

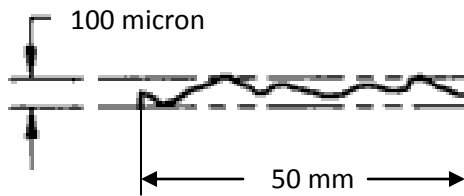
Forward Drift Chamber: Cathode Flatness specification.

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Two different specifications will be used:

Local variation specification. This is primarily intended to address surface defects and wrinkling at the bonded edges of the three Kapton segments. Measurements will be taken with the Kapton membrane supported by a flat surface (probably a Rohacel sheet)



Height variation across the entire active plane (diameter=996mm). This would be due to electrostatic forces and differential pressure effects that may occur as a result of the required gas flow through the six drift cells in an FDC segment. The approach will be to calculate the gas flow and pressure differentials using the CFX module in ANSYS, add the calculated electrostatic “pressure” and then measure the cathode deflection under an equivalent pressure.

