Using Transforms and Crop in SketchBook Designer

In this section you will learn the following:

- How to use different transforms for specific conditions
- How to crop an image
- How to export a TIFF with layers
- How to underlay a 3D AutoCAD conceptual model
1. In this exercise we'll adjust an image to fit a conceptual design. In this case, we have a very rough idea of the shape of the building's curtain wall, and we may want to communicate a possible end state. Building a more complete version of the curtain wall will take some time, so we decide to compose an image of the potential solution into the conceptual design.

2. We'll start by importing a photo of a curtain wall. It's not complete, and has some distortion, so we want to adjust it first.

3. Let's use the Polyline Marquee to select the piece of the curtain wall we want to use. When we complete the loop, we'll press Enter to finish.
4. From the Edit menu, we will now select Crop to Selection.

5. We now have our selection of the curtain wall, which we need to adjust in order to correct the deformation.

6. Selecting the Warp transform tool we will have a lot of flexibility for the operation. Don’t hesitate to add control points along the sides of the bounding box.
7. Let’s export this image as a TIFF. This format will keep the layers contained in this canvas.

8. Now let’s go to our model in AutoCAD, and isolate the piece that we want to work with.

9. We’ll create a canvas only with Paint Underlay, and send it to Sketchbook Designer.
10. Let's import the image we created some minutes ago, so we can overlay it on this elevation.

![Image of Sketchbook Designer interface with imported image]

11. We have to use Transform so as to fit the curtain wall in our design.

![Image of Sketchbook Designer interface with transformed image]

12. Once we are done, we can now duplicate the layer, and redo the whole operation once we move the duplicated layer to the side. Moving constrained to the axis is really helpful in this case.

![Image of Sketchbook Designer interface with duplicated layer moved to side]
13. The next duplicate is longer than what's remaining of the building, so let's make a rectangular selection of the exceeding panel, leaving only the one that doesn't fit. Delete the content once you have the selection done.

14. Select the panel that doesn't fit, and do a transform. In this case we will use the non-uniform scale along the axis, so we don't distort the height.

15. We need to keep copying the curtain wall to the rest of the façade. The following part of the façade is slightly different since it changes its height. Simply use Distort instead of a Scale transform, and work with the corner grips.
16. This one has a curve, so we’ll use the Warp transform to make it fit.

![Warp transform example]

17. After some operations with transforms and duplicates, we get a very good idea of the final state of our curtain wall without having done any modeling.

![Final state of curtain wall]

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