

City of Portland, Maine - Building or Use Permit Application

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

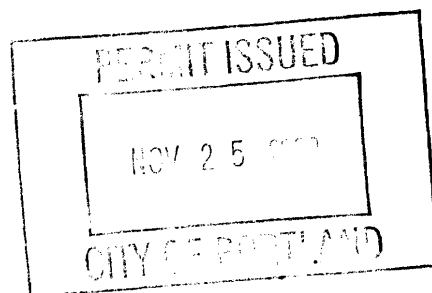
Permit No: 08-1472	Issue Date: 11/24/08	CBL: 197 B018001
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Location of Construction: 1412 CONGRESS ST	Owner Name: BRADLEY REALTY CO	Owner Address: P.O. BOX 20	Phone:
Business Name:	Contractor Name: HVAC Services, Inc.	Contractor Address: 73 Bradley Drive Westbrook	Phone: 2078544822
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: B-2

Past Use: Commercial "Tim Hortons"	Proposed Use: Commercial "Tim Hortons" - Install a Trane Tux direct vent Furnace	Permit Fee: \$230.00	Cost of Work: \$20,840.00	CEO District: 3
Proposed Project Description: Install a Trane Tux direct vent Furnace		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied TO NPPA 90A	INSPECTION: Use Group: A-2 Type: SB IBC-2003 IMC-2003	
		Signature: (Gregg) CAPS		Signature: CL 11/24/08
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: ldobson	Date Applied For: 11/19/2008	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>	<p>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetland</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/></p> <p>Date: <i>ok</i> 11/19/08</p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date: _____</p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in District or Landmark</p> <p><input type="checkbox"/> Does Not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>g</i></p>
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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.

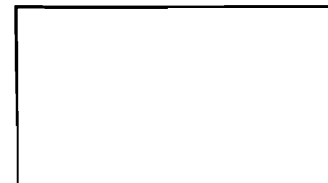
SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE



FILL IN AND SIGN WITH INK

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 177 B 018 Use of Building Restaurant Date 11/17/08

Name and address of owner of appliance _____

1412 Congress St. Portland, Me.

Installer's name and address HVAC SERVICES INC.

73 Bentley Drive Westbrook, Me 04092 Telephone 207-854-4822

Location of appliance:

- Basement Floor
 Attic Roof

Type of Fuel:

- Gas Oil Solid

Appliance Name: TRANE TXC FURNACE

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 # PNT6365
 Other _____

Type of Chimney:

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

Type of Fuel Tank

- Oil
 Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 20840

Permit Fee: \$ 230

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Approved with Conditions

- See attached letter or requirement

[Signature]

Inspector's Signature

11/24/08

Date Approved

Signature of Installer [Signature]

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Permit No: 08-1472	Date Applied For: 11/19/2008	CBL: 197 B018001
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Business Name:	Contractor Name: HVAC Services, Inc.	Contractor Address: 73 Bradley Drive Westbrook	Phone: (207) 854-4822
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Commercial "Tim Hortons" - Install a Trane Tux direct vent Furnance	Proposed Project Description: Install a Trane Tux direct vent Furnance
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Dept: Zoning	Status: Approved	Reviewer: Marge Schmuckal	Approval Date:	Ok to Issue: <input checked="" type="checkbox"/>
Note:				
Dept: Building	Status: Approved with Conditions	Reviewer: Chris Hanson	Approval Date: 11/24/2008	Ok to Issue: <input checked="" type="checkbox"/>
Note:				
1) Maintain proper setback(s) from property lines/buildings and proper clearances from verticle openings when direct venting.				
2) The appliance shall be installed in accordance with the IMC 2003 and NFPA 211				
3) The installation must comply with the State of Maine Gas Regulations.				
4) Separate permits are required for any electrical, plumbing, HVAC or exhaust systems. Separate plans may need to be submitted for approval as a part of this process.				
Dept: Fire	Status: Approved with Conditions	Reviewer: Capt Greg Cass	Approval Date: 11/20/2008	Ok to Issue: <input checked="" type="checkbox"/>
Note:				
1) Install shall comply with all manufacture's specifications.				
2) Any cutting or welding operations require a seperate permit from the Fire dept.				

DESIGN LOADS

BUILDING CODE: INTERNATIONAL BUILDING CODE 2006

FLOOR LIVE LOAD (SLAB ON GRADE):	100 PSF
MEZZANINE LIVE LOAD:	50 PSF
ROOF DEAD LOAD:	
ROOF DEAD LOAD:	20 PSF
ROOF DEAD LOAD RESISTING UPLIFT:	20 PSF
ROOF LIVE LOAD:	
MINIMUM ROOF LIVE LOAD:	20 PSF
DESIGN ROOF LIVE LOAD:	20 PSF
ROOF SNOW LOAD (ASCE 7-05):	
GROUND SNOW LOAD (Pg) = 50 PSF	
MIN. FLAT-ROOF SNOW LOAD (P _f min.) = 35 PSF	
RAIN ON SNOW SURCHARGE = N/A	
SNOW EXPOSURE FACTOR (Ce) = 1.0	
SNOW LOAD THERMAL FACTOR (Ct) = 1.0	
SNOW LOAD IMPORTANCE FACTOR (I) = 1.0	
ALL APPLICABLE EFFECTS DUE TO SNOW DRIFTING.	

WIND LOADS (ASCE 7-05)

BASIC WIND SPEED (3 SECOND GUST) = 100 MPH
WIND LOAD IMPORTANCE FACTOR = 1.0
WIND EXPOSURE CATEGORY C FOR MAIN WINDFORCE-RESISTING SYSTEM
INTERNAL PRESSURE COEF. = 0.18
WIND DESIGN PRESSURES
1. 16.2 psf. FOR WINDWARD WALLS (END ZONE) (TMFRS)
2. 5.6 psf. FOR LEeward WALLS (END ZONE) (TMFRS)
3. 0.0 psf. FOR WINDWARD PARAPET (TMFRS)
4. 0.0 psf. FOR LEeward PARAPET (TMFRS)
5. 5.0 psf. FOR SIDE WALLS (TMFRS)
6. 4.6 psf. ROOF UPLIFT (FIELD) (TMFRS)
7. 6.5 psf. ROOF UPLIFT (END ZONE) (TMFRS)
8. 23.8 psf. FOR COMPONENTS AND CLADDING (WALLS)
9. 24.4 psf. FOR COMPONENTS AND CLADDING (CORNERS)
10. 0.0 psf. FOR COMPONENTS AND CLADDING (PARAPET-FIELD), 0.0 psf. (PARAPET-CORNER)
11. 21.9 psf. ROOF COMPONENTS AND CLADDING (ROOF UPLIFT-FIELD)
12. 25.7 psf. ROOF COMPONENTS AND CLADDING (ROOF UPLIFT-EAVE/RIDGE)
13. 25.7 psf. ROOF COMPONENTS AND CLADDING (ROOF UPLIFT-CORNERS)
14. 37.2 psf. OVERHANG COMPONENTS AND CLADDING (UPLIFT), 37.2 psf. (OVERHANG CORNERS) (UPLIFT)
15. 20.1 psf. DOWNWARD (ALL ZONES)

SEISMIC DESIGN CRITERIA (ASCE 7-05)

SEISMIC OCCUPANCY CATEGORY II
SEISMIC IMPORTANCE FACTOR, I _s = 1.0
MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, S _a = 31.7%
MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S ₁ = 7.70%
SITE CLASS = D
FIVE-PERCENT DAMPED DESIGN SPECTRAL RESPONSE ACCELERATION AT 0.2 SECOND PERIOD, S _d = 0.327
FIVE-PERCENT DAMPED DESIGN SPECTRAL RESPONSE ACCELERATION AT 1.0 SECOND PERIOD, S _{d1} = 0.123
SEISMIC DESIGN CATEGORY = B
SEISMIC-FORCE-RESISTING SYSTEM: BEARING WALL, ORDINARY PLAIN MASONRY SHEAR WALL
DESIGN BASE SHEAR, V = 0.218 H KIPS
SEISMIC RESPONSE COEFFICIENT C _s = 0.218
RESPONSE MODIFICATION FACTOR R = 1.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
SPECIAL LOADS:
INTERIOR PARTITIONS: 5 PSF
HANDRAILS: 50 PLF / 200 LBS
FROST DEPTH (BELOW GRADE): 4'-0"

MASONRY

CONCRETE BLOCK DESIGN AND CONSTRUCTION SHALL CONFORM TO 'BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES', ACI 530-02/ASCE 5-02/TMS 402-02.

MASONRY MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS:

- HOLLOW LOAD BEARING CONCRETE BLOCK: ASTM C-90, GRADE NI
- MORTAR: ASTM C-270, TYPE S
- MINIMUM COMPRESSIVE STRENGTH = 1800 PSI AT 28 DAYS
- MORTAR: ASTM C-270, TYPE M
- MINIMUM COMPRESSIVE STRENGTH = 2500 PSI AT 28 DAYS (USED FOR BELOW GRADE WORK)
- GROUT: ASTM C-476
- MINIMUM COMPRESSIVE STRENGTH = 2000 PSI AT 28 DAYS
- MASONRY REINFORCEMENT: ASTM A-62, GALVANIZED
- MASONRY PRISM STRENGTH: F_m = 1500 PSI
- BAR REINFORCING ASTM A618, GRADE 60

PRIOR TO DELIVERY OF MASONRY UNITS TO THE JOB SITE, FURNISH TO THE OWNER AFFIDAVITS FROM AN APPROVED TESTING LABORATORY CERTIFYING THAT ALL UNITS CONFORM TO THEIR RESPECTIVE ASTM REQUIREMENTS.

GROUT ALL CAVITIES CONTAINING REINFORCEMENT IN LIFTS NOT TO EXCEED 4'-0".

LABORATORY PREPARED MIXES SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH ASTM C-270. FIELD MORTAR SHALL BE TESTED BY AN APPROVED TESTER IN ACCORDANCE WITH ASTM C-780 TWO SETS OF THREE MORTAR CUBES SHALL BE TAKEN DIRECTLY FROM THE MIXER FOR EACH DAY OF MASONRY WORK. TEST THE CUBES AT 28 DAYS. ACCEPTANCE OF THE MORTAR SHALL BE AT THE DISCRETION OF THE ENGINEER.

PROVIDE STANDARD DUR-O-WALL OR EQUIVALENT REINFORCEMENT AT EVERY SECOND BLOCK COURSE IN ALL WALLS UNLESS MORE RESTRICTIVE REQUIREMENTS ARE NOTED.

CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE INCLUDED IN MORTAR OR GROUT MIX, EXCEPT WHEN APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. NO ANTI FREEZE COMPOUNDS SHALL BE USED TO LOWER THE MORTAR'S FREEZING POINT.

REINFORCED MASONRY, WHERE VERTICAL BARS ARE TO BE GROUTED INTO CORES, THE FOLLOWING REQUIREMENTS APPLY:

- PROVIDE DOWELS FROM FOOTING, SAME SIZE AND SPACING AS WALL BARS, LAP 12 INCHES MINIMUM WITH WALL BAR. EMBED INTO FOOTING 4 INCHES.
- PROVIDE A CONTINUOUS VERTICAL CAVITY, AT LEAST 2' X 3' IN SIZE, FREE OF MORTAR DROPPINGS.
- PROVIDE REBAR ALIGNMENT DEVICES AT A MAXIMUM SPACING OF 96 BAR DIAMETERS (MINIMUM OF 2 PER BAR).
- LAP PER SCHEDULE.
- ALL REINFORCEMENT MUST BE INSTALLED AND SECURELY ANCHORED IN PLACE PRIOR TO PLACEMENT OF GROUT.
- MAXIMUM HEIGHT OF GROUT LIFT = 4'-0".

NO EXTERIOR MASONRY SHALL BE LAID WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN 40 DEGREES FAHRENHEIT, UNLESS THE RECOMMENDATIONS SPECIFIED BY THE INTERNATIONAL MASONRY INDUSTRY ALL WEATHER COUNCIL IN THEIR PUBLICATION 'RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY' ARE STRICTLY FOLLOWED.

THE MASONRY CONTRACTOR SHALL PROVIDE BRACING TO WITHSTAND HORIZONTAL PRESSURES AS REQUIRED BY THE BUILDING CODE AND LOCAL ORDINANCE.

REINFORCED CONCRETE

ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE 'AMERICAN CONCRETE INSTITUTE BUILDING CODE' (ACI 318) AND WITH 'SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS' (ACI 301) LATEST EDITIONS.

ALL NORMAL WEIGHT CONCRETE (145 PCF) SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI, (3500 PSI FOR SLABS).

ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED AS RECOMMENDED BY ACI 318.

TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN CHAPTER 16 OF ACI-301.

REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A-618, GRADE 60. WELDABLE STEEL SHALL CONFORM WITH ASTM A706, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. ALL REINFORCING AND ACCESSORIES SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318 AND 318R.

PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.

THE GENERAL CONTRACTOR SHALL CHECK WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND THE SUB-CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR PROPER LOCATION.

CONSTRUCTION JOINTS:

- CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE STRUCTURAL ENGINEER. ALL CONSTRUCTION JOINTS ARE TO BE KEPT. KEY WAYS SHALL BE CONSTRUCTED PER PLANS.
- CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH'S IN.
- CONCRETE EXPOSED TO EARTH OR WEATHER:
 - 1/2 IN.
 - 2 IN.

JOINT DEVICES AND FILLER MATERIALS

- JOINT FILLER (ASTM D1752): CLOSED CELL MOLDED VINYL FOAM, RESILIENCY RECOVERY OF 98 PERCENT IF NOT COMPRESSED MORE THAN 50 PERCENT OF ORIGINAL THICKNESS.
- CONSTRUCTION JOINT DEVICES: INTEGRAL GALVANIZED STEEL, FORMED TO TONGUE AND GROOVE PROFILE, WITH REMOVABLE TOP STRIP EXPOSING SEALANT TROUGH, KNOCKOUT HOLES SPACED AT 6 INCHES, RIBBED STEEL SPIKES WITH TONGUE TO FIT TOP SCREED EDGE.
- SEALANT AND PRIMER: SEALANT NO. 2.1 A2.

STRUCTURAL STEEL

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC 'SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS' AND THE AISC 'CODE OF STANDARD PRACTICE'.

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

BEAMS (W-SHAPE)	ASTM A992, Fy = 50 KSI
ANCHOR RODS	F1554, GR 36
HIGH STRENGTH STRUCTURAL BOLTS	A325-N U.N.C.
STRUCTURAL SHAPES AND PLATES	A36 (MIN.)
STRUCTURAL TUBES	A500 GRADE B
STRUCTURAL PIPES	ASTM A53, Fy = 35 KSI

ALL WELDING ELECTRODES SHALL BE E70-XX. ALL SHOP AND FIELD WELDING SHALL BE MADE IN ACCORDANCE WITH A.I.W.S. D1.1-06 'CODE FOR WELDING IN BUILDING CONSTRUCTION' AND SHALL BE MADE BY CERTIFIED WELDERS.

SPECIFICATIONS WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D11.1 UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION TO BE GOVERNED BY:

- AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
- AISC CODE OF STANDARD PRACTICE.
- STRUCTURAL WELDING CODE, AWS D1.1-06 OF THE AMERICAN WELDING SOCIETY.
- SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

CONNECTIONS:

- CONNECTIONS TO BE DESIGNED BY THE FABRICATOR TO DEVELOP FULL STRENGTH OF MEMBERS OR FORCES SHOWN ON THE PLANS, WHICHEVER GOVERNS. FOLLOW INSTRUCTIONS ON DRAWINGS FOR GENERAL ARRANGEMENT OR PARTICULAR DETAILS. FIELD CONNECTIONS TO BE BOLTED. SHOP CONNECTION TO BE WELDED OR BOLTED.
- FULL PENETRATION AND PARTIAL PENETRATION FIELD WELDS IN MATERIAL OVER 5/16 INCH THICK SHALL BE SUBJECT TO NONDESTRUCTIVE TESTING (OTHER THAN VISUAL INSPECTION) BY AN INDEPENDENT LABORATORY.
- ALL BOLTS IN BRACED FRAMES AND BOLTS IN SHEAR CONNECTIONS USED IN CONJUNCTION WITH FULL PENETRATION FLANGE WELDS SHALL BE SLIP CRITICAL (FRICTION) TYPE.

PAINT:

- FINISHED PRODUCT CONCEALED FROM VIEW. DO NOT PAINT ANY STEEL WHICH WILL BE LOCATED OUT OF VIEW.

GALVANIZING: ALL SHELF ANGLES, LINTELS IN EXTERIOR WALLS, AND ALL EXTERIOR STEEL EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED.

SUBMITTAL DRAWINGS:

- SHOP DRAWINGS SHOWING LAYOUT AND DETAIL NECESSARY FOR DETERMINING FIT AND PLACEMENT IN THE BUILDING SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW.
- PRODUCTION: DO NOT PROCEED WITH PRODUCTION UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED BY THE ARCHITECT AND/OR ENGINEER.

MISCELLANEOUS

- PROVIDE HOLES FOR OTHERS. IF OPENING IS NOT SHOWN ON THE STRUCTURAL DRAWINGS, OBTAIN PRIOR APPROVAL.
- STEEL SUPPORTING OR CONNECTED TO HVAC AND OTHER EQUIPMENT AND ROOF OPENINGS AS SHOWN ON THE DRAWINGS IS SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL RECONCILE EXACT SIZE AND LOCATION BEFORE PROCEEDING WITH HIS WORK.
- GROUT UNDER BEARING PLATES, BASE PLATES, AND SETTING PLATES TO BE NON-SHRINK TYPE.
- STEEL BELOW GRADE TO BE PROTECTED BY A MINIMUM OF 3 INCHES OF CONCRETE.
- PROVIDE 1/4 INCH THICK SETTING PLATES FOR ALL BEAMS BEARING ON MASONRY WHICH DO NOT REQUIRE A BEARING PLATE.
- PROVIDE SHOP WELDED ANCHORS FOR ATTACHMENTS OF MASONRY. SPACING TO BE 16 INCHES ON COLUMNS AND BEAMS.
- PROVIDE HEAVY WASHER AT ALL ANCHOR BOLTS.
- FINISH ENDS OF ALL COLUMNS, STIFFENERS AND ALL OTHER MEMBERS IN DIRECT BEARING.
- PROVIDE BOLT HOLES FOR JOISTS BOLTED TO BEAMS AND ATTACHMENT FOR JOINING EXTENDED JOIST BOTTOM CHORDS.
- MINIMUM BEARING BEARING ON MASONRY = 8 INCHES UNLESS NOTED OTHERWISE.
- EMBEDMENT LENGTH OF EXPANSION BOLTS INTO SOLID MASONRY OR CONCRETE SHALL BE AS FOLLOWS:
 - 1/2 INCH DIAMETER BOLTS --- 3 1/2 INCHES EMBEDMENT
 - 3/4 INCH DIAMETER BOLTS --- 5 INCHES EMBEDMENT

STRUCTURAL LUMBER

ALL GRADES OF LUMBER SHALL BE RATED IN ACCORDANCE WITH THE NATIONAL INSPECTION BUREAU (SPIB), OR THE WESTERN ASSOCIATION (WAPA), LUMBER GRADES SHA MAXIMUM MOISTURE CONTENT OF 19%.

- SOUTHERN PINE NO. 2.
- DOUGLAS FIR-LARCH NO. 2.
- HEM-FIR NO. 2.

EXTERIOR WALL SHEATHING 1/2" OR 5/8" E PLUGGED EXPOSURE 1 WITH EXTERIOR GLUE RATING OF 40/20. USE 10d COMMON NAILS AT INTERMEDIATE SUPPORTS.

SPECIFICATIONS UNLESS SPECIFICALLY SHOWN OTHER AND ERECTION SHALL BE GOVERNED BY THE LATEST:

- NATIONAL DESIGN SPECIFICATION FOR STRESS-
- U.S. PRODUCT STANDARD PS-1 FOR SOFTWOOD INDUSTRIAL.

CONNECTIONS:

- JOISTS TO BEAMS - 16 GA. GALVANIZED STD. OTHERWISE.
- BOLT HEADS AND NUTS BEARING ON W.C. STANDARD CUT WASHERS. ALL WOOD IN MASONRY SHALL BE PRESSURE TREATED.
- MINIMUM NAILED CONNECTIONS FOR WOOD ACCORDANCE WITH THE LOCAL BUILDING BUILDING CODE, 2006 EDITION, IF NO OTHER.
- CONNECTORS SHOWN ON THE DETAILS A WRITTEN APPROVAL BY ENGINEER REQUIRED.
- DOUBLE TOP PLATE - TYPICAL END JOI BE OFFSET AT LEAST 24 INCHES O/C.

MISCELLANEOUS:

- USE ONE LINE OF SOLID BLOCKING OR CROSS B.
- MAX. FOR ALL ROOF RAFTERS, USE SOLID B/LC RAFTER BEARING, U.N.O.
- USE SOLID BLOCKING AT MID-HEIGHT FOR ALL INTERIOR BEARING PARTITIONS, U.N.O.
- USE DOUBLE STUDS UNDER BEAM AND LINTEL OTHERWISE.
- ALL WOOD IN DIRECT CONTACT WITH CC TREATED. ALL CONNECTIONS TO PRESSURE GALVANIZED.

AIR DEVICE SCHEDULE																				
TAG	TYPE				BORDER				THROW				MATERIAL		ACCESSORY		SYMBOL KEY - FIRST LETTER: S-SUPPLY R-RETURN E-EXHAUST SECOND LETTER: D-DIFFUSER R-REGISTER G-GRILLE			
	DIFFUSER	REGISTER	GRILLE	DIFFUSER LINEAR	SURFACE MTD	LAY-IN	1-MAY	2-MAY	3-MAY	4-MAY	STEEL	ALUMINUM	PLASTIC	DAMPERS	EQUAL GRID	DIFFUSER	MODEL NO. ①	SIZE		REMARKS
																		FACE	NECK	
SD-1	●				●					●	●						ARNS1024x24L	24"x24"	10"φ	③ ④ ⑤ ⑥ ⑦ ⑧
SD-2	●				●					●	●						ARNS0612x12L	12"x12"	6"φ	③ ④ ⑤ ⑥ ⑦ ⑧
SD-3	●				●					●	●						ARNS0612x12L	12"x12"	6"φ	③ ④ ⑤ ⑥ ⑦ ⑧
SD-4	●				●					●	●						ARNS1024x24L	24"x24"	12"φ	③ ④ ⑤ ⑥ ⑦ ⑧
RR-1		●				●					●						51FB5524x24L	24"x24"	16"φ	③ ④ ⑤ ⑥ ⑦ ⑧
RR-2			●		●						●						5155H5	12"x12"	8"φ	③ ④ ⑤ ⑥ ⑦ ⑧
RR-3			●		●						●						5155HL	24"x24"	8"φ	③ ④ ⑤ ⑥ ⑦ ⑧
ER-1		●				●					●						ARNS0612x12L	12"x12"	6"φ	③ ④ ⑤ ⑥ ⑦ ⑧

- ① BASED ON NAILOR
 ② UNLESS SHOWN OTHERWISE ON DWGS.
 ③ VERIFY ARRANGEMENT WITH CEILING TYPE (LAY-IN, SURFACE MOUNT, ETC.)
 ④ FURNISH SQUARE TO ROUND NECK TRANSITION PIECE WHERE REQUIRED.
 ⑤ DAMPERS TO BE RADIAL OPPOSED BLADE
 ⑥ AIR DEVICE TO BE STANDARD OFF-WHITE FINISH
 ⑦ PROVIDE WITH NAILOR MODEL #DFA12x12 D/H FRAME
 ⑧ EQUAL UNITS BY CARNES SERIES 4300-4, HART AND COOLEY SERIES FFD, AND ANEMOSTAT SERIES PRIO ARE ACCEPTABLE. NO SUBSTITUTIONS PERMITTED ON CORPORATE OWNED STORES.

MECHANICAL EQUIPMENT SCHEDULE																		
UNIT NO.	MFR. MODEL NO.	CFM	O.A. CFM	EXT. S.P.	COOLING DATA			MOTOR			HEATING DATA			FILTERS	MCA	MOCP	REMARKS	
					TOTAL COOLING MBH	SENSIBLE COOLING MBH	WATTS	HP	R.P.M.	VOLTS	STAGES	HEAT OUTPUT MBH	HEAT INPUT MBH					
AHU-1	LENNOX GS1HP-60D-135/CH33-60D-2F	2025	525	0.5'	62.6	47.7	--	1	--	120	1	2	132	123	2'	①	20	
AHU-2	LENNOX GS1HP-60D-135/CH33-60D-2F	2025	525	0.5'	62.6	47.7	--	1	--	120	1	2	132	123	2'	①	20	
AHU-3	LENNOX GS1HP-60D-135/CH33-60D-2F	2025	525	0.5'	62.6	47.7	--	1	--	120	1	2	132	123	2'	①	20	

- ① BLOWER MOTOR DRAWS LESS THAN 12 AMPS.

REMOTE CONDENSER SCHEDULE								
UNIT NO.	MFR. MODEL NO.	COOLING DATA		MOTOR		MCA	MOCP	REMARKS
		COOLING CAPACITY MBH	EFF. SEER	VOLTS	PHASE			
CU-1	LENNOX TSA06054N42Y	63.5	13.0	208	3	21.3	35	
CU-2	LENNOX TSA06054N42Y	63.5	13.0	208	3	21.3	35	
CU-3	LENNOX TSA06054N42Y	63.5	13.0	208	3	21.3	35	

OUTSIDE AIR REQUIREMENT SCHEDULE						
ROOM NAME / NO.	ASHRAE OUTSIDE AIR REQUIREMENTS				SYSTEM MARK	ACT OA CFM / UNIT
	OCCUPANT CLASS	SQ. FT.	OCCUPANT LOAD	CFM PER OCCUPANT		
DINING	DINING ROOMS	785	46	20	AHU-1#2	1050
KITCHEN	KITCHEN (COOKING)	836	6	15	AHU-3	525
				TOTAL:		1575
TOILET (WOMEN)	TOILET	55	1	† 75	EF-4	150
TOILET (MEN)	TOILET	66	1	† 75		
				TOTAL:		150

* OCCUPANCY IS BASED OFF OF ACTUAL OCCUPIED NUMBERS AS INDICATED ON ARCHITECTURAL DRAWINGS.
 ** CFM / SQ. FT.
 † EXHAUST

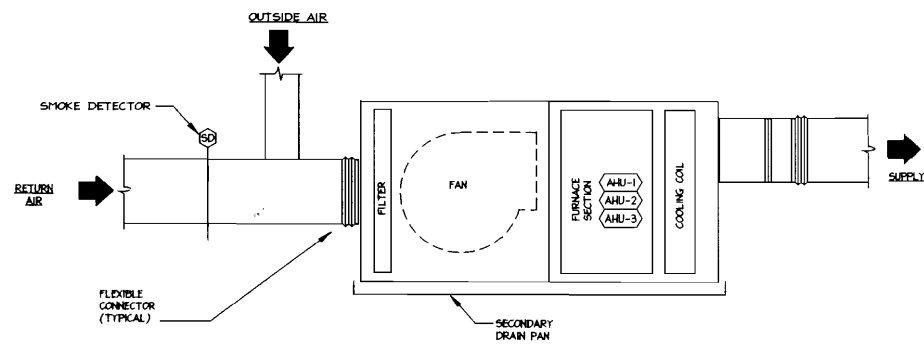
AIR BALANCE SCHEDULE					
MARK	SUPPLY AIR	RETURN AIR	OUTSIDE AIR	EXHAUST AIR	RESULTING PRESSURE
AHU-1	2025	1500	525	0	+525
AHU-2	2025	1500	525	0	+525
AHU-3	2025	1500	525	0	+525
EF-1	----	----	---	-300	-300
EF-2	----	----	---	-300	-300
EF-3	----	----	---	-150	-150
EF-4	----	----	---	-300	-300
EF-5	----	----	---	-500	-500
TOTALS	6075	4500	1575	-1550	+25

MARK	MO. NUM.
H-1	AEROLA # ADH
H-2	AEROLA BAGEL HOOD
H-3	AEROLA DISH-WASH HOOD
H-4	AEROLA SOUP HOOD

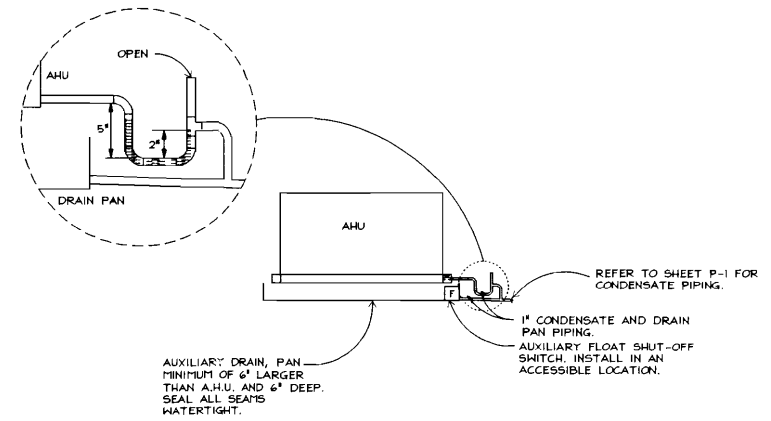
① ALL DUCTWORK ACCORDING TO CODES.
 ② FINAL BALANCE PERFORMED SHEET FURNISHED.
 ③ EXHAUST AIR ALL HOODS TO TRANSITION

UNIT NO.	MFR. MODEL NO. ①	TYPE	C.F.M.
EF-1	JENCO FAN TXD1025SC	ROOF DIRECT DRIVE	300
EF-2	JENCO FAN TXD1025SC	ROOF DIRECT DRIVE	300
EF-3	JENCO FAN LPD 6	ROOF DIRECT DRIVE	150
EF-4	JENCO FAN TXD1025SC	ROOF DIRECT DRIVE	300
EF-5	JENCO FAN TXD1025SC	ROOF DIRECT DRIVE	500

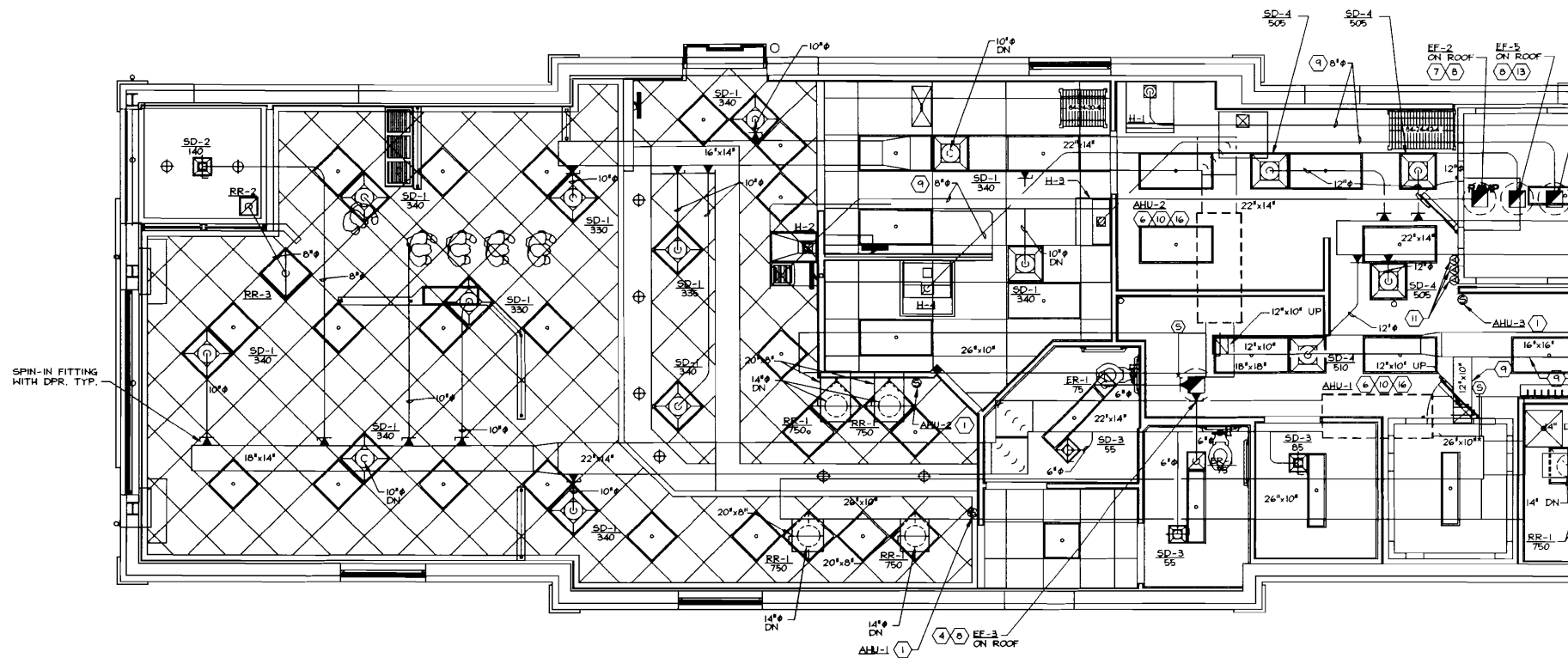
- ① FANS WILL BE SUPPLIED AS PART OF...
 ② PROVIDE WITH DISCONNECT SWITCH.
 ③ PROVIDE WITH SPEED CONTROL
 ④ INTERLOCK WITH AIR HANDLER UNITS



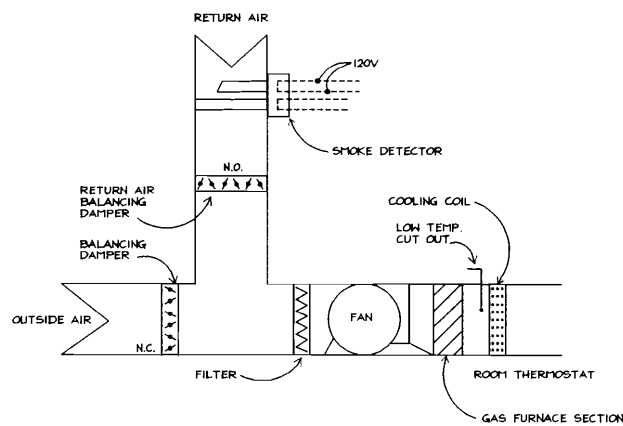
AHU DETAIL
NTS



AHU CONDENSATE TRAP
NTS



HVAC PLAN
1/4"=1'-0"

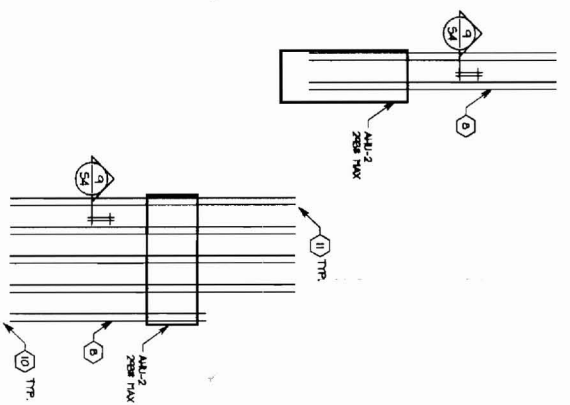


NOTE:
VERIFY ACTUAL COIL CONNECTIONS WITH UNIT MANUFACTURER.

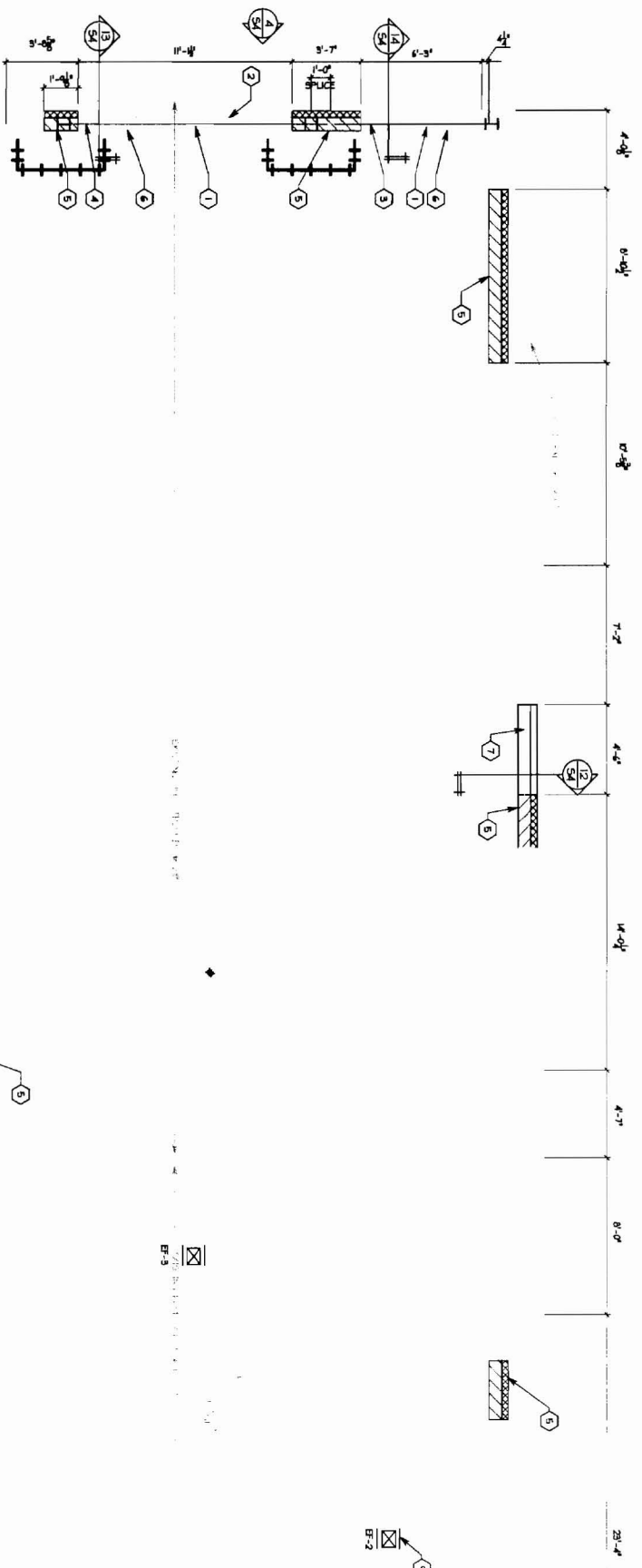
CONTROL DIAGRAM
NTS

SYMBOLS & ABBREVIATIONS LEGEND

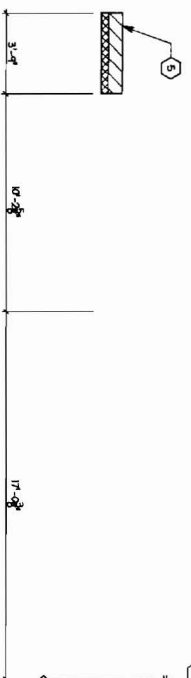
⊕	THERMOSTAT	CONTR	CONTRACTOR	15	48"x4"
⊙	SENSOR	COORD	COORDINATE	ADJL	CONT
⊗	ANNUNCIATOR	CABINET	CABINET UNIT	NEED	NEED
⊕	HUMIDISTAT	HEATER	HEATER	16	AHU
⊕	DUCT SMOKE DETECTOR	DIFF	DIFFUSER	MOUN	REFE
⊕	DUCT OFFSET	DISC	DISCONNECT	INFORM	
⊕	SUPPLY DUCT - UP	DN	DOWN		
⊕	SUPPLY DUCT - DN	DPR	DAMPEN		
⊕	RA OR EXH DUCT UP	EA	EACH		
⊕	RA OR EXH DUCT DN	EC	ELECTRICAL CONTRACTOR		
⊕	ELBOW TURNING VANES	EX	EXISTING		
⊕	FIRE DAMPER (F.D.)	EXH	EXHAUST		
⊕	MANUAL BALANCE DAMPER	F DPR	FIRE DAMPER		
⊕	TRANSITION	FLEX	FLEXIBLE		
⊕	SUPPLY DIFFUSER	FLR	FLOOR		
⊕	RETURN GRILLE	GC	GENERAL CONTRACTOR		
⊕	ROUND DUCT	HC	HEATING CONTRACTOR		
⊕	EXHAUST GRILLE	HP	HORSEPOWER		
⊕	SPIN-IN FITTING	MAX	MAXIMUM		
⊕	SPIN-IN FITTING W/ MAN BAL DPR	MCA	MAX CIRCUIT AMPACITY		
AB	ABOVE	MECH	MECHANICAL MANUFACTURER		
A/C	AIR CONDITIONING	MIN	MINIMUM		
AD	ACCESS DOOR	MOCIP	MAX OVERCURRENT PROTECTION		
AFF	ABOVE FINISHED FLOOR	HTD	HUNG		
AHU	AIR HANDLING UNIT	NTS	NOT TO SCALE		
ARCH	ARCHITECT	OA	OUTSIDE AIR		
BDD	BACKDRAFT DPR	PC	PLUMBING CONTRACTOR		
BEL	BELOW	RA	RETURN AIR		
BLDG	BUILDING	RTU	ROOFTOP UNIT		
CFM	CUBIC FEET PER MINUTE	SA	SUPPLY AIR		
CLG	CEILING	TV	TURNING VANES		
CONT	CONTINUATION	TYP	TYPICAL		
		WH	WATER HEATER		
		W/	WITH		



AMU
203



⑤ TRP
 EF-2
 EF-5 EF-4



ROOF FRAMING PLAN

SCALE 1/8" = 1'-0"