



Say Hello to **STAAD.Pro** **CONNECT** Edition V22



Prepare to be



What's new in **STAAD Pro CONNECT** edition v.22?

- New Workflow Style Layout
- A 64-bit solver for the analysis
- Physical Modeler
- CONNECT Advisor
- Update Service



STAAD.Pro CONNECT edition v.22

Info

New

Open

Save

Save As

Print

Report

ISM

Import/Export

Cloud Services

Settings

Tools

Help

Close

New

Model Info

Job Info

Create

Model Information

File Name:

Structure1

Location:

C:\Users\Pasan\STAAD.Pro Connect edition

Browse...

Type:

Analytical

Physical

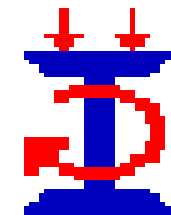
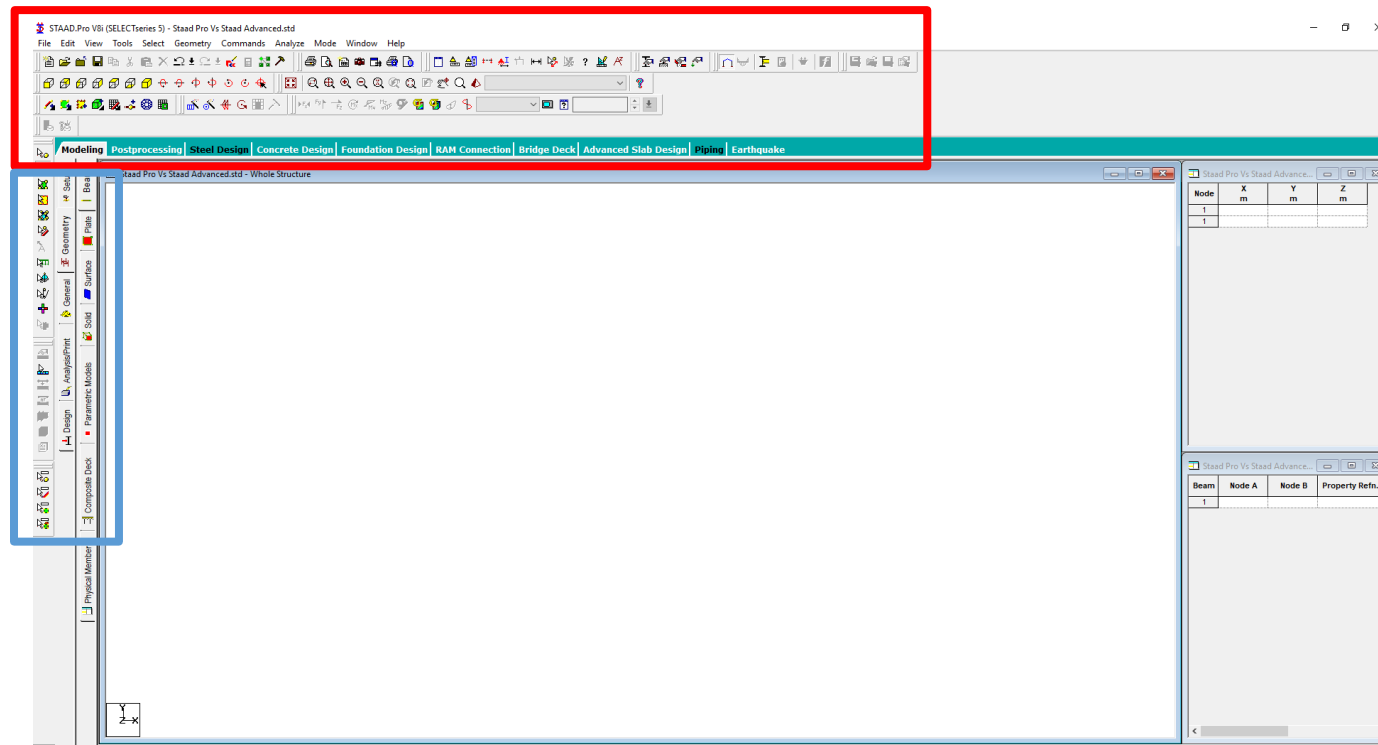
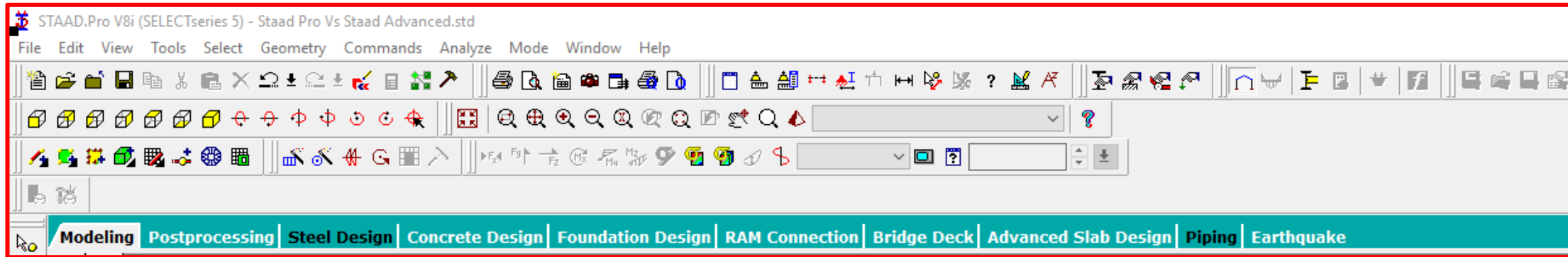
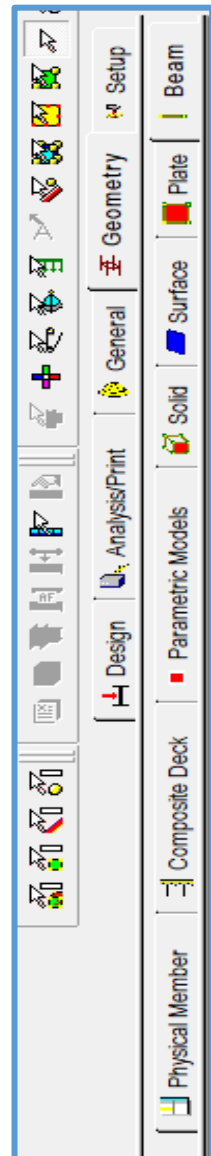
Building

Units:

English

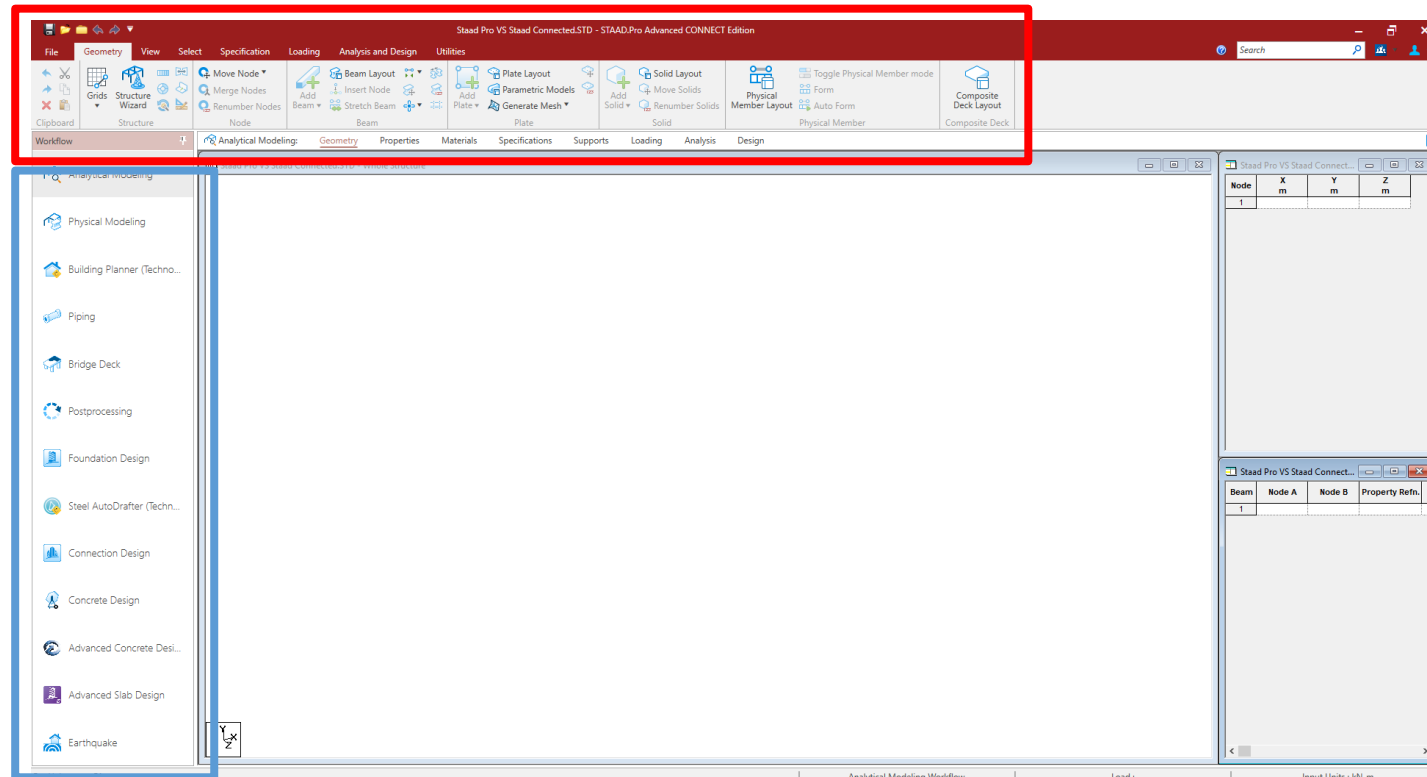
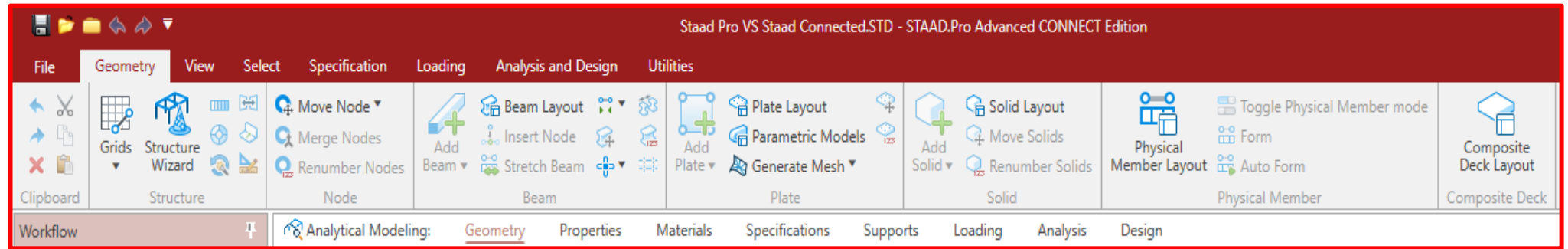
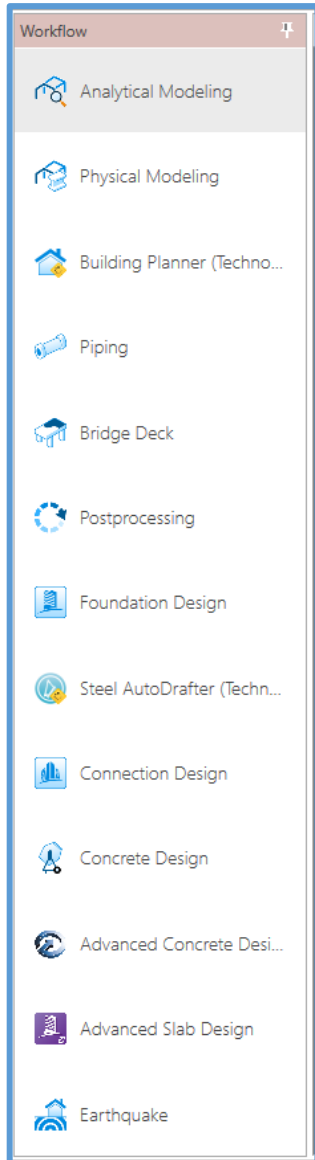
Metric

Then...



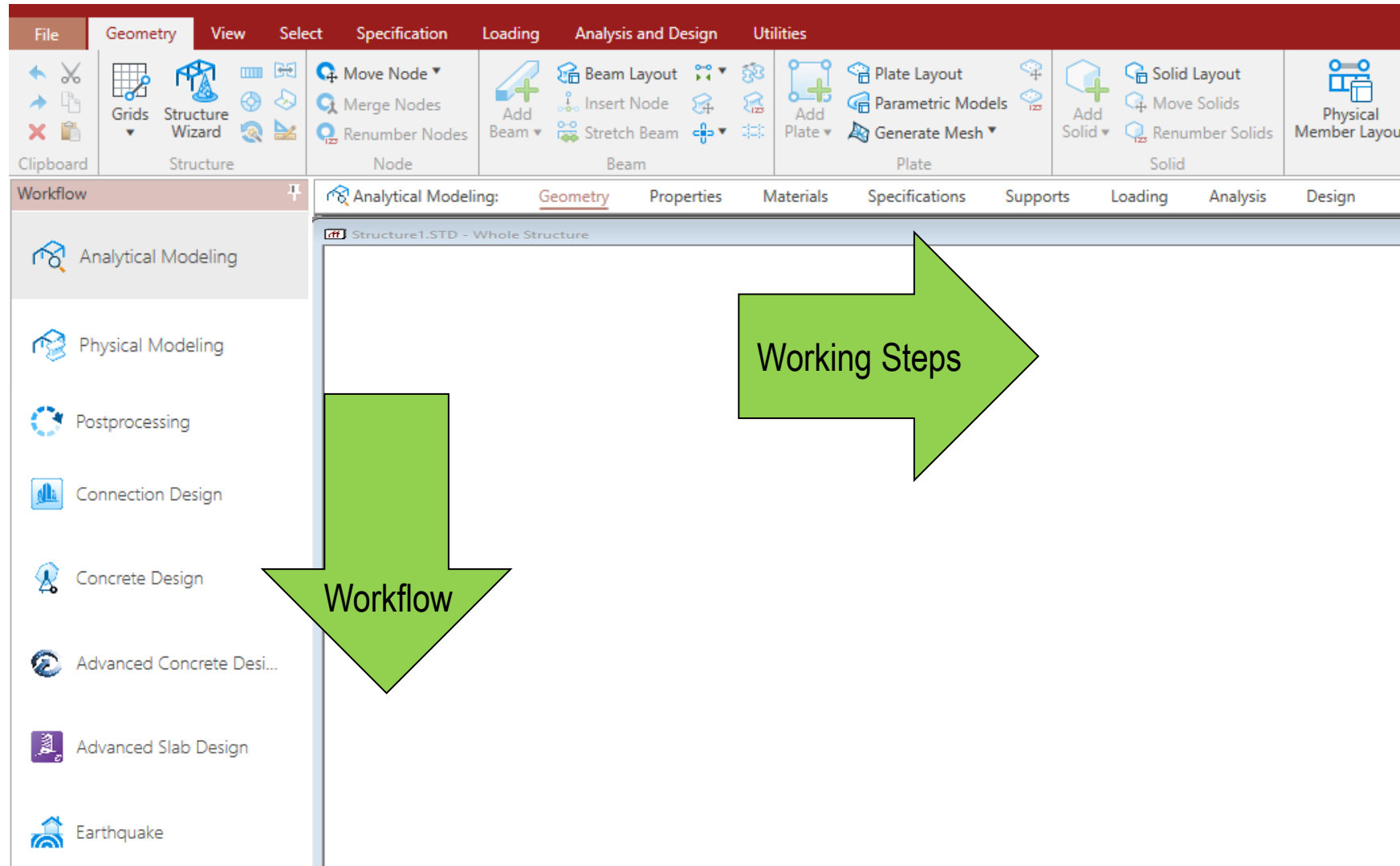
STAAD Pro V8i SS6

Now...



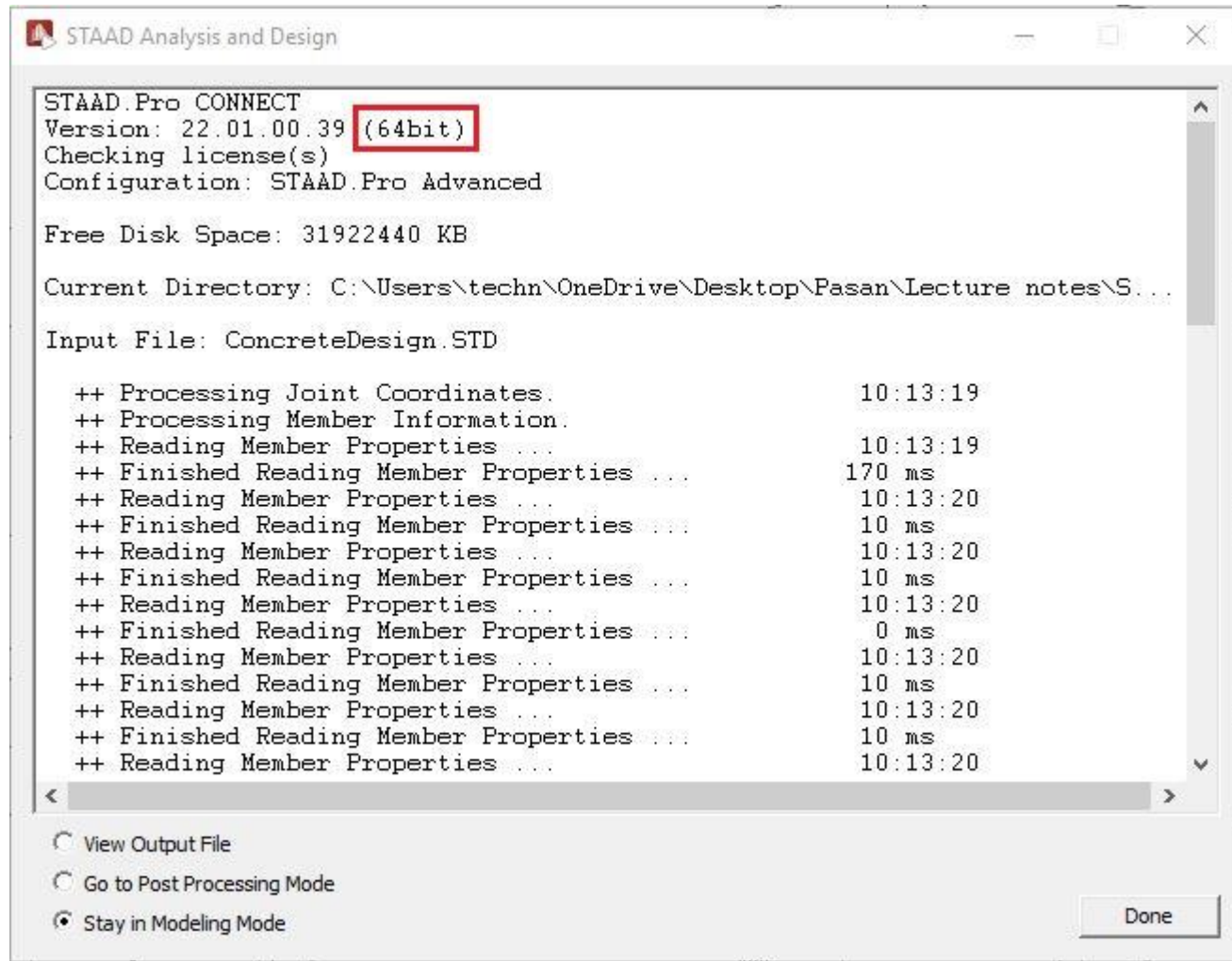
STAAD Pro
Connect Edition

Integrated Workflow



64 bits Solver..

- Analyse bigger & more complex models
- Significant time saving



STAAD.Pro (Standard)

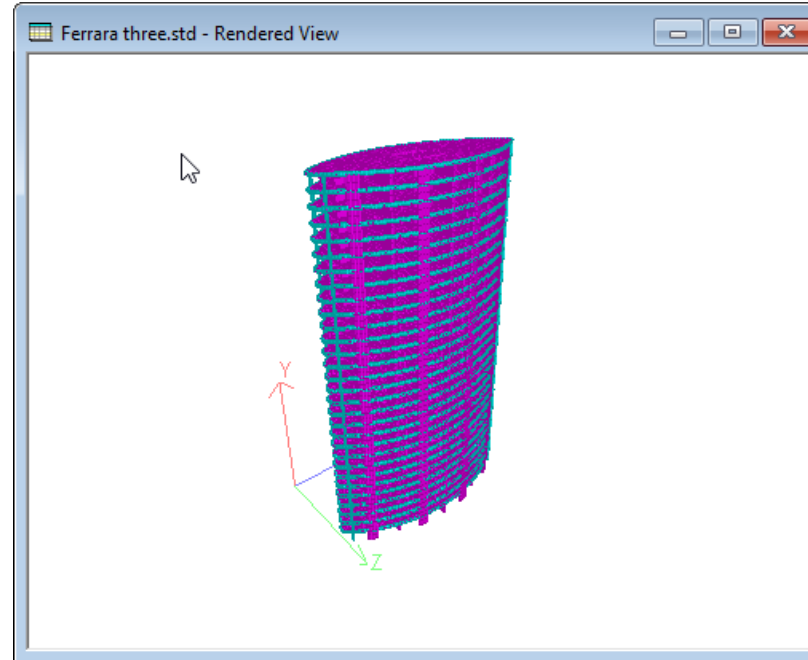
Capability of analysis methods

- Static and dynamic
- Linear Analysis
- P-Delta Analysis
- Compression/Tension only Members
- Compression/Tension only Springs
- Multi-linear Springs
- AISC Direct Analysis
- Simple Buckling
- Time History
- Response Spectrum

Connect Edition(Standard) vs. V8i SS6

STAAD.Pro
Standard
CONNECT

STAAD.Pro
Standard
v8i



```
STAAD Analysis and Design

++ Processing Triangular Factorization.      18:24:44
++ Finished Triangular Factorization.      14 m:49.440 sec
++ Calculating Joint Displacement.         18:39:34
++ Finished Joint Displacement Calculation.  4.140 sec
++ Calculating Member Forces.              18:39:38
++ Analysis Successfully Completed ++
++ Processing Element Forces.               18:39:41
++ Processing Element Corner Forces.        18:39:44
++ Processing Element Stresses.             18:39:47
++ Creating Displacement File (DSP)...       18:39:52
++ Creating Reaction File (REA)...          18:39:52
++ Calculating Section Forces1-110.         18:39:52
++ Calculating Section Forces2.            18:39:52
++ Calculating Section Forces3.            18:39:52
++ SECT DISP member 39692 4728 of 4740
++ SECT DISP member 1036 24 of 4740
++ Creating Section Displace File (SCN)...   18:39:53
++ Creating Element Stress File (EST)...     18:39:53
++ Creating Element JT Stress File (EJT)...  18:39:53
++ Creating Element JT Force File (ECF)...   18:39:54
++ Done.                                   18:39:55

0 Error(s), 0 Warning(s), 0 Note(s)

++ End STAAD.Pro Run Elapsed Time = 920 Secs
D:\Temp\STAAD.Pro\64 bit\CONNECT Edition\Ferrara thr...anl

View Output File
Go to Post Processing Mode
Stay in Modeling Mode
```

```
STAAD Analysis and Design

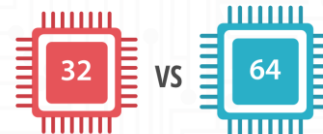
++ Processing Triangular Factorization.      18: 0: 1
++ Finished Triangular Factorization.      16 m:59.330 sec
++ Calculating Joint Displacement.         18:17: 0
++ Finished Joint Displacement Calculation.  5.330 sec
++ Calculating Member Forces.              18:17: 5
++ Analysis Successfully Completed ++
++ Processing Element Forces.               18:17:10
++ Processing Element Corner Forces.        18:17:16
++ Processing Element Stresses.             18:17:19
++ Creating Displacement File (DSP)...       18:17:26
++ Creating Reaction File (REA)...          18:17:26
++ Calculating Section Forces1-110.         18:17:27
++ Calculating Section Forces2.            18:17:27
++ Calculating Section Forces3.            18:17:27
++ Creating Section Force File (BMD)...      18:17:27
++ SECT DISP member 39692 4728 of 4740
++ Creating Section Displace File (SCN)...   18:17:28
++ Creating Element Stress File (EST)...     18:17:28
++ Creating Element JT Stress File (EJT)...  18:17:28
++ Creating Element JT Force File (ECF)...   18:17:30
++ Done.                                   18:17:31

0 Error(s), 0 Warning(s), 0 Note(s)

++ End STAAD.Pro Run Elapsed Time = 1064 Secs
D:\Temp\STAAD.Pro\64 bit\CONNECT Edition\Ferrara three.anl

View Output File
Go to Post Processing Mode
Stay in Modeling Mode
```

CONNECT Edition is on average
1.5 times faster
than V8i.



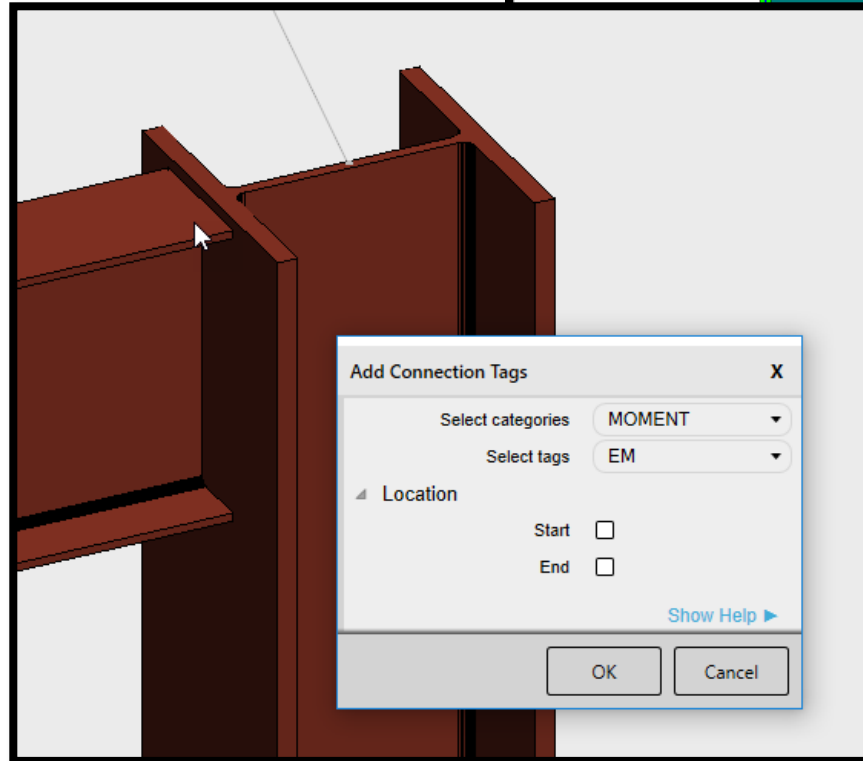
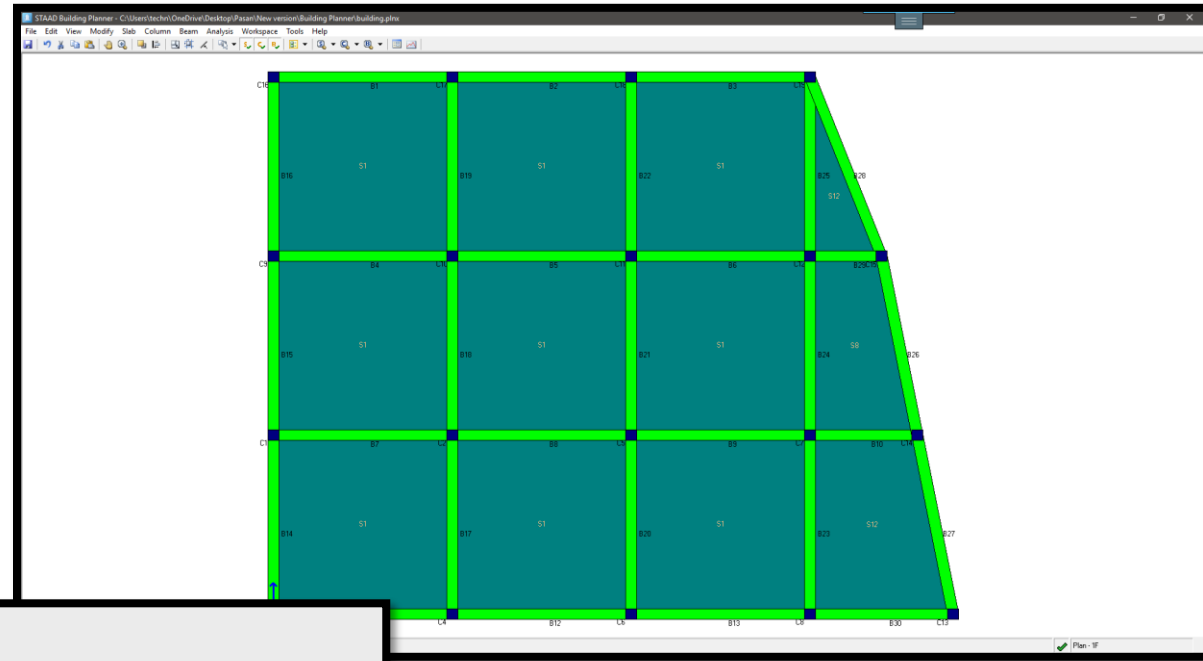
Enhanced Modelling

Analytical Modeller

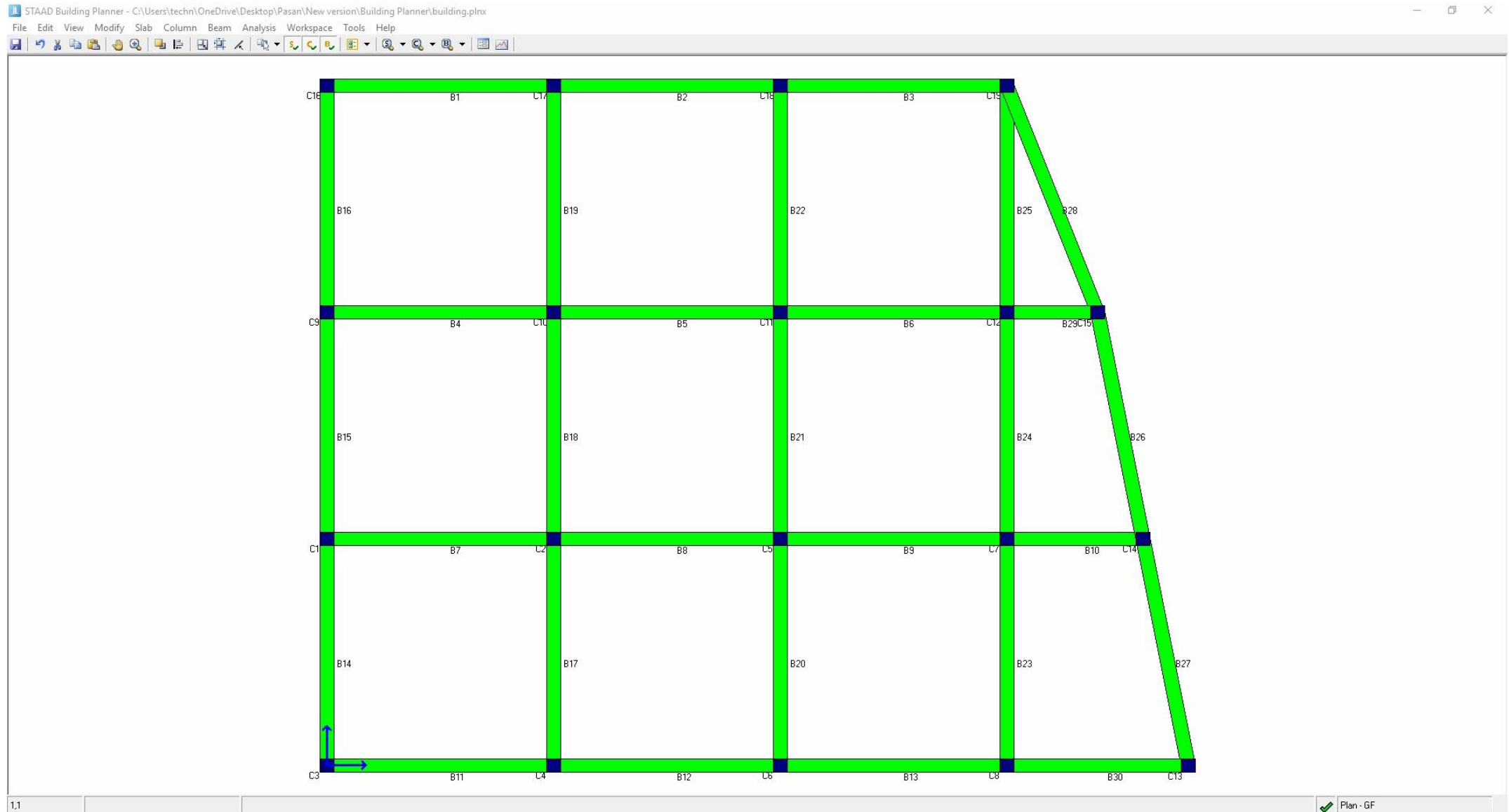
- STAAD Building Planner (Planwin)

Physical Modeller

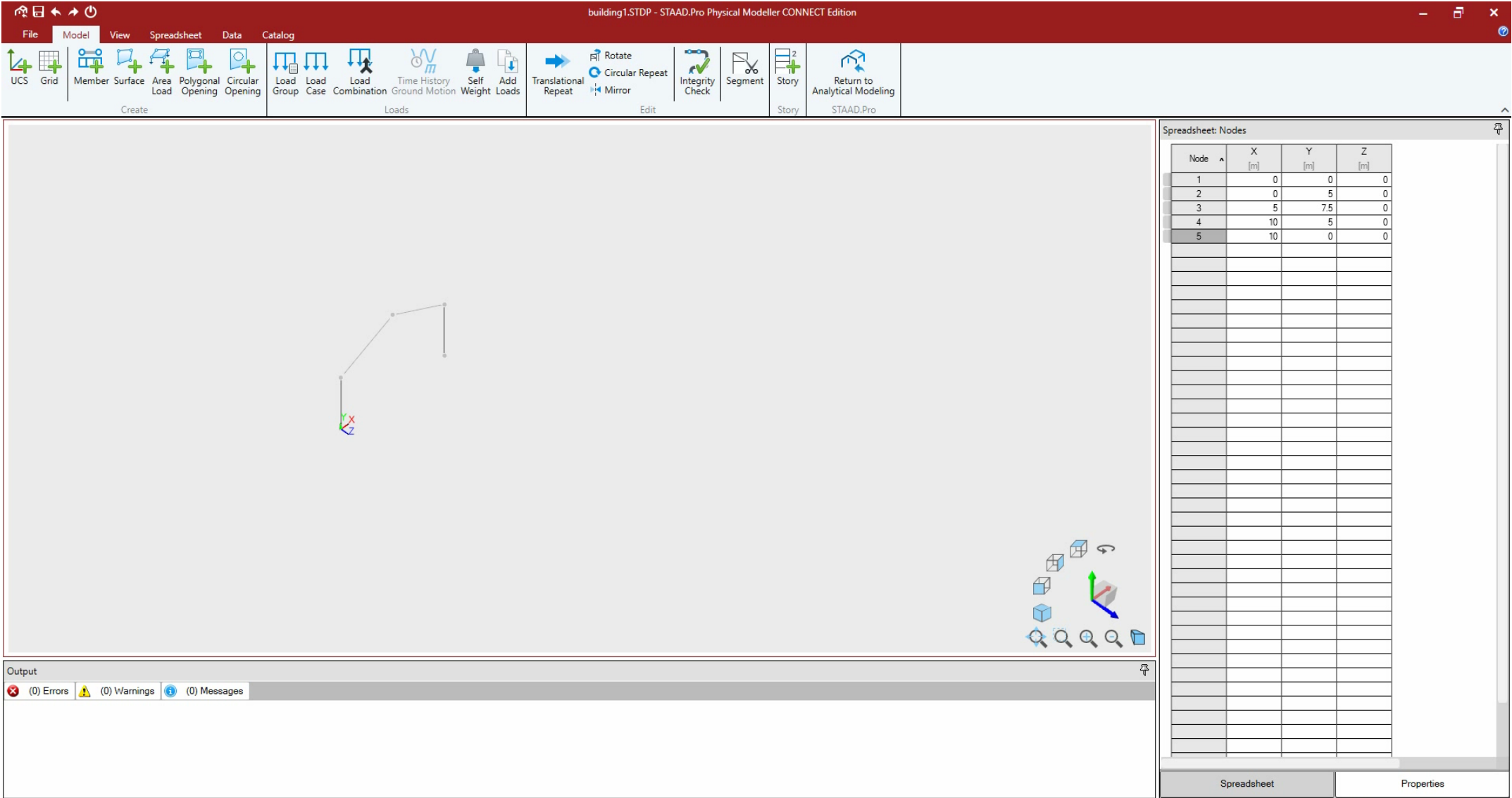
- Static Loading
- Interop with ISM
- Connection Tags



STAAD Building Planner



Physical Modeler..





Design codes

- **More than 90 International design codes**
- **AISC 360 – 16**
 - **HSS Design**
 - **Enhanced Torsion**
- **ACI 318 – 14**
 - **Metric**
- **IS 13920**
 - **2016 Edition**

Seismic Loading

- IBC 2015 / ASCE 07 – 10

- Static Seismic
- Response Spectrum

- IS 1893 – 2016

- Static Seismic
- Response Spectrum



Create New Definitions / Load Cases / Load Items :

Seismic Parameters

Type : IBC 2015 ASCE 7-10 ☐ Include Accidental Load

Parameter	Value	Unit
Zip Code	92887	
Latitude	33.8845	
Longitude	-117.7294	
Ss	2.246568	
S1	0.8170356	
TL	12	seconds
Importance factor (I)	1	
Response Modification Factor X (RX)	3	
Response Modification Factor Z (RZ)	4	
Site class (SCL)		

Provide the zip code of the location of the latitude and longitude and consequent factors.

Edit :

Response Spectrum

Code : IBC - 2015/ASCE 7-10 Zip : 92887

Latitude : 33.8845 Longitude : -117.729

Combination Method : SRSS Ss : 2.24658 S1 : 0.817039

☐ Save

Spectrum Type : ☒ Acceleration ☐ Direction

Long Period (TL) : 8 Fa : 0.8 Fv : 0.8 Site class (SCL) : A

Interpolation Type : ☐ Linear ☐ Logarithmic

Damping Type : ☒ Damping ☐ CDAMP ☐ MDAMP

Damping : 0.001

Direction : ☐ X : 0 ☒ Y : 1 ☐ Z : 0

☐ Use Torsion

Dynamic Eccentricity (DEC) : 0

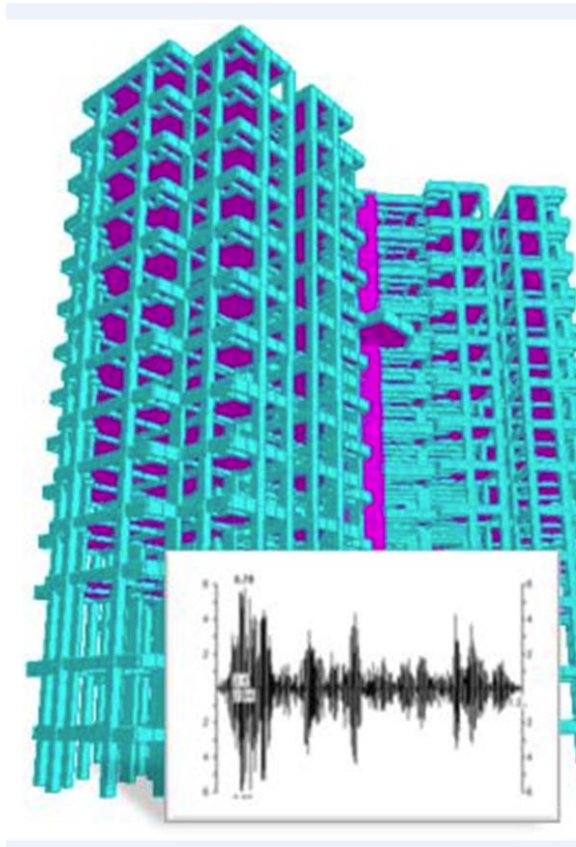
Accidental Eccentricity (ECC) : 0

Signed Response Spectrum Results Options : ☐ Dominant Mode No : 1 ☐ Signed

Individual Modal Response Load Case Generation Options : ☐ Generate load case(s) for first 1 mode(s) starting with Load Case no 0

Others : Scale : 386.4 ☐ Missing Mass ☐ ZPA

Graph

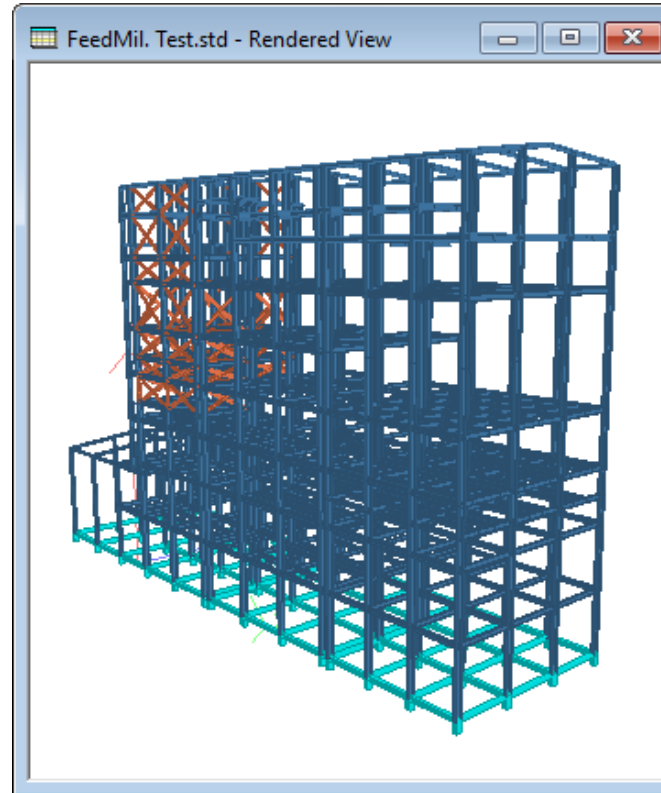
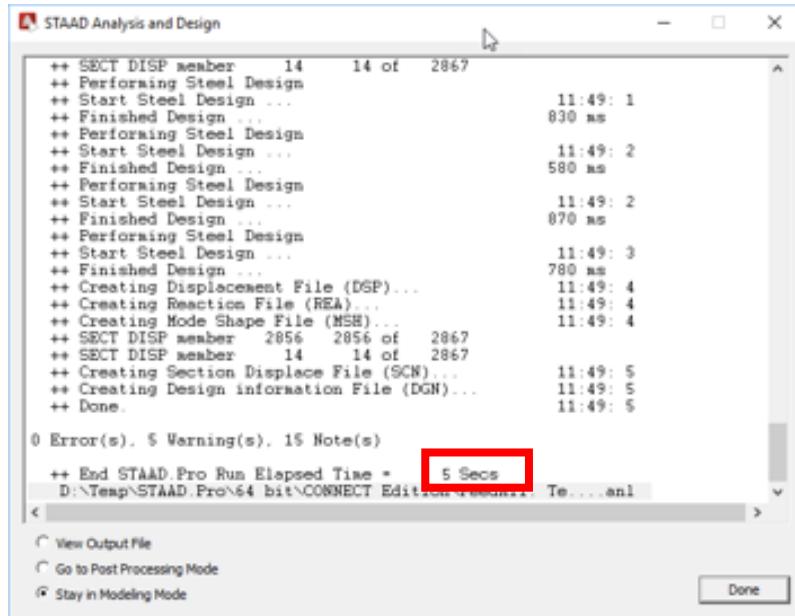


STAAD.Pro Advanced

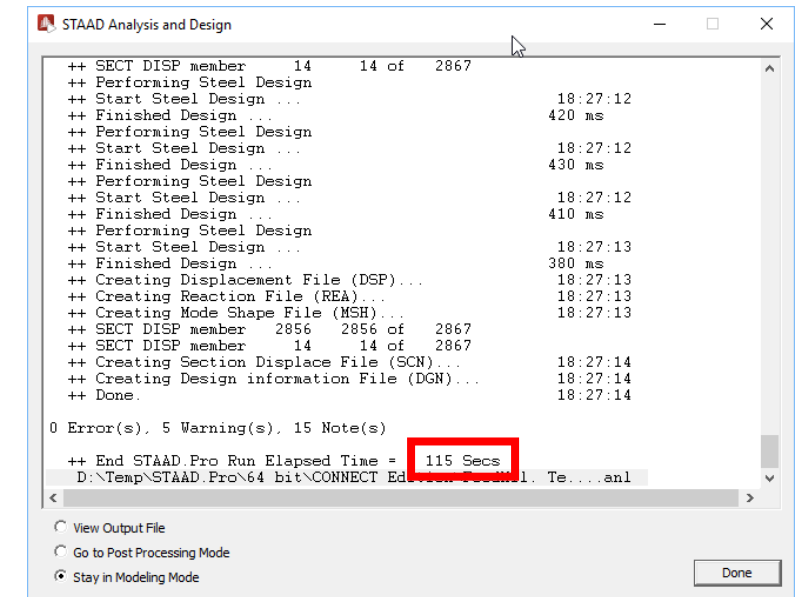
- Faster 64-bit, **multi-core advanced solver** for larger models with many load cases
- Geometric Non Linear (GNL)
- Non-linear cable
- Dynamic steady state
- Advanced buckling
- Floor Response Spectrum
- Alternative Methods for Eigen Solution i.e. Lanczos-Arnoldi, Ritz Vector

CONNECT Edition Comparison

STAAD.Pro
Advanced
CONNECT



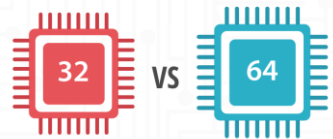
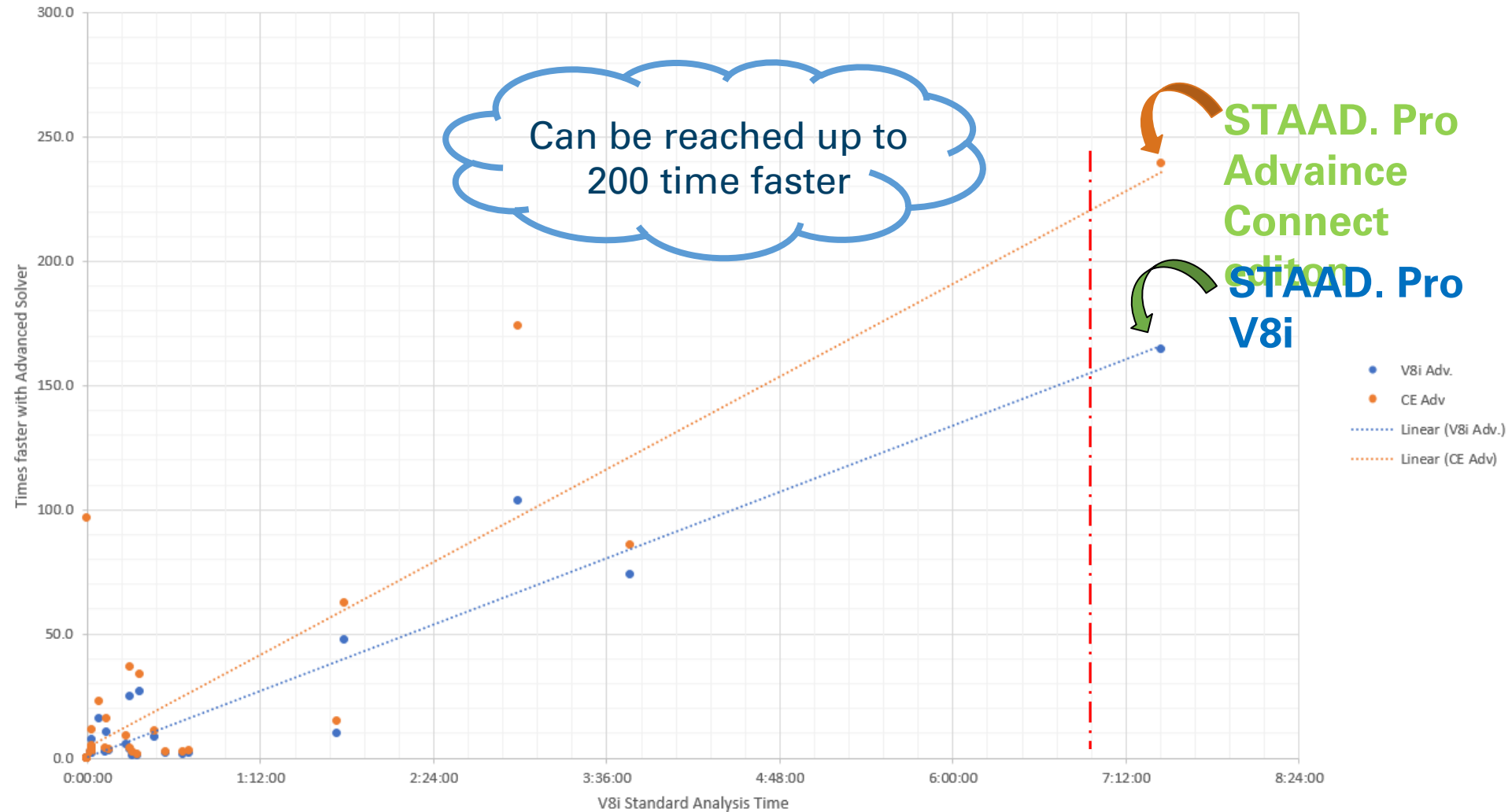
STAAD.Pro
Standard
CONNECT



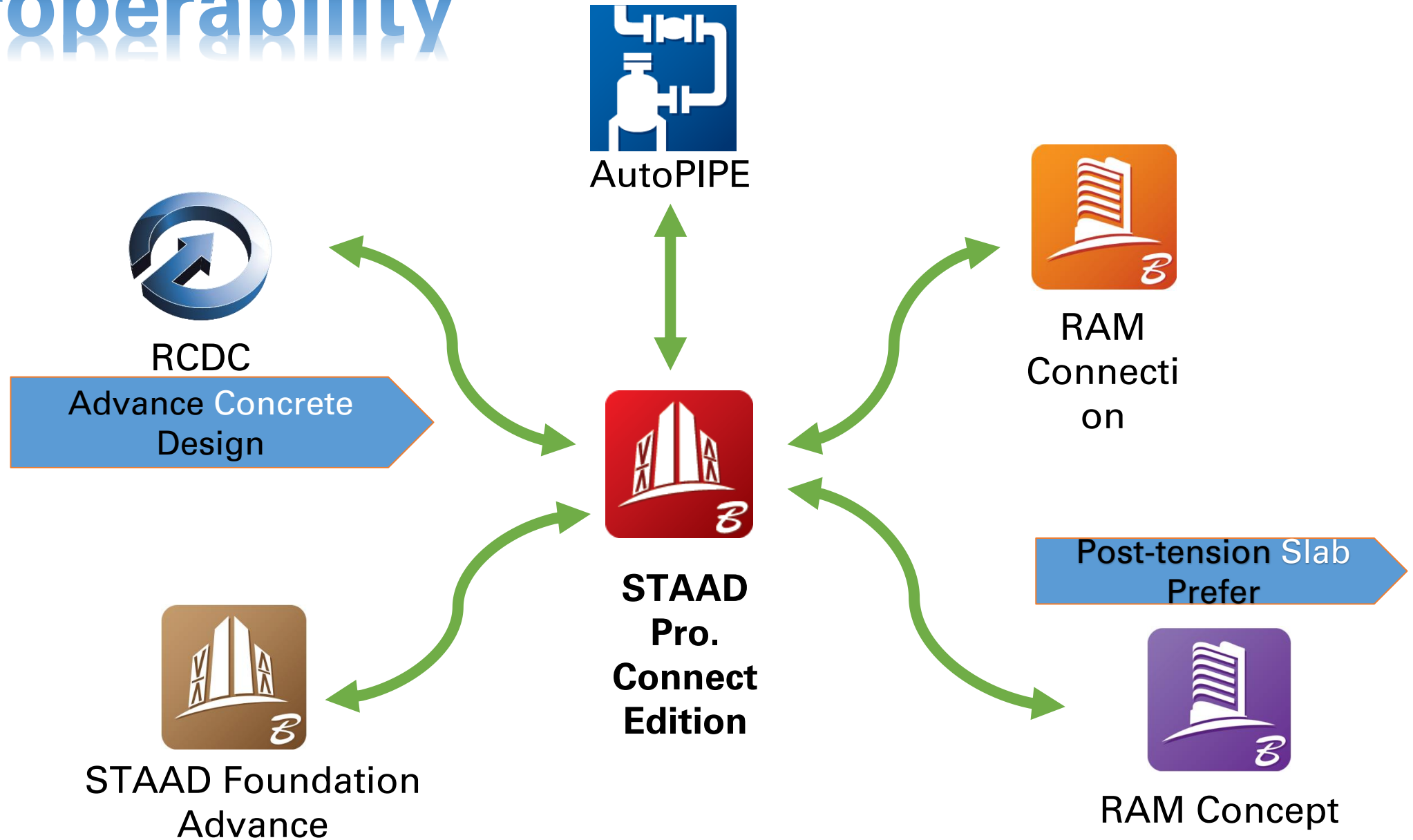
$$\frac{115}{4.6} * 100 = 2500\%$$

Advanced is on average
25 times faster
than the Standard version.

Connect Edition(Advance) vs. V8i SS6



Interoperability





Steel AutoDrafter

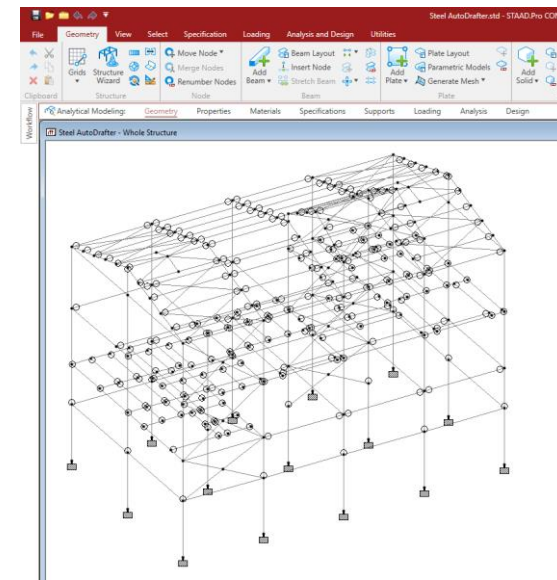
Drawing | Documentation



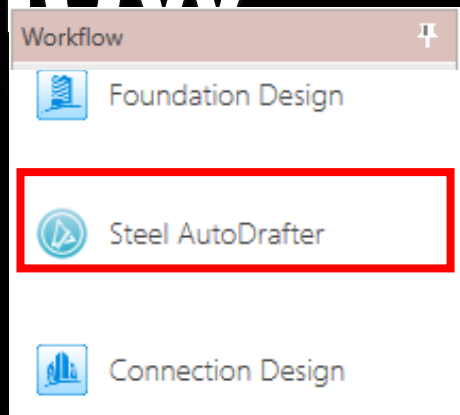
Steel AutoDrafter converts the analysis model into working design drawings.

Can generate

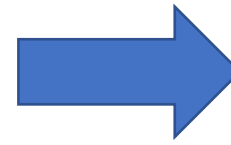
- Plans
- Sections
- Projected views of steel structure



Work Flow



STAAD Pro. Connect
Edition



Steel
AutoDrafter

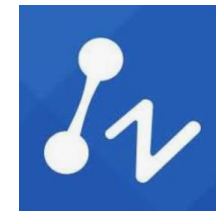


MicroStation



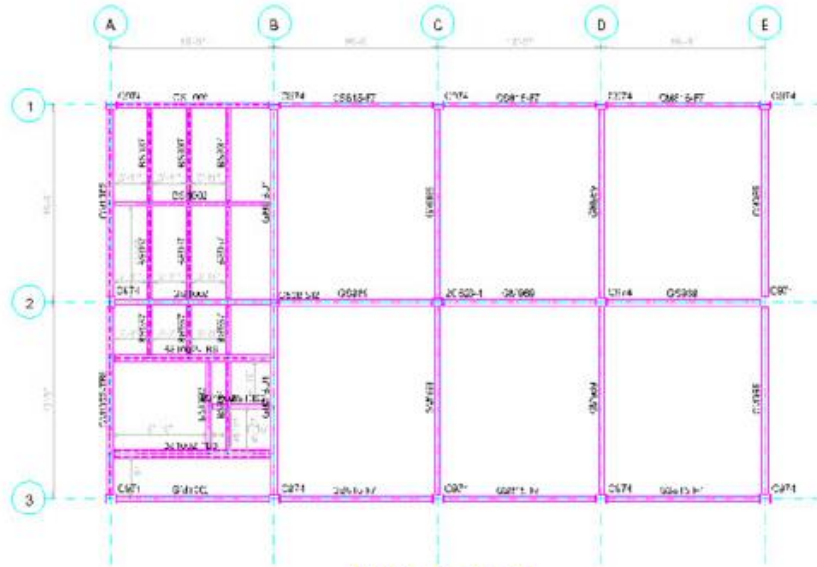
DraftSight

AutoCAD

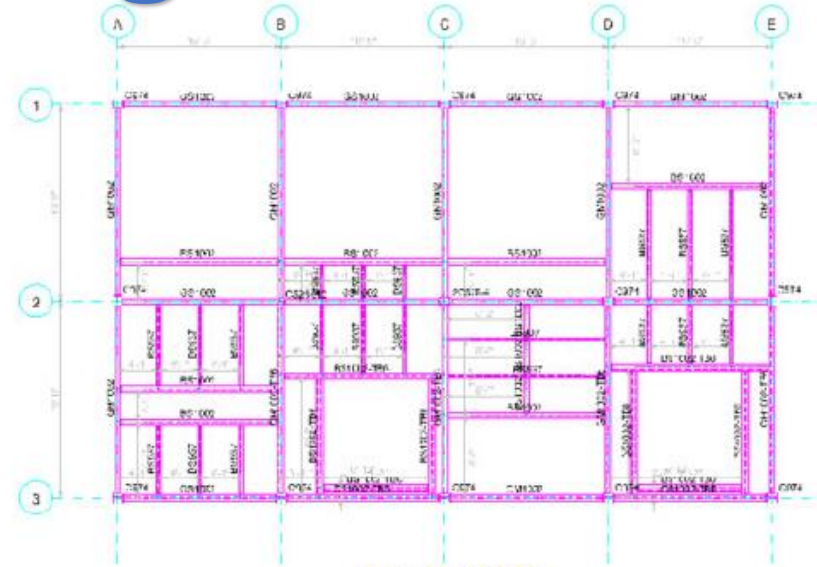


ZWCAD

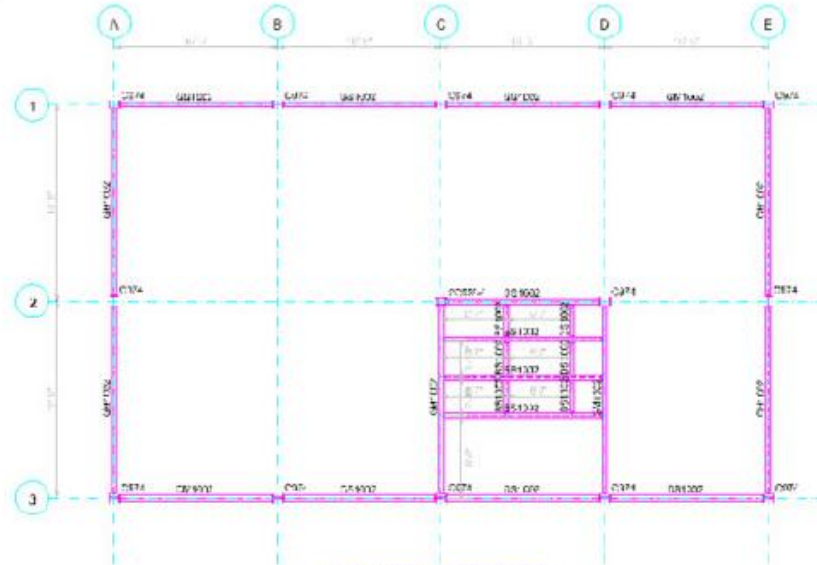
Drawings



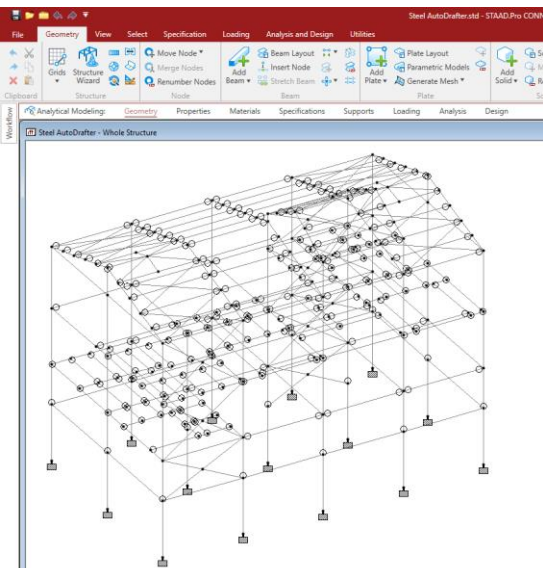
PLAN AT EL.2 (TOS)
(SCALE 1:100)



PLAN AT EL.3 (TOS)
(SCALE 1:100)



PLAN AT EL.ROOF (TOS)
(SCALE 1:100)



Some other Unique Features



Identifies trusses and portals frames and generates 2D drawing from a wire frame model



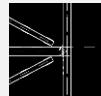
Auto correction of joints



Recognizes and draws built-up sections



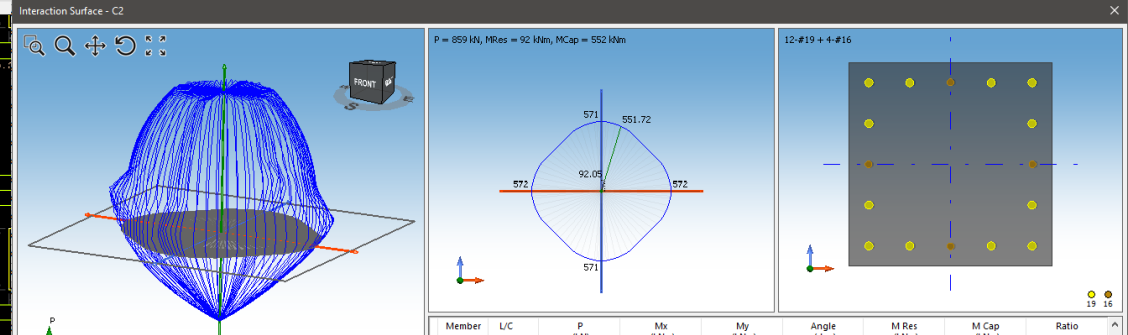
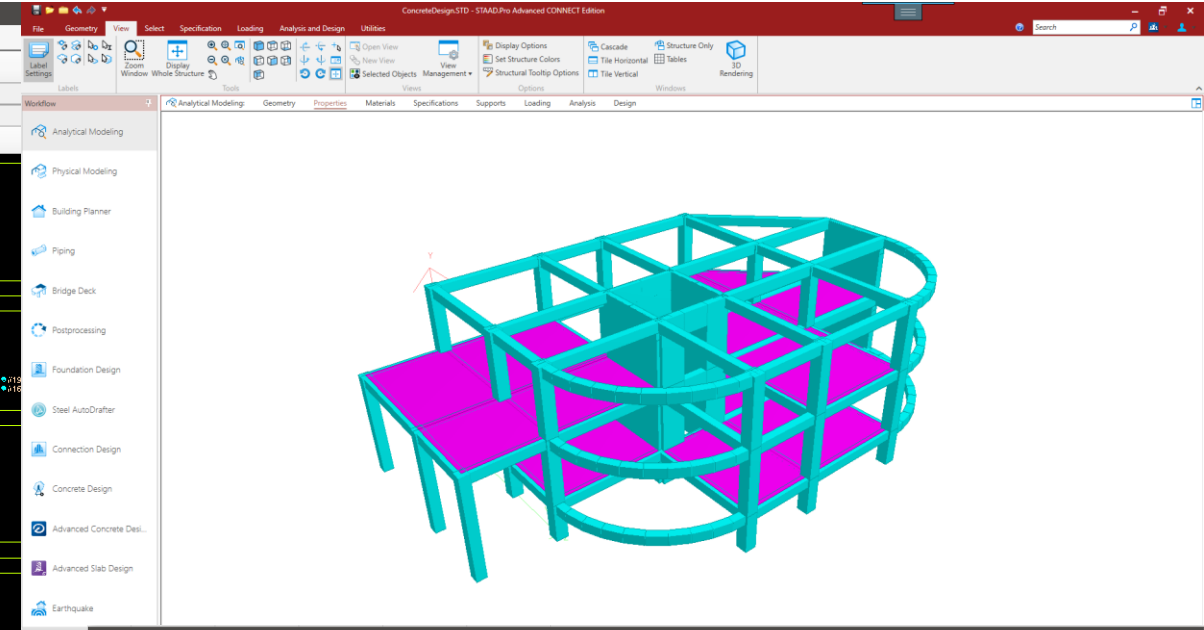
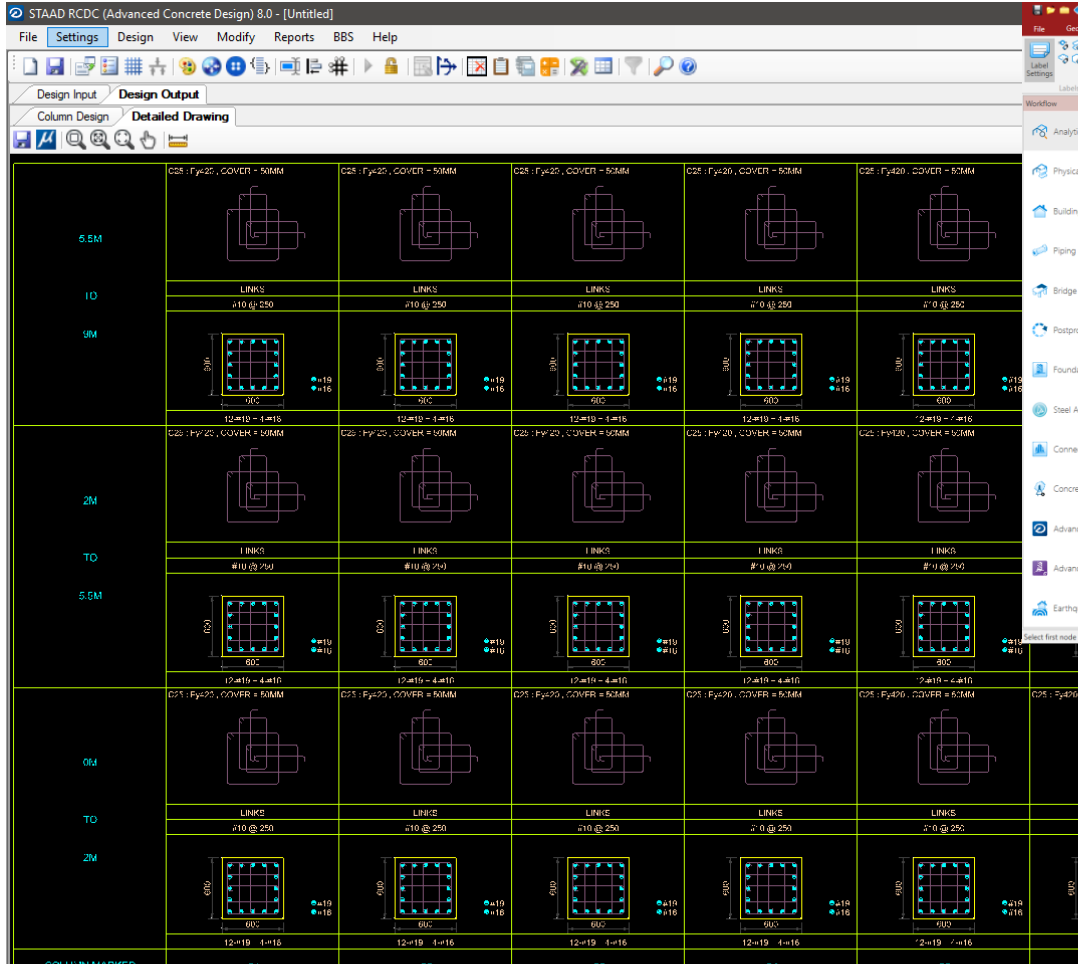
Intersecting members are identified



Auto off-sets member and exact elevation



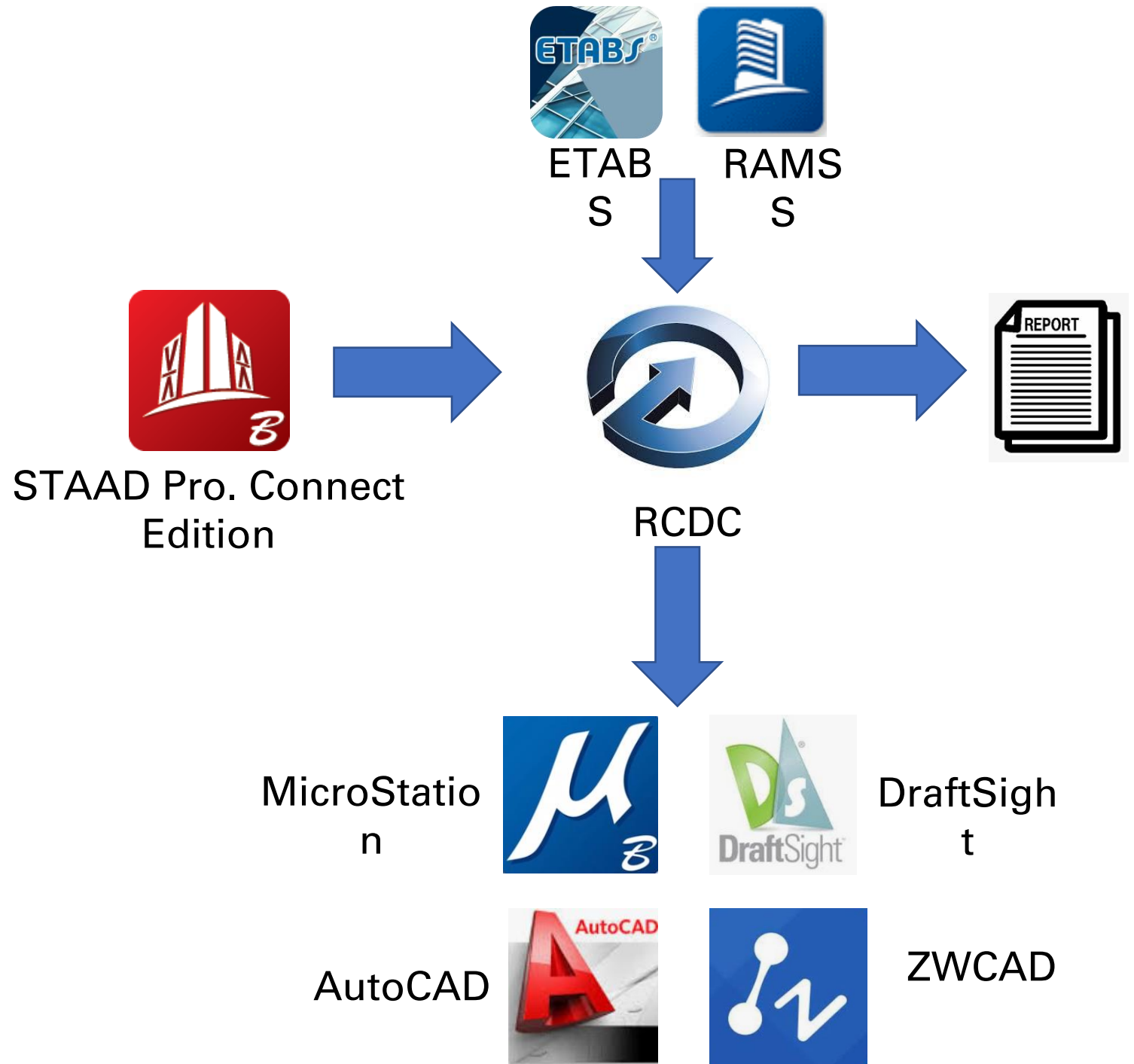
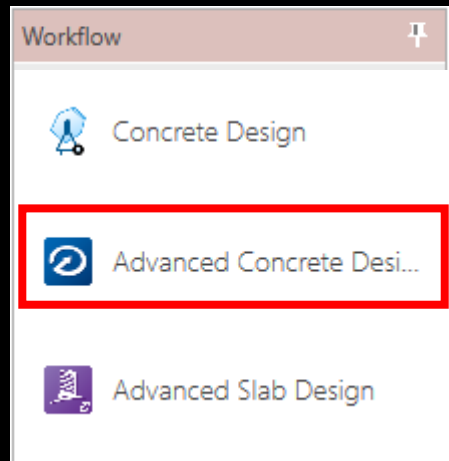
Multiple presentation styles and drawing style control



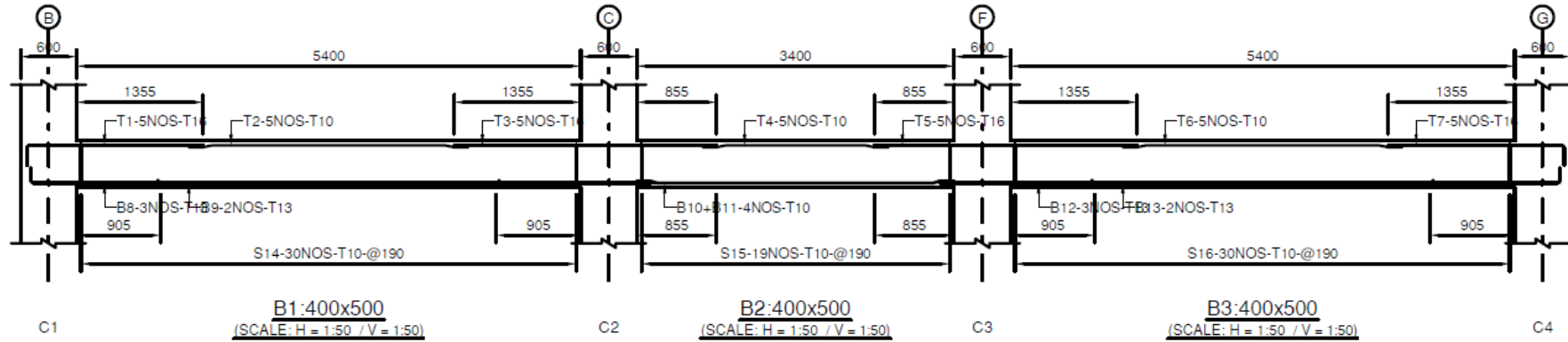
RCCDC

Design | Drawing | Documentation

Work Flow



Drawings & BBS



ELEMENT	BAR MARK	BAR NOS.	REBAR	BAR SHAPE	CUTTING LENGTH mm	DIMENSIONS (mm)							
						A	B	C	D	E	F	G	R
B1, B2 B3	T1	5	16		2065	215	1888						48
	T2	5	10		2995	150	97	16	2500	16	97	150	
	T3	5	16		2810	2810							
	T4	5	10		1995	150	97	16	1500	16	97	150	
	T5	5	16		2810	2810							
	T6	5	10		2995	150	97	16	2500	16	97	150	
	T7	5	16		2065	215	1888						48
	B8	3	13		6770	163	6636						39
	B9	2	13		3590	3590							
	B10	1	10		3555	3324	78	13	150				
	B11	3	10		3405	150	78	13	2948	13	78	150	
	B12	3	13		6770	163	6636						39
	B13	2	13		3590	3590							
	S14	30	10		1710	320	420						30
	S15	19	10		1710	320	420						30
	S16	30	10		1710	320	420						30

SUMMARY : B1, B2, B3

REBAR	10	13	16	TOTAL
LGT(m)	188	54	48	290
WT(kg)	105	54	76	235

