Rebar configurations – Main rebar

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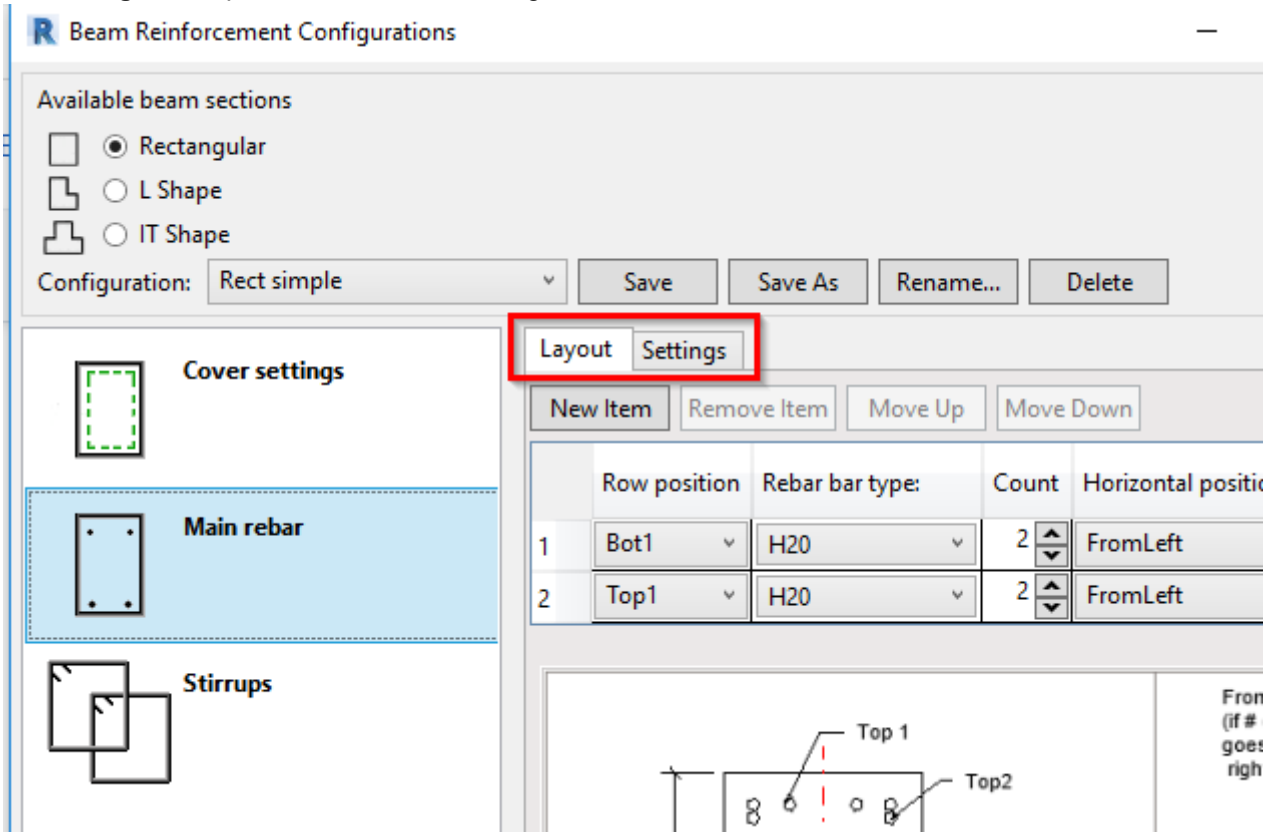
First you must define how many bars you want to have at the bottom, top, center, etc. Then you go to the Stirrups tab and define which Main rebar should be tied to which type of stirrup.

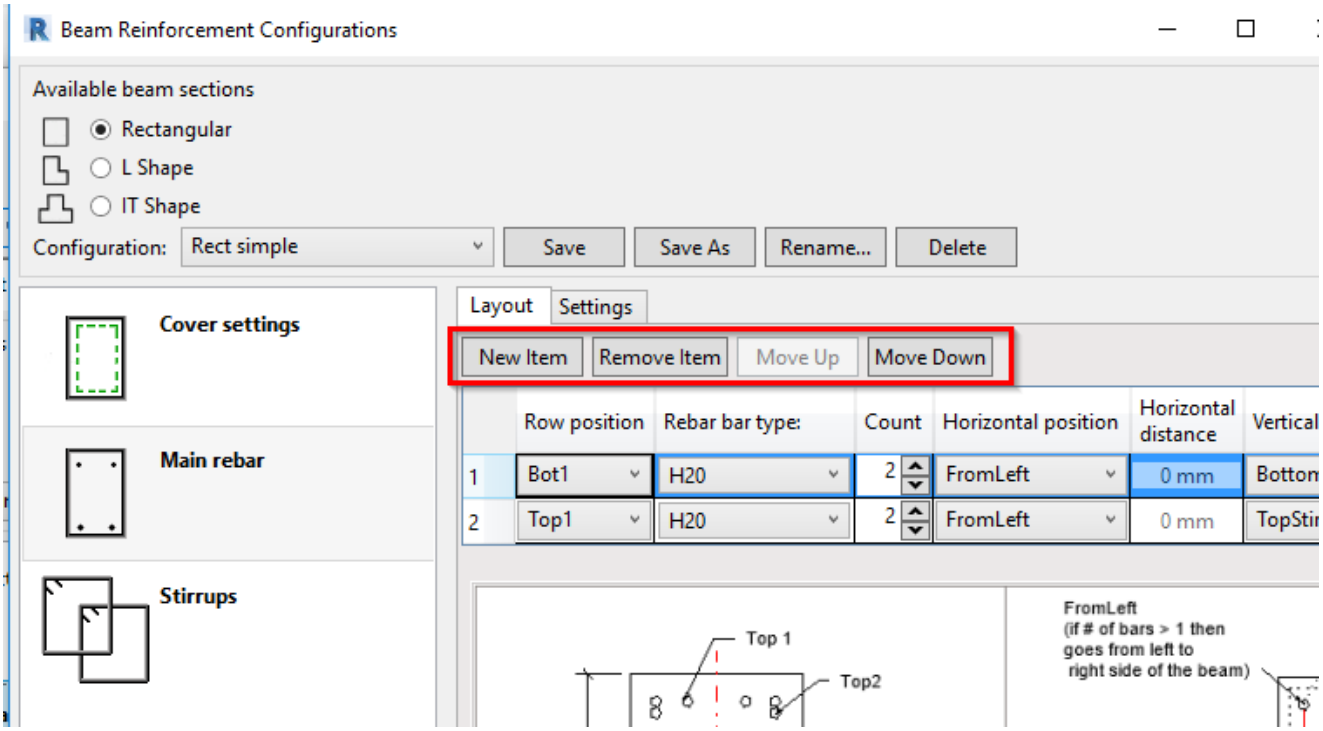
In the Main rebar window, there are 2 tabs:

Layout tab – define reinforcement settings here

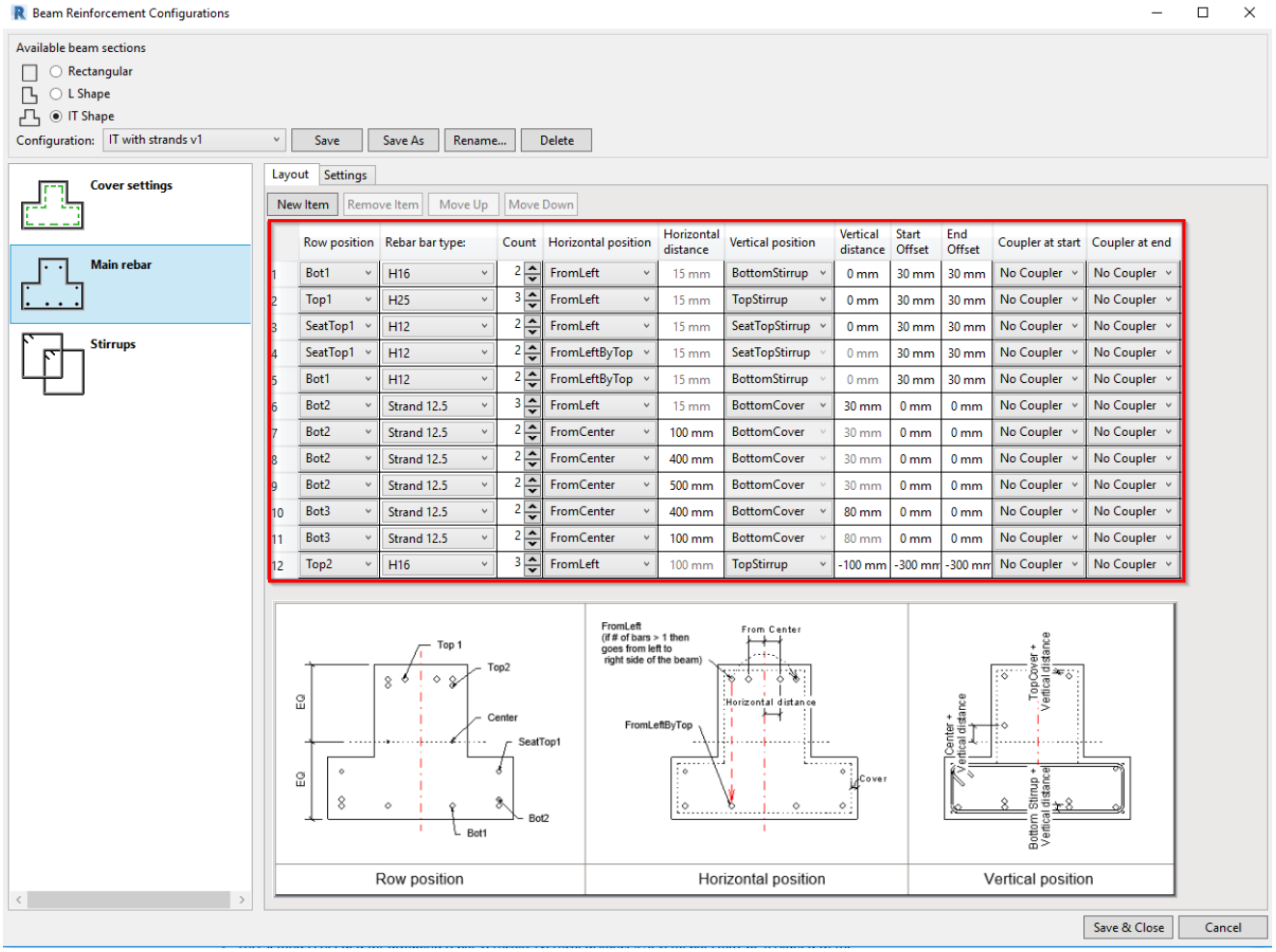
Settings tab – pick some common settings, like view in Solid, Partition, etc.



In the **Layout tab**, use the New Item button to insert as many rows as needed. Use the adjacent buttons to move a row up or down or remove it.



Looking at the column headers of the table in the Layout tab, there are many different options when inserting rebar. Let's go through each:



- **Row position**– This needs to be selected first. It depends on Beam section type and is described in the image shown at the bottom of the window. It could be at the bottom of the beam (Bot1, Bot2, Bot3) or top of the beam (Top1, Top2, etc.)
    - This setting is needed for grouping rebar vertically (Vertical distance). Several bars may be assigned to the same Row position, for example, Bot1, but a second rebar will be at the same vertical distance as the

first one.

- **Rebar bar type** – Select rebar Type from available bar types in your project. If you don't have them, load them first of all into the current project.

- **Count** – how many bars you want to insert in the current row.

- **Horizontal position**– Select how rebar will be inserted:
  - ***FromLeft*** – Rebar will be inserted from the left side of the beam. If Count > 1, then the number of bars will be distributed from the left to the right side of the beam with equal distance between them. The first bar will be on the left side.
  - ***FromRight*** – same as *FromLeft*, except that the first bar of the rebar set will be on the right side of the beam.
  - ***FromCenter*** – Places rebar with the distance from the beam center as defined in Horizontal distance column.
  - ***FromLeftByTop*** – may be selected only for rebar in Bot1, Bot2, Bot3 row position. Rebar will be placed based on the top width of the beam. Usually used for L and IT beams.

- **Horizontal distance** – active only if *FromCenter*is selected as the Horizonal position.
  - If Count = 1, then this is the distance from center of beam to center of bar. A positive value will move rebar to the left, a negative value to the right.
  - If Count > 2, then this is the distance from center of beam to center of bar for first pair, and the distance from the first bar to the next bar.
  - If Count = odd number, there will be a bar in the center of the beam.

- **Vertical position**– Select vertical position of rebar:
  - ***BottomStirrup (TopStirrup, SeatStirrup etc.)*** – Vertical distance will be measured from stirrup.
  - ***BottomCover –*** Vertical distance will be measured from cover, defined in Cover settings.

- **Vertical distance** – distance from stirrup, cover, or center of beam. It is locked if the *Row position* was inserted previously. Table rows indicate priority. Vertical distance may be positive or negative: a negative pushes bar outside the beam, positive inside. For center bars, positive is up, negative down.

- **Start/End offset** – rebar offset from start/end of the beam. May be positive or negative: a negative extends bar outside the beam, positive inside.

- **Coupler at start/end** – add coupler at rebar start/end. Appropriate family of coupler must be selected.