

Building Drawing

Building —

A building is a living place surrounded by walls and covered by roof to provide shelter to human beings and protect them from effect of sun, wind and rain.

Building Plans are important legal documents.

Correct drawings save cost, labour and time for its construction.

Parts of Building —

Any building essentially consists of the following parts.

- Foundation

- Super Structure

Foundation —

It is the bottom most part of a structure.

On ~~etc~~ total building rests.

It is constructed inside the ground & provides a stable base for the structural members.

Super Structure : —

The structure above the ground level is known as super structure.

It consists of

a) wall & columns

b) Door, windows & Ventilators

c) Lintel, chajjas etc.

Roof : —

It is the uppermost part of the structure, shielding the building from sun, rain and snow etc.

The top view of a building is

known as Plan.

whereas the front view is known
as elevation.

Long Plan

It is drawn with one sketch which
shows various arrangements of the
rooms with their internal dimensions.

Q

Draw the plan and elevation
of the building as given in the
line diagram adopting a scale of
1:50 with the following
specification:

wall thickness - 200 mm

Plinth height - 600 mm

Plinth projection - 100 mm

Ceiling ht of
room - 3.5 m

Verandah ht - 2.1 m

Roof slab thickness - 100 mm

Door :- 1200 X 2100 mm

Window :- 1000 X 1200 mm

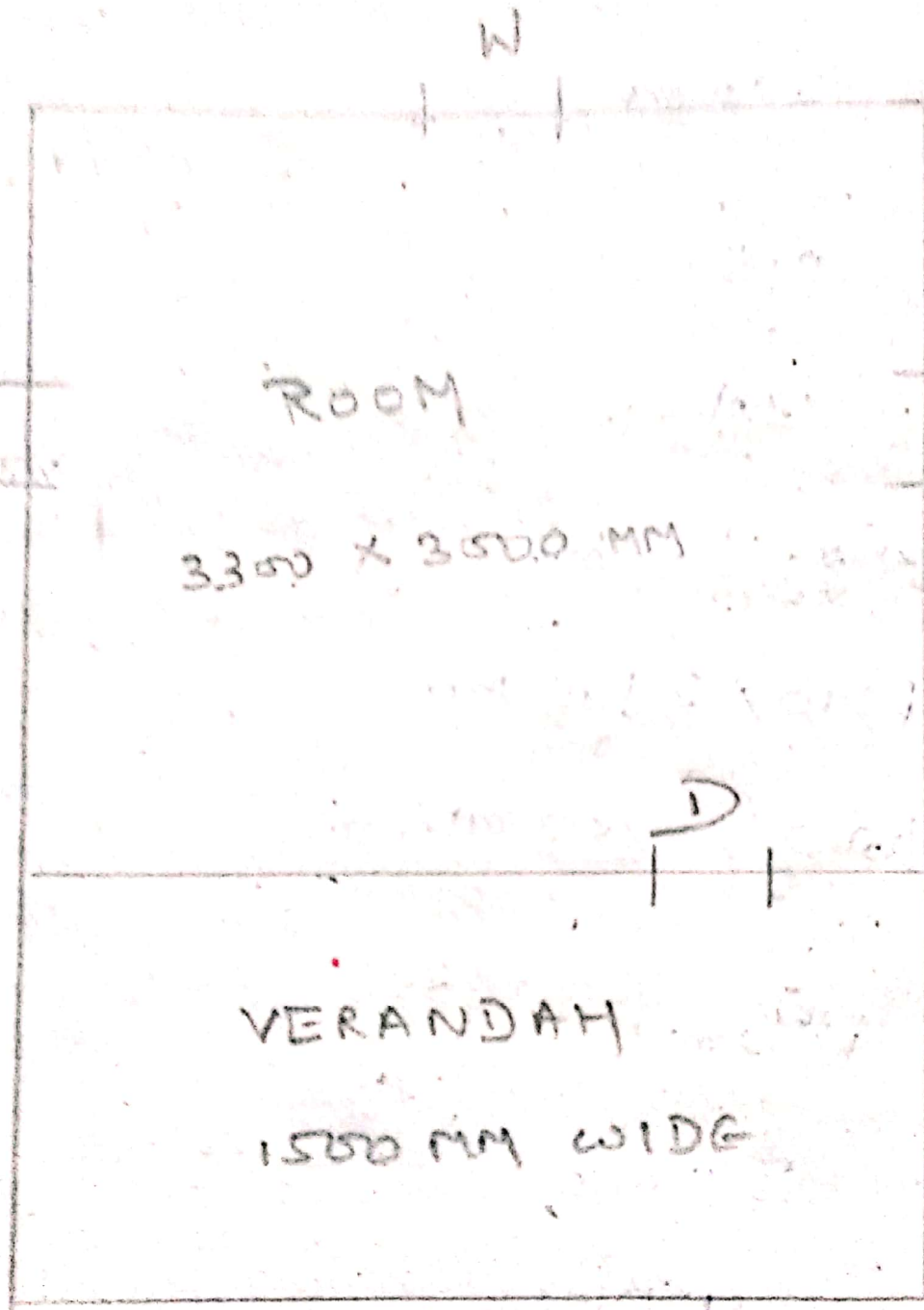
Steps -

Rise - 150 mm

Tread - 300 mm

Songheel :- 450 mm

Parapet :- 900 mm



LINE DIAGRAM

Ans
Using the scale 1:50, convert all the given specification into drawing size.

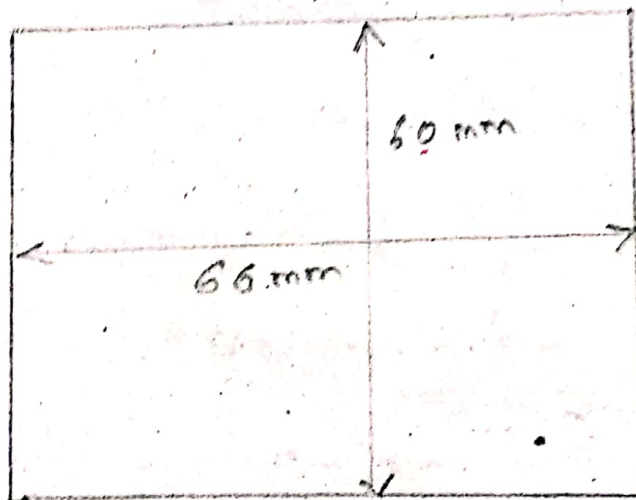
SPECIFICATION	Actual size	DRG. SIZE
WALL THICKNESS	300 mm	6 mm
PLINTH HEIGHT	600 mm	12 mm
PLINTH PROJECTION	150 mm	2 mm
CEILING Ht. of room	3.5 m	70 mm
Verandah Ht	2.1 m	42 mm
Roof Slab thickness	150 mm	2 mm
DOOR	1200 x 2100 mm	24 x 42 mm
WINDOW	1800 x 1200 mm	20 x 24 mm
STEP - Rise	150 mm	3 mm
- TREAD	300 mm	6 mm
SUNSHED	450 mm	9 mm
PARAPET	900 mm	18 mm
ROOM SIZE	3300 x 3000 mm	66 x 60 mm
VERANDAH	1500 mm	30 mm
PILLAR	300 x 300 mm	6 x 6 mm

Ques I am drawing step by step for easily describing you.

- You have to draw it in a single drawing. Both Plan & elevation.

1st Step

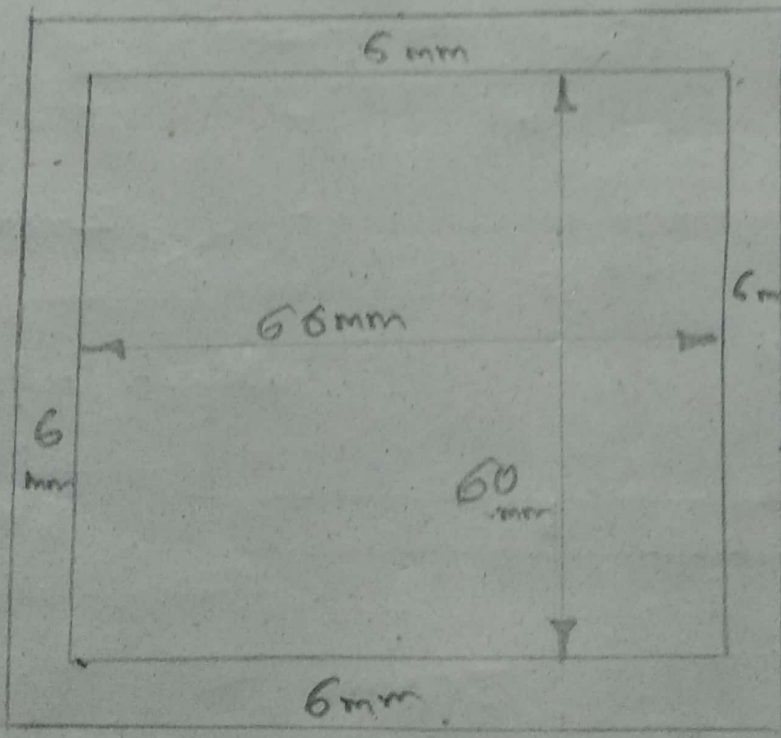
- Draw the Plan.
- Draw a rectangle of size 65×60 mm.
- It is the internal dimension of wall of the room.



← Room size

2nd step

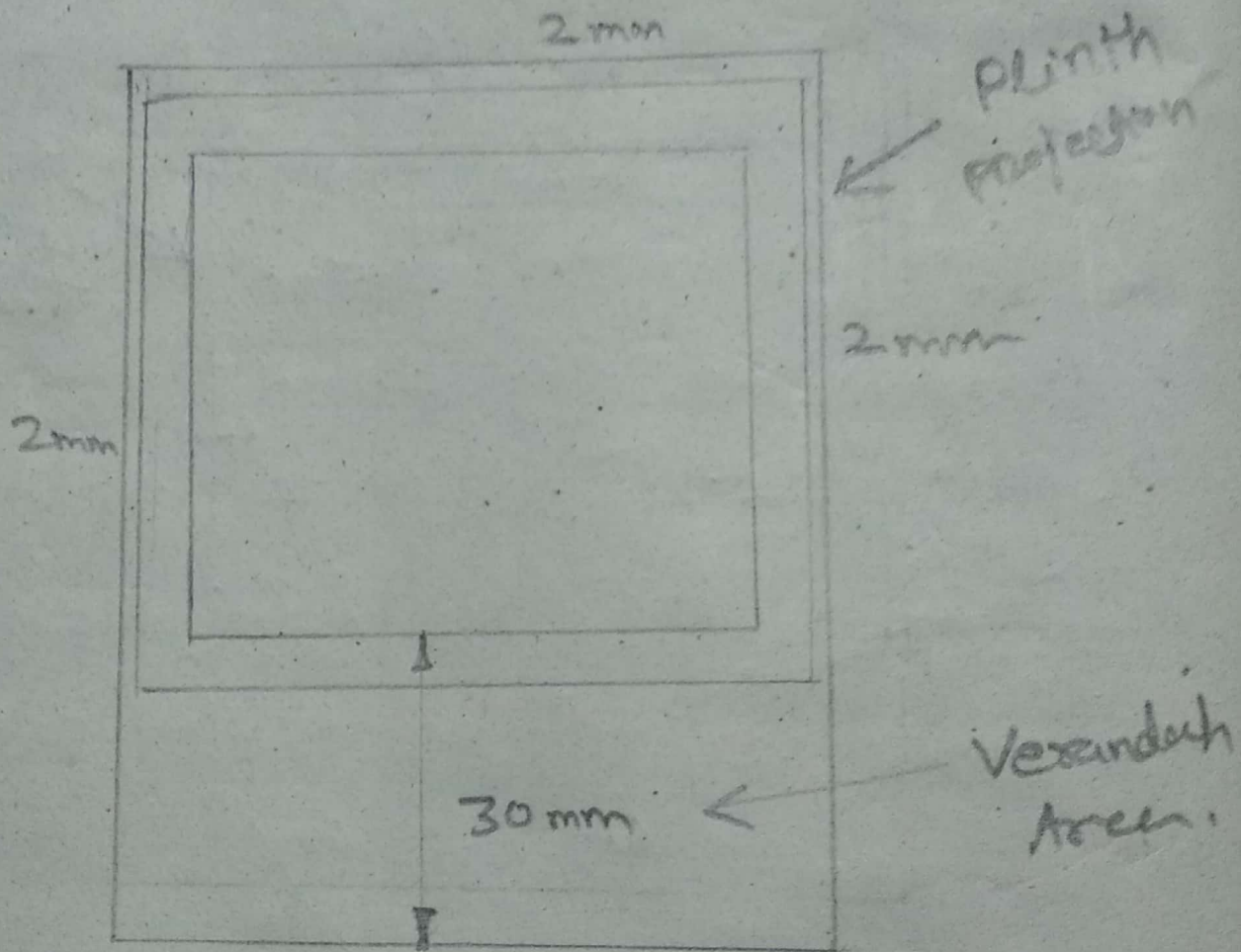
Draw 6 mm wall thickness along the
wall (internal dimension of wall)



Wall Thickness

Step-3

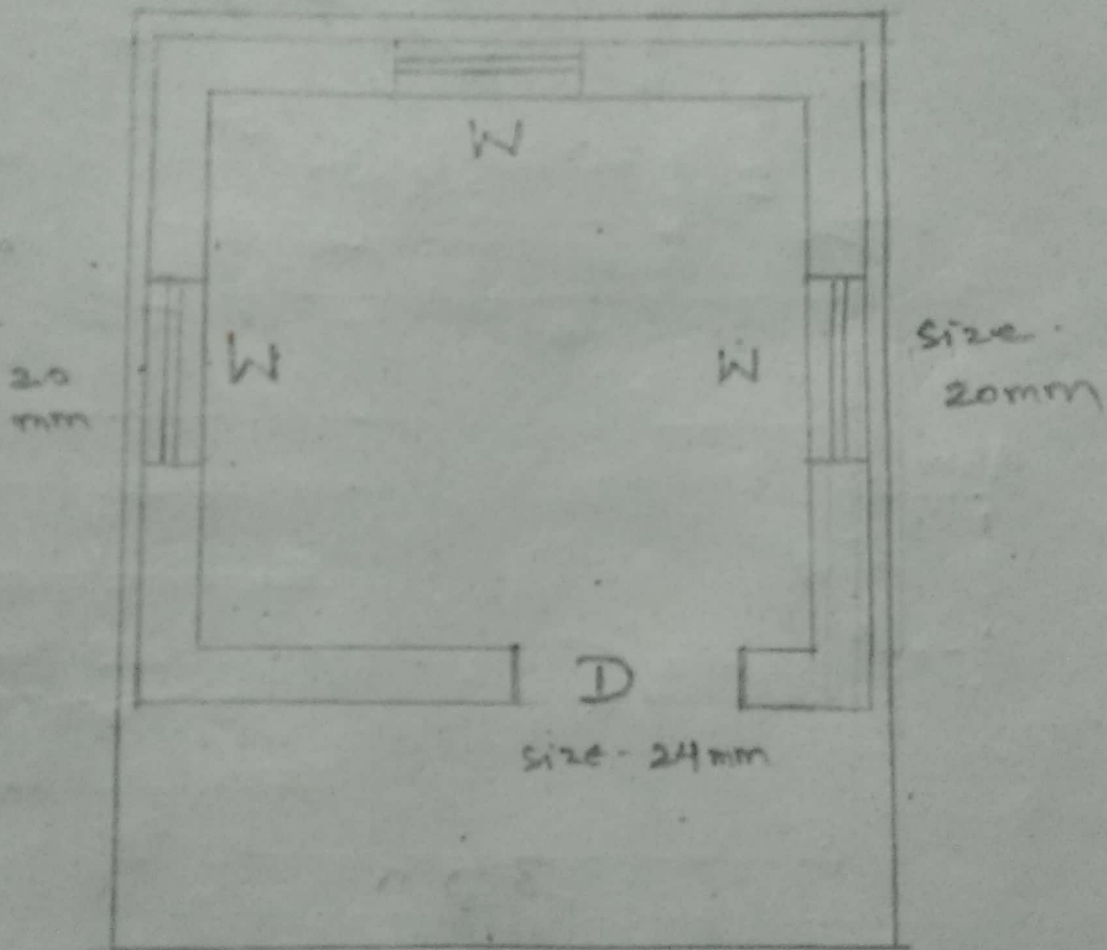
Draw the Plinth Projection
(1er 2mm) around the wall and Verendah.



PLAN

Step-4

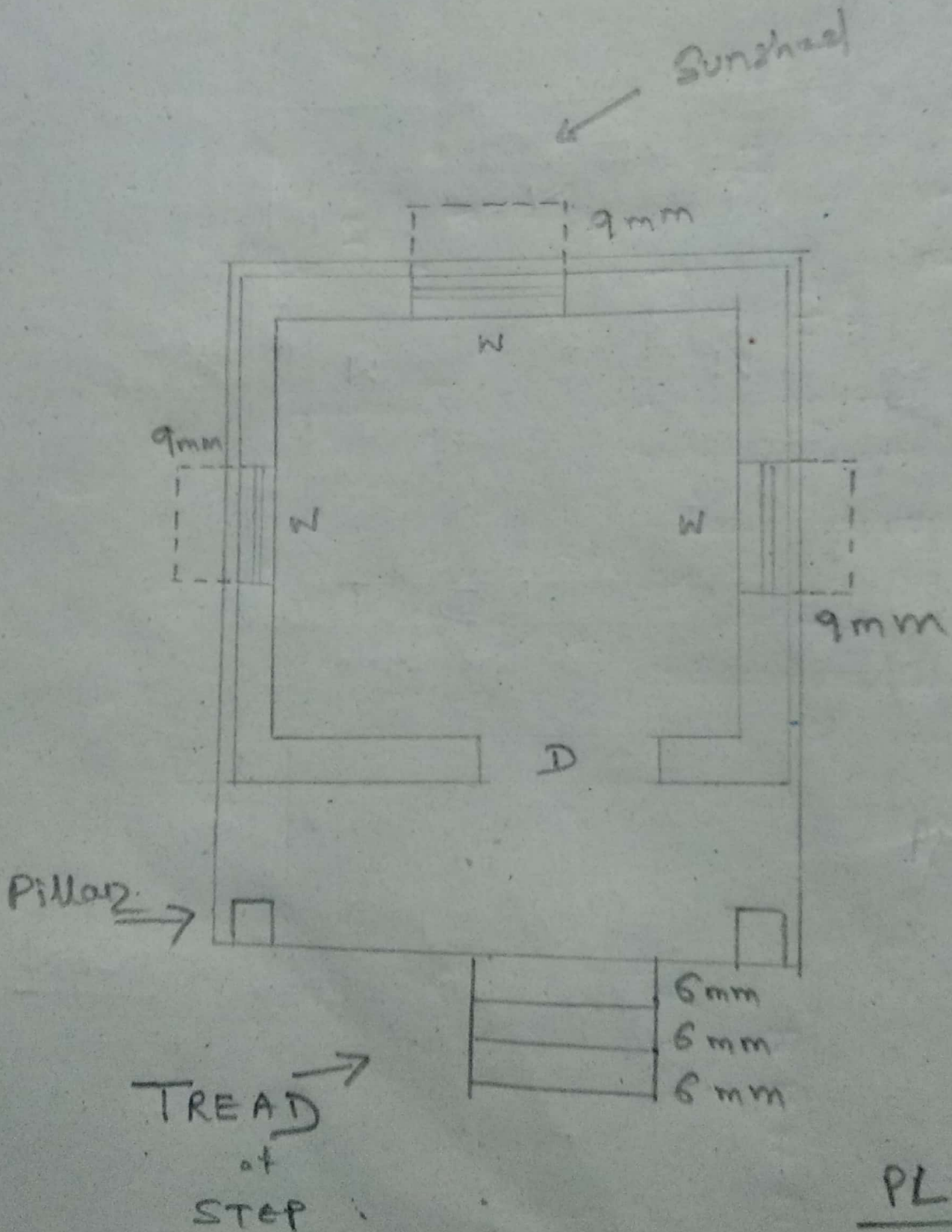
- Draw window and Door
- window should be draw on the middle of the wall.



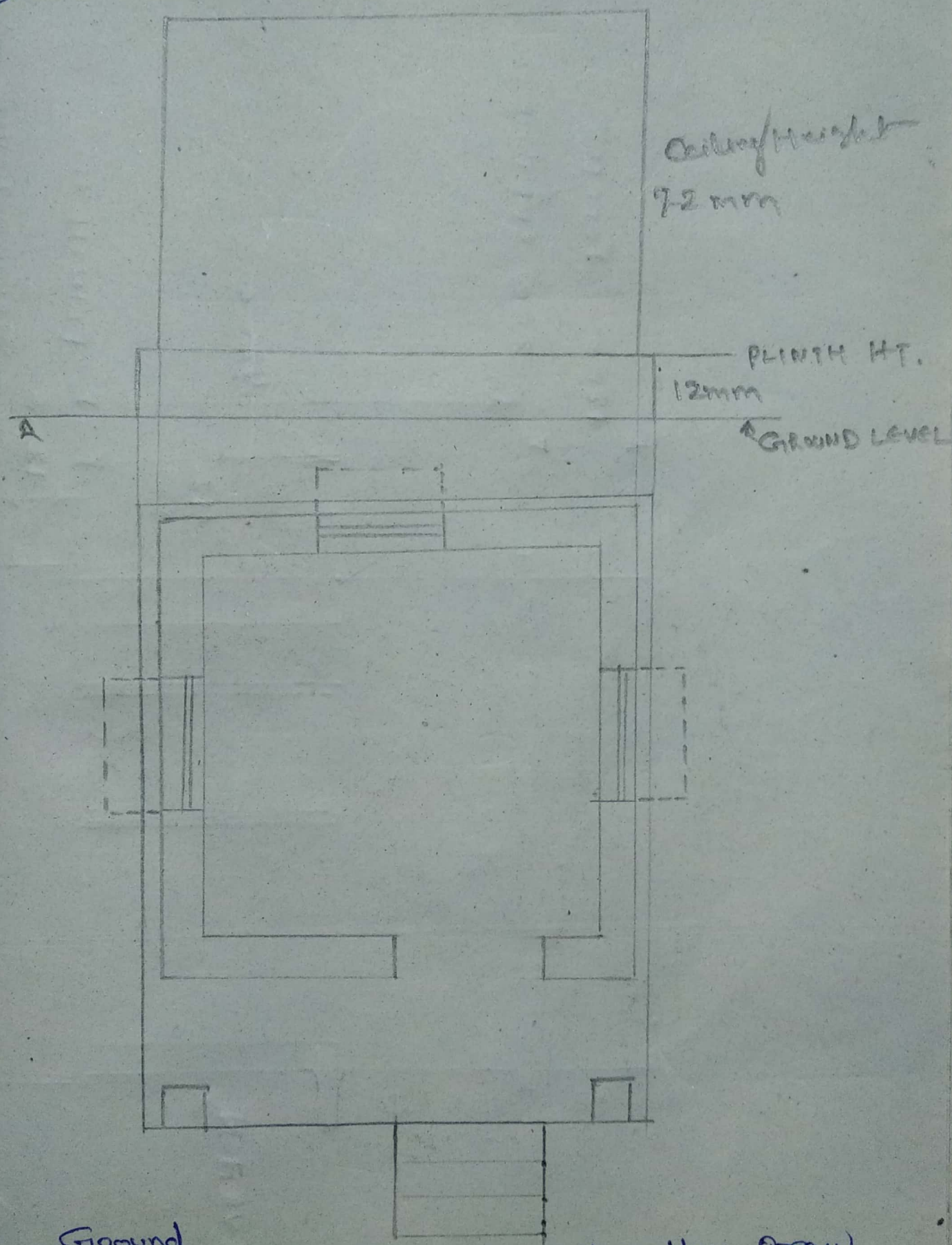
PLAN

Step-5

- Mention sunshed and Step (a TREAD)
- Draw dash line from outer wall.

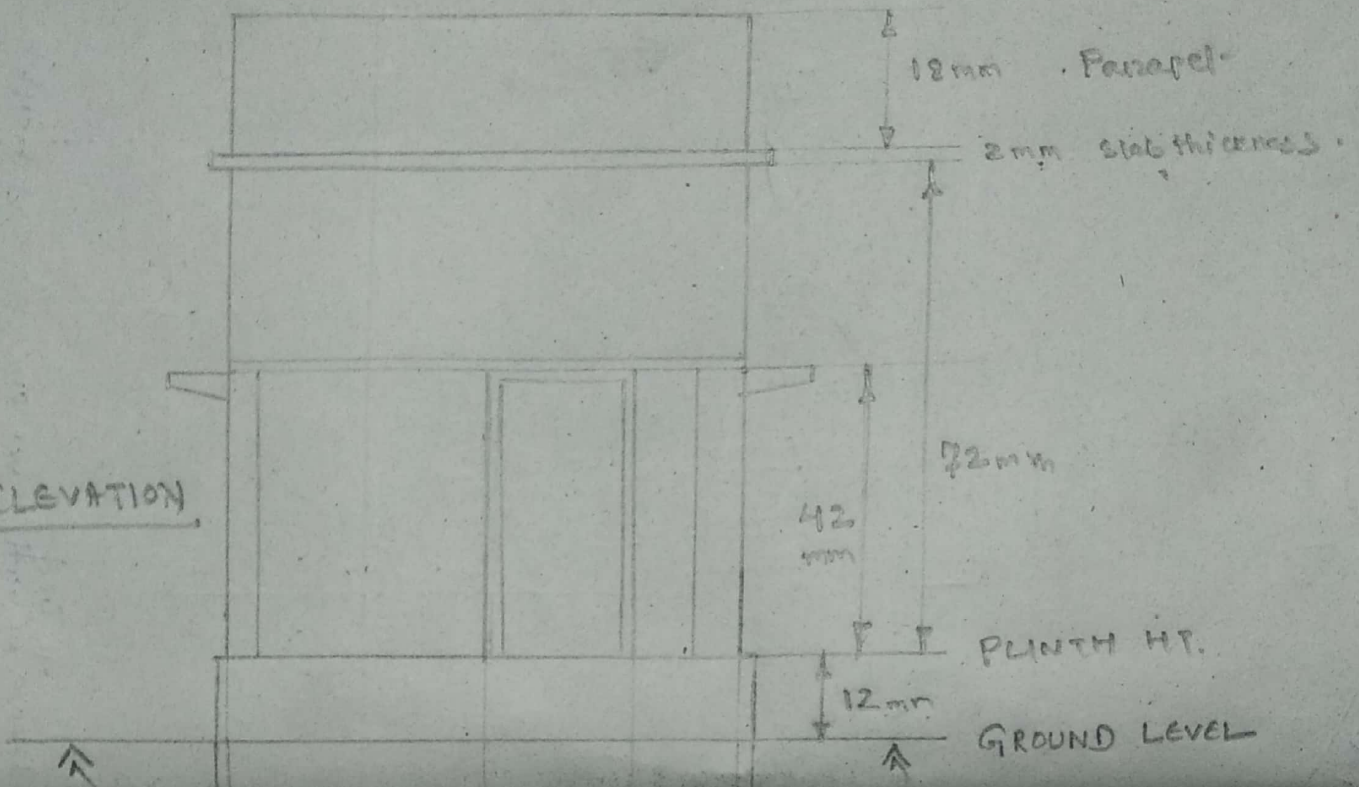


step-6

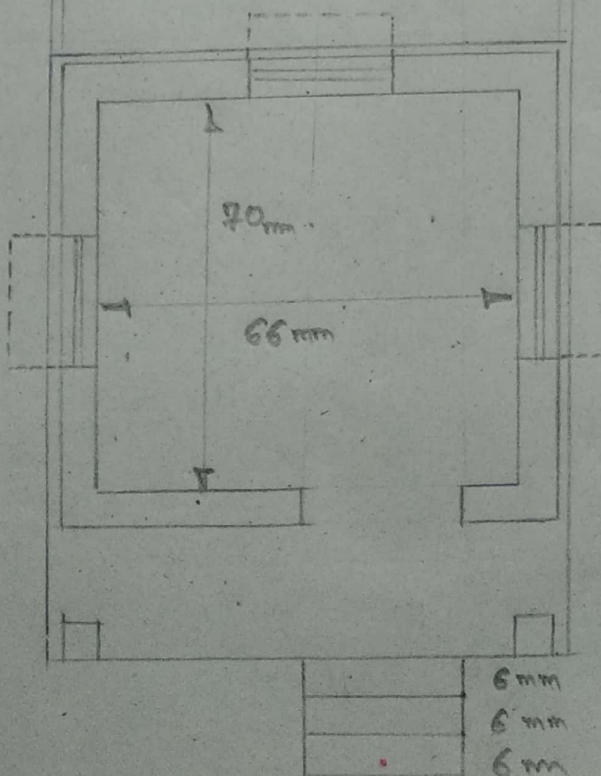


Ground
Draw ~~Ground~~ level line at any height then Draw
Plinth ht and ~~ceiling~~ ceiling ht.

ELEVATION



PLAN



SCALE: 1:50