

REFER TO SHEET M2.1 FOR CONTINUATION (ROUTE FROM RTU-3)

Capped off above ceiling
 Main Supply Drop 12" round flex duct
 Main Return Drop 12" round flex duct

RTU-7

HVAC CONTRACTOR SHALL COORDINATE LOCATION AND POSITION OF ROOFTOP UNIT WITH STRUCTURAL ENGINEER. NO ROOFTOP UNIT SHALL BE MOUNTED WITH UNIT BEARING ON STRUCTURAL CORRUGATED DECK ONLY. ROOFTOP UNITS SHALL BE SUPPORTED BY JOISTS OR STRUCTURAL FRAMING MEMBERS. COORDINATE LOCATION OF AIR DEVICES WITH CEILING GRID.

EF-15 Drop

Capped off

RTU-6

Capped off above ceiling

RTU-9 Drop

REF: 6/M2.1 FOR OFFICE MEZZANINE PLAN

H.V.A.C. SYMBOL LEGEND:

90° ELBOW WITH TURNING VANES	STANDARD BRANCH CONNECTION WITH AIR VOLUME DAMPER	90° SPLITTER DAMPER WITH TURNING VANES

DESIGN AMBIENT TEMPERATURES:
 SUMMER: 100° F. and ABOVE
 WINTER: 17° F. and ABOVE
 REFERENCE DETAILS:
 ESD-5, 6H, & 11

NOTE: ALL CONTROL WIRE TO BE PLENUM RATED

BRADLEY KALWANS
 CONSULTING ENGINEER
 6700 JAMES, SUITE 150
 HOUSTON, TEXAS 77040 (713) 690-5300

MECHANICAL FLOOR PLAN
 SCALE: 1/8" = 1'-0"

CDM ARCHITECTS
 14455 CONNOR CHAMBERS DESIGN ASSOCIATES, INC.
 7114 40-3301 FAX 713/440-3735

KROGER FOOD STORES

FLOOR PLAN - MECHANICAL

KROGER SW-543
 COOPER AT LAMAR
 ARLINGTON, TEXAS

M1.1

ISSUED FOR BIDDING	9/13/99	MODIFICATION NO. 5	2/14/00
ADDENDUM NO. 1	9/29/99	MODIFICATION NO. 6	5/2/00
ADDENDUM NO. 2	9/30/99		
MODIFICATION NO. 1/CONSTRUCTION ISSUE	12/13/99		
MODIFICATION NO. 3 (REVISED)	1/20/00		
MODIFICATION NO. 4	2/7/00		

FAN SCHEDULE *												
MARK	EF-1	EF-2	EF-3	EF-4	EF-5	EF-6	EF-7	EF-8	EF-8A	EF-9	EF-10	EF-11
SERVES	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM	COMPR. ROOM
CFM	42,000	42,000	42,000	42,000	NOT USED	NOT USED	NOT USED	9000	3240	1,200	640	400
TYPE/DRIVE	BELT	BELT	BELT	BELT	---	---	---	BELT	BELT	DIRECT	DIRECT	DIRECT
S.P. IN. W.G.	0.375"	0.375"	0.375"	0.375"	---	---	---	1.0"	1.0"	25"	0.250"	0.25"
HORSEPOWER	5.0	5.0	5.0	5.0	---	---	---	1-1/2	1-1/2	1/4	1/4	1/3
RPM MAX.	791	791	791	791	---	---	---	1045	850	1200	1100	1100
VOLTS/PHASE/HERTZ	480/3/60	480/3/60	480/3/60	480/3/60	---	---	---	208/3/60	208/3/60	120/1/60	120/1/60	120/1/60
CONTROLS	64"	64"	64"	64"	---	---	---	MANUAL	MANUAL	MANUAL	T-STAT	MANUAL
MANUFACTURER	AMERICAN COOL. AIR	AMERICAN COOL. AIR	AMERICAN COOL. AIR	AMERICAN COOL. AIR	---	---	---	JENNIFAN	JENNIFAN	JENNIFAN	JENNIFAN	JENNIFAN
MODEL NO.	JBC720	JBC720	JBC720	JBC720	---	---	---	JXB-20	JXB-20	RED10	RED10	TXB-12
NOTES	1,2,3	1,2,3	1,2,3	1,2,3	---	---	---	6,7	6,7	1,8	1,8	1,8

- NOTES:
- PROVIDE WITH PRE-FABRICATED INSULATED METAL ROOF CURB (PER SPEC'S), BACKDRAFT DAMPER, AND DISCONNECT SWITCH.
 - CONTRACTOR SHALL STENCIL OR MARK PERMANENTLY WITH PAINT THE PROPER TEMPERATURE SETTING ON THE THERMOSTAT CONTROLLING COMPRESSOR ROOM FANS.
 - REFER TO TEMPERATURE SETTING TO START FANS IN FAN SCHEDULE, STARTING SEQUENCE: EF-1, EF-2, EF-3, EF-4.
 - PROVIDE A TITUS AG-606 MOTORIZED DAMPER.
 - PROVIDE WITH PRE-FABRICATED ROOF CURB PER SPEC'S.
 - PROVIDE WITH PRE-FABRICATED ROOF CURB (PER SPEC'S) AND EXTERIOR DISCONNECT SWITCH.
 - FAN SHALL BE UL 782 CONSTRUCTION.
 - PROVIDE A DIROSCREEN.
 - A THERMOSTAT SHALL BE PROVIDED WITH FAN.
 - REFER TO SPEC'S FOR APPROVED SUPPLIERS OF PRE-FABRICATED INSULATED METAL ROOF CURBS.

ELECTRIC DUCT HEATER SCHEDULE		
MARK	EDH-1	EDH-2
DUCT SIZE	24"x16"	24"x16"
TOTAL KW	17.5	22.8
VOLTS/PHASE/CYCLES	480/3/60	480/3/60
TOTAL FLA	21	27
CONTROL	T-STAT	T-STAT
MANUFACTURER	INDECO	INDECO
MODEL	TYPE QUA	TYPE QUA
NOTES	1,2	1,2

- NOTES:
- SUPPLY DUCT HEATER WITH DISCONNECT SWITCH, CONTROL PANEL AND AIR FLOW CONTROL. MODIFY DUCTWORK AS REQUIRED.
 - PROVIDE MINIMUM OF THREE STAGES.

THE FOLLOWING EQUIPMENT TO BE FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. SEE SPECIFICATIONS FOR DETAIL.

- VENTILATION / EXHAUST FANS
- HVAC UNITS / CURBS
- CPAC ENVIRONMENTAL CONTROL PANEL
- EXHAUST HOODS
- FIRE SUPPRESSION SYSTEM FOR HOODS

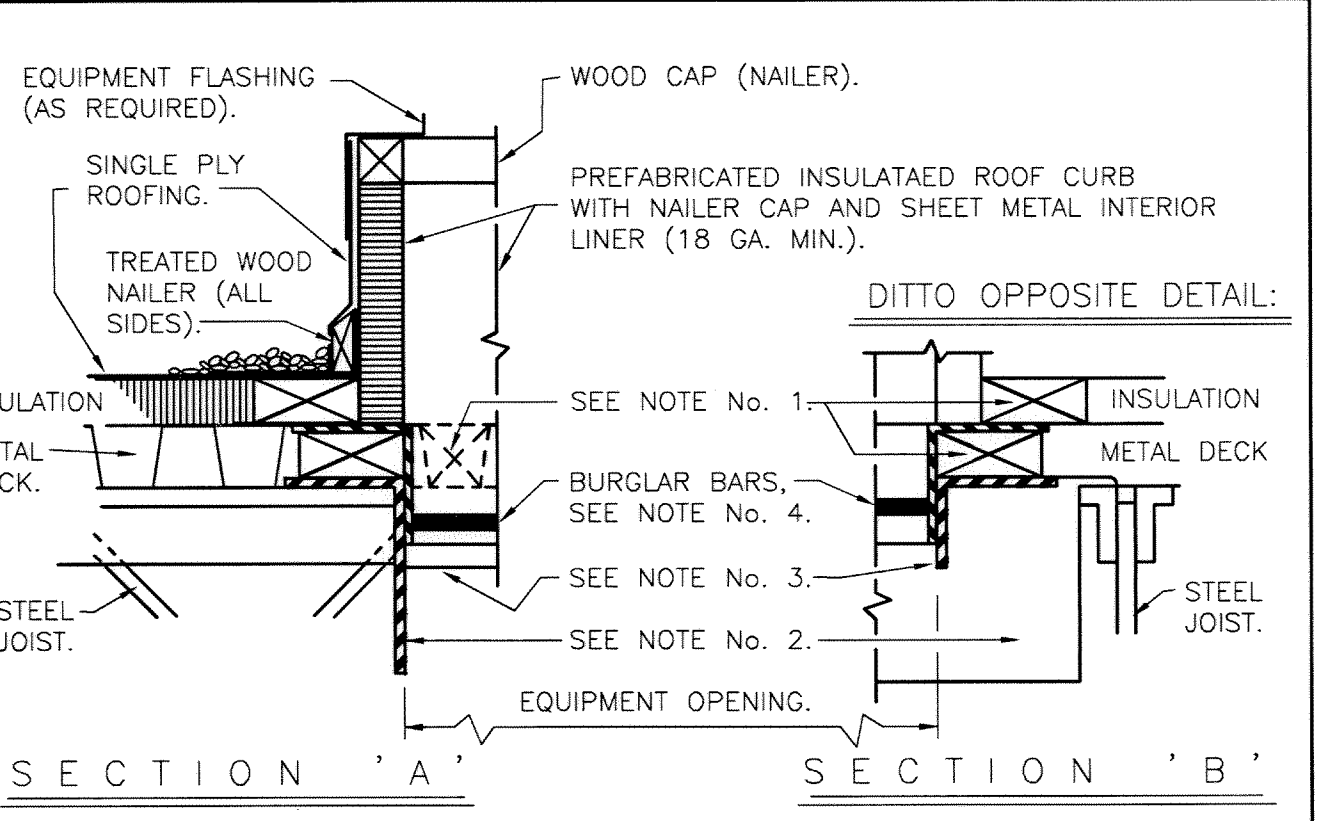
ROOFTOP UNIT SCHEDULE

MARK	RTU-1	RTU-2	RTU-3	RTU-4	RTU-5
SERVES	SALES	SALES	DEL. DOCK	BAKERY & DELI	OFFICE AREA
TOTAL CFM	21,980	24,990	2,400	6,000	5,000
O.A. CFM	4,125	4,530	465	225	655
EXT. S.P. "H ₂ O"	1.0	1.0	.75	.75	.75
HORSEPOWER	20	25	9	3.06	2.08
COOLING					
EDB / EWB	79.8/65.1	79.5/65.0	79.8/65.1	75.9/63.0	78.5/65.5
SEN. HT. BTU/HR	543,240	640,900	61,145	128,959	118,448
TOTAL HT. BTU/HR	672,240	815,900	80,176	157,050	162,884
AMB. TEMP.	102"	102"	102"	102"	102"
HEATING					
HEATING SYSTEM	HEAT RECLAIM & GAS	HEAT RECLAIM & GAS	GAS	GAS	GAS
TOTAL BTU/HR GAS OUTPUT	680,000	680,000	97,000	203,000	203,000
VOLTS/PHASE/CYCLES	480/3/60	480/3/60	480/3/60	480/3/60	480/3/60
MCA/MOCP					
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL	SAHFC6040	SAHFC7540	YCD090C	YCD180B	YCD180B
NOTES	1,2,3,5,6,7,8,9,10	1,2,3,5,6,7,8,9,10	4,5,9,10	4,5,9,10	4,5,9,10

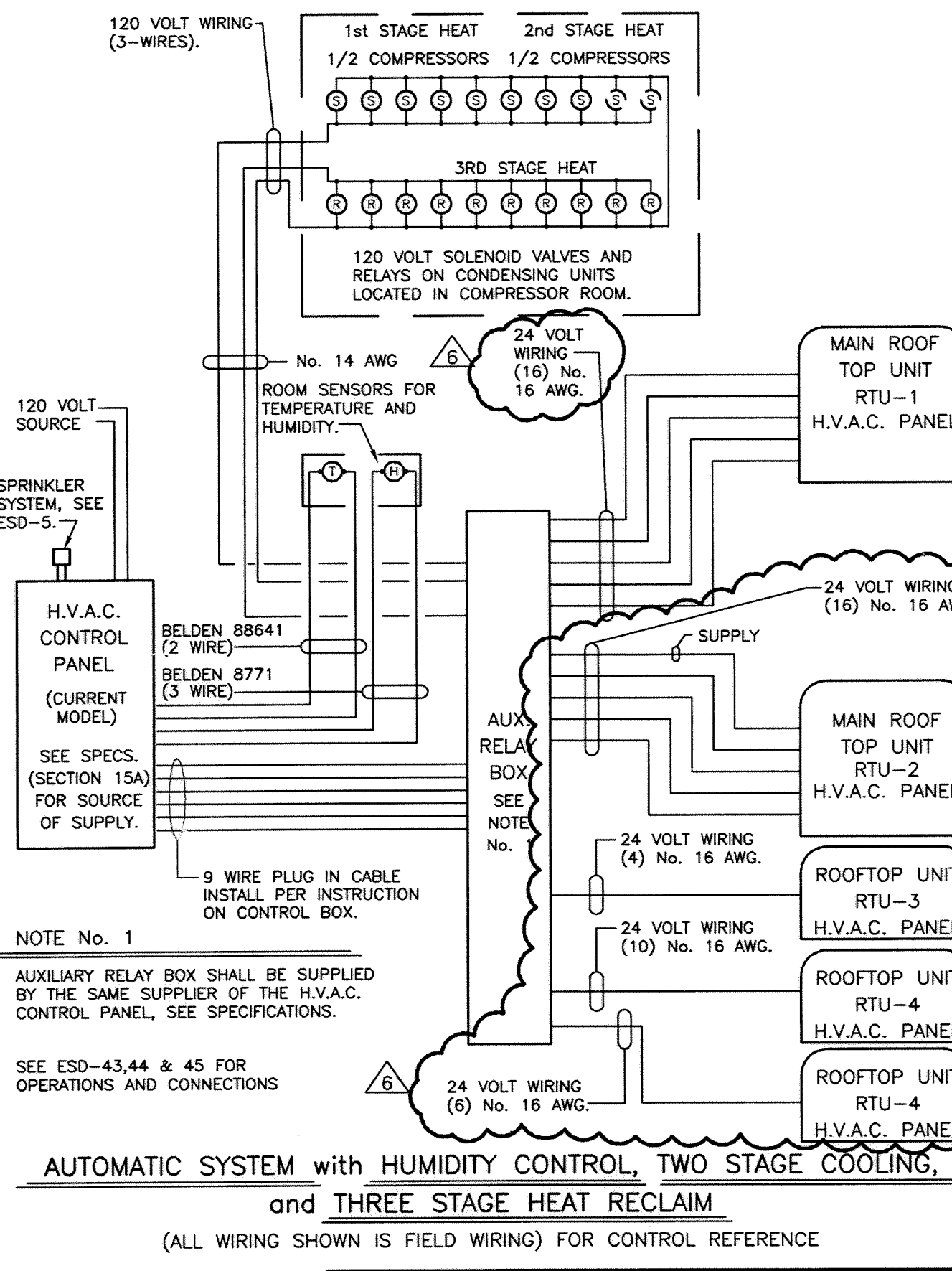
- NOTES:
- HEIGHT OF UNIT SHALL NOT EXCEED 98".
 - PROVIDE WITH INSULATED PREFAB. TAPEDED ROOF CURB, TWO-SPEED FAN BLOWER MOTOR 1800/1200 RPM MAXIMUM, 2" HIGH EFFICIENCY FILTERS, MANUAL DAMPERS, INTERLAGED EVAPORATOR COIL, BURGLAR BARS, AND ACCESS LADDER MOUNTED ON OUTSIDE OF UNIT. VERIFY ROOF SLOPE WITH STRUCTURAL ENGINEER.
 - REFER TO ROOFTOP UNIT CONTROL SEQUENCE OF OPERATION ON THIS SHEET.
 - PROVIDE WITH FABRICATED, SLOPED ROOF CURB AND 2" THICK THROWAWAY FILTERS.
 - VERIFY ROOF SLOPE WITH STRUCTURAL ENGINEER.
 - EXTERNAL STATIC PRESSURE INCLUDES DUCTWORK, GRILLES, AND DAMPERS BUT NOT COOLING COIL, HEATING COIL, FILTER OR CABINET LOSSES.
 - TRANE UNITS SHALL NOT BE PROVIDED WITH INTERNAL CONTROLLERS. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONTROLLER IN CPIC PANEL. TRANE TO PROVIDE TERMINAL BOARD HOOD UP INSIDE UNITS AND MANUAL CONDENSING FAN CONTROLS.
 - PROVIDE A CLEANABLE OUTSIDE AIR FILTER WITH AHI.
 - PROVIDE WITH MOTORIZED OUTSIDE AIR DAMPER (AT FACTORY).
 - SMOKE DETECTORS IN UNIT TO BE WIRED TO SHUT DOWN UNIT.
 - ALL UNITS FURNISHED W/DISCONNECT SWITCH AND DUPLEX RECEPTACLE.

AIR DEVICE SCHEDULE *					
MARK	MANUFACTURER	MODEL	FACE SIZE	AIR FLOW	REMARKS
(A)	CARNES	SKBA-40	24" x 24"	4-WAY	(1)(2)(5)
(B)	CARNES	SKBA-30	24" x 24"	3-WAY	(1)(2)(5)
(C)	CARNES	SKBA-20	24" x 24"	2-WAY	(1)(2)(5)
(D)	CARNES	SKFA-40	--	4-WAY	(1)(3)(5)
(E)	CARNES	SKFA-30	--	3-WAY	(1)(3)(5)
(F)	CARNES	SKFA-20	--	2-WAY	(1)(3)(5)
(G)	CARNES	RNPAH	48"x24"	CEILING RETURN	(1)(2)(4)(5)
(H)	CARNES	SPJB	24" x 24"	CEILING RETURN	(1)(2)(4)(5)
(I)	CARNES	SPJB	24" x 24"	CEILING RETURN	(2)(4)(5)(9)
(J)	CARNES	RSLAV	SEE PLAN	RETURN EXHAUST	(3)(6)
(K)	CARNES	RSLAH	SEE PLAN	RETURN EXHAUST	(3)(6)
(L)	CARNES	RSLAH	SEE PLAN	FAN INTAKE	(6)(7)
(M)	CARNES	FLAA	SEE PLAN	EXHAUST LOUVER	(8)
(N)	CARNES	RSDAV	SEE PLAN	SIDEWALL SUPPLY	(9)
(O)	CARNES	RSDAH	SEE PLAN	SIDEWALL SUPPLY	(9)
(P)	CARNES	SKBA-40	24" x 24"	4-WAY	(2)(9)

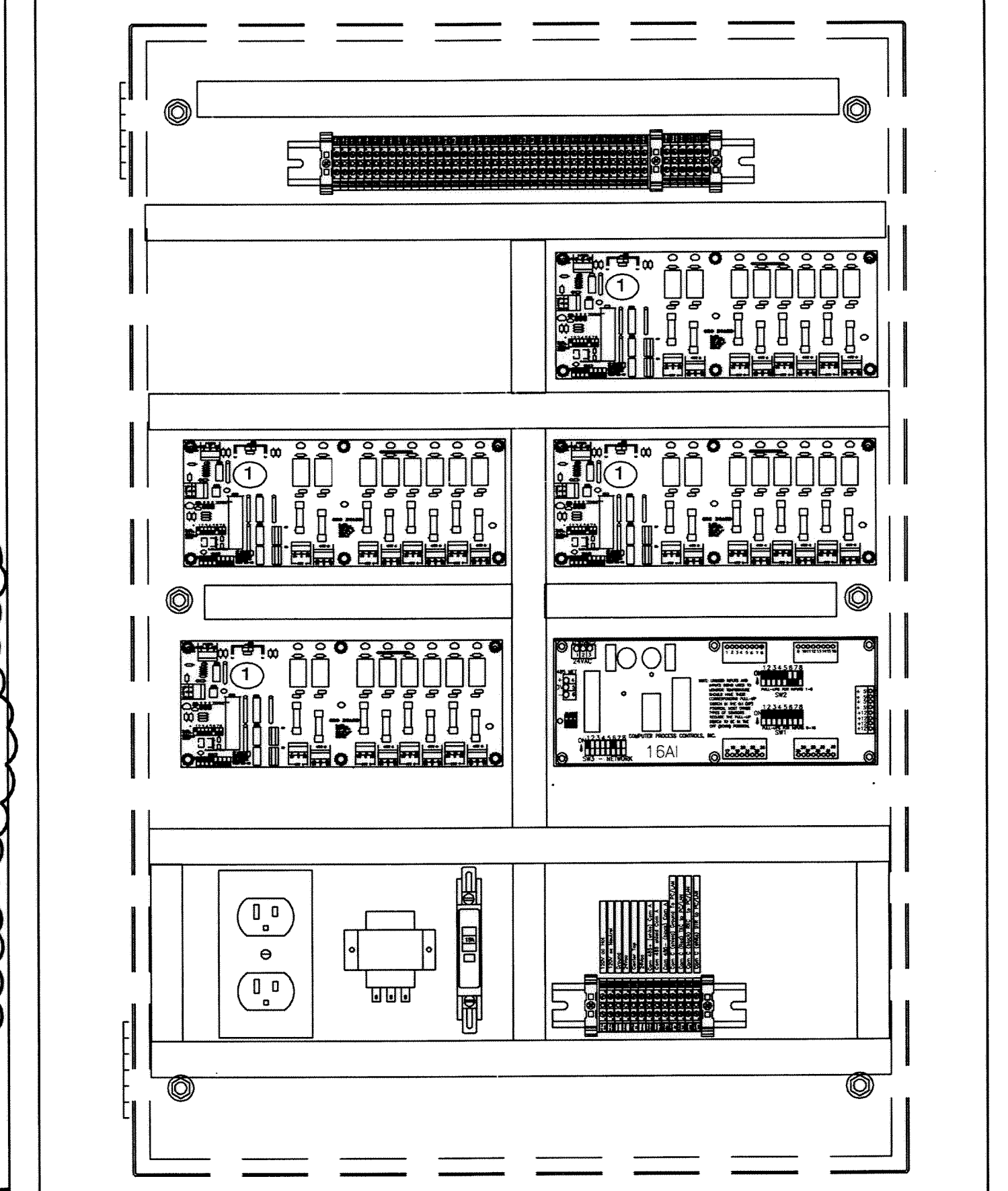
- NOTES:
- MODEL KOLA (#43) DAMPERS REQUIRED FOR ALL DIFFUSERS. SPECIFICATIONS FOR APPROVED ALTERNATES:
 - COLOR TO BE STANDARD WHITE.
 - CEILING DIFFUSER FOR LAY-IN TEE BAR CEILING.
 - CEILING DIFFUSER WITH FLANGED BORDER FOR SURFACE MOUNTING.
 - PERFORATED RETURN GRILLE.
 - SEE PLAN FOR NECK SIZE.
 - STEEL GRILLE WITH 45° ANGLE BLADES.
 - PROVIDE WITH TYPE "K" FIRE DAMPER.
 - PROVIDE AN INSECT SCREEN.
 - COLOR TO BE SELECTED BY ARCHITECT.



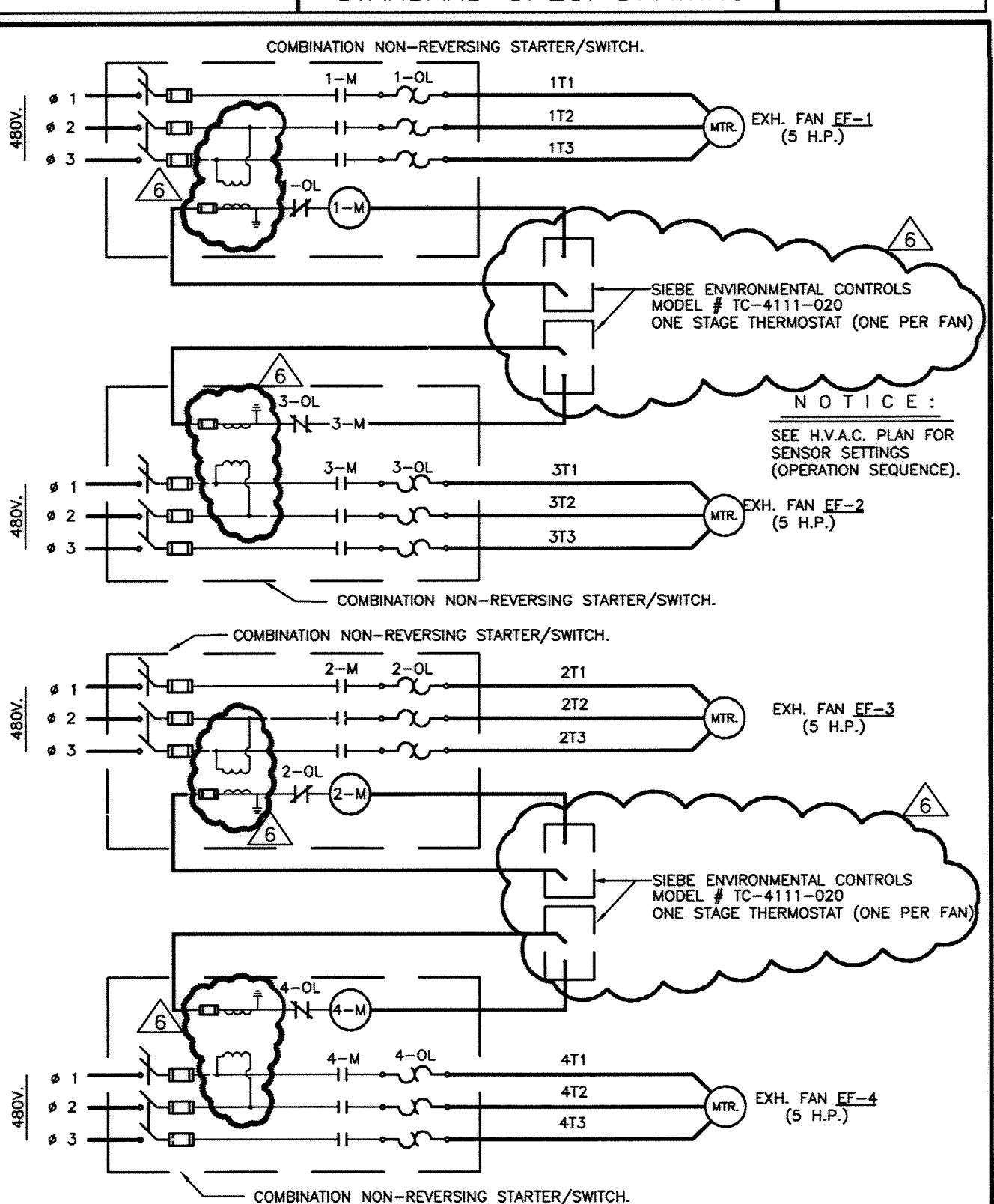
- NOTES:
- FIRE TREATED WOOD BLOCKING (ALL SIZES) AS INDICATED.
 - STEEL JOIST HEADER -- SEE FRAMING PLAN FOR SIZE (WELD TO JOISTS).
 - 4" x 3" x 5/16" ANGLE PARALLEL TO JOISTS (WELD TO JOIST HEADER).
 - SUPPLY PREFABRICATED CURBS COMPLETE WITH BURGLAR BAR FRAME SHALL BE BY GEN. CONTR. WELD FRAME TO JOIST HEADERS AND FRAMING ANGLES. BURGLAR BARS SHALL BE 1/2" DIAMETER BARS AT MAX. 12" CENTERS, BOTH WAYS, WELDED AT INTERSECTIONS AND AT CONNECTION TO FRAME.
 - PREFABRICATED METAL CURB SHALL BE SHOP COAT PAINTED.



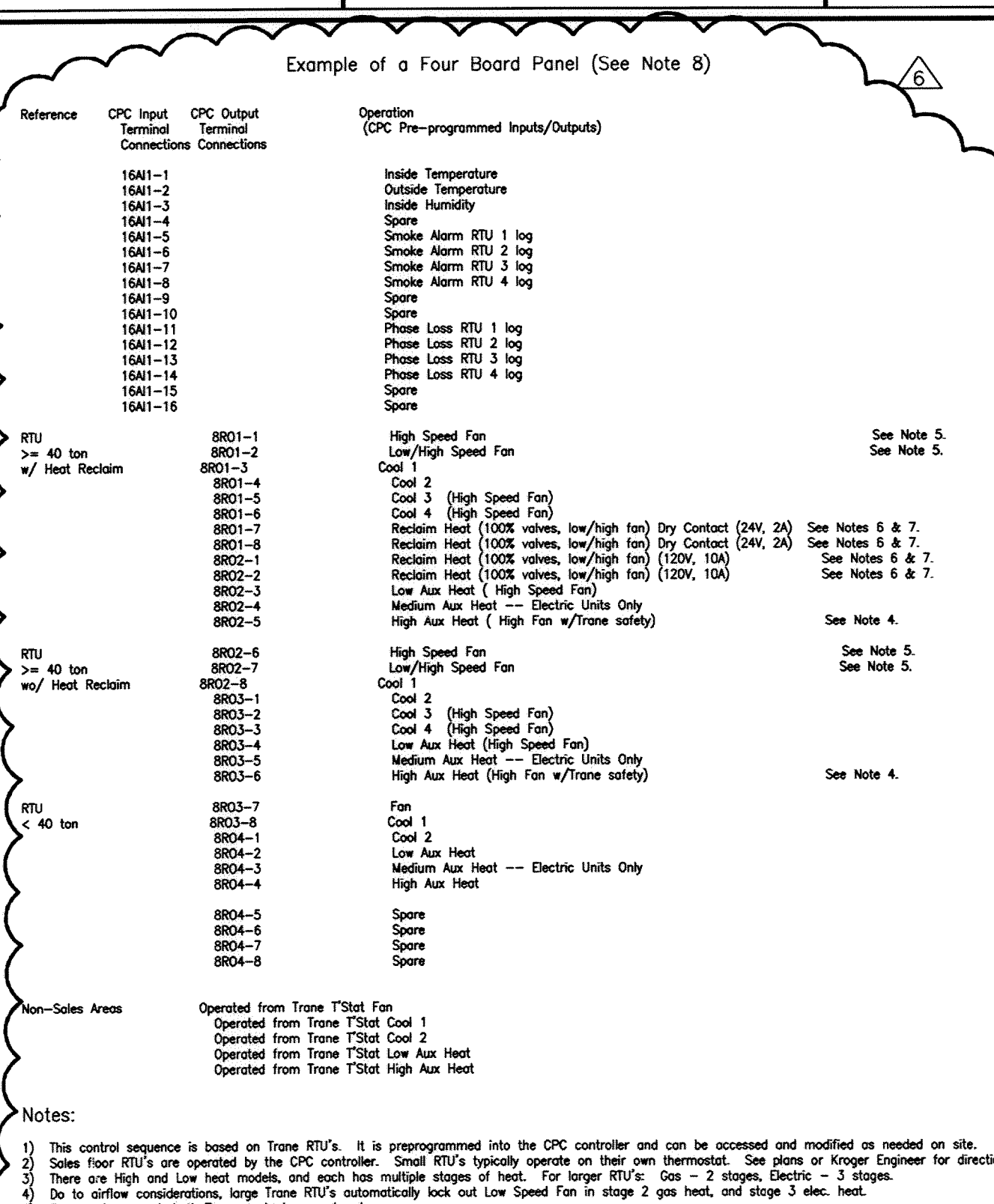
MAIN HEATING & COOLING SYSTEM CONTROL WIRING
STANDARD SPEC. DRAWING ESD-61
DATE: 4-22-89
SCALE: NONE



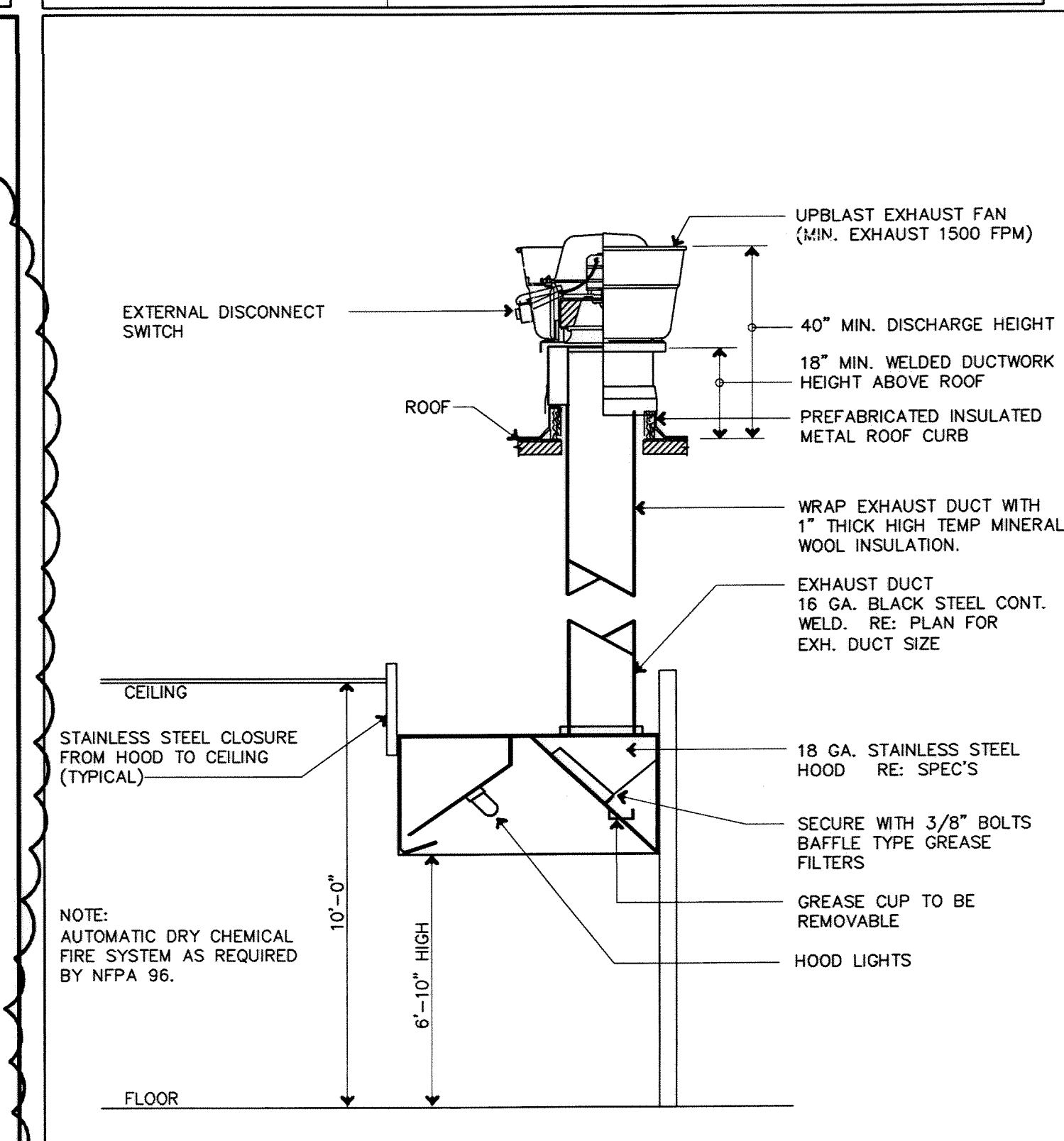
Computer Process Controls, Inc.
Panel Layout, HVAC, Kroger 5 to 6 RTU
DATE: 4-22-89
SCALE: NONE



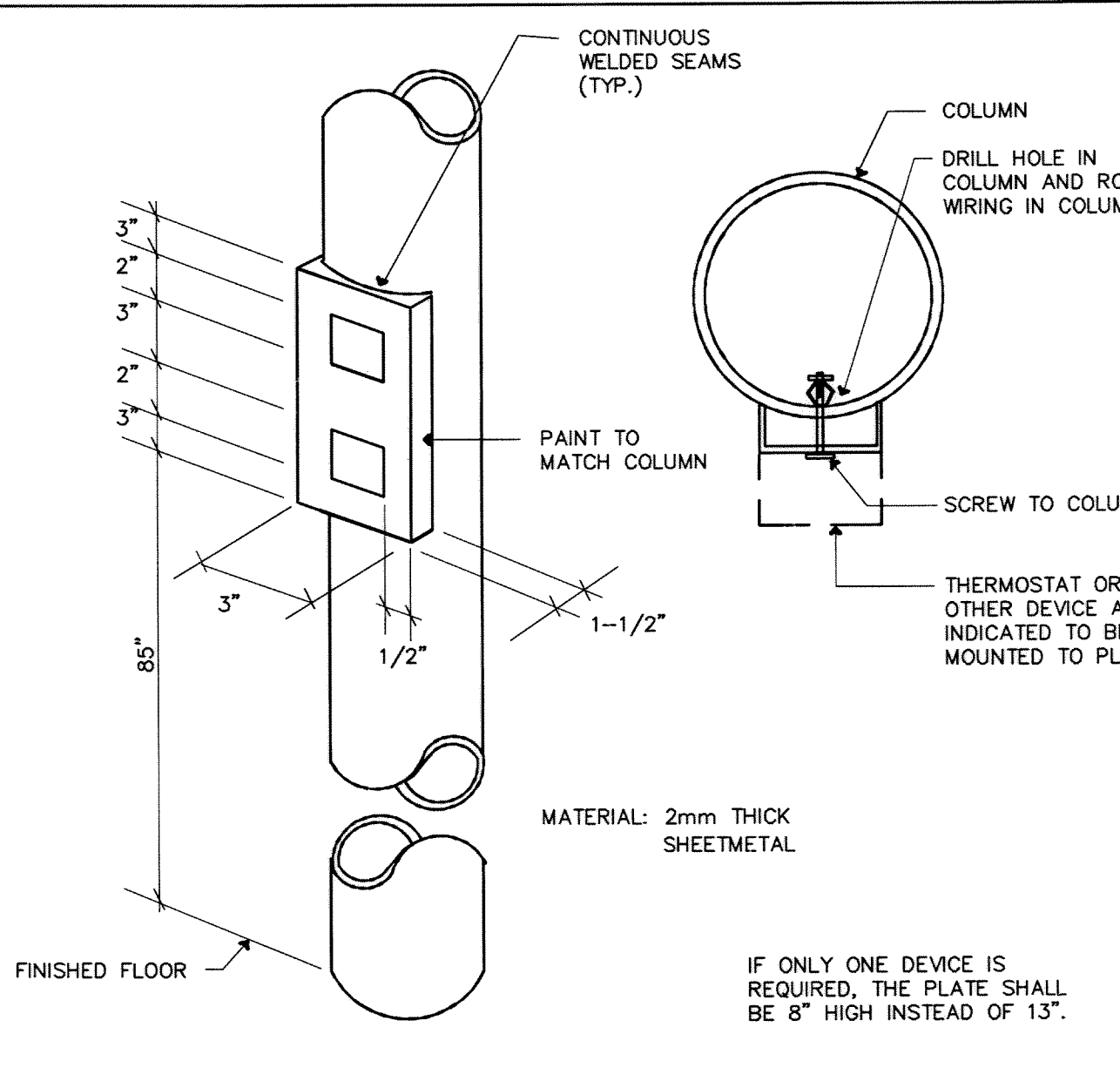
WIRING DIAGRAM COMPRESSOR ROOM EXHAUST FANS
STANDARD SPEC. DRAWING ESD-18S
DATE: 4-22-85
SCALE: NONE



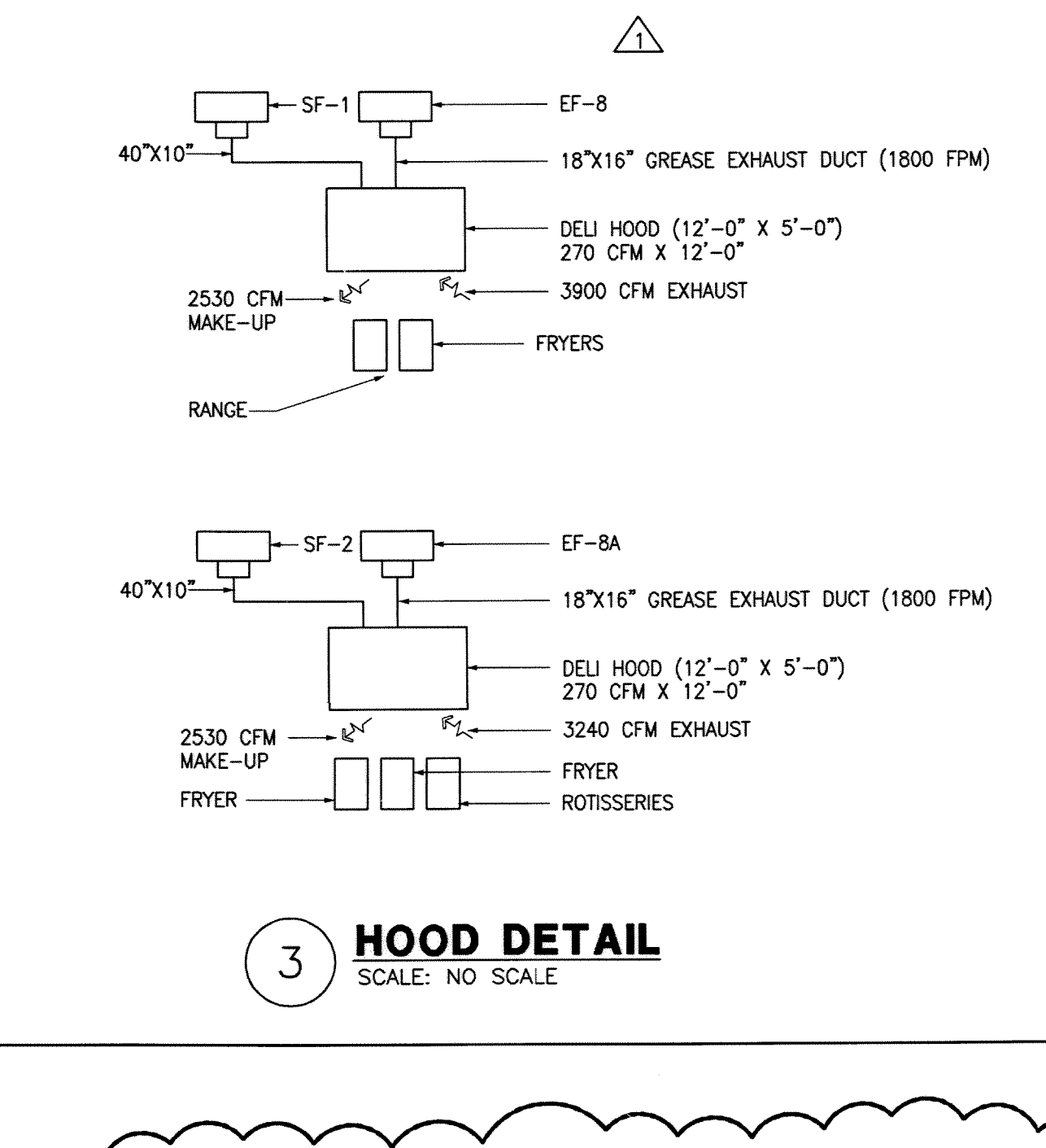
CPC HVAC TERMINAL CONNECTIONS
STANDARD SPEC. DRAWING ESD-43
DATE: 2-29-00
SCALE: NONE



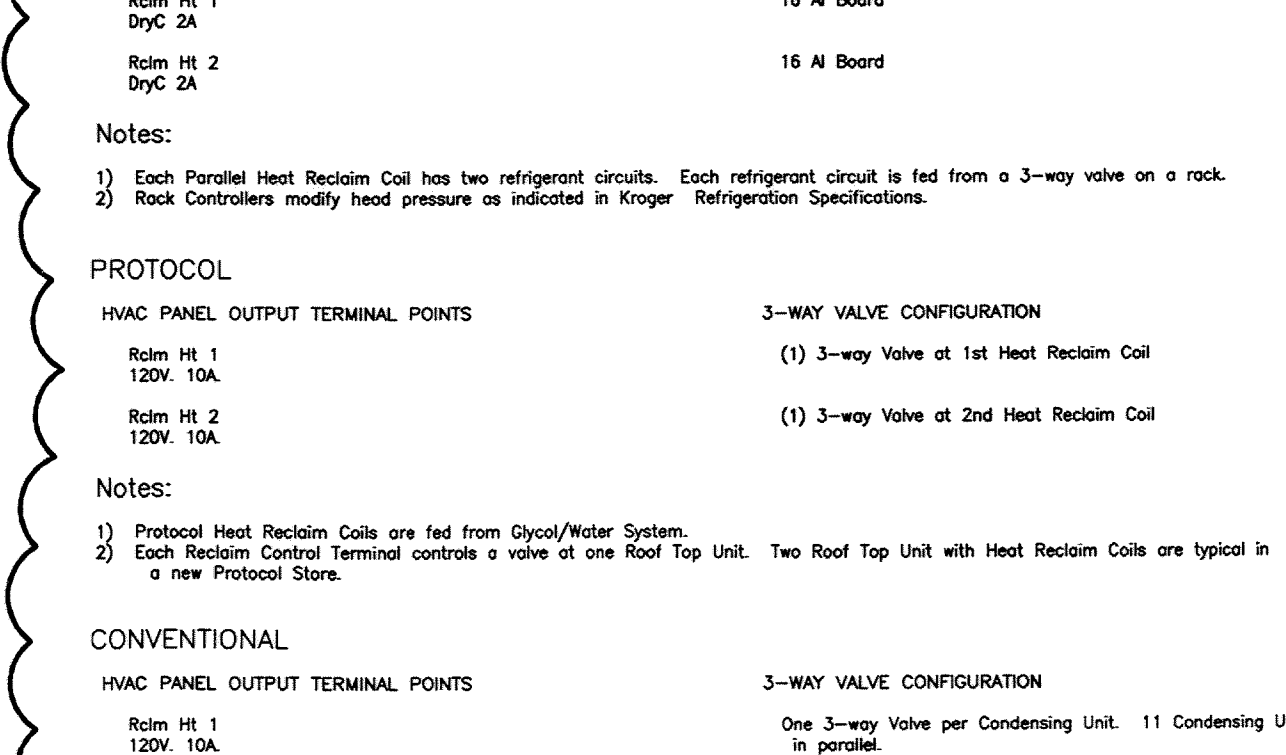
SEAFOOD STEAMER HOOD DETAIL
NO SCALE



TEMPERATURE SENSOR MOUNTING DETAIL
NO SCALE

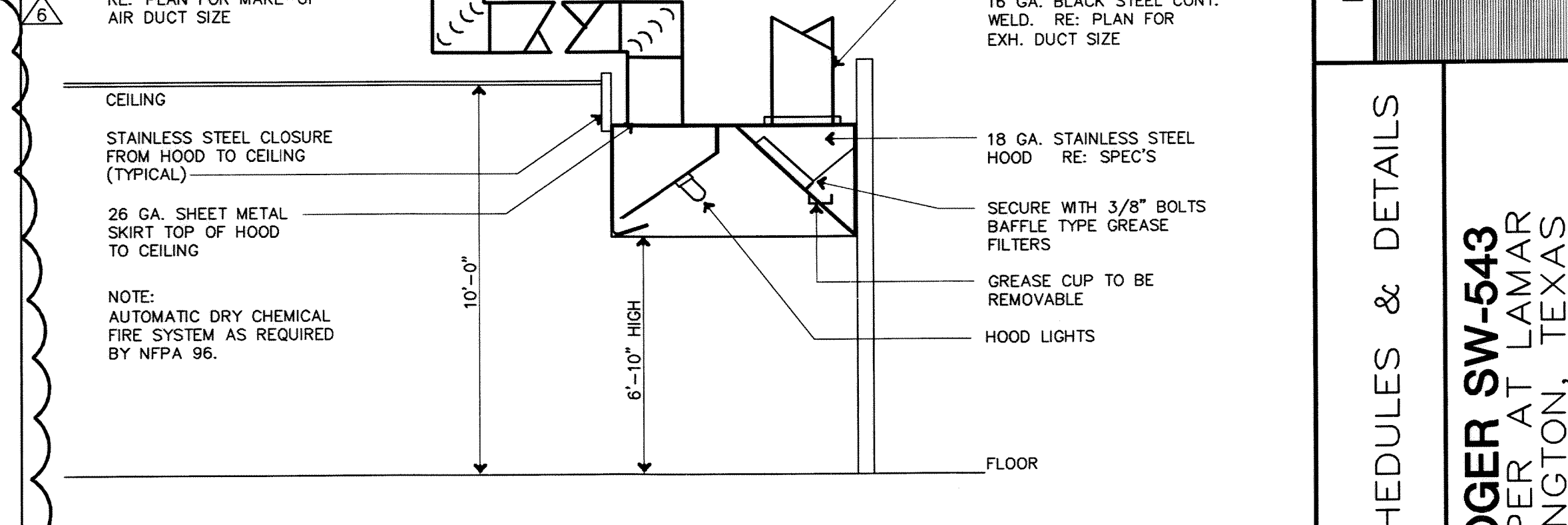
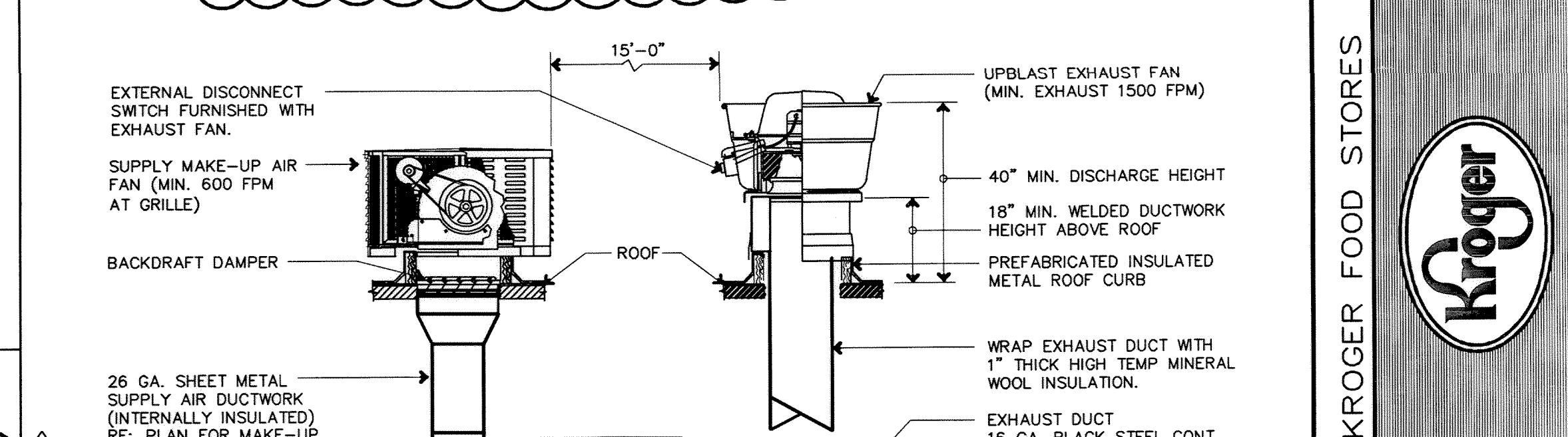
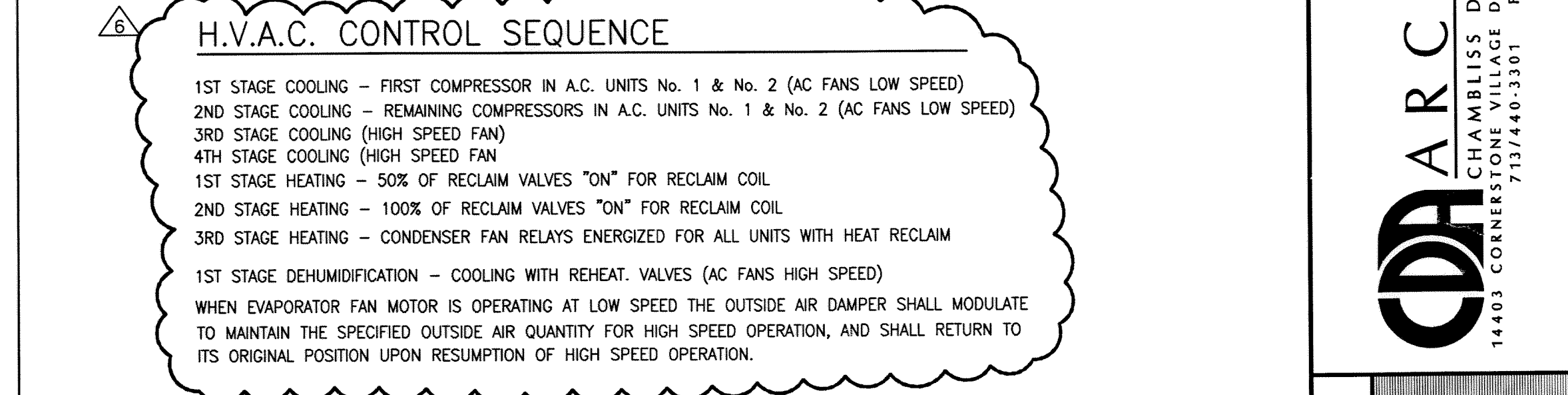
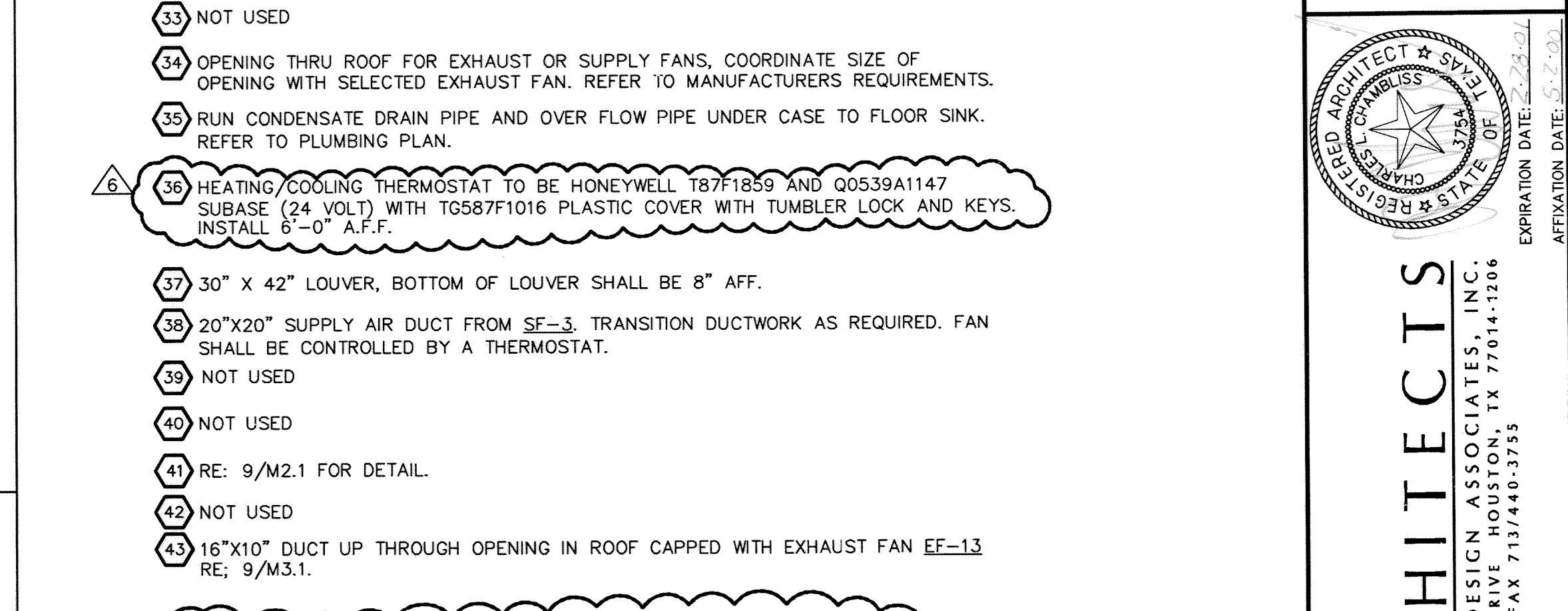


HOOD DETAIL
SCALE: NO SCALE



HEAT RECLAIM CONNECTIONS
STANDARD SPEC. DRAWING ESD-45
DATE: 2-29-00
SCALE: NONE

- PLAN NOTES**
- SEE HEATING, VENTILATING & AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS.
 - ALL DIFFUSERS AND CEILING GRILLES SHALL BE COORDINATED WITH LAY-IN CEILING GRID.
 - NOT USED.
 - WALL MOUNTED TEMPERATURE SENSOR, THERMOSTAT FOR CONTROLLING TEMPERATURE LOCATED IN HVAC CONTROL PANEL. -- SEE CONTROL DIAGRAMS ON SHEET M3.1.
 - DUCTWORK UP TO ROOFTOP UNIT. TRANSITION DUCTWORK AS REQUIRED. RE: ROOF PLAN 5/M2.1
 - OPENING THRU ROOF FOR HEAT RECLAIM LINES. RE: ROOF PLAN, 5/KM2.1.
 - INTERNAL HEAT RECLAIM COIL. SEE ROOFTOP UNIT SCHEDULE ON SHEET M3.1
 - CONTRACTOR TO SUPPLY GALVANIZED FLUE DUCTS WITH BREIDRET ROOF CAPS AND MAKE FINAL CONNECTIONS. SIZE AS REQUIRED. WRAP FLUE DUCTS WITH 1" THICK HIGH TEMP. MINERAL WOOL INSULATION. RE: 2 & 8 /M2.1.
 - NOT USED.
 - 18"x18" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-8. RE: 1/M3.1.
 - 18"x18" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-8A. RE: 1/M3.1.
 - NOT USED.
 - 40"x10" MAKE-UP AIR DUCT DOWN FROM SUPPLY FAN SE-1 ON ROOF. FAN SHALL BE INTERLOCKED WITH EF-8. RE: 1/M3.1.
 - 14"x8" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-11. FAN SHALL BE INTERLOCKED WITH RTU-5.
 - PROVIDE SHROUD AT HOOD TO FILL SPACE BETWEEN HOOD AND CEILING WHERE REQUIRED. REFER TO DETAIL SHEET AND SPECIFICATIONS.
 - 14"x14" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-9. RE: 1/KM2.1.
 - 12"x12" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-10.
 - 12"x12" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-12.
 - 40"x10" MAKE UP AIR DUCT DOWN FROM SUPPLY FAN SE-2 ON ROOF. FAN SHALL BE INTERLOCKED WITH EF-8A. RE: 1/KM3.1.
 - NOT USED.
 - CONNECT 1 1/4" CONDENSATE LINE TO 2" CONDENSATE LINE.
 - RUN CONDENSATE DRAIN PIPE FROM ROOFTOP UNIT DOWN THROUGH ROOF. PROVIDE A P-TRAP BEFORE PENETRATION.
 - CONNECT SUPPLY DUCT TO THE TOP OF SUPPLY DUCT, OFFSET AS REQUIRED AND RUN BETWEEN ROOF JOIST. COORDINATE EXACT DUCT LOCATION WITH ROOF JOIST AND CEILING GRID.
 - NOT USED.
 - NOT USED.
 - 30"x36" GRILLE, BOTTOM OF GRILLE SHALL BE 8" ABOVE FLOOR.
 - FULL SIZE SUPPLY AIR DUCT DOWN FROM ROOFTOP UNIT, VERIFY DIMENSIONS WITH MANUFACTURER. TRANSITION DUCTWORK AS REQUIRED. RE: 3/M2.1.
 - FULL SIZE RETURN AIR DUCT UP TO ROOFTOP UNIT (57" x 92" ROOF OPENING)
 - RUN CONDENSATE DRAIN PIPE IN CEILING SPACE.
 - RUN CONDENSATE DRAIN PIPE DOWN TO FLOOR DRAIN, (INDIRECT CONNECTION). REFER TO PLUMBING DRAWINGS FOR LOCATION.
 - THERMOSTAT 5"-0" A.F.F. SEE ESD-58S. FASTEN BULBS HORIZONTALLY TO UNISTRUT CHANNELS PER NOTE 9 ON RSD-5B.
 - NOT USED.
 - OPENING THRU ROOF FOR EXHAUST OR SUPPLY FANS. COORDINATE SIZE OF OPENING WITH SELECTED EXHAUST FAN. REFER TO MANUFACTURER'S REQUIREMENTS.
 - RUN CONDENSATE DRAIN PIPE AND OVER FLOW PIPE UNDER CASE TO FLOOR SINK. REFER TO PLUMBING PLAN.
 - HEATING/COOLING THERMOSTAT TO BE HONEYWELL 187F188 AND Q0539A1147 SUBBASE (24 VOLT) WITH T0587F1016 PLASTIC COVER WITH TUMBLER LOCK AND KEYS. INSTALL 8"-0" A.F.F.
 - 30" x 42" LOUVER, BOTTOM OF LOUVER SHALL BE 8" AFF.
 - 20"x20" SUPPLY AIR DUCT FROM SE-3. TRANSITION DUCTWORK AS REQUIRED. FAN SHALL BE CONTROLLED BY A THERMOSTAT.
 - NOT USED.
 - NOT USED.
 - RE: 9/M2.1 FOR DETAIL.
 - NOT USED.
 - 16"x10" DUCT UP THROUGH OPENING IN ROOF CAPPED WITH EXHAUST FAN EF-13. RE: 3/M3.1.



DELI PREP. HOOD DETAIL (TYP. OF 2)
NO SCALE

2/14/00	5/2/00
MODIFICATION NO. 5	MODIFICATION NO. 6
9/13/99	9/29/99
ADDITIONAL NO. 1	ADDITIONAL NO. 2
ADDITIONAL NO. 3	ADDITIONAL NO. 4
ADDITIONAL NO. 5	ADDITIONAL NO. 6
ADDITIONAL NO. 7	ADDITIONAL NO. 8
ADDITIONAL NO. 9	ADDITIONAL NO. 10
ADDITIONAL NO. 11	ADDITIONAL NO. 12
ADDITIONAL NO. 13	ADDITIONAL NO. 14
ADDITIONAL NO. 15	ADDITIONAL NO. 16
ADDITIONAL NO. 17	ADDITIONAL NO. 18
ADDITIONAL NO. 19	ADDITIONAL NO. 20
ADDITIONAL NO. 21	ADDITIONAL NO. 22
ADDITIONAL NO. 23	ADDITIONAL NO. 24
ADDITIONAL NO. 25	ADDITIONAL NO. 26
ADDITIONAL NO. 27	ADDITIONAL NO. 28
ADDITIONAL NO. 29	ADDITIONAL NO. 30
ADDITIONAL NO. 31	ADDITIONAL NO. 32
ADDITIONAL NO. 33	ADDITIONAL NO. 34
ADDITIONAL NO. 35	ADDITIONAL NO. 36
ADDITIONAL NO. 37	ADDITIONAL NO. 38
ADDITIONAL NO. 39	ADDITIONAL NO. 40
ADDITIONAL NO. 41	ADDITIONAL NO. 42
ADDITIONAL NO. 43	ADDITIONAL NO. 44
ADDITIONAL NO. 45	ADDITIONAL NO. 46
ADDITIONAL NO. 47	ADDITIONAL NO. 48
ADDITIONAL NO. 49	ADDITIONAL NO. 50
ADDITIONAL NO. 51	ADDITIONAL NO. 52
ADDITIONAL NO. 53	ADDITIONAL NO. 54
ADDITIONAL NO. 55	ADDITIONAL NO. 56
ADDITIONAL NO. 57	ADDITIONAL NO. 58
ADDITIONAL NO. 59	ADDITIONAL NO. 60
ADDITIONAL NO. 61	ADDITIONAL NO. 62
ADDITIONAL NO. 63	ADDITIONAL NO. 64
ADDITIONAL NO. 65	ADDITIONAL NO. 66
ADDITIONAL NO. 67	ADDITIONAL NO. 68
ADDITIONAL NO. 69	ADDITIONAL NO. 70
ADDITIONAL NO. 71	ADDITIONAL NO. 72
ADDITIONAL NO. 73	ADDITIONAL NO. 74
ADDITIONAL NO. 75	ADDITIONAL NO. 76
ADDITIONAL NO. 77	ADDITIONAL NO. 78
ADDITIONAL NO. 79	ADDITIONAL NO. 80
ADDITIONAL NO. 81	ADDITIONAL NO. 82
ADDITIONAL NO. 83	ADDITIONAL NO. 84
ADDITIONAL NO. 85	ADDITIONAL NO. 86
ADDITIONAL NO. 87	ADDITIONAL NO. 88
ADDITIONAL NO. 89	ADDITIONAL NO. 90
ADDITIONAL NO. 91	ADDITIONAL NO. 92
ADDITIONAL NO. 93	ADDITIONAL NO. 94
ADDITIONAL NO. 95	ADDITIONAL NO. 96
ADDITIONAL NO. 97	ADDITIONAL NO. 98
ADDITIONAL NO. 99	ADDITIONAL NO. 100

ARCHITECTS
CHAMBLISS DESIGN ASSOCIATES, INC.
14403 CONNORVILLE ROAD, SUITE 1500
ARLINGTON, TEXAS 76010-1518
PHONE: 714/460-3301 FAX: 714/460-3755
EXPIRATION DATE: 12/31/2000

KROGER FOOD STORES
Kroger
MECH. SCHEDULES & DETAILS
KROGER SW-543
COOPER AT LAMAR
ARLINGTON, TEXAS
R.H. George and Associates, Inc.
Consulting Engineering
8700 Jamahl, Suite 1500
Houston, Texas 77040 (713) 690-6300