

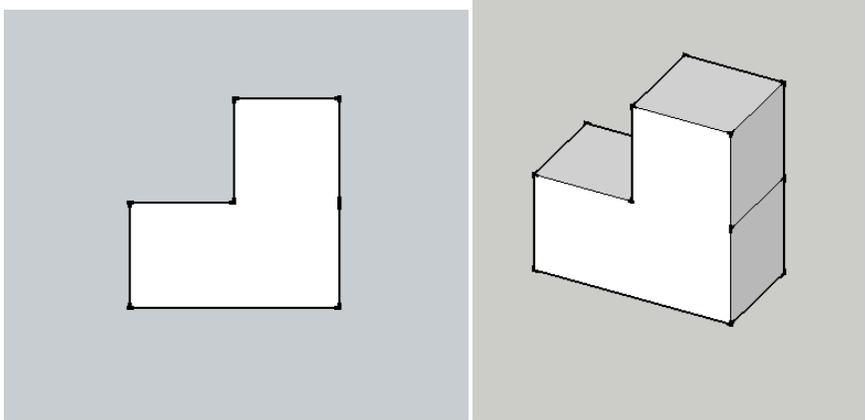
## Building Castle Parapet Walls Design and Production

This guide will assist you in building the parapet at the top of a castle's walls. The alternating high and low stones that look like teeth are called **CRENELLATIONS**. Their purpose was to allow castle defenders to fight from a defended position.

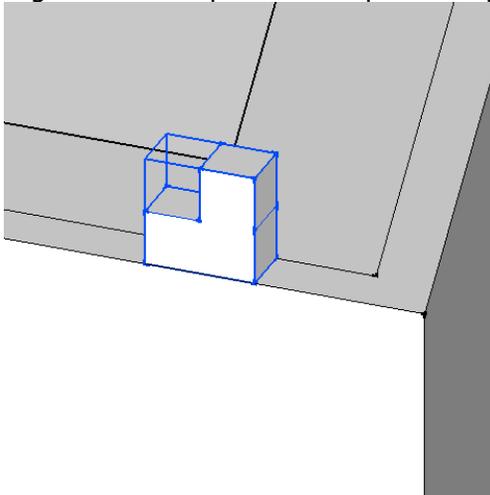
You will need to adapt the techniques shown here for the shapes of your castles walls. If you are using walls that are mostly curved, you will need to use the second method towards the end of this document. This may take some time to detail effectively!

1. If your walls are mostly straight lines, this method will be simple and effective. First we want to make a component that represents a single section of the crenellation - one low part and one high part. Depending on the thickness of your walls you may need to adjust the size. I suggest 3' or 5' for the line segments (that means draw each short line in the image below at either 3' long or 5' long, then connect them as shown).

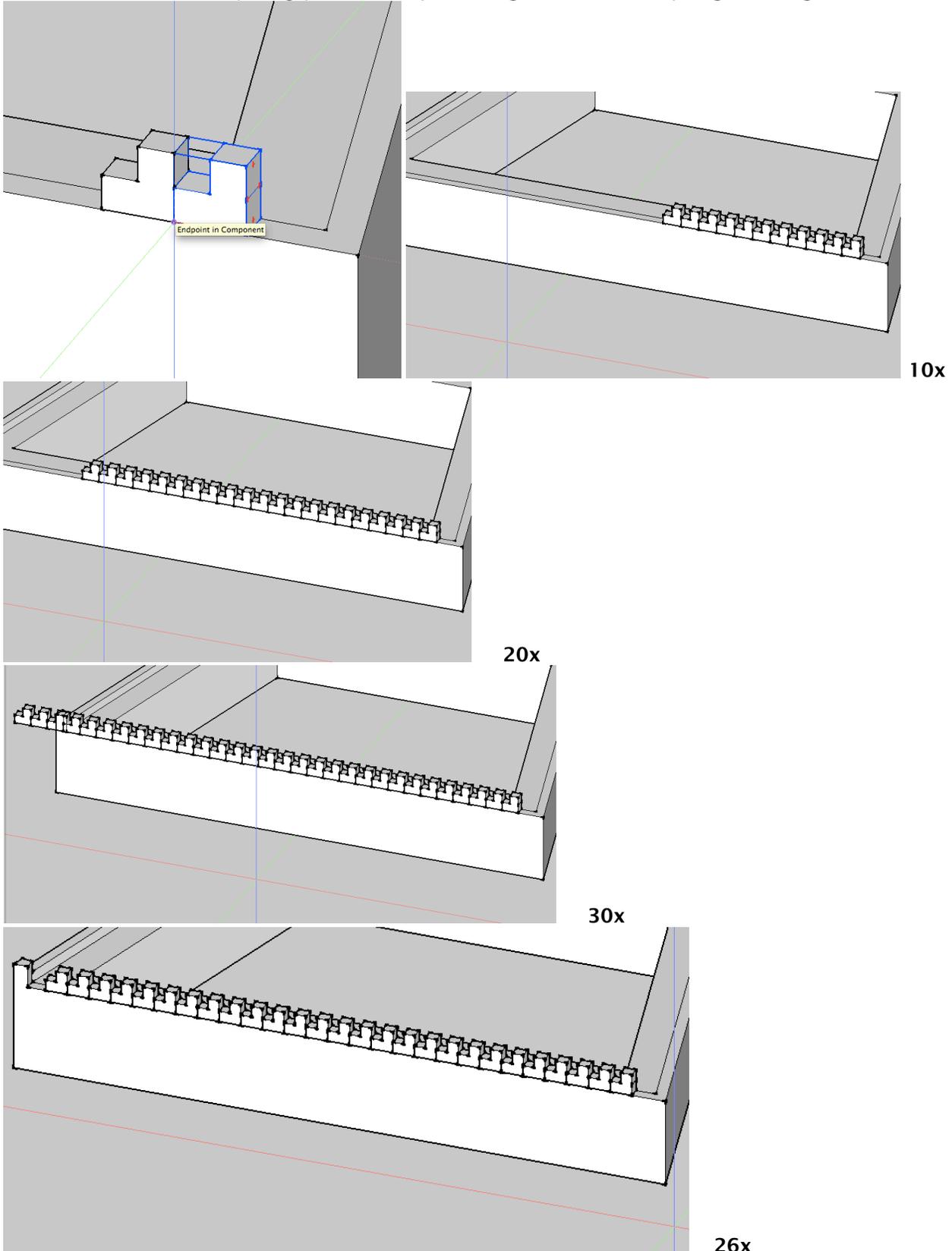
After you draw the outline, pull it into 3D the same distance, either 3' or 5'. This will form an L shaped object that you should turn into a component called "**Crenellation Segment**".



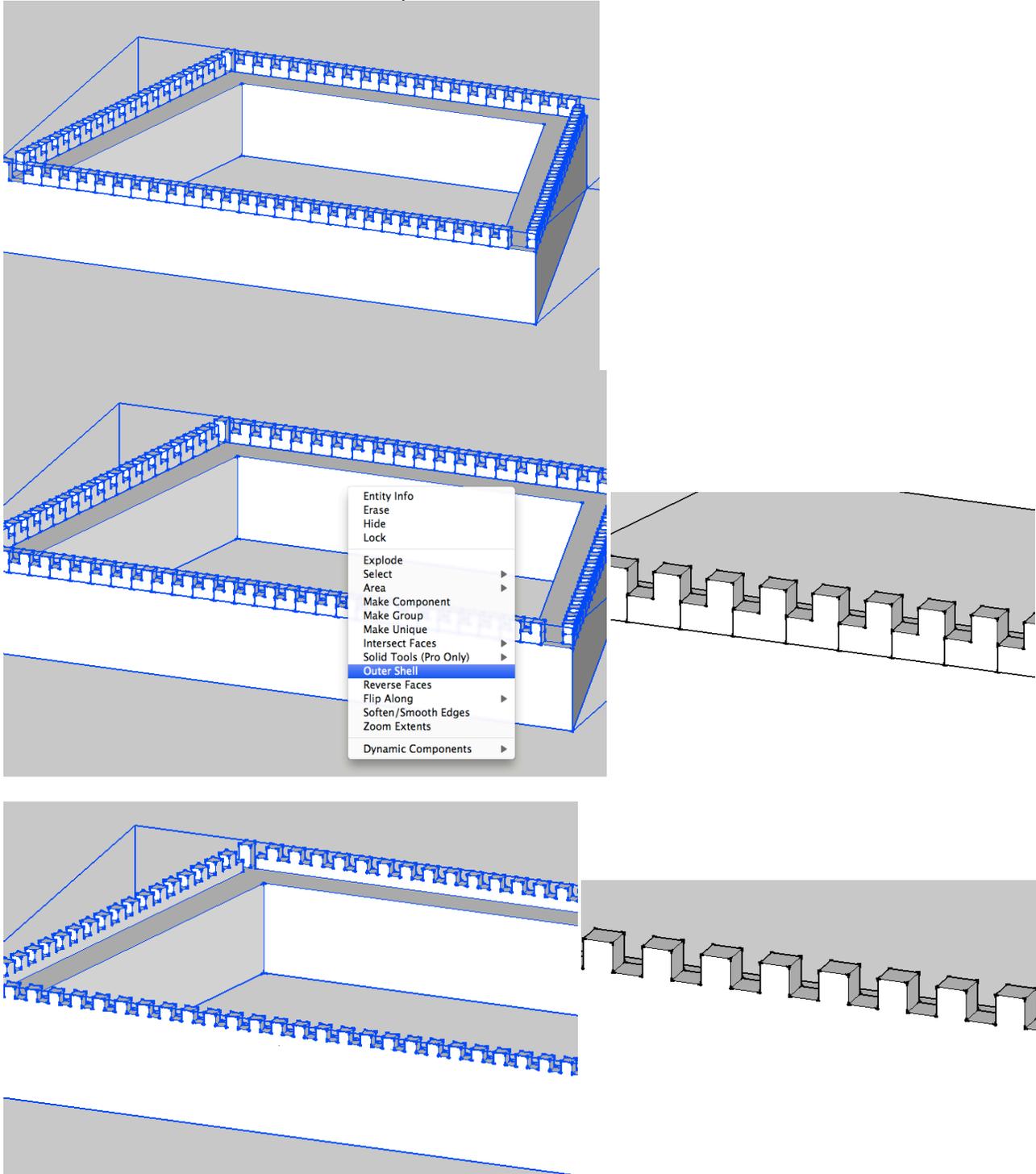
2. Now we want to take a look at your castle walls. You may want to HIDE your Towers and Keep by selecting them, right clicking, and selecting "HIDE". You can unhide them at any time from the **Edit Menu > Unhide > All**.
3. Since you will likely have towers at the corners of your walls you don't have to worry about having the components line up nicely all the way to the corners. Place one on top of the wall at the outer edge so that the edges line up (when you start the move, be sure to select on the edge of the component and place it right onto the outer edge of the wall).



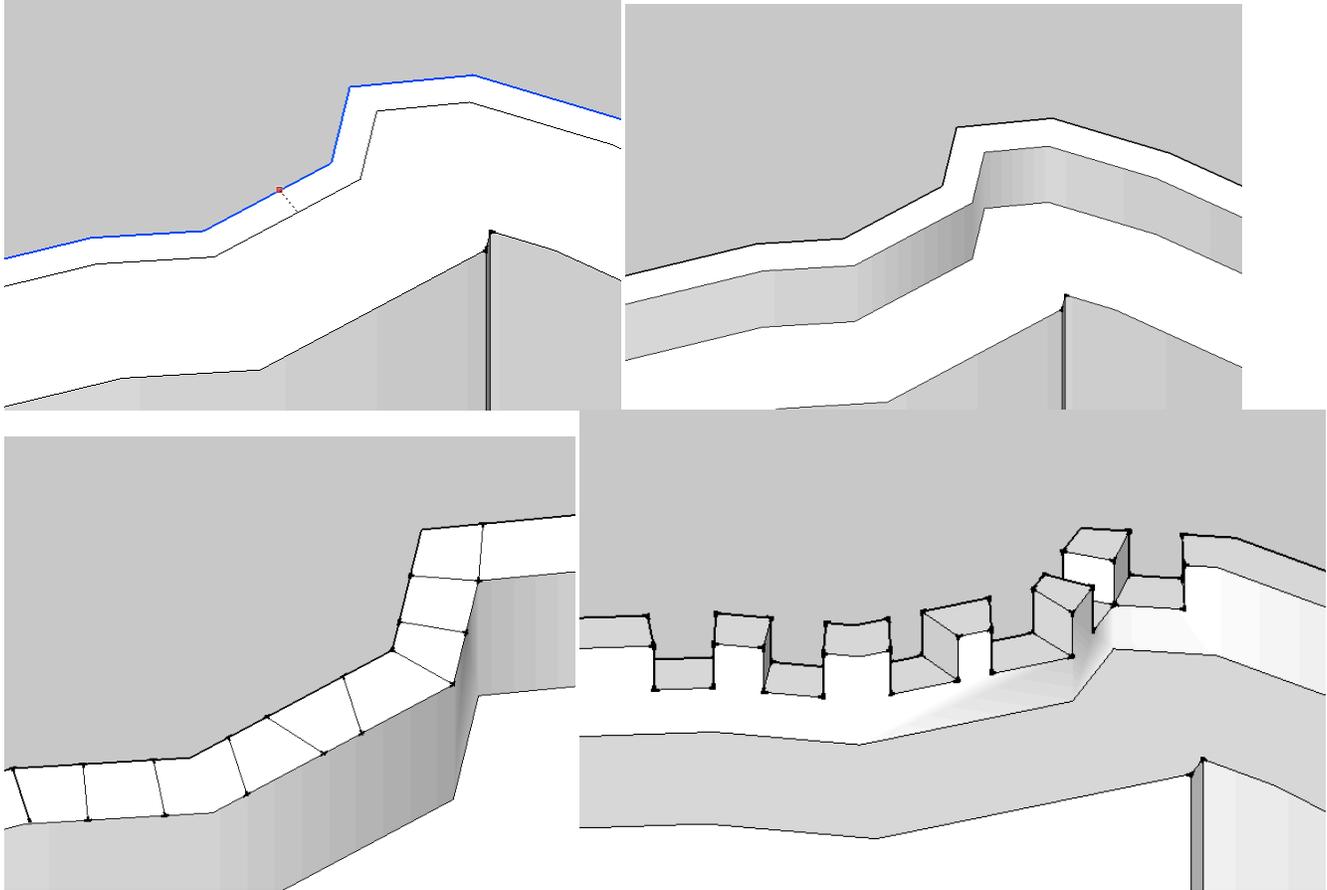
4. Take this and move/copy it down towards the other end of the wall from one edge of the component to the next. Then, before clicking, zoom out enough so you can see the whole wall and start entering a number of copies (10x, 20x, 30x, etc...). You can try entering different numbers until you have enough crenellations to cover the length of the wall. As long as you don't click on anything you can keep entering numbers until you get the right amount.



5. Repeat this step for any length of wall you have, and along the top of the keep. Again, if you have towers on the corners you don't have to line them up exactly with the corners because they will be covered. Don't worry about the visible lines, since there is an easy technique to get rid of them. Make sure your wall objects are a GROUP (if they aren't, select them by triple clicking on them - the crenellations shouldn't be selected when you do this - then right click and select MAKE GROUP). Then select all of those objects, the walls and the components, right click, and select **OUTER SHELL**. This will turn all of those objects into a single group with as few faces and extra lines as possible.



6. If your walls are curved, you will have to go a bit more slowly with this process. Not all curved walls need to have the crenellations. You could select the top face of your curved walls (which should be about 20' thick) and offset the outer edge inwards 3 or 5', then pull the resulting outer ring up about 8-10'. This will give you a parapet wall and could simply be a design choice on your end. If you wish to create crenellations to enhance the appearance (and **earn some additional points**) you will need to manually draw lines on the top of this new ring, and push down alternating crenellations to form the shape.



7. When you draw the lines just be careful that they connect the inner and outer edge, and just gauge them by eye to be about 5' wide - they don't need to be perfect squares. It will take some time to surround your wall with these crenellations but they will look really great in the end!