

HVAC PLAN
SCALE: 1/8" = 1'-0"

NOTES

- 1 - ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
- 2 - SEE ALL OTHER DRAWINGS AND WALGREENS SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.
- 3 - NOT USED.
- 4 - ALL FRESH AIR INTAKES ON ROOF SHALL BE LOCATED A MINIMUM OF 5'-0" AWAY FROM ANY EXHAUST DUCT, BLOWER DISCHARGE, PLUMBING VENT, ETC.
- 5 - HVAC ROOF-TOP UNIT TO INCLUDE FLEXIBLE CONNECTIONS, TURNING VANES, AND VIBRATION ELIMINATORS, AS REQUIRED. OUTSIDE AIR INTAKE TO BE SIZED FOR A MINIMUM OF 100% OUTSIDE AIR FOR ECONOMIZER SYSTEMS.
- 6 - ALL DUCTWORK TO BE GALVANIZED SHEET METAL. (LINED DUCTWORK WILL NOT BE ACCEPTED)
- 7 - ALL HVAC SUPPLY AND RETURN AIR DUCTS SHALL HAVE 1/2" EXTERNAL INSULATION. (OR MORE IF CODE REQUIRES)
- 8 - EACH HVAC UNIT TO HAVE ITS OWN CONTROLS. SEE DRAWING M2.2 FOR HVAC CONTROL WIRING DIAGRAM.
- 9 - PROVIDE CONDENSATE DRAIN (CD) WITH TRAP, AT EACH HVAC UNIT. SEE DRAWING PU FOR CONDENSATE PIPING.
- 10 - ALL HVAC SYSTEMS TO BE BALANCED BY AN INDEPENDENT CERTIFIED AIR BALANCE CONTRACTOR WITH A MINIMUM OF 5 YEARS EXPERIENCE (UNLESS MECHANICAL CONTRACTOR IS AUTHORIZED TO BALANCE BY WALGREENS), AFTER COMPLETION OF WORK.
- 11 - SEE SHEET A13 FOR EXACT LOCATION OF RTU.
- 12 - PROVIDE FLUE TO ROOF (WITH WEATHER CAP) FOR GAS FIRED WATER HEATER (IF APPLICABLE). SEE DETAIL 3/P21.
- 13 - EQUIPMENT MANUFACTURER SHALL PROVIDE ON EACH NEW WALGREEN STORE, FACTORY SUPERVISED 'CHECK, TEST & START' SERVICE, UTILIZING STANDARD WALGREEN FORMS AS PROVIDED BY FACILITIES PLANNING AND DESIGN DEPARTMENT. HVAC CONTRACTOR SHALL VERIFY COMPLIANCE WITH PLANS AND SPECIFICATIONS AND SHALL FORWARD TO THE WALGREEN CO., COMPLETED C.T.S. FORMS, ALONG WITH THREE COPIES OF SERVICE AND INSTALLATION MANUALS, PARTS LIST AND ALL RELATED WARRANTIES. SUBMITTALS SHALL BE IN BOOK FORM AND APPLICABLE TO ACTUAL EQUIPMENT INSTALLED.
- 14 - HVAC UNITS MUST BE INSTALLED LEVEL ON ROOF.
- 15 - THERMOSTAT SENSOR WIRING TO BE RUN INSIDE PIPE COLUMNS.
- 16 - DO NOT INSTALL SUPPLY AIR DIFFUSERS IN CEILING PANEL ADJACENT TO ROW OF LIGHT FIXTURES. COORDINATE DIFFUSERS WITH REFLECTED CEILING PLAN ON DWG. A12.
- 17 - FLEXIBLE DUCT LENGTH NOT TO EXCEED A MAXIMUM OF 7'-0".
- 18 - SUPPLY AND/OR RETURN AIR CEILING PLENUMS WILL NOT BE ACCEPTED.
- 19 - NOT USED
- 20 - NOT USED
- 21 - GAS PIPING SHALL BE RUN ABOVE CEILING, (OUT THRU ROOF) PROVIDE SHUT-OFF VALVE AT EACH PIECE OF EQUIPMENT (NOT BELOW ROOF FOR RTU'S)
- 22 - SEE SHEET A12 FOR EXACT LOCATION OF CEILING GRID AND DIFFUSERS.
- 23 - NOT USED

MECHANICAL KEYED NOTES

- 1 HVAC ROOF-TOP UNIT. SEE GENERAL NOTES (ABOVE) AND SCHEDULE ON DRAWING M21 FOR ADDITIONAL INFORMATION.
- 2 S.A.D., CFM AND SIZE AS NOTED. SEE DETAIL 1/M21.
- 3 S.A.D., MOUNT AT GYP. BOARD CEILING. CFM AND SIZE AS NOTED. SEE DETAIL 1/M21.
- 4 S.A.D., THERMALLY POWERED VARIABLE AIR VOLUME (VAV) DIFFUSER. THERMAL PRODUCTS CORPORATION, VARIFLOW CFM & SIZE AS NOTED.
- 5 S.A.G., CFM AND SIZE AS NOTED. SEE DETAIL 2/M21.
- 6 R.A.G., CFM AND SIZE AS NOTED. SEE DETAIL 3/M21.
- 7 CONCENTRIC DIFFUSER
- 8 GAS SERVICE AND METER.
- 9 ROOF VENTILATOR, GREENHECK GR5 WITH GP5 SERIES CURB OR ACCEPTABLE EQUAL.
- 10 GAS WATER HEATER PROVIDED BY OTHERS, 33.5 MBH INPUT PER WALGREEN CRITERIA DRAWING P21.
- 11 GAS FIRED, UNIT HEATER (SEE SCHEDULE DWG. M21) BOTTOM 12'-0" UP THERMOSTAT MOUNTED 5'-0" UP ON WALL (SET AT 60°F). PROVIDE 4" FLUE TO ROOF WITH WEATHER CAP.
- 12 ROOF-TOP CONDENSING UNIT FOR WALK-IN COOLER/FREEZER.
- 13 PIPE PORTAL FOR WALK-IN COOLER/FREEZER CONDENSING UNIT REFRIGERANT AND ELECTRICAL LINES. SEE DETAIL 6, M21.
- 14 EXHAUST FAN (WITH BACK DRAFT DAMPER) WITH EXHAUST DUCT TRANSITION FROM EXHAUST DUCT TO EXHAUST FAN AS REQUIRED CFM AS NOTED.
- 15 ADJUST FRONT HORIZONTAL BARS TO AN ANGLE OF 45° SO THAT THE AIR FLOWS AWAY FROM THE WINDOW. THIS IS TO HELP PREVENT CONDENSATION ON THE GLASS IN HOT, HUMID CLIMATE CONDITIONS.
- 16 PROVIDE SEISMIC RESTRAINTS PER MAGMA GULE LINES & IN ACCORDANCE WITH NATIONAL, STATE & LOCAL CODES & ORDINANCES.
- 17 PROVIDE EF-6 & EF-7 TO VENTILATE MEZZANINE AND MITIGATE AGAINST OVER HEATING (SEE DETAIL 5/M21)
- 18 WALL HEATER (EWH) & FLR. HEATERS (EH) FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. SEE DRAWING EL2 FOR FURTHER INFORMATION.
- 19 NOT USED.
- 20 NOT USED.
- 21 PHASE I FAN SHALL BE MOUNTED FROM STRUCTURAL MEMBER (OTHER THAN CEILING) APPROXIMATELY 2' ABOVE INTENDED FINISHED CEILING. PHASE 2, AT THE TIME OF CEILING INSTALLATION THE EXHAUST GRILLE AND FLEXIBLE DUCT WORK (7' MAXIMUM LENGTH) CONNECTING GRILLE TO EXHAUST FAN SHALL BE INSTALLED.
- 22 PROVIDE AUTOMATIC SHUTOFF ACTIVATED BY SMOKE DETECTORS IN EACH SYSTEM DELIVERING HEATING OR COOLING AIR IN EXCESS OF 2000 CFM. DETECTOR SHALL BE LOCATED IN MAIN SUPPLY AIR PER UMC 1994.

Evergreen Refrigeration Inc.,
727 South Kenyon Street,
Seattle, WA 98108

Contractor License EVERG1201D7
TEL: 1 (206) 763 - 1744
FAX: 1 (206) 763 - 2389

DRAWINGS/SPECIFICATIONS BY:
 WALGREENS' CONSULTANT
 LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
 WALGREENS' CONTRACTOR
 LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

STORE		BUILDING	
NEW.....	<input checked="" type="checkbox"/>	NEW.....	<input checked="" type="checkbox"/>
REMODELING.....	<input type="checkbox"/>	EXISTING.....	<input type="checkbox"/>
RELOCATION.....	<input type="checkbox"/>	NEW SHELL ONLY	<input type="checkbox"/>
OTHERS.....	<input type="checkbox"/>		

Walgreens

NEC AMBAUM BLVD. @ SW 148TH STREET
BURIEN, WASHINGTON

NO.	DATE	BY	DESCRIPTION	CONST.
1	12-31-96	LL	Q.A. SET	
2	3-25-97	LL	WALGREEN COMM.	
3	7-23-97	LL	CRITERIA REV.	

REVISIONS

DRAWING TITLE

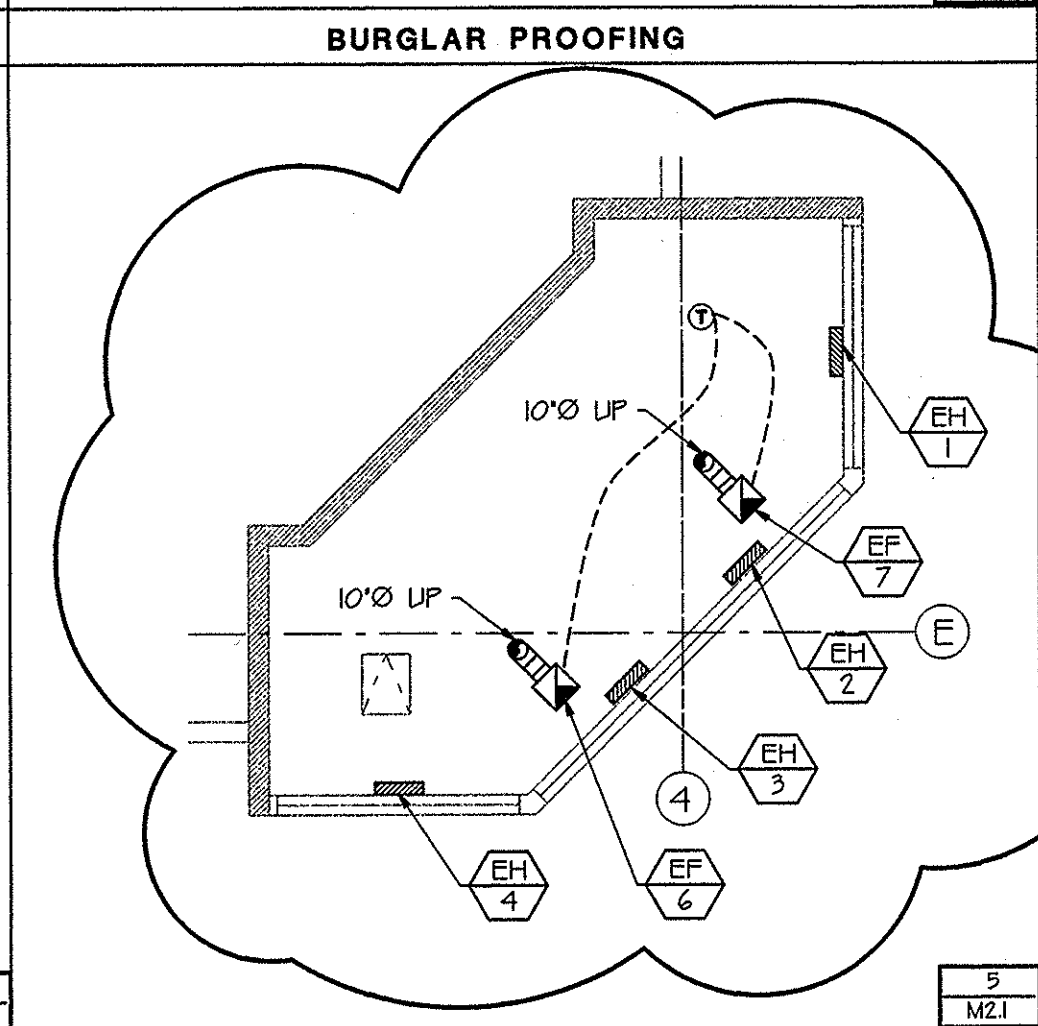
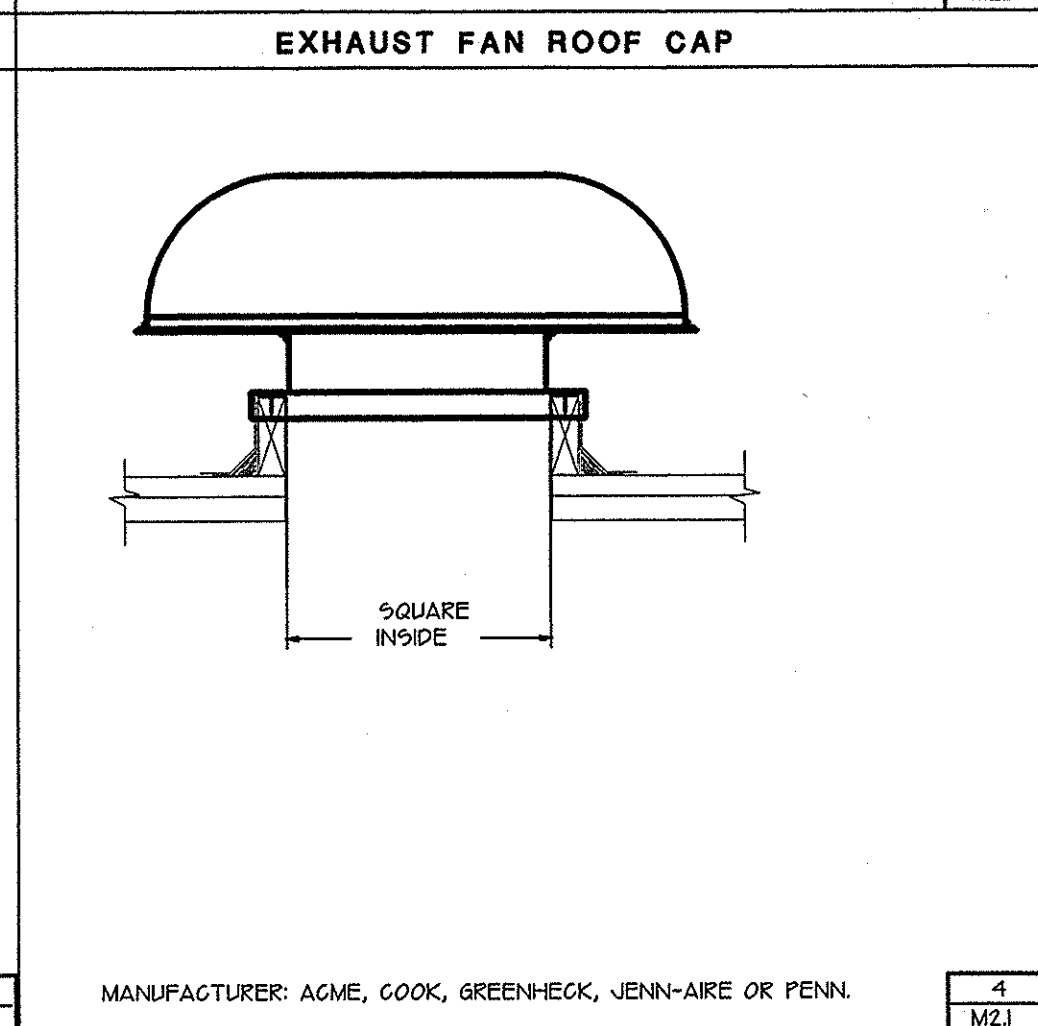
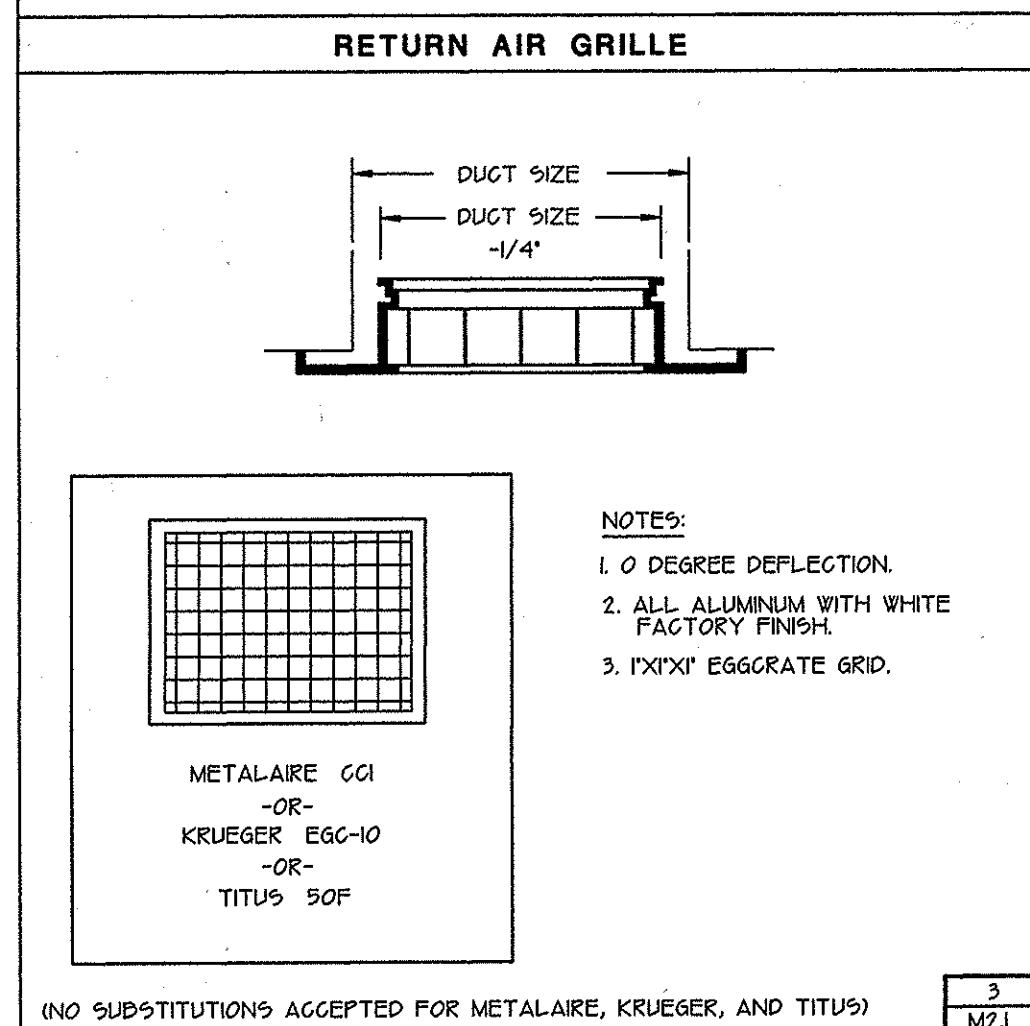
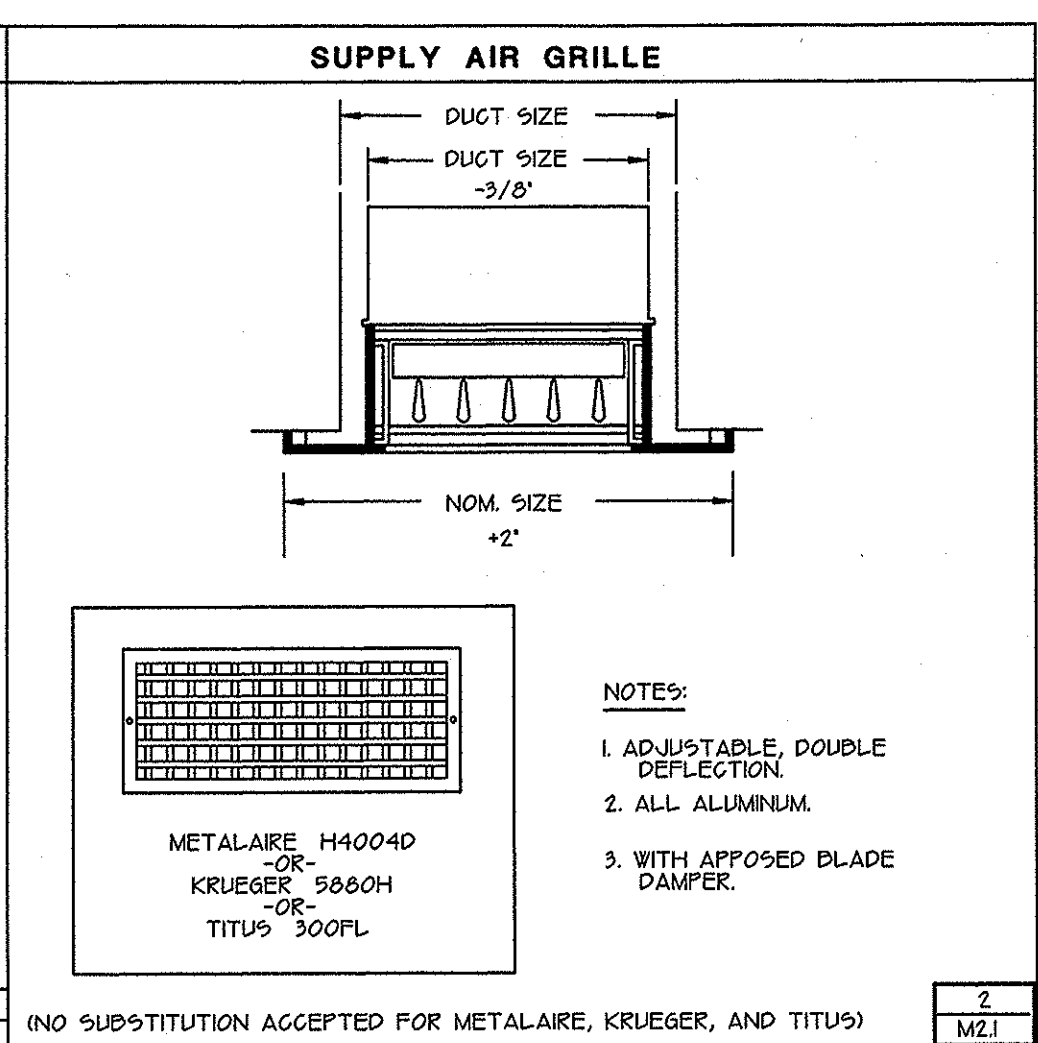
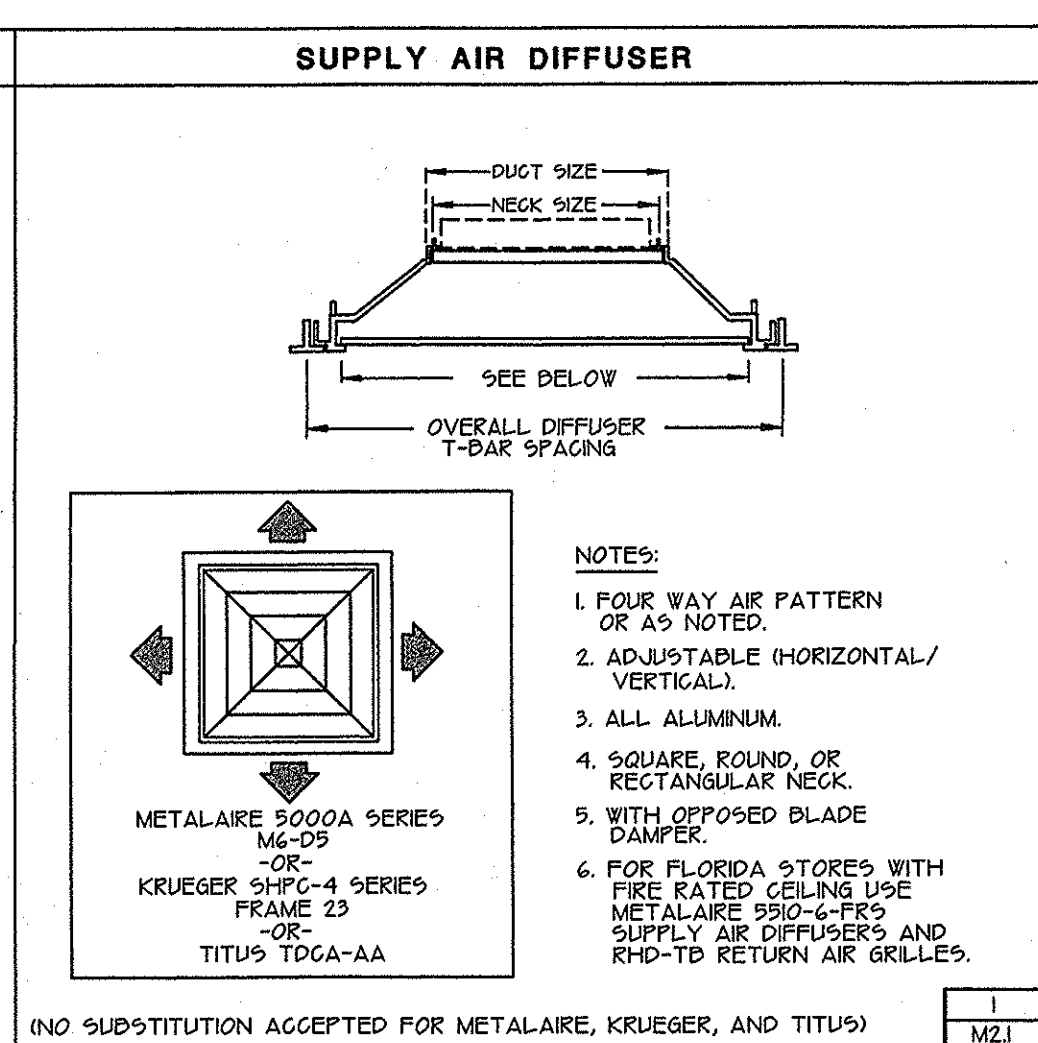
HVAC PLAN FACILITIES
OCT 1 1997
PLANNING & DESIGN

DATE:	12-04-96	STORE NO.:	03640	DRAWING NO.:	
PROJECT ENG.:	ML	JOB NO.:			
DRAWN BY:	LL	DWG. NAME:	AMBAUM-I		
REVIEWED BY:	ML	RELEASED TO CONSTRUCTION:			

M1.1

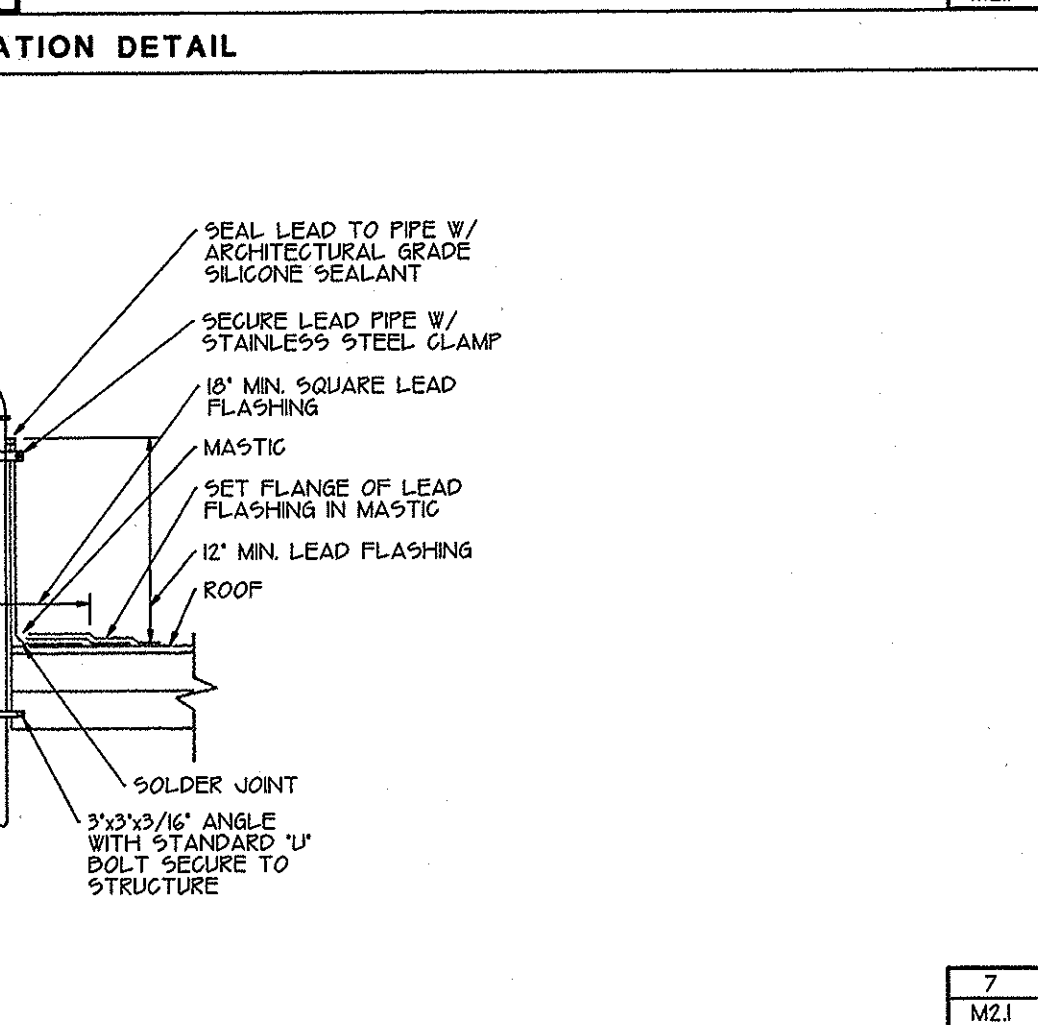
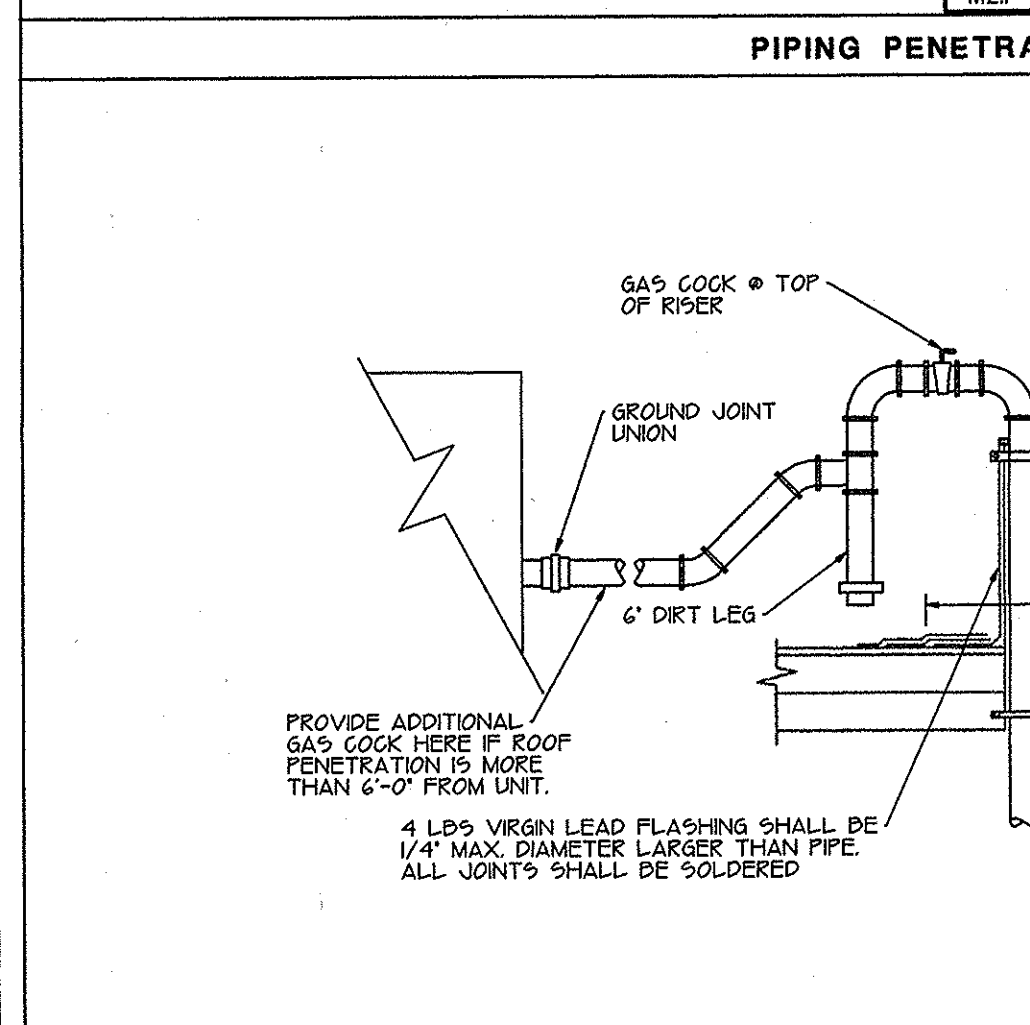
MECHANICAL NOTES

- SEE SECTION 1550 IN SPECIFICATIONS FOR AIR CONDITIONING AND HEATING CONTROLS.
- SEE ARCHITECTURAL DRAWING FOR HVAC UNIT ROOF CURB AND SUPPORT DETAIL.
- ALL NON-AIR CONDITIONING COMPRESSORS LISTED WITH REFRIGERANT PIPING SHALL BE FURNISHED BY WALGREENS. ALL ELECTRICAL WORK (SEE DRAWING E12) AND PLUMBING WORK (SEE DRAWING P10, INCLUDING ROOF SUPPORTS, FURNISHED BY CONTRACTOR.
- SEE ARCHITECTURAL DRAWING FOR ROOF-TOP COMPRESSOR CURB AND SUPPORT DETAIL.



LEGEND

- SUPPLY AIR
- RETURN AIR
- TEE - TURNING VANES AND ADJUSTABLE SPLITTER DAMPER
- ELBOW - TURNING VANES
- CONDENSATE DRAIN
- GAS
- SANITARY SEWER
- CONCENTRIC AIR DIFFUSER AND BOX SHALL BE MICRO METL 902 AND 906 OR APPROVED EQUAL. MOUNT BOX TOP AT UNDERSIDE OF BAR JOIST.
- CFM
- EXHAUST FAN
- ELECTRIC HEATER
- ELECTRIC WALL HEATER
- SUPPLY AIR DIFFUSER (SEE DETAIL 1/M2.1), CFM AND SIZE AS NOTED.
- SUPPLY AIR GRILLE (SEE DETAIL 2/M2.1), CFM AND SIZE AS NOTED.
- SUPPLY FAN
- RETURN AIR GRILLE (SEE DETAIL 3/M2.1), CFM AND SIZE AS NOTED.
- ROOF TOP UNIT
- UNIT HEATER
- MOTOR (SEE SCHEDULE ON DRAWING M2.1)
- THERMOSTAT (MOUNT 5'-0" UP) SEE CONTROL DIAGRAM, DRAWING M2.2.
- SENSOR FOR HONEYWELL THERMOSTAT (T7300) SEE CONTROL DIAGRAM, DWG M2.2, (MOUNT 6'-0" UP)
- GAS METER
- WATER METER WITH VALVES
- SPRINKLER HEAD
- FLOOR DRAIN
- FLOOR CLEAN OUT
- POST HYDRANT
- WALL HYDRANT



UNIT HEATER SCHEDULE

MARK	MFR./MOD.	TYPE	AREA SERVED	BTU/HR INPUT	BTU/HR OUTPUT	WT	MOTOR	
							HP	POWER
UH-1	REZNOR / FE 50	GAS UNIT HEATER	STOCK ROOM	50,000	40,000	85	1/40	115V / 1Ø

FAN SCHEDULE

MARK	MFR./MOD.	AREA SERVED	CFM	ESP	HP	POWER	SONES
EF-1	PENN - ZEPHYR-Z8HTDA	EMPLOYEE ROOM	300	1/3'	0.08	115V / 1Ø	4.4
EF-2	PENN - ZEPHYR-Z85TDA	MEN'S TOILET	200	1/4'	0.08	115V / 1Ø	2.6
EF-3	PENN - ZEPHYR-Z85TDA	WOMEN'S TOILET	200	1/4'	0.08	115V / 1Ø	2.6
EF-4	PENN - ZEPHYR-Z125TDA	PHOTO PROCESSING	750	1/4'	0.12	115V / 1Ø	5.6
EF-5	PENN - ZEPHYR-Z8HTDA	OFFICE	300	1/3'	0.08	115V / 1Ø	4.4
EF-6	PENN - ZEPHYR-Z10H	MEZZANINE	500	1/3'	0.29	115V / 1Ø	3.5
EF-7	PENN - ZEPHYR-Z10H	MEZZANINE	500	1/3'	0.29	115V / 1Ø	3.5

AIR CONDITIONING UNIT SCHEDULE

MARK	MFR./MODEL	NOM. TONS.	AIRFLOW CFM	MIN OSA CFM	S.P. (INS)	COOLING			HEATING		ELECTRICAL			WEIGHT				
						TOTAL	SEER	EER	INPUT	OUTPUT	AFUE	VOLTS	PHASE	M.C.A.	UNIT	ECON	OSA DPR	CURB
RTU-3	TRANE / YGD074	6	2500	810	0.5	72,000	—	10.0	120,000	97,000	81 %	208-230	3	39.2	767	40	—	82
RTU-1, 2 & 4	TRANE / YGD091	7-1/2	3000	810	0.5	86,000	—	10.0	120,000	97,000	81 %	208-230	3	41.7	869	40	—	82
RTU-5 & 6	TRANE / YGD037	3	1200	320	0.5	42,400	12.0	—	80,000	65,000	81 %	208-230	3	19.6	691	40	—	80

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△	12-31-96	LL	QA SET	
△	3-25-97	LL	WALGREEN COM.	
△	7-23-97	LL	CRITERIA REVISION	
△	7-26-97	LL	ERI GEN. REVISION	

DRAWING TITLE

HVAC DETAILS FACILITIES
OCT 10 1997
PLANNING & DESIGN

DATE: 12-04-96	STORE NO: 03840	DRAWING NO.
PROJECT ENG: ML	JOB NO: _____	M2.1
DRAWN BY: LL	DWG. NAME: AMBAUM	
REVIEWED BY: ML	RELEASED TO CONSTRUCTION:	

Evergreen Refrigeration Inc.,
727 South Kenyon Street,
Seattle, WA 98108

Contractor License EVERGI201D7
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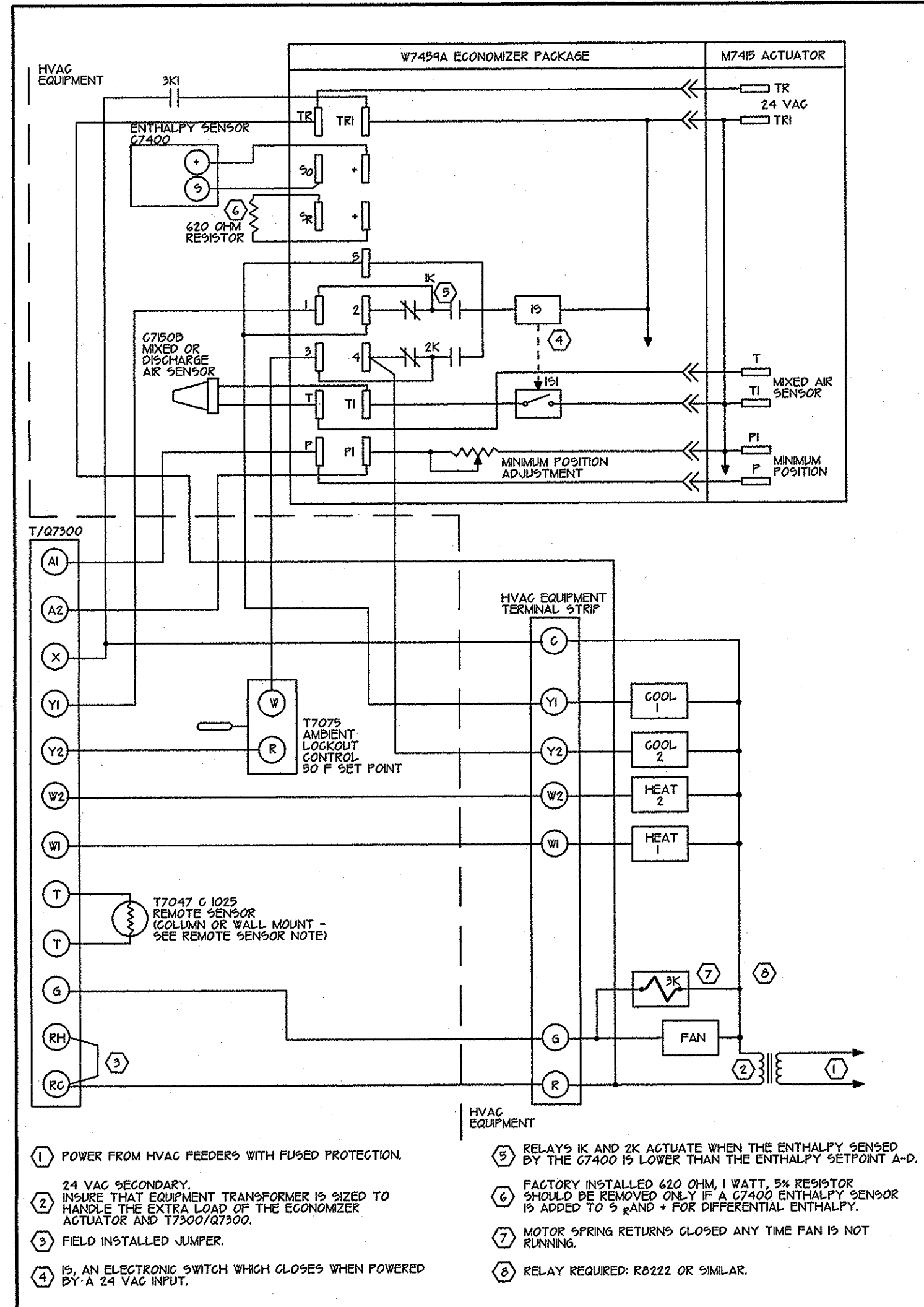
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STORE		BUILDING	
NEW.....	<input checked="" type="checkbox"/>	NEW.....	<input checked="" type="checkbox"/>
REMODELING...	<input type="checkbox"/>	EXISTING.....	<input type="checkbox"/>
RELOCATION...	<input type="checkbox"/>	NEW SHELL ONLY	<input type="checkbox"/>
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Walgreens
NEC AMBAUM BLVD. @ SW 148TH STREET
BURIEN, WASHINGTON



T7300/Q7300 DEFEATING ECONOMIZER MINIMUM POSITION DURING UNOCCUPIED IN A TWO STAGE COOLING SYSTEM WITH SINGLE ENTHALPY CHANGEOVER USING M7459A/G7400 WITH AN M7415 ACTUATOR.

HVAC CONTROL DIAGRAM (EACH UNIT)

NOTE:
ABOVE WIRING DIAGRAM ARRANGEMENT IS APPLICABLE FOR PROJECTS WITH THE ECONOMIZER SYSTEM.

BILL OF MATERIAL			
THE FOLLOWING CONTROLS TO BE FURNISHED BY TEMPERATURE CONTROL CONTRACTOR			
NO.	QUANTITY	MAKE	REMARKS
T1	1 (PER UNIT)	HONEYWELL T7075B1006	-20°F TO 80°F SCALE 1 DEGREE DIFFERENCE (USE AS COMPRESSOR LOCKOUT SET AT 50°F).
T2	1 (PER UNIT)	HONEYWELL T7300A1005 MODEL Q7300A1018	NOTE: FOR PHARMACY UNIT USE T7300/Q7300B1008 (SWITCHING BASE)
	1 (PER UNIT)	HONEYWELL T7047G1025	REMOTE SENSOR (NOTE: EXCEPT PHARMACY UNIT)

REMOTE SENSOR NOTE:

REMOTE SENSOR (T7047G1025) IS TO BE MOUNTED ON COLUMN (OR WALL), 4'-0" A.F.F. WITH THE SUBBASE (T7300) LOCATED IN OFFICE. CONNECT REMOTE SENSOR TO T-T TERMINALS OF SUBBASE VIA TWO (2) #16 AWG SHIELDED, TWISTED PAIR WIRES, BELDEN 8761. SEE CONTROL WIRING DIAGRAM. (NOTE: NOT TO INCLUDE PHARMACY UNIT.)

*** NO SUBSTITUTIONS FOR HONEYWELL ***

(CONTROLS WITH OTHER NAMEPLATES, SUCH AS LENNOX AND YORK, WHICH ARE MADE BY HONEYWELL AND PERFORM EXACTLY AS HONEYWELL ARE ACCEPTABLE)

PROVIDE ZONE THERMOSTAT CAPABLE AND SET FOR A DEAD BAND OF AT LEAST 3°F (NREC. H12.2)

PROGRAM	
1) COOLING 76° F	} OCCUPIED SALES AND PHARMACY
2) HEATING 72° F	
1) COOLING 78° F	} OCCUPIED GENERAL STOCKROOM
2) HEATING 68° F	
1) COOLING 85° F	} NOT OCCUPIED SALES GENERAL STOCKROOM
2) HEATING 60° F	
1) COOLING 80° F	} NOT OCCUPIED PHARMACY
2) HEATING 68° F	
(NOTE: ENTRANCE HEATER NOT OCCUPIED TEMPERATURE TO BE SET AT 50°F)	
OCCUPIED (ON)	8 AM
UNOCCUPIED (OFF)	10 PM

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△	7-23-97	LL	CRITERIA REV.	

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HVAC CONTROL FACILITIES
OCT 10 1997
PLANNING & DESIGN

DATE: 12-04-96	STORE NO: 03840	DRAWING NO.
PROJECT ENG: ML	JOB NO:	M2.2
DRAWN BY: LL	DWG. NAME: AMBAUM	
REVIEWED BY: ML	RELEASED TO CONSTRUCTION:	