

How to Build a Viaduct by Barry Jack



I used Extruded Polystyrene, (eps), rigid foam insulation. In Canada, there are three manufacturers, Owens Corning, Dow and Dupont. They are easily recognized by their product colour namely pink, blue or dark grey. They come in a variety of sizes, ranging from 1" to 4" thick in 2' x 8' or 4' x 8' lengths. The commonly found white styro will work, but I suggest lowering the temperature of your Hot Wire, (H.W.), foam cutter if you are using that type of foam.

Starting with a 2' x 4' piece of eps. Next, determine the size of brick or stone you want. Using a pen and ruler draw lines on the foam representing the thickness of your brick rows. Then draw the vertical lines representing brick lengths across the foam surface.

Hint: I measured the brick lengths on the first row, then eye-balled the bricks on every other row. In the rows missed, I marked the midpoint of the brick above to identify the brick grout line. This is a time saver compared to accurately marking every brick size. If you plan on a stone wall, like this, it will add realism to your wall, as not every brick is identical.



Set a 'Hot Wire Adjustable Sled Guide' and their 'Precision Engraver', to an appropriate depth. Slide across your foam surface, following the brick pattern. Moving at a constant speed produces uniform grout line depth and thickness.

For Viaduct openings, I made a pattern out of Masonite, then traced the pattern onto the foam and cut the openings with the H.W. Probe tool.

Hint: using the probe tool to free hand cut the openings left a rough uneven surface. If a female pattern for the opening was used as a guide for Probe tool, it may have resulted in a smoother cut surface.

Black paint was used as a base coat, and for the grout lines and for the inside of the viaduct openings. After dry brushing several successive paint colours on the foam surface, the desired stone look was achieved.

The viaduct arches were created from 0.020" Styrene, using a Silhouette cutter similar to the Cricut commonly found in Michael's, then painted and glued it place.