

Steps to Construct a 'Big Boy' Muffler.

Step 1:

Using 25mm x 25mm wire mesh cut and bend a piece 1450mm X 680mm(this includes 50mm overlap) into a tube shape. Diameter of mesh tube will be ~200mm.

Step 3:

Grove two Echosoft 60 grade; 50mm thick sound reducing batts. Each batt is cut to 885mm x 600mm(width). Grooves are 100mm apart, 20mm wide & ~20mm deep...across each 600mm width batt. Cut the grooves on the non bonded side of the batts. Taper the ends to achieve a good fitting joint.

Step 4:

Wrap and tape each grooved batt around the wire mesh tube side by side with the grooves facing inwards to the mesh. Use a ratchet strap to hold, then tape the batts tightly together.

Step 5:

Wrap the standard acoustic batt material around the wire mesh tube about 100mm in from the end. Wrap enough to accommodate the tapered section of the reducer. Wrap PVC tape around batt material to hold it.

Step 6:

Cut and wrap one layer Acoustiflex matting (silver side inwards) around the outside of the Echosoft batts. Using a ratchet strap to hold, then tape.

Step 7:

Cut the 12" (300mm) diameter snap lock pipe to 1200mm in length leaving the corrugated end on. Snap and lock the pipe seam together to make the 1200mm long pipe.

Step 8:

Fit mesh tube into the 300mm to 200 mm reducer and attach mesh to 200mm collar of reducer...flush with the reducer end using a metal strap and pop rivets. This becomes the bottom reducer of the muffler.

Step 9:

Make cuts in the 300mm (12") dia. bottom reducer collar ~40mm apart all around the circumference.

Step 9:

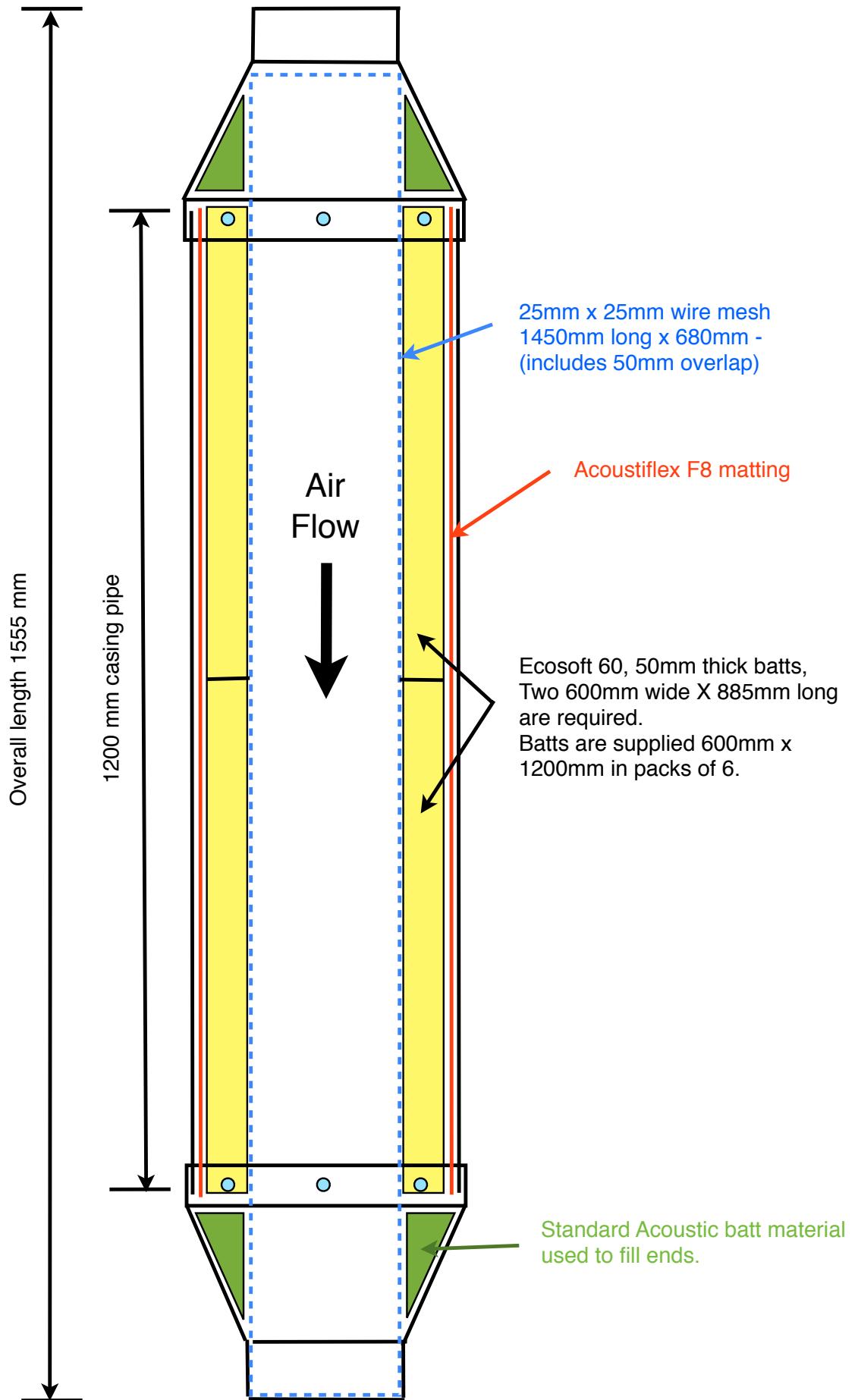
Slide the non corrugated end of the pipe into the inside of the 300mm dia. collar as far as possible.

Step10:

Fit top reducer. Partially slide on the reducer then fill and compress the tapered section with standard acoustic batt material. Slide the reducer over the pipe and pop rivet the collar and pipe together.

Step 11:

Gaffer tape over the cuts on both top and bottom reducer collars to cover up the sharp edges.



Muffler Cross Section