

ÜBER RADIANT BASIC TUTORIAL

by {NtK} Perun

OK lets start with getting all you need to create a Elite Force 2 map.
This is what you need:

ÜberRadiant tool :

<http://www.fileplanet.com/129283/120000/fileinfo/Star-Trek:-Elite-Force-II-GDK-v1.0.0?r=3>

ÜberRadiant common textures update :

[*http://eliteforce2.filefront.com/file/Uber_Radiant_System_Textures_Update;56249](http://eliteforce2.filefront.com/file/Uber_Radiant_System_Textures_Update;56249)

**Put these in base folder of elite force 2 game with the rest of .pk3 files*

Ok now you should learn something about sizes in ÜberRadiant tool...
Check this tutorial from Chrisstrahl :

http://eliteforce2.filefront.com/file/BoundingBox_Introduction;100237

Check also these for more help:

http://eliteforce2.filefront.com/file/EF2_Tutorials_berRadiant_Basics;81301

http://eliteforce2.filefront.com/file/EF2_Tutorials_berRadiant_Basics;81301

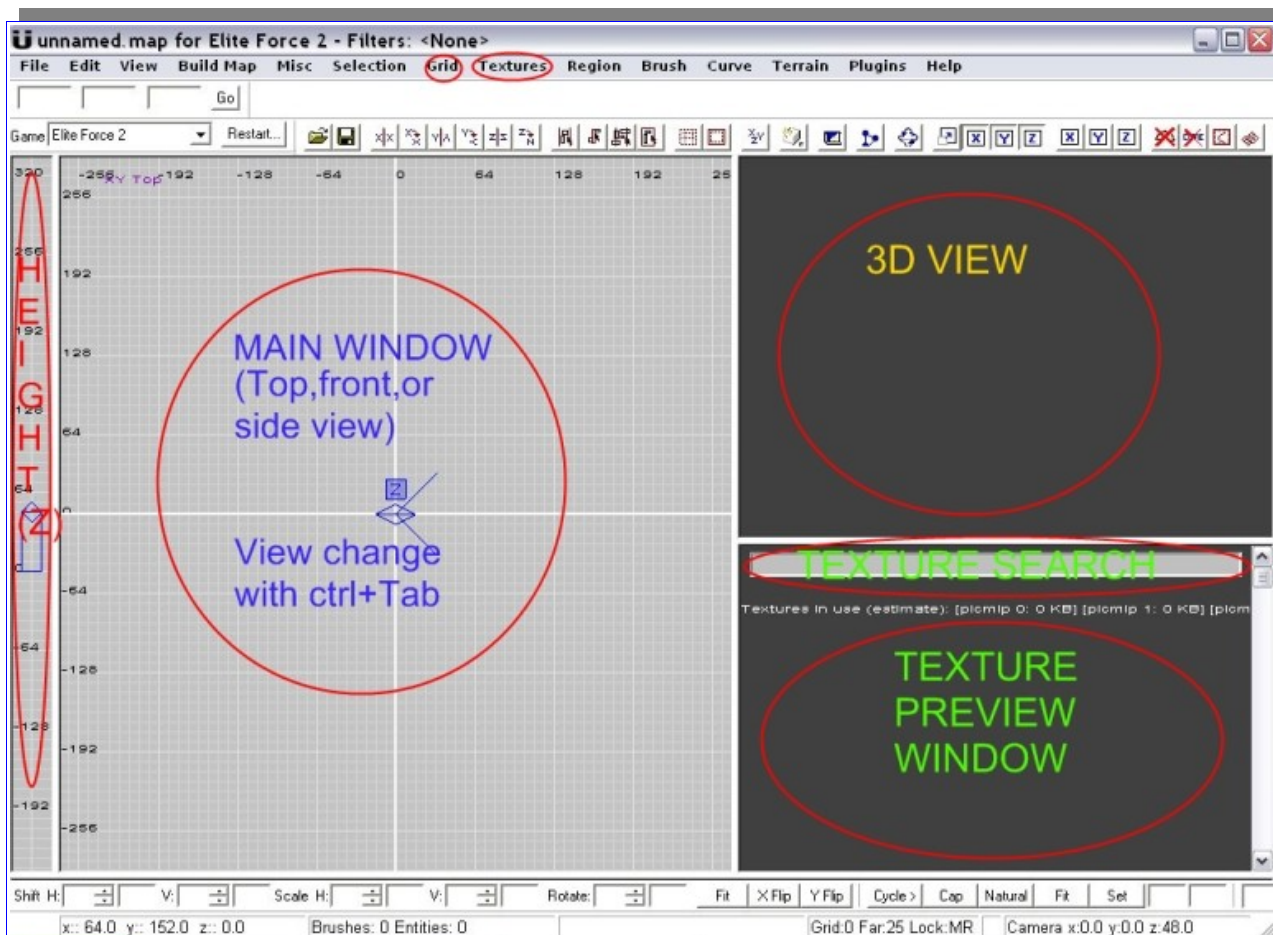
There you will see how much units player is tall and wide so your rooms and hallways wouldn't be to small.



Ok lets start with our first map...

Start your EF2 map editor and you will see then this:

You should set your tool for game Elite force 2 (upper left).
So here is your tool...



1. **MAIN VIEW WINDOW** - there you do all the work (I prefer to see only one side but you can change this in EDIT-PREFERENCES-LAYOUT if you want to see all 3 views at once (top,side,front)).

- * Zoom in and out with middle scroll mouse button
- * Click right mouse button to open options menu

2. Next you see **HEIGHT** -here you change brushes height.

3. On the right side you will have **3D VIEW** where you can see your work in 3D and you can also pick & size brushes etc.

- * You can move trough it by holding right mouse button
- * You can pick brushes with left mouse button or brush faces with ctrl+shift+left mouse button to texture only the one face of certain brush

4. Below 3D view window is **TEXTURE WINDOW** here you can preview textures that you have loaded

5. **GRID SIZE** here you chose on how big grid you need/want to work. I use mostly grid 32 (keyboard shortcut "6") for start when I make floors,walls and rest bigger things so its easier to get wished size of the brush.

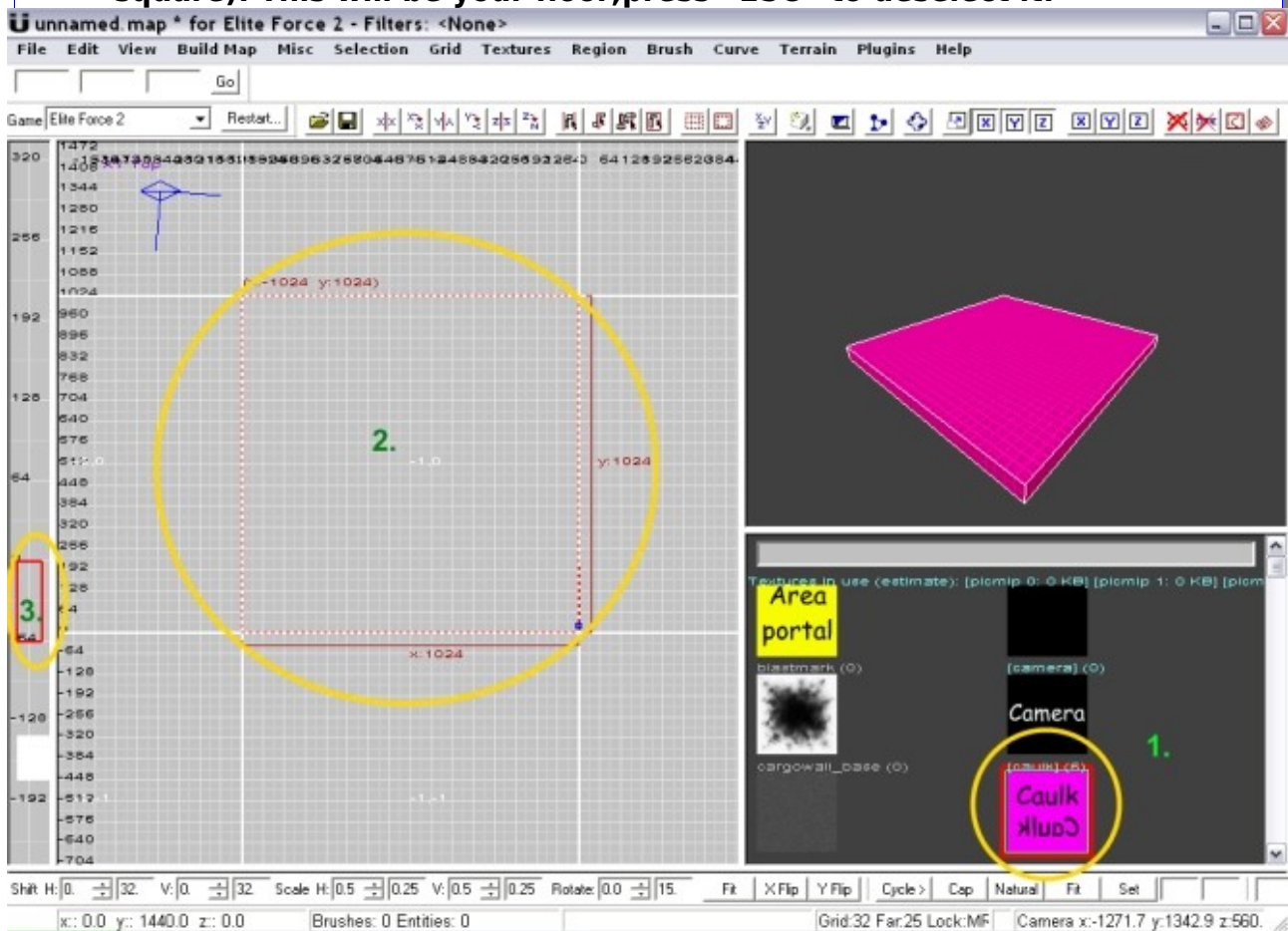
Latter on as you will do details on map you'll use grids 4 and 1 units (keyboard shortcuts "4" & "1") .

FIRST ROOM

First go up and locate Textures tab click it and click on COMMON textures to load them.

Common textures are base for building a map.

1. So now when you have your common textures loaded choose CAULK texture in texture window, press "6" (the shortcut to grid 32) and make brush in size of $1024 * 1024$ and lower it under 0 on height (Z) grid window on left (by holding down the left mouse button inside the red square). This will be your floor, press "ESC" to deselect it.



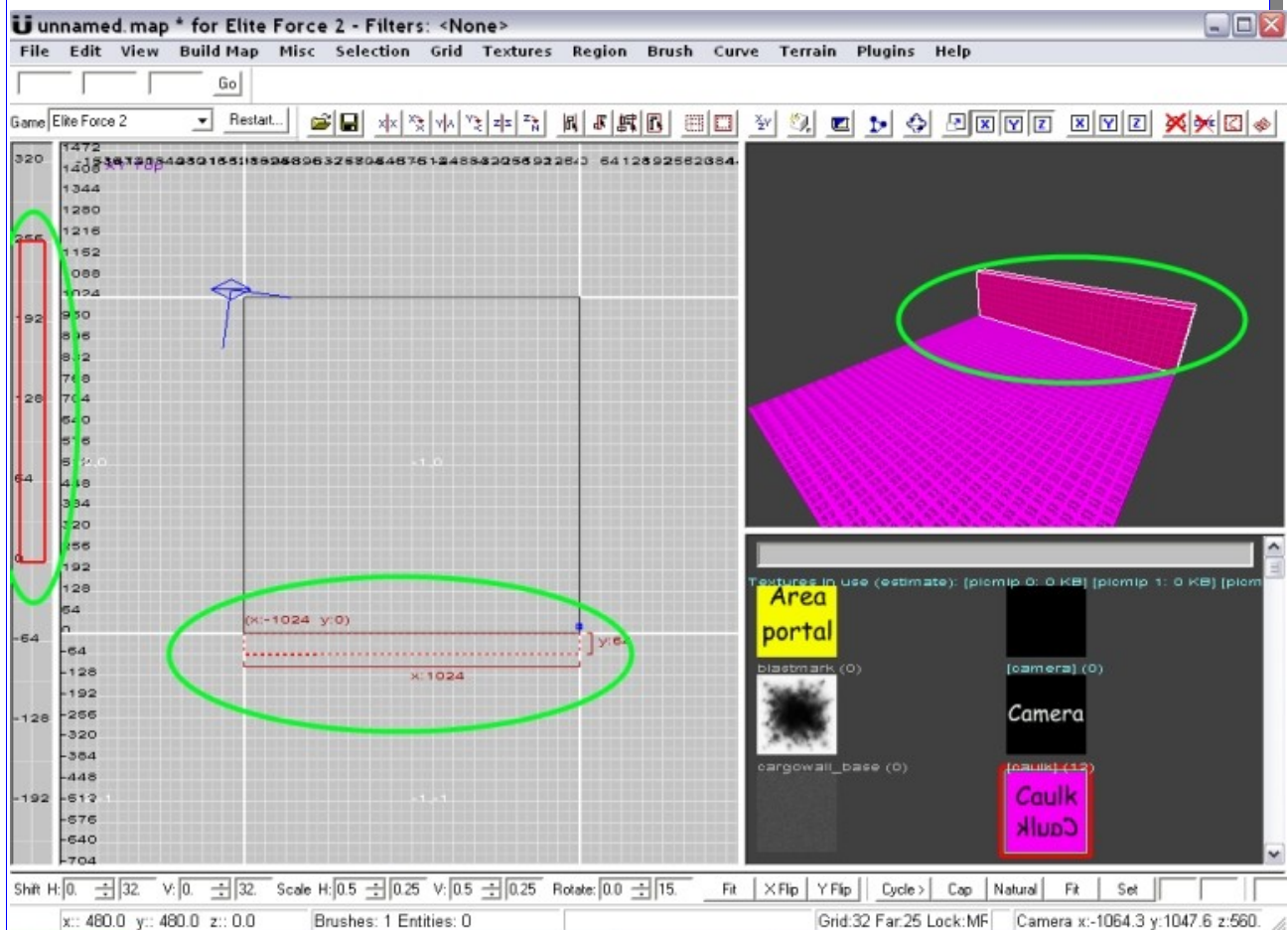
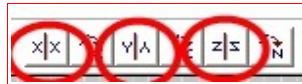
2. Next you make walls, make one brush 1024 units long and 64 wide and put the brush above the 0 in height window and give it a height of 256 units in height window (hold left mouse outside red square and move up to border of 256 units).

Now press "Space" to clone the brush and move the cloned one on the other side of floor brush, clone it again and rotate brush in Z direction and clone it again and move it on place for last wall.

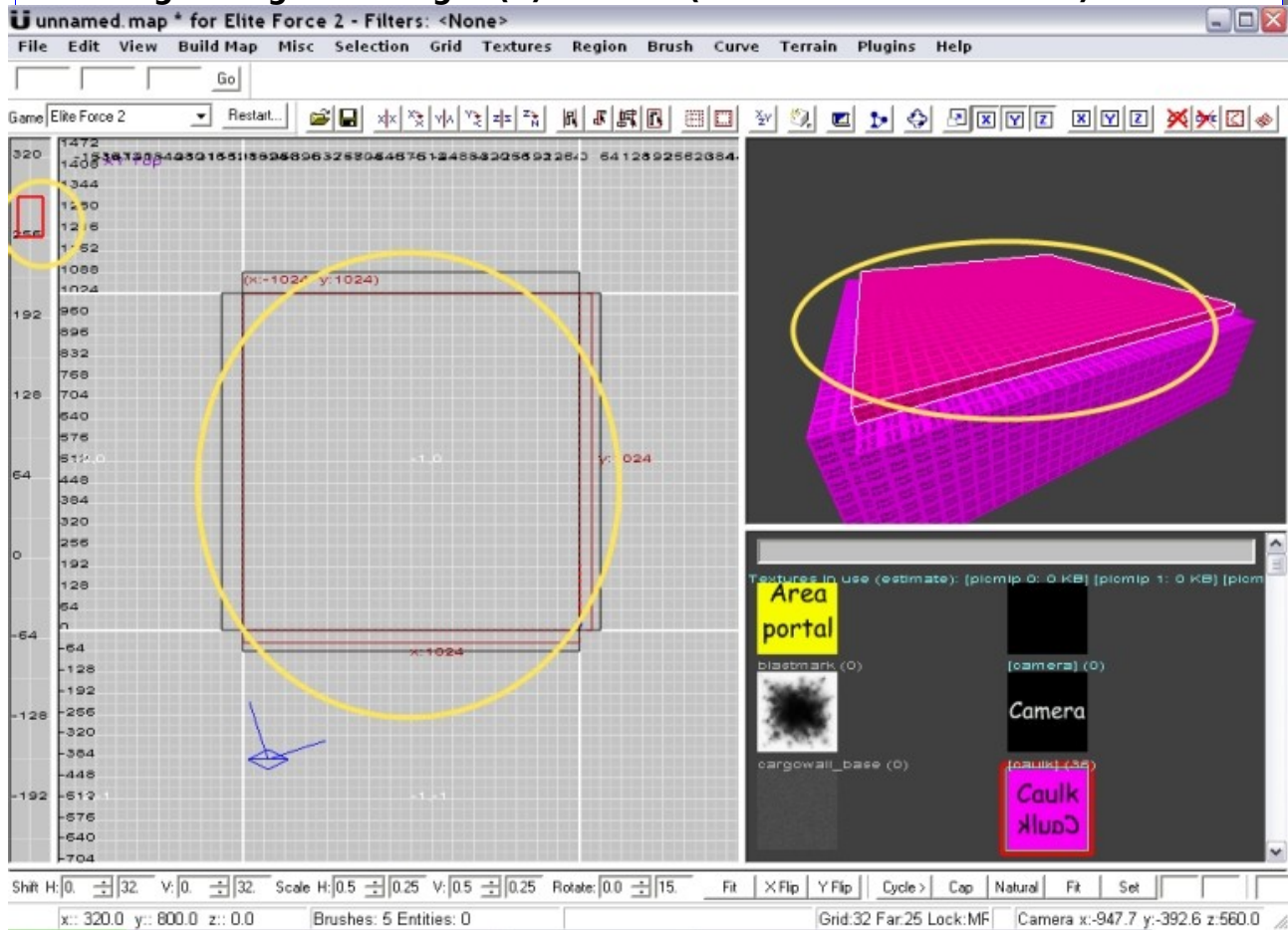
Picture of rotate buttons:



Picture of flip buttons:



3. Select floor brush (shift+left mouse) and clone it (space) and move the cloned brush up to place where ceiling will be, take care that its on right height on height (Z) window (above 256 units border).



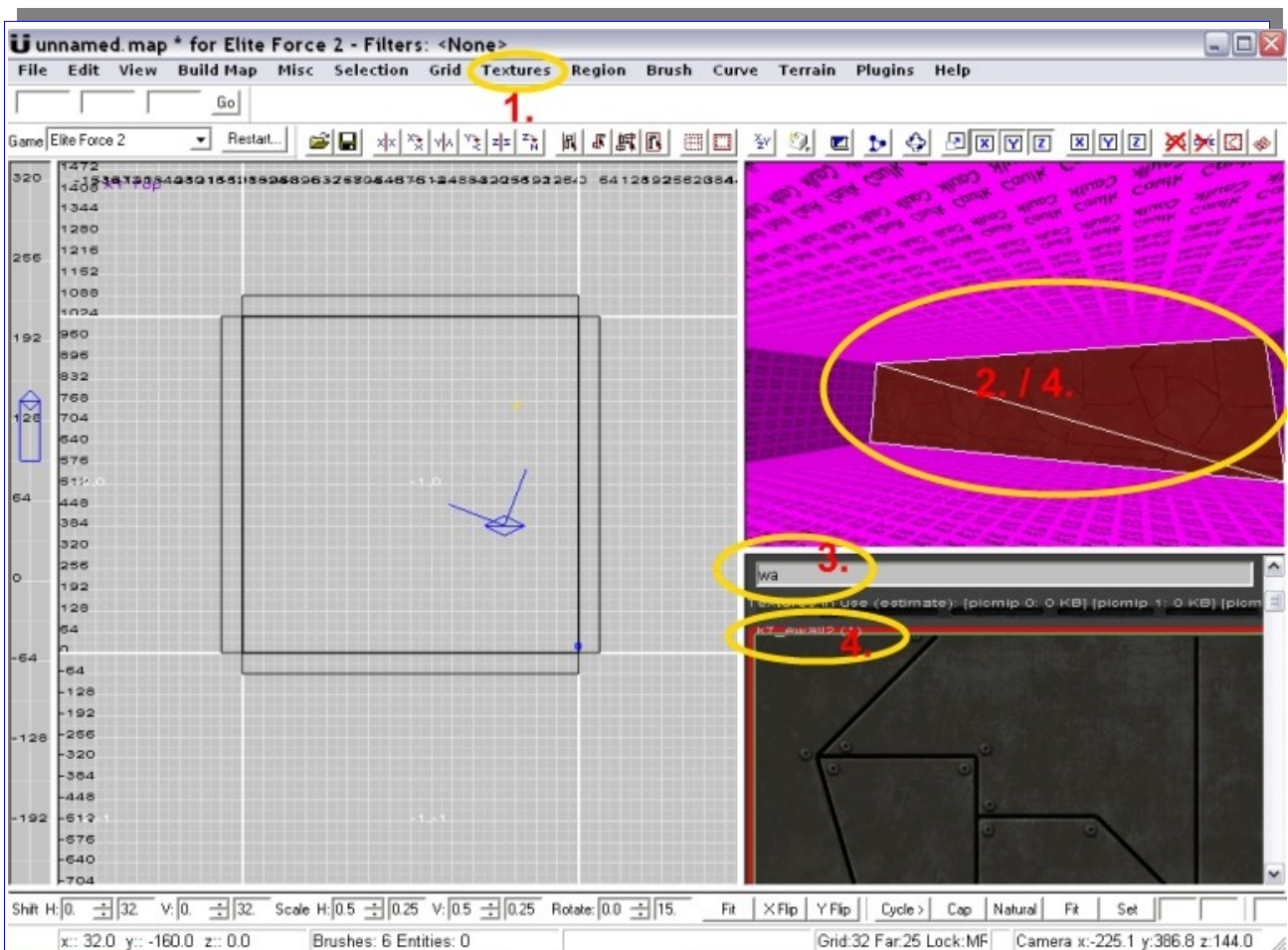
TEXTURING

Now only thing in our first room to do is to texture the inner walls.
So lets say you make a klingon look map:

Click on textures tab and load texture set "k-7_starbase" go in 3D view into your room and select **FACE** of wall by holding down ctrl+shift and picking the face of wall by clicking left mouse on surface.

Now when you selected the face of that wall brush click on texture finder and type W or Wa or long Wall to filter certain textures by letter.

Now select "k7_ewall2" texture and it will apply to the face of wall brush, do the same with the rest 3 walls.

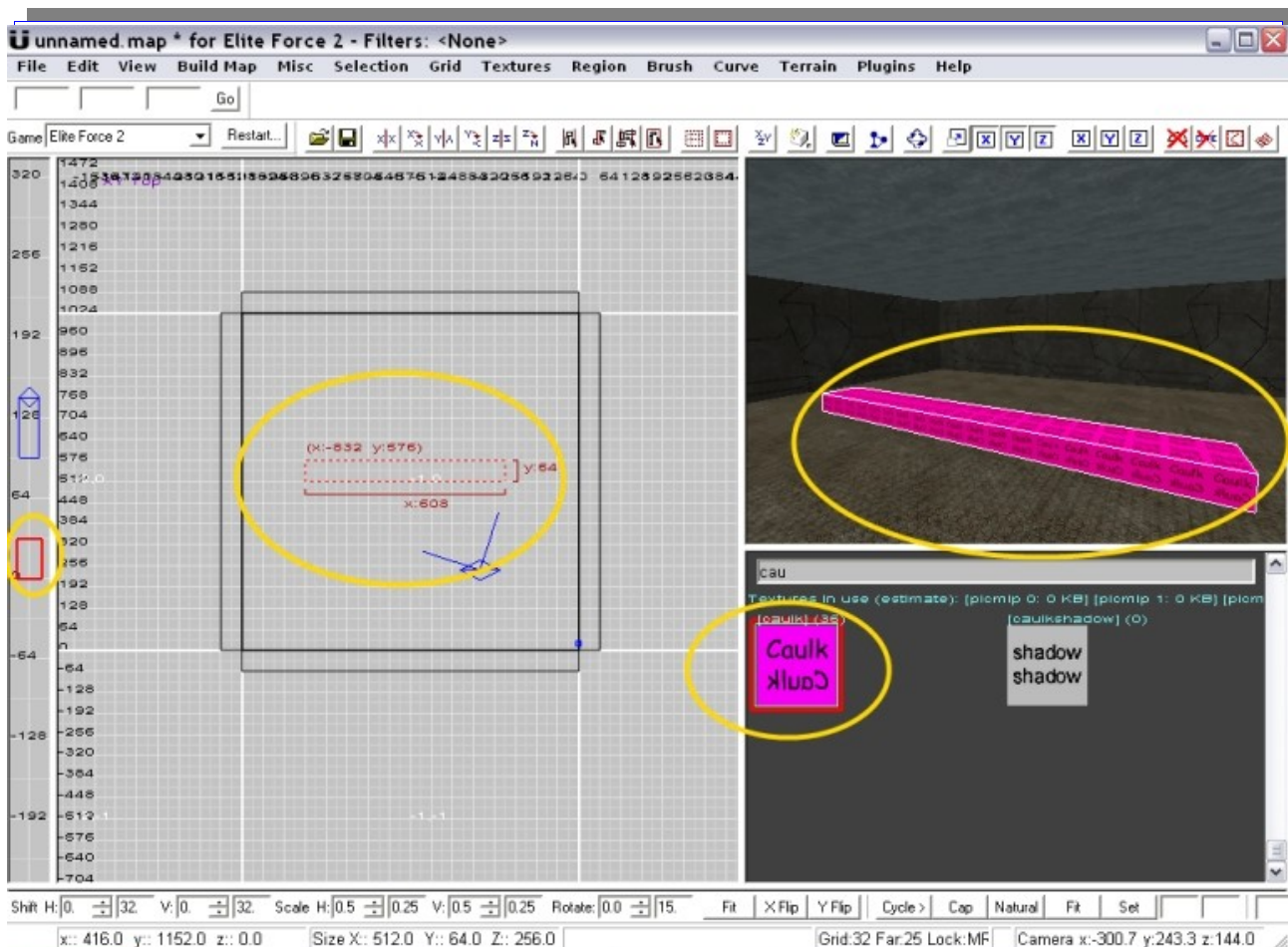


With that method texture the floor and ceiling with desired textures.

DETAILS (TRIMER)

Textures come in certain sizes 32,64,128,256,512 so if you want the certain texture to fit you should do brushes in that sizes.

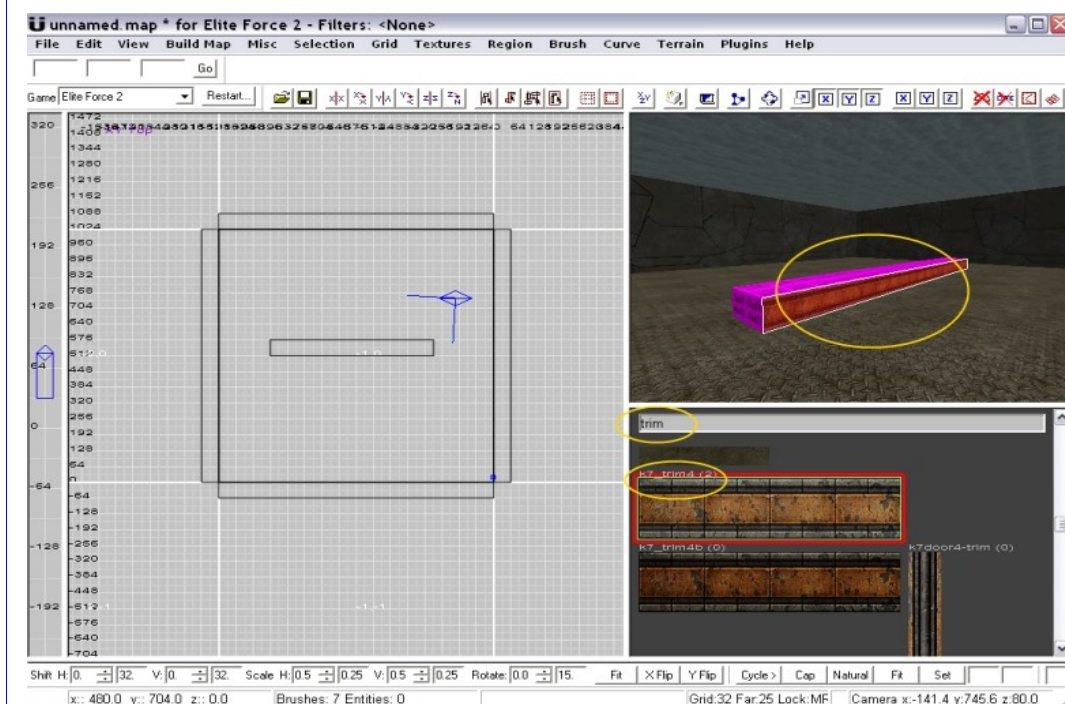
Example: Make brush in center of your room in size 608(x)*64(y) and 32(z) units high,that will be out trimmer so our wall will look more complex.



OK now deselect brush and select its 2 faces leaving top and other two smaller sides as they are.

Go to texture finder and type " T " or "Trimmer" doesn't matter much it will only filter further in case of Trimmer.

OK with those 2 sides selected select one of trim brushes , I had choosen texture "k7_trim4" and it fits perfect.



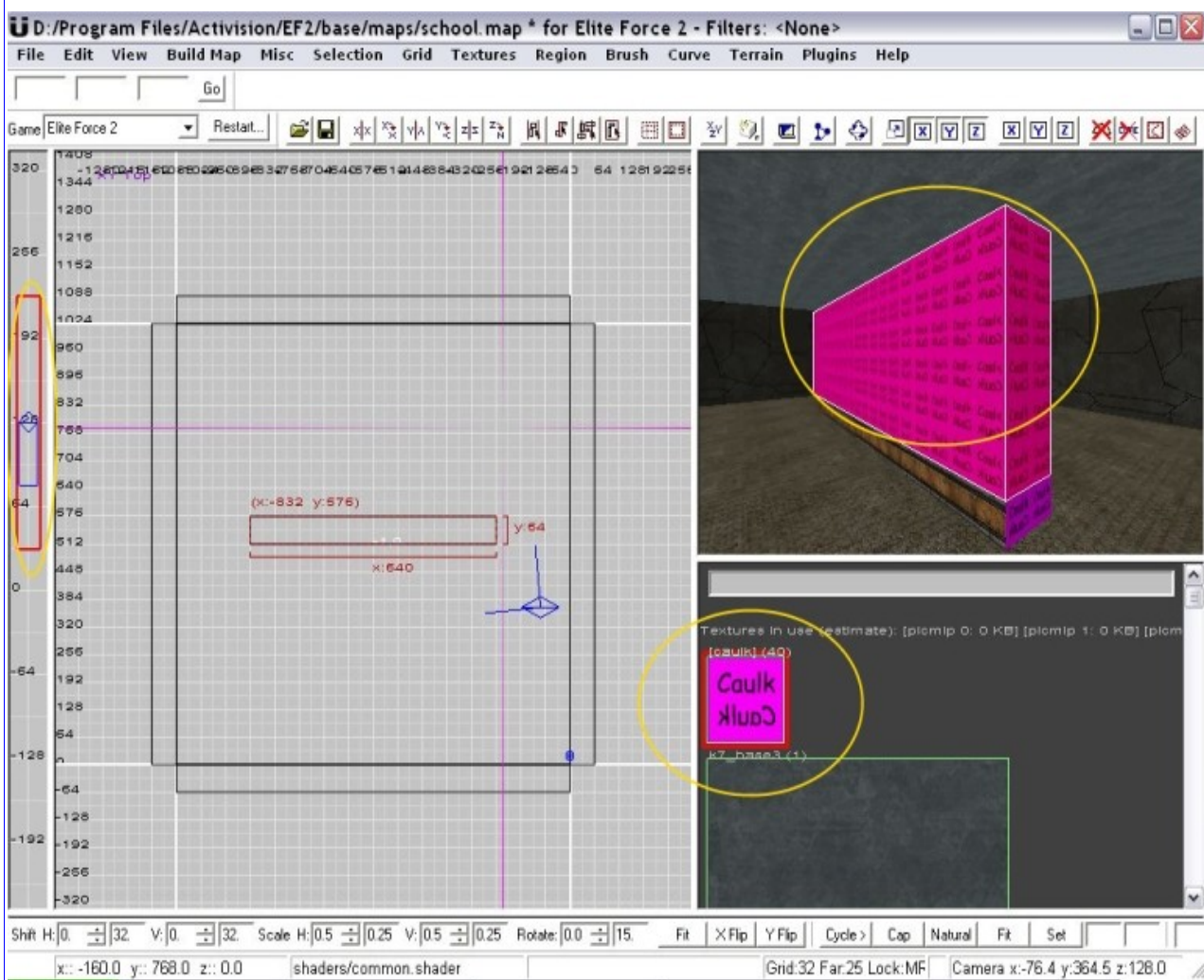
OK now when we done that lets do the rest of wall.

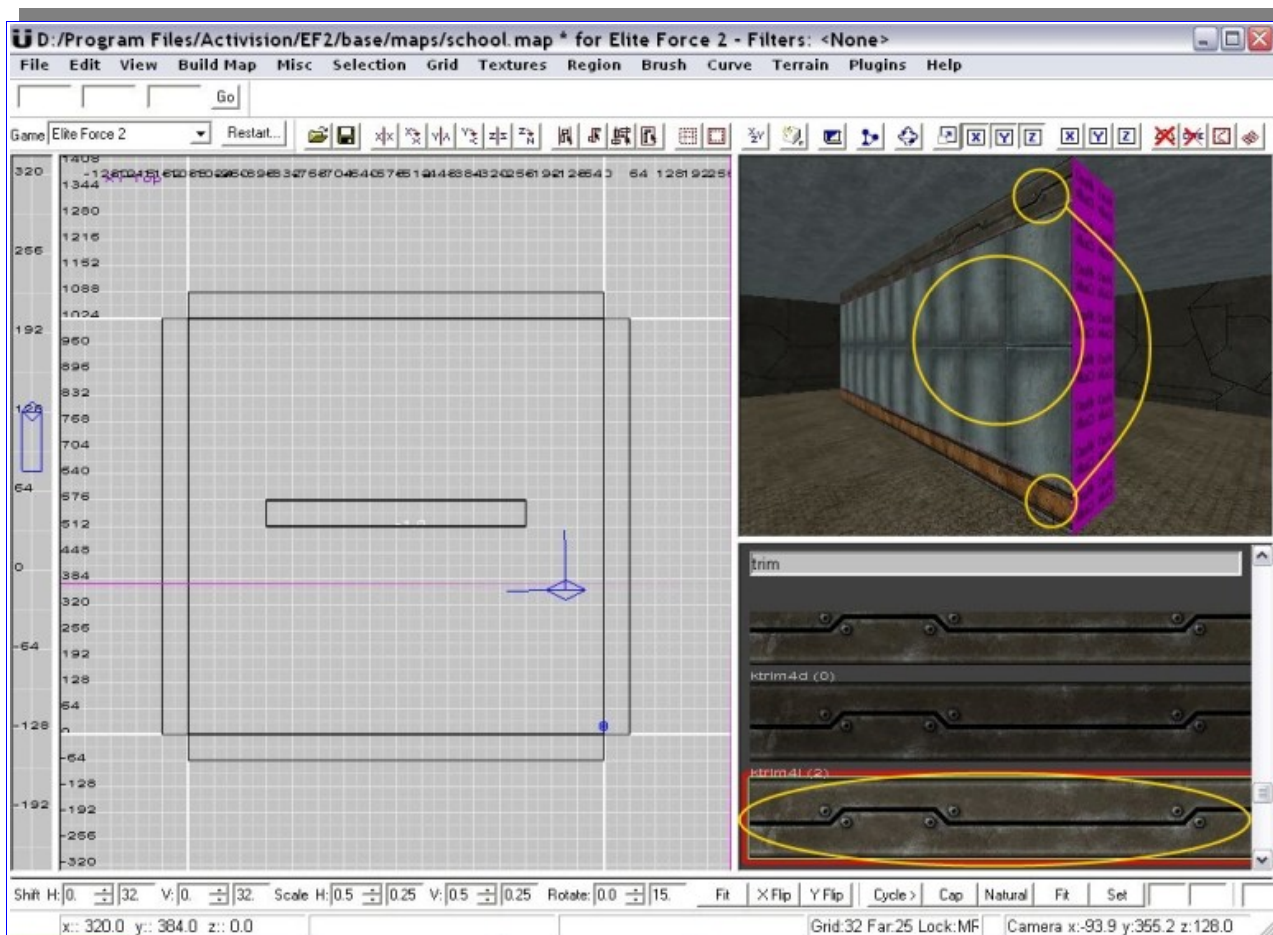
The best way is to select our trimmer brush (shift+left mouse) and clone it and put it on top of trimmer brush and lift it up so it wont overlap.

Now increase the height of brush to 192 units in Height (z) window on left (In 32 grid size that is on half between the 192 and 256).

Now get rid of the trimmer texture and go to texture finder and enter CAU now find and select CAULK texture,now your wall is ready for texturing, select the faces as for trimmer and go to texture finder and enter W and find some nice texture for your wall and apply it.

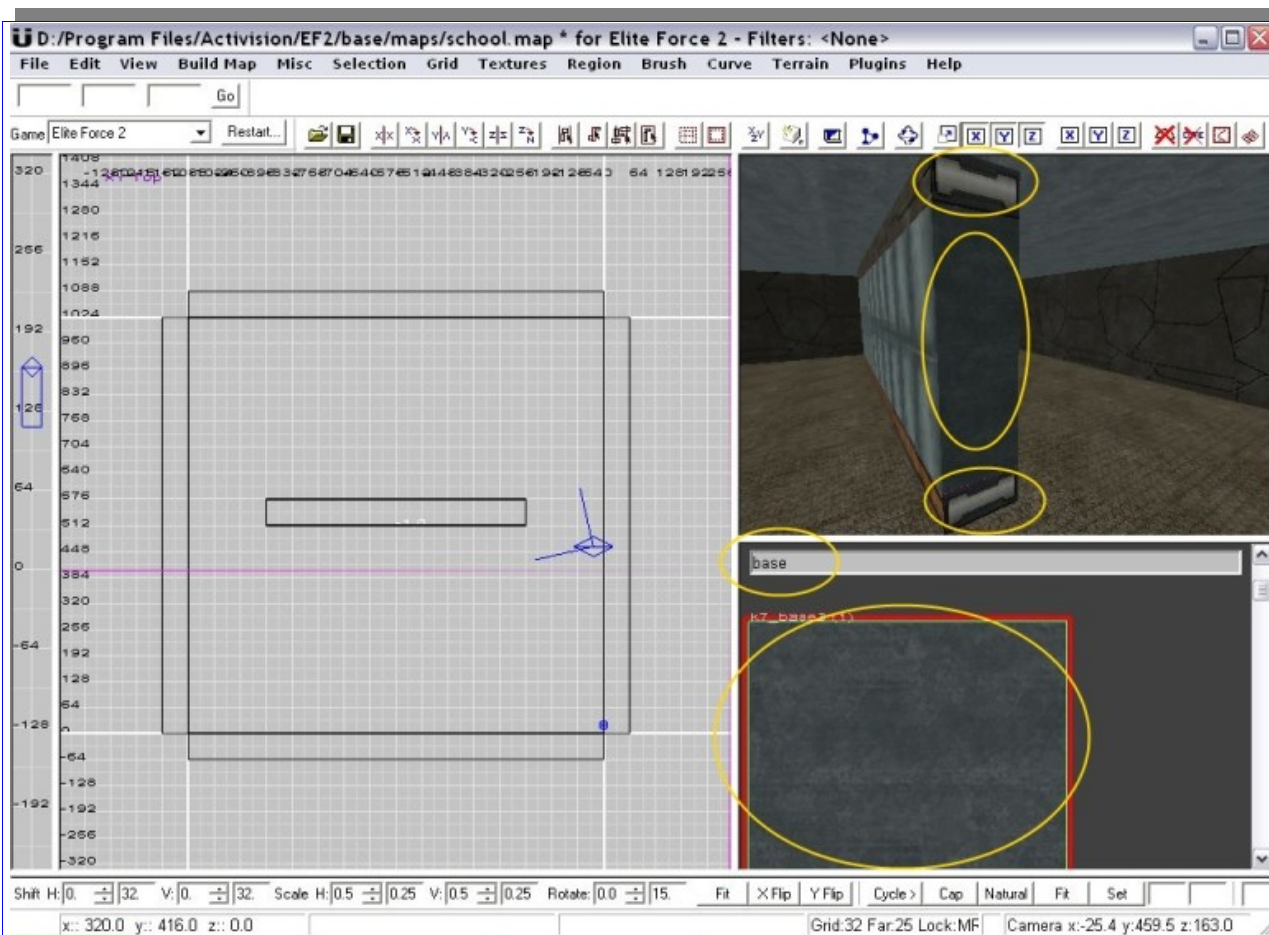
Next you do again new trimmer that will be on top,so select the bottom trimmer brush clone it (space) and move it up on top of wall,again select caulk texture and find some nice trimmer texture.





This way it should look on end

OK now select 4 remaining untextured sides of trimmer brushes and go to texture finder and enter LIGHT and apply the texture (probably it won't fit right so if doesn't **PRESS CTRL+F TO FIT TEXTURE**), and on the end texture the 2 remaining untextured sides of middle wall brush (I've chosen "k7_base3" texture).



GLASS

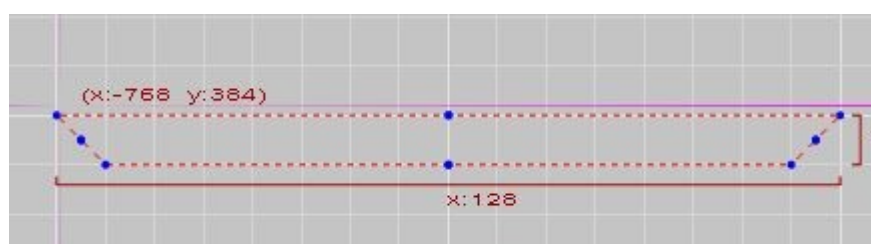
Now ill show you how to make glass...

So we will now make a frame for glass first out of 4 parts and 2 parts will be legs of that frame.

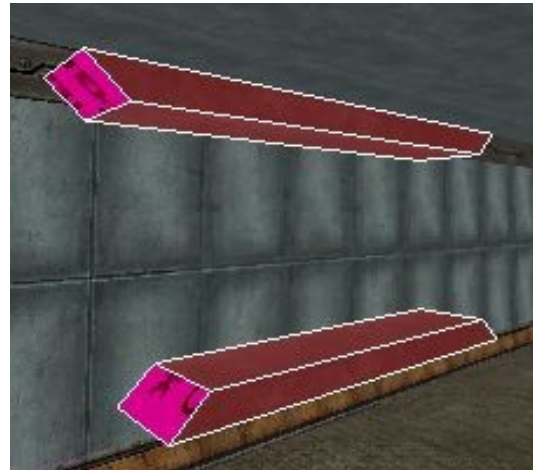
Choose smaller grid first (ill use keyboard shortcut 4 -grid 8 units-) and make a small brush out of a caulk again in size of 128(x)*8(y) and 16(z) and texture the sides that will be visible with base texture and make the brush **DEATIL** this is very important,all small brushes should be **DETAIL**. You make them **DETAIL** by pressing the **ctrl+shift+d** while they are selected.

Now I'll do some angles on that brush so it would fit good to rest of parts of frame.

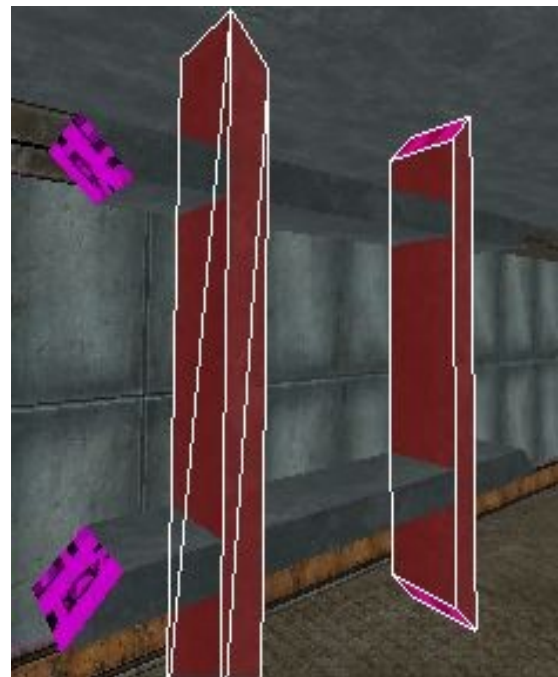
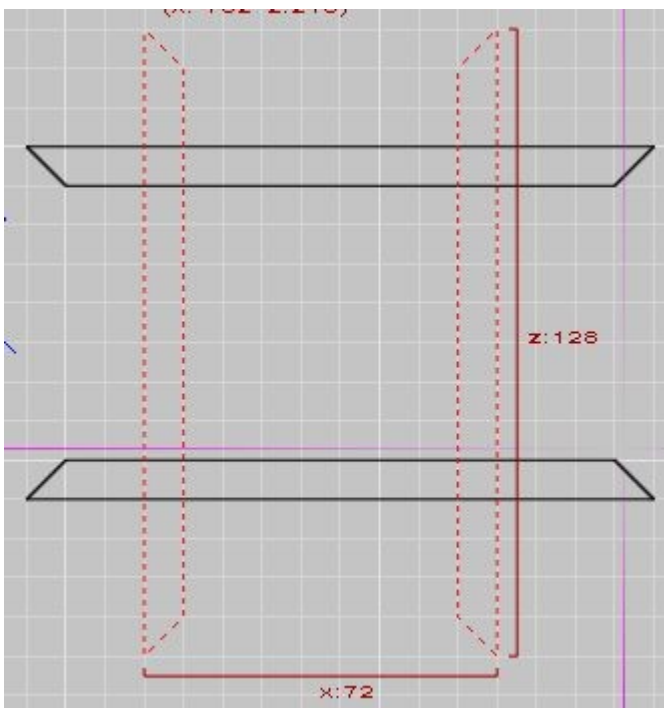
I pick the brush (shift+left mouse) in side (ctrl+tab) view and hit "E" now you'll get dots on corners and middles so ill move 2 of them to get this...



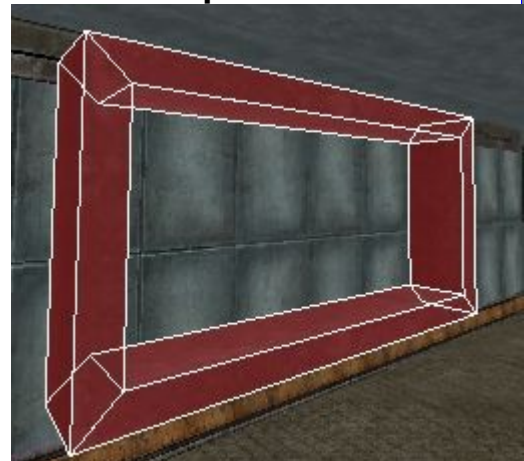
Now when I am done I clone it and rotate it (x) so I get my horizontal parts of frame.
Like this:



Next ill clone the both parts together and rotate them Y like this:



And resize them and put them on place to fit with other 2 parts like this:

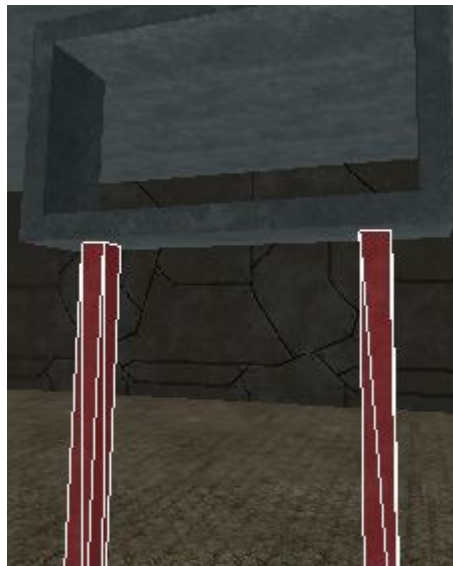
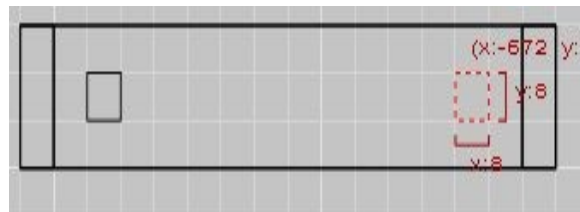


So this is our frame... one thing its important that sides that aren't visible to player must remain CAULK like it this picture when I moved out little 2 horizontal parts of frame:



OK now lets make legs for our frame...

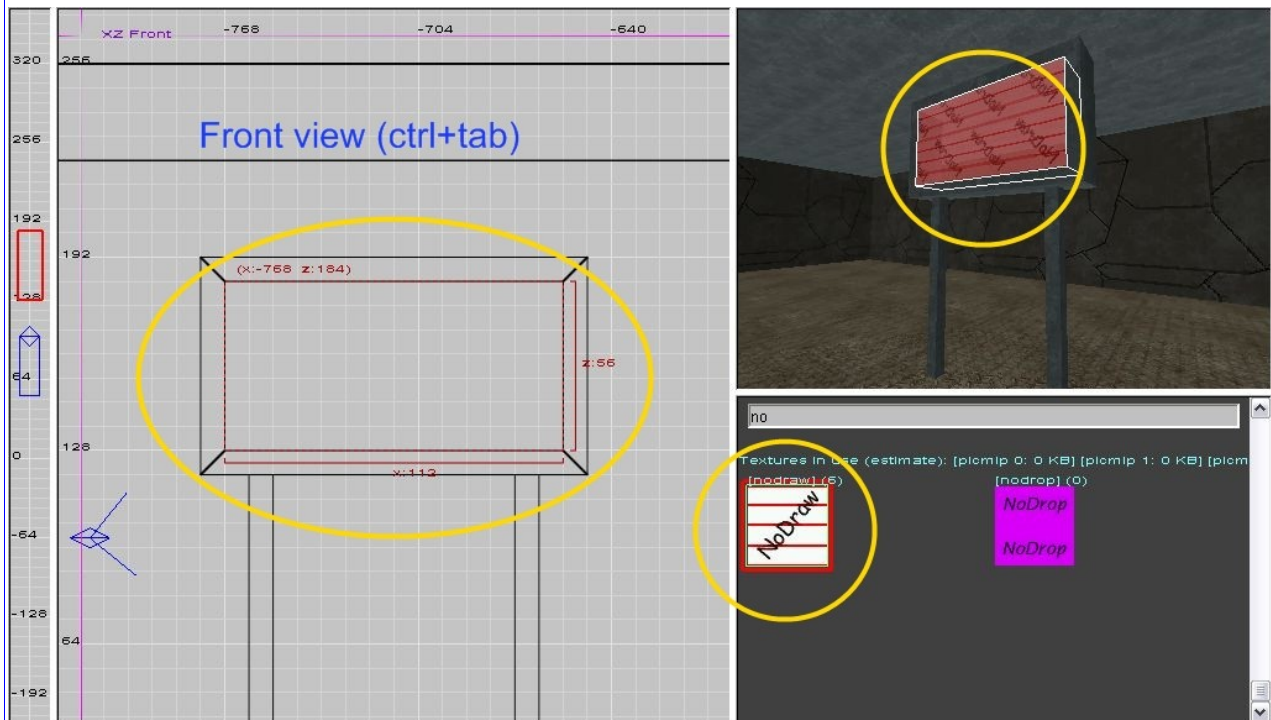
Make 1 small brush in top view (ctrl+tab) texture the 4 visible sides by picking them one by one with ctr+shift+left mouse and clone it and put it on place of second leg.



So now we are going to add glass:

For this you don't use caulk you use NODRAW from common textures.

So find it and make the brush out of the NODRAW texture to fit in the frame we made like this:



So we need now glass texture... Klingon textures don't have it (seems logical they would brake it :)) so we find our glass texture in the Attrexian station textures.



Now go to texture search and type in "glass" and apply that texture on 2 visible sides of nodraw brush and that's it.

Looks like this:

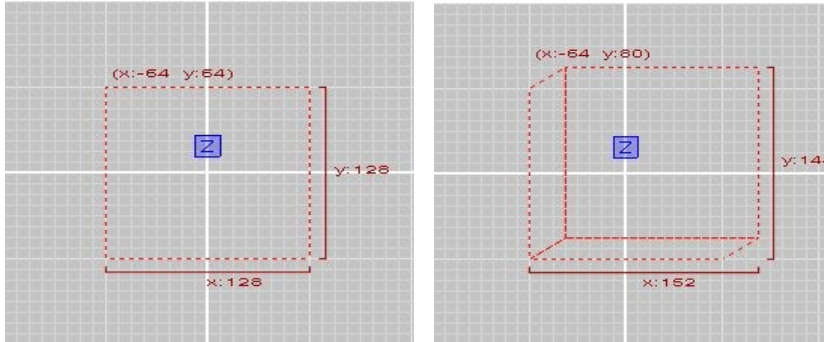


I intentionally pulled it out little so you see the remaining NODRAW texture.
Now last check that all parts are DETAIL all parts should be green on grid!

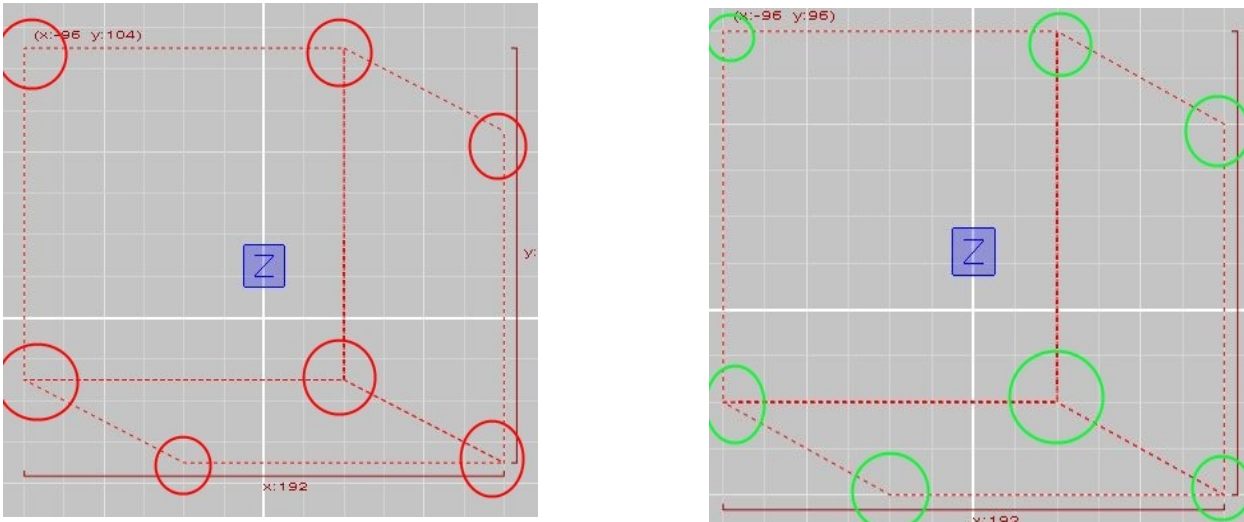
You have learned now some basics in Über Radiant:
I'll show you now some keyboard shortcuts that are very useful.

"H " hide selected brush , **shift+h** unhide brushes

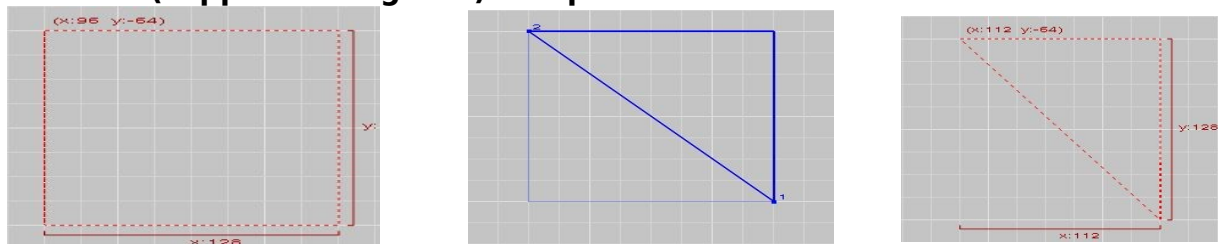
ctrl+left mouse (move mouse around)



ctrl+g (snaps the brush edges to grid -very useful and I use it a lot)



x shortcut (clipper cutting tool) --- >press enter -----> result

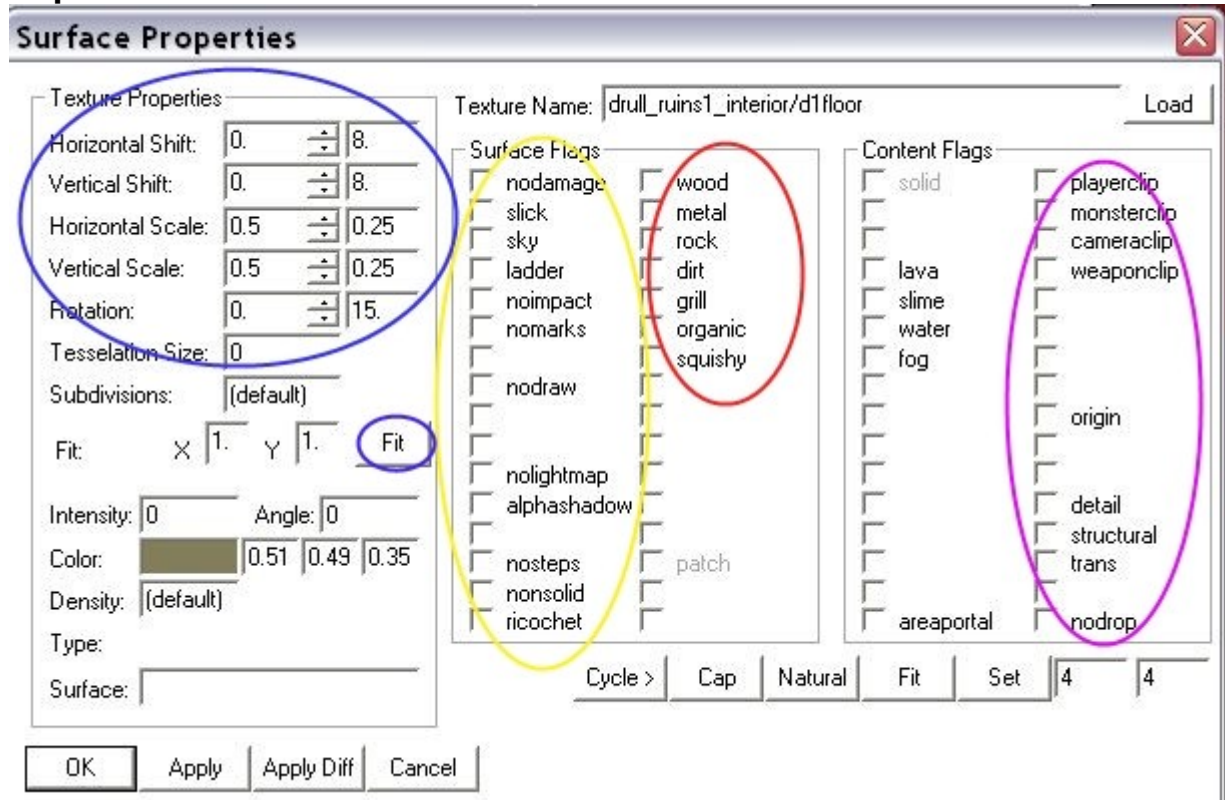


or hold down **shift+enter** to keep the both parts...



SURFACE INSPECTOR TOOL

Surface inspector tool is very useful for aligning textures in the way as we wish both on the patches and brushes (patches will come latter). It also contains options for surface parameters of sound(floor on which player walks...will it sound like metal , rock ...etc), and other options that I will present now.



Area marked with blue is for aligning textures shift it up or down or scale it horizontally or vertically and you can rotate your texture as needed.

Area marked with yellow are surface contest flags so if you mark NODAMAGE player wont receive damage if he falls on floor from great heights.

Slick will make surface to walk on it like ice.

Nonsolid makes that surface like air you can walk and shoot trough it.

Area marked with red are sounds which certain surface will produe when walked on it.

Area marked with purple are content flags so in example playerclip marks that player cant pass trough that sourface,weaponclip does the same but only for weapons etc.

So if you make a force field and you want that player can pass trough it and weapons cant you will select NONSOLID in yellow marked area and weaponclip in purple marked area.

PATCHES

Patches are the most tricky part in building maps but they give you big freedom in mapping with them you can do cool curved stuff.

Patches are made in this way: You make a brush of certain size and go to tab curves and open it so you see this:



In primitives are stuff like cone or cylinder.

Simple patch mesh makes a patch plane with certain amount of points on patch that can be moved (like 3*3 or 7*7 the bigger the numbers the more complex patch will be).

Cap - If you make cylinder and you want it to fully close you'll select here cap cylinder etc.

Thicken - for example when you make cylinder patch and you want it to be textured on all sides (cause patches are textured only on 1 side and only 1 side can be visible) so you pick your cylinder and hit Thicken and set how much thick it will be.

Invert - Inverts the visible textured sides for other non-visible.

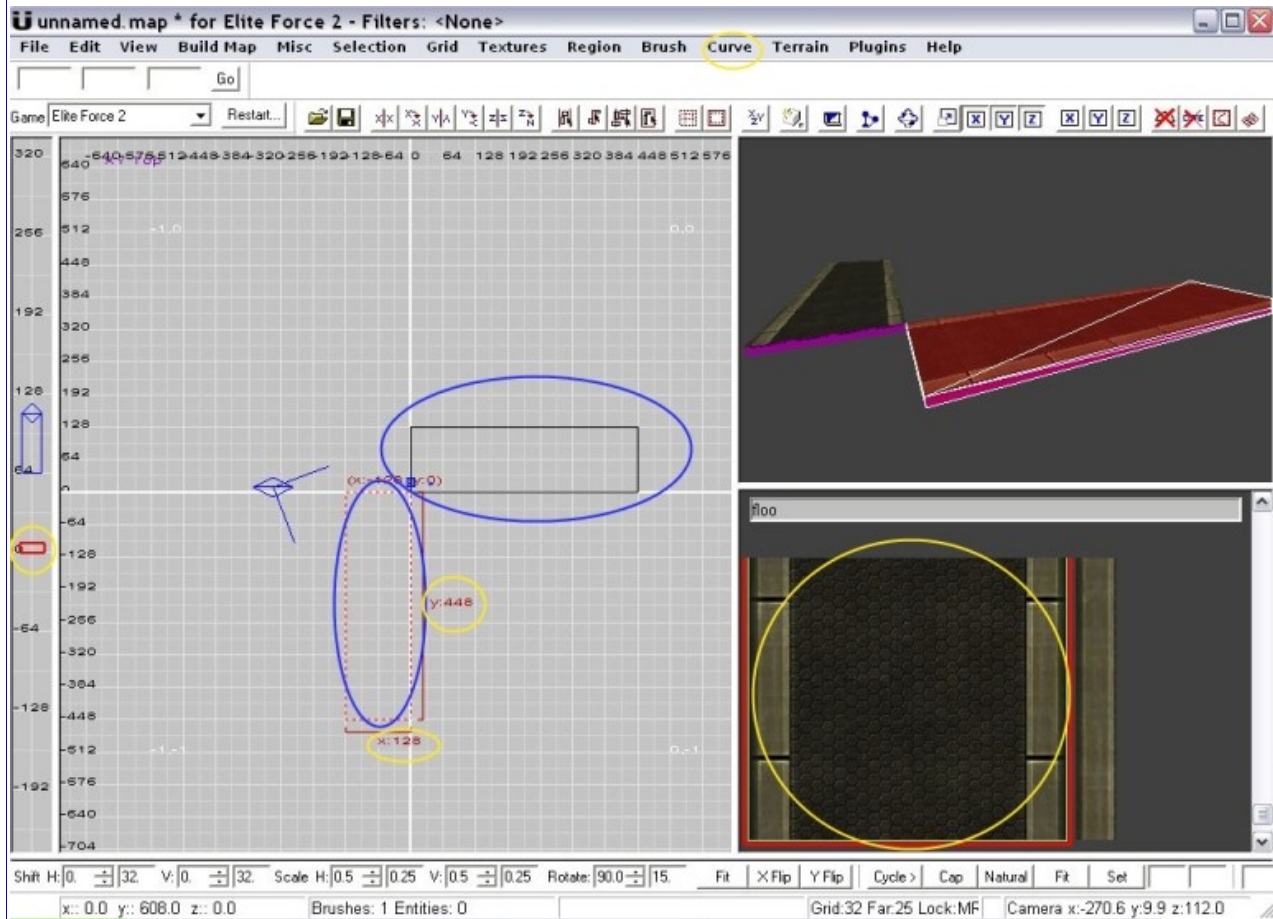
Bend - With this tool you can bend your pipes and stuff.

If you want to make other complex forms you have shortcut V that will show you certain amount of points (dots) that can be moved to create forms like curved ceiling.

NOTE THAT PATCHES LEAK THEY NEED TO BE SEALED BY CAULK BRUSH

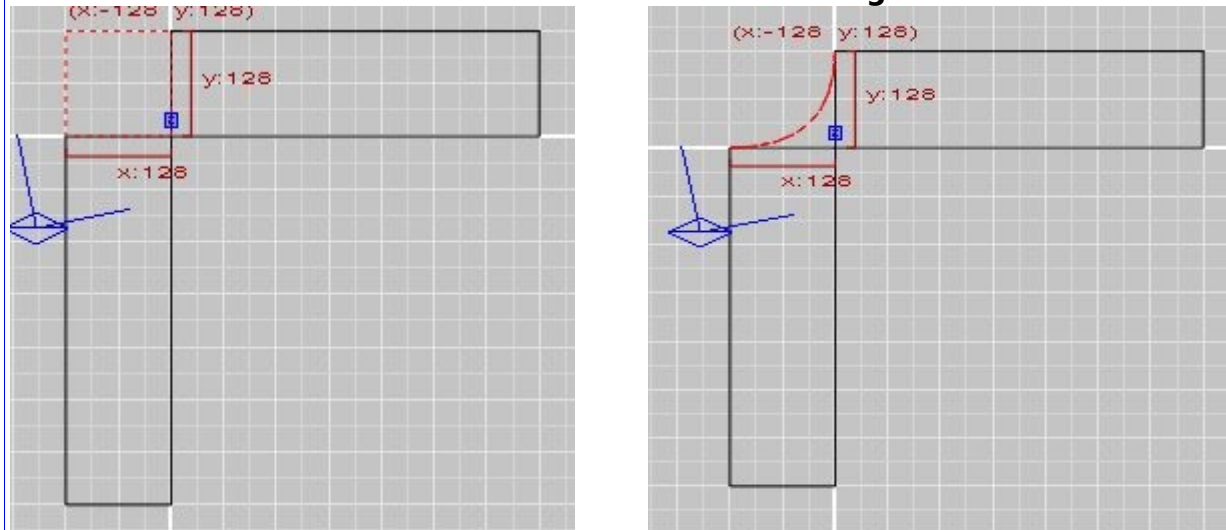
So here is my example how to make nice curved floor and how to seal it so your map wouldn't leak.

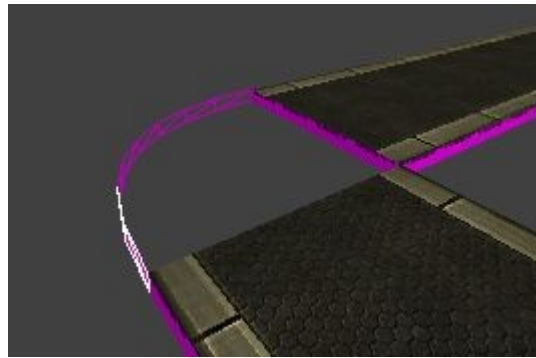
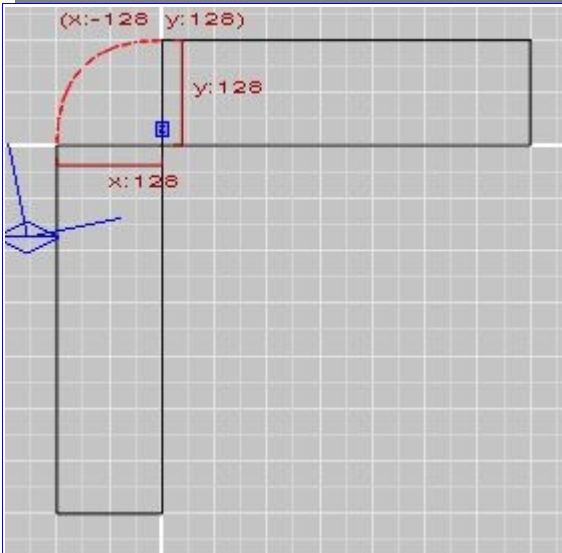
I've made two floor brushes on where the floor will be, I texture it and aligned the textures and gave them flags as METAL so when play will walk on it will sound like metal.



So in empty space between those two floor brushes you want to make nice curve...

So you pick one brush...clone it...re size it and then go under Curve menu then - Primitives - then bevel and rotate it in "Z" to get this...

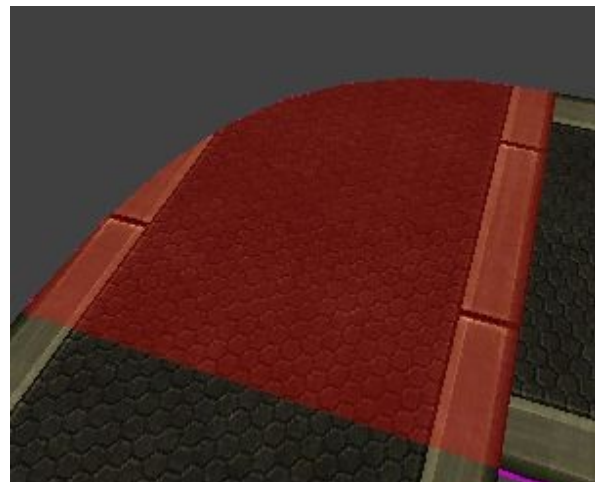
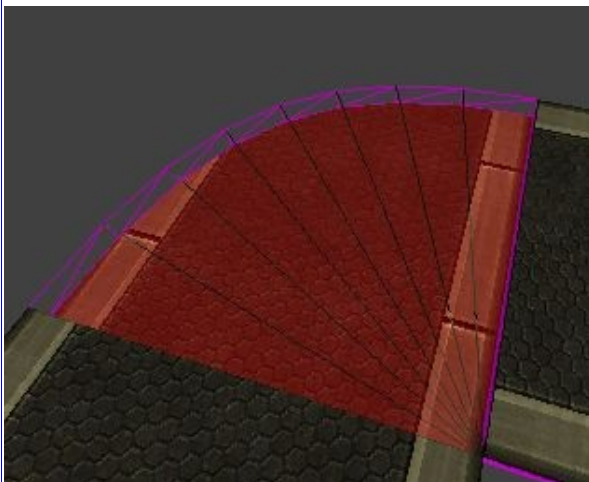




Now while it still selected make to that bevel a cap under Curves - Caps - Bevel.

You will notice that sides are inverted in way that we dont want so lets fix that by pressing the ctrl+I shortcut (Invert).

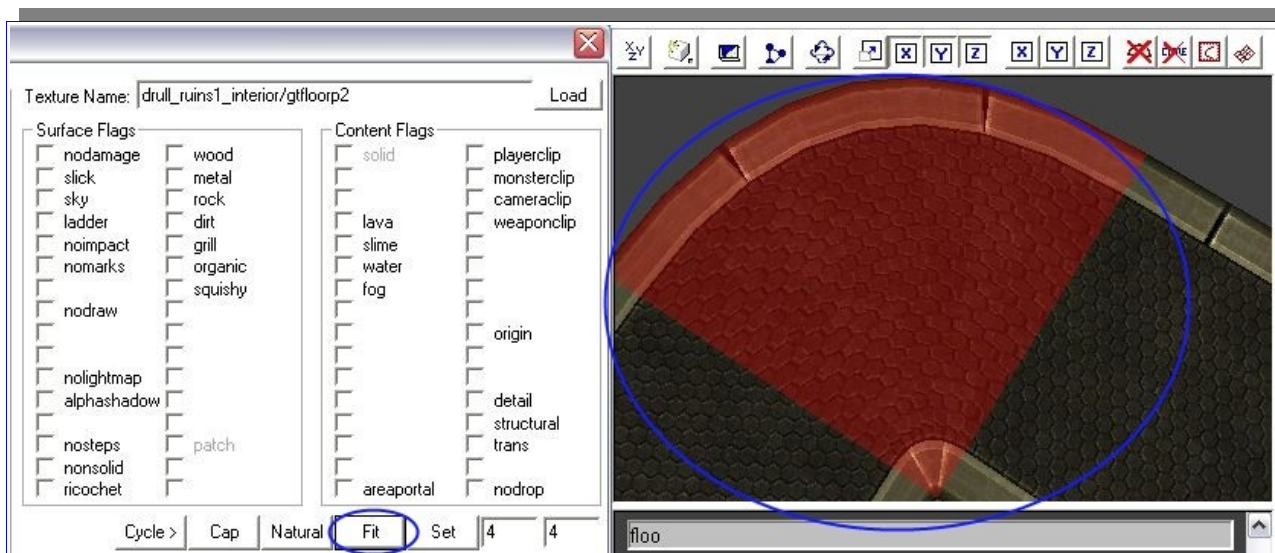
In next pictures I pressed J shortcut so I lose off the white lines to see better texture.



BAD----->CTRL+I----->GOOD

So now we have 1 bevel and 2 Caps,we do not need anymore our bevel and other cap that is down so delete them.

Next you want our floor texture get nice curve so open Surface inspector (S) and hit the fit button on right bottom side...



And now there is only left for us to get it right looking by changing vertical or horizontal scale in surface inspector.
In end looks like this...



And now last step is to make the 4 sided brush in size of that patch and put it below it so we seal it so it wont leak during compile...like this:



Don't be concerned about overlapping the caulk brush it wont be seen ingame.

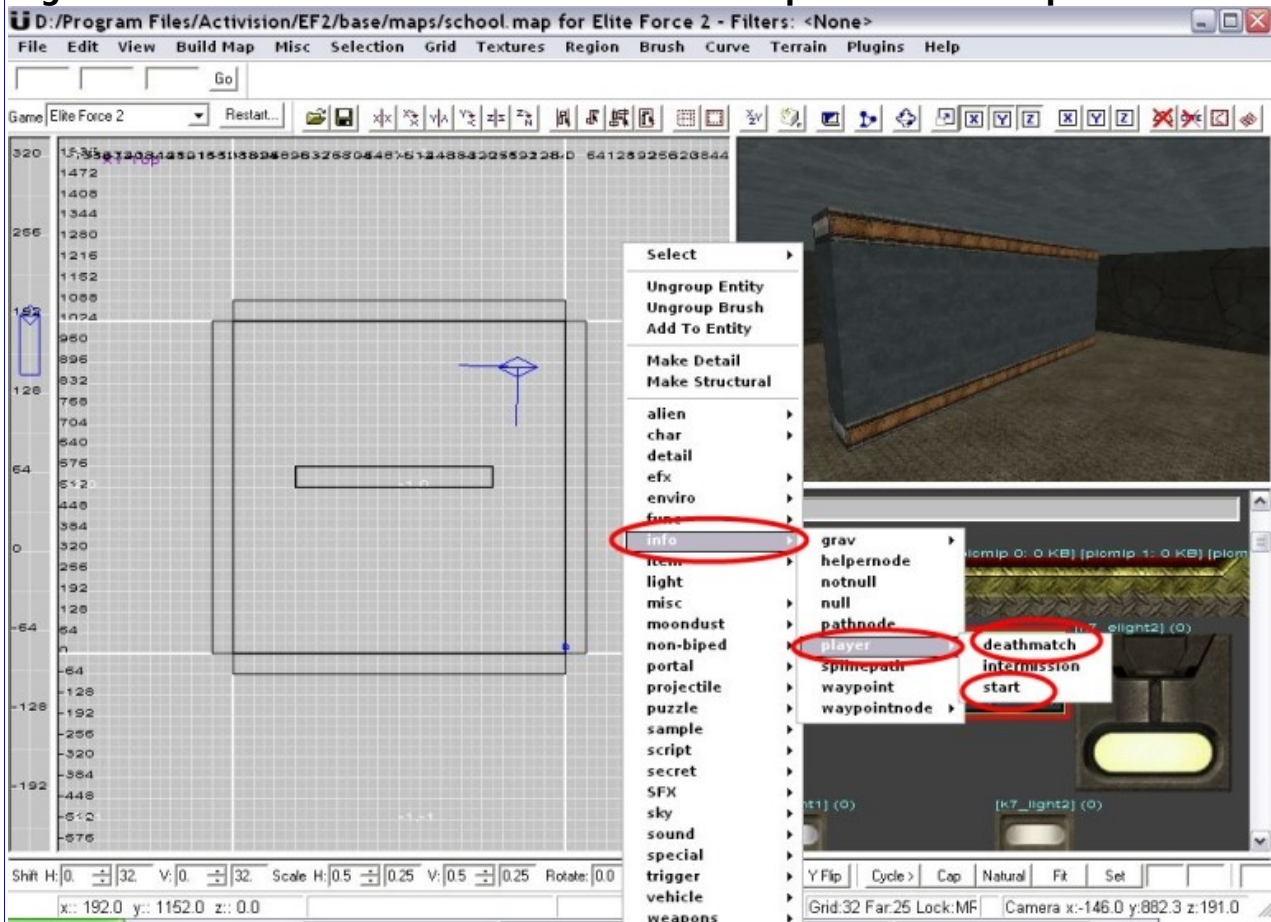
Ok now when you learned basics you should play little with forms and shapes and patches to see what all you can do with them before you start your first real map.

PLAYERS START POSITIONS AND ITEMS

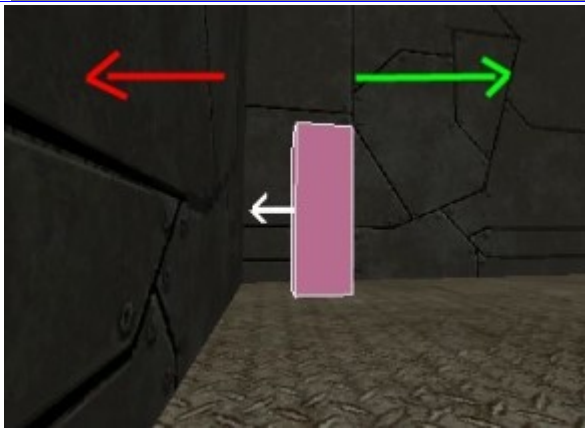
Ok now when you have your first map you need to set the players start positions.

You need one for Single player and few for Deathmatch.

Right click on center main view and menu will open like this on picture:

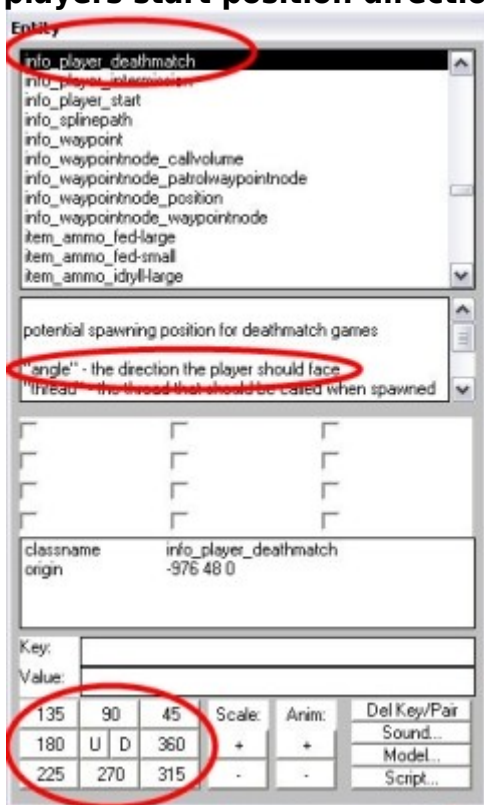


And make one **START** and ill do 4 **Deathmatch** and level them nicely so it will not be in floor or ceiling....and now ill show you how to change direction to where player will face when spawns there (so your first sight wouldn't be a wall).



Player facing the wall

So you pick that player start box and you press “**N**” so now you see Entity window with a lot of stuff inside but for this you need only to see your players start position direction here:



Just pick one of directions that you need and that it.

So now when you have done that you can tryout your map.

Go to **BUILD MAP** and chose **QUICK COMPILE (BSP ONLY)** if you've done all good it shouldn't say anything about leaks. Go ingame and check out your map.

OK now lets put on map some guns, hypos , shield and ammo...

Again right click on main view window In center and you will see again this:



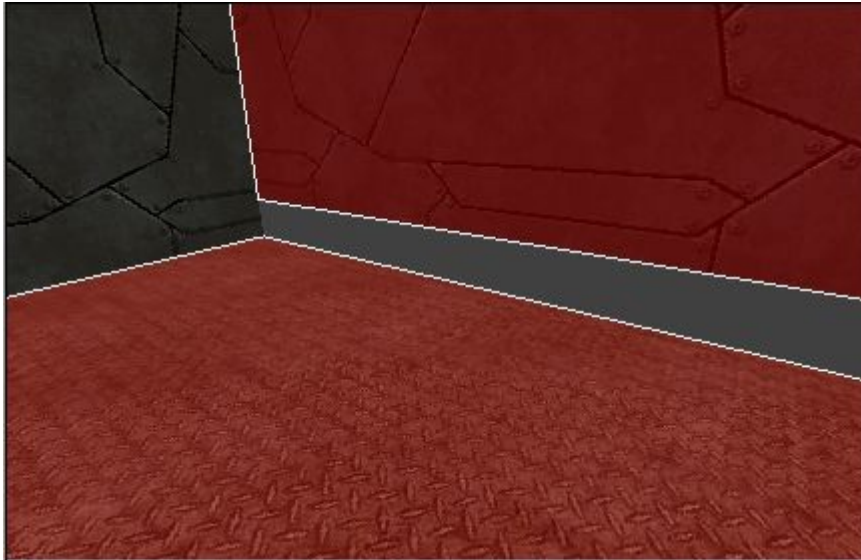
**So in red marked options are ammo,health and shields and some other stuff
And in green marked options are weapons.**

So basically just pick one item/weapon and place it somewhere on map.

LEAKS

Leaks are your worst enemy as newbie mapper but you can avoid them by holding to few simple rules.

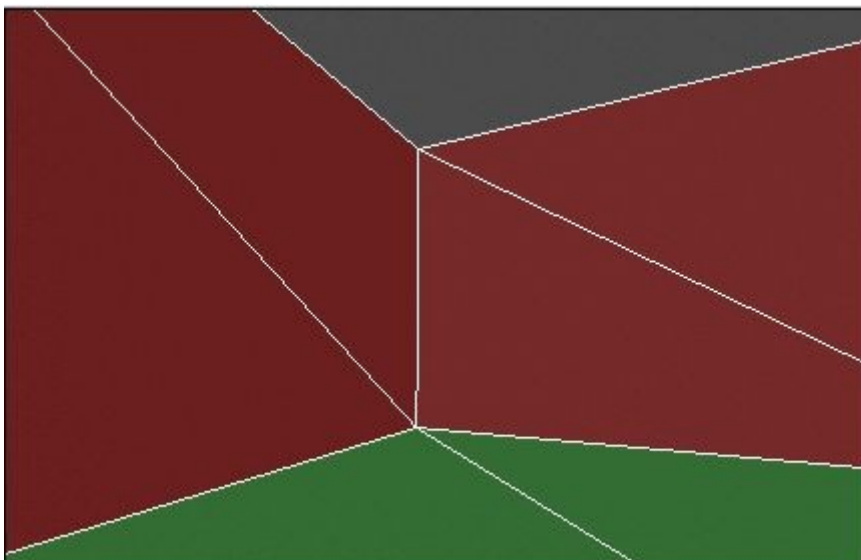
Don't leave cracks between your walls not a 1 unit wide cause it will leak and you wont be able to run your map!



This picture up shows you where the map will leak, between those 2 selected brush is hole to the void. So you or need to lower down the wall brush or stretch it to floor.

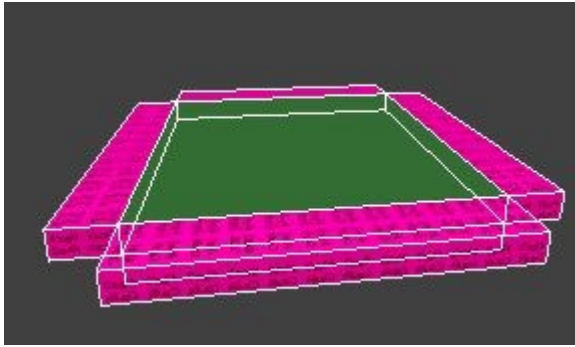
Patches leak (you didn't sealed the patch) like shown in patches section.

Or finnayl **DETAIL BRUSH** leak (detailed brushes are like patches they cant seal of the map).

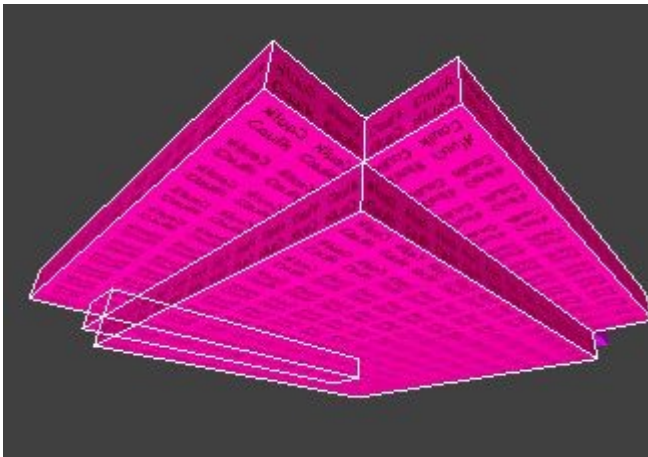


Here the floor brush is **DETAIL** and its green when selected and that **DETAIL** brush will leak so you need to put under it like a box of Structural brushes so you close it of from touching the void!!!

Like this:



View from up



And view from below.

So now you have your knowledge to make Elite Force 2 maps. Unfortunately I didn't explained how to do lights but that part I still figure out the best for you would be to make some simple room and put some light and play with it so you see what you can all do (Compile the map **NORMAL (BSP,VIS,LIGHT)** to be able to see your lights. When your map is finished you need to do **FULL COMPILE.**

For creation of this tutorial I used next applications:

OpenOffice.org - thx guys for wonderful tool

XnView - for image capturing

Paint.Net - for manipulating the images

ÜberRadiant 1.0