

Q: Typically Engineer of Record says the beam end reaction R is equal to half the total uniform load capacity of beams given shape, span per AISC uniform table 3-6. Will RISACONNECTION calculate the end reactions? Say at the start of the project in RISACONNECTION.

A: RISACONNECTION requires that you enter the forces at the member end. If you are linking the model with your RISA-3D or RISAFloor model then the member end reactions are automatically transferred.

Q: Typical EOR note says 50% for Non composite beam and 75% for composite beam. Let say I don't have the RISA-3D model. Then do I have to calculate manually and enter in the reaction in RISACONNECTION for each connection?

A: That is correct. You have to enter the reaction into RISACONNECTION. The program doesn't do any beam reaction calculations. I will add this as a request for a future release though.

Q: If we have an option when we enter beam saying composite or non-composite beam, then for the general criteria can we say non comp beam 50% and comp beam 75% of beam capacity?

$$M = WL^2/8 \ggg W=8M/L^2$$

$$R = W*L*50\% \text{ or } R = W*L*75\%$$

A: We currently don't have a method to enter the length of distributed load on the member which is why it isn't currently in the program. This would have to be an added field which is definitely possible. I will bring this to our development group.

Q: Question on Shear Tabs and Shear Force Eccentricity. Per Part 10 of the AISC Manual 14th Ed., for Shear Tab connections, it says that the columns are allowed to be designed for an axial force (due to reaction of beam) without eccentricity. Correct?

A: In the 14th Edition you are never allowed to ignore the eccentricity but you can use a reduced eccentricity in certain circumstances.

Q: Will the program flag the user if there is an interference between the flange and web bolts?

A: The program does check geometry restrictions so you will see a failure if there is a violation of edge distance, etc.

Q: Do you have truss connection design?

A: We currently have beam, column and brace connection design but we do plan to add truss connections in the future.

Q: Does braced connection design address seismic provision?

A: We currently design per the AISC 360 but we are working on the AISC 341 Seismic Provisions for the Fall 2014 release.

Q: Does the double angle connection design the prying action in the double angle?

A: Yes, it does account for prying action.

Q: What connections do you see being developed for the near future?

A: We are currently working on the AISC 341 Seismic Provisions as well as some additional Canadian design codes. Our next major feature will be sloped connections although this is at least one year away.

Q: Does program design flexible moment connections as well?

A: We currently design fully restrained moment connections.