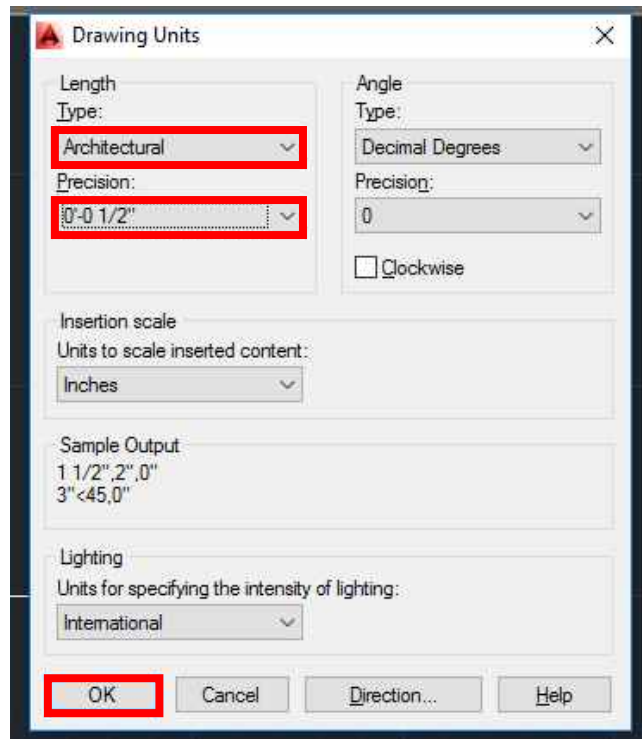


Autocad Drawing Basics
EEE 154 | Spring | 2017 | Brn
North South University

CAD (Drawings)

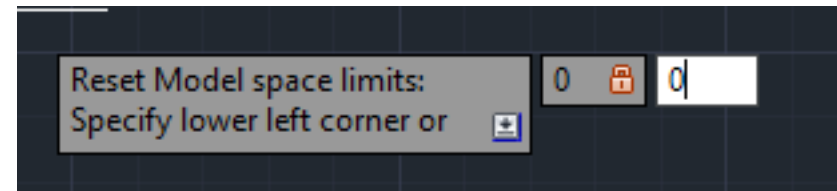
1. Open Auto cad (select 2d drawing)

2. Set Units (Type Units)

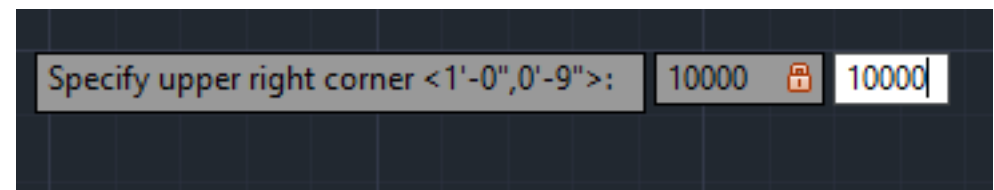


3. Set limits (Type Limits)

Set lower left corner (Type 0,0 enter)

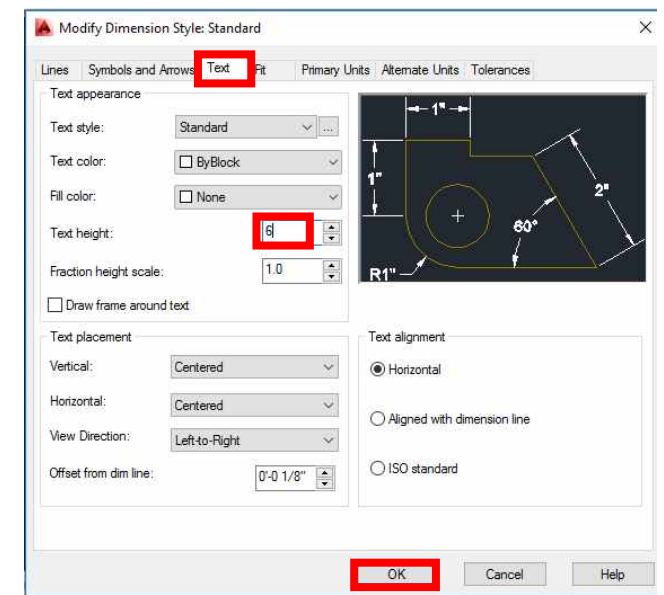
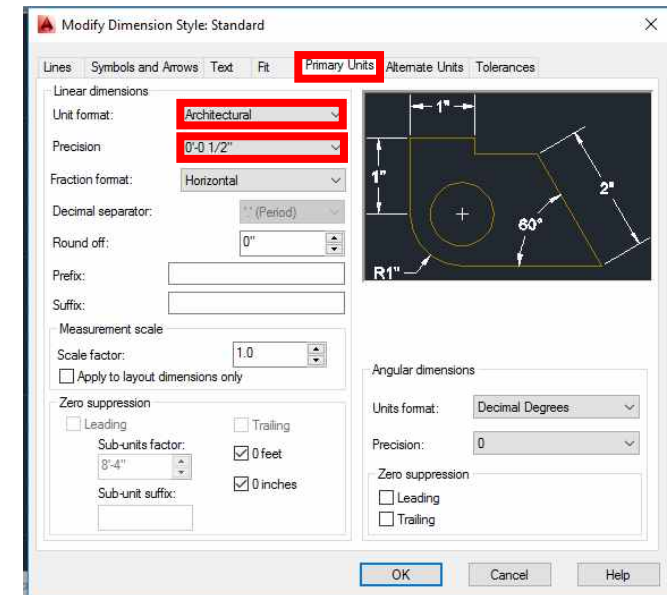
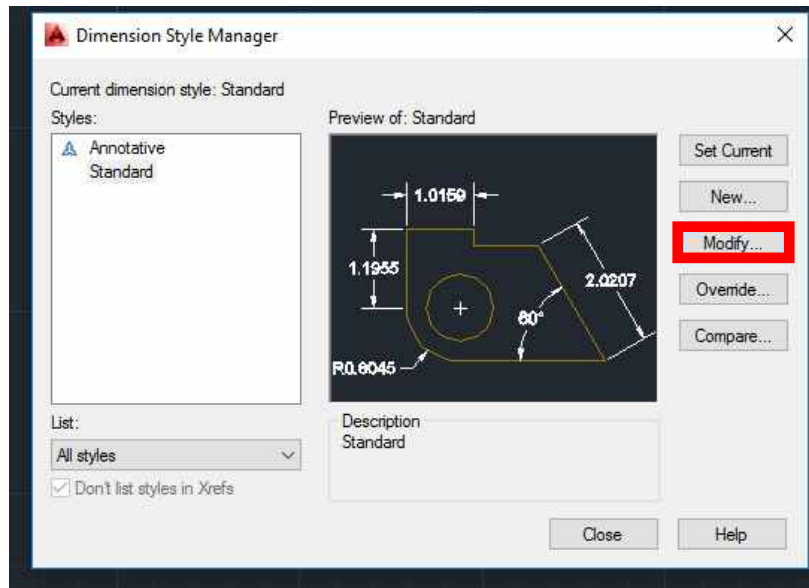


Set upper right corner (Type 1000,1000 enter)



Modify Dimension Style

Click on Dimension. Select Dimension style manager



Option needed to be turned on











- **keep (ortho, osnap) on
- **Ortho must be turned off in case of drawing slanted line
- **Right click on osnap, press settings and turn on mid point












**while drawing put the exact length in command button, for 10' wall, type 10' enter



For drawing related commands/ icon please follow the AutoCAD commands in next page

Auto cad commands

Command	Keystroke	Icon	Menu	Result
Line	Line / L		<u>D</u> raw > <u>L</u> ine	Draw a straight line segment from one point to the next
Circle	Circle / C		<u>D</u> raw > <u>C</u> ircle > Center, <u>R</u> adius	Draws a circle based on a center point and radius.
Erase	Erase / E		<u>M</u> odify > <u>E</u> rase	Erases an object.
Print	Print / Plot Cntl+P		<u>F</u> ile > <u>P</u> rint	Enables the Print/Plot Configuration Dialog Box
Undo	U (Don't use 'Undo' for now)		<u>E</u> dit > <u>U</u> ndo	Undoes the last command.
Rectangle	RECTANGLE / REC		<u>D</u> raw > Rectangle	Draws a rectangle after you enter one corner and then the second.
Multi Lines	MLINE / ML	No Icon	<u>D</u> raw > <u>M</u> ultiline	Draw parallel lines based on the parameters you define.
Trim	TRIM / TR		<u>M</u> odify > <u>T</u> rim	Trims objects to a selected cutting edge.
Extend	EXTEND / EX		<u>M</u> odify > <u>E</u> xtend	Extends objects to a selected boundary edge.
Offset	OFFSET / O		<u>M</u> odify > <u>O</u> ffset	Offsets an object (parallel) by a set distance.
Object Snaps	OSNAP / OS / F3	CLICK 	<u>T</u> ools > Object <u>S</u> nap Settings	Brings up the OSNAP dialog box.

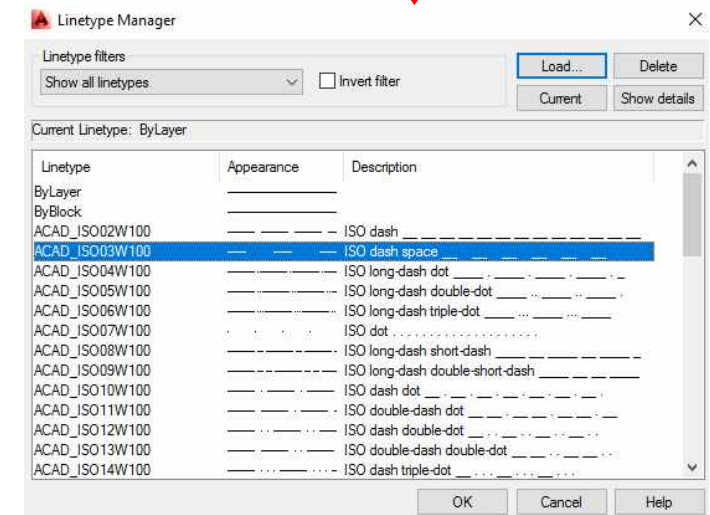
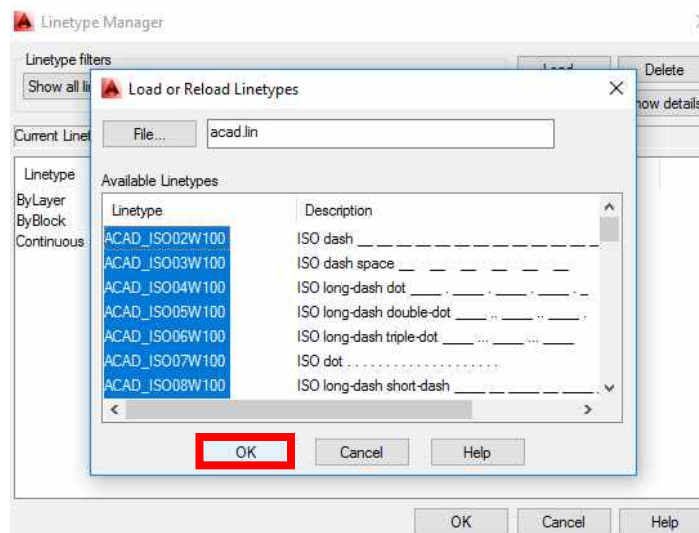
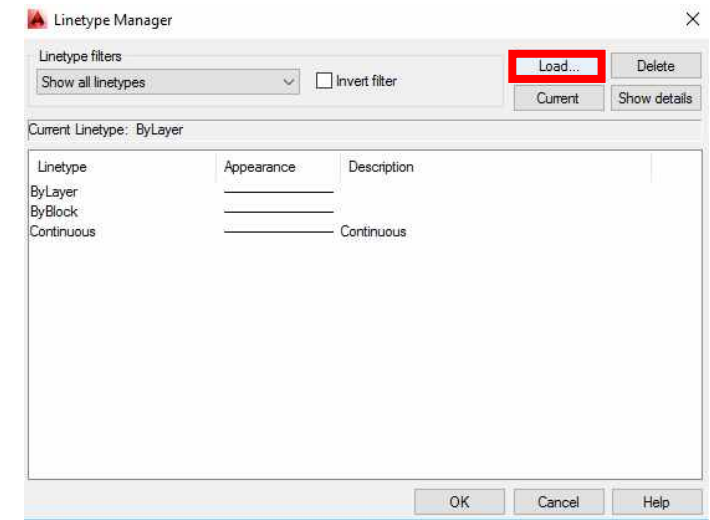
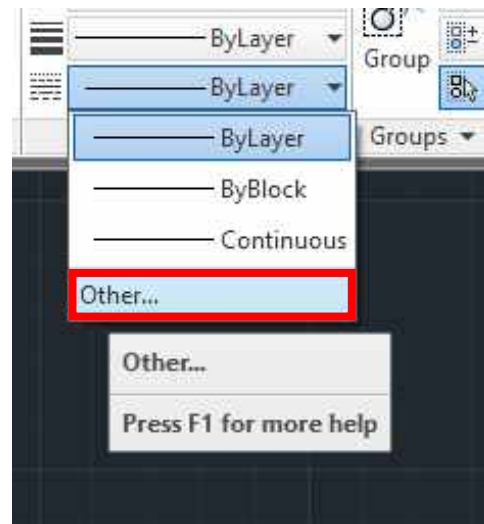
Command	Keystroke	Icon	Menu	Result
Move	Move / M		<u>M</u> odify > <u>M</u> ove	Moves an object or objects
Copy	Copy / CP		<u>M</u> odify > <u>C</u> opy	Copies object(s) once or multiple times
Stretch	Stretch / S		<u>M</u> odify > <u>S</u> tretch	Stretches an object after you have selected a portion of it
Mirror	Mirror / MI		<u>M</u> odify > <u>M</u> irror	Creates a mirror image of an object or selection set
Rotate	Rotate / RO		<u>M</u> odify > <u>R</u> otate	Rotates objects to a certain angle
Fillet	Fillet / F		<u>M</u> odify > <u>F</u> illet	Creates a round corner between two lines
Chamfer	Chamfer / CHA		<u>M</u> odify > <u>C</u> hamfer	Creates an angled corner between two lines
Array	Array / AR		<u>M</u> odify > <u>A</u> rray	Creates a repeating pattern of the selected objects
Layer	Layer / LA		<u>F</u> ormat > <u>L</u> ayer	Starts the Layer and Linetype property dialog box
Text	Text		<u>D</u> raw > Single Line <u>T</u> ext	Creates a single line of text
Dimension	Dim	Many	<u>D</u> imension > (<i>pick one</i>)	Dimensions previously drawn objects
Scale	Scale / SC		<u>M</u> odify > <u>S</u> cale	Proportionately resizes (or scales) objects

Line type (dot line)

*** Dot line for showing
sunshade or elements that are above plan level in plan

*** Load dot lines

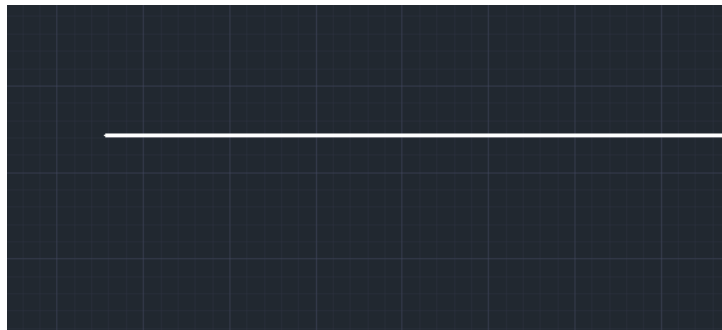
*** Now select your preferred line



*** Select one line type
then press **ctrl A**

*** Select your preferred line type
then press **ok**

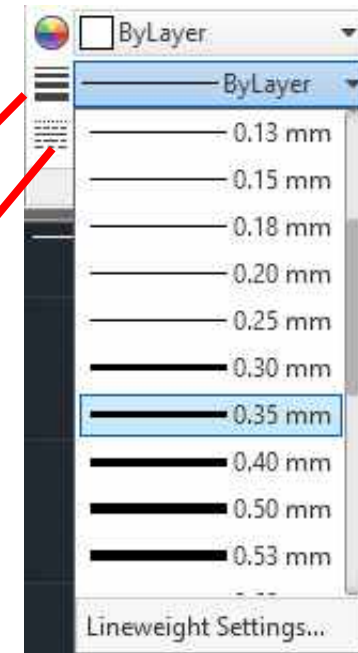
Changing a line type/ properties (thickness)



1. select the line

For line thickness click here

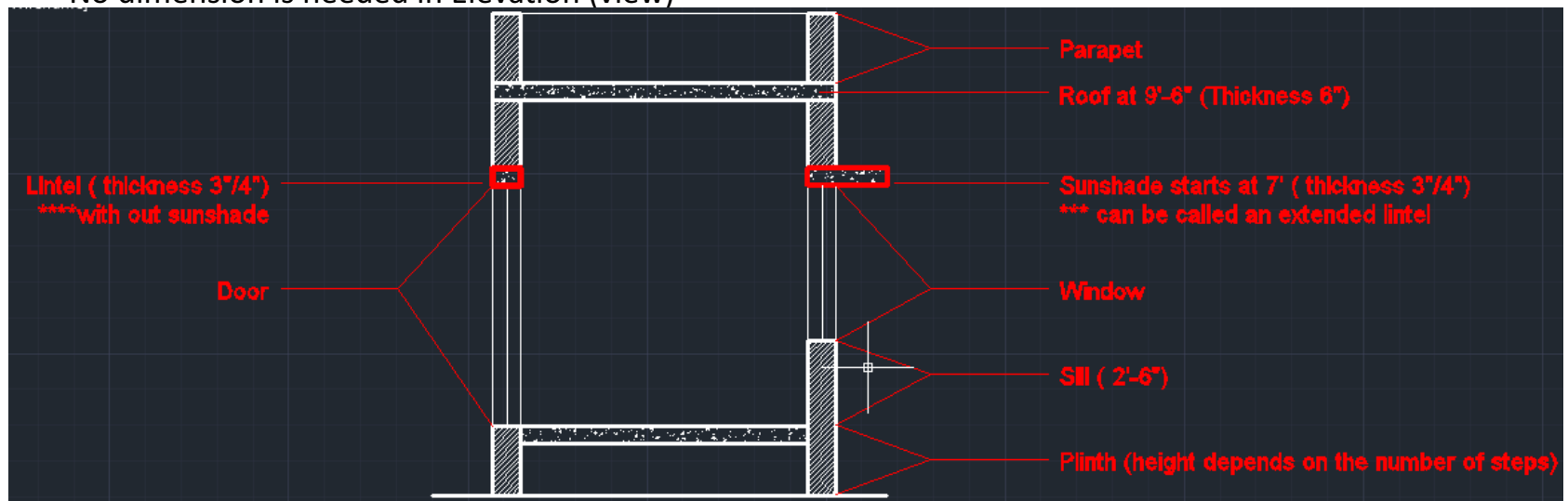
For Dot line click here



Section

*** Add dimension in section

*** No dimension is needed in Elevation (view)

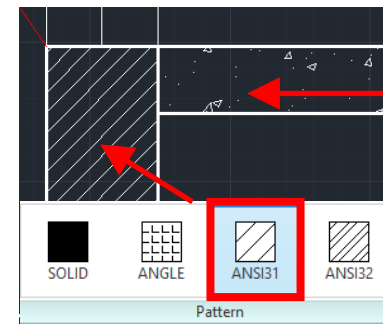


Sample section showing details

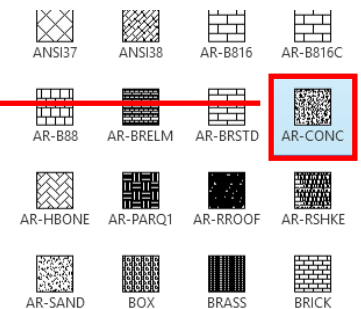
Applying Hatch (for material)

Press H for hatch

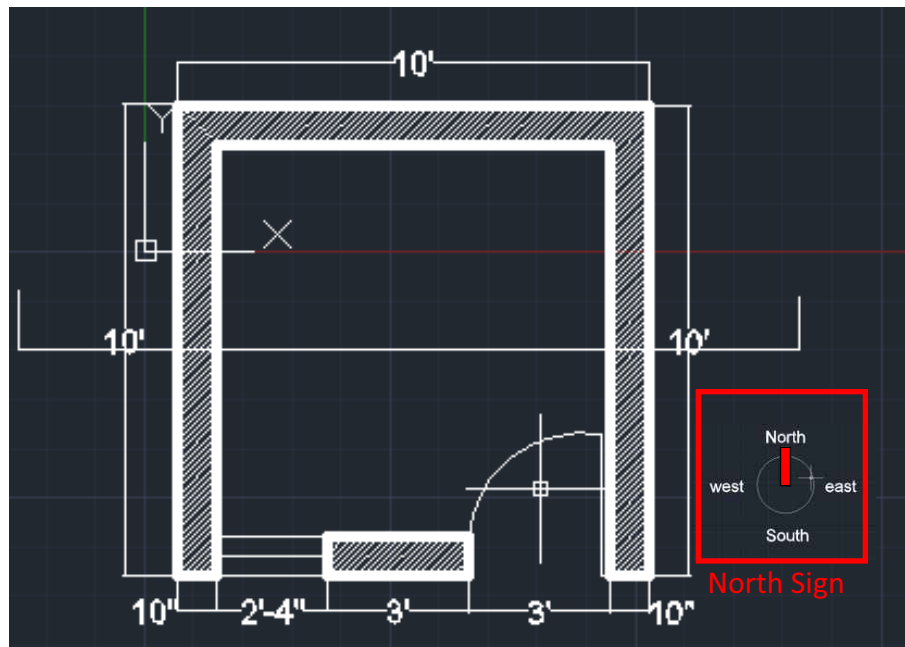
Select your preferred hatch type



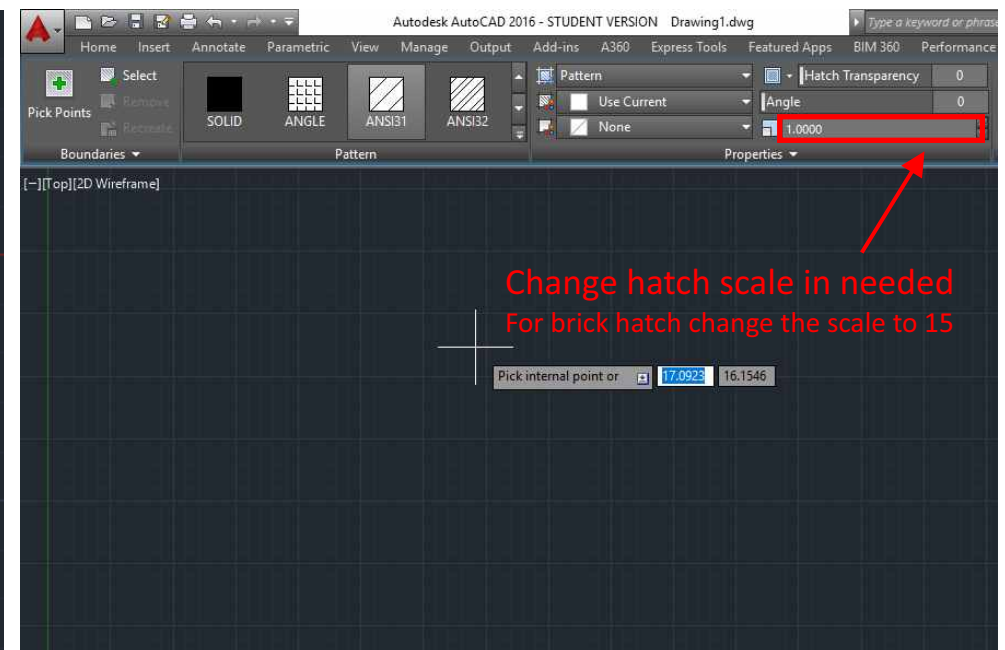
Brick hatch (wall)



Concrete hatch (lintel/ roof, floor, sunshade)



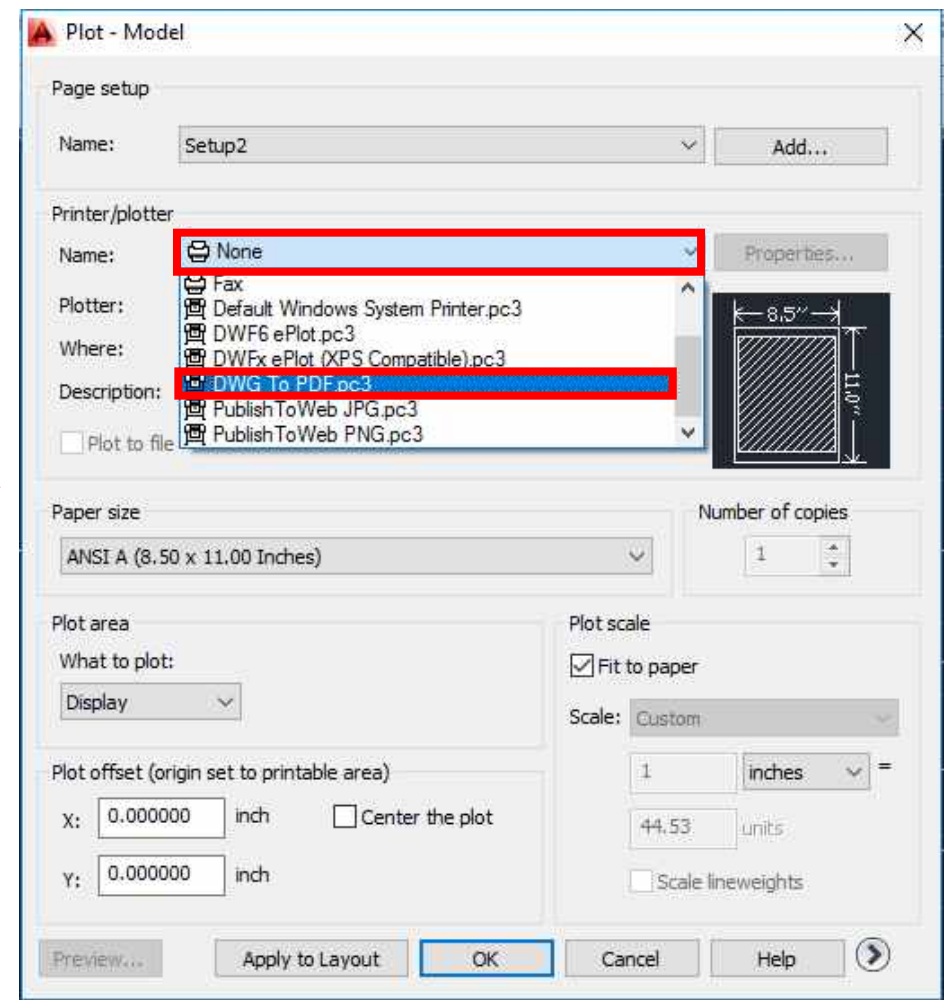
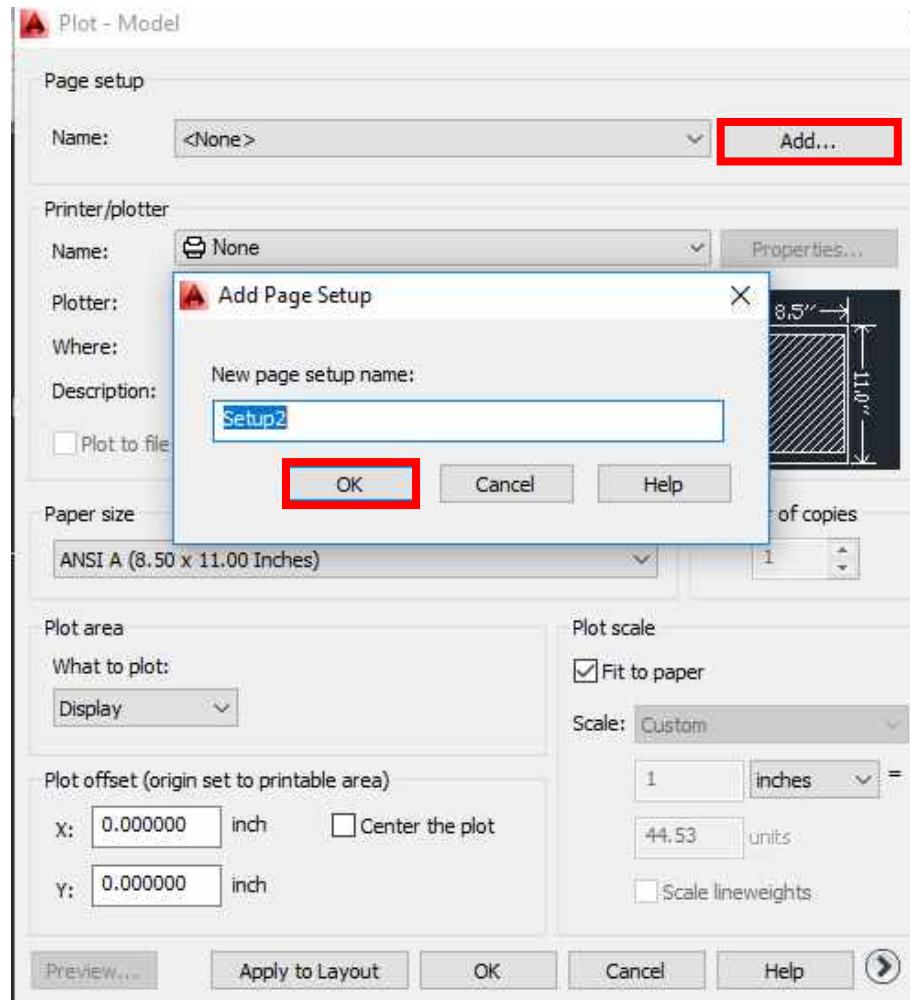
Plan



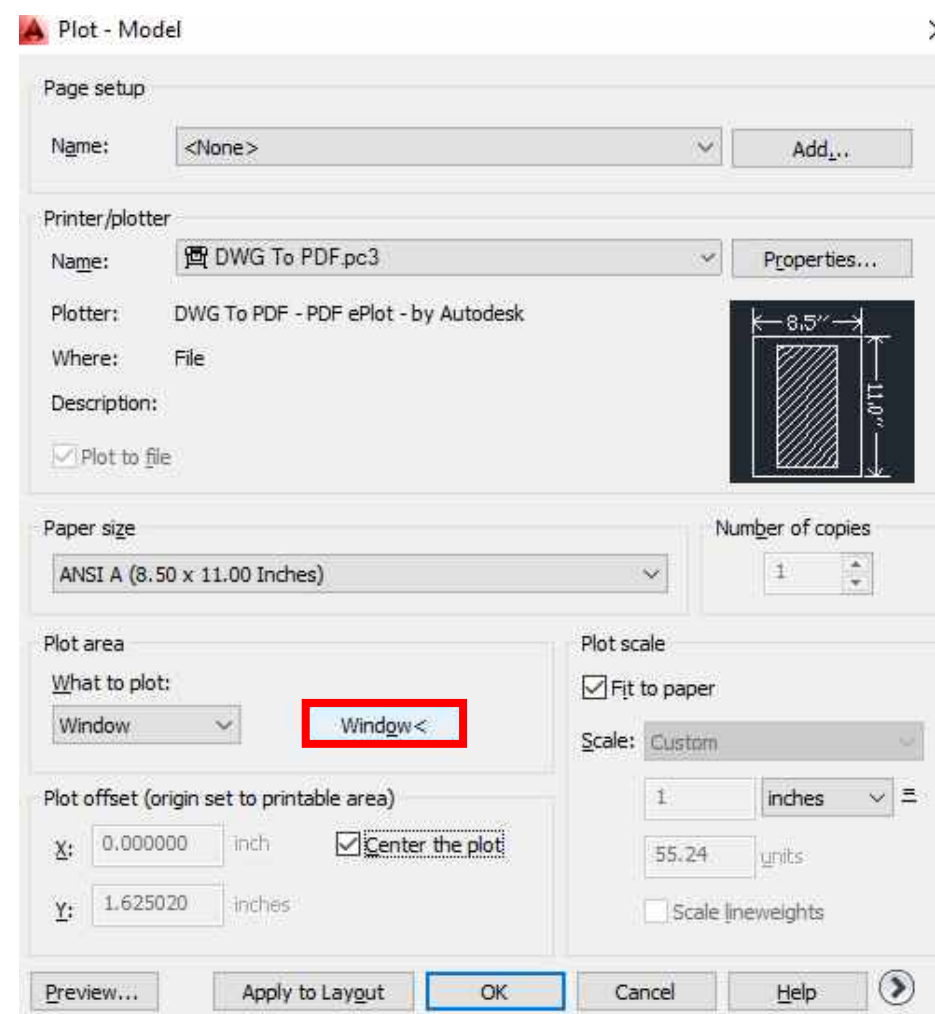
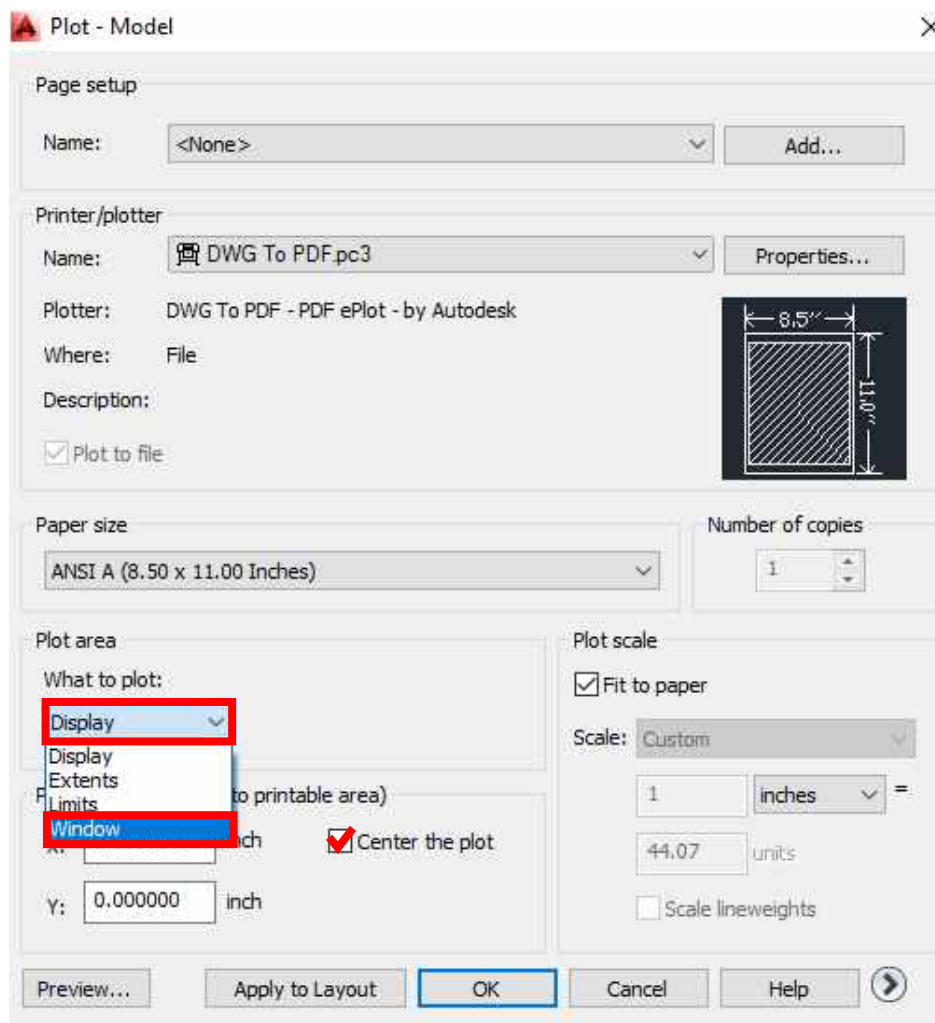
Change hatch scale in needed
For brick hatch change the scale to 15

Print

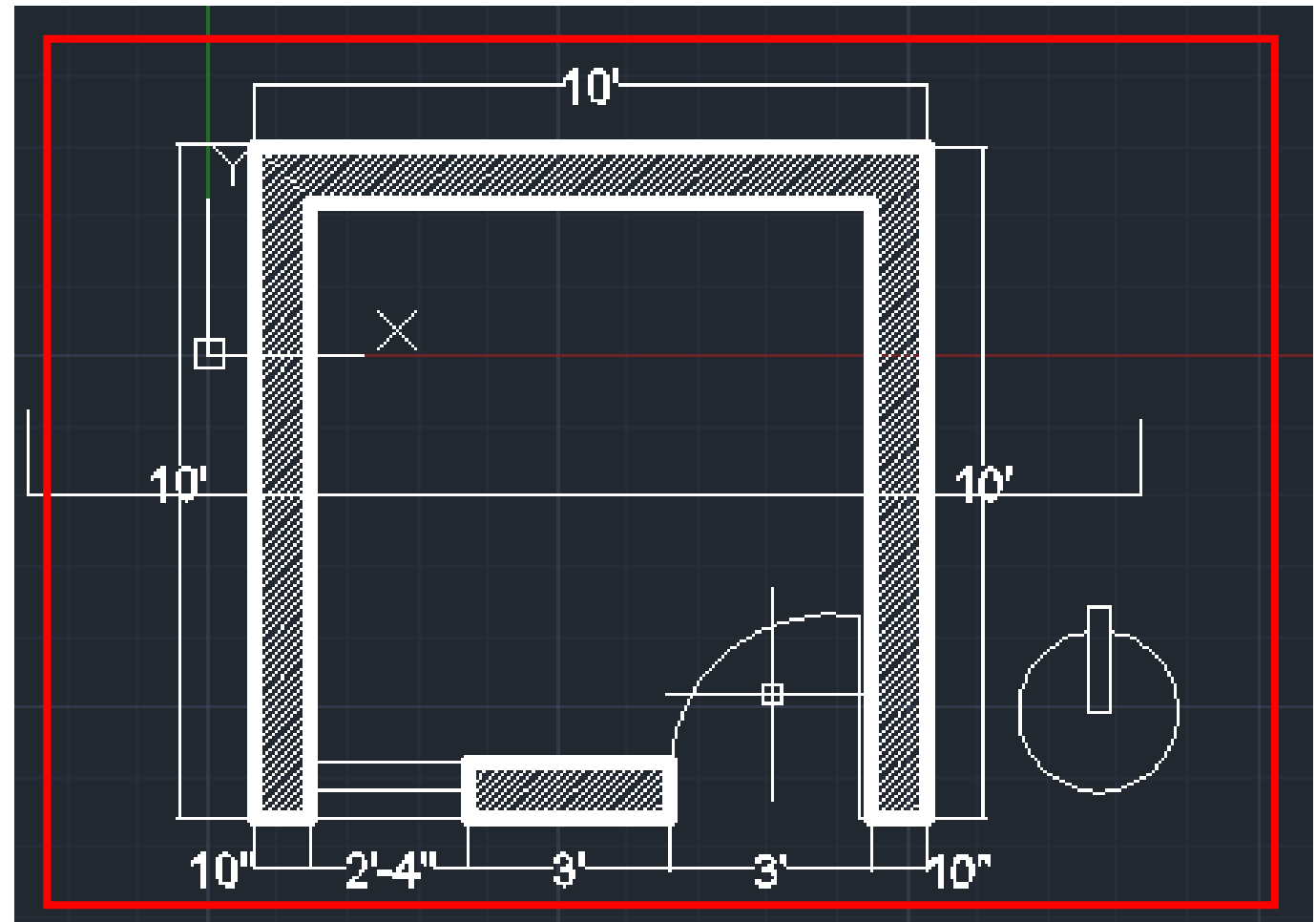
***Press Ctrl P



Print

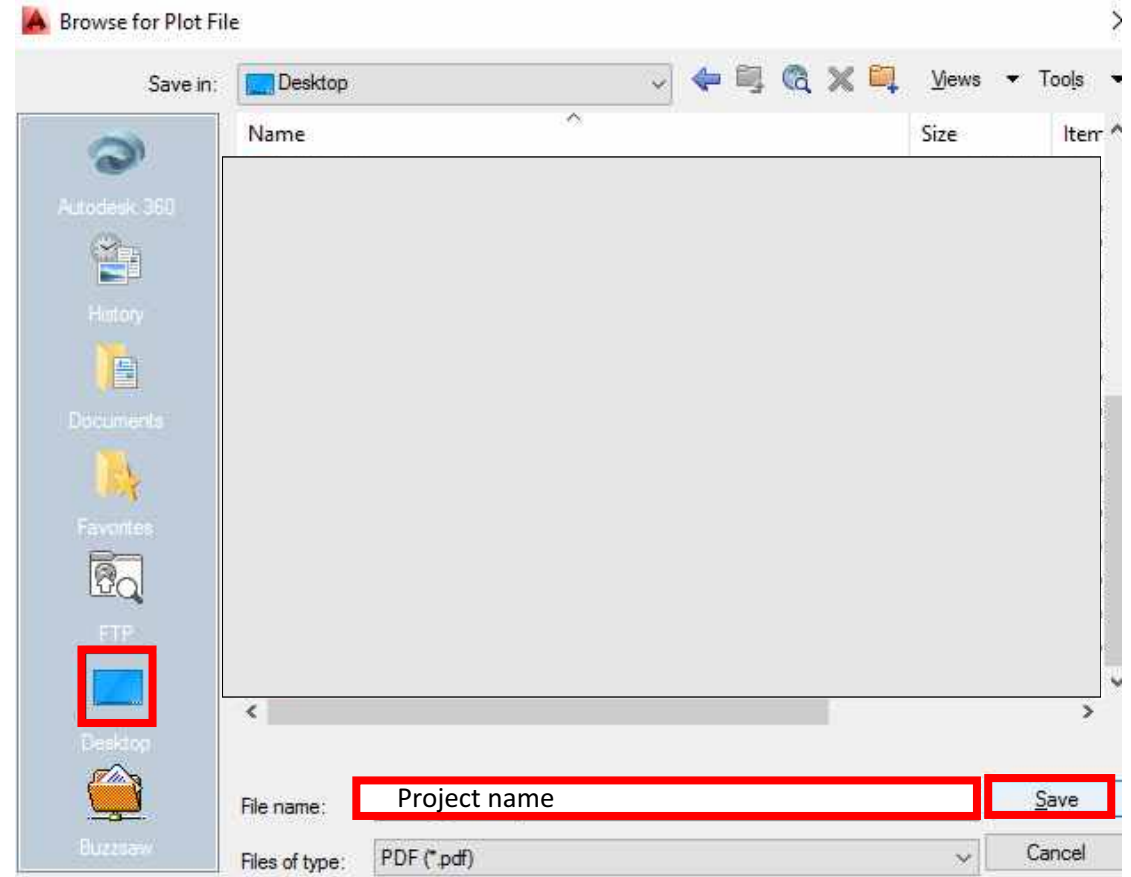
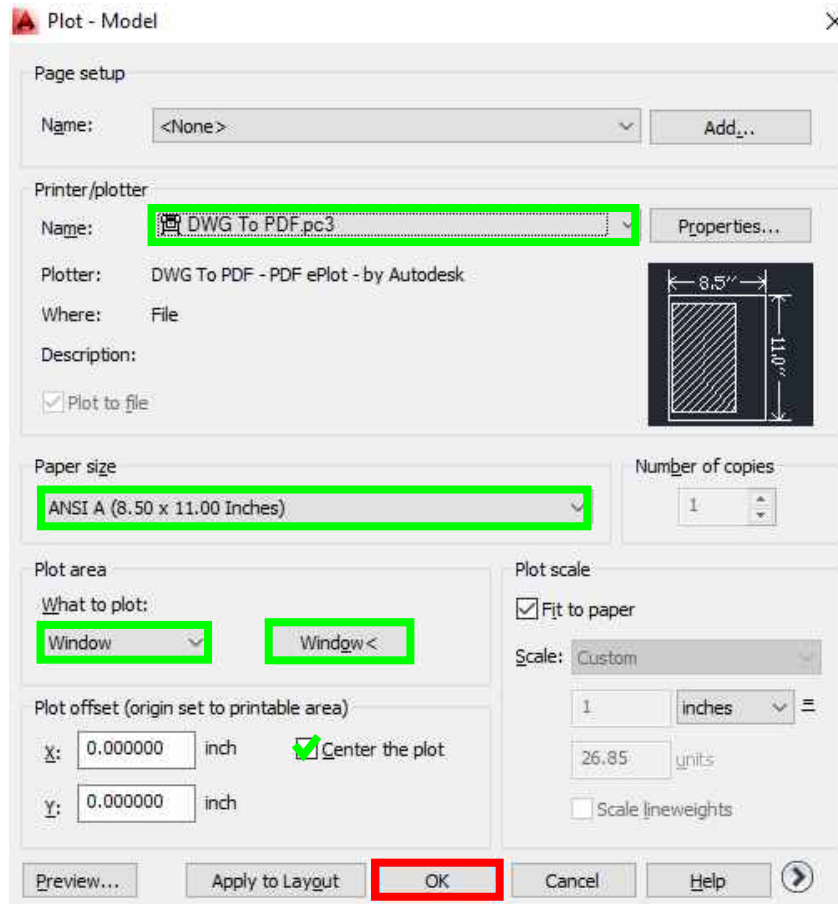


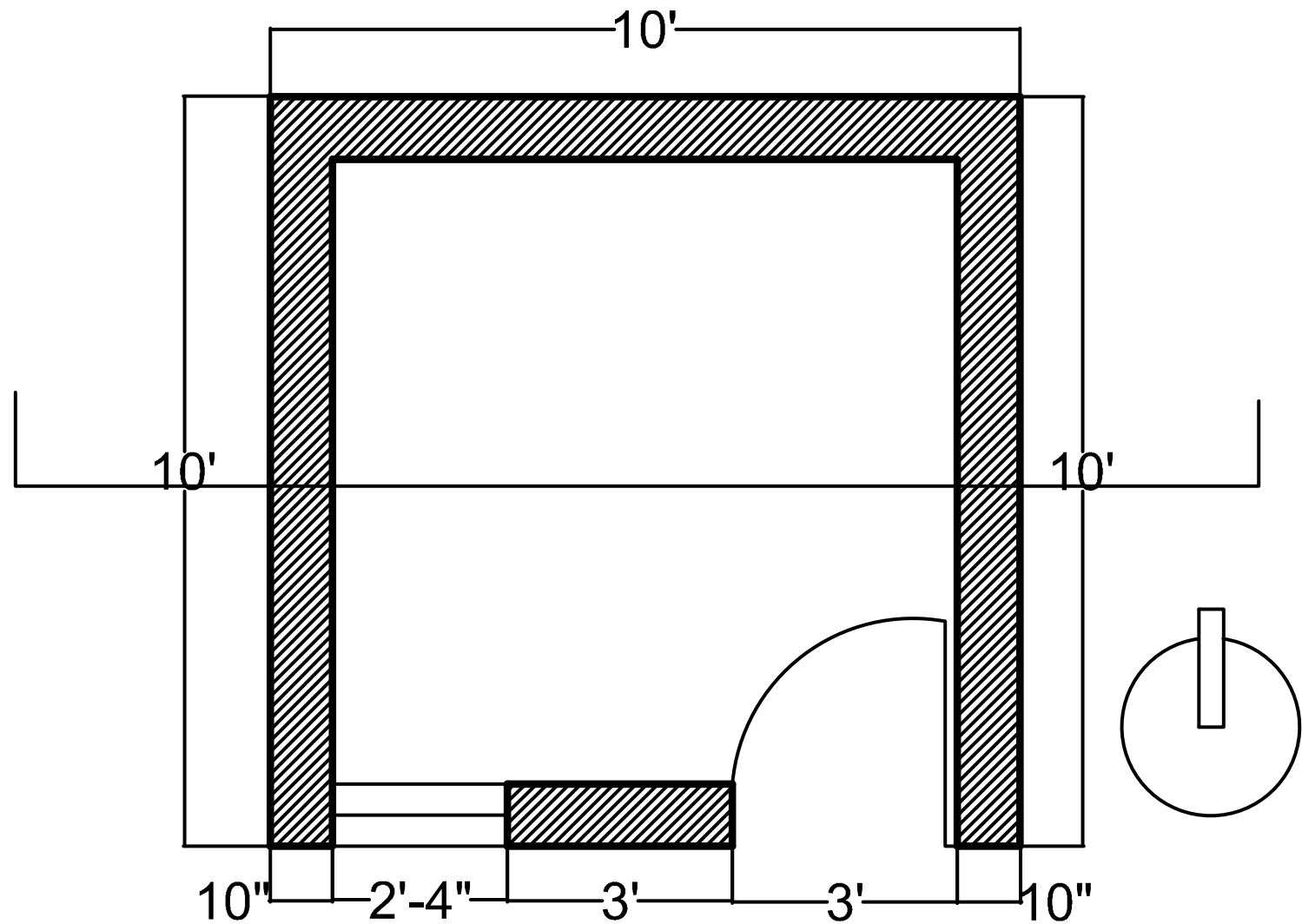
Print



Select the area you would like to print

Print





*** Check the pdf file

Thank you for investing your valuable time!!!
I hope you have learned something!!
No one can teach you any thing, unless you are eagre to learn
So learn for yourself, learn as much as you can

Even if you haven't succeeded or achieved your goal/ dream
don't be disappointed! remember you have tried!
There's nothing else better than trying and having hope
Keep on trying, try some thing new... think out of the box
be fearless, make mistakes, learn from mistakes..

Please never lose hope!
You don't have to be like some one.. be yourself.. make an example of yourself.
Be honest, Be a good human being...

Enjoy life... indeed life is more beautiful than the way we live

May you all be successful in your life
The best wises and prayer