City of Portland, Maine - Building or Use Permit Application

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

REPORT ISSUED

Permit No:	Issue Date:	CBL:
05-0062	JAN 2 1 2005	306 B006001

Location of Construction:	Owner Name:	Owner Address:	Phone:
585 Riverside St	B & L Partners Llc	277 Milton Rd	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Avery Services, Inc.	7 Thomas Drive Westbrook	2077728687
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	I-M

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial	Commercial / Install Propane Tubular Gas fired Propeller Unit heaters	*$66.00*	*$5,000.00*	*5*

FIRE DEPT: ☐ Approved ☐ Denied

N/A

Signature

INSPECTION:

Use Group U Type Heating

State Gas Reg.'s

Signature:

Proposed Project Description:

Install Propane Tubular Gas fired Propeller Unit heaters

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	01/18/2005

1.

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..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
late:	late:	Date:

N/A

N/A

N/A

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

FILL IN AND SIGN WITH INK

PERMIT ISSUED
JAN 21 2005
CITY OF PORTLAND

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

585 Riverside St.

To the INSPECTOR OF BUILDINGS, **PORTLAND,** ME.

*The undersigned hereby applies for a permit to install the following heating, **cooking or** power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:*

Location / CBL 306 B006 Use of Building Warehouse Date 1/11/05

Name and address of owner of appliance R+L Constructo Partners
277 Milton Rd. Rochester, NH 03867

Installer's name and address Avery Services

Telephone

Location of appliance:

- ❑ Basement
- ❑ Floor
- ❑ Attic
- ☑ Roof

Type of Fuel:

- ❑ Gas
- O Oil
- O Solid

Propane

Appliance Name: Tubular Gas Fired Propane Unit Heater

U.L. Approved ❑ Yes ❑ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☑ Yes ❑ No

IF NO Explain:

The Type of License of Installer:

- ❑ Master Plumber #
- ❑ Solid Fuel #
- ❑ Oil #
- ☑ Gas # PNT1439
- ❑ **Other**

Type of Chimney:

- ❑ Masonry Lined
- Factory built
- ☒ Metal
- Factory Built U.L. Listing # All Fuel
- UL Standard # 441
- ❑ Direct Vent
- Type RECEIVED UL#

DEPT OF BUILDING INSPECTION CITY OF PORTLAND, ME JAN 18 2005

Type of Fuel Tank

- ❑ Oil
- ❑ Gas

In-Ground Propane

Size of Tank 1000 gal

Number of Tanks 2

Distance from Tank to Center of Flame _____ **feet.**

Cost of Work: $ 5,000

Permit Fee: $

Approved

Fire:

Ele.:

Bldg.:

Approved with Conditions

❑ See attached letter or requirement

Inspector's Signature Date Approved

Signature of Installer Robert C. Hall PNT1439

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

City of Portland, Maine - Building or Use Permit

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Permit No:	Date Applied For:	CBL:
05-0062	01/18/2005	306 B006001

Location of Construction:	Owner Name:	Owner Address:	Phone:
585 Riverside St	B & L Partners Llc	277 Milton Rd	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Avery Services, Inc.	7 Thomas Drive Westbrook	(207) 772-8687
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
Commercial / Install Propane Tubular Gas fired Propeller Unit heaters	Install

Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 01/20/2005

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 01/20/2005

Note: **Ok to Issue:** ☑

1) The installation must be in compliance with chapter 34 of the IBC 2003.

2) The installation must comply with the State of Maine Gas Regulations.

SBM Associates, Inc.
ARCHITECT

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

January **14,2005**

City of Portland
Code Enforcement Dept.
389 Congress Street
Portland, ME 04101

Re: Heating Units
A. H. Harris Company Renovations
B&L Business Park
Riverside Street
Portland, Maine

Attn: Kevin Carroll

Dear Kevin:

Enclosed **are** the cut sheets on the new unit heaters that have been installed for the above-mentioned project. The new units are about two-thirds (2/3) to half (1/2) the weight of the old cast iron units they are replacing and are hung from the same existing angle fastened to the existing purlins in the same locations. Cut sheets on the standard hanging methods and material sizes *are* also provided for your use.

Under the **IBC 2003,** Chapter **34,** Section **3403, § 3403.2 Structural,** we **are** allowed to re-hang these in place of the old cast iron units provided that we do not increase the loads by more **than** 5%; please note that we are decreasing the loads with the use of the lighter units.

I also understand that a permit is required for this repair/alteration and it will be obtained.

I hereby **certify** to the best of my knowledge that the design description for the above project meets the IBC **2003** standards.

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
2005

Thank you.

Sincerely,

Harvey "Pete" Sawyer III R.A.
SBM Associates, Inc.

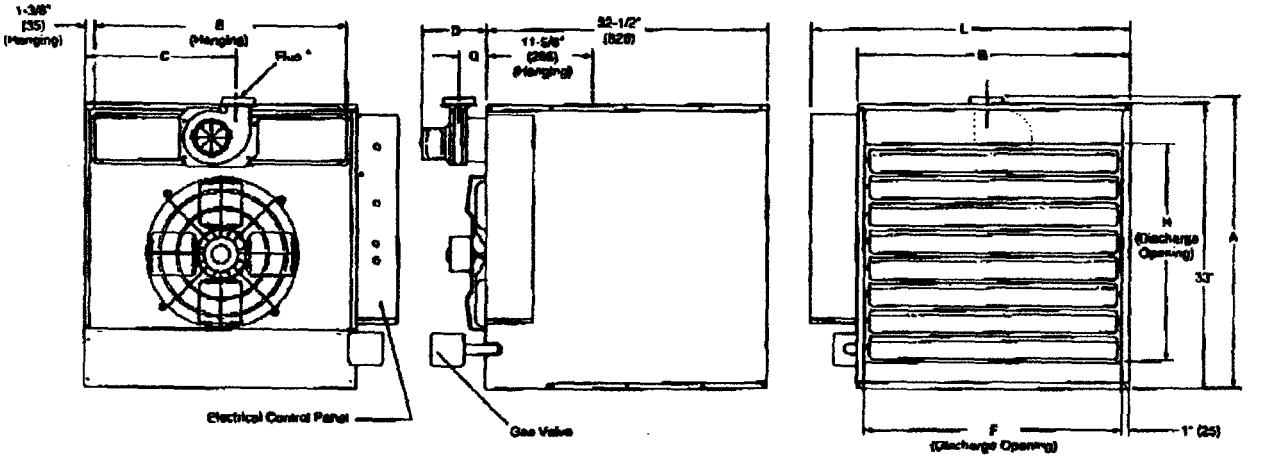
LICENSED ARCHITECT
HARVEY E. SAWYER III #1776
STATE OF MAINE

14 Deer Run Drive Gorham, Maine 04038 Tele. 207-839-5243 Fax 207-839-5883 E-mail sbm111@maine.rr.com

Model BTU Performance & Dimensional Data

Unit Size	100	125	150	175	200	250	300	350	400
PERFORMANCE DATA†									
Input - BTU/Hr.	100,000	125,000	150,000	175,000	200,000	250,000	300,000	350,000	400,000
(kW)	(29.3)	(36.6)	(43.9)	(51.2)	(58.6)	(73.2)	(87.8)	(102.5)	(117.1)
Output - BTU/Hr.	81,000	101,250	121,500	141,750	162,000	202,500	243,000	283,500	324,000
(kW)	(23.7)	(29.6)	(35.6)	(41.5)	(47.5)	(59.3)	(71.2)	(83.0)	(95.0)
Thermal Efficiency (%)	81	81	81	81	81	81	81	81	81
Free Air Delivery - CFM	1,600	2,200	2,400	2,850	3,200	3,450	5,000	5,000	5,000
(cu. m/s)	(0.756)	(1.039)	(1.133)	(1.346)	(1.511)	(1.629)	(2.361)	(2.364)	(2.738)
Air Temperature Rise - Deg. F	47	42	47	46	47	54	45	47	51
(Deg. C)	(26)	(23)	(26)	(26)	(26)	(30)	(24)	(26)	(28)
Full Load Amps at 120V	5.3	5.8	5.8	8.0	8.0	8.0	11.3	13.5	13.5
MOTOR DATA : Motor HP (Qty.)	1/10	1/8	1/4	1/3	1/3	1/3	(2) 1/4	(2) 1/3	(2) 1/3
Motor kW	(0.75)	(0.19)	(0.19)	(0.25)	(0.25)	(0.25)	(0.19)	(0.25)	(0.25)
Motor Type	SP	PSC	PSC	PSC	PSC	PSC	PSC	PSC	PSC
R.P.M.	1,050	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140
Amps @ 115V	4.2	4.7	4.7	5.8	5.8	5.8	9.4	11.6	11.6
DIMENSIONAL DATA - Inches (mm)									
"A" Overall Height to Top of Flue	33-3/4	33-3/4	33-3/4	33-3/4	33-3/4	33-3/4	34	34	34
	(857)	(857)	(857)	(857)	(857)	(857)	(864)	(864)	(864)
"B" Jacket Width of Unit	20-3/4	20-3/4	20-3/4	32-3/4	32-3/4	32-3/4	50-3/4	50-3/4	50-3/4
	(527)	(527)	(527)	(831)	(831)	(831)	(1289)	(1289)	(1289)
"C" Width to Centerline Flue	13-3/8	13-3/8	13-3/8	19-3/8	19-3/8	18-3/8	28-3/8	28-3/8	28-3/8
	(340)	(340)	(340)	(492)	(492)	(492)	(721)	(721)	(721)
"D" Depth to Rear of Housing	11	11	11	11	11	11	12-1/4	12-1/4	12-1/4
	(279)	(279)	(279)	(279)	(279)	(279)	(311)	(311)	(311)
"E" Hanging Distance Width	18-5/8	18-5/8	18-5/8	30-5/8	30-5/8	30-5/8	48-5/8	48-5/8	48-5/8
	(473)	(473)	(473)	(778)	(778)	(778)	(1235)	(1235)	(1235)
"F" Discharge Opening Width	18-3/4	18-3/4	18-3/4	30-3/4	30-3/4	30-3/4	48-3/4	48-3/4	48-3/4
	(476)	(476)	(476)	(781)	(781)	(781)	(1238)	(1238)	(1238)
"G" Depth to Centerline Flue	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	5-1/8	5-1/8	5-1/8
	(121)	(121)	(121)	(121)	(121)	(121)	(130)	(130)	(130)
"H" Discharge Opening Height	24-1/2	24-1/2	24-1/2	24-1/2	24-1/2	24-1/2	24-1/2	24-1/2	24-1/2
	(622)	(622)	(622)	(622)	(622)	(622)	(622)	(622)	(622)
"L" Overall Unit Width	25-1/4	25-1/4	25-1/4	37-1/4	37-1/4	37-1/4	55-1/4	55-1/4	55-1/4
	(641)	(641)	(641)	(946)	(946)	(946)	(1403)	(1403)	(1403)
*Flue Size Diameter - in.	5	5	5	5	5	5	6	6	6
(Dia.-mm)	(127)	(127)	(127)	(127)	(127)	(127)	(152)	(152)	(152)
Fan Diameter - in. (Qty.)	16	16	16	16	16	16	(2) 16	(2) 16	(2) 16
Gas Inlet-Natural Gas (in.)	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4	3/4
Gas Inlet- LP Gas (in.)	1/2	1/2	1/2	1/2	1/2	1/2 OR 3/4	1/2 OR 3/4	1/2 OR 3/4	1/2 OR 3/4
Approximate Unit Weight - lbs.	137	145	155	191	201	211	307	321	335
(kg)	(60)	(66)	(70)	(87)	(91)	(96)	(139)	(145)	(152)
Approximate Ship Weight - lbs.	173	185	195	241	251	281	367	381	395
(kg)	(78)	(84)	(88)	(109)	(114)	(118)	(166)	(173)	(179)

† Published ratings are shown for elevations up to 2,000 feet (610m) above sea level. For higher elevations derate 4% for each 1,000 feet (305m) above sea level.
In Canada, derate 10% for altitudes 2,000 to 4,500 feet (610 to 1372m).
* Flue collar is factory supplied with unit, to be field installed per included instructions. Canadian units include the vent cap.



Rear View | Side View | Front View

D4617

DIMENSIONS .XXX STANDARD LIMITS
DIMENSIONS IN PARENTHESIS (XXX) MILLIMETERS

Ann Pete

175/200
129.

INSTALLATION (continued)

CLEARANCES: Each Gas Unit Heater shall be located with respect to building construction and other equipment so as to permit access to the Unit Heater. Clearance between vertical walls and the vertical sides of the Unit Heater shall be no less than 6 inches (152mm). However. To ensure access to the control box, a minimum of 18' (457mm) is required for the control box side. A minimum clearance of 6 inches (152mm) must be maintained between the top of the Unit Heater and the ceiling. The bottom of the Unit Heater must be no less than 12 inches (305mm) from any combustible. The distance between the flue collector and any combustible must be no less than 6 inches (152mm). Also see AIR FOR COMBUSTION and VENTING sections.

NOTICE: Increasing the clearance distances may be necessary if there is a possibility of distortion or discoloration of adjacent materials.

⚠ WARNING Make certain that the lifting methods used to lift the heater and the method of suspension used in the field installation of the heater are capable of uniformly supporting the weight of the heater at all times. Failure to heed this warning *may* result in property damage or personal injury!

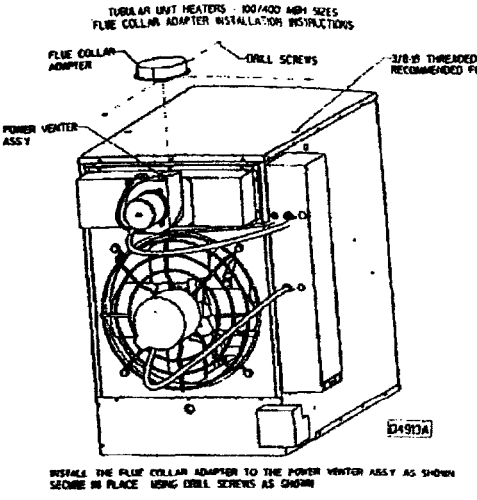
⚠ WARNING Make sure that the structure to which the unit heater is to be mounted is capable of safely supporting its weight. Under no circumstances must the *gas* lines, the venting system or the electrical conduit be used to support the heater; or should any other objects (i.e. ladder, person) lean against the heater gas lines, venting system or the electrical conduit for support. Failure to heed these warnings may result in property damage, personal injury, or death.

⚠ CAUTION Unit Heaters must be hung level from *side* to side and from front to back see Figure 3A, 3B and 3C. Failure to do so will result in poor performance and/or premature failure of the unit

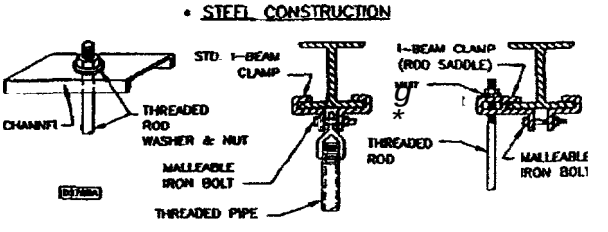
⚠ WARNING Insure that all hardware used in the suspension of each unit heater is more than adequate for the job. Failure to do so may result in extensive property damage, severe personal injury, or death!

Refer to Figures 3A, 36 and 3C for suspension of units.

Figure 3A

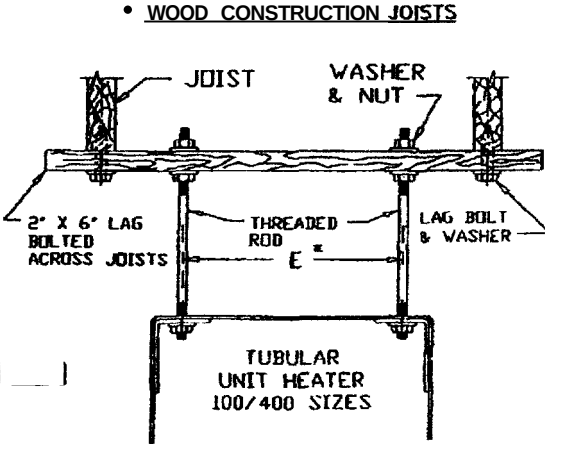


Figures 38 - Heater Mounting'



*All hanging hardware and wood *is* not Muded with the unit (Tobe field supplied).

Figures 3C



* SEE TABLE 1 FOR DIMENSION E.