



Chick-fil-A

5200 Buffington Rd.  
Atlanta Georgia,  
30349-2998

Revisions:

Mark	Date	By
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Seal

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INTERPLAN  
ARCHITECTURE  
ENGINEERING  
INTERIOR DESIGN  
PROJECT MANAGEMENT

STORE  
S97-100  
SOUTHCHASE PLAZA  
FSU  
13085 S. ORANGE  
BLOSSOM TRAIL  
ORLANDO, FL 32837

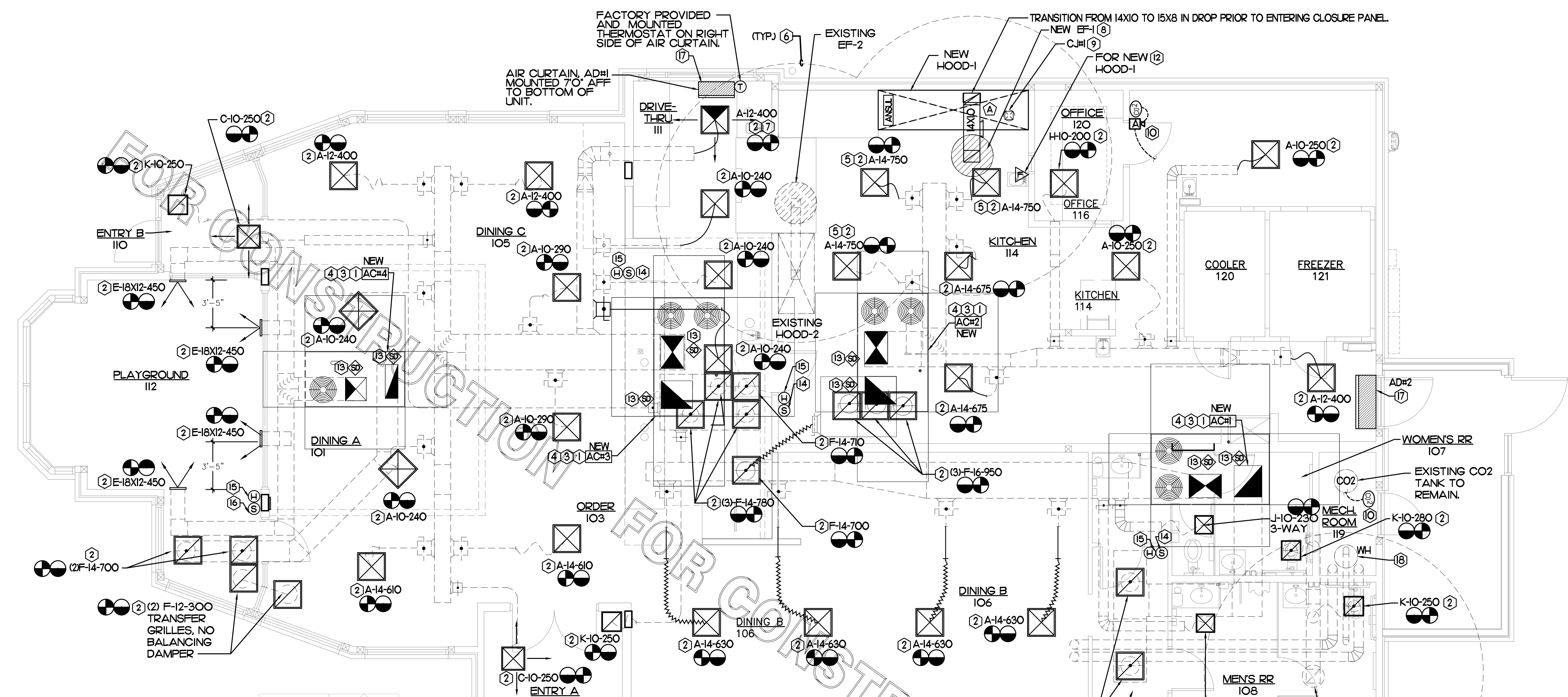
SHEET TITLE  
MECHANICAL  
FLOOR PLAN

VERSION: S97-100  
ISSUE DATE: 03.12.15

Job No. : 14.0416  
Store : 01128  
Date : 03.12.15  
Drawn By : CL  
Checked By : SH

Sheet

M-11



# MECHANICAL FLOOR PLAN

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

## KEY NOTES

- 1 CONTRACTOR TO REPLACE EXISTING ROOFTOP UNIT WITH NEW ELECTRIC COOLING/GAS HEATING ROOFTOP UNIT WITH CURB ADAPTER (IF POSSIBLE) IF NOT PROVIDE NEW 14" HIGH ROOF CURB. MAINTAIN MINIMUM HEIGHT OF 8" FROM ROOF SURFACE. FIELD COORDINATE SIZE WITH MANUFACTURER REQUIREMENTS PRIOR TO BID. REFER TO HVAC SCHEDULE ON SHEET M-3.1. CONTRACTOR'S TO FIELD VERIFY EXISTING CONDITIONS, CURB DIMENSIONS, AND REQUIREMENTS PRIOR TO ORDERING.
- 2 REPLACE EXISTING DIFFUSERS WITH NEW, OR PROVIDE NEW AIR DEVICE. RE-CONNECT TO EXISTING DUCT SYSTEM WITH NEW FLEX DUCT. MAXIMUM LENGTH OF FLEXIBLE DUCT RUN-OUT IS 4 FEET NO EXCEPTIONS. MODIFY EXISTING DUCTWORK AS NEEDED TO ACCOMMODATE NEW GRILLE LOCATIONS (TYP. ALL). FIELD VERIFY & COORDINATE LOCATIONS PRIOR TO BID & CONSTRUCTION. RE-BALANCE AIR QUANTITY AS SHOWN ON PLAN. PROVIDE WITH MANUAL VOLUME DAMPER WITH ACCESSIBILITY. ANY DEFICIENCIES AND OR DISCREPANCIES SHALL BE REPORTED TO ARCHITECT/ENGINEER IMMEDIATELY. REFER TO DETAIL ON SHEET M-3.1.
- 3 BRANCH TAKE-OFFS ARE NOT TO BE LOCATED CLOSER THAN 3'-0" FROM ANY ELBOW INCLUDING THE SUPPLY AIR DROP FROM CURB.
- 4 CONTRACTOR TO VERIFY OVERFLOW SWITCH INSIDE ROOFTOP UNIT DRAIN PAN EXISTS & IT'S IN GOOD WORKING CONDITION. ON DOWN-FLOW UNITS AND ALL OTHER COILS THAT DO NOT HAVE A SECONDARY DRAIN AND DO NOT HAVE A MEANS TO INSTALL AN AUXILIARY DRAIN PAN, A WATER-LEVEL MONITORING DEVICE SHALL BE INSTALLED INSIDE THE PRIMARY DRAIN PAN. THIS DEVICE SHALL SHUT OFF THE EQUIPMENT SERVED IN THE EVENT THAT THE PRIMARY DRAIN BECOMES RESTRICTED. EXTERNALLY INSTALLED DEVICES AND DEVICES INSTALLED IN THE DRAIN LINE SHALL NOT BE PERMITTED.
- 5 MECHANICAL CONTRACTOR TO ADJUST PATTERN DEFLECTORS TO THROW STRAIGHT DOWN.
- 6 FIELD VERIFY EXHAUST FAN MAINTAINS A 10 FOOT CLEARANCE FROM ANY FRESH AIR INTAKE.
- 7 MECHANICAL CONTRACTOR TO CLOSE THE AIR PATTERN DEFLECTORS ON DRIVE-THRU WINDOW SIDE.
- 8 PROVIDE NEW KITCHEN HOOD EXHAUST FAN REPLACING THE EXISTING FAN. INSTALL NEW FAN AND EXTENSION ON EXISTING CURB. FIELD VERIFY FAN IS LOCATED MINIMUM OF 10 FT FROM PARAPET WALLS OR FROM ANY NEW OR EXISTING OUTSIDE AIR INTAKE. FIELD VERIFY & COORDINATE EXACT LOCATION PRIOR TO BID & CONSTRUCTION. SEE EXHAUST FAN DETAIL SHEET M-3.1 FOR ORIENTATION OF HINGE SIDE OF FAN ON CURB.
- 9 SEE ELEVATIONS ON M-2.I SECTION 2 AND M-1.I FOR C.J FAN DUCTING REQUIREMENTS.

- 10 PROVIDE CO2 ALARM FOR THE EXISTING CO2 TANK & FOR THE NEW BEVERAGE CARBONATOR INTERLOCKED WITH STROBE AUDIO/VISUAL ALARM. SEE CO2 ALARM SYSTEM DETAIL ON SHEET M-4.1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID.
- 11 NOT USED.
- 12 A MANUAL PULL STATION SHALL BE LOCATED 10 FEET MINIMUM TO 20 FEET MAXIMUM FROM HOOD, ONE AT OR NEAR EVERY POINT OF EGRESS FROM THE HOOD COOKING AREA. PULL STATION SHALL BE SECURELY MOUNTED NOT LESS THAN 42" (INCHES) OR MORE THAN 48" (INCHES) FROM THE FLOOR. PROVIDE SIGNAGE FOR PULL STATION.
- 13 PROVIDE FACTORY INSTALLED "SYSTEM SENSOR" RETURN SIDE SMOKE DETECTOR IN THE ROOFTOP UNIT. CONTRACTOR SHALL ADD AN ADDITIONAL FIELD INSTALLED "SYSTEM SENSOR" REMOTE SMOKE HEAD INSTALLED IN THE SUPPLY AIR DUCT (PROVIDED BY LENNOX OR EQUAL) AND AN ANNUNCIATOR WITH 4-WIRES. TIE & CONNECT BACK TO THE "SUNCOAST ENVIRONMENTAL CONTROLS". UNIT SHALL SHUT DOWN UPON DETECTION OF SMOKE IF FIRE ALARM IS NOT INSTALLED IN THE BUILDING. THE ACTIVATION OF THE SMOKE DETECTOR SHALL ACTIVATE A AUDIBLE/VISUAL ALARM IN A NORMALLY OCCUPIED LOCATION, AND TROUBLE CONDITIONS SHALL BE INDICATED VISUALLY OR AUDIBLY IN A NORMALLY LOCATION. SMOKE DETECTOR SHALL BE COMPLIANT WITH LOCAL CODES. ACCESS SHALL BE PROVIDED FOR INSPECTION AND MAINTENANCE. CONTRACTOR SHALL VERIFY CODE REQUIREMENTS FOR APPLICABLE CONFIGURATION PRIOR TO BID & CONSTRUCTION.
- 14 MOUNT REMOTE SENSOR ON WALL AT 5'-0" AFF AND ROUTE WIRING BACK TO SUNCOAST TEMP CONTROL PANEL. FOR SENSOR SERVING ACH1, LOCATE SENSOR DIRECTLY BELOW REFRIGERATOR DISCONNECT AND COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT.
- 15 MOUNT LENNOX HUMIDITY SENSOR ON WALL ABOVE SPACE TEMP SENSOR AND ROUTE WIRING TO UNIT ON ROOF.
- 16 MOUNT REMOTE SENSOR FOR PLAYGROUND 10'-8" AFF. ROUTE WIRING BACK TO SUNCOAST TEMP CONTROL PANEL.
- 17 AIR CURTAIN MOUNTED OVER DOOR HEADER AT 7'-5" AFF TO BOTTOM OF UNIT. LOCATE MAGNETIC CONTACT TYPE MICROSWITCH IN DOOR FRAME ON STRIKE SIDE.
- 18 EXISTING WATER HEATER TO REMAIN.

## SHEET NOTES

1. DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.
2. MECHANICAL CONTRACTOR SHALL BALANCE HVAC SYSTEM AS SHOWN ON THE PLAN & RTU SCHEDULE ON SHEET M-3.1. 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.
3. NO PIPING OR DUCTWORK ALLOWED ABOVE ANY ELECTRICAL/CONTROL PANELS.
4. COORDINATE NEW WORK WITH EXISTING CONDUITS, STRUCTURE, & PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR TO NOTIFY DESIGN TEAM WITHOUT DELAY IF ACTUAL LOCATION OF EXISTING MECHANICAL EQUIPMENT DOESN'T MATCH FLOOR PLAN.
5. CONTRACTOR SHALL CLEAN & REFURBISH ALL EXISTING DUCTWORK, AND EXISTING HVAC AIR DEVICES TO "LIKE NEW" CONDITION. PATCH & REPAIR OPENING AIR TIGHT OF EXISTING DUCTWORK AS REQUIRED (TYPICAL ALL). FIELD VERIFY AND COORDINATE ALL EXISTING HVAC SIZES, LOCATIONS, AND CONDITION PRIOR TO BID.
6. REUSE AND REWORK EXISTING HVAC DUCTWORK. PROVIDE NEW SECTION FOR RECONNECTION AS REQUIRED. FIELD VERIFY ALL REQUIREMENTS PRIOR TO BID.

## 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 HIRED BY HALTON.
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 HOOD-1 FROM WALL AND STRUCTURE AS SHOWN ON HALTON SHOP DRAWING MH-1. ATTACHMENT TO WALL REQUIRES FIELD DRILLING OF SUPPORT ANGLE AT BACK OF HOODS. ATTACH HOOD TO WALL AT 16" INTERVALS ALONG FULL LENGTH OF HOOD ON TOP AND BOTTOM. EACH WALL ATTACHMENT POINT MUST OCCUR AT A WALL STUD. ATTACHMENT HARDWARE TO BE #12-24 HEX HEAD SHEET METAL SCREW EQUAL TO TEXTRON SDS EDT265, LENGTH AS REQUIRED TO FULLY PENETRATE THE STUD. FRONT EDGE OF HOOD TO BE SUPPORTED FROM STRUCTURE WITH MIN # ATR. SHEATH THE ATR WITH 300 SERIES STAINLESS STEEL TUBING. NO LETTERING OR MARKINGS ON TUBING. TUBING TO EXTEND THRU ACT CEILING. PROVIDE STAINLESS STEEL ESCUTCHEON AT CEILING PENETRATION. ATTACH TO STRUCTURE. REFER TO STRUCTURAL DRAWINGS.

### 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.

### CAPTURE JET NOTE

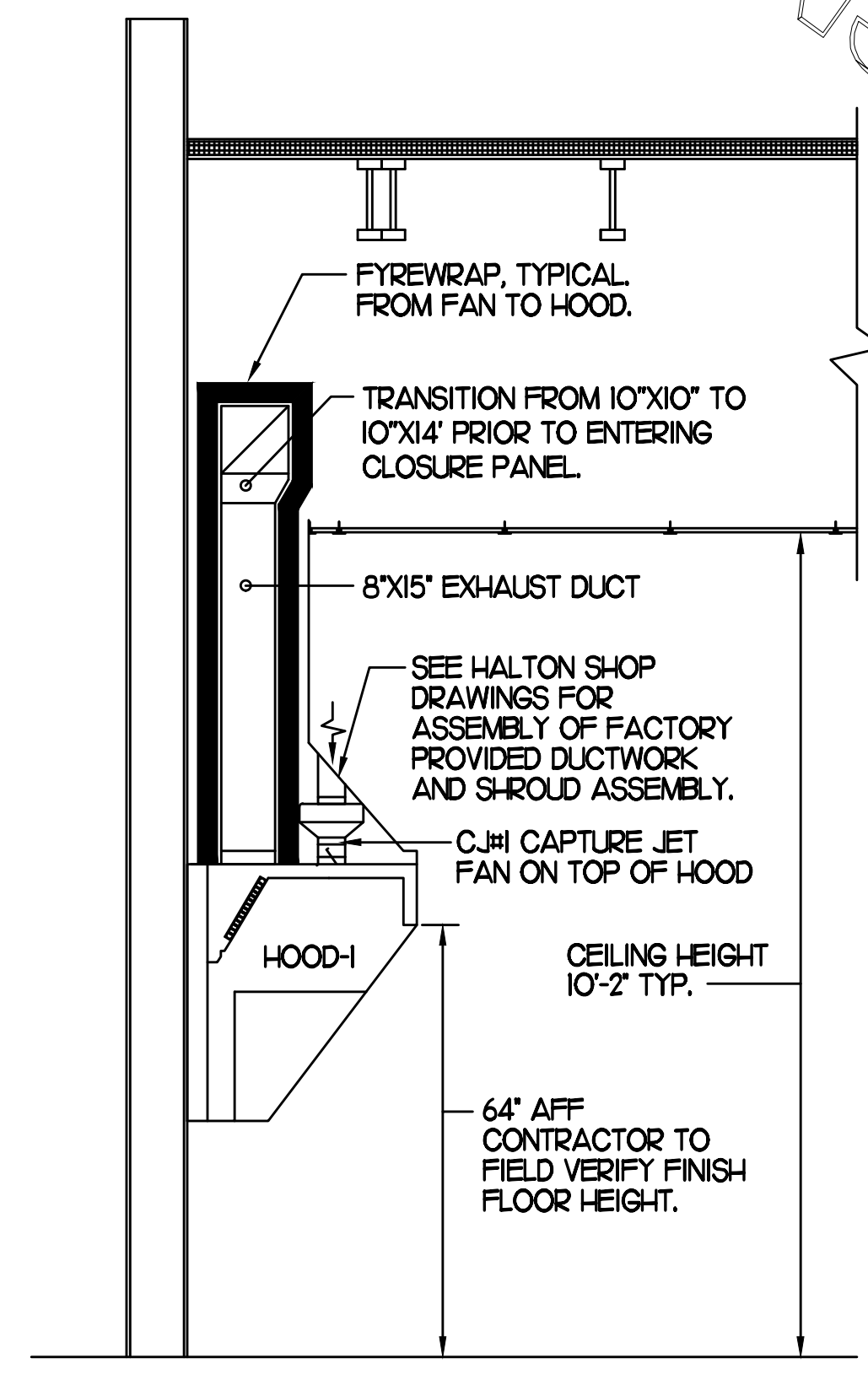
REFER TO 'CAPTURE-JET FAN INSTALLATION AND DIMENSIONAL DATA' SCHEDULE ON HALTON SHOP DRAWINGS (SHEET MH-1) FOR INFORMATION ON CAPTURE JET FAN.

### 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.

### HOOD ELEVATION NOTE

HOOD ELEVATIONS ON THIS SHEET ONLY SERVE ILLUSTRATIVE PURPOSES. SEE DETAILS ON HALTON SHOP DRAWINGS ON SHEET MH-1 FOR DETAILS ON STANDOFFS, CLEARANCES, AND HOOD CONSTRUCTION.



**SECTION "A-A"**

**2 HOOD ELEVATIONS**  
NONE

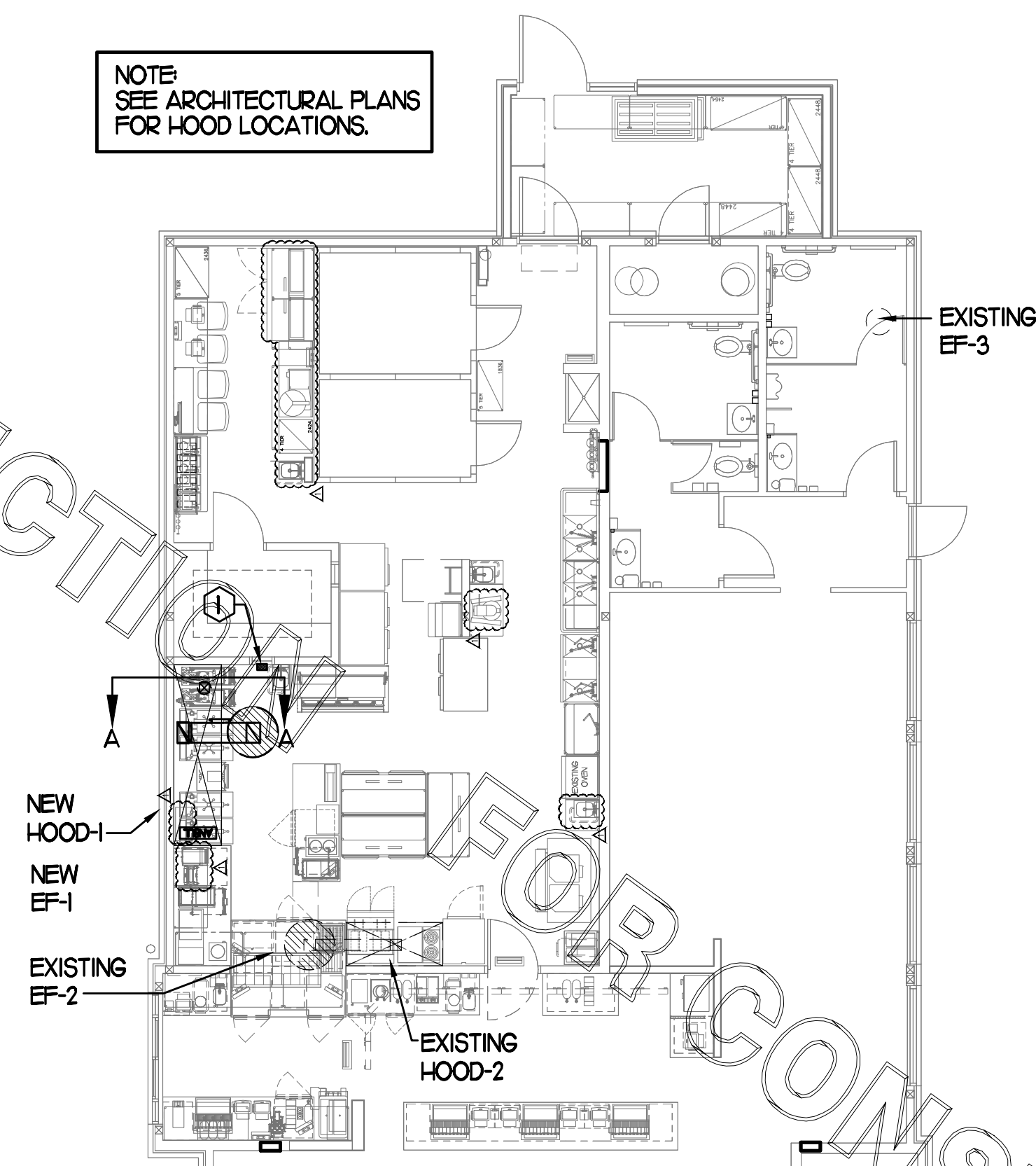
## HOOD SCHEDULE

MARK	EXHAUST CFM	SP • TAB PORT	CAPTURE JET CFM & SP.	TYPE	COLLAR SIZE	WIDTH	DEPTH	HEIGHT	MANUFACTURER	MODEL	REMARKS
NEW HOOD - 1	1,465	012"	96 • 0.30"	BACK SHELF	15X8	129"	37"	38"	HALTON	KVL-2	2
EXISTING HOOD - 2	858	-	-	BACK SHELF	-	-	-	-	-	-	1
NOTES	DIMENSIONS OF HOODS INCLUDE BACK AND SIDE SPACERS (HEIGHT DOES NOT INCLUDE CLOSURE PANELS).										
	ALL HOODS SHALL BE STAINLESS STEEL CONSTRUCTION AND PROVIDED W/ FOLLOWING: <ul style="list-style-type: none"> <li>• TOP PLENUM CAPTURE JET FAN, SPEED CONTROLLER AND COLLAR</li> <li>• FULL HEIGHT SS CLOSURE PANEL WITH ACCESS PANEL IN FRONT LARGE ENOUGH TO REMOVE CAPTURE JET FAN</li> <li>• CAPTURE JET AIR INLET AND COLLAR AT FRONT OF CLOSURE PANEL</li> <li>• PRE-PIPED ANSUL R-102 WET FIRE EXTINGUISHING SYSTEM</li> <li>• EQUIPMENT ID. LABELS LOCATED ON FRONT LEADING EDGE OF HOOD</li> </ul> VERIFY ALL DATA AND REQUIREMENTS LISTED HEREIN W/ HALTON SHOP DRAWINGS. CONSULT FACTORY FOR ANY DISCREPANCIES.										
REMARKS	1. EXISTING HOOD TO REMAIN. 2. TYPICAL INSTALLATION FOR NEW HOOD. FIELD VERIFY, COORDINATE, & CONFIRM WITH HALTON HOOD DRAWING MH-1 PRIOR TO BID & CONSTRUCTION.										

### NOTE:

NEW HOOD AT THE MAIN COOKLINE SHALL BE RATED WITH ONE INCH THICK LAYER OF FACTORY INSTALLED INSULATION TO MEET "ZERO INCH CLEARANCE" TO COMBUSTIBLE MATERIALS. HOOD SHALL BE CERTIFIED BY ETL SPECIFICATIONS, AND SHALL CONFORM TO UL STANDARD 710, BUILT PER NFPA 96 SECTION 4.2.2., AND NSF LISTED.

NOTE:  
SEE ARCHITECTURAL PLANS FOR HOOD LOCATIONS.



### HOOD LAYOUT NOTES

- 1 ANSUL PULL STATION SERVING NEW HOOD-1. LOCATE ANSUL PULL STATION BETWEEN 42" AND 48" AFF. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT ELEVATIONS. J-BOX AND CONDUIT ARE BY ELECTRICAL. PROVIDE RED BAKELITE LABEL WITH 1/2" HIGH LETTERS INDICATING THE HOODS SERVED, I.E. 'MAIN COOKLINE HOOD'.

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



Chick-fil-A

5200 Buffington Rd.  
Atlanta Georgia,  
30349-2998

### Revisions:

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**INTERPLANE**  
ARCHITECTURE  
ENGINEERING  
INTERIOR DESIGN  
PROJECT MANAGEMENT

STORE  
S97-100  
SOUTHCHASE PLAZA  
FSU  
13085 S. ORANGE  
BLOSSOM TRAIL  
ORLANDO, FL 32837

SHEET TITLE  
HOOD DETAILS  
& SCHEDULES

VERSION: S97-100  
ISSUE DATE: 03.12.15

Job No. : 14.0416  
Store : 01128  
Date : 03.12.15  
Drawn By : CL  
Checked By : SH

Sheet

M-2.I



Chick-Fil-A

5200 Buffington Rd. Atlanta Georgia, 30349-2998

Revisions: Mark Date By

Table with 3 columns: Mark, Date, By. Contains revision symbols and lines.

Seal

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INTERPLAN ARCHITECTURE ENGINEERING INTERIOR DESIGN PROJECT MANAGEMENT

STORE S97-100 SOUTHCHASE PLAZA FSU 13085 S. ORANGE BLOSSOM TRAIL ORLANDO, FL 32837

SHEET TITLE HVAC DETAILS & SCHEDULES

VERSION: S97-100 ISSUE DATE: 03.12.15

Job No. : 14.0416

Store : 01128

Date : 03.12.15

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M-3.I

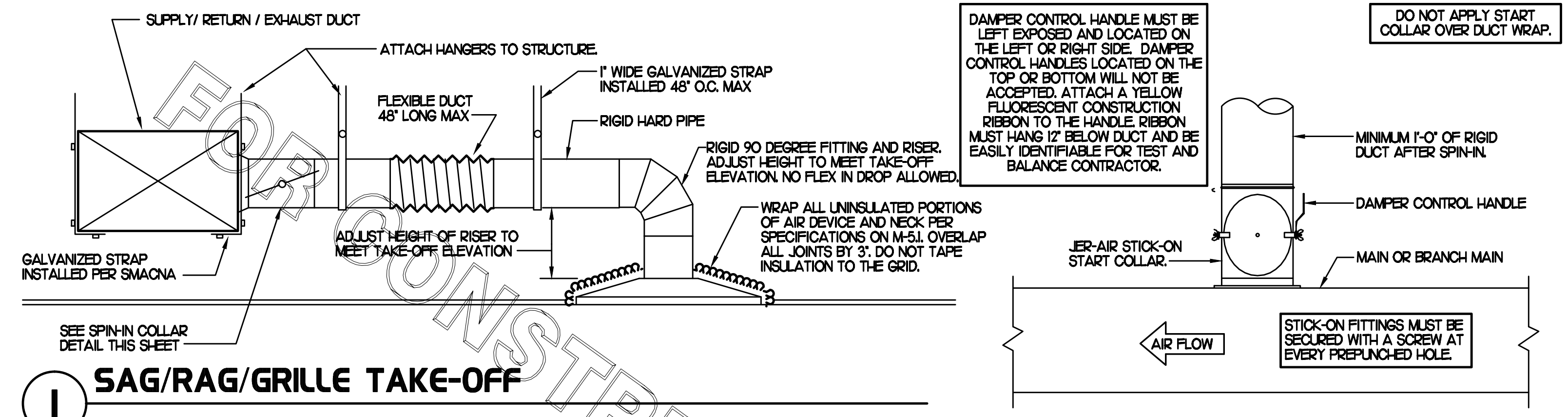
### OUTDOOR AIR CALCULATION

Table with columns: ROOM NUMBER & NAME, AREA SQ. FT., NO. OF PEOPLE, REQ'D OA CFM/PERSON, REQ'D OA CFM/SQ FT, TOTAL OSA, REQ'D EXHAUST AIR PER FIXTURE, REQ'D OSA AC-1, REQ'D OSA AC-2, REQ'D OSA AC-3, REQ'D OSA AC-4. Includes rows for Dining B, Mens RR, Womens RR, RR Vestibule, Kitchen, Office, Entry A, Entry B, Dining A & C, Order Area, Drive Thru, Serving Area, Playground, and Totals.

### GAS FIRED ROOFTOP UNIT SCHEDULE

Table with columns: MARK, AREA SERVED, TONNAGE, COOLING CAPACITY (MBH) TOTAL, SENS, INPUT, OUTPUT, HEATING CAPACITY (MBH) SUPPLY, O.A., HP, ESP, FAN SECTION (CFM) SUPPLY, O.A., HP, ESP, EXISTING MANUFACTURER/MODEL, NEW MANUFACTURER/MODEL, PERCENTAGE OF OUTDOOR AIR, MANUFACTURER, ARI RATINGS, ELECTRICAL DATA, REMARKS, APPROX. NET WEIGHT INCLUDING OPTIONS.

CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE JER-AIR START COLLARS FOR BOTH WITH AND WITHOUT A MANUAL BALANCING DAMPER. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE JER-AIR START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0101 FOR PRICING AND AVAILABILITY. JER-AIR START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.



### 1 SAG/RAG/GRILLE TAKE-OFF

NO SCALE

HINGED SIDE OF EF#1, EF#2, EF#3, AND EF#4 MUST FACE THE MAIN ENTRY SIDE OF THE BUILDING.

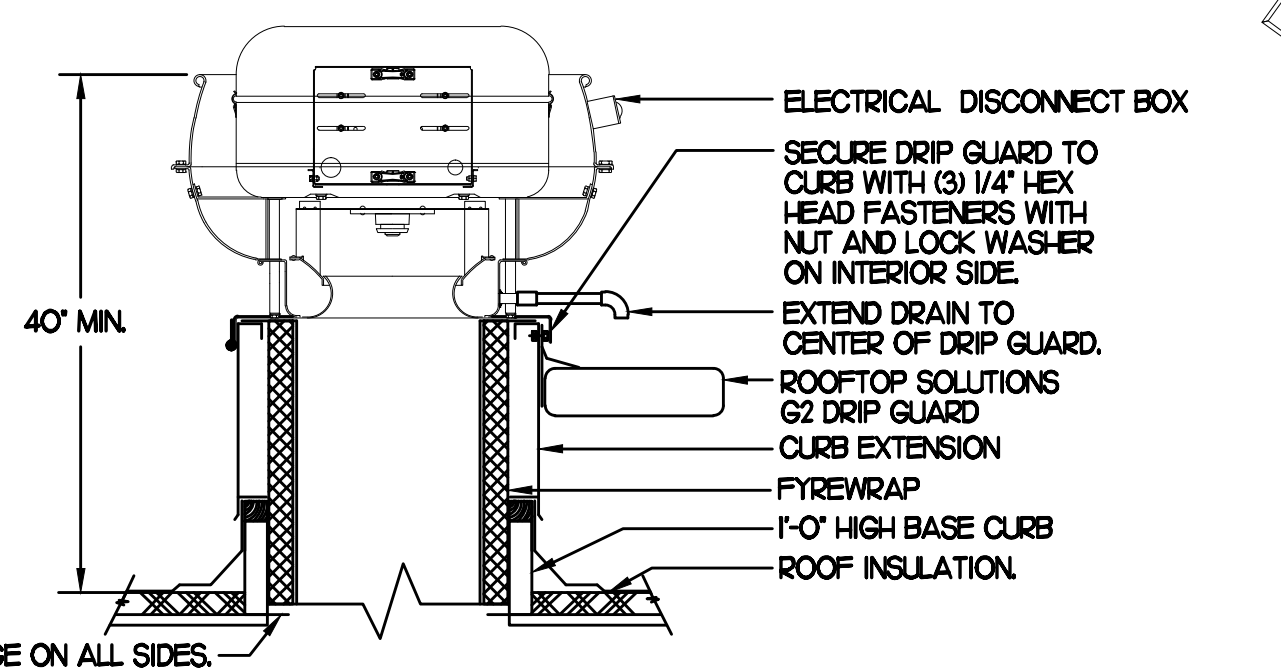
SECURE FAN TO CURB WITH #12X1/2" SHEET METAL SCREWS ON 1'-0" CENTERS. SCREWS MUST BE INSTALLED ON THE SIDE OF THE CURB, NOT THE TOP.

### 2 START COLLAR

NO SCALE

### 3 KITCHEN HOOD EXHAUST FAN

NO SCALE



### FLEX DUCT SIZE

Table with columns: CFM, DIA, SP. Rows: 0-80 CFM - 6" DIA, 81-170 CFM - 8" DIA, 171-300 CFM - 10" DIA, 301-510 CFM - 12" DIA, 511-750 CFM - 14" DIA, 751-1100 CFM - 16" DIA, 1101-1450 CFM - 18" DIA, 1451-1900 CFM - 20" DIA.

BASED ON WIRE HELIX FLEXIBLE DUCT TYPE FLEX-MASTER

UL LISTING: UH18 / ETL CLASS I AIR DUCT STANDARD CODE:

NFPA 90A AND 90B, BOCA, SBBC HUD/FHA, MIN PROPERTY STD. FLAME SPREAD...LESS THAN 25 SMOKE DEVELOP...LESS THAN 50

MIN R8.0 FOR ATTIC/UNCONDITION SPACE. MIN R6.0 FOR RETURN CONDITIONED SPACE.

MANUFACTURER IS TO BE USED AS A BASIS FOR DESIGN. EQUAL IS APPROVED.

### KITCHEN PRESSURIZATION

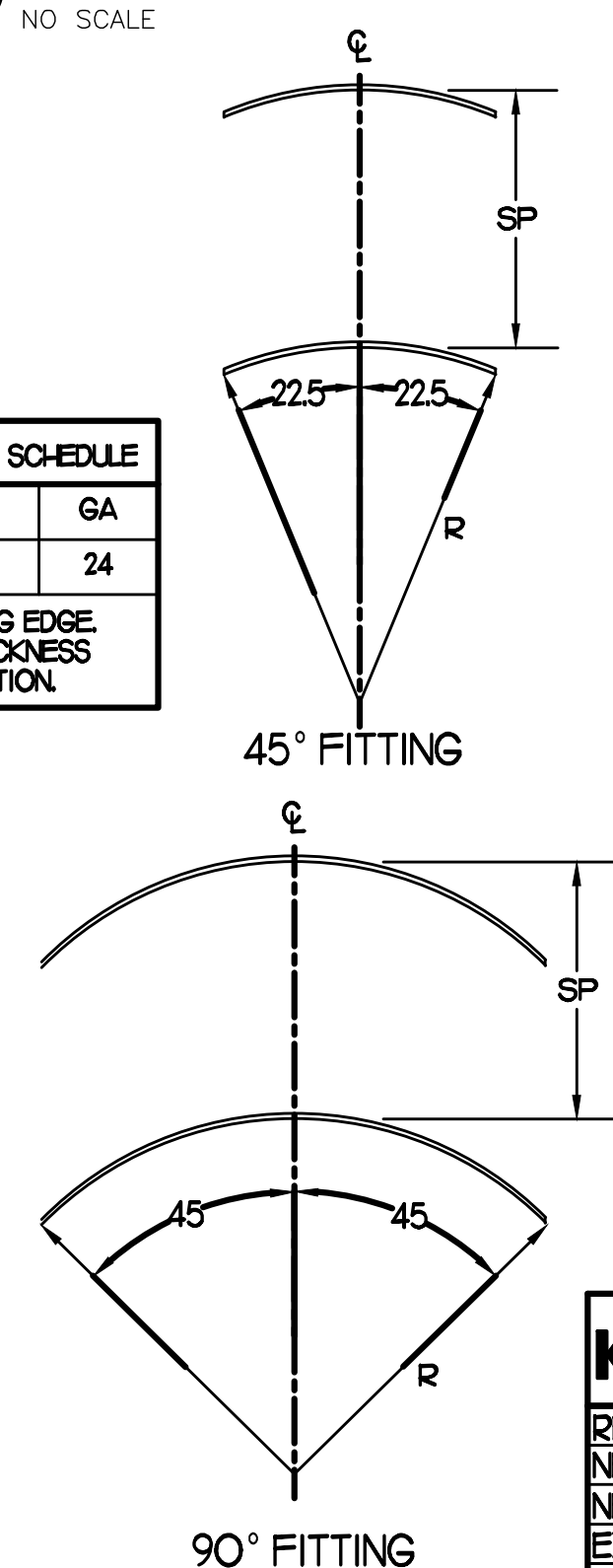
Table with columns: Description, Value. Rows: RETURN AIR FROM DINING BACK TO AC-2 (+700), NEW AC-2 OA (125 TON)-23% OA (+1,150), NEW EF-1 KITCHEN HOOD-1 (-1,465), EXISTING EF-2 KITCHEN HOOD 70" (-858), TOTAL (-473).

### DINING PRESSURIZATION

Table with columns: Description, Value. Rows: NEW AC-1 OA (8.5 TON)-23% OA (+780), NEW AC-3 OA (125 TON)-23% OA (+1,150), EXISTING AC-4 OA (5.0 TON)-20% OA (+400), EXISTING EF-3 RESTROOM EXHAUST (-530), RETURN AIR FROM DINING BACK TO AC-1 (-700), TOTAL (+1,100), BUILDING POSITIVE PRESSURE (+627).

### 4 TURNING VANES

NO SCALE



TURNING VANE SCHEDULE table with columns: R, SP, GA. Row: 2", 15", 24.

1) NO TRAILING EDGE 2) SINGLE THICKNESS CONSTRUCTION

### EXHAUST FAN SCHEDULE

Table with columns: MARK, CFM, ESP, RPM, TIP SPEED (RPM), HP, AREA SERVED, MODEL, MANUFACTURER, REMARKS. Includes rows for NEW EF-1, EXISTING EF-2, EXISTING EF-3, and remarks.

### AIR DOOR SCHEDULE

Table with columns: MARK, CFM, VELOCITY, HEATING CAP, HP, AREA SERVED, MODEL, MANUFACTURER, REMARKS. Includes rows for AD#1, AD#2, and remarks.

### AIR DEVICE SCHEDULE

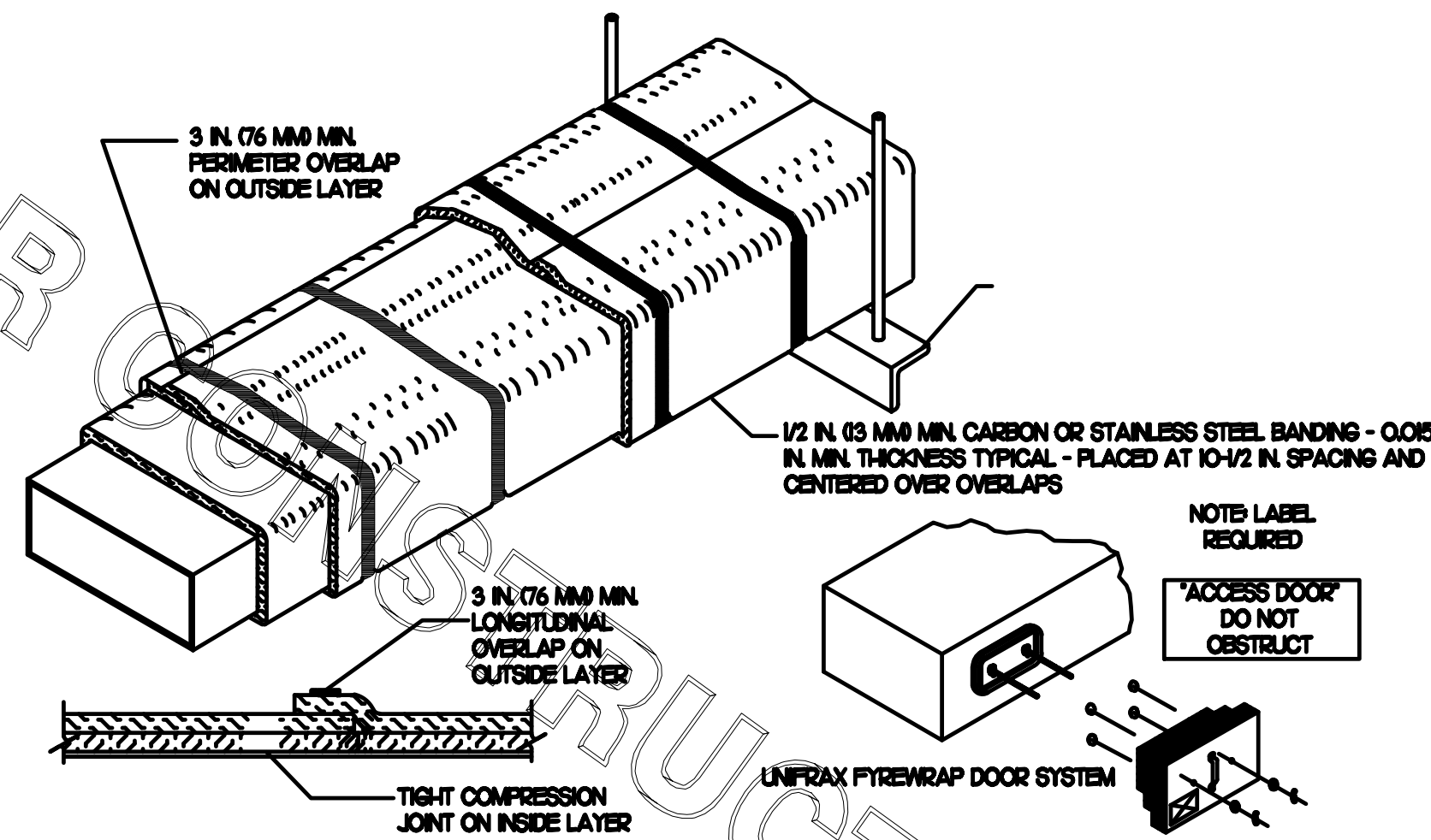
Table with columns: MARK, DESCRIPTION, LOCATION, NECK SIZE, FACE SIZE, FRAME TYPE, REMARKS. Includes rows for A, C, E, F, H, J, K, and remarks.

### RTU CURB NOTE

REUSE EXISTING CURB (IF POSSIBLE). CONTRACTOR TO FURNISH AND INSTALL FACTORY MANUFACTURED ROOF CURB ADAPTER (IF REQUIRED) (FIELD FABRICATED NOT PERMITTED). IF NOT PROVIDE NEW 14" HIGH ROOF CURB REFER TO DETAIL ON SHEET M4.I. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS, CURB DIMENSIONS, AND REQUIREMENTS PRIOR TO ORDERING NEW ADAPTER CURB. INSTALL ROOFTOP UNIT, CURB ADAPTER, OR NEW CURB PER MANUFACTURER'S RECOMMENDATIONS. ALL ROOF WORK TO BE PERFORMED BY LANDLORD'S APPROVED ROOFING CONTRACTOR. PLEASE CONTACT STEVE JENSON OF CURBS-PLUS, PH 888-639-2872 CURBS PLUS IS THE ADAPTER CURB VENDOR FOR CHICK-FIL-A.



**FIREWRAP ELITE DUCT INSULATION**  
**COMMERCIAL KITCHEN GREASE DUCT SYSTEM**  
 ASTM E 2336/ICC-ES AC01 SYSTEM  
 1- & 2-HOUR FIRE-RATED ENCLOSURE SHAFT ALTERNATIVE  
 ZERO CLEARANCE TO COMBUSTIBLES  
 BLITT JOINT SYSTEM (BOTH LAYERS, MAX 24"x24" DUCT)

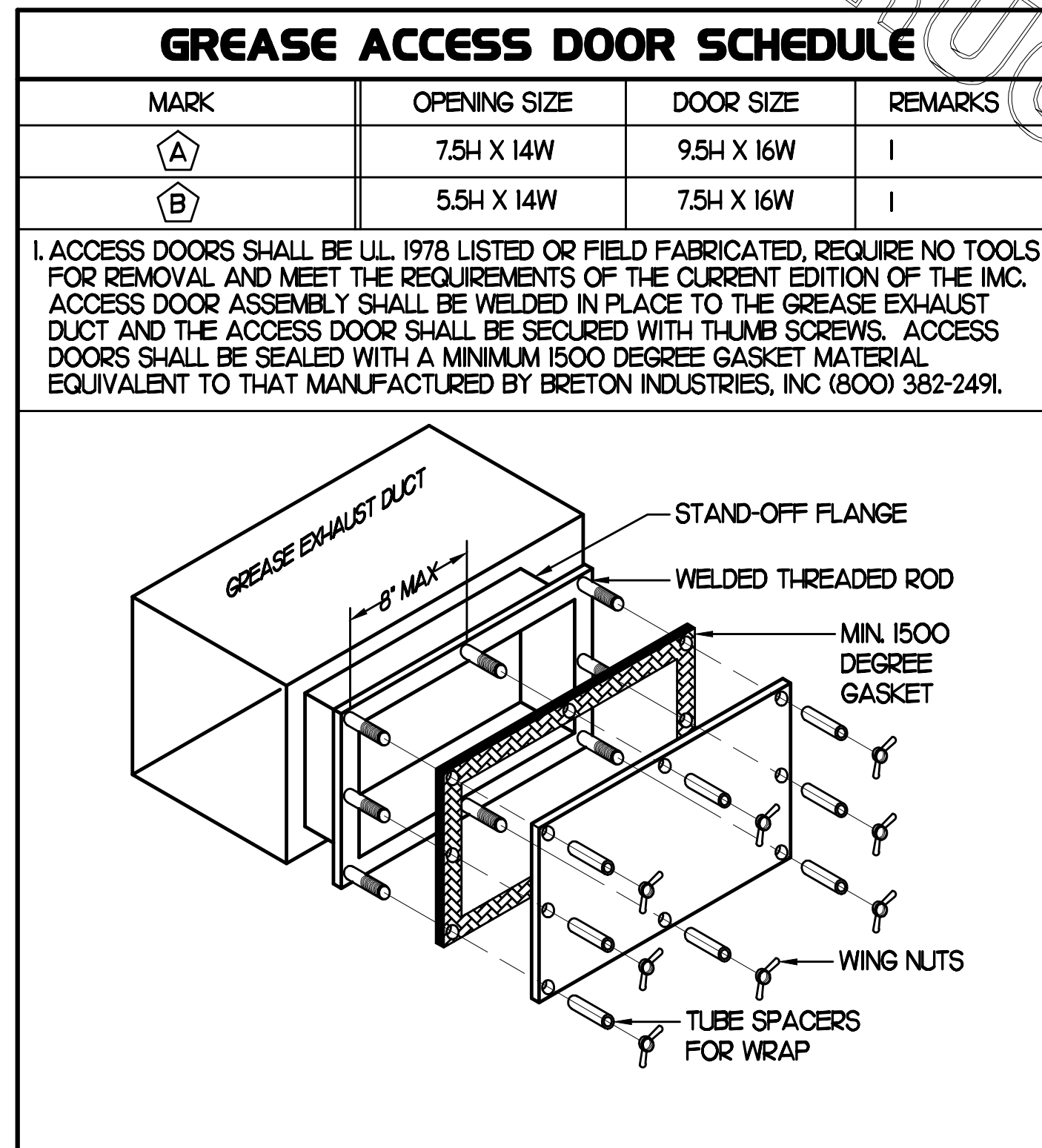


- UNIFRAX FIREWRAP ELITE L5 DUCT INSULATION HAS BEEN TESTED IN ACCORDANCE WITH ASTM E 2336 TO PROVIDE ZERO CLEARANCE TO COMBUSTIBLES AND MEETS THE REQUIREMENTS FOR ONE OR TWO HOUR ENCLOSURES. THROUGH PENETRATIONS FIRESTOP SYSTEMS ARE TESTED IN ACCORDANCE WITH EITHER ASTM E 814 OR UL 1479. ICC-ES APPROVAL PER REPORT ESR 2283 OR ESR 2632. UNDERWRITERS LABORATORIES (UL) LISTINGS SHOW COMPLIANCE TO UL 1479 FOR THROUGH PENETRATION FIRESTOP SYSTEMS.
- COMPLIANT TO THE FOLLOWING CODES:  
 2009 NFPA 101 LIFE SAFETY CODE  
 2010 FLORIDA FIRE PREVENTION CODE  
 2010 EDITION, FLORIDA MECHANICAL CODE.
- INSULATION APPLIED IN TWO LAYERS WITH TIGHT COMPRESSION JOINT ON INSIDE LAYER AND 3 INCH MINIMUM OVERLAPS ON BOTH PERIMETER AND LONGITUDINAL OVERLAPS ON OUTSIDE LAYER.
- GREASE EXHAUST DUCT RUNS FROM THE HOOD EXHAUST CONNECTION UP TO THE EXHAUST FAN ON THE ROOF WITH MINIMAL TURNS OR BENDS AND MAINTAINING MINIMUM 1/4 UNIT VERTICAL RISE PER 12 UNITS HORIZONTAL RUN. NFPA 96 COMPLIANT ACCESS DOORS LOCATED AS REQUIRED BY CODE.
- UNIFRAX FIREWRAP ELITE L5 ACCESS DOORS AS SPECIFIED IN ICC-ES BUILDING CODE REPORTS ESR 2283 OR ESR 2632.
- ROOF MOUNTED EXHAUST FAN IS MOUNTED ON A HINGED BASE WHICH ALLOWS ACCESS TO THE DUCT FROM THE ROOF.
- SUPPORT HANGER SYSTEMS DO NOT NEED TO BE WRAPPED PROVIDED THE HANGER RODS ARE AT LEAST A MINIMUM OF 3/8 IN DIAMETER. USE MINIMUM 2 X 2 X 1/8 IN. STEEL ANGLE OR SMAONA EQUIVALENT SUPPORT SYSTEM.
- UNIFRAX FIREWRAP ELITE L5 DUCT ENCLOSURE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- UNIFRAX FIREWRAP ELITE L5 DUCT WRAP SHALL BE INSTALLED ON THE DUCT FROM THE HOOD CONNECTION TO THE CONNECTION TO THE FAN.

### 3 GREASE EXHAUST DUCT PROTECTION TO COMBUSTIBLES DETAIL

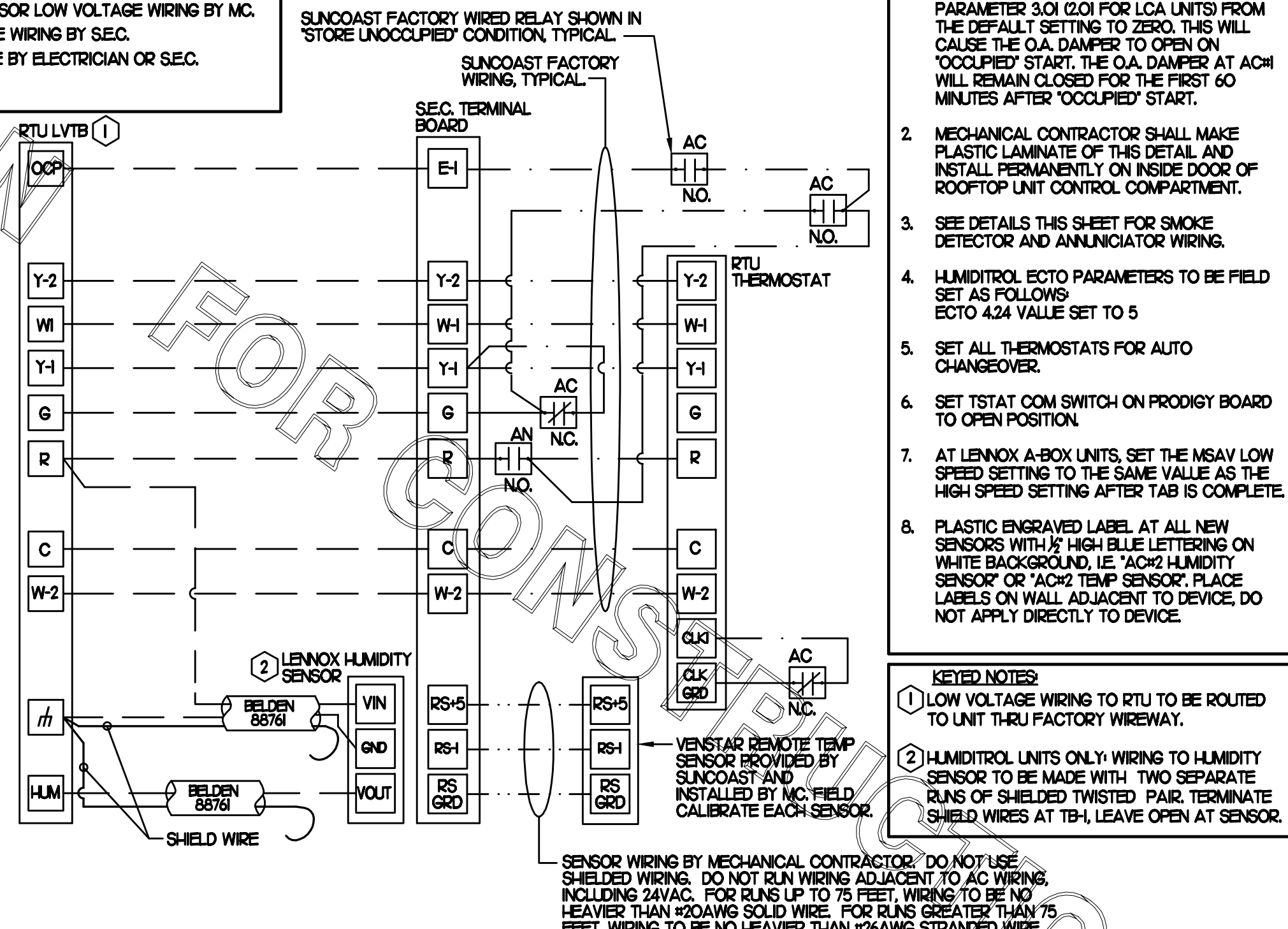
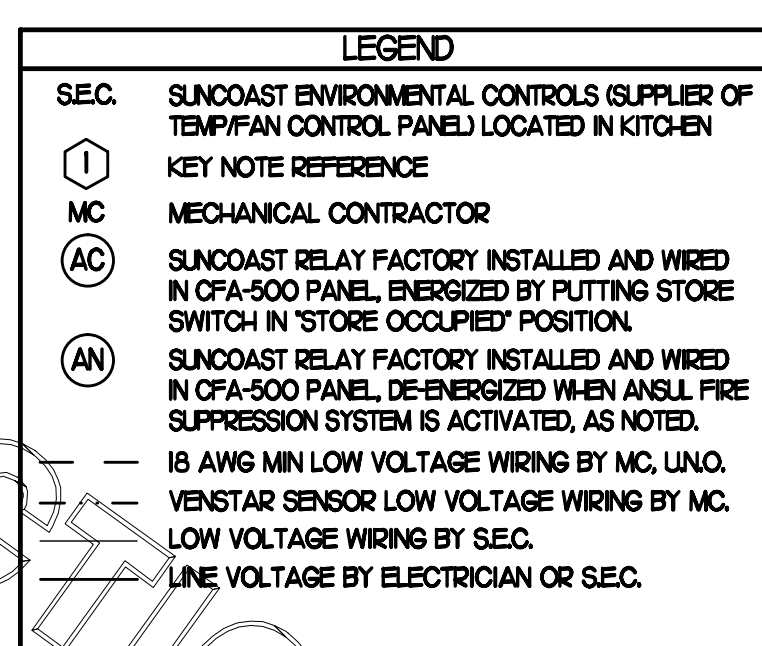
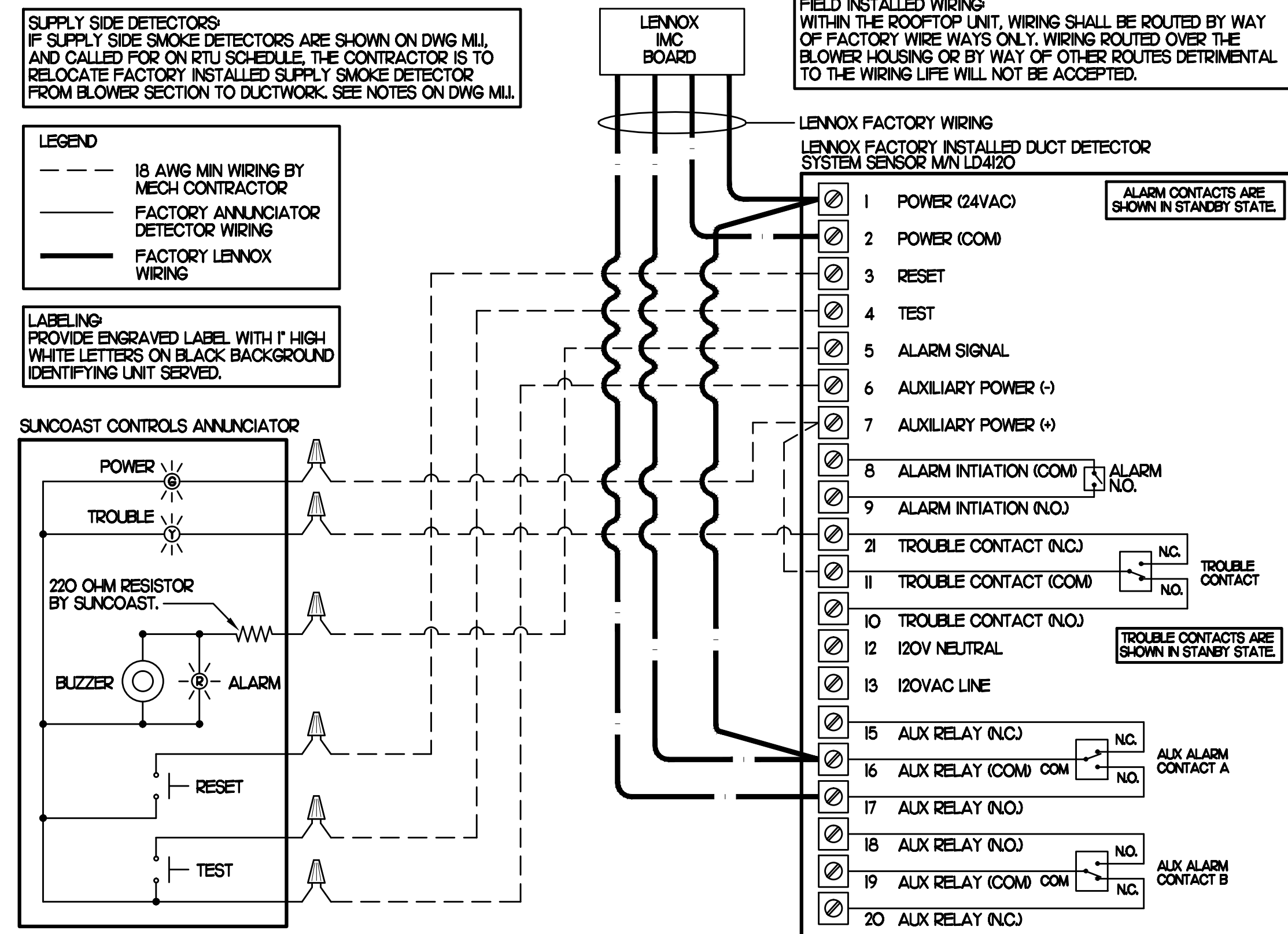
NO SCALE

LEGEND			
A-12-400	TYPE - NECK SIZE - CFM	EF#	EXHAUST FAN #I (TYP.)
	SPIN-IN FITTING WITH MANUAL BALANCING DAMPER, WITHOUT SCOOP	ACH1	AIR CONDITIONING UNIT #I (TYP.)
	SPIN-IN HARD $\phi$ FLEXIBLE $\phi$ DIFFUSER		POINT OF DISCONNECTION. CAP, PATCH, & REPAIR OPENING AIR TIGHT OF EXISTING DUCTWORK AS REQUIRED (TYPICAL ALL). FIELD VERIFY AND COORDINATE ALL EXISTING DUCTWORK SIZE AND CONDITION PRIOR TO BID.
	MANUAL VOLUME DAMPER		POINT OF CONNECTION. CONTRACTOR TO CONNECT NEW DUCTWORK TO EXISTING DUCT SYSTEM. FIELD VERIFY AND COORDINATE ALL EXISTING DUCTWORK SIZE AND LOCATION PRIOR TO BID. CONNECT NEW DUCT TO EXISTING DUCT PER SMACNA STANDARDS. CONTRACTOR SHALL CLEAN & REFURBISH ALL EXISTING DUCTWORK TO 'LIKE NEW' CONDITION. PATCH & REPAIR EXISTING UNUSED BRANCH TAPS AS REQUIRED (TYPICAL ALL).
12X18	DUCT SIZE (REVERSE FOR ELEVATION VIEWS) 1ST NUMBER - HORIZONTAL DIMENSION 2ND NUMBER - VERTICAL DIMENSION		REMOTE TEMPERATURE SENSOR
	EXHAUST (TYP.)		HUMIDITY SENSOR
	RETURN (TYP.)		PLAN NOTE REFERENCE
	SUPPLY (TYP.)		STROBE AUDIO/VISUAL ALARM
	NEW AIR DEVICE. CONTRACTOR SHALL VERIFY AND COORDINATE NEW DEVICE LOCATION WITH LIGHTING, FIRE SPRINKLER HEAD, CEILING LAYOUTS, AND ALL WALL ELEMENTS AS REQUIRED PRIOR TO BID. PROVIDE AND EXTEND NEW FLEXIBLE DUCT AT THIS LOCATION. MAXIMUM LENGTH OF FLEXIBLE DUCT RUN-OUT IS 5 FEET. RE-BALANCE AIR QUANTITY AS SHOWN ON PLAN. PROVIDE WITH MANUAL VOLUME DAMPER WITH ACCESSIBILITY. ANY DEFICIENCIES AND OR DISCREPANCIES SHALL BE REPORTED TO ARCHITECT/ENGINEER IMMEDIATELY. REFER TO DETAIL THIS SHEET.		CO2 SENSOR
			SMOKE DETECTOR



### 2 ROOFTOP UNIT CONTROL WIRING - LENNOX

NONE



5200 Buffington Rd.  
 Atlanta Georgia,  
 30349-2998

Revisions:

Mark	Date	By
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△		

Seal

STACY HENSON, P.E.

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 PH 407 645 5008  
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INTERPLAN  
 ARCHITECTURE  
 ENGINEERING  
 INTERIOR DESIGN  
 PROJECT MANAGEMENT

STORE  
 S97-100  
 SOUTHCHASE PLAZA  
 FSU  
 13085 S. ORANGE  
 BLOSSOM TRAIL  
 ORLANDO, FL 32837

SHEET TITLE  
 HVAC CONTROLS  
 & DETAILS

VERSION: S97-100  
 ISSUE DATE: 03.12.15

Job No. : 14.0416

Store : 01128

Date : 03.12.15

Drawn By : CL

Checked By : SH

Sheet

M-4.2

# 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 NATURAL GAS FIRED HEATING UNITS BY LENNOX AS SHOWN ON DRAWINGS. EQUIPMENT SHALL BE ARI CERTIFIED AND A.G.A. 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 HEAT EXCHANGERS SHALL BE STEEL WITH ALUMINIZED STEEL COATING. HEATING CONTROLS SHALL CONSIST OF REDUNDANT GAS VALVES, INTERMITTENT PILOT WITH ELECTRONIC SPARK OR HOT PLATE IGNITION SYSTEM, COMBUSTION/EXHAUST FAN PROTECTED BY CENTRIFUGAL SWITCHES, HEAT LIMIT SWITCHES, TIME-DELAY RELAY, FLAME, AND PILOT SENSORS. ALL UNITS SHALL BE CAPABLE OF TWO STAGES OF HEAT. HEAT EXCHANGES SHALL HAVE A TEN (10) YEAR WARRANTY. BURNERS SHALL BE ALUMINIZED IN-SHOT TYPE. THE DRAFT MOTOR SHALL BE MONITORED BY THE CONTROL SYSTEM.
- 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 CFA-500 TEMPERATURE CONTROL PANEL AS MANUFACTURED BY SUNCOAST ENVIRONMENTAL CONTROLS (S.E.C.) (PH: 877-544-6679). THE PANEL IS PROVIDED AND MOUNTED BY THE ELECTRICAL CONTRACTOR. 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 "SYSTEM SENSOR" RETURN SIDE SMOKE DETECTOR IN THE ROOFTOP UNIT. CONTRACTOR SHALL ADD AN ADDITIONAL FIELD INSTALLED "SYSTEM SENSOR" REMOTE SMOKE HEAD INSTALLED IN THE SUPPLY AIR DUCT. 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 BY THE ELECTRICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE AND TURNED OVER TO THE MECHANICAL CONTRACTOR FOR INSTALLATION.
- E. THE REMOTE TEST/RESET ANNUNCIATORS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. INSTALLATION BY MECHANICAL SHALL INCLUDE MOUNTING OF THE ANNUNCIATORS AND ALL WIRING FROM EACH DEVICE TO THE RTU. ELECTRICAL WILL PROVIDE A JUNCTION BOX IN THE WALL WITH 1/2" CONDUIT STUBBED UP ABOVE THE CEILING FOR EACH REMOTE TEST STATION AS SHOWN ON THE ELECTRICAL PLANS. 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 VENSTAR T2700 THERMOSTAT PRE-WIRED IN THE TEMPERATURE CONTROL PANEL. A REMOTE TEMPERATURE SENSOR FOR EACH THERMOSTAT IS ALSO PROVIDED. MECHANICAL CONTRACTOR SHALL INSTALL ALL WIRING BETWEEN THE THERMOSTAT, THE REMOTE SENSOR AND THE ROOFTOP UNIT.
- 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.

### 3.02 LEED PROJECTS

- A. CONTRACTOR SHALL COMPLETE RECEIPT INSPECTION CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN WITHIN 5 DAYS OF RECEIVING EQUIPMENT ON SITE.
- B. CONTRACTOR SHALL COMPLETE PRE-FUNCTIONAL CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN. CHECKLISTS SHALL BE RETURNED AT LEAST 5 DAYS PRIOR TO SCHEDULING FUNCTIONAL PERFORMANCE TESTING.
- C. CONTRACTOR SHALL PROVIDE A TECHNICIAN TO ASSIST THE THIRD PARTY COMMISSIONING AUTHORITY WITH FUNCTIONAL TESTING. FUNCTIONAL TESTING SHALL OCCUR AFTER ALL CONTROLS HAVE BEEN INSTALLED AND VERIFIED AND AFTER TEST AND BALANCE IS COMPLETE. THE FUNCTIONAL PERFORMANCE TEST PROCEDURES CAN BE FOUND IN THE COMMISSIONING PLAN.
- D. IF THE TOTAL TIME REQUIRED TO CORRECT PROBLEMS DURING TESTING IS GREATER THAN FORTY-FIVE (45) MINUTES (UNLESS EXTENUATING CIRCUMSTANCES EXIST), THE TEST SHALL BE CONSIDERED FAILED AND MUST BE REPEATED IN ITS ENTIRETY.
- E. RE-TESTING: DURING THE COURSE OF THE RETEST, IF AT ANY POINT A MAJOR DEFICIENCY IS DISCOVERED, THE TEST WILL BE STOPPED. REPEAT TESTS UNTIL ACCEPTABLE RESULTS ARE ACHIEVED. IF MORE THAN TWO FUNCTIONAL PERFORMANCE TESTS (ONE INITIAL TEST AND ONE RETEST) FOR ANY TYPE OF EQUIPMENT DUE TO ISSUES THAT THE CONTRACTOR HAD DIRECT OR INDIRECT CONTROL OVER ARE REQUIRED, THE COSTS FOR THE CXA TO WITNESS RETESTING OF SIMILAR TYPES OF EQUIPMENT UNTIL SATISFACTORY RESULTS ARE OBTAINED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

NATIONAL ACCOUNTS			
1.	LENNOX EQUIPMENT - CONTACT LENNOX NATIONAL ACCOUNTS AT 972-497-6260 (OR BY FAX AT 972-497-5112) FOR PRICING, ORDERING AND AVAILABILITY. LENNOX EQUIPMENT NOT PURCHASED THRU LENNOX NATIONAL ACCOUNTS WILL NOT BE ACCEPTED.	5.	SUNCOAST ENVIRONMENTAL CONTROLS - THE CFA 500 PANEL AND THE TEST/RESET STATIONS WILL BE PURCHASED AND PROVIDED BY THE ELECTRICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE. SEE PART II PARAGRAPH 3A, 3D, AND 3E OF THE MECHANICAL SPECIFICATIONS FOR MORE INFORMATION.
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.	6.	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.
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.	7.	JER-AIR 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.
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.		



**Chick-Fil-A**

5200 Buffington Rd.  
Atlanta Georgia,  
30349-2998

#### Revisions:

Mark Date By

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**INTERPLAN**  
ARCHITECTURE  
ENGINEERING  
INTERIOR DESIGN  
PROJECT MANAGEMENT

STORE  
S97-100  
SOUTHCHASE PLAZA  
FSU  
13085 S. ORANGE  
BLOSSOM TRAIL  
ORLANDO, FL 32837

SHEET TITLE  
MECHANICAL  
SPECIFICATIONS

VERSION: S97-100  
ISSUE DATE: 03.12.15

Job No. : 14.0416

Store : 01128

Date : 03.12.15

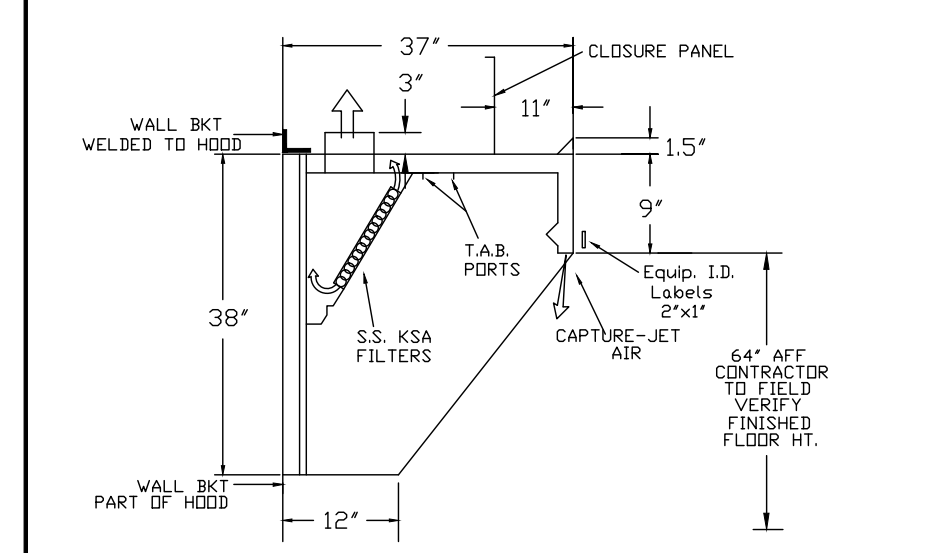
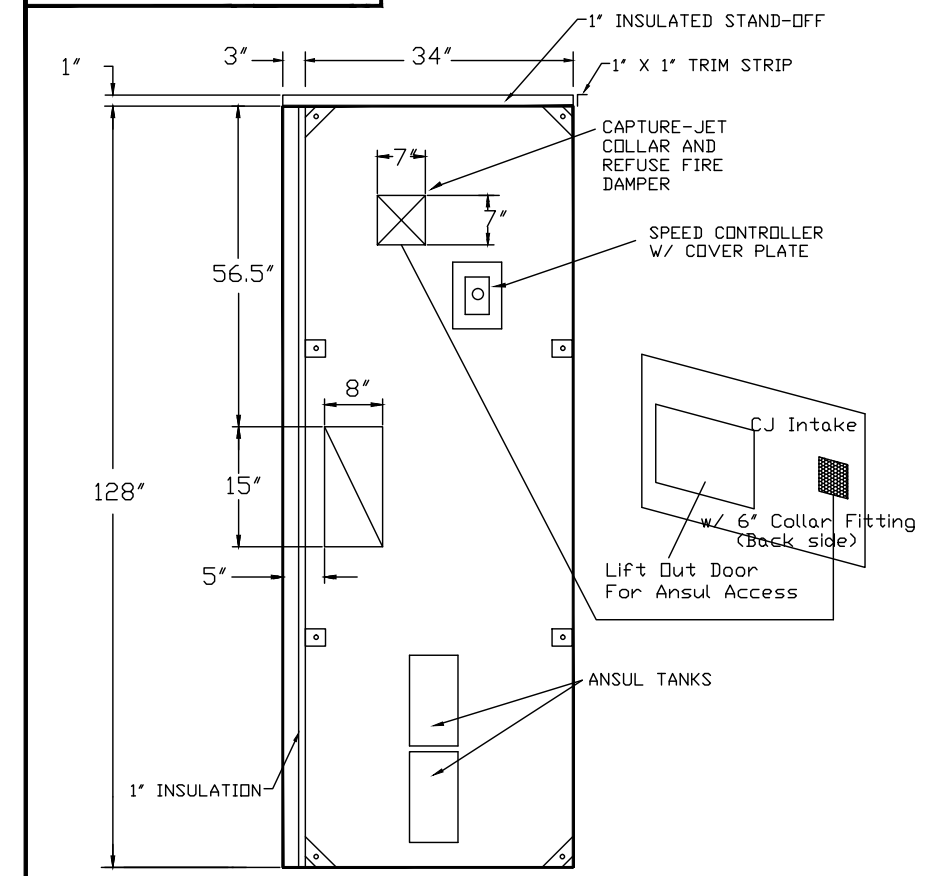
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Checked By : SH

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**M-5.I**

MODEL: KVL-2



DATE	DWG. NO.	ITEM NO.	EXHAUST AIR INFORMATION
03.04.15	U15-136-1	H-1	CFM TAB SP
PROJECT: CHICK-FIL-A #1128 SOUTHCHASE PLAZA			1465 .12' .23'
LOCATION: ORLANDO, FL			CAPTURE AIR INFORMATION
SUBMITTED BY: HALTON CO.			CFM SP
			96 .30'

**STANDARD FEATURES**

- S.S. FILTERS (KSA) 6
- 1/2 S.S. FILTERS (KSA) 0
- CAPTURE-JET FIRE DAMPER \*
- STAND-OFF \*

**OPTIONS**

- REMOTE SWITCH PANEL \*
- FIRE PROTECTION \*
- ETL LISTED W/O EXHAUST DAMPER \*
- CEILING CLOSURE 2
- STD. BACKSPASH
- INSULATED BACKSPASH

**MATERIAL**

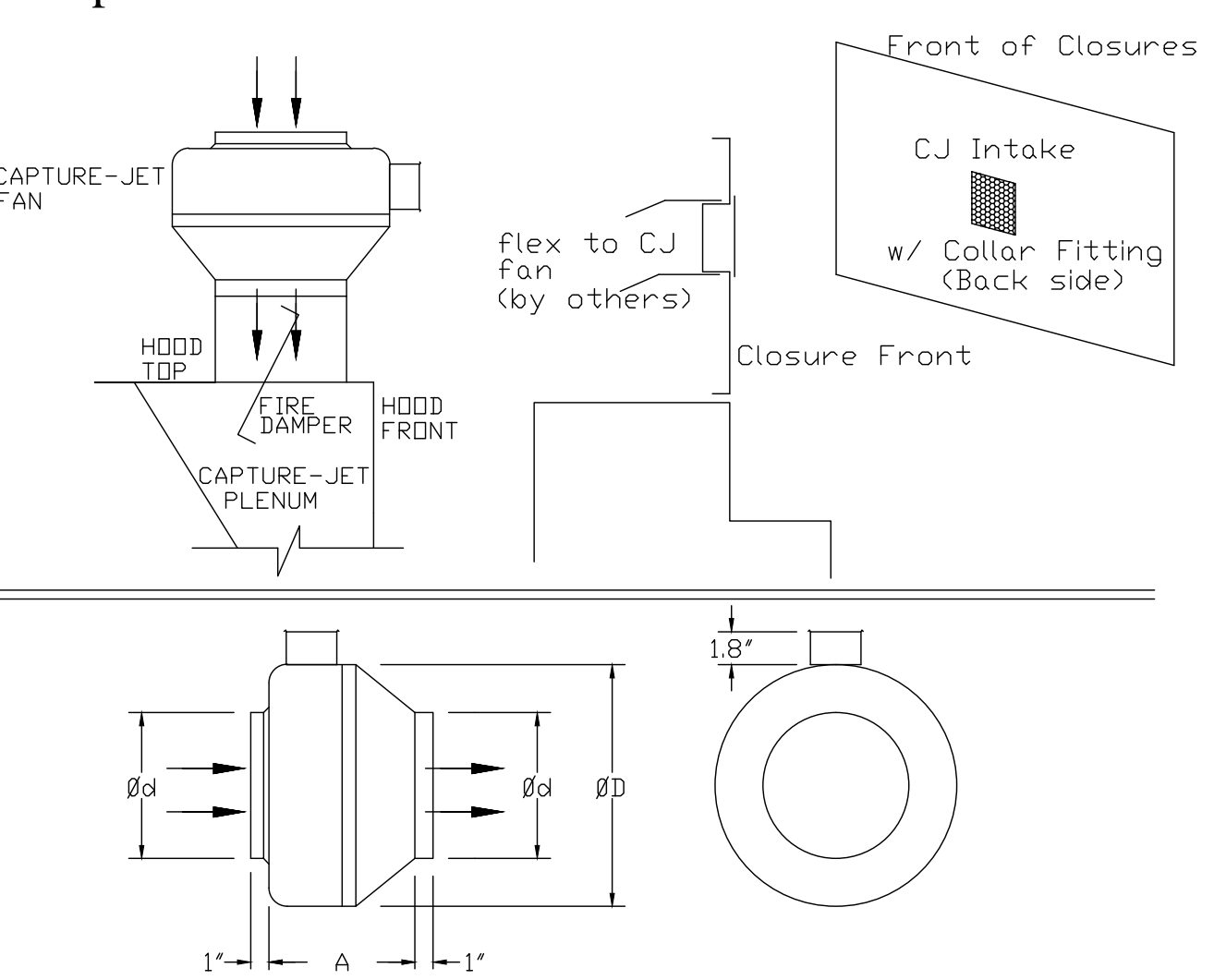
- EXPOSED SURFACES 18 GA. S.S. \*
- ALL 18 GA. S.S.

**COMMENTS:**

- CLOSURE HEIGHT = TBD (TWO SIDES) CEILING HEIGHT = ADVISE
- CEILING CLOSURE RECESSED 11" FROM FRONT TO CREATE SHELF
- FRONT CLOSURE PANEL WITH 54"x24" ACCESS DOOR LEFT SIDE (ACCESS TO ANSUL TANKS) & 18"x18" ACCESS DOOR RIGHT SIDE AT CAPTURE-JET W/ FRONT CJ INTAKE
- 1" x 1" TRIM STRIP FOR STAND-OFF ON RIGHT END
- HOOD TO GET ADJUSTABLE TRIM ANGLES
- 1" SIDE STAND-OFF & 3" REAR STAND-OFF TO HAVE 1" THICK INSULATION
- EQUIPMENT COVERED (4) PRESSURE FRYER (2) GRILL
- ANSUL WEIGHT = 63 LBS HOOD WEIGHT = 759 LBS

**Halton**

**Capture-Jet Fan Installation and Dimensional Data**

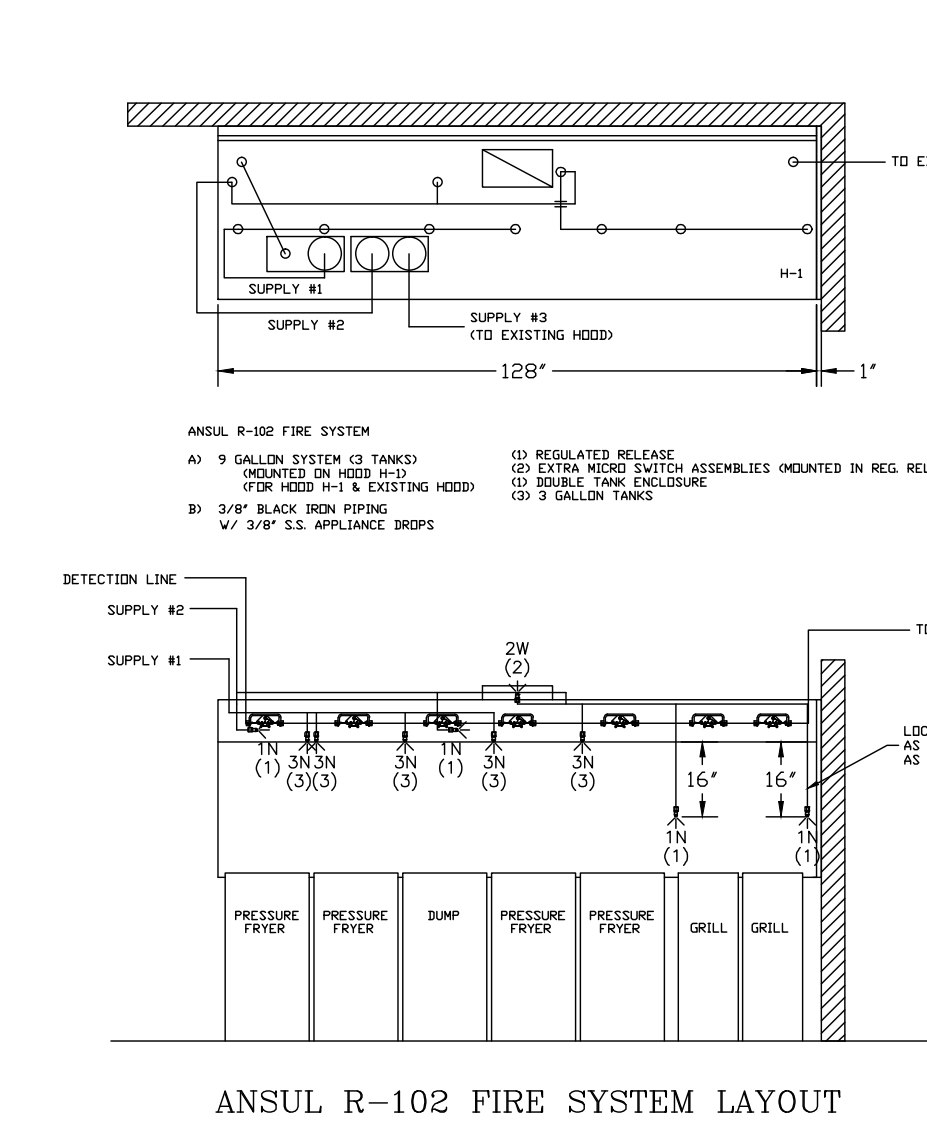
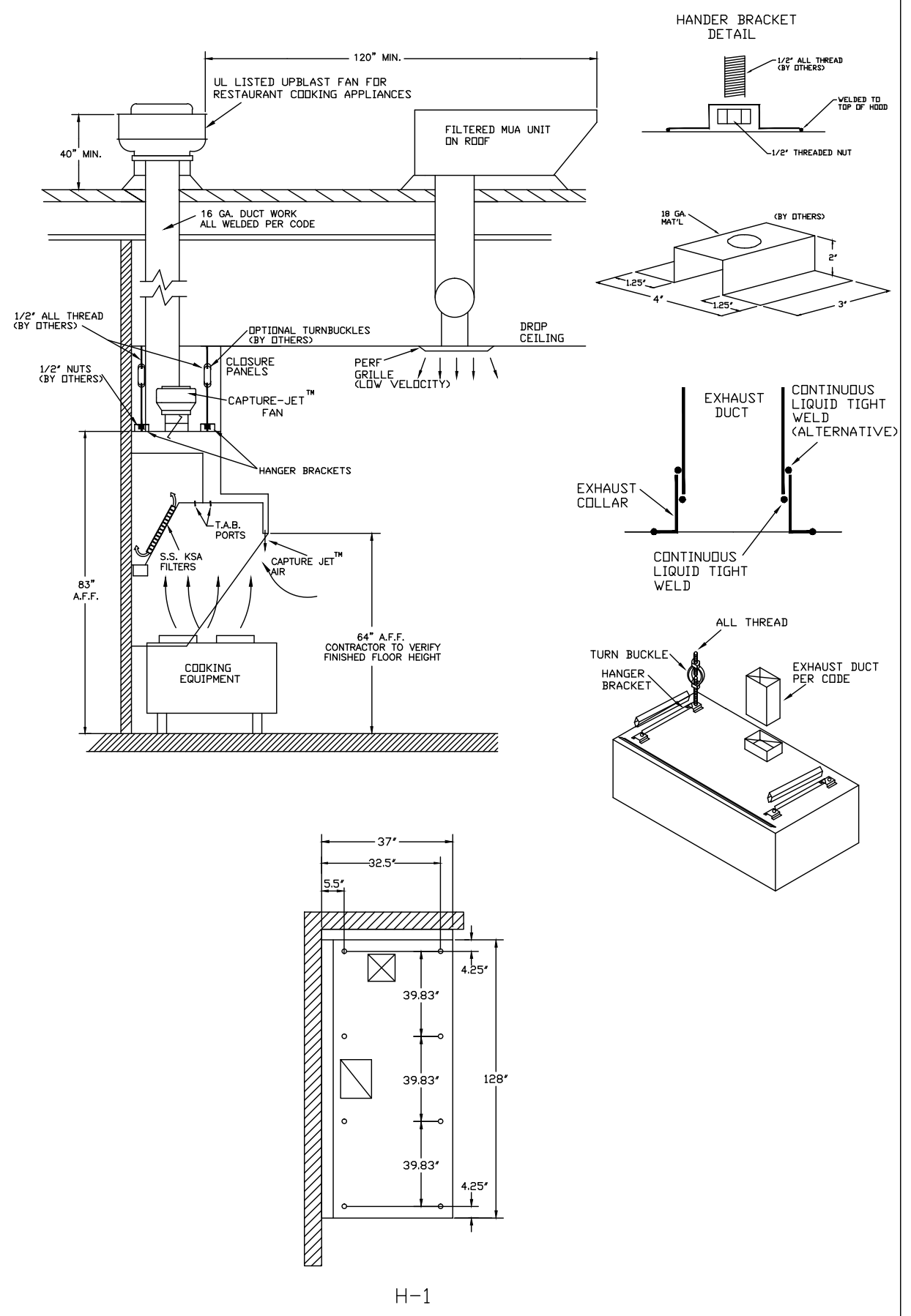


MODEL	AIR FLOW @1' SP	ØD	Ød	A	HP	FLA	VOLTAGE	LBS.
K4XL	30 CFM - 80 CFM	9.50"	4.0"	6.0"	.11	.75	120/1/60	6.6
K6XL	70 CFM - 170 CFM	13.20"	6.0"	6.0"	.20	1.31	120/1/60	10.6
K8XL	100 CFM - 240 CFM	13.20"	8.0"	6.0"	.20	1.32	120/1/60	11

TAG	MODEL	QTY	AIRFLOW
H-1	K6XL	1	96

PROJECT: CHICK-FIL-A #1128 DATE: 03.04.15  
 LOCATION: ORLANDO, FL DWG: U15-136-1

**HANGER BRACKET DETAIL**



**FUSIBLE LINK RATINGS**

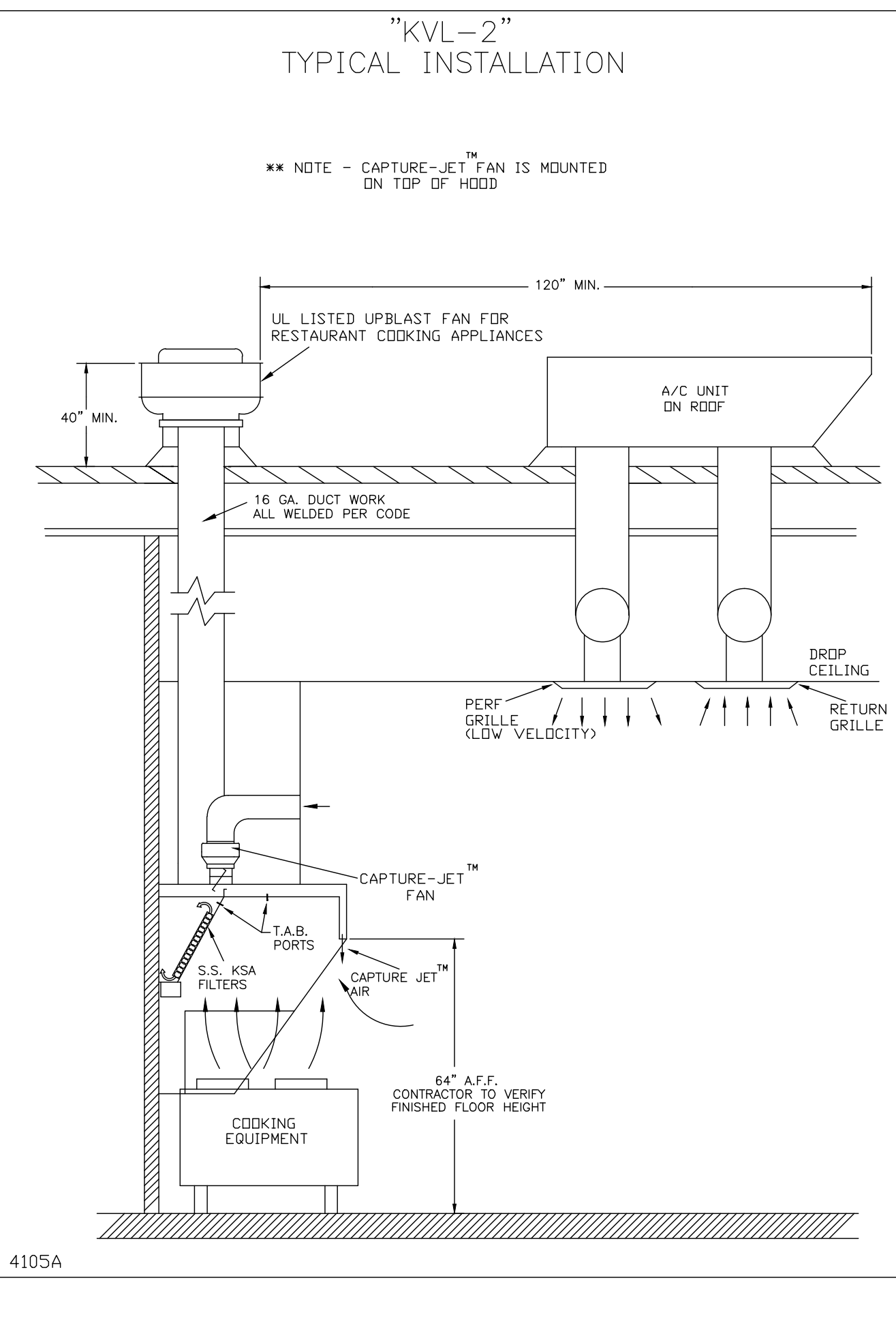
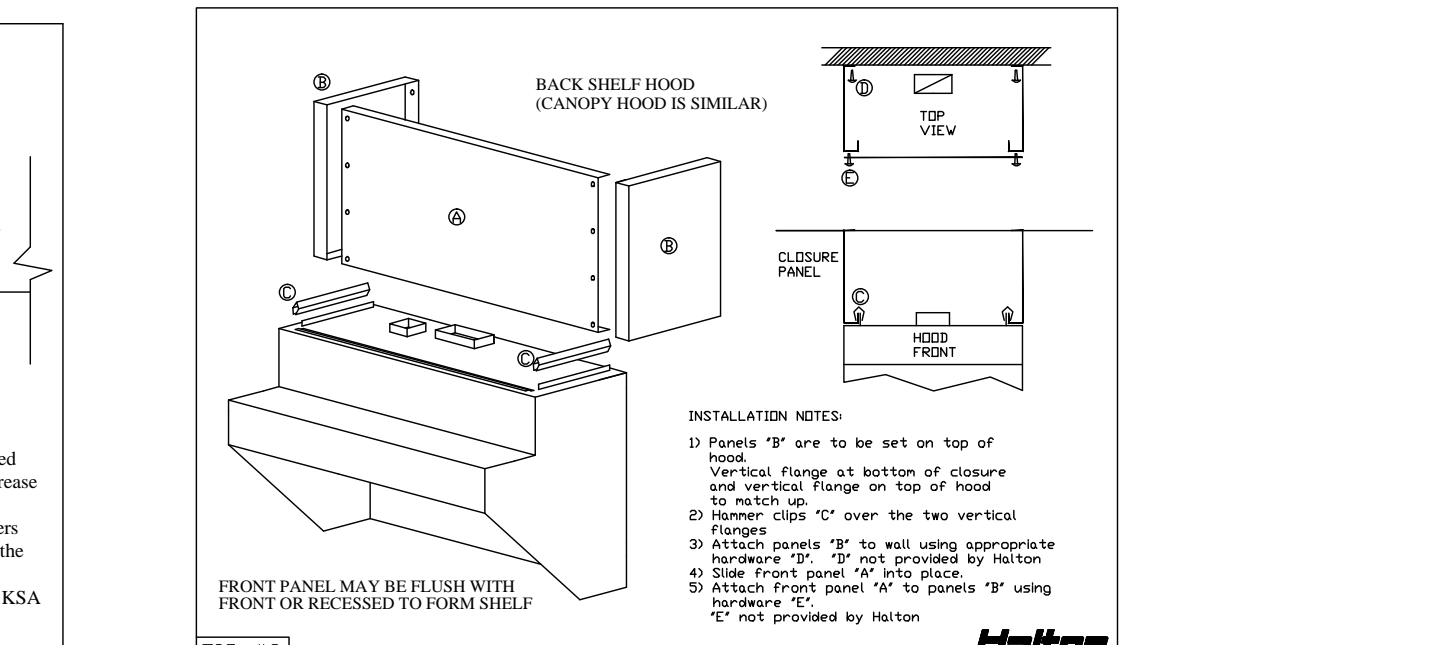
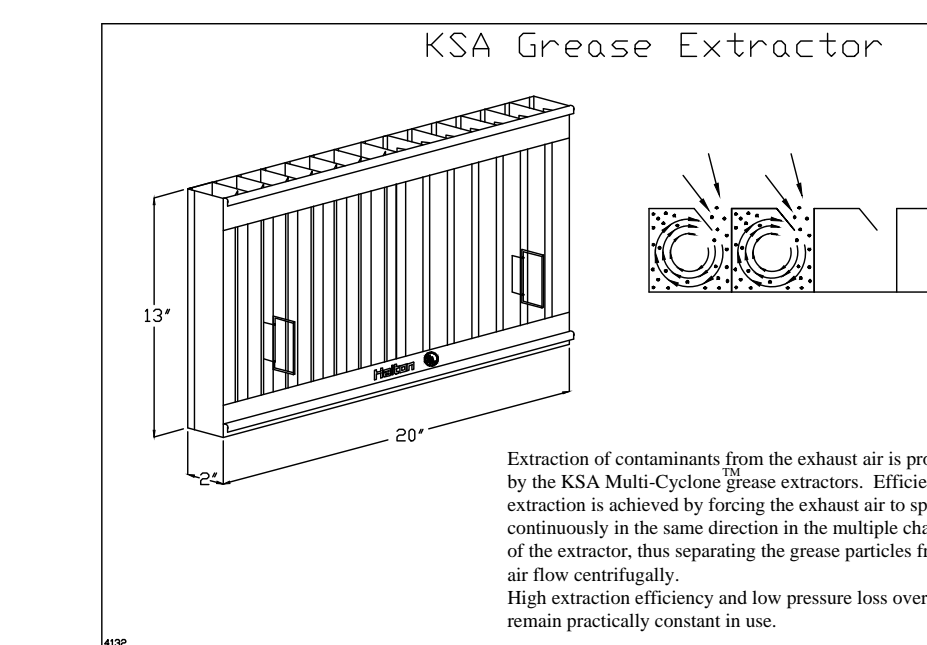
ITEM	TEMP
OPEN FRYERS	450°
2 BURNER / FLAT TOP	450°
PRESSURE FRYERS	450°
GRILL	450°
EXHAUST COLLARS	450°

**ANSUL R-102 FIRE SYSTEM NOTES**

- THREE TANK SYSTEM MOUNTED ON TOP OF (H-1) MAXIMUM FLOW POINTS = 33
1. FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
2. ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO-SWITCH INSTALLED IN REGULATED RELEASE BY ANSUL INSTALLER
3. REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS

ITEM #	QTY	DESCRIPTION	FLOW PTS (TOTAL)
2W	1	DUCT NOZZLES	2
1N	2	PLENUM NOZZLES	2
1N	2	APPLIANCE NOZZLES	2
3N	5	APPLIANCE NOZZLES	15
<b>TOTAL FLOW POINTS = 21</b>			

ITEM #	QTY	DESCRIPTION
#200	6	SERIES DETECTORS W/ FUSIBLE LINKS
#201	1	TERMINAL DETECTOR W/ FUSIBLE LINKS
#202	1	REGULATED RELEASE W/ DOUBLE POLE MICRO SWITCH
#203	3	3 GALLON TANKS
#204	1	DOUBLE TANK ENCLOSURE
#205	1	REMOTE PULL STATION



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

**Halton**  
 HALTON COMPANY, 101 INDUSTRIAL DR., SCOTTSVILLE, KY 42664  
 MODEL NO. KVL-2 SERIAL NO. \_\_\_\_\_  
 LISTED ETL NSE  
 EXHAUST HOOD WITHOUT EXHAUST DAMPER

**GENERAL REQUIREMENTS**

- HOOD MUST BE INSTALLED AT THE COOKING SURFACE.
- HOOD CLEARANCE TO THE COOKING SURFACE, SEE TABLE 1 TO FRONT EDGE OF HOOD.
- MINIMUM DESIGN EXHAUST AIR FLOW, SEE TABLE 1.
- REPLACE FILTERS ONLY WITH UL CLASSIFIED GREASE FILTERS OF THE SAME MODEL AND MANUFACTURER.
- SUITABLE FOR USE WITH COOKING APPLIANCE DEVELOPING SURFACE TEMPERATURES UP TO 400°F (200°C).
- DESIGN SUPPLY AIR FLOW PRESSURE AT SIDE JETS TO BE SET AT 1.0 IN. W.G. AT PRESSURE PORT.
- HOOD OVERHANG FROM COOKING SURFACE, 6 IN. (152.4 MM) MINIMUM TO FRONT EDGE OF HOOD.

HOOD CLEARANCE TO THE COOKING SURFACE	MINIMUM DESIGN EXHAUST AIR FLOW (CFM)	DESIGN SUPPLY AIR FLOW (CFM)
20 IN. (508.0 MM) TO 30 IN. (762.0 MM)	125 CFM (3.58 M <sup>3</sup> /MIN)	0.88 IN. W.G. (20.7 Pa)
30 IN. (762.0 MM) TO 36 IN. (914.4 MM)	150 CFM (4.25 M <sup>3</sup> /MIN)	0.88 IN. W.G. (20.7 Pa)
36 IN. (914.4 MM) TO 42 IN. (1066.8 MM)	175 CFM (4.93 M <sup>3</sup> /MIN)	0.88 IN. W.G. (20.7 Pa)
42 IN. (1066.8 MM) TO 48 IN. (1219.2 MM)	200 CFM (5.68 M <sup>3</sup> /MIN)	0.88 IN. W.G. (20.7 Pa)

THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:

- ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS AND CLEARANCES.
- THE LOCATION AND TYPE OF COOKING EQUIPMENT.

NOTE: COOKING EQUIPMENT SUCH AS INCREASED ENERGY INPUTS OR EQUIPMENT POSITION MAY AFFECT EXHAUST AIRFLOW. HALTON MUST BE NOTIFIED IF ANY OF THESE CHANGES OCCUR, A RECALCULATION EXHAUST AIRFLOW MAY BE REQUIRED.

REVISION: 1. DATE: 03.04.15 BY: M.H. DESCRIPTION: REVISION DESCRIPTION

DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

WITH CHANGES AS NOTED

WITH NO CHANGES

WWW.HALTONCOMPANY.COM

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

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

PROJECT: CHICK-FIL-A #1128 SOUTHCHASE PLAZA ORLANDO, FL

DATE: 03.04.15

SCALE: NTS

Halton Dwg: U15-136-1

**Halton**  
 CARE FOR INDOOR AIR

Sheet MH-1.1