



Client:	Project Name:	Project No:	
Area:	Drawing No's:	Date:	Sheet: 1 of 2
Check Conducted By:	Signature:	Check Approved By:	Signature:

INTRODUCTION

The test procedure guideline has been prepared to explain the minimum standard for measuring the air quantities in duct work systems using a pitot traverse.

Procedure recommended general checks

1. Prior to commencing any testing and adjustment of the air distribution systems ensure that the duct work systems have been completed with grilles installed and the duct work systems have been pressure tested for leakage (as specified)
2. Ensure all the filters in the fan, FCU or AHU systems are clean
3. Determine positions for measuring points as detailed in the Reference Standards and drill holes for the pitot tubes based on recommended spacing detailed in the Reference Standards
4. Confirm that all measuring point locations are accessible
5. Prepare single line drawings of the entire system highlighting the design flow rates required to be achieved, duct work sizes, measuring locations and balancing damper locations
6. Confirm that all balancing dampers are fully open

Procedure recommended for testing operation

1. Undertake pitot traverse of duct work in accordance with the Reference Standards so that readings are repeatable
2. Where there is a large variance between the upper and lower velocities read or there are negative readings in the group of readings, reselect another location for a pitot traverse.
3. Average all the readings of the pitot traverse and multiply by the cross-sectional area of the duct work at the measuring point to determine the flow rate in L/s

REFERENCE STANDARDS

CIBSE Commissioning Code A – Air Distribution Systems

NEBB Procedural Standards for Testing Adjusting and Balancing of Environmental Systems



CHECKLIST

Fan System Reference					
Drawing Number					
	ITEM	VERIFICATION METHOD	RESULT	RESULT	RESULT
1	Check installation against approved shop drawings	Site Inspection			
2	Check all filters are clean	Site Inspection			
3	Determine suitable location of measuring points and drill holes	Site Inspection			
4	Prepare single line drawings of the entire system highlighting design flows, ductwork sizes	Site Preparation			
5	Confirm all measuring points are accessible	Site Inspection			
6	Measure air flow in measuring station using a pitot traverse and calculate air quantity in L/s	Site Measurement			
Certified By Sub Contractor (initial):					
Date:					
Confirmed By (Head Contractor / Client) (initial):					
Date:					