

KEY NOTES

- ① MOUNT REMOTE SENSOR ON WALL AT 5'-0" AFF AND ROUTE WIRING BACK TO SUNCOAST TEMP CONTROL PANEL. FOR SENSOR SERVING ACH, LOCATE SENSOR AT 5'-8" AFF. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT. SEE ELEVATION I/K3.2.
- ② CJ#4 MOUNTED INSIDE CABINERY SERVING SCJ PLENUM, SEE DETAIL 2/M2-1.
- ③ BRANCH TAKE-OFFS ARE NOT TO BE LOCATED CLOSER THAN 3'-0" FROM ANY ELBOW INCLUDING THE SUPPLY AIR DROP FROM CURB.
- ④ TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. PROVIDE TURNING VANES IN ELBOW. FOR ACH3 AND ACH4, COMPLETE TRANSITION WITHIN STRUCTURE.
- ⑤ TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN WITHIN CURB. NO TURNING VANES IN ELBOW.
- ⑥ DUCT DROP TO BE FULL SIZE OF CURB CONNECTION. TERMINATE DROP 0'-6" ABOVE CEILING.
- ⑦ MOUNT LENOX HUMIDITY SENSOR ON WALL ABOVE SPACE TEMP SENSOR AND ROUTE WIRING TO UNIT ON ROOF.
- ⑧ LOCATE A MINIMUM OF 10 FT FROM PARAPETS. SEE DETAIL 3/M3H FOR ORIENTATION OF HINGE SIDE OF FAN ON CURB.
- ⑨ IOXIO DUCT DOWN.
- ⑩ MOUNT REMOTE SENSOR FOR PLAYGROUND 10'-8" AFF. ROUTE WIRING BACK TO SUNCOAST TEMP CONTROL PANEL.
- ⑪ EXTEND 60X16 RETURN DUCT HORIZONTALLY BELOW STRUCTURE TO ACCOMMODATE (3) 14" START COLLARS ON SIDE.
- ⑫ MECHANICAL CONTRACTOR TO ADJUST PATTERN DEFLECTORS TO THROW STRAIGHT DOWN.
- ⑬ 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.
- ⑭ SEE ELEVATIONS ON M2-1 FOR CJ FAN DUCTING REQUIREMENTS.
- ⑮ TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. NO TURNING VANES IN ELBOW.
- ⑯ 18X32 VERTICAL DROP. PROVIDE TURNING VANES IN ELBOW. ELBOW TO BE PARTIALLY LOCATED WITHIN STRUCTURE. BOTTOM OF ELBOW TO BE AT SAME ELEVATION AS BOTTOM OF 32X18 SUPPLY MAIN. 32X18 SUPPLY MAIN TO BE LOCATED ENTIRELY BELOW JOISTS. HOLD 32X18 SUPPLY MAIN AS HIGH AS POSSIBLE DUE TO LIMITED CLEARANCE.
- ⑰ 16X18 VERTICAL DROP. PROVIDE TURNING VANES IN ELBOW. 18X16 SUPPLY MAIN TO BE LOCATED ENTIRELY BELOW JOISTS. HOLD 18X16 SUPPLY MAIN AS HIGH AS POSSIBLE DUE TO LIMITED CLEARANCE.
- ⑱ PROVIDE RUSKIN CD35 MANUAL BALANCING DAMPER WITH 6" MAXIMUM BLADE WIDTH, OPPOSED BLADE ACTION, LOCKING QUADRANT HANDLE WITH 2" STANDOFF AND 16 GA GALVANIZED BLADE AND FRAME CONSTRUCTION.
- ⑲ NOT USED.
- ⑳ PROVIDE 1/4" DIA. SPIN-IN COLLAR PER DETAIL I/M3J AND CAP FOR FUTURE USE.
- ㉑ PROVIDE 1/2" DIA. SPIN-IN COLLAR PER DETAIL I/M3J AND CAP FOR FUTURE USE.

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 UL 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.

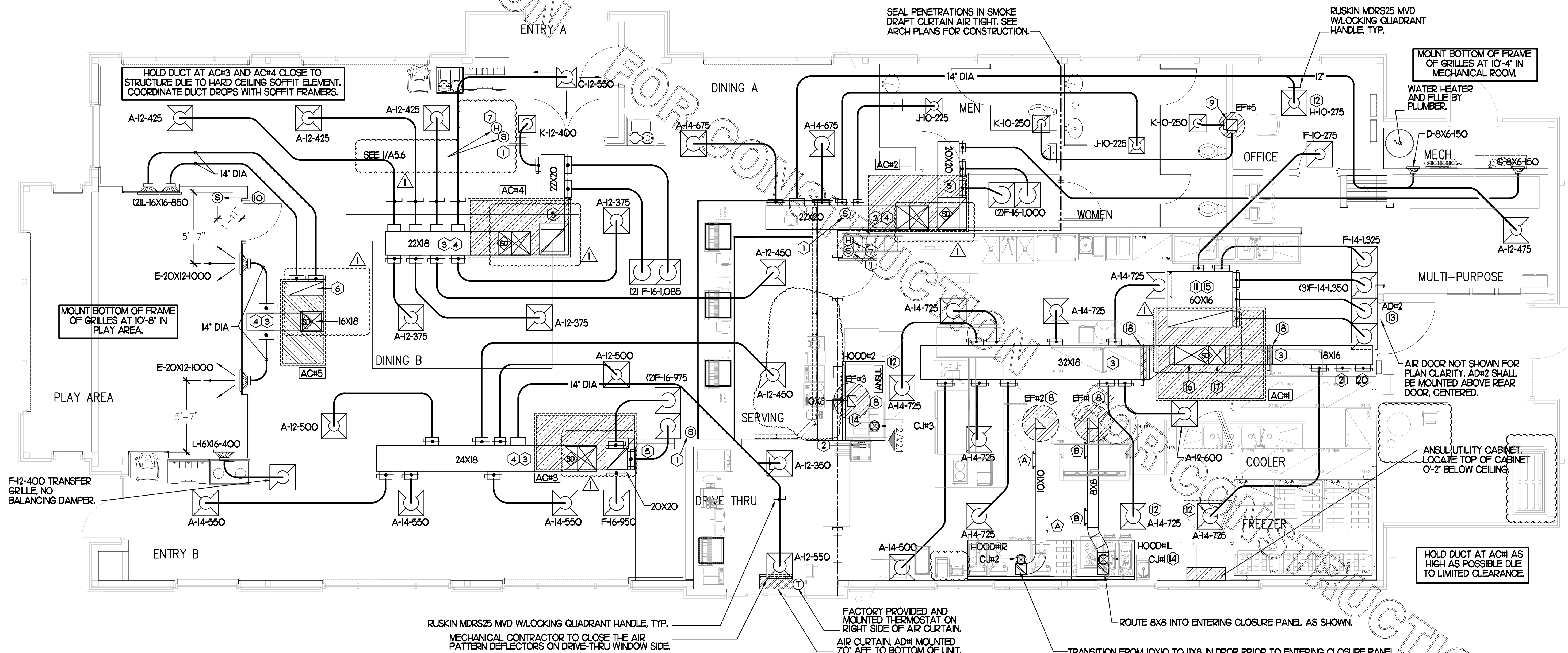
SEE FIREWRAP INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION ON CONFIGURING INSULATION OVER AN ACCESS DOOR.

LEGEND

A-12-400	TYPE - NECK SIZE - CFM	EF#1	EXHAUST FAN #1 (TYP)
+	SPIN-IN FITTING WITH MANUAL BALANCING DAMPER, WITHOUT SCOOP	ACH#1	AIR CONDITIONING UNIT #1 (TYP)
⊕	SPIN-IN HARD Ø FLEXIBLE Ø DIFFUSER	⊗	RETURN/EXHAUST (TYP)
⊖	REMOTE TEMPERATURE SENSOR	⊠	SUPPLY DIFFUSER, SQ FACE (TYP)
⊙	HUMIDITY SENSOR	①	PLAN NOTE REFERENCE
⊛	SMOKE DETECTOR	↔	MANUAL VOLUME DAMPER
12X18	DUCT SIZE (REVERSE FOR ELEVATION VIEWS) 1ST NUMBER - HORIZONTAL DIMENSION 2ND NUMBER - VERTICAL DIMENSION	↔	DIRECTION OF THROW ON DIFFUSER

AIR BALANCE SCHEDULE

AIR TYPE	TOTAL CFM
SUPPLY	19,000
RETURN	14,970
EXHAUST	3,222
OUTSIDE AIR	4,050
BUILDING POSITIVE PRESSURE	808

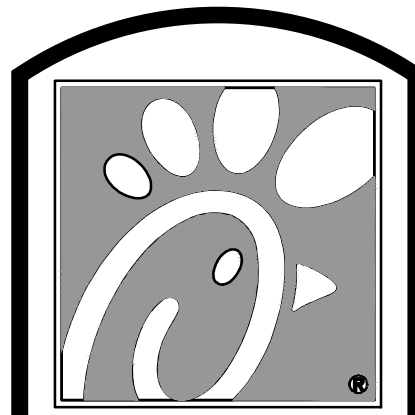


SHEET NOTES

- ① DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.

MECHANICAL FLOOR PLAN

1/4"=1'-0"



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
1	4/10/15	HEALTH DEPT

REV FOR PERMIT & BID REVIEW

Mark	Date	By
△		

Mark	Date	By
△		

Seal

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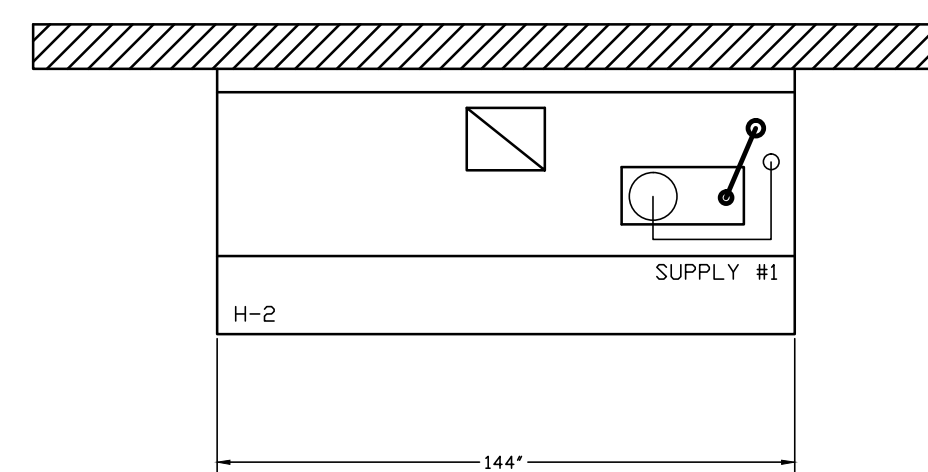
SHEET TITLE
MECHANICAL
FLOOR PLAN

VERSION: V2
ISSUE DATE: 11-2014

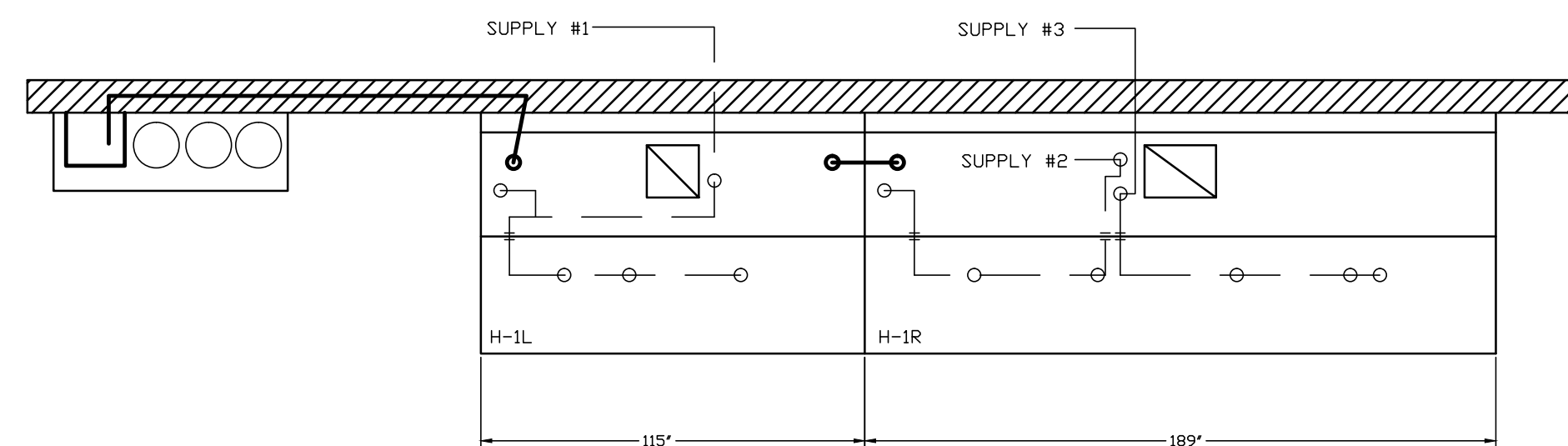
Job No. : CF1514
Store : 2913
Date : 05/14/15
Drawn By : BF
Checked By : MK

Sheet

M-11



- ANSUL R-102 FIRE SYSTEM**
- A) 3 GALLON SYSTEM (3 TANKS) (MOUNTED ON HOOD H-2) (FOR HOOD H-2)
 - B) 3/8" BLACK IRON PIPING W/ 3/8" S.S. APPLIANCE DROPS
 - (1) REGULATED RELEASE
 - (2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN REG. REL.)
 - (3) 3 GALLON TANK



- ANSUL R-102 FIRE SYSTEM**
- A) 9 GALLON SYSTEM (3 TANKS) (REMOTE MOUNTED ON WALL IN F.C.) (FOR HOODS H-1L & H-1R)
 - B) 3/8" BLACK IRON PIPING W/ 3/8" S.S. APPLIANCE DROPS
 - (1) REM REGULATED RELEASE
 - (2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN REG. REL.)
 - (3) 3 GALLON TANKS

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 WALL
 MAXIMUM FLOW POINTS = 33

ANSUL R-102 FIRE SYSTEM NOTES
 ONE TANK SYSTEM MOUNTED ON TOP OF (H-2)
 MAXIMUM FLOW POINTS = 11

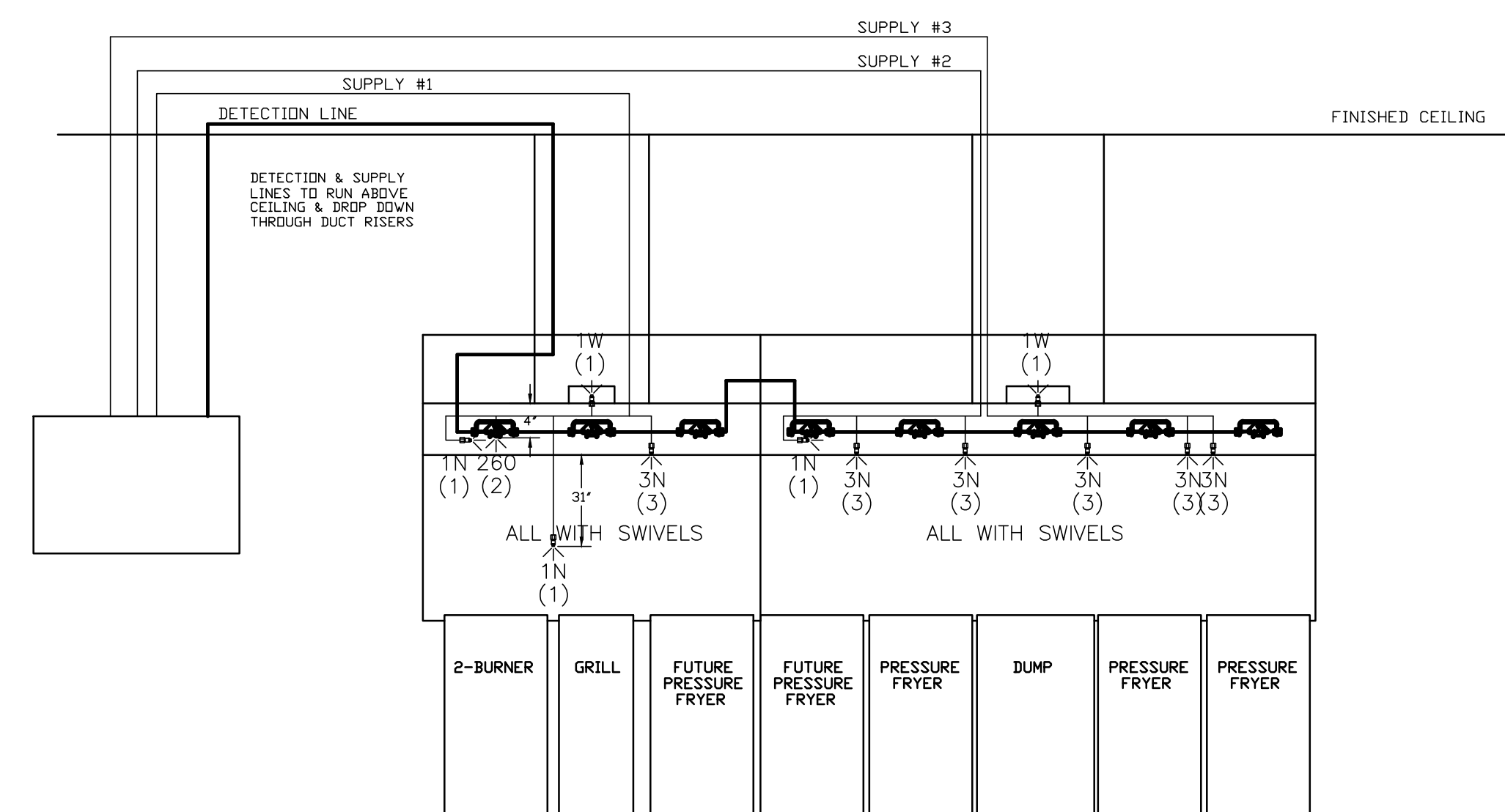
ITEM #	QTY	DESCRIPTION	FLOW PTS (TOTAL)
1W	3	DUCT NOZZLES	3
1N	3	PLENUM NOZZLES	3
1N	1	APPLIANCE NOZZLES	1
3N	8	APPLIANCE NOZZLES	24
260	2	APPLIANCE NOZZLES	4

TOTAL FLOW POINTS - 35

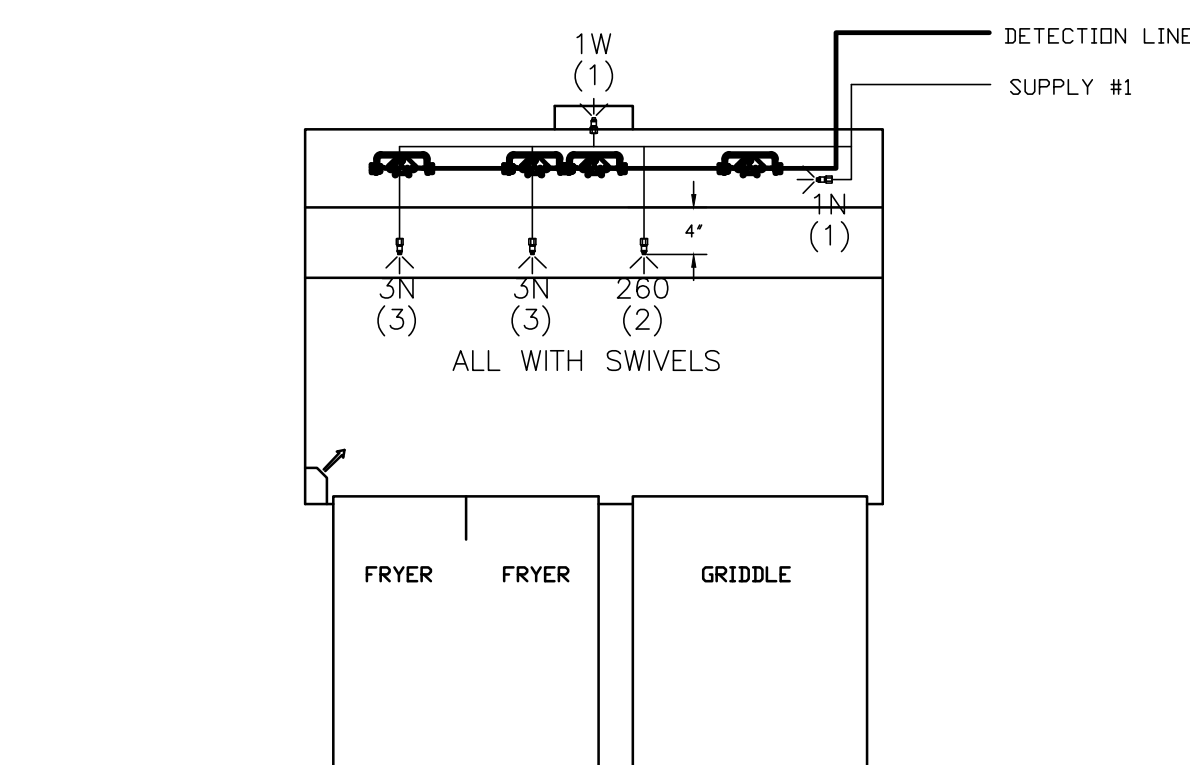
ITEM #	QTY	DESCRIPTION
#200	10	SERIES DETECTORS W/ FUSIBLE LINKS
#201	2	TERMINAL DETECTOR W/ FUSIBLE LINKS
#202	1	REGULATED RELEASE W/ DOUBLE POLE MICRO SWITCH
#203	1	DEM REGULATED RELEASE W/ DOUBLE POLE MICRO SWITCH
#204	4	3 GALLON TANKS
#205	2	REMOTE PULL STATION

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

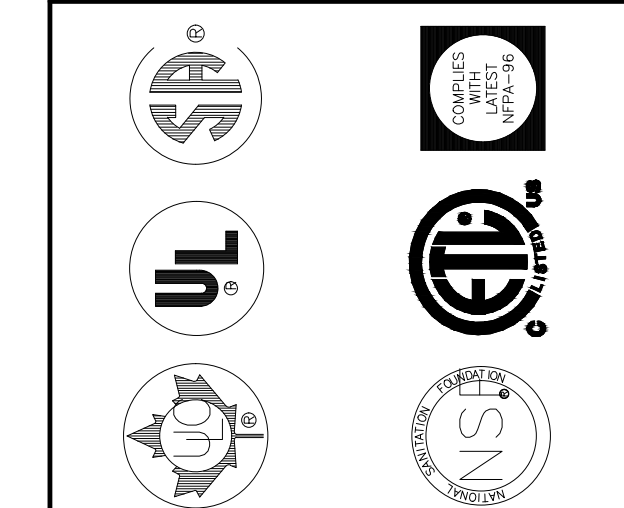


ANSUL R-102 FIRE SYSTEM LAYOUT



ANSUL R-102 FIRE SYSTEM LAYOUT

THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:
 1. ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS
 2. THE LOCATION AND TYPE OF COOKING EQUIPMENT.
NOTE TO APPROVER:
 ANY CHANGES TO THE DRAWING, INCLUDING 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.
 REVISE AND RESUBMIT
 APPROVED FOR FABRICATION WITH NO CHANGES
 WITH CHANGES AS NOTED
 APPROVED BY: _____ DATE: _____



MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:	WEBSITE: WWW.HALTONCOMPANY.COM
HALTON CO. (CANADA) 1021 BREVIK PLACE MISSISSAUGA, ON L4W 3R7 1-905-624-0301	HALTON CO. (USA) 101 INDUSTRIAL DRIVE SCOTTSDALE, KY 42164 1-270-257-5600
REVISION DESCRIPTION	BY DATE
1	
2	
3	
4	
5	
6	
7	

PROJECT: CFA #2913
 LOCATION: CLEVELAND, GA
 DRAWN BY: M.H. DATE: 03.06.15
 SCALE: NTS
 Halton Dwg: U15-141-2

Halton
 CARE FOR INDOOR AIR

Sheet H-1.2

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 FYREWAP. INSULATION ON ACCESS DOORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION RECOMMENDATIONS. UNIFRAX FYREWAP PRODUCT USED SHALL MEET LOCAL CODE REQUIREMENTS.
9. SUPPORT HOOD#1L AND HOOD#1R FROM WALL AND STRUCTURE AS SHOWN ON HALTON SHOP DRAWINGS. 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 3" 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 AS DETAILED ON STRUCTURAL DRAWING SS-1.
10. SUPPORT HOOD#2 WITH THREADED ROD AT EACH FACTORY SUPPORT POINT. EACH SUPPORT POINT MUST SUPPORT THE HOOD WEIGHT EQUALLY. ATTACH TO STRUCTURE AS DETAILED ON STRUCTURAL DRAWING SS-1. 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 TEXTRON SDS EDT265, LENGTH AS REQUIRED TO FULLY PENETRATE THE STUD.
11. JOIN HOODS #1L AND #1R TOGETHER WITH SAE GRADE 5 HARDWARE AS SHOWN ON HALTON SHOPS.

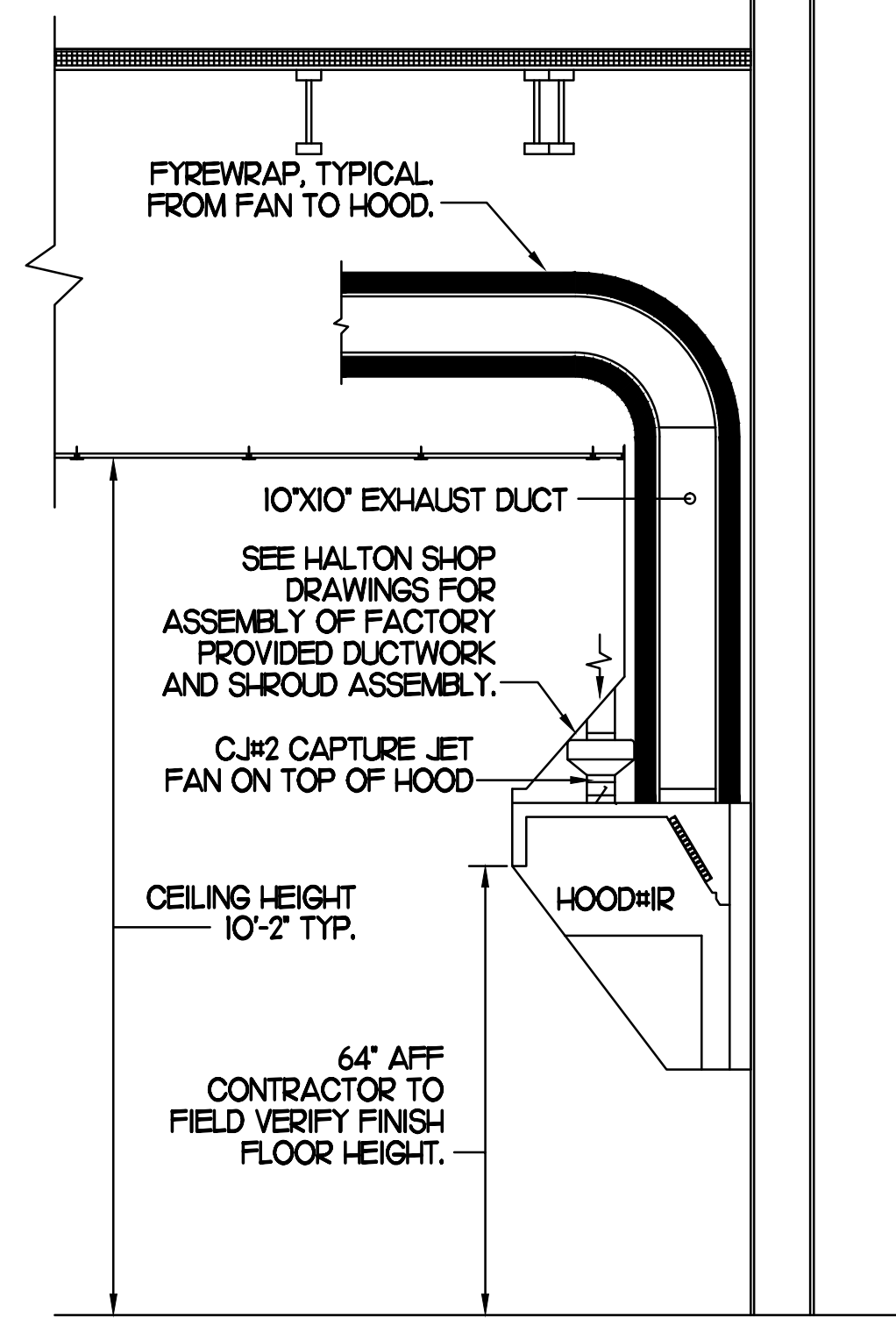
GREASE EXHAUST DUCT CLEARANCE NOTE

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

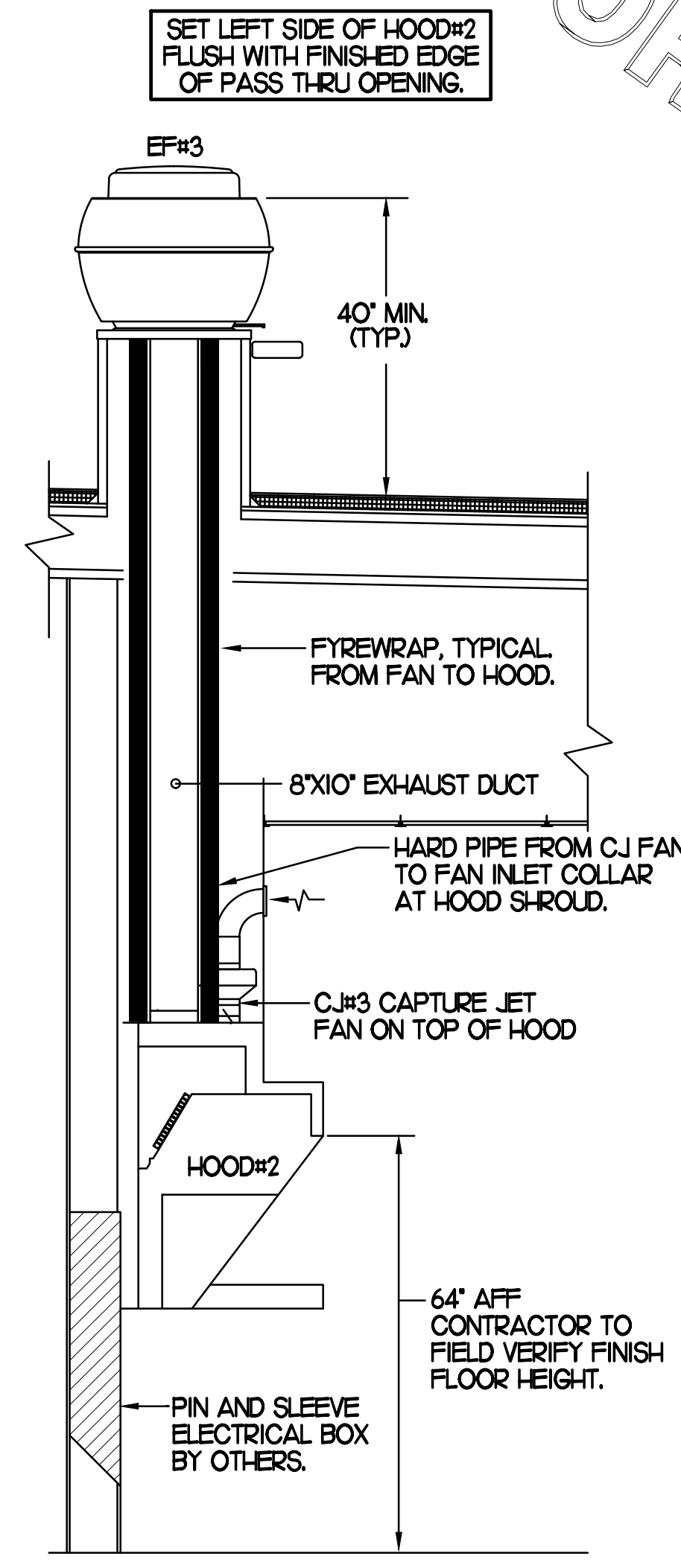
CLEANOUT DOOR NOTE

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.

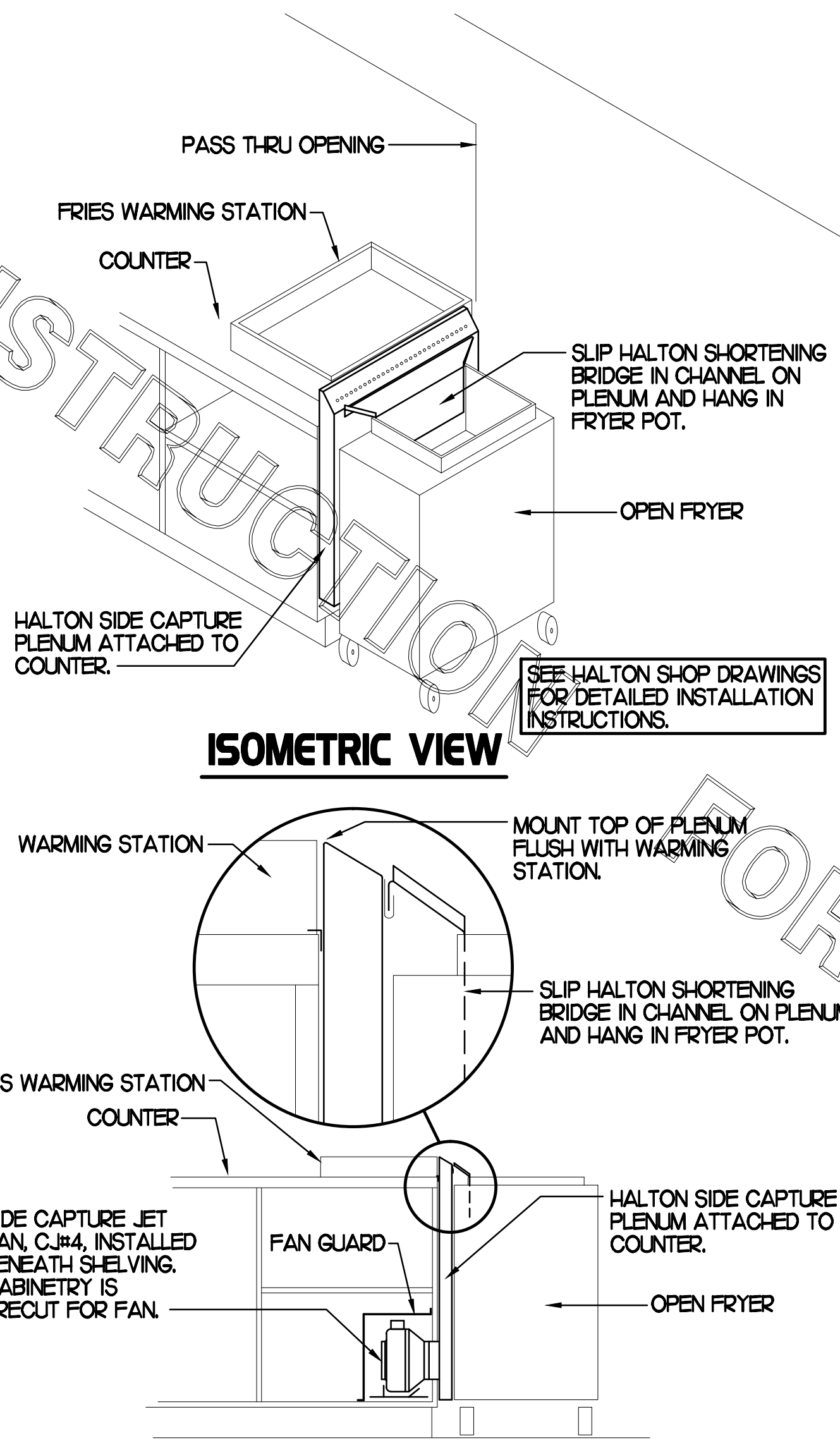
HOOD#1L IS SIMILAR TO HOOD#1R.



SECTION "A-A"

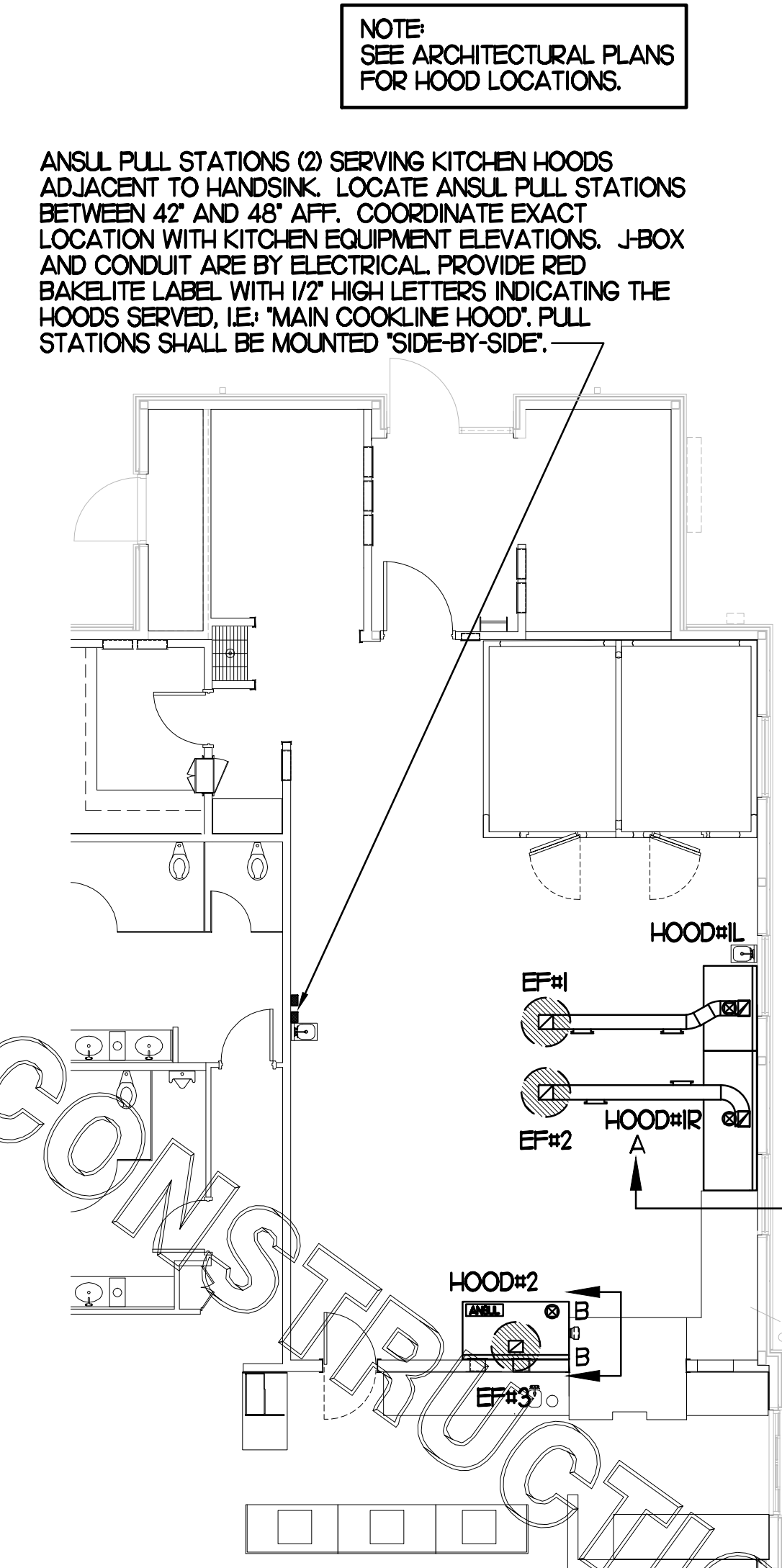


SECTION "B-B"



ISOMETRIC VIEW

FRONT VIEW

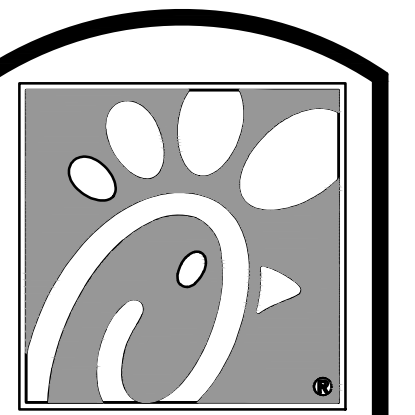


HOOD LAYOUT

HOOD SCHEDULE

MARK	EXHAUST CFM	SP • TAB PORT	CAPTURE JET CFM & SP.	TYPE	COLLAR SIZE	WIDTH	DEPTH	HEIGHT	MANUFACTURER	MODEL	REMARKS
HOOD#1L	662	015"	44 • 0.30"	BACK SHELF	8"X8"	59"	37"	38"	HALTON	KVL-2	1,4,5,7,13,19,20,21,22,23
HOOD#1R	1,085	012"	73 • 0.30"	BACK SHELF	11"X8"	97"	37"	38"	HALTON	KVL-2	1,4,5,7,10,13,19,20,21,23,24
HOOD#2	975	016"	56 • 0.30"	BACK SHELF	10"X8"	74"	34"	48"	HALTON	KVL-C	1,2,3,4,6,8,13,14,16,18,19,22

- NOTES: DIMENSIONS OF HOODS INCLUDE BACK AND SIDE SPACERS (HEIGHT DOES NOT INCLUDE CLOSURE PANELS).
- REMARKS:
1. STAINLESS STEEL CONSTRUCTION.
 2. PROVIDE FULL HEIGHT SS CLOSURE PANEL WITH ACCESS PANEL IN FRONT LARGE ENOUGH TO REMOVE CAPTURE JET FAN.
 3. PROVIDE FULL HEIGHT SS CLOSURE PANEL WITH ACCESS PANEL IN FRONT LARGE ENOUGH TO SERVICE ANSUL COMPONENTS AND TO REMOVE THE CAPTURE JET FAN.
 4. PROVIDE PRE-PIPED ANSUL R-102 WET FIRE EXTINGUISHING SYSTEM.
 5. PROVIDE UTILITY CABINET TO ENCLOSE REMOTE WALL MOUNTED ANSUL COMPONENTS FOR HOOD#1L AND HOOD#1R.
 6. ANSUL CABINET AND COMPONENTS ABOVE HOOD ON RIGHT SIDE.
 7. PROVIDE 3" BACK SPACER.
 8. PROVIDE 3" CUSTOM BACK SPACER TO ACCOMMODATE PIN AND SLEEVE ELECTRICAL BOX. ZERO CLEARANCE TO COMBUSTIBLE BACK SPACER FOR HOOD#2.
 9. NOT USED.
 10. PROVIDE NOTCHED LEFT END SIDE PANEL.
 11. NOT USED.
 12. NOT USED.
 13. PROVIDE TOP PLENUM CAPTURE JET FAN, SPEED CONTROLLER AND COLLAR.
 14. PROVIDE COUNTER MOUNTED SIDE CAPTURE JET PLENUM ASSEMBLY AND FAN ON LEFT SIDE OF HOOD.
 15. NOT USED.
 16. PROVIDE CAPTURE JET AIR INLET AND COLLAR AT FRONT OF CLOSURE PANEL.
 17. NOT USED.
 18. PROVIDE PIN AND SLEEVE ELECTRICAL BOX (DOUBLE CONNECTION). SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 19. PROVIDE EQUIPMENT I.D. LABELS LOCATED ON FRONT LEADING EDGE OF HOOD.
 20. PROVIDE SLOPED FALSE TOP AND DUCT ENCLOSURE.
 21. PROVIDE FACTORY WALL MOUNTING ANGLE AT TOP OF HOOD.
 22. PROVIDE NOTCHED RIGHT END SIDE PANEL.
 23. PROVIDE CONTINUOUS CAPTURE INTERNAL END CUTOUT.
 24. PROVIDE SPLICE STRIP AND U-CHANNEL.



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
△	4/10/15	HEALTH DEPT

REV FOR PERMIT & BID REVIEW

Mark	Date	By
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Seal

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SHEET TITLE
HOOD DETAILS
& SCHEDULES

VERSION: V2
ISSUE DATE: 11-2014

Job No. : CF1514
Store : 2913
Date : 05/14/15
Drawn By : BF
Checked By : MK

Sheet

M-2.1

3 HOOD ELEVATIONS
NONE

2 HALTON SIDE CAPTURE JET PLENUM
NOT TO SCALE

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

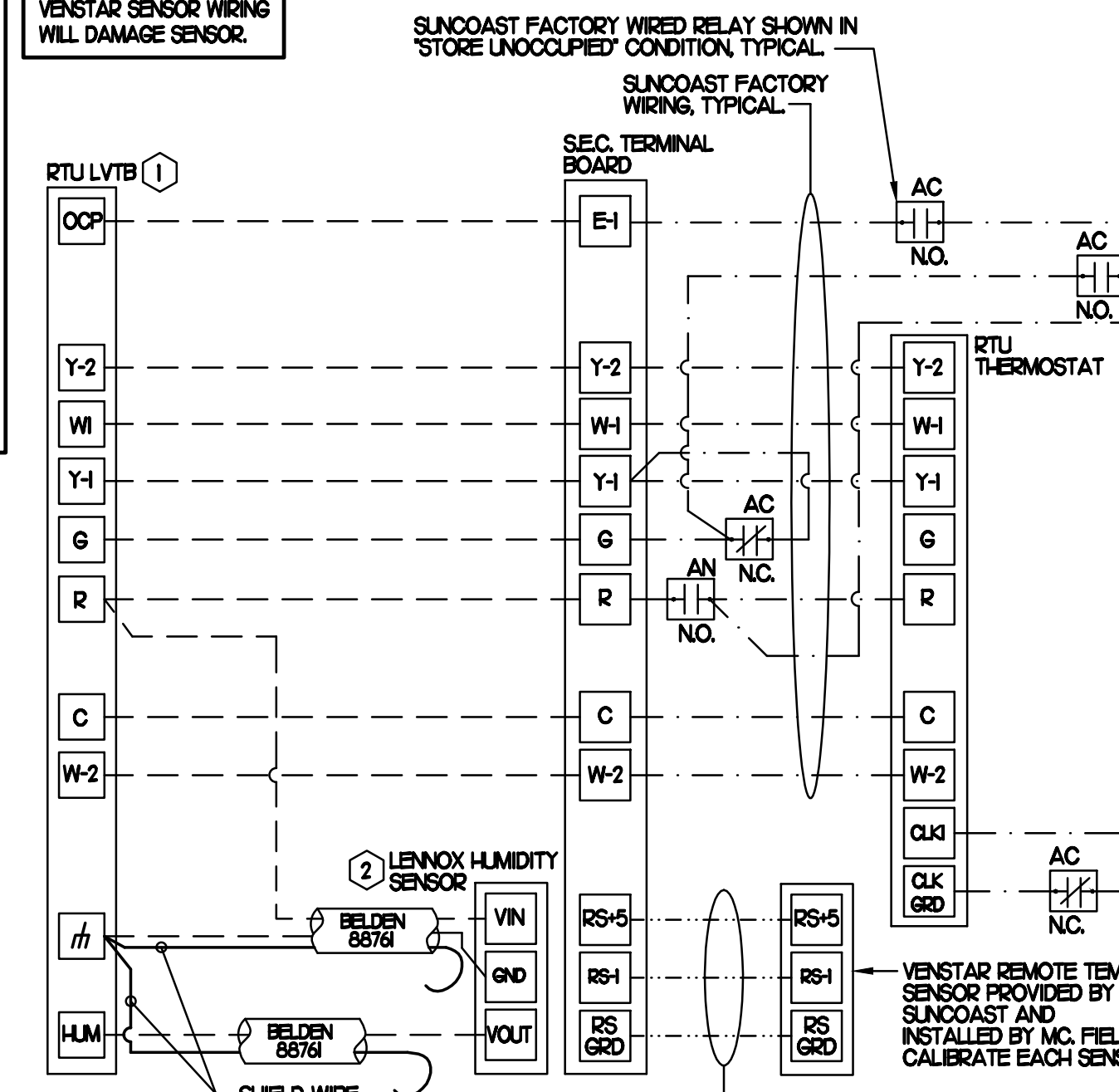
PROVIDE A PROFESSIONALLY LAMINATED COPY OF THESE DETAILS TO BE INSTALLED INSIDE THE ROOFTOP UNIT CONTROL CABINET. USE A SETON CHART FRAME STYLE #68624, TELEPHONE NUMBER 800-243-6624 FOR MOUNTING THE DETAIL. ATTACH THE FRAME TO THE INTERIOR OF THE UNIT IN PLAIN AND EASY VIEW OF THE CONTROLS SECTION. CONTACT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

FOR CONSTRUCTION

FOR CONSTRUCTION

LEGEND	
SEC.	SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF TEMP/FAN CONTROL PANEL LOCATED IN KITCHEN)
①	KEY NOTE REFERENCE
MC	MECHANICAL CONTRACTOR
AC	SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, ENERGIZED BY PULLING STORE SWITCH IN 'STORE OCCUPIED' POSITION.
AN	SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, DE-ENERGIZED WHEN ANSL FIRE SUPPRESSION SYSTEM IS ACTIVATED, AS NOTED.
---	18 AWG MIN LOW VOLTAGE WIRING BY MC, UNO.
---	VENSTAR SENSOR LOW VOLTAGE WIRING BY MC.
---	LOW VOLTAGE WIRING BY SEC.
---	LINE VOLTAGE BY ELECTRICIAN OR SEC.

CAUTION
REVERSING POLARITY ON VENSTAR SENSOR WIRING WILL DAMAGE SENSOR.



- NOTES**
- FOR ALL RTUS EXCEPT AT ACH, CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #65 TO ZERO (OLDER IMC BOARD ECTO PARAMETER 301 FOR GAS UNITS AND ECTO 201 FOR LCA UNITS). THIS WILL CAUSE THE O.A. DAMPER TO OPEN ON 'OCCUPIED' START. AT ACH LEAVE THE SETTING AT THE DEFAULT VALUE SO THE O.A. DAMPER WILL REMAIN CLOSED FOR THE FIRST 60 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 #05 FOR DEHUMIDIFICATION OPERATION TO A VALUE OF 5. OLDER M-8 IMC BOARD ECTO PARAMETER 424 VALUE TO BE SET TO A VALUE OF 5.
 - SET ALL THERMOSTATS FOR AUTO CHANGEOVER.
 - SET TSTAT COM SWITCH ON PRODIGY BOARD TO OPEN POSITION.
 - AT LENNOX A-BOX UNITS, SET THE MSVA LOW SPEED SETTING TO THE SAME VALUE AS THE HIGH SPEED SETTING AFTER TAB IS COMPLETE.
 - PLASTIC ENGRAVED LABEL AT ALL NEW SENSORS WITH 1/2" HIGH BLUE LETTERING ON WHITE 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 RUNS OF SHIELDED TWISTED PAIR. TERMINATE SHIELD WIRES AT TB, LEAVE OPEN AT SENSOR.

SENSOR WIRING BY MECHANICAL CONTRACTOR. DO NOT USE SHIELDED WIRING. DO NOT RUN WIRING ADJACENT TO AC WIRING, INCLUDING 24VAC. FOR RUNS UP TO 75 FEET, WIRING TO BE NO HEAVIER THAN #20AWG SOLID WIRE. FOR RUNS GREATER THAN 75 FEET, WIRING TO BE NO HEAVIER THAN #26AWG STRANDED WIRE.

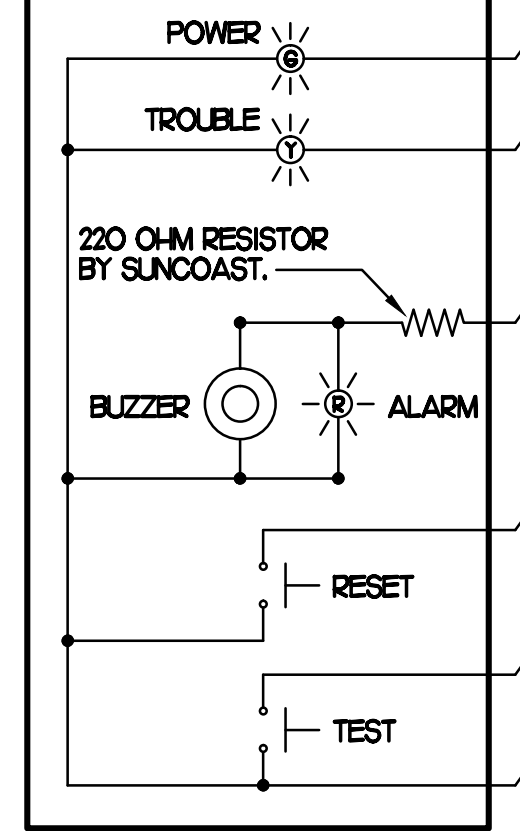
2 ROOFTOP UNIT CONTROL WIRING - LENNOX

SUPPLY SIDE DETECTORS
IF SUPPLY SIDE SMOKE DETECTORS ARE SHOWN ON DWG M11, AND CALLED FOR ON RTU SCHEDULE, THE CONTRACTOR IS TO RELOCATE FACTORY INSTALLED SUPPLY SMOKE DETECTOR FROM BLOWER SECTION TO DUCTWORK. SEE NOTES ON DWG M11.

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

- | | | |
|----|------------------------|---|
| 1 | POWER (24VAC) | ALARM CONTACTS ARE SHOWN IN STANDBY STATE |
| 2 | POWER (COM) | |
| 3 | RESET | |
| 4 | TEST | |
| 5 | ALARM SIGNAL | |
| 6 | AUXILIARY POWER (+) | |
| 7 | AUXILIARY POWER (-) | |
| 8 | ALARM INITIATION (COM) | ALARM NO. |
| 9 | ALARM INITIATION (NO.) | |
| 10 | TROUBLE CONTACT (NC) | TROUBLE CONTACT |
| 11 | TROUBLE CONTACT (COM) | |
| 12 | TROUBLE CONTACT (NO.) | TROUBLE CONTACTS ARE SHOWN IN STANDBY STATE |
| 13 | 120VAC LINE | |
| 15 | ALX RELAY (NC) | ALX ALARM CONTACT A |
| 16 | ALX RELAY (COM) | |
| 17 | ALX RELAY (NO.) | |
| 18 | ALX RELAY (NO.) | ALX ALARM CONTACT B |
| 19 | ALX RELAY (COM) | |
| 20 | ALX RELAY (NC) | |

1 SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM - LENNOX

NO SCALE



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:
Mark Date By

△

Mark Date By

△

Mark Date By

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Seal

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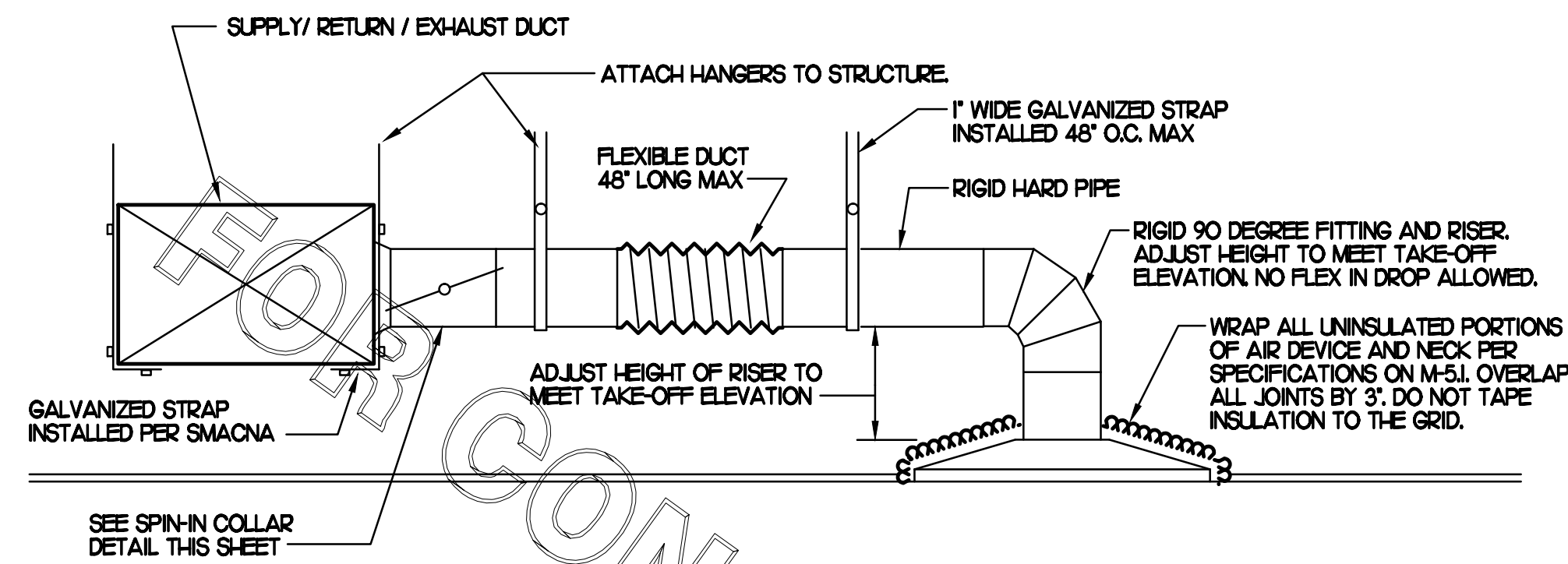
STORE
CABBAGE PATCH
CUSTOM - IN-FILL
25 West Underwood St.
Cleveland, GA 30528

SHEET TITLE
HVAC
CONTROLS

VERSION: V2
ISSUE DATE: 11-2014

Job No. : CF1514
Store : 2913
Date : 05/14/15
Drawn By : BF
Checked By : MK

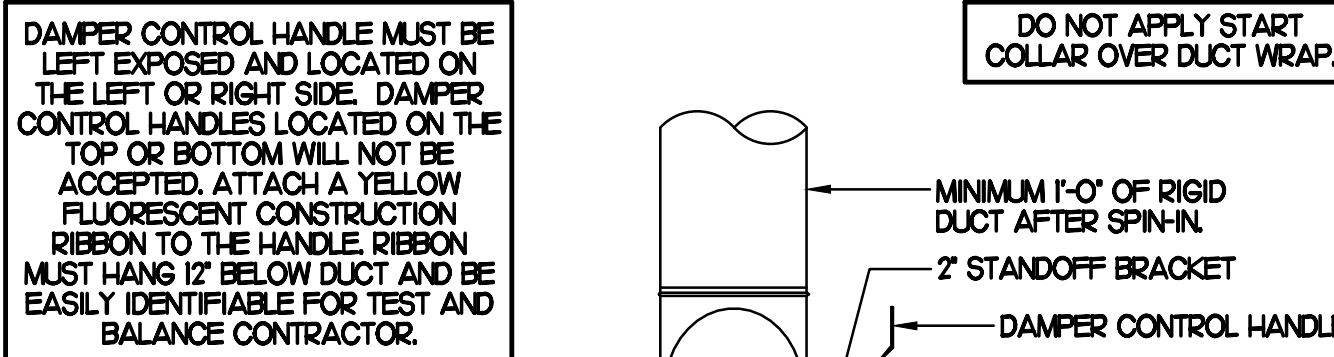
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M-4.1



1 SAG/RAG/GRILLE TAKE-OFF

NO SCALE

CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARRROW 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 BARRROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. JER-AIR START COLLARS NOT PURCHASED THRU TOM BARRROW COMPANY WILL NOT BE ACCEPTED.

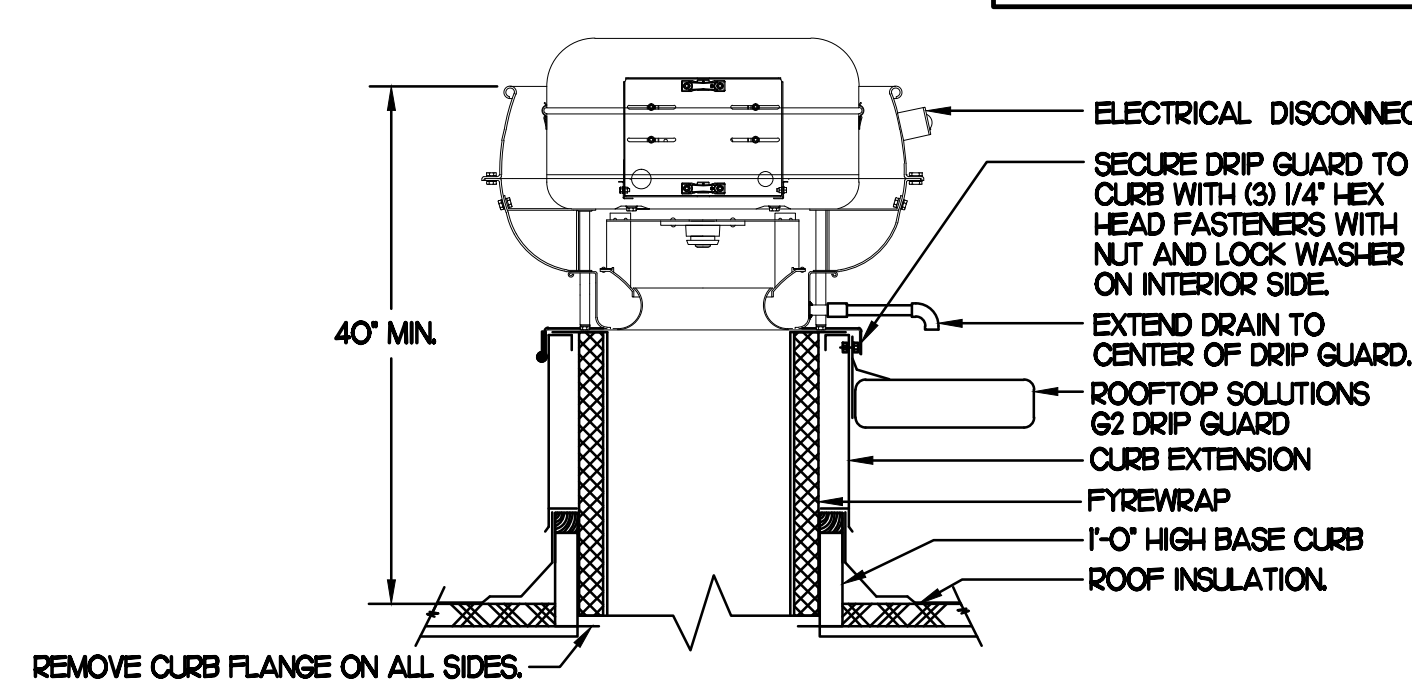


2 START COLLAR

NO SCALE

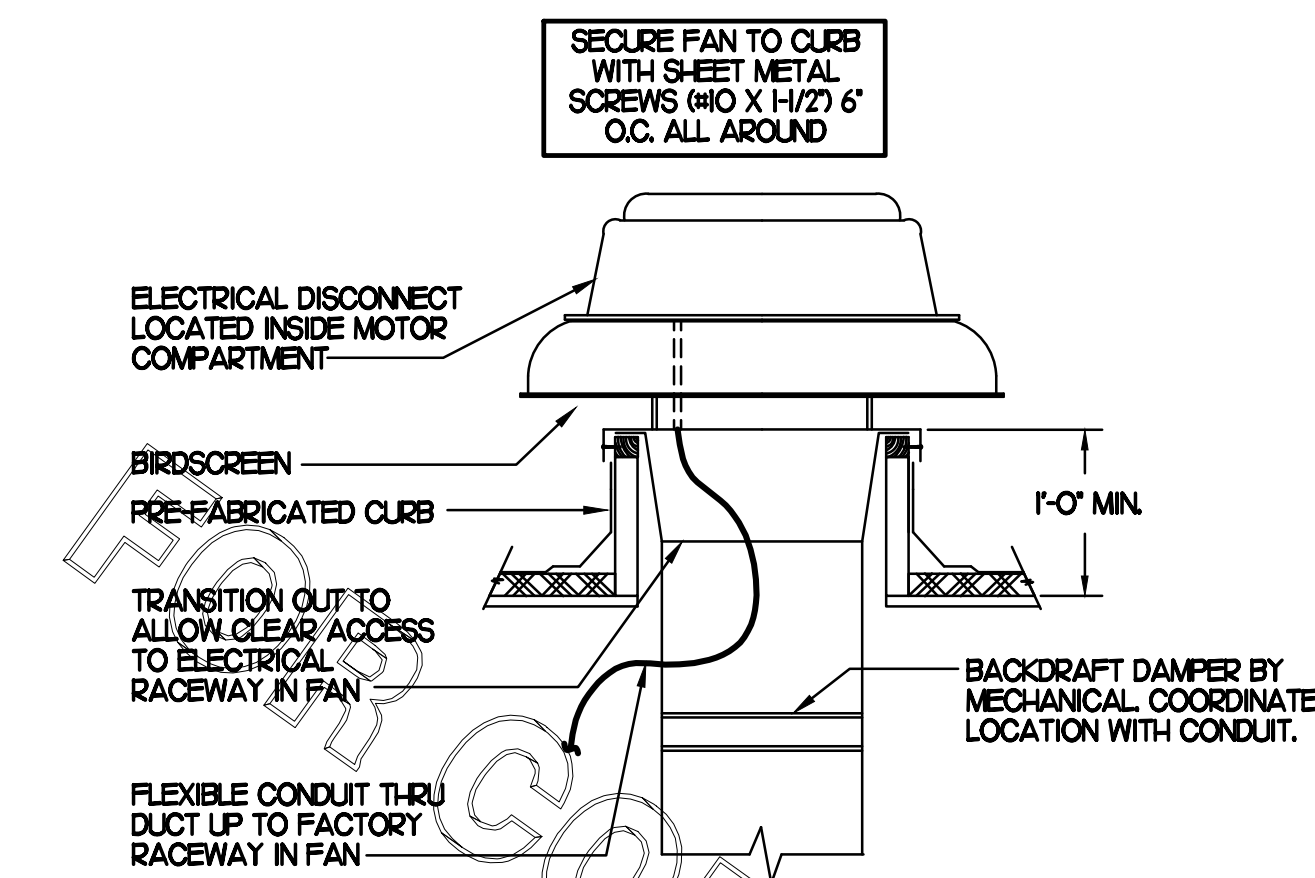
HINGED SIDE OF EP#1, EP#2, EP#3, AND EP#4 MUST FACE THE MAIN ENTRY SIDE OF THE BUILDING.

SECURE FAN TO CURB WITH #12X1/2\"/>



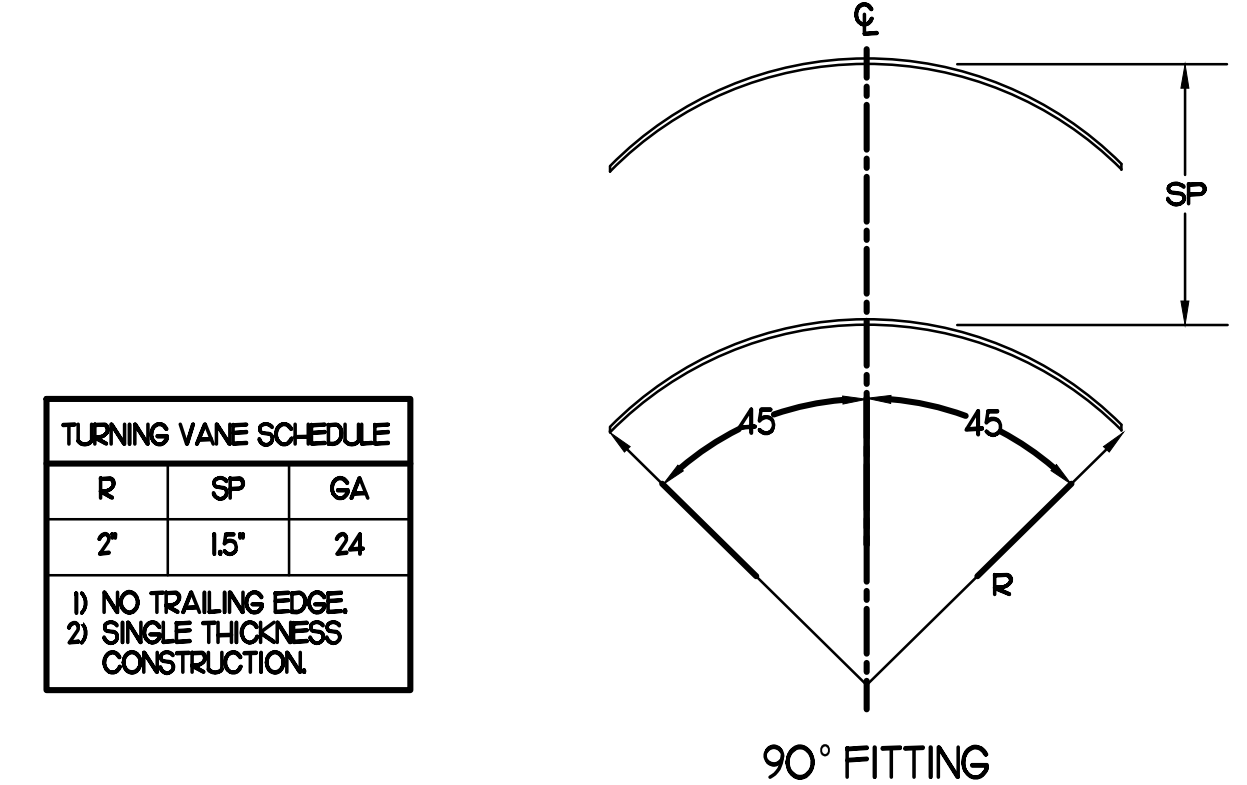
3 KITCHEN HOOD EXHAUST FAN

NO SCALE



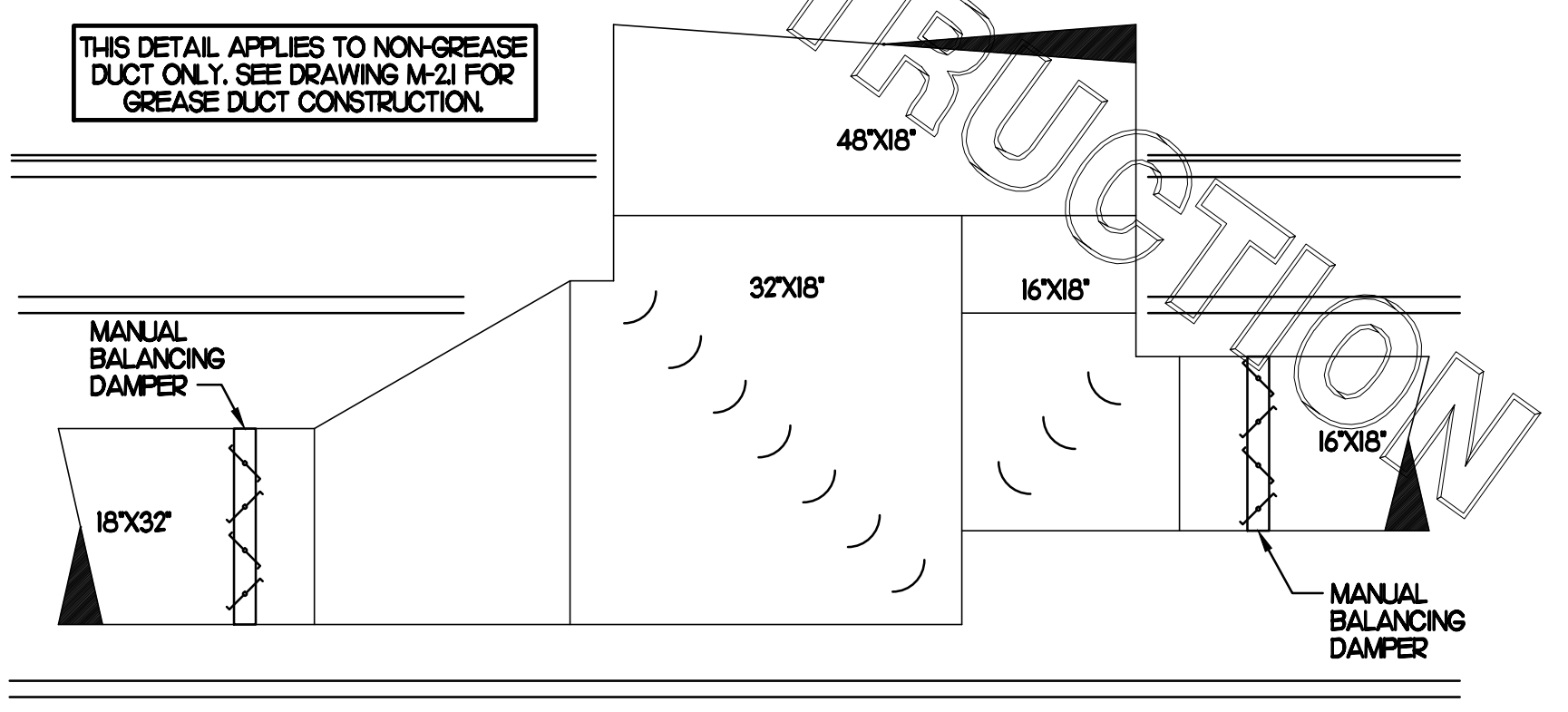
4 RESTROOM EXHAUST FAN

NO SCALE



5 TURNING VANES

NO SCALE



6 TEE CONSTRUCTION

NO SCALE

GAS FIRED ROOFTOP UNIT SCHEDULE

MARK	COOLING CAPACITY (MBH)		HEATING CAPACITY (MBH)		FAN SECTION (CFM)			MODEL	MANUFACTURER	REMARKS
	TOTAL	SENS	INPUT	OUTPUT	SUPPLY	O.A.	HP ESP			
ACH1	2325	1813	480.0	384.0	6900	1250	75	10	LGH24064	LENNOX 13,45,7,8,9,10,11,13
ACH2	91.0	64.6	240.0	192.0	2700	550	2	.65	LGH09244	LENNOX 2,3,4,6,7,8,9,10,11,12
ACH3	124.4	89.6	240.0	192.0	4,000	1000	5	.65	LGH20244	LENNOX 13,4,6,7,8,9,10,11,12
ACH4	103.8	78.9	240.0	192.0	3,400	830	2	.65	LGH0244	LENNOX 2,3,4,6,7,8,9,10,11,13
ACH5	63.3	47.5	150.0	120.0	2,000	300	1	.65	LGH06244	LENNOX 2,3,4,7,8,9,10,11,12
NOTES	<ul style="list-style-type: none"> COOLING CAPACITIES ARE GROSS, BASED ON ENTERING 80°FDB/67°FWB, OUTDOOR 95°FDB, AND 400 CFM PER TON. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT FOR EQUIPMENT WITH LENNOX CORPORATION. CONTACT LENNOX NATIONAL ACCOUNTS AT 972-497-6289 (OR BY FAX AT 972-497-5122 FOR PRICING, ORDERING AND AVAILABILITY). MECHANICAL CONTRACTOR TO VERIFY LENNOX SUBMITTAL WITH CONSTRUCTION DOCUMENTS. 									
REMARKS	<ol style="list-style-type: none"> PROVIDE DIFFERENTIAL ENTHALPHY ECONOMIZER WITH POWER EXHAUST. PROVIDE DIFFERENTIAL ENTHALPHY ECONOMIZER WITH BAROMETRIC EXHAUST. FACTORY 14\"/> 									

EXHAUST FAN SCHEDULE

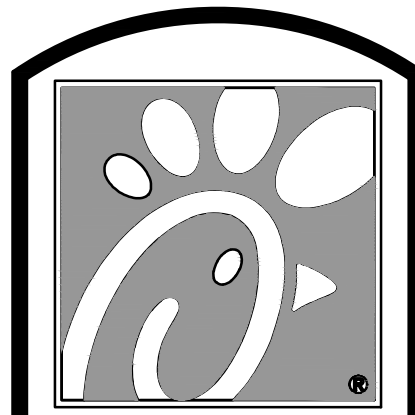
MARK	CFM	ESP	RPM	TP SPEED (RPM)	HP	AREA SERVED	MODEL	MANUFACTURER	REMARKS	
EF#1	662	.75	126	4,775	1/4	HOOD#L	150 VCR-HP	LOREN COOK	12,3,4,5,6	
EF#2	1,085	.75	1,488	5,843	1/2	HOOD#R	150 VCR-HP	LOREN COOK	12,3,4,5,6	
EF#3	975	.75	1,409	5,533	1/3	HOOD#2	150 VCR-HP	LOREN COOK	12,3,4,5,6	
EF#4	FUTURE EXHAUST FAN - NOT PART OF THIS ISSUE									
EF#5	500	.375	1,294	3,091	1/8	RESTROOMS	ACED-900150H	LOREN COOK	2,6,7,8,9,10,11	
NOTES	<ul style="list-style-type: none"> 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 BARRROW COMPANY FOR THE FAN/CURB PACKAGE. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN/CURB PACKAGE DIRECTLY FROM TOM BARRROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. FANS AND CURBS NOT PURCHASED THRU TOM BARRROW COMPANY WILL NOT BE ACCEPTED. 									
REMARKS	<ol style="list-style-type: none"> PROVIDE FACTORY 1'-0\"/> 									

AIR DOOR SCHEDULE

MARK	CFM	VELOCITY	HEATING CAP	HP	AREA SERVED	MODEL	MANUFACTURER	REMARKS
AD#1	750	3,050	72 KW	1/5	DRIVE THRU	MP-30E	POWERED-AIRE	1,2
AD#2	3,867	4,28	NA	3/4	REAR DOOR	18TH-48	POWERED-AIRE	3
NOTES	<ul style="list-style-type: none"> CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARRROW COMPANY FOR THE AIR DOORS. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DOORS DIRECTLY FROM TOM BARRROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100, FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARRROW COMPANY WILL NOT BE ACCEPTED. 							
REMARKS	<ol style="list-style-type: none"> FACTORY PROVIDED, WIRED, AND UNIT MOUNTED THERMOSTAT LOCATED ON RIGHT SIDE. FACTORY PROVIDED, WIRED, AND UNIT MOUNTED SPEED CONTROLLER LOCATED ON BOTTOM. 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 APD5P ALUMINUM SUPPLY AIR DIFFUSER WITH AIR PATTERN CONTROLLER.	DINING AREA KITCHEN	SEE PLAN	24X24	LAY-IN	1,8
C	PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	ENTRYS	14X14	20X20	BEVELLED	1,3,5,7
D	PRICE MODEL 22 DOUBLE DEFLECTION ALUMINUM SIDEWALL SUPPLY GRILLE FRONT BLADE PARALLEL TO SHORT SIDE.	MECH/ELEC ROOM	8X6	10X8	SURFACE	1
E	PRICE MODEL 22 DOUBLE DEFLECTION ALUMINUM SIDEWALL SUPPLY GRILLE FRONT BLADE PARALLEL TO LONG SIDE.	PLAYGROUND	18X12	20X14	SURFACE	1
F	PRICE MODEL 80 EGGRATE RETURN AIR GRILLE WITH REMOVABLE WHITE CORE, FACTORY FLAT BLACK BACKPAN AND ROUND NECK.	DINING/OFFICE KITCHEN	SEE PLAN	24X24	LAY-IN	1,8
G	PRICE MODEL 21 ALUMINUM SIDEWALL RETURN GRILLES FRONT BLADE PARALLEL TO LONG SIDE.	MECH/ELEC ROOM	8X6	10X8	SURFACE	1
H	PRICE MODEL APD5P ALUMINUM SUPPLY AIR DIFFUSER WITH AIR PATTERN CONTROLLER.	OFFICE	10	24X24	LAY-IN	1,6,8
J	PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	RESTROOMS	10X10	16X16	BEVELLED	1,2,3,5,7
K	PRICE MODEL APDOR ALUMINUM PERFORATED FACE RETURN AIR GRILLE.	RESTROOMS ENTRYS	14X14	17X17	SURFACE	1,4,5,7
L	PRICE MODEL 21 ZERO DEGREE DEFLECTION ALUMINUM SIDEWALL RETURN GRILLE FRONT BLADE PARALLEL TO LONG SIDE.	PLAYGROUND	16X6	18X8	SURFACE	1
NOTES	<ul style="list-style-type: none"> MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DEVICES DIRECTLY FROM TOM BARRROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100, FOR PRICING AND AVAILABILITY. AIR DEVICES NOT PURCHASED THRU TOM BARRROW COMPANY WILL NOT BE ACCEPTED. 					
REMARKS	<ol style="list-style-type: none"> STANDARD OFF WHITE FINISH. PROVIDE MODEL VCS3 NECK DAMPER. SEE DRAWING M11 FOR THROW. PROVIDE MODEL VCR7 NECK DAMPER ON GRILLES IN RESTROOMS. FIELD FABRICATE 8\"/> 					



Chick-fil-A

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30349-2998

Revisions:
Mark Date By
1 4/10/15 HEALTH DEPT
REV FOR PERMIT & BID REVIEW

Mark Date By
1

Mark Date By
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SHEET TITLE
HVAC DETAILS
& SCHEDULES

VERSION: V2
ISSUE DATE: 11-2014

Job No. : CF1514
Store : 2913
Date : 05/14/15
Drawn By : BF
Checked By : MK

Sheet
M-3.I

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. RADIUS 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 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 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.
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 404-351-0101 FOR PRICING AND AVAILABILITY. FANS AND CURBS 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 404-351-0101 FOR PRICING AND AVAILABILITY. AIR DEVICES 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 404-351-0101 FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARROW COMPANY 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.
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.
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 404-351-0101 FOR PRICING AND AVAILABILITY. START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.



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Revisions:

Mark Date By

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SHEET TITLE
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