

## Instruction for loudspeaker kit

Kompacte\_4 is high-quality low-profile speaker system (120mm deep), designed to hang on the wall.

For best performances, Kompacte\_4 should be associated with subwoofer (low pass at 50Hz, 24dB/Oct suggested for Sub.).

It can be used in many purposes, such as home theater or HiFi demanding system.

Connected in regular stereo amplifier, Kourtisane\_4 provides natural roll-off in low frequency around 58Hz at -3dB, 50Hz at -6dB).

In this configuration, we recommend 50W amplifier.

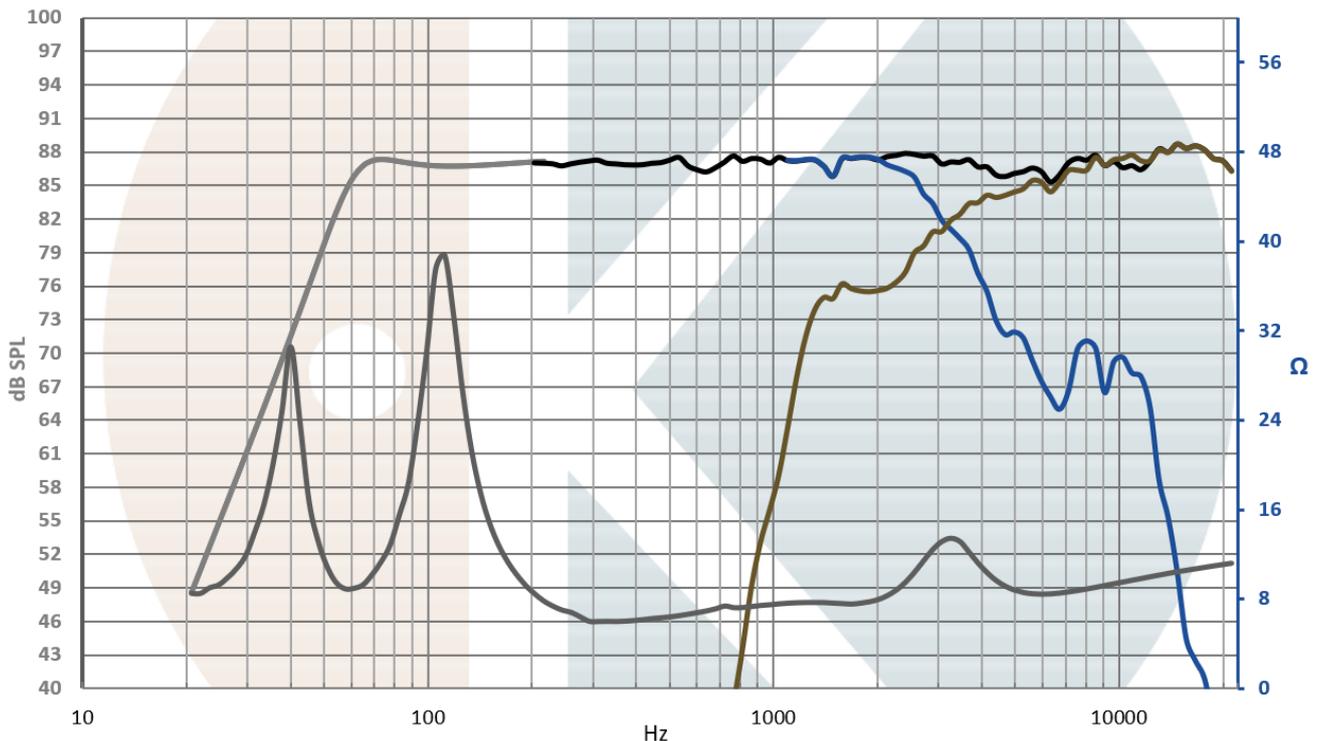
In home-theater, we suggest to configure Kompacte\_4 in small, and apply high-pass filter at 70Hz to make power handling compatible with 100W amplifier and more.

The innovative loudspeakers used in Kompacte\_4 provide very detailed sounding without fatigue, and astonishing dynamic capability.



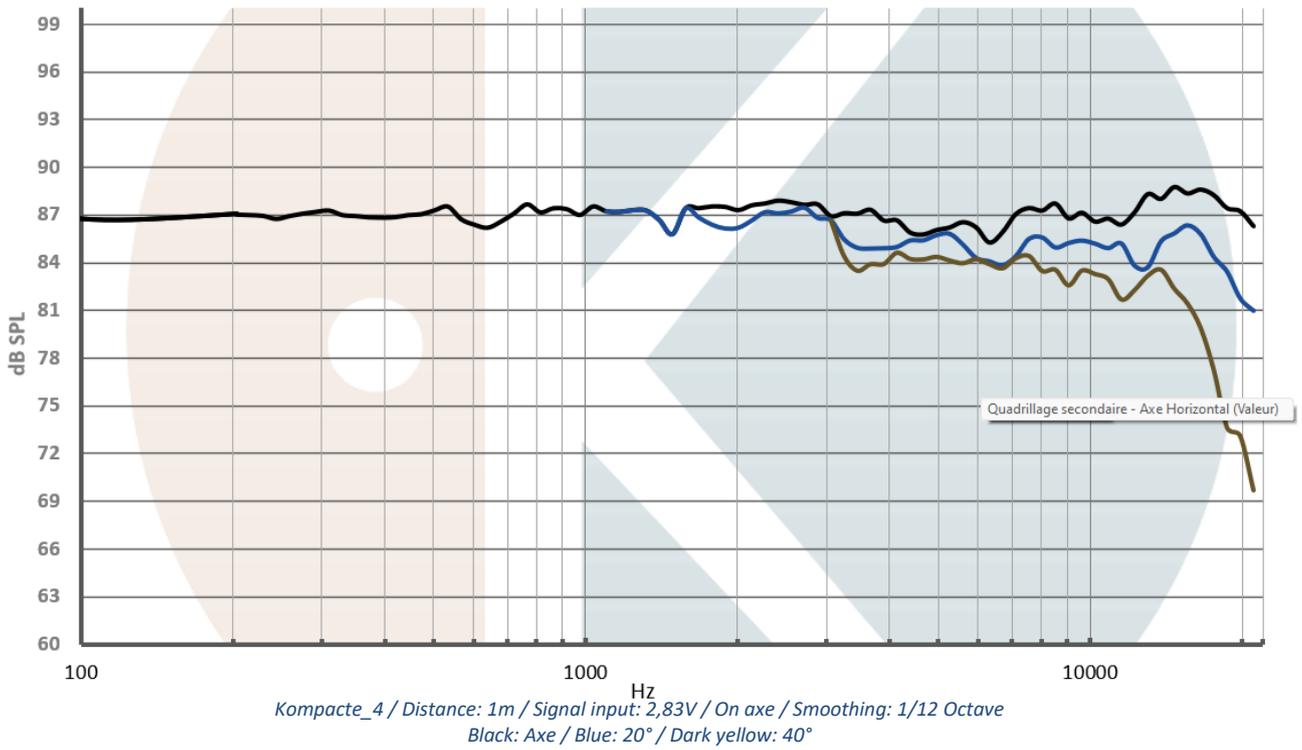
Enclosure must be built according to following drawing.  
Damping material and screws are free choices from builder.  
Wall mounting kit can be built with 3D printing.

### Frequency response, Crossover, Impedance



*Kompacte\_4 / Distance: 1m / Signal input: 2,83V / On axe / Smoothing: 1/12 Octave  
Impedance measured in Kompacte\_4  
Curve below 200Hz is simulated in 4.5L vented enclosure, Fc = 62Hz (as Kompacte\_4)*

### Horizontal off-axis frequency response

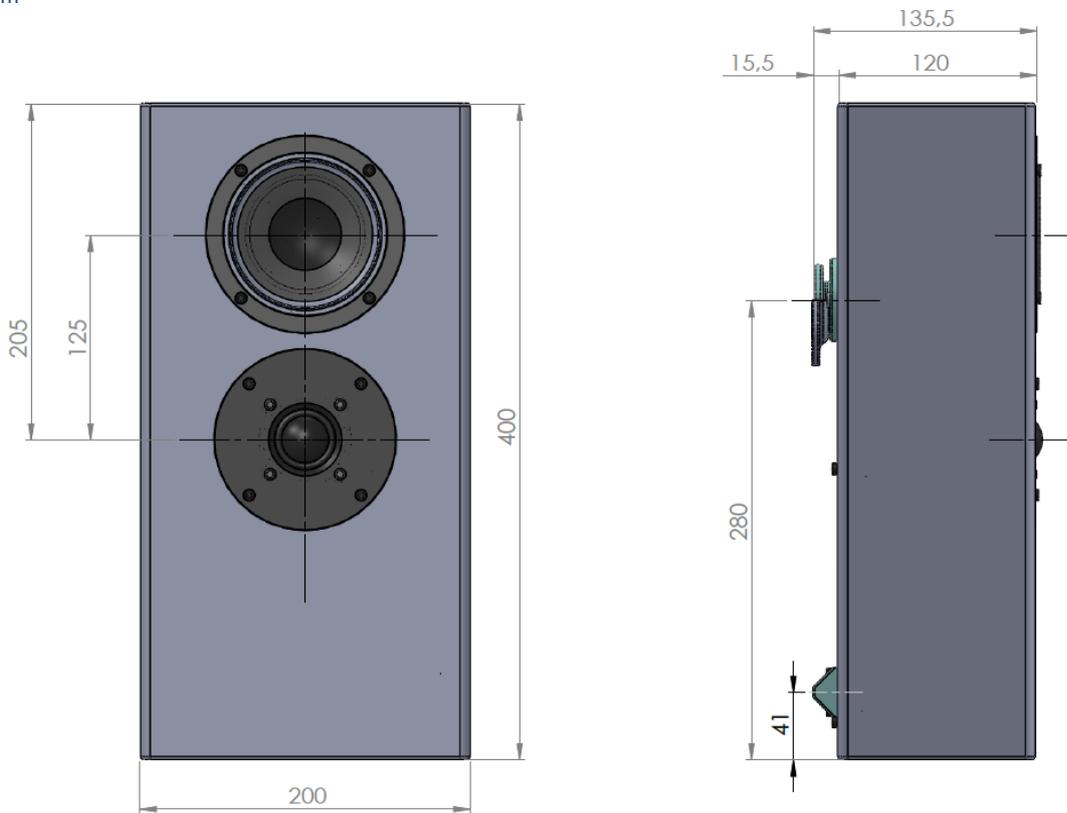


### Drawing main dimension

See detailed drawing on separate PDF

Suggested material: MDF, thickness : 15mm

Unit : mm





## Inspiration for finish / design

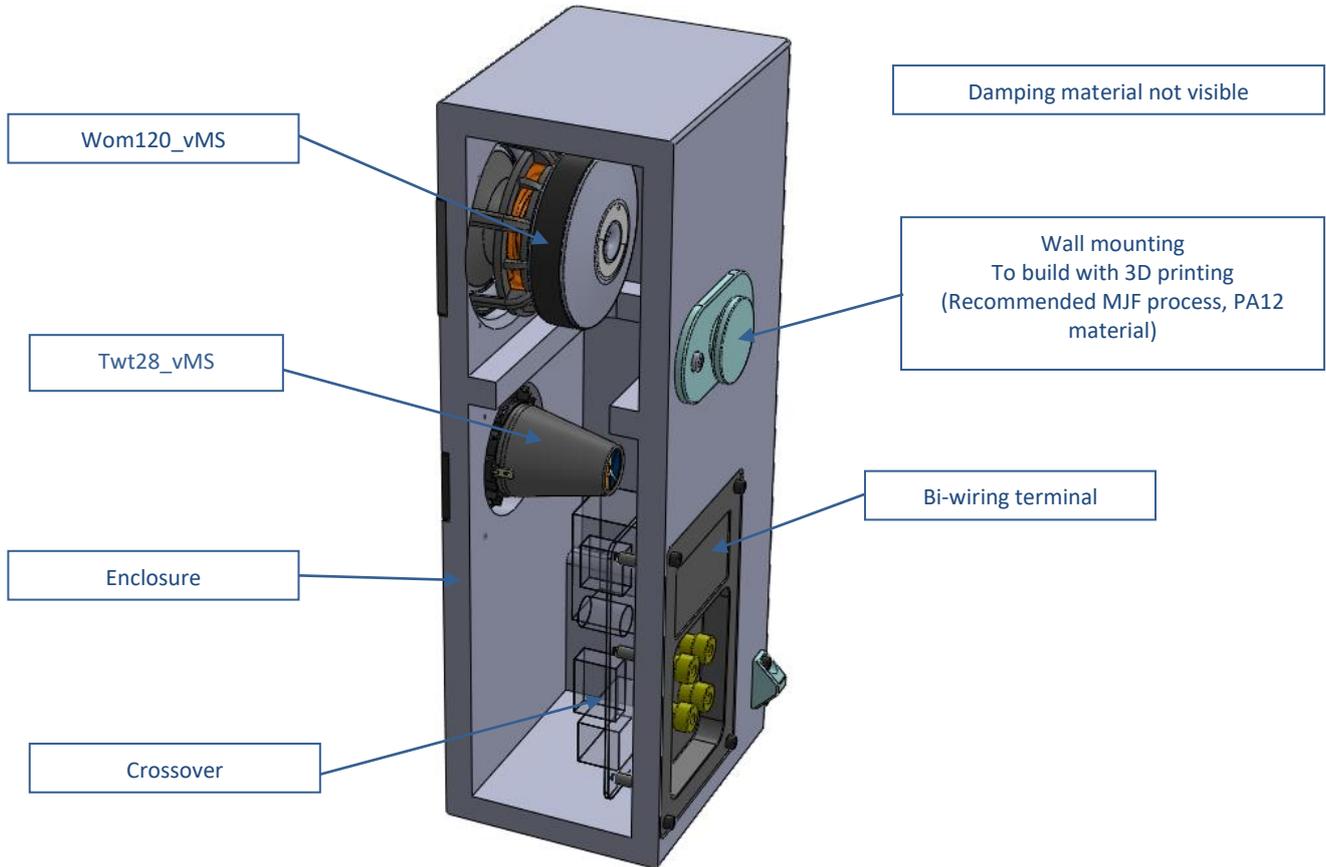


We provide 3D files for wall mounting kit.  
This wall mounting allow to adjust the position of the speaker on the wall, ensuring clean installation.

**It is highly recommended to ensure your 3D printing process is suitable for this purpose.  
Test performed by Kartesian has been made with Multi Jet Fusion 3D printing process, and PA12 material.  
Kartesian should not be responsible of damages caused by unappropriated 3D printing process or fixation on wall.**



## Overall view



### Crossover kit.

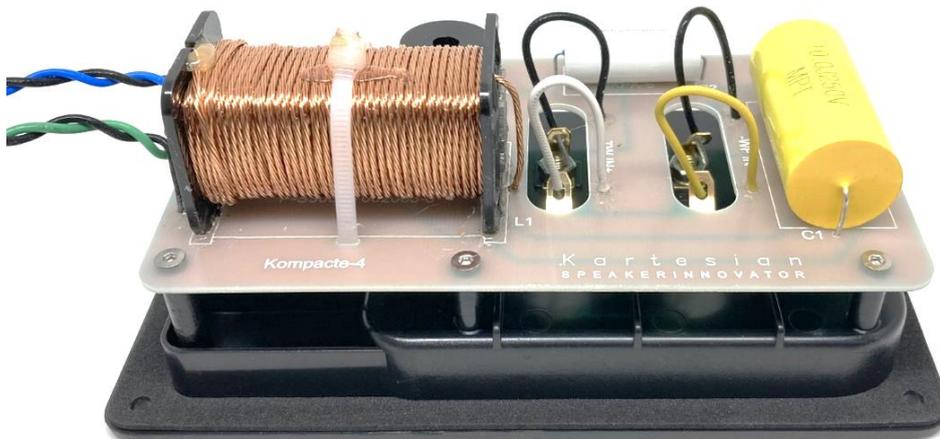
Wires to connect loudspeakers and terminal are included on crossover (Silver plated cooper, PTFE sheath).

Low-pass and high pass filter are 2<sup>nd</sup> order, 12dB/Octave. High quality silver capacitor is used for the high-pass filter.

Output cables must be connected as below:

- Black / Green = Wom120\_vMS. Black on negative speaker terminal, Green on positive speaker terminal.
- Black / Blue = Twt28\_vMS. Black on positive speaker terminal, Blue on negative speaker terminal.

The PCB is designed to be screwed on Kartesian terminal as shown below (crossover and terminal separately sold).

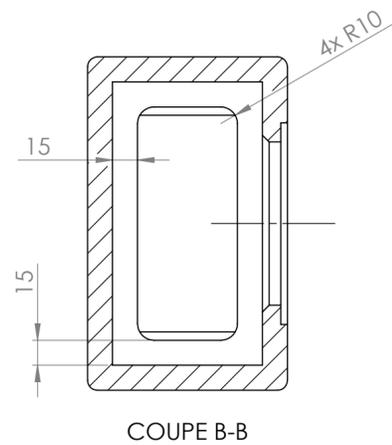
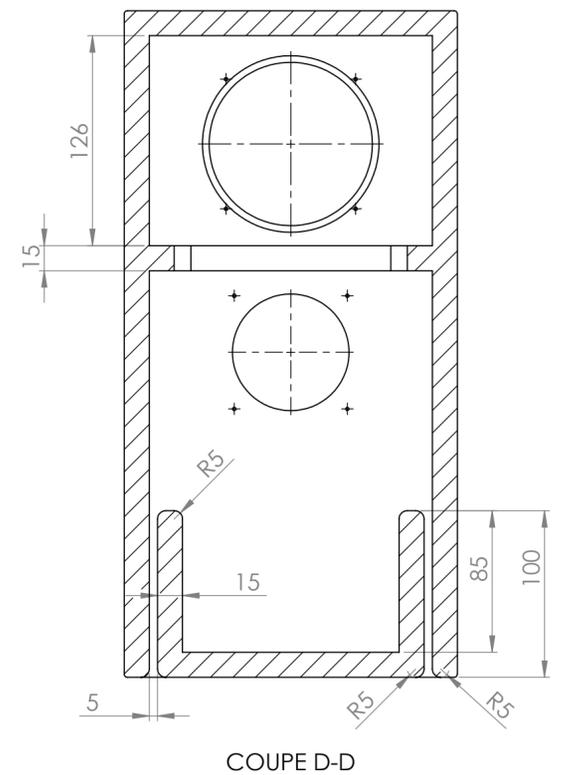
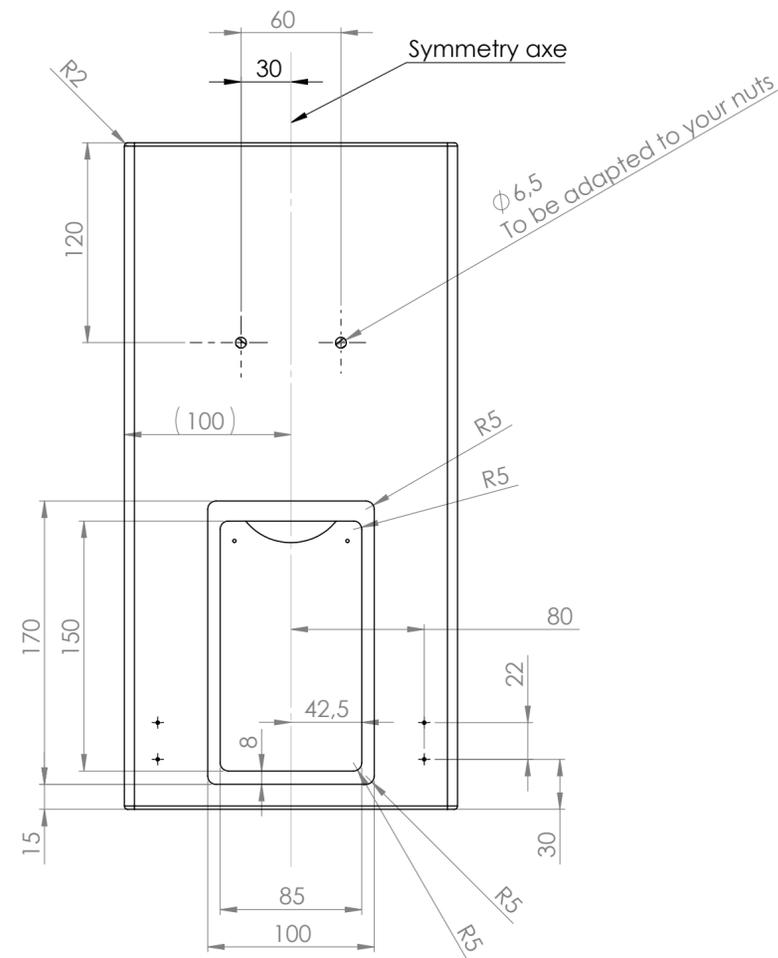
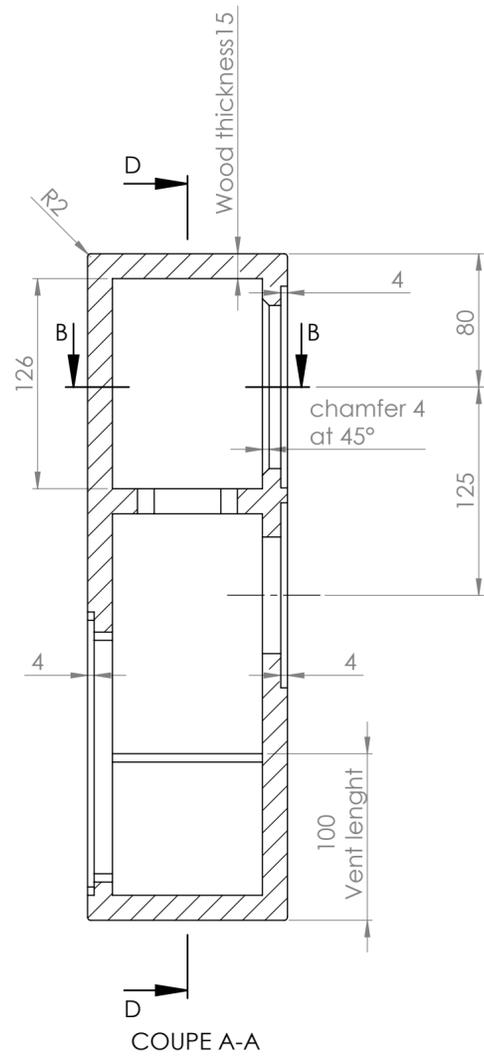
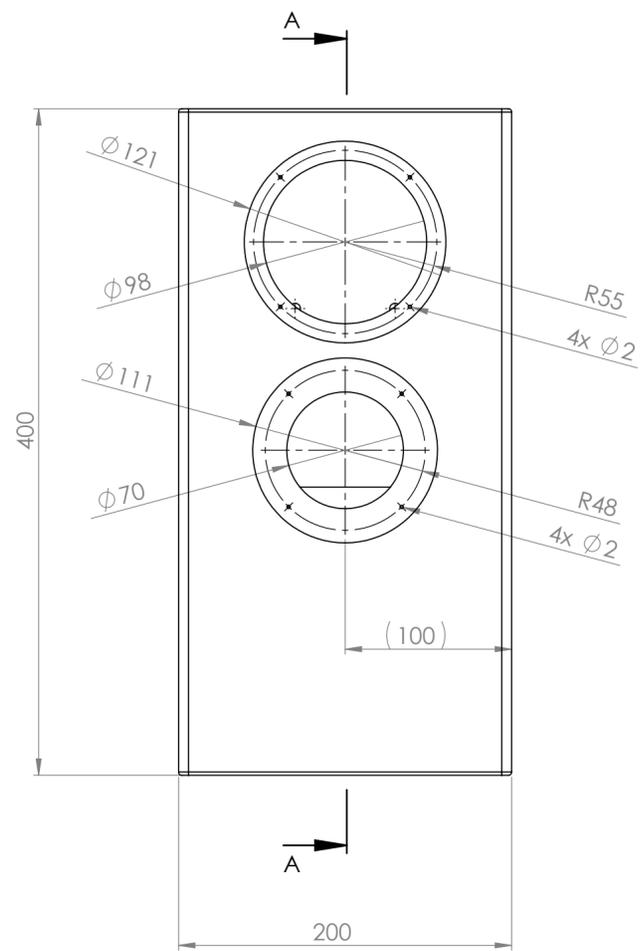
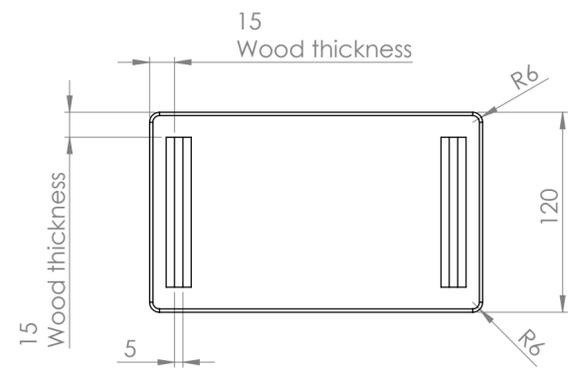


### Damping material

We recommend to used synthetic acoustic damping

1 sheet of 130mm x 200mm, thickness 30mm provide good compromise for bass extension and control.

Additional damping will slow down the air velocity and decrease the energy in low frequency.



## Kompacte\_4

Kartesian loudspeaker kit  
Dedicated to DIY community

Enclosure material : MDF or Plywood  
Thickness : 15mm  
Unit : [mm]

*Note: This kit is dedicated to DIY community.  
Kartesian couldn't be responsible of assembling  
mistake and its consequences.*

