

# RSM-RIB DESIGN CATALOGUES

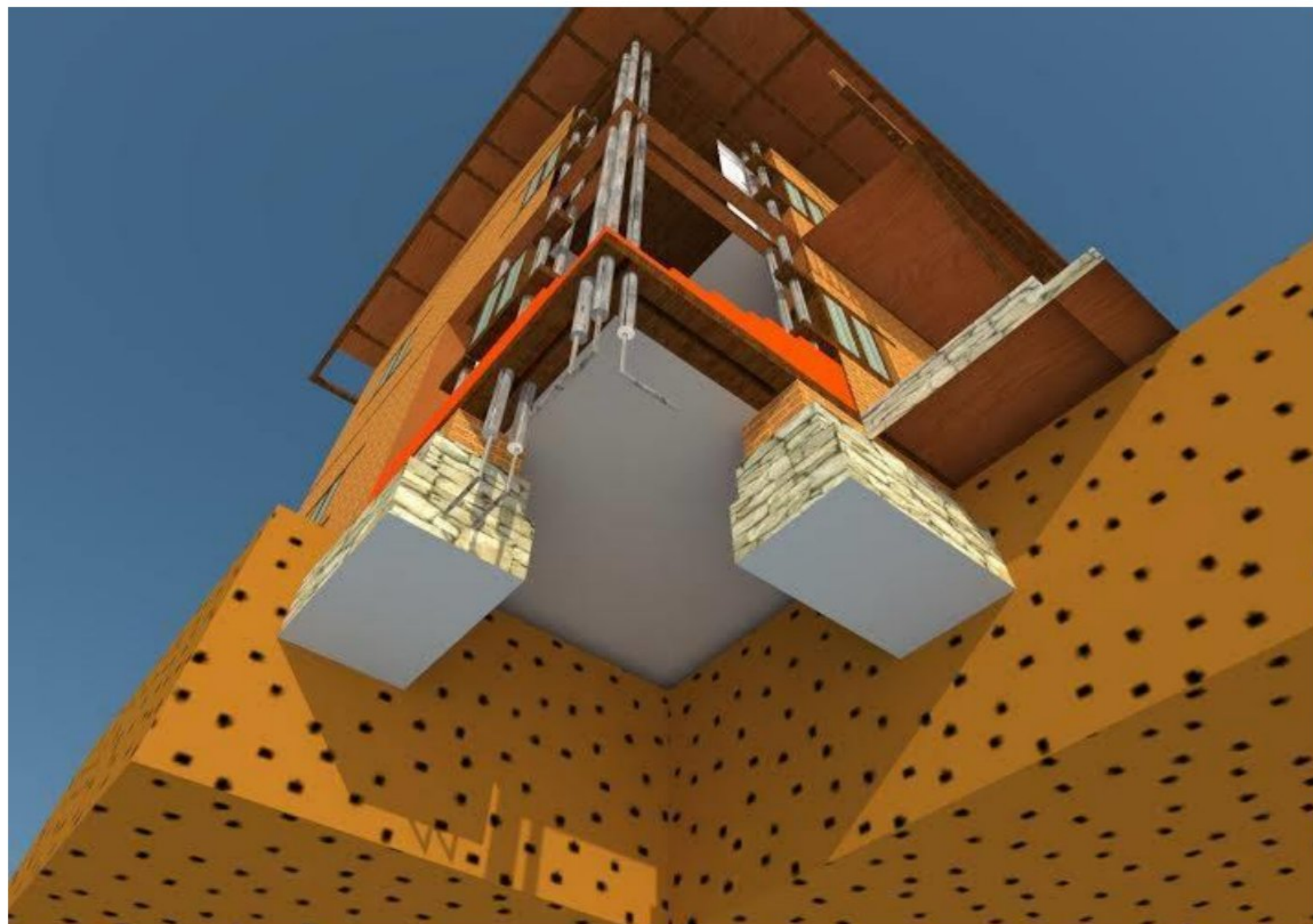
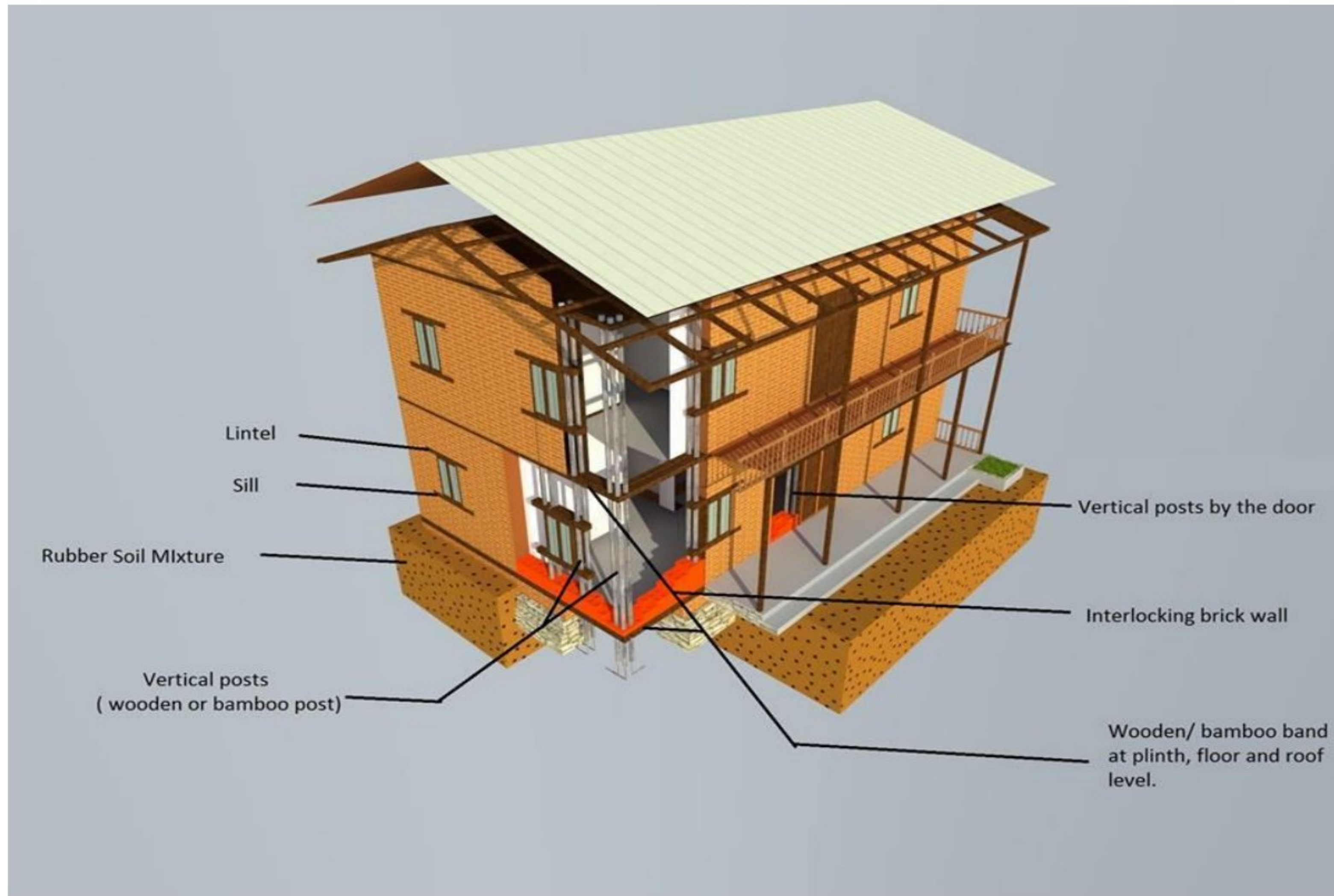
BY  
ER.DR. SHANKER DHAKAL

GHEaSES INTERNATIONAL PVT  
LTD.

# INTERLOCKING BRICK MAKING



# Model RSM-RIB-1.1 TECHNICAL DETAILS (SEISMIC ELEMENTS) – 1





Site visit to Barpak and Laprak, Gorkha

Local people participation

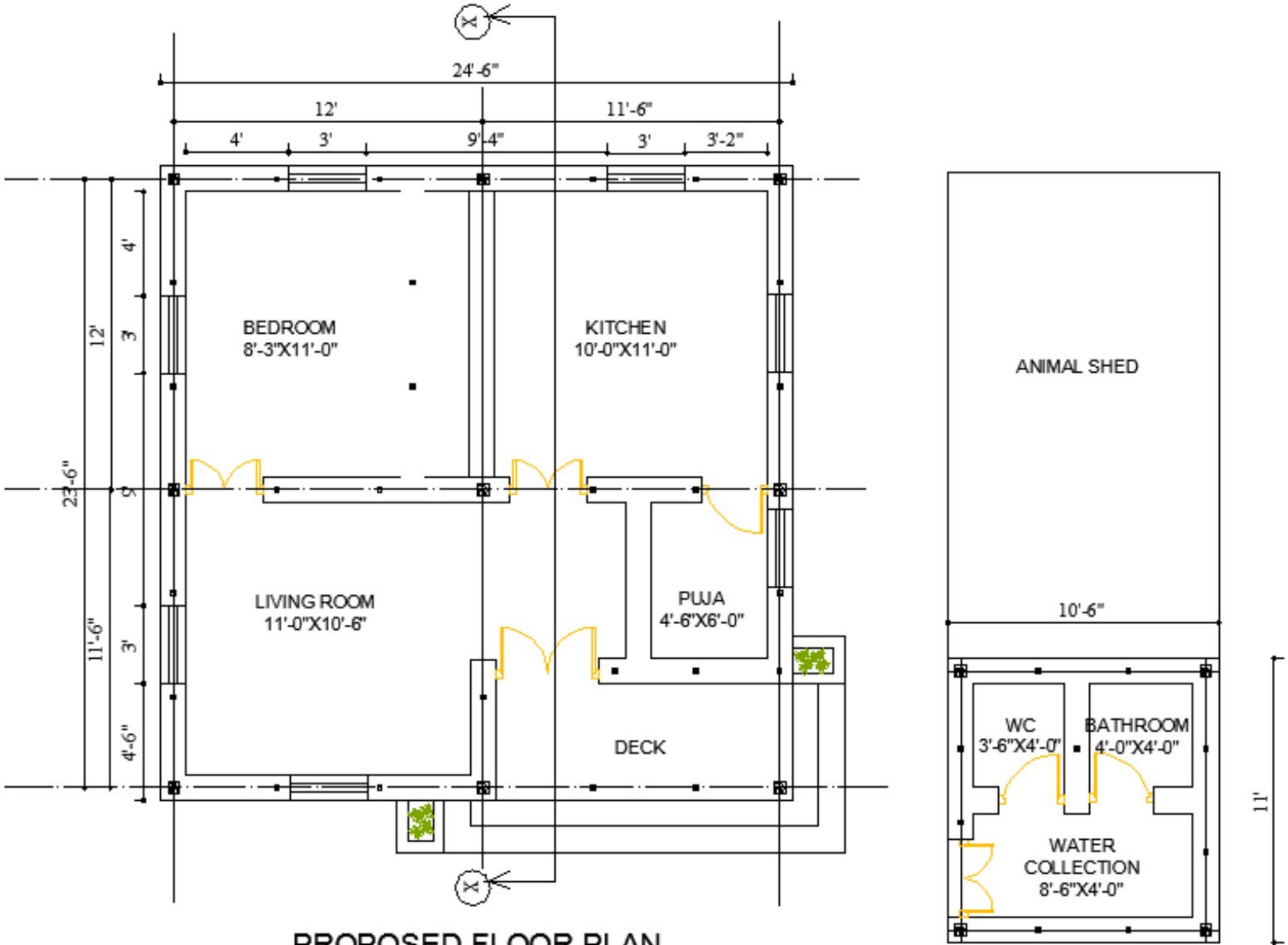


## Model RSM-RIB-1.1 REINFORCED INTERLOCKING BRICK MASONRY WITH RUBBER SOIL FOUNDATION



## CONSTRUCTION MATERIAL AND MANPOWER

Level	Manpower's (man-days)		Material				
	Skilled	Unskilled	Stone (cum)	Rubber (cum)	Compressed earth cement block (numbers)	Timber (cum)	Bamboo of 20 ft. long
Upton plinth	35	50	22.3	10.89	2052	3.2	0
Super structure	57	40	0	0	9134	0.3	0
Roof	32	20	0	0	206	0	12
Total	124	110	22.3	10.89	11392	3.5	12



PROPOSED FLOOR PLAN  
1-BEDROOM HOUSE  
600sq. ft.

TOTAL AREA: 600 sq. ft.

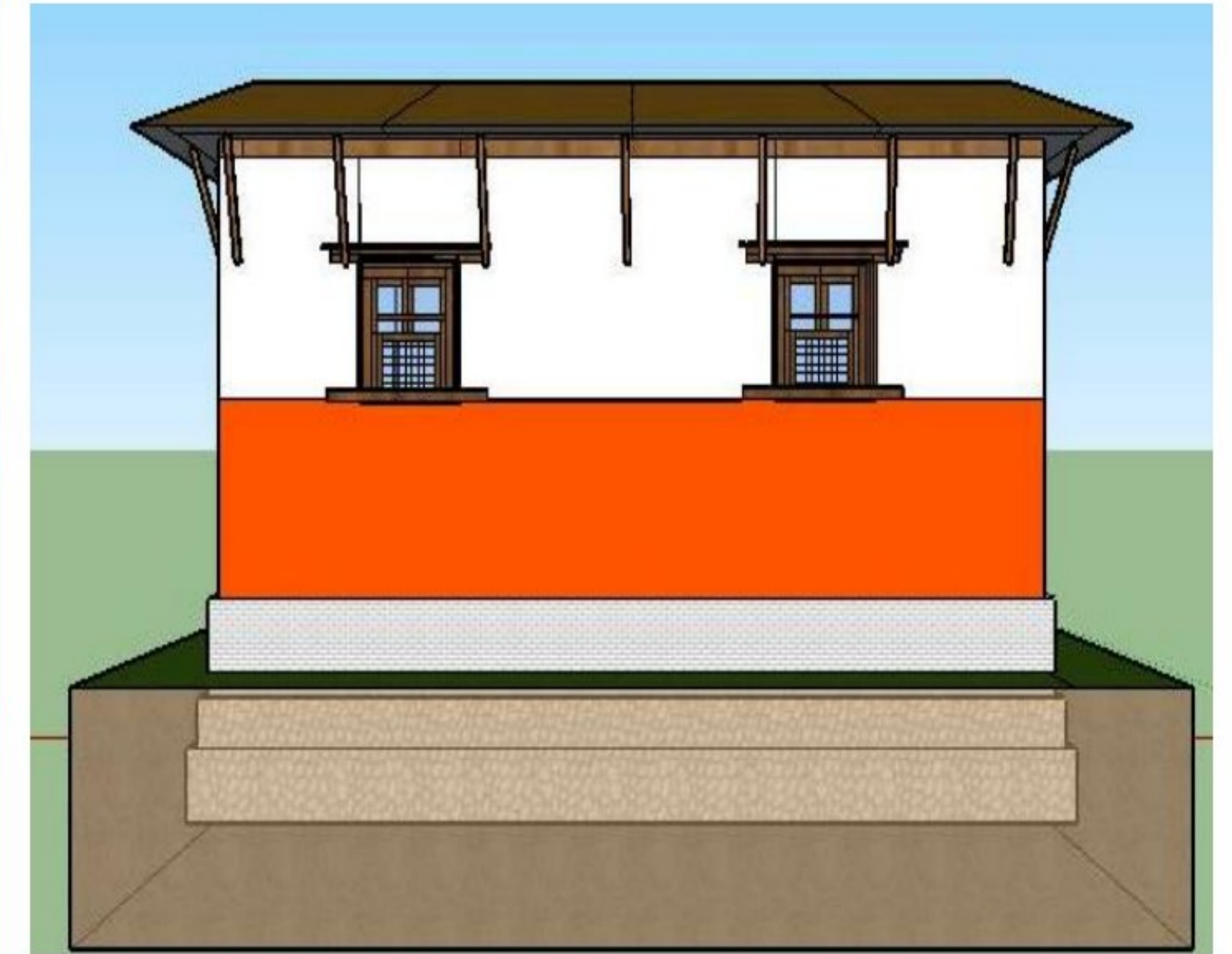
Model RSM-RIB-1.1 REINFORCED INTERLOCKING MASONRY WALL WITH RUBBER SOIL FOUNDATION



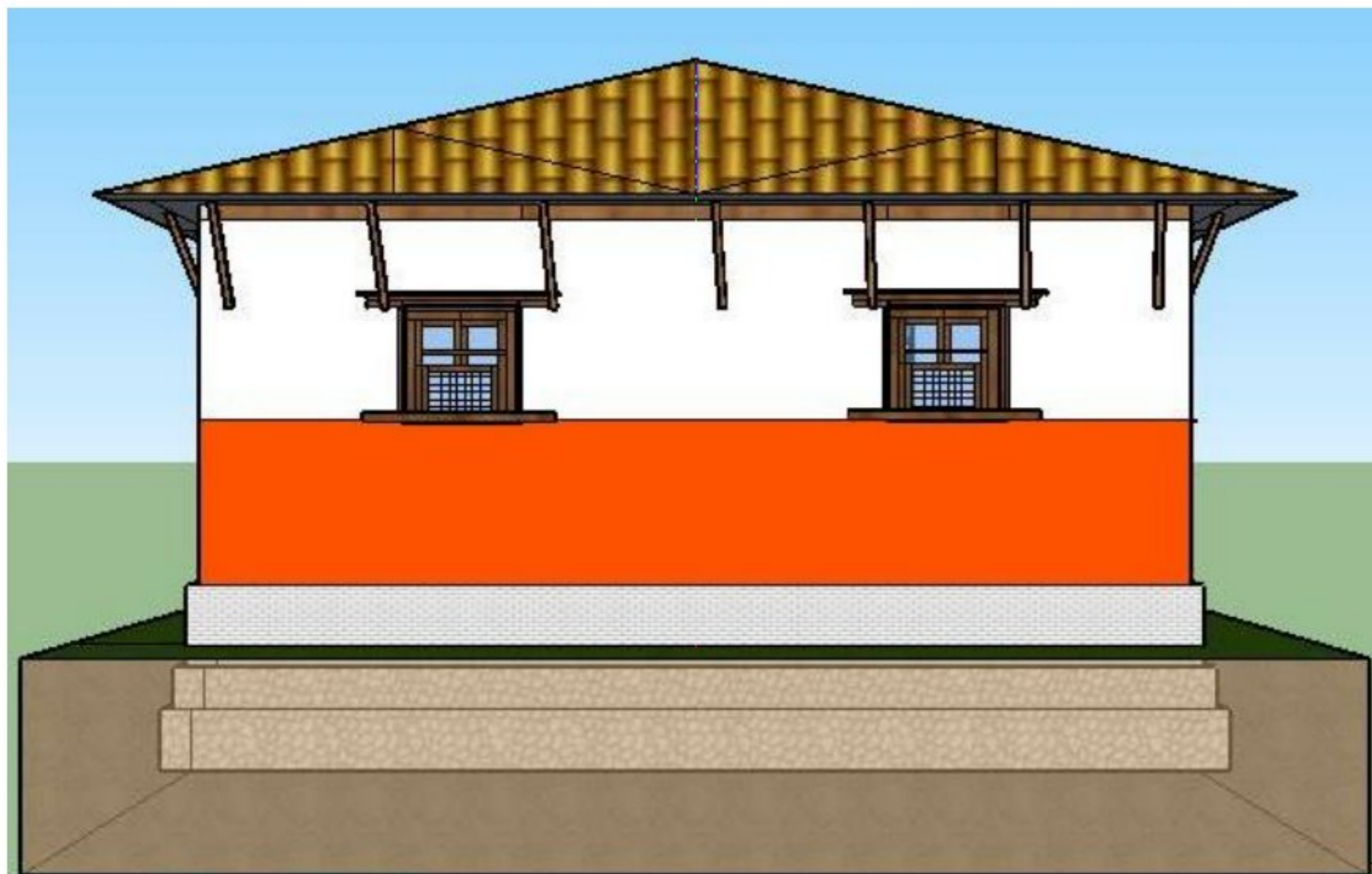
FRONT ELEVATION



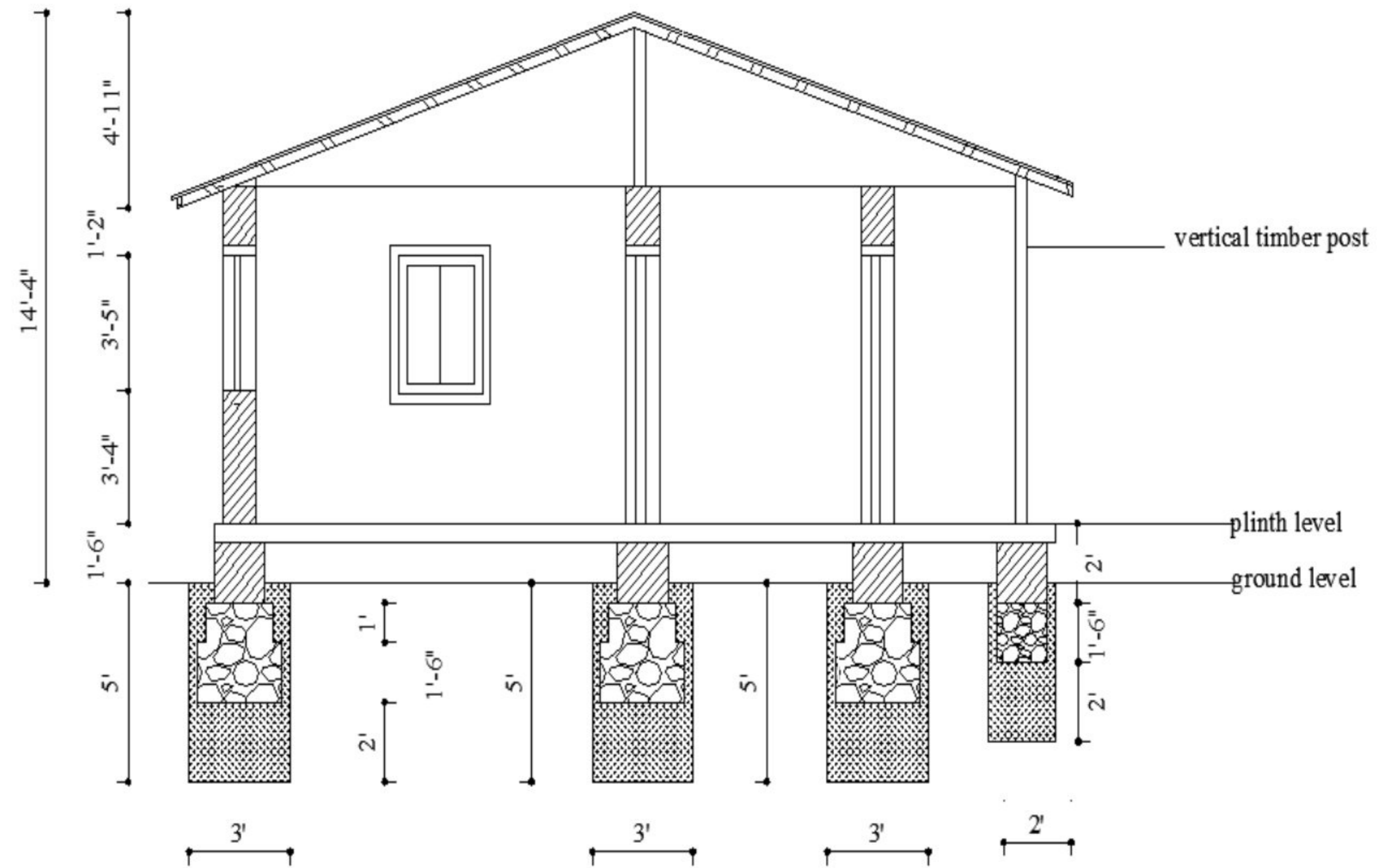
RIGHT SIDE ELEVATION



BACK ELEVATION



LEFT SIDE ELEVATION



sectional elevation at X-X

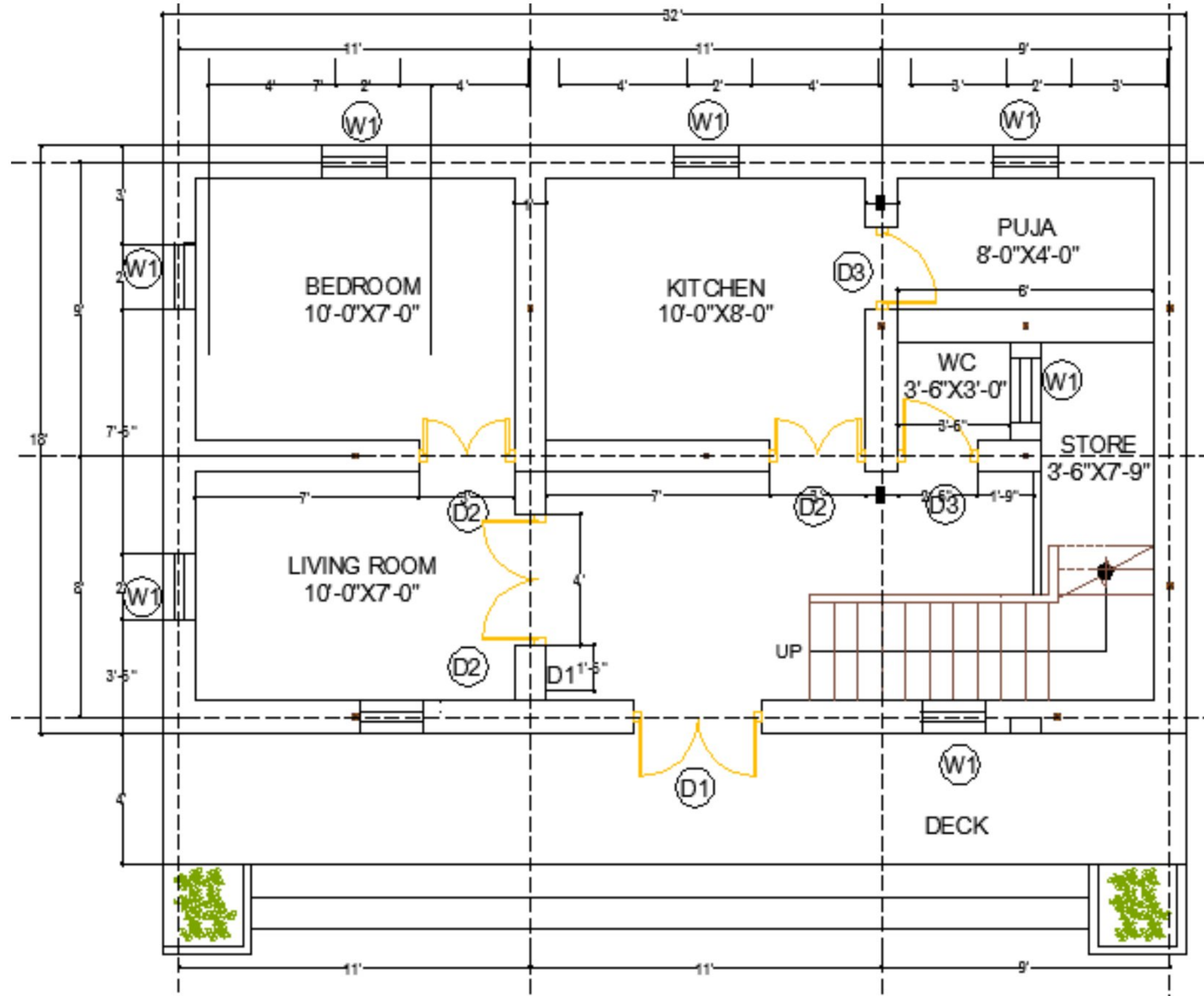


LEVEL	Man powers (man days)		Material				
	Skilled	Unskilled	Stone (cum)	Interlocking bricks (numbers)	Timber (cum.)	Bamboo of 20 ft. long (numbers)	CGI (bundles)
Up to plinth	43	96	26.6	2660	0.7	0	0
Superstructure	185	135	0	10670	2.5	0	0
Roof	80	30	0	102	0	18	4.03
<b>TOTAL</b>	<b>308</b>	<b>271</b>	<b>26.6</b>	<b>13432</b>	<b>3.2</b>	<b>18</b>	<b>4.03</b>



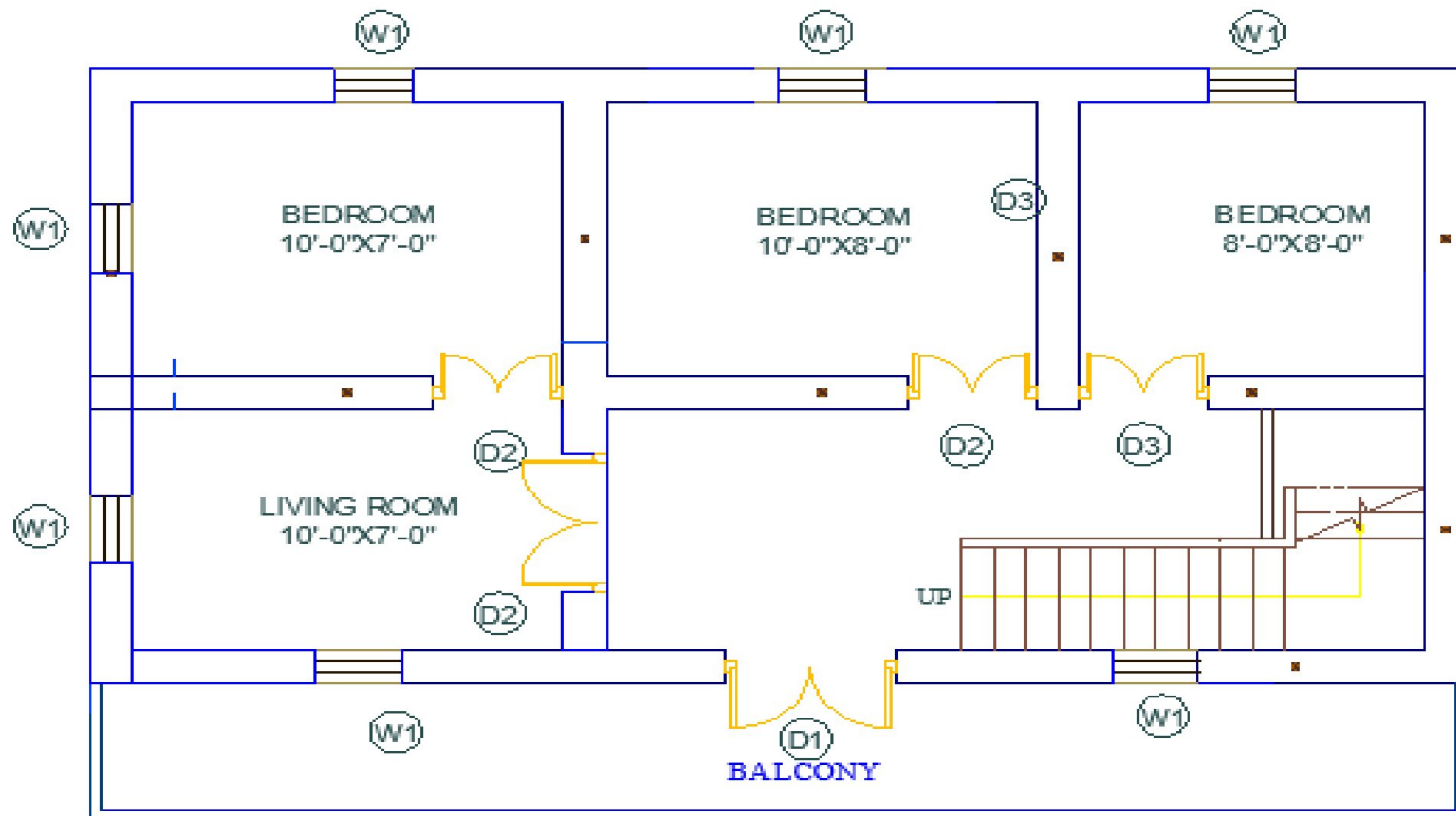
Model RSM-RIB-2.1 REINFORCED INTERLOCKING BRICK MASONRY WITH RUBBER SOIL FOUNDATION

TWO-STOREY



TOTAL AREA: 2@710 sq. ft.

Model RSM-RIB-2.1 REINFORCED INTERLOCKING BRICK MASONRY WITH RUBBER SOIL FOUNDATION



**FIRST FLOOR PLAN**

TOTAL AREA: 2@710 sq. ft.

MODEL RSM-RIB-2.1

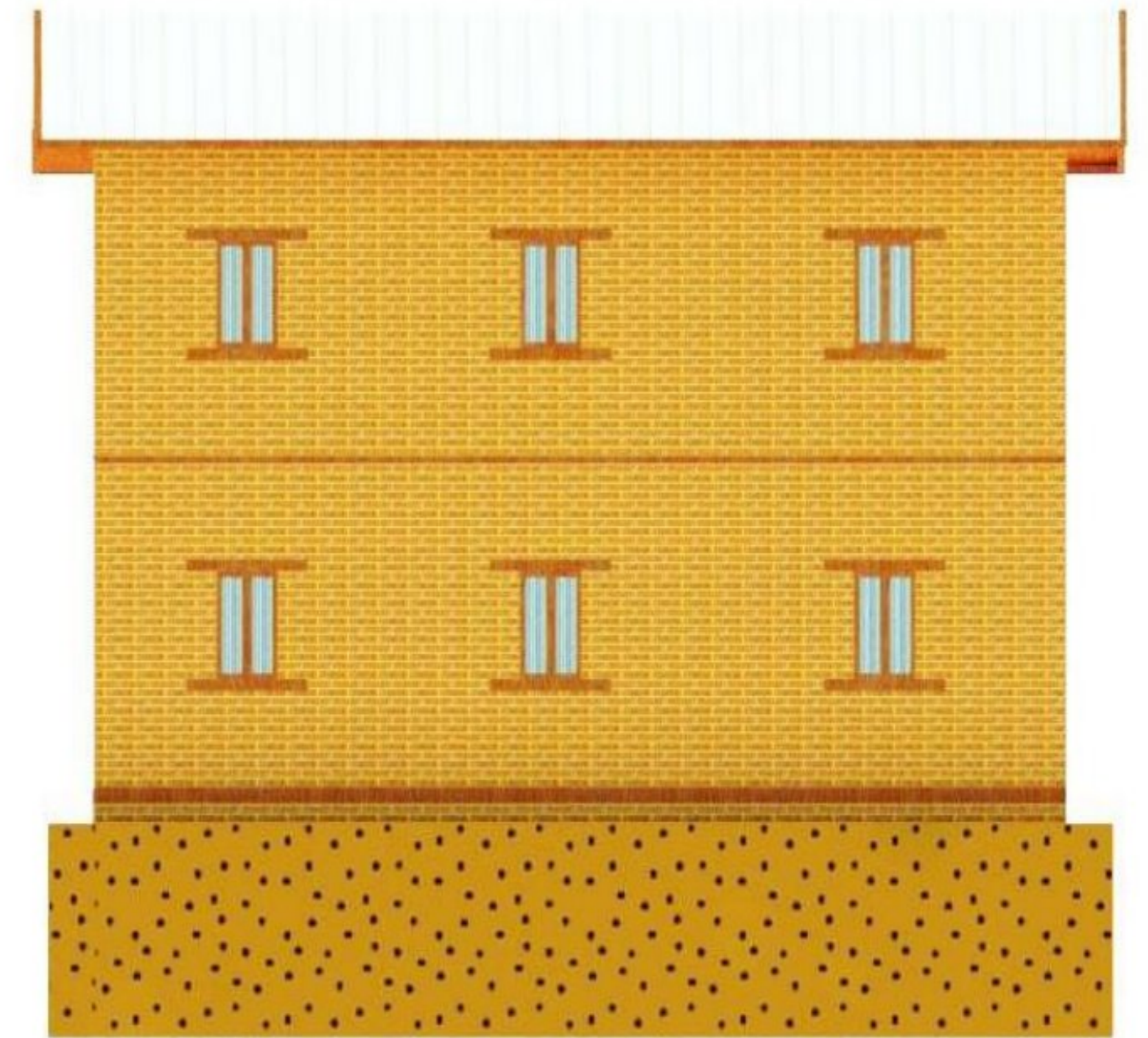
FIRST FLOOR PLAN



FRONT ELEVATION



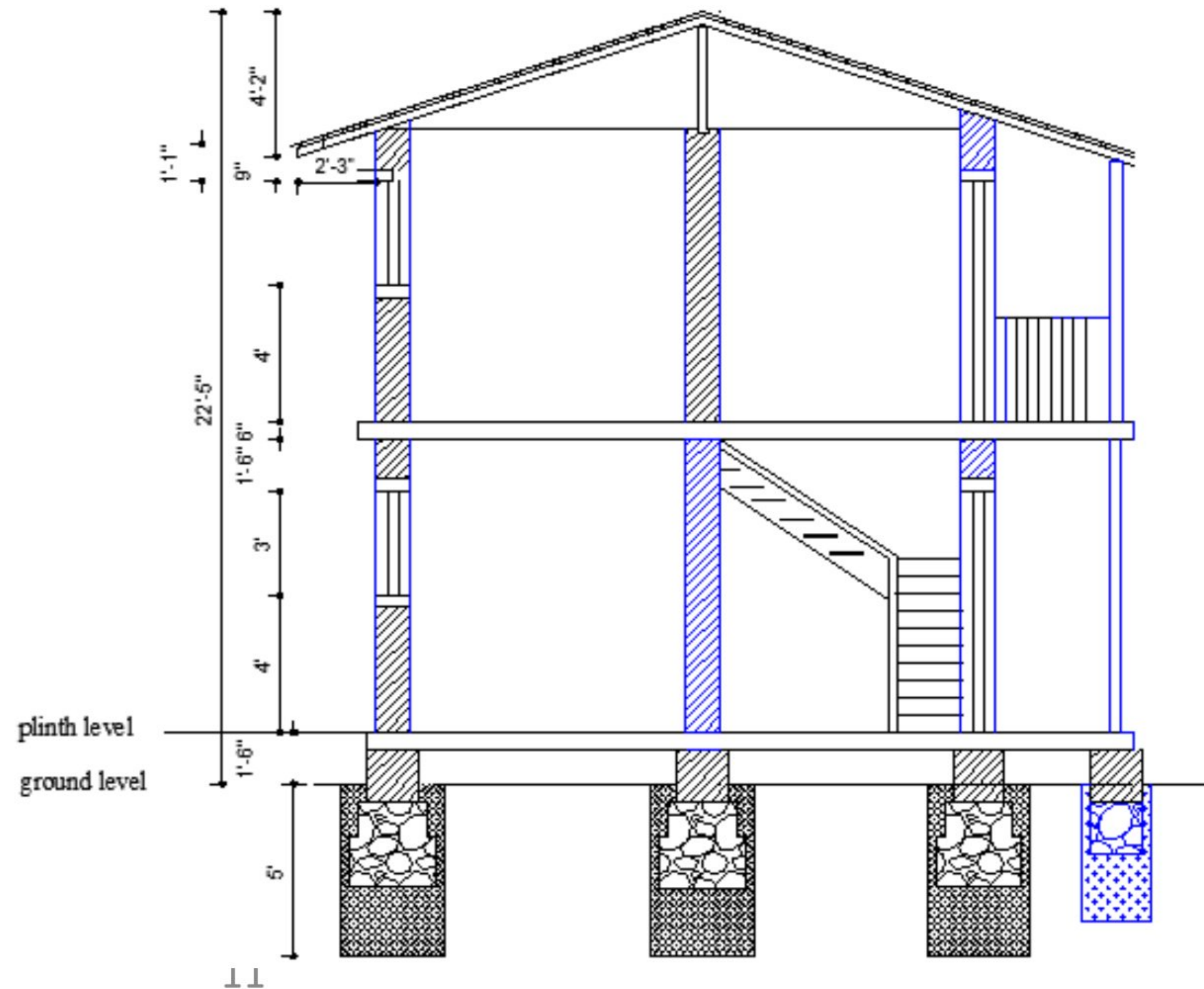
RIGHT SIDE ELEVATION



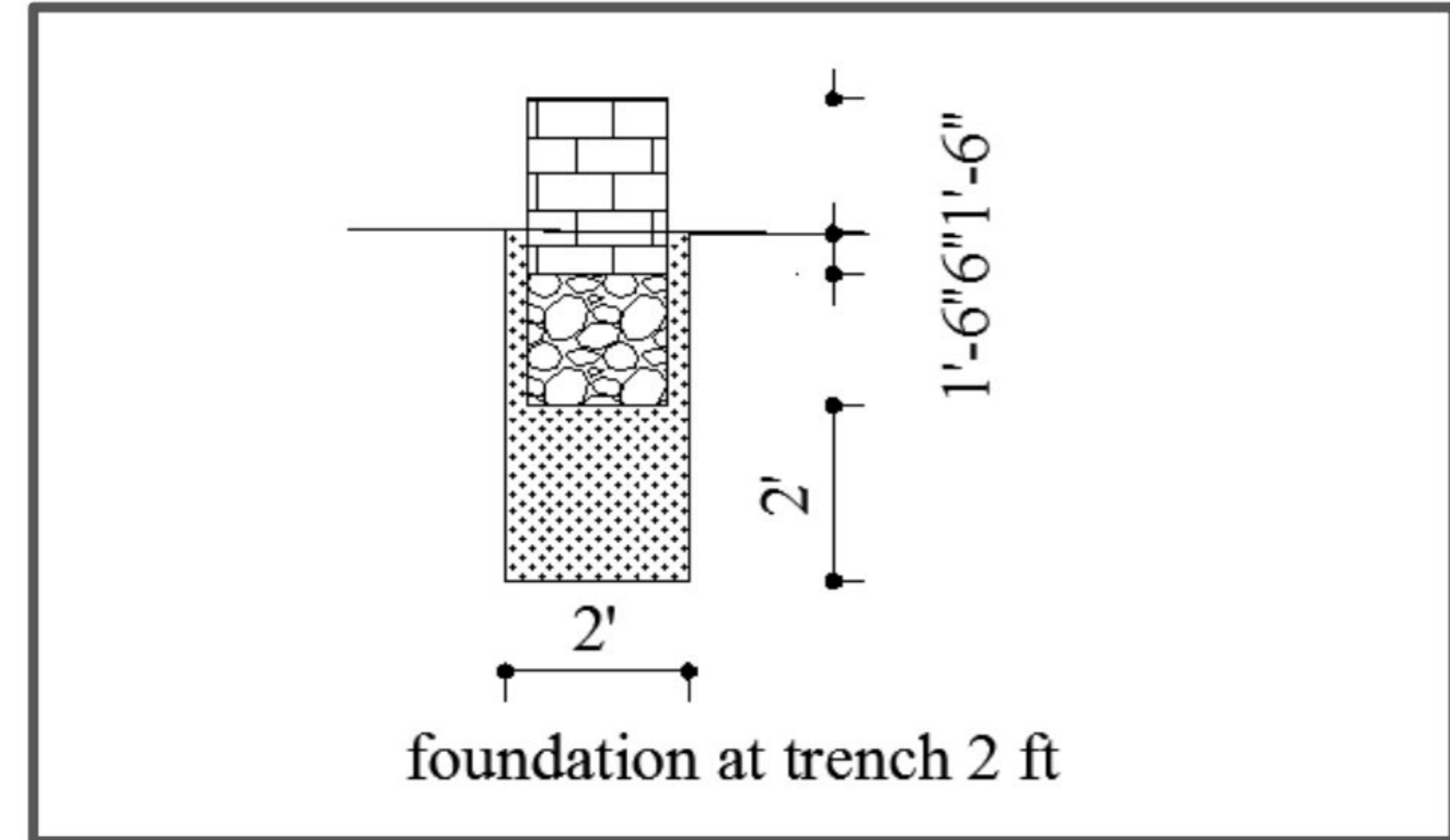
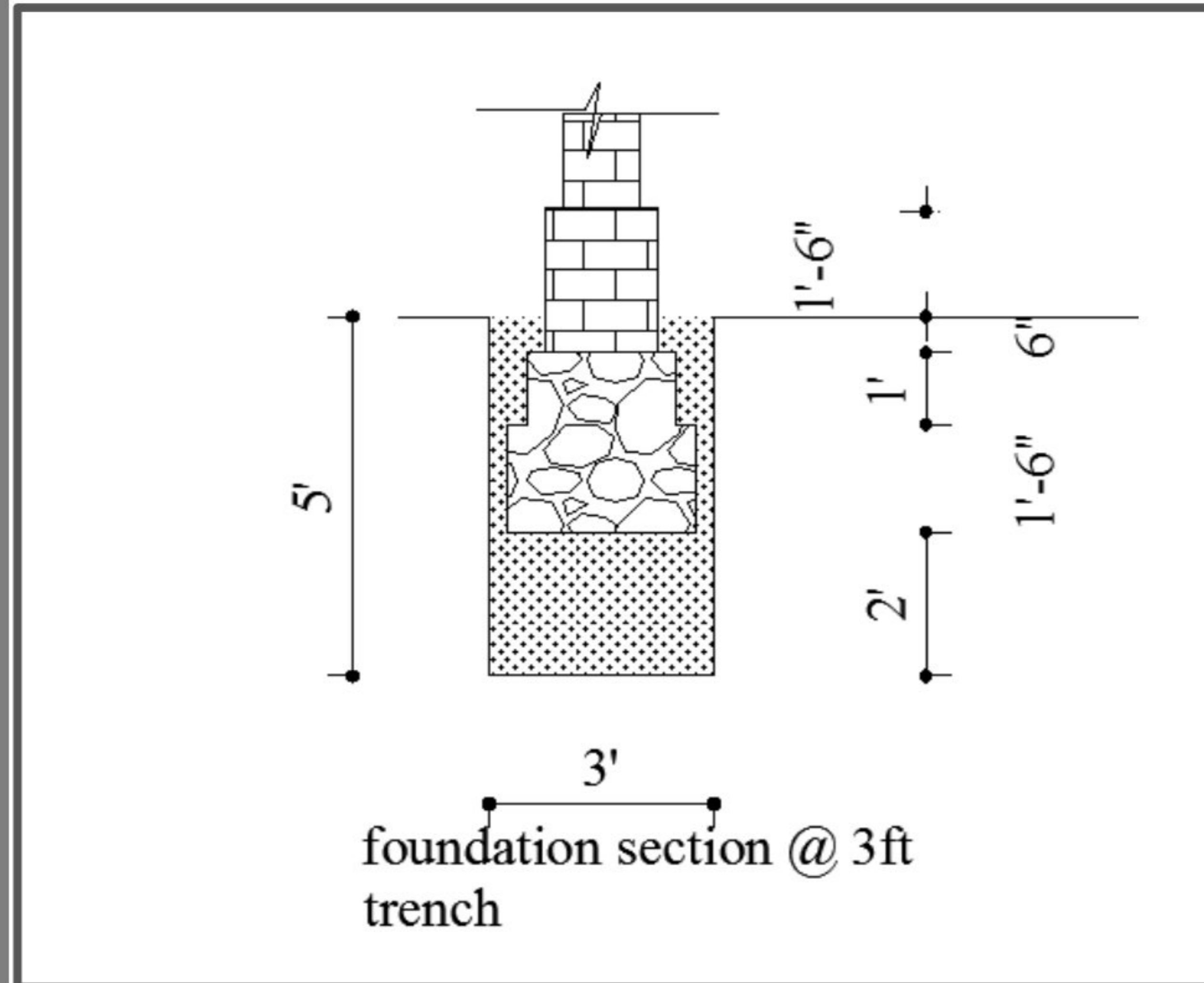
BACK ELEVATION



LEFT SIDE ELEVATION



# FOUNDATION



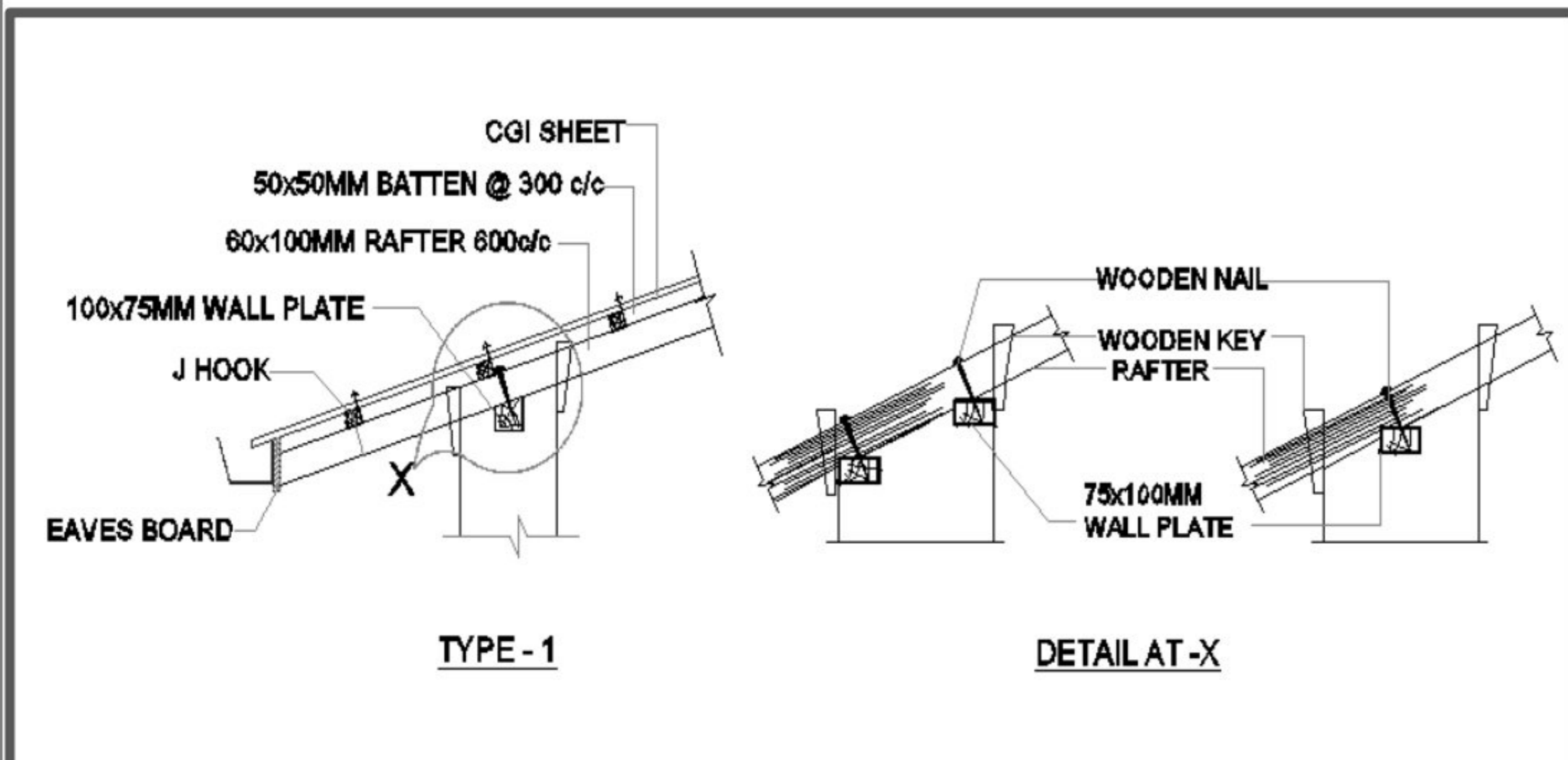
Base width of footing (NBC 202)

Masonry Type	No. Of Story	Minimum base width (mm) of wall footing for soil type:		
		Soft	Medium	Hard
Brick	Two	900	650	550
	One	650	550	550
Stone	Two	*	600	600
	One	800	600	600

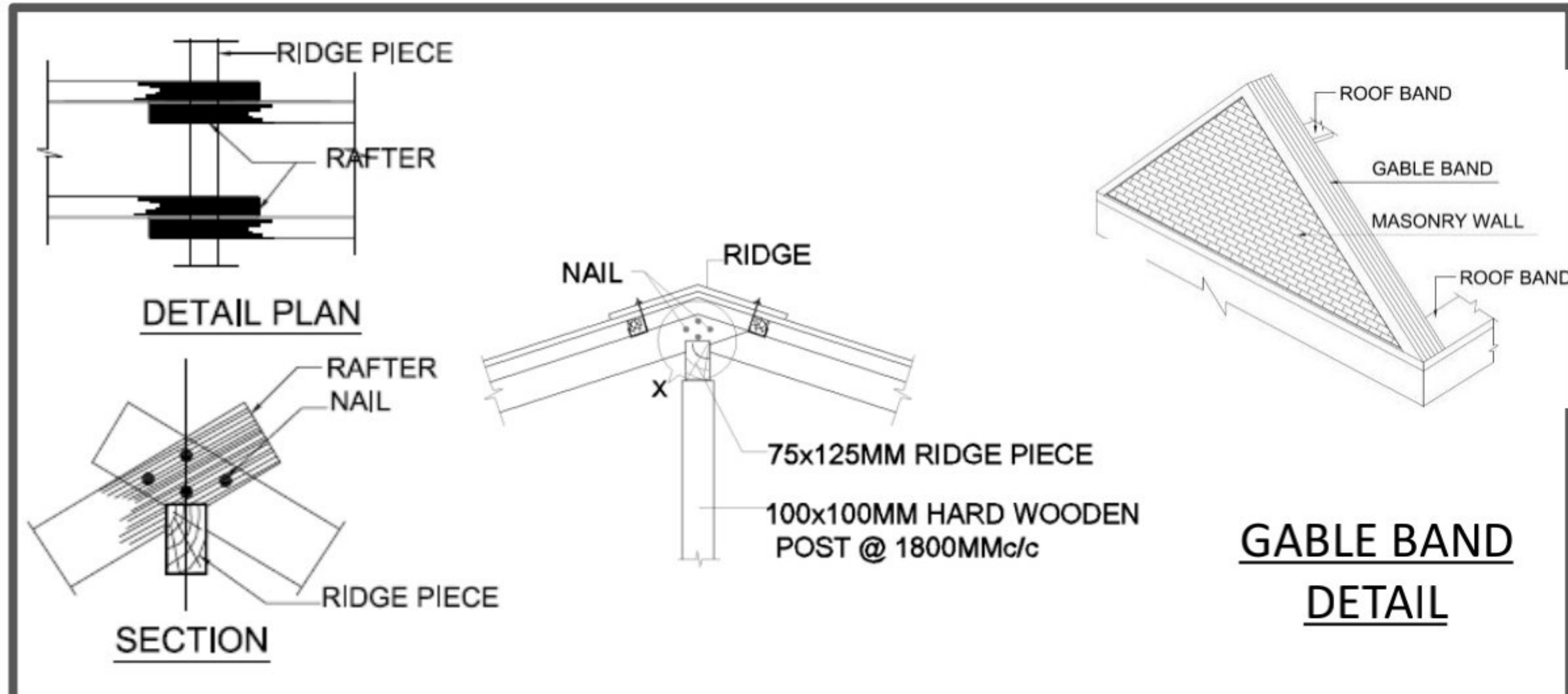
## Classification of Foundation Soil and Safe Bearing Capacity (NBC 202)

Foundation Soil Classification	Types of Foundation Materials	Presumed Safe Bearing Capacity, KN/m <sup>2</sup>
Hard	Rocks in different state of weathering, boulder bed, gravel, sandy gravel and sand-gravel mixture, dense or loose coarse to medium sand offering high resistance to penetration when excavated by tools; stiff to medium clay which is readily indented with a thumb nail.	$\geq 200$
Medium	Fine sand and silt (dry lumps easily pulverised by the finger); moist clay and sand-clay mixture which can be indented with strong thumb pressure.	$< 200$ and $\geq 150$
Soft	Fine sand, loose and dry; soft clay indented with moderate thumb pressure.	$< 150$ and $\geq 100$
Weak	Very soft clay which can be penetrated several centimeters with the thumb, wet clays.	$< 100$

# ROOF: OPTION 1 (TIMBER), applicable to all models



**Detail of Rafter Joint with Wall Plate**



**Detail of Rafter Joint at Ridge**

For all models, source: UDBC catalogue, vol. 1

TECHNICALDETAIL 6 (Roof)

# ROOF: OPTION 1 (TIMBER), applicable to all models

## ◆ Top (Plan) View



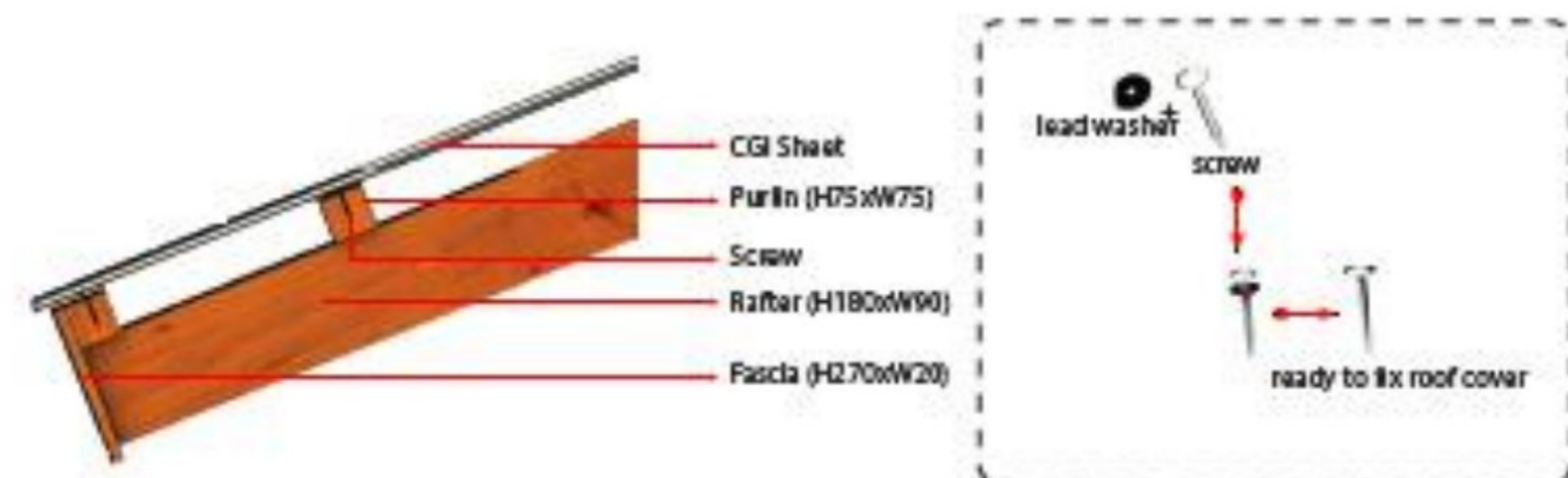
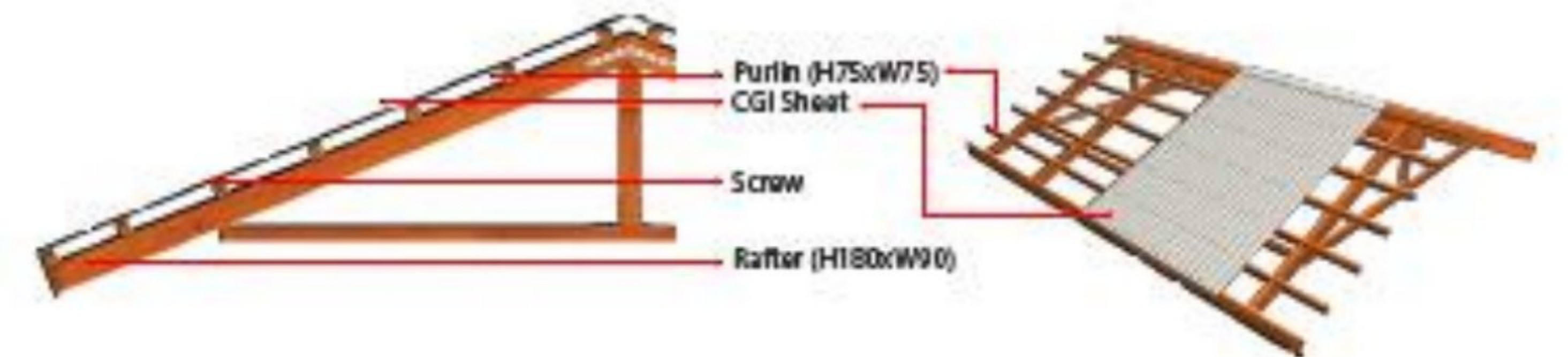
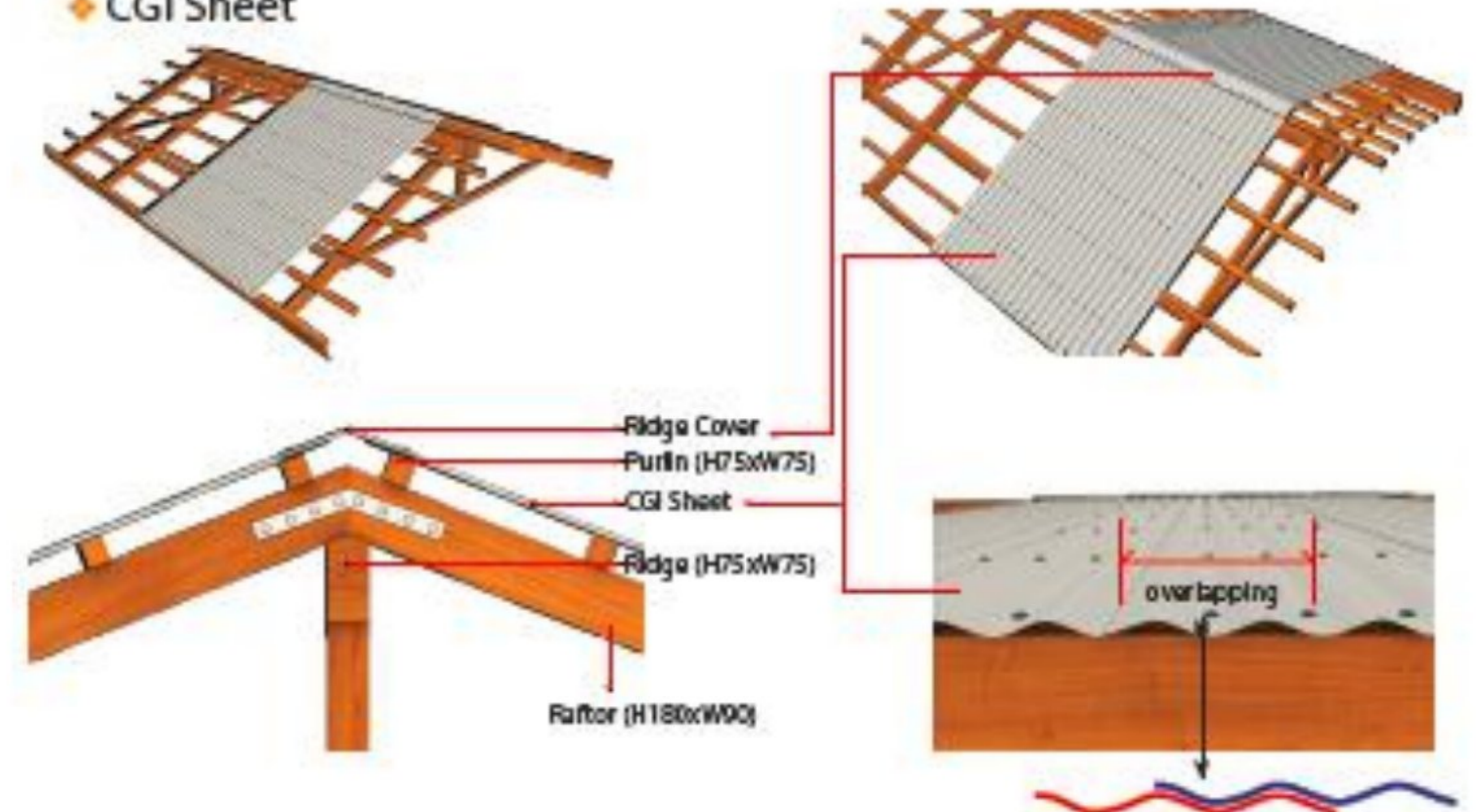
## ◆ Side View



## ◆ Isometric View



## ◆ CGI Sheet



For all models, source: DUDBC catalogue vol. 1

None

TECHNICAL DETAIL 7 (Roofing)

