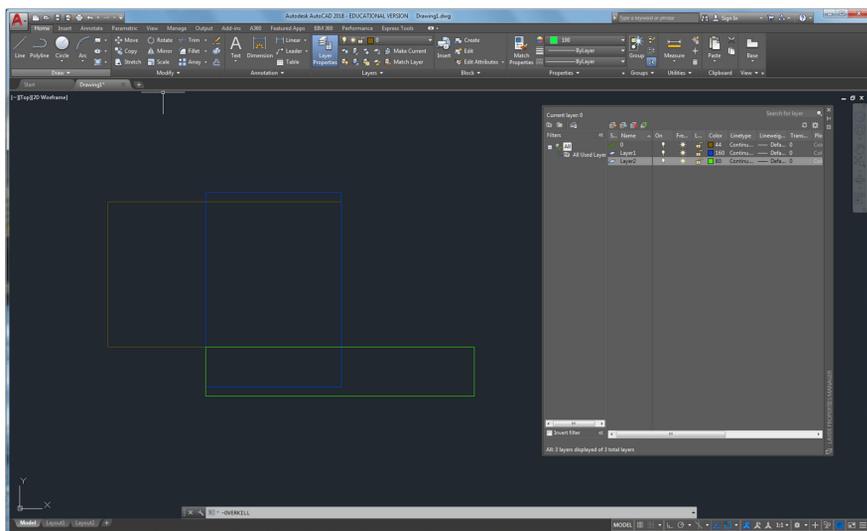


Preparation of AutoCAD file for laser cutting



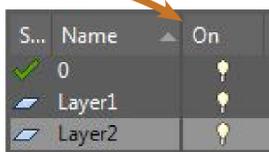
Before printing your file make sure you 'explode' and 'overkill' your AutoCAD file. This will save time on the laser cutter and ensures the laser cutting software (Ethos) can read your file correctly.



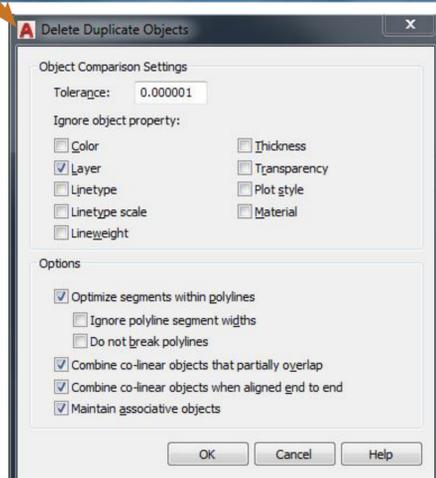
OVERKILL Command:

1. The example above shows three rectangular shapes which intersect and overlap at many points. If this were to be printed now the laser cutter would do repeat cuts for the overlapping lines. This takes up valuable time during the cutting process, but more importantly, puts the edge the material you are cutting at greater risk of burning or even catching fire.

2. To remedy this start by turning **all your layers on** from the layers property menu. Next, **select everything in your document** and in the command line at the bottom of the window type



'OVERKILL' then **'ENTER'**. You will now get this window to the right.



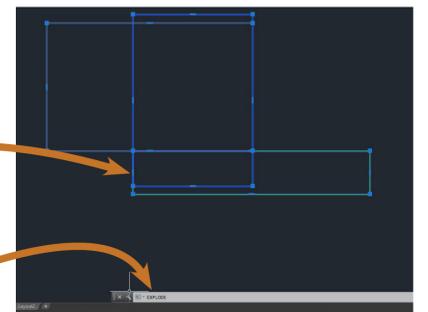
3. This menu allow you to control the parameters of the overkill command. Make sure you tick the options as above and click OK.

4. All underlying lines that were not visible and surplus to requirements should now have been deleted. Save as a new file with a different name to make sure you keep the amendable original file.

EXPLODE Command:

1. Occasionally things are lost in translation between AutoCAD and Ethos (laser cutting software) and elements of your drawing re-distribute themselves when opened in Ethos. This is sometimes seen by Ethos as a much bigger file than it should be and/or parts of your drawing may be missing. We have found this a particular problem when using files from 'digimap.edina.ac.uk'. The Explode command should solve this in most case.

2. Start by turning **all your layers on** from the layers property menu and **select everything in your document**. Next type **'EXPLODE'** in the command line and press **ENTER**.



Printing to PDF ready for the laser cutter:
Output>Plot for the Plot - **Model** window.

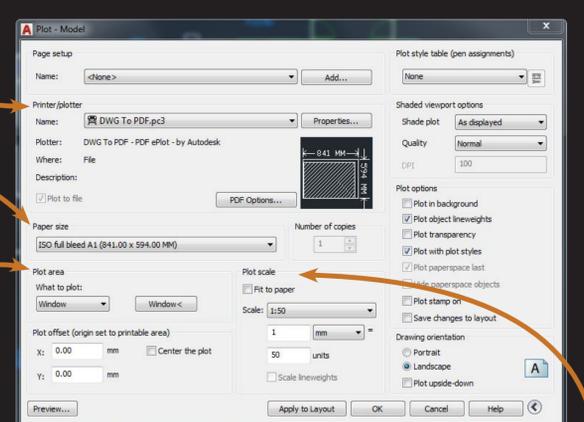
Printer/plotter name: DWG To PDF.pc3

Paper size: is usually set to A1 (if you are using sheets bought from the the workshop)

Plot area: Extents - Plots all objects in the drawing. Display - Plots all objects displayed in the drawing area.

View - Prints/plots a saved view. Select a view from the list provided. Window - Plots objects in the area you define.

Plot scale: If you have prepared your drawing to fit on an A1 then you would set this to 1:1 to fit on an A1 sheet. If your drawing is a different size/scale then select the appropriate option to get the best fit for your laser cut.



You can use the preview button to check any scaling. When you are happy with the parameters you can click OK and save your PDF ready for laser cutting.