

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0007688
Insp Area: 1

Site Address: 1423 J ST SAC
Parcel No: 006-0056-014 4TH FLOOR

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

CONTRACTOR
KLEEMAN ROEBBELEN
1241 HAWKS FLIGHT CT
H DORADO HILLS

OWNER
AT & T COMMUNICATIONS OF CALIFORNIA INC
SACRAMENTO CA
95851

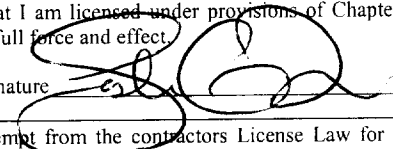
ARCHITECT

Nature of Work: INT REMODEL: TO NEW TELECOMMUNICATIONS SWITCH GEAR WITH NEW 8000 AMP POWER PLANT(BATTERY ROOM)

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 B License Number 737566 Date 6/01 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):

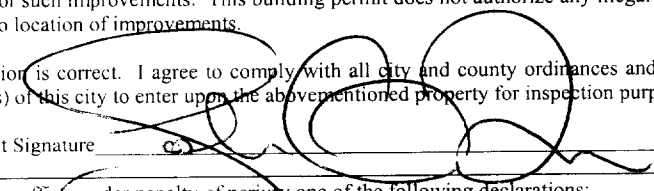
_____, I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, 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.)

_____, 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: _____
Date _____ Owner Signature _____

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.

Date 10/12/02 Applicant/Agent Signature 

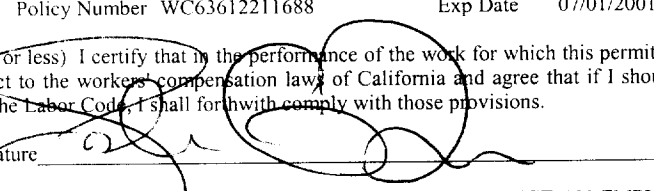
WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

_____, 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 ARGONAUT INS CO Policy Number WC63612211688 Exp Date 07/01/2001

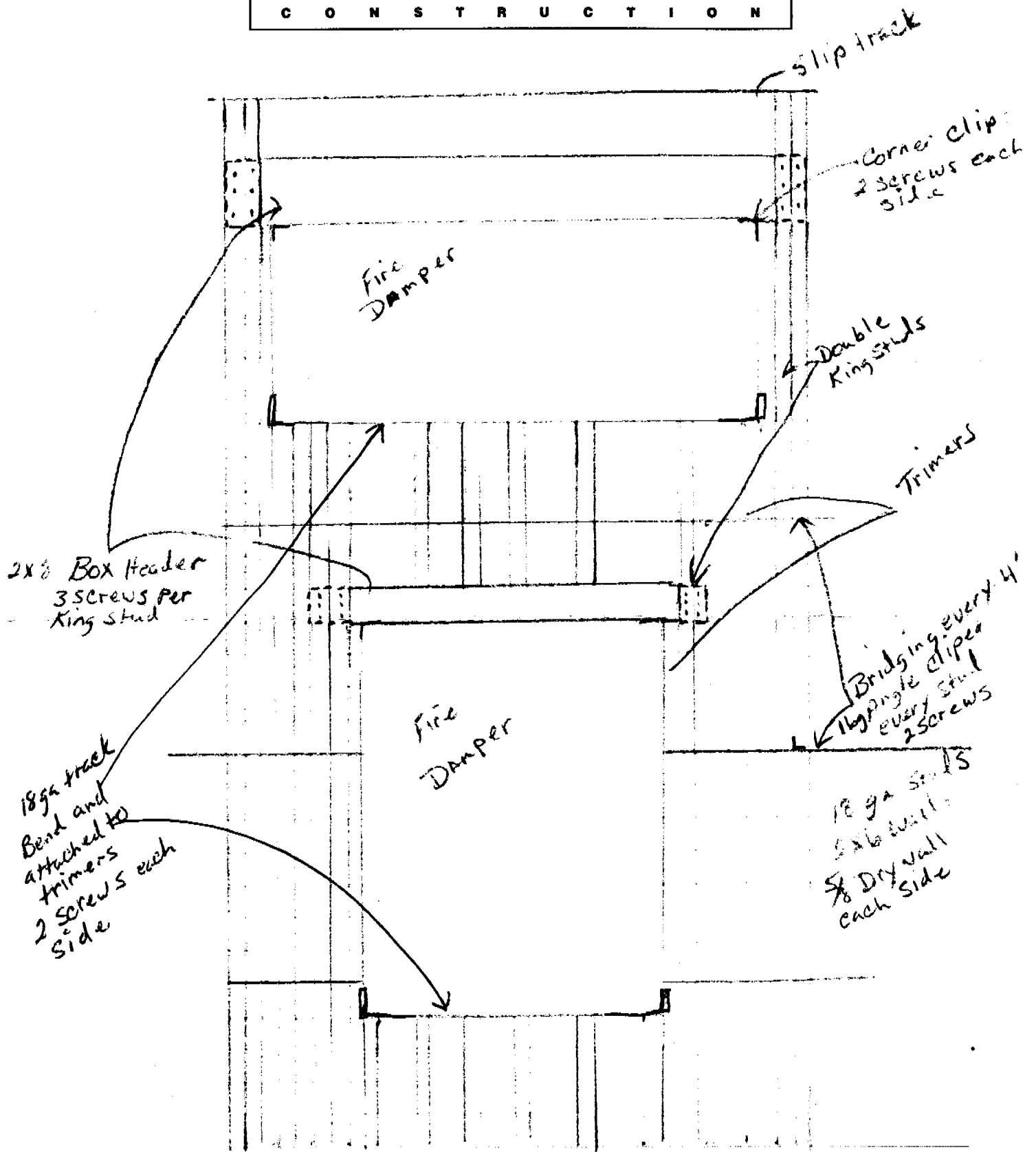
_____, (This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation law of California and agree that if I should become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

Date 10/12/02 Applicant Signature 

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 3700 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

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

KLEEMAN • ROEBBELEN
 C O N S T R U C T I O N



PCI Industries, Inc.

Products for the HVAC Industry

2824 North Sylvania Avenue
Fort Worth, Texas 76111

817/831-7036 • Fax 817/831-4707

February 22, 2001

Dick Johnson
Air Tech Sales
1830 Vernon St. suite #2
Roseville, CA 95678

Ref: Pac Bell Project
Damper Installation

Dear Dick,

I have reviewed the drawings sent to me by David Champion. The installation of the dampers looks to be correct. Our installation instructions show the way to install each damper that penetrates a firewall. As long as each damper is properly installed, it does not matter that there are two or more dampers in the same wall. For your information, when the dampers are tested at UL, there is more than one damper in the wall being tested.

If you should have any questions, do not hesitate to call.

Sincerely,



Gary L. Brooks
Western Regional Sales Manager

AIR TECH SALES
1830 Vernon St. Suite#2
Roseville, CA. 95678
Ph: (916) 969-8730
Fax: (916) 782-7550

FAX TRANSMITTAL LETTER

To: CUSTOM AIRE MECHANICAL
Date: February 22, 2001
Attn: DON SOUTER
Sbjct: POTTORFF LETTER
Prjct: PAC BELL SWITCH ADDITION
From: DICK J.

DON....

This a copy of the letter the inspector requested for the fire damper installation at
Pac Bell Switch Addition.

If you need more information please call me.

Thank You,
Dick Johnson

dickj@airtechsales.com

THIS TRANSMISSION IS 2 PAGE(S) LONG, INCLUSIVE.
IF YOU DO NOT RECEIVE ALL PAGES PLEASE CALL AND LET ME KNOW.
FROM THE DESK OF.....DICK JOHNSON

AIR TECH SALES

CARTER AIR BALANCE COMPANY

1130 FIRST STREET, SUITE 210

NAPA, CA 94559

Phone (707)252-4859 Fax (707)252-8351

TEST AND BALANCE ANALYSIS REPORT

JOB: Power Room and Switch Addition - Pacific Bell - J Street

CONTRACTOR: Custom Aire Mechanical, Inc.

ENGINEER: Taylor Systems Engineering

ARCHITECT: Lionakis Beaumont Design Group



DATE: April 19, 2001

TECHNICIAN: Larry Lee

APPROVED BY: Jeff Carter



AABC

Associated Air Balance Council

Annual Certificate

Awarded to

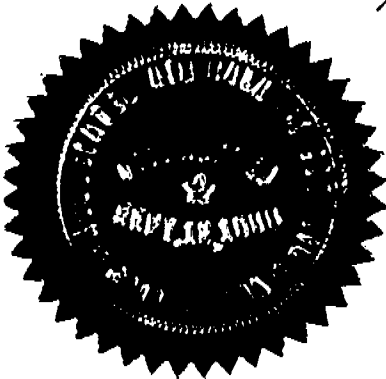
Jeff A. Carter

Carter Air Balance Company

*In recognition of his qualifications as a
Certified Test and Balance Engineer
under the rules, regulations, and requirements of the
Associated Air Balance Council. The above named is fully
authorized to perform total system balance in accordance
with the standards as established by the AABC and as a
member of the Associated Air Balance Council for the year*

2001

*This registration number 94-01-33, being issued this day
January 1, 2001, is fully recognized by the bylaws and
charter of this professional association. This certificate is
renewable on an annual basis after examination of the agency's
record for the preceding year.*



William A. Dese
President

Kenneth M. Snyka
Executive Director

CARTER AIR BALANCE COMPANY

1130 First Street, Suite 210

Napa, California 94559

Phone: 707 252-4859 Fax: 707 252-8351

ABBREVIATIONS

BHP	BRAKE HORSEPOWER
CER	CEILING EXHAUST REGISTER
CRR	CEILING RETURN REGISTER
CSD	CEILING SUPPLY DIFFUSER
DD	DIRECT DRIVE
DFH	DIGITAL FLOW HOOD
DNA	DATA NOT AVAILABLE
DNL	DATA NOT LISTED
DNT	DATA NOT TAKEN
ESP	EXTERNAL STATIC PRESSURE
FH	FLOW HOOD
FLA	FULL LOAD AMPERAGE
HP	HORSEPOWER
L/S	LITERS PER SECOND
NA	NOT APPLICABLE
NI	NOT INSTALLED
NIC	NOT IN CONTRACT
NT	NOT TAKEN
NVL	NO VALID LOCATION
OSA	OUTSIDE AIR
Pa	PASCALS
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SP	STATIC PRESSURE
TSP	TOTAL STATIC PRESSURE
WE	WALL EXHAUST REGISTER
WG	WATER GAUGE
WRR	WALL RETURN REGISTER
WSR	WALL SUPPLY REGISTER

Certified Agency of



AABC

Carter Air Balance Company

1130 First Street, Suite 210
 Napa, California 94559
 (707) 252-4859 Fax (707) 252-8351
 California License No. 725518

JOB NO. AB-1765

SECTION 1

PAGE 1

DATE 4-13-01

UNIT AHU-1 Supply Fan

AREA SERVED 4th. Floor

FAN AND OUTLET TEST SHEET

FAN SUBMITTAL DATA				CFM	20000	SP	2.0" ESP	RPM	DNL	BHP	DNL
MOTOR NAMEPLATE DATA				DATA ITEM		TEST 1		TEST 2		TEST 3	
MFG Century				VOLTS		470				470	
HP	20	V	460	FLA	24.8	AMPS		21 21 20		20 20 19.8	
PH	3	SF	1.15	RPM	1745	BHP		16.9		16.1	
SHEAVE DATA											
DIA		2B5V62		SHAFT		1 5/8					
P.D. ADJ		NO		FIXED		YES					
FAN NAMEPLATE DATA											
MFG Trane				RPM		1465				1465	
MODEL MCC40				SP-		2.05				2.00	
TYPE CENT.				SP+		0.65				1.22	
SIZE 40				TSP/ESP		2.70 TSP				3.22 TSP	
FAN SHEAVE DATA				FILTER SP		0.80				1.00	
DIA		2B5V74		SHAFT		2 3/16		CFM TOTAL		41423	
BELTS 2-5VX560				CFM RA		CLOSED				CLOSED	
DIRECT DRIVE NO				CFM OA MIN.		100%				100%	

ROOM	OPENING			FACTOR	DESIGN		TEST 1		TEST 2		TEST 3	
	NO.	TYPE	SIZE		FPM	CFM	FPM	CFM	FPM	CFM	FPM	CFM
MAIN ZONE	DUCT	PITOT										
Z-1	DUCT	PITOT	18 x 18	2.25	1333	3000	1065	2396			1495	3364
Z-2	"	"	36 x 30	7.5	1426	10700	1150	8625			1590	11925
Z-3	"	"	36 x 24	6.0	1437	8625	1145	6870			1600	9600
Z-4	"	"	36 x 20	5.0	1265	6325	1010	5050			1415	7075
Z-5	"	"	36 x 20	5.0	1265	6325	1015	5075			1400	7000
Z-6	"	"	36 x 20	5.0	1265	6325	1020	5100			1425	7125
Z-7	"	"	32 x 24	5.33	971	5175	780	4157			1080	5756
Z-8	"	"	36 x 20	5.0	1035	5175	830	4150			1160	5800
Z-9	"	"	36 x 20	5.0	----	CAP	----	CAP			----	CAP
					Fan	Total	51650	41423				57645

REMARKS: Test 1 with two air handler fans running at 60 Hertz.

Test 3 with three air handler fans running at 60 Hertz.

Certified Agency of



Carter Air Balance Company

1130 First Street, Suite 210
Napa, California 94559
(707) 252-4859 Fax (707) 252-8351
California License No. 725518

JOB NO. AB-1765

SECTION 1 PAGE 2

DATE 4-13-01

UNIT AHU-2 Supply Fan

AREA SERVED 4th. Floor

FAN AND OUTLET TEST SHEET

FAN SUBMITTAL DATA				CFM 20000	SP 2.0" ESP	RPM DNL	BHP DNL
MOTOR NAMEPLATE DATA				DATA ITEM	TEST 1	TEST 2	TEST 3
MFG Century				VOLTS	470		470
HP 20	V 460	FLA 24.8		AMPS	21 20 21		19.9 20 20
PH 3	SF 1.15	RPM 1745		BHP	16.9		16.1
SHEAVE DATA							
DIA 2B5V62		SHAFT 1 5/8					
P.D. ADJ NO		FIXED YES					
FAN NAMEPLATE DATA							
MFG Trane				RPM	1460		1460
MODEL MCC40				SP-	2.05		2.00
TYPE CENT.				SP+	0.70		1.23
SIZE 40				TSP/ESP	2.75 TSP		3.23 TSP
FAN SHEAVE DATA				FILTER SP	0.80		1.00
DIA 2B5V74		SHAFT 2 3/16		CFM TOTAL	41423		57645
BELTS 2-5VX560				CFM RA	CLOSED		CLOSED
DIRECT DRIVE NO				CFM OA MIN.	100%		100%

ROOM	OPENING			FACTOR	DESIGN		TEST 1		TEST 2		TEST 3	
	NO.	TYPE	SIZE		FPM	CFM	FPM	CFM	FPM	CFM	FPM	CFM

REMARKS: Test 1 with two air handler fans running at 60 Hertz.
Test 3 with three air handler fans running at 60 Hertz.

Certified Agency of



AABC

Carter Air Balance Company

1130 First Street, Suite 210
Napa, California 94559
(707) 252-4859 Fax (707) 252-8351
California License No. 725518

JOB NO. AB-1765

SECTION 1

PAGE 3

DATE 4-13-01

UNIT AHU-3 Supply Fan

FAN AND OUTLET TEST SHEET

AREA SERVED 4th. Floor

FAN SUBMITTAL DATA			CFM 20000	SP 2.0" ESP	RPM DNL	BHP DNL
---------------------------	--	--	-----------	-------------	---------	---------

MOTOR NAMEPLATE DATA			DATA ITEM	TEST 1	TEST 2	TEST 3
-----------------------------	--	--	-----------	--------	--------	--------

MFG	Century			VOLTS	470	470
HP	2	V 460	FLA 24.8	AMPS	20 21 20	19.8 20 19.7
PH	3	SF 1.15	RPM 1745	BHP	16.9	16.1

SHEAVE DATA

DIA	2B5V62	SHAFT	1 5/8
P.D. ADJ	N O	FIXED	YES

FAN NAMEPLATE DATA

MFG	Trane			RPM	1462	1462
MODEL	MCC40			SP-	2.04	2.00
TYPE	CENT.			SP+	0.68	1.24
SIZE	40			TSP/ESP	2.72 TSP	3.24

FAN SHEAVE DATA

DIA	2B5V74	SHAFT	2 3/16	FILTER SP	0.80	1.00
BELTS	2-5VX-560			CFM TOTAL	41423	57645
DIRECT DRIVE	N O			CFM RA	CLOSED	CLOSED
				CFM OA MIN.	100%	100%

ROOM	OPENING			FACTOR	DESIGN		TEST 1		TEST 2		TEST 3	
	NO.	TYPE	SIZE		FPM	CFM	FPM	CFM	FPM	CFM	FPM	CFM

REMARKS: Test 1 with two air handler fans running at 60 Hertz.
Test 3 with three air handler fans running at 60 Hertz.

CARTER AIR BALANCE COMPANY

FAN TEST SHEET

DATE: 4-13-01

SHEET NO: 4

AREA SERVED:

4th. Floor Power Room

UNIT NO. AHU-1EF

INSTALLED EQUIPMENT

MOTOR NAMEPLATE DATA

MFG	Century		
HP	7.5	V 460	FLA 9.7
PH	3	SF 1.15	RPM 1745

SHEAVE DATA

DIA	1BK72	SHAFT	1 3/8
ADJ P.D. NO	FIXED	YES	

FAN

SUBMITTED DESIGN DATA

FAN CFM	20000
TOTAL SP	DNL
EXT. SP	0.75
RPM	DNL
BHP	"
R.A.	CLOSED
O.S.A.	100%

MOTOR

DATA ITEM TESTED

VOLTS	470
AMPS	9 9.1 9.0
BHP	7.0

FAN NAMEPLATE DATA

MFG	Trane		
MODEL	MCC40		
TYPE	CENT.		
SIZE	40		

DESIGN Exhaust Air

TOTAL CFM	20000
-----------	-------

TESTED Exhaust Air

TOTAL CFM	19476
-----------	-------

TRAVERSE TOTAL

TOTAL CFM	19476
-----------	-------

FAN

RPM	1148
SP -	0.50
SP +	0.10
TSP	0.60
FILTER SP	NONE
CFM TOTAL	19476
CFM RA	----
CFM OA MIN.	----

SHEAVE DATA

DIA	1B5V110	SHAFT	2 3/16
BELTS	1-BX63		
DIRECT DRIVE	NO		

DIFFUSERS & GRILLES

ROOM NO.	OUTLET NO.	CODE	SIZE	EFFECTIVE AREA	REQUIRED		TEST RESULTS	
					F.P.M.	C.F.M.	F.P.M.	C.F.M.
MAIN	DUCT	PITOT	48 x 34	11.33	1765	20000	1719	19476

REMARKS :

CARTER AIR BALANCE COMPANY

DIFFUSER & GRILLE TEST SHEET

DATE: 4-13-01

SHEET NO: 7

AREA SERVED

4th. Floor Power Room

UNIT NO. AHU-1&2

ROOM NO.	OUTLET NO.	CODE	SIZE	EFFECTIVE AREA	REQUIRED		TEST RESULTS			
					F.P.M.	C.F.M.	F.P.M.	C.F.M.		
POWER ROOM	1	SD-3	30 x 10	1.05	952	1000	1060	1113		
	2	SD-3	30 x 10	1.05	952	1000	1050	1102		
	3	----	----	----	----	OMIT				
	4	SD-2	12 x 6	0.23	543	125	600	138		
	5	"	"	"	"	125	580	133		
	6	"	"	"	"	125	620	142		
	7	"	"	"	"	125	590	136		
	8	"	"	"	"	125	600	138		
	9	"	"	"	"	125	580	133		
	10	"	"	"	"	125	580	133		
	11	"	"	"	"	125	600	138		
						----		----		
				ZONE 1	Total	3000		3306		
SWITCH	12	SD-1	6 x 24	0.47	1223	575	1370	644		
	13	"	"	"	"	575	1350	634		
	14	"	"	"	"	575	1380	648		
	15	"	"	"	"	575	1400	658		
	16	"	"	"	"	575	1370	643		
	17	"	"	"	"	575	1380	648		
	18	"	"	"	"	575	1360	639		
	19	"	"	"	"	575	1350	634		
	20	"	"	"	"	575	1370	643		
	21	"	"	"	"	575	1360	639		
	22	"	"	"	"	575	1390	653		
	23	"	"	"	"	575	1380	648		
	24	"	"	"	"	575	1350	634		
LOBBY	25	CD	10 x 10	FH	FH	225	FH	250		
SWITCH	26	SD-1	6 x 24	0.47	1223	575	1340	630		
	27	"	"	"	"	575	1350	634		
	28	"	"	"	"	575	1360	639		
	29	"	"	"	"	575	1380	648		
LOBBY	30	CD	1624	FH	FH	700	FH	730		
						----		----		
				ZONE 2	Total	10700		11896		

REMARKS: Air balance with three air handler fans running at 60 Hertz.

CARTER AIR BALANCE COMPANY

DIFFUSER & GRILLE
TEST SHEET

DATE: 4-13-01

SHEET NO: 8

AREA SERVED

4th. Floor Power Room

UNIT NO. AHU-1&2

ROOM NO.	OUTLET NO.	CODE	SIZE	EFFECTIVE AREA	REQUIRED		TEST RESULTS			
					F.P.M.	C.F.M.	F.P.M.	C.F.M.		
SWITCH	31	SD-1	6 x 24	0.47	1273	575	1370	644		
"	32	"	"	"	"	575	1340	630		
"	33	"	"	"	"	575	1350	634		
"	34	"	"	"	"	575	1380	648		
"	35	"	"	"	"	575	1360	639		
"	36	"	"	"	"	575	1370	644		
"	37	"	"	"	"	575	1350	634		
"	38	"	"	"	"	575	1350	634		
"	39	"	"	"	"	575	1380	648		
"	40	"	"	"	"	575	1360	639		
"	41	"	"	"	"	575	1350	634		
"	42	"	"	"	"	575	1370	644		
"	43	"	"	"	"	575	1340	630		
"	44	"	"	"	"	575	1350	634		
"	45	"	"	"	"	575	1370	644		
						----		----		
				ZONE 3	Total	8625		9580		
SWITCH	46	SD-1	6 x 24	0.47	1273	575	1350	634		
"	47	"	"	"	"	575	1350	634		
"	48	"	"	"	"	575	1370	644		
"	49	"	"	"	"	575	1360	639		
"	50	"	"	"	"	575	1380	648		
"	51	"	"	"	"	575	1340	630		
"	52	"	"	"	"	575	1370	644		
"	53	"	"	"	"	575	1370	644		
"	54	"	"	"	"	575	1350	634		
"	55	"	"	"	"	575	1360	639		
"	56	"	"	"	"	575	1350	634		
						----		----		
				ZONE 4	Total	6325		7024		
REMARKS:										

CARTER AIR BALANCE COMPANY

**DIFFUSER & GRILLE
TEST SHEET**

DATE: 4-13-01

SHEET NO: 9

AREA SERVED

4th. Floor Power Room

UNIT NO. AHU-1&2

ROOM NO.	OUTLET NO.	CODE	SIZE	EFFECTIVE AREA	REQUIRED		TEST RESULTS			
					F.P.M.	C.F.M.	F.P.M.	C.F.M.		
SWITCH	57	SD-1	6 x 24	0.47	1273	575	1350	634		
"	58	"	"	"	"	575	1370	644		
"	59	"	"	"	"	575	1340	630		
"	60	"	"	"	"	575	1330	625		
"	61	"	"	"	"	575	1350	634		
"	62	"	"	"	"	575	1340	630		
"	63	"	"	"	"	575	1370	644		
"	64	"	"	"	"	575	1360	639		
"	65	"	"	"	"	575	1360	639		
"	66	"	"	"	"	575	1350	634		
"	67	"	"	"	"	575	1370	644		
						----		----		
				ZONE 5	Total	6325		6997		
SWITCH	68	SD-1	6 x 24	0.47	1273	575	1360	639		
"	69	"	"	"	"	575	1360	639		
"	70	"	"	"	"	575	1350	634		
"	71	"	"	"	"	575	1350	634		
"	72	"	"	"	"	575	1340	630		
"	73	"	"	"	"	575	1360	639		
"	74	"	"	"	"	575	1350	634		
"	75	"	"	"	"	575	1350	634		
"	76	"	"	"	"	575	1360	639		
"	77	"	"	"	"	575	1340	630		
"	78	"	"	"	"	575	1350	634		
						----		----		
				ZONE 6	Total	6325		6986		
SWITCH	79	SD-1	6 x 24	0.47	1273	575	1360	639		
"	80	"	"	"	"	575	1360	639		
"	81	"	"	"	"	575	1350	634		
"	82	"	"	"	"	575	1340	630		
"	83	"	"	"	"	575	1360	639		
"	84	"	"	"	"	575	1350	634		
"	85	"	"	"	"	575	1370	644		
"	86	"	"	"	"	575	1360	639		
"	87	"	"	"	"	575	1350	634		
				ZONE 7	Total	5175		5732		
REMARKS:										

TECHNICAL SERVICES

2900 Main St Alameda CA 94501 Phone (510) 522-8126 Fax (510) 522-3113

Certificate of Calibration

CARTER AIR BALANCE

P.O. BOX 179

NAPA

CA 94558

Customer ID # 2762

File # 510

Instrument Type FLOW HOOD

Range 2000

Units CFM

Resolution N/A

Mfg ALNOR

Model BALOMETER

Cal By MIKE MCCONNELL
90765

Current Cal Cycle (Months) 12

Previous Cal Cycle N/A

Standards Used DO-ALL 54-R-379 DUE
7/1/2000 NIST-821-245855

Rated Accuracy 2.3%

Pass/Fail as Found PASS

Pass/Fail as Left PASS

1st (Mfg) S/N BR107763

2nd S/N N/A

Cal Date 4/10/00

Cal Due 4/10/01

ISO 9001 COMPLIANT

Notes

TECHNICAL SERVICES GROUP CERTIFIES THAT THIS INSTRUMENT HAS BEEN CALIBRATED TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY AND CONFORMS TO ISO 10012 AND ANSI/NCSL Z-540. UNLESS OTHERWISE SPECIFIED MEASUREMENT UNCERTAINTIES ARE LESS THAN 1/4 OF TOLERANCE OR 1 MINOR DIVISION.

TECHNICAL SERVICES

2900 Main St Alameda CA 94501 Phone (510)522-8326 Fax (510)522-313

Certificate of Calibration

CARTER AIR BALANCE

P.O. BOX 179

NAPA

CA 94558

Customer ID # 2762

File # 510

Instrument Type FLOW HOOD

Range 2.500

Units CFM

Resolution 0.1

Mfg. SHORTRIDGE

Model CFM88

Cal By R.K. STRAHL

Curent Cal Cycle (Months) 12

Previous Cal Cycle 12

Standards Used DO-ALL 54-R-379 DUE
7/19/2001 NIST 821-259564

Rated Accuracy SEE DATA SHEET

Pass/Fail as Found FAIL

Pass/Fail as Left PASS

1st (Mfg) S/N M88776

2nd S/N N/A

ISO 9000 COMPLIANT

Cal Date 2/22/01

Cal Due 2/22/02

Notes DAMAGED. REPAIRED HOOD/ EPOXY

TECHNICAL SERVICES GROUP CERTIFIES THAT THIS INSTRUMENT HAS BEEN CALIBRATED TRACEABLE TO THE NATIONAL BUREAU OF STANDARDS AND TECHNOLOGY AND CONFORMS TO ISO 10012 AND ANSI / NCSL Z-540. UNLESS OTHERWISE SPECIFIED MEASUREMENT UNCERTAINTIES ARE LESS THAN 1/4 OF TOLERANCE OR 1 MINOR DIVISION.

TECHNICAL SERVICES

2900 Main St Alameda CA 94501 Phone (510)522-8326 Fax (510)522-313

Certificate of Calibration

CARTER AIR BALANCE

P.O. BOX 179

NAPA

CA 94558

Customer ID # 2762

File # 510

Instrument Type FLOW HOOD

Range SEE DATA SHEET

Units SEE DATA SHEET

Resolution SEE DATA SHEET

Mfg. ALNOR

Model BALOMETER

Cal By MIKE MCCONNELL
90765

Current Cal Cycle (Months) 12

Previous Cal Cycle 12

Standards Used DO-ALL 54-R-379 DUE
7/19/2001 NIST 821-259564

Rated Accuracy SEE DATA SHEET

Pass/Fail as Found PASS

Pass/Fail as Left PASS

1st (Mfg) S/N BR107516

2nd S/N N/A

Cal Date 2/27/01

Cal Due 2/27/02

Notes

ISO 9000
COMPLIANT

TECHNICAL SERVICES GROUP CERTIFIES THAT THIS INSTRUMENT
HAS BEEN CALIBRATED TRACEABLE TO THE NATIONAL INSTITUTE
OF STANDARDS AND TECHNOLOGY AND CONFORMS TO ISO 10012
AND ANSI / NCSL Z-540. UNLESS OTHERWISE SPECIFIED
MEASUREMENT UNCERTAINTIES ARE LESS THAN 1/4 OF TOLERANCE
OR 1 MINOR DIVISION.



2900 Main St Alameda CA 94501 Phone (510)522-8326 Fax (510)522-313

Certificate of Calibration

CARTER AIR BALANCE

P.O. BOX 179

NAPA

CA 94558

Customer ID #	2762	Rated Accuracy	>1RPM
File #	510	Pass/Fail as Found	PASS
Instrument Type	DIGITAL TACHOMETER	Pass/Fail as Left	PASS
Range	20,000	1st Mfg. S/N	49811030
Units	RPM	2nd S/N	N/A
Resolution	+/-1 RPM	Cal Date	11/27/00
Mfg.	SHIMPO	Cal Due	11/27/01
Model	DT205B	Notes	
Cal By	R.K. STRAHL		
Current Cal Cycle (Months)	12		
Previous Cal Cycle	N/A		
Standards Used	FLUKE 1953 A S/N 2285049 NIST 2451H742203 DUE JUNE 6, 2001		

TECHNICAL SERVICES GROUP CERTIFIES THAT THIS INSTRUMENT HAS BEEN CALIBRATED TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY AND CONFORMS TO ISO 10012 AND ANSI / NCSL Z-540. UNLESS OTHERWISE SPECIFIED MEASUREMENT UNCERTAINTIES ARE LESS THAN 1/4 OF TOLERANCE OR 1 MINOR DIVISION.