CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0509255
Insp Area: 4
Thos Bros: 277H6

Site Address: 2326 DEL PASO BL SAC
Parcel No: 275-0052-002

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

CONTRACTOR

OWNER
CALVARY CHRISTIAN CHURCH CENTER
PO BOX 15010
SACRAMENTO, CA 95851

ARCHITECT

Nature of Work: ADD ANSUL HOOD AND SINKS TO EXISTING KITCHEN

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'sAddress_____

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);

_Y_ 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 7/29/05 Owner Signature_____

CITY OF SAC
PAID
JUL 29 2005

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 herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 7/29/05 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 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, Ishall 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.

Date 7/29/05 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 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

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

Fixed Position OA Fan: 20" BELT Section: Exhaust Item: 2 Page: 3

Full Demand Test

	Date & By: 3-27-06	For determination of	CFM/SP relationship		
	Design	Test #1		Test #2		Test #3	
	CFM	Ref. SP	CFM	Ref. SP	CFM	Ref. SP	CFM
under Full Demand	2160	.488	2300		2100		2170

Exhaust Fan Fan: Captive Aire Hood Section: EX Item: 1 Page: 1/1

Test Description				Design Plans	Design Submit	Test # 1	Test # 2 FINAL	Test #
						2300 CFM	2100 CFM	2170 CFM
Fan	Manufacturer			DAYTON				
	Model Number			7A627				
	Type or Size			20"				
	Volume Control Type			NA				
Motor	Manufacturer			DAYTON				
	HP	RPM-hi	RPM-lo	1/2	1720			
	Frame	Phase	SF					
	Volts			120				
	FLA			5.8				
	SFA							
Motor Sheave	Model or Size			DAYTON		DIRECT DRIVE		
	Bore or Bushing			3/4"				
	Adj. % of Max			80%				
Fan Sheave	Model or Size			6"				
	Bore or Bushing			3/4"				
Number Belts	Belt Size							
Centerline	% of Max Adj.							
Volume Control	Set Point	Indicated	Actual	-	-	-	-	
	Position							
Tested RPM	Motor							
	Fan			-	-			
Air Dist. Total	SAcfm	% des.						
Fan Air Flows	SAcfm	% des.			-			
	RAcfm	% SA						
	OAcfm	% SA						
Discharge SP	ESP	TSP						
Suction SP	ESP	TSP						
Total Resistance	ESP	TSP		-	-			
ΔP's	Filter/ Cooling Coil			-	-			
Volts	T1-T2	T1-T3	T2-T3					
Voltage Corrected FLA								
Amps	T1	T2	T3					
Approximate BHP				-	-			
No Load Amps (if overloaded)								

Motor name plate

valid location to test motor and fan RPM

Test Equipment Detail

Application	Description	Manufacturer	Model	Current Cal	Cal Due
Air Velocity - Duct ✓ Air Velocity - Fume Hood ✓ Air Velocity - Registers ✓ Air Volume - Registers Air Differential Pressure Duct Static Pressure ✓ Air, Contact & Immersion Temperature	DWYER ANEMOMETER 470	DWYER	470	2/3/06	2/3/07
Air Velocity - Pressure & Temperature	Thermo Anemometer	TSI	8385		
Duct Leak Testing	Calibrated Orifice Tube	United McGill	LTK-S		
Rotational Speed	Chronometric Tachometer	O.Zernickow	252		N/A
	Stroboscope Tachometer	Extech	461830		
	Digital Tachometer	Pacer	DT3		
Electrical	Digital Clamp-on Volt / Amp Meter	Fluke	32		
	Digital Multi Meter	Fluke	29		
	Documenting Process Calibrator	Fluke	701		
Water Gage Pressure Water Differential Pressure Air, Contact & Immersion Temperature	Hydro Data Multimeter	Shortridge	HDM-150		
Air, Contact & Immersion Temperature Multi-Point Measurement	Multi-Temp	Shortridge	HDM-300 MT-44K		
Temperature Source	Dry Block Temperature Chamber	ThermaCal	18B-0-600		
Relative Humidity Measurement & Source	Chilled Mirror Meter	General Eastern	M-4		
	RH Chamber	General Eastern	C-1		
	Salt Bath Calibrator	Vaisala	HMC-11		
Relative Humidity & Temperature	Thin Film Capacitive RH Meter	Vaisala	HMC-20 / HMP20B		
PC Based Monitoring & Logging	Thin Film Capacitive RH Meter	Vaisala	HM-34F		
	Data Acquisition	National Instruments	SCXI-1100/1200 & LabView		
	Temp & Humidity Transmitters	Vaisala	HMD-20YB	N/A	N/A
	DP Transmitters	Mamac	PR-274-R2-mA		
Air Temperature Recorder	Digital Data Recorder	MicroLogger	32-96F		
Relative Humidity Recorder	Digital Data Recorder	MicroLogger	1H100-C		
Airborne Particle Counter (non-viable) w/ Temp & %RH	Laser Particle Counter	Met-One	Particle Counter: A2408		
			Particle Counter: A2408		
			Particle Counter: A2100B		
			Particle Counter: A2100B		
			T&RH Probe: 85A		
			T&RH Probe: 85A		
			T&RH Probe: 85		
			T&RH Probe: 85		
Airborne Particle Counter (Viable)	Viable Microbe Air Sampler	Biotest	RCS Centrifugal Air Sampler		
	Airflow Indicator	Biotest	940210		
	Anemometer	Biotest	940312		
DOP Filter Leak Testing	Photometer	Air Techniques	TDA-2E		
	Generator		TDA-2G		
		Air Techniques	TDA-4B		
			TDA-5B	N/A	N/A
			TDA-6A		
PSL Leak Testing	PSL Generator / DI Water Fogger	KimAir, Inc.	Challenger I		
		Cleanroom Sciences	µS-25K-1	N/A	N/A
	PSL Generator, Multi-Nozzle	Sunbeam	KUH-15/694	N/A	N/A
	Particulate Dilution Chamber	KimAir, Inc.	Challenger II	N/A	N/A
Lighting Level (intensity)	Light Illumination Meter	MESA3	PDC-1		
Lighting Spectrum	Radiometer	Extech	K81792		
Sound Pressure Level	Sound Level Meter	UVP	UVX		
Electromagnetic Interference (EMI)	Magnetic Field Test Kit	Simpson	Meter 886, Filters 898, Calib 890		
Electric Space Charge	Ion Density Meter	Holaday	3604		
	Charge Plate Monitor	Semtronics	EN160		
Electrical Grounding	Digital Safety Inspector	NilStat	210		
Floor Conductivity	Conductive Meter	Ohmic	SI-100ND		
Compressed Gas Properties Oil, Moisture, CO, CO_2, NO, NO_2, SO_2	Compressed Gas Tester	Biddle	Mark IV		
		Draeger	Aerotest # E1-1A001-E440		
Compressed Gas Particlates	Particulate Sampling Chamber	MESA3	PSC-1	N/A	N/A
	Flowmeter 4-40 l/min	Dwyer	VFB-69-BV-CDS	N/A	N/A
Compressed Gas Dew Point	Compressed Gas Dew Point Monitor	Hygrodynamics	8092		

TRIMLINE SHEET METAL HEATING & AIR CONDITIONING

22515 CANYON WAY
COLFAX,CA 95713
PHONE (530)637-5156
FAX (530)637-5156
E-MAIL TRIMLINEHVAC@MSN.COM

DATE: 3/27/06

TO: Saca Co.

FROM: THE DESK OF JOHN PLATT

MAKE up AIR - Supply

10" X 16" = 120" X 16" = 1920 cu" ÷ 144 =

13.33 Sq FT. = 146.16 CFM per Sq FT. Avaage = 146.6 ON Make up perforated MAKE up OUTLet.

Supply design = 1944 CFM

Setting = 1955 CFM

Exhuast

10" X 20" = 200 cu in ÷ 144 = 1.38 cu.FT

1572 per Sq FT CFM X 1.38 = 2169.36

Exhuast design = 2160 CFM

Setting = 2170 CFM

Fixed Position OA

Fan: Squirrel Change Section: MAKE-UP AIR Item: 1 Page: 3

Full Demand Test

For determination of CFM/SP relationship

	Design	Test #1		Test #2		Test #3	
Date & By:		3/27/06					
	CFM	Ref. SP	CFM	Ref. SP	CFM	Ref. SP	CFM
under Full Demand	1944	.062		1944	1955	-	1955 CFM

Make-up Air Fan

Fan: WILLIAMS Section: Item: 1 Page: 1/1

Test Description				Design Plans	Design Submit	Test # 1	Test # 2 FINAL	Test #	
Fan	Manufacturer			WILLIAMS		2200	1955		1955 CFM .062
	Model Number			35000F					
	Type or Size			20"					
	Volume Control Type			YES					
Motor	Manufacturer			DAYTON					
	HP	RPM-hi	RPM-lo	3/4					
	Frame	Phase	SF	1					
	Volts			120					
	FLA			6.8					
	SFA								
Motor Sheave	Model or Size				NO - DIRECT DRIVE				
	Bore or Bushing			1/2"					
	Adj. % of Max			4" - 2"					
Fan Sheave	Model or Size			14"					
	Bore or Bushing			3/4					
Number Belts 1	Belt Size								
Centerline	% of Max Adj.								
Volume Control	Set Point	Indicated	Actual		-	-	-		
	Position								
Tested RPM	Motor								
	Fan			-	-				
Air Dist. Total	SAcfm	% des.							
Fan Air Flows	SAcfm	% des.			-				
	RAcfm	% SA							
	OAcfm	% SA							
Discharge SP	ESP	TSP							
Suction SP	ESP	TSP							
Total Resistance	ESP	TSP		-	-				
ΔP's	Filter/ Cooling Coil			-	-				
Volts	T1-T2	T1-T3	T2-T3						
Voltage Corrected FLA									
Amps	T1	T2	T3						
Approximate BHP				-	-				
No Load Amps (if overloaded)									

Motor name plate

valid location to test motor and fan RPM