



# New Feature in RISA

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➤ 32 & 64 bit versions

- ✓ Automatic installs based  
your computer!

Program Version	32-bit	64-bit
Joints	100,000	500,000
Members	32,000	100,000
Plates	100,000	250,000
Shapes	50,000	100,000
Wall Panels	5,000	10,000
Openings/Regions (per Wall Panel)	25/100	25/100
Solids	100,000	250,000
Section Sets	5,000	10,000
Loads (All Types Combined)	300,000	300,000
Materials	500	500
Custom Wood Species	500	500
Diaphragms	500	500
Basic Load Cases	1,000	1,000
Moving Loads	5,000	5,000
Load Combinations	5,000	5,000
Mode Shapes	2,000	2,000

## ➤ IBC 2012 Material Code Updates

- ✓ Wood design per the NDS 2012
- ✓ Aluminum design per AA ADM1-10: ASD & LRFD
- ✓ Cold-Formed Steel design per AISI S100-10: ASD & LRFD
- ✓ AISC 341-10 Seismic design for Hot rolled steel
- ✓ Tapered Wide Flange design per Design Guide 25

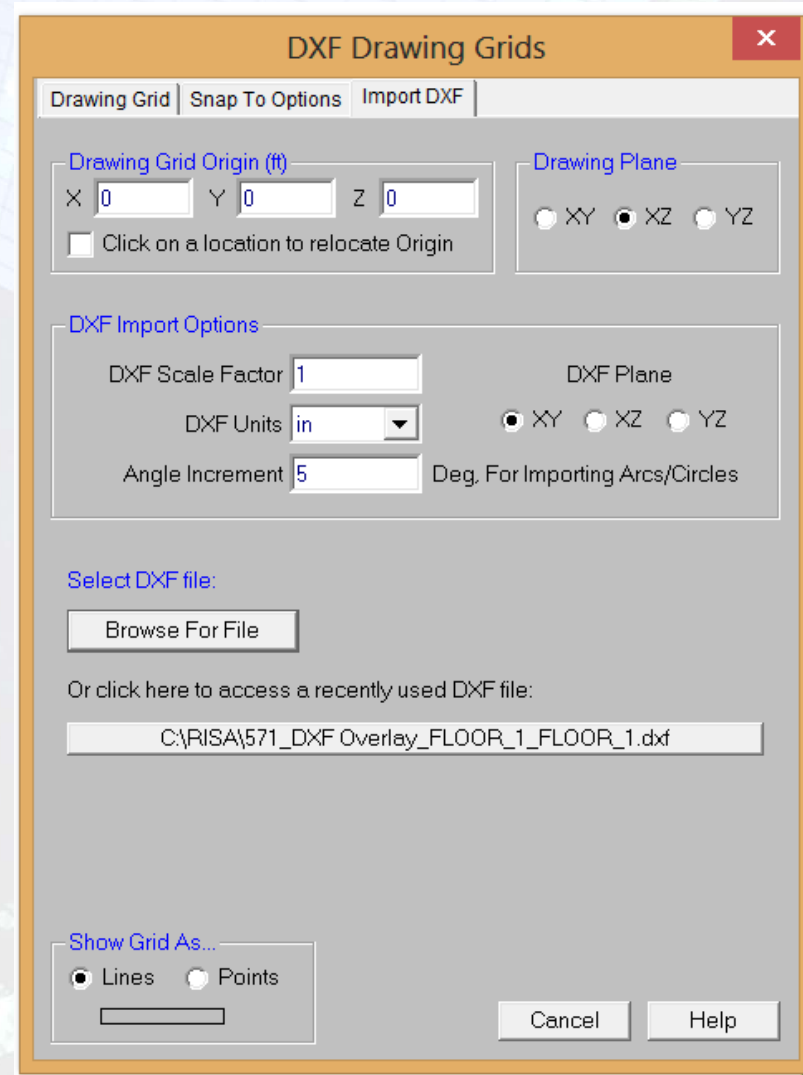
Let's See Tapered Design now!

## ➤ Canadian Code Updates

- ✓ Hot Rolled steel design per Canadian CSA S16-09
- ✓ Cold-Formed Steel design per CSA S136-10: LSD
- ✓ Seismic and Wind Loading per NBC 2010
- ✓ Added the design Response Spectra per NBC 2010
- ✓ Load Combination generation per NBC 2010

➤ DXF Import

Added the ability to import a DXF as a background image.



# Added Virtual Joist Girders

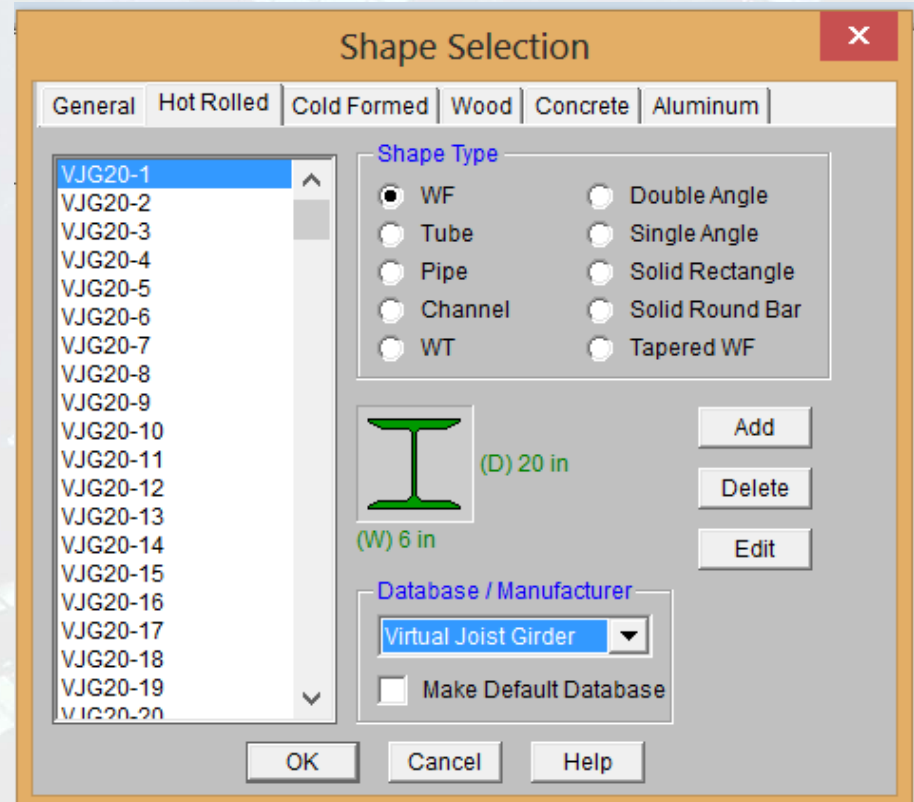
- Converts common joist sizes into equivalent wide flange beam

### Design Tip:

Use the Design Rules: Depth to help you select the correct Joist Girder

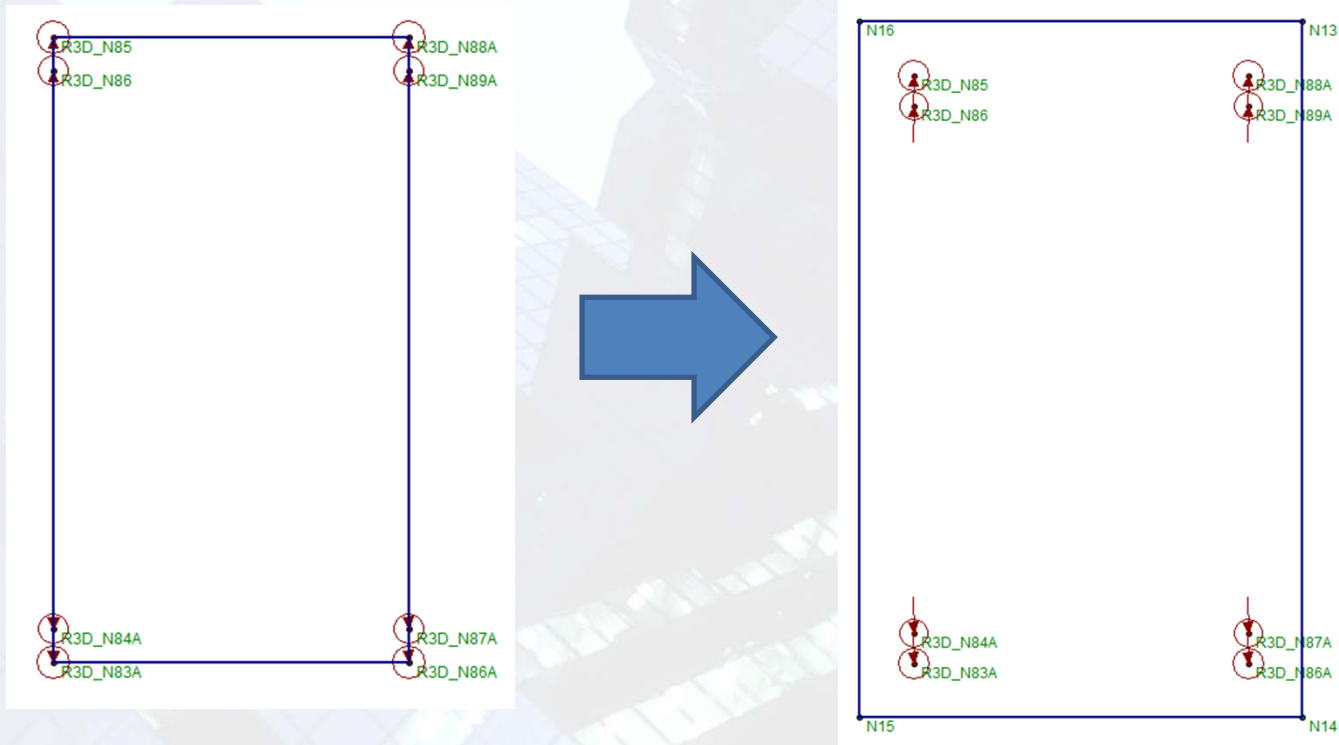
Design Size and Code Check Parameters			
Size/UC	Concrete Rebar		
	Label	Max Depth[in]	Min Depth[in]
1	VJG Depth Restriction	48	

Let's See These Features Now!

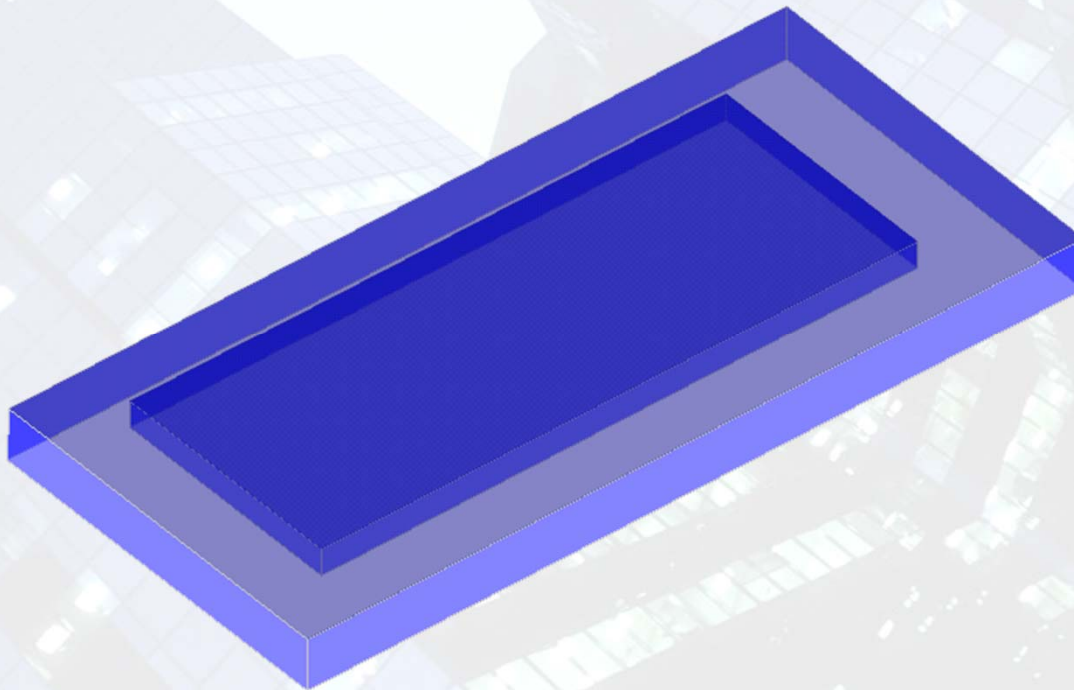


# Added Modeling Features

## Offset Slab



## Openings & Thickened Slabs



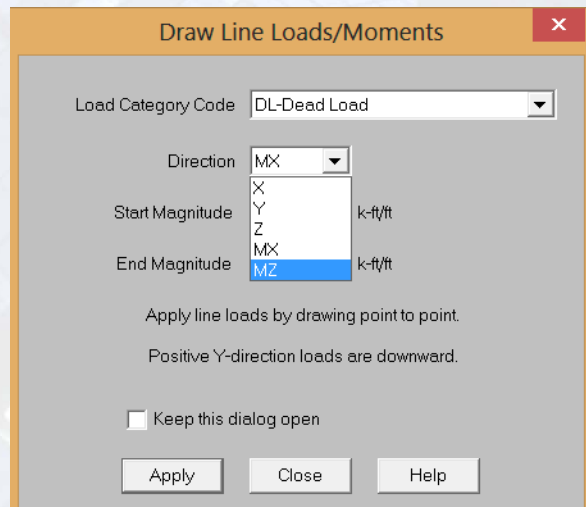


## Added Modeling Features

### Copy foundation elements linearly

- Copy Selected Beams
- Copy Selected Pedestals
- Copy Selected Retaining Walls
- Copy Selected Slabs
- Copy Selected Footings/Piles/Pile Caps

### Add line moments and line horizontal forces

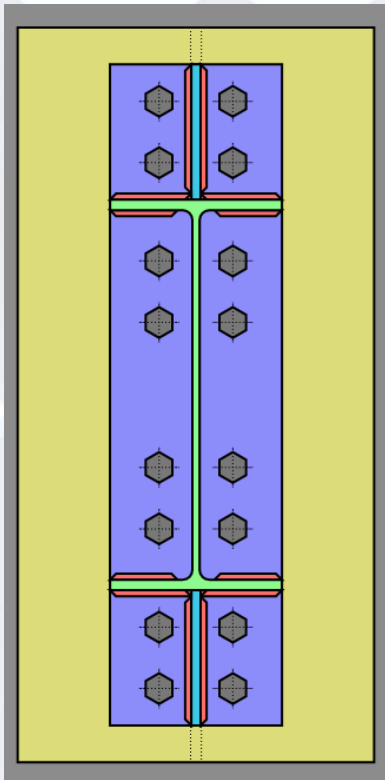


The screenshot shows a dialog box titled "Draw Line Loads/Moments" with a close button (X) in the top right corner. The dialog contains the following fields and options:

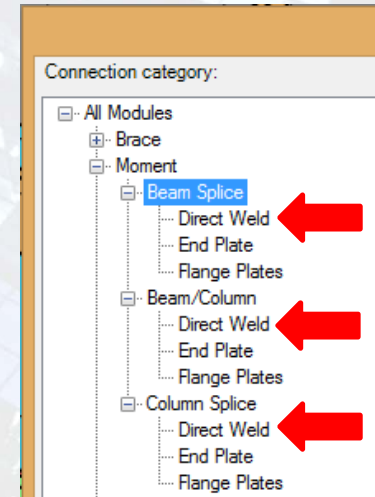
- Load Category Code: DL-Dead Load (dropdown menu)
- Direction: MX (dropdown menu)
- Start Magnitude: Y (dropdown menu), k-ft/ft
- End Magnitude: MX (dropdown menu), MZ (dropdown menu), k-ft/ft
- Apply line loads by drawing point to point.
- Positive Y-direction loads are downward.
- Keep this dialog open
- Buttons: Apply, Close, Help

Let's See This Now!

- Added the AISC 360-2010 (14th edition) steel code.

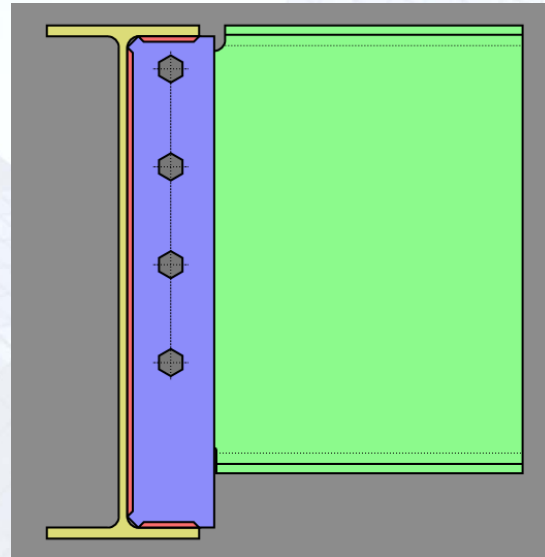


- Added Direct Weld Connections  
Beam to column moment connection  
Moment splice connection



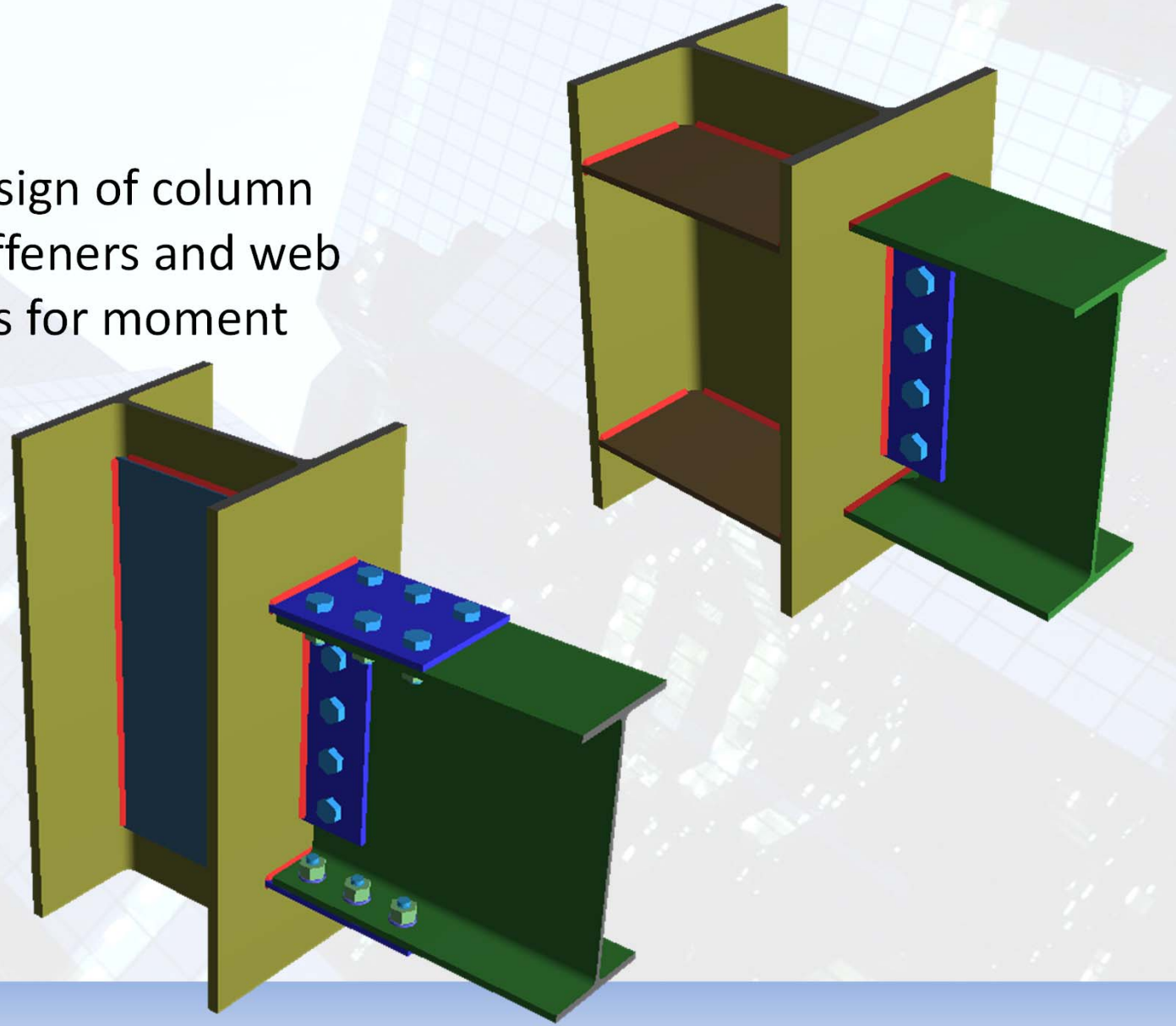
- Enhanced Bolted End Plate Moment Connections  
Added 8 bolt option for the bolted end plate moment connections.  
Added thin plate/prying considerations per AISC Design Guide 16.

- Added the ability to use full depth shear tab connections.



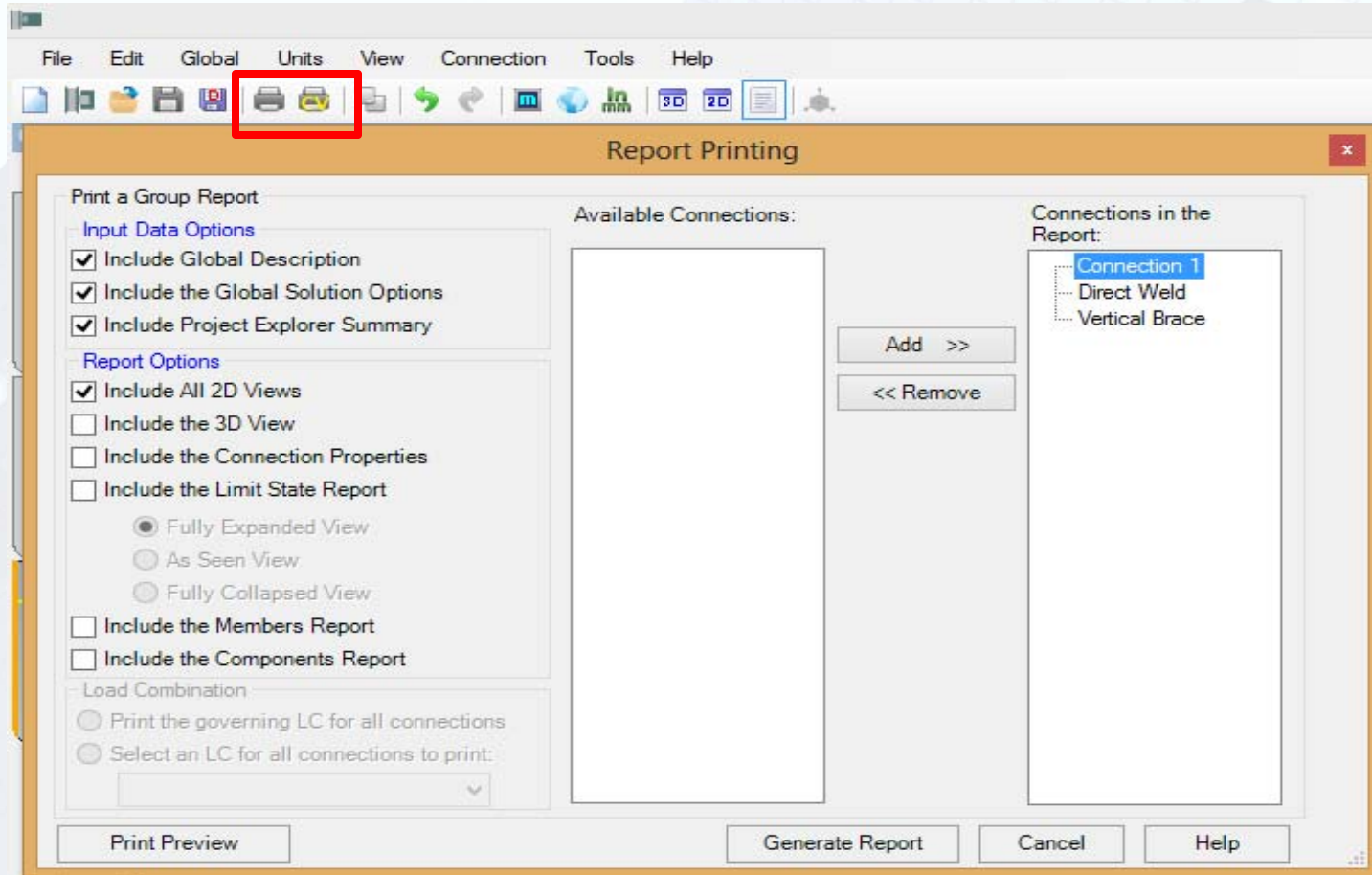
- Added the ability to consider moment due to eccentricity in clip angle shear connections

- Added the design of column transverse stiffeners and web doubler plates for moment connections.



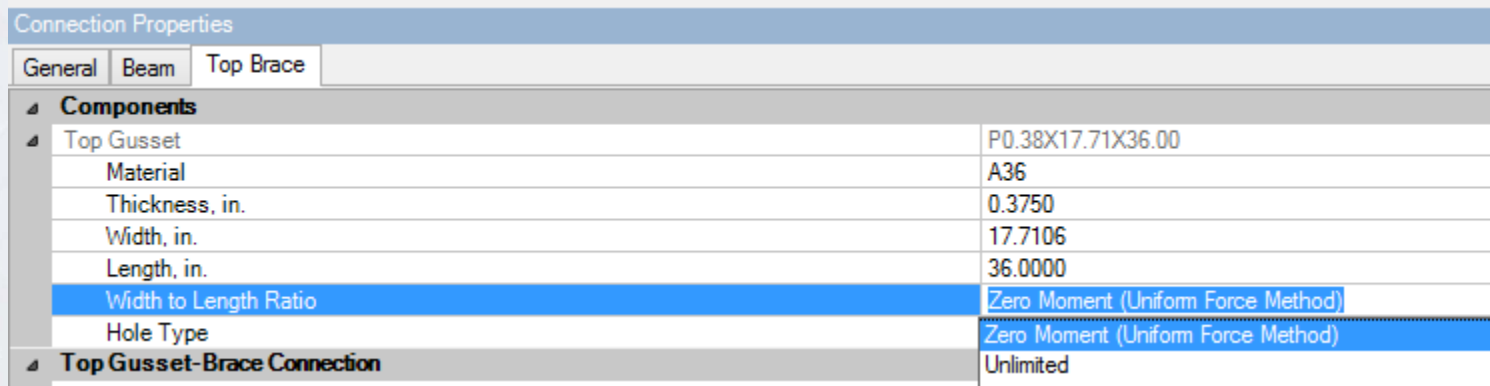
RISAConnection

## Added Report Printing Generator



## Updated Vertical Brace Connections

- Added the ability to specify any sized gusset plate- regardless of length to width ratio



The screenshot shows the 'Connection Properties' dialog box with the 'Top Brace' tab selected. The 'Components' section is expanded to show the 'Top Gusset' properties. The 'Width to Length Ratio' and 'Hole Type' fields are highlighted in blue.

Connection Properties		
General	Beam	Top Brace
<b>Components</b>		
Top Gusset		P0.38X17.71X36.00
Material		A36
Thickness, in.		0.3750
Width, in.		17.7106
Length, in.		36.0000
Width to Length Ratio		Zero Moment (Uniform Force Method)
Hole Type		Zero Moment (Uniform Force Method)
<b>Top Gusset-Brace Connection</b>		Unlimited

- Added the ability to use non-concentric brace work points.

Let's See this now!

## Coming Soon:

- RISACONNECTION integration with Tekla Structures

## Next Version:

- HSS Connections



## New Verification Problems available!

### RISA-3D New Examples:

- ✓ AISC 14<sup>th</sup> edition
- ✓ Aluminum design

### RISAFloor New Examples:

- ✓ Composite beam design
- ✓ Vibration analysis
- ✓ Steel joist design
- ✓ Live load reduction

### RISAFoundation textbook and complete hand calculation examples:

- ✓ Footings
- ✓ Pile caps
- ✓ Retaining walls

### RISAConnection examples:

- ✓ AISC 14<sup>th</sup> Edition

Find them in your RISA directory or on our website: [www.risa.com](http://www.risa.com)

**RISA-3D, RISAFloor, RISAFoundation, RISAConnection**





## Questions?

Please let us know if you have questions.

We will answer as many questions as time permits during the webinar.

Once the webinar is closed, we will post all Q&A's to our website: [www.risa.com](http://www.risa.com)

For further information, contact us at: [webinar@risatech.com](mailto:webinar@risatech.com)

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