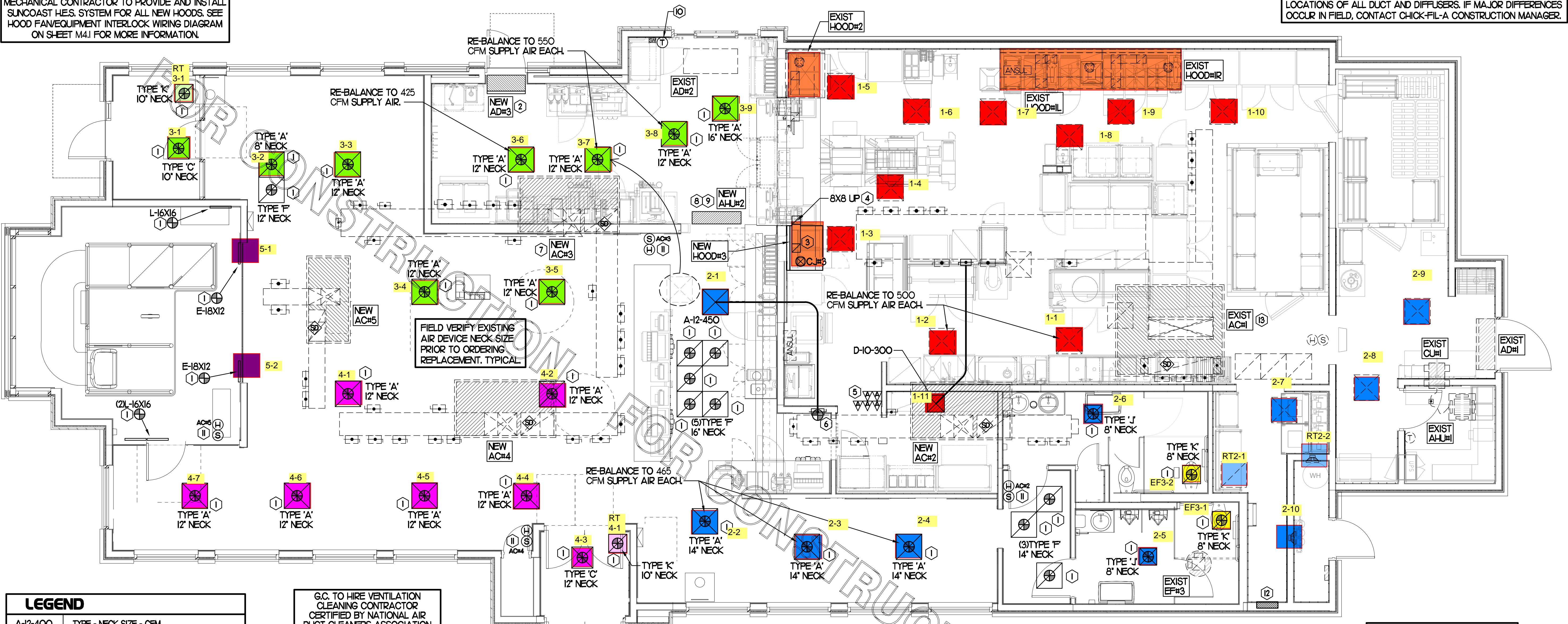


H.E.S. SYSTEM
MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL SUNCOAST H.E.S. SYSTEM FOR ALL NEW HOODS. SEE HOOD FAN/EQUIPMENT INTERLOCK WIRING DIAGRAM ON SHEET M4.I FOR MORE INFORMATION.

EXISTING CONDITIONS SHOWN ARE FROM PREVIOUS DRAWINGS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL DUCT AND DIFFUSERS. IF MAJOR DIFFERENCES OCCUR IN FIELD, CONTACT CHICK-FIL-A CONSTRUCTION MANAGER.



LEGEND

A-12-400	TYPE - NECK SIZE - CFM
	SPIN-IN FITTING, MVD, NO SCOOP
	REMOTE TEMPERATURE SENSOR
	REMOTE HUMIDITY SENSOR
	SMOKE DETECTOR
	GREASE ACCESS DOOR TYPE
	DIRECTION OF THROW
	KEY NOTE REFERENCE
	EXISTING START COLLAR
	EXISTING RUNOUT TO REMAIN
	EXISTING RETURN/EXHAUST (TYP)
	EXISTING SUPPLY DIFFUSER (TYP)
	NEW RETURN/EXHAUST, UNO. (TYP)
	NEW SUPPLY DIFFUSER, UNO. (TYP)
	NEW DUCT (TYP)
	SMOKE DETECTOR TEST/RESET STATION

G.C. TO HIRE VENTILATION CLEANING CONTRACTOR CERTIFIED BY NATIONAL AIR DUCT CLEANERS ASSOCIATION (NADCA) TO CLEAN ALL EXISTING DUCTWORK THAT IS TO REMAIN.

SHEET NOTES

- DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE
- REFER TO ELEVATIONS ON M2.I AND HOOD DETAILS ON M4.I FOR CAPTURE-LET FANS DUCTING REQUIREMENTS.
- HARDPIPE SHALL BE USED FOR ALL TAKE-OFFS EXCEPT WHERE ALLOWED BY DETAIL 1/M3.I. USE OF FLEXIBLE DUCT SHALL BE LIMITED TO THOSE SITUATIONS WHERE NO OTHER MEANS TO ACCOMPLISH ROUTINGS IS POSSIBLE.
- COORDINATE NEW WORK WITH EXISTING CONDUITS, STRUCTURE AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR TO NOTIFY DESIGN TEAM WITHOUT DELAY IF ACTUAL LOCATION OF EXISTING MECHANICAL EQUIPMENT DOES NOT MATCH FLOOR PLAN.
- MECHANICAL CONTRACTOR SHALL BALANCE HVAC SYSTEM AS SHOWN ON THIS PLAN & IN SCHEDULES ON SHEET M3.I. IF AIRFLOWS DIFFER BY MORE THAN 5%, CONTACT CFA CONSTRUCTION MANAGER. TEST AND BALANCE REPORT SHALL BE DONE PRIOR TO STORE TURNOVER AND SUBMITTED TO CFA'S CONSTRUCTION MANAGER.

KEY NOTES (THIS SHEET ONLY)

- CONNECT NEW AIR DEVICE TO EXISTING TAKE-OFF. IF NECESSARY, MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL NEW DUCT IN ORDER TO MAKE CONNECTION TO AIR DEVICE IN NEW LOCATION. ANY FLEX DUCT USED SHALL NOT BE LONGER THAN 4'-0". SEE DETAIL 1/M3.I. COORDINATE AIR DEVICE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- AIR CURTAIN MOUNTED OVER DOOR HEADER AT 7'-2" AFF TO BOTTOM OF UNIT. PROVIDE BLOCKING IN WALL BEHIND AIR CURTAIN. USE FACTORY PRE-PUNCHED MOUNTING HOLES ON BACK SIDE OF AIR CURTAIN ONLY. ATTACH AIR CURTAIN TO WALL USING 3/8" LAG BOLTS, LENGTH AS REQUIRED TO FULLY PENETRATE BLOCKING. LOCATE MAGNETIC CONTACT TYPE MICROSWITCH IN DOOR FRAME ON STRIKE SIDE.
- HALTON MBD DAMPER AT HOOD COLLAR BY MECHANICAL CONTRACTOR. REFER TO SHEET M2.I AND M4.I FOR FURTHER INFORMATION.
- GREASE DUCT UP THRU EXISTING ROOF PENETRATION FROM FULL SIZE OF MBD COLLAR. OFFSETS THRU ROOF NOT TO BE GREATER THAN 45 DEGREES. SEE SHEET M1.2 FOR CONTINUATION.
- MOUNT NEW SMOKE DETECTOR TEST/RESET STATIONS FOR ALL A/C UNITS ON WALL. COORDINATE EXACT LOCATION WITH KITCHEN ELEVATIONS AND ELECTRICAL. CONTACT SUNCOAST ENVIRONMENTAL CONTROLS AT 1-877-544-6679 TO PURCHASE A NEW SMOKE DETECTOR TEST/RESET STATION FOR EACH RTU.
- PROVIDE & INSTALL NEW SPIN-IN COLLAR AND ROUTE NEW DUCT TO NEW GRILLE AS SHOWN.
- G.C. TO CONFIRM EXACT LOCATION OF AC#3 MAIN DUCT RUNS RELATIVE TO PROPOSED NEW WALL PRIOR TO START OF CONSTRUCTION. CONTACT JLL PM OR AOR IF DETERMINED THERE IS A CONFLICT.

MECHANICAL FLOOR PLAN

SCALE: 1/4"=1'-0"

HOLD DUCT AT ALL AC UNITS AS HIGH AS POSSIBLE DUE TO LIMITED CLEARANCE ABOVE CEILING.

TOTAL AIR BALANCE SCHEDULE

EQUIPMENT MARK	AC#1 (EXIST)	AC#2 (NEW)	AC#3 (NEW)	AC#4 (NEW)	AC#5 (NEW)	EF#1 (EXIST)	EF#2 (NEW)	EF#3 (EXIST)	TOTAL
SERVES	KITCHEN	SIDE DINING	DRIVE THRU	MAIN DINING	PLAY AREA	HOOD#1 HOOD#1R	HOOD#2 HOOD#3	REST-ROOMS	
SUPPLY AIR CFM	8,000	2,830	4,000	2,765	1,800				19,395
RETURN AIR CFM	6,200	2,080	3,000	2,165	1,500				14,945
OUTSIDE AIR CFM	1,800	750	1,000	600	300				+4,450
EXHAUST CFM						1,912	1,402	400	-3,714
PRESSURIZATION									+736
REMARKS	ADJUST AND VERIFY BALANCE OF ALL HVAC EQUIPMENT IS AS SHOWN IN ORDER TO MAINTAIN BUILDING AIR BALANCE.								



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CHICK-FIL-A
MECHANICSBURG FSU
6416 CARLISLE PIKE STE 3500
MECHANICSBURG, PA 17050-2957

FSR#02167
BUILDING TYPE / SIZE: SR 506
RELEASE: 23.04

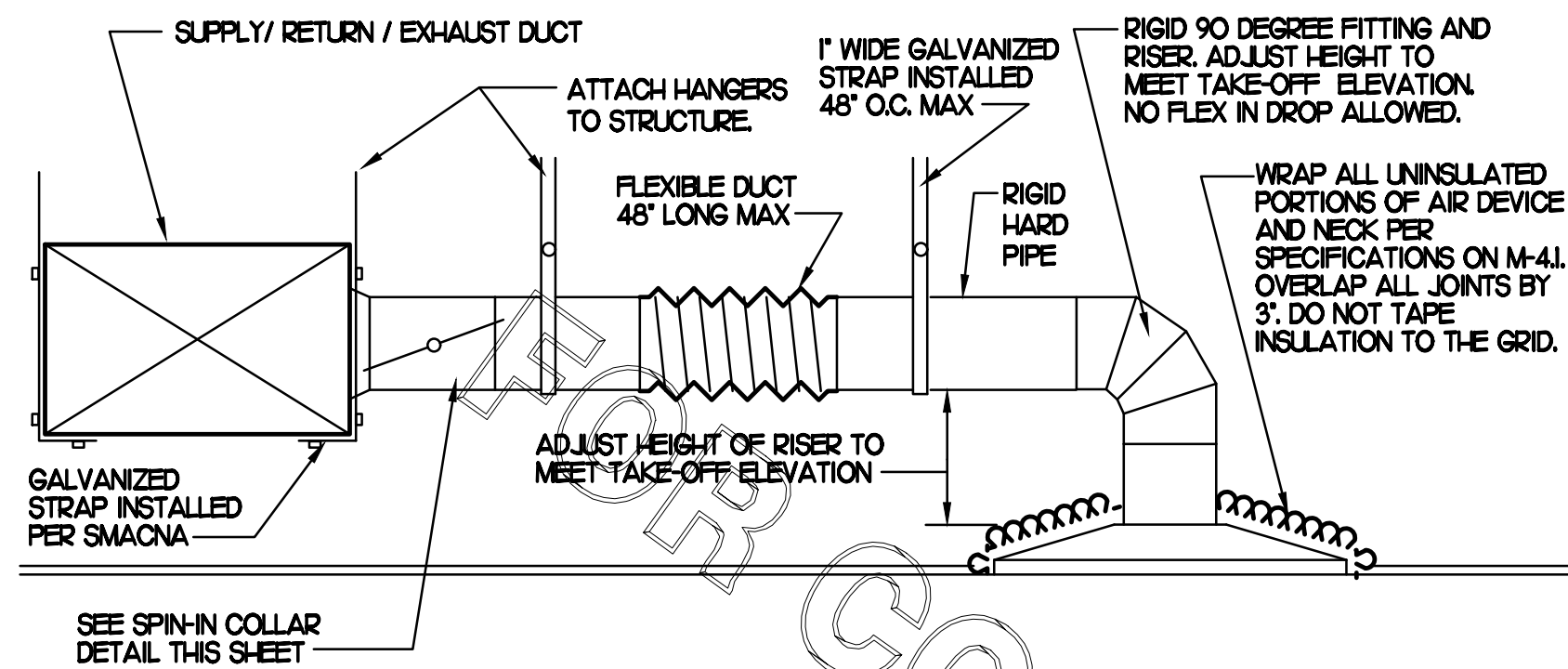
REVISION SCHEDULE

NO.	DATE	DESCRIPTION

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SHEET
MECHANICAL
FLOOR PLAN
SHEET NUMBER

M1.1

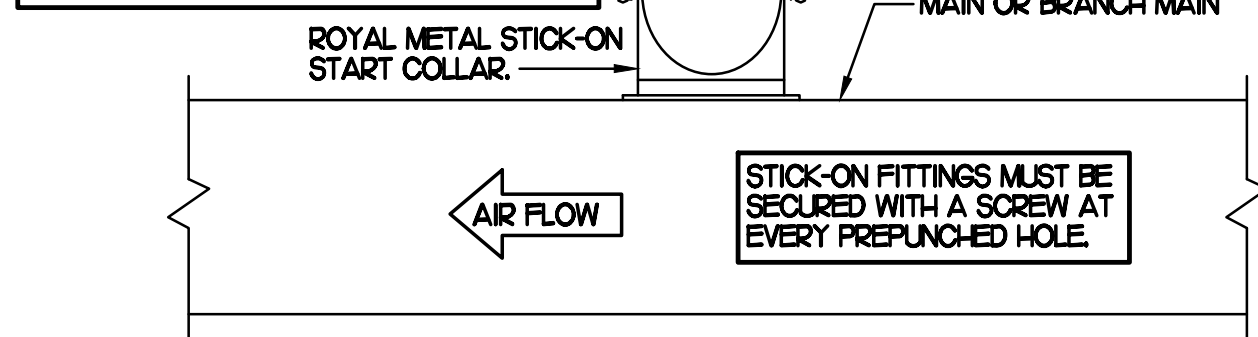


1 SAG/RAG/GRILLE TAKE-OFF

NO SCALE

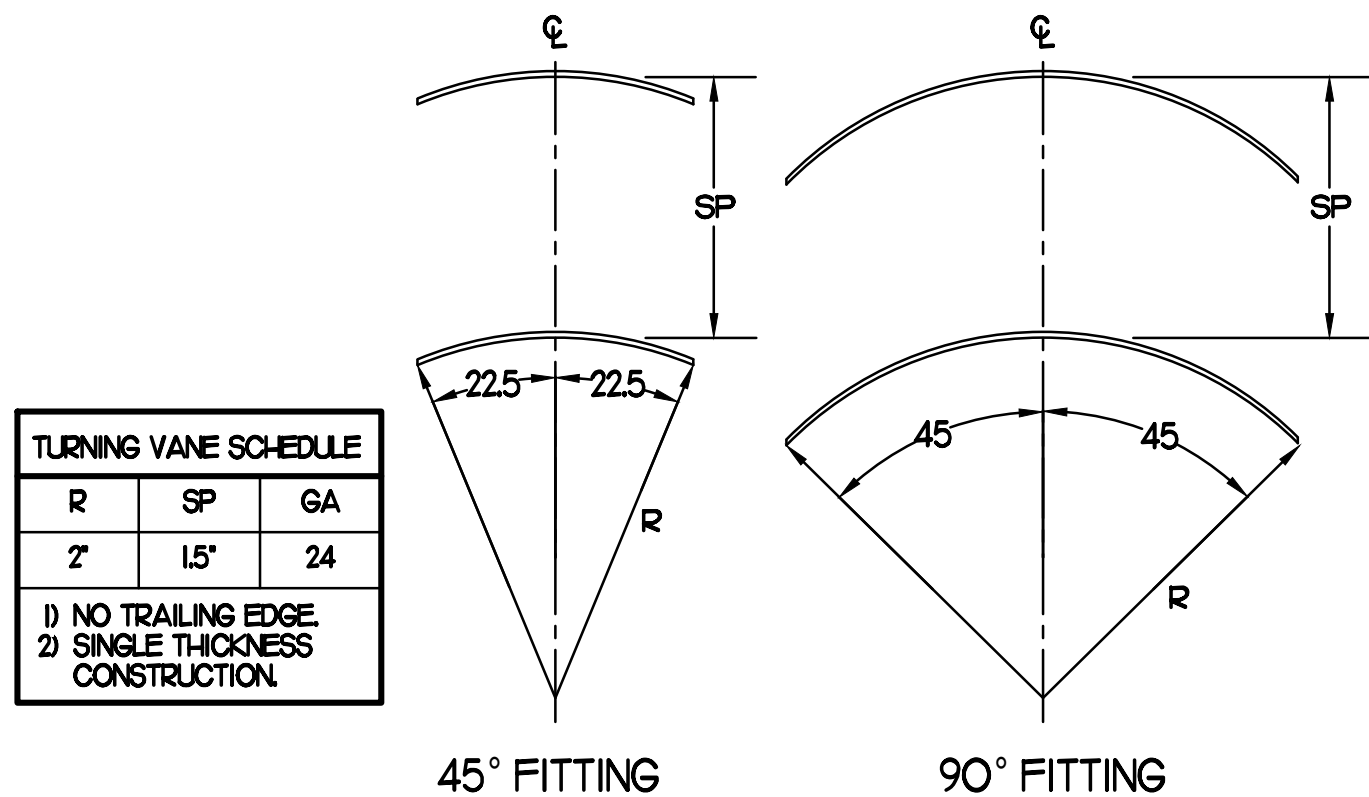
CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE ROYAL METAL START COLLARS. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE ROYAL METAL START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. ROYAL METAL START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.

DAMPER CONTROL HANDLE MUST BE LEFT EXPOSED, LOCATED ON THE LEFT OR RIGHT SIDE WHEN INSTALLED ON HORIZONTAL DUCTS, AND LOCATED ON THE BOTTOM WHEN INSTALLED ON VERTICAL DUCTS. DAMPER CONTROL HANDLES NOT INSTALLED IN THE CORRECT ORIENTATION AS SPECIFIED ABOVE WILL NOT BE ACCEPTED. ATTACH A YELLOW FLUORESCENT CONSTRUCTION RIBBON TO THE HANDLE. RIBBON MUST BE 12" LONG AND BE EASILY IDENTIFIABLE FOR TEST AND BALANCE CONTRACTOR.



2 START COLLAR

NO SCALE



3 TURNING VANES

NO SCALE

LENNOX FRESH AIR TEMPERING SETUP

- INSTALL FRESH AIR TEMPERING KIT WIRING HARNESS AS RECOMMENDED BY LENNOX.
- LOCATE SUPPLY AIR TEMPERATURE SENSOR IN SUPPLY DUCT DOWNSTREAM OF FIRST ELBOW. SECURE WIRING TO DUCT OR STRUCTURE WITH RUBBER COATED CLAMPS. DO NOT RUN WIRING INSIDE DUCT WORK. PROTECT ALL WIRING PENETRATIONS WITH RUBBER GROMMETS.
- CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #156 TO A VALUE OF 66 (OLDER MI-8 IMC BOARD ECTO PARAMETER 6.20 SET TO A VALUE OF 145). THIS WILL PREVENT THE SUPPLY AIR TEMPERATURE FROM DROPPING BELOW 66°F DURING HEATING MODE WHEN THERMOSTAT IS NOT ACTIVELY CALLING FOR HEAT. NOTICE - THIS PARAMETER #156 (6.20) MUST BE CHANGED TO ACTIVATE THE FRESH AIR TEMPERING FEATURE.
- CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #157 TO A VALUE OF 14 (OLDER MI-8 IMC BOARD ECTO PARAMETER 6.21 SET TO A VALUE OF 2). THIS WILL MAKE THE DEADBAND VALUE EQUAL 14°F.
- CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #158 TO A VALUE OF 300 (OLDER MI-8 IMC BOARD ECTO PARAMETER 6.22 SET TO A VALUE OF 37). THIS WILL MAKE THE CYCLE TIME VALUE EQUAL 5 MINUTES.

EXHAUST FAN SCHEDULE

MARK	CFM	ESP	RPM	TP SPEED (FPM)	HP (WATTS)	AREA SERVED	MODEL	MANUFACTURER	REMARKS
EF#1 (EXIST)	1,918	-	-	-	-	HOOD#1 & HOOD#R	-	EXISTING	-
EF#2 (NEW)	1,402	0.95	1,199	4,708	3/4	HOOD#2 & HOOD#3	150 OPS	LOREN COOK	H2
EF#3 (EXIST)	400	-	-	-	-	RESTROOMS	-	EXISTING	-

NOTES

- GREASE EXHAUST FAN RPM BASED ON 80 DEGREE F AIR AT 1000 FEET ABOVE SEA LEVEL.
- GREASE EXHAUST FANS TO BE UL 762 LISTED.
- CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR FAN/CLUB PACKAGE. MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN/CLUB PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. FANS AND CLUBS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.

REMARKS

- PROVIDE AND INSTALL ROOFTOP SOLUTIONS G2 DRIP GUARD, MC. TO CONTACT ROOFTOP SOLUTIONS AT 800-913-7034
- PROVIDE FACTORY INSTALLED, PRE-WIRED, NEMA 3 NON-FUSED DISCONNECT. COORDINATE WITH E.C.
- INTEGRAL THERMAL OVERLOAD WITH AUTOMATIC RESET.
- UPBLAST, ARRANGEMENT IO, CCW ROTATION SEE PLANS TO CONFIRM CONFIGURATION
- PROVIDE FACTORY STEEL FAN WHEEL.
- PROVIDE FACTORY STEEL INLET FLANGE AND INLET COMPANION FLANGE.
- PROVIDE FACTORY WEATHER HOUSING W/ HINGED ACCESS DOOR.
- PROVIDE FACTORY DRAIN CONNECTION.
- PROVIDE FACTORY BOLTED ACCESS DOOR ON SCROLL.
- PROVIDE FACTORY STEEL OUTLET COMPANION FLANGE.
- UTILITY SET FAN CLUB AND ASSOCIATED EXHAUST DUCT CLUB PROVIDED BY TOM BARROW COMPANY.
- PROVIDE FACTORY BELT DRIVE WITH ADJUSTABLE MOTOR SHEAVE AND SPARE BELT.

AIR DOOR SCHEDULE

MARK	CFM	VELOCITY	HEATING CAP	HP	AREA SERVED	MODEL	MANUFACTURER	REMARKS
AD#1 (EXIST)	-	-	-	-	REAR DOOR	-	EXISTING	-
AD#2 (EXIST)	-	-	-	-	DRIVE THRU	-	EXISTING	-
AD#3 (NEW)	2,899	4,220	NA	3/4	DRIVE THRU DOOR	RBT-136	POWERED-AIRE	1

NOTES

- CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE AIR DOORS. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DOORS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.

REMARKS

- FACTORY PROVIDED MAGNETIC DOOR CONTACT WITH FACTORY INSTALLED LOW VOLTAGE CONTROLS LOCATED IN AIR DOOR CABINET.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION	LOCATION	NECK SIZE	FACE SIZE	FRAME TYPE	REMARKS
A	PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS.	DINING AREA KITCHEN	SEE PLAN	24X24	LAY-IN	17
C	PRICE MODEL SWCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	ENTRYS	14X14	20X20	BEVELLED	1,3,5,6
D	PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS.	DINING AREA KITCHEN	SEE PLAN	16X16	LAY-IN	17
E	PRICE MODEL 22 DOUBLE DEFLECTION ALUMINUM SIDEWALL SUPPLY GRILLE, FRONT BLADE PARALLEL TO LONG SIDE.	PLAY AREA	18X12	20X14	SURFACE	1
F	PRICE MODEL 80 EGGRATE RETURN AIR GRILLE WITH REMOVABLE WHITE CORE, FACTORY FLAT BLACK BACKPAN AND ROUND NECK.	DINING KITCHEN	SEE PLAN	24X24	LAY-IN	17
J	PRICE MODEL SWCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	RESTROOMS	10X10	16X16	BEVELLED	1,2,3,5,6
K	PRICE MODEL APDCR ALUMINUM PERFORATED FACE RETURN AIR GRILLE.	RESTROOMS ENTRYS	14X14	17X17	SURFACE	1,4,5,6
L	PRICE MODEL 21 ALUMINUM SIDEWALL RETURN GRILLE, FRONT BLADE PARALLEL TO LONG SIDE.	PLAY AREA	16X16	18X18	SURFACE	1

NOTES

- MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DEVICES DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. AIR DEVICES NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.

REMARKS

- STANDARD OFF WHITE FINISH.
- PROVIDE MODEL VCS3 NECK DAMPER.
- SEE DRAWING M/J FOR THROW.
- PROVIDE MODEL VCR7 NECK DAMPER ON GRILLES IN RESTROOMS.
- PROVIDE BACKPAN MC TO SEAL JOINTS WITH MASTIC AND INSULATE EXTERNALLY.
- FIELD INSULATE BACKPAN AS SHOWN ON DETAIL 1/M3.
- FACTORY INSULATED R-6 BACKPAN.

GAS FIRED ROOFTOP UNIT SCHEDULE

MARK	COOLING CAPACITY (MBH)		HEATING CAPACITY (MBH)		FAN SECTION (CFM)				MODEL	MANUFACTURER	REMARKS	
	TOTAL	SENS	INPUT	OUTPUT	STAGES	SUPPLY	O.A.	HP				ESP
ACH (EXIST)	-	-	-	-	-	8,000	1,800	-	-	-	EXISTING	-
ACH2 (NEW)	96.6	67.6	240.0	194.0	2	2,830	750	3.75	0.8	LGT1024HE	LENNOX	H214-17
ACH3 (NEW)	129	89.0	240.0	194.0	2	4,000	1,000	3.75	0.8	LGT2024HE	LENNOX	H214-17
ACH4 (NEW)	93.1	64.8	240.0	194.0	2	2,765	600	3.75	0.8	LGT0924HE	LENNOX	H214-17
ACH5 (NEW)	61.6	44.4	150.0	120.0	2	1,800	300	1.0	0.8	LGT0604HE	LENNOX	H1J3-17

NOTES

- COOLING CAPACITIES ARE GROSS, BASED ON INDOOR EDB 80°F, INDOOR EWB 67°F, OUTDOOR EDB 95°F.
- FOR PROPER BUILDING AIR BALANCE, VERIFY AMOUNT OF OUTSIDE AIR PROVIDED BY ALL EXISTING UNITS. ADJUST AS PER SCHEDULE IF NECESSARY.
- VERIFY MIN IO DISTANCE OF O.A. INTAKE OPENINGS OF A/C UNITS FROM ANY EXISTING SOURCE OF AIR POLLUTION (EXHAUST FAN, COMBUSTION FLE, VENT ETC). IF SUCH CONDITIONS EXIST, CONTRACTOR IS REQUIRED TO DUCT OUTSIDE AIR INTAKE ON ROOF AWAY FROM ANY SUCH SOURCE.

REMARKS

- PROVIDE DIFFERENTIAL ENTHALPHY ECONOMIZER WITH POWER EXHAUST, ECONOMIZER TO BE LOW LEAKAGE/HIGH PERFORMANCE.
- SEE DETAIL 2/M41 FOR SETTING OF PRODIGY M3 BOARD CONTROL PARAMETERS BY MC.
- PROVIDE FACTORY INSTALLED AND UNIT POWERED 15V GFI SERVICE OUTLET.
- VERIFY FACTORY INSTALLED RETURN SIDE SMOKE DETECTOR.
- PROVIDE FACTORY INSTALLED NON-FUSED DISCONNECT.
- PROVIDE 2" MERV 8 THROW AWAY FILTERS.
- PROVIDE HINGED PANELS FOR FILTER ACCESS, FAN MOTOR ACCESS, COMPRESSOR ACCESS AND CONTROL COMPARTMENT ACCESS.
- ADJUST GAS MANIFOLD PRESSURE AT LOCATIONS WHERE ELEVATION EXCEEDS 2000' ABOVE SEA LEVEL AS RECOMMENDED BY MANUFACTURER.
- PROVIDE FACTORY INSTALLED COIL HAIL GUARD.
- PROVIDE HUMIDITROL OPTION WITH FACTORY WALL MOUNTED HUMIDITY SENSOR.
- PROVIDE WITH FACTORY CONDENSATE DRAIN PAN OVERFLOW SWITCH.
- PROVIDE WITH FACTORY RETURN AIR ADAPTER PLATE.
- PROVIDE WITH ADAPTER CLUB, UNIT BEING REPLACED IS LENNOX MODEL LG6A06H. ADAPTER CLUB IS PROVIDED BY LENNOX AS PART OF THE TOTAL EQUIPMENT PACKAGE.
- PROVIDE WITH MSAV BLOWER.
- PROVIDE FACTORY CONFIGURED PHASE LOSS PROTECTION.
- PROVIDE HIGH FALLT SCOR (1000).
- PROVIDE FACTORY FRESH AIR TEMPERING KIT.

DUCTLESS SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

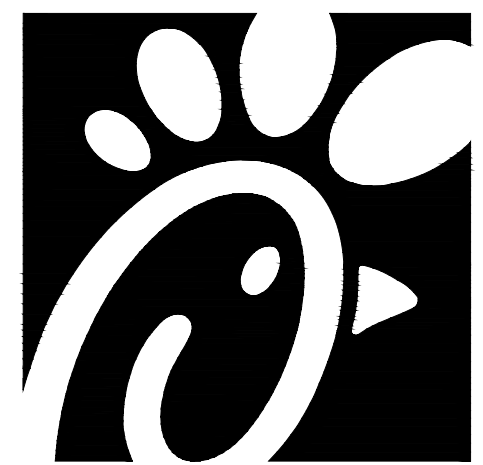
MARK	COOLING CAPACITY (MBH)		HEATING CAPACITY (MBH)		EFFICIENCIES	FAN SECTION (CFM)	ELECTRICAL DATA		R-410A MODEL	MFR			
	MIN	MAX	MIN	MAX			NCA	MCCP			VOLTAGE	AHU	CU
AH#2/CL#2 (NEW)	180	335	180	400	16.2	10.0	635-730-830	28	140	208/1160	FKA-A36KA7	PLZ-HA36HA5	MITSUBISHI

NOTES

- MECHANICAL CONTRACTOR SHALL PURCHASE THE SPLIT SYSTEM HEAT PUMP DIRECTLY FROM TRANE/MITSUBISHI. CONTACT MS. LALRI FRANKOWSKI AT 630-400-4285, FOR PRICING AND AVAILABILITY.

REMARKS

- ELECTRICIAN TO PROVIDE NON-FUSED DISCONNECT.
- MECHANICAL TO PROVIDE AND INSTALL REFRIGERANT PIPING AS PER MFR RECOMMENDATIONS.
- PROVIDE ENGRAVED PLASTIC LABEL AT AHU AND CU WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND RIVETED TO UNIT CABINET.
- PROVIDE WITH ADEQUATE REFRIGERANT LINE SET, FIELD VERIFY DISTANCE FROM WHERE CONDENSER IS TO BE SET TO AIR HANDLER LOCATION PRIOR TO ORDERING.
- PROVIDE WITH WALL MOUNTED THERMOSTAT (TAR-CT01MALU-SBL) USE TWO-WIRE, STANDARD, NON-POLAR CONTROL WIRE TO CONNECTOR TB5 ON INDOOR UNIT CONTROLLER, PROGRAM THERMOSTAT CONTROLS TO MATCH DRIVE-THRU RTU SETPOINTS.
- PROVIDE PAC-SE56RA-E CONNECTOR AT INDOOR UNIT (CONNECTOR CH3), WIRE ORANGE AND RED WIRES TO SPARE POLE ON RELAY R-1 IN SNUOCAST T-500 PANEL (TERMINALS 11 AND 7 RESPECTIVELY) AND CAP THE BROWN WIRE.
- PROVIDE WITH CONDENSATE PUMP (BLUE DIAMOND MAXI BLUE MODEL# X87-72).



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12-18-23

CHICK-FIL-A
MECHANICSBURG FSU
6416 CARLISLE PIKE STE 3500
MECHANICSBURG, PA 17050-2957

FSR#02167

BUILDING TYPE / SIZE: SR 506
RELEASE: 23.04

REVISION SCHEDULE
NO. DATE DESCRIPTION

CONSULTANT PROJECT # 23130.HF.R
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SHEET
MECH DETAILS
& SCHEDULES
SHEET NUMBER

M3.1

Halton MODEL: KVL-C-IC

FACTORY MUST BE ADVISED OF ANY SPECIAL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AS TO THE TYPE OF MOTOR.

DATE	DWG. NO.	ITEM NO.	PROJECT	LOCATION
08/14/23	U23-738-01	H-3	MECHANICSBURG FSU	MECHANICSBURG, PA

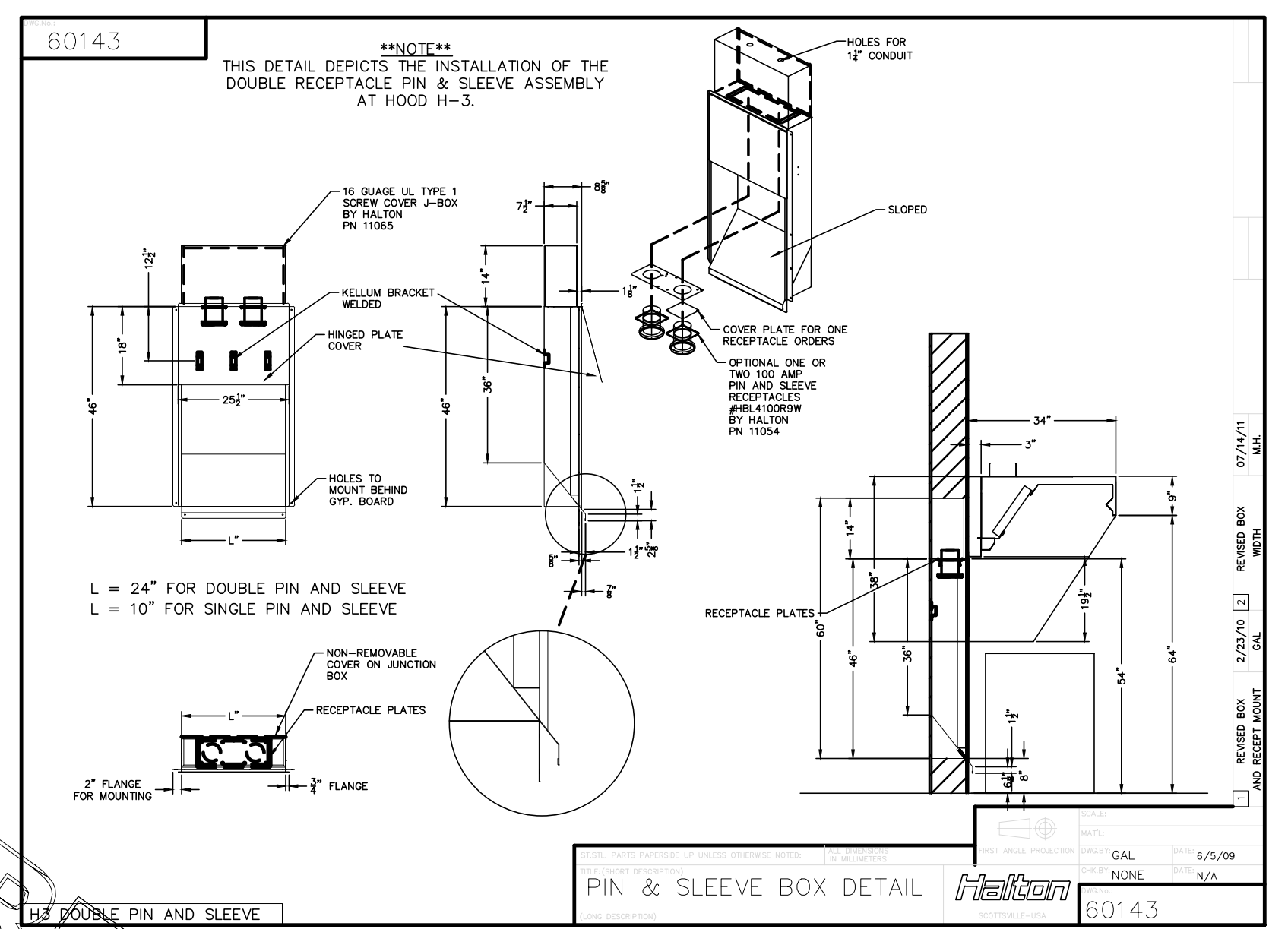
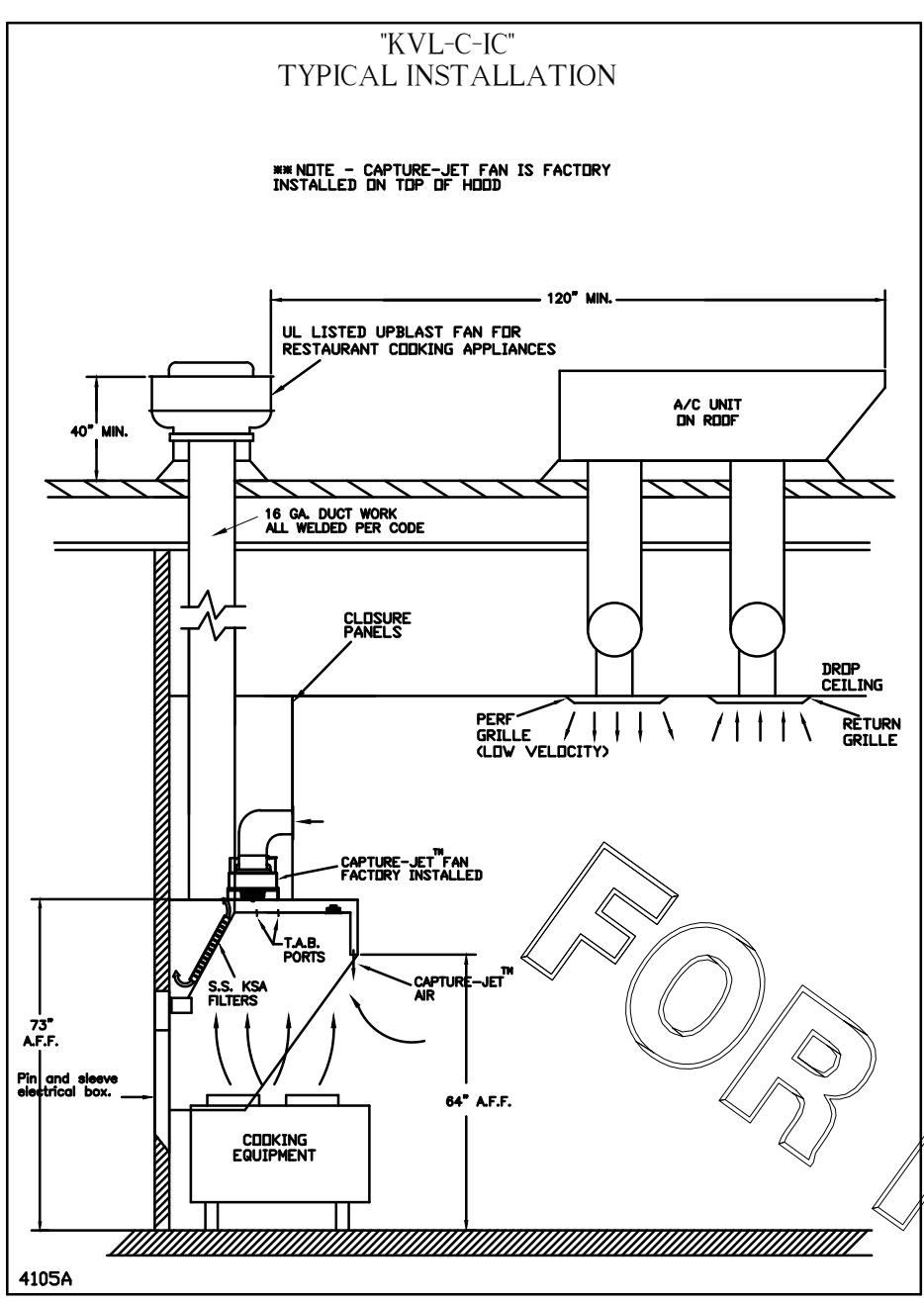
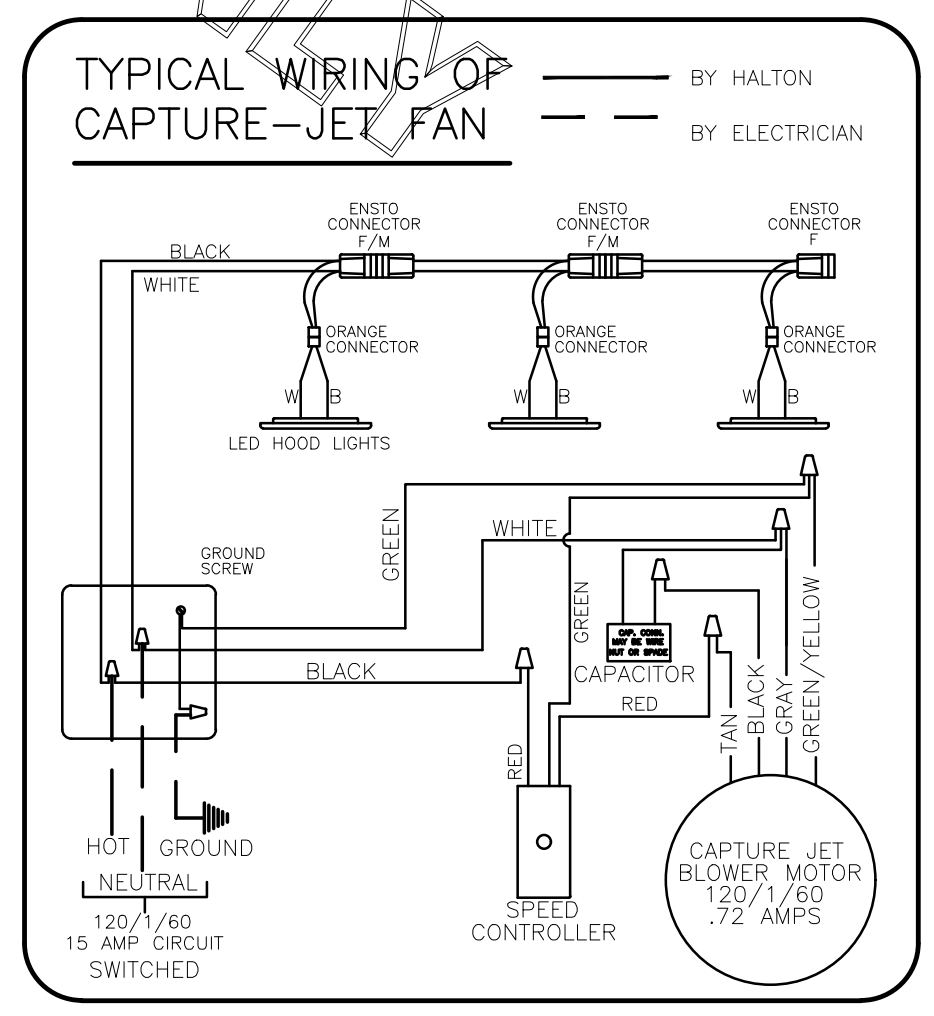
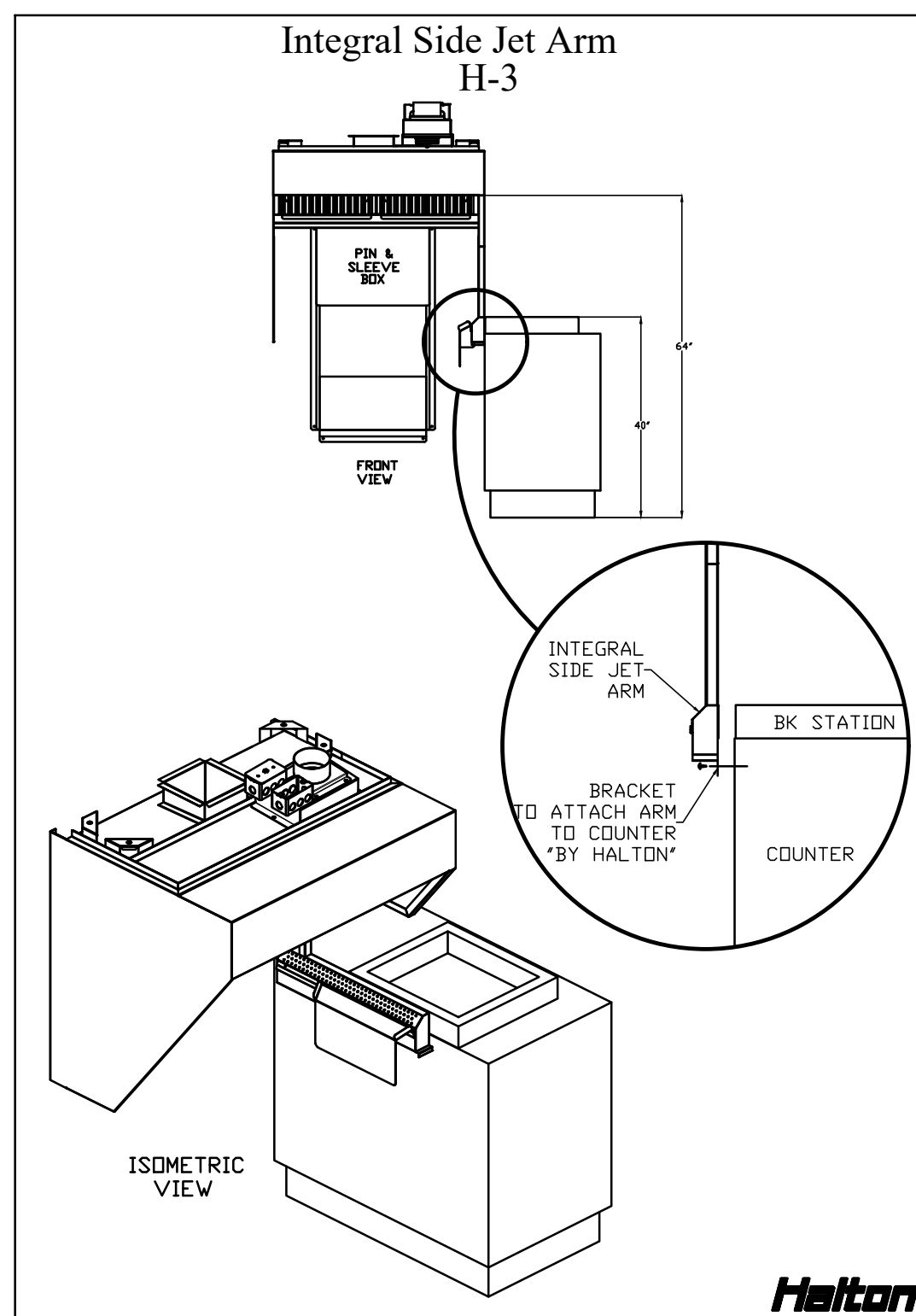
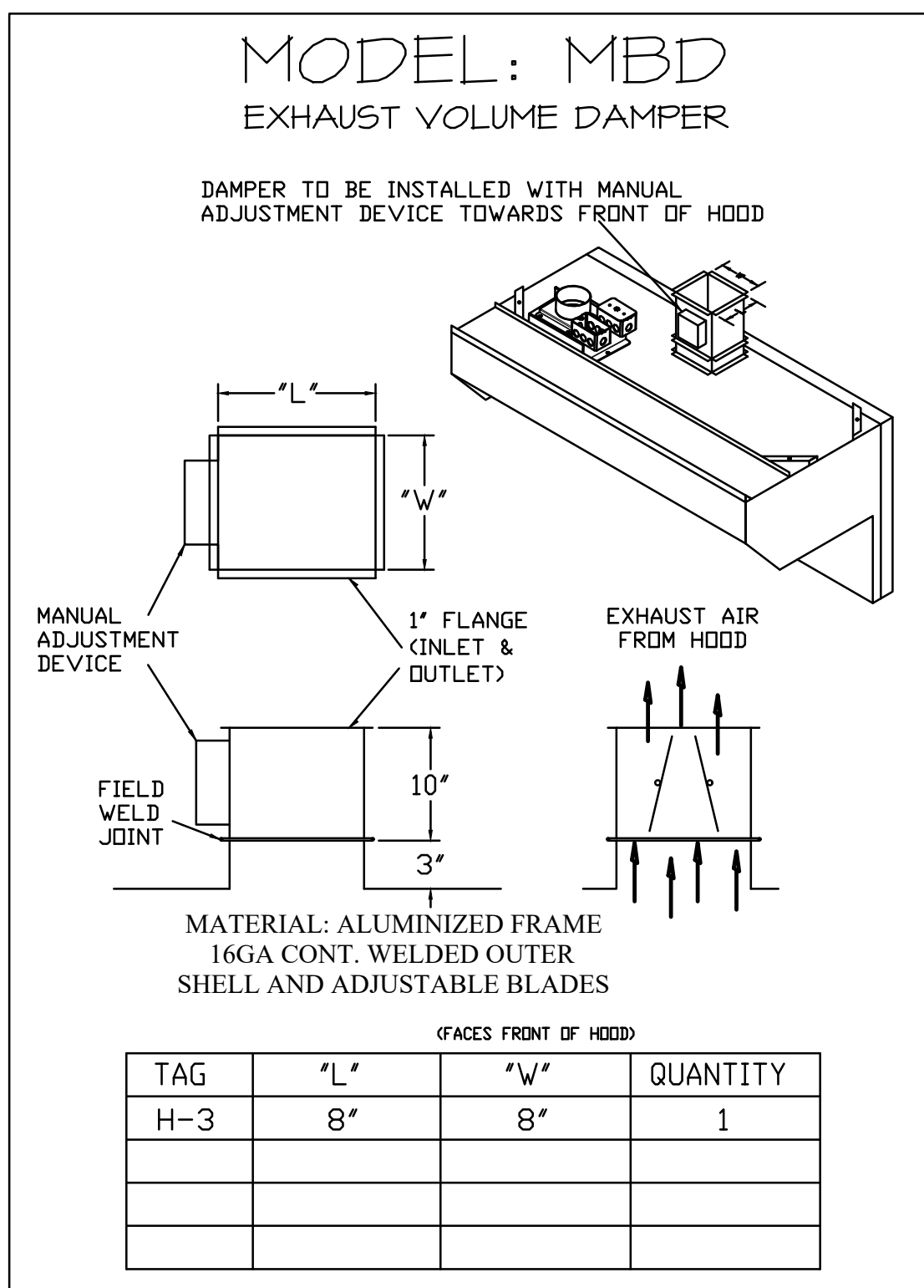
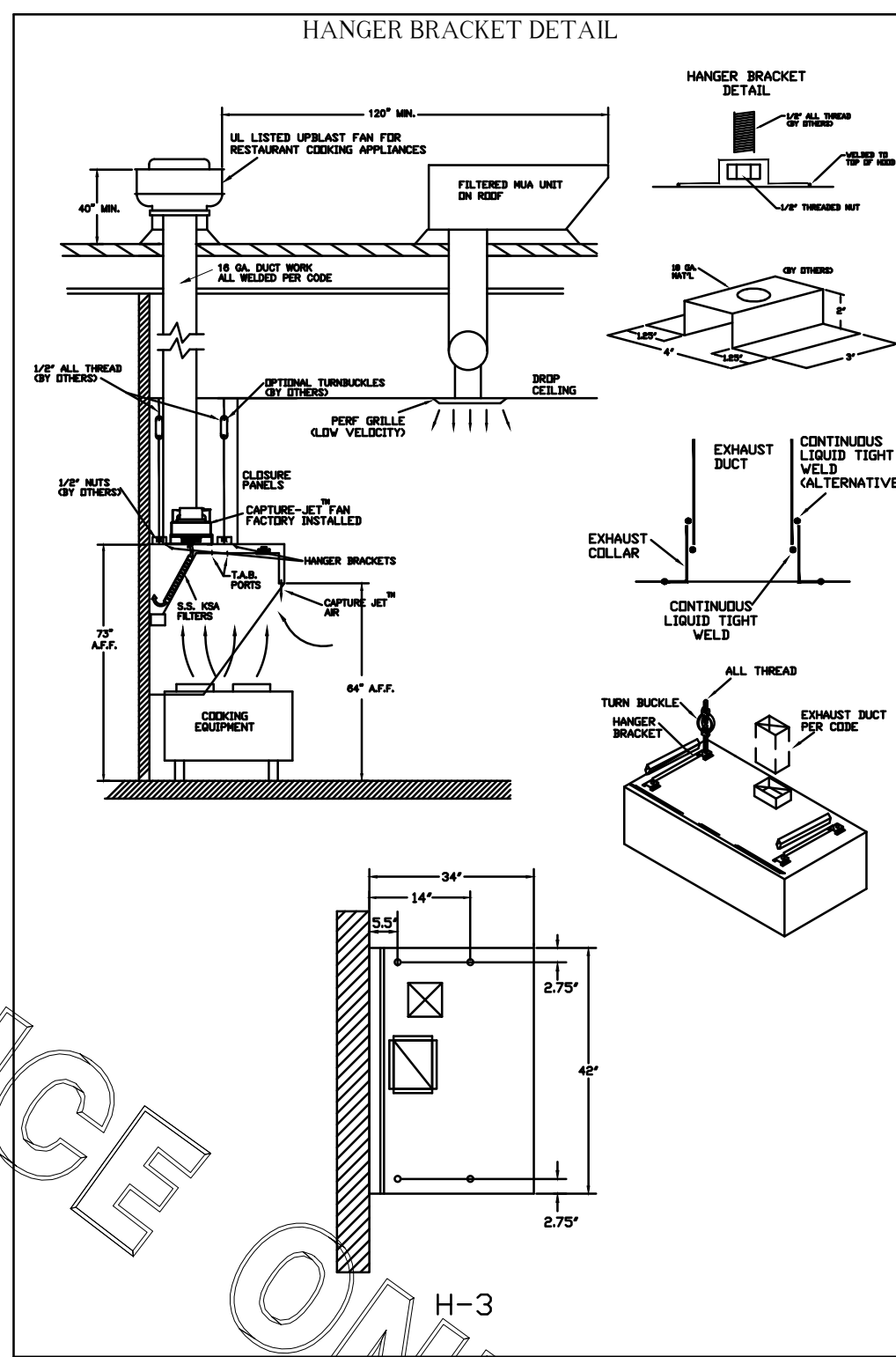
EXHAUST AIR INFORMATION	CAPTURE AIR INFORMATION
CFM	CFM
701	0.29'
0.29'	0.29'
30	0.29'

K FACTOR EQUATION: CFM = K FACTOR * (DIP) K FACTOR = 1891

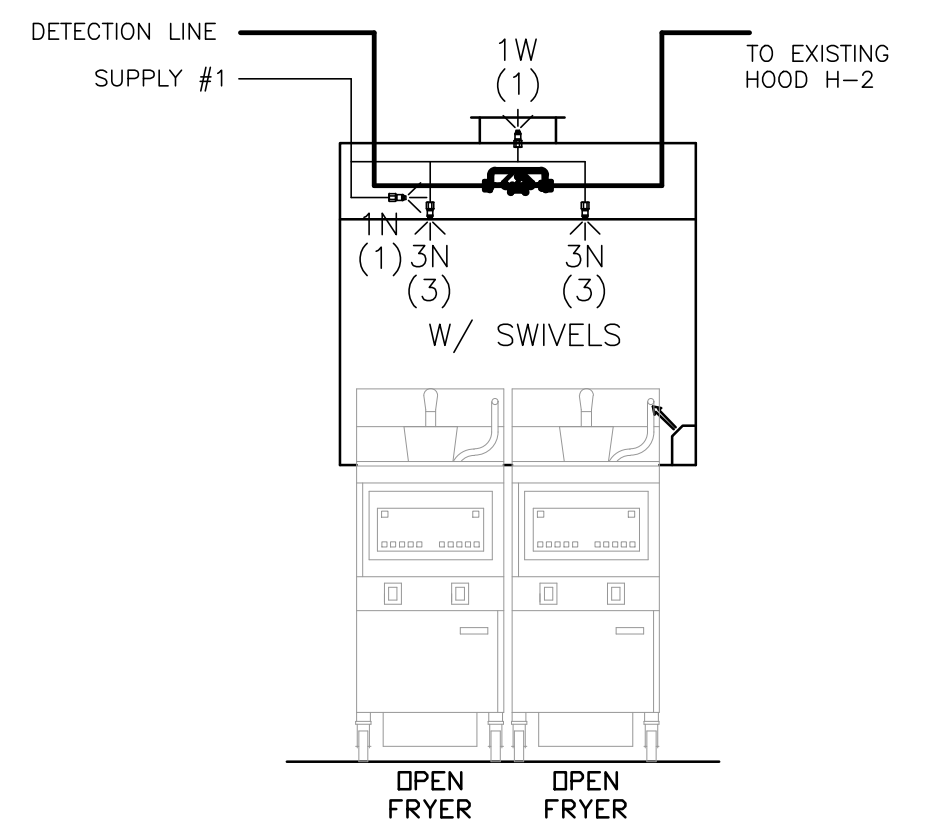
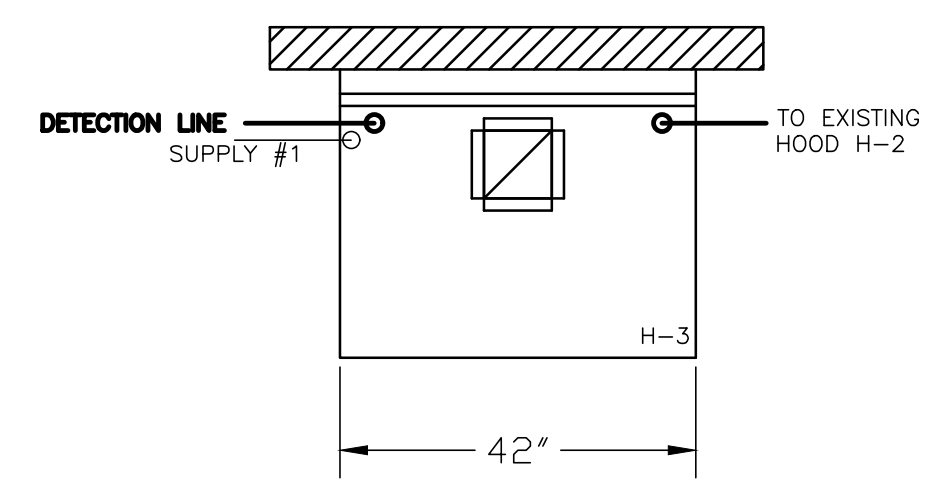
STANDARD FEATURES	OPTIONS
3/32 S.S. FILTERS (KSA)	REMOTE SWITCH PANEL
1/2" S.S. FILTERS (KSA)	FIRE PROTECTION
CAPTURE-JET	ETL LISTED W/D EXHAUST DAMPER
STAND-OFF	CEILING CLOSURE
LED LIGHTS	STD. BACKSPLASH
INSULATED BACKSPLASH	INSULATED BACKSPLASH
MBD DAMPER	MBD DAMPER

MATERIAL
EXPOSED SURFACES 18 GA. S.S.
W/ 3/32 S.S. FILTERS

CLOSURE HEIGHT = TBD (THREE SIDES)
CEILING CLOSURE RECESSED 10" FROM FRONT TO CREATE SHELF
18"x18" ACCESS DOOR CENTERED AT CAPTURE-JET WITH FRONT C/J INTAKE
MATCHED RIGHT END PANEL
DOUBLE RECEPTACLE PIN & SLEEVE
3" SIDE STAND-OFF TO HAVE 1" THICK INSULATION EQUIPMENT COVERED (2) PRESSURE FRYERS
HOOD WEIGHT = 845 LBS



NEW HOOD H-3 TO BE CONNECTED TO EXISTING 6 GALLON ANSUL SYSTEM



ANSUL R-102 FIRE SYSTEM LAYOUT

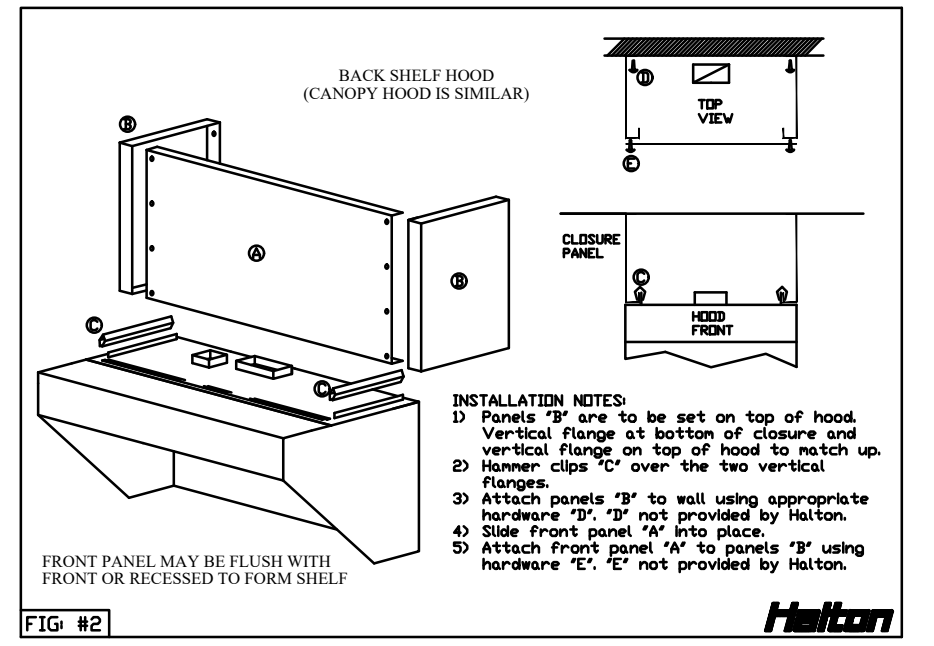
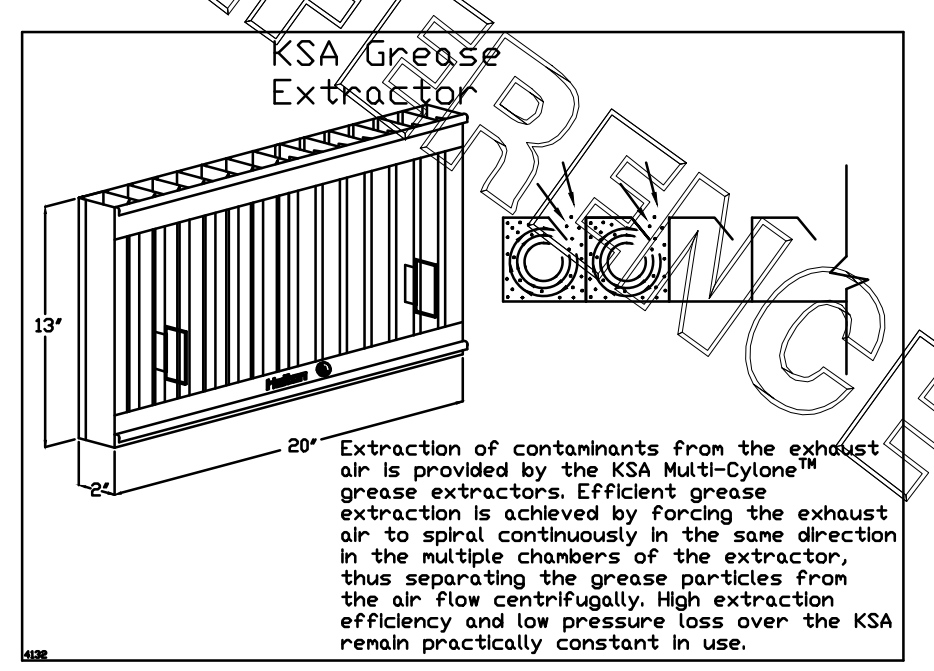
FUSIBLE LINK RATINGS

ITEM	TEMP
OPEN FRYERS	450°
2 BURNER / FLAT TOP	450°
PRESSURE FRYERS	450°
GRILL	450°
EXHAUST COLLARS	450°

ANSUL R-102 FIRE SYSTEM NOTES
TWO TANK SYSTEM REMOTE MOUNTED
MAXIMUM FLOW POINTS = 22

ITEM	PART #	QTY	DESCRIPTION	FLOW PTS (TOTAL)
1W	10023	1	DUCT NOZZLES	1
1N	10022	1	PLENUM NOZZLES	1
3N	10021	2	APPLIANCE NOZZLES	6
			TOTAL FLOW POINTS	8
ITEM	QTY	DESCRIPTION		
#200	10035	1 SERIES DETECTORS W/ FUSIBLE LINKS		

- ANSUL R-102 FIRE SYSTEM
UL LISTED PER STD LATEST STD 300
- FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
 - ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO-SWITCH INSTALLED IN REGULATED RELEASE BY ANSUL INSTALLER
 - REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS



HALTON HOODS
- ETL LISTED PER LATEST 710 STANDARD
- BUILT PER NFPA 96
- NSF LISTED

NSF Halton INTERTEK 3012225
CONFORMS TO UL STD UL STD 710 CERTIFIED TO UL STD S646

HALTON COMPANY, 101 INDUSTRIAL DR., SCOTTSDALE, KY 42164
MODEL NO. SERIAL NO. ITEM NO.
KVL-C-IC

GENERAL REQUIREMENTS
FILTER TYPE EXHAUST HOOD FOR COMMERCIAL AND INSTITUTIONAL KITCHENS
THE FAN CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE LIGHTING CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE HOOD HAS BEEN CERTIFIED BY ETL FOR 3" INCH CLEARANCE TO COMBUSTIBLE MATERIALS (TOP, SIDES, FRONT AND REAR) IN COMPLIANCE WITH UL 710 WITH CONSIDERATION TO NFPA 96.
THE HOOD IS PROVIDED WITH REPLACEABLE KSA FILTERS AND LIGHTING FIXTURES. REPLACE FILTERS ONLY WITH UL CLASSIFIED FILTER TYPE OF THE SAME MODEL AND MANUFACTURER.
SUITABLE FOR USE TO MEDIUM DUTY COOKING APPLIANCES.

DUTY LEVEL	MINIMUM OVERHANG	EDGE OF HOOD AND COOKING SURFACE, IN	MIN	MAX	MIN EXHAUST CAPACITY IN HOOD LENGTH
MEDIUM	0	0	21	31	138

JET SUPPLY AIR FLOW SHALL ONLY BE SET AT 0.30 IN H2O

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:

WEBSITE: www.halton.com

HALTON CO. (USA)
101 INDUSTRIAL DRIVE
SCOTTSDALE, KY 42164
1-270-237-5600

HALTON CO. (CANADA)
1021 BREVIK PLACE
MISSISSAUGA, ON L4W 3R7
1-905-624-0301

PROJECT: CHICK-FIL-A #2167
MECHANICSBURG FSU

LOCATION: MECHANICSBURG, PA

DRAWN BY: SKK DATE: 08.14.23
SCALE: NOT TO SCALE

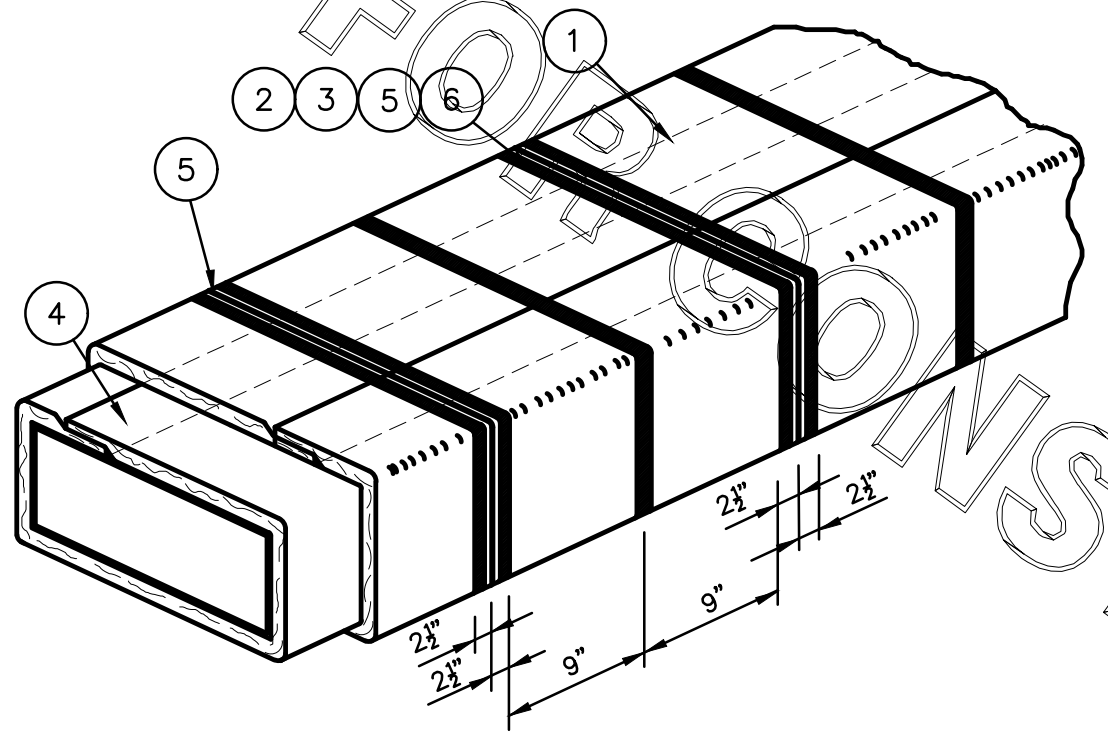
DATE: 07/11/21

REVISION DESCRIPTION

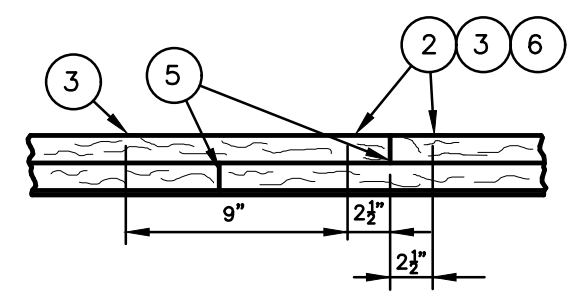
REV.	DATE	DESCRIPTION
1		
2		
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7		
8		
9		
10		

DRAWING NO.: U23-738-01
SHEET NO.: MH1.1

FyreWrap® Elite™ 1.5 Duct Insulation
 Commercial Kitchen Grease Duct System
 ASTM E 2336/ICCES AC101 System
 1 and 2 Hour Fire-Rated Enclosure, Shaft Alternative
 Zero Clearance to Combustibles
 Intertek Design No. UNI/BI 120-02
 Butt Joint System (Both Layers, Max. 24"x24" Duct)



INSTALLATION METHOD:



LEGEND:

- 1 FYREWAP ELITE 1.5 DUCT INSULATION, TWO LAYERS (EACH 1 1/2" TOTAL THICKNESS - 3")
- 2 FILAMENT TAPE (TEMPORARY HOLD)
- 3 1/2" CARBON OR SS BANDING STRIPS (PERMANENT HOLD)
- 4 3" MINIMUM LONGITUDINAL OVERLAP
- 5 3" COMPRESSED BUTT JOINT
- 6 3" WIDE ALUMINUM FOL TAPE AT 90 DEGREE TRANSVERSE BUTT JOINTS

Butt-Joint
Adjacent Blanket Pieces

Revision	Comments

SUBJECT: _____
 LOCATION: _____
 BLDG. NO.: _____ DATE: 04-05-2018 DRAWING NO. FP-693
 DRAWN: S.A.RUSTAY APPROVAL: _____
 SCALE: N.T.S. DATE SHED: _____ PROJECT NO. _____

KITCHEN HOOD SYSTEMS NOTES

1. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT WITH HALTON CO. FOR THE HOODS. CHICK-FIL-A WILL PURCHASE AND PROVIDE THE HOODS FOR INSTALLATION BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE HOODS. CONTACT HALTON CO. AT 270-237-5600 FOR MORE INFO.
2. THE FIRE SUPPRESSION SYSTEM SHALL CONSIST OF A COMPLETE WET ANSUL SYSTEM FURNISHED BY HALTON. THE HOOD SHALL BE FURNISHED PRE-PIPED BY HALTON.
3. THE R-102 ANSUL FIRE SUPPRESSION SYSTEM EXTERNAL TO THE HOODS SHALL BE INSTALLED IN ACCORDANCE WITH HOOD MANUFACTURER'S SHOP DRAWINGS BY AN AUTHORIZED ANSUL SYSTEM INSTALLER SELECTED AND HIRED BY HALTON. COST FOR ANSUL INSTALLATION INCLUDED IN PRICE OF HOODS TO CFA.
4. HOOD EXHAUST DUCTWORK SHALL BE 16 GA. BLACK STEEL WITH CONTINUOUS LIQUID TIGHT WELD OF JOINTS & SEAMS.
5. TURNS IN GREASE EXHAUST DUCTWORK SHALL BE LONG RADIUS TYPE, WITH A CENTERLINE RADIUS R=3W/2, NO EXCEPTIONS ALLOWED. NO MITERED FITTINGS ALLOWED.
6. ALL STAINLESS STEEL CLOSURE PANELS SHALL BE SUPPLIED BY HOOD MANUFACTURER AND INSTALLED BY THE MECHANICAL CONTRACTOR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. SLOPE ALL GREASE EXHAUST DUCT BACK TO HOOD AT 1/4" PER FOOT OF RUN.
8. WRAP NEW GREASE DUCT WITH UNIFRAX FyreWRAP. INSULATION ON ACCESS DOORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION RECOMMENDATIONS. UNIFRAX FyreWRAP PRODUCT USED SHALL MEET LOCAL CODE REQUIREMENTS.
9. SUPPORT HOODS WITH THREADED ROD AT EACH FACTORY SUPPORT POINT. EACH SUPPORT POINT MUST SUPPORT THE HOOD WEIGHT EQUALLY. ATTACH TO STRUCTURE AS DETAILED ON STRUCTURAL DRAWINGS. ATTACH HOOD TO WALL AT 16" INTERVALS ALONG FULL LENGTH OF HOOD ON TOP AND BOTTOM. ATTACHMENT TO WALL REQUIRES FIELD DRILLING OF SUPPORT ANGLE AT BACK OF HOODS. EACH WALL ATTACHMENT POINT MUST OCCUR AT A WALL STUD. ATTACHMENT HARDWARE TO BE #12-24 HEX HEAD SHEET METAL SCREW EQUAL TO TETRON SDS EDT265, LENGTH AS REQUIRED TO FULLY PENETRATE THE STUD.
10. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL SUNCOAST H.E.S. SYSTEM FOR ALL HOODS. SEE HOOD FAN/EQUIPMENT-INTERLOCK WIRING DIAGRAM ON SHEET M4.1 FOR MORE INFORMATION.

HOOD SCHEDULE

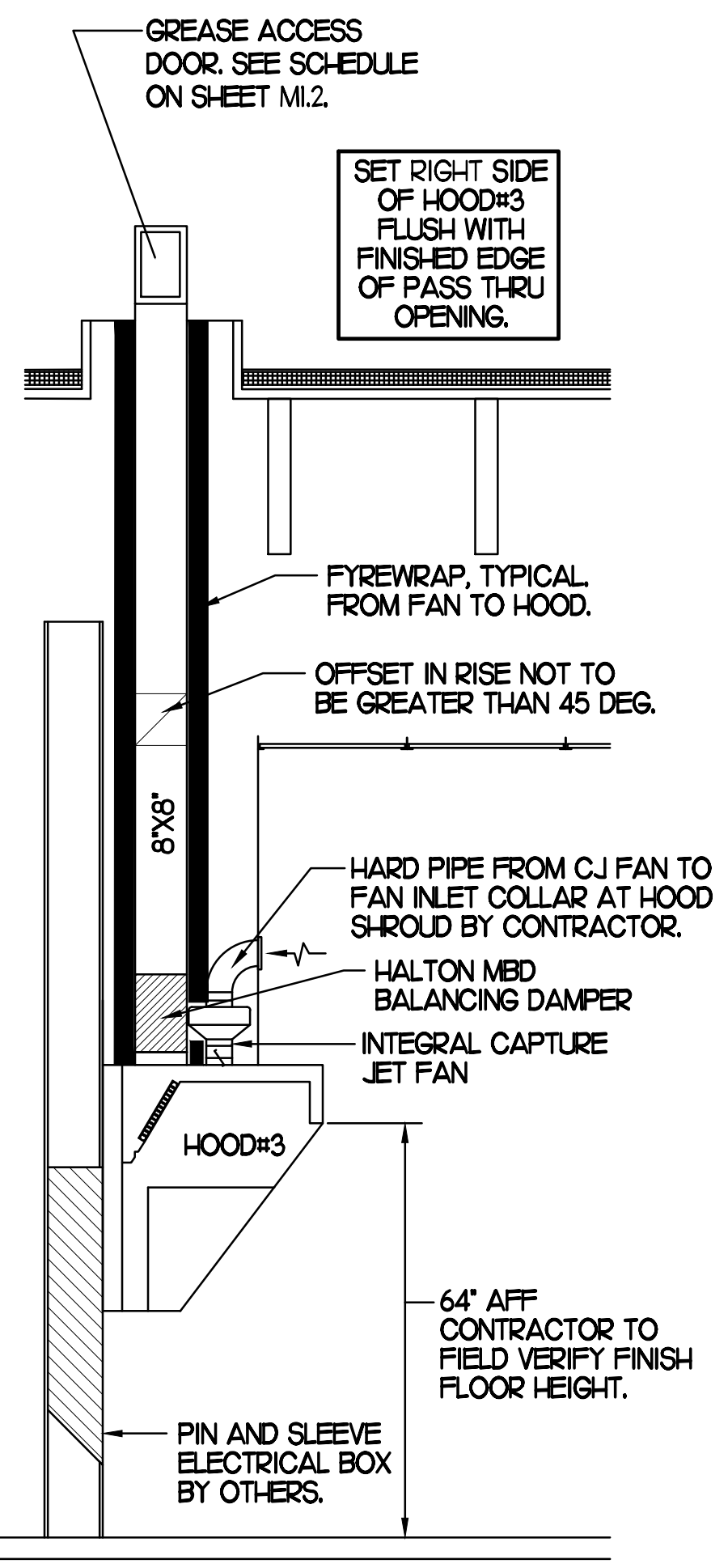
MARK	EXHAUST CFM	SP • TAB PORT	CAPTURE JET CFM & SP.	TYPE	COLLAR SIZE	WIDTH	DEPTH	HEIGHT	MANUFACTURER	MODEL	REMARKS
HOOD#1L	1,080	-	-	-	-	-	-	-	EXISTING	-	-
HOOD#1R	832	-	-	-	-	-	-	-	EXISTING	-	-
HOOD#2	701	-	-	-	-	-	-	-	EXISTING	-	-
HOOD#3	701	0.30"	30 • 0.25"	BACK SHELF	8"x8"	42"	34"	38"	HALTON	KVL-C	I

NOTES: DIMENSIONS OF HOODS INCLUDE BACK AND SIDE SPACERS (HEIGHT DOES NOT INCLUDE CLOSURE PANELS).
 REMARKS: I. HOOD SHOP DRAWINGS ARE INCLUDED FOR REFERENCE ON SHEETS M-1.1. REFER TO SHOP DRAWINGS FOR HOOD OPTIONS AND CONSTRUCTION.

NOTE:
SEE ARCHITECTURAL PLANS
FOR HOOD LOCATIONS.

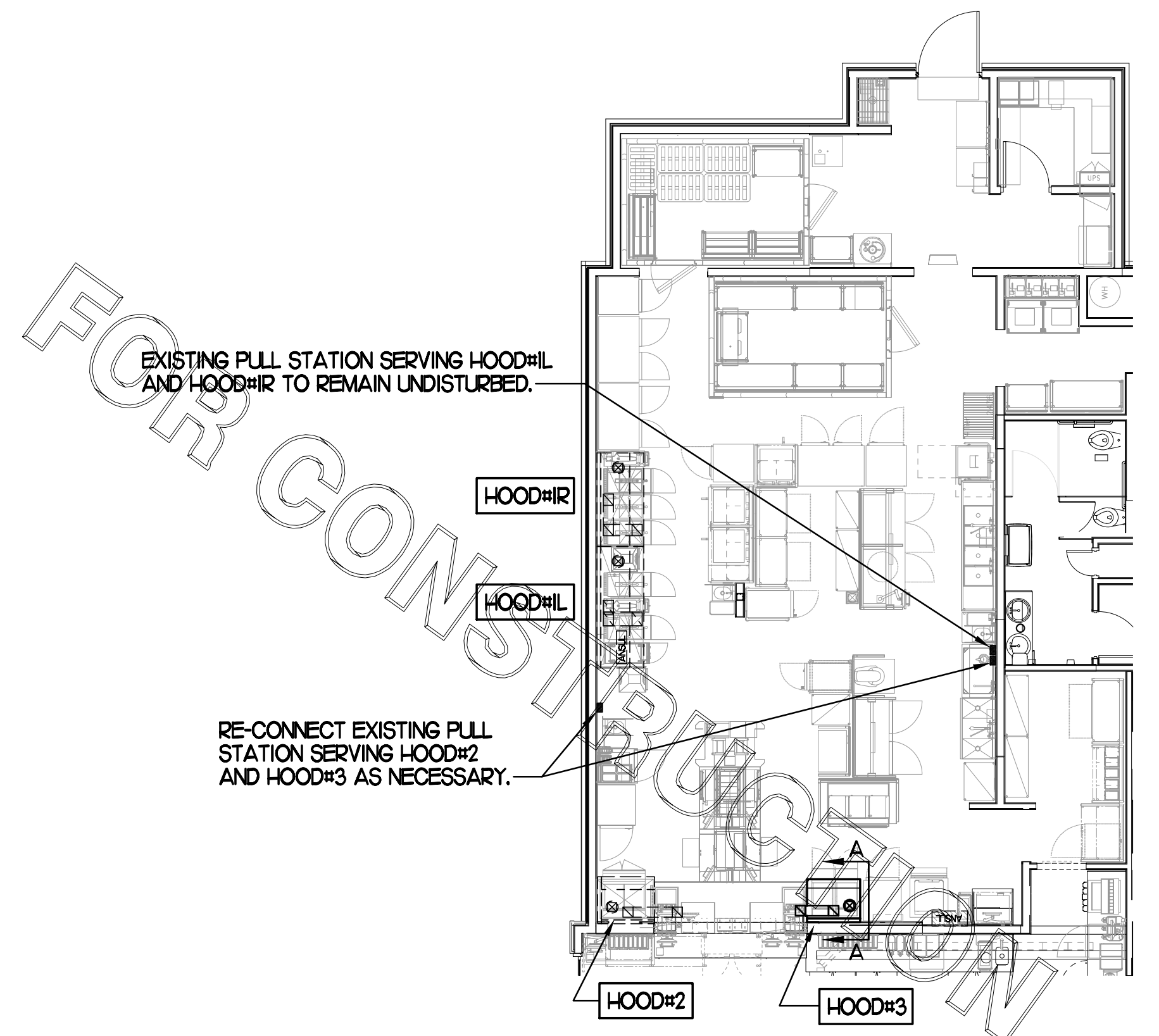
CLEANOUT DOOR NOTE:
 DUCT WRAP SHALL BE APPLIED TO THE CLEANOUT DOOR PER THE WRAP MFR'S INSTALLATION INSTRUCTIONS, NO EXCEPTIONS. ALSO, THE CLEANOUT DOOR MUST BE REMOVABLE WITHOUT TOOLS AND MUST BE CLEARLY AND PERMANENTLY LABELED.

GREASE EXHAUST DUCT CLEARANCE NOTE:
 CLEARANCES ABOVE CEILING ARE TIGHT. MECHANICAL CONTRACTOR TO FIELD VERIFY EXACT ROUTING AND CLEARANCES PRIOR TO FABRICATING GREASE EXHAUST DUCT.



SECTION "A-A"

3 HOOD ELEVATIONS
NONE



1 HOOD LAYOUT
1/8"=1'-0"



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349



Kurzynske & Associates
CONSULTING ENGINEERS
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



12-18-23

CHICK-FIL-A
MECHANICSBURG FSU
 6416 CARLISLE PIKE STE 3500
 MECHANICSBURG, PA 17050-2957

FSR#02167
 BUILDING TYPE / SIZE: SR S06
 RELEASE: 23.04

REVISION SCHEDULE

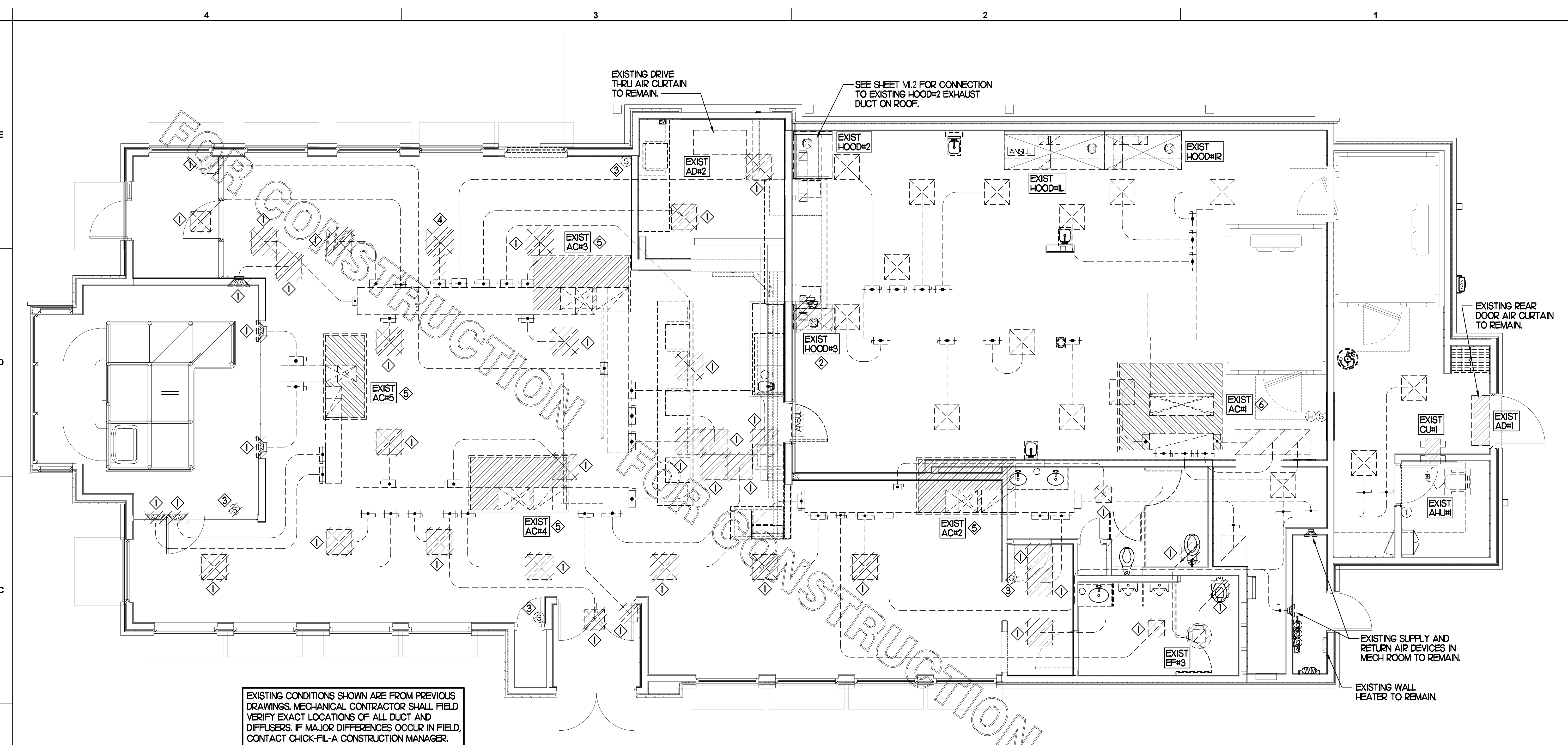
NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # 23130.HF.R
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 DRAWN BY DSF

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 SHEET
HOOD DETAILS & SCHEDULES
 SHEET NUMBER

M2.1

CONSTRUCTION



EXISTING CONDITIONS SHOWN ARE FROM PREVIOUS DRAWINGS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL DUCT AND DIFFUSERS. IF MAJOR DIFFERENCES OCCUR IN FIELD, CONTACT CHICK-FIL-A CONSTRUCTION MANAGER.

DEMOLITION NOTES

- ① CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND PAYING ALL APPLICABLE FEES.
- ② DISPOSAL OF EQUIPMENT AND MATERIALS REQUIRED TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE WORK.
- ③ DE-ENERGIZE ALL ELECTRICAL CIRCUITS RELATED TO EQUIPMENT THAT WILL BE MOVED OR REMOVED PRIOR TO STARTING WORK. DE-ENERGIZED CIRCUITS SHALL BE PROTECTED WITH LOCKING DEVICES USING APPROPRIATE WARNING LABELS.
- ④ MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ROOF AFTER REMOVAL OF EXISTING MECHANICAL EQUIPMENT. SEE ARCHITECTURAL DRAWINGS FOR ROOF PATCHING REQUIREMENTS.
- ⑤ EXCEPT WHERE NOTED, EXISTING REMOTE TEMPERATURE &/OR HUMIDITY SENSORS TO REMAIN. IF DURING RENOVATION PURPOSES CONTROLS SHALL BE TAKEN DOWN, MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLING AND TO PROVIDE ANY ADDITIONAL WIRING NEEDED. VERIFY EXISTING UNIT CONTROLS ARE IN GOOD WORKING ORDER. IF NOT, CONTACT CHICK-FIL-A CONSTRUCTION MANAGER.
- ⑥ MECHANICAL CONTRACTOR SHALL REPLACE FILTERS FOR ALL RTUS AT END OF PROJECT AND PRIOR TO REOPENING. MC TO PROVIDE PROPOSAL TO FACILITIES MANAGER, CONSTRUCTION MANAGER, AND OPERATOR TO CORRECT EXISTING RTU PUNCH ITEMS IDENTIFIED BY HALTON.
- ⑦ CONTRACTOR SHALL INDICATE SALVAGE VALUE IN BID FOR ROOFTOP UNITS BEING REPLACED.

MECHANICAL DEMOLITION FLOOR PLAN
SCALE: 1/4"=1'-0"

DEMOLITION LEGEND	
	EXISTING EQUIPMENT, DUCT, AIR DEVICE ETC. TO REMAIN INTACT
	EQUIPMENT, DUCT, AIR DEVICE ETC. TO BE DEMOLISHED

DEMOLITION KEY NOTES

- ① DETACH AND DEMOLISH EXISTING AIR DEVICE. SECURE DUCT ABOVE CEILING GRID FOR RE-CONNECTION. SEE SHEET M3.1 FOR NEW CONNECTION.
- ② DEMOLISH EXISTING HOOD, ALL ASSOCIATED GREASE DUCT, CAPTURE JET FAN AND DIFFUSER (IF EXISTING), EXHAUST FAN, AND IT'S ASSOCIATED ROOF CURB. COVER ROOF PENETRATION WEATHER-TIGHT FOR RE-USE.
- ③ EXISTING REMOTE TEMPERATURE AND/OR REMOTE HUMIDITY SENSORS TO BE REPLACED WITH NEW. DEMOLISH ALL ASSOCIATED CONTROL WIRING. SEE SHEET M3.1 FOR FURTHER INFORMATION.
- ④ DEMOLISH EXISTING AIR DEVICE AND ASSOCIATED BRANCH DUCT. SEAL PLENUM AIR-TIGHT.
- ⑤ EXISTING RTU TO BE REPLACED WITH NEW AS SCHEDULED ON SHEET M3.1. UNLESS NOTED OTHERWISE, DEMOLISH ALL EXISTING UNIT CONTROLS (REMOTE TEMP SENSOR, REMOTE HUMIDITY SENSOR, TSTAT, REMOTE SMOKE DETECTOR ANNUNCIATOR, ETC.). EXISTING ROOF CURB AND SUPPLY & RETURN DUCT TO REMAIN. COVER CURB WEATHER-TIGHT FOR RE-USE. GC BID ALTERNATE MATERIALS AND LABOR TO BE BILLED UNDER SEPARATE CONTRACT AND COORDINATED VIA WORK ORDER WITH FEQ SPECIALIST.
- ⑥ DEMOLISH EXISTING DUCT SMOKE DETECTOR(S) AND REMOTE TEST/RESET STATION(S). SEE SHEET M3.1 FOR NEW.



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349



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Telephone: (615) 255-8203



CHICK-FIL-A
MECHANICSBURG FSU
6416 CARLISLE PIKE STE 3500
MECHANICSBURG, PA 17050-2957

FSR#02167

BUILDING TYPE / SIZE: SR 506
RELEASE: 23.04

REVISION SCHEDULE		
NO.	DATE	DESCRIPTION

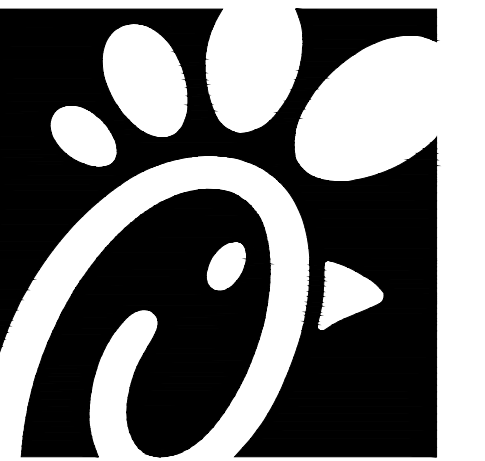
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SHEET
MECHANICAL
DEMO PLAN
SHEET NUMBER

M0.1

CONSTRUCTION



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349



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Nashville, Tennessee 37214
Telephone: (615) 255-5203



CHICK-FIL-A
MECHANICSBURG FSU
6416 CARLISLE PIKE STE 3500
MECHANICSBURG, PA 17050-2957

FSR#02167
BUILDING TYPE / SIZE: SR 306
RELEASE: 23.04

REVISION SCHEDULE		
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SHEET
MECHANICAL
COMCHECK
SHEET NUMBER

M6.1

FOR CONSTRUCTION

FOR CONSTRUCTION

FOR CONSTRUCTION

COMcheck Software Version 4.1.5.1
Mechanical Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Chick-fil-A #2167
Location:	Mechanicsburg (Cumberland), Pennsylvania
Climate Zone:	5a
Project Type:	Alteration

Construction Site:	Owner/Agent:	Designer/Contractor:
6416 Carlisle Pike Ste 3500 Mechanicsburg, PA 17050	Chick-fil-A 5200 Buffington Road Atlanta, GA 30349	Kurzynske & Associates 2705 Lebanon Pike - Suite One Nashville, TN 37214 615-255-5203

Mechanical Systems List

Quantity	System Type & Description
1	AC#2 (8.5 ton) (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 194 kBtu/h Proposed Efficiency = 81.00% EI, Required Efficiency: 80.00 % EI or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 97 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.10 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: AC#2 Dining - Compliance (Motor nameplate HP method) : Passes Fans: Supply Supply, Constant Volume, 2830 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade Exhaust Exhaust, Constant Volume, 750 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade
1	AC#3 (10 ton) (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 194 kBtu/h Proposed Efficiency = 81.00% EI, Required Efficiency: 80.00 % EI or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 122 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.10 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: AC#3 Dining - Compliance (Motor nameplate HP method) : Passes Fans: Supply Supply, Constant Volume, 4000 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade Exhaust Exhaust, Constant Volume, 1000 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade
1	AC#4 (7.5 ton) (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 194 kBtu/h Proposed Efficiency = 81.00% EI, Required Efficiency: 80.00 % EI or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 93 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.30 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: AC#4 Dining - Compliance (Motor nameplate HP method) : Passes Fans: Supply Supply, Constant Volume, 2765 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade Exhaust Exhaust, Constant Volume, 600 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade
1	AC#5 (5 ton) (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 121 kBtu/h Proposed Efficiency = 81.00% EI, Required Efficiency: 80.00 % EI or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 62 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 17.10 SEER, Required Efficiency: 14.00 SEER Fan System: AC#5 Play Area - Compliance (Motor nameplate HP method) : Passes

Quantity / System Type & Description

Fans:	Supply Supply, Constant Volume, 1800 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade Exhaust Exhaust, Constant Volume, 300 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade
1	AHU#2/CL#2 (Single Zone): Split System Heat Pump Heating Mode: Capacity = 40 kBtu/h Proposed Efficiency = 18.60 HSPF, Required Efficiency = 8.20 HSPF Cooling Mode: Capacity = 34 kBtu/h Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER Fan System: None

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1, and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

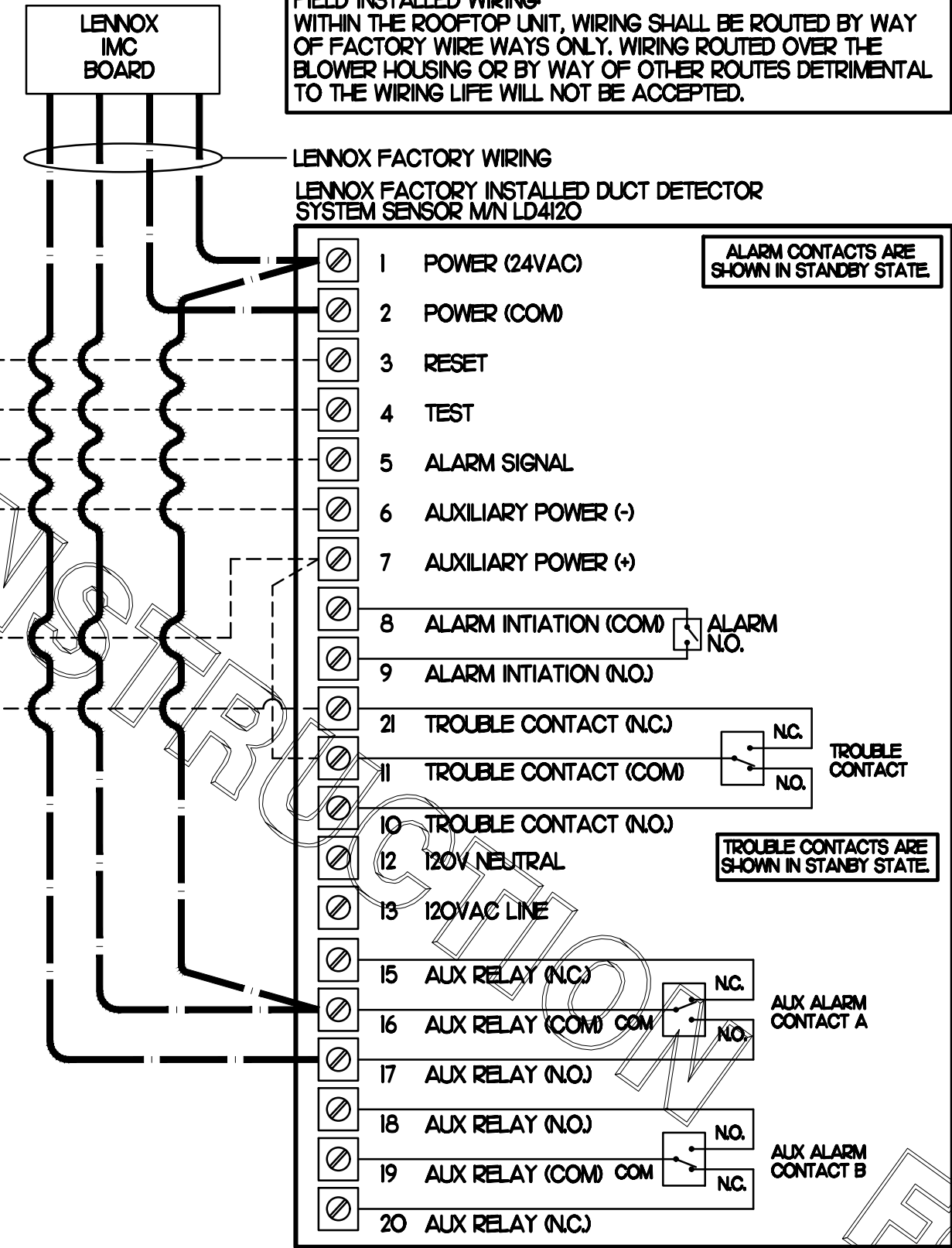
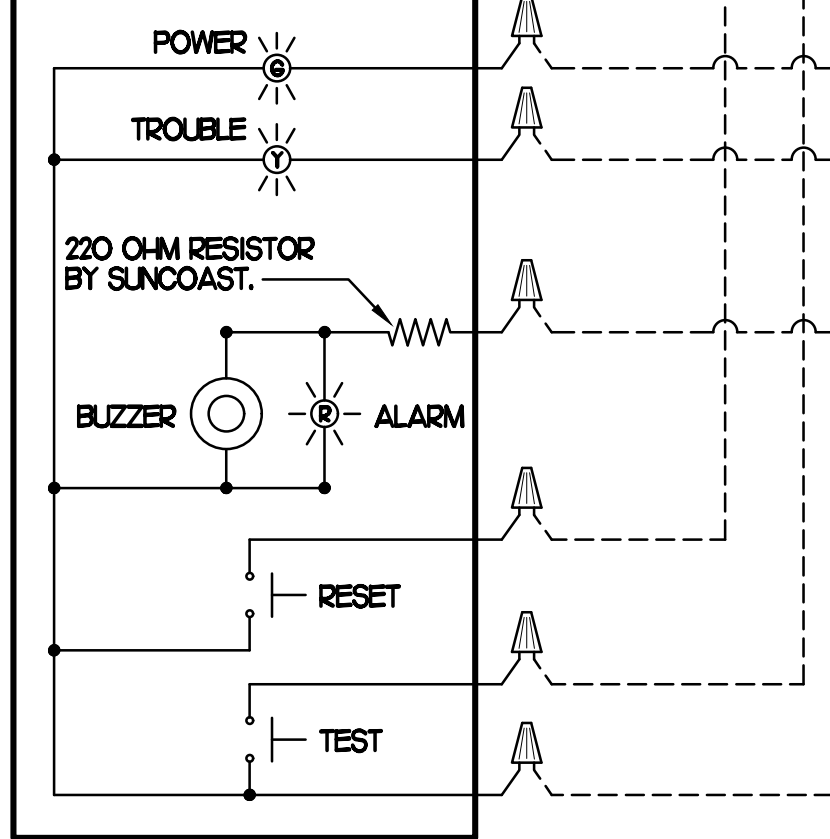
Mark Kurzynske, P.E.  8/24/23
Name - Title Signature Date

SUPPLY SIDE DUCT DETECTORS
WHERE SUPPLY SIDE DUCT DETECTORS ARE SHOWN ON DWG M.I. AND/OR CALLED FOR ON THE RTU SCHEDULE, THE CONTRACTOR IS TO RELOCATE THE FACTORY INSTALLED SUPPLY SIDE DUCT DETECTOR FROM THE BLOWER SECTION TO THE DUCTWORK. SEE NOTES ON DWG M.I.

LEGEND
 - - - 18 AWG MIN WIRING BY MECH CONTRACTOR
 - - - FACTORY ANNUNCIATOR DETECTOR WIRING
 - - - FACTORY LENNOX WIRING

LABELING
PROVIDE ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON BLACK BACKGROUND IDENTIFYING UNIT SERVED.

SUNCOAST CONTROLS ANNUNCIATOR



FIELD INSTALLED WIRING
WITHIN THE ROOFTOP UNIT, WIRING SHALL BE ROUTED BY WAY OF FACTORY WIREWAYS ONLY. WIRING ROUTED OVER THE BLOWER HOUSING OR BY WAY OF OTHER ROUTES DETRIMENTAL TO THE WIRING LIFE WILL NOT BE ACCEPTED.

LENNOX FACTORY WIRING
LENNOX FACTORY INSTALLED DUCT DETECTOR SYSTEM SENSOR M/N LD4120

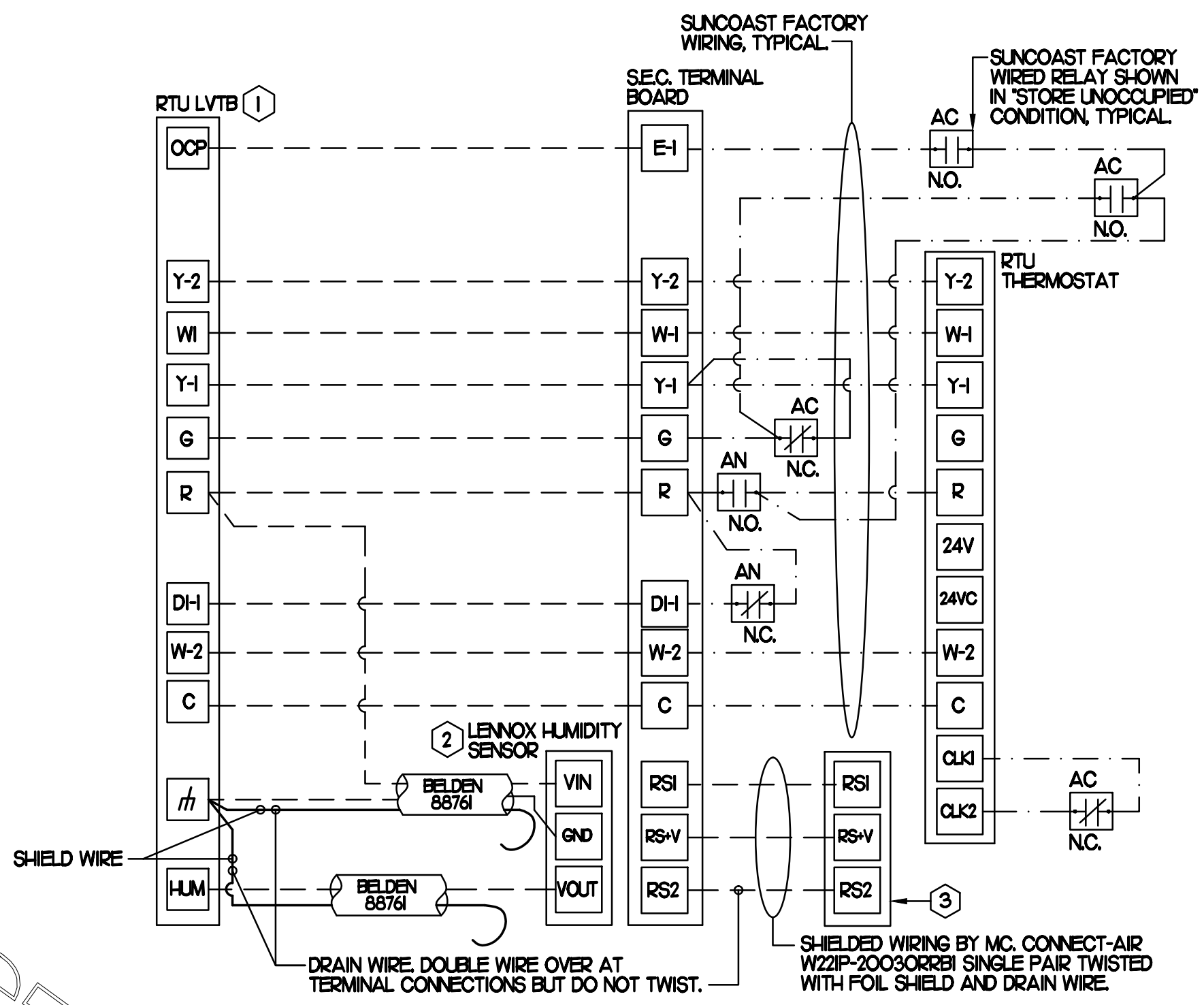
ALARM CONTACTS ARE SHOWN IN STANDBY STATE

TROUBLE CONTACTS ARE SHOWN IN STANDBY STATE

ALX ALARM CONTACT A

ALX ALARM CONTACT B

LEGEND
 S.E.C. SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF TEMP/FAN CONTROL PANEL) LOCATED IN KITCHEN
 MC MECHANICAL CONTRACTOR
 AC SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, ENERGIZED BY PUTTING STORE SWITCH IN 'STORE OCCUPIED' POSITION.
 AN SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, DE-ENERGIZED WHEN ANSLL FIRE SUPPRESSION SYSTEM IS ACTIVATED, AS NOTED.
 - - - 22 AWG MIN LOW VOLTAGE WIRING BY MC. U.N.O. USE CONNECT-AIR SINGLE PAIR TWISTED WITH FOIL SHIELD AND DRAIN WIRE FOR TEMPERATURE SENSORS. (NOT FOR HUMIDITY SENSORS)
 - - - LOW VOLTAGE WIRING BY SEC.
 - - - LINE VOLTAGE BY ELECTRICIAN OR SEC.



PROVIDE A PROFESSIONALLY LAMINATED COPY OF THESE DETAILS TO BE INSTALLED INSIDE THE ROOFTOP UNIT CONTROL CABINET. USE A SETON CHART FRAME STYLE #68624, TELEPHONE NUMBER 800-243-6624. FOR MOUNTING THE DETAIL, ATTACH THE FRAME TO THE INTERIOR OF THE UNIT IN PLAIN AND EASY VIEW OF THE CONTROLS SECTION. CONTACT ENGINEER OF RECORD FOR A REPRODUCIBLE COPY OF THE DETAIL.

- NOTES:
- FOR ALL RTUS EXCEPT AT KITCHEN RTUS, CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #65 TO ZERO (#58 ON LCH UNITS). ON OLDER BOARDS THIS IS ECTO PARAMETER #01 FOR LCH UNITS OR ECTO #201 FOR LCH UNITS. THIS WILL CAUSE THE O.A. DAMPER TO OPEN ON 'OCCUPIED' START. AT KITCHEN RTUS (LGH TYPE) LEAVE THE SETTING AT THE DEFAULT VALUE SO THE O.A. DAMPER WILL REMAIN CLOSED FOR THE FIRST 60 MINUTES AFTER 'OCCUPIED' START. AT KITCHEN RTUS (LCH TYPE) CHANGE THE VALUE TO 5400 SO THE O.A. DAMPER WILL REMAIN CLOSED FOR THE FIRST 90 MINUTES AFTER 'OCCUPIED' START.
 - MECHANICAL CONTRACTOR SHALL MAKE PLASTIC LAMINATE OF THIS DETAIL AND INSTALL PERMANENTLY ON INSIDE DOOR OF ROOFTOP UNIT CONTROL COMPARTMENT.
 - SEE DETAILS THIS SHEET FOR SMOKE DETECTOR AND ANNUNCIATOR WIRING.
 - AT HUMIDITROL RTUS SET PRODIGY-M3 BOARD CONTROL PARAMETER #106 FOR DEHUMIDIFICATION OPERATION TO A VALUE OF 7. OLDER M-8 IMC BOARD ECTO PARAMETER 424 VALUE TO BE SET TO A VALUE OF 7.
 - AT HUMIDITROL RTUS, SET PRODIGY-M3 BOARD CONTROL PARAMETER #106 FOR DEHUMIDIFICATION SET POINT TO A VALUE OF 60 (60% RH).
 - AT HUMIDITROL RTUS, SET PRODIGY-M3 BOARD CONTROL PARAMETER #107 FOR DEHUMIDIFICATION MODE DEAD BAND TO A VALUE OF 2 (2% RH).
 - SET ALL THERMOSTATS FOR AUTO CHANGEOVER.
 - FOR MSAV UNITS, SET THE MSAV LOW SPEED SETTING TO THE SAME VALUE AS THE HIGH SPEED SETTING AFTER TAB IS COMPLETE.
 - PROVIDE PLASTIC ENGRAVED LABEL AT ALL NEW SENSORS WITH 1" HIGH WHITE LETTERING ON BLACK BACKGROUND, I.E. 'ACH2 HUMIDITY SENSOR' OR 'ACH2 TEMP SENSOR'. PLACE LABELS ON WALL ADJACENT TO DEVICE. DO NOT APPLY DIRECTLY TO DEVICE.

- KEYED NOTES:
- LOW VOLTAGE WIRING TO RTU TO BE ROUTED TO UNIT THRU FACTORY WIREWAY.
 - HUMIDITROL UNITS ONLY: WIRING TO HUMIDITY SENSOR TO BE MADE WITH TWO SEPARATE RINGS OF SHIELDED TWISTED PAIR. TERMINATE SHIELD WIRES AT TB-1 LEAVE OPEN AT SENSOR.
 - NETWORK TSTAT REMOTE TEMP SENSOR PROVIDED BY SUNCOAST AND INSTALLED BY MC. FIELD CALIBRATE EACH SENSOR.

1 SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM - LENNOX

NO SCALE

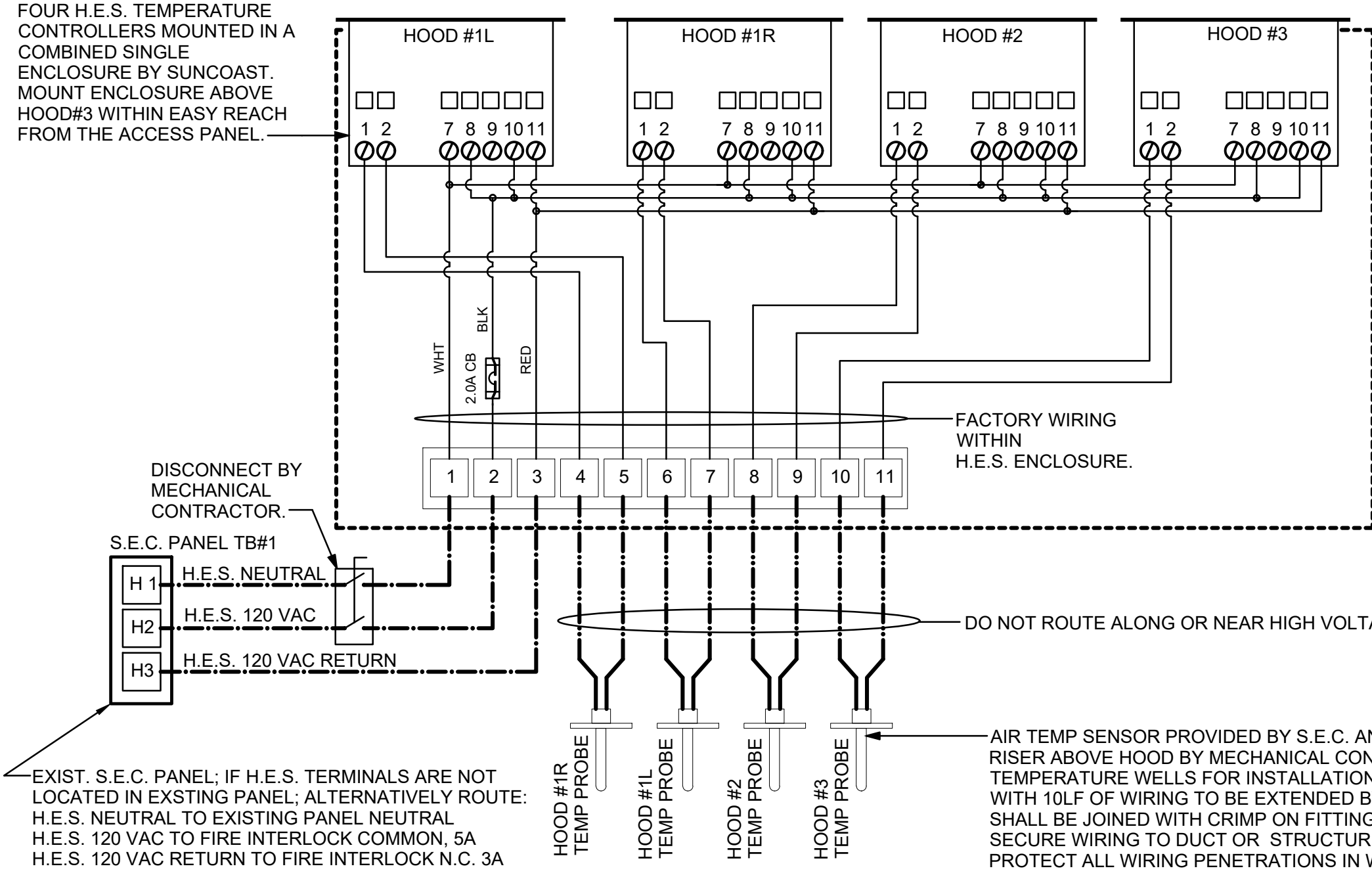
2 ROOFTOP UNIT CONTROL WIRING - LENNOX

NONE

LEGEND
 S.E.C. SUNCOAST ENVIRONMENTAL CONTROLS CFA-500 ENERGY MGT PANEL
 H.E.S. SUNCOAST ENVIRONMENTAL CONTROLS HOOD EXHAUST SAFETY CONTROLLER
 M.C. MECHANICAL CONTRACTOR
 - - - 18 AWG MIN UNSHIELDED LOW VOLTAGE WIRING BY MC, U.N.O.
 - - - 120 VAC WIRING BY MECHANICAL CONTRACTOR

- GENERAL NOTES
- MECHANICAL CONTRACTOR TO PURCHASE THE H.E.S. CONTROL PANEL AND COMPONENTS FROM SUNCOAST ENVIRONMENTAL CONTROLS. TELEPHONE 877-544-6679. CONTROLS COMPONENTS TO BE FACTORY MOUNTED IN LABELED NEMA-1 ENCLOSURES.
 - MECHANICAL CONTRACTOR TO PROVIDE A PROFESSIONALLY LAMINATED COPY OF THIS DETAIL ATTACHED TO THE ENCLOSURE. CONTACT ENGINEER OF RECORD FOR A REPRODUCIBLE COPY OF THE DETAIL.

S.E.C. H.E.S. OPERATION
 IN THE EVENT THAT ANY COOKING EQUIPMENT ITEM BENEATH ANY HOOD IS STARTED WITHOUT THE 'STORE SWITCH' BEING IN THE 'OCCUPIED' POSITION, THE H.E.S. CONTROLLER WILL SENSE THE HEAT RISE WITHIN THE HOOD CANOPY AND ENERGIZE THE EXHAUST FANS.



3 HOOD EXHAUST SAFETY SWITCH (H.E.S.) WIRING DIAGRAM

NONE

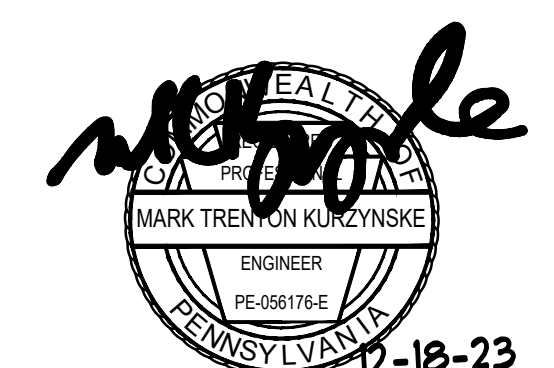


Chick-fil-A

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MECHANICSBURG, PA 17050-2957

FSR#02167

BUILDING TYPE / SIZE: SR S06
RELEASE: 23.04

REVISION SCHEDULE

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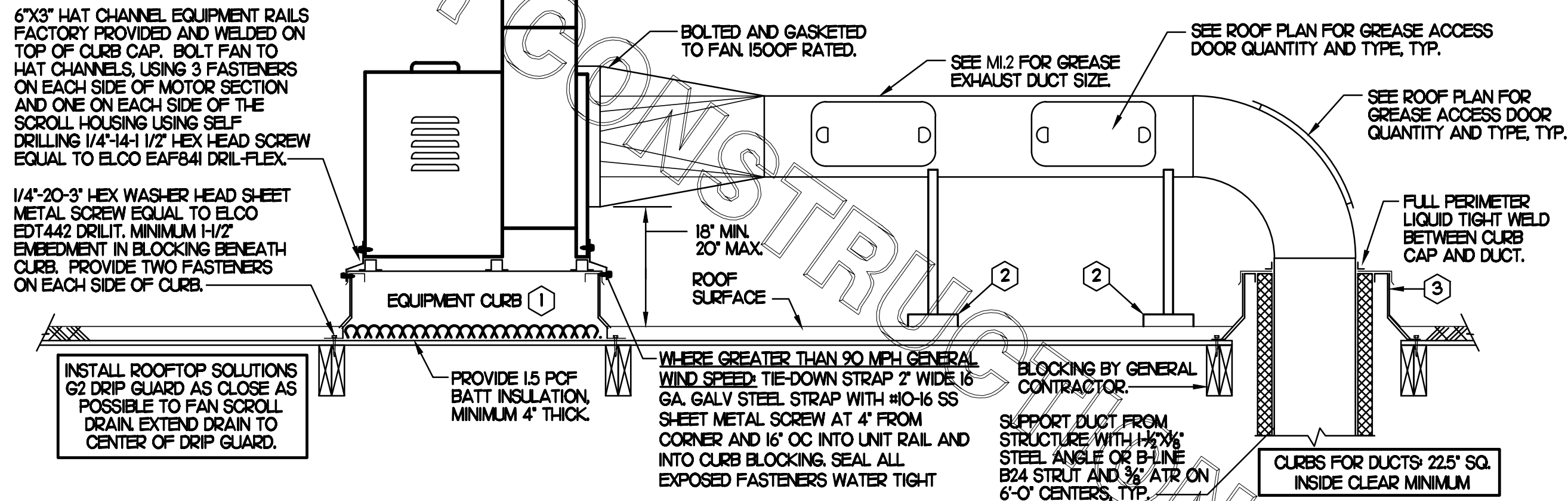
SHEET HVAC CONTROLS

SHEET NUMBER

M4.1

FABRICATE 1/8 GA STAINLESS NOZZLE. NOZZLE INLET FULL SIZE OF FAN DISCHARGE. 1'-0" MINIMUM NOZZLE HEIGHT. TERMINATE 0'-2" ABOVE HIGHEST PARAPET WITHIN 10'-0".

- KEYED NOTES:**
- EQUIPMENT CURB WITH REINFORCED BASE AND STEEL CURB CAP PROVIDED BY TOM BARROW COMPANY. WIDTH OF CURB SHALL BE 4" WIDER THAN FAN FOOTPRINT IN BOTH DIRECTIONS. HEIGHT OF CURB SHALL BE SUCH THAT NO PART OF ANY DUCT TO BE WITHIN 18" OF ROOF SURFACE. PROVIDE FACTORY EQUIPMENT RAILS WELDED TO CAP.
 - ALL DUCT ON ROOF TO BE SUPPORTED WITH MIRO 6-DS DUCT SUPPORT SYSTEM AT 6'-0" INTERVALS MAXIMUM. PROVIDE MIRO SUPPORT PADS AT EACH SUPPORT. ATTACH SUPPORT TO DUCT. PROVIDE A DUCT SUPPORT STAND AT EACH ROOF PENETRATION.
 - 12" HIGH INSULATED CURB PROVIDED BY TOM BARROW COMPANY. MECHANICAL CONTRACTOR TO PROVIDE 1/8 GA MINIMUM CURB CAP.



SHEET NOTES

- ALL DUCTWORK AND UNFINISHED METAL ON ROOF EXCEPT STAINLESS SHALL BE PREPARED WITH TWO COATS OF SHERWIN WILLIAMS B66-200 SERIES DTM WHITE ACRYLIC SEMI-GLOSS INDUSTRIAL MAINTENANCE COATING. DEGREASE AND PRIME BARE METAL SURFACE WITH ONE COAT OF SHERWIN WILLIAMS DTM PRIMER PRIOR TO PAINTING.
- AT EACH PIECE OF ROOF EQUIPMENT, PROVIDE A PLASTIC ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. THE LABEL IS TO HAVE A SELF-ADHESIVE BACKING.
- MAINTAIN 18" CLEARANCE FROM GREASE EXHAUST DUCTWORK ABOVE ROOF TO ANY COMBUSTIBLE CONSTRUCTION INCLUDING PARAPET WALLS.

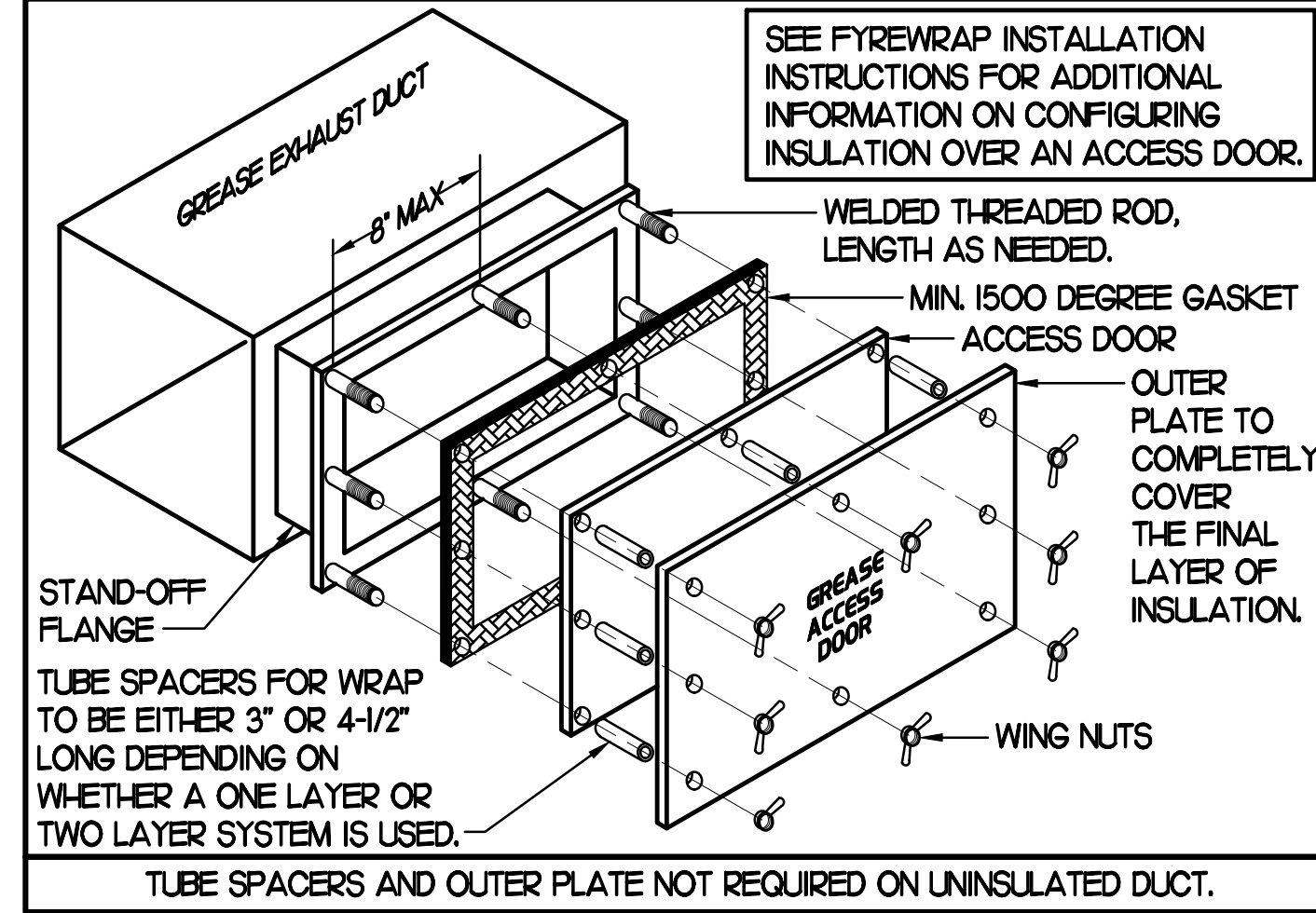
KEY NOTES

- FABRICATE DISCHARGE AIR NOZZLE. LOCATE EXHAUST TERMINATION A MINIMUM 10'-0" FROM OUTSIDE AIR INTAKES. SEE DETAIL 2 THIS SHEET.
- GREASE EXHAUST DUCT LOCATED ON ROOF SHALL SLOPE 1/4" PER FOOT TOWARDS THE HOOD, THE FAN, OR A COMBINATION OF THE TWO SUCH THAT NO PORTION OF THE RADIUS ELBOW AT THE CURB IS BELOW THE CURB CAP AND SUCH THAT THE FAN BASE SETS DIRECTLY ON THE CURB RAILS. THE BOTTOM OF THE RADIUS ELBOW MAY BE EVEN FLUSH WITH THE CURB CAP, BUT NOT BELOW THE CAP. THE DUCT AT THE FAN MUST BE CENTERED ON THE FAN INLET. THE MC MAY ADD A VERTICAL RISER AT THE RADIUS ELBOW LOCATED AT THE DUCT CURB AS NEEDED IN ORDER TO CENTER THE DUCT ON THE FAN INLET.

GREASE ACCESS DOOR SCHEDULE

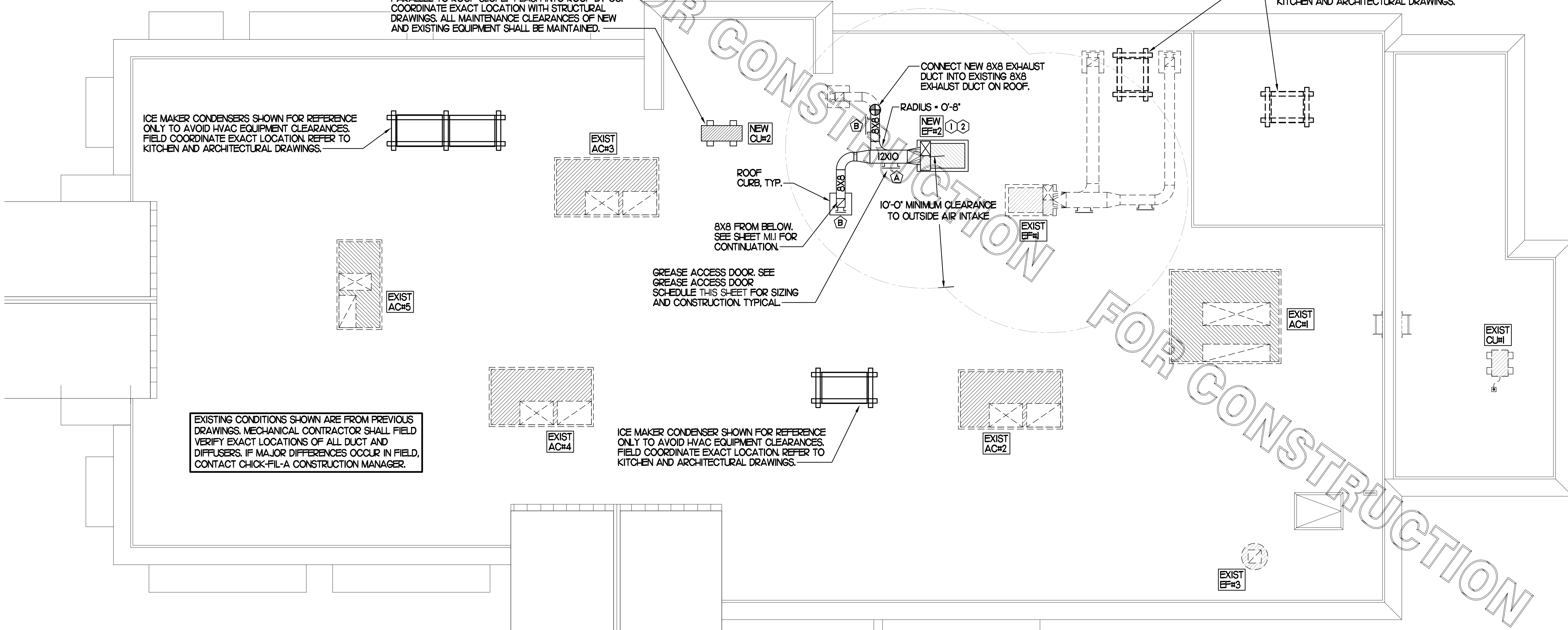
MARK	OPENING SIZE	DOOR SIZE	REMARKS
A	7.5H X 14W	9.5H X 16W	I
B	5.5H X 14W	7.5H X 16W	I

I. ACCESS DOORS SHALL BE U.L. 1978 LISTED OR FIELD FABRICATED. REQUIRE NO TOOLS FOR REMOVAL AND MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE IMC. ACCESS DOOR ASSEMBLY SHALL BE WELDED IN PLACE TO THE GREASE EXHAUST DUCT AND THE ACCESS DOOR SHALL BE SECURED WITH THUMB SCREWS. ACCESS DOORS SHALL BE SEALED WITH A MINIMUM 1500 DEGREE GASKET MATERIAL EQUIVALENT TO THAT MANUFACTURED BY BRETON INDUSTRIES, INC (800) 382-2491.



2 KITCHEN HOOD EXHAUST FAN - UTILITY SET FAN
NO SCALE

SET CONDENSING UNIT ON ROOF USING TWO CURBS PLUS CPES-1 EQUIPMENT CURBS. SECURE CONDENSING UNIT TO CURBS ARRANGED IN PARALLEL. SET LONG SIDE OF CURB PARALLEL TO ROOF SLOPE. FLASH INTO ROOF BY GC. COORDINATE EXACT LOCATION WITH STRUCTURAL DRAWINGS. ALL MAINTENANCE CLEARANCES OF NEW AND EXISTING EQUIPMENT SHALL BE MAINTAINED.

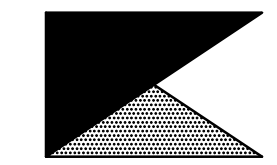


1 MECHANICAL ROOF PLAN

SCALE: 1/4"=1'-0"



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SHEET
MECHANICAL
ROOF PLAN
SHEET NUMBER

M1.2

CONSTRUCTION

A

B

C

D

E

4

E

D

C

B

A

I. SECTION C15000 - MECHANICAL SPECIFICATIONS

PART I - GENERAL

- 1.01 SCOPE
 - A. IT IS THE RESPONSIBILITY OF CONTRACTOR TO READ ALL SPECIFICATIONS AND CONSULT ALL DRAWINGS WHICH MAY AFFECT THE INSTALLATION AND COORDINATION OF HIS WORK WITH OTHER TRADES. CONTRACTOR SHALL COORDINATE AND MAKE MINOR ADJUSTMENTS IN LOCATION OF EQUIPMENT AND MATERIALS AS NECESSARY TO SECURE COORDINATION.
 - B. COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THE LATEST APPROVED EDITIONS OF NFPA-96, NFPA-90A, NFPA-54, SMACNA, ASHRAE 90.1 AND ASHRAE 62.
 - C. SYSTEM LAYOUT IS SCHEMATIC AND EXACT LOCATIONS SHALL BE DETERMINED BY STRUCTURAL CONDITIONS, COORDINATION WITH OTHER TRADES, COORDINATION WITH FINISHES AND OTHER CONDITIONS. STRUCTURAL SUPPORTS SHALL NOT BE CUT OR ALTERED TO ASSURE FIT OF HVAC SYSTEM. TEN FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN OUTSIDE AIR INTAKES AND EXHAUST FANS AND PLUMBING VENT TERMINALS.
 - D. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND REPLACEMENTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT IS APPROVED. CONTRACTOR SHALL HONOR FACTORY WARRANTIES ON ALL EQUIPMENT PROVIDED AS PART OF THIS SYSTEM.
 - E. UPON COMPLETION OF PROJECT, ALL SYSTEM EQUIPMENT AND MATERIALS SHALL BE IN NEW, CLEAN CONDITION WITH ALL DAMAGE RESTORED TO CONDITION ACCEPTABLE TO THE OWNERS REPRESENTATIVE. ALL EQUIPMENT, COMPONENTS AND DUCTWORK SHALL BE INSPECTED AND THOROUGHLY CLEANED, READY FOR USE. AT COMPLETION OF JOB, ALL MISCELLANEOUS TOOLS, SCAFFOLDING, SURPLUS MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED BY CONTRACTOR.
 - F. CONTRACTOR SHALL PROVIDE TWO SETS OF 2" MERV 8 OR HIGHER THROW AWAY TYPE FILTERS. A CLEAN SET SHALL BE PROVIDED PRIOR TO TEST AND BALANCE AND AGAIN PRIOR TO OPENING.

PART II - PRODUCTS

- 2.01 HEATING AND COOLING EQUIPMENT (C15730)
 - A. FURNISH AND INSTALL R-410A ROOFTOP SINGLE PACKAGE COMBINATION ELECTRIC COOLING AND ELECTRIC HEATING UNITS BY LENNOX AS SHOWN ON DRAWINGS. EQUIPMENT SHALL BE ARI CERTIFIED AND U.L. LISTED.
 - B. ACCESSORIES SHALL INCLUDE LOW AND HIGH PRESSURE SAFETIES, CRANK CASE HEATER, OVERCURRENT AND OVERTEMPERATURE SAFETY, COMPRESSOR VIBRATION ISOLATORS, FILTER DRIERS, REFRIGERANT SERVICE VALVES, COIL HAIL GUARDS WHERE SCHEDULED, CONVENIENCE OUTLETS FACTORY INSTALLED ON SCHEDULED UNITS, UNIT MOUNTED NON-FUSED DISCONNECTS, LOW AMBIENT OPERATION DOWN TO 30 DEGREES F AND EVAPORATOR FREEZE STAT.
 - C. COMPRESSORS SHALL BE FULLY HERMETIC SCROLL TYPE WITH INTERNAL VIBRATION ISOLATORS. COMPRESSORS SHALL BE PROVIDED WITH A MINIMUM FIVE (5) YEAR FULL WARRANTY.
 - D. THE UNIT HEATING ELEMENTS SHALL BE BARE NICHROME WIRE EXPOSED TO THE AIR STREAM. HEATING CONTROLS SHALL INCLUDE TIME DELAY THAT SHALL BRING ELEMENTS ON AND OFF IN SEQUENCE WITH TIME DELAY BETWEEN EACH ELEMENT. HEATING SHALL BE PROVIDED IN TWO STAGES. LIMIT CONTROL SHALL PROVIDE OVERLOAD AND SHORT CIRCUIT PROTECTION. HEATER SHALL HAVE A ONE (1) YEAR WARRANTY.
 - E. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT FOR EQUIPMENT WITH LENNOX CORPORATION. PRICING FOR THE EQUIPMENT HAS BEEN ESTABLISHED IN ADVANCE. CONTACT LENNOX NATIONAL ACCOUNTS AT 972-497-6260 (OR BY FAX AT 972-497-5112) FOR PRICING, ORDERING AND AVAILABILITY.

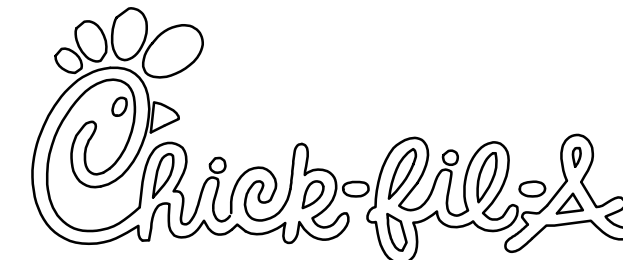
- 2.02 DUCTWORK (C15735) (SEE DWG M2.1 FOR ADDITIONAL GREASE DUCT SYSTEM REQ.)
 - A. ACCEPTABLE MANUFACTURERS OF INSULATION ARE MANVILLE, OWENS CORNING OR KNAUF.
 - B. ALL DUCTWORK SHALL BE SHEET METAL, UNLESS NOTED OTHERWISE (U.N.O.).
 - C. DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS, U.N.O.
 - D. CONSTRUCTION OF DUCTWORK SHALL MEET SMACNA 1" W.C. PRESSURE CLASS STANDARD AND RECOMMENDATIONS. SMACNA SHALL BE FOLLOWED WITH RESPECT TO GAGE THICKNESS, JOINTS, REINFORCING, CONSTRUCTION, INSTALLATION AND SUPPORT FOR PRESSURE CLASS STATED. ALL TRANSVERSE JOINTS IN RECTANGULAR AND ROUND DUCT SHALL BE SEALED PER SMACNA SEAL CLASS C WITH U.L. DUCT MASTIC SEALANT APPROVED FOR INTENDED USE. DUCT TAPE IS NOT AN ACCEPTABLE SUBSTITUTE FOR MASTIC UNLESS EQUAL TO HARDCAST FOIL-GRIP 1402 BUTYL RUBBER ADHESIVE TAPE.
 - E. ALL DUCT INSULATION SHALL MEET MINIMUM R-VALUE REQUIRED BY ASHRAE 90.1 LATEST EDITION. ALL DUCT WRAP SHALL BE MINIMUM 2" THICK, 3/4 PCF AND 5.6 R-VALUE INSTALLED WITH EITHER A VAPOR BARRIER WITH MAXIMUM PERMEANCE 0.05 OR A MINIMUM 2 MIL ALUMINUM REINFORCED FOIL/KRAFT FACING.
 - F. ALL DUCT DROPS FROM THE ROOFTOP UNITS SHALL BE EXTERNALLY INSULATED.
 - G. SUPPLY AND RETURN AIR DUCTWORK SERVING ALL AREAS SHALL BE EXTERNALLY INSULATED.
 - H. ALL AIR CONVEYANCE COMPONENTS SUCH AS, BUT NOT LIMITED TO DUCT, DUCT PLENUMS, GRILLES/DIFFUSERS, BACK PANS, AND BOOTS SHALL BE INSULATED. INSULATION TYPE IS COVERED ELSEWHERE IN THIS SPECIFICATION.
 - I. RESTROOM RECTANGULAR EXHAUST AIR DUCTWORK SHALL BE LINED WITH 1" THICK, 1-1/2 PCF INSULATION.
 - J. TRUNK DUCTS SHALL BE ISOLATED FROM UNIT VIBRATION WITH THE USE OF NFPA AND U.L. APPROVED FLEXIBLE CONNECTORS INSTALLED AT THE TOP OF BOTH SUPPLY AND RETURN DROPS.
 - K. INSULATED FLEXIBLE DUCT MAY BE UTILIZED FOR RUNOUTS TO GRILLES AND DIFFUSERS ONLY IN THE HORIZONTAL POSITION AND IN MAXIMUM LENGTHS OF 4'-0". NO EXCEPTIONS. SEE TAKE-OFF DETAIL ON DRAWING M3.1.
 - L. CONSTRUCTION OF FLEXIBLE DUCTWORK SHALL INCLUDE SPIRAL METAL HELIX BONDED TO A POLYESTER CORE, FIBERGLASS INSULATION WITH POLYETHYLENE OR MYLAR VAPOR BARRIER. ALL COMPONENTS SHALL HAVE APPROPRIATE U.L. APPROVAL AND SHALL BE EQUIVALENT TO THERMAFLEX MKE.
 - M. FLEXIBLE DUCT SHALL BE INSTALLED PER THE "ADC FLEXIBLE DUCT PERFORMANCE AND INSTALLATION STANDARDS, 4TH ED" USING FOIL TAPE AND DRAWBAND ON THE INNER CORE AND TAPE OR DRAWBAND ON THE OUTER JACKET.
 - N. DUCT TAPE SHALL BE EQUAL TO FASSON 181-B FX, 2-1/2" WIDE.
 - O. SINGLE THICKNESS TURNING VANES SHALL BE INSTALLED AT 90 DEGREE TURNS IN SUPPLY DUCTWORK WHERE ANY ONE DIMENSION IS GREATER THAN 12".
 - P. RADIUSSED ELBOWS MAY BE SUBSTITUTED FOR 90 DEGREE ELBOWS AT THE DISCRETION OF THE CONTRACTOR. CENTERLINE RADIUS EQUAL TO: R=W PER FIGURE NO. 2-2 IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
 - Q. EXTERNAL INSULATION ON BOTTOM OF DUCTS 24" OR WIDER SHALL BE SUPPORTED WITH STICK PINS ON 18" CENTERS. STICK PIN WASHERS SHALL BE COVERED WITH DUCT TAPE OR MASTIC.

2.03 CONTROLS (C15735)

- A. SYSTEMS SHALL BE COMPLETE WITH CONNECTIONS TO EXISTING CFA-500 TEMPERATURE CONTROL PANEL AS MANUFACTURED BY SUNCOAST ENVIRONMENTAL CONTROLS (S.E.C.) (PH: 877-544-6679). CONTROL WIRING TERMINATIONS ARE BY THE MECHANICAL CONTRACTOR.
- B. THE SMOKE DETECTORS SHALL BE FACTORY INSTALLED AND WIRED BY THE ROOFTOP UNIT MANUFACTURER.
- C. A FACTORY INSTALLED SMOKE DETECTOR IN THE RETURN AIR SECTION OF EACH AIR CONDITIONING UNIT SHALL STOP THE INDOOR FAN AND CLOSE THE OUTSIDE AIR DAMPER IN THE EVENT OF EXCESSIVE TEMPERATURE OR SMOKE. SMOKE DETECTOR SHALL BE LOCATED PRIOR TO ANY EXHAUST FROM THE BUILDING OR MIXING WITH FRESH AIR MAKE-UP. UPON DETECTION, THE SYSTEM SHALL NOT RESTART UNTIL THE DEVICE IS MANUALLY RESET. DEVICES SHALL BE LOCATED WHERE THEY CAN BE EASILY ACCESSED AND WHERE CLEAR OF FILTERS.
- D. CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH SUNCOAST ENVIRONMENTAL CONTROLS FOR THE SMOKE DETECTOR TEST/RESET ANNUNCIATOR STATIONS. THE TEST/RESET STATIONS WILL BE PURCHASED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE.
- E. THE REMOTE TEST/RESET ANNUNCIATORS SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. INSTALLATION BY MECHANICAL SHALL INCLUDE MOUNTING OF THE ANNUNCIATORS AND ALL WIRING FROM EACH DEVICE TO THE RTU OR AHU. PROVIDE A JUNCTION BOX IN THE WALL WITH 1/2" CONDUIT STUBBED UP ABOVE THE CEILING FOR EACH REMOTE TEST STATION. ANNUNCIATOR SHALL BE SUNCOAST CONTROLS REMOTE TEST/RESET STATION WITH POWER LED, TROUBLE LED, ALARM LED, 90DB HORN AND TEST/RESET BUTTON.
- F. THE RESTROOM FAN SHALL BE INTERLOCKED TO THE LIGHTS SERVING THE MEN AND WOMEN'S RESTROOMS. THE HOOD FANS SHALL BE CONTROLLED VIA THE SUNCOAST CFA-500 CONTROL PANEL. WIRING, RELAYS AND SWITCHES FOR CONTROL OF ALL FANS ARE BY ELECTRICAL CONTRACTOR.
- G. LENNOX UNITS - THERMOSTATS ARE PROVIDED AND INTEGRATED INTO THE TEMPERATURE CONTROL PANEL BY SUNCOAST ENVIRONMENTAL CONTROLS. SUNCOAST WILL PROVIDE A NETWORK THERMOSTAT US32-CFA TSTAT PRE-WIRED IN THE TEMPERATURE CONTROL PANEL. A REMOTE TEMPERATURE SENSOR FOR EACH THERMOSTAT IS ALSO PROVIDED. SOME UNITS MAY HAVE MORE THAN ONE SENSOR. MECHANICAL CONTRACTOR SHALL INSTALL ALL WIRING BETWEEN THE THERMOSTAT, THE REMOTE SENSOR AND THE ROOFTOP UNIT OR AHU.
- H. MECHANICAL CONTRACTOR SHALL INSTALL CONTROL WIRING IN 1/2" CONDUIT WHERE REQUIRED BY CODE. WHERE NOT REQUIRED TO BE IN CONDUIT, ALL WIRING SHALL BE RUN PARALLEL TO STRUCTURAL MEMBERS OR PERPENDICULAR WITH NO DIAGONAL ROUTING. ALL WIRING SHALL BE SECURED TO THE FRAMING TO PREVENT SAGGING IN RUNS. WIRING TO ROOFTOP UNITS SHALL BE ROUTED THROUGH THE FACTORY THRU-BASE FITTING IN THE UNIT BASE. NO SPLICING OF WIRING WILL BE ACCEPTED. ALL WIRING ABOVE THE ROOF SHALL BE INSTALLED IN EXTERIOR GRADE FLEXIBLE CONDUIT. ALL CONTROL WIRING AND CONTROL WIRING CONDUIT SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. WIRING SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF NEC. ALL LOW VOLTAGE CONTROL WIRING SHALL BE NO LESS THAN 18 AWG MIN. CONTROL WIRING CONDUCTORS SHALL BE SIZED TO ACCOUNT FOR LOAD AND LENGTH OF RUN TO ALLOW SUFFICIENT VOLTAGE AVAILABLE AT CONTROLLED DEVICE TO OPERATE THE SYSTEM RELIABLY.

PART III - EXECUTION

- 3.01 SCOPE
 - A. FURNISH AND INSTALL SYSTEM IN ACCORDANCE WITH REFERENCED STANDARDS, APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED ON DRAWINGS.
 - B. OWNER SHALL TEST AND BALANCE MECHANICAL SYSTEM IN ACCORDANCE WITH NCI OR AABC STANDARDS TO ASSURE CONFORMANCE WITH DESIGN. G.C. WILL MAKE MECHANICAL CONTRACTOR AVAILABLE DURING TEST AND BALANCE TO ASSIST TESTING AGENCY AND TO MAKE CORRECTIONS IMMEDIATELY NECESSARY. CONTRACTOR SHALL CORRECT ITEMS ON WRITTEN TEST AND BALANCE REPORT.
 - C. CONTRACTOR SHALL INSTRUCT THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT THROUGH DEMONSTRATION AND EXPLANATION OF OPERATING & MAINTENANCE MANUALS.
 - D. CONTRACTOR SHALL PROVIDE A "SAMPLE MAINTENANCE PROPOSAL" TO THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 - E. CONTRACTOR SHALL COMPLETE A/C EQUIPMENT STARTUP DOCUMENTATION PROVIDED BY OWNER.



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12-18-23

CHICK-FIL-A
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FSR#02167

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 SHEET
 MECHANICAL
 SPECIFICATIONS
 SHEET NUMBER

M7.1

NATIONAL ACCOUNTS

1.	LENNOX EQUIPMENT - CONTACT LENNOX NATIONAL ACCOUNTS AT 800-367-6285 (OR BY FAX AT 972-497-5112) FOR PRICING, ORDERING AND AVAILABILITY. LENNOX EQUIPMENT NOT PURCHASED THRU LENNOX NATIONAL ACCOUNTS WILL NOT BE ACCEPTED.	6.	ROYAL METAL PRODUCTS START COLLARS - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.
2.	LOREN COOK FAN AND CURB PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN/CURB PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS AND CURBS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.	7.	SPACE RAY INFRARED HEATER PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE HEATER PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. HEATERS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.
3.	PRICE AIR DEVICES - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE AIR DEVICES DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. AIR DEVICES NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.	8.	CIRCULATING FAN PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.
4.	AIR DOORS - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE AIR DOORS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.	9.	BROMIC ELECTRIC HEATER PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE HEATER DIRECTLY FROM BROMIC COMPANY. CONTACT BLAKE RUSSIE AT 858-381-4850 FOR PRICING AND AVAILABILITY. HEATERS NOT PURCHASED THRU BROMIC COMPANY WILL NOT BE ACCEPTED.
5.	HALTON HOODS - CHICK-FIL-A WILL PURCHASE AND PROVIDE THE HOODS FOR INSTALLATION BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE HOODS. CONTACT HALTON CO. AT 270-237-5600 FOR MORE INFO.		

CONSTRUCTION