

ALNOR[®]**TSI Incorporated**

AIR CONES

USER NOTES

Air cones have been developed as a tool for use with Ø100mm vane anemometers. The anemometer is snap located into the aircone and held with the seal against the supply/extract grille to be measured. Ensure the flow direction arrow on the anemometer points in the direction of flow.

For instruments allowing velocity measurement only, take the velocity reading and using the appropriate graph read off the corresponding volume flow reading. Metric or imperial readings can be taken. e.g. a reading of 8m/s for a supply grille corresponds to a volume flow of 0.050m³/s.

For area programmable instruments that are capable of direct volume flow measurement then either metric or imperial area factors can be input directly as area's (m² or ft² respectively). e.g. for imperial measurements on an extract grille program an area of 0.0676ft². The instrument will then provide a direct readout of volume flow in m³/s or ft³/min.

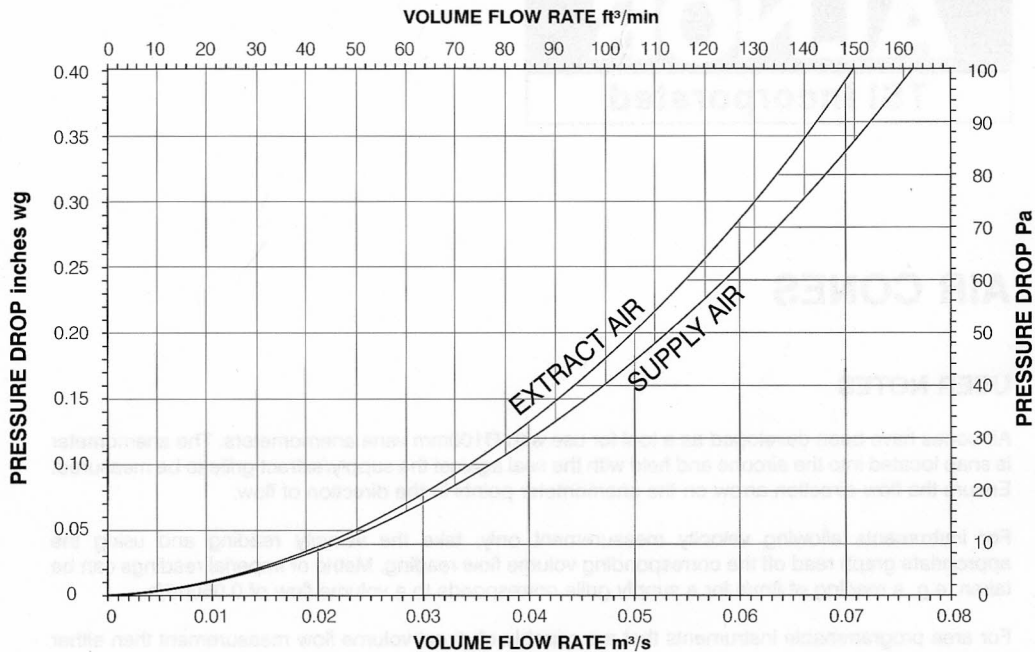
Where grilles are larger than the size of the rectangular cone it is suggested that the area is divided into equal areas, avoiding overlapping where possible, then a series of readings can be taken to evaluate total volume flow.

Air cones will induce some back pressure on the system being measured. This can be determined by reading off the pressure drop against the corresponding volume flow rate.

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PRESSURE DROP ACROSS BOTH TYPES OF CONE WITH A Ø100mm VANE ANEMOMETER FITTED (NO GRILLE)



CALIBRATION CHART USING RECTANGULAR AND CIRCULAR CONES

