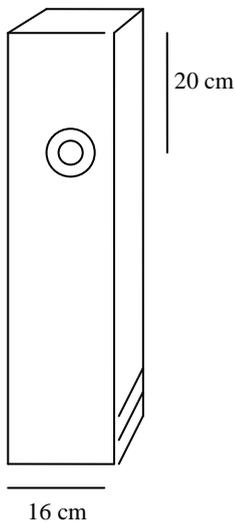
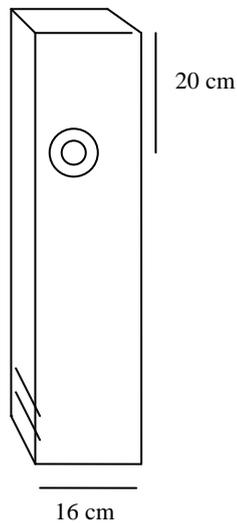


left speaker



right speaker



Drawing of speakers is not according scale – just for illustrative purposes.

Per pair in 16mm mdf Pieces

10 x 81 cm (sides)	2p (+2mm compensation for mdf-thickness in tunnel)
10 x 79,4 cm (sides)	2p
16 x 81 cm (front, back)	4p
16 x 13,3 cm (top, base)	4p (+2p if leaning backwards)
10 x 8,6 cm (tunnel)	2p (adjustment due to mdf-thickness)
18 x 20 cm	2p (optional base for better stability, especially if leaning the speaker backwards)

Tabaq-BMod

This modified version of the widespread standing TabaQ design incorporates some changes to the original design. The changes can be summarized as:

- a) These are built in 16mm mdf. Easier to work with, to glue and to put screws in. Less vibrations.
- b) The TB 3 inch is replaced by the 4 inch W4-1320 SIF for better all-round capability. The larger cone will lead to some decreased dispersion in the high-frequencies because of the larger cone but this is somewhat handled through the shelving circuit as described below.
- c) The loudspeaker cabinet is rotated so that the W4-1320 is placed at the wider side while the port is still to be found at the narrow side. Therefore the port ends up at the side of the loudspeaker and not at the front. This is done by building them mirrored so that both ports face inwards (or outwards). The purpose is to get some more room for the 4 inch W4-1320 and for some additional baffle support. It is also easier to tailor the bass response in your room by aiming the ports from or towards adjacent walls/corners.
- d) The loudspeaker leans backward with approx 3dgr. The purpose is to tilt the beaming of high-frequencies upwards towards the listener and also to reduce early hf floor reflections.
- e) The shelving circuit is changed with an added MKP capacitor of 4,7 mF to enhance the top end of the sound spectrum. Most of the listening is supposed to be done with the speakers turned slightly inwards and therefore off-axis so the cap is needed but it is also due to personal preferences. The baffle step compensation is approx 5db with an Inductance of 1,4 mH (which is of 0,8 mm air core copper to raise QTS). The resistor is 6 ohm (and 10w).
- f) The centre of the W4-1320 is placed 20 cm down from the top of the loudspeaker. I could not place it closer to the top due to stability concerns and also due to suppression of resonance.
- g) The W4-1320 is placed 1 cm closer (mirrored) to one long side of the speaker (the ported side) to mitigate baffle diffraction.
- h) Stuffing is reduced, compared with the original version, due to lower QTS in W4-1320 than in the original TB 3 inch and therefore less need but also due to personal preferences.