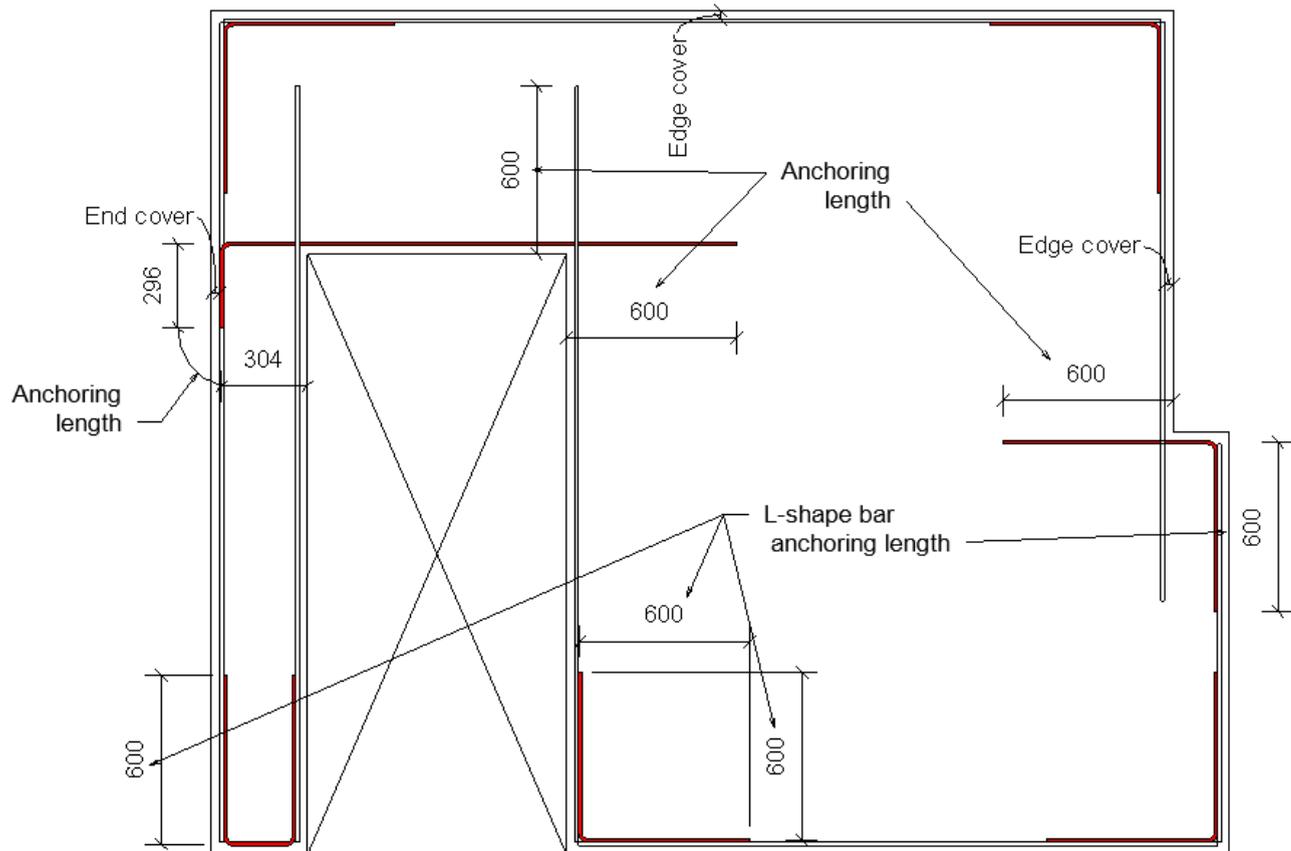


Perimeter Reinforcement

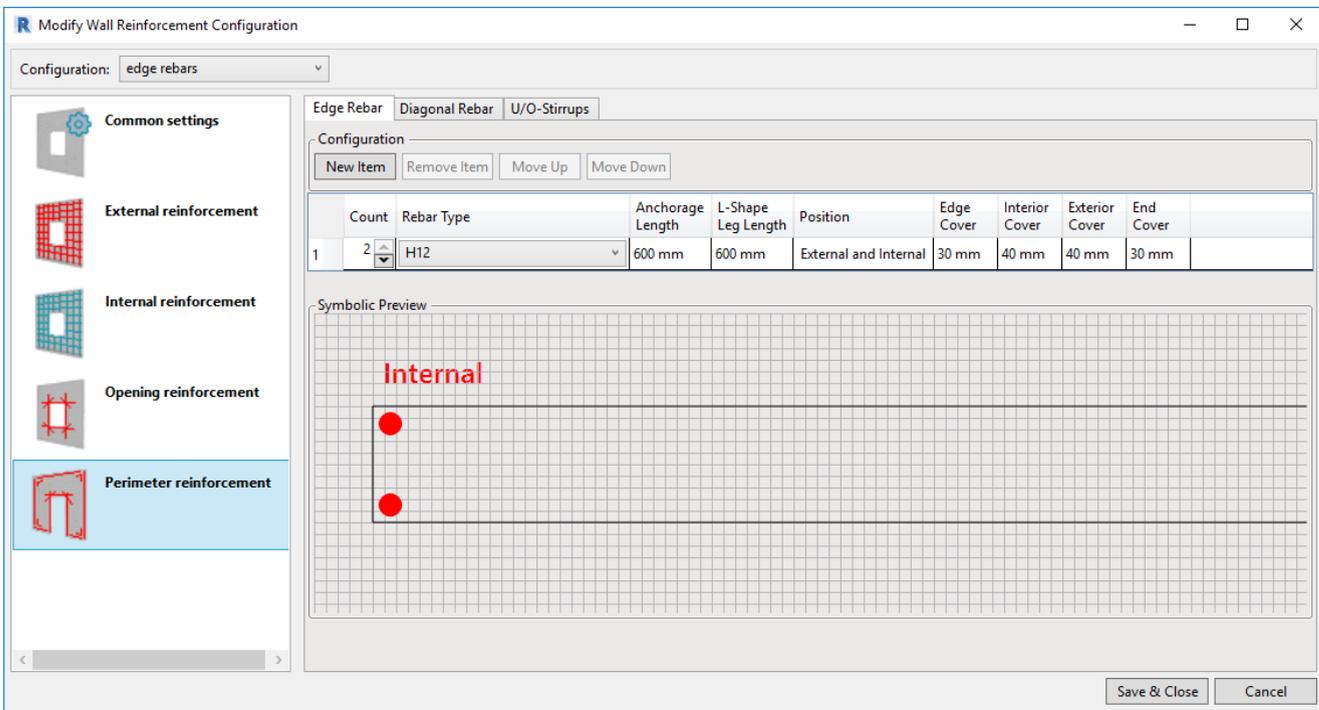
Modified on: Mon, 26 Oct, 2020 at 2:23 PM

Perimeter Edge Rebar

Rebar along the perimeter of a wall consists of straight bar and corner bar at the corners. Corner bar has anchoring length, as does straight bar when wall perimeter changes.



Configuration settings:



New Item – adds an additional line of reinforcement. A maximum of 2 lines are allowed.

Remove Item – removes reinforcement definition line.

Move Up/down – moves them in defined direction.

Count – defines how many bars you want to create at perimeter edge. A maximum of 2 rebar may be placed in one row.

Anchorage Length – defines the length of rebar that should extend from opening edge when the perimeter changes. If it will meet another edge, then the bar will be bent along interfering wall edge to meet anchorage length requirements.

L Shape Leg Length – what should be the length of L shape bar in the corners.

Position – the position of bars depends on their Count.

If Count=1, you can choose to place it at center or with offset from selected face.

If Count=2, they will be placed by using Interior and Exterior Cover values.

Edge Cover – distance from wall edge face to rebar face.

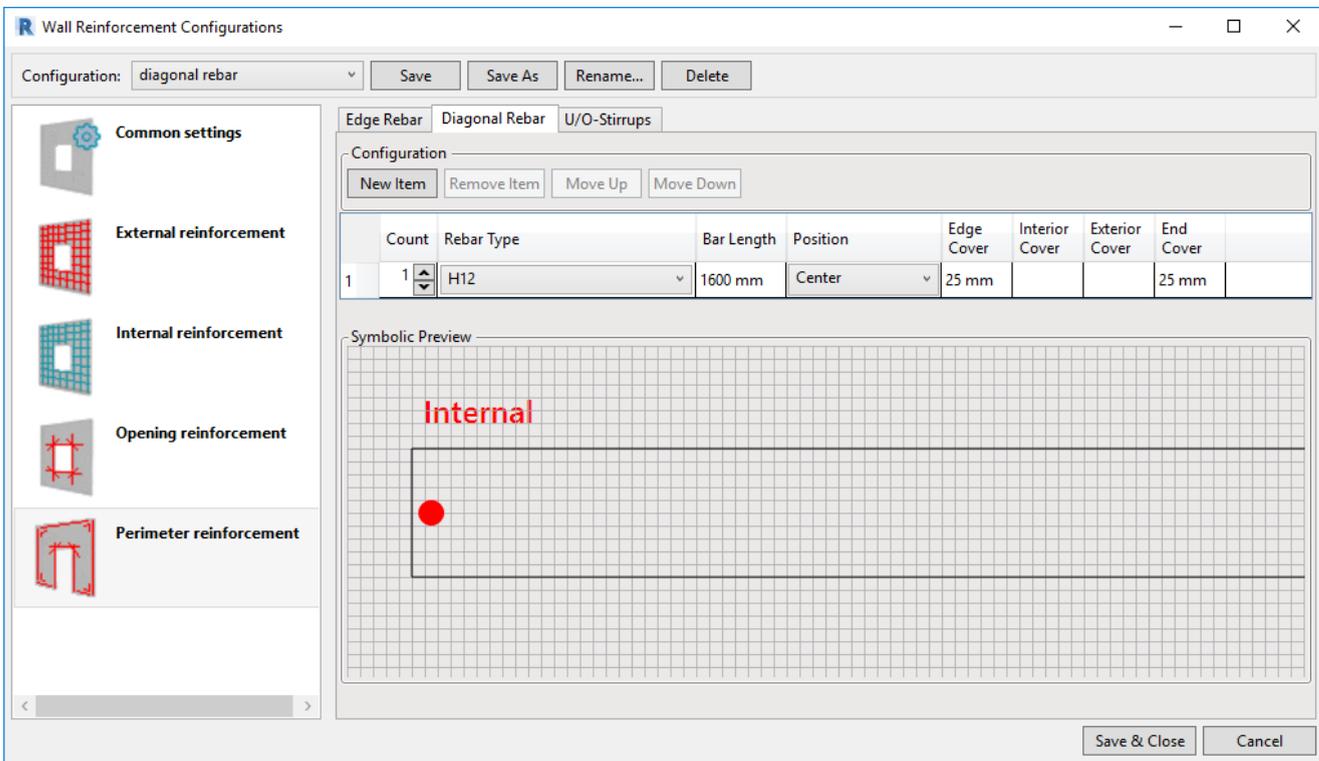
Interior Cover – cover from Internal Face of wall layer to rebar face. If Count=1, it is switched OFF and Position=Center.

Exterior Cover – cover from Exterior Face of wall layer to rebar face. If Count=1, it is switched OFF and Position=Center.

End Cover – if anchored bar meets another edge of the wall and is bent to meet anchorage length, this parameter will define the distance between that edge and bent bar face.

Perimeter Diagonal Rebar

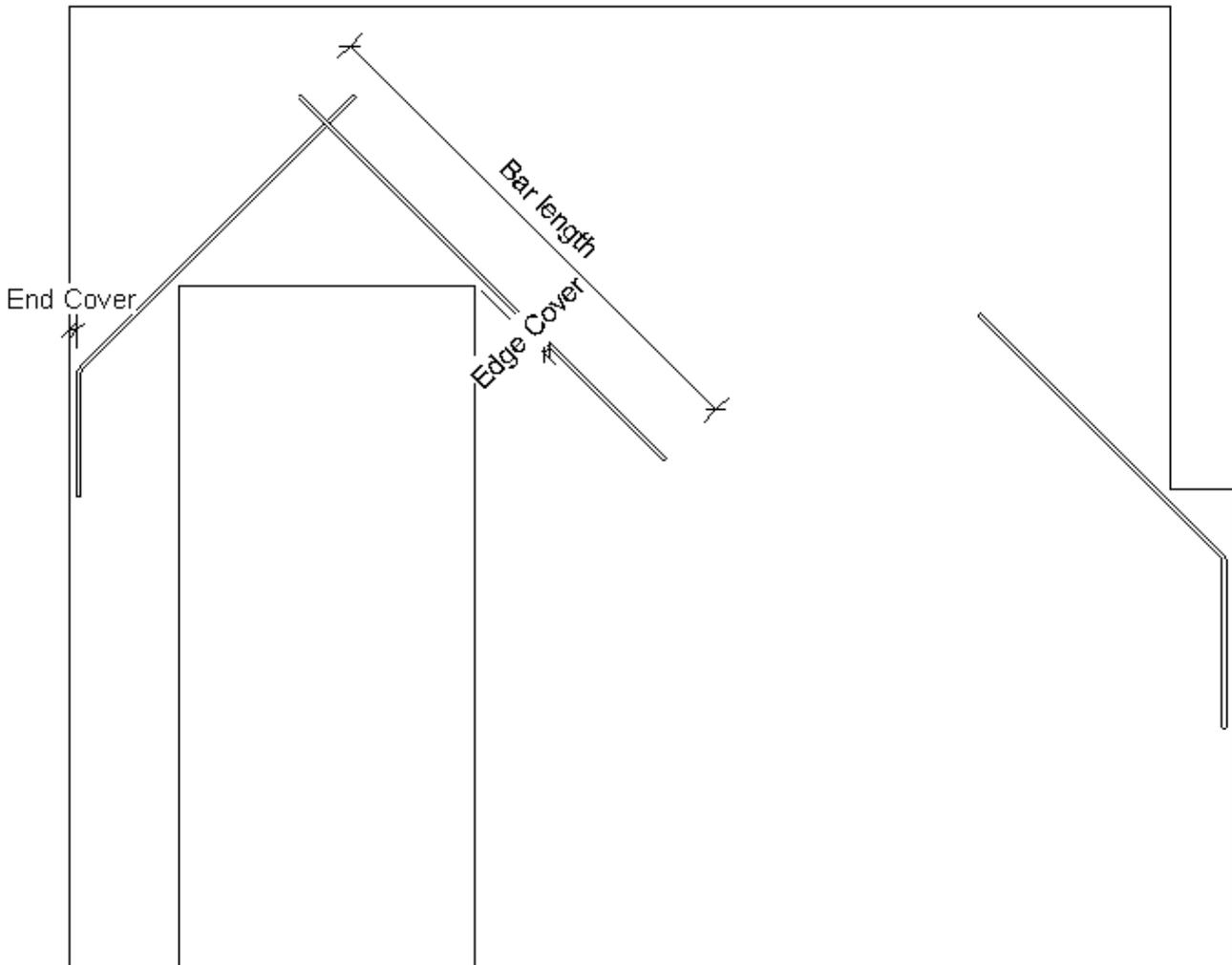
Perimeter Diagonal Rebar refers to diagonal bar at the corners of perimeter.



Settings are similar as in Perimeter Edge Rebar definition. Different options are described below:

Bar Length – length of rebar. If there is not enough space it will be bended along interfering wall edge.

Edge cover – cover from corner of opening to rebar.



Perimeter U/O Stirrups

Wall Reinforcement Configurations

Configuration: Default Configuration Save Save As Rename... Delete

Edge Rebar Diagonal Rebar **U/O-Stirrups**

Create perimeter bars

Vertical U-Stirrup reinforcement Horizontal U-Stirrup reinforcement

Rebar style: StirrupTie StirrupTie

Rebar bar type: H8 U bars H8 U bars

Rebar Hook Type: No Hook No Hook

Rebar Hook Orientation: Right Right

Bottom/Start cover: 30 mm 30 mm

Top/End cover: 30 mm 30 mm

External cover: 38 mm 38 mm

Internal cover: 38 mm 38 mm

A-segment length: 396 mm 396 mm

Step: 400 mm 400 mm

First/Last Spacing

Distance: 50 mm 50 mm

Usage: Use for First Use for Last Use for Both Use for First Use for Last Use for Both

Vertical O-Stirrup: Horizontal O-Stirrup:

Vertical O-Stirrup: Horizontal O-Stirrup:

O-Stirrup hook type: Stirrup/Tie - 135 deg. short Stirrup/Tie - 135 deg. short

O-Stirrup hook orientation: Right Right

Save & Close Cancel

Edge Rebar Diagonal Rebar U/O-Stirrups

Create perimeter bars

Vertical U-Stirrup reinforcement Horizontal U-Stirrup reinforcement

Rebar style: StirrupTie StirrupTie

Rebar bar type: H12 H12

Create perimeter bars – if you want to create perimeter bars, turn ON. If not, switch OFF.

Vertical U-Stirrup reinforcement – turn ON if you want to have vertical U shape bars created at horizontal edges of the wall.

Horizontal U-Stirrup reinforcement – turn ON if you want to have horizontal U shape bars created at vertical edges of the wall.

Select what settings should be used for U bar:

Edge Rebar	Diagonal Rebar	U/O-Stirrups
	<input checked="" type="checkbox"/> Create perimeter bars	
	<input checked="" type="checkbox"/> Vertical U-Stirrup reinforcement	<input checked="" type="checkbox"/> Horizontal U-Stirrup reinforcement
Rebar style:	StirrupTie	StirrupTie
Rebar bar type:	H8 U bars	H8 U bars
Rebar Hook Type:	No Hook	No Hook
Rebar Hook Orientation:	Right	Right
Bottom/Start cover:	30 mm	30 mm
Top/End cover:	30 mm	30 mm
External cover:	38 mm	38 mm
Internal cover:	38 mm	38 mm
A-segment length:	396 mm	396 mm
Step:	400 mm	400 mm
First/Last Spacing		
Distance:	50 mm	50 mm
Usage:	<input checked="" type="radio"/> Use for First	<input checked="" type="radio"/> Use for First

Rebar Style – Standard or StirrupTie options available. Recommended to use StirrupTie for U shape bar.

Rebar bar type – select from available rebar types in the project.

Rebar Hook Type – select hook type for U shape. Usually 'No Hook' will be selected.

Rebar Hook Orientation – choose direction of hook.

Edge Cover 1 – cover from wall perimeter face.

Edge Cover 2 – cover from opening if U bar turns to O shape in situations when A-segment length is bigger than gap between wall edge and opening.

External Cover – cover from external face of the wall layer.

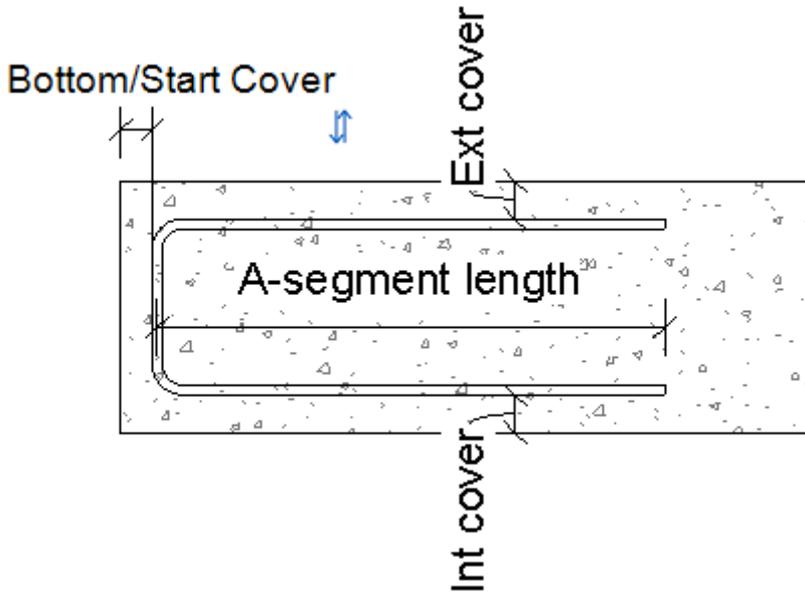
Internal Cover – cover from internal face of the wall layer.

A-segment length – U bar length from the middle of short edge to the end of U legs.

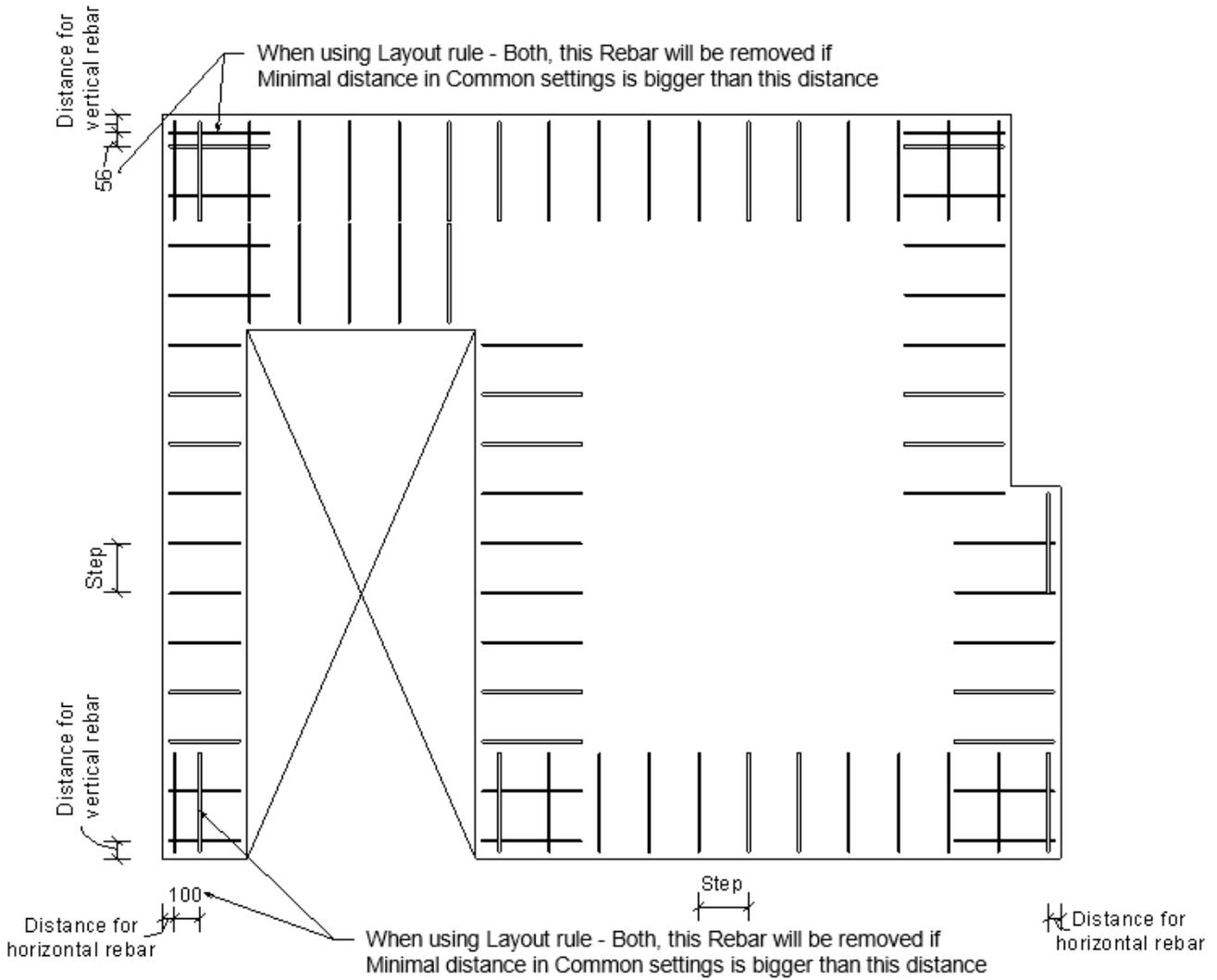
Step - step of U bar along the edge of perimeter.

See explanatory images below:

Plan view:



Front view:



First/Last Spacing:

First/Last Spacing			
Distance:	<input type="text" value="50 mm"/>	<input type="text" value="50 mm"/>	
Usage:	<input type="radio"/> Use for First <input type="radio"/> Use for Last <input checked="" type="radio"/> Use for Both	<input type="radio"/> Use for First <input type="radio"/> Use for Last <input checked="" type="radio"/> Use for Both	

Distance – define distance from wall start/end to first rebar.

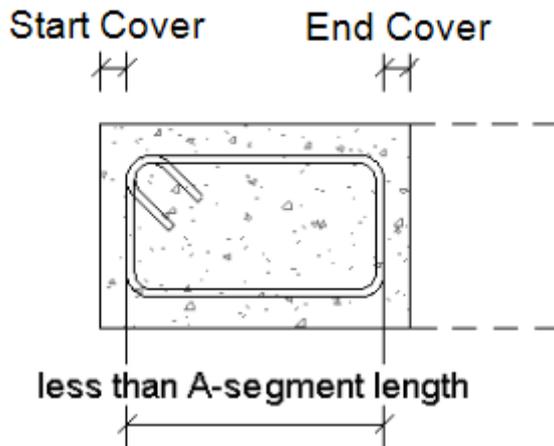
Use for First/Last – choose from which side of the wall rebar should be distributed.

Use for Both option works together with Minimal Rebar distance in common settings. Software will try to create rebar at start and end of the wall with defined distance, and then it will distribute bars from the start of the wall, and if last step is smaller than Minimal Rebar Distance, rebar at the end will be removed. (Check common settings description.)

O shape bars

O-shaped bars will be created instead of U bars if there is not enough space for U-shaped bars between perimeter edge face and opening edge face.

	<input checked="" type="checkbox"/> Vertical U-Stirrup reinforcement	<input type="checkbox"/> Horizontal U-Stirrup reinforcement
	Vertical O-Stirrup:	Horizontal O-Stirrup:
O-Stirrup hook type:	<input type="text" value="Stirrup/Tie - 135 deg. short"/>	<input type="text" value="No Hook"/>
O-Stirrup hook orientation:	<input type="text" value="Right"/>	<input type="text" value="Right"/>



Vertical/Horizontal O-Stirrup reinforcement – turn ON if you want to create O bars instead of U bars if condition is met.

O-Stirrup hook type – choose from available hook types in the project.

O-Stirrup hook orientation – choose direction of hook.