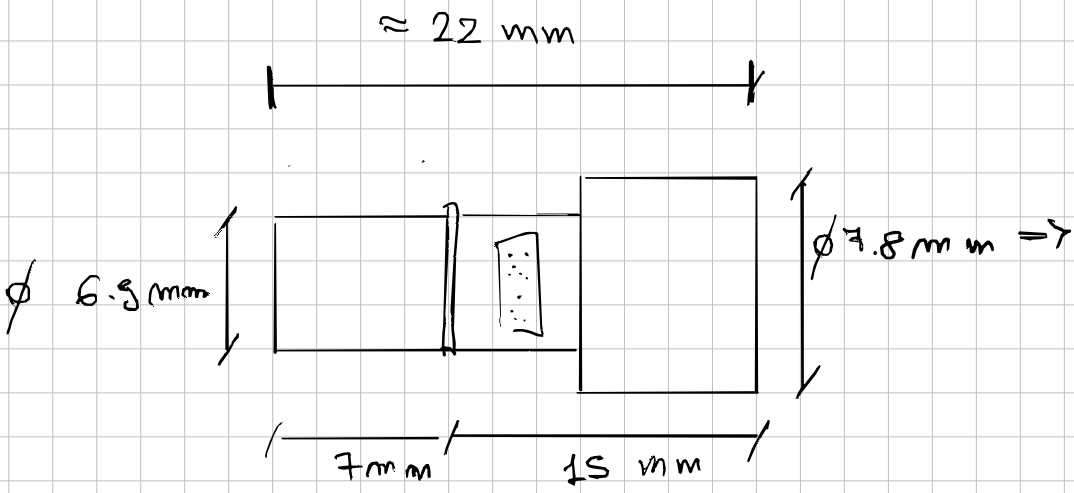
MICROPHONE DIMENSIONS



we need a 8mm cavity diameter for mic

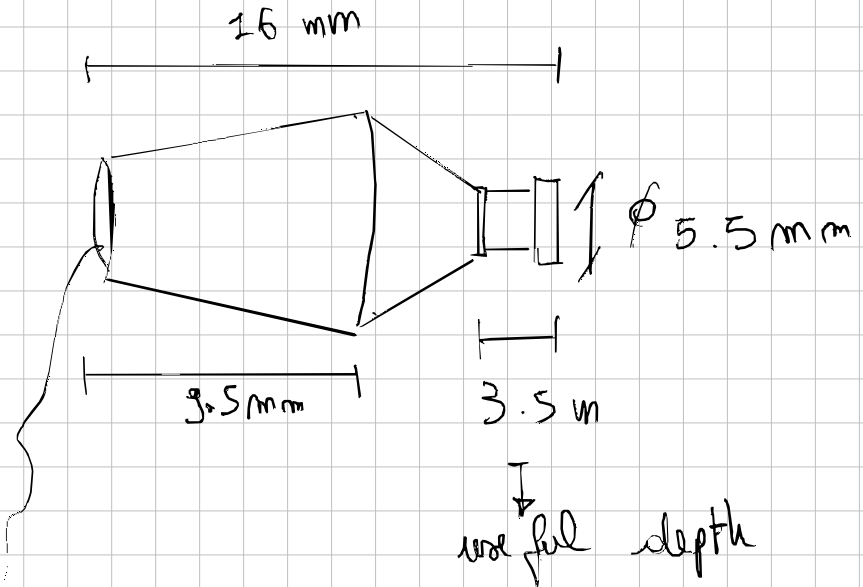
OUTER PART

this has not to be glued, but it is left outside of the cavity in case of removal

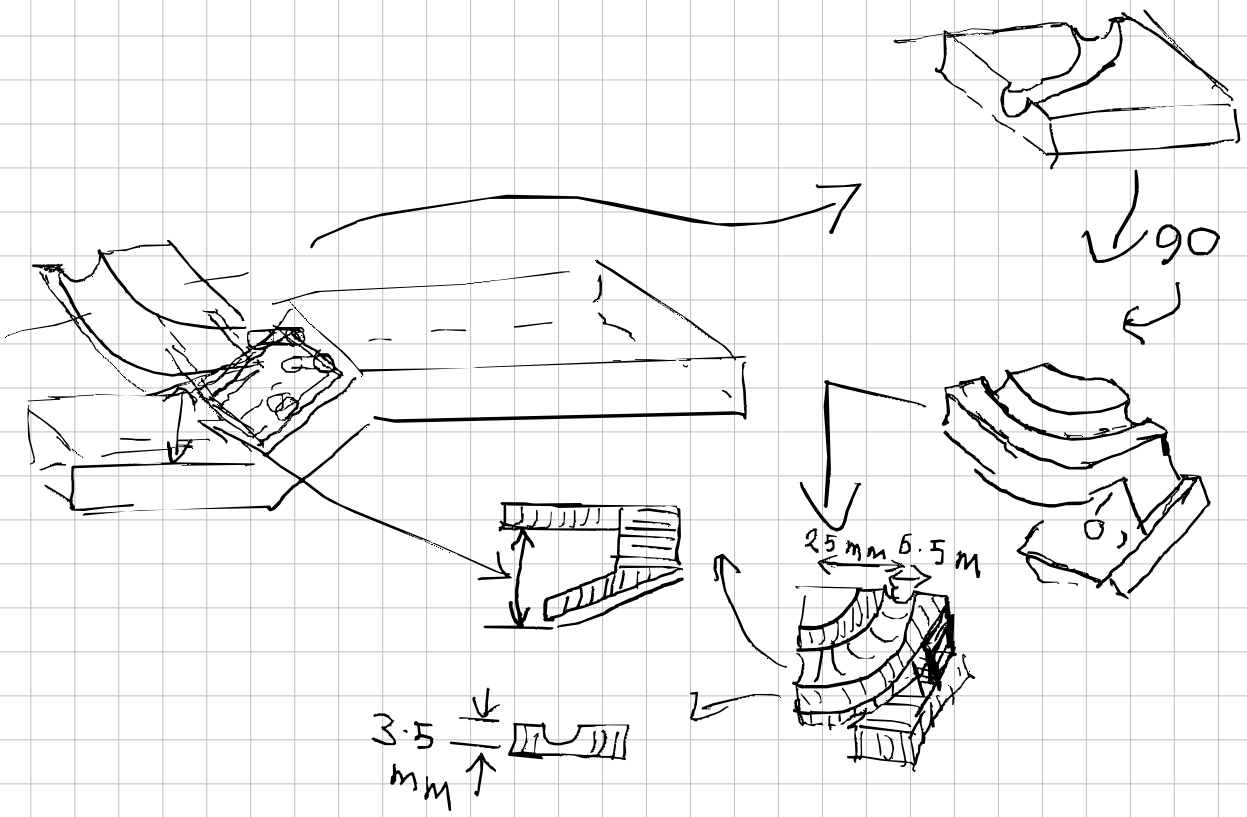
INNER PART

this has to be inserted completely into the cavity to receive the sound wave

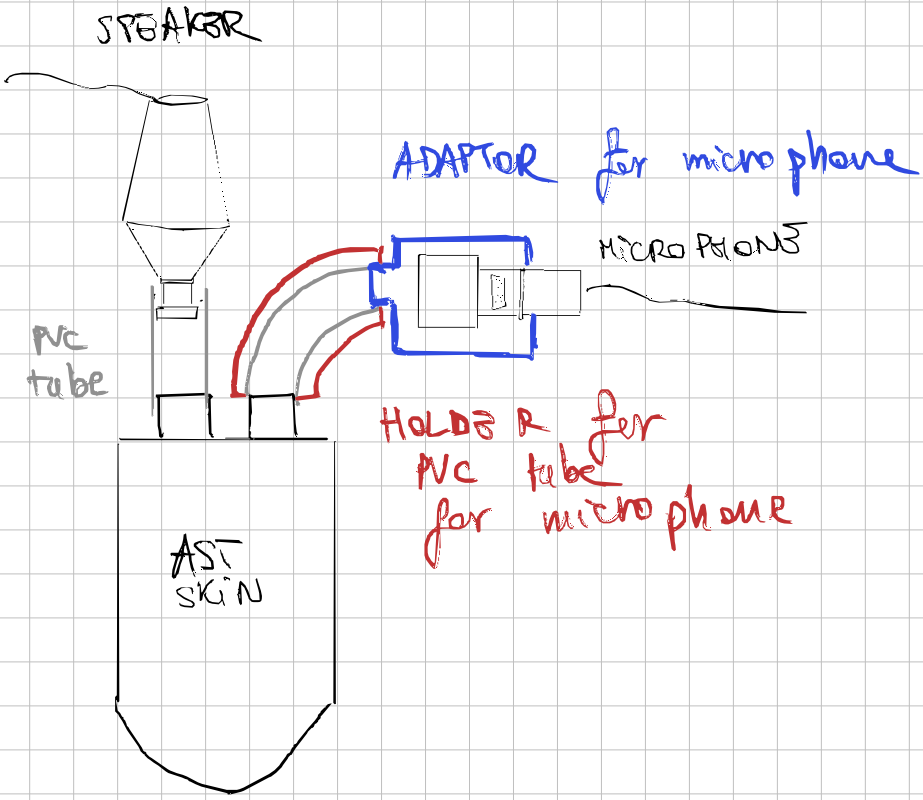
SPEAKER DIMENSIONS



Amir sketches

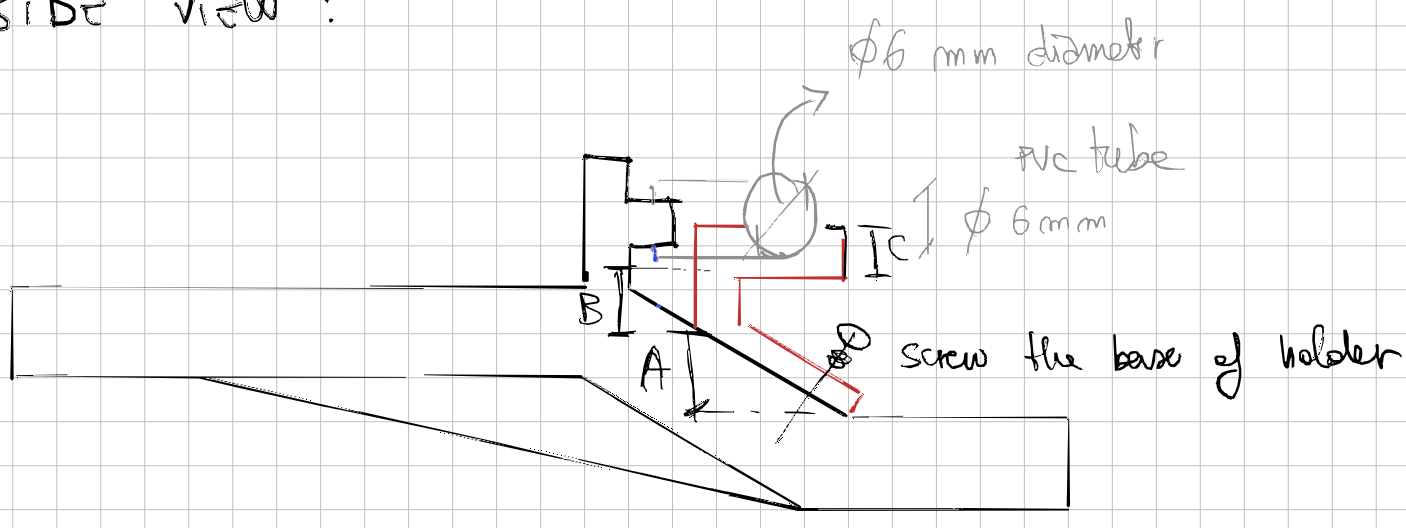


Final idea configuration : top view

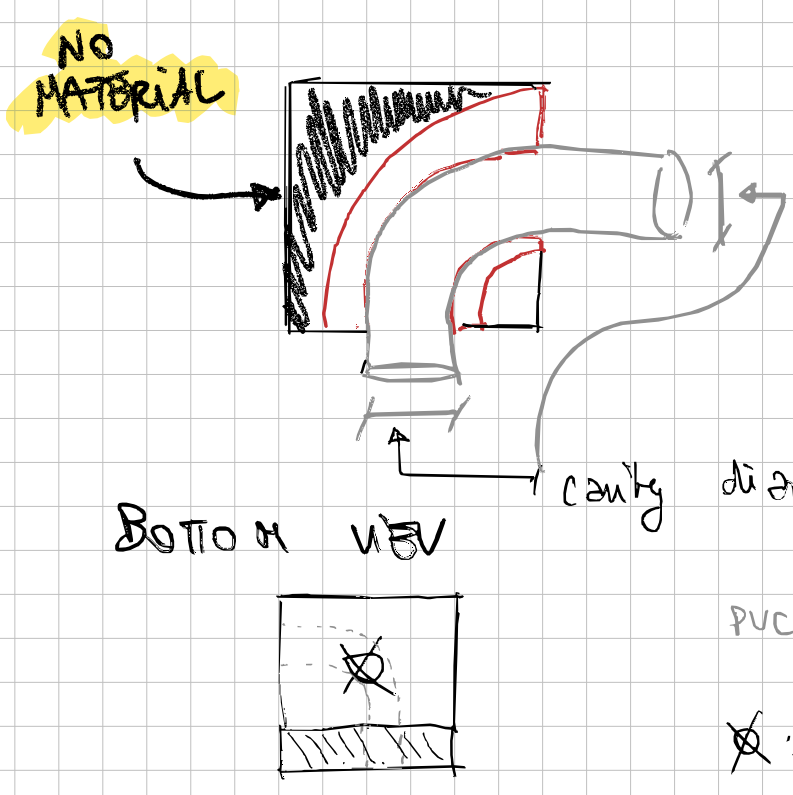


HOLDER

SIDE VIEW :



TOP VIEW of holder



- holder has a cavity that leads PVC to have a specified curvature

PVC tube

ϕ 6 mm ext diameter

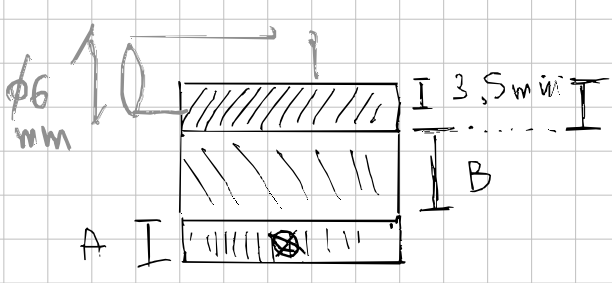
cavity diameter is ϕ 6.5 mm

PVC tube ϕ6 mm ext diameter

ϕ : screw !

BOTTOM VIEW

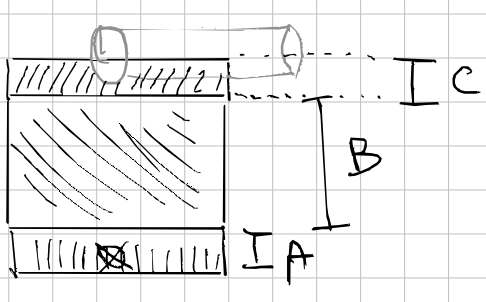
FRONT VIEW



C : it includes 3.5 ($\frac{1}{2}$ of ϕ 6 mm)

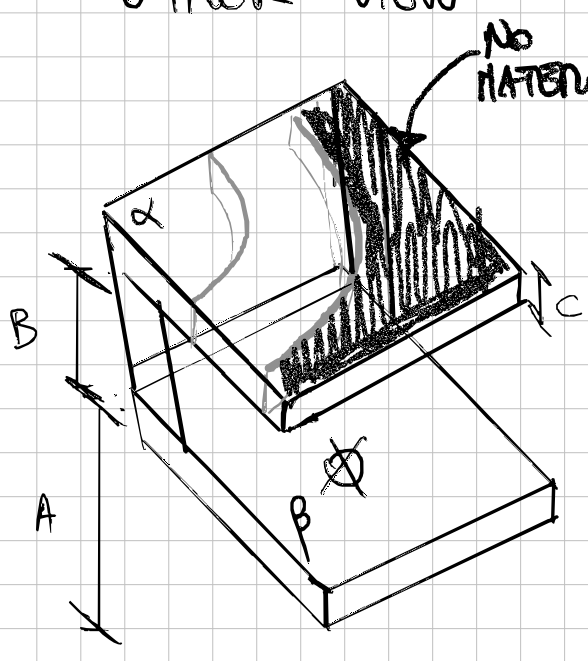
ϕ : screw

BACK VIEW



ϕ : screw

OTHER VIEW

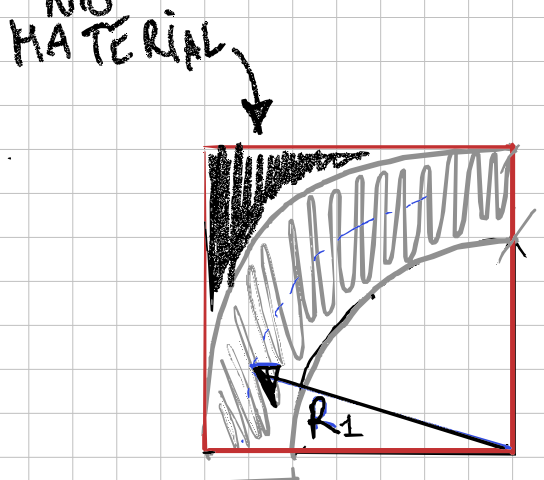


- plane α and plane β are NOT parallel !

↳ the purpose it's to only give the idea of the product !

ϕ : screw

HOLDER PLATE (from another perspective)



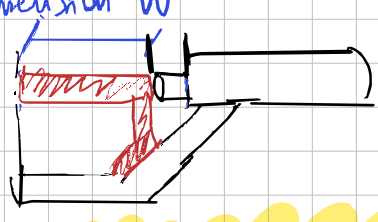
R_1 = 25 mm

PVC tube : ϕ6.5 mm

EDGE of plate = 28.25 mm

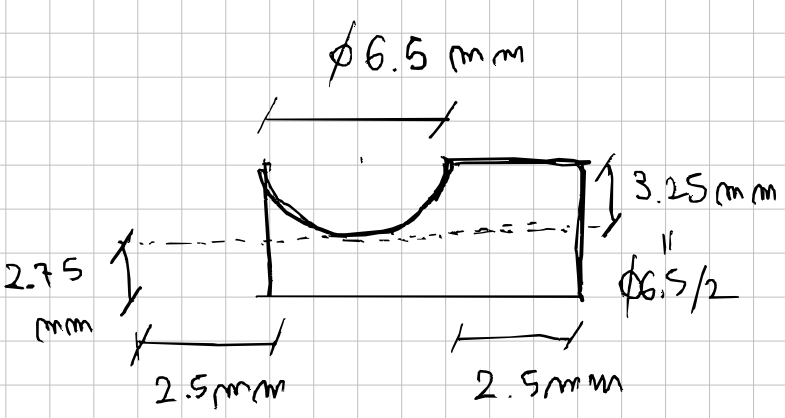
= $\frac{6.5}{2}$ + 25

- to check feasibility of EDGE of plate considering the length dimension W in AST



EDGE of plate ≤ dimension W

otherwise R_1 should be less



- Comments :

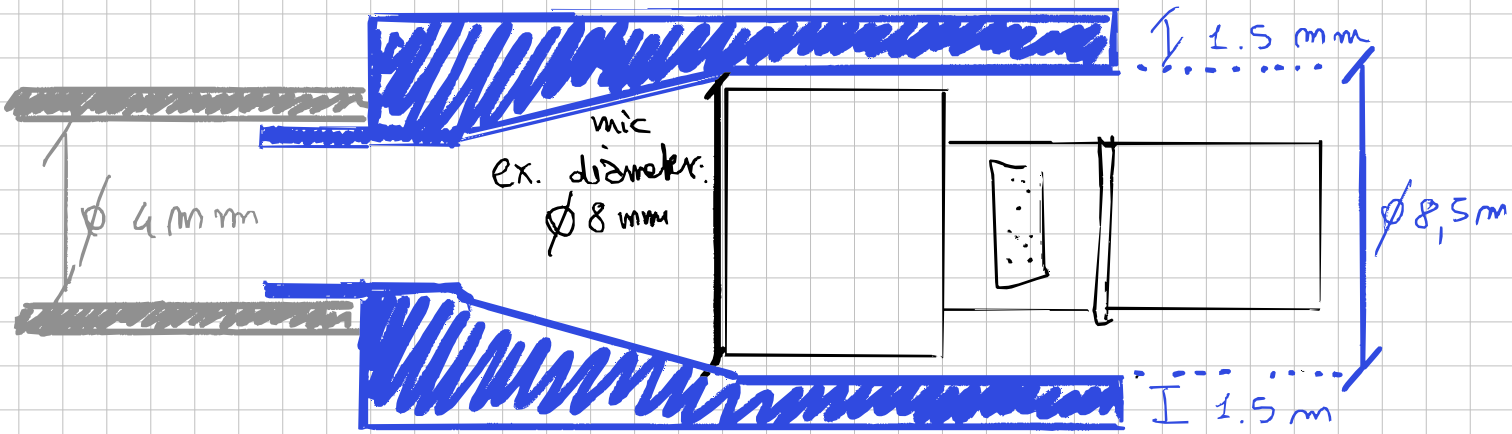
dimension W (measured) = 20 mm ⇒ to be checked with CAD

$\Rightarrow R_1 + \frac{6.5}{2} \leq 20$

$$\boxed{R_1 \leq 20 - 3.25 = 16.75}$$

ADAPTOR :

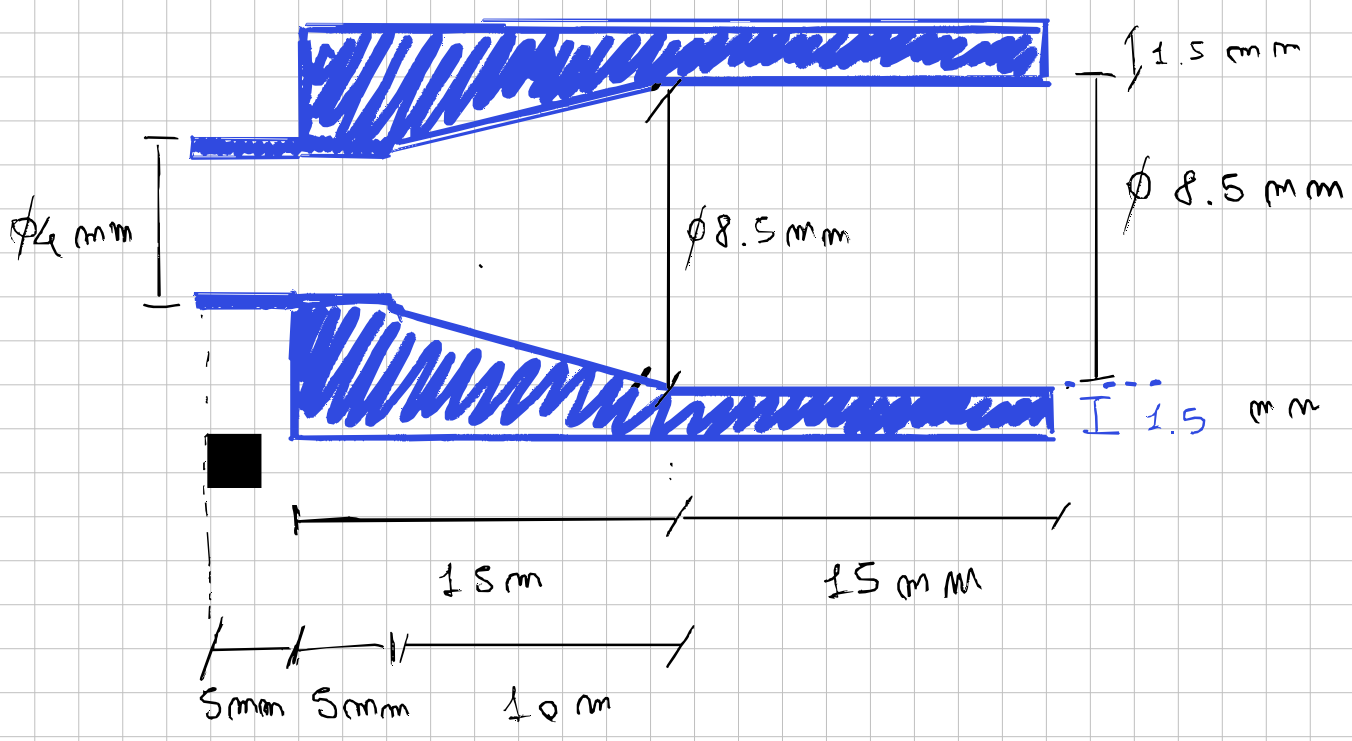
→ goal : from cross section of ⌀ 4 mm diameter (pvc tube)
to cross section of ⌀ 8 mm diameter (mic.)



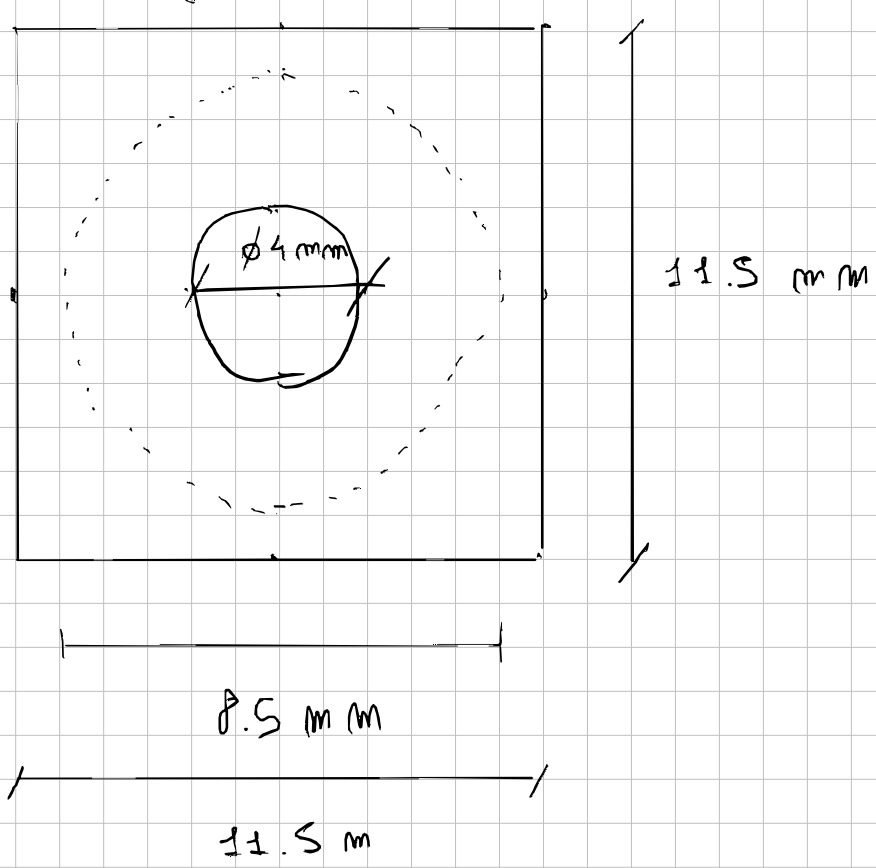
PVC internal diameter :

· ⌀ 4 mm

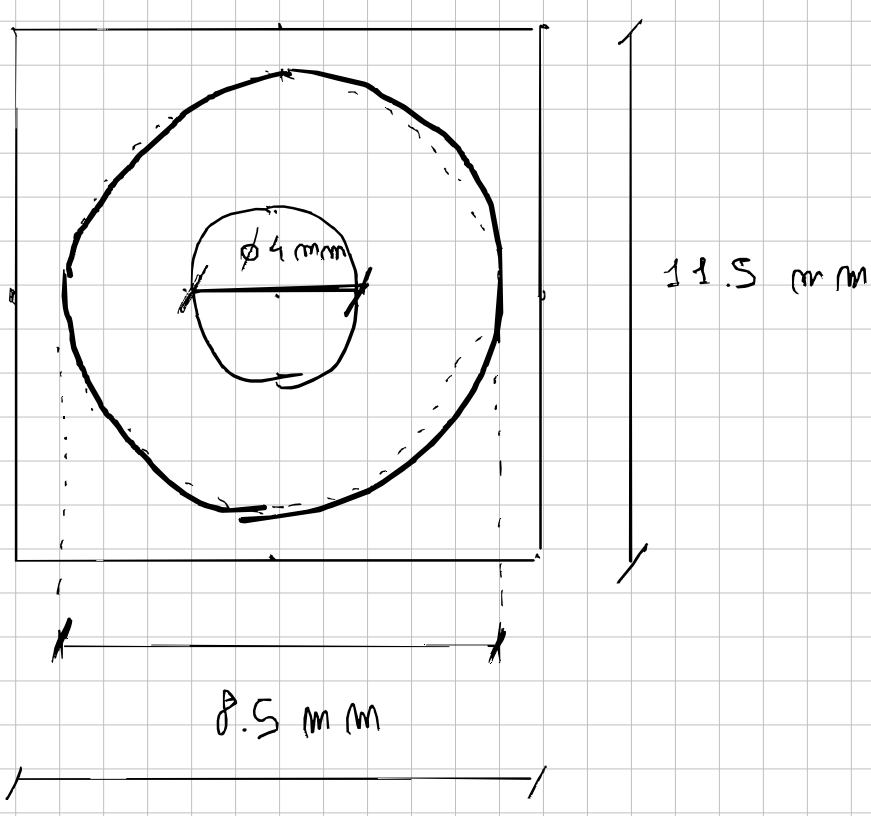
SIDE VIEW



FRONT VIEW (small diameter)



BACK VIEW



UPPER VIEW