

Development of characterisation of RPCs for ICAL detector

M.Bhuyan¹, V.M.Datar², S.D.Kalmani¹, S.M.Lahamge¹, S.Mohammed³, N.K.Mondal¹, P.Nagaraj¹, D.Samuel¹, M.N.Saraf¹, B.Satyanarayana¹, R.R.Shinde¹ and P.Verma¹

1: Department of High Energy Physics, Tata Institute of Fundamental Research, Mumbai, 400005, India.

2: Nuclear Physics Division, Bhabha Atomic Research Centre, Mumbai, 400085, India.

3: Department of Physics, Aligarh Muslim University, Aligarh, 202002, India

Email: samuel@tifr.res.in

The India-based Neutrino Observatory (INO) collaboration is planning to build a massive 50kton magnetised iron calorimeter (ICAL) detector to study atmospheric neutrinos. About 30,000 2m × 2m size glass RPCs will be used as active detector elements. Starting with a small 30cm × 30cm size RPCs, we have now started developing full size 2m × 2m RPCs. The production method for this large size RPCs as well as their performance will be discussed in this paper.