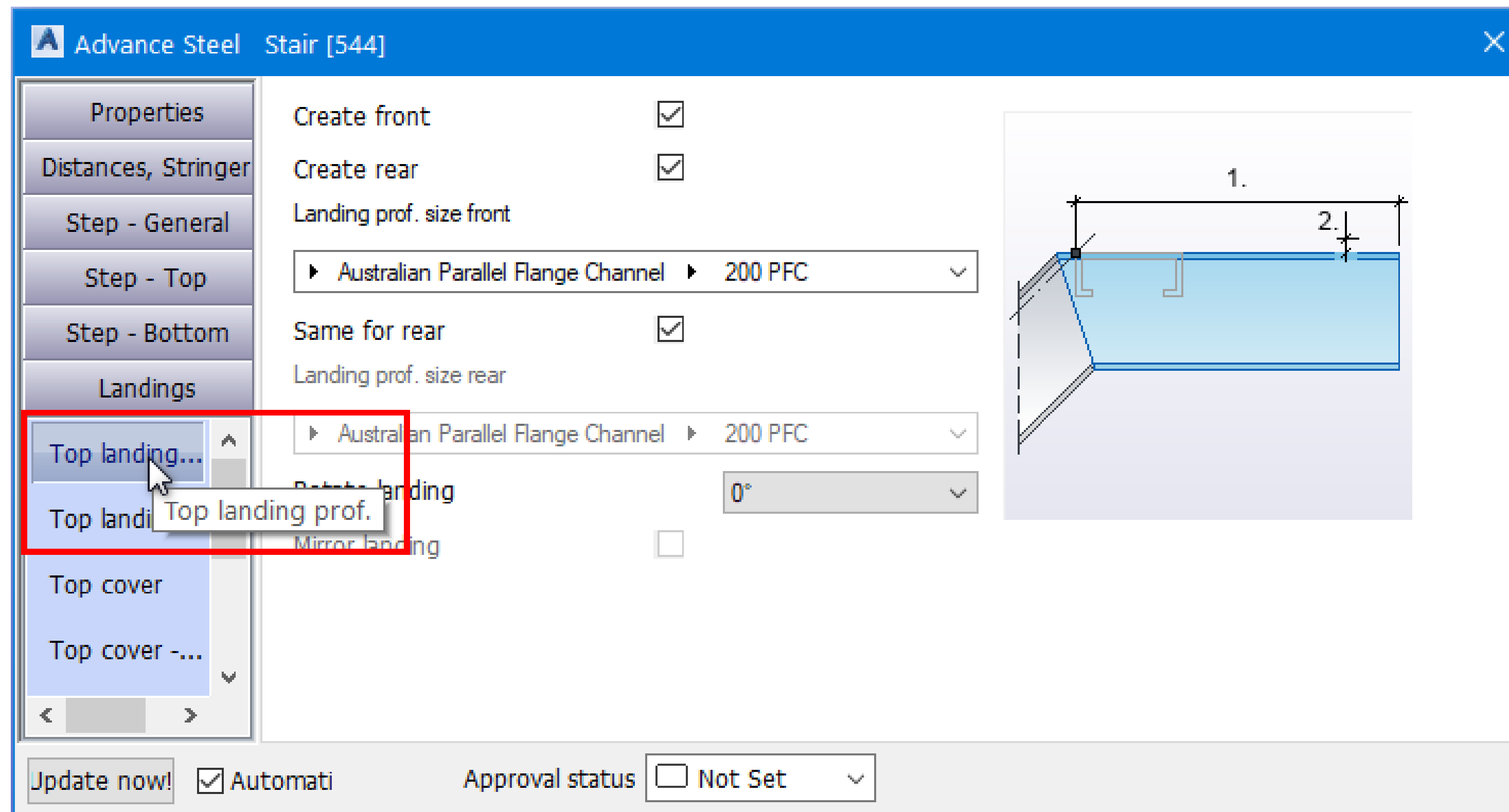
Section 2: Inserting and Copying Columns, Peripheral Beams and Filter Beams *(Remaining Steps)*

- Unisolate All Objects
- Copy all Beams



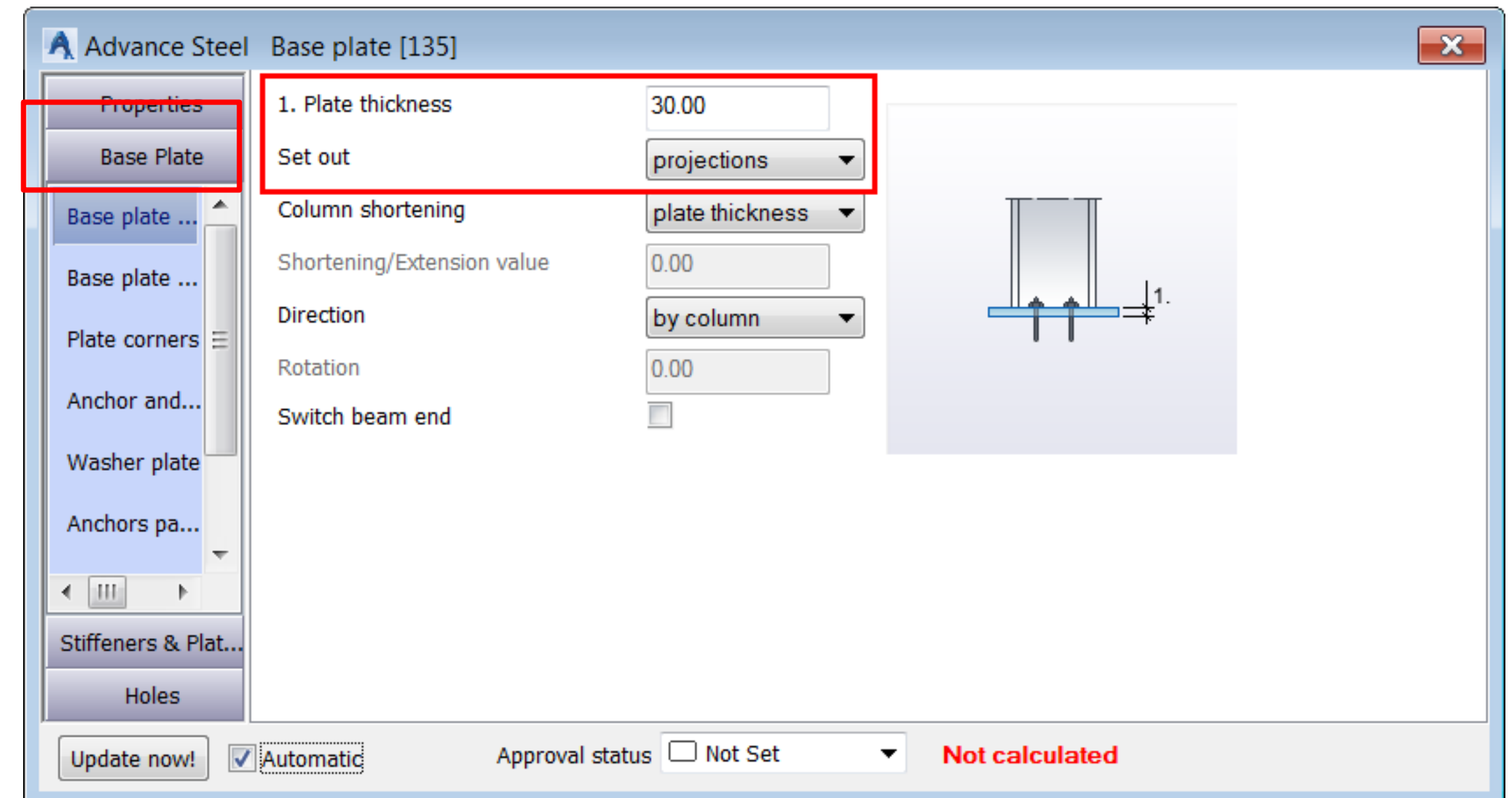
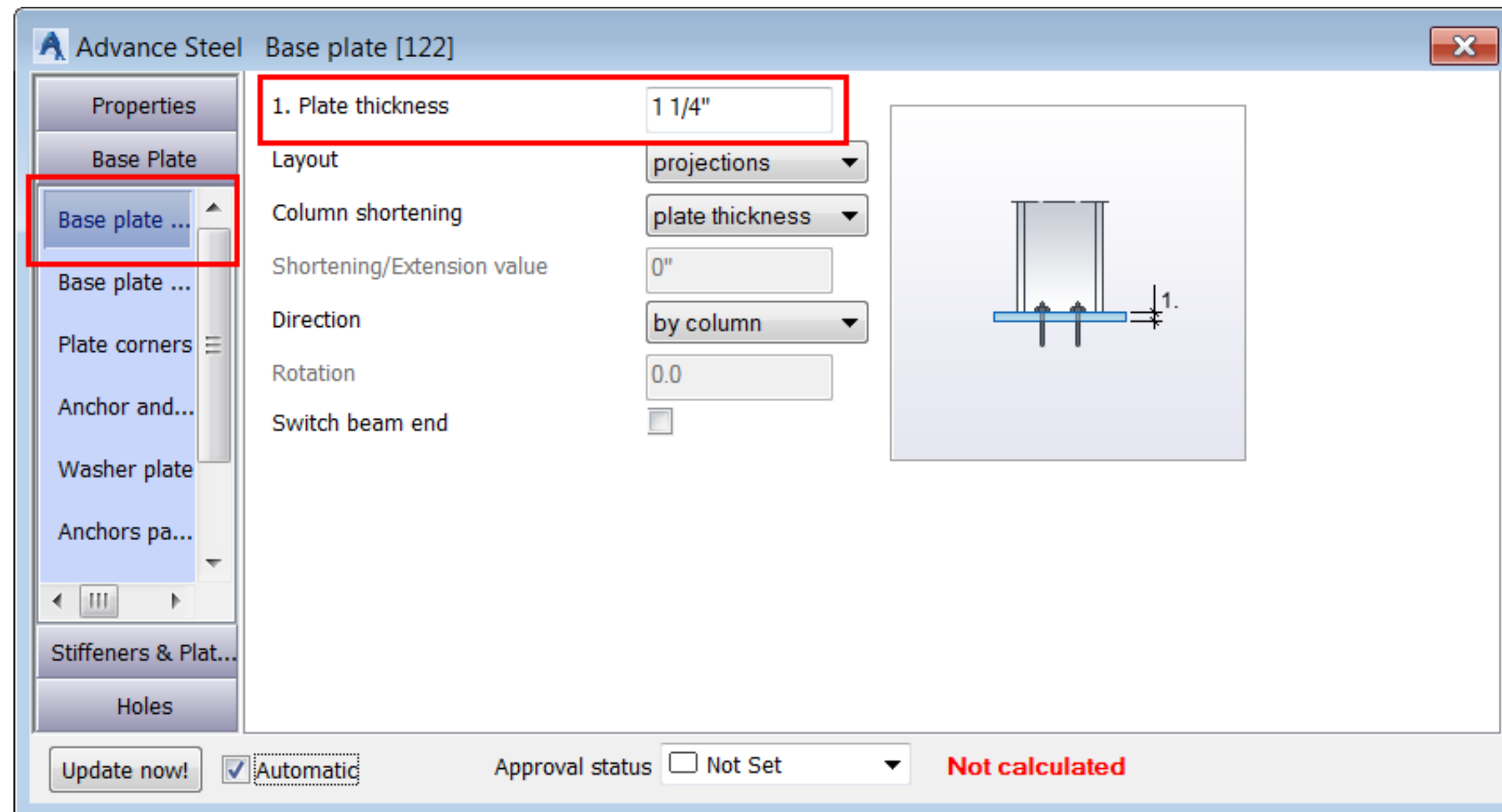
Section 3: Inserting and Copying the Base Plate Joints (*Important thing about the Dialog box Tab Names*)

- 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

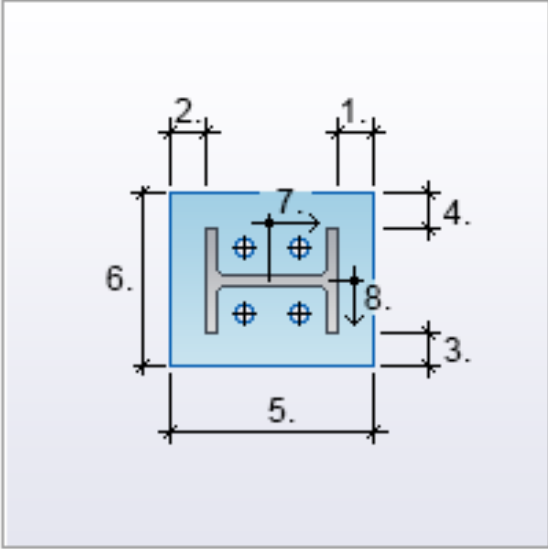
Anchors pa...

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

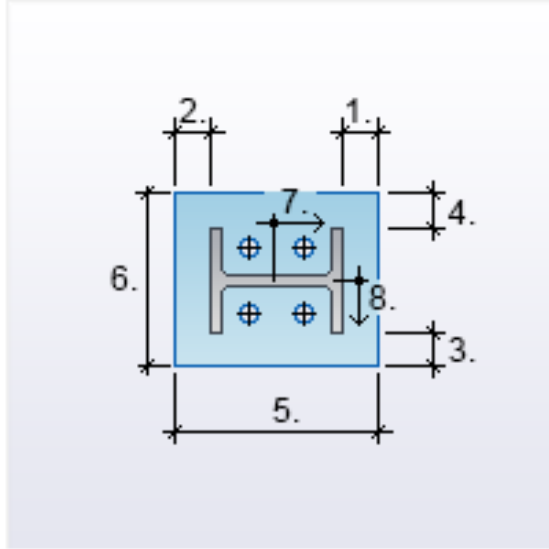
Anchors pa...

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 ☒

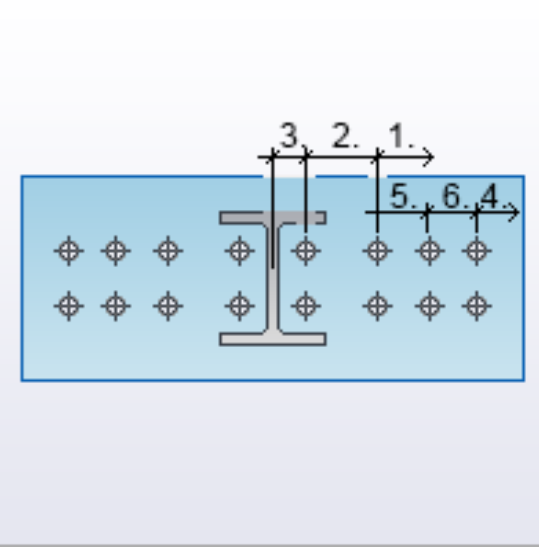
Group 2 none

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 ☒

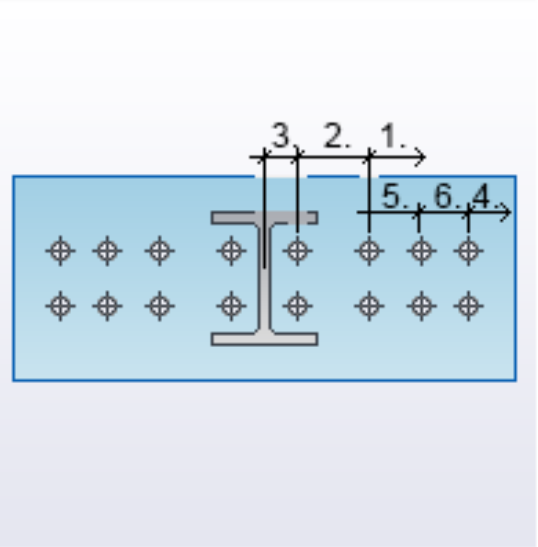
Group 2 none

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](#):

Advance Steel Base plate [122]

Properties

Base Plate

Plate corners

Anchor and...

Washer plate

Anchors pa...

Anchors pa...

Welds

Stiffeners & Plat...

Holes

1. Number 4

2. Intermediate distance 6"

3. Offset from center 0"

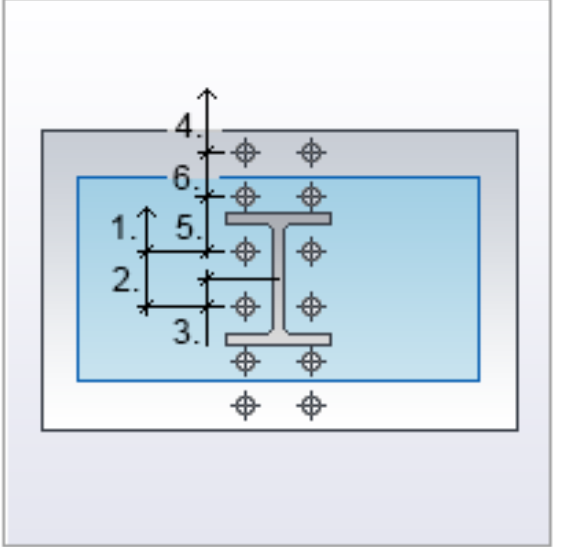
Group 2 none

4. Number group 2 0

5. Distance 4"

6. Intermediate distance 3"

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



Advance Steel Base plate [135]

Properties

Base Plate

Plate corners

Anchor and...

Washer plate

Anchors pa...

Anchors pa...

Welds

Stiffeners & Plat...

Holes

1. Number 4

2. Intermediate distance 150.00

3. Offset from centre 0.00

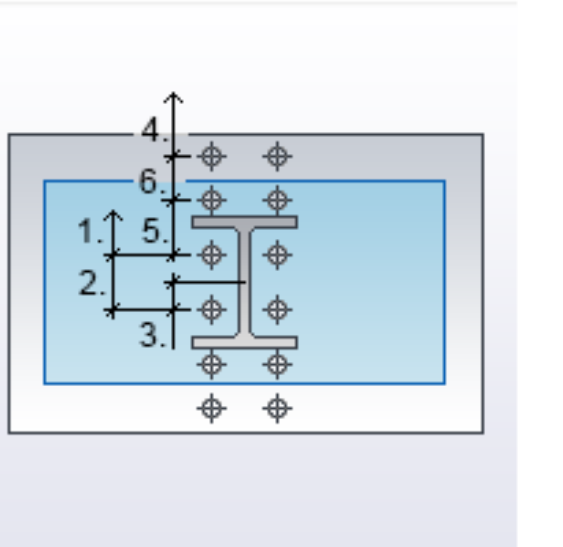
Group 2 none

4. Number group 2 0

5. Distance 80.00

6. Intermediate distance 75.00

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



Section 3: Inserting and Copying the Base Plate Joints

- Stiffeners & Plates > Web stiffener [tab](#):

Advance Steel Base plate [122]

Properties

Base Plate

Stiffeners & Plat...

Leveling pl...

Shim Plates

Shear anchor

Shear anch...

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"

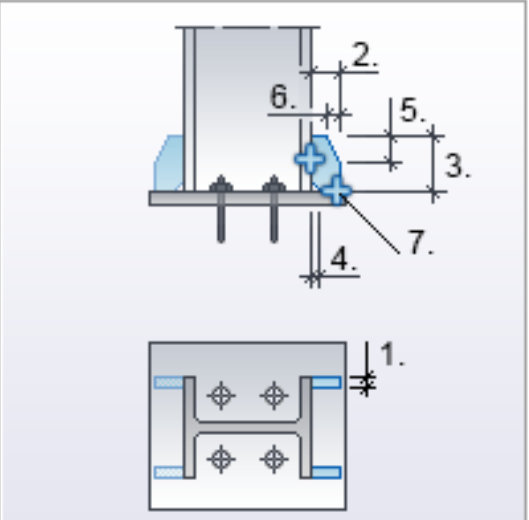
5. Outside chamfer height 10"

6. Outside chamfer width 4"

Outside vertical

7. Weld thickness 1/4" Double fillet welc

Update now! Automatic Approval status Not Set Not calculated



Advance Steel Base plate [135]

Properties

Base Plate

Stiffeners & Plat...

Levellng pl...

Shim plates

Shear anchor

Shear anch...

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

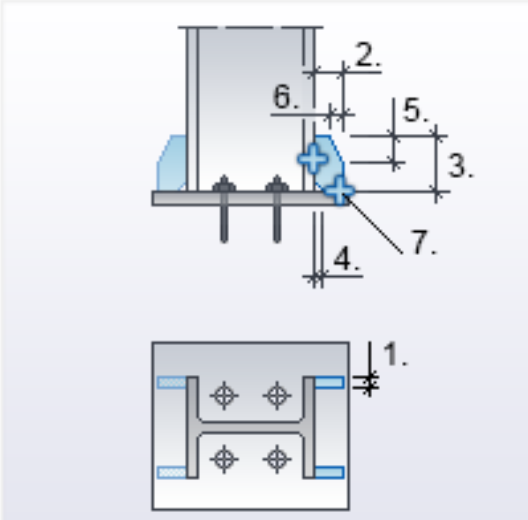
5. Outside chamfer height 250.00

6. Outside chamfer width 100.00

Outside vertical

7. Weld thickness 6.00 Double fillet welc

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"

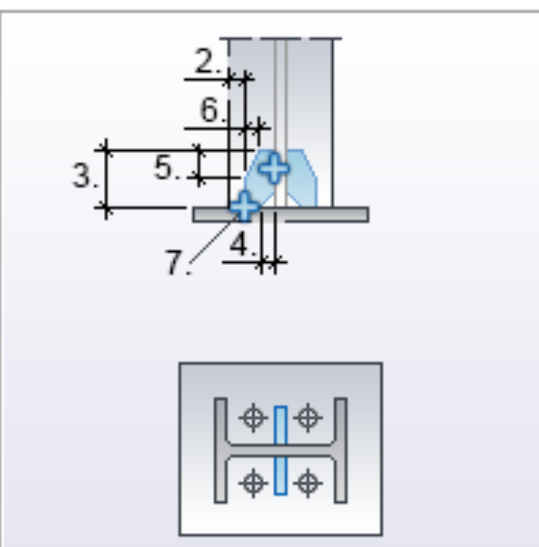
6. Outside chamfer width 5"

Outside vertical ☐

7. Weld thickness 3/16" Double fillet welc

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

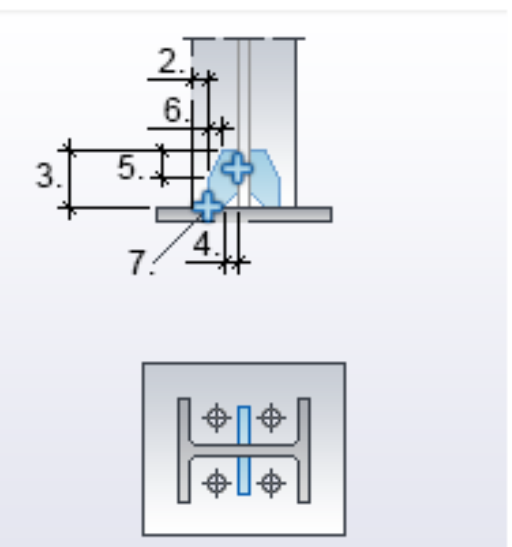
6. Outside chamfer width 125.00

Outside vertical ☐

7. Weld thickness 4.00 Double fillet welc

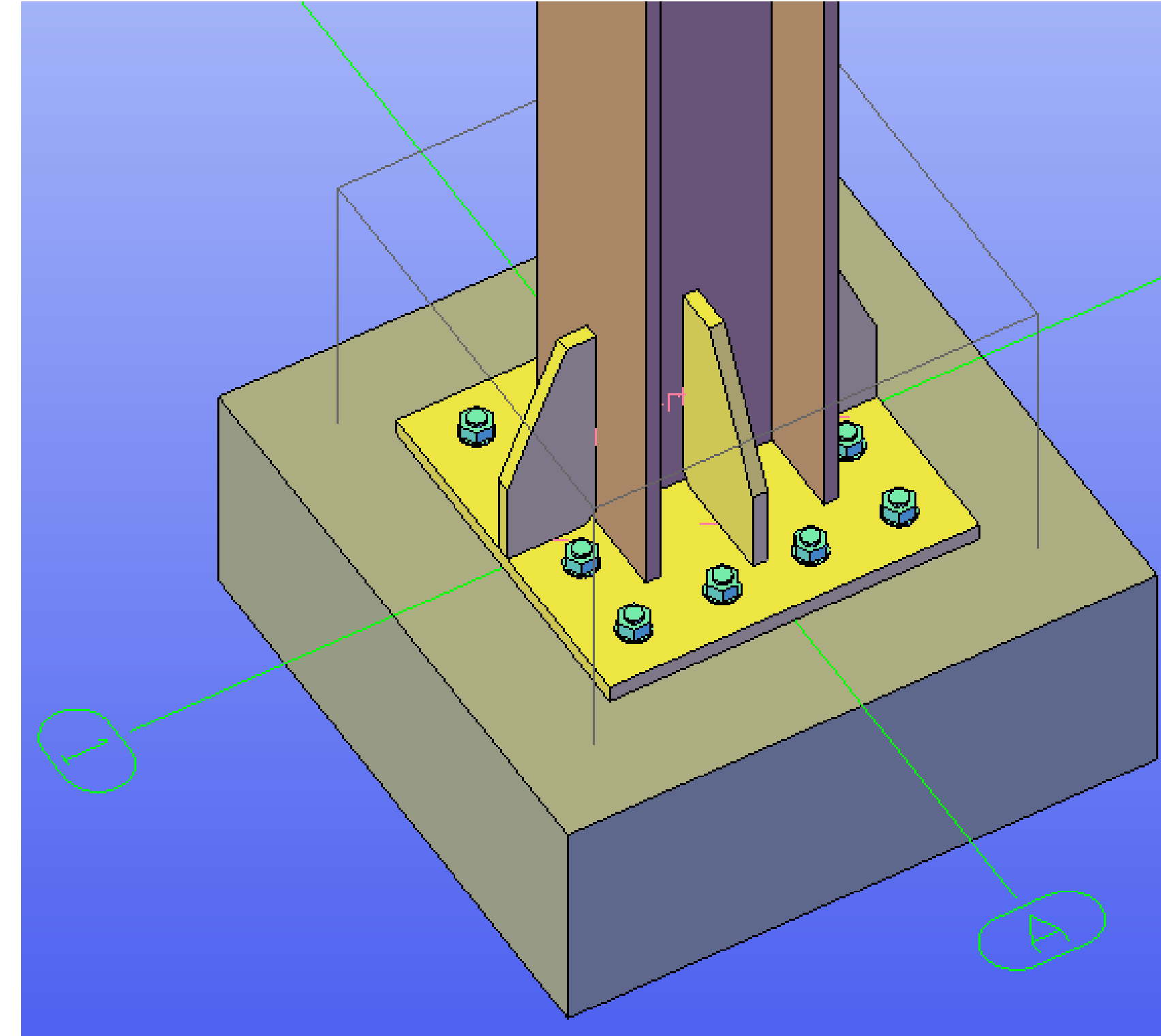
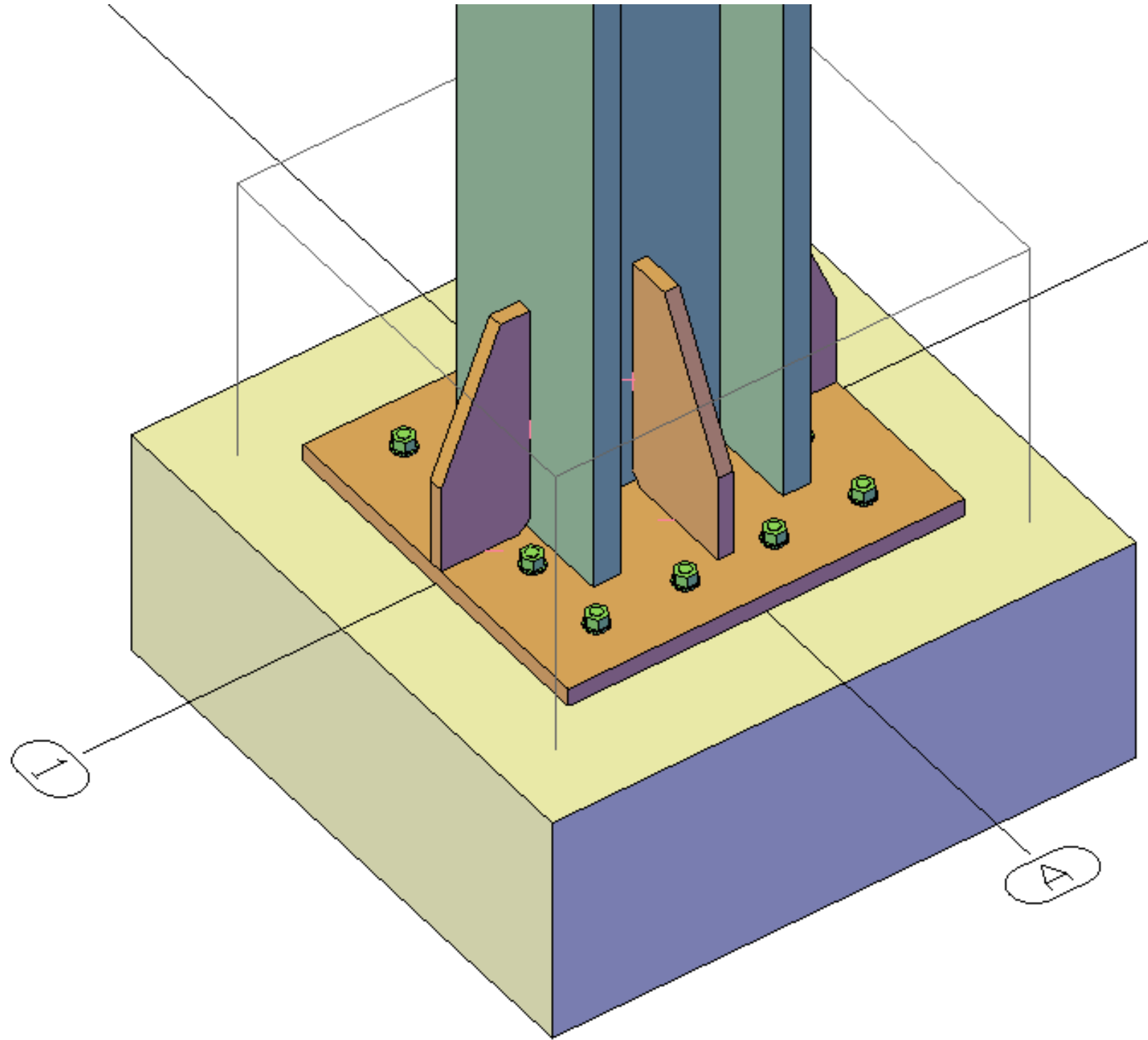
8. Stiffener offset 0.00

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



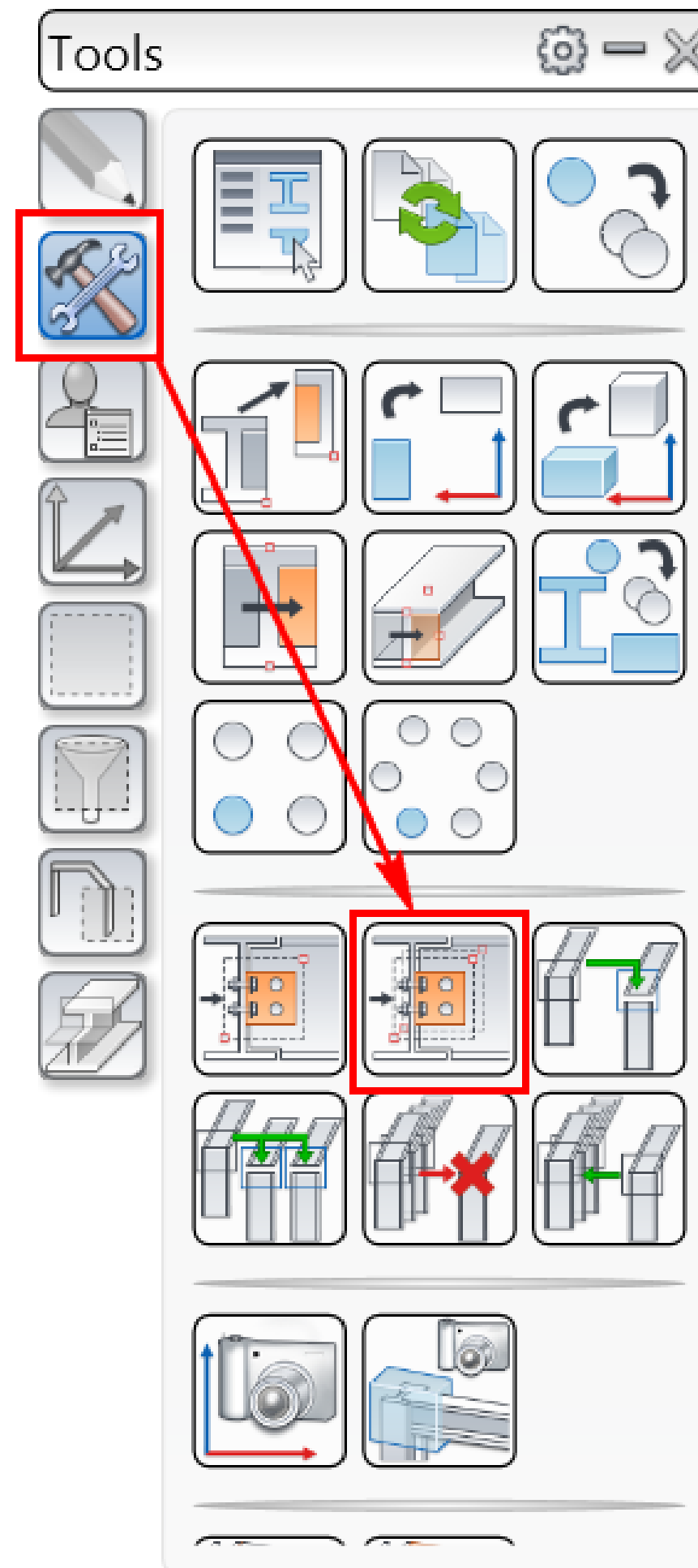
Section 3: Inserting and Copying the Base Plate Joints

- Close the dialog box.



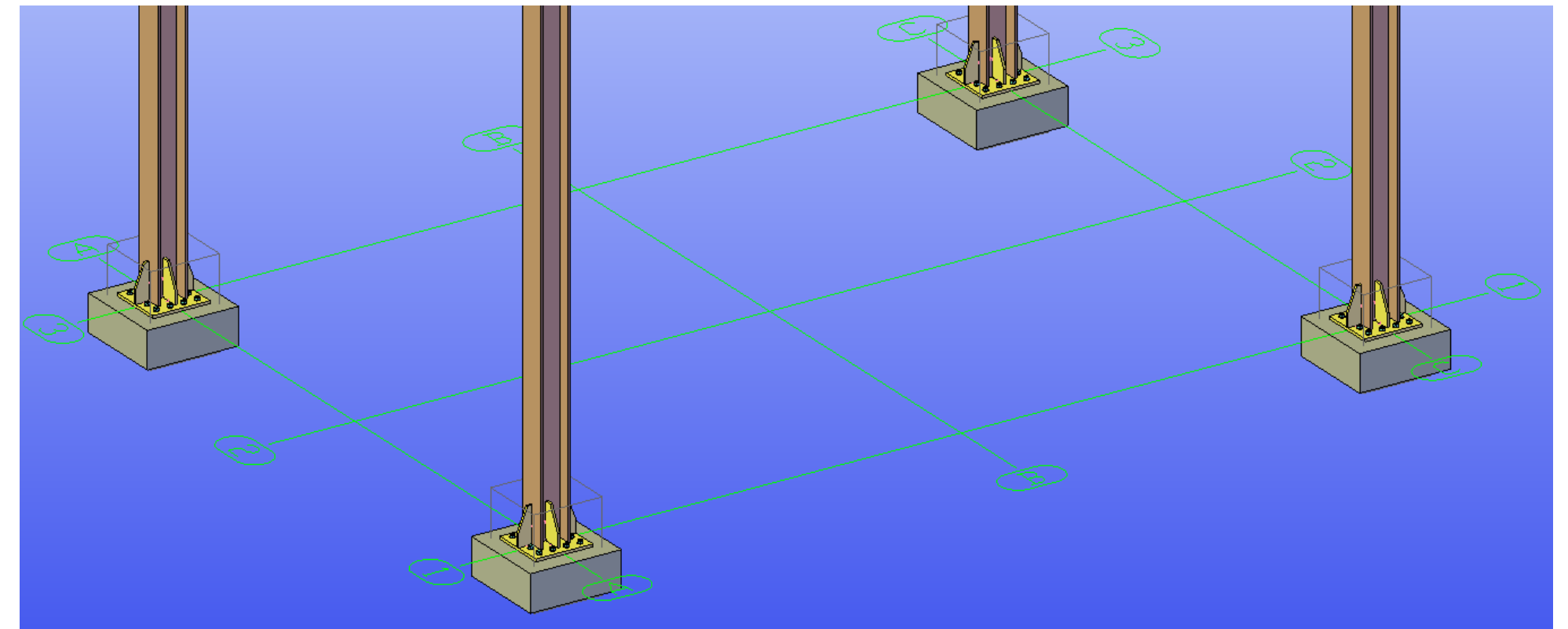
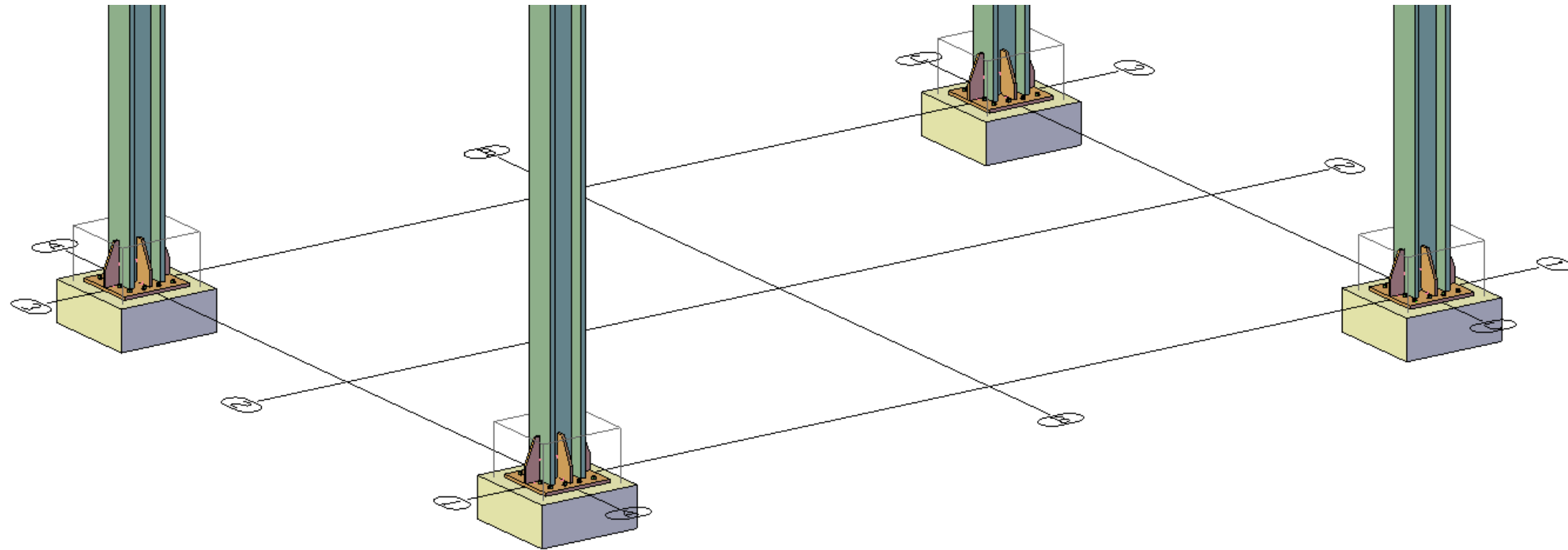
Section 3: Inserting and Copying the Base Plate Joints

- From the Advance Steel Palette > Tools tab, invoke the Create by template, multiple tool.



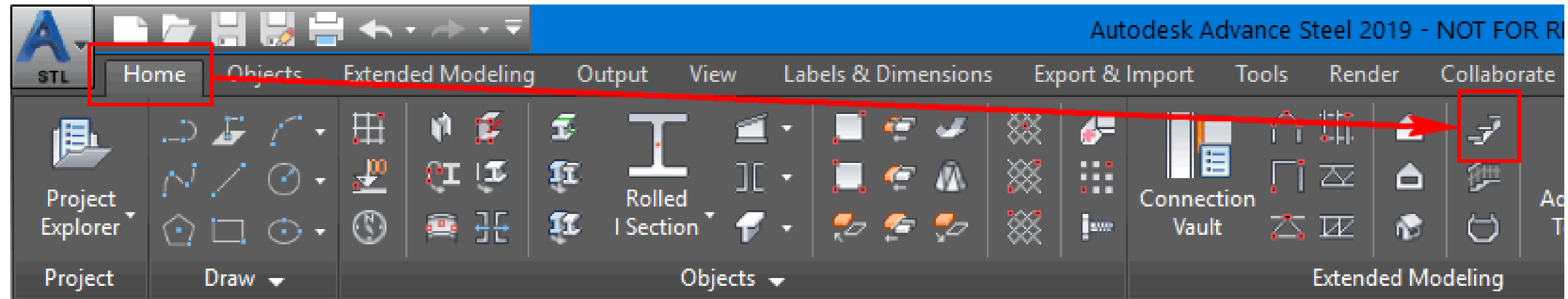
Section 3: Inserting and Copying the Base Plate Joints *(Remaining Steps)*

- Copy the joint to the remaining columns.



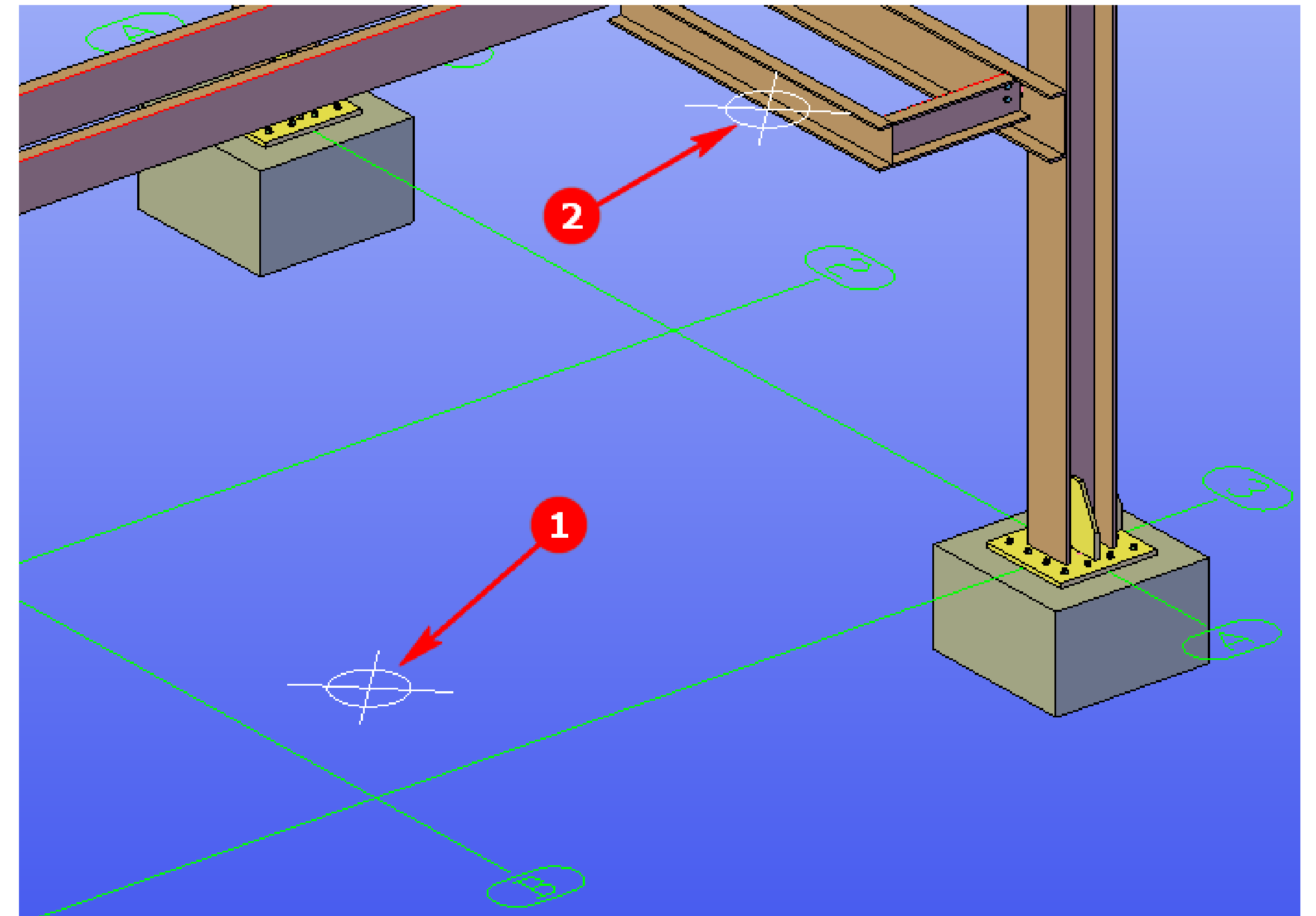
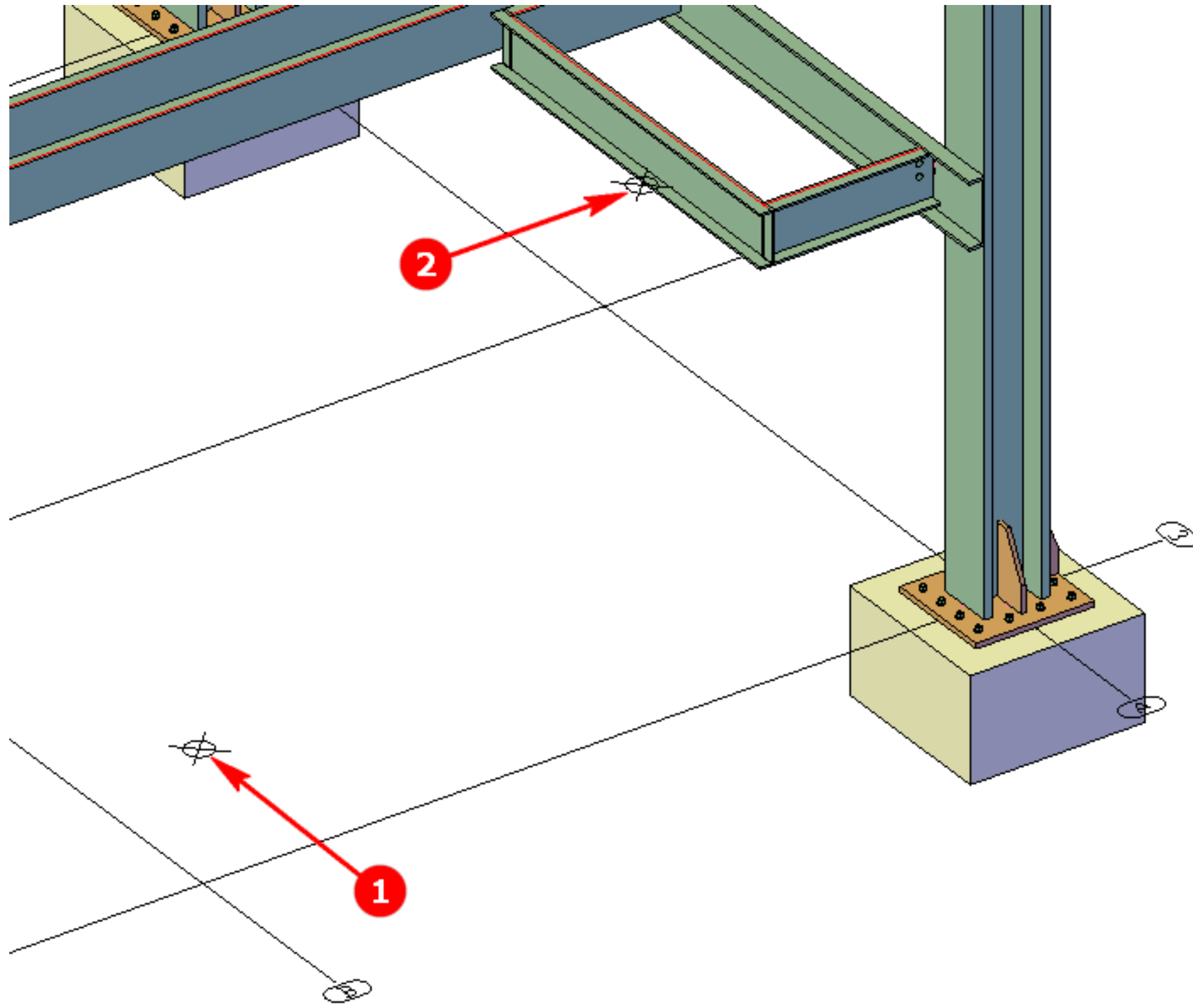
Section 4: Inserting Stairs (*Do initial steps with me*)

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



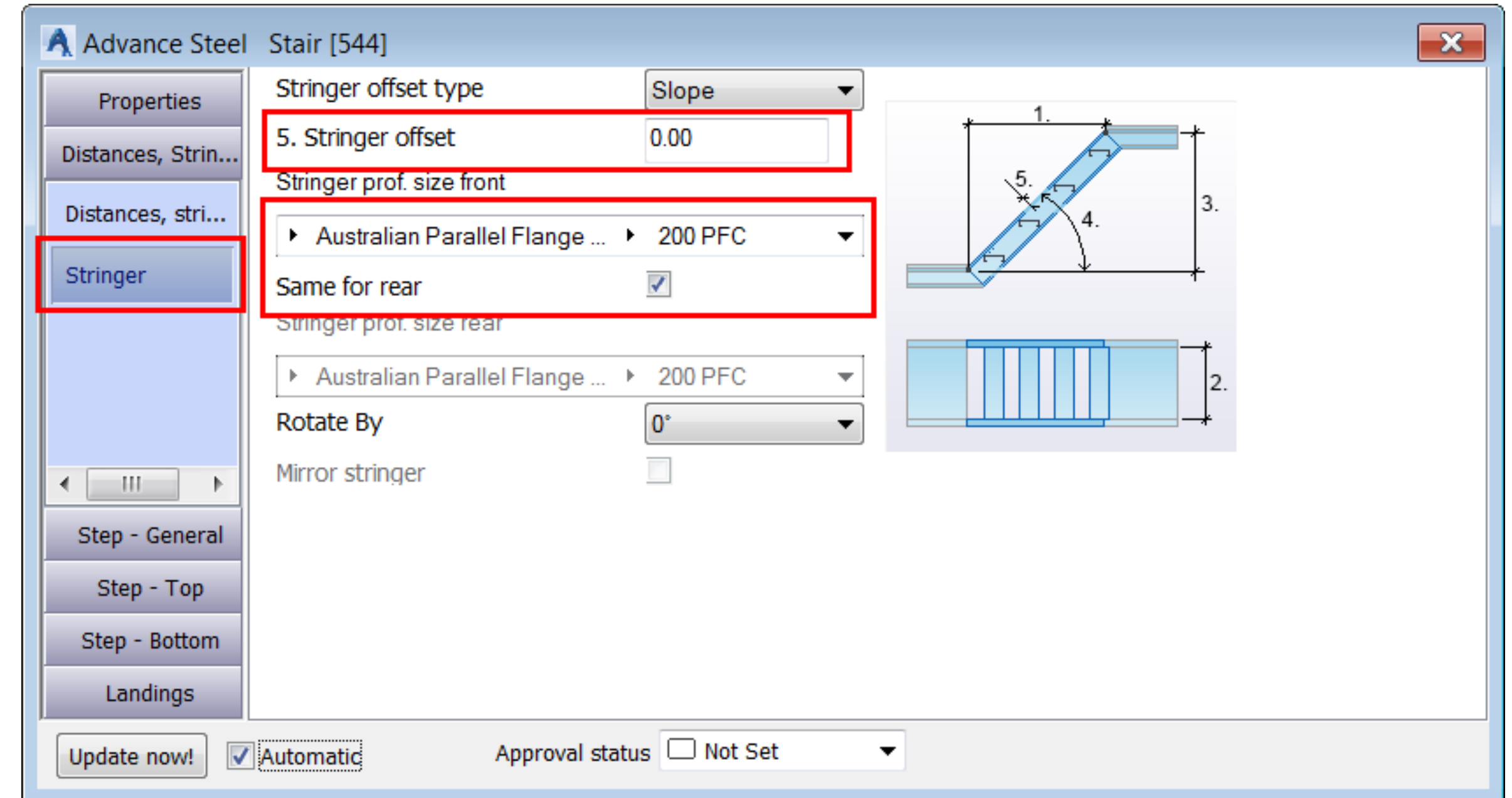
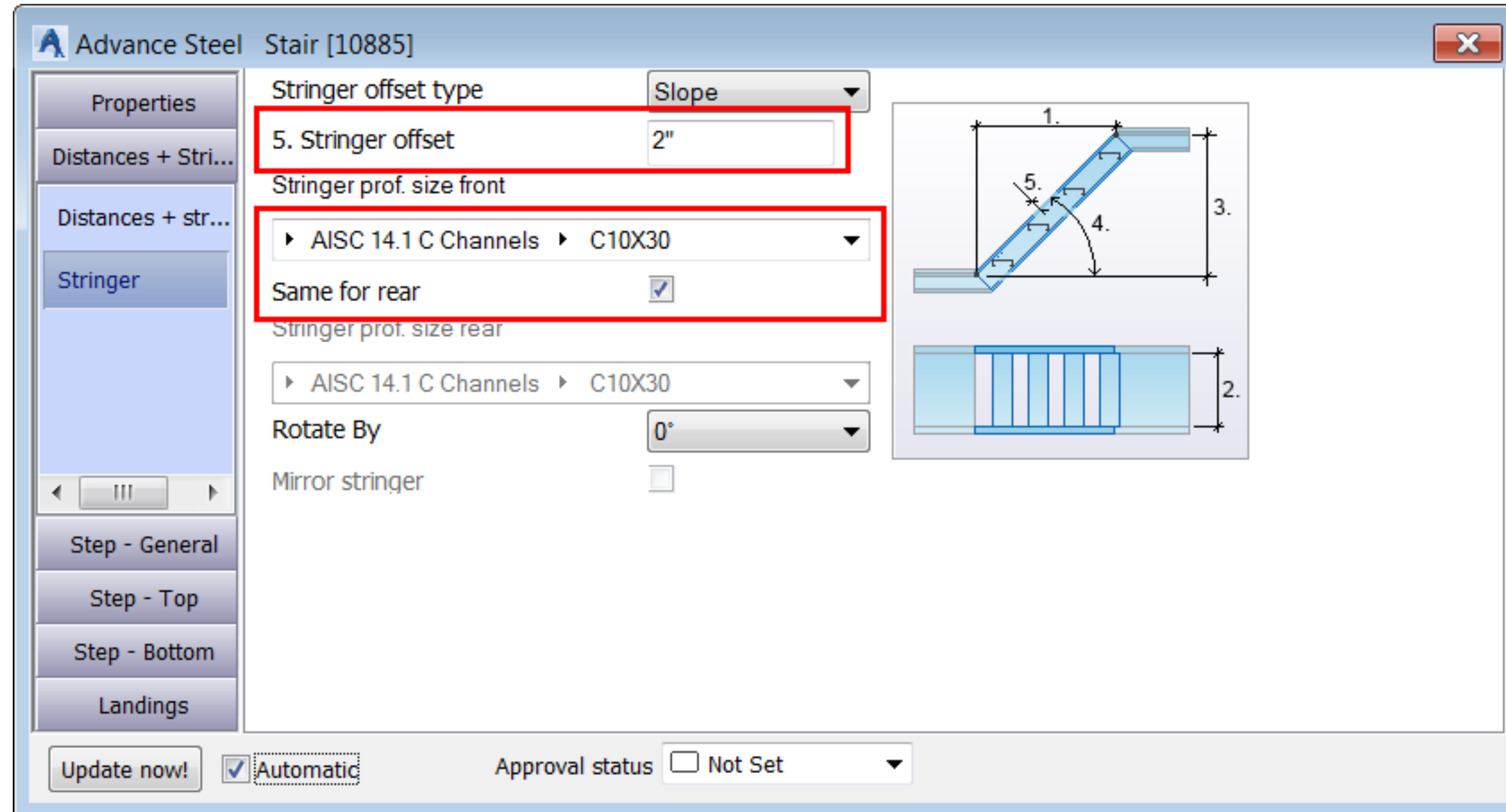
Section 4: Inserting Stairs (*Do initial steps with me*)

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



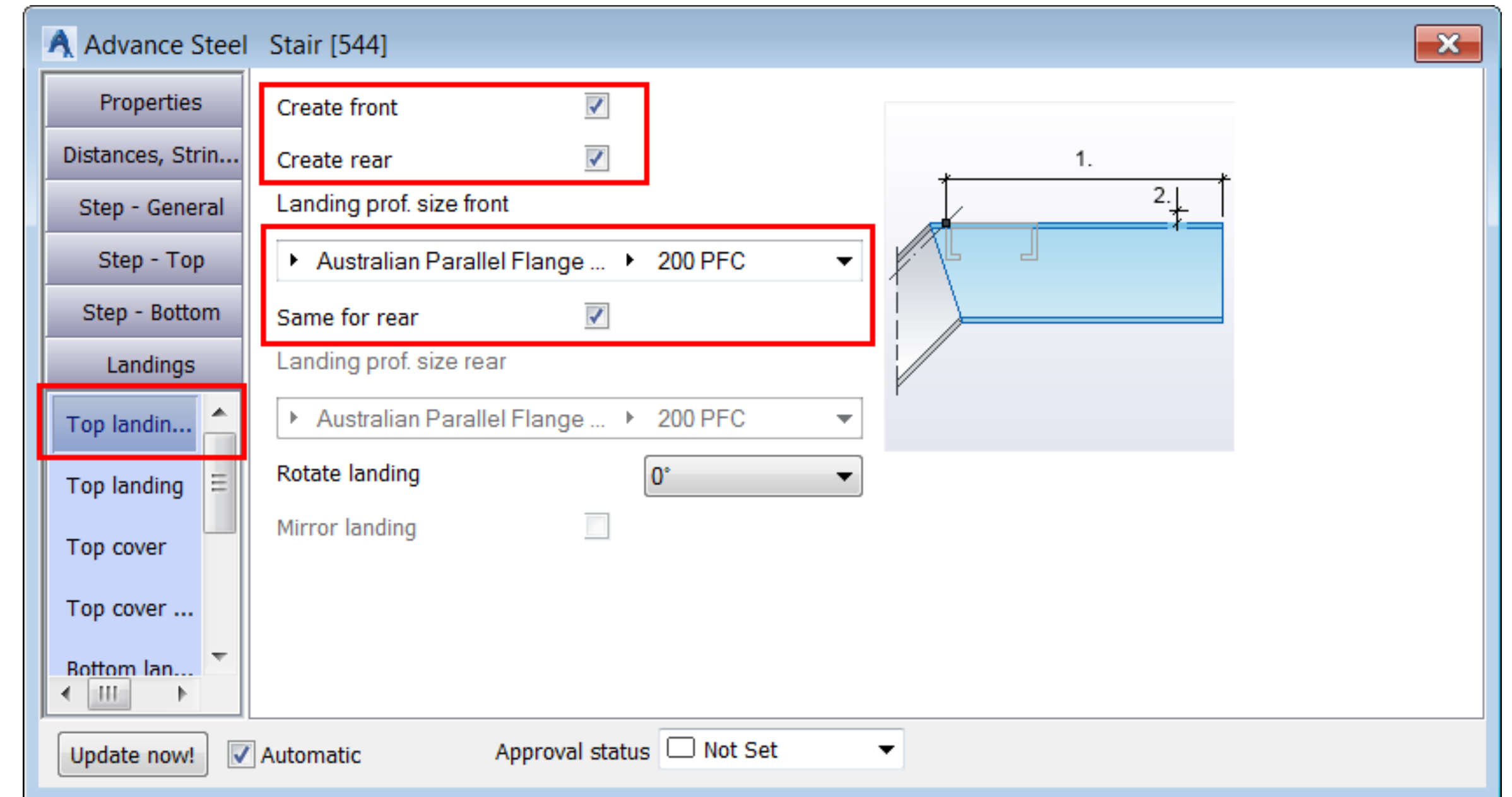
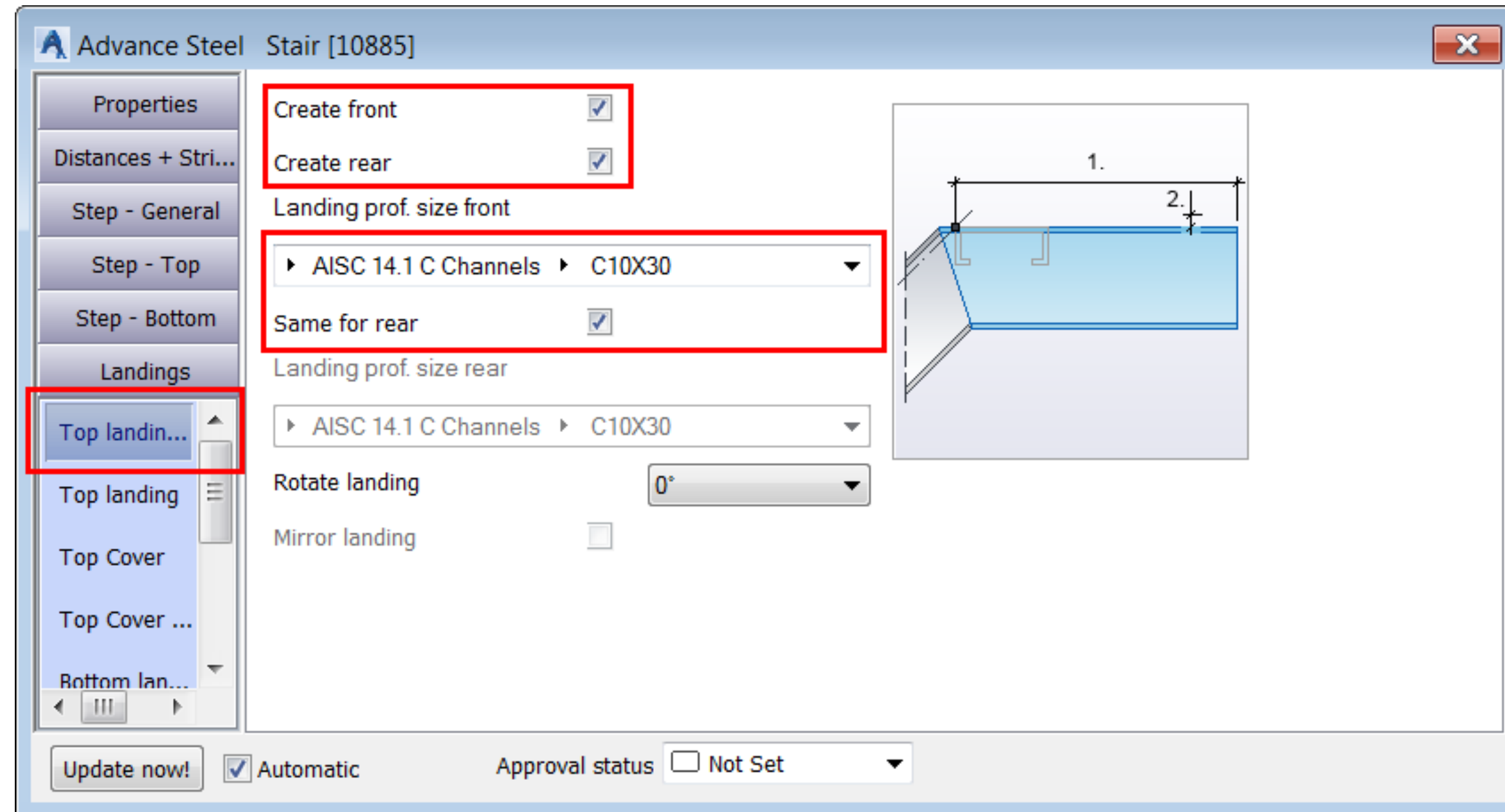
Section 4: Inserting Stairs (*Step 8 Onwards*)

- Distances + Stringer > Stringer **tab**:



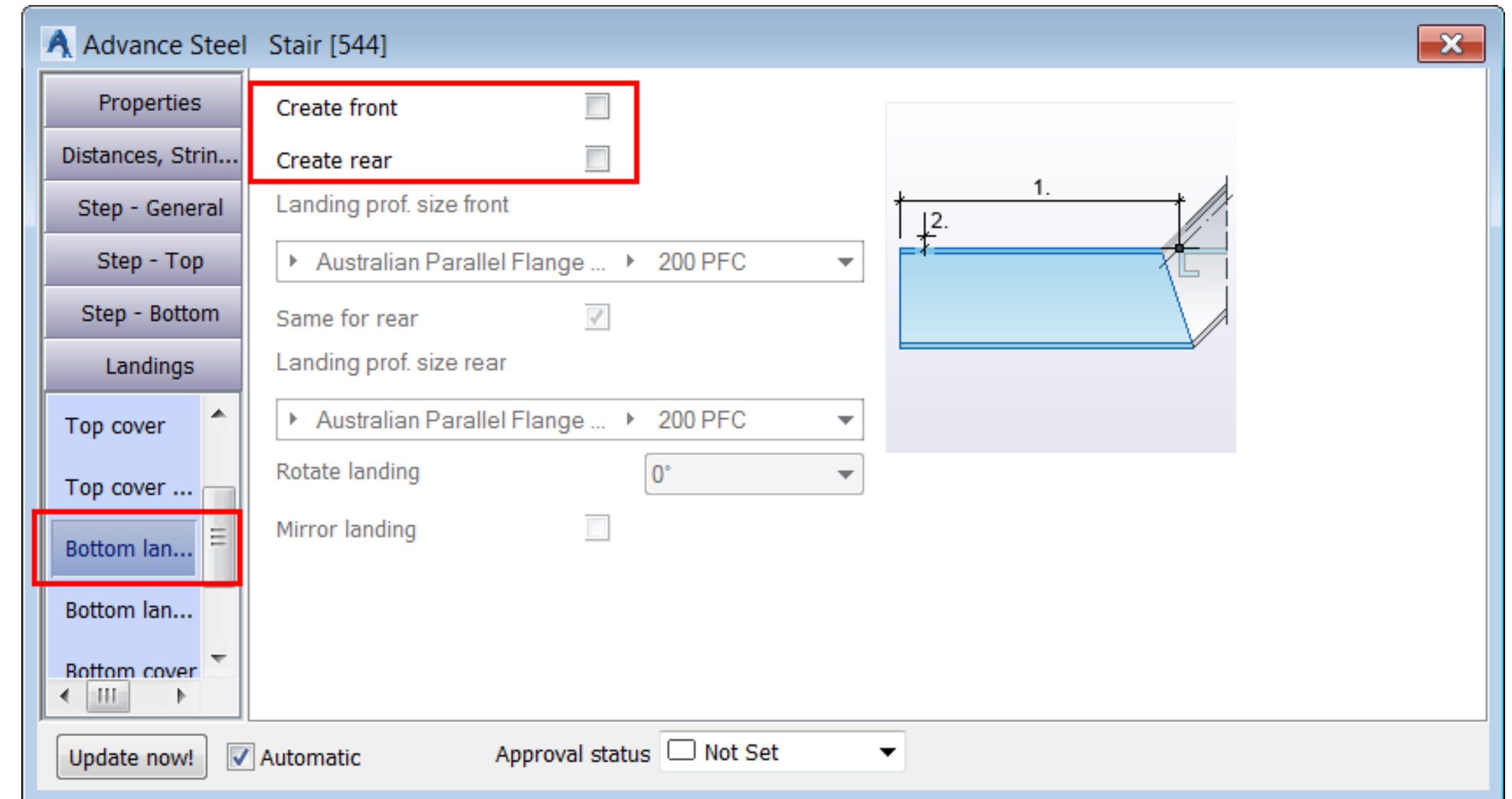
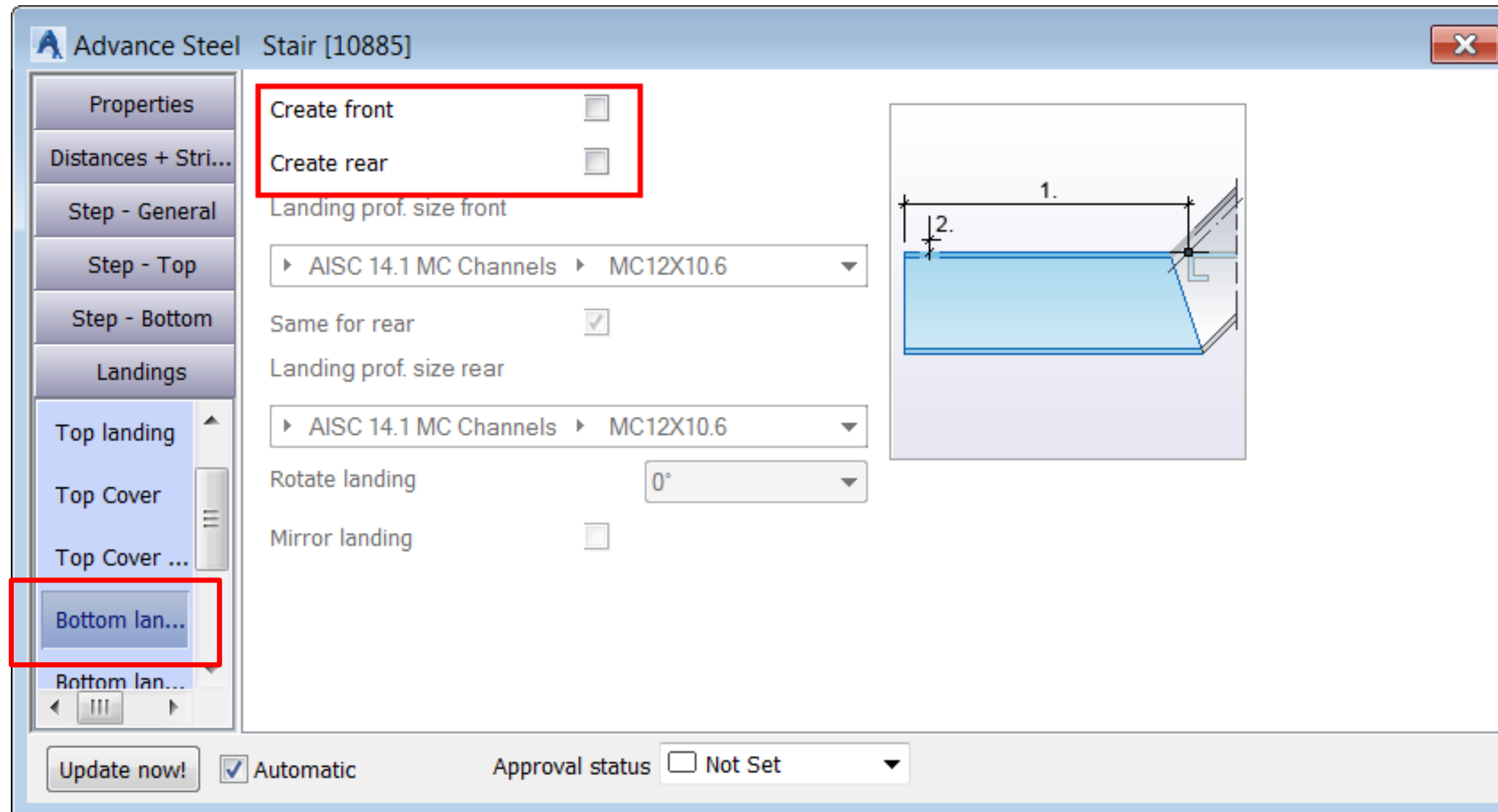
Section 4: Inserting Stairs

- Landings > Top landing prof. [tab](#):



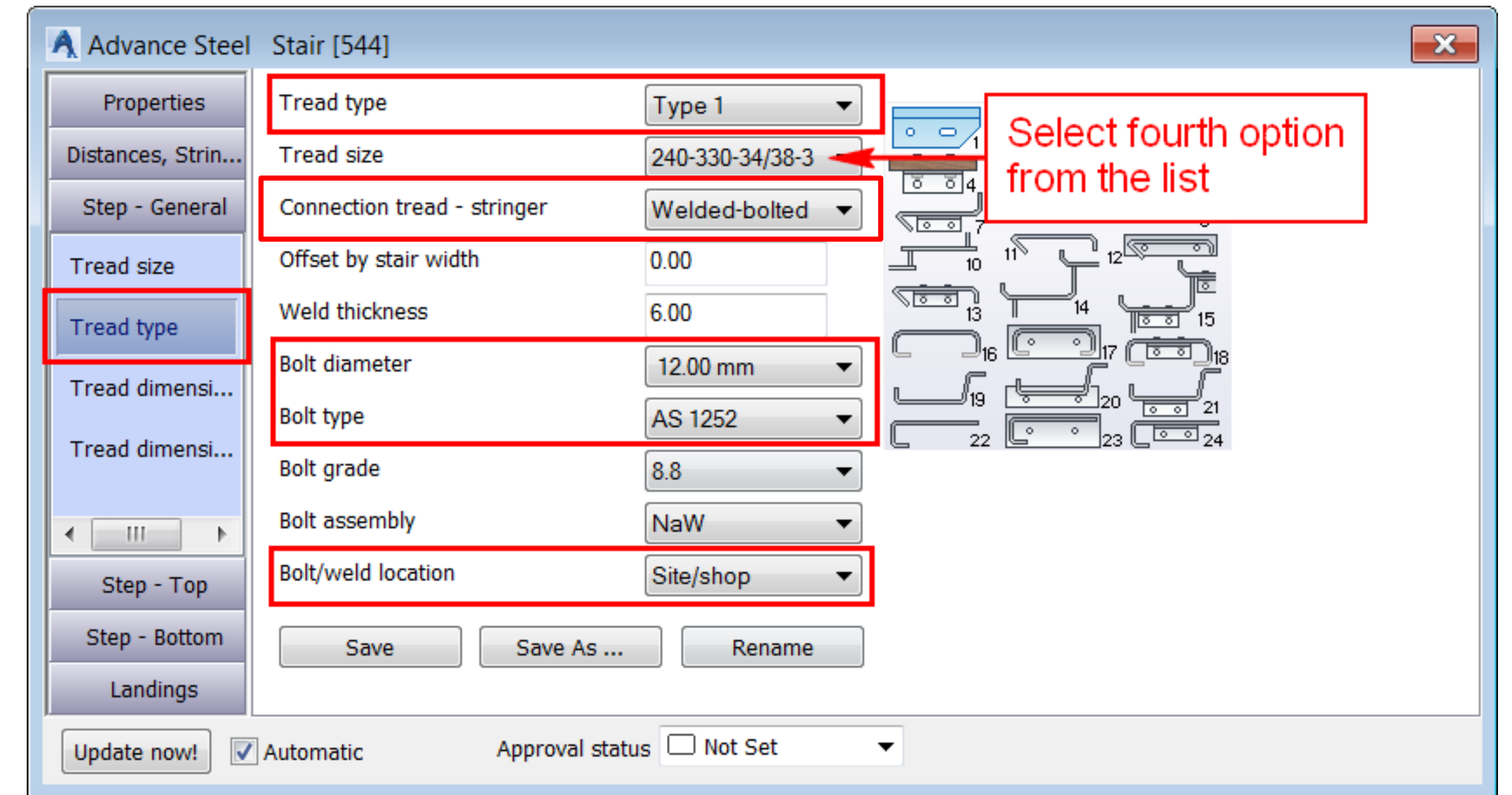
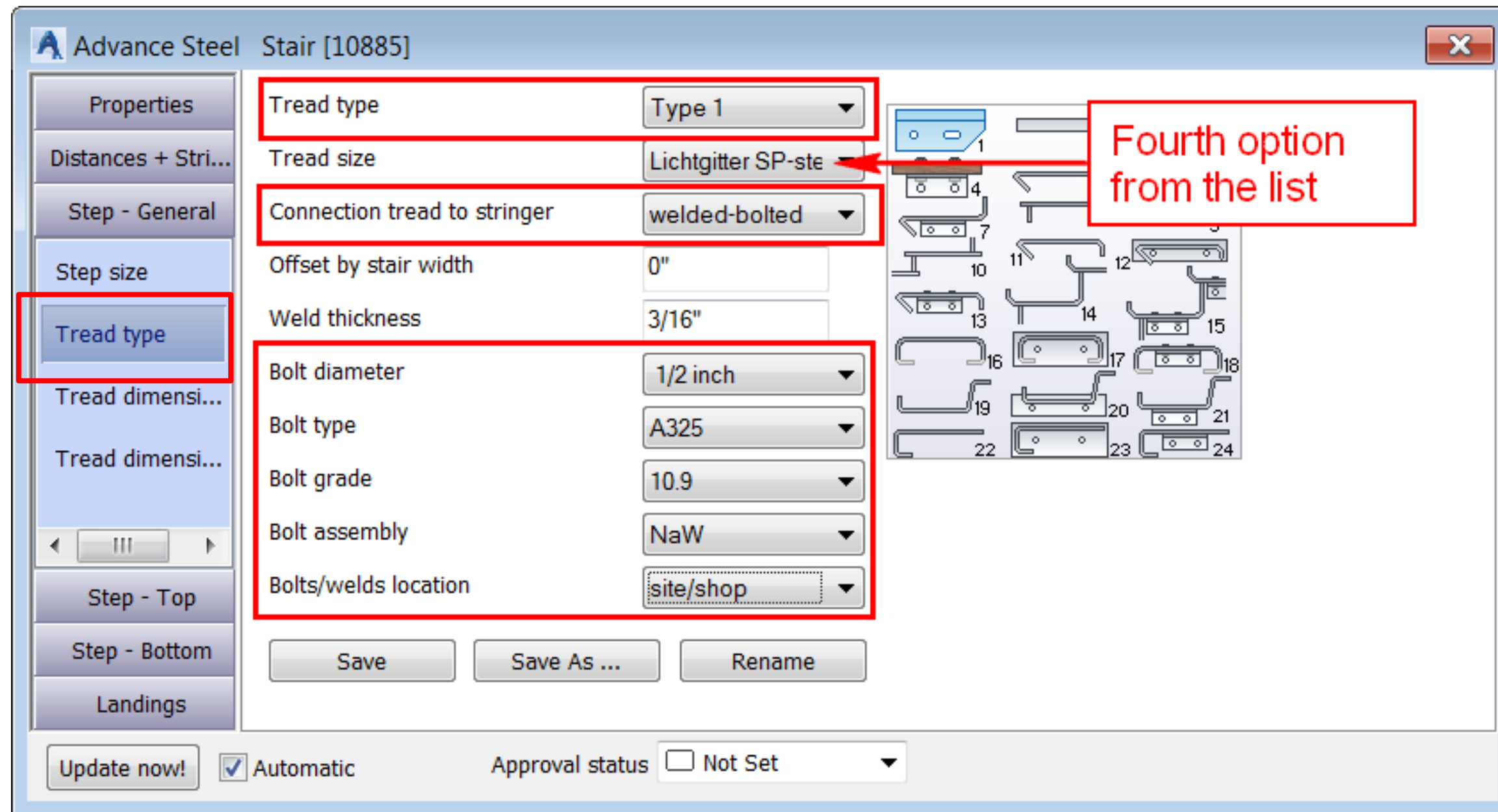
Section 4: Inserting Stairs

- Landings > Bottom landing prof. [tab](#):



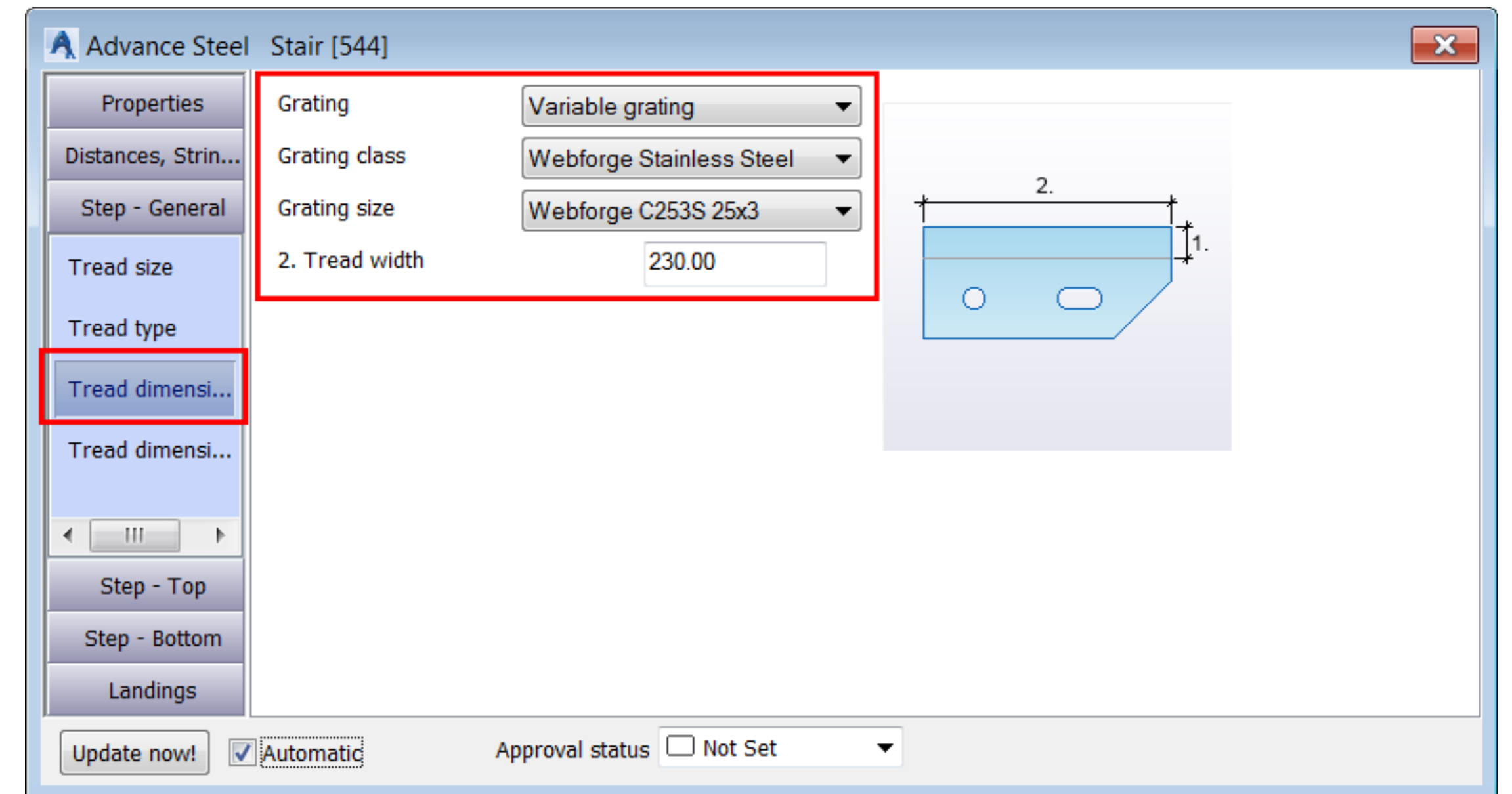
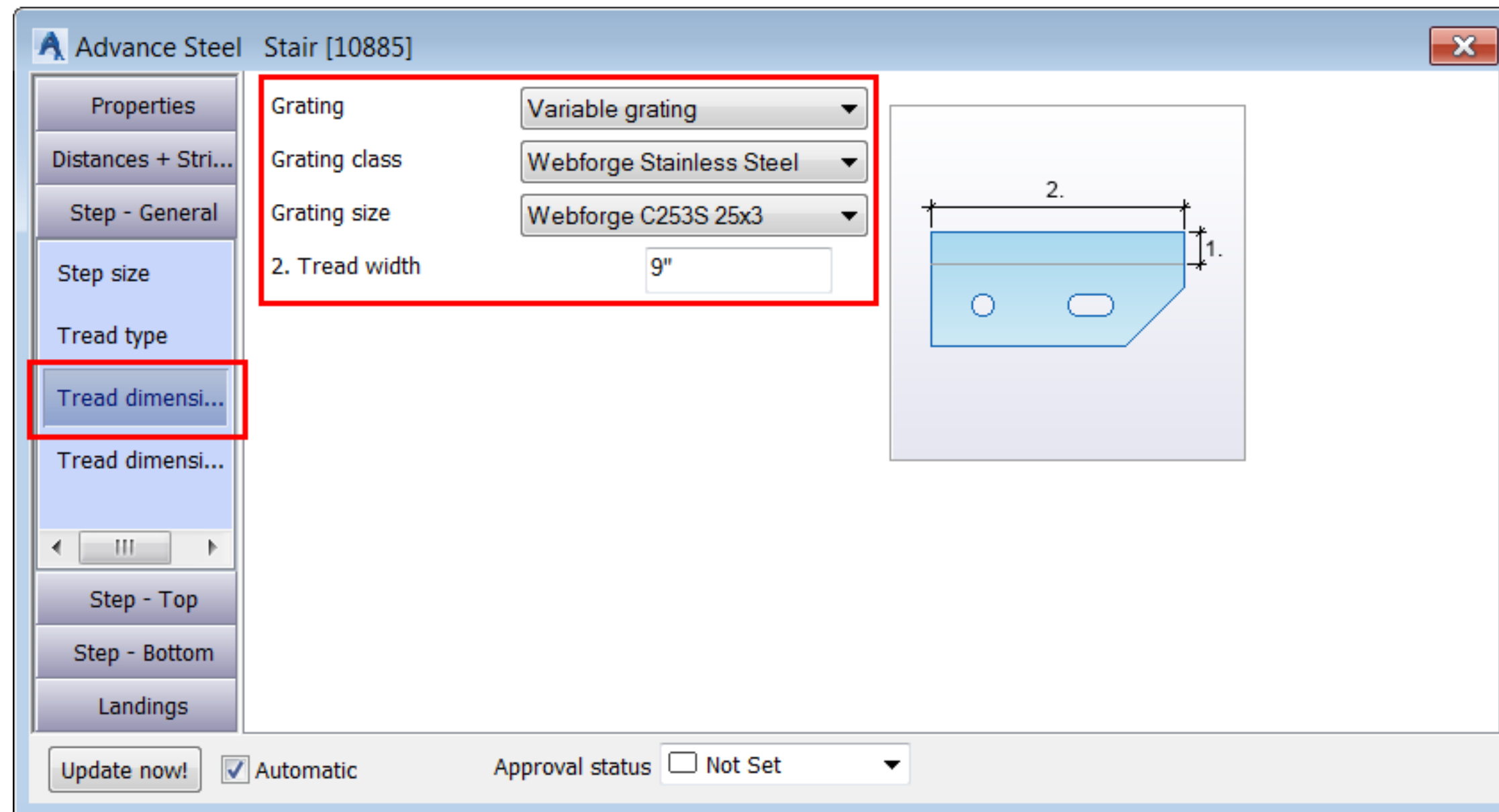
Section 4: Inserting Stairs

- Step - General > Tread type tab:



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...

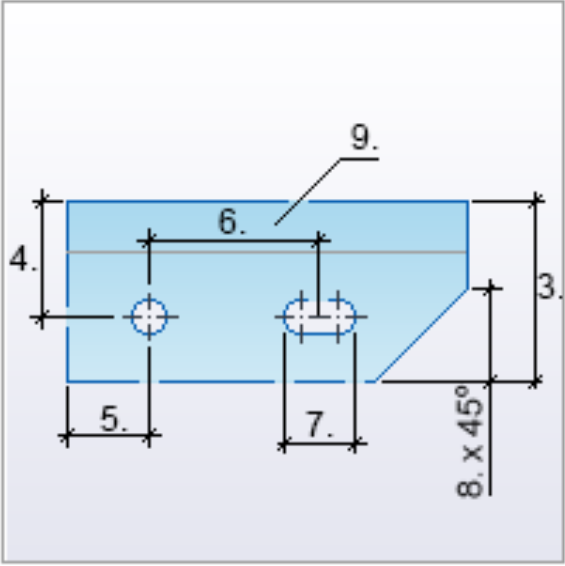
Tread dimensi...

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...

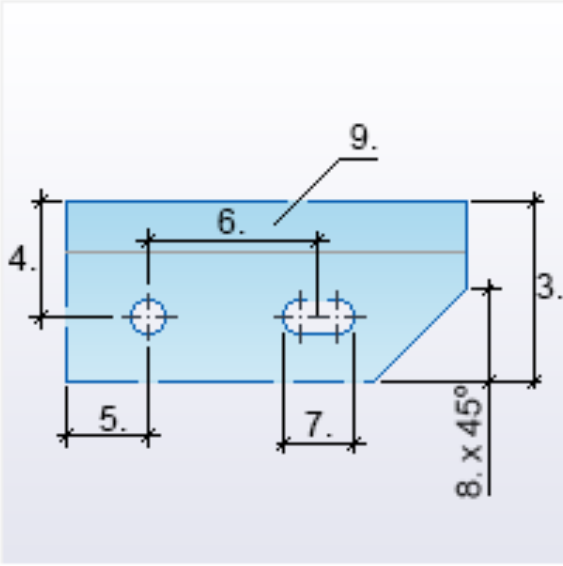
Tread dimensi...

Step - Top

Step - Bottom

Landings

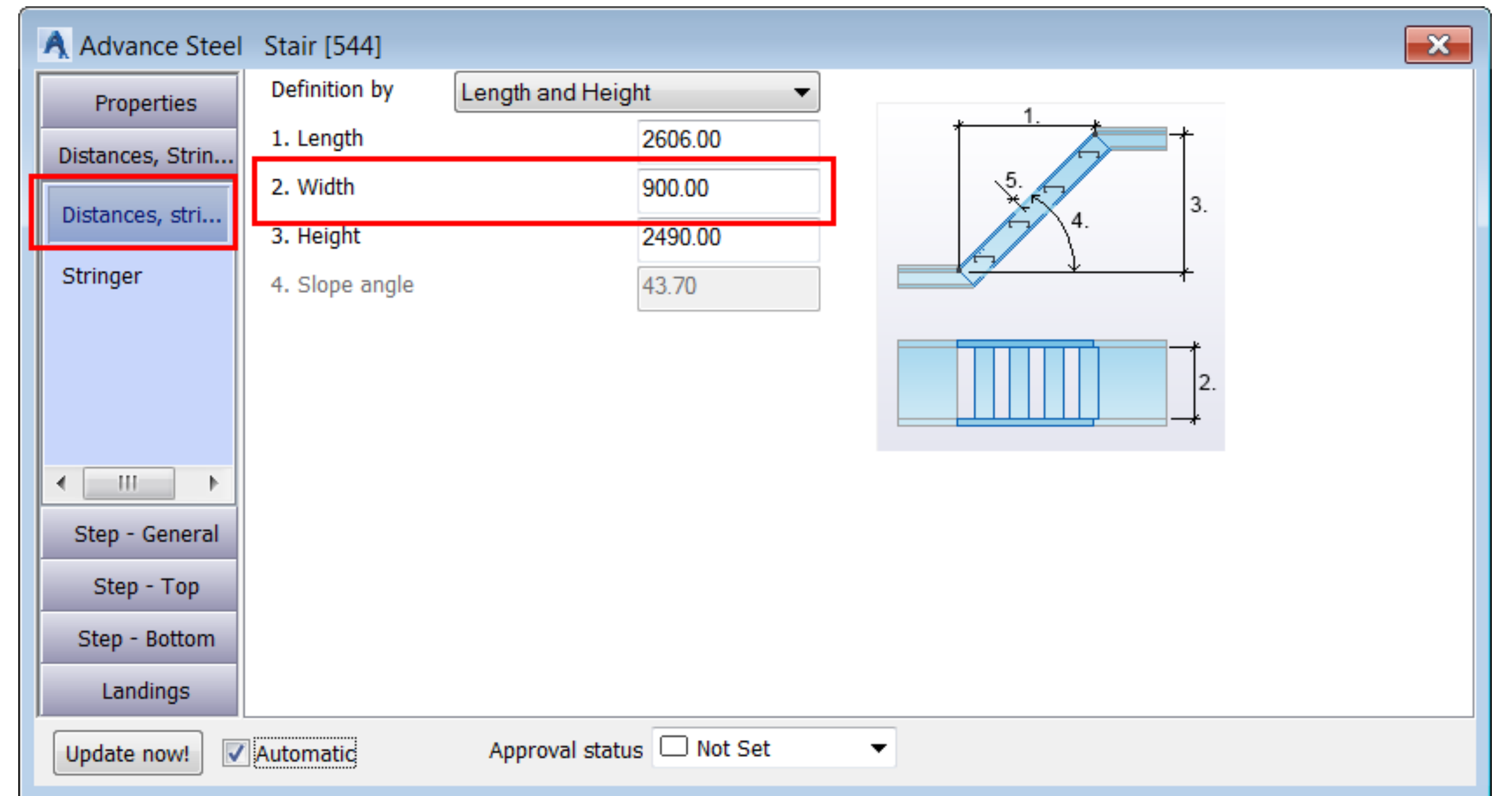
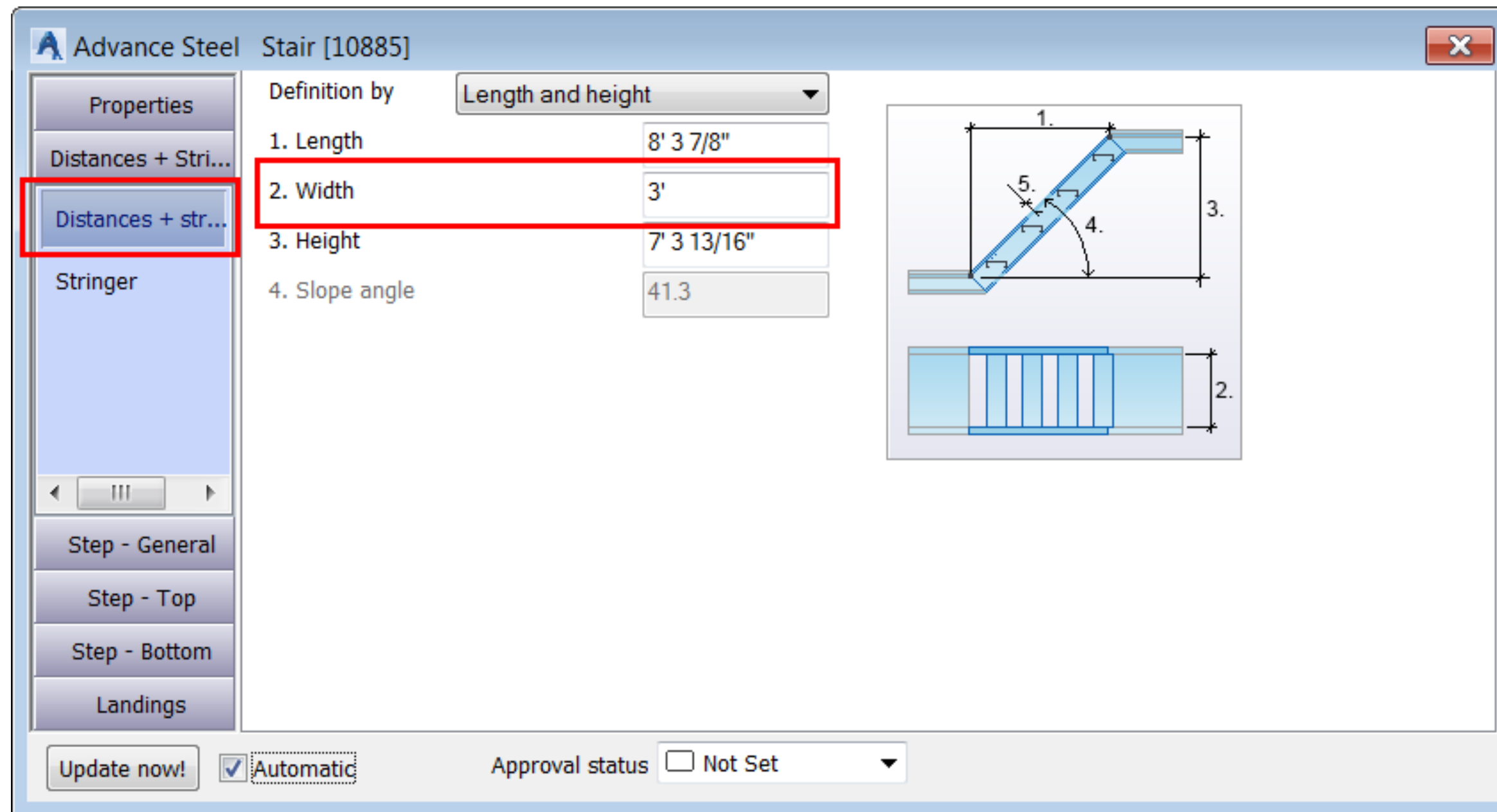
3. Side height	75.00
4. Top distance	55.00
5. Side distance	35.00
6. Bolt group distance	125.00
7. Slot length	33.00
8. Corner finish	30.00
9. Side thickness	3.00



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'

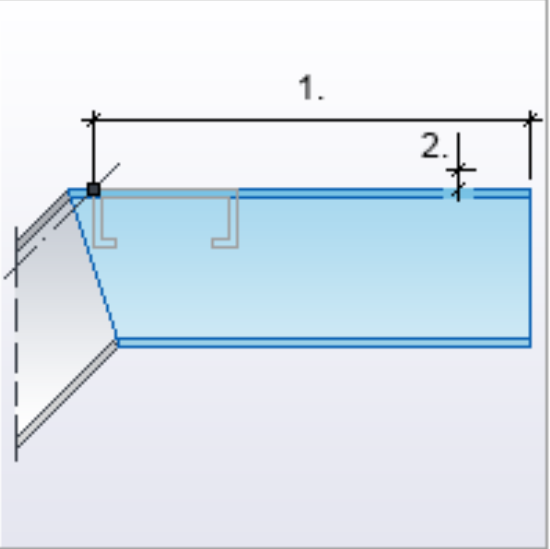
1. Landing length (rear) 1'

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

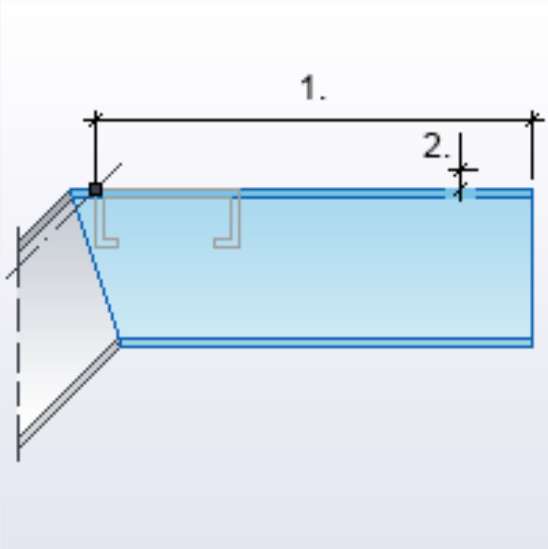
1. Landing length (rear) 310.00

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

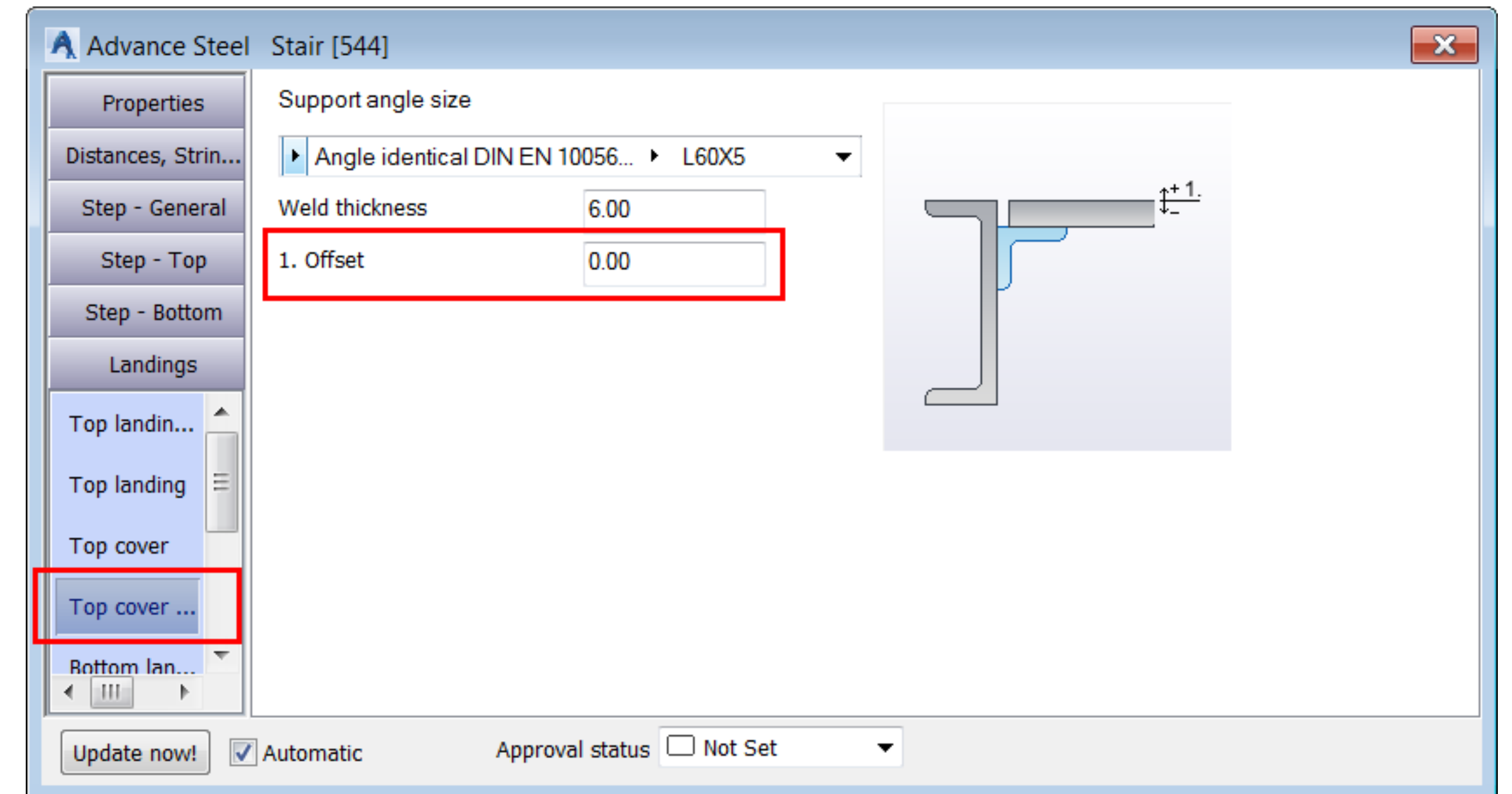
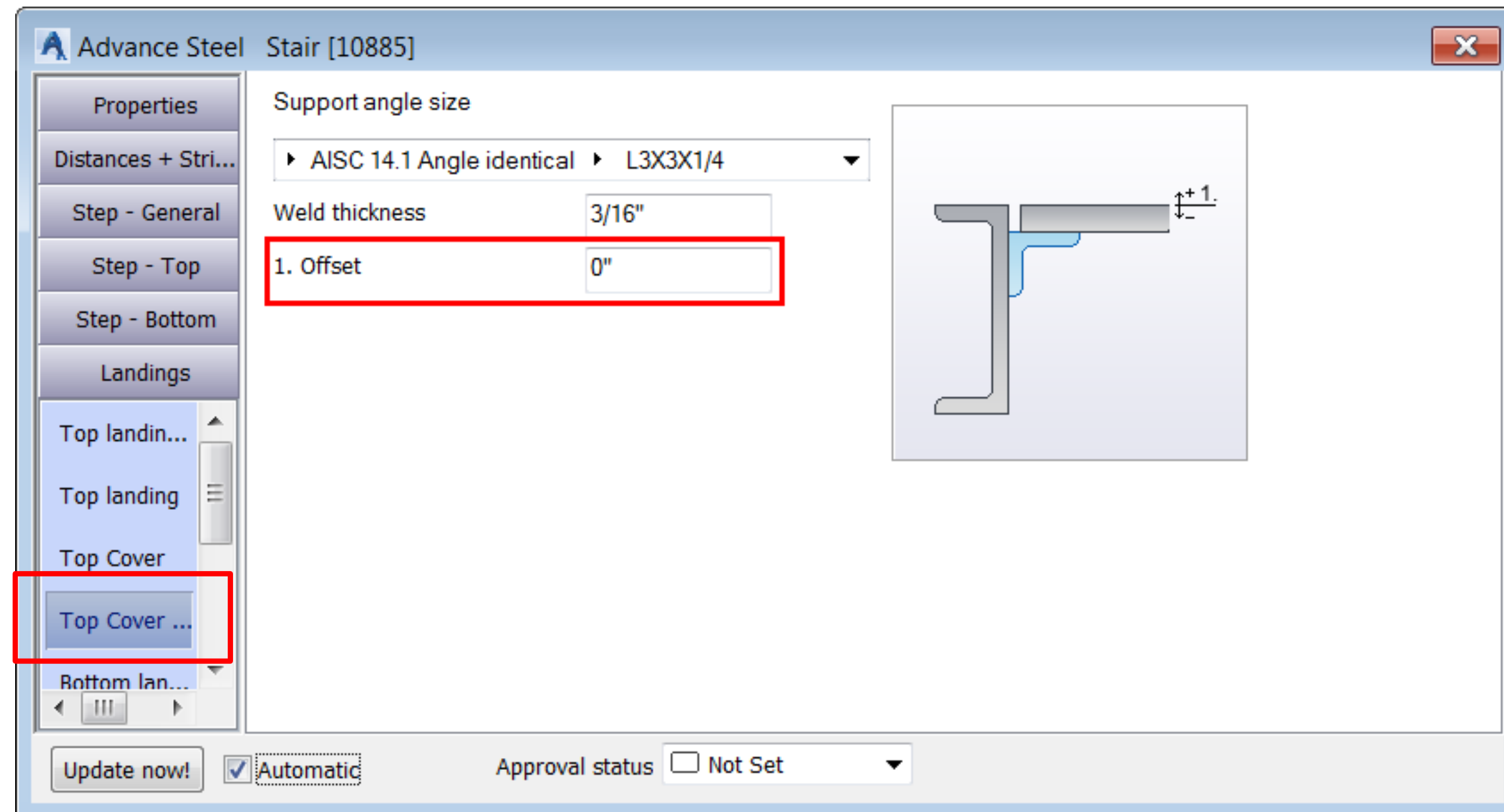
4. Offset from axis end: 0.00

Stay on top of landing: ☐

Update now! ☒ Automatic Approval status: ☐ Not Set

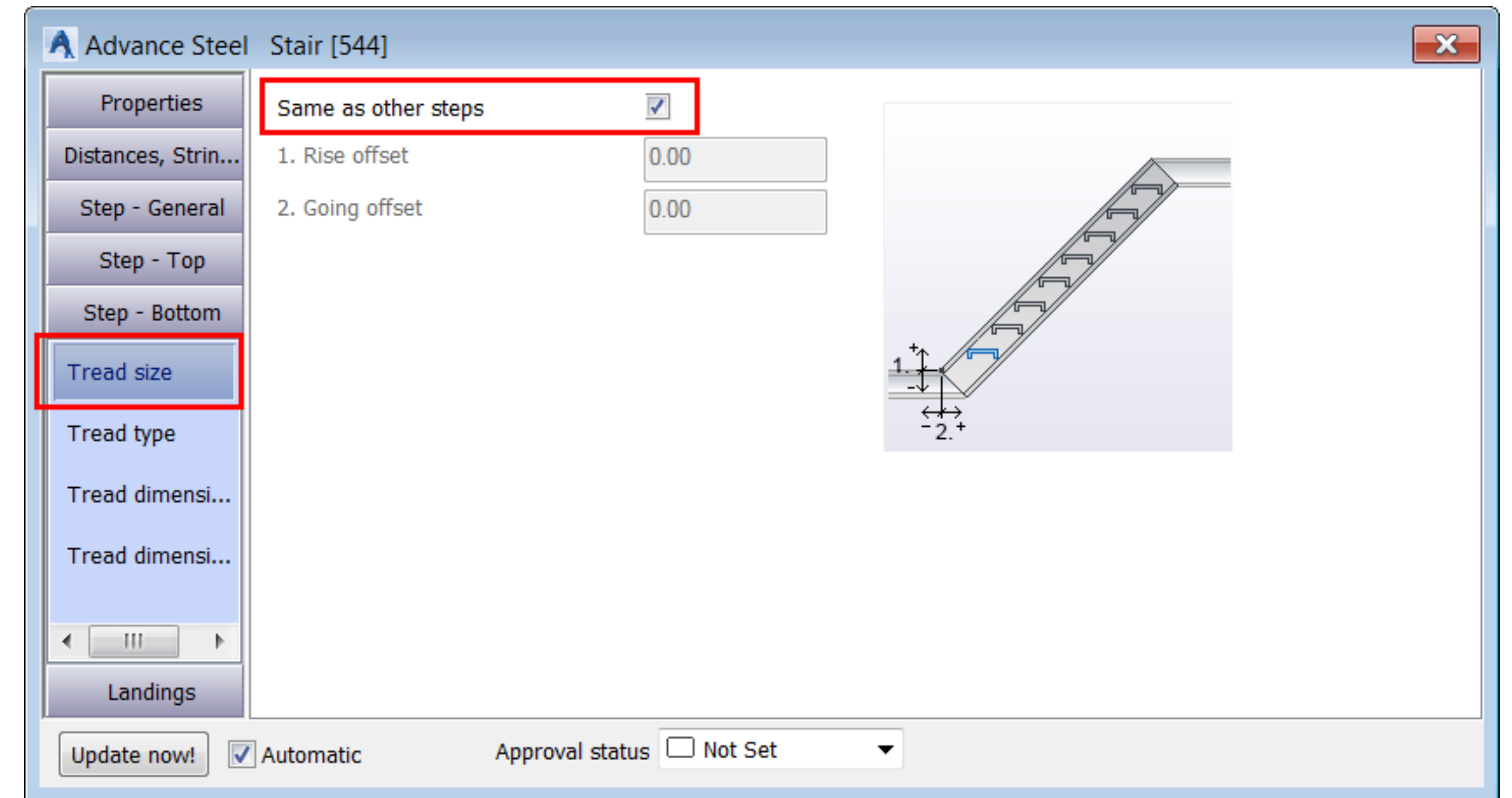
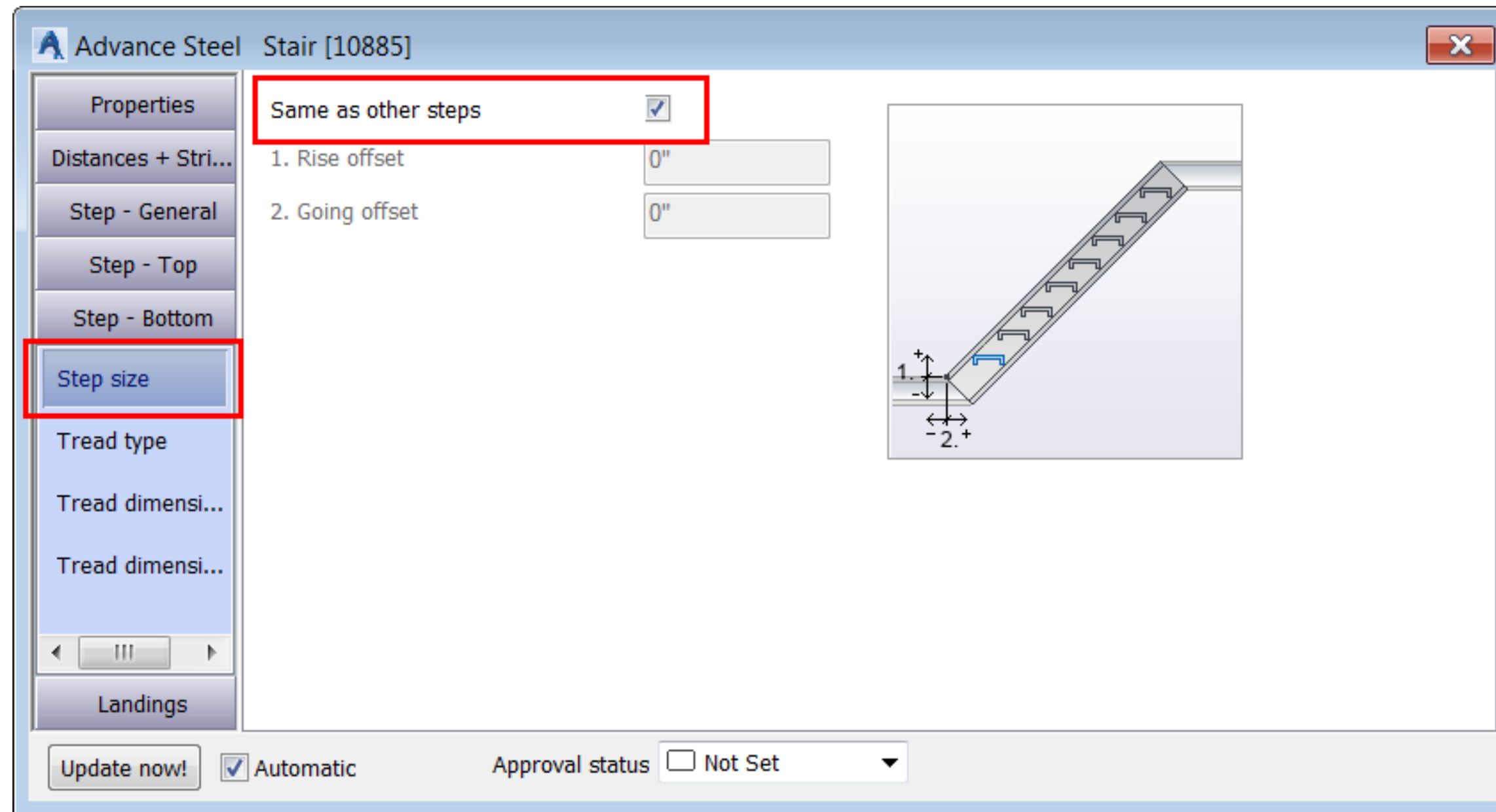
Section 4: Inserting Stairs

- Landings > Top Cover - Angle **tab**:



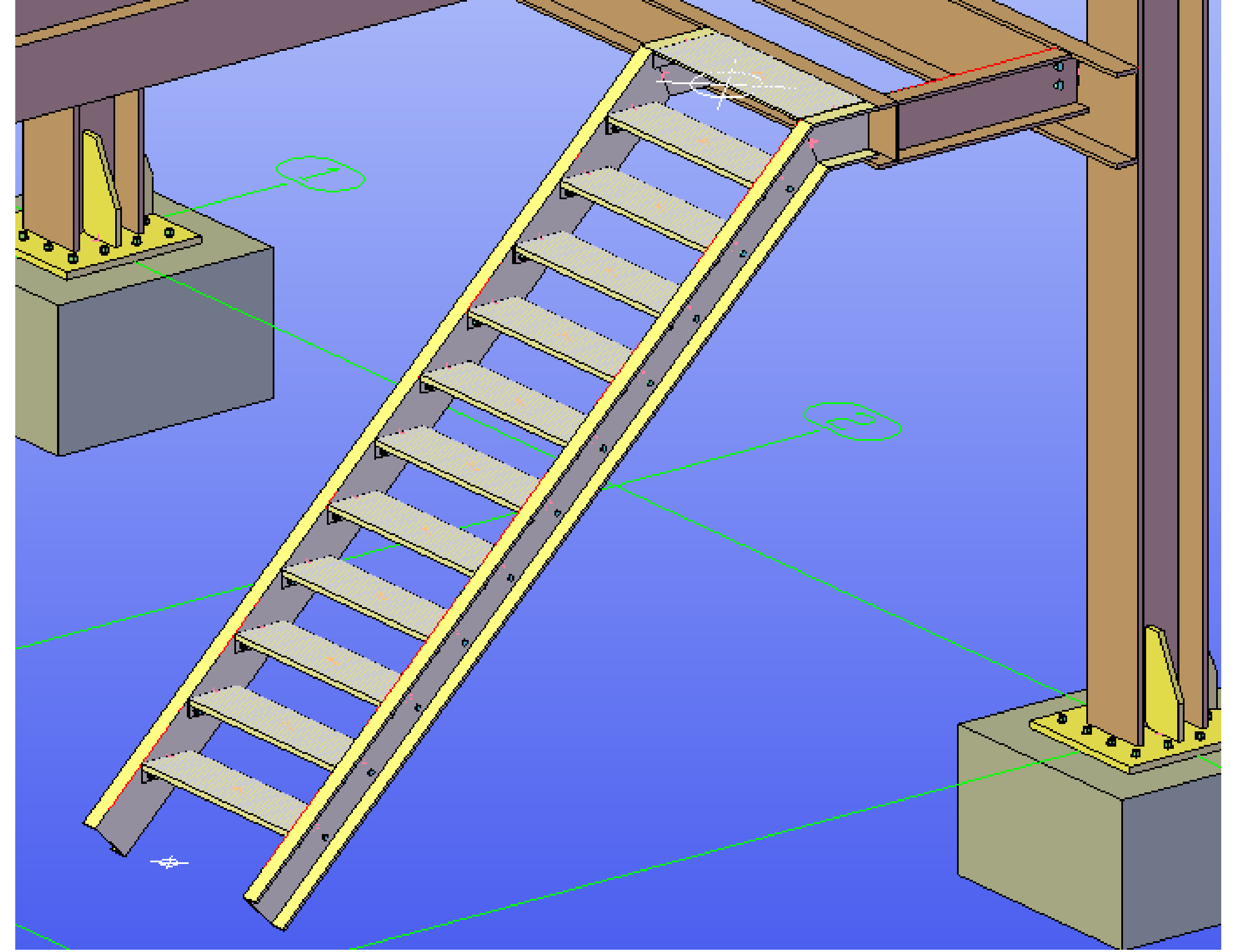
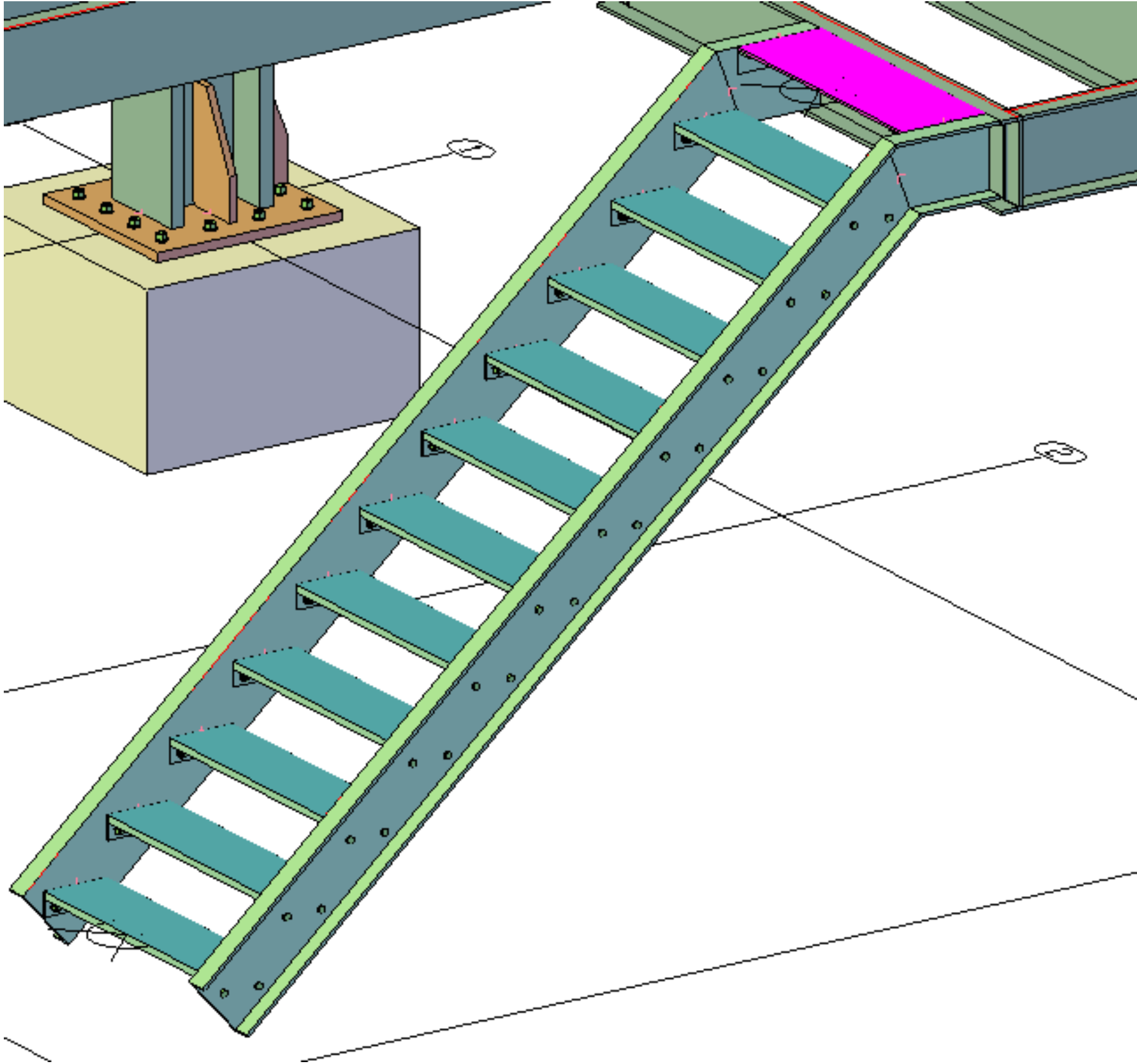
Section 4: Inserting Stairs

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



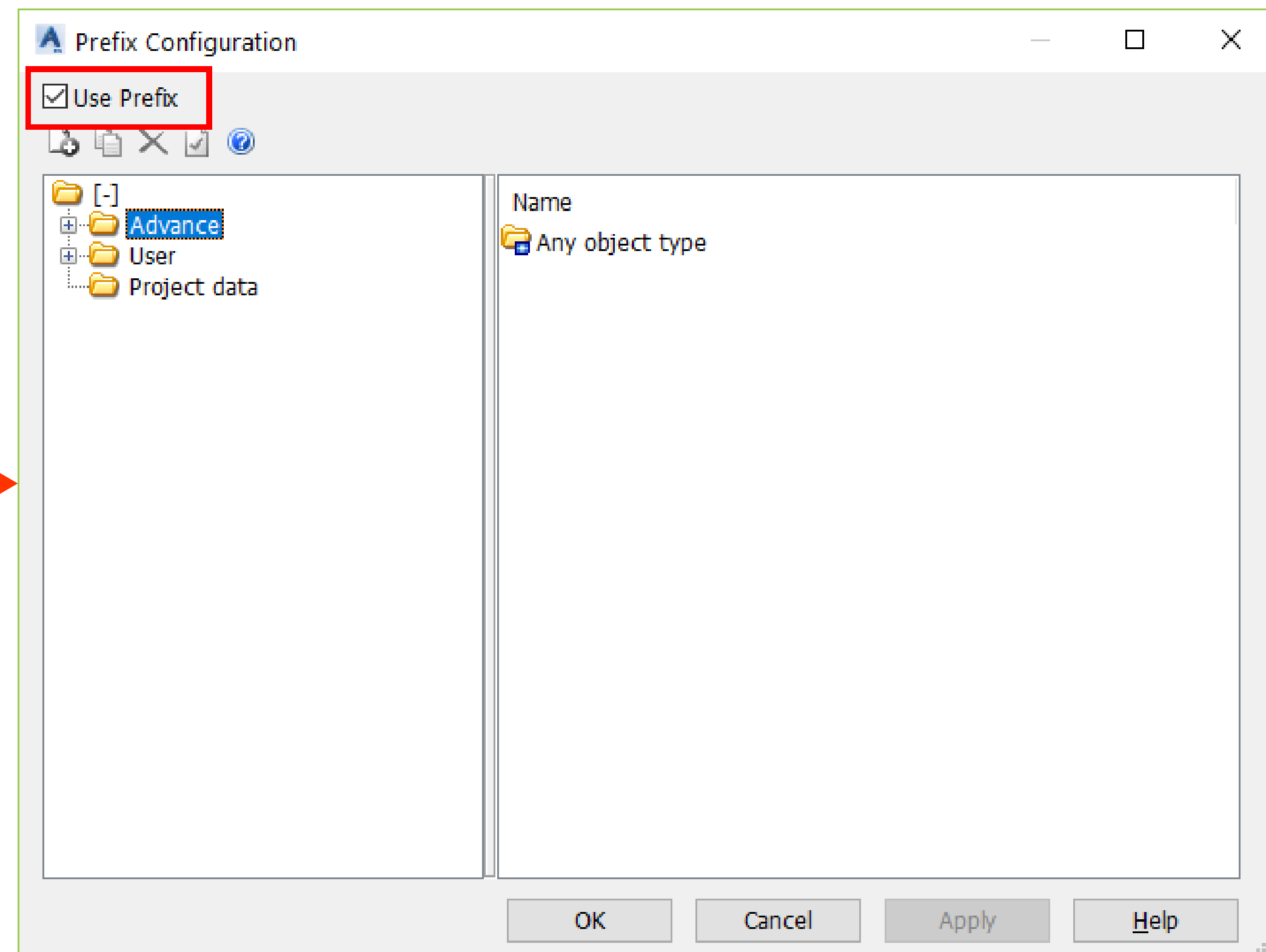
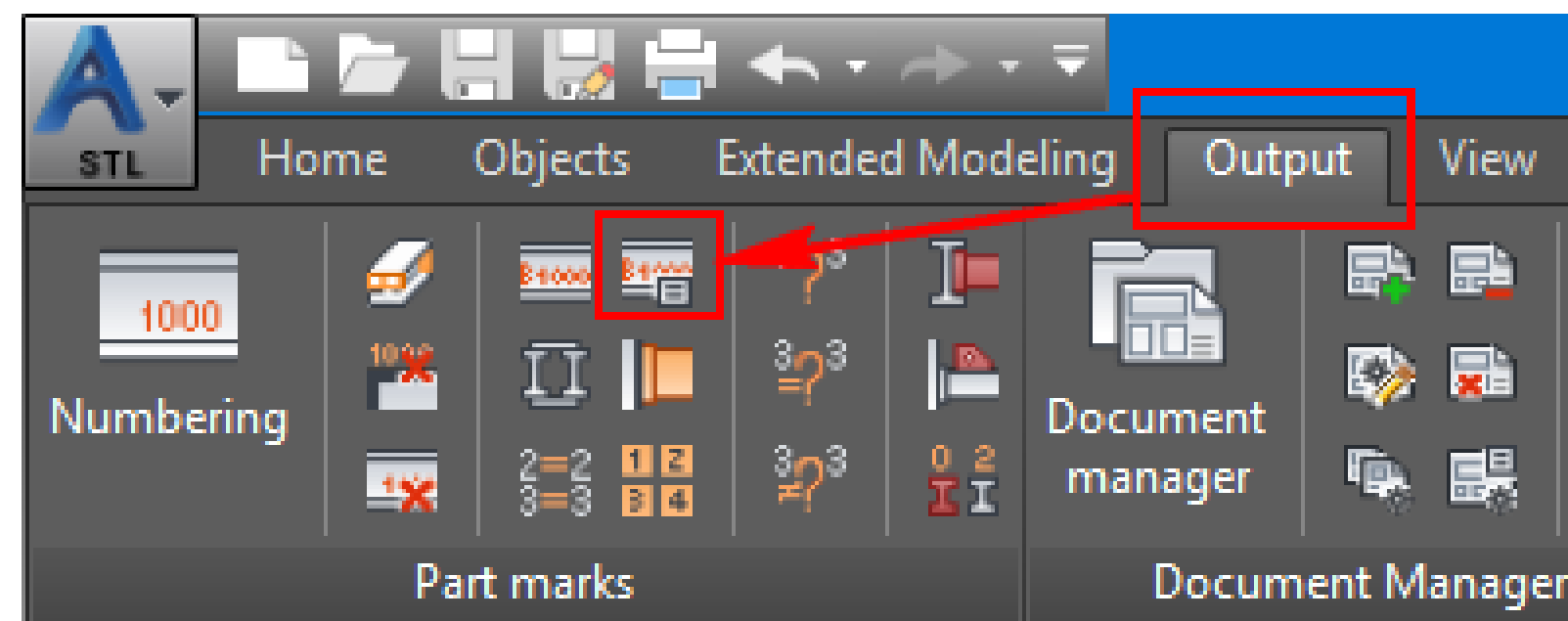
Section 4: Inserting Stairs

- Close the dialog box



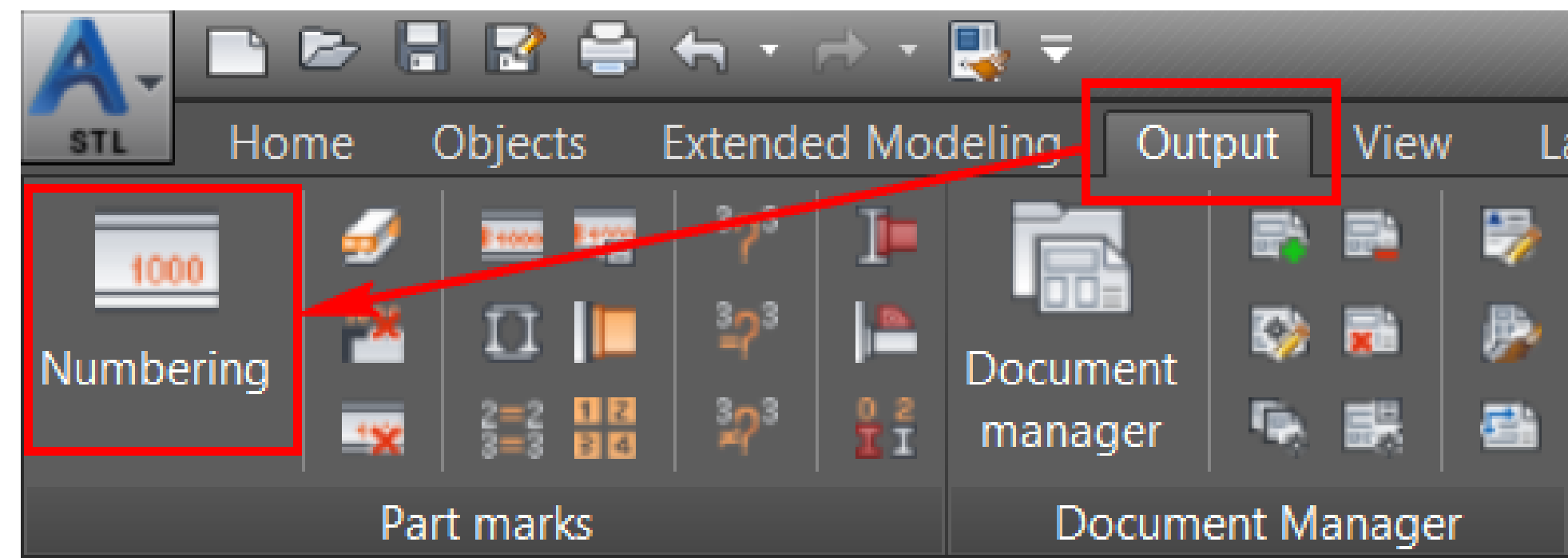
Section 5: Numbering Single Parts and Assemblies *(Do with me)*

- 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

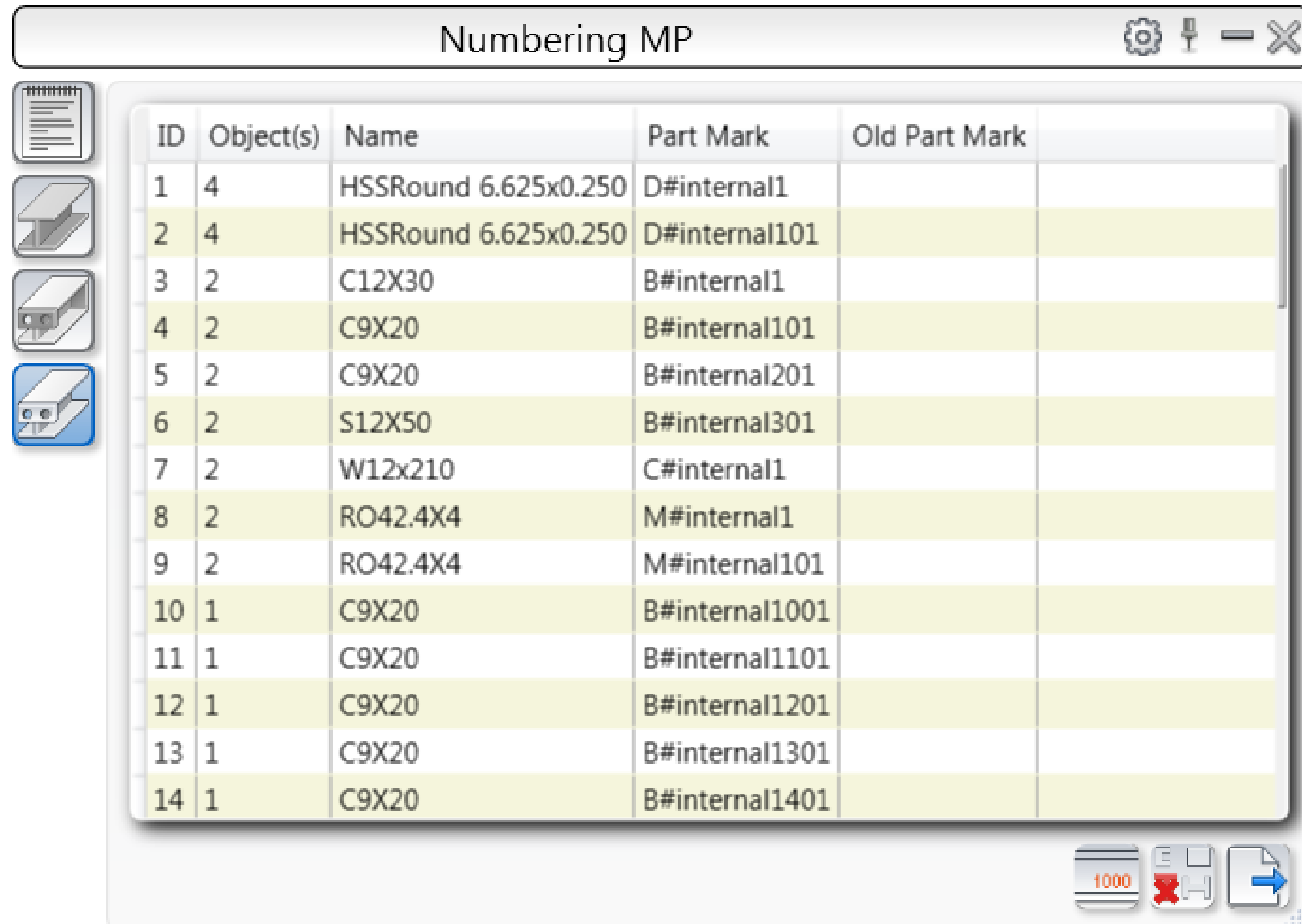
Start: 100 (indicated by a red arrow)
Increment: 1

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

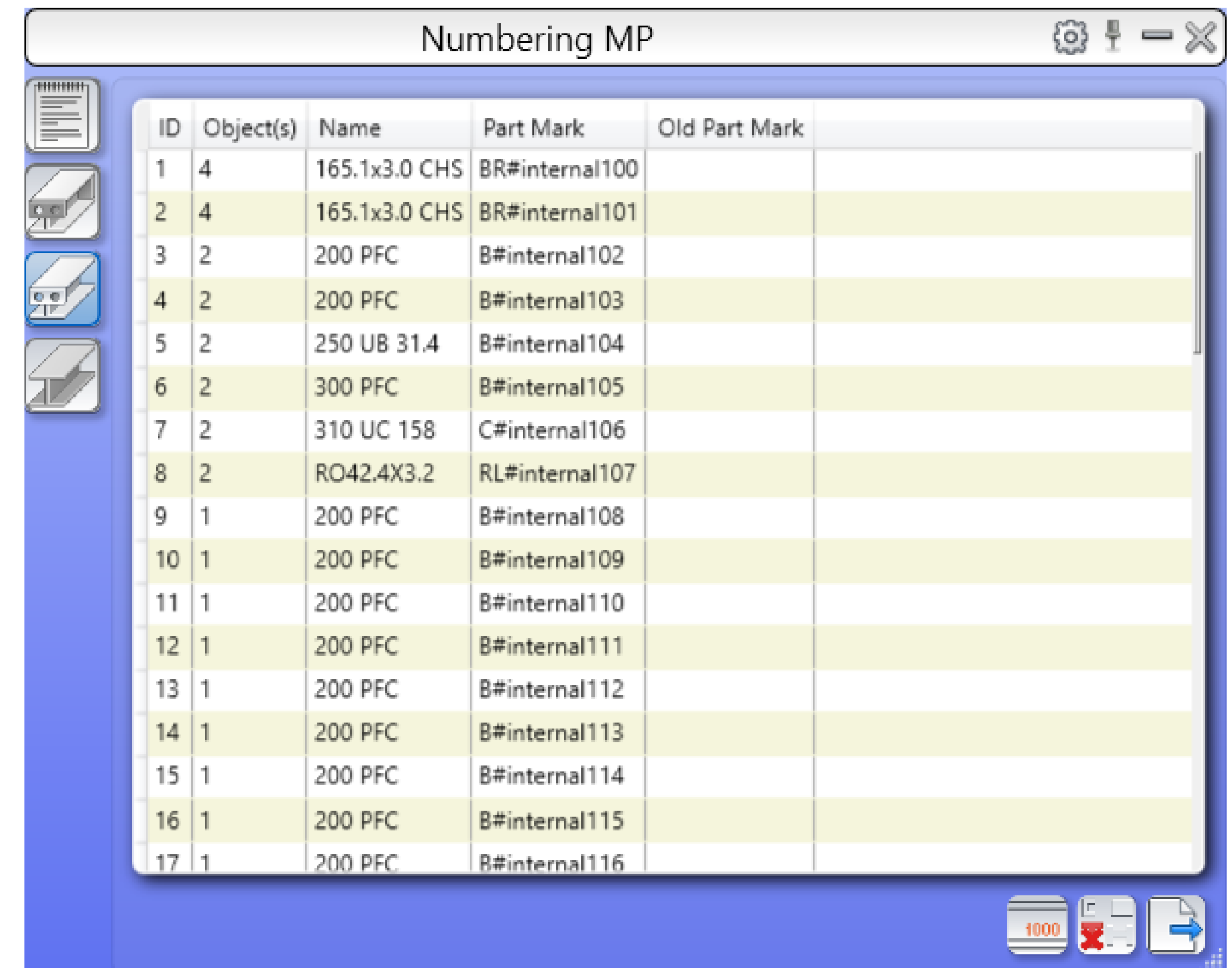
Section 5: Numbering Single Parts and Assemblies *(All Steps)*

- Click OK in the dialog box



The dialog box titled "Numbering MP" contains a table with 6 columns: ID, Object(s), Name, Part Mark, Old Part Mark, and an empty column. It lists 14 items with their respective part marks. On the left, there are four icons representing different types of structural members. At the bottom right, there are three icons: a list, a red 'X' over a document, and a blue arrow pointing right.

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		

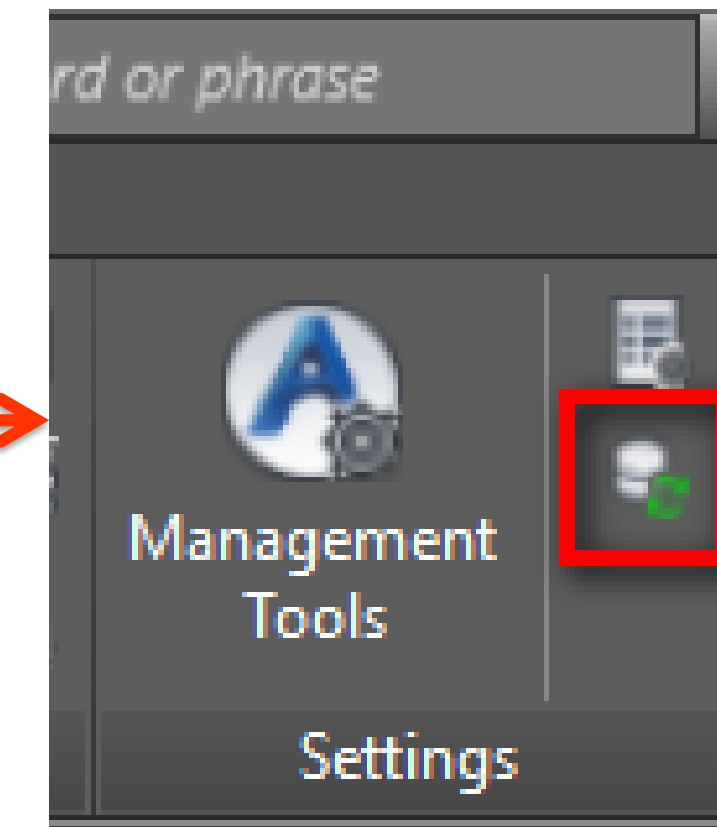
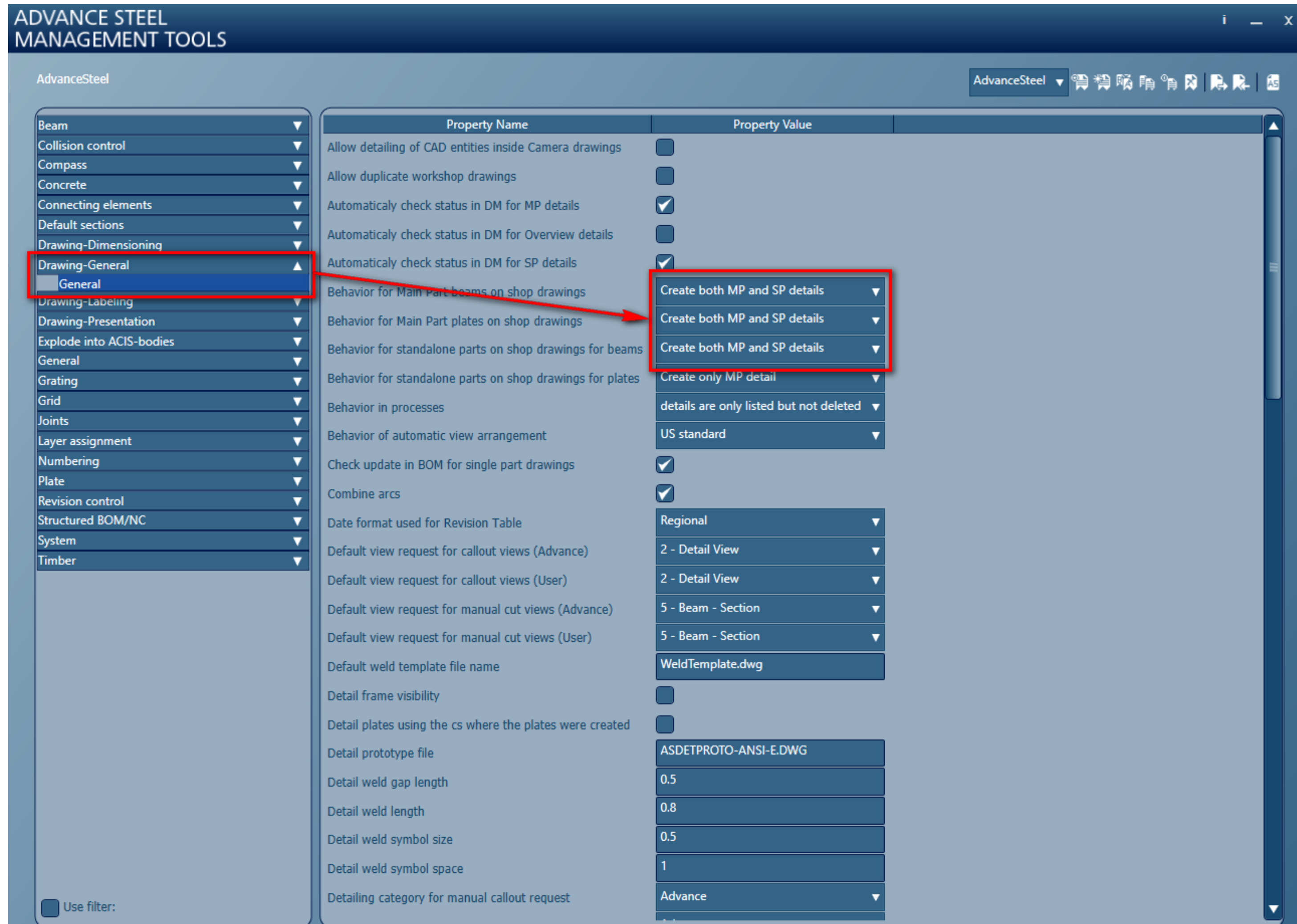


The dialog box titled "Numbering MP" contains a table with 6 columns: ID, Object(s), Name, Part Mark, Old Part Mark, and an empty column. It lists 17 items with their respective part marks. On the left, there are four icons representing different types of structural members. At the bottom right, there are three icons: a list, a red 'X' over a document, and a blue arrow pointing right.

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		

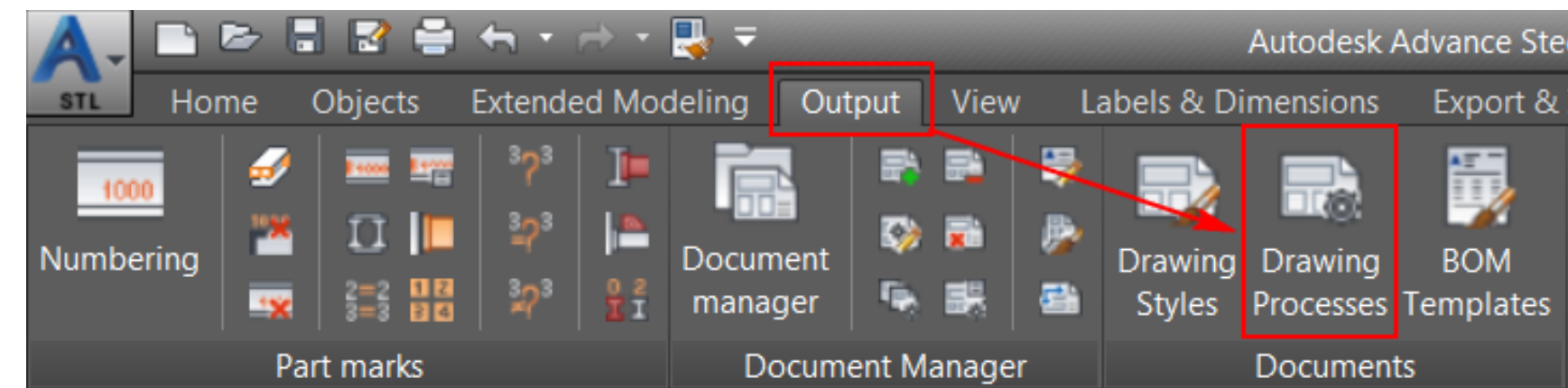
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Do with me)*

- For IMPERIAL ONLY

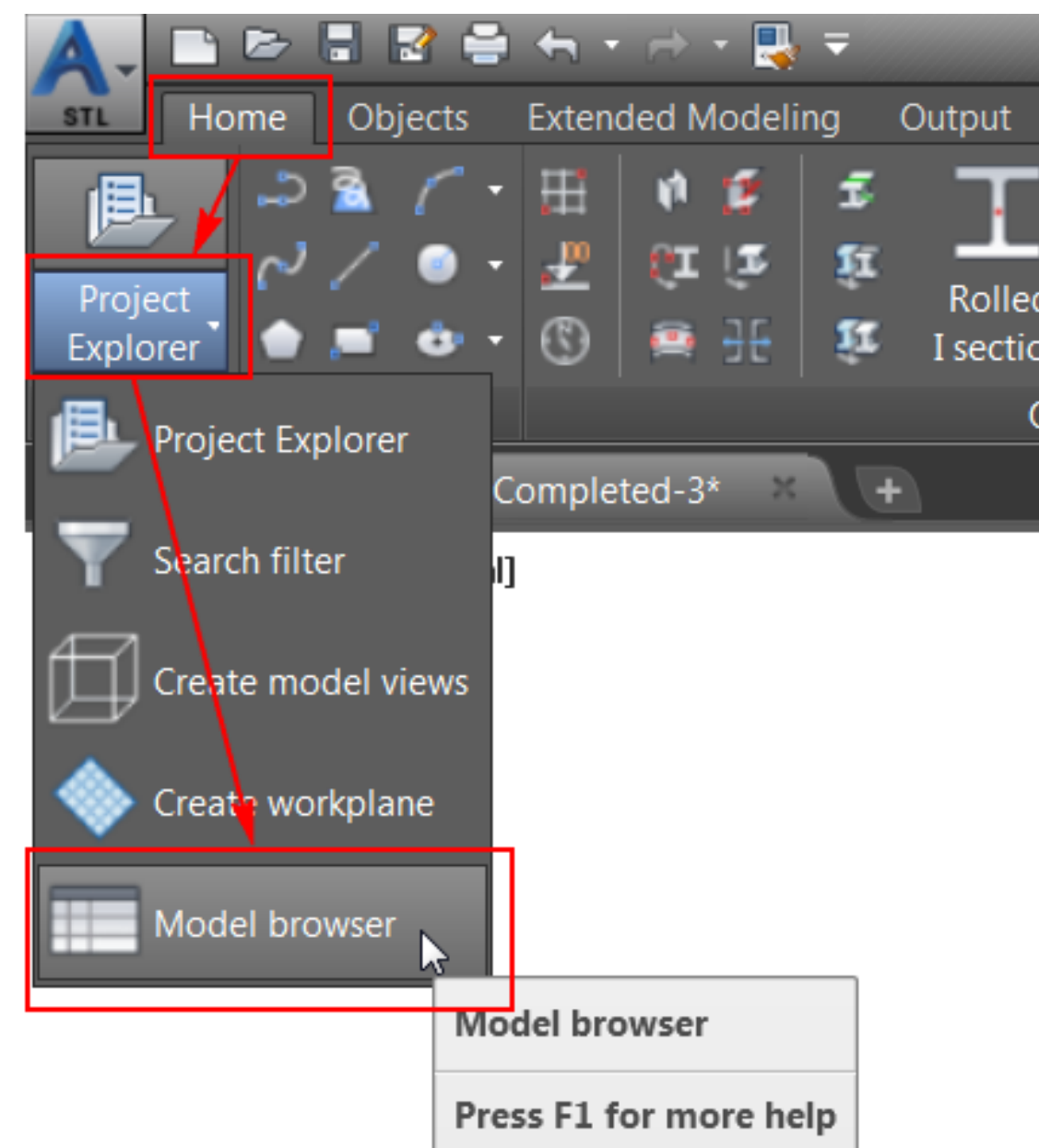


Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Do with me)*

- Invoke the Drawing Processes tool

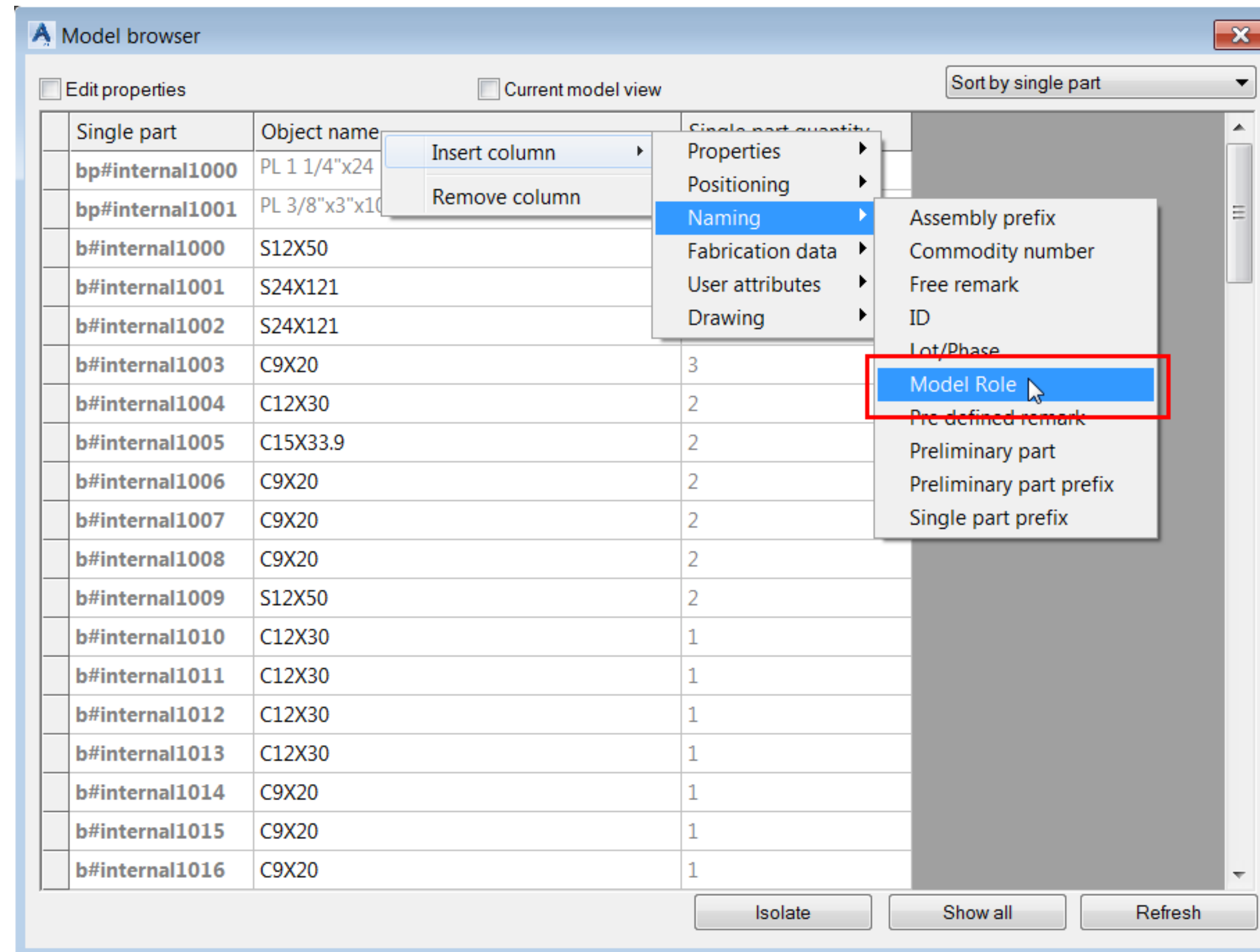


- Select Model browser, as shown below



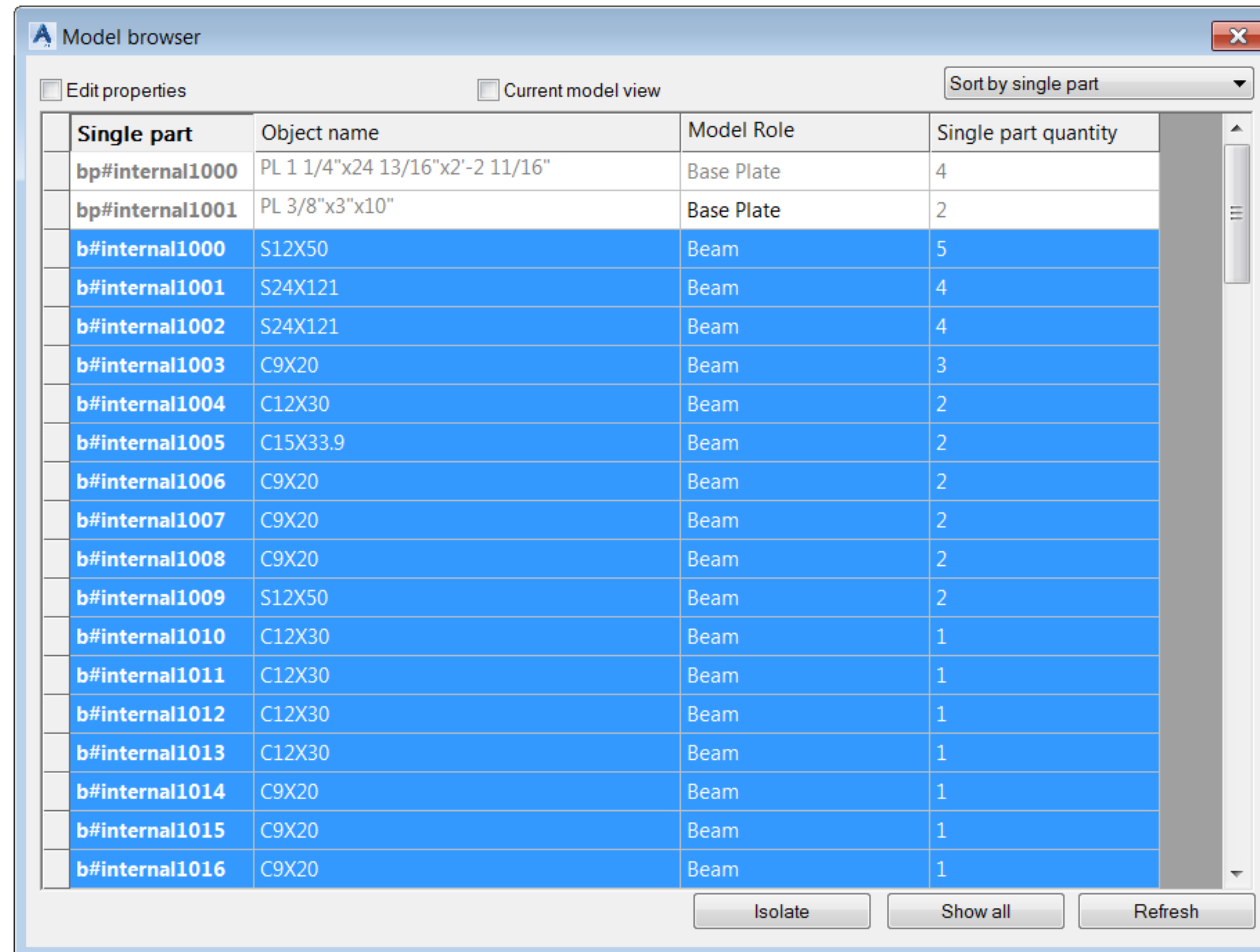
Section 6: Generating Single Part Drawings Using the Default Drawing Processes

- Display the Model Role column:



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

- Sort by Model Role and select all Beams and close Model browser

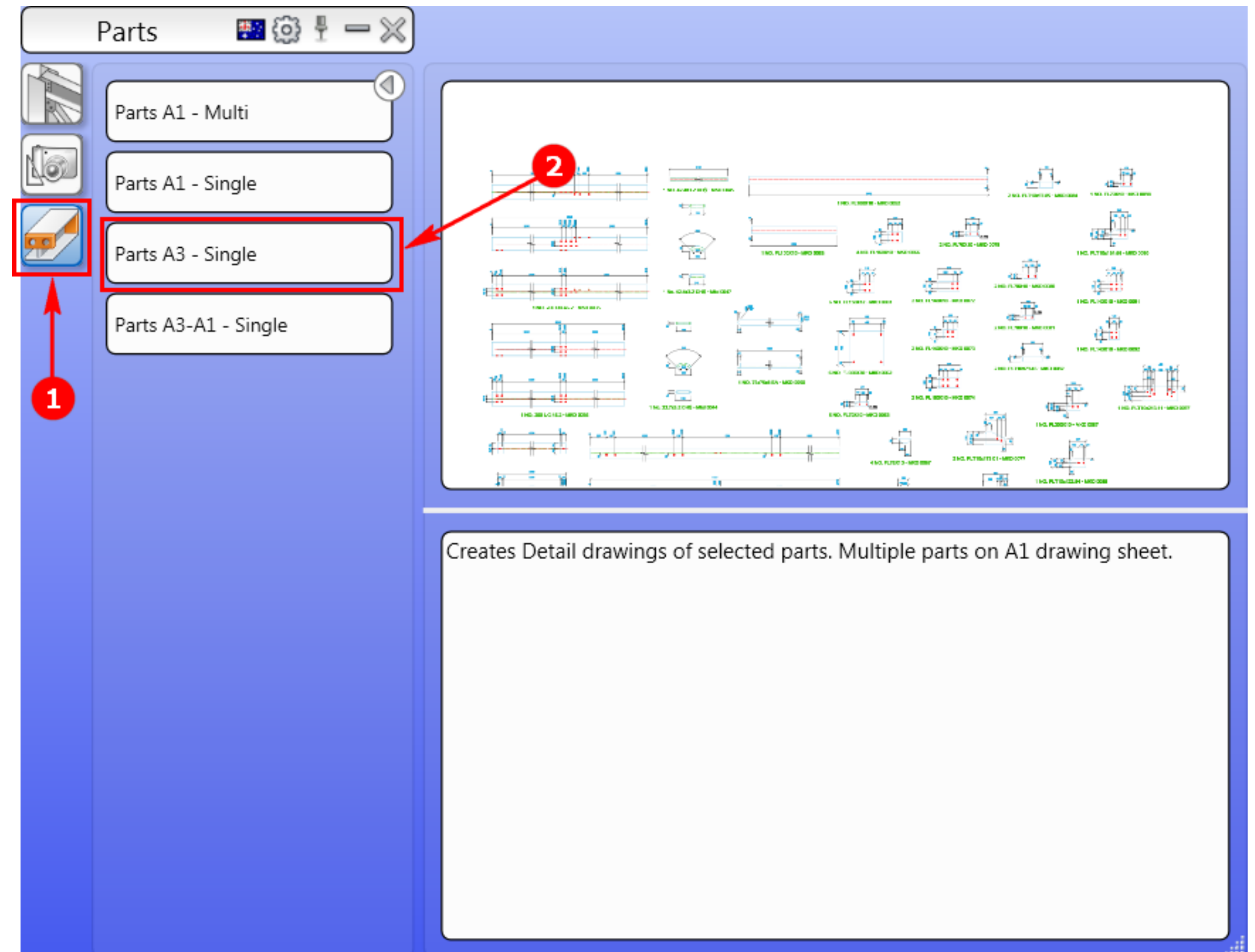
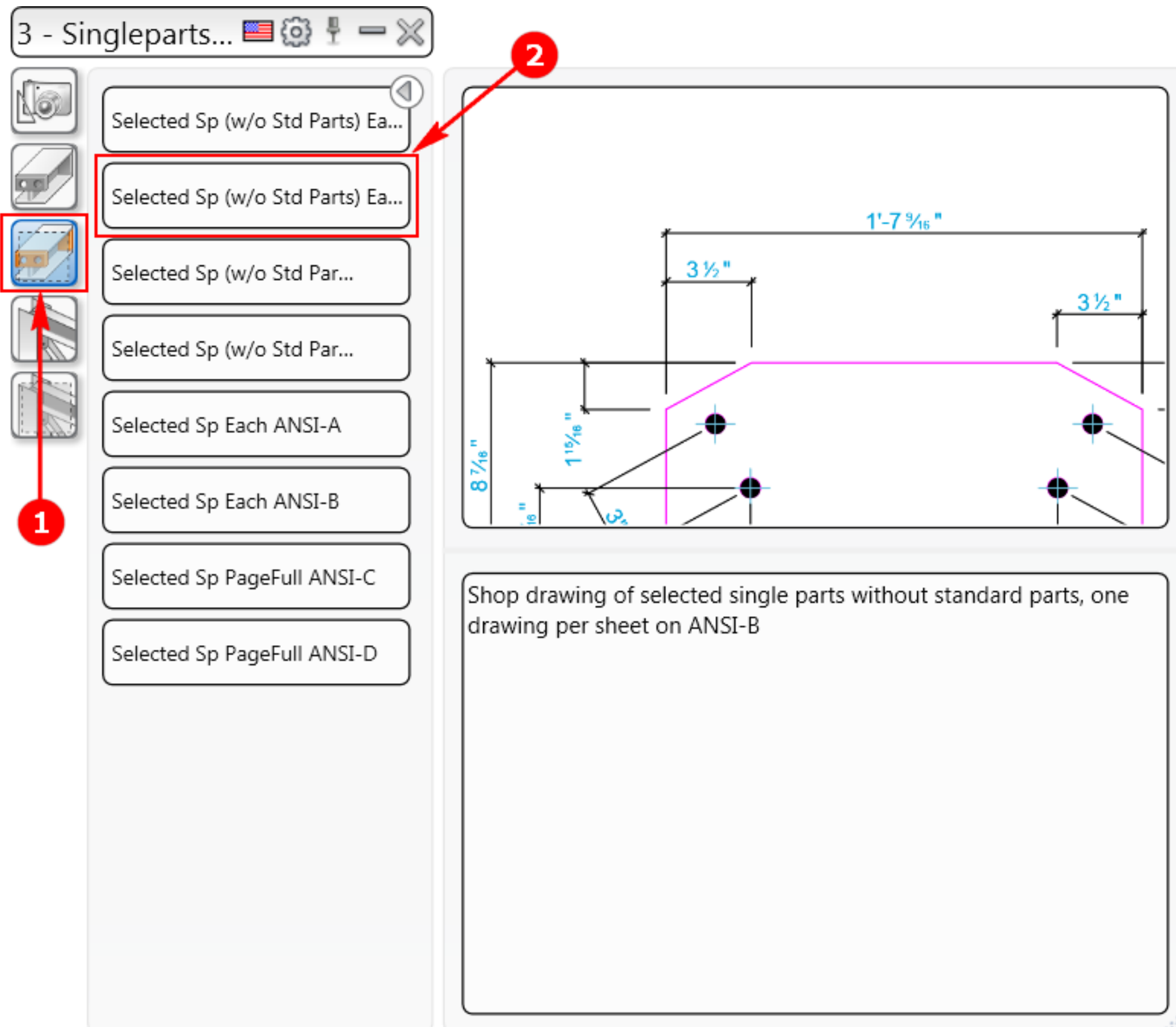


The screenshot shows the 'Model browser' window with a table of parts. The table is sorted by 'Model Role'. The first two rows are 'Base Plate' and the remaining 14 rows are 'Beam'. All 'Beam' rows are highlighted in blue. The table has columns for 'Single part', 'Object name', 'Model Role', and 'Single part quantity'. At the bottom of the window are buttons for 'Isolate', 'Show all', and 'Refresh'.

Single part	Object name	Model Role	Single part quantity
bp#internal1000	PL 1 1/4"x24 13/16"x2'-2 11/16"	Base Plate	4
bp#internal1001	PL 3/8"x3"x10"	Base Plate	2
b#internal1000	S12X50	Beam	5
b#internal1001	S24X121	Beam	4
b#internal1002	S24X121	Beam	4
b#internal1003	C9X20	Beam	3
b#internal1004	C12X30	Beam	2
b#internal1005	C15X33.9	Beam	2
b#internal1006	C9X20	Beam	2
b#internal1007	C9X20	Beam	2
b#internal1008	C9X20	Beam	2
b#internal1009	S12X50	Beam	2
b#internal1010	C12X30	Beam	1
b#internal1011	C12X30	Beam	1
b#internal1012	C12X30	Beam	1
b#internal1013	C12X30	Beam	1
b#internal1014	C9X20	Beam	1
b#internal1015	C9X20	Beam	1
b#internal1016	C9X20	Beam	1

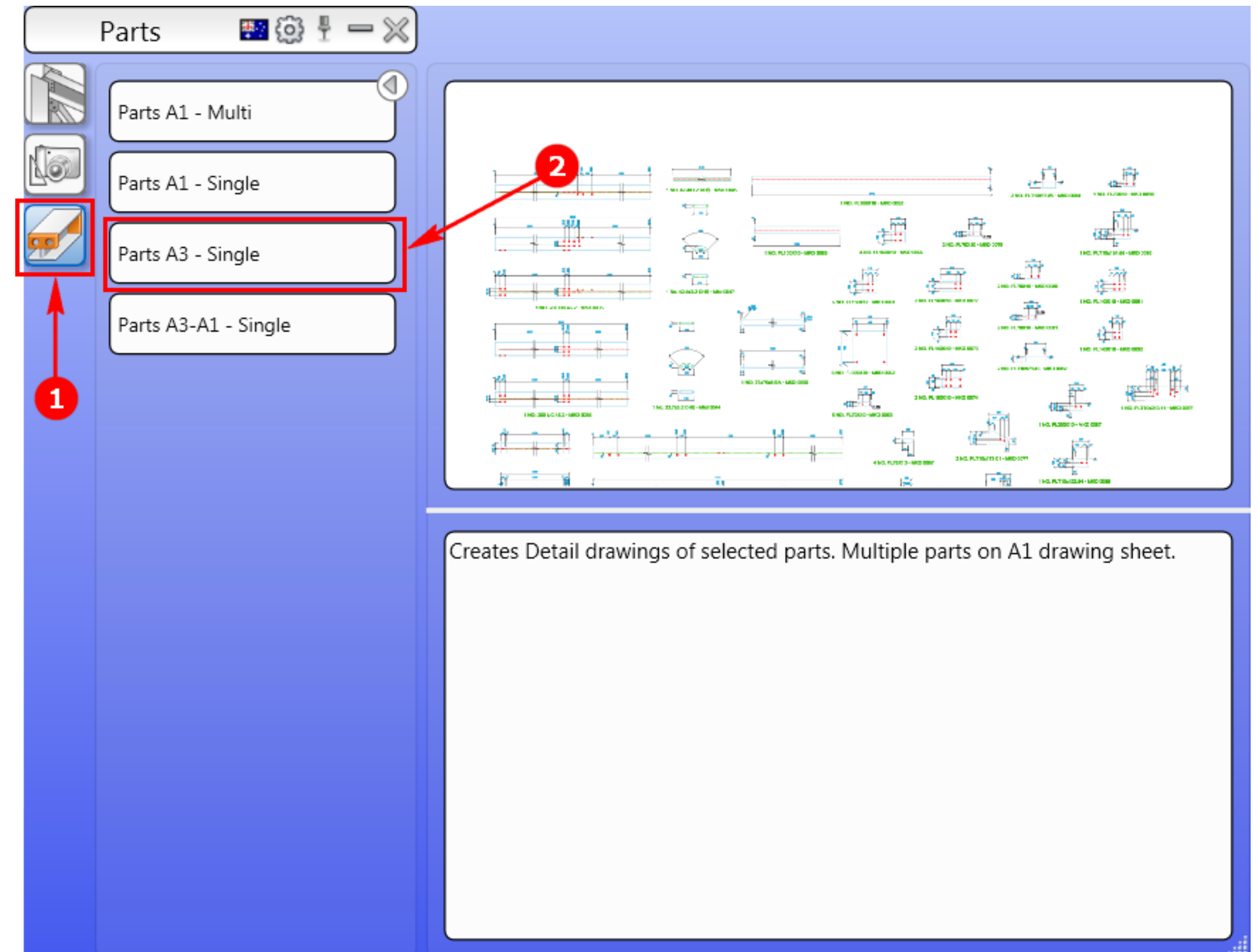
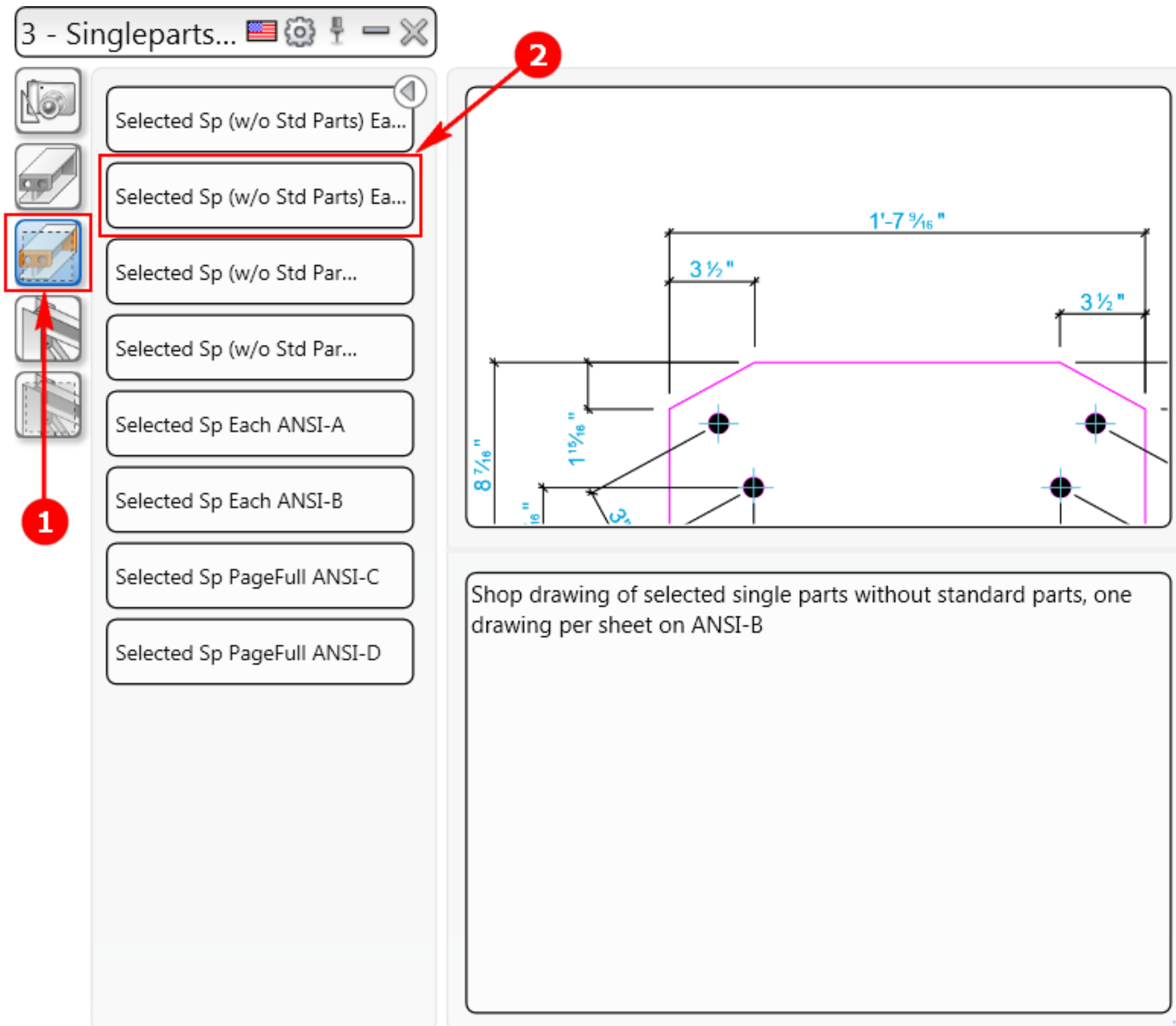
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Imperial - Steps 12-14, Metric - 7-9 Only)*

- Select the tool to generate single part drawings



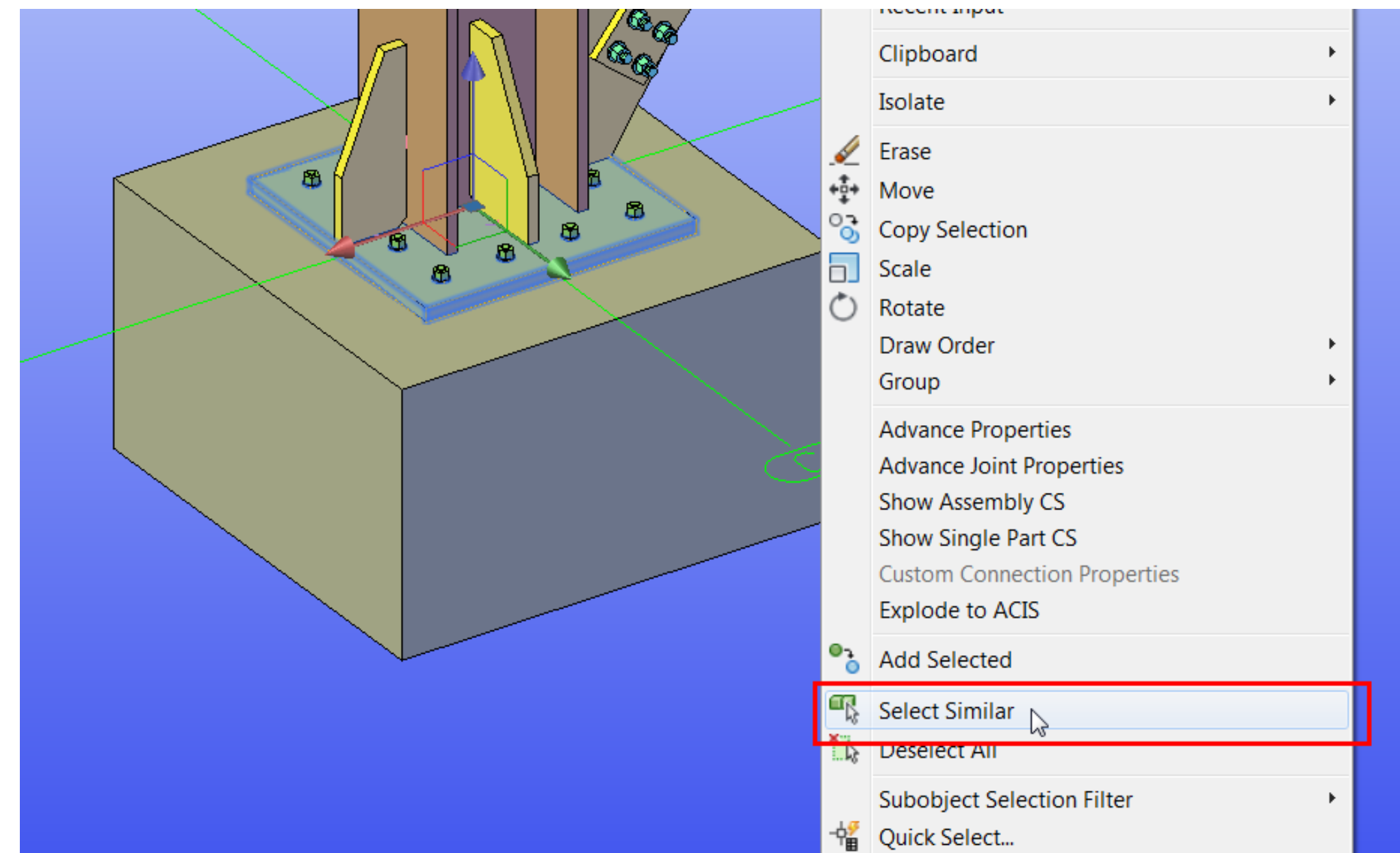
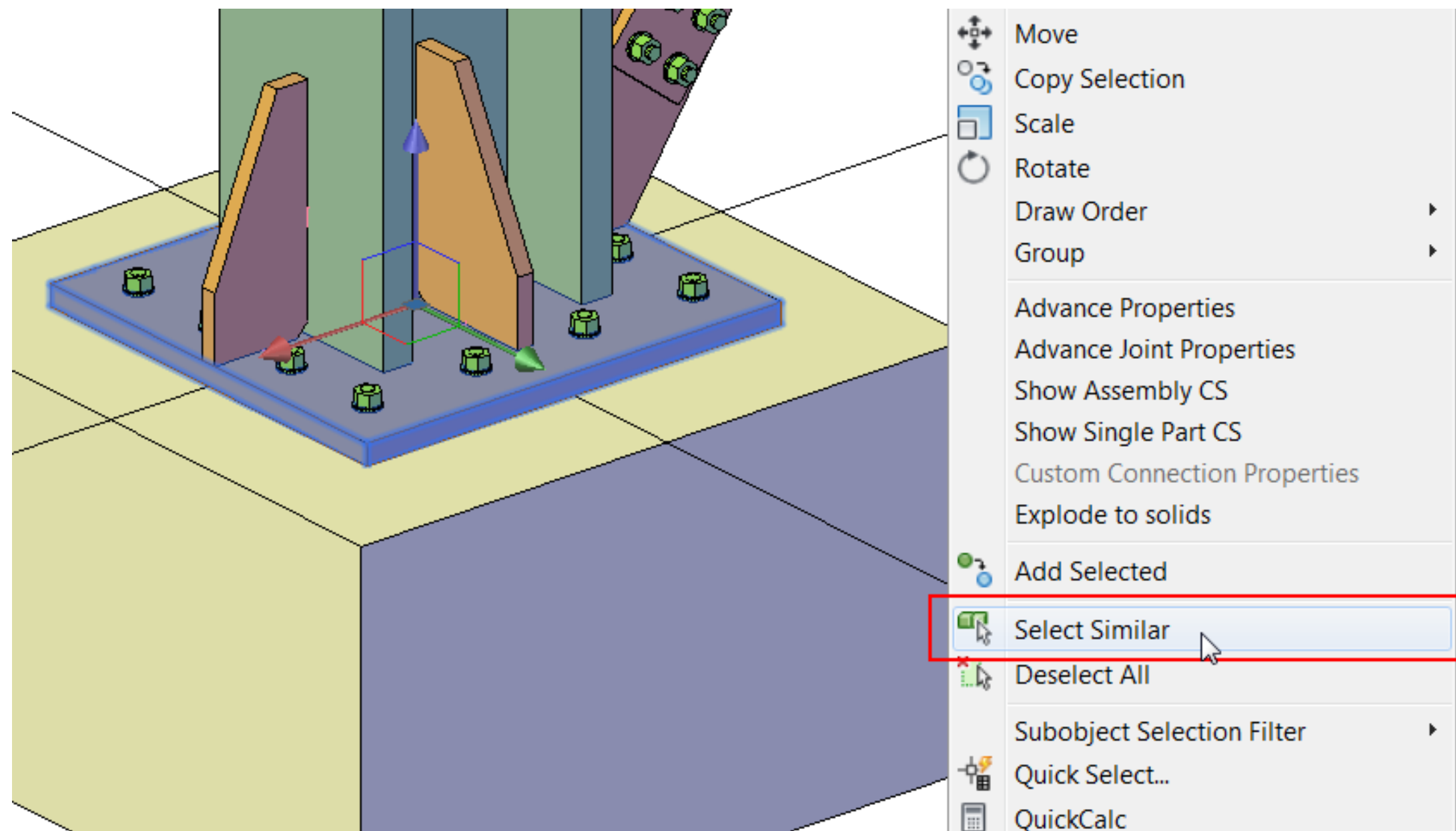
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Imperial - Steps 15-17, Metric - 10-12)*

- Select the Four Columns and then select the tool to generate column drawings



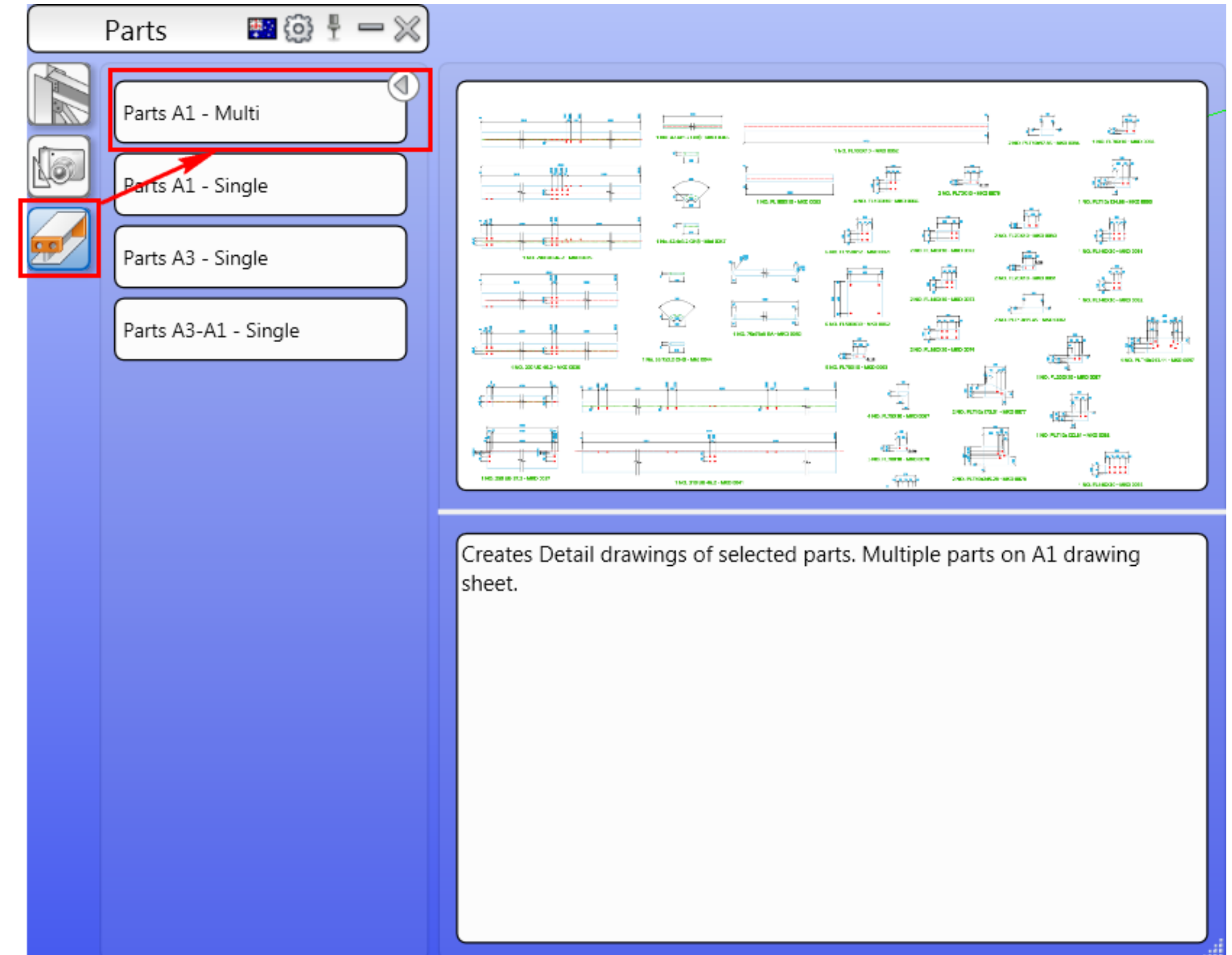
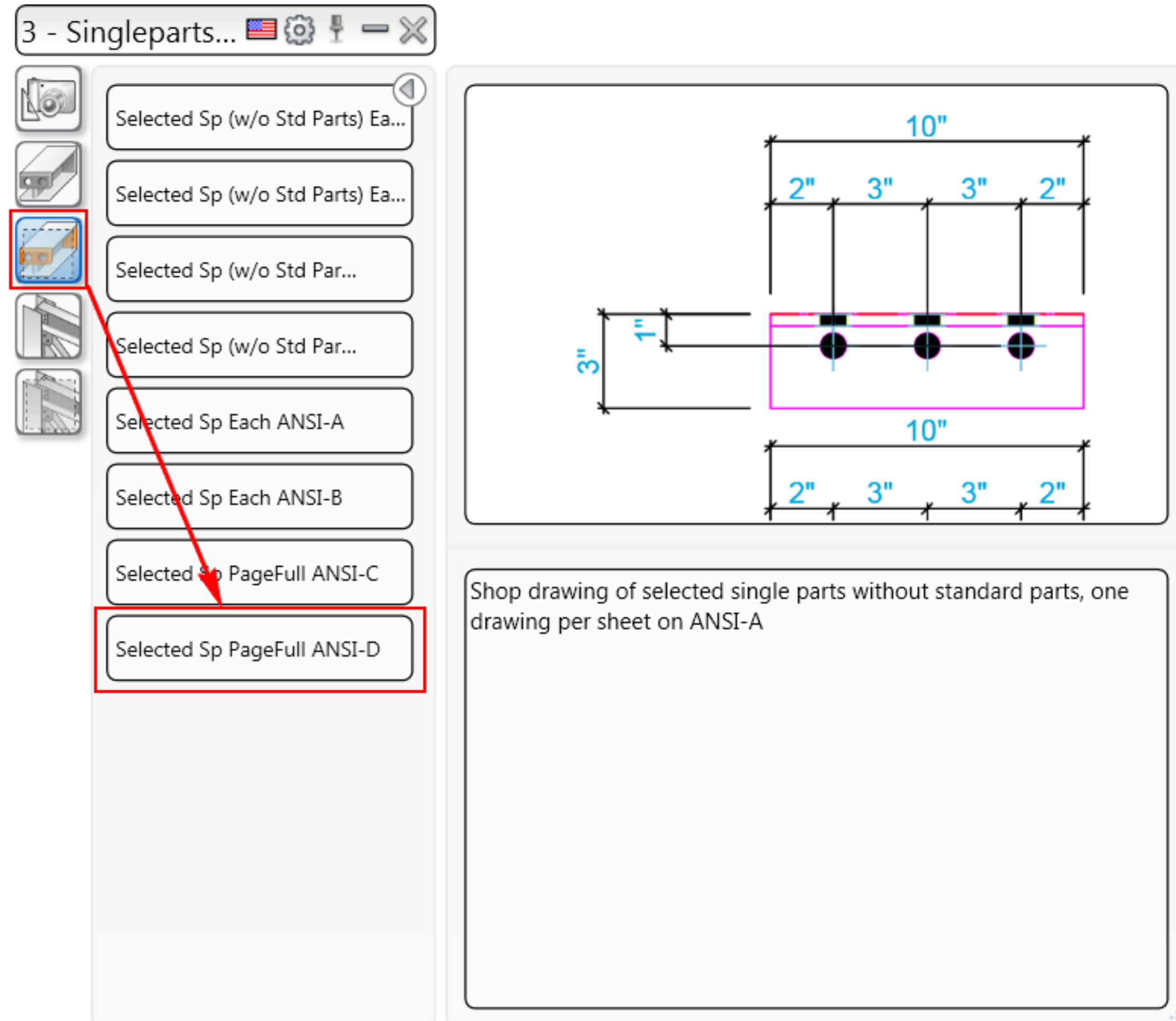
Section 6: Generating Single Part Drawings Using the Default Drawing Processes

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



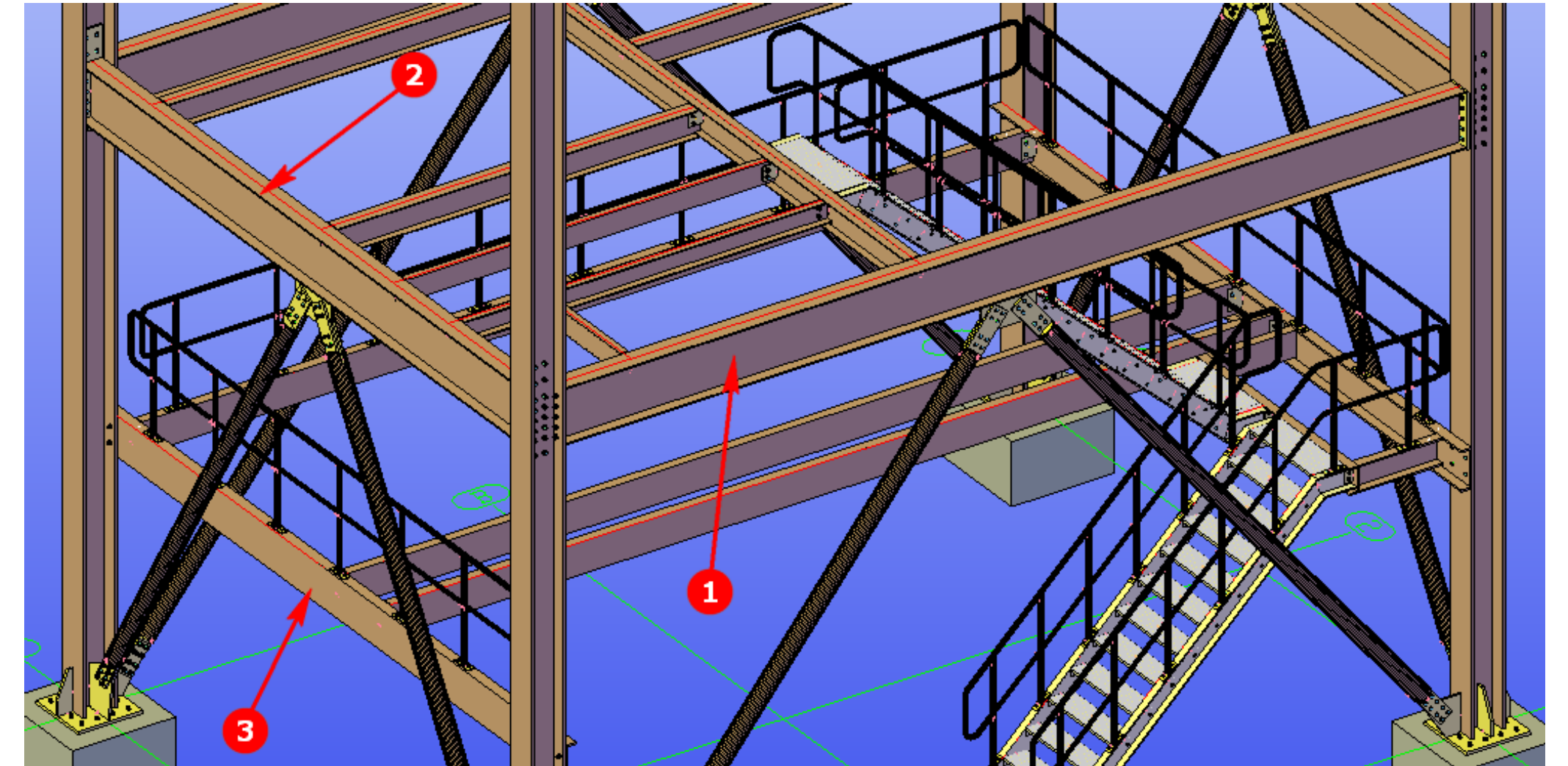
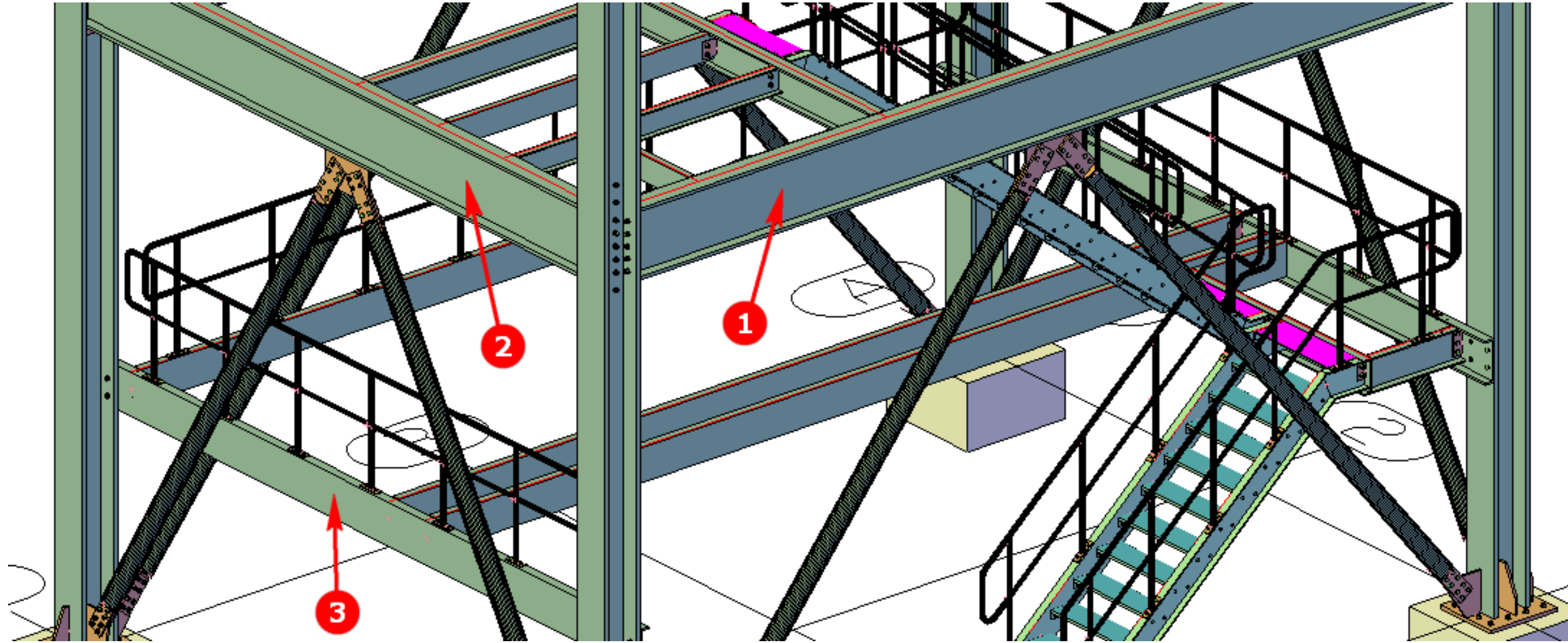
Section 6: Generating Single Part Drawings Using the Default Drawing Processes *(Remaining Steps)*

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



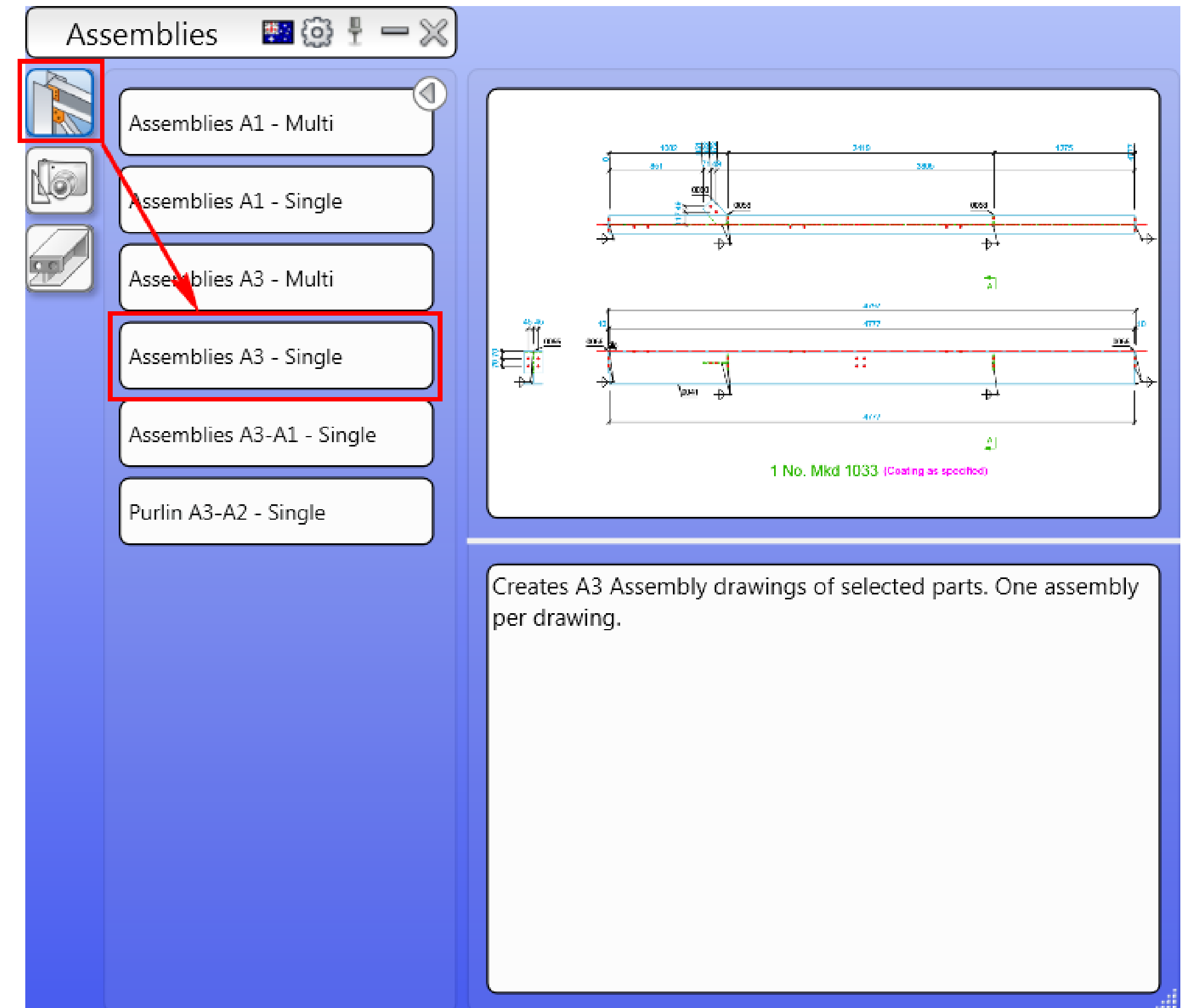
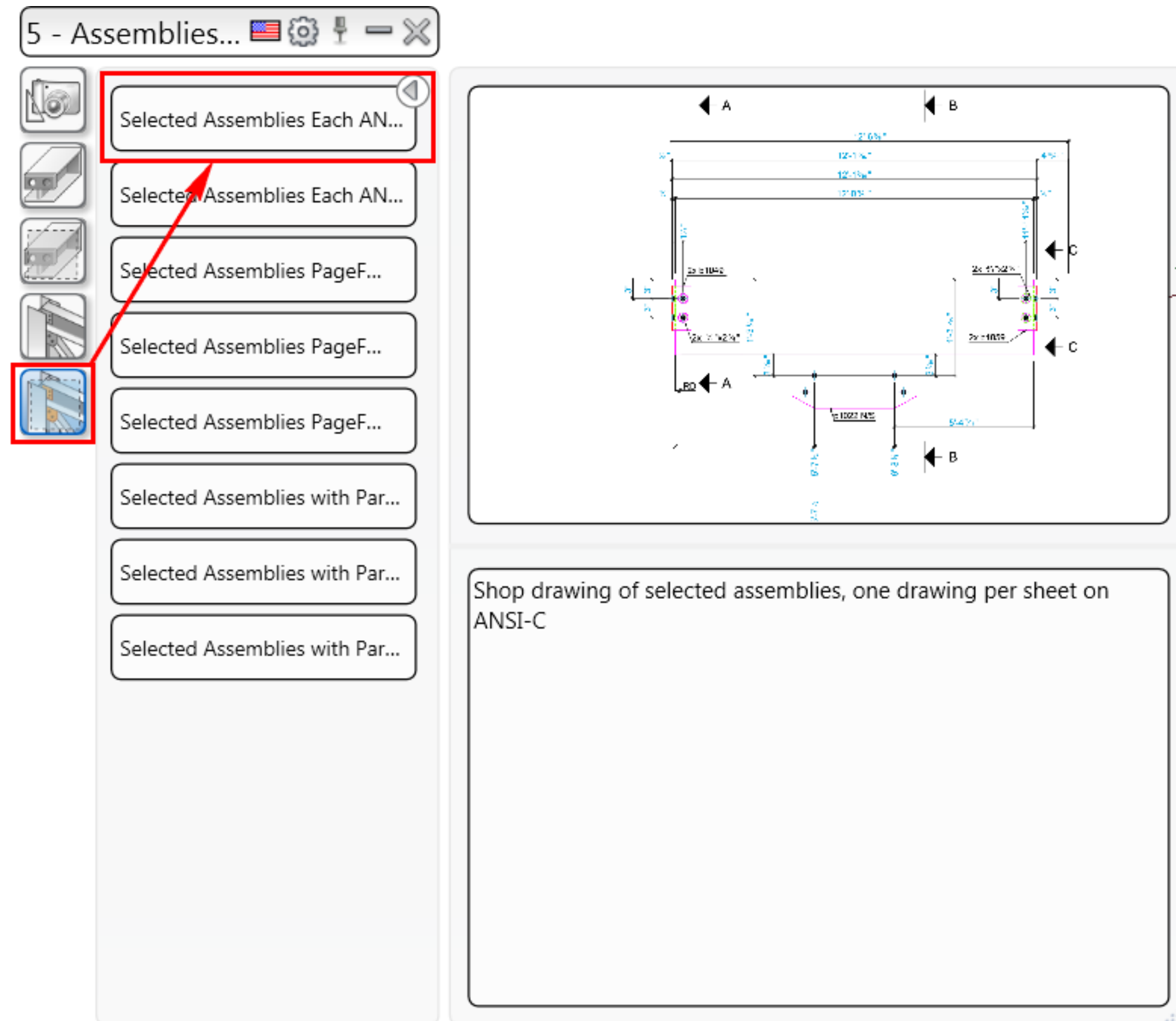
Section 7: Generating Assembly Drawings Using the Default Drawing Processes

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

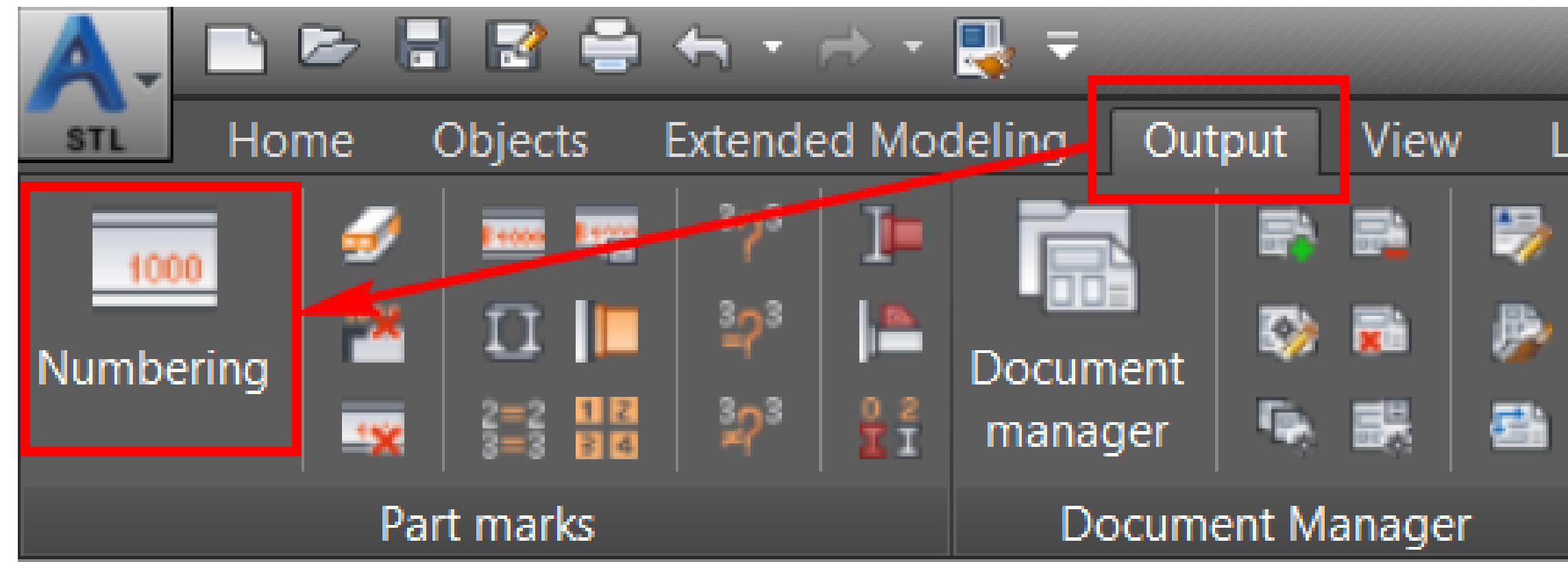


Section 7: Generating Assembly Drawings Using the Default Drawing Processes *(All Steps)*

- Select the tool to generate Assembly drawings

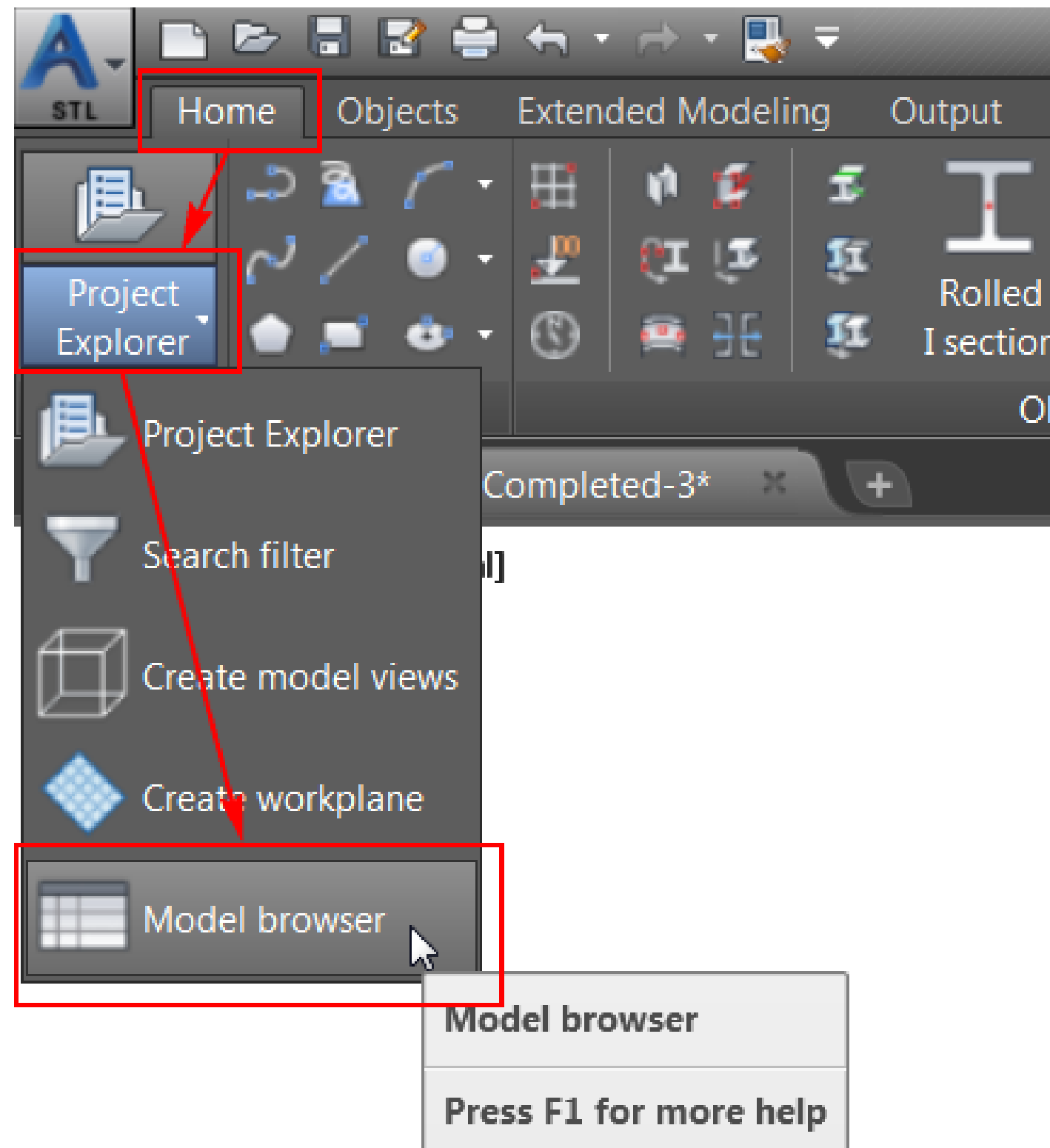


Section 8: Running the Numbering Again *(All Steps)*



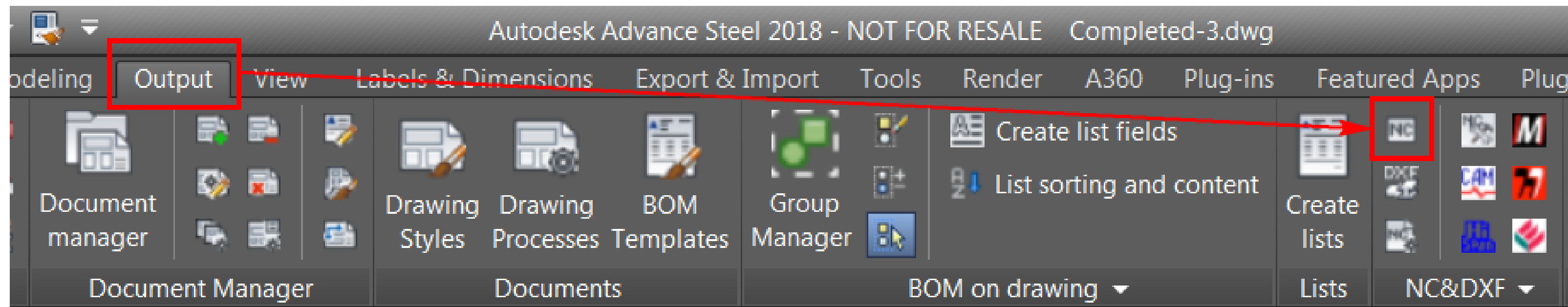
Section 9: Generating NC Files for Beams and DXF Files for Plates

- **Invoke** Model browser



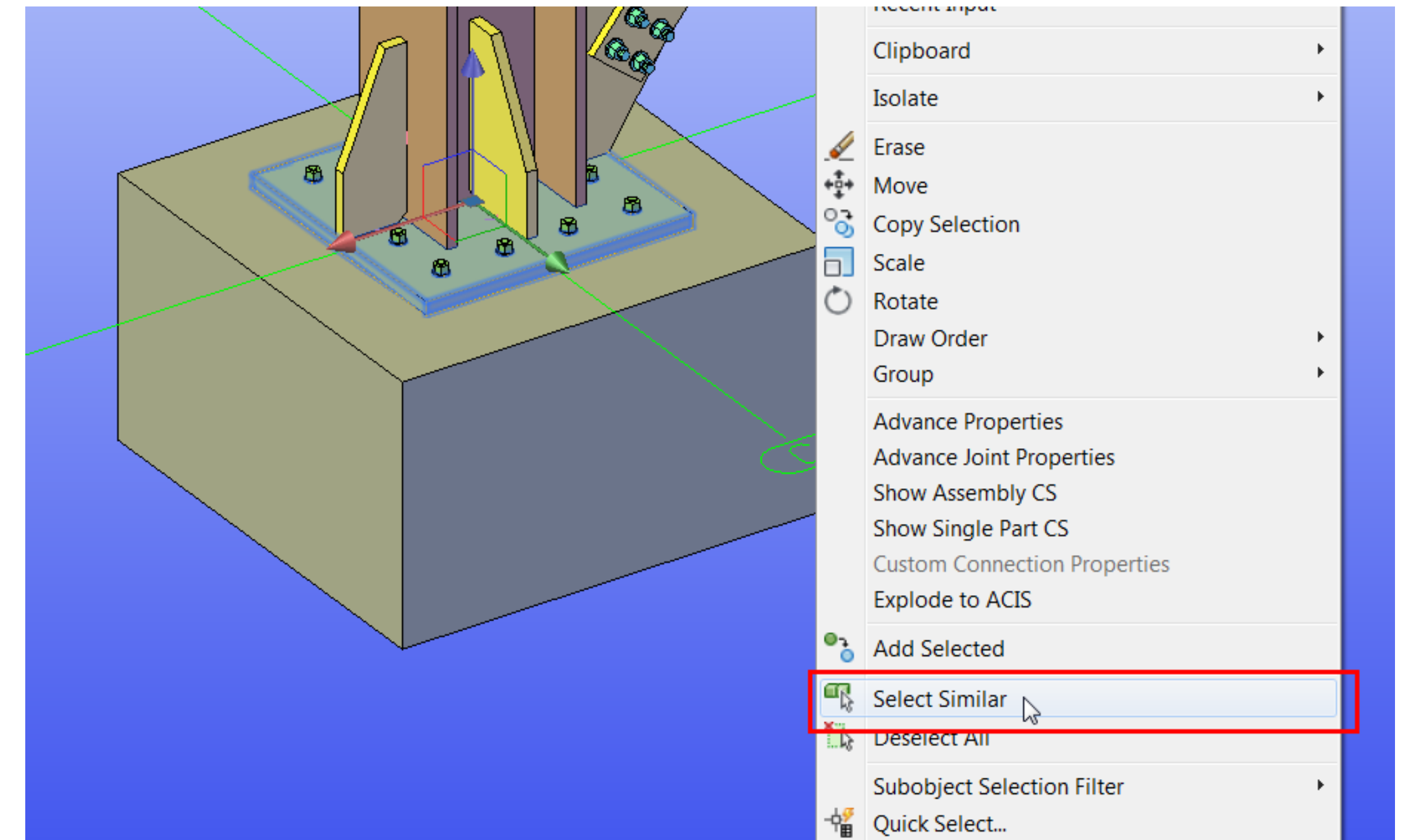
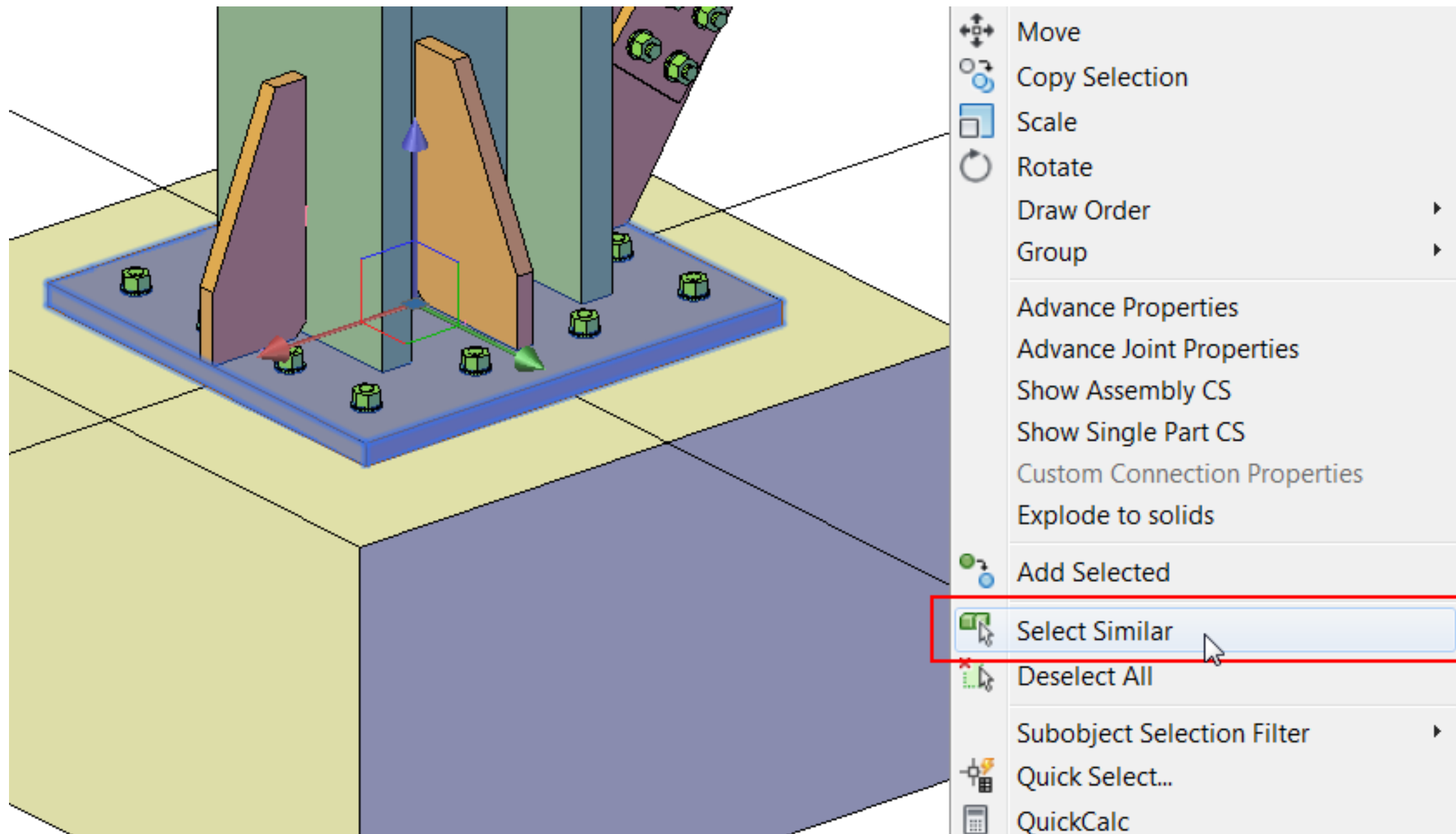
Section 9: Generating NC Files for Beams and DXF Files for Plates (*Steps 1-4*)

- Select all Beams
- Select the NC tool



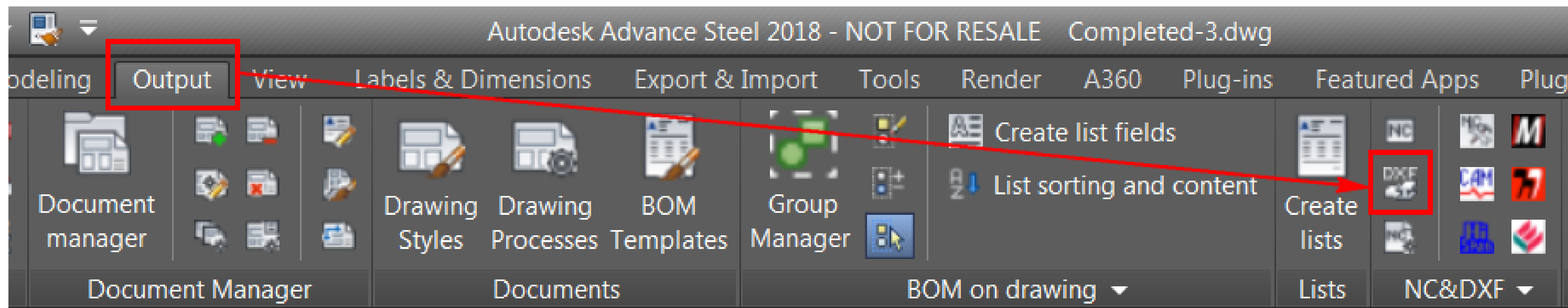
Section 9: Generating NC Files for Beams and DXF Files for Plates

- 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



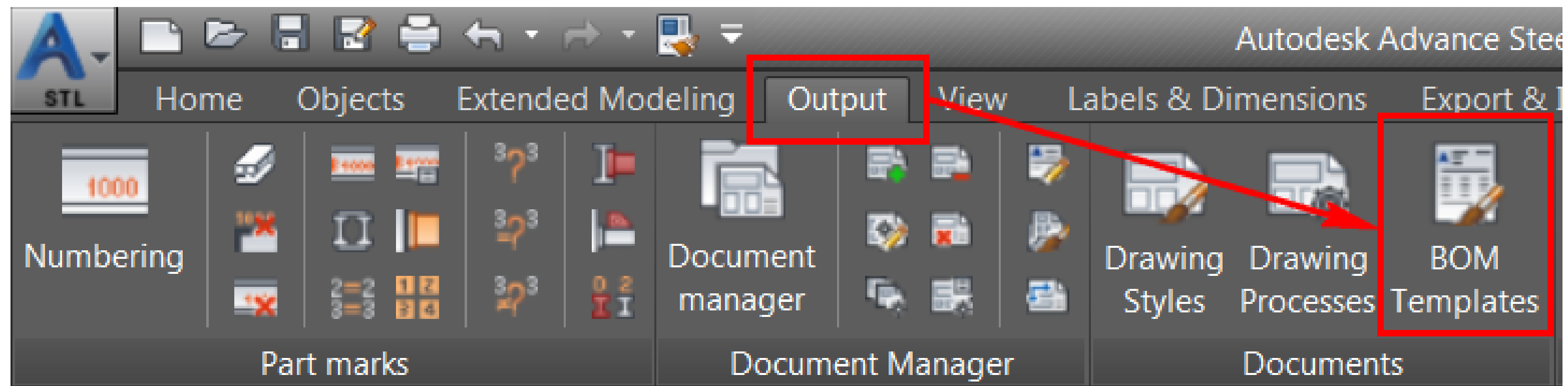
Section 9: Generating NC Files for Beams and DXF Files for Plates *(Steps 5 to the End)*

- Invoke the DXF tool



Section 10: Generating Bill of Materials (BOMs)

- Invoke the BOM Templates tool



Section 10: Generating Bill of Materials (BOMs)

- **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

Company

Client: _____

Project: _____

Designer: _____

Unit: 12

Quantity	Mark	Description	Length (inch)	Weight Grade	Part weight pound	Total weight pound	End surface sq ft	Is
12	B1	W12x16	8' 10 11/16"					
12	B1	W12x16	8' 10 11/16"	A992	94.28	1,130.83	16.14	
					TOTAL	1,130.83		
10	B3	L3X3X3/8	8' 10 7/8"					
10	B3	L3X3X3/8	8' 10 7/8"	A36	45.73	457.27	6.0	
					TOTAL	457.27		
2	B43	W12x26	11' 10 11/16"					
2	B43	W12x26	11' 10 11/16"	A992	303.11	618.21	45.04	
12		A325 B7C x 1.314	1.314"	10.0	0.32	4.23		
12		A325 NUT 1.314		10.0	0.12	1.43		
12		Washer 1.314 x .50		10.0	0.04	0.47		
					TOTAL	816.34		

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

Company
Job:
Client:
Project:
Description:

Date: 11-Feb-2016

**STRUCTURED LIST -
expl.Bolts**

Mark	Quantity	Name	Coultly	Length (mm)	Width (mm)	Weight of piece (kg/piece)	Total weight (kg)	Surface S. ribbe (m2/piece)	Total Surface (m2)
A20	4	C 120X2.5							
P1041	1	C 120X2.5	2226	4200	12740.0	76800.0	0.000	0.000	
						76800.0			0.000
A21	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

OpenSaveExport

1/18BackwardForward

AUTODESK®
ADVANCE STEEL

Company

Client:

Job No:

Project:

Detailer:

Date:

13-Sep-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	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#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#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		
2		A563 Nut M 3/4		10.9	0.19	0.39		
2		Washer F436 - 3/4		10.9	0.04	0.09		
					TOTAL	88.00		9.97 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

Assembly list - exploded bolts

OpenSaveExport

1/19BackwardForward

</

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) 114 RE 11/12 Pm 2509.037	7 5 510"	A25	39.71	61.42	
2	D2	AISC (3) 114 RE 11/12 Pm 2509.036	9 2 710"	A25	37.71	75.42	
2	D3	AISC (3) 114 RE 11/12 Pm 29 5 235	8'6" 510"	A25	38.23	76.46	
2	D4	AISC (3) 114 RE 11/12 Pm 3509.273	10'11" 510"	A25	43.84	87.68	
1	D6	AISC (3) 114 RE 11/12 Pm 89 492	3 3 140"	A25	11.02	47.29	
1	D7	AISC (2) 54 RE 11 Pm 509.106	11 6 140"	A25	16.05	67.25	
4	D8	AISC (3) 114 RE 11/12 Pm 650.492	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:

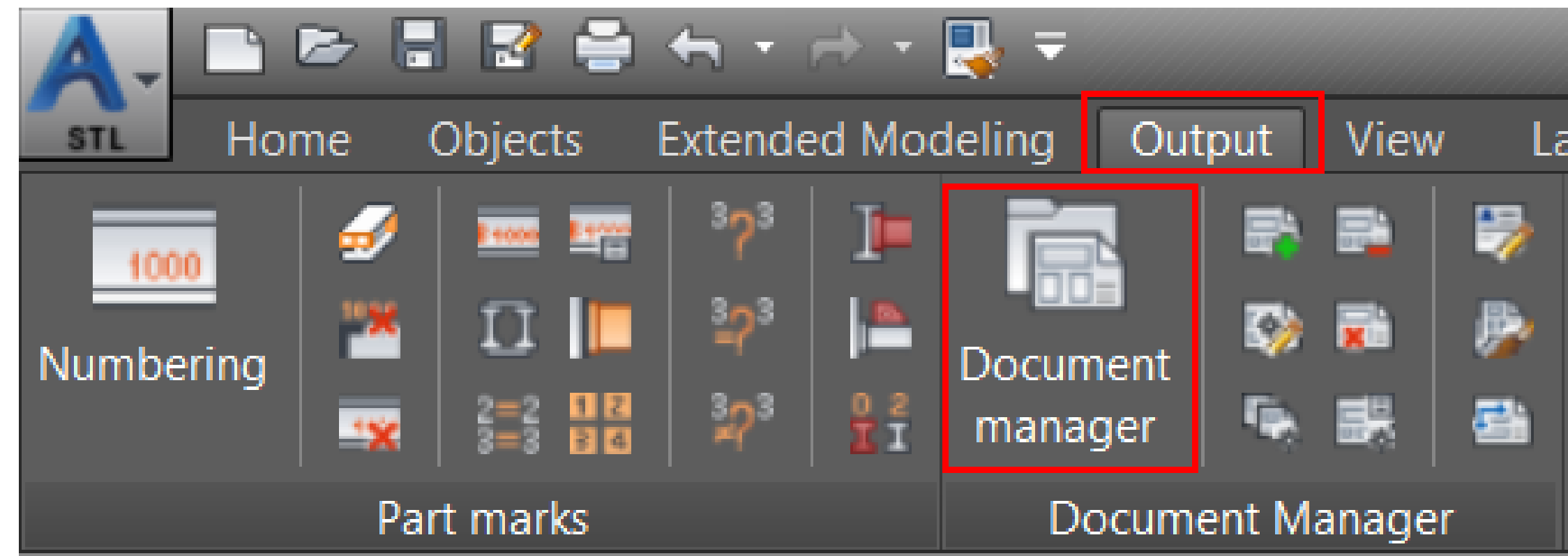
BEAM LIST - STRAIGHT

Mark	Size	Grade	Length (mm)	Quantity	Weight per metre (kg/m)	Weight each (kg)	Total Weight (kg)	Surface Area (m²)	Total Surface (m²)	Description
A1	HACIERO 3.333.30 T	S235	1250	312	5878.5	7348.2	2202629.0	2073810.	227831814.	[S](None)[None]
A3	C120X2.0	S235	853	40	4700.0	4068.1	181418.6	0.000	0.000	
A4	44-180	S235	8075	26	15000.0	177000.0	3884854.4	5030724	143861006	
A5	CHANTILLY 540.000 B	S235	920	20	1570.0	1413.0	40277.0	61455.778	1782217.904	[S](None)[None]
A6	180180	S235	9075	20	15800.0	80185.0	2325864.4	5181734.	01890008.901	
A7	HACIERO 3.333.30 T	S235	101	26	5878.0	691.2	15370.7	233270.416	6220510.816	[S](None)[None]
A8	HACIERO 3.333.30 T	S235	1250	24	5878.0	7140.2	173358.1	2873118	21571670.058	[S](None)[None]
A9	HACIERO 3.333.30 T	S235	858	19	5878.0	4042.9	52549.8	1835025	21287098.908	[S](None)[None]
A10	HACIERO 3.333.30 T	S235	650	19	5878.0	3699.6	61040.8	1017153.	2102090.007	[S](None)[None]
A11	HACIERO 3.333.30 T	S235	118	19	5878.0	691.6	5930.0	273836.316	3535022.905	[S](None)[None]
A12	HACIERO 3.333.30 T	S235	115	13	5870.0	675.4	5709.6	273340.401	3535022.905	[S](None)[None]

List with straight beams, sorted by part number

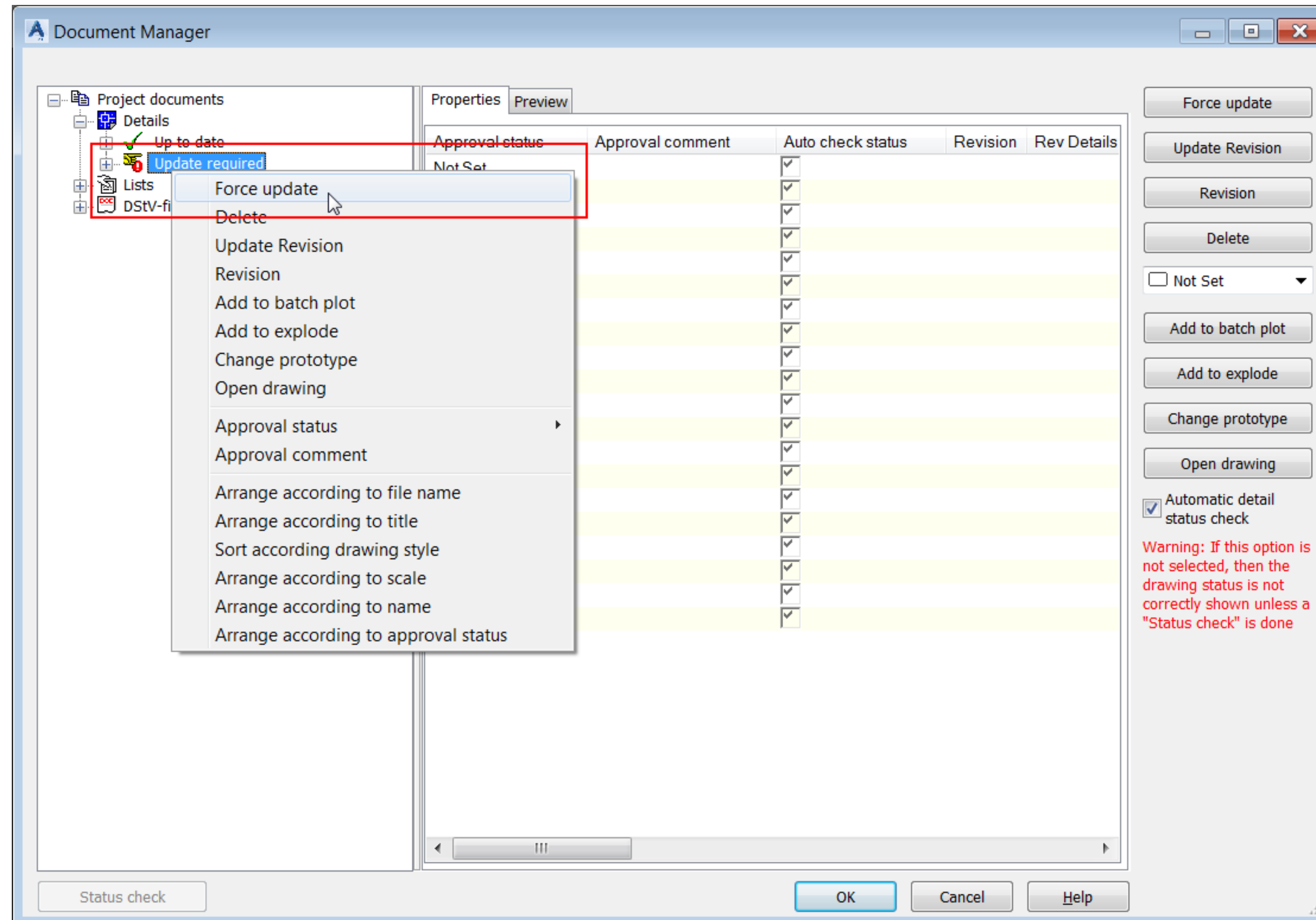
Section 11: Reviewing the Generated Documentation

- Invoke the Document manager tool



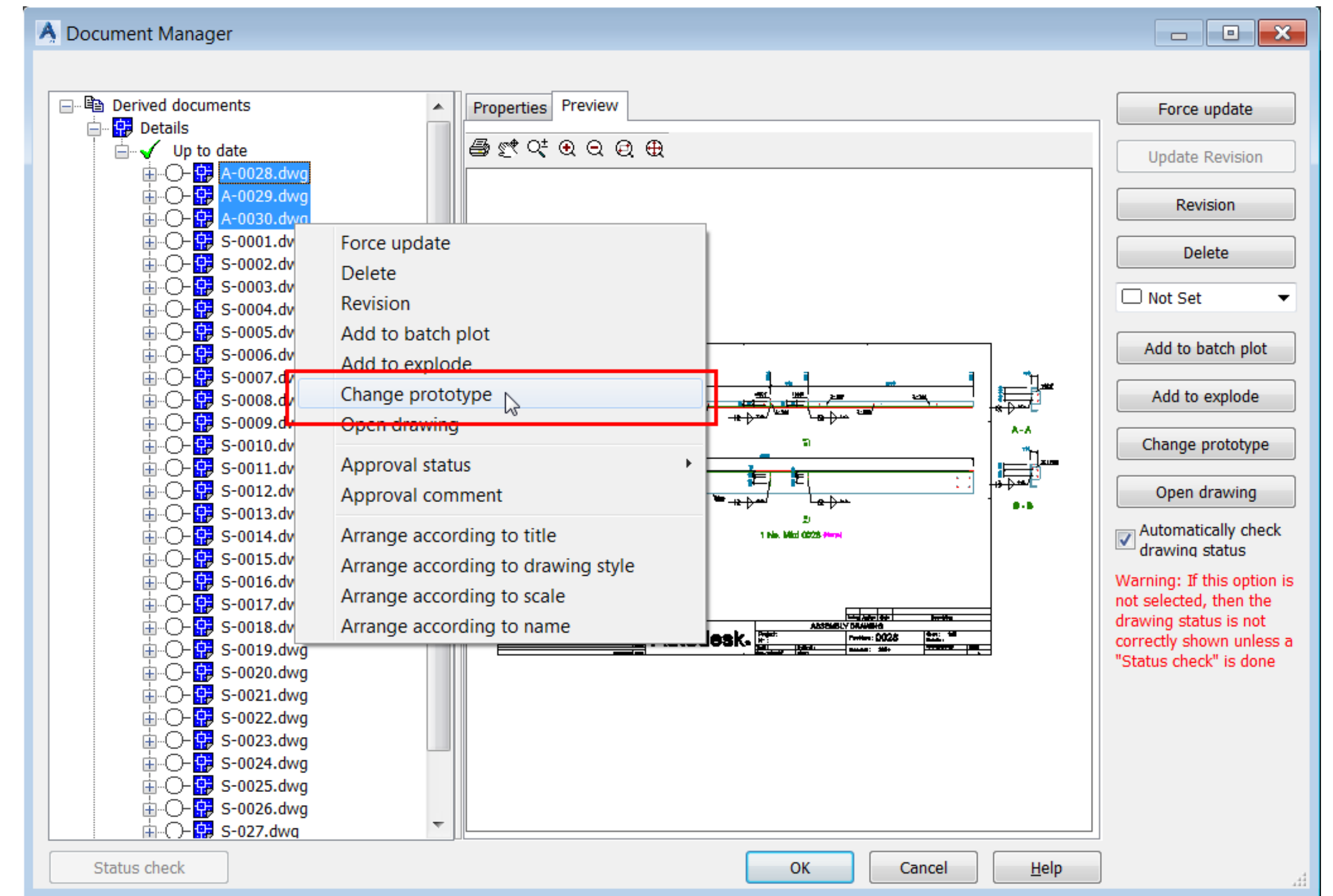
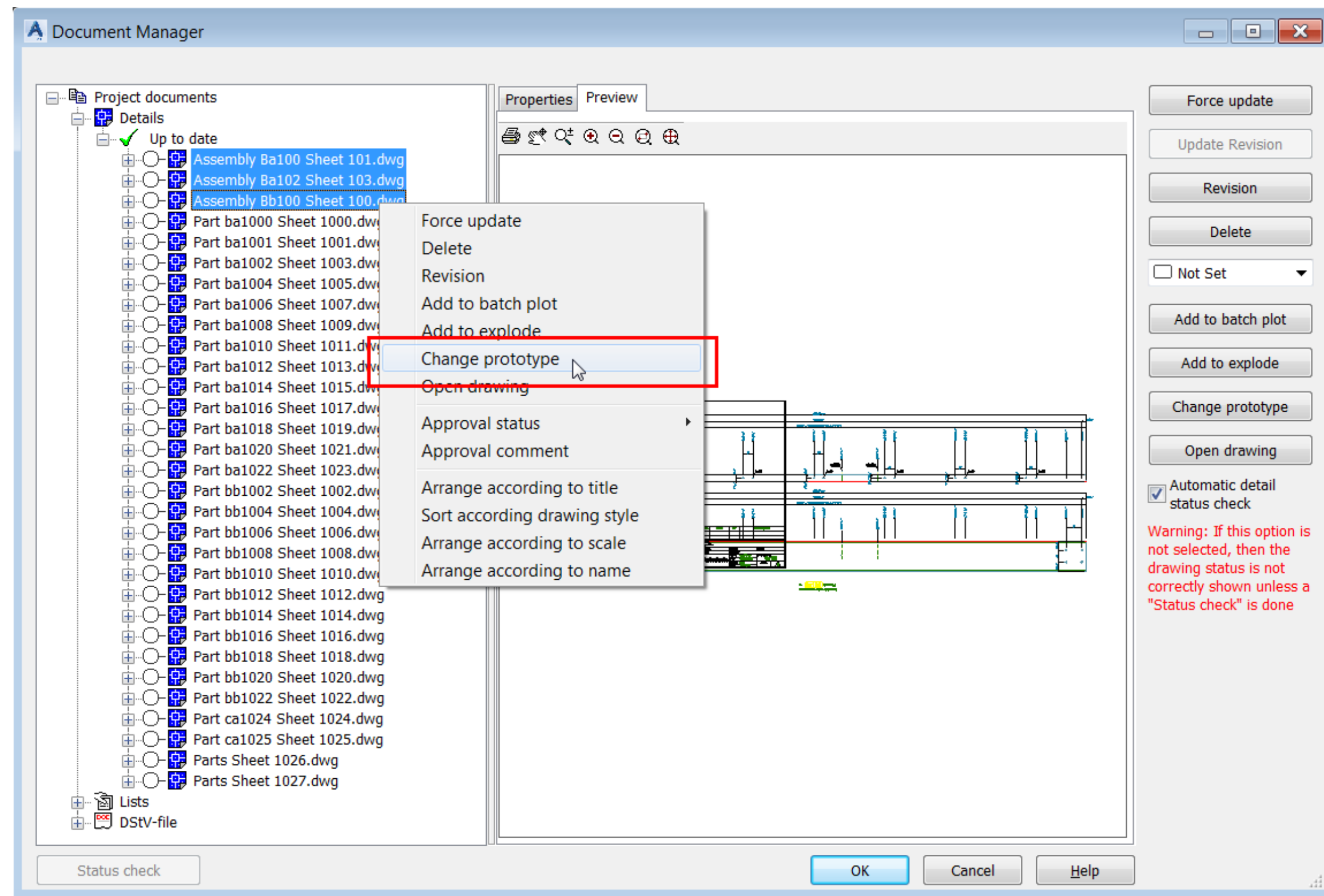
Section 11: Reviewing the Generated Documentation *(Steps 1-3)*

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



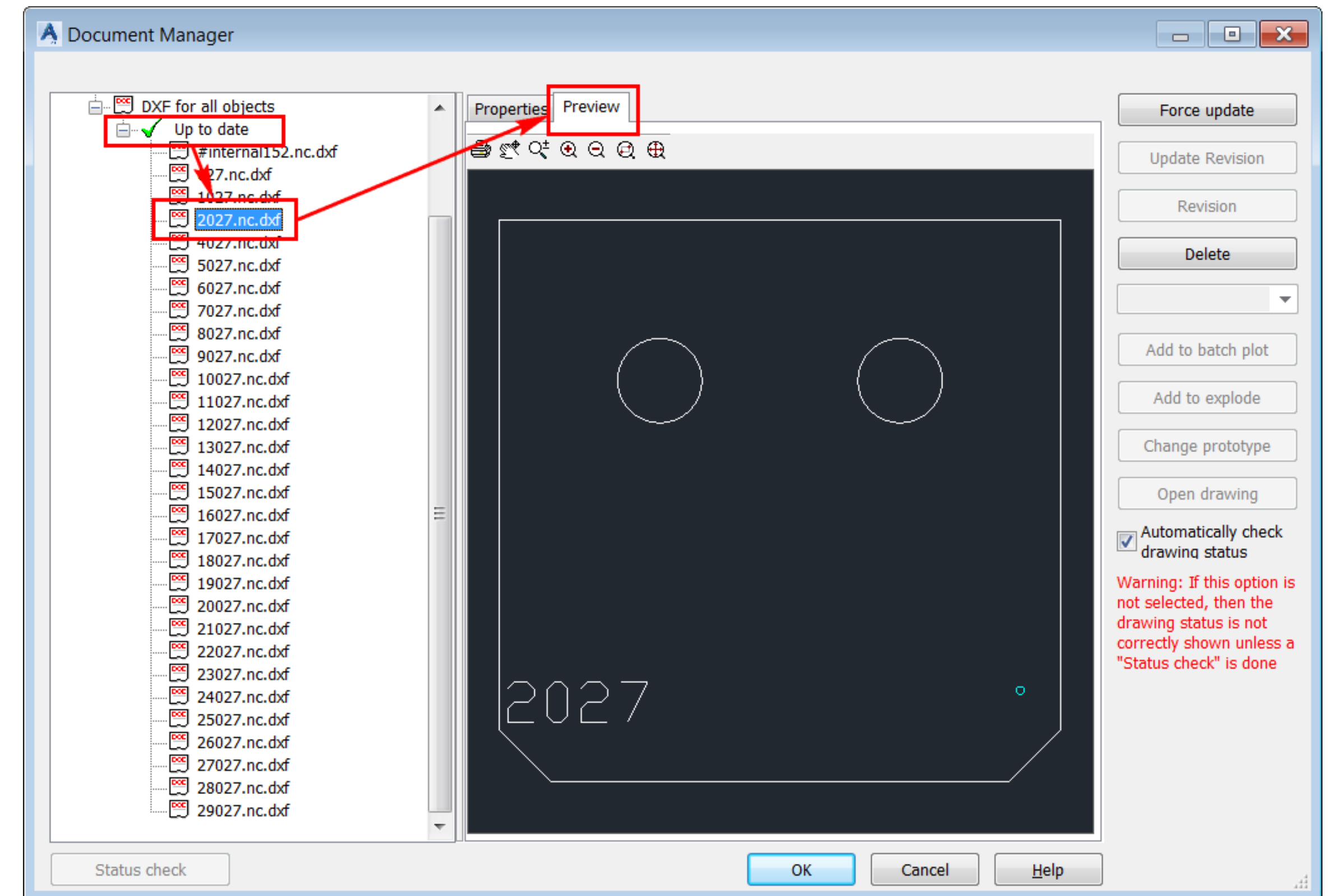
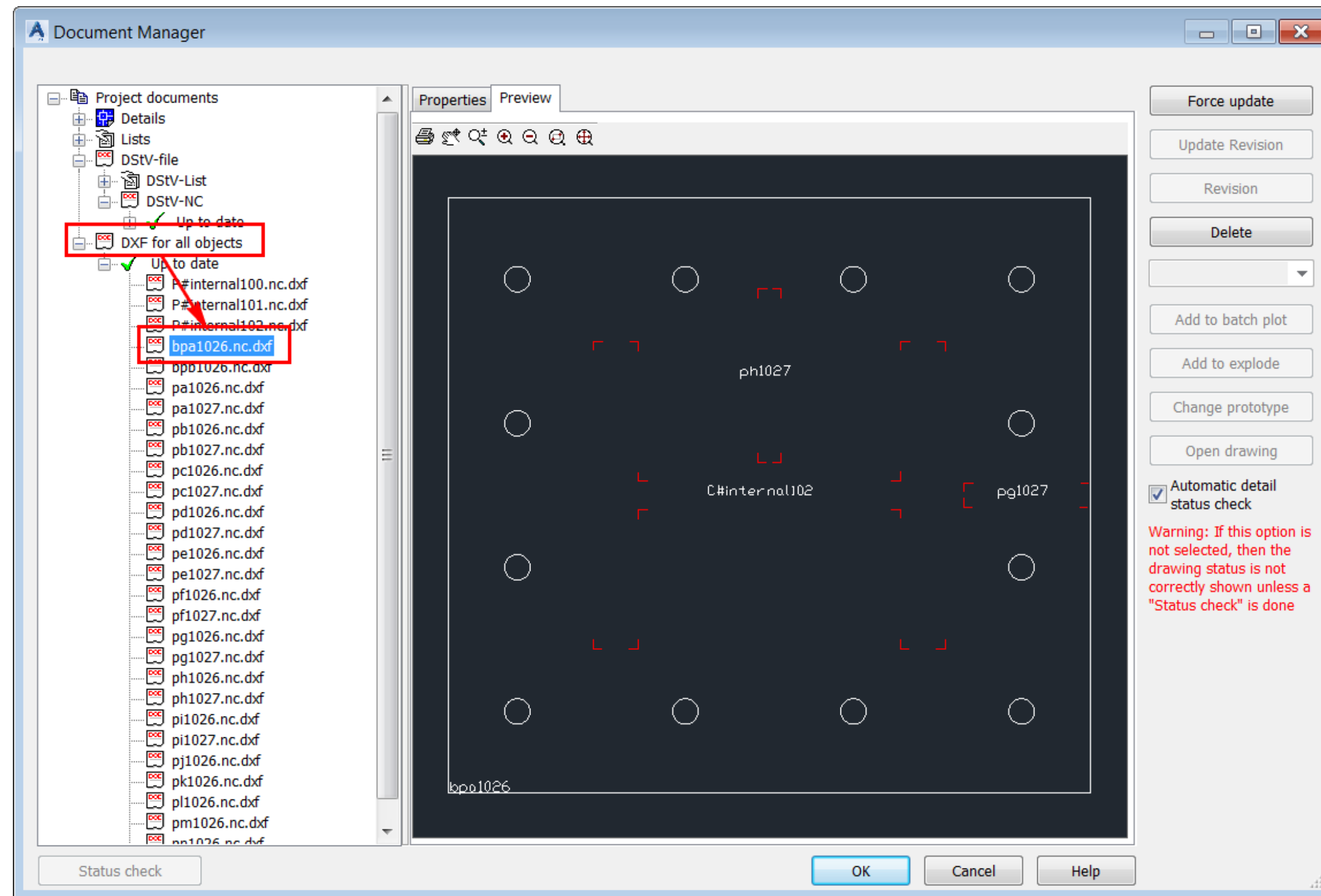
Section 11: Reviewing the Generated Documentation *(Steps 4-9)*

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



Section 11: Reviewing the Generated Documentation *(All Steps)*

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



Feedback Form



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