

ORTHOGONAL DRAWING

USING ILLUSTRATOR TO DRAW YOUR DIMENSIONS

KEY POINTS TO REMEMBER

- Dimension lines carry the measurements and are drawn between projection lines.
- Projection lines start 2mm out from the object.
- Dimension lines start 10mm out from the object, and then another 10mm between each dimension line.
- The measurement numbers are placed on top of the horizontal lines, or on the side furthest from the object for vertical lines
- Smallest measurements are placed closest to the object, then followed by larger measurements outside of these.
- Only ever show each measurement once (Don't double up).

HOW TO: STEP BY STEP ILLUSTRATOR DIMENSIONING

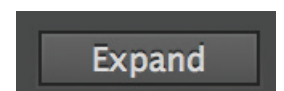
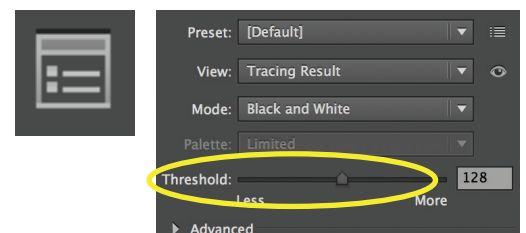
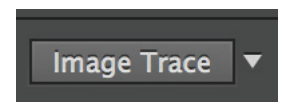
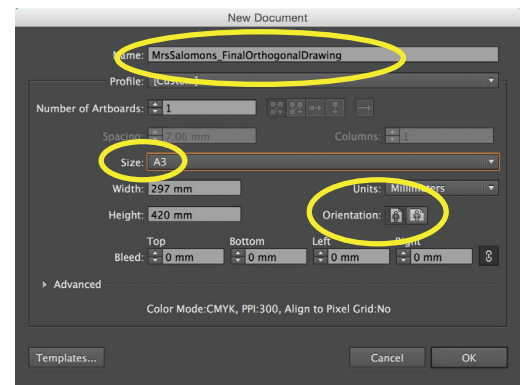
1 Scan your hand-drawn orthogonal drawing to your email and then save it onto your USB or desktop.

2 Open a new A3 document in Illustrator and call it 'Your Name - Final Orthogonal Drawing'. Remember to choose the correct orientation for your object.

3 Go File > Place to insert your scanned drawing into the document.

4 Click on 'Image Trace' in the top tool bar.
* If the trace is missing some lines, try adjusting the threshold settings. To do this click on Image Trace Panel button and move the marker to the right a bit.

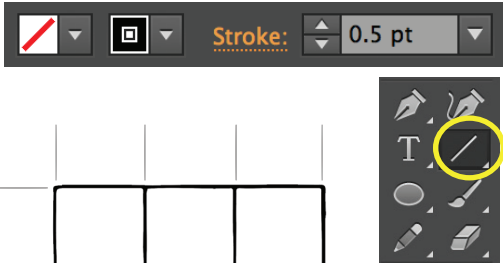
5 Click on the Expand button and then use the white arrow tool to select and delete any marks or lines you don't want.



6

- fill is set to empty
- stroke is set to black,
- stroke weight is 0.5pt

Then use the line tool to draw your projection lines.
 * Remember these lines need to start 2mm from your object and extend 2mm past the last dimension line.

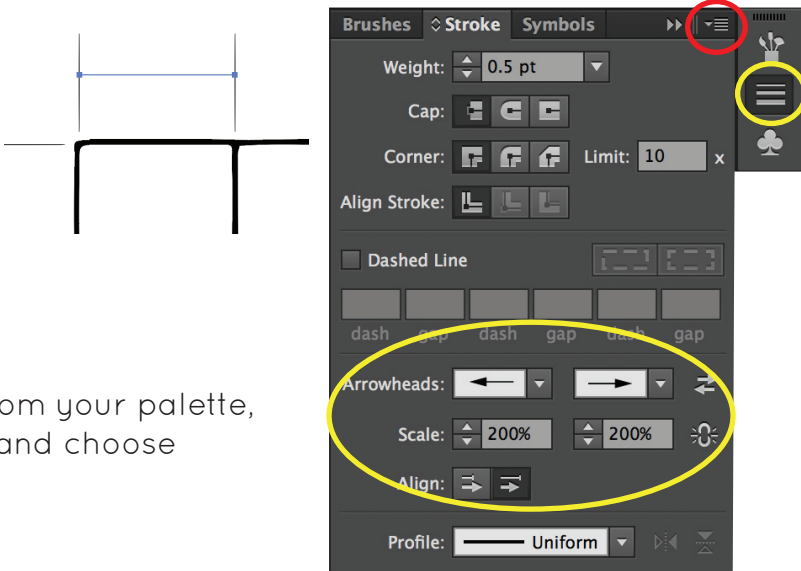


7

Then using the line tool again, draw your first dimension line between the two projection lines.

Select your dimension line and using the 'Stroke' palette choose arrowhead no. 9 and set the scale to 200% for both length and height.

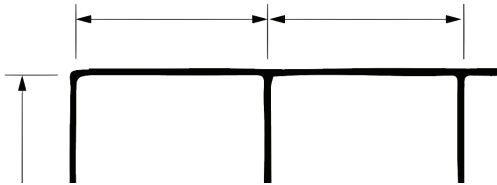
*If the arrow options are missing from your palette, click on the little drop down menu and choose 'Show Options'.



8

Copy and paste this line with the arrowheads to all the different measurement points you need. Make it shorter or longer, or rotate it when needed.

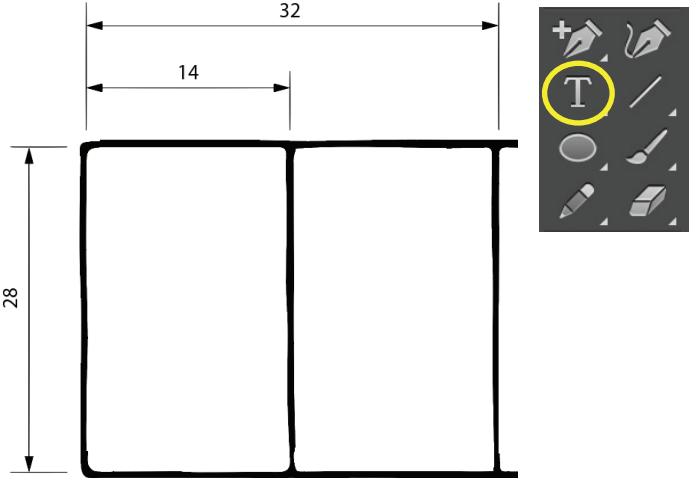
* Remember not to double up with any of your measurements.



9

Using your type tool write each measurement out in a clear sans serif font. Centre these numbers above (horizontal lines) or beside (vertical lines) each line.

* All measurements should be in mm.



10

- Using your type tool:
- Complete your title bar with all relevant information.
 - Include your scale information e.g. 'SCALE 1:1'
 - Include the statement 'ALL DIMENSIONS ARE IN MM'.