

## Rebar Configurations – Main Rebar

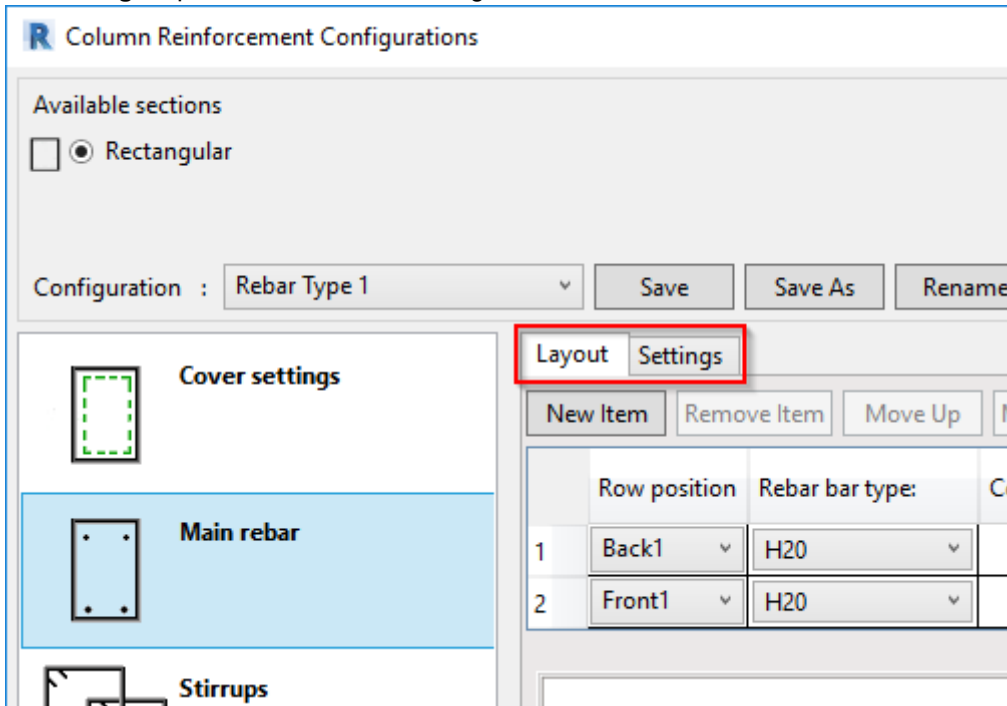
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First you must define how many bars you want to have at the Front, Back, Center, etc. Then you go to the Stirrups tab and define which Main rebar should be tied to which type of stirrup.

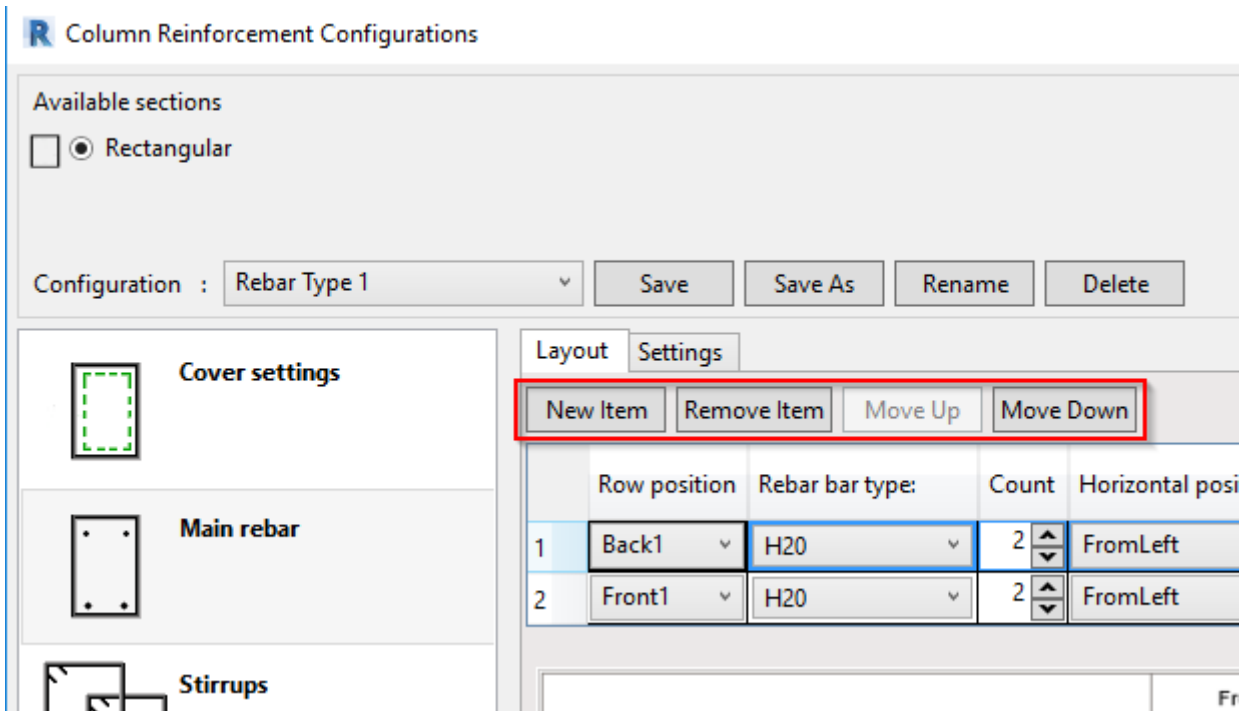
In the Main rebar window, there are 2 tabs:

**Layout** – define reinforcement settings

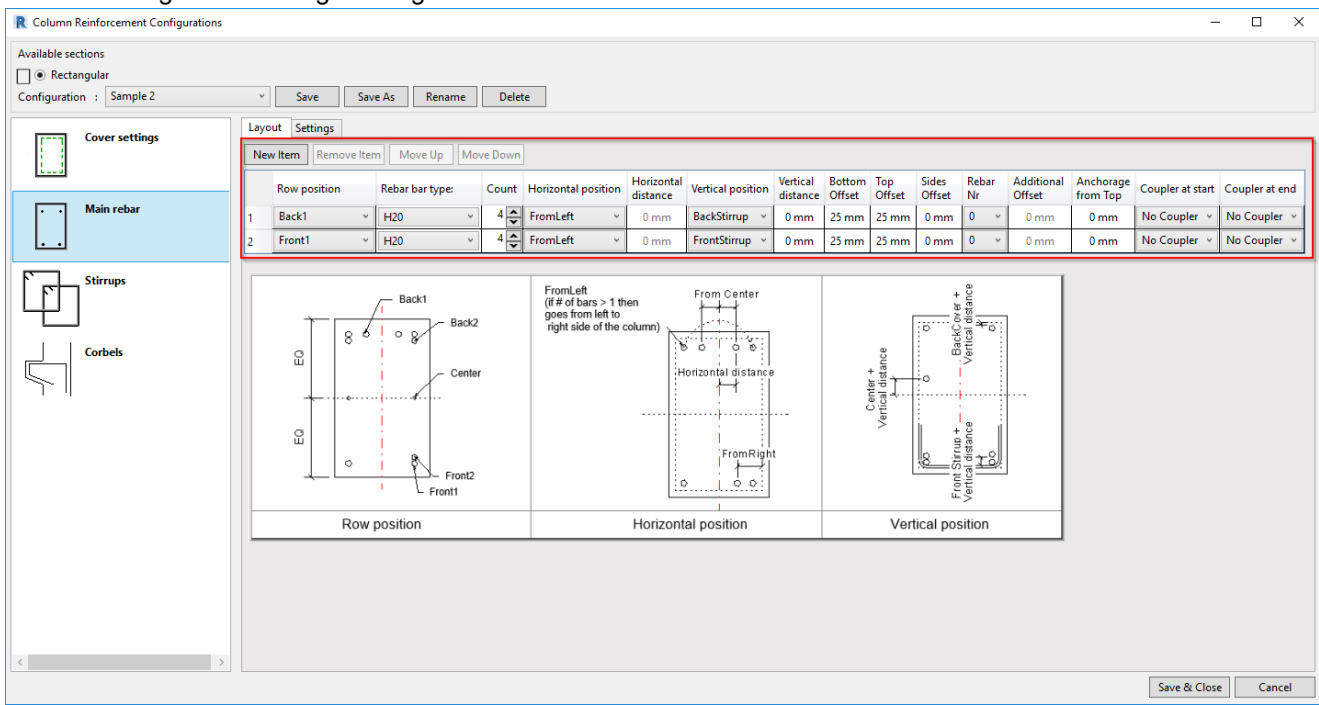
**Settings** – pick some common settings, like view in Solid, Partition, etc.



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.



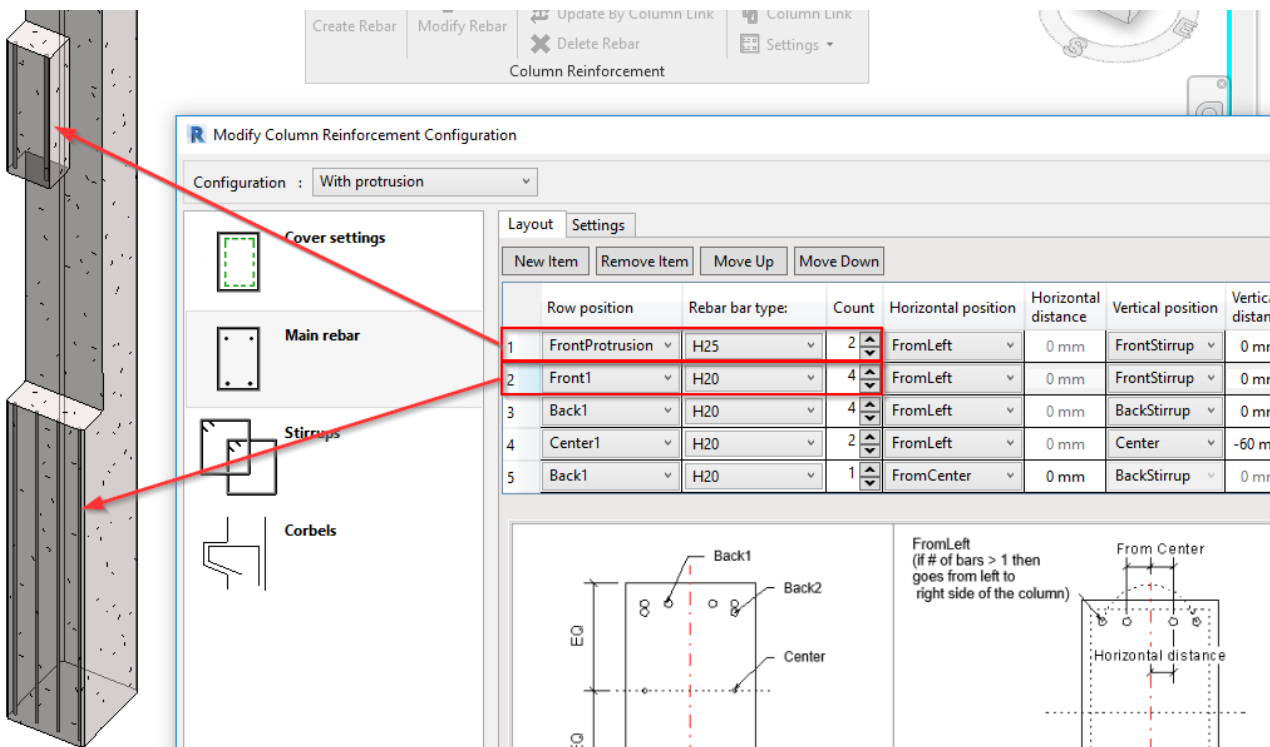
Looking at the column headers of the table in the **Layout** tab, there are many different options (see table column headers) when inserting rebar. Let's go through each:



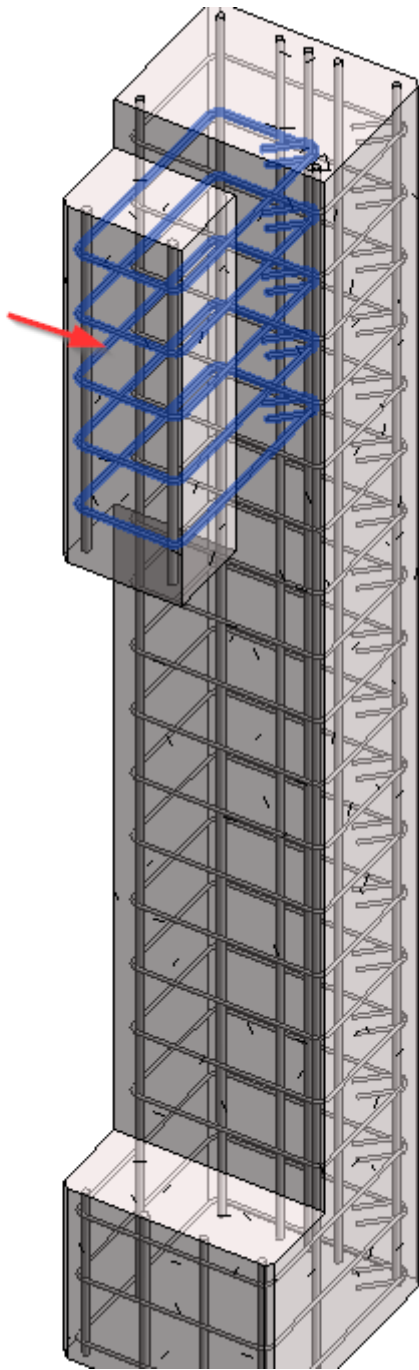
- **Row position** – This needs to be selected first. It depends on column section type and is described in the image shown at the bottom of the window. It could be at the Front of the column (Front1, Front2, Front3), Back of the column (Back1, Back2, etc.), Center, FrontProtrusion

This setting is needed for grouping rebar vertically (Vertical distance). Several bars may be assigned to the same Row position, for example, Front1, but a second rebar will be at the same vertical distance as the first one.

**TIP:** *FrontProtrusion* - could be used in situations where column is cut with voids, to define different number or rebar than in full width column. Example could be found in sample project.



Note: software will create additional O shape stirrups at protrusion.



- **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 column. If Count > 1, then the number of bars will be distributed from the left to the right side of the column equidistantly. 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 column.
  - **FromCenter** – Places rebar with the distance from the column center as defined in Horizontal distance column.

- **Horizontal distance** – active only if *FromCenter* is selected as the Horizontal position.
  - If Count = 1, then this is the distance from center of column 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 column 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 column.
  
- **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 column. It is locked if the same *Row position* was inserted previously. Table rows indicate priority. Vertical distance may be positive or negative: a negative pushes bar outside the column, positive inside. For center bars, positive is up, negative down.
  
- **Start/End offset** – rebar offset from start/end of the column. May be positive or negative: a negative extends bar outside the column, positive inside.
  
- **Coupler at start/end** – add coupler at rebar start/end. Appropriate family of coupler must be selected.