

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

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

Permit No: 05-0300	Issue Date: <b>PERMIT ISSUED</b> MAR 30 2005	014 C001001
Owner Name: Egbert Shea	Owner Address: 59 Lafayette St	Phone:
Business Name:	Contractor Name: Avery Services, Inc.	Contractor Address: 7 Thomas Drive Westbrook
Lessee/Buyer's Name	Phone:	Permit Type: HVAC
		Zone: R-6

Location of Construction: 59 Lafayette St	Owner Name: Egbert Shea	Owner Address: 59 Lafayette St
Business Name:	Contractor Name: Avery Services, Inc.	Contractor Address: 7 Thomas Drive Westbrook
Lessee/Buyer's Name	Phone:	Permit Type: HVAC

Past Use: Single family	Proposed Use: Single family install a Carrier boiler
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Permit Fee: \$93.00	Cost of Work: \$7,729.00	CEO District: 1
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FIRE DEPT: <input type="checkbox"/> Approved <input checked="" type="checkbox"/> Denied Signature: <i>[Signature]</i>	INSPECTION: Use Group: R/U Type: SB/Kat State Gas Regs Signature: <i>[Signature]</i>
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Proposed Project Description:  
Install a Carrier boiler

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)  
Action:  Approved  Approved w/Conditions  Denied  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Permit Taken By: dmartin	Date Applied For: 03/24/2005
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**Zoning Approval**

- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- 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**

Shoreland  
 Wetland  
 Flood Zone  
 Subdivision  
 Site Plan  
Maj  Minor  MM

late: \_\_\_\_\_

**Zoning Appeal**

Variance  
 Miscellaneous  
 Conditional Use  
 Interpretation  
 Approved  
 Denied

late: \_\_\_\_\_

**Historic Preservation**

Not in District or Landmark  
 Does Not Require Review  
 Requires Review  
 Approved  
 Approved w/Conditions  
 Denied

late: \_\_\_\_\_

**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

141 P 001

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

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 \_\_\_\_\_ Use of Building \_\_\_\_\_ Date \_\_\_\_\_

Name and address of owner of appliance Shra Elyant 59 Lafayette St  
Portland, ME

Installer's name and address Avery Services, Inc 7 Thomas Dr  
Westbrook, ME 04092 Telephone 775-8682 (FAX) 879-1043

### Location of appliance:

- Basement
- Floor
- Attic
- Roof

### Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Cupert. S9MxA040

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 # PNT1431
- Other \_\_\_\_\_

### Type of Chimney:

- Masonry Lined  
Factory built N/A
- Metal  
Factory Built U.L. Listing # N/A
- Direct Vent  
Type PVC UL# \_\_\_\_\_

### Type of Fuel Tank

- Oil N/A
- Gas N/A

Size of Tank N/A

Number of Tanks N/A

Distance from Tank to Center of Flame \_\_\_\_\_ feet.

Cost of Work: \$ 7729

Permit Fee: \$ \_\_\_\_\_

### Approved

### Approved with Conditions

Fire: \_\_\_\_\_  
Ele.: \_\_\_\_\_  
Bldg.: \_\_\_\_\_

See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer \_\_\_\_\_

**City of Portland, Maine - Building or Use Permit**

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

Permit No: 05-0300	Date Applied For: 0312412005	CBL: 014 C001001
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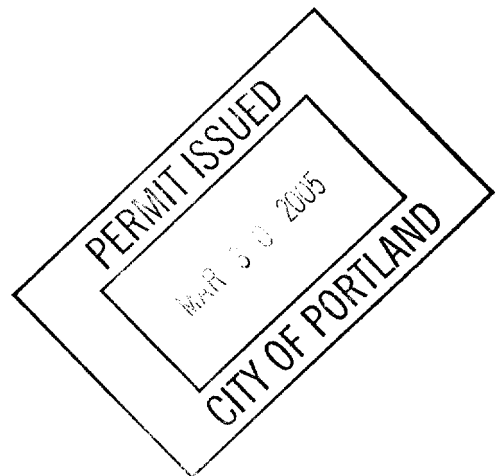
Location of Construction: 59 Lafayette St	Owner Name: Egbert Shea	Owner Address: 59 Lafayette St	Phone:
Business Name:	Contractor Name: Avery Services, Inc.	Contractor Address: 7 Thomas Drive Westbrook	Phone (207) 772-8687
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Single family install a Carrier boiler	Install a Carrier boiler
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Dept: Zoning      Status: Approved      Reviewer: Tammy Munson      Approval Date: 0312912005  
 Note:      Ok to Issue:

Dept: Building      Status: Approved with Conditions      Reviewer: Tammy Munson      Approval Date: 0312912005  
 Note:      Ok to Issue:

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



# Performance data

UNIT SIZE	040-08	040-12	060-08	060-12	060-16	080-12	080-16	080-20	100-16	100-20	120-20	140-20
DIRECT-DRIVE MOTOR Hp (PSC)	1/5	1/3	1/5	1/3	1/2	1/3	1/2	3/4	1/2	3/4	3/4	3/4
MOTOR FULL LOAD AMPS	4.9	5.8	4.9	5.8	7.9	5.8	7.9	11.1	7.9	11.1	11.1	11.1
RPM (Nominal) — SPEEDS	1075—3	1075—4	1075—3	1075—4								
BLOWER WHEEL DIAMETER X WIDTH (In.)	10 x 6	10 x 7	10 x 6	10 x 7	11 x 8	10 x 7	11 x 8	11 x 10	11 x 8	11 x 10	11 x 10	11 x 10
FILTER SIZE (In.) — (Washable)	(1) 16 x 25 x 1							(1) 20 x 25 x 1			(1) 24 x 25 x 1	

PSC—Permanent Split Capacitor

## EFFICIENCY

UNIT SIZE		040-08	040-12	060-08	060-12	060-16	080-12	080-16	080-20	100-16	100-20	120-20	140-20
CAPACITY* (ICS) (Shaded capacities are specified on rating plate)	Upflow	38,000	38,000	56,000	56,000	56,000	75,000	75,000	75,000	94,000	94,000	113,000	129,000
	Downflow	38,000	38,000	56,000	56,000	56,000	75,000	75,000	75,000	94,000	94,000	113,000	129,000
	Horizontal	38,000	38,000	56,000	56,000	56,000	74,000	75,000	75,000	93,000	93,000	112,000	128,000
AFUE%*	Upflow	94.3	95.5	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	92.6
	Downflow	92.9	94.0	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.2
Nonweatherized ICS	Horizontal	93.7	94.9	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.0

\* Capacity and AFUE in accordance with U.S. Government DOE test procedures effective November 10, 1997.

ICS—Isolated Combustion System

# Clearance to combustibles

## INSTALLATION

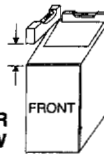
This forced air furnace is equipped for use with natural gas at altitudes 0 - 10,000 ft (0 - 3,050m), except 140 size furnaces are only approved for altitudes 0 - 7,000 ft. (0 - 2,135m). An accessory kit, supplied by the manufacturer, shall be used to convert to propane gas use or may be required for some natural gas applications. This furnace is for indoor installation in a building constructed on site. This furnace may be installed in a manufactured (mobile) home when stated on rating plate and using factory authorized kit.

This furnace may be installed on combustible flooring in alcove or closet at minimum clearance from combustible material. This appliance requires a special venting system. Refer to the installation instructions for parts list and method of installation. This furnace is for use with schedule-40 W/C, PVC-DWV, CPVC, or ABS-DWV pipe, and must not be vented in common with other gas-fired appliances. Construction through which vent/air intake pipes may be installed is maximum 24 inches (600 mm), minimum 3/4 inches (19 mm) thickness (including roofing materials).

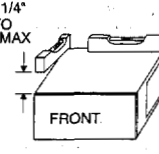
Cette fournaise à air pulsé est équipée pour utilisation avec gaz naturel et altitudes comprises entre 0 - 3,050m (0-10,000 pi), excepté que les fournaises de 140 taille sont pour altitudes comprises entre 0 - 2,135m (0 - 7,000 pi). Utiliser une trousse de conversion, fournie par le fabricant, pour passer au gaz propane ou pour certaines installations au gaz naturel. Cette fournaise à air pulsé est pour installation à l'intérieur dans un bâtiment construit sur place. Cette fournaise à air pulsé peut être installée dans une maison préfabriquée (maison mobile) si prescrit par la plaque signalétique et si l'on utilise une trousse spécifiée par le fabricant. Cet appareil nécessite un système d'évacuation spécial. La méthode d'installation et la liste des pièces nécessaires figurent dans les instructions d'installation. Cette fournaise doit s'utiliser avec la tuyauterie des nomenclatures 40 PVC, PVC-DWV, CPVC, ou ABS-DWV et elle ne peut pas être ventilée conjointement avec d'autres appareils à gaz. Epaisseur de la construction au travers de laquelle il est possible de faire passer les tuyaux d'aération (admission/évacuation): 24 po (600 mm) maximum, 3/4 po (19 mm) minimum (y compris la toiture).

For upflow and downflow applications, furnace must be installed level, or pitched within 1/2" of level. For a horizontal application, the furnace must be pitched minimum 1/4" to maximum of 1/2" forward for proper drainage. See Installation Manual for IMPORTANT unit support details on horizontal applications.

LEVEL (0°)  
TO  
1/2" MAX



MIN 1/4"  
TO  
1/2" MAX



HORIZONTAL

Pour des applications de flux ascendant et descendant, la fournaise doit être installée de niveau ou inclinée à pas plus de 1/2" du niveau. Pour une application horizontale, la fournaise doit être inclinée entre minimum 1/4" et maximum 1/2" du niveau pour le drainage approprié. En cas d'installation en position horizontale, consulter les renseignements IMPORTANTS sur le support dans le manuel d'installation.

UPFLOW OR  
DOWNFLOW

### MINIMUM INCHES CLEARANCE TO COMBUSTIBLE CONSTRUCTION

#### ALL POSITIONS:

Minimum front clearance for service 30 inches (762mm).

†† 140 size furnaces require 1 inch back clearance to combustible materials.

#### DOWNFLOW POSITIONS:

† For installation on combustible floors only when installed on special base No. KGASB0201ALL, Coil Assembly, Part No. CD5 or CK5, or Coil Casing, Part No. KCAKC.

#### HORIZONTAL POSITIONS:

Line contact is permissible only between lines formed by intersections of top and two sides of furnace jacket, and building joists, studs, or framing.

Clearance shown is for air inlet and air outlet ends.

120 and 140 size furnaces require 1 inch bottom clearance to combustible materials.

### DÉGAGEMENT MINIMUM EN POUCHES AVEC ELEMENTS DE CONSTRUCTION COMBUSTIBLES

#### POUR TOUS LES POSITIONS:

\* Dégagement avant minimum de 762mm (30 po) pour l'entretien.

†† Pour les fournaises de 140 taille, 1 po (25mm) dégagement des matériaux combustibles est requis au-dessus.

#### POUR LA POSITION COURANT DESCENDANT:

† Pour l'installation sur le plancher combustible seulement quand on utilise la base spéciale, pièce n° KGASB0201ALL, l'ensemble serpentin, pièce n° CD5 ou CK5, ou le carter de serpentin, pièce n° KCAKC.

#### POUR LA POSITION HORIZONTALE:

Le contact n'est permis qu'entre les lignes formées par les intersections du dessus et des deux côtés de la chemise de la fournaise, et des solives, des montants ou de la charpente du bâtiment.

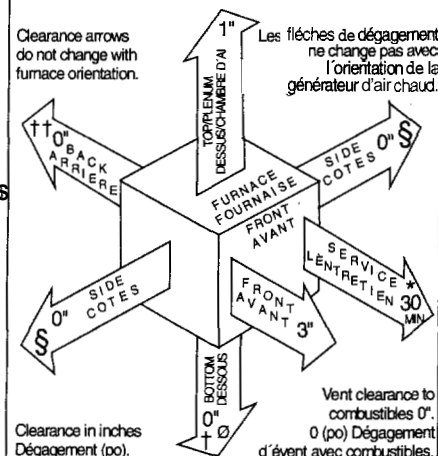
La distance indiquée concerne l'extrémité du tuyau d'arrivée d'air et l'extrémité du tuyau de sortie d'air.

Pour les fournaises de 120 et 140 taille, 1 po (25mm) dégagement des matériaux combustibles est requis au-dessous.

This furnace is approved for UPFLOW, DOWNFLOW and HORIZONTAL installations.

Cette fournaise est approuvée pour l'installation HORIZONTALE et la circulation d'air VERS LE HAUT et VERS LE BAS.

Clearance arrows do not change with furnace orientation.



Clearance in inches  
Dégagement (po).

A02148

# Physical data

UNIT SIZE		040-08	040-12	060-08	060-12	060-16	080-12	080-16	080-20	100-16	100-20	120-20	140-20
OUTPUT CAPACITY BTUH* (ICS) (Shaded capacities are specified on rating plate)	Upflow	38,000	38,000	56,000	56,000	56,000	75,000	75,000	75,000	94,000	94,000	113,000	129,000
	Downflow	38,000	38,000	56,000	56,000	56,000	75,000	75,000	75,000	94,000	94,000	113,000	129,000
	Horizontal	38,000	38,000	56,000	56,000	56,000	74,000	75,000	75,000	93,000	93,000	112,000	128,000
INPUT BTUH†		40,000	40,000	60,000	60,000	60,000	80,000	80,000	80,000	100,000	100,000	120,000	138,000
SHIPPING WEIGHT (Lb)		174	175	180	182	183	198	205	214	229	232	261	261
CERTIFIED TEMP RISE RANGE (°F)		30—60	15—45	45—75	30—60	20—50	40—70	30—60	20—50	45—75	30—60	40—70	50—80
CERTIFIED EXT STATIC PRESSURE (In. wc)	Heating	0.10	0.10	0.12	0.12	0.12	0.15	0.15	0.15	0.20	0.20	0.20	0.20
	Cooling	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
AIRFLOW CFM‡	Heating	850	1125	885	1065	1320	1190	1285	1785	1315	1690	1720	1970
	Cooling	895	1215	900	1200	1545	1245	1525	1925	1570	1930	2000	1990
LIMIT CONTROL		SPST											
HEATING BLOWER CONTROL (Off Delay)		Selectable 90, 120, 150, or 180 Sec.											
BURNERS (Monoport)		2	2	3	3	3	4	4	4	5	5	6	6
GAS CONNECTION SIZE		1/2-in. NPT											
GAS VALVE (Redundant) Manufacturer		White-Rodgers											
Minimum Inlet Pressure (In. wc)		4.5 (Natural Gas)											
Maximum Inlet Pressure (In. wc)		13.6 (Natural Gas)											
IGNITION DEVICE		Hot Surface											

\* Capacity in accordance with U.S. Government DOE test procedures.

† Gas input ratings are certified for elevations to 2000 ft. For elevations above 2000 ft, reduce ratings 2% for each 1000 ft above sea level. In Canada, derate the unit 5% for elevations 2000 to 4500 ft above sea level.

‡ Airflow shown is for bottom only return-air supply with factory supplied 1-in. washable filter(s).

- For air delivery above 1800 CFM, see Air Delivery table for other options.

- An airflow reduction of up to 7% may occur when using the factory-specified 4 5/16-inch wide, high efficiency media filter.

- For best furnace efficiency when using the 4 5/16-inch wide media filter, adjust the blower speed tap to near the mid-point of the rise range.

ICS—Isolated Combustion System;