Front Drift Chamber for BigBite: Cathode Planes

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Drift Chamber Characteristics

Sensitive area is 1400 x 350 mm

Consists of:
8 cathode planes
6 wire planes
2 gas windows

Distance between cathode plane and wire plane is 3.4 mm

Distance between sense wires is 10 mm

Stretching Mylar

Displacement of Mylar leads to variation of electric field

Goal is to maintain displacements below 50 micrometers



Gluing

3" strip

Both mechanical and conductive epoxy

 Uniform height of 2 mils



Width of Glue (1)



Width of Glue (2)



Apply Pressure

 Five struts provide force

Plane Aluminum surface

 Force on struts equalized using torque wrench

