

Work to a 200mm module where possible to avoid cutting and retain alignment of vertical cores for rebar.

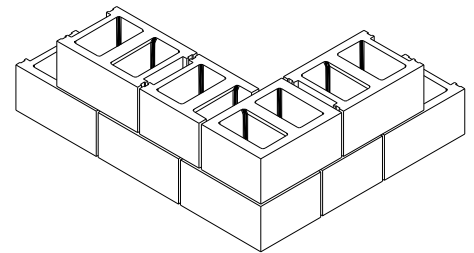
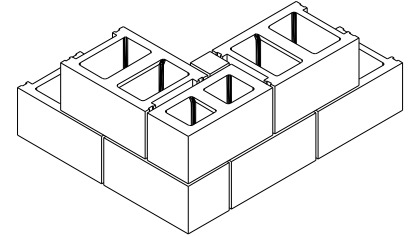
Openings should be placed at a modular distance from corners or other openings (distance between them in whole multiples of module (200mm)).

The mason will make corners work. On the left are examples of structural wall corners in different block sizes.

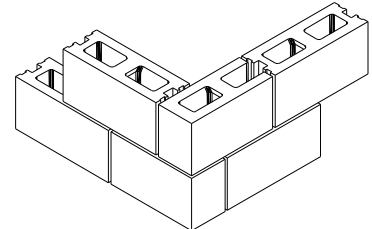
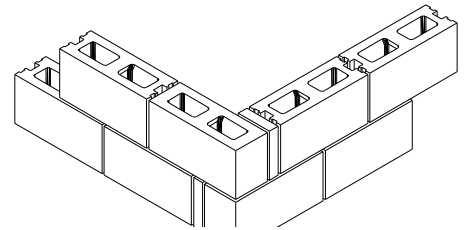
### **STRUCTURAL LAYOUT**

Structural masonry is typically reinforced (our seismic zones make the use of reinforcing steel mandatory). Dowels are placed in the footing before any masonry units are laid. This requires careful planning so as to avoid “missing the cores”. Luckily, block core location is easy to predict.

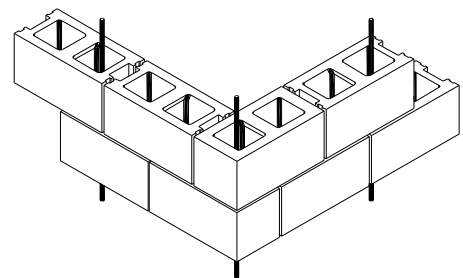
- First dowel is placed 100mm from corner
- All other dowels are usually spaced at multiples of 200mm apart (Typically 800mm) based on engineering requirements



300mm block corners



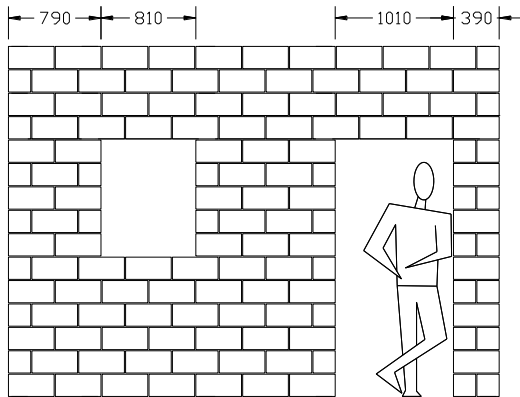
150mm block corners



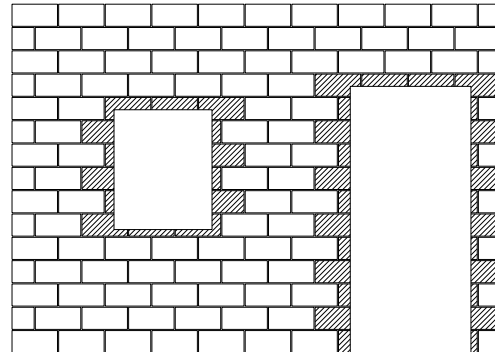
Dowel Layout

## LAYOUT EXAMPLES

Proper layout will minimize costs by reducing time of construction, maximizing the strength of the material and reducing waste.



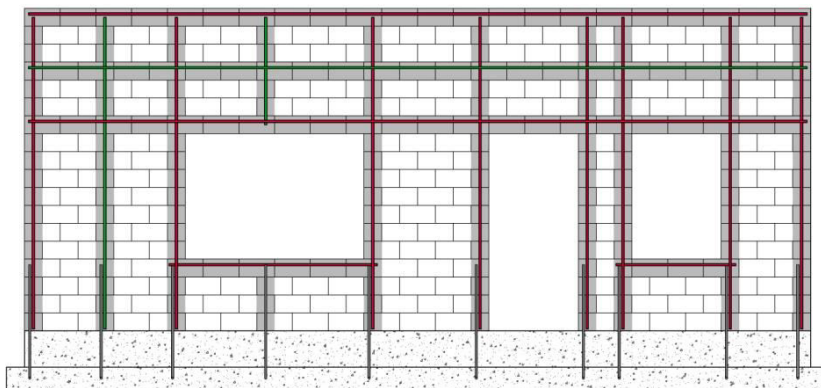
Proper layout with no cut units.



Many cut units reduce productivity and increase waste.

Notice how the window is 20mm (thickness of two joints) wider than the pier on the left. The pier loses a joint, while the opening “gains” one

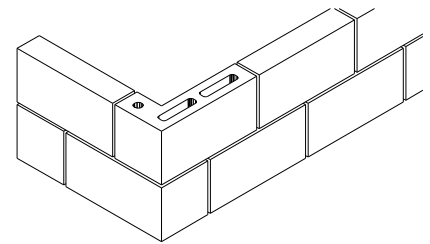
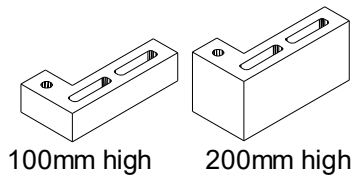
Reinforcement creates a grid of steel and grout within the concrete block wall. Modular design ensures the steel can be placed and grouted properly to meet design requirements.



## VENEER LAYOUT

Veneer units are available in both “Half high” (100mm vertical module) and “Full high” (200mm vertical module).

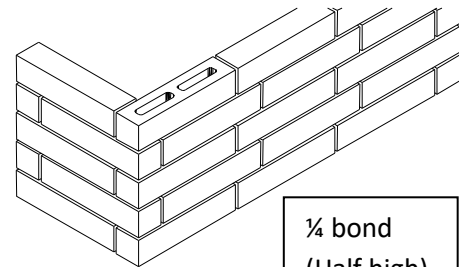
Walls built with veneer units may keep the same appearance as structural walls by using special L-corner return units.



Corner of “Full high” with return L-corner.

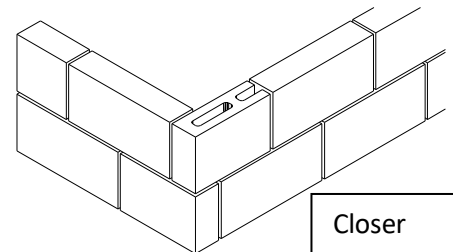
### “Half high” units

These units have a 1:4 height to length ratio. They are generally laid in 1/2 bond to match any surrounding structural masonry, but can also be laid in 1/4 bond. Corners in 1/2 bond require cut pieces (Bats) or special L-corner pieces.



1/2 bond (Half high)

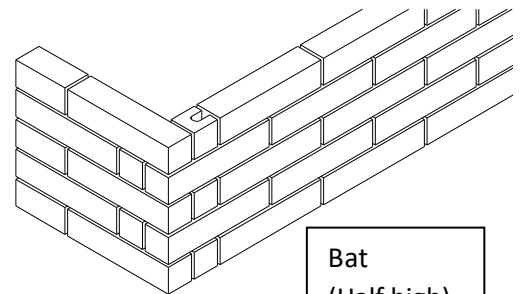
<b>Metric</b>	<b>Horizontal</b>	<b>Module:</b>	<b>200mm</b>
		Block:	390mm
		Joint:	10mm
<b>Metric</b>	<b>Vertical</b>	<b>Module:</b>	<b>100mm</b>
		Coursing	1c=100mm
		Block:	90mm
		Joint:	10mm



Closer (Full high)

### “Full high” units

<b>Metric</b>	<b>Horizontal</b>	<b>Module:</b>	<b>200mm</b>
		Block:	390mm
		Joint:	10mm
<b>Metric</b>	<b>Vertical</b>	<b>Module:</b>	<b>200mm</b>
		Coursing	1c=200mm
		Block:	190mm
		Joint:	10mm



Bat (Half high)