

ON PRINCIPAL FRONTAGE OF WORK
CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Permit Number: 031115

Please Read
Application And
Notes, If Any,
Attached

This is to certify that October Corporation/Payton Line Corp.
has permission to Amendment to permit #03-0...: new cooling unit or basement condenser on roof
AT 2 Canal Plaza 032 I033001

provided that the person or persons, firm or corporation accepting this permit shall comply with all
of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating
the construction, maintenance and use of buildings and structures, and of the application on file in
this department.

Apply to Public Works for street line
and grade if nature of work requires
such information.

Notification of inspection must
be given and when permit is procured
before this building or part thereof
is occupied or construction is begun.
HEAR NOTICE REQUIRED.

A certificate of occupancy must be
procured by owner before this build-
ing or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. AHM/S
Health Dept. _____
Appeal Board _____
Other _____
Department Name

[Signature]
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 03-1115	Issue Date:	CBL: 032 I033001
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Location of Construction: 2 Canal Plaza	Owner Name: October Corporation	Owner Address: One Canal Plaza 5th Floor	Phone:
Business Name:	Contractor Name: Payton Maine Corp.	Contractor Address: 75 Market Street Portland	Phone: 207 874 8500 207 874 2722
Lessee/Buyer's Name	Phone:	Permit Type: Amendment to Commercial	Zone: B3

Past Use: Office space	Proposed Use: Office space with new cooling unit for basement w/condenser on roof: Amendment to permit #03-0868	Permit Fee: \$471.00	Cost of Work: \$50,000.00	CEO District: 1
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: B Typ: N/A 10/2/03 [Signature]	

Proposed Project Description: Amendment to permit #03-0868: new cooling unit for basement, condenser on roof	Signature: [Signature]	Signature: [Signature]
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) in basement & roof Action: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: D. Andrews Date: 9/29/03		

Permit Taken By: kwd	Date Applied For: 09/12/2003	Zoning Approval
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1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: 9/23/03	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input checked="" type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Any exterior work requires Separate Review TO D.A. 9/23/03 D. Andrews 9/29/03
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CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

03-1115

All Purpose Building Permit Application

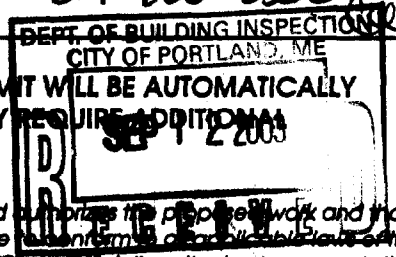
If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

INVOLVANT, BASEMENT LEVEL

Location/Address of Construction: <u>TWO CANAL PLAZA PORTLAND, MAINE</u>		
Total Square Footage of Proposed Structure	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# <u>032</u> Block# <u>T</u> Lot# <u>033</u>	Owner: <u>OCTOBER CORPORATION</u> <u>BOULOS PROPERTY MANAGEMENT</u> <u>IS JENNAK</u>	Telephone: <u>207-775-6717</u>
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: <u>PAYTON MAINE CORP.</u> <u>56 INDUSTRIAL PARK ROAD</u> <u>SACO, ME 04072</u> <u>207-286-8500</u>	Cost Of Work: <u>\$49,934.00</u> Fee: \$ <u>477.00</u>
Current use: <u>OFFICE SPACE</u>		
If the location is currently vacant, what was prior use: <u>OFFICE SPACE</u>		
Approximately how long has it been vacant: <u>—</u>		
Proposed use: <u>OFFICE/COMPUTER ROOM NEW COOLING UNIT.</u>		
Project description: <u>NEW COOLING UNIT</u> <u>Phase II</u> <u># 030868</u>		
Contractor's name, address & telephone: <u>PAYTON MAINE CORP.</u> <u>56 INDUSTRIAL PARK ROAD SACO, ME 04072</u> <u>PHONE = 207 286-8500</u>		
Who should we contact when the permit is ready: <u>BILL CARPENTER, PAYTON MAINE CORP.</u>		
Mailing address: <u>SAME AS ABOVE</u>		
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: <u>207-286-8900</u>		

Amendment to Permit # 030868

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.



I hereby certify that I am the Owner of record of the named property, or that the owner of record has authorized me to make this application as his/her authorized agent. I agree to accept the jurisdiction of the City of Portland in all areas covered by this permit. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: <u>[Signature]</u>	Date: <u>9/10/03</u>
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This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall



Thursday, September 11, 2003

Attn: Mike Nugent
City of Portland Code Enforcement Office
389 Congress Street
Portland, Maine 04101

Re: Inovant - New Computer Room Renovation (NEW HVAC UNIT)

Scope of Work Outline:

The work for this project will be in the basement level and on the mechanical penthouse roof of Two Canal Plaza, Portland, Maine. We are currently constructing the space identified as "New Computer Room" room #007 as shown on the attached 11"x17" plans. This permit application is for the additional cooling required for the computer room. You will recall our previous permit application for this space did not include the mechanical unit. This was because we were working with the tenant, Boulos Property Management, and Price Structural Engineers to determine several things. First, could the existing structure support a new condensing unit on the roof, and if so what was the largest unit that the roof could support? Second, what are the owner's actual cooling requirements? Finally, what was the best unit that would meet the weight limitations of the roof yet meet the tenants cooling requirements? Now, that we have all of these items determined I am submitting to you the following permit application with the following documents enclosed.

Enclosures:

- Original Scope of Work Outline Dated 7/17-03. (1 copy)
- Original 11"x17" Floor Plans Marked-up with new cooling unit location. (2 copies)
- Structural Review and Drawings prepared by Price Engineers. (2 copies)
- Existing Penthouse Structural Drawing. (1 copy)
- New Liebert Unit Cut-sheets Interior & Exterior 6 pages. (1 copy)

Please do not hesitate to call me should you have any questions.

Sincerely

Payton Maine Corp.

A handwritten signature in black ink, appearing to read "Bill Carpenter".

Bill Carpenter

Project Manager / Estimator

Phone: 207-286-8500, Fax: 207-286-3750



Thursday July 17th, 2003

City of Portland Code Enforcement Office
389 Congress Street
Portland, Maine 04101

Re: Inovant - New Computer Room Renovation

Scope of Work Outline:

The work for this project will be in the basement level of Two Canal Plaza, Portland, Maine. Currently the space identified as "New Computer Room" room #007 is open space, which is currently used as overflow space for the existing open office space identified as "Existing Offices" room #006. Our scope of work will include the construction of a new metal stud partition to separate the Existing Office space from the New Computer Room. The wall will be full height to the under side of the metal deck and will be constructed of 25ga. 3 5/8" metal studs with 1/2" GWB each side full height. The intent of the separation is to limit access of the computer room to authorized Inovant employees.

Additionally, as part of the contract, we will be in-filling two existing door openings that are currently not utilized as access into and out of the existing space. The door in-fills will be consistent with existing building materials and finishes in place.

We will also be removing the existing carpet tile flooring in the New Computer Room area and having a new raised floor system installed that would include a ramp and railing.

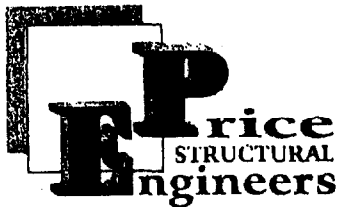
Our Electrician will be adding a new dedicated panel for the computer room as well as several new outlets for this room. The electrical portion will be design build.

There eventually will be a mechanical (cooling) component for this room. Currently, the sizing of the unit, the final location of the unit, and the type of unit are being reviewed by our mechanical contractor and subject to approval by Boulos Property Management. This work will be done on either another contract or possibly as a change order to our existing contract. The mechanical system will be design build. Currently, we are working with the tenant, Boulos Property Management, Price Structural Engineers and our mechanical subcontractor to iron out the details of what system to install. The tenant has given us notice to proceed with the work outlined above for the construction of the room with the mechanical component to be addressed when a final design is reached.

Please call me should you have any questions.

Sincerely
Payton Maine Corp.

Bill Carpenter
Project Manager / Estimator
Phone: 207-286-8500, Fax: 207-286-3750



STAMPED STRUCTURAL DRAWINGS
FOR ROOFTOP SLEEPERS &
PENETRATIONS FOR NEW
CONDENSING UNIT.

75 Farms Edge Road
North Yarmouth, ME 04097
Tel: 207-846-0099
Fax: 207-846-1633
E-Mail: PriceEngrs@aol.com

GENERAL STRUCTURAL NOTES

TWO CANAL PLAZA
Portland, Maine

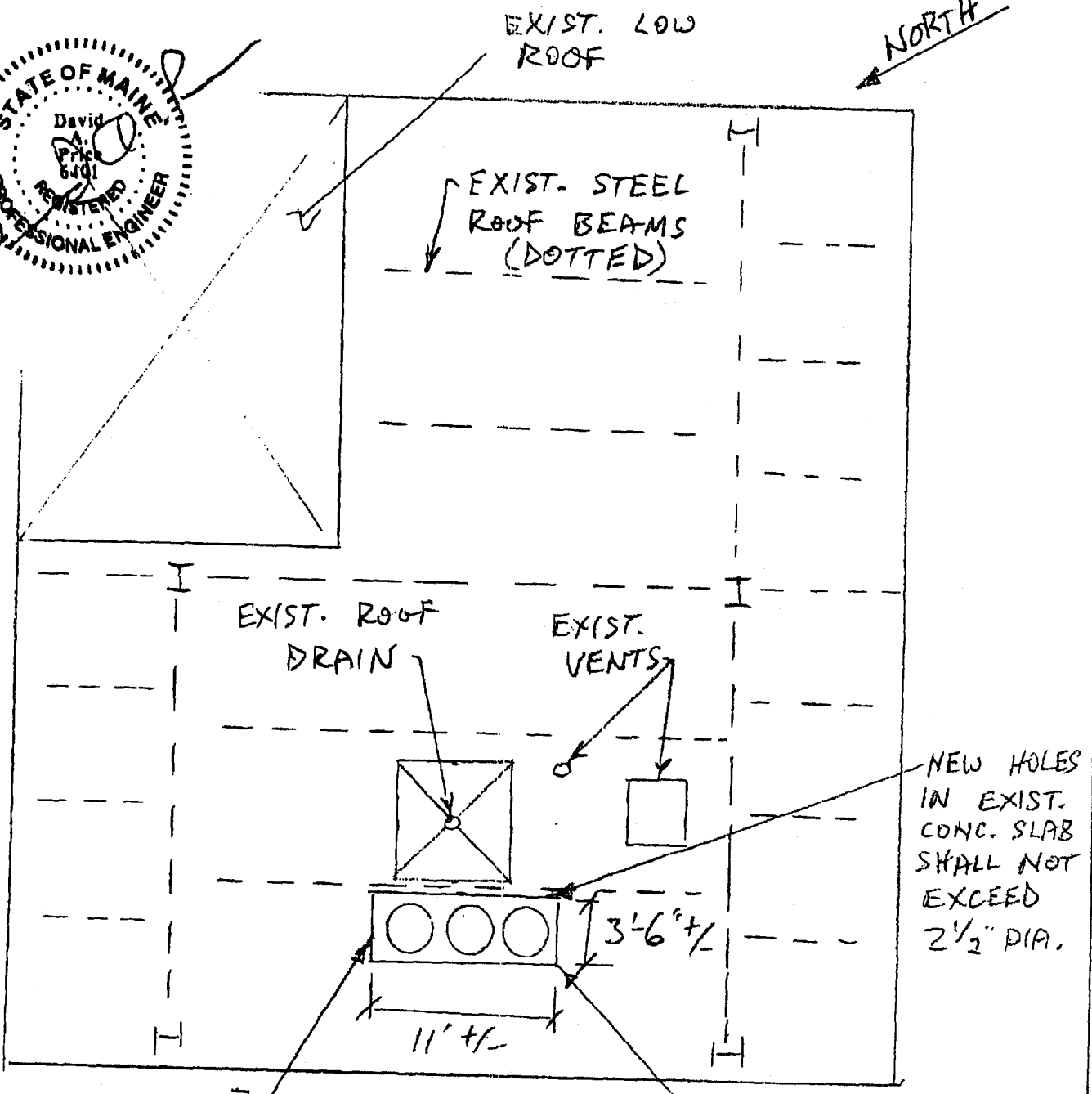
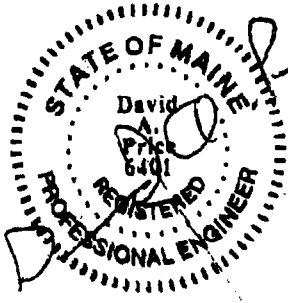
ROOFTOP FAN UNIT ON PENTHOUSE

DIVISION 1 - GENERAL REQUIREMENTS

1. Work and materials shall conform to the 1999 BOCA National Building Code, State of Maine Building Codes, and other applicable codes and standards and shall meet the requirements of local authorities having jurisdiction.
2. Coordinate work schedule, daily hours of construction, location of material storage, access to utilities, and final cleanup requirements with owner prior to construction.
3. Structural drawings and specifications do not include provisions for sitework, ventilation, watertightness of building, NFPA fire code requirements, Americans with Disabilities Act (ADA) requirements, egress requirements, or other architectural features. Coordinate these requirements with others as necessary.
4. The following list of drawings and sketches form a part of this specification:

SK-S1 Penthouse Roof Plan
SK-S2 Sleeper Plan
SK-S3 Section 1
5. The structural design is based on the full interaction of all its connected parts. No provisions have been made for any temporary conditions that may arise during construction prior to the completion of the structure. The Contractor shall be responsible for adequate design and construction of all temporary bracing during the progress of the project.
6. Alternate connection details may be used if such details are submitted to Price Structural Engineers, Inc. for review and written acceptance is granted. However, Price Structural Engineers, Inc. shall be the sole judge of acceptability of those specific details used.

7. The Contractor shall be completely responsible for the safety of adjacent structures, property, and the public. The Contractor shall comply with all federal, state and local safety requirements.
8. Do not scale from Drawings.
9. All materials shall be new except those labeled "EXIST" (existing).
10. Work not indicated on a part of the Drawings but reasonably implied to be similar to that shown at corresponding places shall be included.
11. Modifications or alterations of these Construction Documents or changes in construction from the intent of these documents shall not be made without written approval from Price Structural Engineers, Inc.
12. The Contractor is required to examine the Drawings and Specifications carefully, visit the site and fully inform themselves as to all existing conditions and limitations.
13. Contractor shall obtain all necessary permits prior to proceeding with construction. Coordinate temporary dust enclosure requirements and security requirements with Owner.
14. Remove and legally dispose of demolished materials.
15. Contractor shall take all necessary precautions to ensure that existing building components are not damaged during construction.
16. Stored materials shall be kept under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack materials in such a manner that prevents warping or crushing.
17. Pre-manufactured materials shall be installed in accordance with manufacturer's requirements and recommendations.
18. Substitutions for specified pre-manufactured materials may be made but only after specific written approval has been provided by the owner's engineer prior to installation.
19. Pressure Treated (PT) lumber shall be Southern Yellow Pine, Number 2 grade. Lumber and wood in exterior applications, at sills, at porches and in contact with concrete and masonry shall be pressure treated using CCA preservative with a minimum net retention of 0.40 pcf. Connect wood posts to concrete with Simpson Post Base Connector.
20. All fasteners (including nails and bolts) for pressure treated lumber shall be hot-dip galvanized. Holes for bolts in lumber shall be 1/16" larger than nominal bolt diameter.



SEE SLEEPER PLAN BELOW FAN (SK-S2)

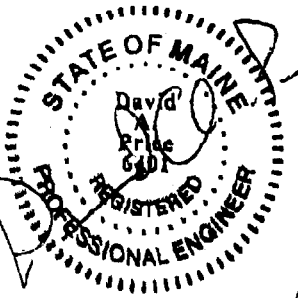
PROPOSED FAN UNIT - OPERATING WEIGHT SHALL NOT EXCEED 700 POUNDS

TWO CANAL PLAZA PENTHOUSE ROOF PLAN

NOTES:
 1. See General Structural Notes for additional requirements.

1/8" = 1'-0"

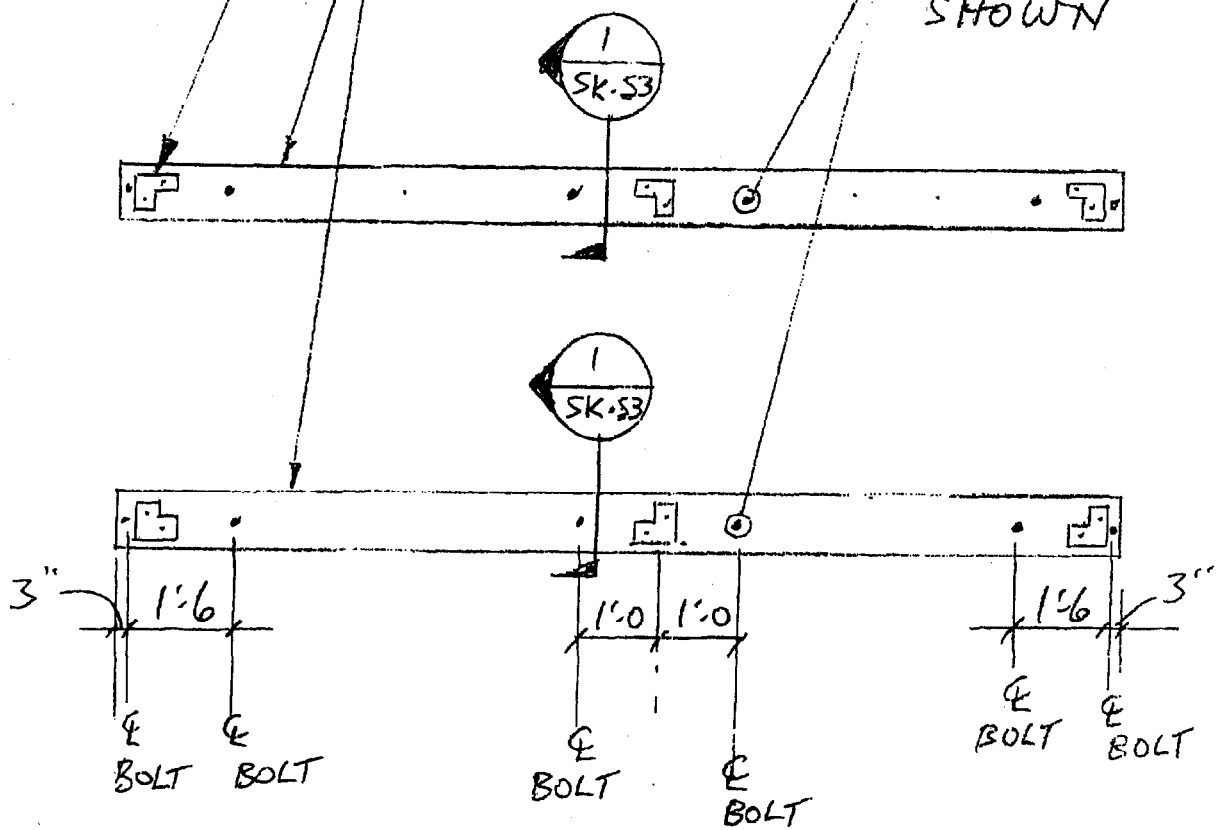
SK-S1



FAN ANCHORAGE DESIGNED BY
FAN MANUFACTURER (NOTE 1)

(3) 2X8 PRESSURE
TREATED
"SLEEPERS"

5/8" DIA EXP. BOLTS
@ 12 LOCATIONS
SHOWN



SLEEPER PLAN

1/2" = 1'-0"

NOTES:

1. Coordinate width & thickness of PT sleepers with fan manufacturer's anchorage requirements prior to construction.

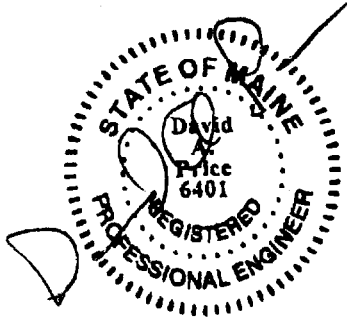
SK-52



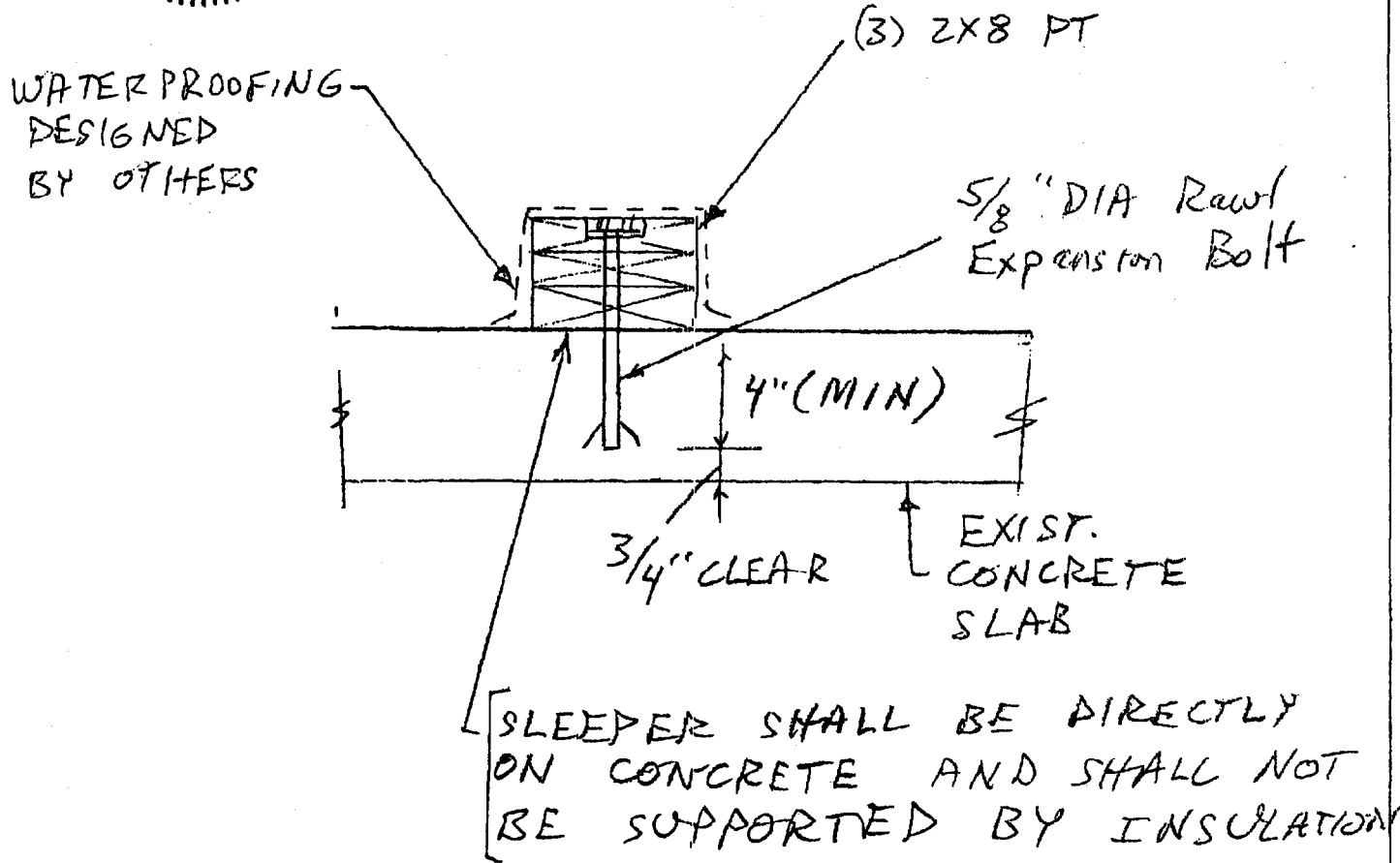
75 Farms Edge Road
 North Yarmouth, ME 04097
 Tel: (207) 846-0099
 Fax: (207) 846-1633

Project: 2 Canal Plaza
 Subject: Fan
 Date: 7/25/03
 Designed by: DAP

Portland SK-53
 Sheet: 5 of 5
 Job #: 117-03
 Checked by:



David A. Price has reviewed this drawing for the structural adequacy of the structural components only and has not reviewed this drawing with regard to adequacy of soils, site drainage, electrical, ventilation, plumbing, fire code requirements, building egress, ADA or handicap accessibility, flashing, watertightness requirements, building finishes, architectural features or environmental requirements.



1 SECTION
 SK-3 1 1/2" = 1'-0"

SK-53

INTERIOR PORTION

1 of 3

AIR COOLED**	WATER COOLED**	GLYCOL COOLED GLYCOOL	UPFLOW GLYCOOL	DIMENSIONAL DATA IN (MM)							
				A	B	C*	D	E	F	G	H
UN/FH/FE-75A	UN/FH/FE-85W	UN/FH/FE-75B		74 (1800)	72 (1829)	33 (833)	32 (813)	31 (787)	30 (762)	70 (1778)	72 (1829)
			UE-75B	74 (1800)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	70 (1778)	72 (1829)
				50 (1270)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	48 (1168)	48 (1219)
UN/FH/FE-114A	UN/FH/FE-127W	UN/FH/FE-110B		74 (1800)	72 (1829)	33 (838)	32 (813)	31 (787)	30 (762)	70 (1778)	72 (1829)
			UE-110B	74 (1800)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	70 (1778)	72 (1829)
UN/FH/FE-121A	UN/FH/FE-130W	UN/FH/FE-110B		74 (1800)	72 (1829)	33 (838)	32 (813)	31 (787)	30 (762)	70 (1778)	72 (1829)
			UE-110B	74 (1800)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	70 (1778)	72 (1829)
UN/FH/FE-180A	UN/FH/FE-210W	UN/FH/FE-180B		92 (2337)	72 (1829)	33 (838)	32 (813)	31 (787)	30 (762)	88 (2235)	90 (2290)
UN/FH/FE-240A	UN/FH/FE-267W	UN/FH/FE-240B	UE-180B	98 (2515)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	95 (2413)	97 (2464)
UN/FH/FE-280A	UN/FH/FE-315W	UN/FH-280B	UE-240B	98 (2515)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	95 (2413)	97 (2464)
UN/FH/FE-300A	UN/FH/FE-412W	UN/FH/FE-300B		122 (3099)	72 (1829)	35 (889)	34 (864)	33 (838)	32 (813)	118 (2997)	120 (3048)

10 →
20 →

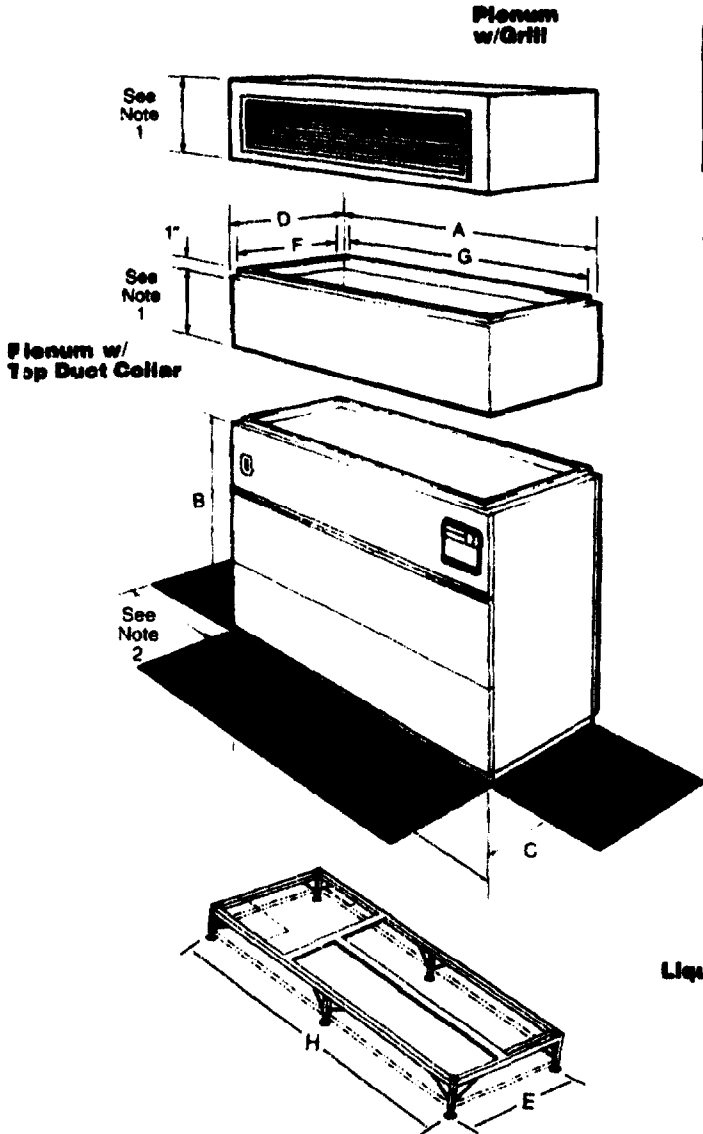
*Projection of display bezel 1/8" (16 mm)
**Upflow air & water cooled units with econocoils (UE) have same dimensions as upflow Glycool units.

- Notes**
- Standard nominal plenum heights are 20" (510 mm), 22 1/4" (578 mm) and 34 1/4" (883 mm). 22 1/4" minimum is required for vertical units with steam reheat, hot water reheat, or steam humidifier options.
 - Provide approximately 34" (864 mm) service clearance on the left, right and in front of the unit whenever possible.

MINIMUM SPACE REQUIRED IN (MM)

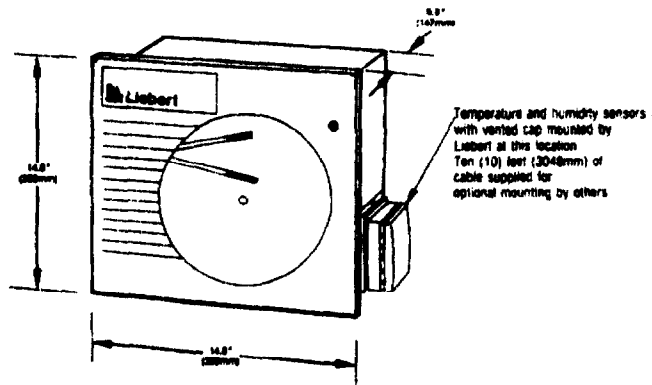
	DOWNFLOW		UPFLOW
	AIR	WHA/COOL	ALL
FRONT	24 (610)	24 (610)	24 (610)
LEFT	18 (457)	18 (457)	18 (457)
RIGHT	0	18 (457)	18 (457)

This space is necessary to provide for routine service such as: 1) replacing filters, 2) adjusting the fan speed, and 3) cleaning the humidifier.

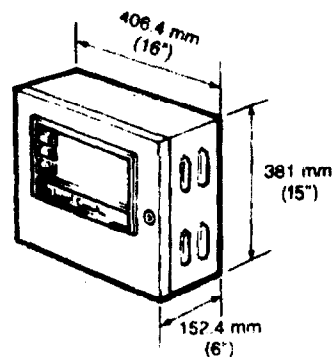


Temperature/Humidity Recorder

Temperature and humidity sensors with vented cap.



Liqui-Tector Panel



INTERIOR PORTION

2 of 3

Electrical Specifications/All Systems

Maximum Electrical Load Amperage

Tab 1A—Air, Water, Glycol Cooled PHAM Models (see next page for Table 1A notes)													
HEAT OPTIONS		ELECTRIC				NONE				ELECTRIC			
REFRIGERATION OPTIONS		NHPA-FED OR STEAM GENERATING*				NHPA-FED OR STEAM GENERATING*				STEAM OR NONE			
KID BELT	VOLTS	208	230	400	575	208	230	400	575	208	230	400	575
FH/JH 75A*	FLA	58.4	52.0	27.9	24.9	55.8	51.0	26.3	23.9	44.4	42.4	20.8	15.9
	90W*	66.3	59.5	31.6	27.7	59.0	54.2	27.7	25.0	54.5	52.1	25.5	19.5
	72B*	MFCB	70	70	40	30	70	60	30	30	60	60	30
FH/JH 114A*	FLA	73.9	66.6	35.7	30.7	71.5	66.6	35.7	29.4	66.9	63.9	32.4	24.1
	127W*	85.7	78.6	40.8	35.0	78.4	71.5	38.2	31.1	82.2	78.6	39.9	29.6
	110B*	MFCB	100	90	45	40	90	90	45	40	100	90	45
FH/JH 125A*	FLA	75.7	68.2	36.5	31.3	73.3	68.2	36.5	30.0	68.7	65.5	33.2	24.7
	130W*	88.0	80.2	41.8	35.7	78.2	73.1	39.0	31.7	84.0	80.2	40.7	30.2
	110B*	MFCB	100	90	60	40	90	90	45	40	100	90	60
FH/JH 190A*	FLA	106.2	103.3	61.6	42.5	93.6	88.2	45.9	40.0	106.2	103.3	51.6	40.3
	210W*	132.6	126.7	63.3	49.7	100.7	95.2	49.4	42.8	132.6	126.7	63.3	49.4
	192B*	MFCB	150	150	70	60	125	110	60	60	150	150	70
FH/JH 245A*	FLA	131.8	129.8	64.5	50.4	115.3	109.4	54.8	48.1	131.8	129.8	64.5	50.4
	287W*	160.6	158.4	78.7	61.5	124.3	118.4	59.2	49.7	160.6	158.4	78.7	61.5
	240B*	MFCB	175	175	80	70	150	150	70	60	175	175	80
FH/JH 290A*	FLA	144.3	141.6	70.0	55.1	132.8	126.2	62.4	52.6	144.3	141.6	70.0	55.1
	315W*	174.3	171.5	84.7	68.6	143.1	136.4	67.4	56.6	174.3	171.5	84.7	68.6
	298B*	MFCB	200	175	100	70	175	175	80	70	175	175	100
FH/JH 300A*	FLA	171.6	164.4	78.7	63.6	171.6	164.4	78.8	61.6	187.0	183.7	78.7	61.6
	412W*	201.1	197.6	94.9	74.2	185.9	178.7	83.2	74.2	201.1	197.6	94.9	74.2
	303B*	MFCB	225	225	110	80	225	225	100	80	225	225	110

Tab 1B—Air Cooled Condenser Amperage†													
HEAT OPTIONS		STEAM OR NONE				STEAM OR HOT WATER				STEAM OR HOT WATER			
REFRIGERATION OPTIONS		NHPA-FED OR STEAM GENERATING*				NHPA-FED OR STEAM GENERATING*				STEAM OR NONE			
KID BELT	VOLTS	208	230	400	575	208	230	400	575	208	230	400	575
FH/JH 75A*	FLA	29.2	28.8	13.4	10.4	57.5	52.6	27.1	24.6	30.9	30.4	14.2	11.1
	90W*	32.4	32.0	14.9	11.5	60.7	55.7	28.5	25.7	34.0	33.5	15.7	12.2
	72B*	MFCB	40	40	20	15	70	70	30	30	45	45	20
FH/JH 114A*	FLA	44.9	44.4	22.8	15.9	73.3	68.2	38.5	30.0	46.7	46.0	23.6	16.5
	127W*	49.8	49.3	25.3	17.6	78.2	73.1	39.0	31.7	51.6	50.9	26.1	18.2
	110B*	MFCB	60	60	35	20	90	90	45	40	70	70	35
FH/JH 125A*	FLA	46.7	46.0	23.6	16.5	76.4	71.0	37.9	31.2	49.8	48.8	25.0	17.7
	130W*	51.6	50.9	26.1	18.2	81.3	75.9	40.4	32.9	54.7	53.7	27.5	19.4
	110B*	MFCB	70	70	35	25	100	90	50	40	70	70	35
FH/JH 190A*	FLA	67.0	66.0	33.0	26.5	99.7	93.8	48.7	42.2	73.1	71.6	35.8	28.7
	210W*	74.1	73.1	36.5	29.3	106.7	100.9	52.2	45.0	80.2	78.7	39.3	31.5
	192B*	MFCB	100	100	50	40	125	125	60	60	100	100	50
FH/JH 245A*	FLA	88.7	87.2	43.2	34.5	122.8	116.2	58.2	49.0	96.2	94.0	46.6	37.4
	287W*	97.7	96.2	47.6	38.0	131.8	125.2	62.6	52.5	105.2	103.0	51.0	41.0
	240B*	MFCB	125	125	60	50	150	150	80	60	125	125	60
FH/JH 290A*	FLA	106.2	104.0	50.8	41.0	139.4	132.2	65.4	54.6	112.8	110.0	53.8	43.0
	315W*	116.5	114.2	55.8	45.0	149.6	142.4	70.4	58.6	123.1	120.2	58.8	47.0
	298B*	MFCB	150	150	70	60	175	175	90	70	150	150	70
FH/JH 300A*	FLA	145.0	142.2	66.2	52.0								
	412W*	159.3	156.5	71.6	57.1								
	303B*	MFCB	200	220	90	70							

Tab 1D—Air Cooled Condenser Amperage†																
KID BELT		VOLTS		FAN SPEED CONTROL (-55°F)					LEE-TEMP (-35°F)							
				PH		FLA			PH		FLA	WSA	OPS			
FH/JH 75A				1	1	4.8		6.0		15	3	4.0		5.0	15	
						2.4		3.0				2.0				2.5
						1.9		2.4				1.4				
FH/JH 114A				3	3	8.8		10.0		20	3	8.0		9.0	20	
						4.4		5.0				4.0				4.5
						3.3		3.8				2.8				
FH/JH 125A				3	3	8.8		10.0		20	3	8.0		9.0	20	
						4.4		5.0				4.0				4.5
						3.3		3.8				2.8				
FH/JH 190A				3	3	8.8		10.0		20	3	8.0		9.0	20	
						4.4		5.0				4.0				4.5
						3.3		3.8				2.8				
FH/JH 245A				3	3	12.8		14.0		25	3	12.0		13.0	20	
						6.4		7.0				6.0				6.5
						4.7		5.2				4.2				
FH/JH 290A				3	3	12.8		14.0		25	3	12.0		13.0	20	
						6.4		7.0				6.0				6.5
						4.7		5.2				4.2				
FH/JH 300A				3	3	16.8		18.0		30	3	16.0		17.0	25	
						8.4		9.0				8.0				8.5
						6.1		6.6				5.6				

Table 1E—Lee Temp Receiver Heater Pads		
ALL AIR COOLED MODELS		
VOLTS	120	230
WATTS/PAD	150	150
TOTAL AMPS (2 PADS)	2.5A	1.3A
WSA (2 PADS)	3.1	1.6
OPS (2 PADS)	15	15

- NOTES: TABLE 1E**
- 1) Separate electrical source required for continuous operation of single phase silicone rubber heater pads for Lee-Temp.
 - 2) Two pads are required for standard installations (one per circuit.)

NOTE 1: TABLE 1D
 1) 95°F Ambient Condensers
 2) FLA=Full Load Amps. WSA=Wire Sizing Amp (Minimum supply circuit ampacity) MFCB=Maximum Fuse or Circuit Breaker
 † Data shown applies to the standard factory supplied condensers. These may vary in local areas and verification with the Liebert representative is strongly recommended.
 † Condenser equipped with stepdown transformer and 200/230 Motor.

INTERIOR PORTION

3 of 3

ELECTRICAL DATA

WIRE SIZE AMPS
OVER CURRENT PROTECTION DEVICE

Table 2
Fan Speed Control

CONDENSER		208/230			460			575		
MODEL	PHASE	FLA	WSA	OPD	FLA	WSA	OPD	FLA	WSA	OPD
065	1	4.8	6.0	15	2.5	3.1	15	1.8	2.4	15
086	1	4.8	6.0	15	2.5	3.1	15	1.8	2.4	15
107C	1	4.8	6.0	15	2.5	3.1	15	1.8	2.4	15
083L/104L	1	4.8	6.0	15	2.5	3.1	15	1.8	2.4	15
130	3	8.8	10	20	4.5	5.1	15	3.3	3.8	15
175/217C	3	8.8	10	20	4.5	5.1	15	3.3	3.8	15
185L/205L	3	8.8	10	20	4.5	5.1	15	3.3	3.8	15
258	3	12.8	14	25	6.5	7.1	15	4.7	5.2	15
291	3	12.8	14	25	6.5	7.1	15	4.7	5.2	15
251L/308L	3	12.8	14	25	6.5	7.1	15	4.7	5.2	15
360	3	16.8	18	30	8.5	9.1	15	6.1	6.6	15
330L/415L	3	16.8	18	30	8.5	9.1	15	6.1	6.6	15
480C	3	16.8	18	30	8.5	9.1	15	6.1	6.6	15
510C	3	16.8	18	30	8.5	9.1	15	6.1	6.6	15
616L	3	25.6	26.8	40	13	13.6	20	9.4	9.9	15
660L	3	33.6	34.8	45	17	17.6	20	12.2	12.7	17.5
830L	3	33.6	34.8	45	17	17.6	20	12.2	12.7	17.5
960C	3	33.6	34.8	45	17	17.6	20	12.2	12.7	17.5
1010C	3	33.6	34.8	45	17	17.6	20	12.2	12.7	17.5

10 →
20 →

Lee-Temp or Fan Cycling, Standard

CONDENSER		208/230			460			575		
MODEL	PHASE	FLA	WSA	OPD	FLA	WSA	OPD	FLA	WSA	OPD
065	3	4	5	15	2	2.5	15	1.4	1.8	15
086	3	4	5	15	2	2.5	15	1.4	1.8	15
107C	3	4	5	15	2	2.5	15	1.4	1.8	15
083L/104L	3	4	5	15	2	2.5	15	1.4	1.8	15
130	3	8	9	20	4	4.5	15	2.8	3.2	15
175/217C	3	8	9	20	4	4.5	15	2.8	3.2	15
185L/205L	3	8	9	20	4	4.5	15	2.8	3.2	15
258	3	12	13	20	6	6.5	15	4.2	4.6	15
291	3	12	13	20	6	6.5	15	4.2	4.6	15
251L/308L	3	12	13	20	6	6.5	15	4.2	4.6	15
360	3	16	17	30	8	8.5	15	5.6	6.0	15
330L/415L	3	16	17	30	8	8.5	15	5.6	6.0	15
480C	3	16	17	30	8	8.5	15	5.6	6.0	15
510C	3	16	17	30	8	8.5	15	5.6	6.0	15
616L	3	24	25	35	12	12.5	15	8.4	8.8	15
660L	3	32	33	40	16	16.5	20	11.2	11.6	15
830L	3	32	33	40	16	16.5	20	11.2	11.6	15
960C	3	32	33	40	16	16.5	20	11.2	11.6	15
1010C	3	32	33	40	16	16.5	20	11.2	11.6	15

Lee-Temp or Fan Cycling, Quiet-Line

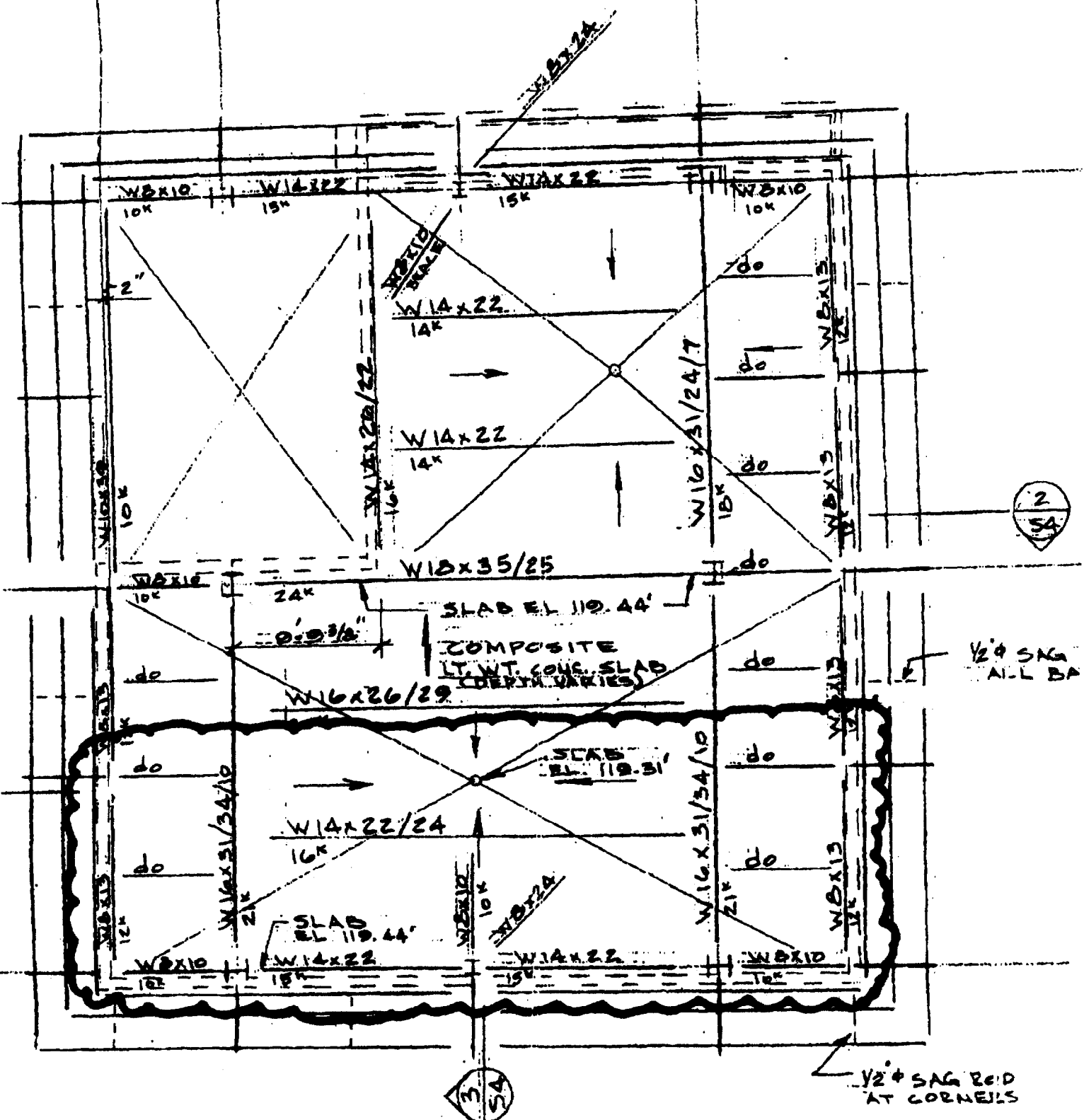
CONDENSER		208/230			460			575		
MODEL	PHASE	FLA	WSA	OPD	FLA	WSA	OPD	FLA	WSA	OPD
063	3	2.7	3.4	15	1.2	1.5	15	-	-	-
119	3	5.4	6.1	15	2.4	2.7	15	-	-	-
127	3	5.4	6.1	15	2.4	2.7	15	-	-	-
143	3	5.4	6.1	15	2.4	2.7	15	-	-	-
179	3	8.1	8.8	15	3.6	3.9	15	-	-	-
214	3	8.1	8.8	15	3.6	3.9	15	-	-	-
238	3	10.8	11.5	15	4.8	5.1	15	-	-	-
276	3	10.8	11.5	15	4.8	5.1	15	-	-	-
286	3	10.8	11.5	15	4.8	5.1	15	-	-	-
358	3	16.2	16.9	20	7.2	7.5	15	-	-	-
409	3	16.2	16.9	20	7.2	7.5	15	-	-	-
477	3	21.6	22.3	25	9.6	9.9	15	-	-	-
572	3	21.6	22.3	25	9.6	9.9	15	-	-	-

Shaded area - Condenser uses a 208/230 volt motor and a stepdown transformer.

FLA - Full Load Amps WSA - Wire Size Amps OPD - Maximum Overcurrent Protection Device Rating

EXISTING PENTHOUSE ROOF
STRUCTURAL FRAMING PLAN

1 of 1



Two Canal Plaza - Portland ME
PENTHOUSE ROOF FRAMING

DIMENSIONAL DATA

EYE BOLTS FOR LIFTING CONDENSER PROVIDED ON 4, 5 & 8 FAN MODELS ONLY

Figure 1

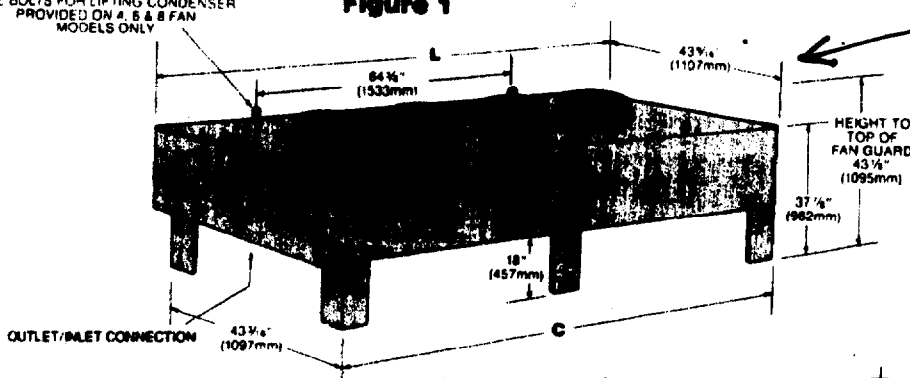
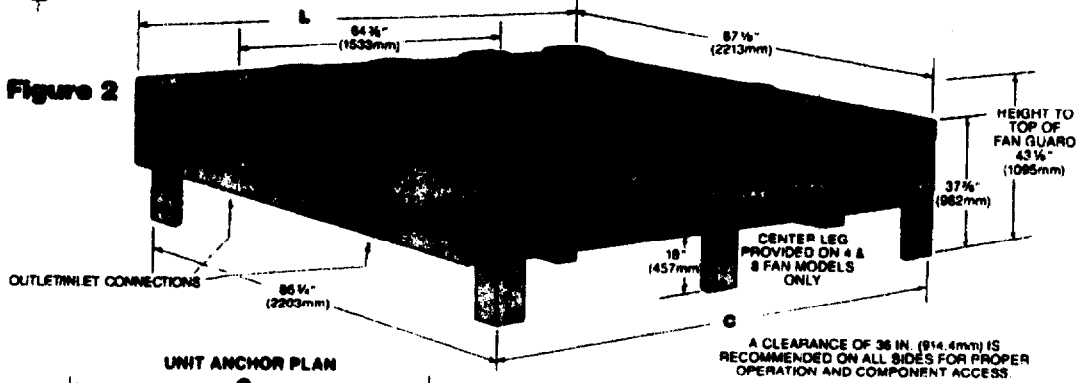
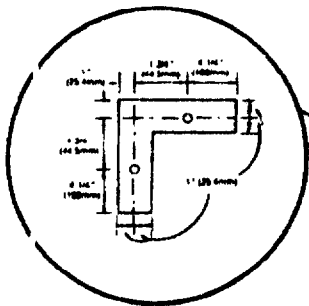


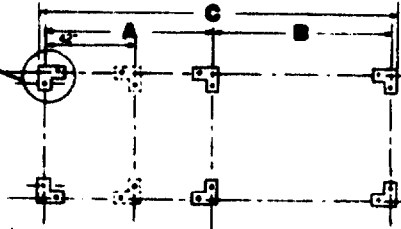
Figure 2



TYPICAL FOOTPRINT



UNIT ANCHOR PLAN



FOR LEE-TEMP RECEIVERS:
 4 LEGS FURNISHED FOR 1 FAN MODEL
 6 LEGS FURNISHED FOR 2 & 3 FAN MODELS
 8 LEGS FURNISHED FOR 4 FAN MODELS
 (ADDITIONAL LEGS INDICATED WITH DOTTED LINES)

**Table 3
Condenser Physical Data**

MODEL NUMBER	FAN QTY	A	B	C	L	# OF CKTS	(ODS) CONNECTION SIZE		NET WEIGHT LBS.	MODEL NUMBER	FAN QTY	A	B	C	L	# OF CKTS	(ODS) CONNECTION SIZE		NET WEIGHT LBS.
							HOT GAS	LIQUID									HOT GAS	LIQUID	
Standard Models										Outlet-Line Models									
*CS*065	1	42	—	44	51 1/2	1	1/2	1/2	295	*CS*063	1	42	—	44	51 1/2	1	1 1/8	5/8	315
*CS*063L	1	42	—	44	51 1/2	1	7/8	5/8	295	*CD*063	1	42	—	44	51 1/2	2	7/8	1/2	315
*CS*065	1	42	—	44	51 1/2	1	7/8	1/2	315	*CS*119	2	82	—	84	91 1/2	1	1 1/8	7/8	425
*CD*104L	1	42	—	44	51 1/2	2	7/8	1/2	315	*CD*119	2	82	—	84	91 1/2	2	7/8	5/8	425
*CD*107C	1	42	—	44	51 1/2	2	7/8	1/2	335	*CS*127	2	82	—	84	91 1/2	1	1 1/8	7/8	495
*CD*130	2	82	—	84	91 1/2	2	7/8	5/8	425	*CD*127	2	82	—	84	91 1/2	2	1 1/8	7/8	495
*CD*155L	2	82	—	84	91 1/2	2	7/8	5/8	425	*CS*143	2	82	—	84	91 1/2	1	1 1/8	7/8	515
*CD*175	2	82	—	84	91 1/2	2	7/8	5/8	495	*CD*143	2	82	—	84	91 1/2	2	1 1/8	7/8	515
*CD*205L	2	82	—	84	91 1/2	2	1 1/8	7/8	495	*CS*179	3	122	—	124	131 1/2	1	1 1/8	7/8	500
*CD*217C	2	82	—	84	91 1/2	2	1 1/8	7/8	515	*CD*179	3	122	—	124	131 1/2	2	1 1/8	7/8	500
*CD*251L	3	122	—	124	131 1/2	2	1 1/8	7/8	500	*CS*214	3	122	—	124	131 1/2	1	1 5/8	1 1/8	840
*CD*258	3	122	—	124	131 1/2	2	1 1/8	7/8	570	*CD*214	3	122	—	124	131 1/2	2	1 1/8	7/8	840
*CD*308L	3	122	—	124	131 1/2	2	1 3/8	1 1/8	670	*CS*238	4	82	80	164	171 1/2	1	1 5/8	1 1/8	740
*CD*291	3	122	—	124	131 1/2	2	1 3/8	1 1/8	780	*CD*238	4	82	80	164	171 1/2	2	1 3/8	1 1/8	740
*CD*330L	4	82	80	164	171 1/2	2	1 3/8	1 1/8	741	*CS*276	4	82	80	164	171 1/2	1	2 1/8	1 3/8	1025
*CD*415L	4	82	80	164	171 1/2	2	1 3/8	1 1/8	815	*CD*276	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1025
*CD*380	4	82	80	164	171 1/2	2	1 3/8	1 1/8	815	*CS*286	4	82	80	164	171 1/2	1	2 1/8	1 1/8	1105
*CD*480C	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1025	*CD*286	4	82	80	164	171 1/2	2	1 1/8	7/8	1105
*CD*510C	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1188	*CS*358	6	122	—	124	131 1/2	1	1 3/8	7/8	1280
*CD*616L	6	122	—	124	131 1/2	2	1 5/8	1 1/8	1380	*CD*358	6	122	—	124	131 1/2	2	1 1/8	7/8	1280
*CD*660L	6	82	80	164	171 1/2	2	1 5/8	1 1/8	1600	*CD*408	6	122	—	124	131 1/2	2	1 5/8	1 1/8	1380
*CD*830L	8	82	80	164	171 1/2	2	1 5/8	1 1/8	1750	*CD*477	8	82	80	164	171 1/2	2	1 5/8	1 1/8	1600
*CD*960C	6	82	80	164	171 1/2	2	2 1/8	1 3/8	2080	*CD*572	8	82	80	164	171 1/2	2	2 1/8	1 1/8	2430
*CD*1010C	8	82	80	164	171 1/2	2	2 1/8	1 5/8	2640										

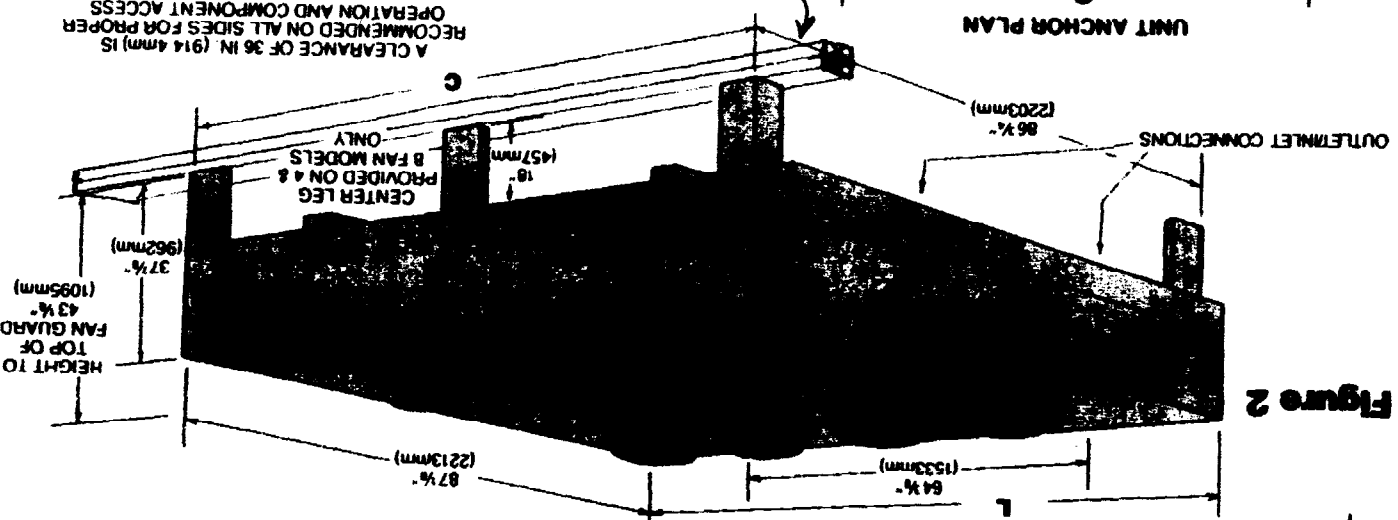
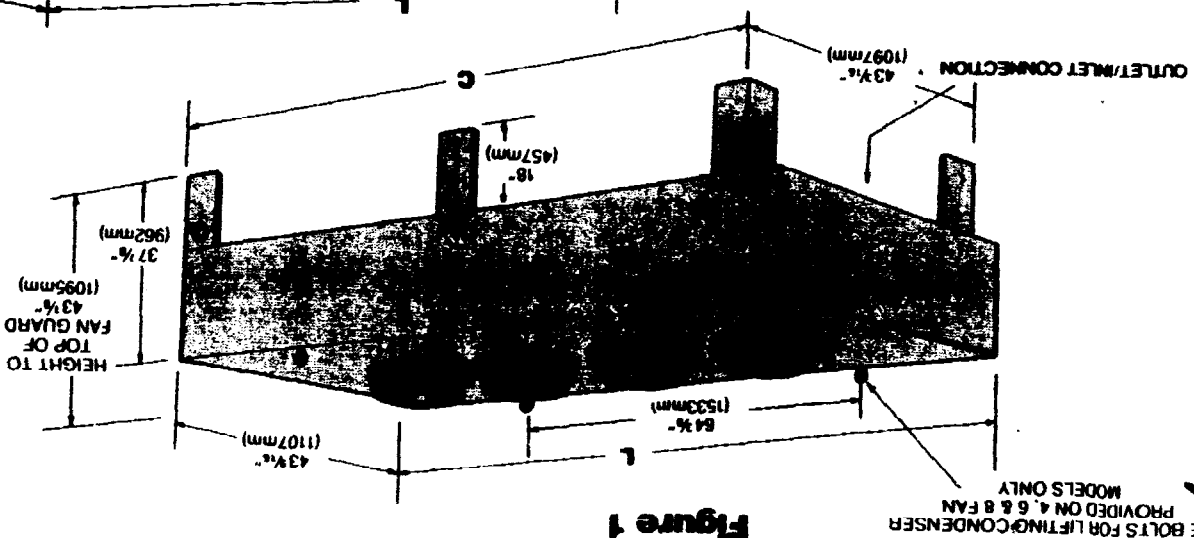
*IOS size at manifold interconnection. Liebert supplied & field installed.

DIMENSIONAL DATA

Roof Top Return

2 of 3

EYE BOLTS FOR LIFTING CONDENSER PROVIDED ON 4, 6 & 8 FAN MODELS ONLY



A CLEARANCE OF 36 IN (914 mm) IS RECOMMENDED ON ALL SIDES FOR PROPER OPERATION AND COMPONENT ACCESS

Pressure Treated Wood Sleepers

FOR LEE TEMP RECEIVERS:
 4 LEGS FURNISHED FOR 1 FAN MODEL
 6 LEGS FURNISHED FOR 2 & 3 FAN MODELS
 8 LEGS FURNISHED FOR 4 FAN MODELS
 (ADDITIONAL LEGS INDICATED WITH DOTTED LINES)

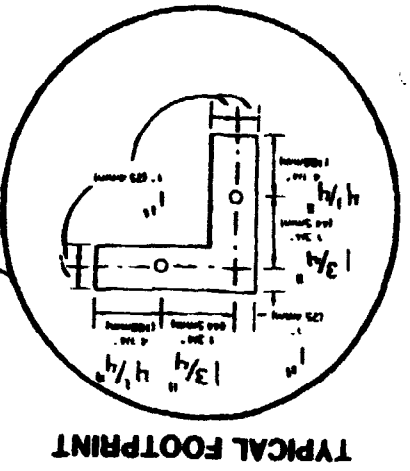
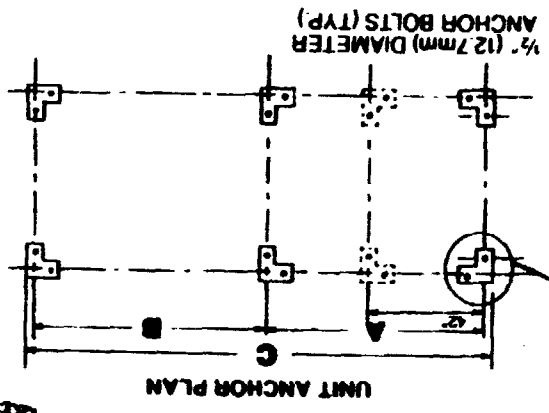


Table 3

ROOFTOP PORTION

3 of 3

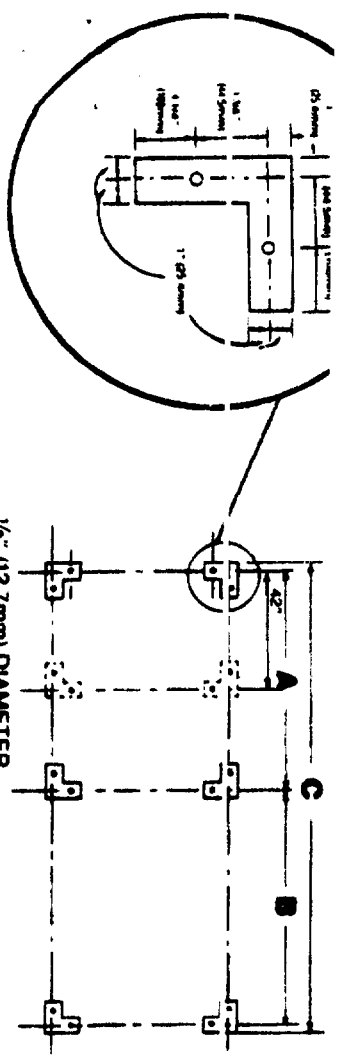


Table 3
Condenser Physical Data

MODEL NUMBER	FAN QTY	A	B	C	L	# OF CKTS	(ODS) CONNECTION SIZE		NET WEIGHT LBS.
							HOT GAS	LIQUID	
Standard Models									
*CS*065	1	42	—	44	51 1/2	1	1/2	1/2	285
*CS*063	1	42	—	44	51 1/2	1	7/8	5/8	285
*CS*066	1	42	—	44	51 1/2	1	7/8	1/2	315
*CD*04L	1	42	—	44	51 1/2	2	7/8	1/2	315
*CD*107C	1	42	—	44	51 1/2	2	7/8	1/2	335
*CD*130	2	82	—	84	91 1/2	2	7/8	5/8	425
*CD*165L	2	82	—	84	91 1/2	2	7/8	5/8	425
*CD*175	2	82	—	84	91 1/2	2	7/8	5/8	485
*CD*205L	2	82	—	84	91 1/2	2	1 1/8	7/8	495
*CD*217C	2	82	—	84	91 1/2	2	1 1/8	7/8	515
*CD*251L	3	122	—	124	131 1/2	2	1 1/8	7/8	500
*CD*258	3	122	—	124	131 1/2	2	1 1/8	7/8	670
*CD*306L	3	122	—	124	131 1/2	2	1 3/8	1 1/8	670
*CD*291	3	122	—	124	131 1/2	2	1 3/8	1 1/8	780
*CD*330L	4	82	80	164	171 1/2	2	1 3/8	1 1/8	741
*CD*415L	4	82	80	164	171 1/2	2	1 3/8	1 1/8	815
*CD*360	4	82	80	164	171 1/2	2	1 3/8	1 1/8	815
*CD*480C	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1025
*CD*510C	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1188
*CD*616L	6	122	—	124	131 1/2	2	1 5/8	1 1/8	1380
*CD*660L	8	82	80	164	171 1/2	2	1 5/8	1 1/8	1600
*CD*830L	8	82	80	164	171 1/2	2	1 5/8	1 1/8	1750
*CD*960C	8	82	80	164	171 1/2	2	2 1/8	1 3/8	2090
*CD*1010C	8	82	80	164	171 1/2	2	2 1/8	1 5/8	2840
Quick-Line Models									
*CS*063	1	42	—	44	51 1/2	1	1 1/8	5/8	315
*CD*063	1	42	—	44	51 1/2	2	7/8	1/2	315
*CS*119	2	82	—	84	91 1/2	1	1 1/8	7/8	425
*CD*119	2	82	—	84	91 1/2	2	7/8	5/8	425
*CS*127	2	82	—	84	91 1/2	1	1 1/8	7/8	485
*CD*127	2	82	—	84	91 1/2	2	1 1/8	7/8	485
*CS*143	2	82	—	84	91 1/2	1	1 1/8	7/8	515
*CD*143	2	82	—	84	91 1/2	2	1 1/8	7/8	515
*CS*179	3	122	—	124	131 1/2	1	1 1/8	7/8	500
*CD*179	3	122	—	124	131 1/2	2	1 1/8	7/8	500
*CS*214	3	122	—	124	131 1/2	1	1 5/8	1 1/8	840
*CD*214	3	122	—	124	131 1/2	2	1 1/8	7/8	840
*CS*238	4	82	80	164	171 1/2	1	1 5/8	1 1/8	740
*CD*238	4	82	80	164	171 1/2	2	1 3/8	1 1/8	740
*CS*276	4	82	80	164	171 1/2	1	2 1/8	1 3/8	1025
*CD*276	4	82	80	164	171 1/2	2	1 5/8	1 1/8	1025
*CS*286	4	82	80	164	171 1/2	1	2 1/8	1 1/8	1105
*CD*286	4	82	80	164	171 1/2	2	1 1/8	7/8	1105
*CS*358	6	122	—	124	131 1/2	1	1 3/8	7/8	1280
*CD*358	6	122	—	124	131 1/2	2	1 1/8	7/8	1280
*CD*409	6	122	—	124	131 1/2	2	1 5/8	1 1/8	1390
*CD*477	8	82	80	164	171 1/2	2	1 5/8	1 1/8	1600
*CD*572	8	82	80	164	171 1/2	2	2 1/8	1 1/8	2430

FOR LEE-TEMP RECEIVERS:
 4 LEGS FURNISHED FOR 1 FAN MODEL
 6 LEGS FURNISHED FOR 2 & 3 FAN MODELS
 8 LEGS FURNISHED FOR 4 FAN MODELS
 (ADDITIONAL LEGS INDICATED WITH DOTTED LINES)

ID5 size at manifold interconnection. Liebert supplied & field installed.