



AutoCAD Level 3

Session 06

AGENDA

- ISOLATING OBJECTS/ LAYERS
- INTRODUCTION TO MATERIALS
- AUTODESK LIBRARY
- APPLYING MATERIAL TO OBJECTS
- APPLYING MATERIAL TO FACES
- SIMPLE PAINT COLOUR MATERIAL
- METAL MATERIAL
- WOOD MATERIAL
- CUSTOM MADE MATERIAL
- IMPRINT COMMAND
- ADDING A CAMERA

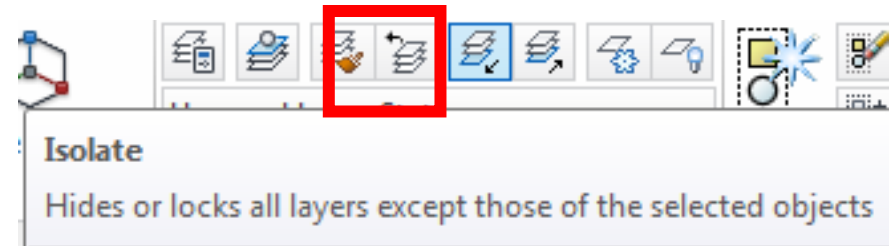
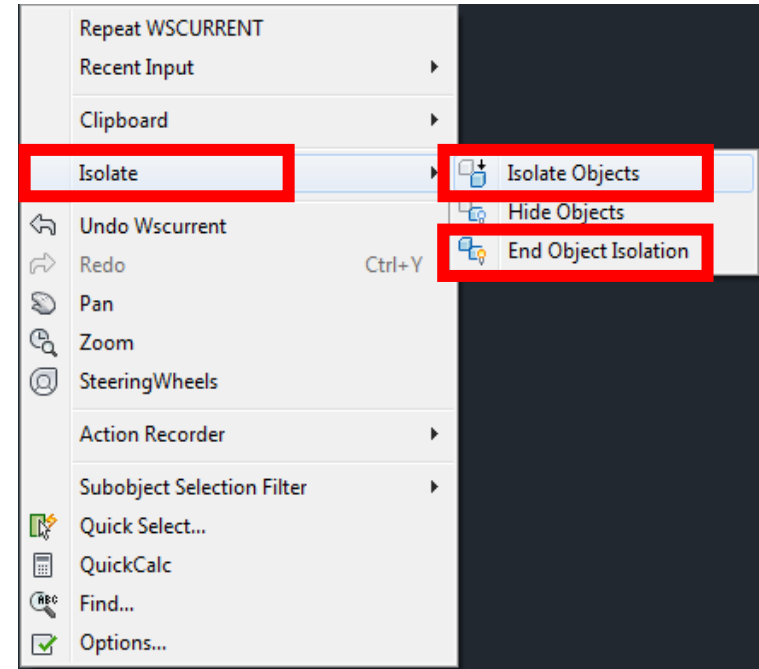
Exercise 13- Café 3d with materials



Isolate Objects/ Layers

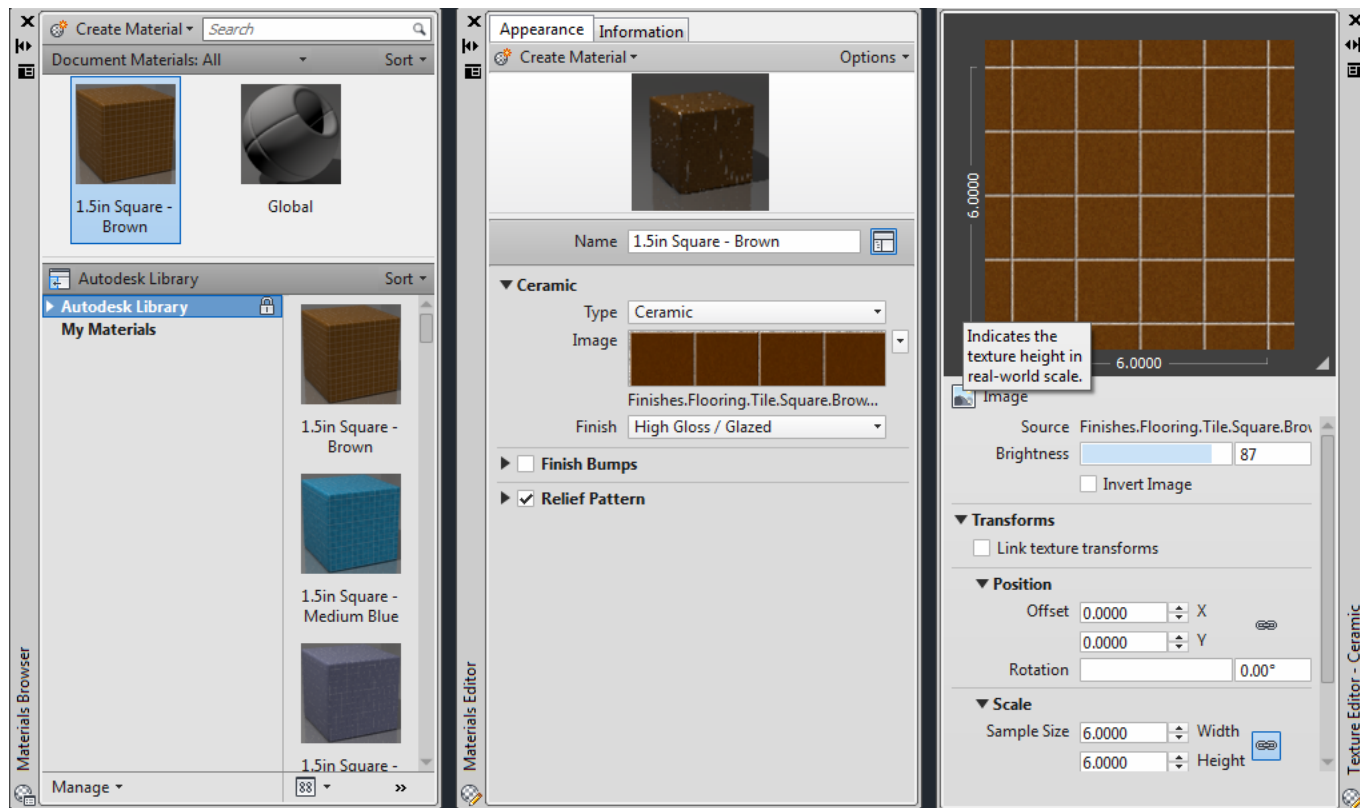
- Process of rendering:
 - Create 3d model
 - Create and apply materials to 3d objects
 - Add lights sources
 - Add cameras
 - Add backgrounds
 - Render it out

- **Isolate and object-** allows you to turn off all layers except one.
 - Do a right click on an empty area of your screen to get the menu shown
 - Select isolate < isolate object or end object isolation



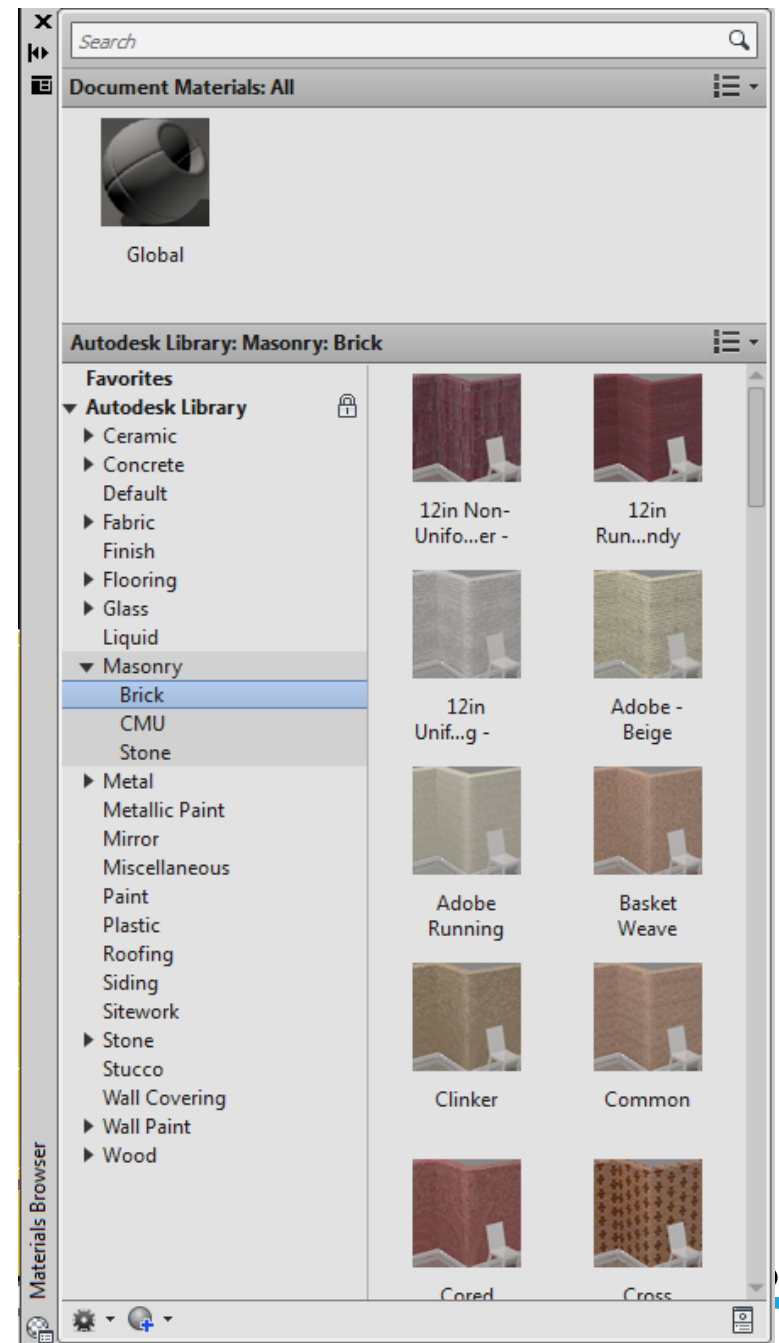
Introduction to materials

- Material browser – used to manage, create, assign, select materials. (anchor it to the left)
- Material Editor – when you double click onto an object in to material browser, the material editor box will appear. (anchor to the right) Here is were you name and edit a material
- Texture Editor – is used to edit material images. (anchor to right)



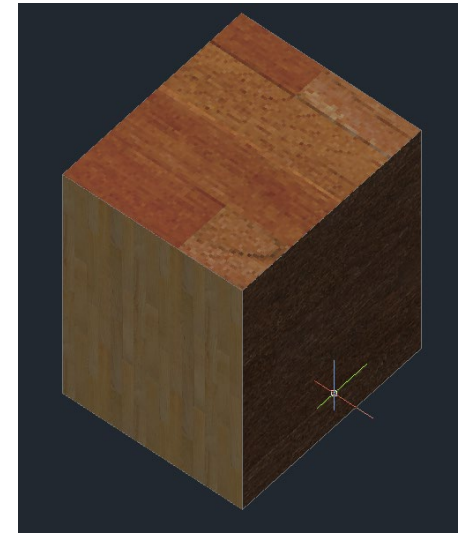
Autodesk Library

- The *Autodesk Material Library* provides a wide variety of material definitions and is shared by multiple products. It is installed with every product and suite.
- The libraries supplied by Autodesk are locked, as indicated by a lock icon. Materials in a locked library cannot be overwritten or deleted.
- An Autodesk-supplied library contains many categories of materials organized by type, such as Concrete, Metal, and Glass.



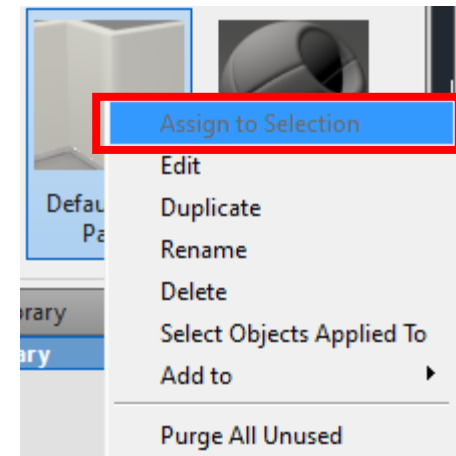
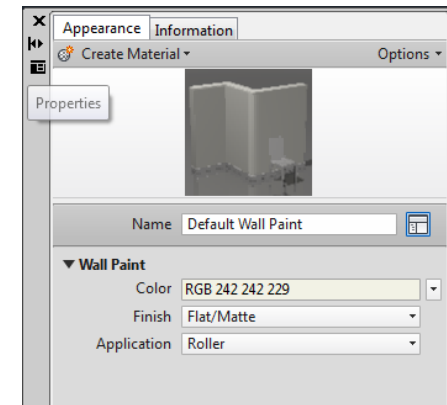
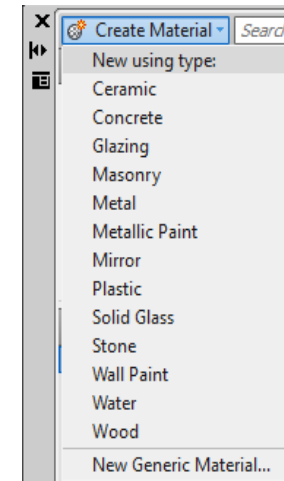
Assigning materials

- Normally when you assign a material to an object either using the “assign to selected” or the drag and drop method, the material is assigned to the entire object.
- If you wish to assign different material to the same object, you can by assigning materials to faces.
- To accomplish this, when using the drag and drop method, press and hold down the CTRL button.



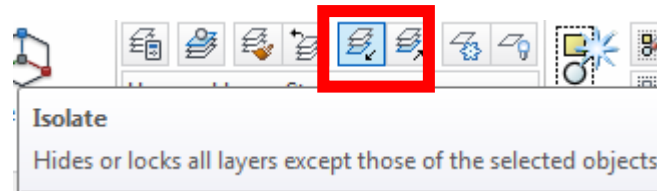
Wall Paint

- In your material browser select the Create Material pulldown menu. Here you can choose many different types of basic material that you can use as a start point and then in material editor you can set the various properties.
- This way of creating material will give you preset properties that are very easy to use. No need to have to set all the complex characteristics of the material from scratch.
- Paint material is great for any objects that you wish to give a simple colour to. With this material you can choose a colour, a finish, and the application method.
- To assign a material to an object, first select the object(s) you wish to assign the material to then from the material browser do a right click on the material and choose 'apply to selected'.
- Best way to view rendered drawings on the screen is in realistic mode

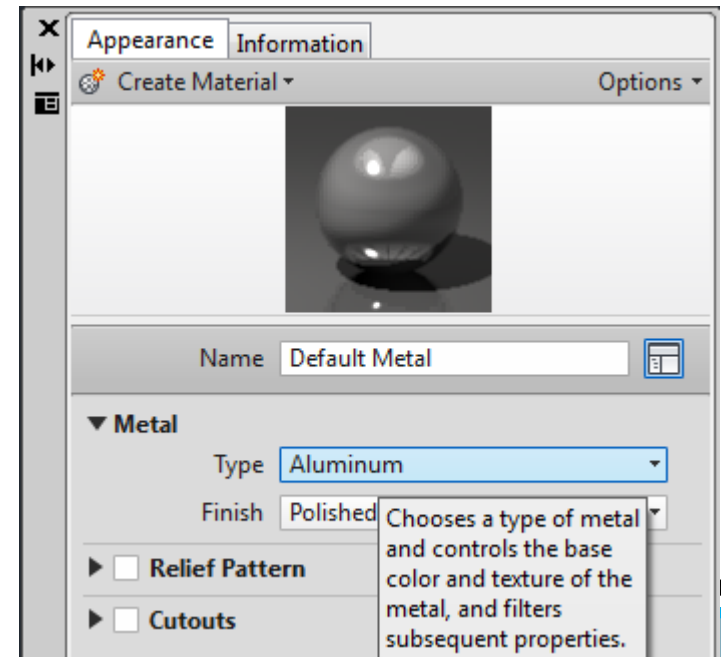


Metal

- Isolate layers- great to use when there are quite a few objects that you wish to isolate and they are all on the same layer.
- Make sure to place the setting to off, rather than fade and lock.

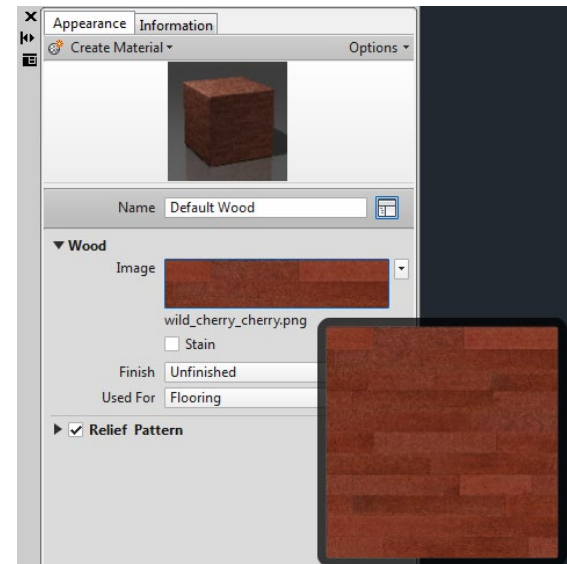


- **Creating metal can be done as well through the create metal pull down menu. Once created, you can choose the type of material you wish (from bass to copper).**
- **When choosing the type of finish, try to limit the shininess of the material, this will influence the rendering time.**



Wood

- Wood is a type of material that is not so simple as paint or metal. This type of material has a pattern.
- We call this pattern an image.
- Materials with such a pattern are ones like fabric, tiles, brick, stone, ect.
- As you can see in the image below, the wood material is created by simply repeating a raster image.
- Use the texture editor to control the size of your pattern as well as its orientation (rotation angle).

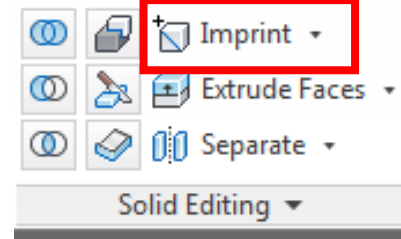


Custom made

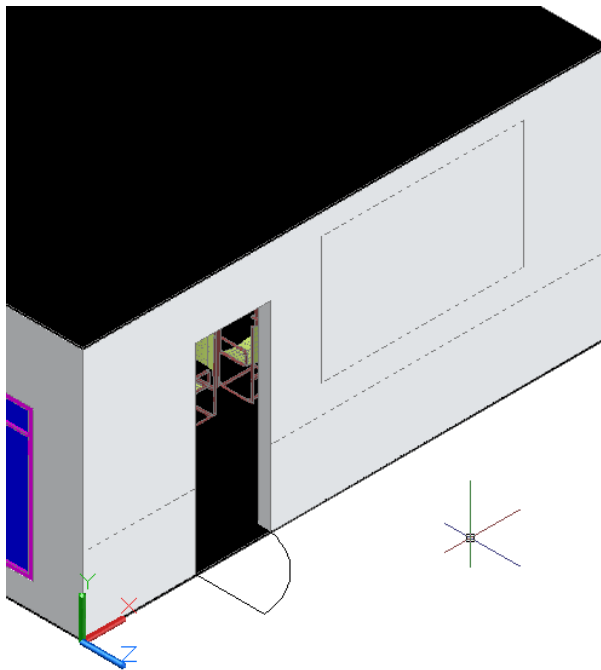
- Using other images other than those found in autocad.
- Choose 'generic material' to create a material with a custom image.
- Under the Image box, select the no image selected text to choose an external image file of your choice.
- Advise: images taken from photographs are not the best type due to there non uniformal lighting.
- Goto Edit image- Texture editor to scale the pattern.



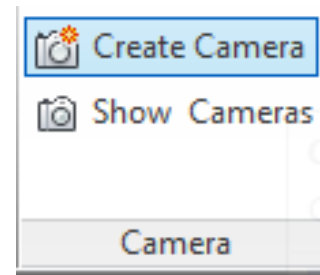
Imprint command



- 2D geometry located on a face or the intersection of a 3D solid with a face can be combined with that face to create additional edges. These edges can provide a visual effect, and can be pressed and pulled to create indentations and extrusions.
- It can also be used to divide faces to apply different materials to different areas.



Adding a camera



- Video 3A- Adding a camera
- When placing a camera, do it in top view with visual style set to wireframe
- Make sure to have your object snap off when setting a location for your camera
- Remember when locating the target point, type .xy prior to picking the location so that you can type in an elevation for the target point
- You can adjust the location and cone of vision of the camera using the grips feature (pick the blue boxes and move them)
- You can also set the ucs to a side and set plan to current ucs and from that side view, you can now use the grips feature to move the camera or target points.