

CADS RC3D FOR REVIT

ENGINEERING SOFTWARE



OVERVIEW

CADS RC3D for Revit has been designed to enhance the placement, annotation and bar marking of reinforcing steel in all kinds of RC structures. Building on the heritage of our world leading detailing and bar listing software CADS RC to extend the powerful reinforcement modelling capabilities of Revit.

CADS RC3D takes the 3D modelling functionality of Revit to the next level allowing rebar to be divided up into bar ranges, bar marks to be created and managed and detailed reinforcement (shop) drawings to be created with a single click!

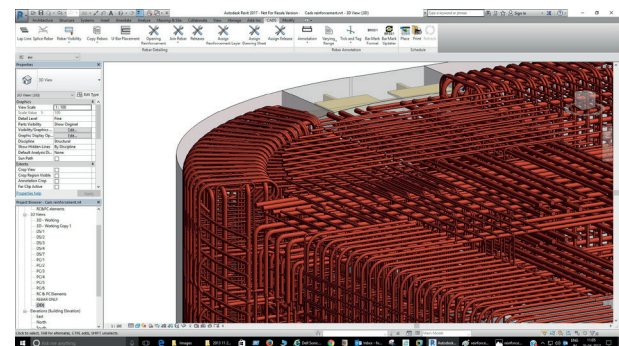
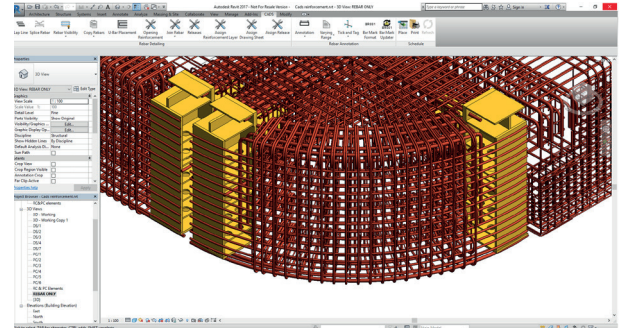
Bar bending schedules are automatically created and material lists exported to external production software file formats such as BVBs and Excel.

EXTEND REVIT'S FUNCTIONALITY

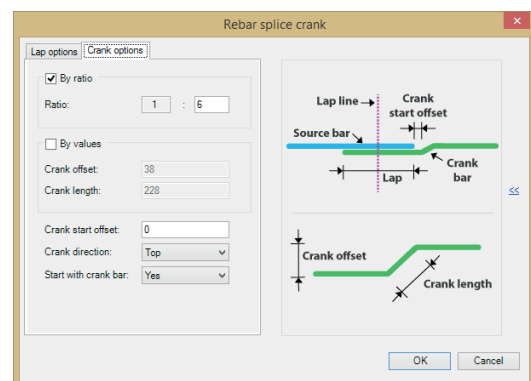
- Specify the position of the splices in the rebar within the concrete host and choose from straight lapped or cranked lapped.
- Change the overall rebar length to a selected boundary. The boundary can be a concrete host, a detail or a model line. Two boundaries can be selected to trim the rebar around an opening.
- Join rebar together to form a new shape.
- Manage the bar marks assigned to each bar set that are displayed on the 2D annotations and in the bar schedule.
- Detail to UK, US and Indian codes with more coming shortly.
- Group bars of the same shape, bar grade and bar diameter into one varying bar mark to apply a step taper to a varying range and to change the visibility of the rebar within the range assembly.

EASE OF USE

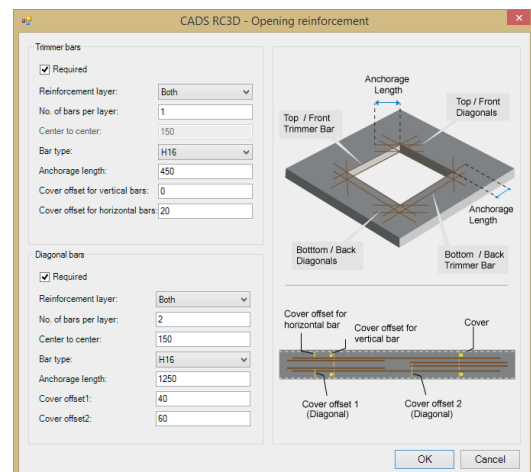
- Copy rebar from host to host or along a path.
- Group rebar together to create additional range styles such as skewed ranges and circular ranges.
- Change a free form shape created in Revit to an appropriate rebar shape.
- Manages the Revit view visibility states to hide/show all the rebar or show rebar by layer.



Reinforcements



Rebar splice crank



Opening reinforcement

- Identify rebars which are not assigned to a drawing sheet or release or rebars that are below the specified minimum bar length or are above the maximum specified stock length.
- As rebar is added to the model or edited the bar marks change, CADS RC3D for Revit indicates when the bar numbers need refreshing.

ADDITIONAL FUNCTIONALITY

Revit places the rebar perpendicular to the specified path but usually U-bars need to be placed in the same direction as the main/secondary rebar. CADS RC3D removes the orientation limitations from placing U bars and L bars around the edge of walls and slabs.

Trim to an acute edge by adjusting the rebar length to fit the slab/wall. The bars will be drawn until the minimum dimension for the bar diameter and shape is reached.

Model the reinforcement around rectangular and circular openings in slabs and walls.

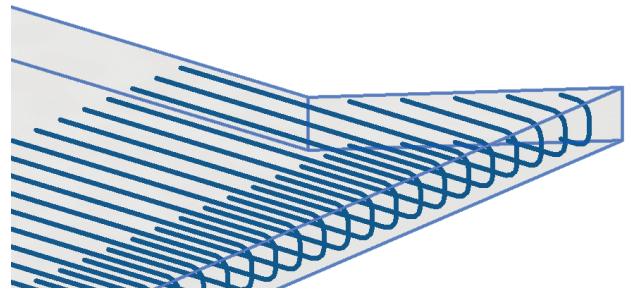
Assign rebar to predefined layers in the structure according to the position in the concrete structure for instance T1 for top major direction, or T2 for top minor direction. The host mark of the concrete structure is used for the member tile in the schedule.

Assign rebar to predefined drawing sheets, schedules can then be printed or placed on the drawing according to this designation.

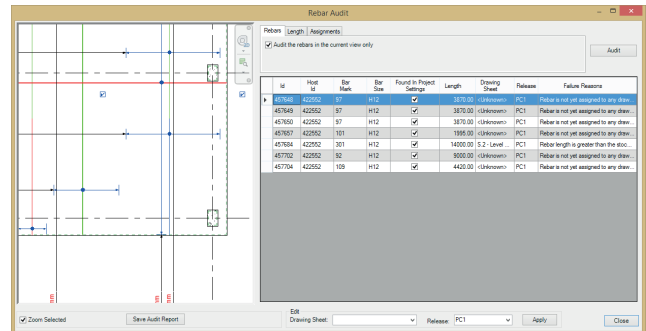
Assign rebar to a predefined release ready to be exported from the drawing for production. Once the rebar is released from the model it is locked to prevent further editing.

OUTPUT

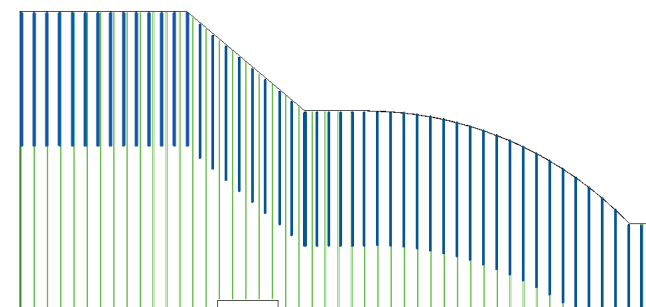
Customise the appearance and content of the schedule to their own specification, using standard Revit family files. The schedule can be placed on a Revit View Sheet or a set of sheets can be created for printing. Additionally, a set of rebar shape code sketch diagrams can be placed on the sheet. Create a production output file such as a BVBs file. You can also export as an XML file or as a CRS file.



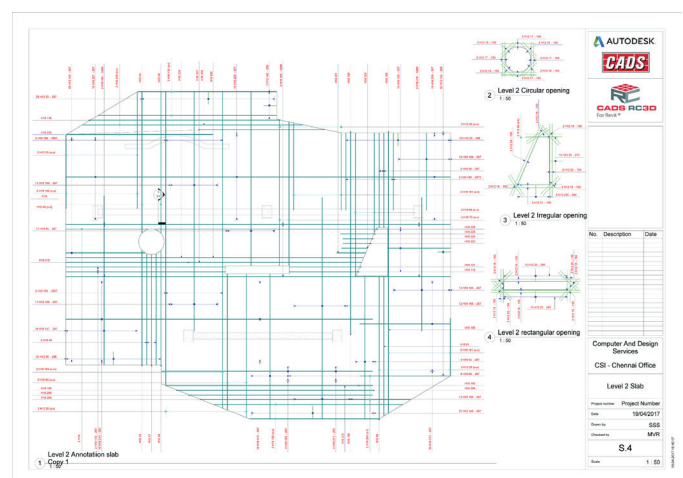
Rebar trimmed



Rebar audit



U bar



Drawing