	D 111 T		Dos	mit No. DEDANT					
City of Portland, Maine	- Building or Use	Permit Application East (207) 874 871	1 ^{rei}						
Logation of Construction	1el. (207)874-870.	$5, \mathbf{rax.}(207) 674-671$			032 000001				
205 DADK AVE	Owner Name:		Owner	r Address: MAY 3	0 2006 ^{Phone:}				
295 FARK AVE	FIREHOUSE	FIVE	2951						
Business Name:	Contractor Name	2:	Contra	actor Address:					
	Avery Service	es, Inc.	$\frac{7 \text{ Th}}{2}$	omas Drive Weythrook	UKILAIN 29 77728687				
Lessee/Buyer's Name	Phone:		Permit	t Type:	Zone: BZ				
(PastUse:	Proposed Use:		Permi	it Fee: Cost of Work	: (CEODistrict:				
Commercial	Commercial in	nstall a Carrier		\$138.00 \$12,49	0.00 1				
	gas/electric ro	oftop unit	FIRE	DEPT: Approved	INSPECTION: Use Group: Type:				
Proposed Project Description				11/41	5/2006				
Proposed Project Description:			· /		1 1 A 1				
Install a Carrier gas/electric roo	oftop unit		Signat	ure:	Signature: All 11				
			PEDE	RICT (P:A.D.)					
			Actior	n: Approved Appr	roved w/Conditions Denied				
			Signat	ture:	Date:				
Permit Taken By:	Date Applied For:	Zoning Approval							
dmartin	05/ 1712006								
1. This permit application do	es not preclude the	Special Zone or Review	ws	Zoning Appeal	Historic Preservation				
Applicant(s) from meeting Federal Rules.	applicable State and	Shoreland		Variance	Not in District or Landmar				
2. Building permits do not in septic or electrical work.	clude plumbing,	Wetland		Miscellaneous	Does Not Require Review				
3. Building permits are void within six (6) months of th	if work is not started date of issuance.	Flood Zone		Conditional Use	Requires Review				
False information may inv permit and stop all work	se information may invalidate a building nit and stop all work			Interpretation	Approved				
		Site Plan		Approved	Approved w/Conditions				
				Denied	Denied				
		late:		Date:	Date:				

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 389 Congress Street. 04101	- Building or Use Permi Tel: (207) 874-8703. Fax: (t 207) 874-871 <u>6</u>	Permit No: 06-0734	Date Applied For: 05/17/2006	CBL: 052 C006001				
Location of Construction:	Owner Name:	0	Owner Address: Phone:						
295 PARK AVE	FIREHOUSE FIVE	2	95 PARK AVE						
Business Name:	Contractor Name:	C	ontractor Address:		Phone				
	Avery Services, Inc.	7	Thomas Drive W	estbrook	(207) 772-8687				
Lessee/Buyer's Name	Phone:	Pe]	ermit Type: HVAC						
Proposed Use:		Proposed	Project Description:						
Commercial install a Carrier g	gas/electric rooftop unit	Install a	Carrier gas/electr	ic rooftop unit					



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

	52 6006	>
	PERMIT ISSUED	
	MAY 3 0 2006	
L C	ITY OF PORTLAND	

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a pemit 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
Installer's name and address <u>Avery Services</u> Westbrook me 01092	hic 7 thomas Dure Telephone 207 - 772-8687 Fox 874-0933
Location of appliance: Basement Floor Attic Roof	Type of Chimney: Masonry Lined Factory built
Type of Fuel: Ø Gas Oil Solid Appliance Name: Carries Carries Leappoint U.L. Approved Yes No Will appliance be installed in accordance with the manufacture's installation instructions? No Will appliance be installed in accordance with the manufacture's installation instructions? No IF NO Explain: DEPT. OF BUILDING INSECTIVE OF PORTLAND, INAY 17 2006 The Type of License of Installer: MAY 17 2006 Oil # Oil # Oil # Oil # Oil # Other	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
Approved Fire:	Approved with Conditions See attached letter or requirement
Signature of Installer <u>Douchas</u> Cline White - Inspection Yellow - File Pi	nk Applicant's Gold - Assessor's Copy

AVERY SERVICES, INC. 7 Thomas Drive WESTBROOK, MAINE 04092 (207) 772-8687

FAX (207) 874-0933

TO: Firehouse Fivec/o J. Michael M. Taylor, M.D.295 Park AvenuePortland ME 04102

PHONE	DATE
775-3526	14/11/06
JOB NAME / LOCATION	
Rooftop unit replacement	
1 1	
JOB NUMBER	JOB PHONE
DCA	

1196

PRCPOSAL

Remove and dispose of the two (2) existing York rooftop units, as per EPA laws.

Supply and install manufacturer's adapter curbs into the existing roof curbs.

Supply and install two (2) Carrier 48TFE, 4-ton gas/electric rooftop units with economizer onto the new curbs.

Reconnect to existing services, ductwork, gas piping, power, control systems.

Supply and install a PVC condensate trap on each of the two (2) new rooftop units.

Price includes; Start up and test, freight, taxes, and permit.

EXCLUSIONS: Structural, roof work, electrical costs if require code/system upgrades, and adequacy of existing systems.

NOTE: Price shown below reflects 10% promotional discount.

We Propose hereby to furnish material and labor — complete in accordance with the above specifications, for the sum of:

 Twelve Thousand Four Hundred Ninety and 00/100 Dollars
 Bellars (%
 12,490.00
).

 Payment to be made as follows:
 Second Se

25% upon acceptance - Progress billing/net ten (10) days - All balances due upon substantial completion. If payment is not made as outlined above a revice enarge 5 2% per worth on the overdue balance plus all reasonable costs of collection between will be relid

All material is guaranteed to be as specified All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders and will become an extra charge over and above the estimate All agreements contingent upon strikes, accidents or	Authorized Signature Frees
delays beyond our control Owner to carry fire tornado and other necessary insurance Our workeis are fully covereo by Workers Compensationinsurance	ote This proposal may be withdrawn by us if not accepted within 14 days
Acceptance of $Proposal$ — The above prices specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above	Signature
Date of Acceprance	Signature
المحت المحت المحت المحت (المحت المحت المحت محت المحت المح - محت المحت المحت - محت المحت المحت - محت المحت المحت - محت	Reorder: or nabelcotti printed in u.s.a. B

<u>__of__/</u>

(For Duct layout see Sheetmetal Info, Pg2)

						** . ** *			:	:						ļ															
	-		_	<u>.</u>															-							İ		<u> </u>			••••••
			<u> </u>								-					+	+														
	-				-+														1			1									
												_		-+			+										<u> </u>				********
																										<u> </u>					
																ļ				<u> </u>	<u> </u>	<u> </u>									
																		<u> </u>		<u> </u>		1									
									_					_												l					
								<u>.</u>				—	-+-	-		·				<u> </u>	<u> </u>	<u> </u>				 					-
	ļ		_						_	_			_	_		ļ					<u> </u>					 				[
.					_					- <u> </u>						Ļ		<u> </u>													
I		·									+	<u> </u>	_			ļ			<u> </u>	 	<u> </u>										
.	<u> </u>		_		_					1					2	<u></u>				6											
	<u> </u>												_	CR V		<u> </u>	<u> </u>		<u> </u>	13	24								·		
			+	_					_		F	ДΓ			Ê	ļ				3	5										
	ļ	_						_			 			+		2				0									<u> </u>		
	ļ		_	_		_				_	<u> </u>							7	*												
								_				A							N.C.				0		3				·		
		<u> </u>			_						-	4			-[<u> </u>	-	<u> </u>	Car.	<u> </u>											
			<u> </u>		_			_	<u> </u>			<u> </u>					-	[·						
												ļ		_	[5 S	8														
									ļ	<u> </u>	ļ					40															
		ļ							ļ		 											·									
								<u> </u>			 	ļ																			
			ļ		ļ	_		<u> </u>			[<u> </u>		_																	
			ļ		ļ				ļ				-		<u>.</u>		<u></u>						_								
			<u> </u>						ļ	<u> </u>			<u> </u>											[]							
		ļ	ļ	<u></u>		ļ			ļ	ļ			ļ					[.										
				ļ		ļ		ļ	ļ	ļ					no	1								_							
				ļ	ļ	ļ		ļ				Same		<u>"</u>										_							
							ļ	<u> </u>					Ľ.																		
										ļ			ļ	_																	P
																								·							
										`																					

¥ f

ALEXANDER HUTCHEON Associates Engineers

 49 Falmouth Road

 Falmouth, Maine 04105

 Telephone (207) 781-3364

 Fax
 (207)781-3364

 Cell
 (207) 233-7662

Date:	May 16, 2006 Time: PM	
то:	MR. DOUG AVERTY	Fax No. 874-0933
_	AVERY SERVICES	
_	WESTBROCK, ME	
Re:		

<u>______</u> pages are being telecopied, including this cover page. Please notify us if you do not receive all pages.

NOTES:

FIRE HOUSE \$ 5 ROOF CALCS.

ALEXANDER HUTCHEON Associates, Engineers

a Watches By:

· 1

ALEXANDER HUTCHEON Associates Engineers

49 Falmouth Road Falmouth, Maine 04105 Telephone (207) 781-3364 Fax (207) 781-3364 Cell (207) 233-7662

May 16, 2006

Mr. Doug Avery Avery Services 7 Thomas Drive Westbrook, Maine

Re: New roof-top A/C units at 295 Park Ave., Portland

Dear Doug:

At your request I examined the roof framing at the former Fire House # 5, 295 Park Avenue, Portland, Maine, and I examined the locations of existing roof-top A/C units and the proposed locations of two new units.

As shown on the enclosed sketch of the roof framing, and on calculation sheets 1, 2 and 3, it is my opinion that the roof framing is adequate for the changes in loading.

Your questions and comments regarding this report are welcome.

Very truly yours,

ALEXANDER HUTCHEON Associates, Engineers

Lexander Autcheon

Alexander Hutcheon, P.E. President

Enclosures: Sketch of roof framing Calculations sheets 1, 2 and 3







5.437

-۵

NUNN N

٦ ۲

:

-

FIRE HOUSE 5: PARK AVE, PORTLAND

RAFTERS 13/4 × 91/4 @19" o.c.

ALEXANDER HUTCHEUN ASSOCIATES

ROOF FRAMING CAPACITY FOR NEW RAT A.C UNITS

SNOW LOAD

42 005

ALLOWABLE BENTING STRESS: EASTERN HEMLOCK *1

ALLOWABLE BENDING; MALLOW = 24.96(1725)/12 = 3587 *

SECTION MODULUS: (1/6)(1.75×9.25)2 = 24.9612

F = 1500 F=1., EF USE x 1.15 DOL = 1725 PS

CX

UNIF. LOAD = 1.503(51)+4 = 84.7 PLF SAY 85 R = .5(85)(9.986) = 424.4 # JOIST (a) w = 815 7 0.960 3,5 5.437 9.986 R1=443* $R_{E} = 469.5$ NO AT 5.215 Factor R. Mmay = 1153.4 # < 3587 # ALLOWADLE OK Joists (), C & ARE INDENTICAL HONDER (A) 120. 1 549.0 139.7 3.208(05)(.5)+469.5 = 609.2* 1870(85)(-5)+469.5 = 549.3* 576 -1508 1508 0.4 (0(05)(-5) + 469.5= 489.6 4.557 RE=817.3* PL 849.3 V=0 AT 2.109 From RL - Man - 1.007.6 5= 3(31.64) = 94.92 W3 f = 1007.6 (12)/94.92 = 127.4 mix 995 ALLOWING ستا ()



FIRE STA. 5; PARK AVE., HOTETLAND ALEXANDER HUTCHEON ASSOCIATES ENGINEERS 545 3 OF 3 ROOF FRAMING CAPACITY (CONT'D) 1344.7*{ 2 662.3 + 598.1) {13=682.4 + 578 D 38=1.3 {13=682.4 + 578 D 38=2.9 CENTER Pur 4x81/2x16'-0'19-4.030 W=12.75(5)(51)+10= 235,1 6.375 RTO HOR @ = 16.125 (.5) 335. 1)= 2702" 12.75 f= 598.1 HOD C R2=2217.5 CENTER LOAD : 598.1+ 2702 + 3500 R_L=1 VOO AT CENTER REVISE Mm = 12979.2 # RAFIEZS CANTILEVER D. 5 = (16)(B.5) = 72.25 12 we si f_ - 12979.2(12)/72.25= 2156 # 6.375 FI EASTERN HERLAL, SELECT STRUOT 1400 481.2 441.2 DOL = 1.15 F6 = 1610 FM 6.375(51X.5) - 401.2 = 27.08 2 BUISED I WITH CANTILLEVEIZED RAFTERS I W TO CENTCH BU- 2(87.08)+ 10 - 184. 7 R1= 2076.1 RE- 1732.8* += 598.1+ 16-20(184.2)= 2082.9 MMAG @ CENSELE 10,092 1484.8 f= 10,092 (12)/72.25 - 16760 > 1610 + 1 4 To eviers **~~**

Note: ALL PALOS PERSONNES WITH HPAI CX "SINRE BEAM" FEWERAM

1

Physical data — 48TF

- New f



A Damage

UNIT SIZE 48TF		E/F/H/M/N004	D/E/\$/G/H/K/L/M/N005	D/E/F/G/H/K/L/M/N006	D/E/F007	•
NOMINAL CAPACITY (tons)		3	4	5	6	•
OPERATING WEIGHT (1b) Unit Al/Al* Al/Cu* Cu/Cu*		460 465 466	470 Unit 476 U Ca	490 497 505	565 576 587	ĺ
Economizer EconoMi\$er+ Roof Curb†		50 115	50 115	50 115	50 115	
COMPRESSOR Quantity No. Cylinders (per Circuit) Oil (oz)		1 2 50	Reciprocating 1 2 50	1 2 50	Scroll 1 2 54	-
REFRIGERANT TYPE						-
Operating Charge (Ib-oz) Circuit 1 Circuit 2		4-4	6-6	6-14	9-0	_
CONDENSER COIL Rows Fins/in. Total Face Area (sq ft)		117 8.36	217 6.36	217 10.42	217 10.42	_
CONDENSER FAN Nominal Cfm QuantityDiameter (In.) Motor Hp Rpm watts Input (Total)		3500 122.0 ¼1100 325	4000 122.0 1/41100 325	4000 122.0 1/4 1100 325	4000 122.0 1/41100 325	_
EVAPORATOR COIL Rows Fins/in. Total Face Area (sq ft)		215 4.17	215 5.5	315 5.5	415 5.5	_
EVAPORATOR FAN Quantity_Size(in.)	Std Alt	110 x 10 110 x 10	110 x 10 110 x 10		11 <u>0</u> x 10	
Type Drive	High-Static Std Alt High-Static	110 x 10 Direct Belt Belt	110 x 10 Direct Belt Belt	Direct Belt Belt	110 x 10 Belt	
Nominal Cfm Maximum Continuous Bhp	Std Alt	1200 .34 1.20	1600 .75 1.20	2000 1.20 1.30/2.40**	2100 2.40	
Motor Frame Size	Std Alt High-Static	2.40 48 48 56	48 48 48 56	48 56 56	56 56 56	
Nominal Rpm High/Low (Direct Drive)	Std Alt High-Static	6601800	10751970	1075/970		6
Fan Rpm Range	Std Alt High-Static	760-1000 1075-1455	770-1175 1075-1455	875-1192 1300-1685	1 070-1460 	
Motor Bearing Type Maximum Allowable Rpm Motor Pulley Pitch Diameter Min/Max (in.)	Std	Ball 2100 1.9/2.9	Ball 2100 1.9/2.9	Ball 2100 2.4/3.4	Ball 2100 2.8/3.8	
Nominal Motor Shaft Diameter (in.)	High-Static Std Alt	2.8/3.8 1/2 1/2	2.8/3.8 1/2 1/2	3.4/4.4 1/2 5/8	3.414.4 5/8	
Fan Pulley Pltch Diameter (in.)	High-Static Std Alt	4.5	4.0	4.5 4.5	4.5	
Belt, Quantity. . TypeLength (in.)	Std Alt	1	1A34	1A39	1Ä40	
Pulley Center Line Distance (in.)	Std Alt High-Static	10.0-12.4	10.0-12.4	14.7-15.5	14.7-15.5	
Speed Change per Full Turn of Movable Pulley Flange (rpm)	Std Alt High-Static	48	70	80 60	80	
Movable Pulley Maximum Full Turns From Closed Position	Std Alt High-Static	56	5	55	5	
Factory Setting	Std		3		3	
Factory Speed Setting (rpm)	High-Static Std Alt High-Static	3 ¹ /2 856 1233	3 ¹ / ₂ 975	3 ¹ /2 1060 1396	31/₂ 1225 1396	
Fan Shaft Diameter at Pulley (in.)	ingri-Static	5/8	5/8	5/8	5/8	

LEGEND

Aluminum

Aluminum
 Brake Horsepower
 Copper

AI Bhp **Cu**

'Evaporator coil fin material/condenser coil fin material. Contact your local representative for details about coated fins.
 'Weight of 14-in. roof curb.
 '' Single phase/three-phase.
 'H Rollout switch lockout is manually reset by interruptingpower to unit or resetting thermostat.

#48TFG, TFH, and TFK units are California compliant three-phase high heat models.
 "Three-phase standard high heat models have heating input values as shown. Single-phase standard high heat models have one-stage heating with heating input values as follows:
 48TFF004 — 115,000 Btuh 48TFF005.006 — 150,000 Btuh 48TFF005.006 — 150,000 Btuh 111 (Trans 2000)
 #11California SCAQMD compliant Low NO, models have combustion products that are controlled to 40 nanograms per joule or less.
 ¶Steady State Efficiency is 80% on all units except 48TFK004, which is 81%.

NOTE: High-static motor not available on single-phase units.

48TF

ф.





- -- . - ---

;

1.04/01

0,00