Steel Connections Package for Dynamo in Revit





New nodes in Dynamo enable automation workflows in Revit for selecting and placing steel connections based on predefined rules. The ability to call up preferred steel connections from shared libraries improves consistency across projects and allows engineers to work within their preferred design systems when modeling. The ability to place steel connections automatically, through a simple flow of rules, saves time and reduces manual input for establishing structural design and material quantities.

Automate steel connections workflows

FEEDBACK FORUM

The move from communicating design intent to tendering bids often entails a large measure of repetitive, manual work for structural engineers. In meetings with customers, we listened to engineers describe how automating the selection and placement of steel connections could improve the speed and accuracy of specifying and quantifying steel structural design, especially when facing bid deadlines.

WHAT WE HEARD

- Adding steel connections in the early stages of a project helps with coordination among disciplines.
- Having preferred connections readily available saves time.
- Coordinating and validating connections is too often a manual process.
- Engineers rely heavily on what they can see when modifying connection parameters.
- There is opportunity for a feature that facilitates connecting structural steel to concrete.

WHAT WE BUILT

The Steel Connections Dynamo nodes with the following capabilities:

- Identify similar geometrical conditions for placing standard and custom connections.
- Read structural analysis results from the Revit native analytical model or the data stored in the Results Manager imported from other applications like Robot Structural Analysis.

Steel Connections Package for Dynamo in Revit (continued)





WHAT WE BUILT (continued)

- Load and place on-demand connection types from Revit libraries or from past projects that match the geometrical and analysis results input, reusing engineering knowledge.
- Out-of-the-box sample scripts that are ready to be used or tailored to adapt to your engineering practice.

Read updates to the <u>Steel Connections Dynamo package released</u> with Revit 2020, 2020.2 and 2021.

WHAT'S NEXT

Developing and adding more benefits to the Steel Connection Automation initiative.

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