DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that BAYSIDE MAINE LLC

Job ID: 2011-03-661-HVAC

Located At 645 CONGRESS ST

CBL: 046 - -/D - 022 - 001 - - - - -

has permission to Install Carrier Chiller To Roof

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 latted 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

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

Director of Planning and Urban Development Penny St. Louis

Job ID: 2011-03-661-HVAC

Located At: 645 CONGRESS

CBL: <u>046 - - D - 022 - 001 - - - - -</u>

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. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
- 3. The maximum noise allowances under the B-3 Zone must be maintained. Any violations of the noise allowances will be strictly enforced. Mitigating measure will be required to bring the unit into compliance.

Building

1. All conditions on previous approval apply.

Fire

1. All conditions on previous approval apply.

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.
- 1. Final inspection at completion of work

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 OCCUOPIED.

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2011-03-661-HVAC	Date Applied: 4/14/2011		CBL: 046 D - 022 - 00	1		
#2011-2782 2 nd chiller permit Location of Construction: 645 CONGRESS ST	Owner Name: BAYSIDE MAINE LLC		Owner Address: 477 CONGRESS S PORTLAND, ME			Phone:
Business Name:	Contractor Name: AAA Energy Services		Contractor Addr 4 Commercial Rd,	ess: POBox 908, Scarboro	ough, ME	Phone: (207) 883-1473
Lessee/Buyer's Name:	Phone:		Permit Type: HVAC - HVAC			Zone: B-3
Past Use: 1st floor retail & services with apartments above	Proposed Use: Same: 1st floor retainservices with apartment above — to add a roo	nents	Cost of Work: \$11000.00 Fire Dept:	Approved Denied N/A	conditions W.	CEO District: Inspection: Use Group: Type: Chiller
Proposed Project Description Add Chilier at Roof	1:		Signature: Pedestrian Activ	B Jer B. ities District (P.A.	W. D.)	Signature:
Permit Taken By: Lannie			 	Zoning Appro	oval	
 This permit application of Applicant(s) from meeting Federal Rules. Building Permits do not septic or electrial work. Building permits are voice within six (6) months of False informatin may invested permit and stop all work. 	include plumbing, d if work is not started the date of issuance. validate a building	Shoreland Wetland Flood Zo Subdivis Site Plan Maj Date: OK	Min MM	Zoning Appeal Variance Miscellaneous Conditional Use Interpretation Approved Denied Date:	Not in Dis Does not I Requires 1 Approved	it or Landmark Require Review
ereby certify that I am the owner of a cowner to make this application as he e appication is issued, I certify that the enforce the provision of the code(s) a	is authorized agent and I agree ne code official's authorized re	or that the prope to conform to	osed work is authorized all applicable laws of the	his jurisdiction. In add	lition, if a permit for wo	rk described in

ADDRESS

SIGNATURE OF APPLICANT

DATE

PHONE



SUBMITTAL

Project

~Untitled27

Date

General Contractor

Mechanical Contractor

Mechanical Engineer

Table Of Contents Project: ~Untitled27 01/25/2011 Prepared By: 02:23PM 60 ton 3 Unit Report 4 Certified Drawing 5 Field Wiring Diagram 6 Acoustic Summary 8

60 ton

Tag Cover Sheet
Unit Report
Certified Drawing
Wiring Diagram
Performance Report
Acoustic Summary
Detailed Performance Output Report

Unit Report For 60 ton

Project: ~Untitled27 Prepared By: 01/25/2011 02:23PM

Unit Information

Tag Name:	60 ton	
Model Number:	30RAP060	
Condenser Type:	Air Cooled	
Compressor Type:		
Nameplate Voltage:	208/230-3-60	V-Ph-Hz
Quantity:	1	
Manufacturing Source:	Charlotte, NC USA	
Refrigerant:	R410A	
Independent Refrigerant C		
Capacity Control Steps:	4	
Minimum Capacity:	25.0	%
Shipping Weight:	2924	lb
Operating Weight:		lb
Unit Length:	89	in
Unit Width:	93	in
Unit Height:	79	in

Accessories and Installed Options

Cooler Heater
Micro Channel E-Coat
Ultra Low Sound
Single Pump, 7.5 HP
Low Sound Compressor Blankets
Vibration Isolation Package

Warranty Information (Note: for US & Canada only)

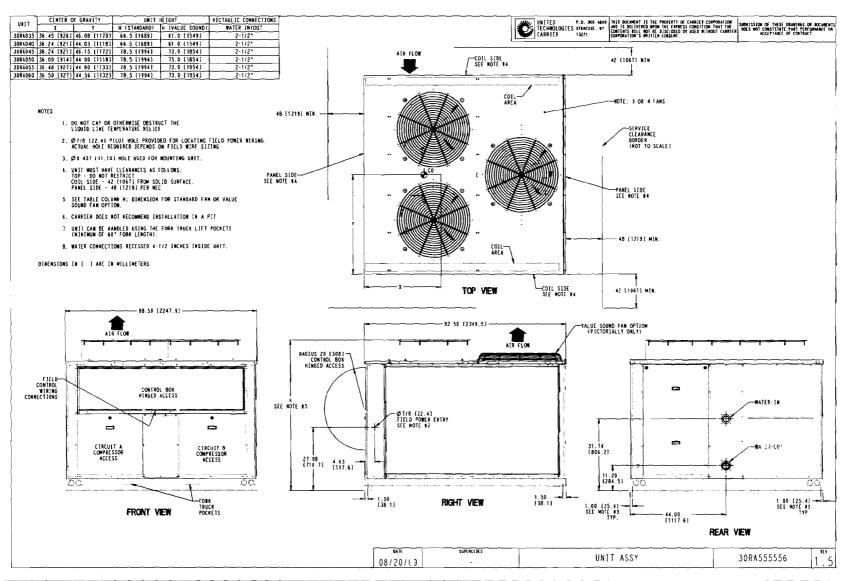
First Year - Parts Only (Standard)

Compressor Years 2-5 Parts & Carrier CCS Labor

Ordering Information

Part Number	Description	Quantity
30RAP0605K-70100	Packaged Chiller	1
	Base Unit	
	Cooler Heater	
	Micro Channel, E-Coat	
	Ultra Low Sound	
	Single Pump, 7.5 HP	
38AP-900009	Low Sound Compressor Blankets	4
30RA-900005	Vibration Isolation Package	1

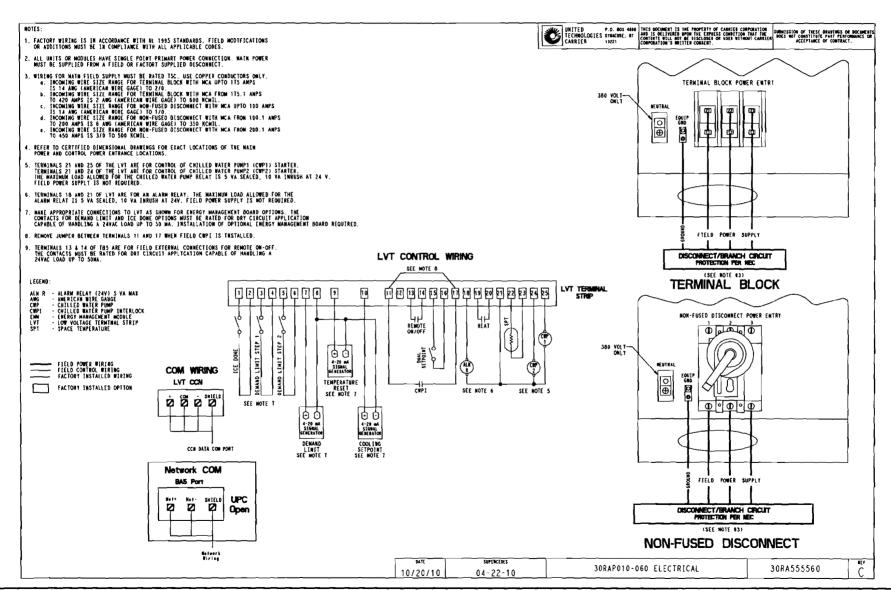
Project: ~Untitled27 Prepared By:



Field Wiring Diagram for 60 ton

Project: ~Untitled27 Prepared By:

01/25/2011 02:23PM







AquaSnap™ Air-Cooled Scroll Chiller



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	Init	INTO	atinn

Tag Name:	60 ton
Model Number:	
Quantity:	1
Manufacturing Source: Charlotte	, NC USA
Refrigerant:	R410A
Independent Refrigerant Circuits:	2
Shipping Weight:	2924
Operating Weight:	
Unit Length:	
Unit Width:	
Unit Height:	79

Evaporator Information

Fluid Type:	Fresh Water	
Fouling Factor:	0.00010	(hr-sqft-F)/BTU
Leaving Temperature:		
Entering Temperature:		
Fluid Flow:	132.7	gpm
Pressure Drop:	39.2	ft

Condenser Information

Altitude: 0	ft
Number of Fans: 4	
Total Condenser Fan Air Flow: 38800	CFM
Entering Air Temperature: 95.0	°F

Integrated Pump Information

Dynamic Head At Pump:	101.9	ft
Internal Chiller Head Loss:		
Dynamic Head External To Chiller:	62.7	ft

Performance Information

Cooling Capacity:	55.5	Tons
Total Compressor Power:	61.8	kW
Total Fan Motor Power:	5.36	kW
Pump Power:	5.68	kW
Total Unit Power (without pump):	67.1	kW
Total Unit Power (with pump):		kW
Efficiency (without pump):		EER
A-Weighted Sound Power Level:		dbA

Accessories and Installed Options

Cooler Heater Micro Channel, E-Coat Ultra Low Sound Single Pump, 7.5 HP Low Sound Compressor Blankets Vibration Isolation Package

Electrical Information

Unit Voltage:	208/230-3-60	V-Ph-Hz
Connection Type:		

Amps	Electrical Circuit 1	Electrical Circuit 2
MCA	279.7	
MOCP	300.0	
ICF	525.9	

All performance efficiency data are without pump.

Certified in accordance with the AHRI Water-Chilling Packages using the Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590-2003.

Sound power measured in accordance with ANSI/AHRI Standard 370-2001.

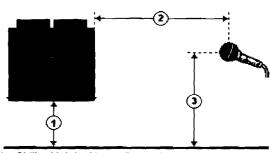
Acoustic Summary For 60 ton

Project: ~Untitled27 Prepared By:

01/25/2011 02:23PM

Unit Parameters

ille i didiliotolo		
Tag Name:	60 ton	
Model Number:		
Condenser Type:	Air Cooled	
Compressor Type:	Scroli	
Chiller Nameplate Voltage:	208/230-3-60	V-Ph-Hz
Quantity:		
Manufacturing Source:		
Refrigerant:	R410A	
Shipping Weight:		ib
Operating Weight:		lb
Unit Length:		in
Unit Width:	93	in
Unit Height:	79	in



- 1 Chiller Height Above Ground
- 2 Horizontal Distance From Chiller to Receiver
- 3 Receiver Height Above Ground

Accessories and Installed Options

Cooler Heater Micro Channel, E-Coat Ultra Low Sound Single Pump, 7.5 HP 38AP-900---009 30RA-900---005

Acoustic Information (Full Load)

Octave Band Center Frequency, Hz	31	63	125	250	500	1k	2k	4k	8k	Total	1
Sound pressure at specified distance in a free field, dB	43	55	55	52	53	53_	48	43	36	61	
A-Weighted Sound Pressure Level, dBA	4	28	39	44	49	53	49	44_	35	(56)	401
Sound Power at Chiller Acoustic Center, dB	75	87	87	84	85	85	80	75	68	93	١.
A-Weighted Sound Power, dBA	36	60	71	76	82	85	81	76	67	88	7

Notes

- 1 Chiller Height Above Ground = 0.0 ft
- 2 Horizontal Distance From Chiller to Receiver = 50.0 ft
- 3 Receiver Height Above Ground = 0.0 ft

Estimated Sound Power levels - dB re: 1 picowatt

Estimated Sound Pressure levels - dB re: 20 micropascal

Estimated sound levels given above are assumed to originate at the acoustic center of the chiller.

Sound pressure level data used to develop this program was determined in accordance with AHRI Standard 575 for water chillers in a free field and ANSI/AHRI Standard 370 for air cooled chillers.

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Detailed Performance Summary For 60 ton

Project: ~Untitled27 Prepared By:

01/25/2011 02:23PM

Unit Information		
Tag Name:	60 ton	
Model Number:	30RAP060	
Condenser Type:		
Compressor Type:		
Nameplate Voltage:		V-Ph-Hz
Quantity:		
Manufacturing Source: Charle	otte. NC USA	
Refrigerant:		
Capacity Control Steps:	4	
Minimum Capacity:	25.0	%
Shipping Weight:		
Operating Weight:		
Unit Length:		in
Unit Width:		in
Unit Height:		in
Minimum Outdoor Operating Temp		°F
Williaman Cutador Operating Temp		•
Performance Information		
Cooling Capacity:	55.5	Tons
Total Compressor Power:		
Total Fan Motor Power:		
Pump Power:		
Total Unit Power (without pump):		
Total Unit Power (with pump):		
Efficiency (without pump):	0.02	KAA
Emciency (without pump)	g.g.	LLIN
Acoustics Information		
A-Weighted Sound Power Level:	88	dbA
-		
Evaporator Information		
Fluid Type:	Fresh Water	
Fouling Factor:	0.00010	(hr-sqft-F)/BTU
Leaving Temperature:		°F '
Entering Temperature:	54.0	°F
Fluid Flow:		gpm
Pressure Drop:	39.2	ft
•		
Condenser Information		
Altitude:		ft
Number of Fans:		
Total Condenser Fan Air Flow:		CFM
Entering Air Temperature:	95.0	°F
- -		
Electrical Information	200/220 2 60	W.Dh. III-

Amps	Electrical Circuit 1	Electrical Circuit 2
MCA	279.7	
MOCP	300.0	
ICF	525.9	

Unit Voltage: 208/230-3-60 V-Ph-Hz
Connection Type: Single Point

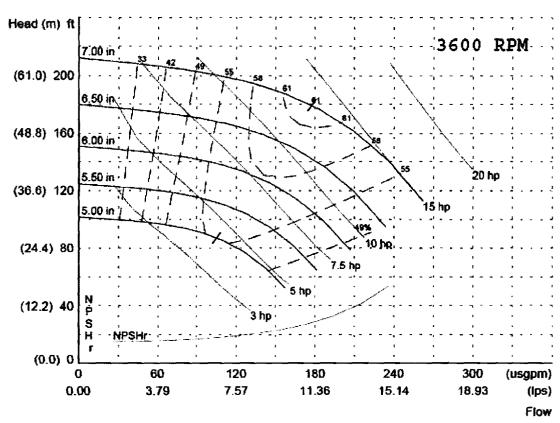
Integrated Pump Information

Dynamic Head At Pump: 101.9	ft
Internal Chiller Head Loss: 39.2	ft
Dynamic Head External To Chiller: 62.7	ft

Detailed Performance Summary For 60 ton

Project: ~Untitled27
Prepared By:

01/25/2011 02:23PM



Accessories and Installed Options

Cooler Heater Micro Channel, E-Coat Ultra Low Sound Single Pump, 7.5 HP Low Sound Compressor Blankets Vibration Isolation Package

Integrated Part Load Value (ARI)

IPLV: 14.28 EER

Unit Performance				
Percent of Full Load Capacity, %	100	75	50_	25
Percent of Full Load Power, %	100.0	69.8	52.2	24.9
Unloading Sequence	A	Α_	A	A
Cooling Capacity, Tons	55.5	41.6	27.7	13.9
Total Unit Power, kW	67.1	46.8	35.0	16.7
Efficiency, EER	9.92	13.50	15.16	14.08
Evaporator Data				
Fluid Entering Temperature, °F	54.0	51.5	49.0	46.5
Fluid Leaving Temperature, °F	44.0	44.0	_ 44.0_	44.0
Fluid Flow Rate, gpm	133.1	133.1	133.1	133.1
Fouling Factor, (hr-sqft-F)/BTU	0,0001	0.0001	0.0001	0.0001
Condenser Data				
Entering Air Temperature, °F	95.0	80.0	65.0	55.0

Packaged Chiller Builder NACO 3.33

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Detailed Performance Summary For 60 ton

Project: ~Untitled27 Prepared By: 01/25/2011 02:23PM

For some 75% operating points, the efficiency may be calculated at a condenser inlet air operating temperature as much as 0.8 degrees higher.

All performance efficiency data are without pump.

Certified in accordance with the AHRI Water-Chilling Packages using the Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590-2003.

Sound power measured in accordance with ANSI/AHRI 370-2001.

Job Summary Report Job ID: 2011-03-661-HVAC

7d1-2782

Report generated on Apr 14, 2011 3:43:34 PM Page 1 HVAC. Add Chiller at Roof Job Year: 2011 Job Type: **Job Description:** 959 **Building Job Status Code: Approved** Pin Value: **Tenant Name: Job Application Date:** Public Building Flag: N **Tenant Number: Estimated Value:** 11,000 Square Footage: **Related Parties:** MAINE BAYSIDE Property Owner AAA ENERGY SERVICE CO - AAA CO PLUMBING CONTRACTOR FAVREAU ELECTRIC INC. - Neil FAVREAU **ELECTRICAL CONTRACTOR** AAA ENERGY SERVICE CO. - AAA ENERGY SERVICE CO. MECHANICAL CONTRACTOR AAA ENERGY SERVICE CO. Job Charges Fee Code Charge **Permit Charge Net Charge Payment** Receipt **Payment Payment Adjustment Net Payment** Outstanding Description Adjustment Amount Date Number **Amount** Amount Amount Amount **Balance** Location ID: 7344 **Location Details** Alternate Id Parcel Number Census Tract GIS X GIS Y GIS Z GIS Reference Longitude Latitude 977810 046 D 022 001 М -70.265518 43.653883 Location Type Subdivision Code Subdivision Sub Code Related Persons Address(es) 1 645 CONGRESS STREET WEST Fire Zone **Inside Outside** District **General Location Inspection Area Jurisdiction Code Location Use Variance Use Zone Code** Code Code Code Code Code Code Code CENTRAL BUSINESS **DOWNTOWN** Historic DISTRICT 3 **BUSINESS** District DISTRICT **Structure Details** Structure: Loc id 000046388 Alt id 977810 **Occupancy Type Code:** Structure Type Code Structure Status Type Square Footage Estimated Value Address Commerical Mixed Use 6 0 645 CONGRESS STREET WEST Grit fees PM Longitude Latitude GIS X GIS Y GIS Z GIS Reference User Defined Property Value 0 0 М

Occupancy	Type Co	de:						
Structure 1	Type Code	Structure Statu	is Type Square Footag	e Estimated Value	Address	_		
CONVERSIO	N	6	0		645 CONGRESS STREET WEST	_		
Longitude	Latitude	GIS X GIS Y	GIS Z GIS Reference			User Defined Property	Value	
0	0	М						

Permit #: 20112158

Location Id	Struc	ture Descripti	on Pen	mit Status Permit Descri	iption Issue Da	ate Reissue Da	ate Expiration	Date	
7344	Ground Floor Re	tail Upper floor	s living space Final	Insp Comp add Chiller To r	roof 4/7/11		10/4/11		
				Inspec	tion Details				
Inspection Id	i Inspection T	ype Inspect	ion Result Status	Inspection Status Date	Scheduled Sta	rt Timestamp	Result Status	Date Final Inspection Flag	_
				Fae	s Details				
					<u> </u>				
Fee Code De	scription	Charge Amount	Permit Charge Adjustment	Permit Charge Adj Remark	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Payment Adj Comment
Fee Code De Historic Review Administrative	scription /	_	_	Permit Charge Adj	Payment		•		•
Historic Review	scription A	mount	_	Permit Charge Adj	Payment Date	Number	Amount		•

Permit Data

Permit #: 20112168

					Pern	nit Data				
Location Id	S	tructure Des	cription	Permit Stat	tus Permit Descrip	tion Issue Date	Reissue Date	Expiration Date	•	
7344	Ground Flo	or Retail Upper	floors living space	Initialized	Chiller On Roof				_	
				•	Inspect	ion Details				
Inspection I	d Inspect	ion Type In	spection Result S	tatus Inspe	ction Status Date	Scheduled Start	Timestamp R	esuit Status Date	Final Inspection Flag	•
Inspection I	d Inspect	ion Type In	spection Result S	tatus Inspe		Scheduled Start	Timestamp R	esuit Status Date	Final Inspection Flag	
Inspection I		Charge	spection Result S Permit Cha Adjustme	rge Pe		Details Payment	Receipt		Final Inspection Flag yment Adjustment Amount	Payment Ad

Job Summary Report Job ID: 2011-03-661-HVAC

Report generated on Apr 14, 2011 3:43:34 PM

Page 3

Fee Code Description	Charge	Permit Charge	Permit Charge Adj	Payment	Receipt	Payment	Payment Adjustment	Payment Adj
	Amount	Adjustment	Remark	Date	Number	Amount	Amount	Comment
Permit Fee								

Permit #: 20112782

					Pe	rmit Data					
Location Id		Structure	Description	Permit Status	Permit De	escription	Issue Date	Reissue Date	Expiration	Date	
7344	Ground F	loor Retail U	pper floors living space	Initialized	install Carrier (Chiller To Roof					
					Inspe	ction Detai	ls				
						CEIGII D COU					_
Inspection I	d Inspe	ction Type	Inspection Result S	tatus Inspecti				ımp Result St	atus Date	Final Inspection Flag	-
Inspection I	d Inspec	ction Type	Inspection Result S	tatus Inspecti	on Status Date			mp Result St	atus Date	Final Inspection Flag	- -
Inspection I Fee Cod Description	e	Charge Amount	Inspection Result S Permit Charge Adjustment	Permit	on Status Date	Scheduled S		Payment Amount		Final Inspection Flag ent Adjustment Amount	Payment Ad Comment

FILL IN AND SIGN WITH INK



APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

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To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

White - Inspection

Pink - Applicant's

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 643 Congress 5+ Name and address of owner of appliance BAYSIDE MAIN PORTCAND ME 04/01	Use of Building Date
PORTCAND ME 04/01 Installer's name and address AHH Energy S Pc Box 908 Sutrburagh Me	Telephone 207-823-1473
Location of appliance: Basement Floor Attic Roof	Type of Chimney: Masonry Lined Factory built
Type of Fuel: Gas Gil Solid Appliance Name: CARZIE CHILLER U.L. Approved Yes No	☐ Metal Factory Built U.L. Listing # ☐ Direct Vent Type UL#
Will appliance be installed in accordance with the manufacture's installation instructions? Yes No IF NO Explain:	Type of Fuel Tank Oil Gas
The Type of License of Installer: Master Plumber #	Number of Tanks Number of Tanks Distance from Tank to Center of Flame feet. Cost of Work: \$ 33.327.00 Permit Fee: \$ 860
Approved Fire: Ele.: Bldg.: Signature of Installer	Approved with Conditions See attached letter or requirement Inspector's Signature Date Approved
White - Inspection Yellow - File P	ink - Applicant's Gold - Assessor's Copy



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accordance: with the same of season, the familiary Code of the Location / CRL	Use of Building San 1-1-12-11
Installer's manufactured actions AAA Emergy 5	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
G Attic G Roof	Type of Chimney: Masonry Lined Pactory built NA
Type of Regit Gas Gibi G Solid Applicate Name: CARRES CHILLES	G Metal Factory Built U.L. Lighting
U.L. Approved Yes No Vill appliance be installed in apportance with the manufacture's installation instructions? Yes	Type of Fuel Tank O Oil
F NO Explain:	Gas Size of Tank N A
The Type of License of Installer: D. Mester Plumber # D. Solid Fuel # D. Oil #	Number of Tanks Distance from Tank to Center of Flame Cost of Work: 8_33.397.00 Permit Fee: 8_8(00)
Approved Fire: Ele.: Bldg.:	Approved with Conditions See attached letter or requirement Inspector's Signature Date Approved

Pink - Applicant's

Yellow - File

White - Inspection

Gold - Assessor's Copy