

CULMI AIR-COND & REFRIGERATION PARTS SUPPLY SDN BHD

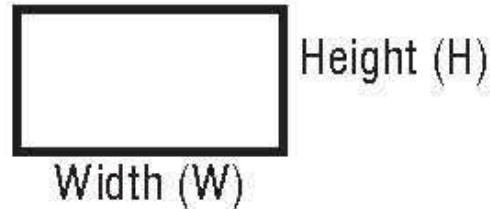
TPI 556C1 Digital Air Velocity / Flow Meter Operating Instruction (Air Flow Measurement)

Air Flow Measurement Continued

6. Measure the area to be measured and calculate the square footage or square meters.

Area equation for Rectangular Ducts:

$$\text{AREA (A)} = \text{Height (H)} \times \text{Width (W)}$$



Common Rectangular Duct Sizes with Area

DUCT SIZE (Inches)	AREA (sq.ft)
8" X 8"	0.444
8" X 10"	0.556
8" X 12"	0.667
8" X 14"	0.778
8" X 15"	0.833
8" X 16"	0.889
8" X 18"	1.000
8" X 20"	1.111

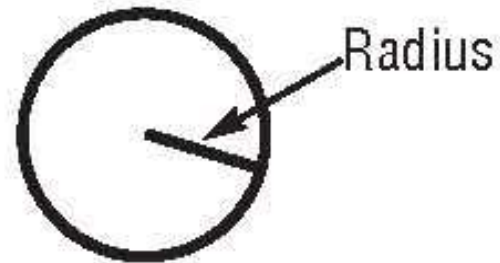
$$= 8'' \times 8''$$

$$\frac{\quad}{144} = 0.444 \text{ sq.ft}$$

144

Area equation for Round Ducts:

$$\text{AREA (A)} = 3.14 \times (\text{Radius} \times \text{Radius})$$

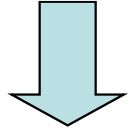


Common Round Duct Sizes with Area

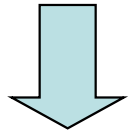
DUCT SIZE (Inches)	AREA (sq.ft)
4"	0.087
5"	0.136
6"	0.196
7"	0.267

$$\begin{aligned} &= 3.14 (2'' \times 2'') \\ &\frac{\text{-----}}{144} = 0.087 \text{ sq.ft} \end{aligned}$$

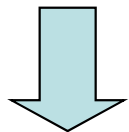
Power Key



Vel Flow



Sample Area



Enter



Air Flow Measurement

1. Push the POWER button to turn meter on.
2. Pressing °C/°F button will toggle between °C and °F
3. Press VEL/FLOW button to display "FLOW"
4. Press UNIT button to select the desired units of airflow: "CFM or CMM"
5. In order to get a correct Air Flow reading it is required to input the sample area. The area is either measured by ft² or m²
7. Press the SAMPLE AREA button, the earlier measured area will be displayed. The left digit on the LCD will be flashing
8. If the calculated area is 1.00, press the numeric button 1 followed by the decimal button followed by the numeric key for 0, 0, 0. Then press the ENTER button. The enter button will only work when all four digits are entered. "1.000" will be displayed on the lower part of the display after the input has been completed.
9. Position the probe at the desired location for measurement.
10. Read the flow on the display, it will take several minutes until the readings get stable after the probe is positioned.
11. Press the ESC/HOLD button to freeze the display after taking a measurement is finished. "DH" will be displayed on the LCD.
12. Press the ESC/HOLD button again to return to normal operation.
13. If you want to record the reading changes, press the RECORD button when the reading gets stable. The "REC" symbol will be displayed. The meter will record the minimum, maximum and average readings.