

Working with multimaterial in 3ds max7

This step by step tutorial will teach you how to use the Multi/Sub-Object function.

If you ever ran out of texture slots in 3dmax, then this is the tutorial for you.

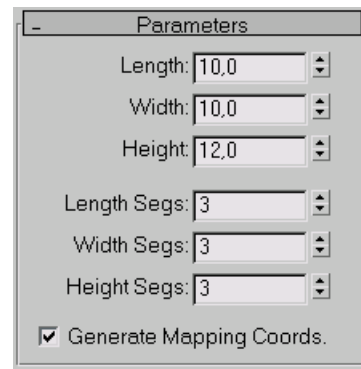
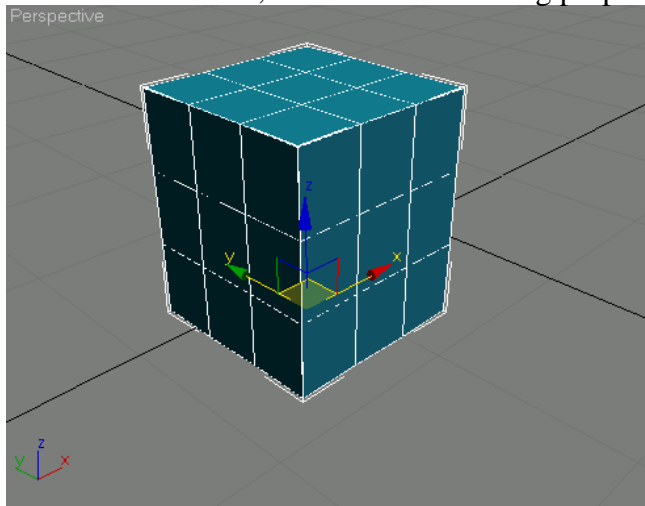
Multimat is a great function, basically giving you unlimited texture slots to use, whether its for diffuse, or overlay textures.

You just have to know how to use it properly, and hopefully we can shine some light onto the multimaterial part of the great world of VC custom mapping.

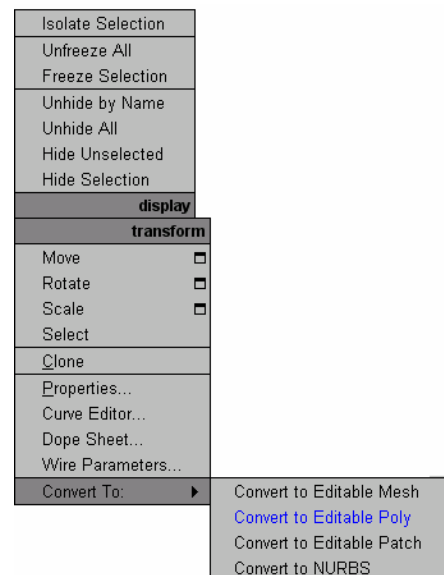
Ok, lets go.

In this example, we will use standard object to let you get known with the basics of multimaterial.

We start with a box, that has the following properties:



The 2nd thing we do, is convert the box to Editable Poly.
Right mouse click Box01 → Convert to: → Editable Poly

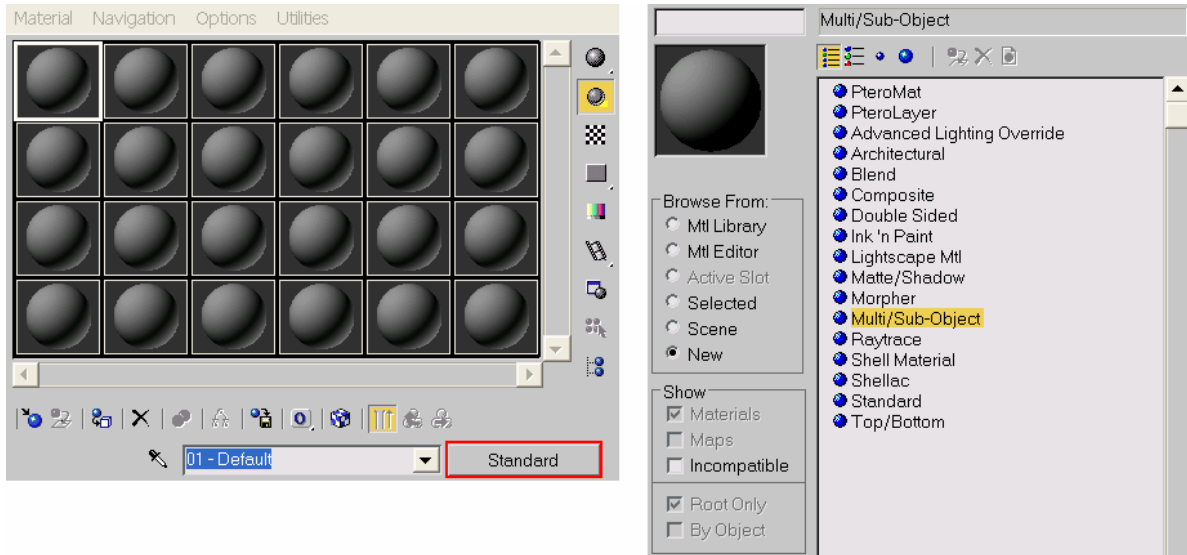


Now its time to start Texturing!

Create a Multimat slot.

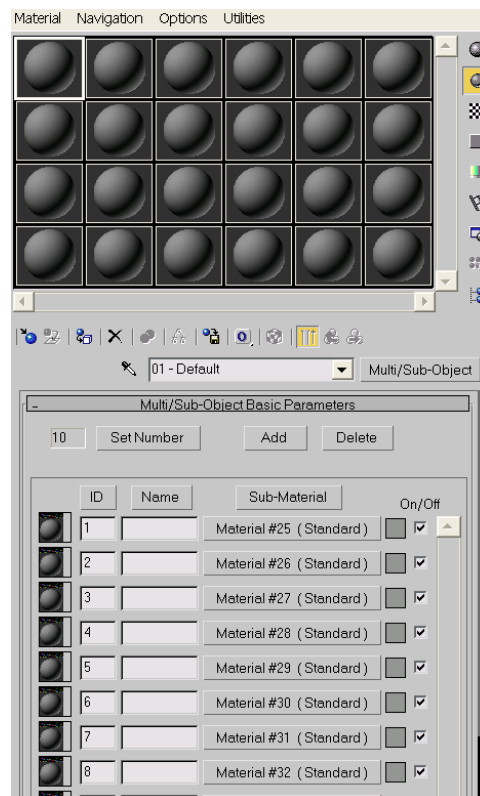
Press M, and the Material Editor will popup.

Click on Standard, and double click Multi/Sub-Object from the Material/Map Browser.



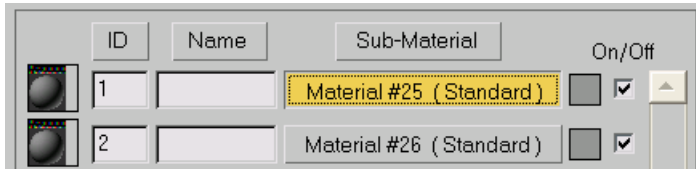
When it asks discard, or keep old material as sub-material, select discard material.

If everything done correctly, your Material Editor should look something like the below:

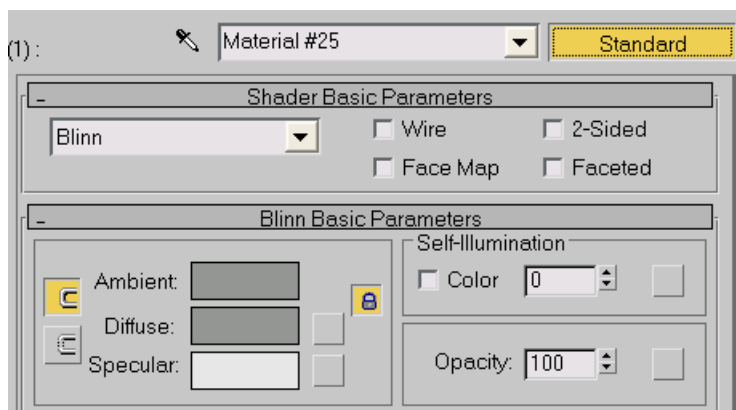


You will see 10 spheres, all with their own ID number, and material type. As material type, we will use PTEROMAT.

Click on the Material button at ID 1.



In this Menu, select Standard, and choose PTEROMAT from the Material/Map Browser.



As you are used, select the type of texture you wish by clicking on the diffuse channel. Apply the type of collision you wish, and if necessary, the transparency type. As said before, in this tutorial we assume you have knowledge on the PTEROMAT and its functions.

ID Slot 1 will be used as the basic texture for your object or scene. We will select all the polygons, and assign this ID (Texture) to them, to make sure we will not forget to texture any polygons, the Editor doesn't like it if that happens.

Select the box, go to polygon mode by clicking the red square.

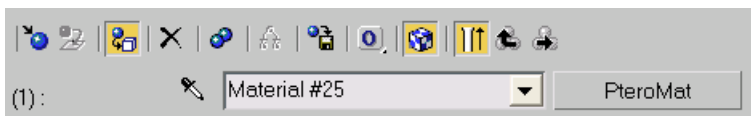


Select all the Polygons of the box.
(You can also select all the polygons by going to **Edit** → **Select all** in the top toolbar.)

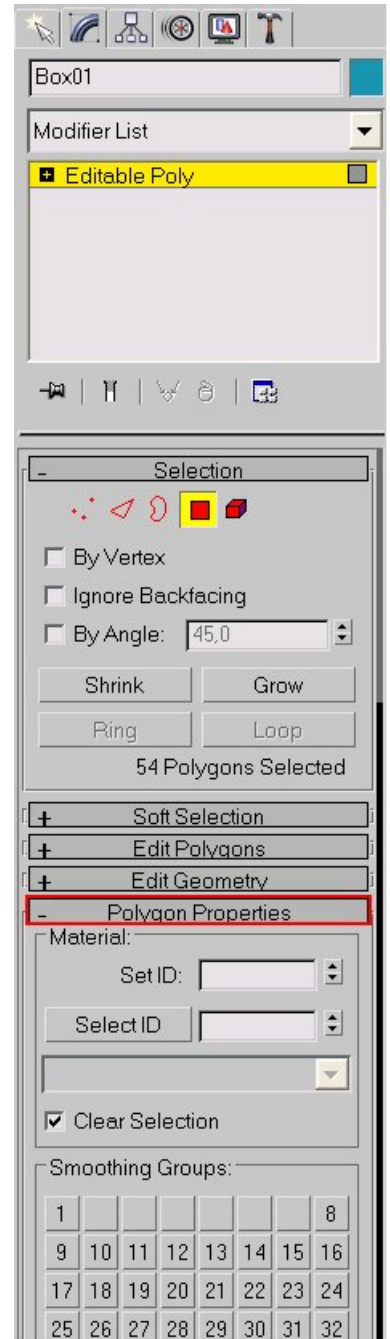
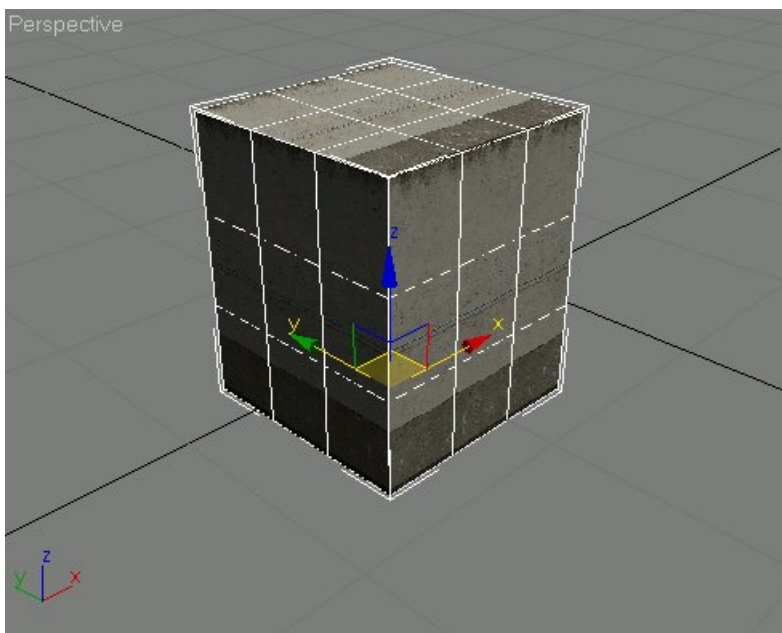
Now, in the Modify toolbar, scroll down until you reach the section called Polygon properties.

You will see a blank section, called Set ID, type **1** in there. And hit enter.
Leave Polygon mode by clicking on Editable Poly located here →

Assign the material by clicking the specified button in the Material Editor.
Make sure the map is visible in the view port, by clicking the blue/white Checkered square button.



You should see your texture applied to the entire object like this:



It is vital you left Polygon mode while assigning the texture, if you don't do this, 3dmax will alter the material ID, and everything goes messed up, don't forget this!

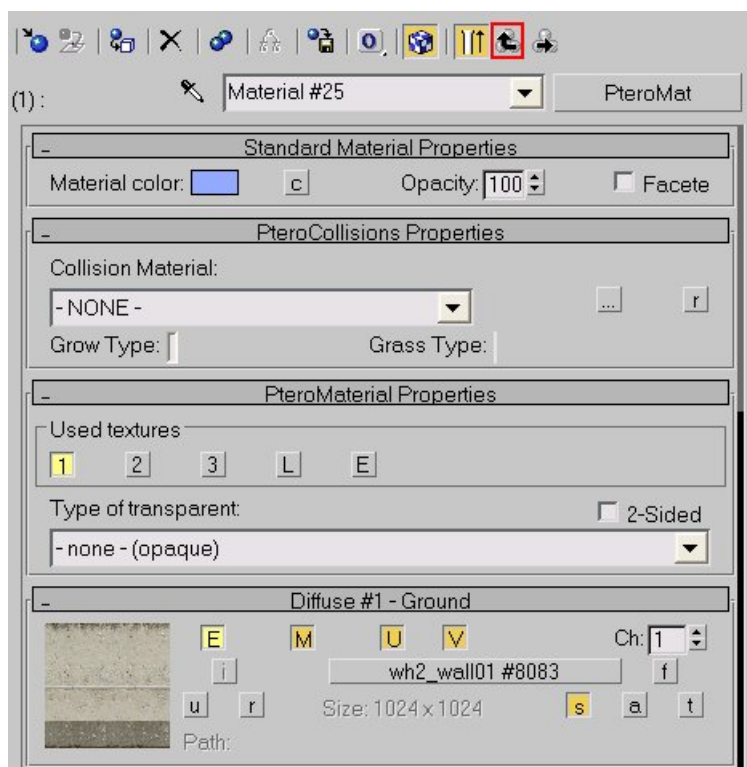
Now, lets say we want some graffiti on one of the walls, as an overlay.

First thing we do, is selecting the vertexes we want to have the graffiti.

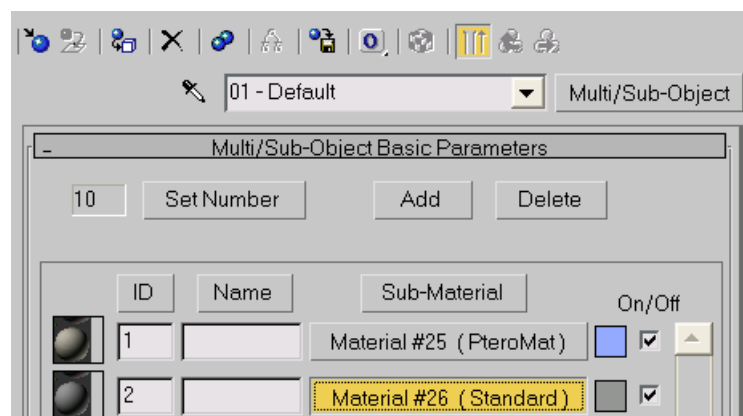
We will need a new texture slot for the overlay, so we change the ID of these Polygons. We will change it to 2.

Leave Editable Poly mode again, and the 2 Polygons should have turned grey. Now its time to apply a texture to those 2 Polygons.

In the Material Editor, click on the go to parent button, the small arrow pointing up, highlighted red in this screenshot.



From the list, click on the material button next to ID 2:



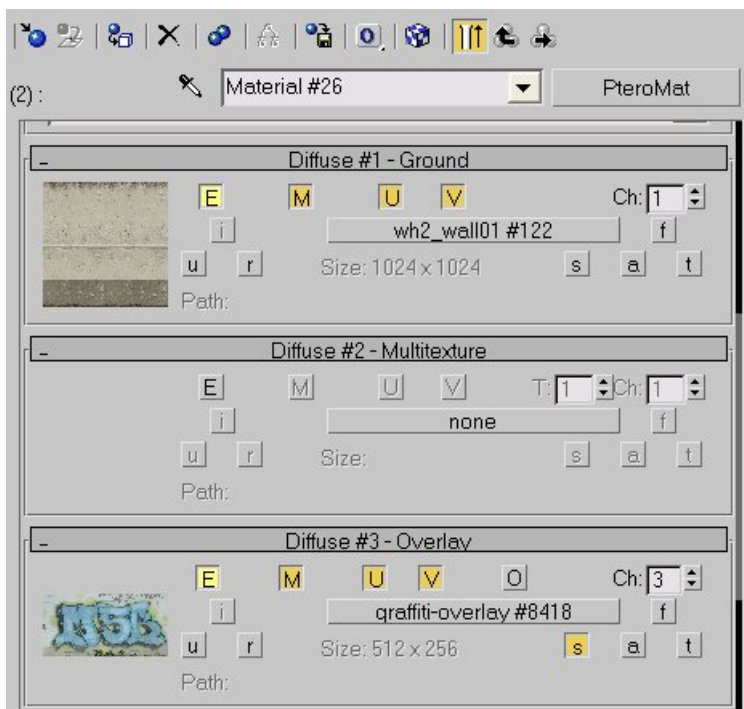
Again, click on Standard, and assign the PTEROMAT.

As Diffuse texture, use the same texture as before.

As Overlay, select your texture of choice.

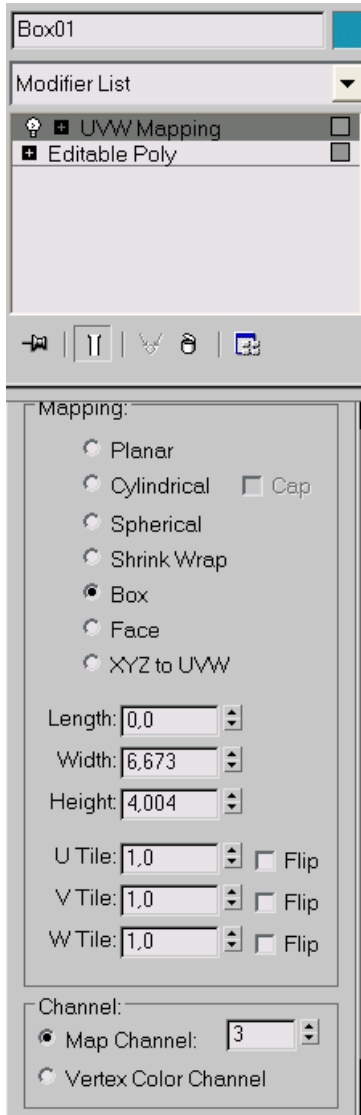
Click on the s-button at the Diffuse #3 – Overlay section, to make the overlay visible in the view port.

This will be necessary to apply a correct UVW Map to the overlay.

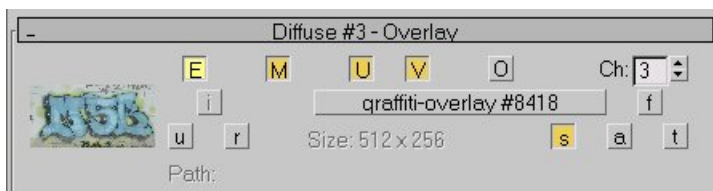


Select the 2 Polygons, and select UVW Map from the Modifier list' drop down menu.

Select the 2 Polygons, and select UVW Map from the Modifier list' drop down menu. Change the Map Channel to **3**, which corresponds with the channel number of the overlay. Change the UVW settings to fit your needs.

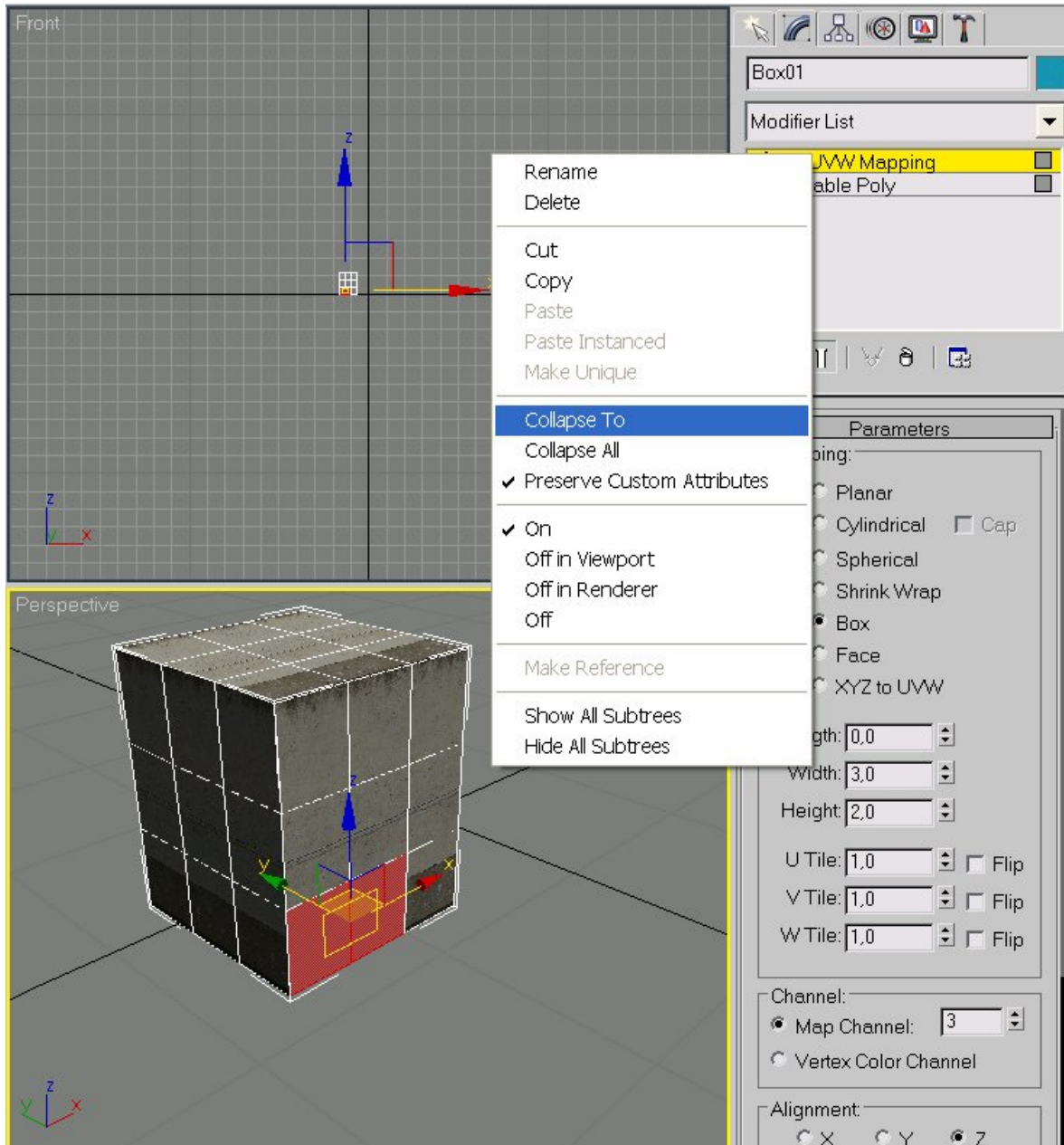


If you don't want your overlay to tile, Deselect the **U** and **V** button at the **Diffuse #3-Overlay** section in the Material Editor, PTEROMAT section.



If you set your UVW map the way you wish, it is vital to **Collapse** the UVW map to the Polygons.

Do that, by right clicking the UVW map Tab, → Collapse to,.



Lets say, I also want to have a nice decal, some damaging will look nice.

Again, select the Polygons you wish to have the overlay texture,
And change the ID number to **3**

In the Material Editor, go back to parent mode, and click the material button next to ID 3
Define PTEROMAT, by clicking on standard and selecting it from the Material/Map
Browser.

Apply a UVW map to the selected Polygons, don't forget to change the map number to 3,
which corresponds with the Overlay texture slot number.

Fit the UVW Map to your needs, and **Collapse** the UVW

The final result, using multimaterial and overlays:

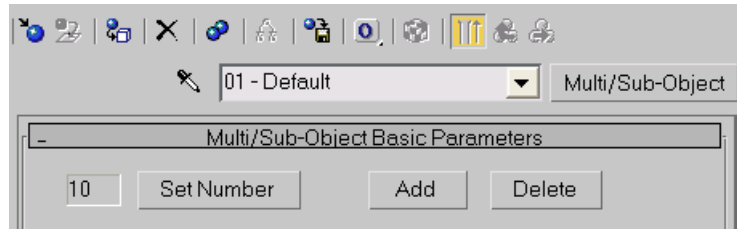


Now this was just a quick briefing on the power of Multimat.

We only used a couple of texture slots this time, but if your model is a bit more complex, it will require a lot more textures and overlays.

Set to standard, the amount of slots one Multi Sub objects give you, is 10.

You can change this amount to anything you need.



Click on Set Number and change it to your requirements, Voila!, unlimited texture slots.

Some things you should keep in mind:

1: Never use more than one Multi/Sub=Object slot!

2: If you decide to use Multi-Sub-Object, then do not use any other material slots, .BES files cannot contain that information, and this will result into not being able to export your mesh to .BES.

3: Collapse your UVWs!

This is the way to make sure you will not mess anything up, especially while having a lot of Polygons with different UVWs.

4: if you created an overlay, DON'T give it any transparency type, the Editor will auto apply its alpha channel to the texture.

If you do apply a transparency type to an overlay slot, the diffuse texture will turn 100% transparent once the model is Light mapped.

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