

CITY OF SACRAMENTO  
1231 I Street, Sacramento, CA 95814

Permit No: 0609595  
Insp Area: 1  
Thos Bros: 297D6

Site Address: 2412 21ST ST SAC  
Parcel No: 010-0216-008

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

CONTRACTOR  
AIR SOLUTIONS  
910 T&U ALLEY  
SACRAMENTO CA 95818

OWNER  
AVALOS FAMILY TRUST  
1266 43RD AVE  
SACRAMENTO, CA 95822

ARCHITECT

Nature of Work: HVAC, C/O LIKE FOR LIKE UNITS \*\*MIN 15% AIR FROM OUTSIDE\*\*

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 C30 License Number 757806 Date 06-27-06 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.)

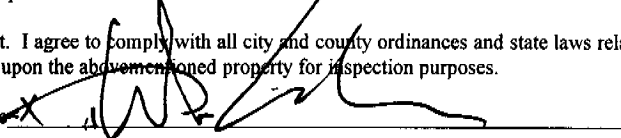
\_\_\_\_\_, I, as owner of the property, am exclusively contracting with licensed contractors to assist in the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with 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 above mentioned property for inspection purposes.

Date 06-27-06 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 NO EMPLOYEES Policy Number Exp Date

X (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.

Date 06-27-06 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.

ISSUED  
CITY OF SACRAMENTO  
JUN 27 2006  
DOWNTOWN PERMIT  
CENTER

De 09595

Min 15% air from outside



Found request for sheet in this office before 2nd pm, with my permission the following day. Letter should read from a correct handbook of Ventilation Requirements for Buildings. Your sheet is under a Building Permit is bound with no section to go with it.

Permits regarding plan review are not required by FIREWORK

In order to process this request, ALL of the following information MUST be provided:

APARTMENTS (40 units per building)  CREW-CAL (pending)

212-234-5678

CONTRACTOR: JOHN SIKKINS

ADDRESS: 30 W. AVENUE

APARTMENTS: 412 ADD 7846

PHONE: 766-43 at 400

ADDRESS: 30 W. AVENUE

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PHONE: 766-43 at 400

ADDRESS: 30 W. AVENUE

<input type="checkbox"/> STAIRS (including 6th) <input type="checkbox"/> TREADS <input type="checkbox"/> RISERS <input type="checkbox"/> BALUSTRADES <input type="checkbox"/> HANDRAILS <input type="checkbox"/> GUARDRAILS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS	<input checked="" type="checkbox"/> STAIRS (including 6th) <input type="checkbox"/> TREADS <input type="checkbox"/> RISERS <input type="checkbox"/> BALUSTRADES <input type="checkbox"/> HANDRAILS <input type="checkbox"/> GUARDRAILS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS	<input type="checkbox"/> STAIRS (including 6th) <input type="checkbox"/> TREADS <input type="checkbox"/> RISERS <input type="checkbox"/> BALUSTRADES <input type="checkbox"/> HANDRAILS <input type="checkbox"/> GUARDRAILS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS	<input type="checkbox"/> STAIRS (including 6th) <input type="checkbox"/> TREADS <input type="checkbox"/> RISERS <input type="checkbox"/> BALUSTRADES <input type="checkbox"/> HANDRAILS <input type="checkbox"/> GUARDRAILS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS <input type="checkbox"/> STAIRS
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DESCRIPTION OF WORK: REPAIR EXISTING ROOF HOIST HYAC CURT

NATURE OF WORK: (Provide a detailed description of work to be done, type of work, in addition below.)

- c. Pull strapping through tension buckle unit taut.
- d. Snap lever down to lock strap in tension buckle. To release strapping, squeeze safety latch, lift lever, and pull webbing outward.
5. Tighten the tension buckle until it is taut. Lifting brackets must be secure in the rigging holds.
6. Attach field-supplied clevis or hook of sufficient strength to hole in the lifting bracket (See Fig. 9).
7. Attach the 2 safety straps directly to the clevis or hook at the lifting brackets. **DO NOT** attach the safety straps to the 4 rigging brackets (See Fig. 9).
8. Position lifting point directly over the unit's center of gravity.
9. Lift unit. When unit is directly over the roof curb, remove the 2 safety straps. Lower the equipment onto the roof curb.

1. Remove unit from shipping carton. Leave top shipping skid on the unit as a spreader bar to prevent the rigging straps from damaging the unit. If the wood skid is not available, use a spreader bar of sufficient length to protect unit from damage.
2. Position the lifting bracket assembly around the base of the unit. Be sure the strap does not twist.
3. Place each of the 4 metal lifting brackets into the rigging holds in the composite pan.
4. Thread lifting bracket strapping around bottom perimeter of unit as follows:
  - a. Open lever of tension buckle (ratchet type).
  - b. Feed strapping through tension buckle as shown in Fig. 8.

INSTALLATION

Fig. 2—50S2024-030 Unit Dimensions

UNIT	ELECTRICAL CHARACTERISTICS		UNIT WEIGHT		UNIT HEIGHT IN. (MM)	CENTER OF GRAVITY IN. (MM)		
	208/230-1-60	208/230-1-60	lb	kg		X	Y	Z
50S2024	343	156	39.02 (991)	41.02 (1042)	20.0 (508)	14.0 (356)	13.0 (330)	
50S2030	366	166	41.02 (1042)	20.0 (508)	20.0 (508)	14.0 (356)	13.0 (330)	

A05162

**REQUIRED CLEARANCE TO COMBUSTIBLE MATL.**  
(Refer to Maximum Operating Clearances)

INCHES (mm)

TOP OF UNIT: 14.00 (355.6)

DUCT SIDE OF UNIT: 2.00 (50.8)

SIDE OPPOSITE DUCTS: 14.00 (355.6)

BOTTOM OF UNIT: 0.50 (12.7)

INCHES (mm)

BETWEEN UNGRADED SURFACES, POWER ENTRY SIDE: 42.00 (1066.8)

UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE: 42.00 (1066.8)

**NEC REQUIRED CLEARANCES**

MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 304.8 (12.00) FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISE.

EVAP COIL ACCESS SIDE: 36.00 (914.0)

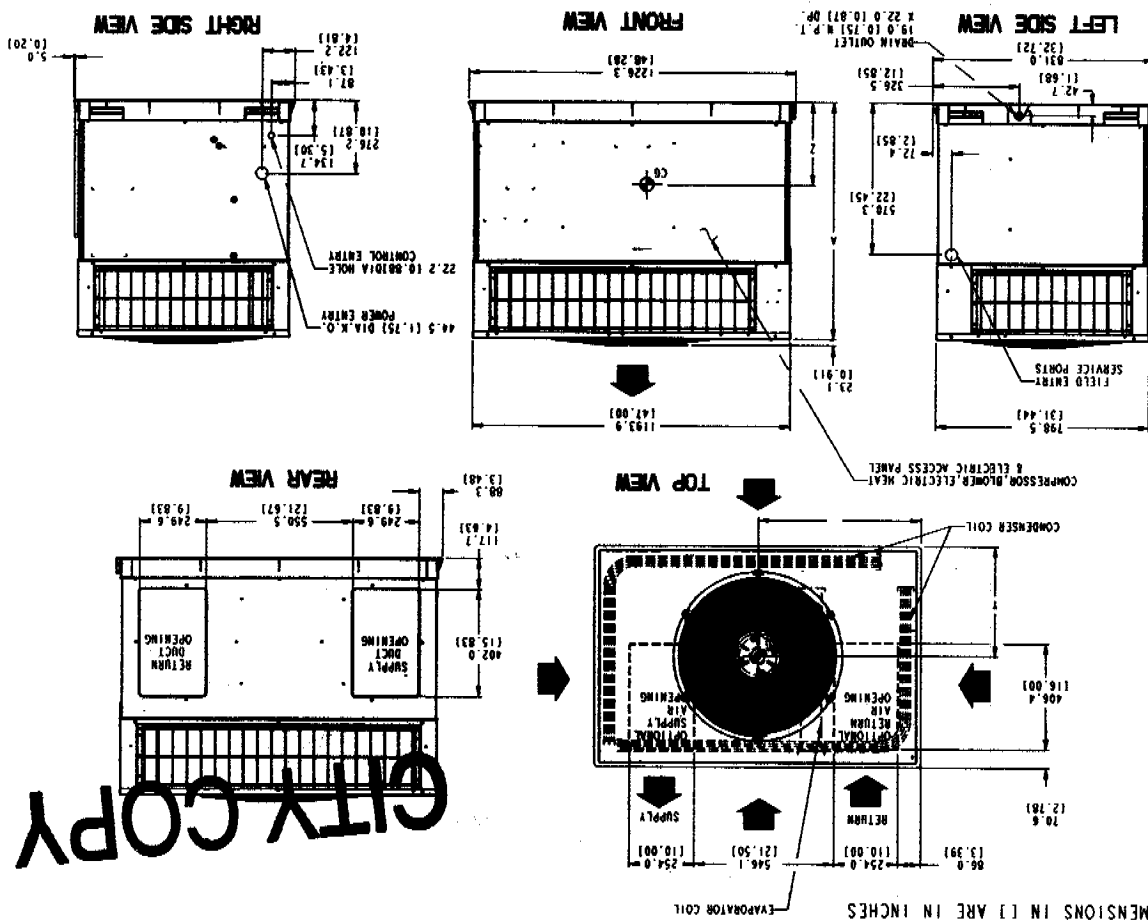
POWER ENTRY SIDE: 42.00 (1066.8)

(EXCEPT FOR NEC REQUIREMENTS)

UNIT TOP: 48.00 (1219.2)

SIDE OPPOSITE DUCTS: 36.00 (914.0)

DUCT PANEL: 12.00 (304.8)



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0409598

0609525

Table 3—Electrical Data—50SZ (Single Point Connection)

UNIT 50SZ SIZE	V-PH-HZ	VOLTAGE RANGE			COMPRESSOR			ELECTRIC HEAT			POWER SUPPLY		
		Min	Max	RLA	LRA	FLA	FLA	FLA	FLA	FLA	MCA	Max Fuse	MOCF
024	208/230-1-60	187	253	10.9	54.0	0.9	2.0	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	16.5/18.5 25.1/28.5 47.6/54.6	16.5/18.5 25.1/28.5 47.6/54.6	30/30 30/30 50/60	— — —
030	208/230-1-60	187	253	14.0	72.5	0.9	2.0	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	20.4/20.4 25.1/28.5 47.6/54.6	20.4/20.4 25.1/28.5 47.6/54.6	25/25 25/30 50/60	— — —
036	208/230-1-60	187	253	16.0	88.0	0.9	3.1	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	26.4/29.9 49.0/56.0 71.6/82.0	26.4/29.9 49.0/56.0 71.6/82.0	30/30 30/30 50/60	— — —
042	208/230-1-60	187	253	18.4	104.0	0.9	4.1	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	28.0/28.0 28.0/31.2 50.3/57.2	28.0/28.0 28.0/31.2 50.3/57.2	35/35 35/35 60/60	— — —
048	208/230-1-60	187	253	18.3	109.0	1.5	4.1	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	28.5/28.5 28.5/31.2 50.3/57.2	28.5/28.5 28.5/31.2 50.3/57.2	35/35 35/35 60/60	— — —
060	208/230-1-60	187	253	25.0	148.0	1.5	6.2	3.8/5.0 7.5/10.0 18.1/20.8	36.1/41.7 54.2/62.5 72.8/83.3	39.0/39.0 39.0/39.0 52.9/59.8	39.0/39.0 39.0/39.0 52.9/59.8	50/50 50/50 60/60	— — —

(See legend following Electrical Data charts)

- LEGEND
- FLA — Full Load Amps
  - LRA — Locked Rotor Amps
  - MCA — Minimum Circuit Amps
  - MOCF — Maximum Overcurrent Protection
  - RLA — Rated Load Amps



Schrader fitting located on the compressor discharge line. Be sure that caps on the ports are tight.

7. High flow valves are located on the compressor hot gas and suction tubes. These valves can not be accessed for service in the field. Ensure the plastic caps are in place and tight or the possibility of refrigerant leakage could occur.

START-UP

Using the Start-Up Checklist supplied at the end of this book, proceed as follows:

Step 1—Check for Refrigerant Leaks

1. Use both high- and low-pressure ports to relieve system pressure and reclaim remaining refrigerant.

2. Repair leak following accepted practices.

NOTE: Install a bi-flow filter drier whenever the system has been opened for repair.

3. Check system for leaks using an approved method.

4. Reclaim refrigerant and evacuate refrigerant system to 500 microns if no additional leaks are found.

5. Charge unit with R-22 refrigerant, using a volumetric-charging cylinder or accurate scale. Refer to unit rating plate for required charge. Be sure to add extra refrigerant to compensate for internal volume of filter drier.

Step 2—Start-Up Adjustments

Complete the required procedures given in the Pre-Start-Up section before starting the unit. Do not jumper any safety devices when operating the unit. Do not operate the unit in Cooling mode

- NOTES:
1. In compliance with NEC (National Electrical Code) requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be Power Supply fuse. The CGA (Canadian Gas Association) units may be fuse or circuit breaker.
  2. Minimum wire size is based on 60 C copper wire, if other than 60 C wire is used, or if length exceeds wire length in table, determine size from NEC.

- e. Inspect coil fins. If damaged during shipping and handling, carefully straighten fins with a fin comb.
4. Verify the following conditions:
  - a. Make sure that outdoor-fan blade is correctly positioned in fan orifice (See Fig. 16).
  - b. Make sure that condensate drain pan and trap are filled with water to ensure proper drainage.
  - c. Make sure that all tools and miscellaneous loose parts have been removed.
5. Compressors are internally spring mounted. Do not loosen or remove compressor hold-down bolts.
6. Each unit system has 2 Schrader-type ports, one low-side Schrader fitting located on the suction line, and one high-side

0609595

EXISTING

2 ton Russell Heat Pump

25 yrs old ~~to be replaced~~

Model - RGHJ024-3

Weight 380#

200/230 volt

Stainless Plumber