Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

B... INSPECTION

Please Read Application And Notes, If Any, Attached

PERMIT

Permit Number: 050771

PERMIT ISSUED

JUL - 5 2005

CITY OF PORTLAND

This is to certify that Fraternal Order Of Eagles/A... Service...

has permission to install a Trane Gas / Electric ...U on Ro... of bui...

AT 180 St John St ... 068 D001001

provided that the person or persons, firm or ...poration ...epting this permit shall comply with all of the provisions of the Statutes of ...ine and of th... ...ances of the City of Portland regulating the construction, maintenance and u... of buildings and st...ctures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

N...fication ... inspec...n must g...n and w...n permi...n procu... b...re this ...ding or ...t thereo... la...ed or c... ...losed-in... H...R NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____
Department Name

6/28/05

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
05-0771	PERMIT ISSUED	068 D001001

JUL - 5 2005

CITY OF PORTLAND

Location of Construction:	Owner Name:	Owner Address:	Phone:
180 St John St	Fraternal Order Of Eagles	184 Saint John St	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Avery Services, Inc.	7 Thomas Drive Westbrook	2077728687
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Eagles Club	Eagles Club/ install a Trane Gas / Electric RTU on Roof of building	$174.00	$16,960.00	2

FIRE DEPT: ☐ Approved ☒ Denied

N/A

Signature:

INSPECTION:
Use Group: V Type: Heating
IBC 2003

Signature:

Proposed Project Description:
install a Trane Gas / Electric RTU on Roof of building

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	06/15/2005

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
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
Date: 6/28/05	Date:	Date: 6/28/05

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 - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
05-0771	06/15/2005	068 D001001

Location of Construction:	Owner Name:	Owner Address:	Phone:
180 St John St	Fraternal Order Of Eagles	184 Saint John St	
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:
Eagles Club/ install a Trane Gas / Electric RTU on Roof of building	install a Trane Gas / Electric RTU on Roof of building

Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 06/28/2005

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 06/28/2005

Note: **Ok to Issue:** ☑

1) An inspection of the installation of the steel shall be conducted by a Professional engineer.

FILL IN AND SIGN WITH INK

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 PORTLAND EAGLES Club (773-9448)
184 St. John Street Portland, Me

Installer's name and address AVERY SERVICES, INC

Telephone 772-8687
FAX 874-0933

Location of appliance:

- ☐ Basement ☐ Floor
- ☐ Attic ☑ Roof

Type of Fuel:

- ☑ Gas ☐ Oil ☐ Solid

Appliance Name: TRANE Gas/Electric RTU

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 # PNT 1341
- ☐ Other_____

Type of Chimney:

- ☐ Masonry Lined
  Factory built NA
- ☐ Metal
  Factory Built U.L. Listing # NA
- ☑ Direct Vent
  Type _____ UL#_____

Type of Fuel Tank

- ☐ Oil
- ☑ Gas – NORTHERN UTILITIES (Nat Gas)

Size of Tank NA

Number of Tanks NA

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

Cost of Work: $_____

Permit Fee: $ _____

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Approved with Conditions

☐ See attached letter or requirement

_____ Inspector's Signature

_____ Date Approved

Signature of Installer _____

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

FILL IN AND SIGN WITH INK

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 68 D 1 Use of Building _____ Date 6-13-5

Name and address of owner of appliance PORTLAND EAGLES DAVID DIPIETRO
184 ST. JOHN ST PORTLAND, ME

Installer's name and address AVERY SERVICES
7 THOMAS DR. WESTBROOK ME Telephone 772 8687

Location of appliance:
- ☐ Basement ☐ Floor
- ☐ Attic ☒ Roof

Type of Fuel:
- ☒ Gas ☐ Oil ☐ Solid

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 _____

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

DEPT. OF BUILDING INSPECTION CITY OF PORTLAND, ME JUN 13 2005 RECEIVED

Type of Fuel Tank
- ☐ Oil
- ☐ Gas

Size of Tank _____

Number of Tanks _____

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

Cost of Work: $ 16,960.00

Permit Fee: $ 174.00

Approved

Fire: _____
Ele.: _____
Bldg.: _____

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature _____ Date Approved

Signature of Installer _____

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

PROPOSAL

915

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

FAX (207) 874-0933

TO: Portland Eagles Club
184 St. John Street
Portland ME 04101

PHONE	DATE
(207) 773-9448	4/29/05

JOB NAME / LOCATION
Rooftop unit replacement at Portland Eagles on St. John Street

JOB NUMBER	JOB PHONE
RBH #579963	

We hereby submit specifications and estimates for:

Avery Services pleased to submit a quote to replace your existing rooftop unit with a new Trane rooftop unit. The scope of work is as follows:

Disconnect and dispose of your existing rooftop unit.

Provide a crane to remove the old unit and set the new unit.

Reconnect to existing gas piping, low voltage control system and existing disconnect. Transition as necessary to connect to existing duct work.

Start up and test.

EXCLUSIONS: Adequacy of existing systems.

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

Sixteen Thousand Nine Hundred Sixty and 00/100 Dollars dollars ($ 16,960.00).

Payment to be made as follows:

25% upon acceptance - Progress billing/net ten (10) [illegible] balances due upon substantial completion.

If payment is not made as outlined above, a service charge of [illegible] per month on the overdue balance plus all reasonable costs of collection, including attorney's fees will be paid.

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 delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

Authorized Signature: PRESIDENT

Note: This proposal may be withdrawn by us if not accepted within 30 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: 5/5/05

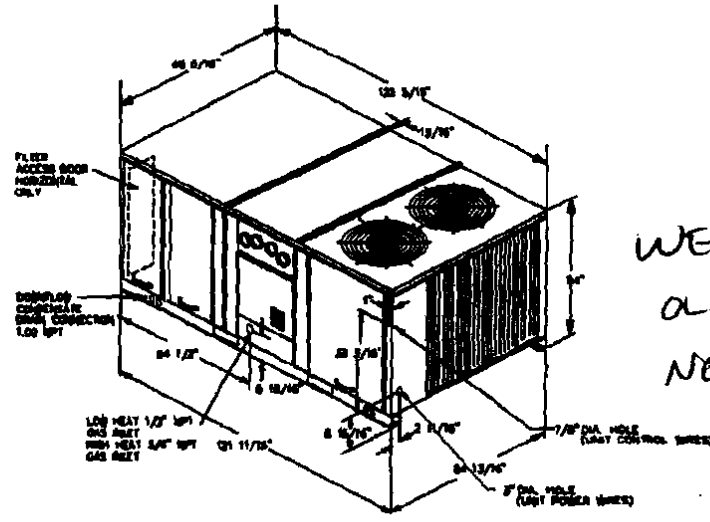
Signature:

Date of Acceptance:

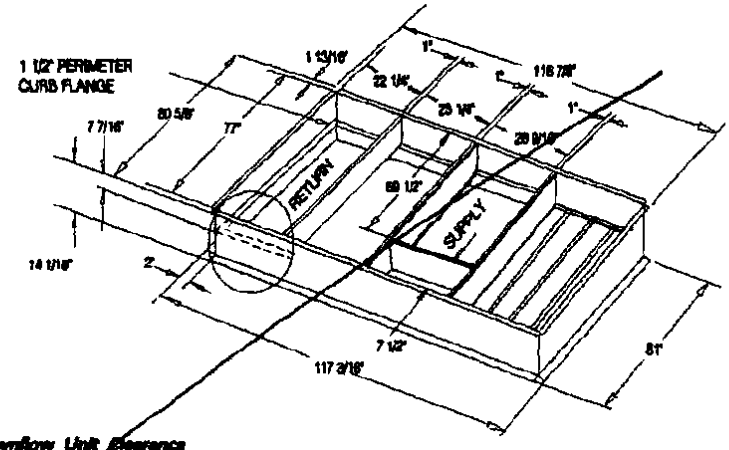
TRANE

Dimensional Data

All dimensions are in inches.

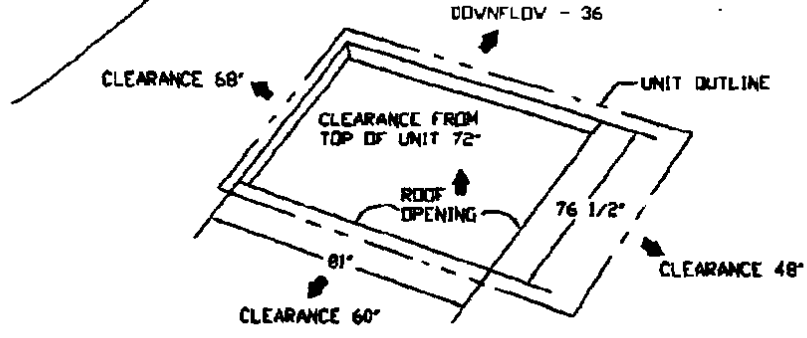


WEIGHT
OLD 2,645lb
NEW 2,645lb



Note:
Duct flanges mount 7-7/16" down inside the curb on the 1-1/2" curb flanges. See recommended duct dimensions on the next page.
Roofcurb is intended for downflow use only.

Downflow Unit Clearance



ALEXANDER HUTCHEON ASSOCIATES
ENGINEERS

314 CONGRESS STREET
PORTLAND, MAINE 04101
TELEPHONE (207) 774-0484
FAX (207) 774-0454

May 18, 2005

Mr. Jim Small
The Fraternal Order of Eagles
184 St. John Street
Portland, Maine 04102

Re: Support of air conditioning unit

Dear Mr. Small:

At your request, I have examined the proposed location of the air conditioning unit, on the roof of the northerly section of your building, and I have measured the various components of the roof framing system, in order to certify, for the Portland Code Enforcement Officer, that the roof structure has the capacity to support the unit safely.

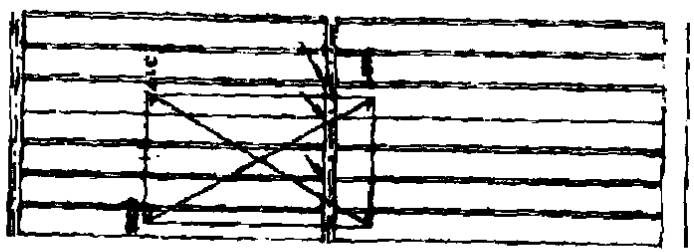
As shown on the enclosed sketch, the roof is framed with full 2 by 8 joists, spanning about 14 feet, between trussed girders, which span the 27-ft. width of the building.

The trussed girders consist of a 5-1/2" by 9" timber top chord, a 1-3/4" diameter steel lower chord, and vertical timber struts at about 8'-10" from each end.

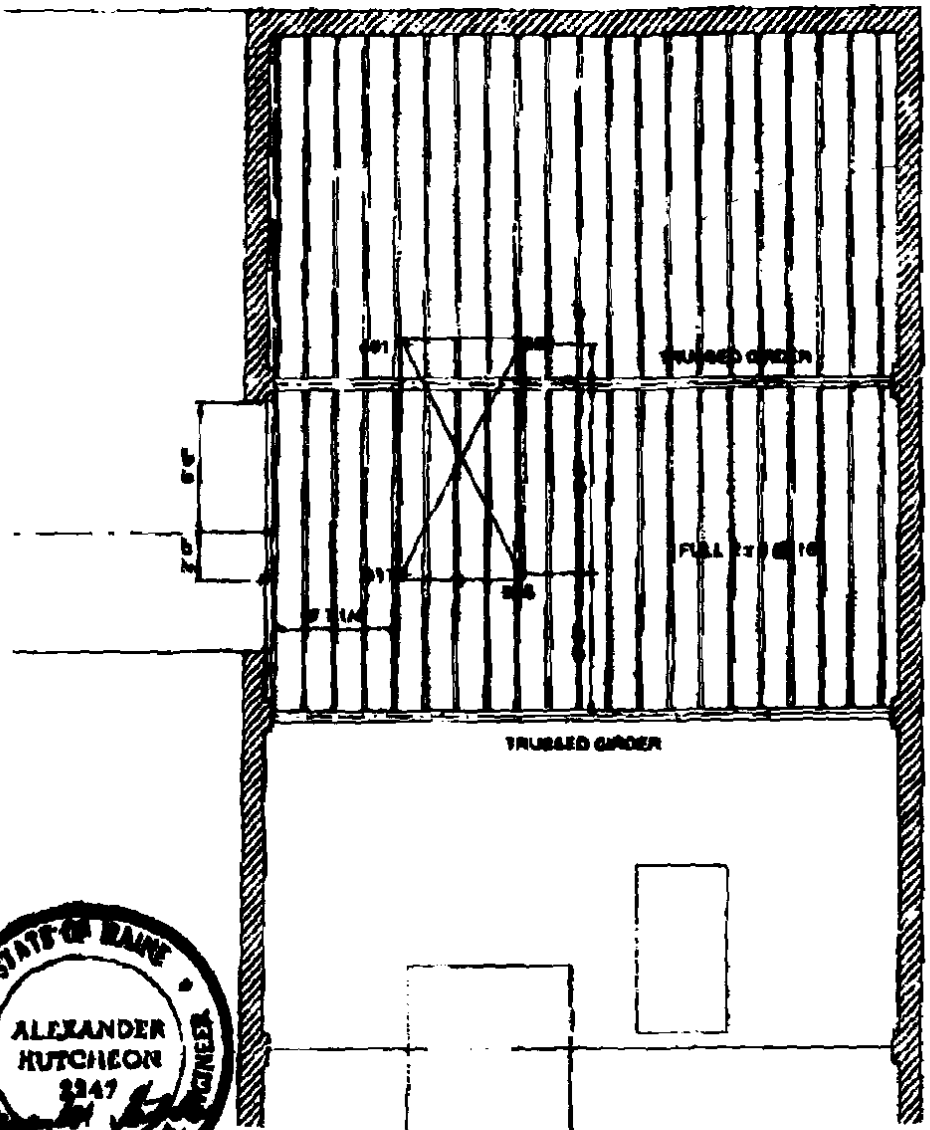
I have determined, from careful and accurate calculations, and loads furnished by Rob Hall, of Avery Services, that the proposed air conditioning unit would cause the top chord of the trussed girder to be overstressed by about 69 per cent, and the lower chord to be overstressed by about 20 per cent. Accordingly, the location of the new unit can not be determined to be safe.

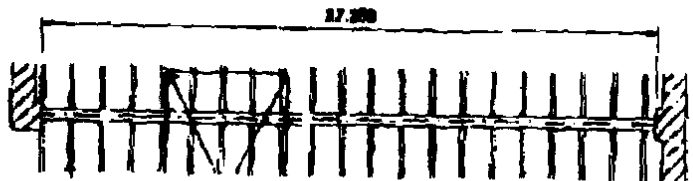
It would not be feasible to reinforce the trussed girder, because of the way in which it is fabricated.

An alternate solution would be to install two 28-ft. steel beams, above the trussed girders, and then frame a support between these two beams, at the desired location of the air conditioning unit.

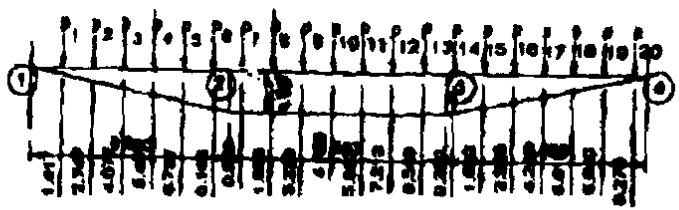


CHECK JOISTS





PLAN AT TRUSSED GIRDER



SECTION AT TRUSSED GIRDER

5/16/05

ROOF PLAN

AIR CONDITIONER SUPPORT
PORTLAND EAGLES
184 ST. JOHN ST.
PORTLAND, ME.

Alexander Hutchison Associates, Engineers
518 Congress St. Portland, ME 04101
Tel. (207) 774-0484 Fax: (207) 774-0484

MAY 16, 2005

Avery Services Inc

Fax# 207-874-0933 Phone# 207-772-8687
7 Thomas Dr Westbrook, ME 04092

Attention: JIM

From: ROB
Date: 5/31/05

HOPE THIS IS
WHAT YOU NEEDED
IF NOT CALL ME
AND LET ME KNOW.

Mr. Jim Small
The Fraternal Order of Eagles

May 18, 2005
page 2 of 2

Re: Support of air conditioning unit

It is possible tht Rob Hall may be able to find an alternate location.

Your questions and comments regarding this report are welcome.

Very truly yours,

ALEXANDER HUTCHEON Associates,
Engineers

Alexander Hutcheon

Alexander Hutcheon, P.E.
President

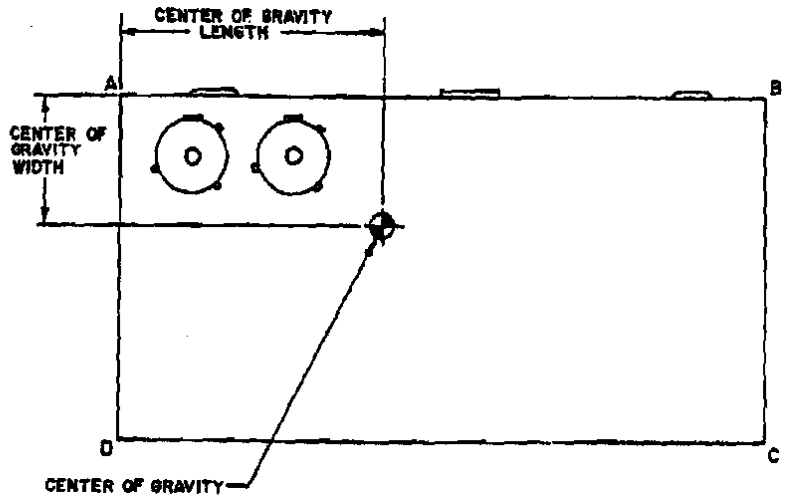
Enclosures: Sketch of partial roof plan
Calculation sheets 1, 2 and 3
Invoice for professional services

Weights (12½ - 25 Tons)

Table W-3 — Maximum Unit And Corner Weights (Lbs) and Center Of Gravity Dimensions (In.)

Tons	Unit Model No.	Maximum Weights (Lbs)[2] Shipping	Net	Corner Weights (Lbs)[1] A	B	C	D	Center of Gravity (In.) Length	Width
12½	YC*150D/YC*151C	1826/1915	1458/1547	496/523	373/383	254/271	336/370	46/45	29/30
	YC*151C (Reheat Units)	1870/1958	1502/1591	506/534	384/394	265/282	347/381	46/45	29/30
15	YC*180B/YC*181C	2033/2464	1665/2005	600/696	395/504	266/345	404/470	43/52	29/35
	YC*181C (Reheat Units)	2097/2528	1729/2069	611/697	406/515	277/356	415/481	43/52	29/35
17½	YC*210C/YC*211C	2189/2547	1821/2088	618/701	463/538	317/369	424/480	46/53	29/35
20	YC*240B/YC*241C	2547/2645	2088/2186	738/751	526/568	343/373	481/494	51/53	34/34
	YC*241C (Reheat Units)	2567/2665	2108/2206	743/756	531/573	348/378	486/499	51/53	34/34
25	YC*300B/YC*301C	2541/2650	2082/2191	721/755	552/569	361/373	458/495	53/53	33/34

Notes:
1. Corner weights are given for information only. 12½-25 ton must be supported continuously by a curb or equivalent frame support.
2. Weights are approximate. Horizontal and downflow unit and corner weights may vary slightly.



*Indicates both downflow and horizontal units.

TRANE

Mechanical Specifications

General
The units shall be dedicated downflow or horizontal airflow. The operating range shall be between 115°F and 0°F in cooling as standard from the factory for all units. Cooling performance shall be rated in accordance with ARI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-22, and 100 percent run tested to check cooling operation, fan and blower rotation and control sequence, before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be UL listed and labeled, classified in accordance to UL 1995/CAN/CSA No. 236-M90 for Heat Pumps. Canadian units shall be CSA Certified.

Casing
Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 500 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. In order to ensure a water and air tight seal, service panels shall have lifting handels and no more thatn three screws to remove. All exposed vertical panels and top covers in the indoor air section shall be insulated with a 1/2 inch, 1 pound density foil-faced, fire-resistant, permanent, odorless, glass fiber material. The base of the downflow unit shall be insulated with 1/2 inch, 1 pound density foil-faced, closed-cell material. The downflow unit's base pan shall have no penetrations within the perimeter of the curb other than the raised $1^1/_8$ inch high supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base of the unit shall have provisions for forklift and crane lifting.

Unit Top
The top cover shall be one piece, or where seams exist, double hemmed and gasket sealed to prevent water leakage.

Filters
Two inch standard filters shall be factory supplied on all units. Optional two inch pleated media filters shall be available.

Compressors
All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of nameplate voltage. Internal overloads shall be provided with the scroll compressors. All models shall have crankcase heaters, low and high pressure control as standard.

Refrigerant Circuits
Each refrigerant circuit shall have independent fixed orifice or thermostatic expansion devices, service pressure ports, and refrigerant line filter driers factory installed as standard. An area shall be provided for replacement suction line driers.

Evaporator and Condenser Coils
Internally finned, 3/8" copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to 200 psig and pressure tested to 450 psig. All dual compressor units shall have intermingled evaporator coils. Sloped condensate drain pans are standard. Patent-pending 1+1+1 condenser coil, permanently gapped for easy cleaning is available.

Gas Heating Section
The heating section shall have a drum and tube heat exchanger design using corrosion resistant steel components. A forced combustion blower shall supply premixed fuel to a single burner ignited by a pilotless hot surface ignition system. In order to provide reliable operation, a negative pressure gas valve shall be used that requires blower operation to initiate gas flow. On an initial call for heat, the combustion blower shall purge the heat exchanger 45 seconds before ignition. After three unsuccessful ignition attempts, the entire heating system shall be locked out until manually reset at the thermostat. Units shall be suitable for use with natural gas or propane (field installed kit) and shall also comply with California requirements for low NOx emissions. The 12½-25 tons shall have two stage heating.

Outdoor Fans
The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor(s) shall be permanently lubricated and shall have built-in thermal overload protection.

Indoor Fan
Units above shall have belt driven, FC centrifugal fans with adjustable motor sheaves. Units with standard motors shall have an adjustable idler-arm assembly for quick-adjustment of fan belts and motor sheaves. All motors shall be thermally protected. Oversized motors shall be available for high static application. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).

June 10, 2005

Mr. Mike Nugent, Code Enforcement Officer
City of Portland, Maine
389 Congress Street
Portland, Maine 04101

Re: New supports for Air Conditioning Unit
Portland Eagles Club
184 St John Street

Dear Mr. Nugent:

I prepared the enclosed drawing, "Air Conditioning Unit Support" dated May 26, 2005, after examining the conditions at the site, and performing structural calculations for the new steel.

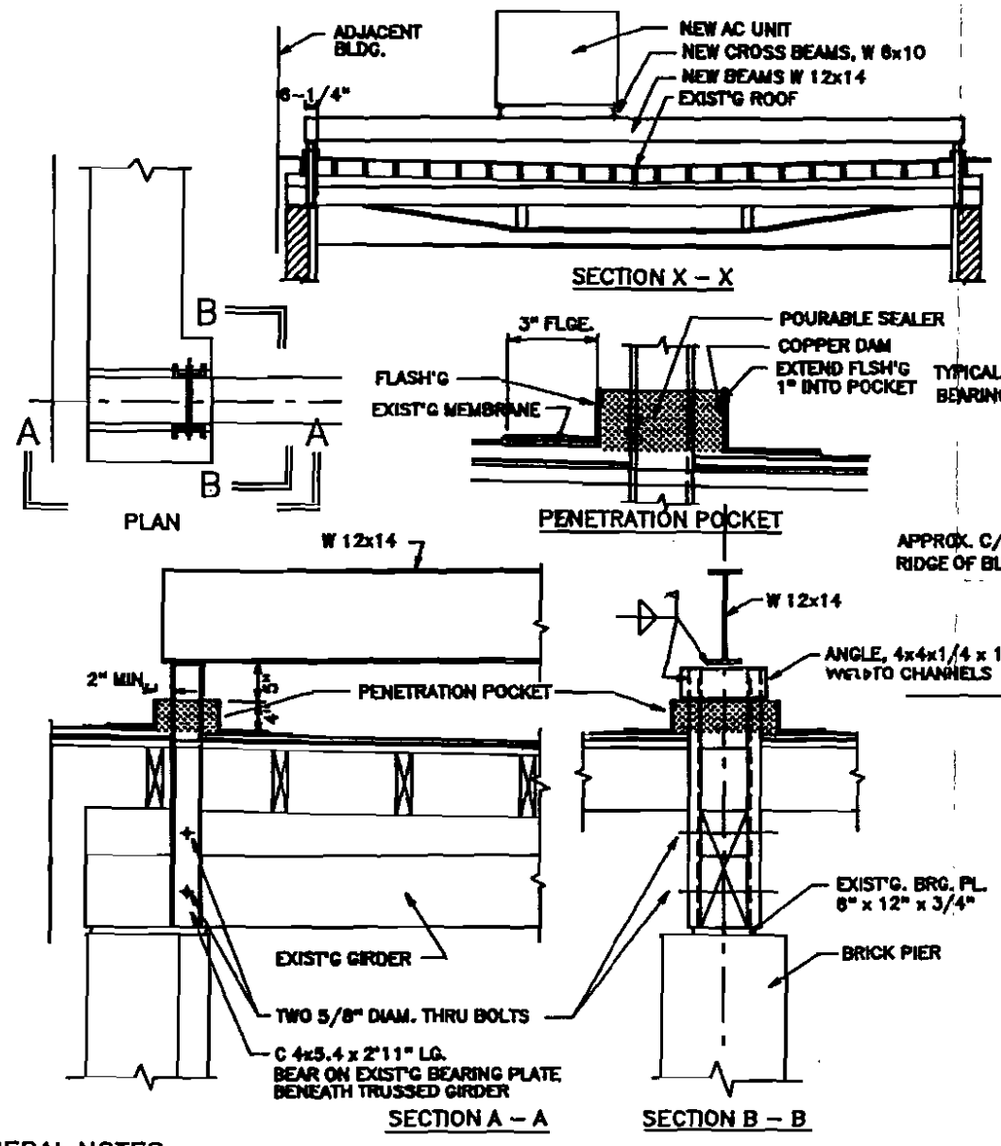
Very truly yours,

ALEXANDER HUTCHEON Associates,
Engineers

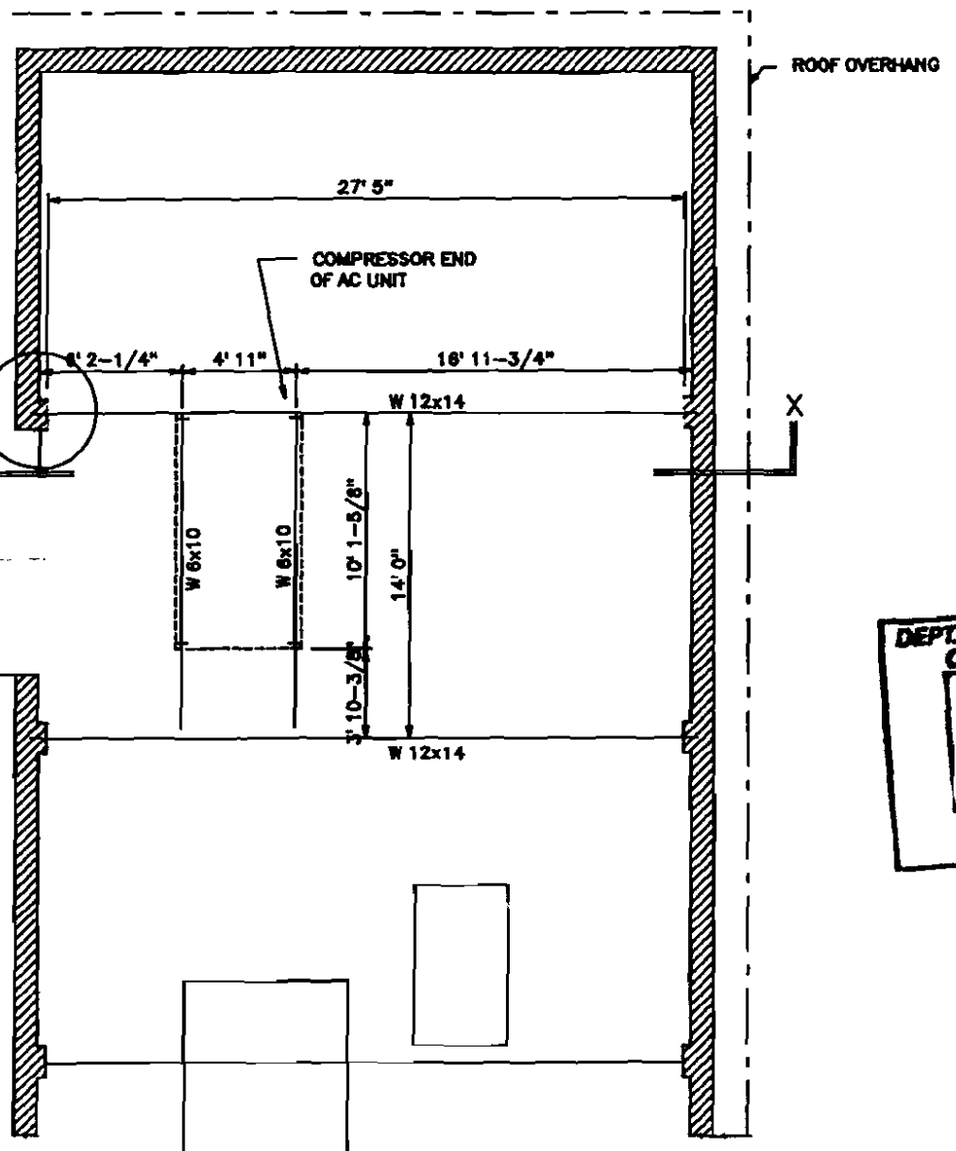
Alexander Hutcheon, P.E.
President

Enclosures: Drawing "Air Conditioning Unit Support"

184 St John



TYPICAL BEAM BEARING DETAILS



ROOF PLAN

GENERAL NOTES:

1. GENERAL:

THE CONTRACTOR SHALL OBTAIN A BUILDING PERMIT, AND SHALL COMPLY WITH LOCAL, CODE ENFORCEMENT REQUIREMENTS.

THE CONTRACTOR SHALL FURNISH THE OWNER A CURRENT CERTIFICATE OF HIS INSURANCE BEFORE BEGINNING ANY WORK.

THE CONTRACTOR SHALL LAY OUT THE WORK IN ACCORDANCE WITH THE EXISTING CONDITIONS AT THE SITE, AND HE SHALL VERIFY, FOR HIMSELF, BY MEASURMENTS, ALL EXISTING CONDITIONS, DIMENSIONS AND CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS, AND SHALL BE SOLELY REPONSIBLE FOR THE EXECUTION OF THE WORK, INCLUDING COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS. HE SHALL BE RESPONSIBLE FOR PROTECTION OF THE EXISTING BUILDING; FOR SAFETY AND HEALTH CONDITIONS AT THE JOB SITE, AND FOR PROTECTION OF THE OCCUPANTS OF THE BUILDING AND THE GENERAL PUBLIC. THE ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR THE EXECUTION OF THE WORK.

2. THE CONTRACTOR SHALL PROTECT THE EXISTING ROOF MEMBRANE FROM DAMAGE, INCLUDING CUTS, ABRASIONS, BURNS FROM WELDING, AND EXPOSURE TO OIL AND GREASE. THE ROOF SHALL BE KEPT WATER TIGHT AT ALL TIMES. CUTTING, PATCHING AND FLASHING SHALL BE DONE BY A QUALIFIED ROOFER, IN A MANNER WHICH WILL MAINTAIN THE BOND ON THE ROOF.

3. STRUCTURAL STEEL SHALL BE NEW, ASTM A-36, MILL FINISH, AND SHALL BE FABRICATED TO MEASUREMENTS FURNISHED BY THE CONTRACTOR. FIELD WELDING SHALL BE BY CERTIFIED WELDERS

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
JUN 28 2005
RECEIVED

ISSUE DATE	AIR CONDITIONING UNIT SUPPORT	DWG. NO.
MAY 26, 2005	PORTLAND EAGLES BUILDING	1
REV. DATE	184 ST. JOHN STREET	OF 1
	PORTLAND, MAINE	

ALEXANDER HUTCHEON Associates, Engineers
519 Congress Street Portland, ME 04101
(207) 774-6484
Fax (207) 774-6484

STATE OF MAINE
ALEXANDER HUTCHEON
2247
REGISTERED PROFESSIONAL ENGINEER
5/26/05