

GENERAL NOTES:

1. THIS DRAWING PROVIDES THE NECESSARY INFORMATION TO MANUFACTURE ONE (1) AIRFLOW STATION. CONTRACT DOCUMENTS WILL SPECIFY QUANTITIES AND OF WHAT SIZE(S).
2. **MANUFACTURING REQUIREMENTS:**
 - A. BREAK ALL SHARP EDGES TO A 1/32" CHAMFER (MINIMUM).
3. **BRAND NAME OR EQUAL:**
 - A. THIS DRAWING INCLUDES A BRAND NAME OR EQUAL ITEM FOR THE AIR FLOW STATION. THE SALIENT CHARACTERISTICS ARE DESCRIBED IN SECTION 4 BELOW. FOR EACH BRAND NAME OR EQUAL ITEM ARE THE SAME AS THE CHARACTERISTICS DESCRIBED BY THAT ITEM'S CATALOG OR WEB SITE DESCRIPTION AVAILABLE FROM THE NAMED MANUFACTURER, PRODUCER, OR DISTRIBUTOR. OFFERS OF EQUAL ITEMS, IN ACCORDANCE WITH THE INCLUDED FAR CLAUSE AT §2.211-6, "BRAND NAME OR EQUAL," SHALL INCLUDE ALL INFORMATION NECESSARY TO DETERMINE "EQUAL" PRODUCTS MEET THESE SALIENT CHARACTERISTICS
4. **AIRFLOW STATION SALIENT CHARACTERISTICS:**
 - A. **BRAND NAME OR EQUAL**
 - B. **RECOMMENDED MANUFACTURER:** AIR MONITOR CORPORATION (MODEL #: FAN-EVALUATOR (FAN-E)); 1050 HOPPER AVENUE, SANTA ROSA, CA. 95406; (707) 544-2706; WWW.AIRMONITOR.COM.
 - C. **SEALING:** THE AIRFLOW STATION SHALL HAVE ADEQUENT SEALING TO PROVIDE ACCEPTABLE LEAK TIGHTNESS.
 - D. **CASING:** CIRCULAR, MINIMUM OF 14 GAUGE GALVANIZED SHEET METAL, CONTINUOUS WELDED CASING SEAMS. ANY PENETRATIONS (I.E. SEAMS, BOLTS, BARBED FITTINGS) IN THE CASING MUST BE AIR TIGHT, TO THE MAXIMUM EXTENT POSSIBLE.
 - E. **CASING DEPTH:** 8" DEEP
 - F. **FLANGES:** CIRCULAR WITH 1-1/2" WIDE FLANGES, WITH CONTINUOUS WELD. (FOR 2.26" DIAMETER, FLANGES SHALL BE 2" WIDE)
 - G. **AIR EQUALIZER - STRAIGHTENER CELL:** CORROSION RESISTANT 3003 ALUMINIUM, 3" DEEP X 1/2" CELL. TOTAL PRESSURE MANIFOLD: COPPER TUBING ASSEMBLED WITH NICKEL SOLDER, GALVANIZED MOUNTING AND SUPPORT BRACKETS.
 - H. **STATIC PRESSURE HEADER AND SENSORS:** COPPER TUBING, GALVANIZED MOUNTING BRACKET, CONNECTION FITTINGS: STAINLESS STEEL BARBED FITTINGS SIZED FOR USE WITH 3/16" I.D. TYGON TUBING.
 - I. **PROVIDE AIRFLOW MEASURING STATION(S) CAPABLE OF CONTINUOUSLY MONITORING THE FAN OR DUCT CAPACITIES (AIR VOLUMES) THEY SERVE.**
 - J. **EACH AIRFLOW MEASURING STATION SHALL CONTAIN MULTIPLE TOTAL AND STATIC PRESSURE SENSORS POSITIONED IN A LOG-TICHEBYCHEFF PATTERN. FOR CIRCULAR DUCTS HAVING A DIAMETER OF .18" OR GREATER, LOCATE MEASUREMENT POINTS ON THREE SYSTEMATICALLY DISPOSED DIAMETERS. FOR ROUND STATIONS SMALLER THAN .18", LOCATE THE MEASUREMENT POINTS ON TWO PERPENDICULAR DIAMETERS.**
 - K. **THE AIRFLOW MEASURING STATION(S) SHALL BE FABRICATED OF A MINIMUM OF 14 GA. GALVANIZED STEEL, WELDED CASING IN 8" DEPTH WITH 90° 1-1/2" CONTINUOUS WELDED CONNECTING FLANGES IN A CONFIGURATION AND SIZE EQUAL TO THAT OF THE DUCT IT IS MOUNTED INTO. EACH STATION SHALL BE COMPLETE WITH AN OPEN PARALLEL CELL AIR STRAIGHTENER-EQUALIZER HONEYCOMB MECHANICALLY FASTENED TO THE CASING, AND EXTERNAL PRESSURE CONNECTION FITTINGS, AN IDENTIFICATION LABEL SHALL BE PLACED ON EACH STATION CASING LISTING MODEL NUMBER, SIZE, AREA, AND SPECIFIED AIRFLOW CAPACITY.**
 - L. **STATIONS SHALL BE AMCA CERTIFIED AND BE CAPABLE OF MEASURING THE AIRFLOW RATES WITHIN AN ACCURACY OF ±2%. THE MAXIMUM ALLOWABLE UNRECOVERED PRESSURE DROP CAUSED BY THE STATION SHALL NOT EXCEED 0.085" W.C. AT 2000 FPM, OR 0.30" W.C. AT 4000 FPM.**
 - M. **ACCURACY: 2% OF ACTUAL FLOW.**
 - N. **OPERATING TEMPERATURE: CONTINUOUS OPERATION TO 200°F.**

REVISIONS

SYMB	REV	DESCRIPTION	DATE	CHANGED BY	APPROVAL
A	A	CHANGED GENERAL NOTES TO INCORPORATE "BRAND NAME OR EQUAL" STATEMENTS.	09MAR2016	J. TERRELL /S/	J. BYRNES /S/

DISTRIBUTION STATEMENT: N/A

A.D.C. REVIEW		DATE
SIGNATURE	J. TERRELL	03MAR2016
CONCURRENCE		
DATE		

/S/ SIGNATURE ON FILE		APPROVAL	DATE
DESIGNED	/S/	J. TERRELL	03MAR2016
DRAWN	/S/		
CHECKED	/S/	M. SORNA	02MAR2016
SCALE	/S/		
DATE			

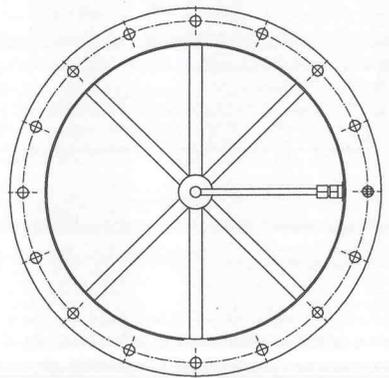
PUGET SOUND NAVAL SHIPYARD
 CODE 2370
 ENGINEERING DIVISION

Unless otherwise specified, dimensions are in inches.
 Decimals:
 XX = ±0.1
 XXX = ±0.06
 XXXX = ±0.005
 XXXXX = ±0.0005
 Fractions = ±1/16
 XXXX = ±1/32
 Angles = ±1/2°

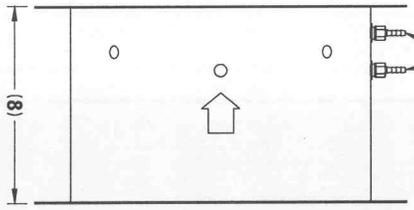
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL

FORMING NO.	2370-1946	REV #	NA
TITLE	AIRFLOW STATION SPECIFICATION		
SCALE	AS SHOWN		
SHEET	Sheet 1 of 2	REV	A

10 9 8 7 6



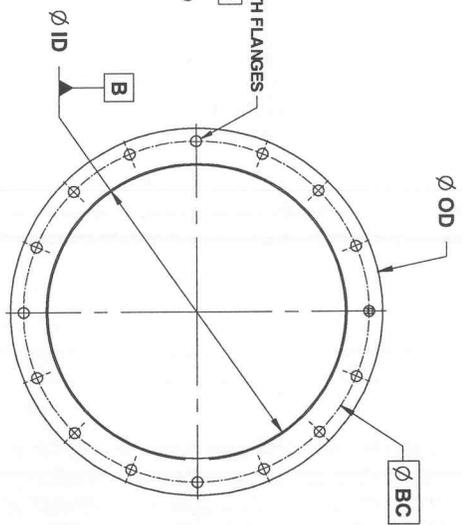
VIEW 9D
AIRFLOW STATION



VIEW 8D
AIRFLOW STATION

STAINLESS STEEL BARBED FITTINGS
(FOR 3/16" I.D. PLASTIC TUBING)

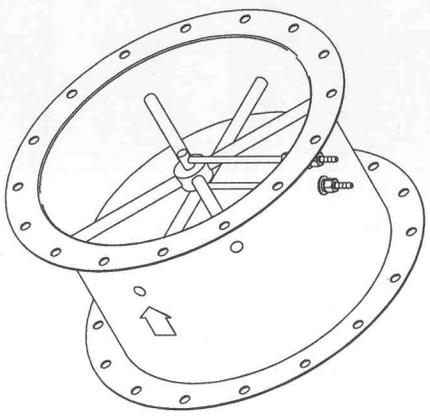
$\phi .438^{+.015}_{-.000}$ THRU BOTH FLANGES
 $\phi .062$ "N" PLACES
EQUALLY SPACED



VIEW 6D
AIRFLOW STATION
(BOLT HOLE PATTERN)

TABLE 9B
AIR FLOW STATION CONFIGURATION TABLE

Duct Diameter	Air Flow Station Serial Number	Inner Diameter "ID"	Bolt Circle Diameter "BC"	Outer Diameter "OD"	Number of Bolt Holes "N"
12	2370-1946-AFS-12	12.000	13.750	15.000	16
13	2370-1946-AFS-13	13.000	14.750	16.000	16
14	2370-1946-AFS-14	14.000	15.750	17.000	16
15	2370-1946-AFS-15	15.000	16.750	18.000	24
16	2370-1946-AFS-16	16.000	17.750	19.000	24
17	2370-1946-AFS-17	17.000	18.750	20.000	24
18	2370-1946-AFS-18	18.000	19.750	21.000	24
19	2370-1946-AFS-19	19.000	20.750	22.000	24
20	2370-1946-AFS-20	20.000	21.750	23.000	24
21	2370-1946-AFS-21	21.000	22.750	24.000	32
22	2370-1946-AFS-22	22.000	23.750	25.000	32
23	2370-1946-AFS-23	23.000	24.750	26.000	32
24	2370-1946-AFS-24	24.000	25.750	27.000	32
25	2370-1946-AFS-25	25.000	26.750	28.000	32
26	2370-1946-AFS-26	26.000	28.250	30.000	32



ISO VIEW 8A
AIRFLOW STATION

10 9 8 7 6

<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.</p> <p>DECIMALS:</p> <p>XX.X = ±0.1 XX.XX = ±0.05 XX.XXX = ±0.005 XXXXX = ±0.0005</p> <p>FRACTIONS = ±1/16 ANGLES = ±1/2°</p> <p>Drawing dimensions and geometric tolerances per ASME Y14.5M-1994</p>		<p>ISSUES:</p> <p>NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL</p>
<p>PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION</p>		<p>AIRFLOW STATION SPECIFICATION</p>
<p>DRAWING NO. 2370-1946</p>	<p>REV. NA</p>	<p>SHEET 2 OF 2</p>