

# DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND BUILDING PERMIT



This is to certify that \_\_\_\_\_ Vessell Services, Inc.

Located At 1 PORTLAND FISH PIER

Job ID: 2012-02-3206-HVAC

CBL: 041- A-001-002

has permission to Replace evaporator coils and add condensing units

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

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED. A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

**Fire Prevention Officer** 

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY PENALTY FOR REMOVING THIS CARD

## BUILDING PERMIT INSPECTION PROCEDURES Please call 874-8703 or 874-8693 (ONLY) or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.
- Permits expire in 6 months. If the project is not started or ceases for 6 months.
- If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

Director of Planning and Urban Development Penny St. Louis

Job ID: 2012-02-3206-HVAC

Located At: <u>1 PORTLAND FISH</u> <u>PIER</u> CBL: 041- A-001-002

### **Conditions of Approval:**

#### Zoning

- 1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
- 2. This WCZ zone has maximum noise allowances. The City of Portland strictly enforces the level of sound generated on the property. Any verified noise violations shall require the owner to take mitigating measures to bring the property and the noise it generates into compliance.

### Fire

Installation shall comply with City Code Chapter 10.

Installation shall comply with NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel–Burning Appliances;

NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems;

NFPA 91, Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids;

NFPA 70, National Electrical Code; and the manufacturer's published instructions.

### City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No:	Date Applied:	·····	CBL:			
2012-02-3206-HVAC	2/3/2012		041- A-001-002			
Location of Construction: 1 PORTLAND FISH PIER	Owner Name: VESSEL SERVICES INC	2	Owner Address: PORTLAND FISH PORTLAND, ME (	PIER )4101		Phone:
Business Name: Vessel Services	Contractor Name: Thayer Corporation		Contractor Addr 1400 Hotel Roa	ess: d, Auburn, ME 042	210	Phone: 782-4197
Lessee/Buyer's Name:	Phone:		Permit Type: HVAC			Zone: WCZ
Past Use:	Proposed Use:	oc/ Fish	Cost of Work: \$166,000.00	CEO District:		
auction/wholesale and ice- making services	auction/wholesale an making services – to evaporator coils con- refrigeration system provide 3 new roof c units	nd ice- replace 5 nected to & ondensing	Fire Dept: Signature:	Approved in / a Denied N/A N/A	2/ 12	Inspection: Use Group Type:
Proposed Project Description refrigeration for vessel service	:		Pedestrian Activ	ities District (P.A.D.)		K
Permit Taken By: Gayle			1	Zoning Approva	l	
<ol> <li>This permit application d Applicant(s) from meetin Federal Rules.</li> <li>Building Permits do not i septic or electrial work.</li> <li>Building permits are void within six (6) months of i False informatin may inv permit and stop all work.</li> </ol>	oes not preclude the ag applicable State and include plumbing, I if work is not started the date of issuance. alidate a building	Special Zo Shorelan Wetland Flood Zo Subdivis Site Plan Maj Date:	Min_MM -WithCond	Zoning Appeal Variance Miscellaneous Conditional Use Interpretation Approved Denied Date:	Historic I Not in D Does no Require: Approve Denied Date:	Preservation Dist or Landmark It Require Review States Review and A w/Conditions

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 bave 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 (	DE WORK TITLE	DATE	PHONE

ADIZ URGAN ADIZ 023FRE IN AND	SIGN WITH INK GG
APPLICATION HEATING OR PO	N FOR PERMIT
To the INSPECTOR OF BUILDINGS, PORTLAND, ME. The undersigned hereby applies for a permit to ins. accordance with the Laws of Maine, the Building Code of Location / CBL OH A00 002 Name and address of owner of appliance <u>level level level</u> 267-772-5718	tall the following heating, cooking or power equipment in the City of Portland, and the following specifications: Use of Building <u>Competitival</u> Marin Selepate <u>1-3-12</u> <u>Inc. 7 Portland Fash Airr</u> , Portland, ME 04/101
Installer's name and address Theyer (otheration, 17	00 Hotel Rd, Auburn 1912 04(218 Telephone 207 282-4197
Location of appliance:         Basement       Floor         Attic       Roof         Type of Fuel:       N/A         Gas       Oil       Solid         Appliance Name:       Kyoukur Thurmahank         U.L. Approved       Yes       No         Will appliance be installed in accordance with the manufacture's installation instructions?       Yes       No         IF NO Explain:	Type of Chimney:       N/A         Masonry Lined         Factory built         Metal         Factory Built U.L. Listing #
The Type of License of Installer: Master Plumber # Solid Fuel # Oil # Gas # Other EAA Refingerent	Number of Tanks Distance from Tank to Center of Flame $\frac{\sqrt{4}}{5855}$ feet. Cost of Work: $\frac{5165855}{2685}$ Permit Fee: $\frac{32685}{2685}$
Approved       Fire:	Approved with Conditions     See attached letter or requirement     Inspector's Signature Date Approved



LINC Service® Contractor

Design/Build/Maintain HVAC

IAQ Engineering & Consultation

AIR CONDITIONING . HEATING . PLUMBING . REFRIGERATION

RESIDENTIAL COMFORT SYSTEMS

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

February 3, 2012

Re: Vessel Services Refrigeration Permit

To Whom It May Concern,

We are reconfiguring and updating the ice storage refrigeration at Vessel Services located at 1 Portland Fish Pier in Portland.

Our general scope of work is as follows:

- Replace (5) evaporator coils currently connected to central refrigeration system (coils located internal to building)
- Provide (3) roof-mounted condensing units to serve new evaporators (See Google Earth print showing equipment locations)
- Structural analysis was provided by The Sheridan Corporation, the original building constructor. (See attached letter and roof sketch showing equipment locations)
- Equipment cut sheets showing condensing unit dimensions and weights is included
- Sound data from the manufacturer is not published. Attached is a letter from the manufacturer's representative with an opinion on noise output.

If you require any additional information or clarification, please contact me at the number below.

Thank you for your consideration in this matter.

Sincerely, Andrew Kent

Project Engineer





The Sheridan Corporation PO Box 359 Fairfield, ME 04937 Phone (207)453-9311 Fax (207)453-2820 www.sheridancorp.com

January 25, 2012

Andy Kent Project Engineer Thayer Corporation 1400 Hotel Road Auburn, Maine 04201

#### **RE: Vessel Services**

The structural capacity of the roof at Vessel Services, 1 Portland Fish Pier, Portland, Me. was investigated in light of the company's need to add three rooftop mounted units to the lower roof area. The weights and approximate locations of the units were provided by the Thayer Corporation. Given this information, the roof support members were examined to determine if they would safely support these loads in the proposed locations. Our analysis indicates that this roof has adequate capacity to support these individual unit's loads in the proposed locations.

Since Xo OF MA le

# THERMOBANK

## 0°F TO -40°F SUCTION TEMPERATURE

MODEL	1 00	MODERCOD	00	NID FAL	0	CONNE	OTIONS	CLIAD		ADDDOX		
MODEL	00	MPRESSUR	00	IND FAN	0	CONNE	GHUNS	CHAR	JE LOS.	APPRUX.		
CTT	QTY	MODEL NO.	QTY	DIA	HP	SUC OD	LIQ OD	UNIT <sup>2</sup>	RECV	NET LBS.		
0400L44	1	2DF-030E	2	24	1/2	1 1/8	1/2	8	30	700		
0500L44	1	2DA-060E	2	24	1/2	1 3/8	1/2	8	30	880		
0600L44	1	3DA-060E	2	24	1/2	1 3/8	1/2	10	30	950		
0800L44	1	3DB-075E	2	24	1/2	1.5/8	5/8	10	30	1100		
0900L44	1	3DF-090E	2	24	1/2	1 5/8	5/8	19	64	1120		
1000L44	1	3DS-100E	2	24	1/2	1 5/8	5/8	19	64	1150		
1200L44	1	4DA-101E	2	24	1/2	1 5/8	5/8	20	64	1230		
1500L44	1	4DL-150E	3	24	1/2	1 5/8	7/8	21	. 71	1500		
2200L44	1	4DT-220E	3	24	1/2	2 1/8	7/8	24	71	1870		
2700L44	1	6DL-270E	3	24	3/4	2 1/8	7/8	27	71	2240		
3100L44	1	6DT-300E	3	24	3/4	2 1/8	7/8	31	103	2890		
4400L44	2a	4DT-220E	4	30	3/4	2 1/8	1 1/8	44	103	4030		
5400L44	2a	6DL-270E	5	30	3/4	2 5/8	1 1/8	49	103	4580		
3200L44	28	6DT-300E	5	30	3/4	2 5/8	1 1/8	57	103	5930		

<sup>a</sup> 2 Compressors piped in parallel. <sup>1</sup> Receiver at 90% full. <sup>2</sup> Estimated refrigerant charge is for a condensing unit only. It does not include evaporators, interconnecting piping or other accessories.

di la la	a and a second s		ELEC	CTRICA	L DATA	- R-404A	& R-507			All			
		2	30 - 3 - 6	0	A 1 Seame 4/2/04	460-3-60							
MODEL	COMP	RESSOR	COND	UNIT		COMPR	RESSOR	COND	UNIT				
CTT	RLA	LRA	FLA	AMPS	MCA <sup>3</sup>	RLA	LRA	FLA	AMPS	MCA <sup>3</sup>			
0400L44	16.8	102	8.0	25.8	30	8.1	52	4.0	12.6	15			
0500L44	28.8	161	8.0	37.8	45	10.2	60	4.0	14.7	18			
0600L44	30.3	150	8.0	39.3	47	13.7	77	4.0	18.2	22			
0800L44	31.5	161	8.0	40.5	49	16.1	83	4.0	20.6	25			
0900L44	39.0	215	8.0	48.0	58	16.9	106	4.0	21.4	26			
1000L44	42.0	215	8.0	51.0	62	18.6	106	4.0	23.1	28			
1200L44	45.2	220	8.0	54.2	66	22.6	110	4.0	27.6	34			
1500L44	52.6	278	5.4	59.0	73	26.3	139	2.7	29.5	37			
2200L44	66.0	374	5.4	72.4	89	33.0	187	2.7	36.2	45			
2700L44	80.8	450	10.2	92.0	113	40.4	225	5.1	46.0	57			
3100L44	95.6	470	10.2	106.8	131	47.8	235	5,1	53.4	66			
44001.44	(2) 66.0	(2) 374	13.6	146.6	164	(2) 33.0	(2) 187	6.8	73.3	83			
5400L44	(2) 80.8	(2) 450	17.0	179.6	200	(2) 40.4	(2) 225	8.5	89.8	101			
6200L44	(2) 95.6	(2) 470	17.0	209.2	234	(2) 47.8	(2) 235	8.5	104.6	118			

<sup>3</sup> MCA does not include evaporator motors.

	De Coopera inter		IENT	5°F AMB	TUH @ 9	CITY-B	CAPA	2	
AMBIENT		URE	TEMPERAT	SUCTION				1	MODEL
CORR.	-40°F	-30°F	-25°F	-20°F	-15°F	-10°F	-5°F	0°F	CIT
FACTOR	10400	14700	17100	19700	22600	25700	29100	32700	0400L44
AMO 40.	14900	20500	23600	26900	30400	34300	38400	42800	0500L44
AIVID. 404	18500	24900	28700	32800	37200	42000	47100	52500	06001.44
0.05	21600	29400	33700	38400	43400	48800	54600	60800	08001.44
80 F 1.	27400	37100	42600	48700	55300	62300	69900	78100	0900L44
acer 4	29800	40400	46400	52800	59700	67000	74700	82900	10001.44
85°F 1.1	33200	46500	53400	60700	68400	76800	86000	96100	1200L44
0005 44	42400	57800	65700	73900	82700	92200	102400	113700	1500L44
90-1 1.0	49100	67600	77300	87500	98100	109200	119800	132000	2200L44
0.595 4/	60400	82600	95200	108700	123100	138100	153700	169800	2700L44
95 - 1.0	69350	92700	106400	121700	136300	153900	169600	187300	3100L44
10005 0.0	98300	135300	154800	175100	196300	218600	242100	267000	4400L44
100-1 0.9	121700	166400	192000	219400	248500	279100	307900	340500	5400L44
105°F 0.9	138200	184750	212100	242600	271650	306700	338000	373300	6200L44

MODEL CTT DIMENSIONS SIZE 1500-6200



		OVERALL		MO	INTING	REFER	ENCE
SIZE	н	W	D	8	C	A	E
1500L, 2200L, 2700L, 3100L	45	164	43 1/8	41	144 1/2	39	9
4400L	52 1/2	260	43 1/8	41	238	39	12
5400L, 6200L	64 1/2	276	57 7/8	56	256	53 1/4	10

Specifications, weights and dimensions subject to change without notice. All dimensions in inches.

1

# THERMOBANK

### 0°F TO -40°F SUCTION TEMPERATURE

p i t e			PHY	SICAL	DAT	A - R-404A	& R-507		9 9	(D)	14 U 201
MODEL	CC	MPRESSOR	CC	ND FAN	IS	CONNE	CTIONS	CHAR	GE LBS.	APPROX.	1
CTT	QTY	MODEL NO.	QTY	DIA	HP	SUC OD	LIQ OD	UNIT <sup>2</sup>	RECV	NET LBS.	1
0400L44	1	2DF-030E	2	24	1/2	1 1/8	1/2	8	30	700	1
0500L44	1	2DA-060E	2	24	1/2	1 3/8	1/2	8	30	880	1
0600L44	1	3DA-060E	2	24	1/2	1 3/8	1/2	10	30	950	1
0800L44	1	3DB-075E	2	24	1/2	1 5/8	5/8	10	30	1100	
0900L44	1	3DF-090E	2	24	1/2	1 5/8	5/8	19	64	1120	1
1000L44	1	3DS-100E	2	24	1/2	1 5/8	5/8	19	64	1150	1
1200L44	1	4DA-101E	2	24	1/2	1 5/8	5/8	20	64	1230	1
1500L44	1	4DL-150E	3	24	1/2	1 5/8	7/8	21	71	1500	1
2200L44	1	4DT-220E	3	24	1/2	2 1/8	7/8	24	71	1870	1
2700L44	1	6DL-270E	3	24	3/4	2 1/8	7/8	27	71	2240	1
3100L44	1	6DT-300E	3	24	3/4	2 1/8	7/8	31	103	2890	1
4400L44	2a	4DT-220E	4	30	3/4	2 1/8	1 1/8	44	103	4030	1
5400L44	2a	6DL-270E	5	30	3/4	2 5/8	1 1/8	49	103	4580	
6200L44	2a	6DT-300E	5	30	3/4	2 5/8	1 1/8	57	103	5930	

<sup>a</sup> 2 Compressors piped in parallel. <sup>1</sup> Receiver at 90% full. <sup>2</sup> Estimated refrigerant charge is for a condensing unit only. It does not include evaporators, interconnecting piping or other accessories.

	and the second s		ELEC	CTRICA	L DATA	- R-404A	& R-507	11 10 10		Bard Bard Art
		2	230 - 3 - 60	)				460-3-60		and a first start first start
MODEL	COMP	RESSOR	COND	UNIT	1	COMPL	RESSOR	COND	UNIT	
CTT	RLA	LRA	FLA	AMPS	MCA <sup>3</sup>	RLA	LRA	FLA	AMPS	MCA <sup>3</sup>
0400L44	16.8	102	8.0	25.8	30	8.1	52	4.0	12.6	15
0500L44	28.8	161	8.0	37.8	45	10.2	60	4.0	14.7	18
0600L44	30.3	150	8.0	39.3	47	13.7	77	4.0	18.2	22
0800L44	31.5	161	8.0	40.5	49	16.1	83	4.0	20.6	25
0900L44	39.0	215	8.0	48.0	58	16.9	106	4.0	21.4	26
1000L44	42.0	215	8.0	51.0	62	18.6	106	4.0	23.1	28
1200L44	45.2	220	8.0	54.2	66	22.6	110	4.0	27.6	34
1500L44	52.6	278	5.4	59.0	73	26.3	139	2.7	29.5	37
22001.44	66.0	374	5.4	72.4	89	33.0	187	2.7	36.2	45
27001.44	80.8	450	10,2	92.0	113	40.4	225	5.1	46.0	57
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5400L44	(2) 80.8	(2) 450	17.0	179.6	200	(2) 40.4	(2) 225	8.5	89.8	101
6200L44	(2) 95.6	(2) 470	17.0	209.2	234	(2) 47.8	(2) 235	8.5	104.6	118

<sup>3</sup> MCA does not include evaporator motors.

	1 1 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	IENT	5°F AMB	TUH @ 9	CITY-B	CAPA		Segmenter and
AMBIE		URE	TEMPERAT	SUCTION				T	MODEL
CORF	-40°F	-30°F	-25°F	-20°F	-15°F	-10°F	-5°F	0°F	CTT
FACTO	10400	14700	17100	19700	22600	25700	29100	32700	0400L44
	14900	20500	23600	26900	30400	34300	38400	42800	0500L44
AMB. 9	18500	24900	28700	32800	37200	42000	47100	52500	0600L44
0005	21600	29400	33700	38400	43400	48800	54600	60800	08001.44
80°F	27400	37100	42600	48700	55300	62300	69900	78100	0900L44
0.000	29800	40400	46400	52800	59700	67000	74700	82900	10001.44
851-	33200	46500	53400	60700	68400	76800	86000	96100	1200L44
0.015	42400	57800	65700	73900	82700	92200	102400	113700	1500L44
90°F	49100	67600	77300	87500	98100	109200	119800	132000	2200L44
0.00	60400	82600	95200	108700	123100	138100	153700	169800	2700L44
95*	69350	92700	106400	121700	136300	153900	169600	187300	3100L44
	98300	135300	154800	175100	196300	218600	242100	267000	4400L44
100%	121700	166400	192000	219400	248500	279100	307900	340500	5400L44
105°F	138200	184750	212100	242600	271650	306700	338000	373300	62.00L44



# LOW TEMPERATURE HOT GAS DEFROST

### MODEL CTT DIMENSIONS SIZE 0400-1200





Kramer 1123 Church Street Covington, GA 30015 (770)-788-5800 (770)-788-5820 Kramer.htpgusa.com

February 1<sup>st</sup>, 2012

Thayer Corporation 1200 Hotel Road Auburn, ME 04210

Attn: Andy Kent

Re: Sound Data for Kramer Units

Dear Andy,

I'm writing you regarding sound data on the Kramer Thermobank systems. Kramer has never published sound data on their larger condensing units however I can estimate the approximate decibel level each unit will emit. At best this will be an educated approximation since Copeland does not publish sound data on their compressors. Therefore, I made my estimates based upon the condenser fans which typically produce the most noise of any condensing unit.

CTT22200L44-G (approximately 61 dB at 30 feet)

CTT20600L44-G (approximately 58 dB at 30 feet)

Again I must reiterate that these are just approximations. The actual measurements may vary depending upon installation variables. Also, environmental factors may have a significant influence on the data.

If you have any questions please feel free to contact me.

Best Regards:

Benjamin A. Mizack

Benjamin A. Mizack SENIOR APPLICATIONS ENGINEER / SALES SPECIALIST REFRIGERATION SPECIALISTS CO NE LLC

12-3/1(d)(2) -75 dBAS Xt property Lines