

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 10-0645	Issue Date:	CBL: 037 D002001
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Location of Construction: 511 Congress St	Owner Name: 511 Plaza Limited Partnership	Owner Address: One Canal Plaza	Phone:
Business Name:	Contractor Name: Patriot Mechanical LLC	Contractor Address: Po Box 747 Gorham	Phone: 2088399500
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: B-3

Past Use: Commercial	Proposed Use: Commercial / Install two 3 ton cooling units on the roof.	Permit Fee: \$140.00	Cost of Work: \$11,344.00	CEO District: 1
		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: Type: HVAC IMC-2003	

Proposed Project Description: Install two 3 ton cooling units on the roof.	Signature:	Signature: JMB 6/15/10
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied		
Signature:	Date:	

Permit Taken By: gg	Date Applied For: 06/04/2010	Zoning Approval		
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<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>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..</p>	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: 5/6/10	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 type="checkbox"/> Not in District or Landmark <input 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 Date:
	<i>OK with conditions</i>		

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 _____



CITY OF PORTLAND, MAINE

Department of Building Inspections

Original Receipt

June 4 2010

Received from Peters Mechanical

Location of Work 511 Congress St

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Total: 140.00

Building (IL) Plumbing (IS) _____ Electrical (IZ) _____ Site Plan (UZ) _____

Other HVAC

CBL: 037 2002

Check #: 1583 Total Collected \$140.00

**No work is to be started until permit issued.
Please keep original receipt for your records.**

Taken by: [Signature]

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy

City of Portland, Maine - Building or Use Permit

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Business Name:	Contractor Name: Patriot Mechanical LLC	Contractor Address: Po Box 747 Gorham	Phone (208) 839-9500
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Commercial / Install two 3 ton cooling units on the roof.	Proposed Project Description: Install two 3 ton cooling units on the roof.
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Dept: Zoning Status: Approved with Conditions Reviewer: Marge Schmuckal Approval Date: 06/08/2010
 Note: Ok to Issue:
 1) The underlying B-3 Zone has requirements regarding the maximum noise levels allowed. These proposed units shall meet the following requirements. From 7:00 am to 9:00 pm the maximum dBAs permitted is 60. From 9:00 pm to 7:00 am the maximum dBAs permitted is 55. It is the responsibility of the application agent to inform the property owner of these regulations. The City of Portland strictly enforces the level of sound generated on property. The property owner may have to take mitigating steps to reduce noise produced by these units.

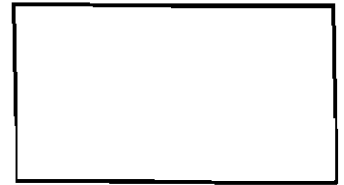
Dept: Building Status: Approved with Conditions Reviewer: Jeanine Bourke Approval Date: 06/15/2010
 Note: Ok to Issue:
 1) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm HVAC systems, heating appliances, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
 2) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
 3) Installation shall comply with 2003 International Mechanical Code.

PERMIT ISSUED**JUN - 4 2010****City of Portland**



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



037 D002

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 511 CONGRESS STREET Use of Building BUSINESS Date 6/3/10
 Name and address of owner of appliance Boulos PROPERTY MANAGEMENT
ONE CANAL PLAZA, PORTLAND ME.
 Installer's name and address PATRIOT MECHANICAL, LLC. Demand
P.O. BOX 717 GORHAM, ME. 04038 Telephone 207-839-9500

Location of appliance: 2-3TON UNITS
 Basement Floor CONDENSES
 Attic Roof ON THE ROOF
36,000 BTU'S
EVAPORATORS
IN THE BASEMENT

Type of Fuel:
 Gas Oil Solid
COOLING ONLY/DUCTLESS SPLIT
SYSTEMS

Appliance Name: _____
 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 # _____
 Other 059700346 RSES

Type of Chimney:
 Masonry Lined
 Factory built _____
 Metal
 Factory Built U.L. Listing # _____
 Direct Vent
 Type _____ UL# _____

Type of Fuel Tank
 Oil
 Gas

Size of Tank _____
 RECEIVED
 JUN - 4 2010
 Dept. of Building Inspections
 City of Portland Maine

Number of Tanks _____
Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$11,344.00
Permit Fee: \$ 140.00

Approved

Approved with Conditions

Fire: _____
 Ele.: _____
 Bldg.: _____

See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer [Signature]

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

Patriot Mechanical LLC
PO Box 747
Gorham ME 04038
Ph: 207-838-8500
Fax: 207-887-7201

Proposal

Boutos Property Management		
One Canal Plaza		
Portland	State ME	ZIP 04101
Site location - 511 Congress Matec Server room		

Date	3/8/2010
contact	Greg McKellar

Description of work to be covered in this contract:

Patriot Mechanical shall provide labor and material to install Two Bryant 3 ton ductless split system's for a total of 6 ton of cooling.

This unit's shall be totally independent for redundancy. R-410A low ambient to -20 degree ambient Temperature. Data4

A partition wall will have to be built to decrease the square footage allowing for 6 ton of cooling
The partition wall to be built by others.

Included in this Proposal is rigging of new unit's,
all related Refrigerant piping, control circuit wiring, condensate piping, condensate pump,
start up report with a One Year warrantee part's and labor.

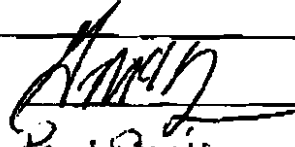
EXCLUDED FROM THIS PROPOSAL IS THE REMOVAL OF THE EXISTING LEIBERT UNIT AND LINE VOLTAGE WIRING AND PARTION WALL.

Total cost labor and material for proposed work shall be \$11,344.00 (Eleven Thousand Three hundred Forty four Dollars)

Please note: These units do not qualify for any rebates due to units are speced for low ambient conditions.

Material cost \$9,244.00
Labor cost \$2,080.00

Customer signature:



Date: 3/24/10

Patriot Mechanical LLC



Date: 3/24/10

By signing this estimate, you agree to the above terms.

HVAC SERVICE- PREVENTIVE MAINTENANCE-OIL/GAS BURNERS 24

HVAC Service Installation • Preventive Maintenance • Oil Gas Burners • Controls • 24 Hour Service

June 1, 2010

Paul Baillargeon
Patriot Mechanical LLC
P.O. Box 747
Gorham ME, 04038

Re: Structural Evaluation, 511 Congress Street, Portland, ME
IIWE P/N 10-027

Dear Paul:

At your request, I inspected the visible structural framing of the roof of 511 Congress Street in Portland, Maine. The two - story building part of the building where the HVAC system will be installed steel truss framing supporting a corrugated metal deck with 3-inch concrete. The roofing is partly a built-up roofing system and partly a rubber membrane system. No structural drawings were found, and limited architectural drawings were viewed. There is a fire wall running parallel to the street in the area where the units will go, with the trusses at 30-36" parallel to this wall. The trusses are 24" deep, with various equipment supported off the bottom of the trusses and a ceiling below this equipment. The framing and corrugated metal deck are in good condition where visible.

A Bryant 538E018 unit weighing 250# will be installed on the roof. With accessories and curbing, the equipment may reach 350#. The unit is approximately 3'-8" x 1'-5". The roof framing appears to be structurally adequate to support this load.

Sleepers will be installed on the deck, cut into the insulation and bolted to the deck, to bring the surface to or above the roofing level, then the roofing will go over the sleepers and the equipment sleepers will be bolted to the shim sleepers. The bolts should penetrate the concrete by 1½".

If needed, I can inspect the completed supports and provide a letter stating that the supports are adequate. Let me know when the work is ready for inspection if this is needed.

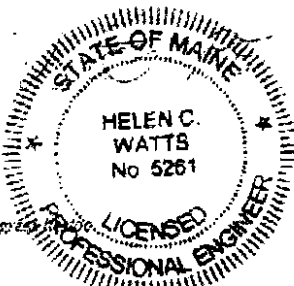
Thank you for giving us the opportunity to be of service to you.

Yours truly,

Helen C. Watts, PE

/HCW

C:\Users\Helen\My Documents\511 Congress



HELEN WATTS ENGINEERING

455 Litchfield Road · Bowdoin, ME 04287 · (207) 522-9366 · hcwatts@gwi.net

SWIFT MODEL NO. (Unit Type)	SWIFT MODEL NO. (Manufacturer)	DIMENSIONS (in)															
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
018	018	16.14	24.00	11.47	11.17	13.10	1.91	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
030	030	16.14	24.00	11.47	11.17	13.10	1.91	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
040	040	16.14	24.00	11.47	11.17	13.10	1.91	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
044	044	16.14	24.00	11.47	11.17	13.10	1.91	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27

NOTE: Dimensions shown in parentheses (in) are millimeters.

UNIT SIZE	OPERATING WT.			
	lb	kg	lb	kg
018	18.00	8.16	10.00	4.54
030	18.00	8.16	10.00	4.54
040	18.00	8.16	10.00	4.54
044	18.00	8.16	10.00	4.54
048	18.00	8.16	10.00	4.54
052	18.00	8.16	10.00	4.54
056	18.00	8.16	10.00	4.54
060	18.00	8.16	10.00	4.54

UNIT SIZE	DIMENSIONS (in)	
	W	H
CHARLES BROS 0 & A	7-11 1/2 x 6-8"	24-27 1/2 IN.
CHARLES BROS 3 & L4	7-07 1/2 x 6-2"	24-27 1/2 IN.

NOTE: 1. Dimensions shown are with coil and unit, unless otherwise indicated. 2. Dimensions shown are for unit only, unless otherwise indicated. 3. Dimensions shown are for unit only, unless otherwise indicated. 4. Dimensions shown are for unit only, unless otherwise indicated.

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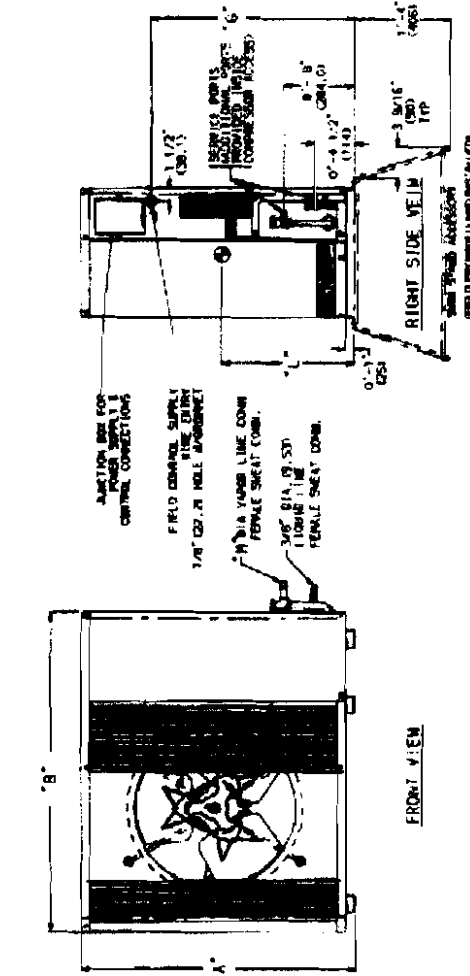
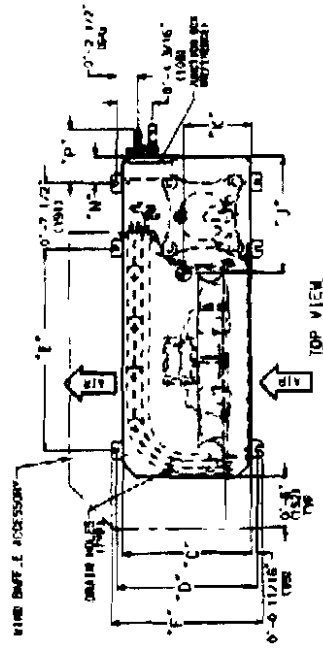


Fig. 2 - 330E A Unit Dimensions

BRYANT

installation, start-up and service instructions

538E

538A

Circle: New

II 538A,E-1R-1
1/15/06

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SAFETY CONSIDERATIONS

Installing and servicing air conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install or service air conditioning equipment.

Untrained personnel can perform basic maintenance, such as cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment, observe safety precautions in literature, tags, and labels attached to unit.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions *thoroughly*. Consult local building codes and the National Electrical Code (NEC) for special installation requirements.

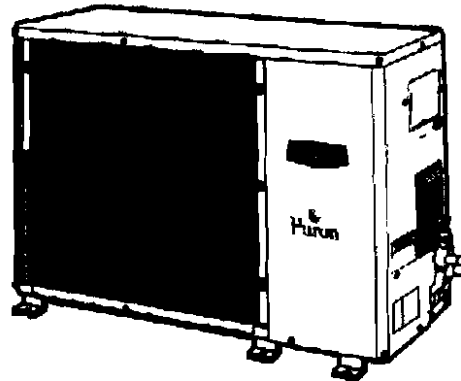


Fig. 1 — 538E,A Units

C. Consider System Requirements

Consult local building codes and NEC for special installation requirements.

Allow sufficient space for airflow clearance, wiring, refrigerant piping, and servicing unit. See Fig. 2.

Locate unit so that condenser airflow is unrestricted on both sides. Refer to Fig. 2.

Unit may be mounted on a level pad directly on base legs or mounted on raised pads at support points. See Fig. 2 for center of gravity.

D. Matching the Condensing Unit to an Indoor Unit

The 538E018-036 duct free condensing units and 538A018-060 ducted condensing units can be matched to corresponding indoor units. The 538E018-036 units can be matched with an in-ceiling cassette or high wall indoor unit. The 538A unit can be matched with under-ceiling and residential fan coils. Refer to separate indoor unit literature for more information.

II. STEP 2 — RIG AND MOUNT UNIT

A. Mounting on Ground

Mount unit on a solid, level concrete pad. Position unit so water or ice from roof does not fall directly onto unit. Accessory stacking kits can be used when units are to be stacked. See installation instructions provided with the accessory kit. Use field provided snow stand or ice rack where prolonged subfreezing temperatures or heavy snow occurs.

If conditions or local codes require unit be fastened to a pad, 6 field supplied tie-down bolts should be used and fastened through slots provided in unit mounting feet.

B. Mounting on Roof

Mount unit on a level platform or frame at least 6 in. above roof surface. Isolate unit and tubing from structure.

INSTALLATION

I. STEP 1 — COMPLETE PRE-INSTALLATION CHECKS

A. Unpack Unit (See Fig. 1)

Move the unit to final location. Remove unit from carton, being careful not to damage service valves and grilles.

B. Inspect Shipment

File a claim with the shipping company if shipment is damaged or incomplete. Check unit nameplate to ensure unit matches job requirements.

Only use factory specified liquid-line filter driers with rated working pressures less than 800 psig.

NOTE: Do not install a suction-line filter drier in liquid line.

C. Make Piping Sweat Connections

Remove plastic caps from liquid and suction service valves. Use refrigerant grade tubing. Service valves are closed from the factory and are ready for brazing. After wrapping the service valve with a wet cloth, the tubing can be brazed to the service valve using either silver bearing or non silver bearing brazing material. Consult local code requirements. Refrigerant tubing and the indoor coil are now ready for leak testing.

NOTE: Unit is shipped with R-410A factory charge indicated on nameplate.

Pass nitrogen or other inert gas through piping while brazing to prevent formation of copper oxide.



D. Provide Safety Relief

A fusible plug is located in unit suction line; do not cap this plug. If local code requires additional safety devices, install as directed.

Table 1A — 53SE018-036 Physical Data

UNIT SIZE	018	024	030	036
NOMINAL CAPACITY (Tons)	1.5	2.0	2.50	3.0
OPERATING WEIGHT (lb)	166	176	187	200
REFRIGERANT TYPE	R-410A			
METERING DEVICE	AccuMeter (Located at Fan Coil)			
CHARGE (lb)	4.8	5.9	5.0	7.1
OUTDOOR FAN Rpm/OD	840/1720	840/1720	840/1720	850/3600
Diameter (in.)	18	18	18	24
No. Blades	3	3	3	3
Motor (hp)	1/5	1/5	1/5	1/5
OUTDOOR COIL Face Area (sq ft)	5.82	7.27	7.27	12.1
No. Rows	2	3	3	2
FPI	20	20	20	20
HIGH PRESSURE SWITCH Cut-in (psig)	420 ± 25	420 ± 25	420 ± 25	420 ± 25
Cutout (psig)	660 ± 10	650 ± 10	660 ± 10	660 ± 10
LOW PRESSURE SWITCH Cut-in (psig)	45 ± 25	45 ± 25	45 ± 25	45 ± 25
Cutout (psig)	20 ± 5	20 ± 5	20 ± 5	20 ± 5
REFRIGERANT LINES Connection Type	Sweat			
Liquid Line (in.) OD	3/8	3/8	3/8	3/8
Vapor Line (in.) OD	1/2	5/8	1/2	3/4
Max Length (ft)	200	200	200	200
Max Lift (ft)	65	65	65	66
Max Drop (ft)	150	150	150	150
COMPRESSOR Type	Scroll			
Model	ZP16K5E-PFV	ZP21K5E-PFV	ZP25K5E-PFV	ZP34K5P-PFV
Oil Charge (POE - oz)	25.0	26.0	25.0	42.0
Accumulator	Yes			
CONTROLS Fusible Plug (F)	210			
Control Voltage†	24 vac			
System Voltage	208/230 v	208/230 v	208/230 v	208/230 v, Single and 3 Phase, 460 v, 3 Phase
FINISH	Gray			

LEGEND

FPI — Fins Per Inch
POE — Polyol Ester

*Unit shipped with full factory charge. See ARI (Air Conditioning and Refrigeration Institute) capacity table for proper charge and piston for each fan coil type.
†24 v and a minimum of 40 va is provided in the fan coil unit.