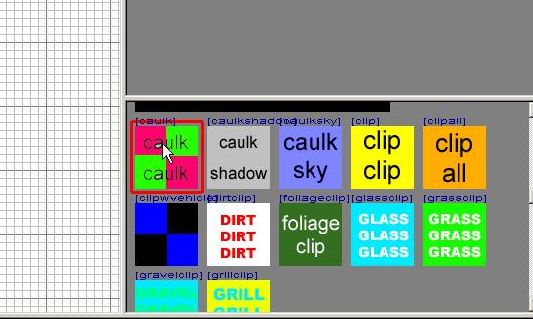
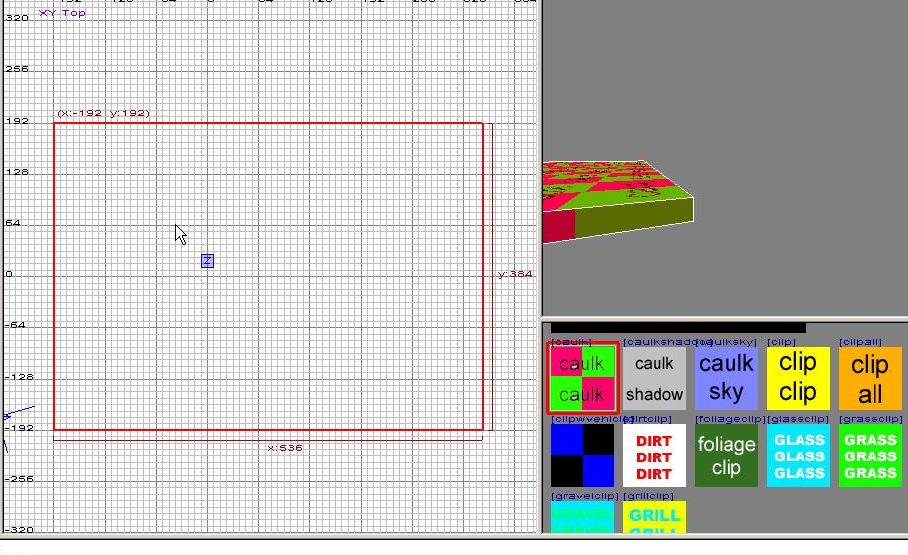
**Brushes**

Ok lets create a basic room, make sure that the Grid area shows "XY Top" in the top left, click on "textures" on the menu bar and click "common". There should now be some textures in the texture area. Scroll down until you find "Caulk" and left click on that. Caulk is the texture you should always use when mapping, the game engine does not draw it, so you build everything with Caulk and then texture (or paint) only the faces you can see during the game. Think of a 10 metre wall in front of you, you can only see the front of it, you can't see on the top, or behind it, or underneath it, so why bother painting those bits? It's the same with textures, more on that later.  
  
  
  
Left click on the grid (hold that button) and draw a rectangle, mine is 536x384, you'll notice that there is now a flat rectangle in the camera area, well done, you've just made a brush, now for some ways to get around.  
  
  
  
Put the cursor on the grid section and hold the right mouse button, this moves the grid around, You use the mouse wheel to zoom in and out, put the cursor inside the rectangle you just made and hold the left button, now you can move the brush around, lastly put the cursor outside the brush, hold the left button and you can change the size of the brush. Move the cursor to the camera area, holding the right mouse button and moving the mouse frontward and backwards moves the camera view, now try side to side, notice the camera icon on the grid moves as well, that tells you where on your map you are, a very useful thing to know, now hold Ctrl and the right mouse button, and move the mouse around, this moves the camera up and down and side to side, now hold ctrl and shift and the right button, you can now swing the camera above or below the brush, push the "End" key to centre the camera again. Now push the "Esc" key to deselect the brush, hold shift and left click to select the brush again.  
  
Ok a word or two about "structural" and "detail" brushes, you will notice that all your brushes (that are not selected) show up as black lines in the Grid view, don't panic! that's good. That means they are "structural" brushes, here's a quote from Disgruntled Goat, he's from the Mohaa Crew and has given me lots of help.  
"When compiling, structural brushes create bsp splits in your map. Depending on how you have the map built, this will increase your FPS rates but...... it will also dramatically increase your compile time. Basically, a good rule of thumb is to make anything that obstructs a player's view ( buildings, terrain etc) into structural for this reason. Detailed brushes could be almost anything else (brushes inside a building, light poles, sidewalks, steps etc). This will give you the best balance of FPS performance and short compile time."   
To make a brush "detail" select the brush, right click and find "detail" this will turn the brush purple. you can make it "structural" again by right clicking and "ungrouping" the brush, then make it "structural".