Advance Steel and Revit
A Seamless Workflow

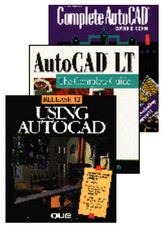
David Cohn

Senior Content Manager – 4D Technologies/CADLearning

AUTODESK. UNIVERSITY

David Cohn

- Senior Content Manager – 4D Technologies/CADLearning
- Contributing Editor – Digital Engineering
- Former editor – CADalyst, Engineering Automation Report
- Writer – PC Magazine, Computer Graphics World
- Registered architect – 35+ years
- AutoCAD experience – 30+ years
- Revit experience – 15+ years
- Author – 12+ books

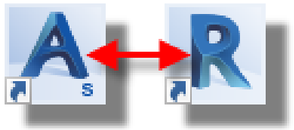


What is Advance Steel

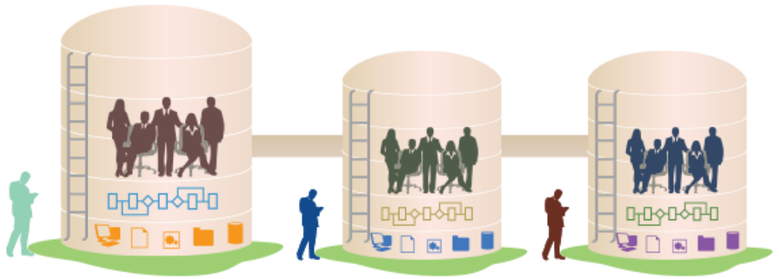
A purpose-built steel construction program for structural engineers and steel detailers built on top of AutoCAD.

- Create and store 3D master model as DWG
- Automatically create drawings, BOMs, etc.

Key Features of Advance Steel

- Bi-directional link with Revit 
- Intelligent structural objects
- Parametric steel connections
- Automatic creation of drawings
- Automatic creation of BOMs, etc.
- Document management & revision control

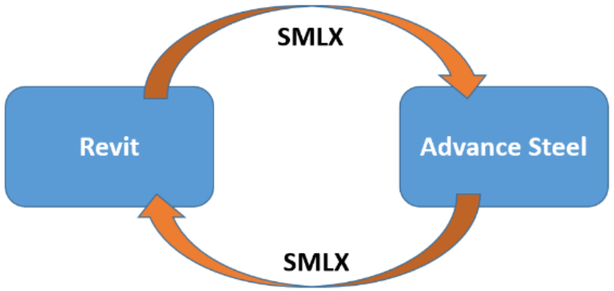
Traditional Workflow



Silos of information result in:

- Duplication of effort → error
- Design changes → manual rework
- Project coordination and productivity suffer

Advance Steel - Revit



Bi-directional exchange using SMLX

- Single unified model → reduces effort/errors
- Design changes → quickly incorporated
- Project coordination and productivity improve

Download the Advance Steel Extension for Revit

Advance Steel 2018 Extension

Autodesk, Inc.

(0 review)

Like 30 Tweet

OS: Win64

Language: English

Description

With Advance Steel 2018 Extension, Autodesk® Revit® 2018 users can quickly connect their models to Advance Steel 2018 using the export, import and synchronize functionalities to transfer the BIM data in LOD350 for Structural Steel. This interoperability helps users to produce general arrangement drawings, fabrication drawings, BOMs, and NC files for steel structures more rapidly.
Users can update the modifications without the need to reimport the entire structure using BIM data synchronization between applications. Synchronization also reduces the risk of potential errors by offering the possibility to track changes made on the same model in different applications.

Using Advance Steel 2018 Extension, the BIM data from the Revit model can be imported or exported also in other formats such as SDNF (Version 2.0 and Version 3.0), CIS2 Fabrication and PSS.

Read Help Document

Free

Download

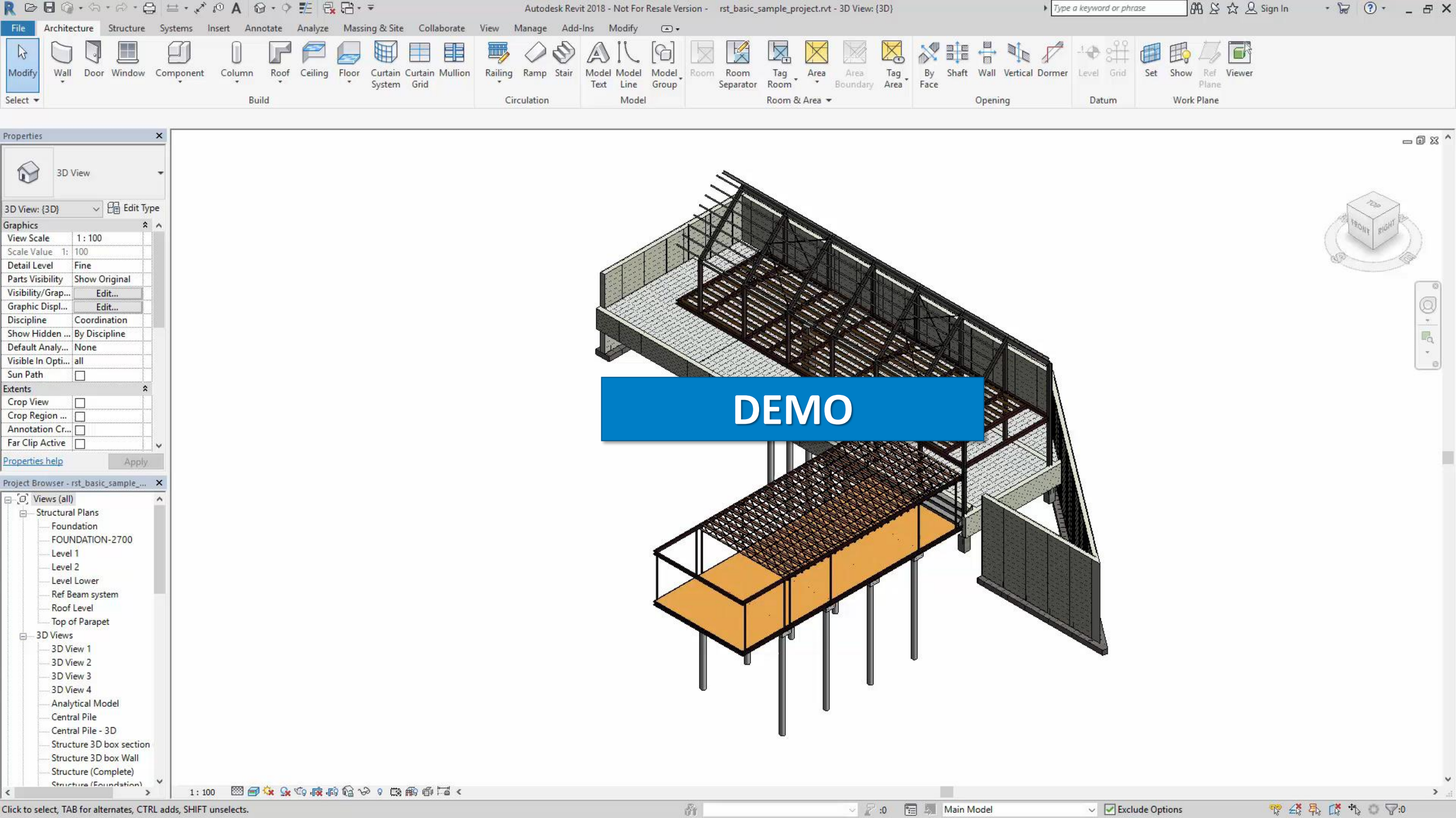
Download Size:	68.4 MB
Release Date:	4/19/2017
Last Updated:	4/28/2017
Version Info:	18.1.7082.0
Website:	http://www.autodesk.com/
Cust. Support:	support.as.extension@autodesk.com

Compatible with:

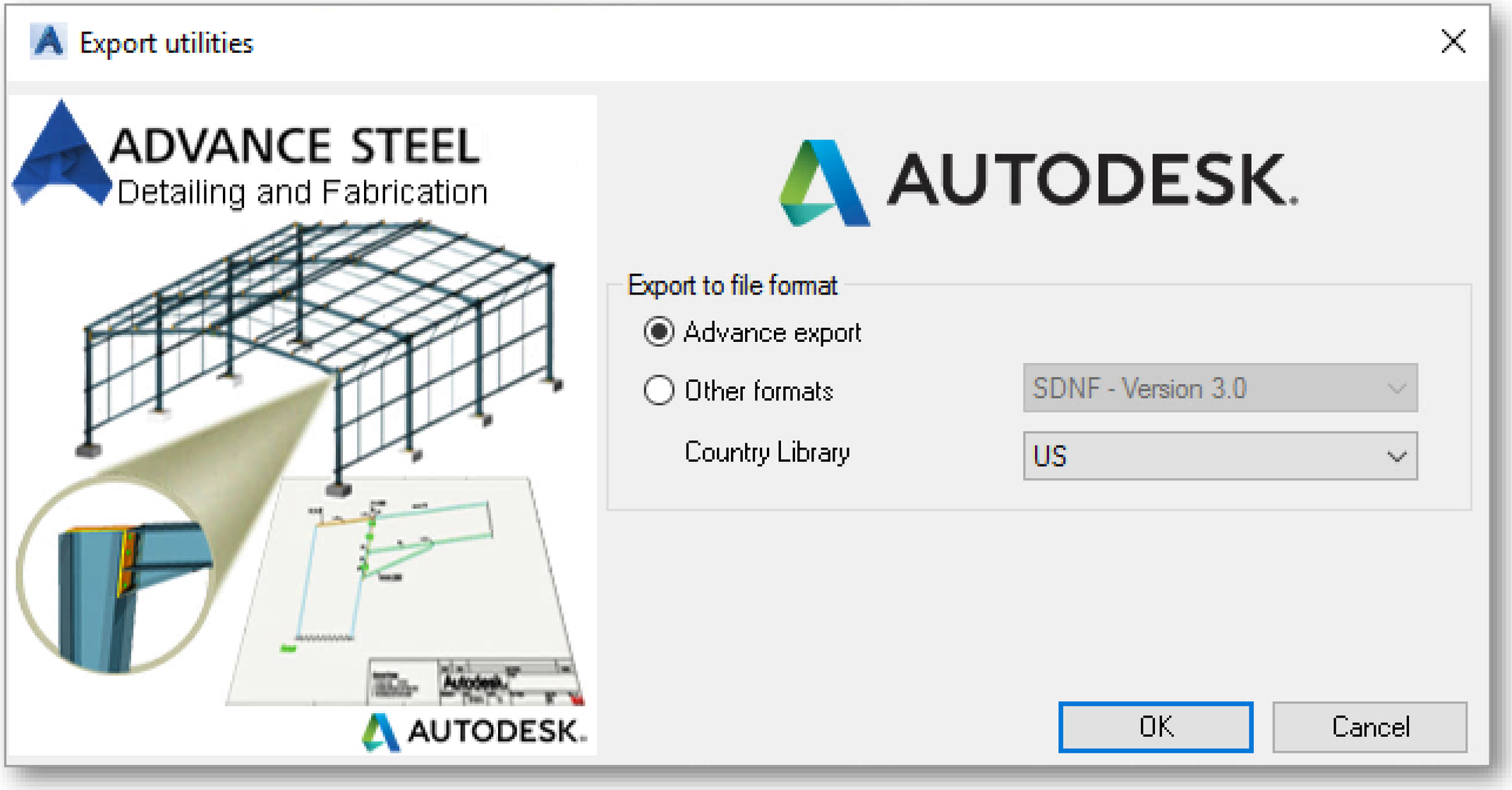
Autodesk Revit
Version: 2018

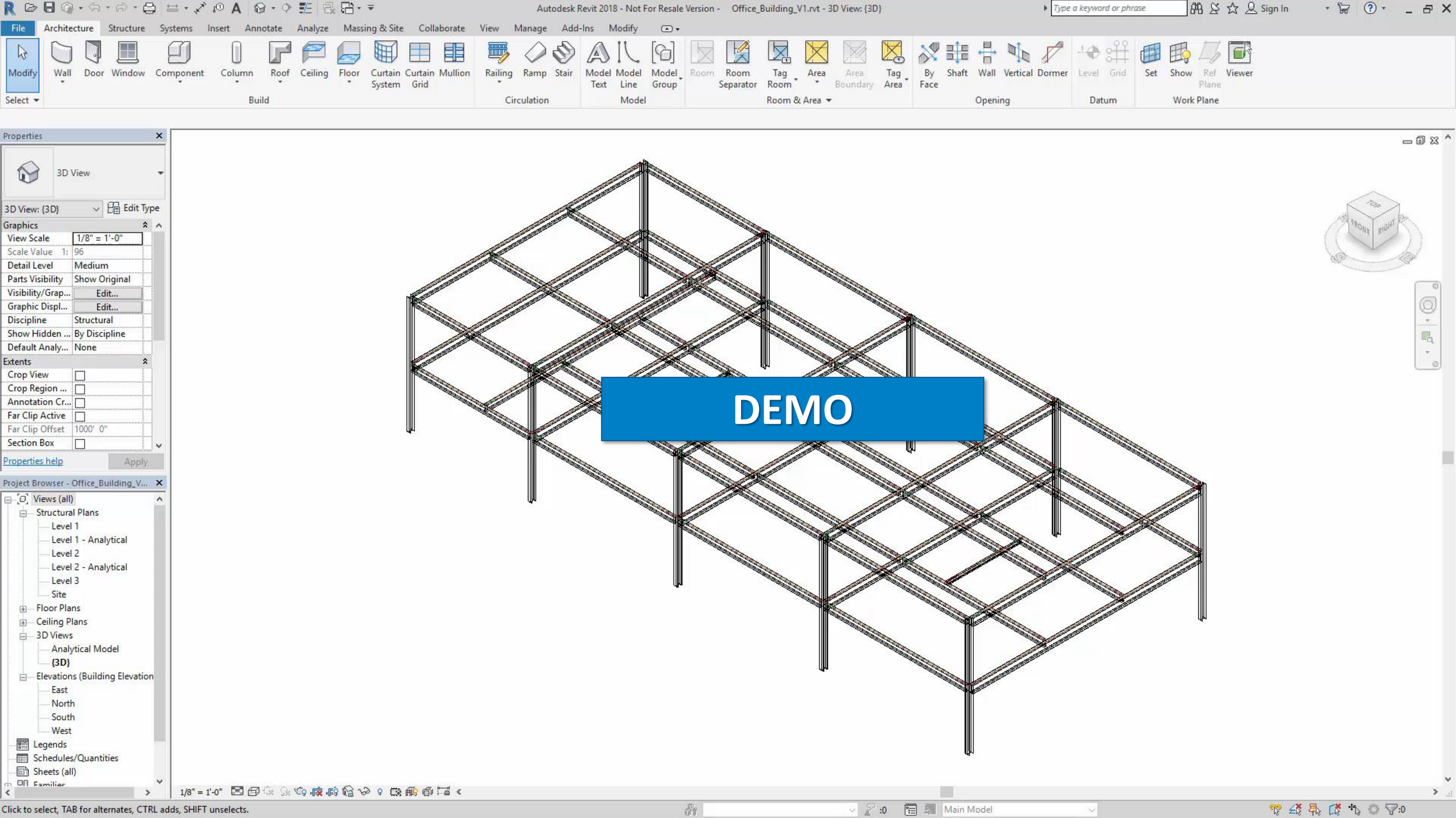
Publisher Information

Autodesk, Inc.
186 Apps


Autodesk Revit 2018 - Not For Resale Version - rst_basic_sample_project.rvt - 3D View: {3D}
Type a keyword or phrase
Sign In
File
Architecture
Structure
Systems
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Modify
Modify
Wall
Door
Window
Component
Column
Roof
Ceiling
Floor
Curtain System
Curtain Grid
Mullion
Railing
Ramp
Stair
Model Text
Model Line
Model Group
Room
Room Separator
Tag Room
Area
Area Boundary
Tag Area
By Face
Shaft
Wall
Vertical
Dormer
Level
Grid
Set
Show
Ref Plane
Viewer
Select
Build
Circulation
Model
Room & Area
Opening
Datum
Work Plane
Properties
3D View
3D View: {3D}
Edit Type
Graphics
View Scale 1 : 100
Scale Value 1: 100
Detail Level Fine
Parts Visibility Show Original
Visibility/Grap... Edit...
Graphic Displ... Edit...
Discipline Coordination
Show Hidden ... By Discipline
Default Analy... None
Visible In Opti... all
Sun Path
Extents
Crop View
Crop Region ...
Annotation Cr...
Far Clip Active
Properties help
Apply
Project Browser - rst_basic_sample_...
Views (all)
Structural Plans
Foundation
FOUNDATION-2700
Level 1
Level 2
Level Lower
Ref Beam system
Roof Level
Top of Parapet
3D Views
3D View 1
3D View 2
3D View 3
3D View 4
Analytical Model
Central Pile
Central Pile - 3D
Structure 3D box section
Structure 3D box Wall
Structure (Complete)
DEMO
TOP
FRONT
RIGHT
1 : 100
Click to select, TAB for alternates, CTRL adds, SHIFT unselects.
Main Model
Exclude Options

Exporting a Revit Structural Model




Autodesk Revit 2018 - Not For Resale Version - Office_Building_V1.rvt - 3D View: {3D}
Type a keyword or phrase
Sign In
File
Architecture
Structure
Systems
Insert
Annotate
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Collaborate
View
Manage
Add-Ins
Modify
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Wall
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Column
Roof
Ceiling
Floor
Curtain System
Curtain Grid
Mullion
Railing
Ramp
Stair
Model Text
Model Line
Model Group
Room
Room Separator
Tag Room
Area
Area Boundary
Tag Area
By Face
Shaft
Wall
Vertical
Dormer
Level
Grid
Set
Show
Ref Plane
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Select
Build
Circulation
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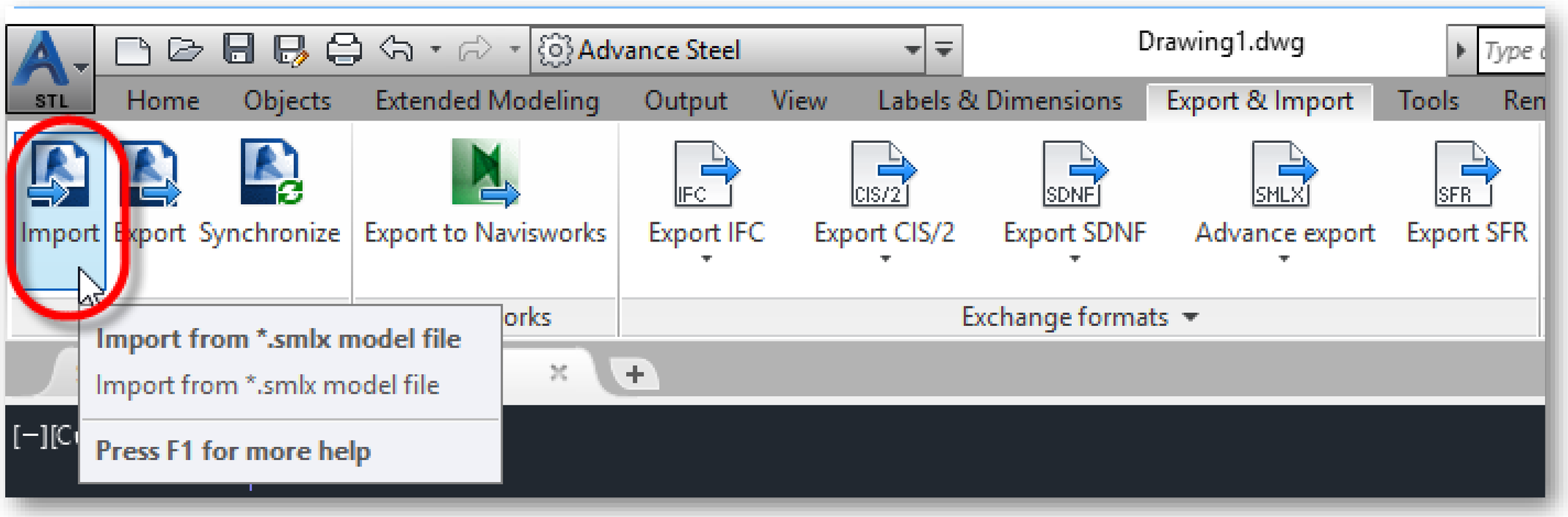
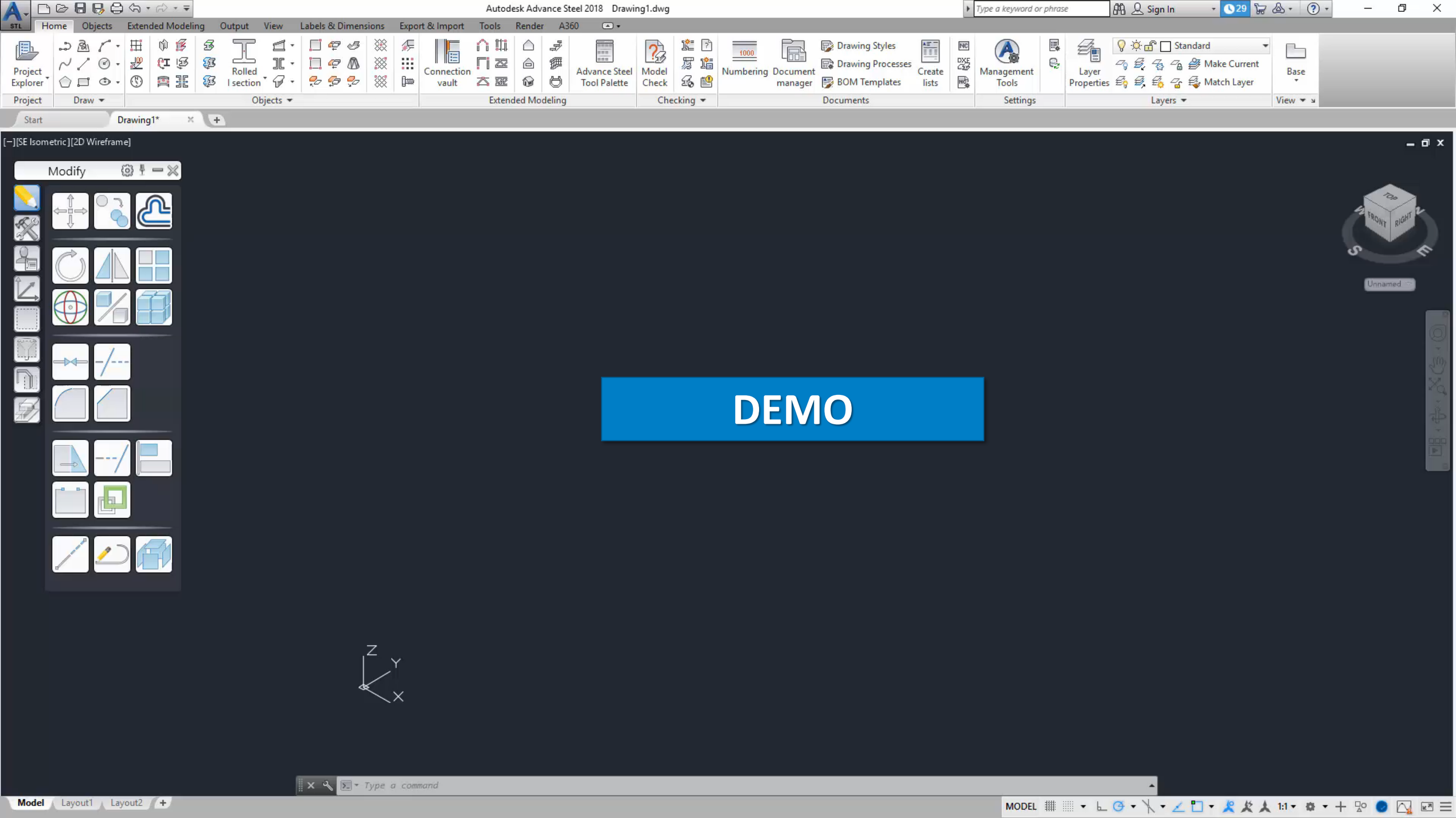
Room & Area
Opening
Datum
Work Plane
Properties
3D View
3D View: {3D}
Edit Type
Graphics
View Scale 1/8" = 1'-0"
Scale Value 1: 96
Detail Level Medium
Parts Visibility Show Original
Visibility/Grap... Edit...
Graphic Displ... Edit...
Discipline Structural
Show Hidden ... By Discipline
Default Analy... None
Extents
Crop View
Crop Region ...
Annotation Cr...
Far Clip Active
Far Clip Offset 1000' 0"
Section Box
Properties help
Apply
Project Browser - Office_Building_V...
Views (all)
Structural Plans
Level 1
Level 1 - Analytical
Level 2
Level 2 - Analytical
Level 3
Site
Floor Plans
Ceiling Plans
3D Views
Analytical Model
{3D}
Elevations (Building Elevation
East
North
South
West
Legends
Schedules/Quantities
Sheets (all)
Families
DEMO
TOP
FRONT
RIGHT
1/8" = 1'-0"
Click to select, TAB for alternates, CTRL adds, SHIFT unselects.
Main Model

Import the Model into Advance Steel




Autodesk Advance Steel 2018 Drawing1.dwg
Type a keyword or phrase
Sign In
Home
Objects
Extended Modeling
Output
View
Labels & Dimensions
Export & Import
Tools
Render
A360
Project Explorer
Rolled I section
Connection vault
Advance Steel Tool Palette
Model Check
Numbering
Document manager
Drawing Styles
Drawing Processes
BOM Templates
Create lists
Management Tools
Layer Properties
Standard
Make Current
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Documents
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Drawing1*
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Modify
DEMO
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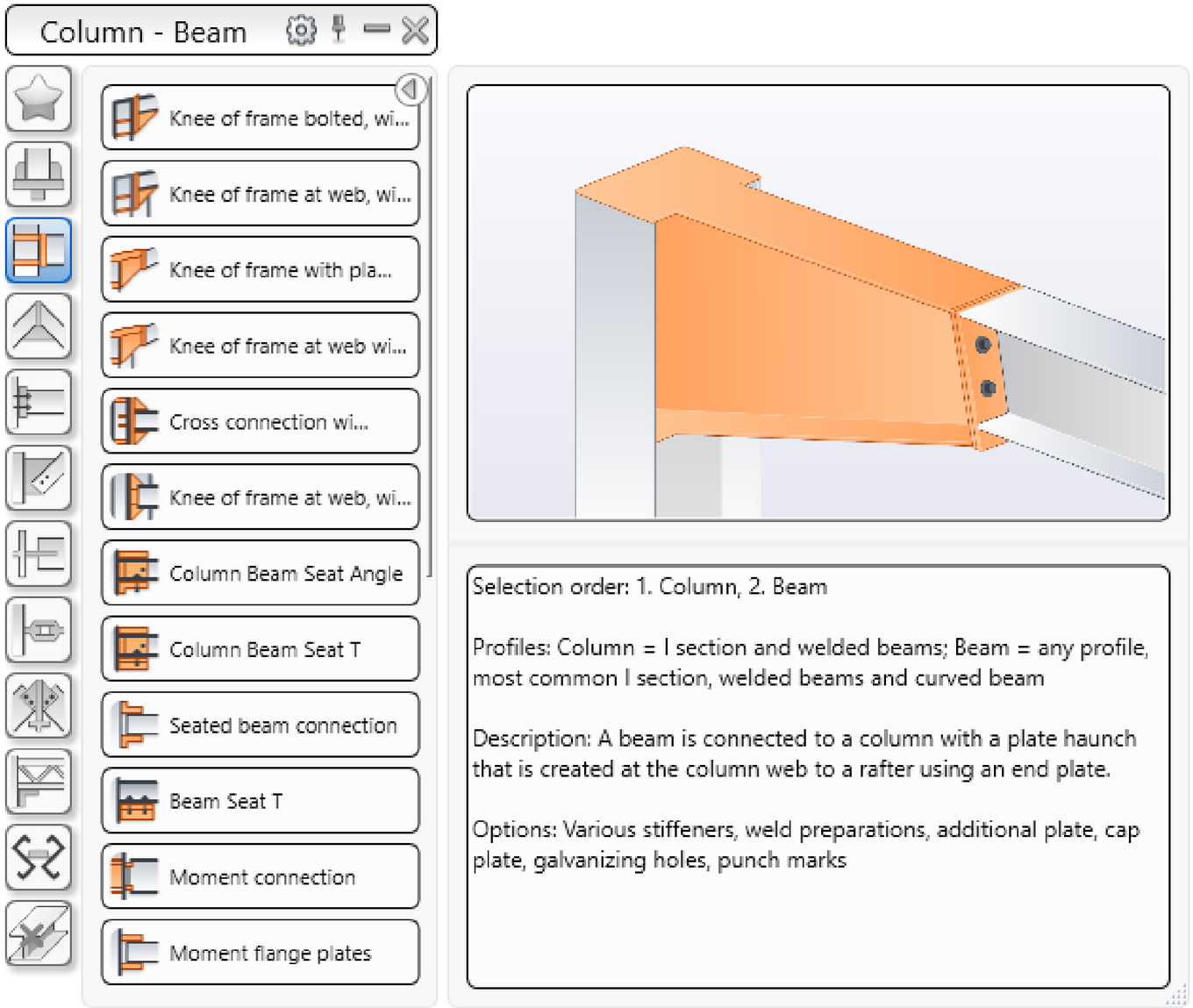
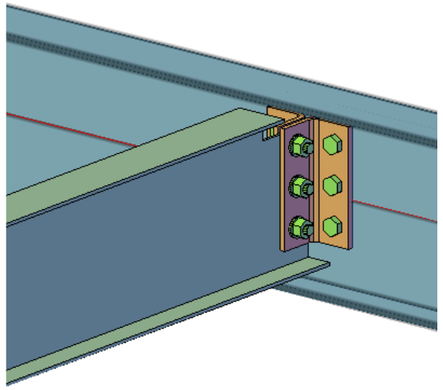
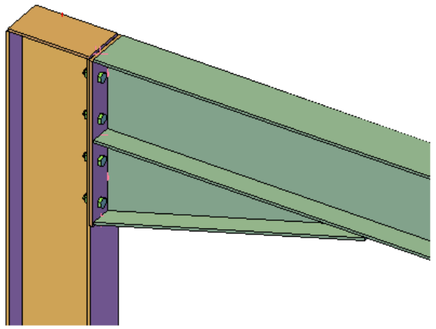
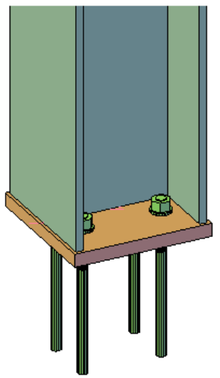
Type a command
Model
Layout1
Layout2
MODEL

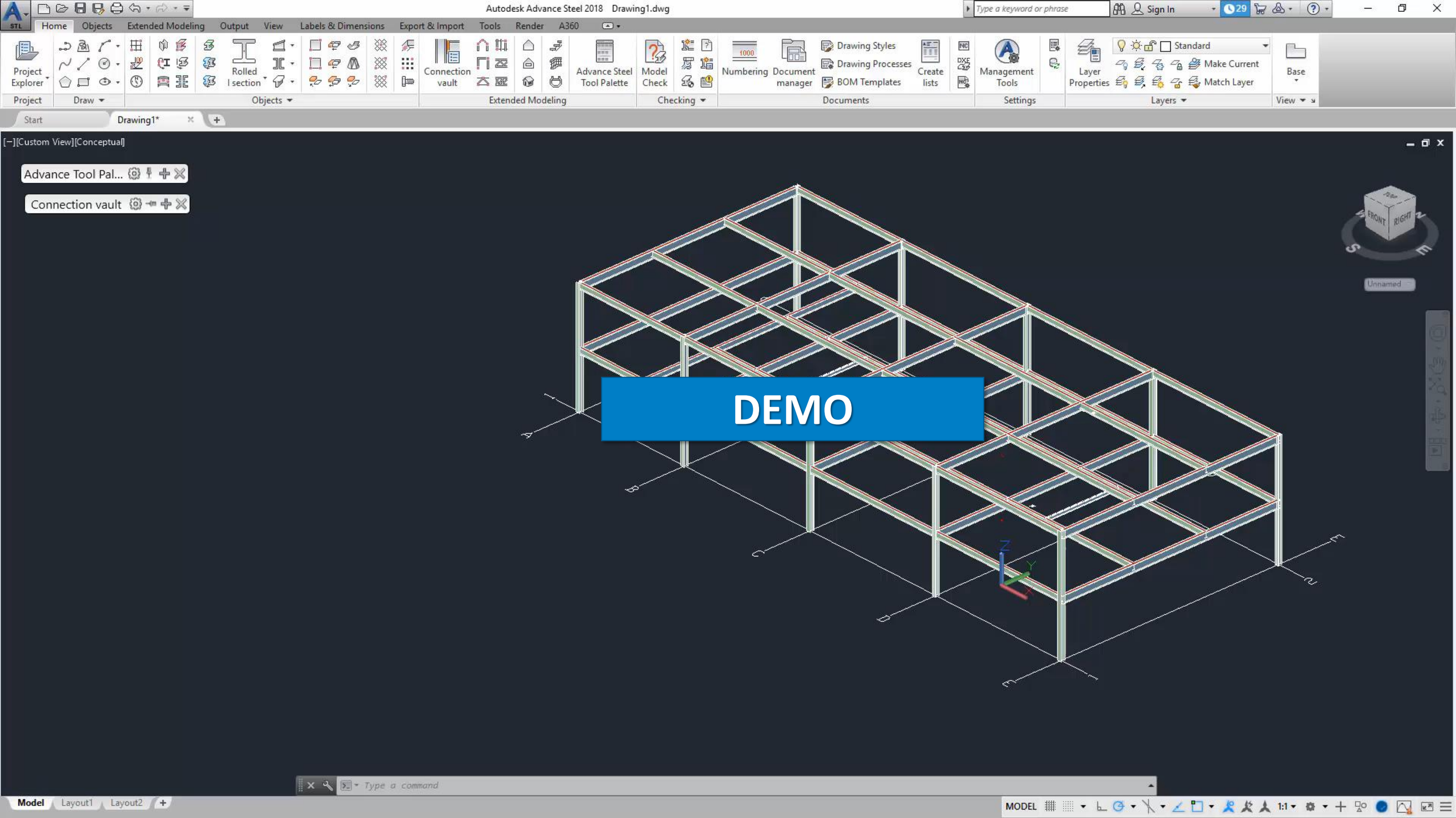
Working in Advance Steel










Autodesk Advance Steel 2018 Drawing1.dwg
Home
Objects
Extended Modeling
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Labels & Dimensions
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Rolled I section
Connection vault
Advance Steel Tool Palette
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Drawing Processes
BOM Templates
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Drawing1*
[−][Custom View][Conceptual]
Advance Tool Pal...
Connection vault
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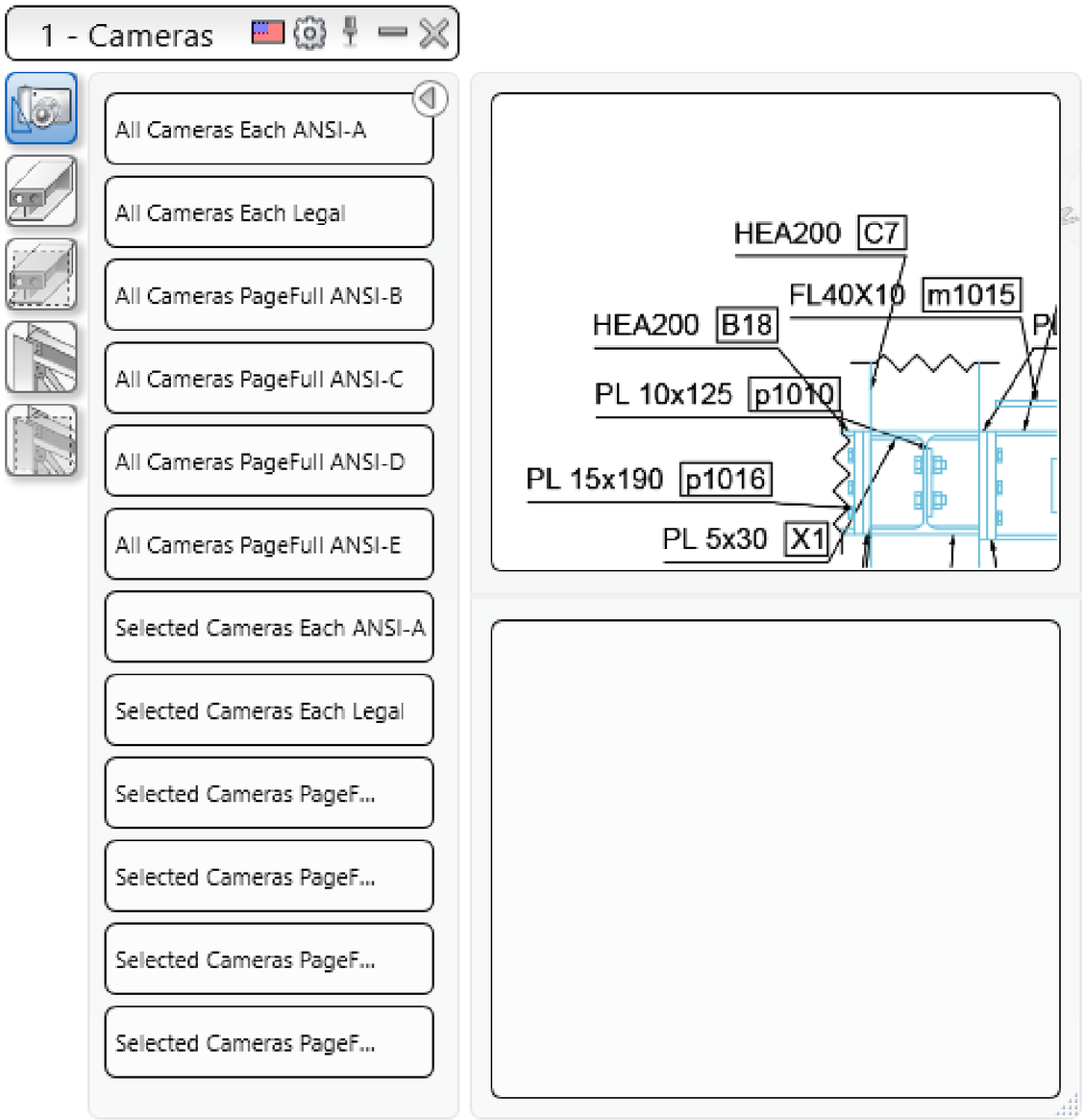
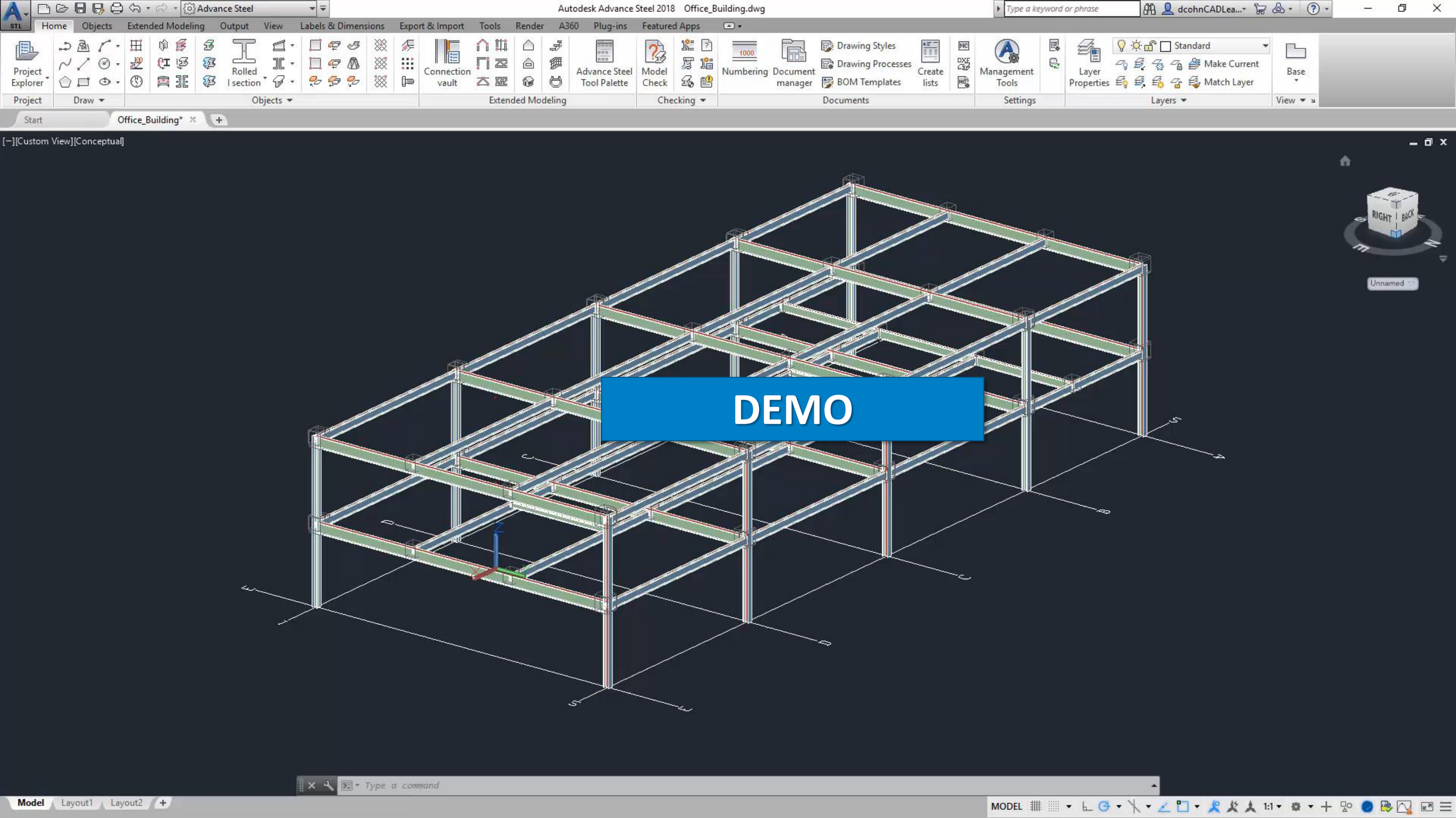
Layout1
Layout2
MODEL

Creating Fabrication Drawings




Advance Steel
Autodesk Advance Steel 2018 Office_Building.dwg
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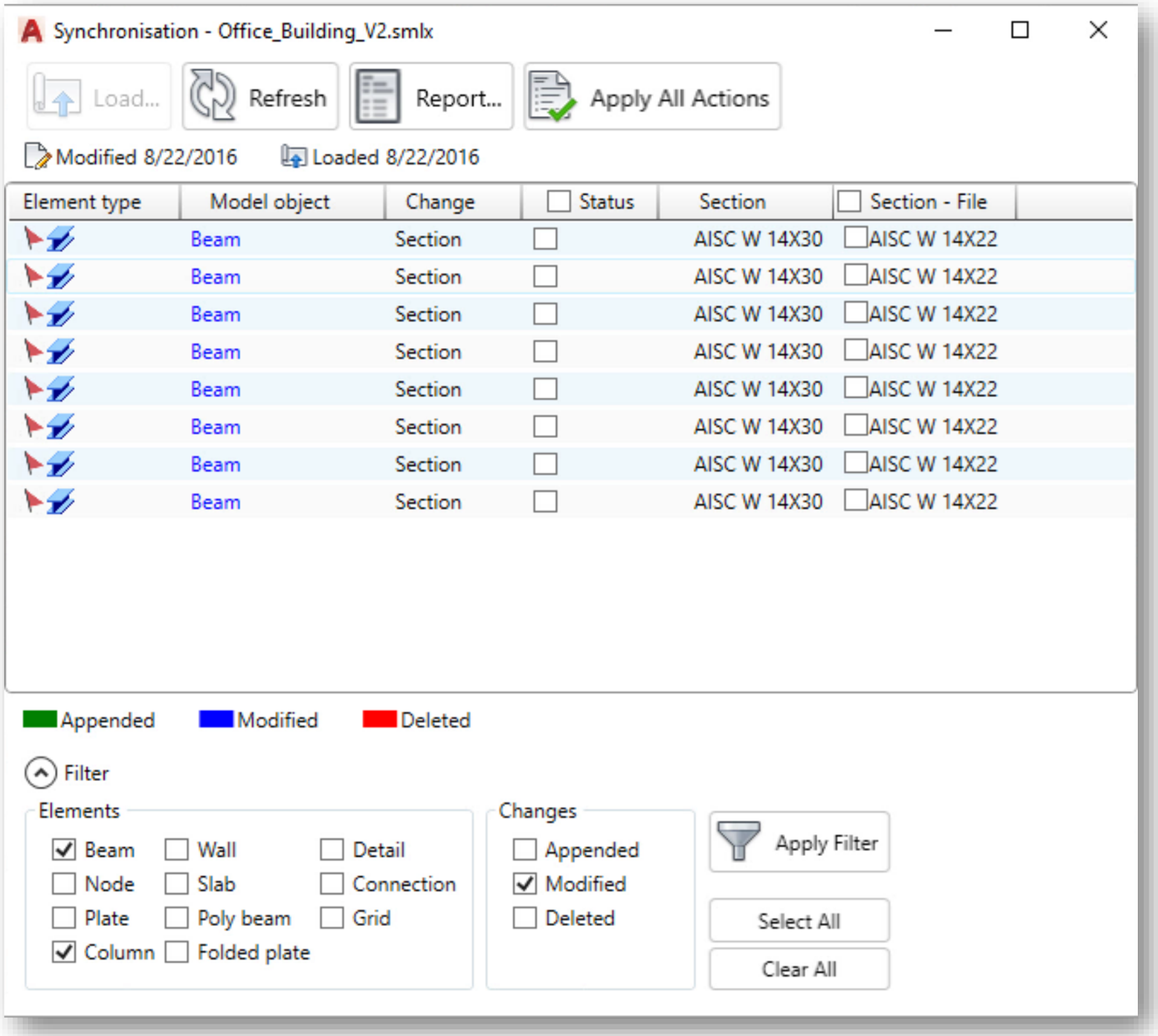
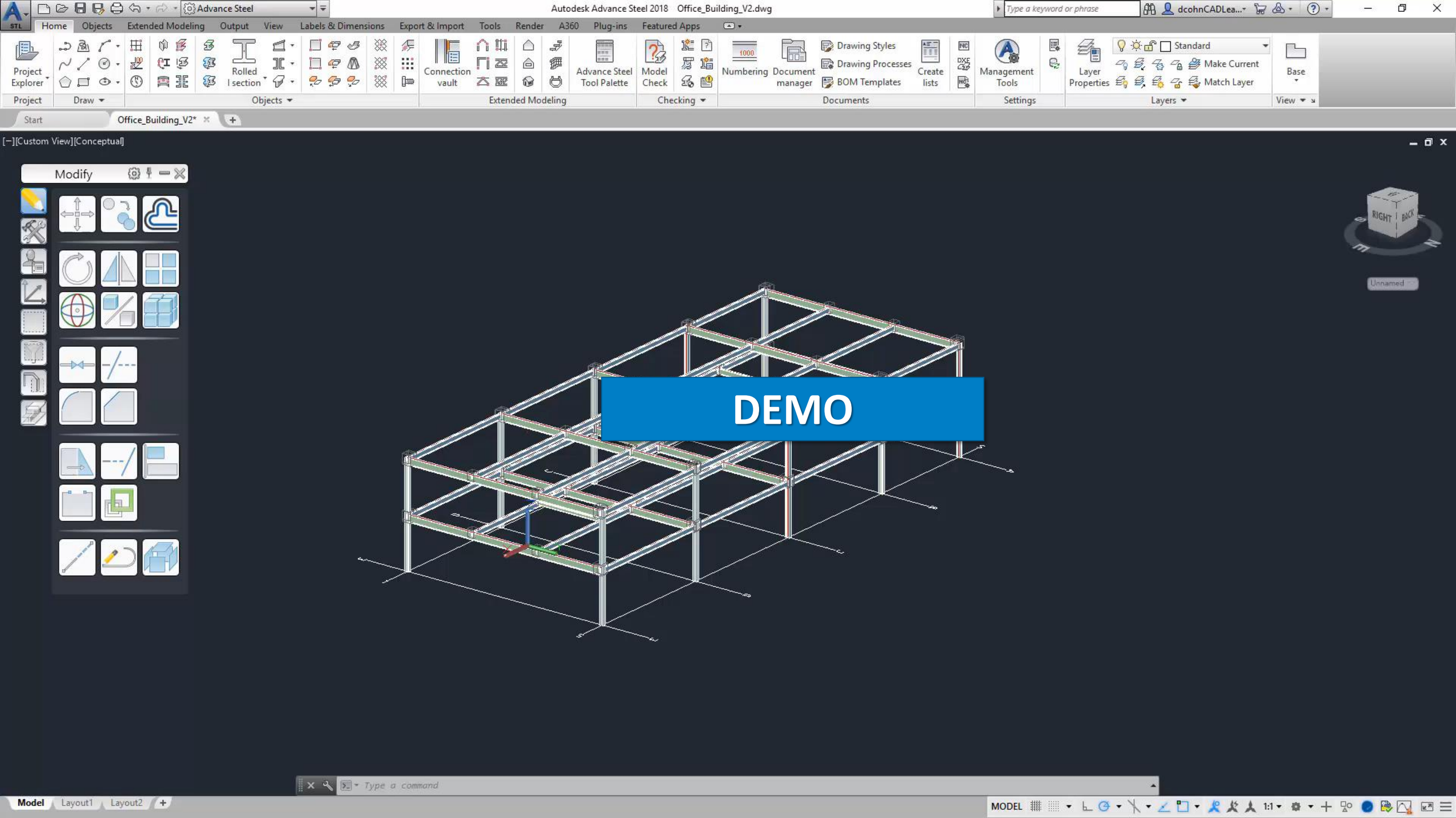
Synchronizing the Advance Steel Model




Autodesk Advance Steel 2018 Office_Building_V2.dwg
Advance Steel
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Labels & Dimensions
Export & Import
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A360
Plug-ins
Featured Apps
Project Explorer
Rolled I section
Connection vault
Advance Steel Tool Palette
Model Check
Numbering
Document manager
Drawing Styles
Drawing Processes
BOM Templates
Create lists
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Modify
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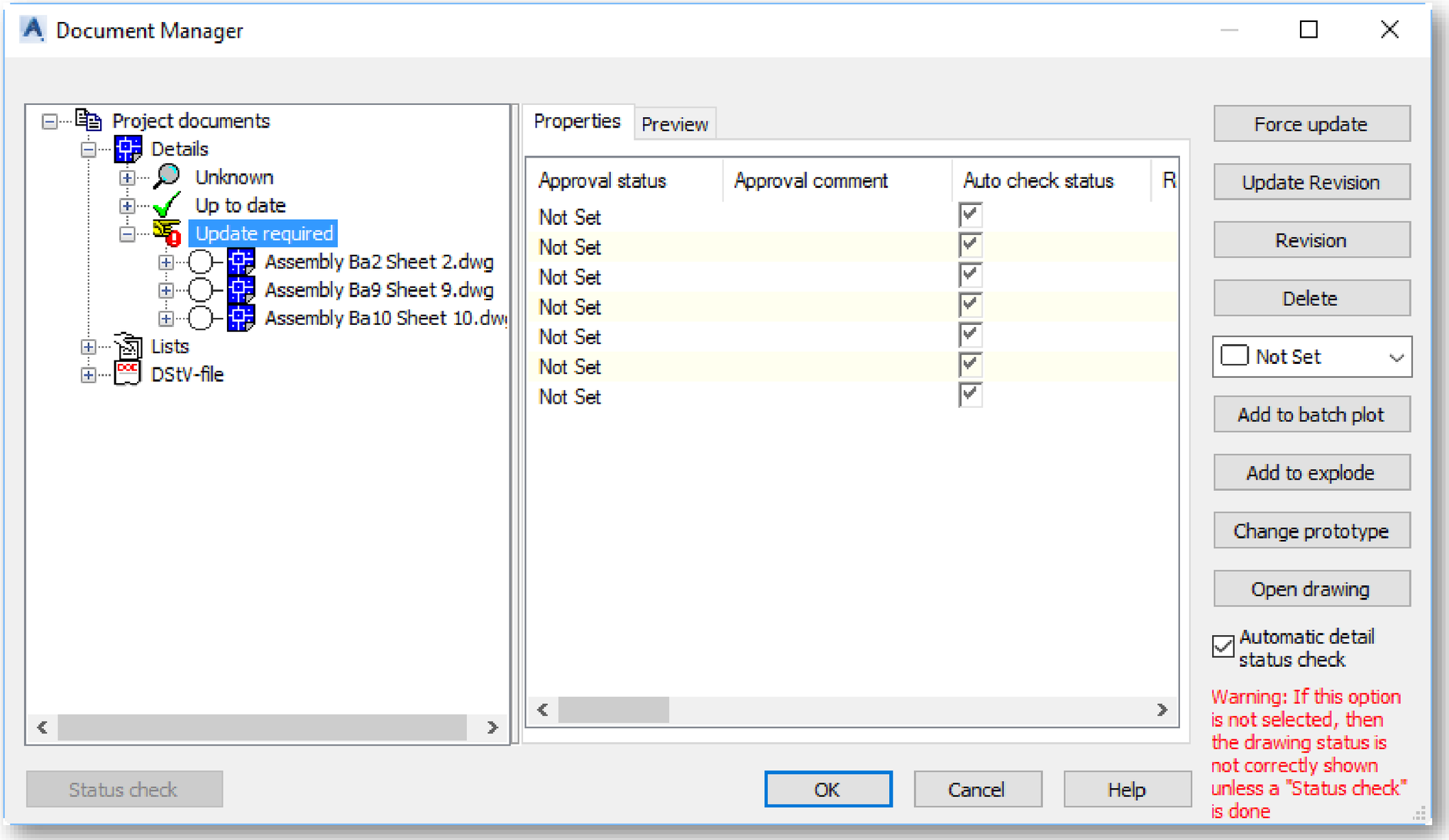
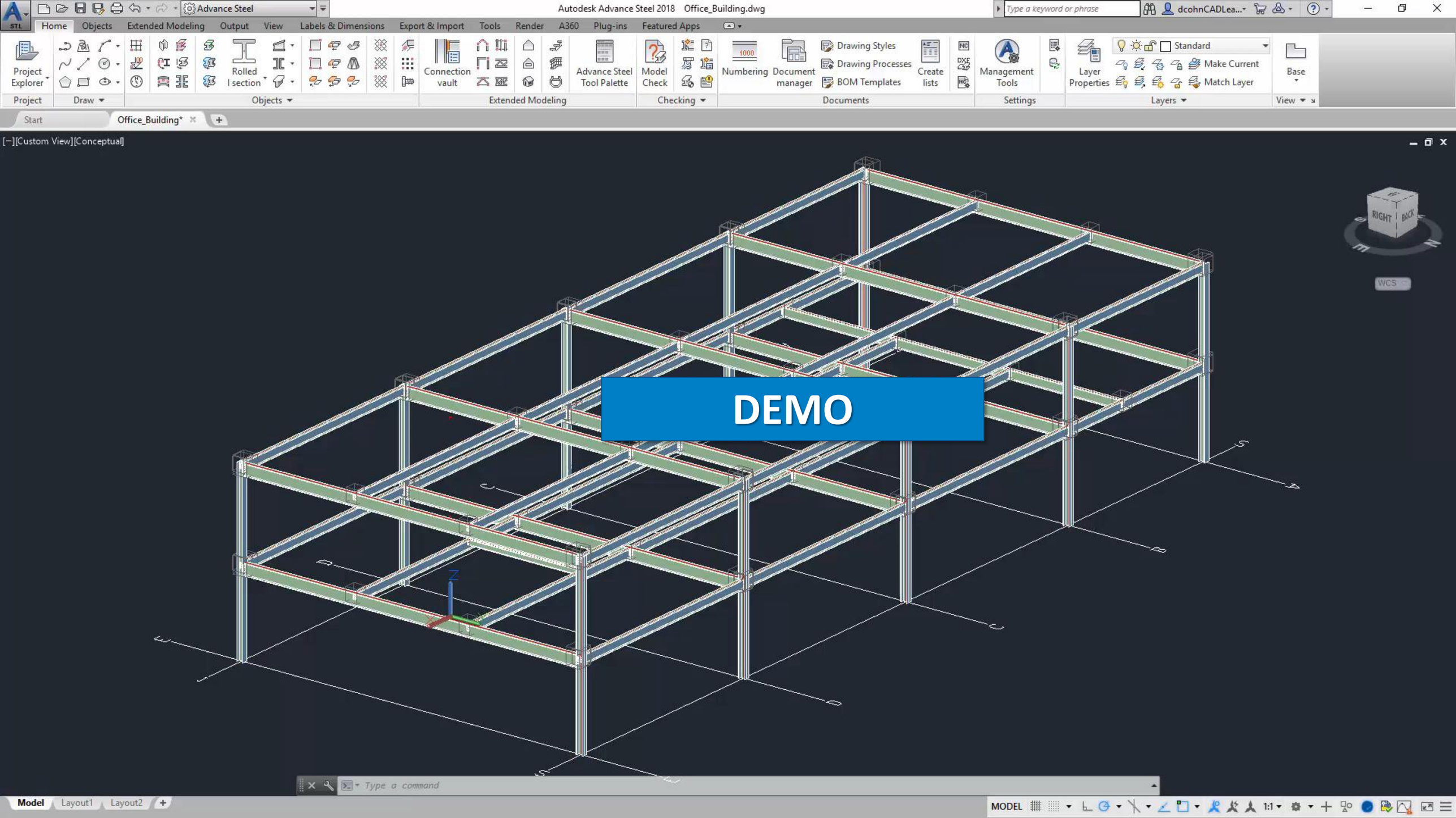
Updating Fabrication Drawings




Autodesk Advance Steel 2018 Office_Building.dwg
Advance Steel
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Labels & Dimensions
Export & Import
Tools
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Plug-ins
Featured Apps
Project Explorer
Rolled I section
Connection vault
Advance Steel Tool Palette
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[−][Custom View][Conceptual]
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Type a command
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Layout1
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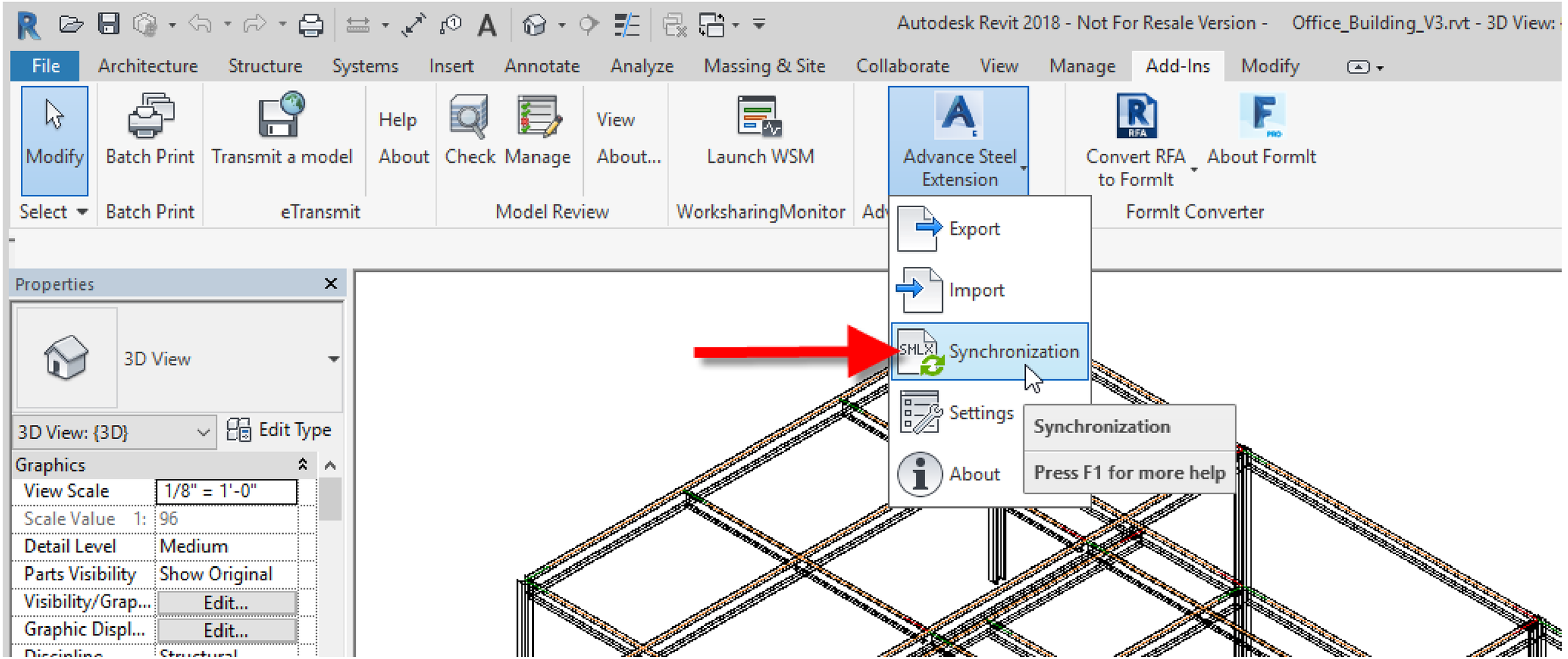
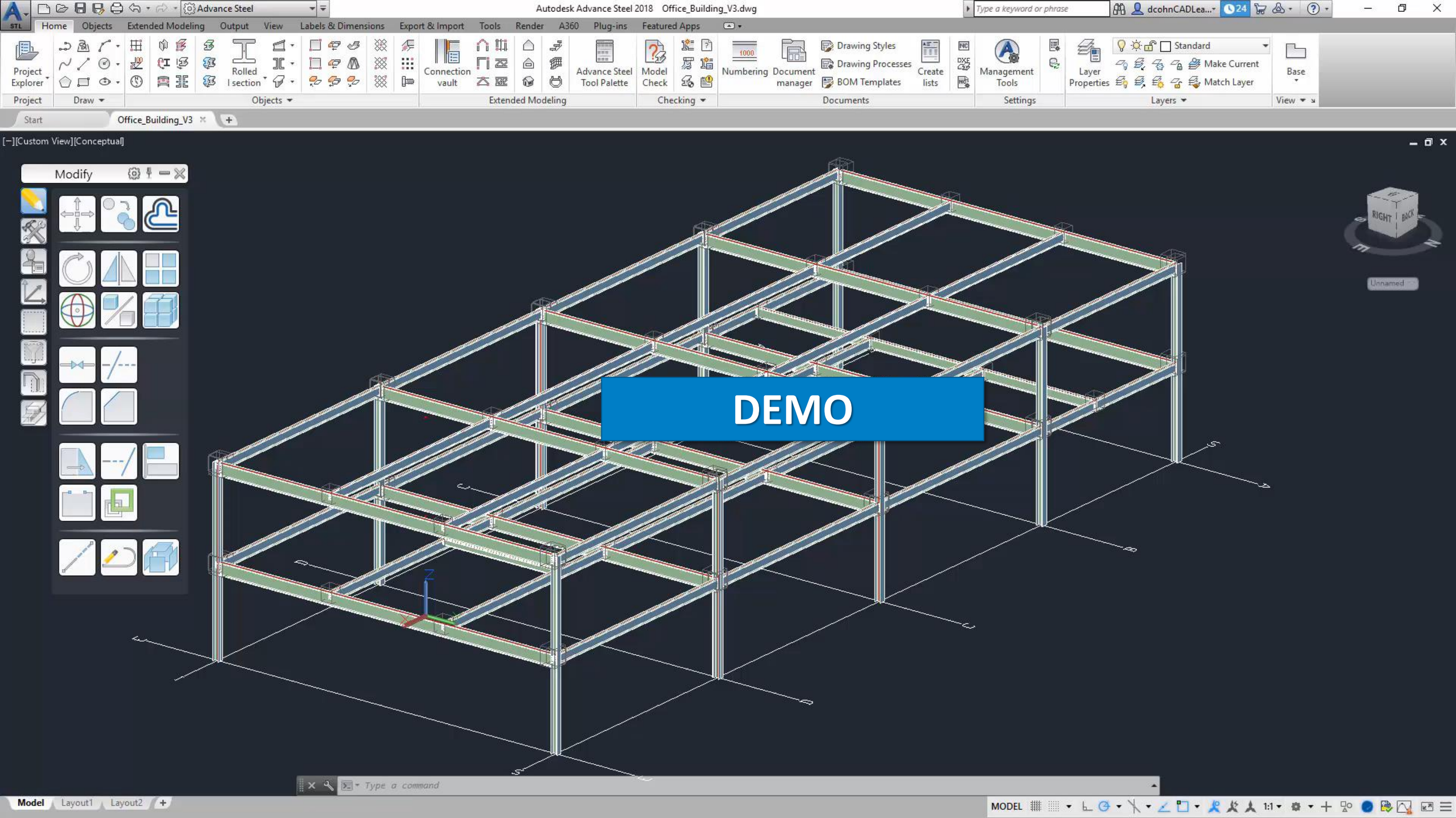
Validating the Advance Steel Model in Revit




Autodesk Advance Steel 2018 Office_Building_V3.dwg
Advance Steel
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Extended Modeling
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Labels & Dimensions
Export & Import
Tools
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A360
Plug-ins
Featured Apps
Project Explorer
Rolled I section
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Advance Steel Tool Palette
Model Check
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Document manager
Drawing Styles
Drawing Processes
BOM Templates
Create lists
Management Tools
Layer Properties
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Layers
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Start
Office_Building_V3
[−][Custom View][Conceptual]
Modify
DEMO
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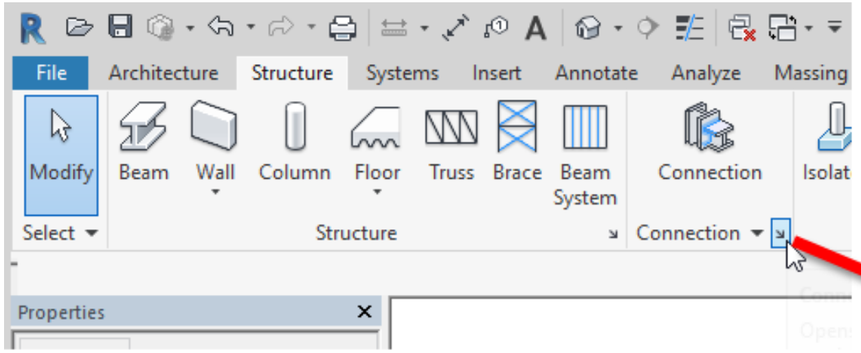
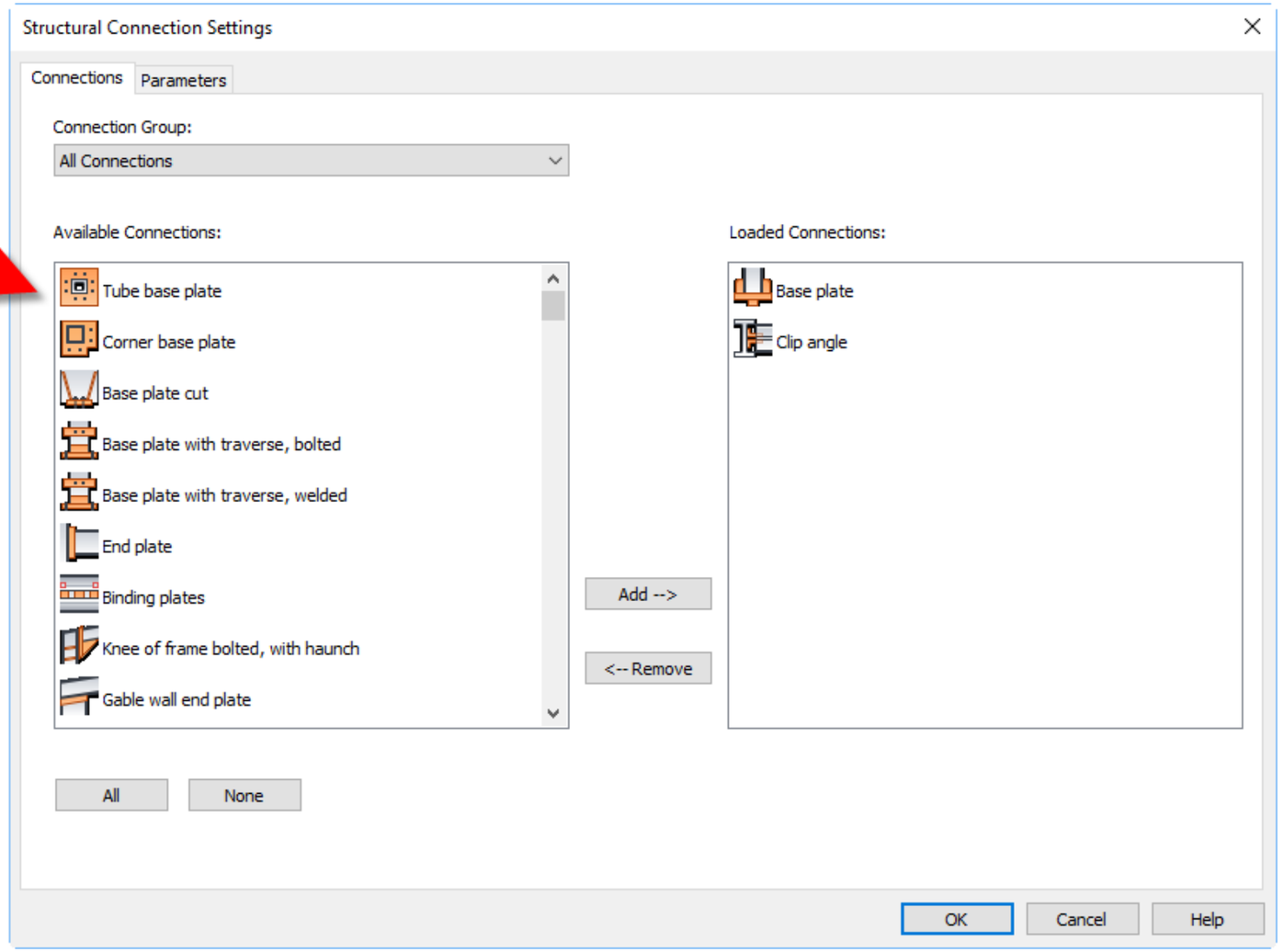
BACK
Unnamed
Type a command
Model
Layout1
Layout2
MODEL

Adding Advance Steel Connections to Revit





Autodesk Revit 2018 - Not For Resale Version - rst_basic_sample_project.rvt - 3D View: {3D}

File | Architecture | Structure | Systems | Insert | Annotate | Analyze | Massing & Site | Collaborate | View | Manage | Add-Ins | Modify

Modify | Wall | Door | Window | Component | Column | Roof | Ceiling | Floor | Curtain System | Curtain Grid | Mullion | Railing | Ramp | Stair | Model Text | Model Line | Model Group | Room | Room Separator | Tag Room | Area | Area Boundary | Tag Area | By Face | Shaft | Wall | Vertical | Dormer | Level | Grid | Set | Show | Ref Plane | Viewer

Select | Build | Circulation | Model | Room & Area | Opening | Datum | Work Plane

Properties

3D View

3D View: {3D} | Edit Type

Graphics

View Scale	1 : 100
Scale Value 1:	100
Detail Level	Fine
Parts Visibility	Show Original
Visibility/Grap...	Edit...
Graphic Displ...	Edit...
Discipline	Coordination
Show Hidden ...	By Discipline
Default Analy...	None
Visible In Opti...	all
Sun Path	

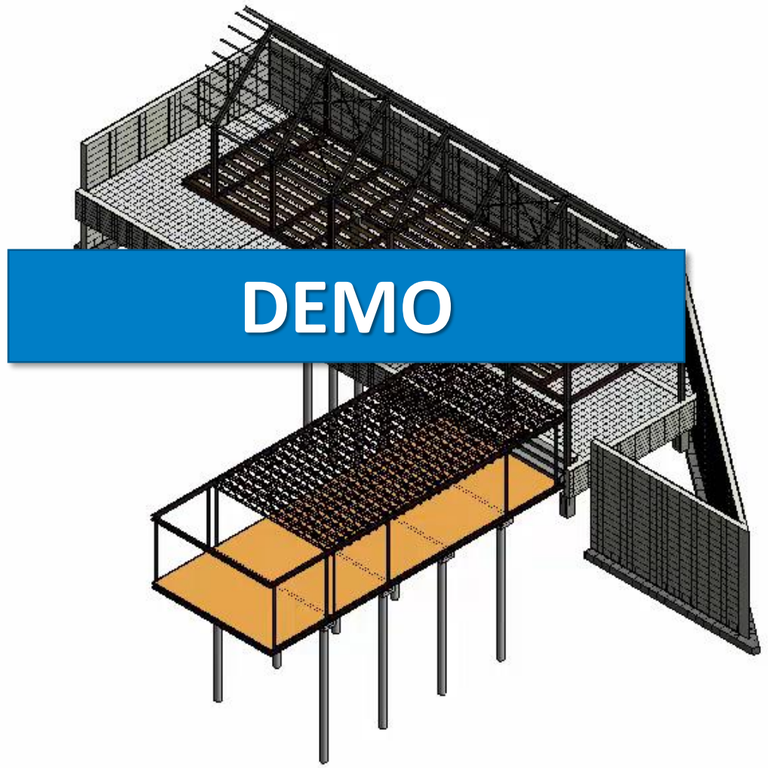
Extents

Crop View	
Crop Region ...	
Annotation Cr...	
Far Clip Active	

Properties help | Apply

Project Browser - rst_basic_sample_...

- Views (all)
  - Structural Plans
    - Foundation
    - FOUNDATION-2700
    - Level 1
    - Level 2
    - Level Lower
    - Ref Beam system
    - Roof Level
    - Top of Parapet
  - 3D Views
    - 3D View 1
    - 3D View 2
    - 3D View 3
    - 3D View 4
    - Analytical Model
    - Central Pile
    - Central Pile - 3D
    - Structure 3D box section
    - Structure 3D box Wall
    - Structure (Complete)
    - Structure (Foundation)

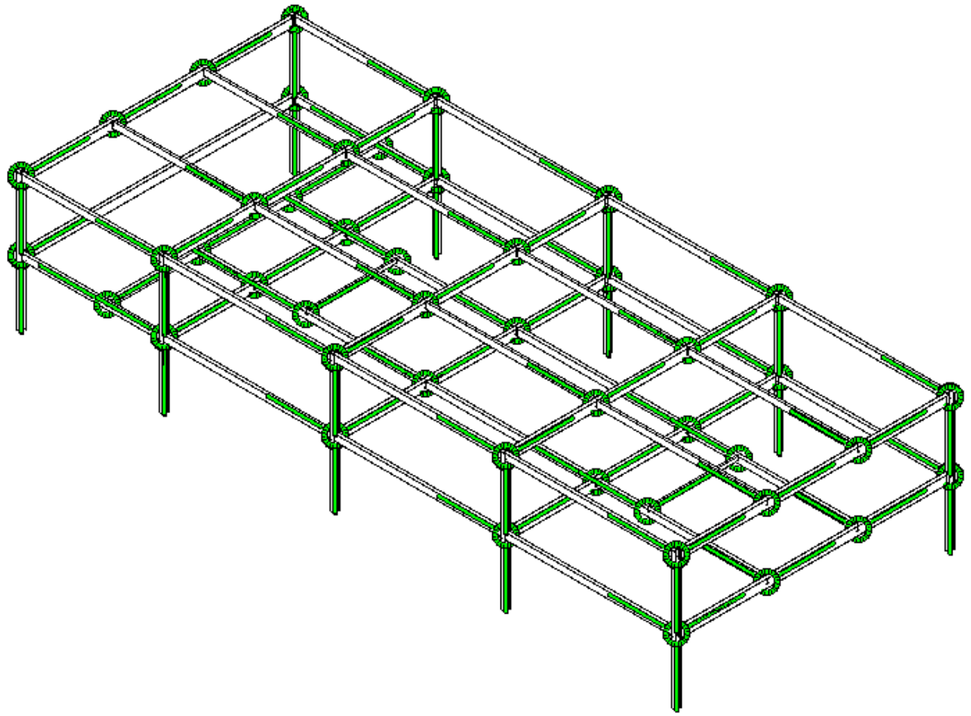


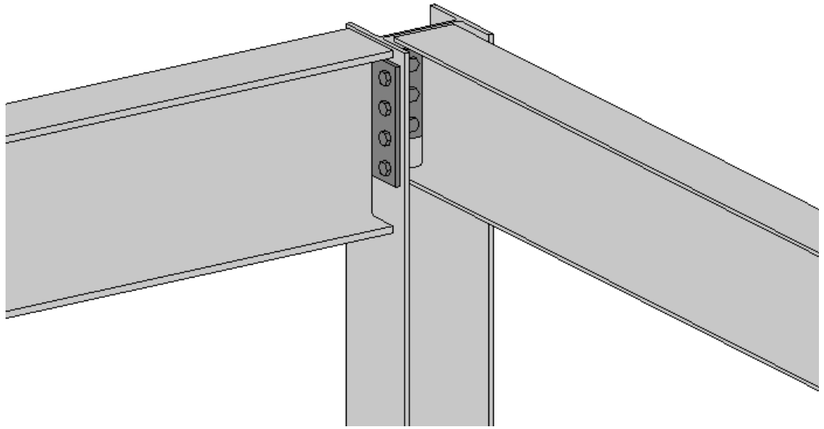
1 : 100

Click to select, TAB for alternates, CTRL adds, SHIFT unselects.

Main Model | Exclude Options

Making Connections Visible in Revit





Visibility/Graphic Overrides for 3D View: {3D}

Model Categories | Annotation Categories | Analytical Model Categories | Imported Categories | Filters

Show model categories in this view

If a category is unchecked, it will not be visible.

Filter list: <show all>

Visibility	Projection/Surface			Cut		Halftone	Detail Level
	Lines	Patterns	Transparency	Lines	Patterns		
Stairs						☐	By View
Structural Area Reinf...						☐	By View
Structural Beam Syst...						☐	By View
Structural Columns						☐	By View
Structural Connecti...						☐	By View
Anchors							
Bolts							
Hidden Lines							
Others							
Plates							
Profiles							
Reference							
Symbol	Override...			Override...			
Structural Fabric Are...						☐	By View
Structural Fabric Rei...						☐	By View

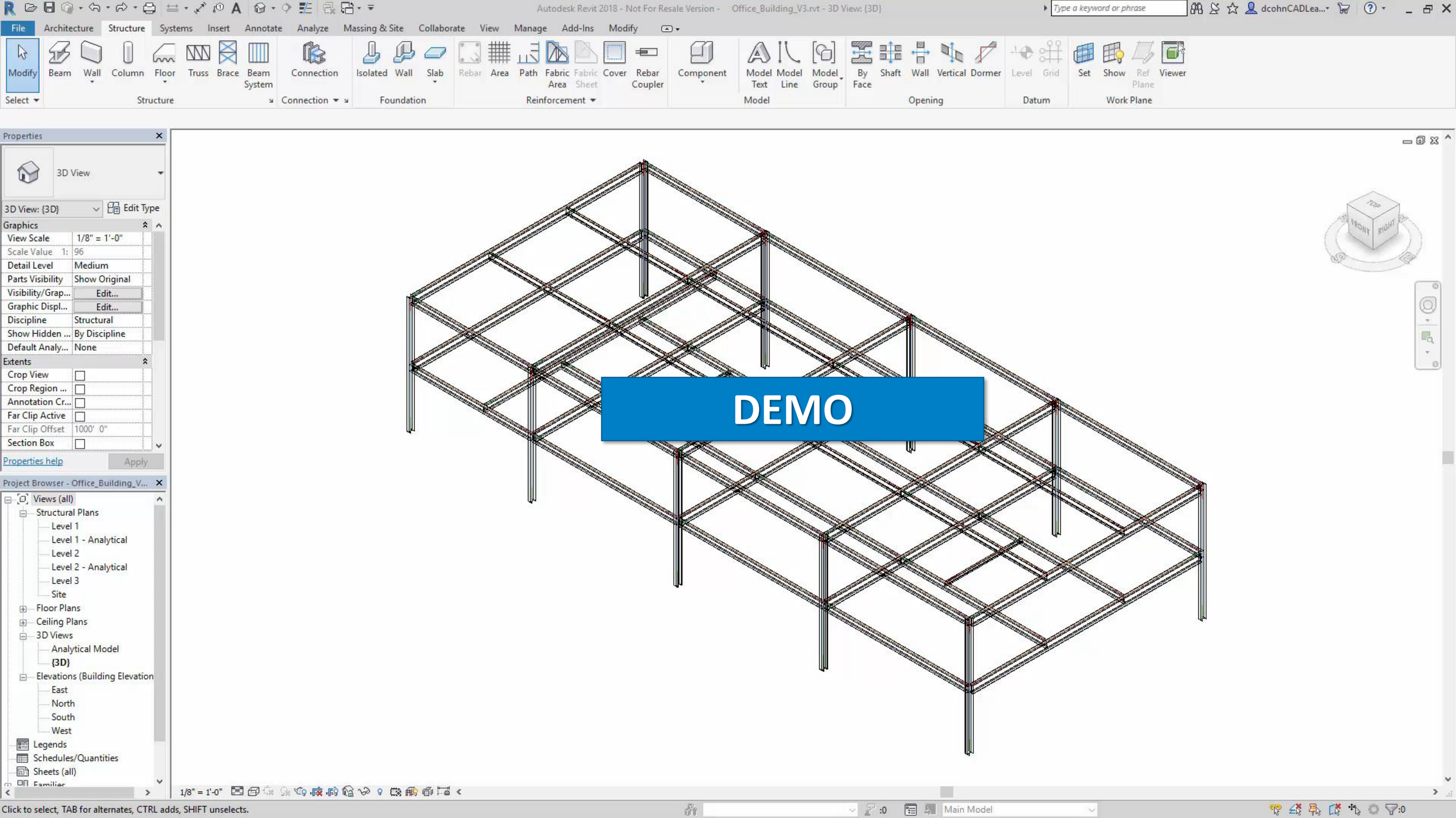
All | None | Invert | Expand All

Override Host Layers

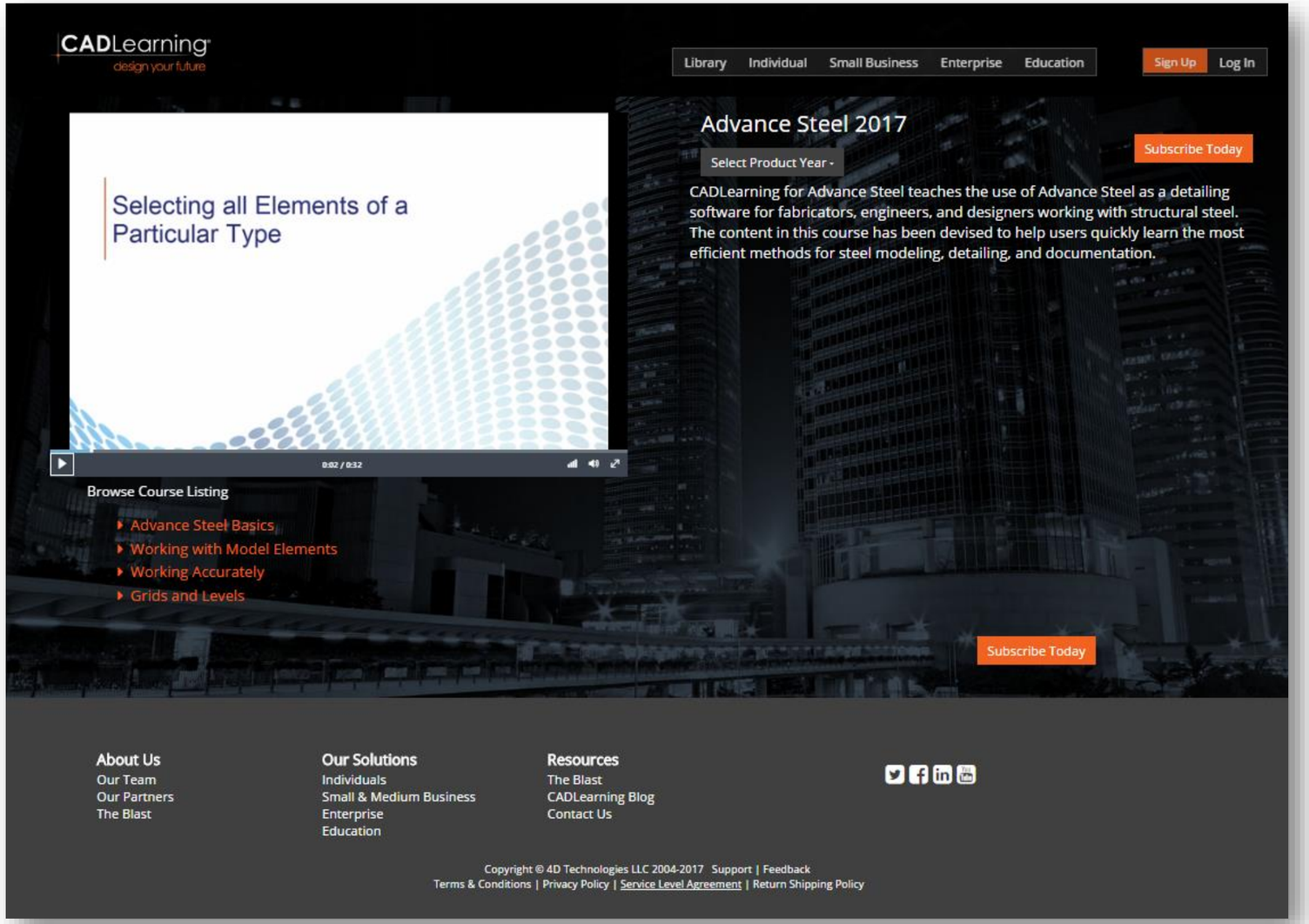
Cut Line Styles | Edit...

Categories that are not overridden are drawn according to Object Style settings. | Object Styles...

OK | Cancel | Apply | Help


Autodesk Revit 2018 - Not For Resale Version - Office_Building_V3.rvt - 3D View: {3D}
File
Architecture
Structure
Systems
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Modify
Modify
Beam
Wall
Column
Floor
Truss
Brace
Beam System
Connection
Isolated
Wall
Slab
Rebar
Area
Path
Fabric Area
Fabric Sheet
Cover
Rebar Coupler
Component
Model Text
Model Line
Model Group
By Face
Shaft
Wall
Vertical
Dormer
Level
Grid
Set
Show
Ref Plane
Viewer
Select
Structure
Connection
Foundation
Reinforcement
Model
Opening
Datum
Work Plane
Properties
3D View
3D View: {3D}
Edit Type
Graphics
View Scale 1/8" = 1'-0"
Scale Value 1: 96
Detail Level Medium
Parts Visibility Show Original
Visibility/Grap... Edit...
Graphic Displ... Edit...
Discipline Structural
Show Hidden ... By Discipline
Default Analy... None
Extents
Crop View
Crop Region ...
Annotation Cr...
Far Clip Active
Far Clip Offset 1000' 0"
Section Box
Properties help
Apply
Project Browser - Office_Building_V...
Views (all)
Structural Plans
Level 1
Level 1 - Analytical
Level 2
Level 2 - Analytical
Level 3
Site
Floor Plans
Ceiling Plans
3D Views
Analytical Model
{3D}
Elevations (Building Elevation
East
North
South
West
Legends
Schedules/Quantities
Sheets (all)
DEMO
TOP
FRONT
RIGHT
1/8" = 1'-0"
Click to select, TAB for alternates, CTRL adds, SHIFT unselects.
Main Model

To learn more…



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