

The #0000 Shaker Oval Box

Michael Wollowski

John Wilson, in his wonderful instruction booklet which accompanies his box making workshops meticulously extended the Shaker box dimensions as given by Ejner Handberg [1]. It turns out that it is possible to extend it to below the smallest one given by John Wilson, resulting in what would be a #0000 box. An image of a finished box can be found at [2]. As it turns out, John Wilson himself built one as indicated on the cover of the January 2006 Lee Valley and Veritas catalog. Below are the dimensions and some construction notes on how to make this box.

Box size: 0000

Tack size: Modified $\frac{3}{4}$ tack. (See note (i) below.)

Band thickness: about 0.04"

Bottom band width and length: $\frac{1}{4}$ " x 4 $\frac{1}{2}$ "

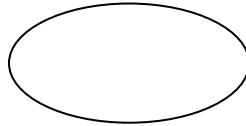
Top band width and length: $\frac{3}{16}$ " x 5 $\frac{1}{8}$ "

Ellipse width and length: $\frac{5}{8}$ " x 1 $\frac{1}{4}$ "

Top and bottom thickness: $\frac{1}{8}$ "

of fingers and Length to tack line: 1 – $\frac{9}{16}$ "

Ellipse pattern (You may have to recreate the ellipse, in case your printer scales this document.):



Notes: (i) The $\frac{3}{4}$ inch tacks need to be filed to the proper dimensions. The length needs to be about $\frac{1}{16}$ of an inch longer than double the thickness of the band. The $\frac{3}{4}$ tacks cannot be cut to the correct length as this leaves the shaft of the tack too thick. The tip will not bend and instead will split the band. The tacks need to be filed shorter and smaller in diameter. If the tip is razor thin, that is fine, as the bands do not exert a lot of pressure on the tacks.

(ii) When it comes to the peg holes, due to the rather small thickness of the top and bottom, smaller holes need to be drilled; a $\frac{2}{64}$ hole is just about right. The hole should be just thick enough so that the peg enters the top or bottom by about an $\frac{1}{8}$ of an inch. More is not necessary due to the small size of the box.

References:

[1] Ejner Handberg. Shop Drawings of Shaker Furniture and Woodenware, Vol.1, Berkshire House Publishers, Lee, MA, 1991.

[2] Michael Wollowski: #0000 Shaker Box,
<http://www.rose-hulman.edu/~wollowsk/wood/four0box.html>, 2005

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