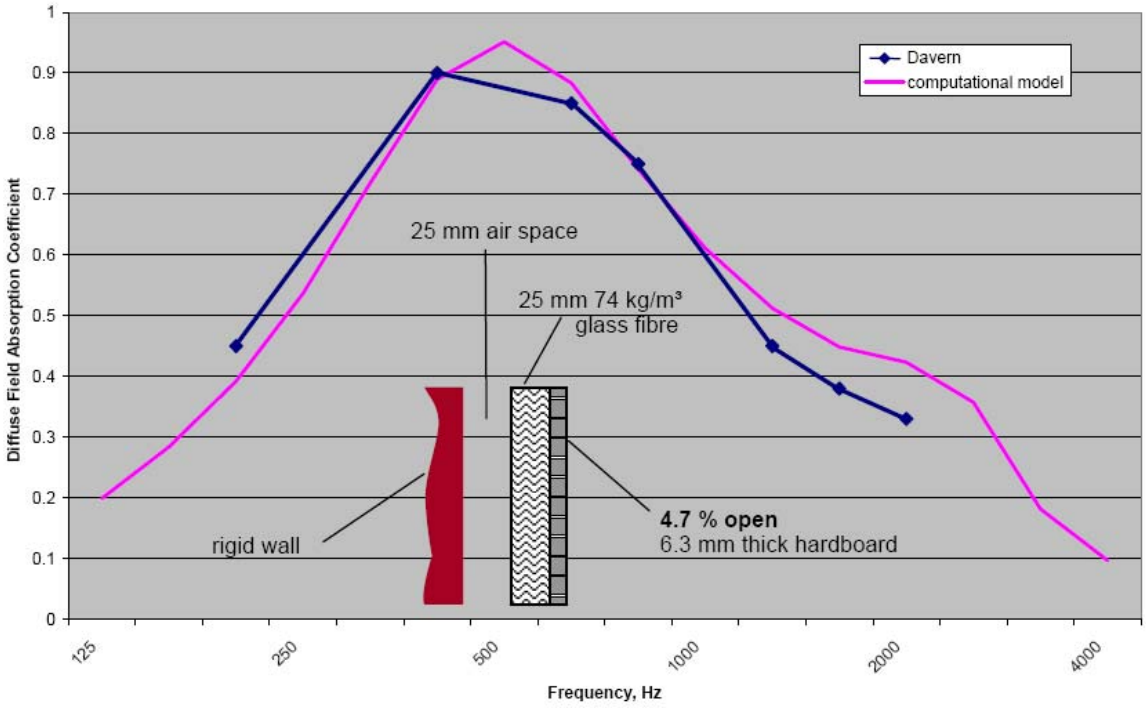

Another type of low-frequency sound absorber is known as a bass trap, which utilizes the "lossy" open-closed organ pipe cavity-type resonance as its principle of operation. The bass trap has alternating layers of absorbent, porous materials (*e.g.* fiberglass insulation) and air to absorb frequencies which have ¼-wavelengths equal to the depth of the bass trap, *i.e.* $D_{bt} = \lambda/4$.

For a depth $D_{bt} = 1\ m$, a bass trap absorbs frequencies $f_{bt} = v/\lambda = v/4D_{bt} = 343/4 \simeq 86\ Hz$.

The construction of a typical bass trap is shown in the figure below: