

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0100981
Insp Area: 3

Site Address: 8425 BELVEDERE AV SAC
Parcel No: 061-0140-037

Sub-Type: REM
Housing (Y/N): N

CONTRACTOR

OWNER
STEVE SCRUBY
8425 BELVEDERE AVE
SAC, CA. 95826

ARCHITECT
RUDY GARCIA
1730 53RD ST
SACRAMENTO, CA. 95819

Nature of Work: ADD 875 SQFT OF OFFICE SPACE TO EXISTING WAREHOUSE

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.)

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class _____ License Number _____ Date _____ Contractor Signature _____

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code, any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00).

____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code). The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

X I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code). The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law)

I am exempt under Sec _____ B & PC for this reason: _____

X Date 4/19/01 Owner Signature Steve Scruby

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

X Date 4/19/01 Applicant/Agent Signature Steve Scruby

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued

____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

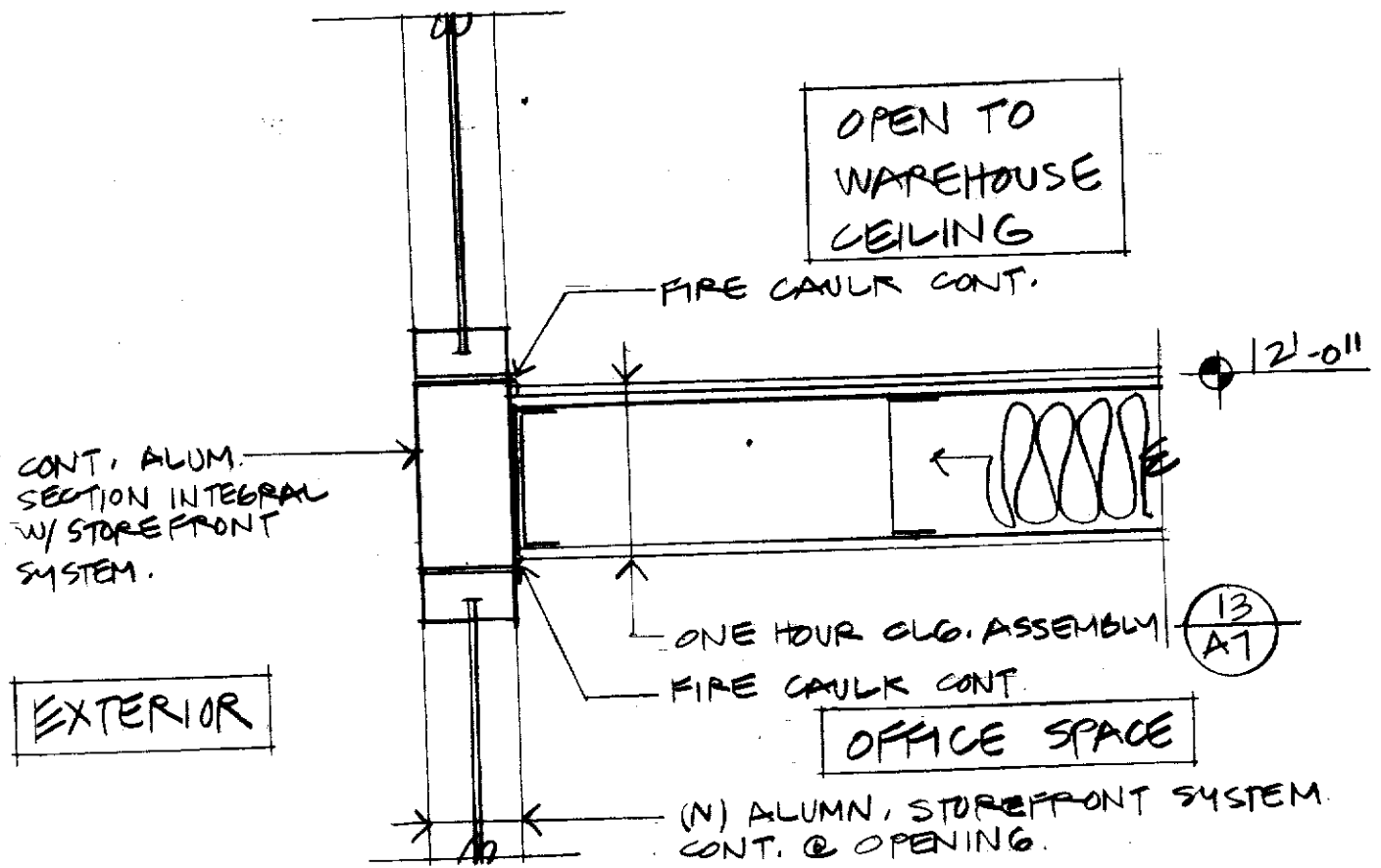
Carrier Exempt Policy Number _____ Exp Date _____

____ (This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

X Date 4/19/01 Applicant Signature Steve Scruby

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.



REVISED
 (17) STOREFRONT @ 1 HR CEILING
 1 1/2" = 1'-0"

ISSUED

AUG 09 2001

Sacramento Building Division

... of plans and specifications must be
 the job at all times and it is understood
 any changes or alterations to the
 without written permission from the
 Inspection Division.
 approval of this plan and specifications
 NOT be held to permit or approve the
 violation of any City Ordinance or State Law.

Client
 Project

Fulcrum Industries
 Office Expansion, PCN 0100981
 8425-B Belvedere Ave.
 Sacramento, CA 95826

Date 8.08.2001
 Rudy C. Garcia
 Architect C18933

John Toms
 8/9/01

APPLICATION FOR COMMERCIAL BUILDING PERMIT

CITY OF SACRAMENTO
 DEVELOPMENT SERVICES DIVISION
 PERMIT SERVICES SECTION
 1231 I Street, Rm. 200
 Sacramento, CA 95814 (916) 264-7619 FAX 264-7046

ACTIVITY # 01-00 981	Insp. Area 3C
--------------------------------------------------------------------------------------	-------------------------------------------------------------------------------

Applicant **MUST** complete ALL Unshaded areas

ADDRESS 825 B BELVEDERE AVE. SACTO Suite B
 PARCEL # 061-01A0-037-0000

<p style="text-align: center;">CONTACT</p> Name <u>GARY NYLAND/PINNACLE ONE</u> Street Address <u>555 STE 260 UNIVERSITY AVE</u> City/State/Zip <u>SACRAMENTO CA 95825</u> Phone <u>916-614-6900</u> FAX <u>614-6906</u> E-mail: _____	<p style="text-align: center;">LICENSED CONTRACTOR Lic No. # _____</p> Name <u>O/B</u> Address _____ City/State/Zip _____ Phone _____ FAX _____ E-mail: _____
<p style="text-align: center;">ARCHITECT/ENGINEER C-18933</p> Name <u>RUDY GARCIA</u> Address <u>1730 53RD STREET</u> City/State/Zip <u>SACRAMENTO CA 95819</u> Phone <u>916-452-8663</u> FAX _____ E-mail: _____	<p style="text-align: center;">OWNER</p> Name <u>STEVE SCRUBY</u> Address <u>825 B BELVEDERE AVE.</u> City/State/Zip <u>SACRAMENTO, CA 95826</u> Phone <u>916-388-1046</u> FAX <u>388-1049</u> E-mail: _____

→ Will permittee have any employees on the jobsite? No Yes → INSURANCE CO: _____
 → WORKER'S COMPENSATION POLICY # _____ EXPIRATION DATE: _____

NATURE OF WORK IN DETAIL: 875# OFFICE SPACE INSIDE EXISTING WAREHOUSE, INCL. ELECT. + MECH. AS PER PLANS

OCCUPANT/TENANT: FULCRUM INDUSTRIES VALUATION: \$ 13,125.00

FLOOD STATUS: <u>NR</u>		S.C.A.T.								
JOB DESCRIPTION		BLDG	SHELL	APT	TI()	REM(✓)	SW	FIRE	ADD	OTH
INSPECTION DISCIPLINES		<u>BLDG</u>	<u>MECH</u>	<u>PLUMB</u>	<u>ELEC</u>	<u>SITE</u>	<u>FIRE</u>			
# Stories	1st flr Area	Total Area	Use Zone	Occp Group	Const type	Fire Req. Y N	Fed Code	Vio. File		
<u>1</u>		<u>875#</u>		<u>B/EI</u>	<u>III</u>	<u>Y</u>	<u>10</u>	[H]	[Quad]	
<u>B</u>	<u>L</u>	<u>P</u>	<u>M</u>	<u>E</u>	<u>P</u>	<u>S</u>	<u>D</u>	PW	UTIL	

COMMENTS: _____

REGIONAL SANITATION FEES? Yes No HEALTH DEPARTMENT? Yes No
 WATER FLOW TEST FOR NEW BUILDINGS OR ADDITIONS? Provided Faxed

Date of Request: _____

By: _____

CITY OF SACRAMENTO DEVELOPMENT SERVICES DIVISION
PLANNING AND ZONING INFORMATION REQUEST

Project

Address: 8425 B. BELVEDERE AVE

Assessor's Parcel Number: 061-0140-037-0000

Previous Use: WAREHOUSE / MANUFACTURING

Description of Request/Proposed Use: CONSTRUCT 875 # OFFICE

SPACE INSIDE EX. WAREHOUSE INCL. ELECT. + MECH.

Is This a Change of Use? NO

Zoning Designation: (M2S)

Prior Applications for Project Site(P#, Z#, DRPB#): _____

Comments: Look at if all bldgs on site -
most office is 25%. If they
exceed 25%, a planning
entitlement would be required.

Are There Any Planning Issues?: (circle one) YES NO see above

- * Staff Site Plan Check Required? (Circle one) YES NO
- * ~~Field Inspection~~ Required? (Circle one) YES NO
- * Design Review/Preservation Required?: (Circle one) YES NO

Planning Review by/Date: [Signature] May 1-23-01.

A list of items that must be reviewed by Planning is provided on the reverse side of this form.

MICROFILM AFTER FINAL

OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNERS

An owner-builder building permit has been applied for in your name and bearing your signature.

Please complete and return this information in the envelope provided at your earliest opportunity to avoid unnecessary delay in processing and issuing your building permit. No building permit will be issued until this verification is received.

1. I personally plan to provide the major labor and materials for construction of the proposed Improvement (yes or no) no

2. I (have/have not) have signed an application for A building permit for the proposed work.

3. I have contracted with the following person (firm) to provide the proposed construction:

Name Pinnacle One Address _____

City _____ Telephone _____

Contractors License No. _____

4. I plan to provide portions of the work, but I have hired the following person to coordinate, Supervise, and provide the major work.

Name _____ Address _____

City _____ Telephone _____

Contractors License No. _____

5. I will provide some of the work but I have contracted (hired) the following to provide the Work indicated:

Name	Address	Phone	Type of work

X Signed Stew Mundy

X Job Address 8425 Belvidere Ave

X Date 4/19/01

Permit No: _____

CITY OF SACRAMENTO
BUILDING INSPECTION DIVISION
APPLICATION FOR BUILDING PERMIT - HAZARDOUS MATERIAL SURVEY

As Required by Assembly Bill #3205 - A Building Permit Cannot be Approved Without This Completed Form

1. Business Name: _____ Phone: _____
 Site Address: 8425 Belvedere Ave Suite: _____
 (Street) (Zip)
 Business Owner/Representative: _____ Phone: 377-1074
 Nature of Business: MFG
 Property Owner: _____ Phone: _____
 Address: 1234 Main St Suite: _____
 (Street) (City)

2. Are you developing an undetermined tenant space? Yes ___ No (State) Is this permit for a shell building? Yes ___ No (Zip)
 Notify lessee of the responsibility to coordinate with the Fire Department regarding the use and handling of hazardous materials.

3. Does/Will your business generate hazardous waste? Yes ___ No

4. Does/Will your business handle, store or transport any solid, liquid, or gaseous chemicals? Yes ___ No

CONSULT THE EPA CHEMICAL LIST LOCATED AT THE BUILDING DIVISION COUNTER FOR HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS TO COMPLETE THE FOLLOWING QUESTIONS.

If you answered "YES" to questions #3 and/or #4 above, continue on to questions 5 - 8.

5. Do you handle, store, or transport 55 gallons, 500 pounds, or 200 cubic feet (at Standard Temperature or Pressure) of a product or formulation containing hazardous materials at any one time? Yes ___ No ___

6. Do you handle, store or transport any amount of acutely hazardous materials? Yes ___ No ___

7. Is/Will your business be located within 1,000 feet of a school? Yes ___ No ___

If you answered "yes" to questions #6 and/or #7, complete the RMPP informational sheet.

8. Is/Will your business be located within 1,000 feet of a hospital, and/or long-term healthcare facility? Yes ___ No ___

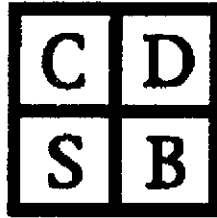
IF YOU ANSWERED "YES" TO QUESTION #3 AND/OR #4, PLEASE CONTACT THE CITY OF SACRAMENTO FIRE DEPARTMENT LOCATED AT 1231 I STREET, SUITE 401, SACRAMENTO, CA OR CALL 449-5416.

Prior to issuance of a certificate of occupancy, each business owner(s) shall contact the City of Sacramento Fire Department and comply with the Health and Safety Code regarding the use and handling of hazardous materials.

PENALTY: Any business that violates Section 25531-25541 of the Health and Safety Code shall be civilly liable to the administering agency in an amount of not more than two thousand dollars (\$2,000) for each day in which the violation occurs. If the violation results in, or significantly contributes to, an emergency, including a fire, the business shall also be assessed the full cost of the city emergency response, as well as the cost of cleaning up and disposing of the hazardous materials. Additional liability and punishment may be assessed for knowing a violation after reasonable notice of the violation.

Applicant's Name: Steve Smith
 (Print)
Steve Smith 4/19/01
 (Signature) (Date)

BID Use Only: Plan Ck# _____ Permit # <u>0100981</u> OK to issue prmt? Y _____ F.D. Appr Req'd? Yes No _____ init date _____	
Hold on Certificate of Occupancy? Yes No Fire Dept. Use Only: OK to issue permit? ini' _____ date _____ OK to issue Certificate of Occupancy? init _____ date _____	



PAGE 1
JOB # CD01-0428

C E R T I F I E D • D E S I G N • S Y S T E M • B A L A N C E

COMPLETION REPORT

June 4, 2001

JOB DESCRIPTION: Office Expansion
Fulcrum Industries, Inc.

CONTRACTOR: Judd Mechanical

ARCHITECT: Rudy C. Garcia

ENGINEER: Rudy C. Garcia

TEST PERFORMED BY: Gary Oulrey

CHECKED BY: *Gary Oulrey*
GARY OULREY

GENERAL NOTES SHEET

The outside air damper was set and marked.

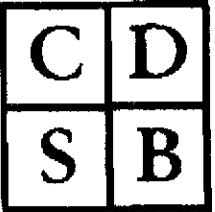
There were no dampers installed in the return air ducts

A Shortridge Electronic Flowhood was used to measure all supply and return terminal units unless noted otherwise.

A Fluke multi meter was used to measure all voltages and amperages.

BALANCE REPORT ABBREVIATIONS

CD	CEILING DIFFUSER
CEG	CEILING EXHAUST GRILLE
CER	CEILING EXHAUST REGISTER
CRG	CEILING RETURN GRILLE
CSR	CEILING SUPPLY REGISTER
DNA	DATA NOT AVAILABLE
DNL	DATA NOT LISTED
FEG	FLOOR EXHAUST GRILLE
FRR	FLOOR RETURN REGISTER
FSR	FLOOR SUPPLY REGISTER
NA	NON ACCESSIBLE
NI	NOT INSTALLED
NT	NOT TAKEN, DUE TO IRREGULAR READINGS
NVL	NO VALID LOCATION FOR TESTING
OPEN	NO TERMINAL, DUCT OPEN
WEG	WALL EXHAUST GRILLE
WRG	WALL RETURN GRILLE
WSR	WALL SUPPLY REGISTER
LSD	LINEAR SUPPLY DIFFUSER
LRR	LINEAR RETURN REGISTER
LER	LINEAR EXHAUST REGISTER

DESIGN  BALANCE	CERTIFIED * DESIGN * SYSTEM * BALANCE P.O. BOX 1249 CITRUS HEIGHTS, CA 95611-1249 PHONE/FAX (916) 725-6317				SB JOB NO. CD01-0428							
					SECTION	PAGE 5						
	FAN AND OUTLET TEST SHEET				DATE 6/4/2001							
AREA SERVED				OFFICE'S				UNIT AC 1				
MOTOR NAMEPLATE DATA				DATA ITEM	TEST 1		TEST 2		TEST 3			
MFG GE				VOLTS			473					
FP 1/3 V 480 FLA 1.20				AMPS			1.07					
PH 1 SF THERM RPM 855				BHP			-					
SHEAVE DATA												
DIA SHAFT												
ADJ % FIXED												
FAN NAMEPLATE DATA												
MFG BRYANT				RPM	HIGH		HIGH					
MODEL 648FEX036000AA				SP -	-		0.21					
TYPE PACKAGE				SP +	-		0.31					
SIZE 3 TON				ESP	-		0.52					
SHEAVE DATA				FILTER SP	-		0.04					
DIA SHAFT				CFM TOTAL	970		880					
BELTS				CFM RA	652		671					
				CFM OA MIN.	318		209					
FAN SUBMITTAL DATA				CFM	SP	DNL	RPM	DNL	BHP	DNL		
ROOM	OPENING			FACTOR	DESIGN		TEST 1		TEST 2		TEST 3	
	NO.	TYPE	SIZE		FPM	CFM	FPM	CFM	FPM	CFM	FPM	CFM
	1	CD	24X10		275		316		299			
	2	CD	24X8		125		199		137			
	3	CD	24X8		100		172		116			
	4	CD	24X8		100		115		121			
	5	CD	24X8		200		168		207			
AC 1 SUPPLY AIR TOTAL					800		970		880			
	6	CRR	24X10		200		229		236			
	7	CRR	24X10		250		234		244			
	8	CRR	24X8		150		189		191			
AC 1 RETURN AIR TOTAL					600		652		671			
		OSA			200		318		209			
REMARKS DESIGN MIN OSA 200												

BALANCE REPORT ABBREVIATIONS

CD	CEILING DIFFUSER
CEG	CEILING EXHAUST GRILLE
CER	CEILING EXHAUST REGISTER
CRG	CEILING RETURN GRILLE
CSR	CEILING SUPPLY REGISTER
DNA	DATA NOT AVAILABLE
DNL	DATA NOT LISTED
FEG	FLOOR EXHAUST GRILLE
FRR	FLOOR RETURN REGISTER
FSR	FLOOR SUPPLY REGISTER
NA	NON ACCESSIBLE
NI	NOT INSTALLED
NT	NOT TAKEN, DUE TO IRREGULAR READINGS
NVL	NO VALID LOCATION FOR TESTING
OPEN	NO TERMINAL, DUCT OPEN
WEG	WALL EXHAUST GRILLE
WRG	WALL RETURN GRILLE
WSR	WALL SUPPLY REGISTER
LSD	LINEAR SUPPLY DIFFUSER
LRR	LINEAR RETURN REGISTER
LER	LINEAR EXHAUST REGISTER

AIRDATA MULTIMETER/FLOWMETER CERTIFICATE OF RECALIBRATION S/N: M941006
 Customer ID: 12274 **CERTIFIED DESIGN SYSTEM BALANCE** City: CITRUS HEIGHTS State: CA Order #: R003155
 Customer: CERTIFIED DESIGN SYSTEM BALANCE City: CITRUS HEIGHTS State: CA Order #: R003155
 As-Received Model #: CFM-88-1.00 Converted/Updated to: 88-1.03 Date of Last Calibration: 07/28/99
 PO #: _____ Customer Eqt ID#: _____ Calibration Due Date: _____ QA Code: 00 10CFR21: _____

AS-Received By: JO Date: 12/24/00 Rh: 22 Ambient Temperature: 74 Within spec: YES NO NA
 FINAL Test By: ME Date: 12-27-00 Rh: 24 Ambient Temperature: 72 Within spec: YES NO
 Test By: _____ Date: _____ Rh: _____ Ambient Temperature: _____ Within spec: YES NO

ABSOLUTE PRESSURE TEST (In Hg)
 TEST METER TOLERANCE = ± 2.0 % ± .1 In Hg AS-RCVD TEST WITHIN SPEC YES NO N/A
 Pressure Standard: Heise #2 S/N: 41741/42451 Calibration Date: 10/05/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #4 S/N: 41743/42453 Calibration Date: 10/10/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #6 S/N: 41742/42452 Calibration Date: 11/14/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #8 S/N: 42188/43328 Calibration Date: 04/14/00 Calibration Due Date: 04/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #10 S/N: 42203/43352 Calibration Date: 06/08/00 Calibration Due Date: 05/2001 As-Rcvd Test 2 FINAL
 Above Heise used for Absolute Pressure Set Points Rated Accuracy: 0.05% Is (0.02 In Hg) Uncertainty: < 0.01 In Hg

Approx Set Point	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
14.0	13.50	13.4	-0.74	14.20	14.1	-0.70			
28.4	28.59	28.4	-0.66	28.61	28.5	-0.38			
40.0	40.27	39.9	-0.92	40.32	40.0	-0.76			

DIFFERENTIAL PRESSURE TEST (In wc)
 TEST METER TOLERANCE = ± 2.0 % ± 0.001 In wc AS-RCVD TEST WITHIN SPEC YES NO N/A
 Pressure Standard: Heise #1 S/N: 41739/42449 Calibration Date: 10/03/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #3 S/N: 41738/42448 Calibration Date: 10/18/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #5 S/N: 41740/42450 Calibration Date: 11/14/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #7 S/N: 42185/42186 Calibration Date: 04/14/00 Calibration Due Date: 04/2001 As-Rcvd Test 2 Final
 Pressure Standard: Heise #9 S/N: 42208/43351 Calibration Date: 06/08/00 Calibration Due Date: 05/2001 As-Rcvd Test 2 FINAL
 Above Heise used for 0.06 In wc Differential Pressure Set Points Rated Accuracy: 0.37% Is (0.000176 In wc) Uncertainty: < 0.00088

Pressure Standard: AirData Multimeter S/N: M98455 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M98099 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M98326 Calibration Date: 11/21/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M98420 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Rated Accuracy: Differential Pressure ± 0.5 % ± 0.0001 In wc Uncertainty: See Uncertainty Table

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
0.0500	0.0510	0.0509	-0.20	0.0502	0.0502	0			
0.1250	0.1265	0.1267	0.16	0.1254	0.1256	0.16			
0.2250	0.2259	0.2262	0.35	0.2235	0.2238	0.13			
0.2700	0.2713	0.2715	0.07	0.2735	0.2738	0.11			
2.000	2.032	2.032	0	2.009	2.011	0.10			
3.000	3.665	3.659	-0.16	3.632	3.630	-0.05			
4.400	4.443	4.425	-0.41	4.423	4.415	-0.18			
27.00	27.12	26.99	-0.48	27.29	27.25	-0.15			
80.00	80.46	80.20	-0.32	81.23	81.11	-0.15			
Overrange	✓	✓		✓	✓				

LOW VELOCITY/FLOW CONFIRMATION (AIRFOIL/FLOW MODE)
 TEST METER TOLERANCE = ± 3.0 % ± 7 FPM/CFM AS-RCVD TEST WITHIN SPEC YES NO N/A
 Vel/Flow Standard: AirData Multimeter S/N: M98455 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M98099 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M98326 Calibration Date: 11/21/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M98420 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Rated Accuracy: Velocity ± 2.0 % ± 3 fpm; Flow ± 2.0 % ± 3 cfm Uncertainty: See Uncertainty Table

Approx Set Point	Standard	Test Meter	Diff	Standard	Test Meter	Diff	Standard	Test Meter	Diff
100	124.3	127	2.7	110.9	112	1.1			
800	523.8	527	0.8	539.0	541	2.0			

ADM-870 and ADM-880 AirData Multimeters are read in AirFoil Mode. ADM-850 and CFM-88 meters are read in air flow.

Showridge Instruments, Inc.
 7855 East Radfield Road Scottsdale, Arizona 85260

Customer ID: 12274 AIRDATA MULTIMETER/FLOWMETER CERTIFICATE OF RECALIBRATION
 Customer: CERTIFIED DESIGN SYSTEM BALANCE City: CITRUS HEIGHTS State: CA Order #: R003155
 As-Received Model #: CFM-88-1.00 Converted/Updated to: 88-1.03 Date of Last Calibration: 07/28/99
 PO #: _____ Customer Eqpt ID#: _____ Calibration Due Date: _____ QA Code: 00 10CFR21: _____

As-Received By: JO Date: 12/14/00 Rh: 22 Ambient Temperature: 74 Within spec: YES NO NA
 FINAL Test By: JK Date: 12/27-00 Rh: 24 Ambient Temperature: 72 Within spec: YES NO
 Test By: _____ Date: _____ Rh: _____ Ambient Temperature: _____ Within spec: YES NO

ABSOLUTE PRESSURE TEST (in Hg)
 TEST METER TOLERANCE = $\pm 2.0\% \pm 1$ in Hg AS-RCVD TEST WITHIN SPEC YES NO N/A

Pressure Standard: Halse #2 S/N: 41741/42451 Calibration Date: 10/05/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #4 S/N: 41743/42453 Calibration Date: 10/10/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #8 S/N: 41742/42452 Calibration Date: 11/14/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #8 S/N: 42188/43328 Calibration Date: 04/14/00 Calibration Due Date: 04/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #10 S/N: 42203/43352 Calibration Date: 05/08/00 Calibration Due Date: 05/2001 As-Rcvd Test 2 Final
 Above Halse used for Absolute Pressure Set Points Rated Accuracy: 0.05% fs (0.02 in Hg) Uncertainty: < 0.01 in Hg

Approx Set Point	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
14.0	13.50	13.4	-0.74	14.20	14.1	-0.70			
28.4	28.59	28.4	-0.66	28.61	28.5	-0.38			
48.0	40.27	39.9	-0.72	42.32	42.0	-0.76			

DIFFERENTIAL PRESSURE TEST (in wc)
 TEST METER TOLERANCE = $\pm 2.0\% \pm 0.001$ in wc AS-RCVD TEST WITHIN SPEC YES NO N/A

Pressure Standard: Halse #1 S/N: 41738/42449 Calibration Date: 10/03/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #3 S/N: 41738/42448 Calibration Date: 10/18/00 Calibration Due Date: 10/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #5 S/N: 41740/42460 Calibration Date: 11/14/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #7 S/N: 42185/42189 Calibration Date: 04/14/00 Calibration Due Date: 04/2001 As-Rcvd Test 2 Final
 Pressure Standard: Halse #9 S/N: 42202/43351 Calibration Date: 05/08/00 Calibration Due Date: 05/2001 As-Rcvd Test 2 Final
 Above Halse used for 0.05 in wc Differential Pressure Set Point Rated Accuracy: 0.07% fs (0.000175 in wc) Uncertainty: < 0.00068

Pressure Standard: AirData Multimeter S/N: M96455 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M96099 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M96326 Calibration Date: 11/21/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Pressure Standard: AirData Multimeter S/N: M99420 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Rated Accuracy: Differential Pressure $\pm 0.5\% \pm 0.0001$ in wc Uncertainty: See Uncertainty Table

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
0.600	0.510	0.509	-0.20	0.502	0.502	0			
1.250	1.265	1.267	0.16	1.254	1.256	0.16			
2.250	2.259	2.262	0.35	2.225	2.238	0.3			
2.700	2.713	2.715	0.07	2.735	2.758	0.11			
2.000	2.032	2.032	0	2.009	2.011	0.10			
3.600	3.665	3.659	-0.16	3.652	3.650	-0.05			
4.400	4.443	4.425	-0.41	4.423	4.415	-0.18			
27.00	27.12	26.99	-0.48	27.29	27.25	-0.15			
50.00	50.46	50.20	-0.52	51.23	51.11	-0.23			
Overrange	✓	✓		✓	✓				

LOW VELOCITY/FLOW CONFIRMATION (AIRFOIL/FLOW MODE)
 TEST METER TOLERANCE = $\pm 3.0\% \pm 7$ FPM/CFM AS-RCVD TEST WITHIN SPEC YES NO N/A

Vel/Flow Standard: AirData Multimeter S/N: M96455 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M96099 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M96326 Calibration Date: 11/21/00 Calibration Due Date: 11/2001 As-Rcvd Test 2 Final
 Vel/Flow Standard: AirData Multimeter S/N: M99420 Calibration Date: 09/18/00 Calibration Due Date: 09/2001 As-Rcvd Test 2 Final
 Rated Accuracy: Velocity $\pm 2.0\% \pm 3$ fpm; Flow $\pm 2.0\% \pm 3$ cfm Uncertainty: See Uncertainty Table

Approx Set Point	Standard	Test Meter	Diff	Standard	Test Meter	Diff	Standard	Test Meter	Diff
100	124.3	127	2.7	110.9	112	1.1			
500	523.8	527	0.8	539.0	541	2.			

ADM-870 and ADM-880 AirData Multimeters are read in AirFoil Mode. ADM-850 and CFM-88 meters are read in air flow.

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