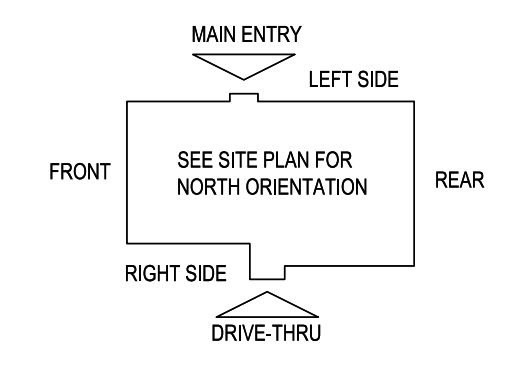


E5 HVAC PLAN
SCALE: 1/4" = 1'-0"



NOTE: ALL DUCTWORK TO BE LOCATED IN TRUSS SPACE WHERE POSSIBLE. SEE FRAMING PLAN.
HVAC SETPOINTS RECOMMENDED BY CORPORATE OPERATIONAL GUIDELINES:
1. DINING: HEATING 70°, COOLING 72°
2. KITCHEN: HEATING 68°, COOLING 74°

SUPPLY DUCTWORK SIZING TABLE*			
ROUND		RECTANGULAR	
SIZE	CFM RANGE	SIZE	CFM RANGE
8"	115 - 235	8"x8"	205 - 300
10"	240 - 435	10"x8"	305 - 400
12"	440 - 710	10"x10"	405 - 550
14"	715 - 1,070	12"x10"	555 - 700
16"	1,075 - 1,530	12"x12"	705 - 900
18"	1,535 - 2,090	14"x12"	905 - 1,105
20"	2,095 - 2,760	16"x12"	1,110 - 1,315
22"	2,765 - 3,550	18"x12"	1,320 - 1,520
24"	3,555 - 4,470	20"x12"	1,525 - 1,740
*CONTRACTOR MAY SUBSTITUTE RECTANGULAR FOR ROUND DUCTWORK ON MAIN RUNS AT THEIR DISCRETION. BRANCHES TO DIFFUSERS TO REMAIN ROUND.		22"x12"	1,745 - 1,950
		24"x12"	1,955 - 2,170
		26"x12"	2,175 - 2,400
		28"x12"	2,405 - 2,610
		30"x12"	2,615 - 2,840
		32"x12"	2,845 - 3,070
		34"x12"	3,075 - 3,290
		36"x12"	3,295 - 3,520
		36"x14"	3,525 - 4,420

DIFFUSER, REGISTER, AND GRILLE SCHEDULE									
TAG	SERVICE	TYPE	MATERIAL	THROW	FACE	NECK	MOUNTING	MANUFACTURER/MODEL	Notes
SD-1	SUPPLY	LOUVERED	STEEL	4-WAY	24X24	SEE PLAN	LAY-IN	RAYMON PRO2	2, 4
SD-2 - NOT USED									
SD-3	SUPPLY	LOUVERED	STEEL	3-WAY	12X12	SEE PLAN	SURFACE	RAYMON PRO2/QMF/DAG	2, 4
SD-4	SUPPLY	LOUVERED	STEEL	4-WAY	12X12	SEE PLAN	SURFACE	RAYMON PRO2/QMF	2, 4
SD-5	SUPPLY	PERFORATED	STEEL	PERFORATED	24X24	SEE PLAN	LAY-IN	RAYMON RPR	2, 4
RG-1	RETURN	SQUARE EGGRATE	ALUMINUM	N/A	24X24	22X22	LAY-IN	RAYMON FGEC-TB1	2, 3, 4
EG-1	EXHAUST	LOUVERED GRILLE	ALUMINUM	N/A	12X12	SEE PLAN	SURFACE	RAYMON RA-HVD	1, 2, 4
TG-1	TRANSFER	LOUVERED GRILLE	ALUMINUM	N/A	SEE PLAN	SEE PLAN	SURFACE	RAYMON RA-RH	2, 4
DIFFUSER NOTES:									
1. PROVIDE w/ ADJUSTABLE OPPOSED BLADE DAMPER									
2. VERIFY ALL DIFFUSERS AND RETURN GRILLE COLORS WITH OWNER AND ARCHITECT									
3. PROVIDE w/ 22X22 PLENUM BOX.									
4. ALL DIFFUSERS AND RETURNS LOCATED IN BLACK CEILING SHALL BE FLAT BLACK FINISH.									

NEW CULVER'S RESTAURANT
505 Northgate Mall Drive
Chattanooga, TN 37415
County of HAMILTON

Culver Franchising System, Inc.
1240 Water Street
Prairie du Sac, WI 53578
608-543-7880

OWNER:
BSJ ENTERPRISES, LLC
4737 County Road 101 #268
Minnelona, MN 55345
Jack Hillen
612-940-2168

OLLMANN ERNEST MARTIN ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7190 Phone
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HVAC PLAN, DIFFUSER
SCHEDULE

2024-137
M101

Date: 11-20-2024
Revision:

GENERAL NOTES

- DEVIATIONS FROM THE HVAC PLANS ARE THE RESPONSIBILITY OF THE HVAC CONTRACTOR & WILL NOT RESULT IN ADDITIONAL COSTS TO THE OWNER UNLESS WRITTEN CHANGE ORDERS ARE APPROVED BY THE OWNER.
- ALL WORK TO BE PERFORMED TO STATE CODE & SMACNA GUIDELINES.
- INSTALL UNITS ACCORDING TO MANUFACTURERS GUIDELINES.
- PROVIDE OWNER W/ OPERATION & MAINTENANCE MANUALS & SYSTEM SCHEMATICS.
- CONTRACTOR TO CONFIRM VOLTAGES & PHASES OF EQUIPMENT PRIOR TO INSTALLATION.
- VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION (DRAWINGS ARE DIAGRAMMATIC IN NATURE & DO NOT REFLECT EXACT LOCATIONS OF EQUIPMENT OR OTHER APPARATUSSES.)
- PROVIDE SHOP DRAWINGS TO THE ARCHITECT/DESIGNER FOR EQUIPMENT, FANS, REGISTERS, ETC. PRIOR TO PROCUREMENT.
- PROVIDE OWNER W/ COLOR CHOICES FOR SWITCHES & OTHER APPARATUSSES WHERE APPLICABLE.
- VENT OWNER WATER HEATER AS REQUIRED.
- VENT DRYER THRU SIDEWALL TO EXTERIOR AS REQUIRED. MAINTAIN CLEARANCE FROM INTAKES AS NOTED.
- HANG & SUPPORT MATERIALS SHALL BE INSTALLED THE LATEST EDITION OF THE ASHRAE HANDBOOK OF FUNDAMENTALS.
- MAINTAIN AT LEAST 10 FEET CLEARANCE FROM INTAKES OR WINDOWS ON ALL EXHAUST VENTS.
- TEST, ADJUST, & CALIBRATE CONTROL SYSTEMS AS REQUIRED. PROVIDE SCHEMATICS / DESCRIPTION TO THE OWNER PRIOR TO INSTALLATION.
- INSTALLER RESPONSIBLE FOR FINAL TEST & BALANCING DURING TRAINING WEEK. PROVIDE WRITTEN REPORT BY THIRD PARTY INDEPENDENT TAB CONTRACTOR.
- VERIFY W/ OWNER EXACT HEATER LOCATION TO AVOID BUILDING FUNCTION INTERFERENCE.
- REPLACE ALL AIR FILTERS PRIOR TO TURNING SYSTEM OPERATIONS OVER TO OWNER.
- HVAC CONTRACTOR IS RESPONSIBLE FOR A COMPLETE & FULLY WORKING SYSTEM.
- DUCT DIMENSIONS LISTED ARE NET FREE - CLEAR INSIDE DIMENSIONS.
- VERIFY DUCT LOCATIONS PRIOR TO FABRICATION. (VERIFY LIMITED AREA FOR DUCTWORK & OTHER APPARATUSSES.)
- INSULATE DUCT WORK TO SMACNA GUIDELINES & STATE CODES.
- INSTALL VOLUME CONTROL DAMPERS AS INDICATED ON PLANS.
- FLEXIBLE ROUND DUCT WORK NOT TO EXCEED 5 FEET IN LENGTH, AVOID UNNECESSARY TURNS & SLACK.
- RETURN AIR DUCT WORK TO BE LINED FOR SOUND ATTENUATION.
- DUCT WORK TO BE STANDARD GAUGE SHEET METAL (FIBROUS DUCT NOT ALLOWED.)
- INSULATE EXHAUST DUCT FOR EXHAUST FAN TO EXTERIOR TERMINATION.
- COORDINATE WORK W/ GENERAL CONTRACTOR & OWNER TO MAXIMIZE CEILING HEIGHT & AVOID CONFLICTS.
- S/S WALL PANELS FOR THE KITCHEN AREA ARE TO BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR. PANELS ARE TO BE 18 GA. TYPE 304 S/S. SEE DETAILS AND LOCATIONS ON THE A103 DRAWING.
- EXHAUST FANS AND FURNACE FANS TO RUN CONTINUOUSLY DURING OCCUPIED MODE.
- NIGHT SET BACK THERMOSTATS TO BE INSTALLED ON ALL HVAC EQUIPMENT.

NATIONAL ACCOUNT PROGRAM

- LENNOX INDUSTRIES, INC.** - ROOFTOP HVAC EQUIPMENT
NATIONAL ACCOUNTS SALES: LennoxNationalAccounts@lennoxind.com;
copy to: dave.ebner@lennoxind.com
NATIONAL ACCOUNT TECHNICAL SUPPORT: (800) 367-6285 Option #2 lennoxind.com
- RAYMON AIR DISTRIBUTION** - DIFFUSERS AND GRILLES
NATIONAL ACCOUNTS SALES: HUNZICKER LLC
MARIE WILSON - (608) 845-9551 marie@hunzickerllc.com

2024-137 CULVER'S OF CHATTANOOGA, TN CHATTANOOGA, TN

RTU SCHEDULES

UNIT No	AREA SERVED	SUPPLY FAN				COOLING				HEATING				ELECTRICAL (1)		ACCEPTABLE MANUFACTURERS					
		SUPLY FAN TYPE	SA FAN VFD	SUPPLY CFM	MIN OA CFM	ESP	°FDB	°FWB	°FDB	°FWB	COIL LAT °FDB	COIL LAT °FWB	SENSIBLE MBH	LATENT MBH	GAS OR ELEC		OUTPUT MBH	OAT °FDB	HEATING STAGES	VOLTAGE	PHASE
RTU-1	DINING ROOM	VAV	YES	6,150	1,700	0.75"	94	75	80.25	66.65	55.00	54.74	167	55	GAS	165	7	2	208	3	LENNOX, CAPTIVEAIRE
RTU-2	KITCHEN	VAV	YES	6,225	1,675	0.75"	94	75	80.11	66.56	55.00	54.78	168	55	GAS	128	7	2	208	3	LENNOX, CAPTIVEAIRE

ADDITIONAL FACTORY INSTALLED OPTIONS FOR BOTH UNITS:

- WEATHERPROOF DISCONNECT
- FACTORY INSTALLED/FIELD POWERED GFCI
- RETURN SMOKE DETECTOR
- DRAIN PAN OVERFLOW SWITCH
- SINGLE ENTHALPY ECONOMIZER W/ FAULT DETECTION DIAGNOSTICS
- BAROMETRIC RELIEF
- HAIL GUARDS
- 2" MERV 13 FILTERS
- S/S HEAT EXCHANGER
- HOT GAS REHEAT

ADDITIONAL FIELD INSTALLED OPTIONS FOR BOTH UNITS:

- 14" DOWNFLOW HYBRID CURB
- PVC DRAIN TRAP KIT
- REMOTE TEMPERATURE AND HUMIDITY SENSORS
- PROGRAMMABLE THERMOSTAT
- OUTDOOR AIR CFM CONTROL

NOTES:
1) NOTIFY ELECTRICAL CONTRACTOR OF BREAKER REQUIREMENTS AFTER SELECTION

PRV-1 RESTROOM EXHAUST FAN - REFER TO SHEET M204

PRV-2 GRIDDLE EXHAUST FAN - REFER TO SHEET M202

PRV-3 FRYER EXHAUST FAN - REFER TO SHEET M203

EF-1A MOP ROOM EXHAUST FAN - REFER TO SHEET M204

ITEM #49A GRIDDLE HOOD - REFER TO SHEET M202

ITEM #59A FRYER HOOD - REFER TO SHEET M203

CONTROL NOTES

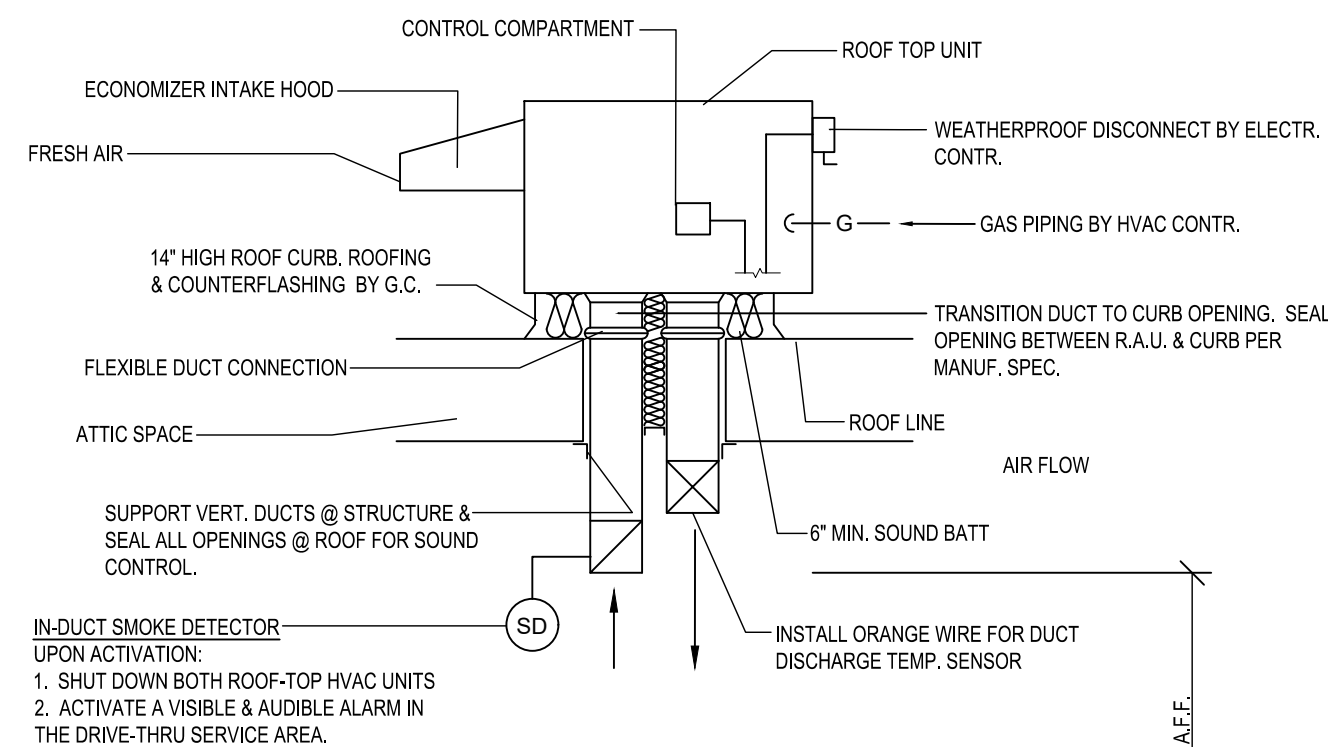
NOTE: KITCHEN HOODS SUPPLIED AND INSTALLED BY HVAC CONTRACTOR

- WIRE RTU-1, RTU-2 TO SHUT-DOWN & EXHAUST HOOD FANS TO CONTINUE TO RUN UPON ACTIVATION OF THE ANSUL SYSTEM.
- WIRE RTU-1 & RTU-2 TO SHUT-DOWN UPON ACTIVATION OF ANY IN-DUCT SMOKE DETECTOR.
- OCCUPIED MODE: FANS IN RTU-1 & RTU-2, EXHAUST FANS PRV-1, PRV-2, PRV-3 AND EF-1 TO RUN CONTINUOUSLY.
- UNOCCUPIED MODE: FANS IN RTU-1 & RTU-2 TO RUN ONLY WHEN COOLING OR HEATING IS CALLED FOR.

TEST & BALANCE NOTES

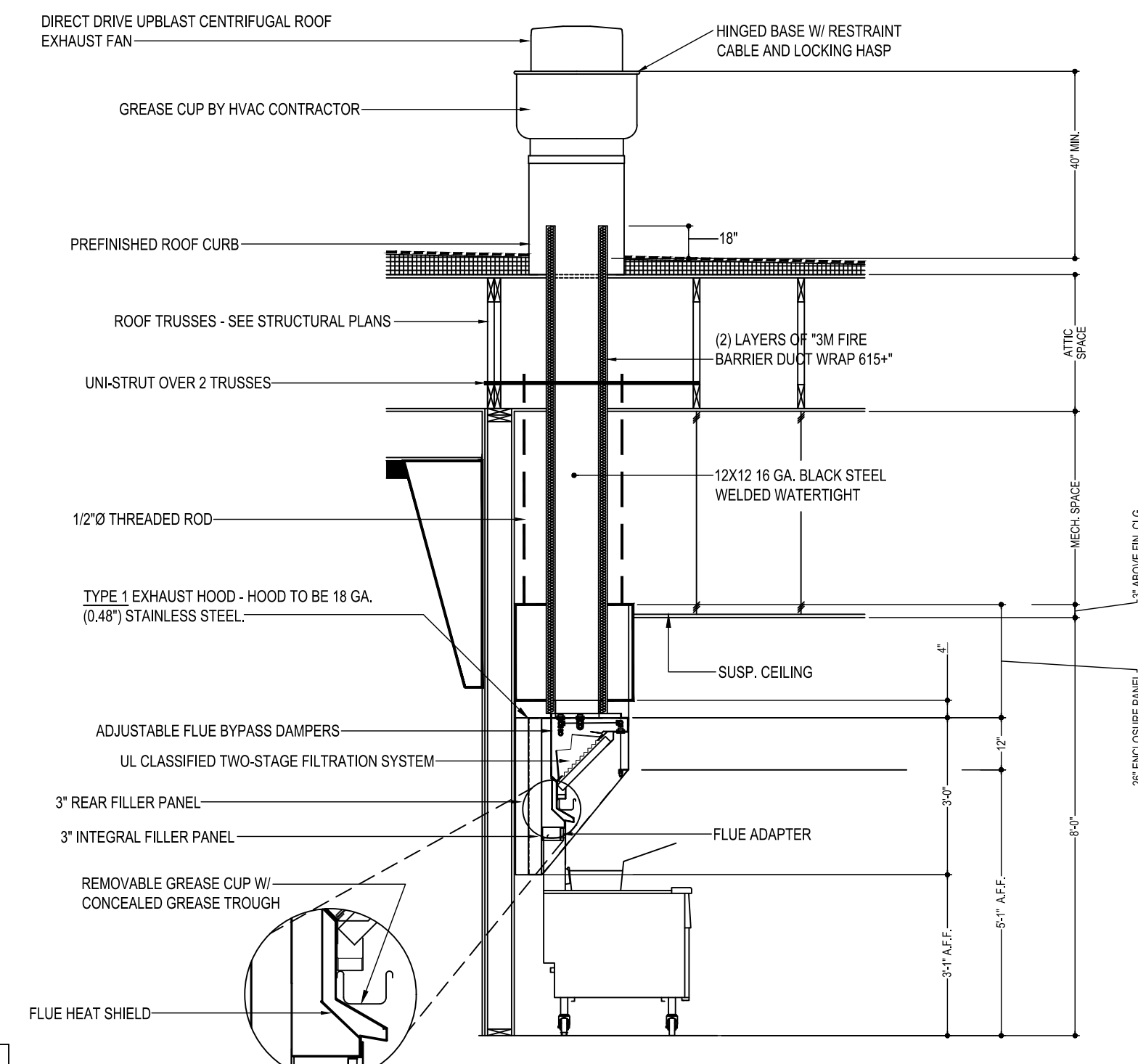
- TEST, ADJUST, AND BALANCE ALL NEW SUPPLY, RETURN, OUTDOOR AIR INTAKE, AND EXHAUST FANS TO +10.0% OF INDICATED AIRFLOWS. INSTALLER RESPONSIBLE FOR FINAL TEST & BALANCING DURING TRAINING WEEK. PROVIDE WRITTEN REPORT BY THIRD PARTY INDEPENDENT TAB CONTRACTOR.
- ESTABLISH MINIMUM OUTSIDE AIR FLOW INDICATED ON SCHEDULES AT ALL SUPPLY FAN SPEEDS.

AIR BALANCE TABLE				
EXHAUST AIR FLOW				
EQUIPMENT TAG	SERVICE	CFM		
PRV-1	RESTROOMS	300		
PRV-2	ITEM #49	1,500		
PRV-3	ITEM #59	1,500		
EF-1A	MOP ROOM	75		
TOTAL =		3,375		
VENTILATION REQUIRED PER 2018 INTERNATIONAL MECHANICAL CODE				
EQUIPMENT TAG	SERVICE	CFM		
RTU-1	DINING ROOM	1,730		
RTU-2	KITCHEN	215		
TOTAL =		1,945		
3,375 > 1,945 -> USE 3,375 CFM FOR OUTSIDE AIR CFM				
OVERALL AIRFLOW SUMMARY				
EQUIPMENT TAG	SERVICE	SUPPLY CFM	RETURN CFM	OUTSIDE AIR CFM
RTU-1	DINING ROOM	6,150	4,450	1,700
RTU-2	KITCHEN	6,225	4,550	1,675
TOTAL OUTSIDE AIR CFM =		3,375		



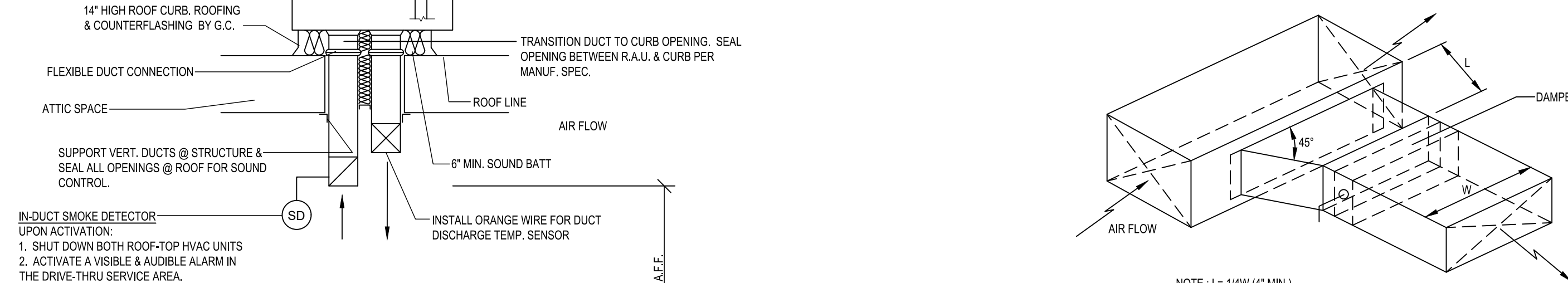
A6 ROOFTOP HVAC UNIT

SCALE: N.T.S.



C3 KITCHEN HOOD EXHAUST DETAIL

SCALE: N.T.S.
VERIFY MOUNTING HEIGHTS W/ OWNER AND GENERAL CONTRACTOR



C6 BRANCH DUCT TAKEOFF DETAILS

SCALE: N.T.S.

LENNOX SETTINGS FOR CULVERS

IN ORDER TO SET UP THE RTUS YOU WILL NEED TO DOWNLOAD LENNOX CORE SERVICE APP, AND PAIR YOUR DEVICE WITH THE CORE CONTROLLER. ONCE PAIRED YOU WILL SEE THE OPERATION OVERVIEW SCREEN. SEE INSTALLATION MANUAL FOR INSTRUCTIONS ON DOWNLOADING THE APP, OR SCAN THE QR CODE ON THE FRONT COVER OF THE CONTROLLER

HEAT DELAY ADJUSTMENT

- HEAT DELAY WILL BE PR68 IN THE CORE CONTROLLER AND CHANGED IN THE APP AS SHOWN IN THE MENU PATH BELOW. DEFAULT IS SET AT 3600 SECONDS.
- TAP THE MENU BUTTON, (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU.
 - TAP SET UP
 - TAP TEST AND BALANCE
 - TAP DAMPER
- THERE ARE SEVERAL SETTINGS TO SELECT IN THIS MENU PATH BEFORE REACHING THE DESIRED SETTING. FRESH AIR HEATING ENABLED = YES OR NO. AFTER ENABLING FAH THE NEXT SCREEN WILL ALLOW THE FAH SET POINT TO BE CONFIGURED. SUGGESTED FAH TEMPERATURE RANGES 65-67 DEGREES F. VERIFY WITH ENGINEER

GLOBAL ECONOMIZER MODE (KITCHEN UNIT ONLY)

- THIS IS SET BY CHANGING CONFIGURATION ID#1 CHARACTER 2 TO G
- FROM THE MAIN SCREEN (OPERATION OVERVIEW) TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP INSTALL
 - TAP NEXT ON DATE AND TIME
 - TAP NEXT ON RTU NAME, MODEL NUMBER, SERIAL NUMBER AND CATEGORY IF ALREADY ENTERED, IF NOT PLEASE ENTER
 - TAP CONFIGURATION ID 1 AND CHANGE 2ND CHARACTER TO G

ECONOMIZER MINIMUM POSITION SET-UP

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN)
 - SCROLL DOWN AND TAP RTU OPTIONS
 - TAP EDIT PARAMETERS
 - CHOOSE FROM THE CATEGORY OF PARAMETERS LISTED (AIRFLOW)
 - CHOOSE THE PARAMETER TO ADJUST (132) MINIMUM FRESH AIR DAMPER POSITION DURING OCCUPIED OPERATION

OCCUPIED AND UNOCCUPIED

- USING 24V THERMOSTAT CONTROL, OCCUPIED/ UNOCCUPIED WILL BE DETERMINED BY INPUT ON P297-8 ON THE IM BOARD
- FOR (KITCHEN UNIT ONLY) BOTH THE THERMOSTAT AND HOOD FANS MUST BE TIED INTO P297-8 ON THE IM CONTROL BOARD

FRESH AIR TEMPERING (HEATING)

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP SET UP
 - TAP TEST AND BALANCE
 - TAP DAMPER
- THERE ARE SEVERAL SETTINGS TO SELECT IN THIS MENU PATH BEFORE REACHING THE DESIRED SETTING. FRESH AIR HEATING ENABLED = YES OR NO. AFTER ENABLING FAH THE NEXT SCREEN WILL ALLOW THE FAH SET POINT TO BE CONFIGURED. SUGGESTED FAH TEMPERATURE RANGES 65-67 DEGREES F. VERIFY WITH ENGINEER

FRESH AIR TEMPERING (COOLING)

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP SET UP
 - TAP TEST AND BALANCE
 - TAP DAMPER
- THERE ARE SEVERAL SETTINGS TO SELECT IN THIS MENU PATH BEFORE REACHING THE DESIRED SETTING. FRESH AIR HEATING ENABLED = YES OR NO. AFTER ENABLING FAH THE NEXT SCREEN WILL ALLOW THE FAH SET POINT TO BE CONFIGURED. SUGGESTED FAH TEMPERATURE RANGES 73-75 DEGREES F. VERIFY WITH ENGINEER

ENSURE THAT THE PROBE STYLE SENSOR GETS INSTALLED IN THE SUPPLY DUCTWORK FOR FAH/FAH TO OPERATE PROPERLY.

FOR HELP PLEASE CALL LENNOX NATIONAL ACCOUNT TECH SUPPORT AT 1-800-367-6285

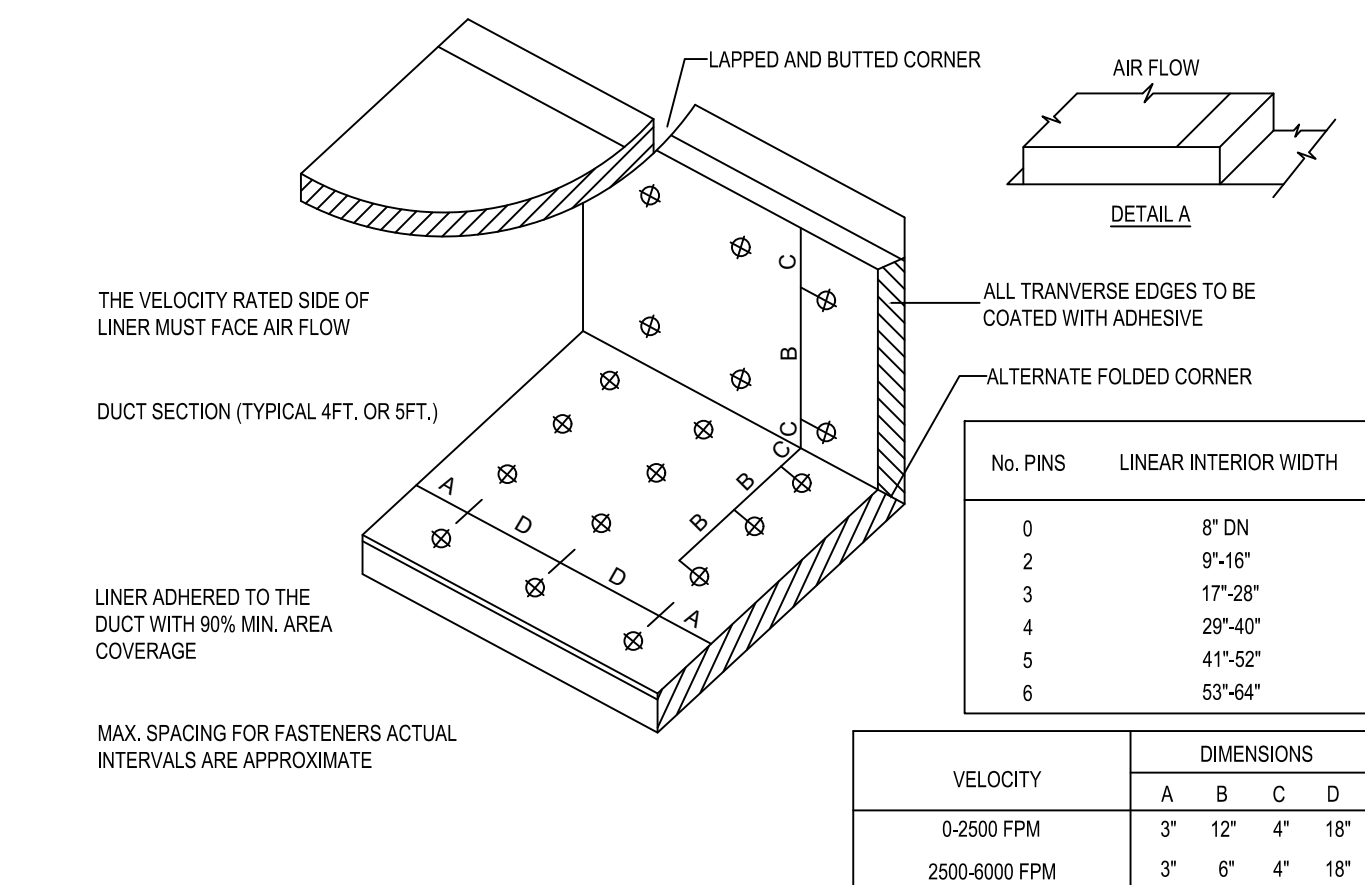
CHECK FOR CORRECT OPERATION AND WIRING OF ALL SENSORS

COOKING APPLIANCE / TYPE 1 HOOD INTERLOCK

- REMOTE SWITCH ON - POWER TO KITCHEN FAN CONTROL CENTER (KFCC)
- KFCC CONTROLS:
 - EXHAUST FANS PRV-2 (GRILLE) & PRV-3 (FRYERS) ARE STARTED.
 - OPENS OUTSIDE AIR INTAKE ON RTU-1 & RTU-2 TO MINIMUM FRESH AIR OPENING.
 - POWER TO OUTLETS #51 (GRILLE) & #60 (FRYERS).
- GRILLE & FRYER CAN BE STARTED.
- IN CASE OF FIRE:
 - SHUNT TRIP BREAK FOR GRILLE & FRYERS OUTLET TRIPS.
 - ANSUL SYSTEM IS ACTIVATED.
 - THE MECHANICAL GAS VALVES CLOSES.
 - SHUT DOWN RTU-1 & RTU-2 & CLOSE OUTSIDE AIR.
 - EXHAUST FANS PRV-2 & PRV-3 CONTINUE TO RUN.

GREASE HOOD FIRE SUPPRESSION SYSTEM

WET-CHEMICAL EXTINGUISHING SYSTEMS SHALL BE INSTALLED, MAINTAINED, PERIODICALLY INSPECTED AND TESTED IN ACCORDANCE WITH NFPA 17A AND THEIR LISTING.



E5 DUCT LINER INSTALLATION DETAIL

SCALE: N.T.S.
NOTE: USE ONLY ON VERTICAL DROP FROM RTU TO WITHIN 9-10' A.F.F.
DUCT LINER WILL NOT BE PERMITTED ON ANY HORIZ. RUNS.

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LENNOX INDUSTRIES, INC.
D. AGRICULTURE
NEW CULVER'S RESTAURANT
505 Northgate Mall Drive
Chattanooga, TN 37415
County of HAMILTON

OWNER:
BSJ ENTERPRISES, LLC
4737 County Road 101, #656
Minnetonka, MN 55345
Jack Hillen
612-940-2168

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FOR QUESTIONS, CALL THE

Florida National Accounts
REGION 60
PHONE: (407) 682 - 3100
EMAIL: reg60@captivaire.com

HOOD INFORMATION - JOB#6912492

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFMFT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)						HOOD CONSTRUCTION	HOOD CONFIG		
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL		SP	END TO END	ROW
1	FRYER HOOD	3347 BD-2	CAPTIVEAIRE	7' 0"	600 DEG	I	HEAVY	214	1500			4"	12"	1500	1910	-1.090"	430 SS WHERE EXPOSED	ALONE	ALONE
2	GRIDDLE HOOD	3347 BD-2	CAPTIVEAIRE	5' 6"	600 DEG	I	HEAVY	273	1500			4"	12"	1500	1910	-1.412"	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

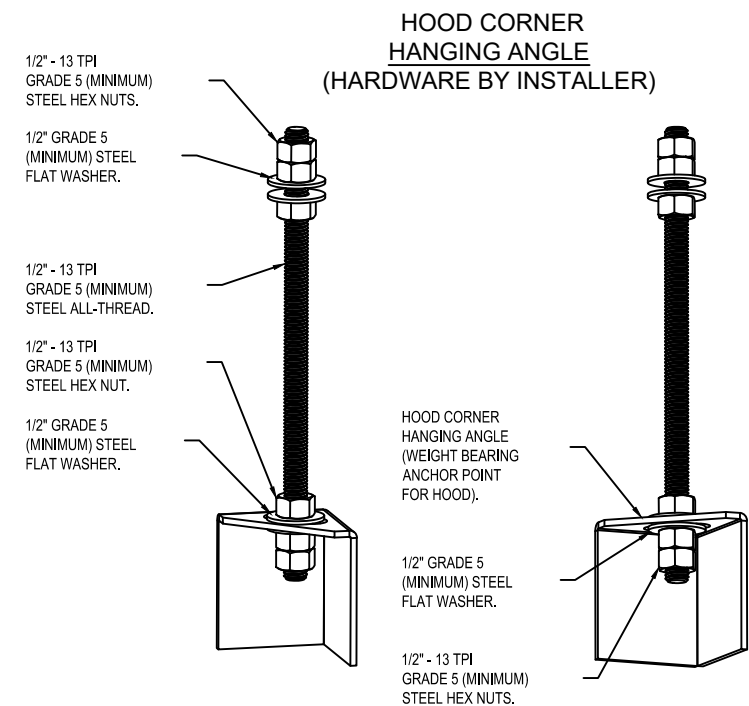
HOOD NO	TAG	TYPE	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE	SIZE	ELECTRICAL MODEL #		
1	FRYER HOOD	CAPTRATE SOLO FILTER	5	16"	16"	85% SEE FILTER SPEC	4	L55 SERIES E26	NO						YES	291 LBS
2	GRIDDLE HOOD	CAPTRATE SOLO FILTER	4	16"	16"	85% SEE FILTER SPEC	4	L55 SERIES E26	NO						YES	243 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	FRYER HOOD	FIELD WRAPPER 14.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. SENSOR-CV.
2	GRIDDLE HOOD	FIELD WRAPPER 14.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. SENSOR-CV.

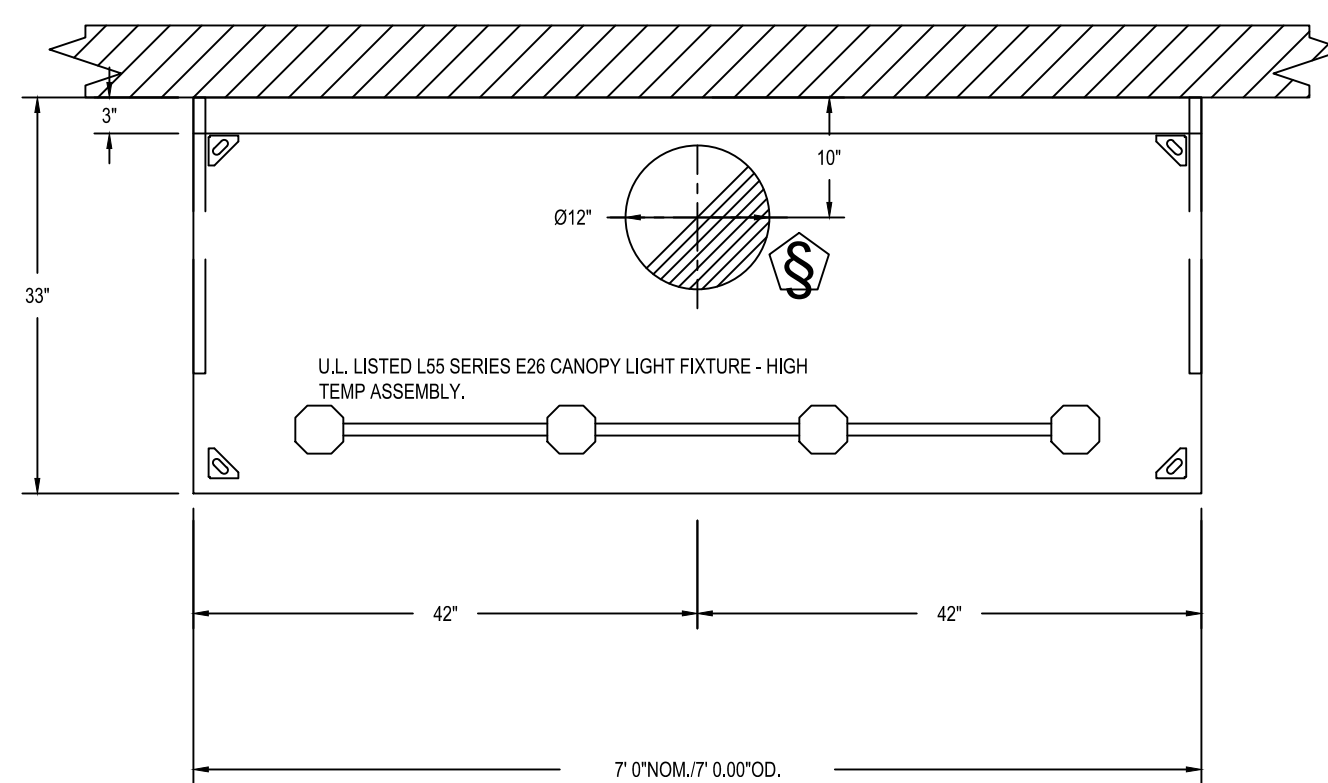
WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S)				WEIGHT
			TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	
1	WALL MNT	12"x48"x30"	TANK FS	4.0x4.0	SC-E012011MA	1 LIGHT 1 FAN	340.00 LBS

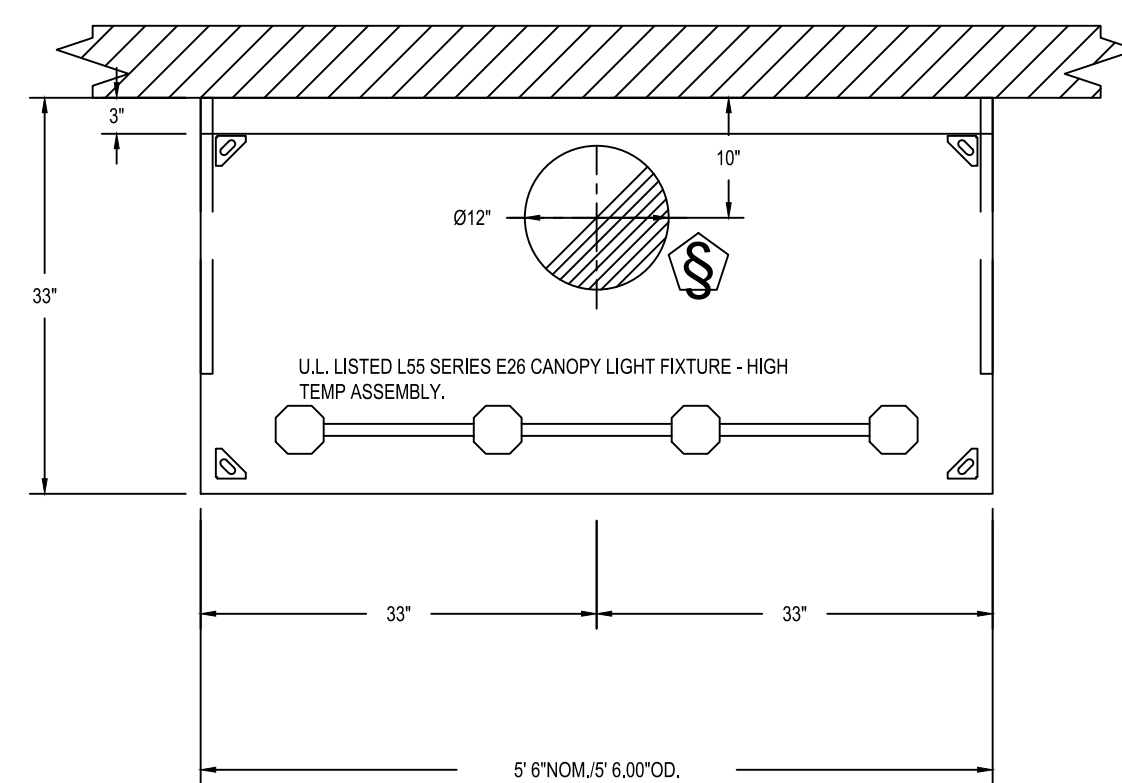


ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



PLAN VIEW - HOOD #1 (FRYER HOOD)
7' 0.00" LONG 3347BD-2



PLAN VIEW - HOOD #2 (GRIDDLE HOOD)
5' 6.00" LONG 3347BD-2

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

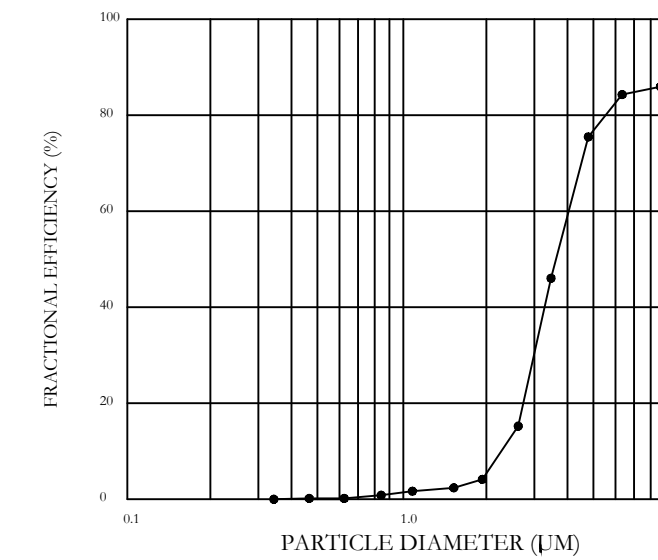
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

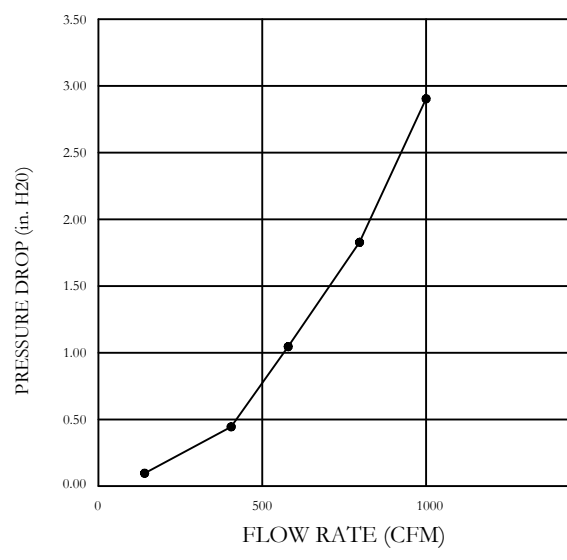
UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

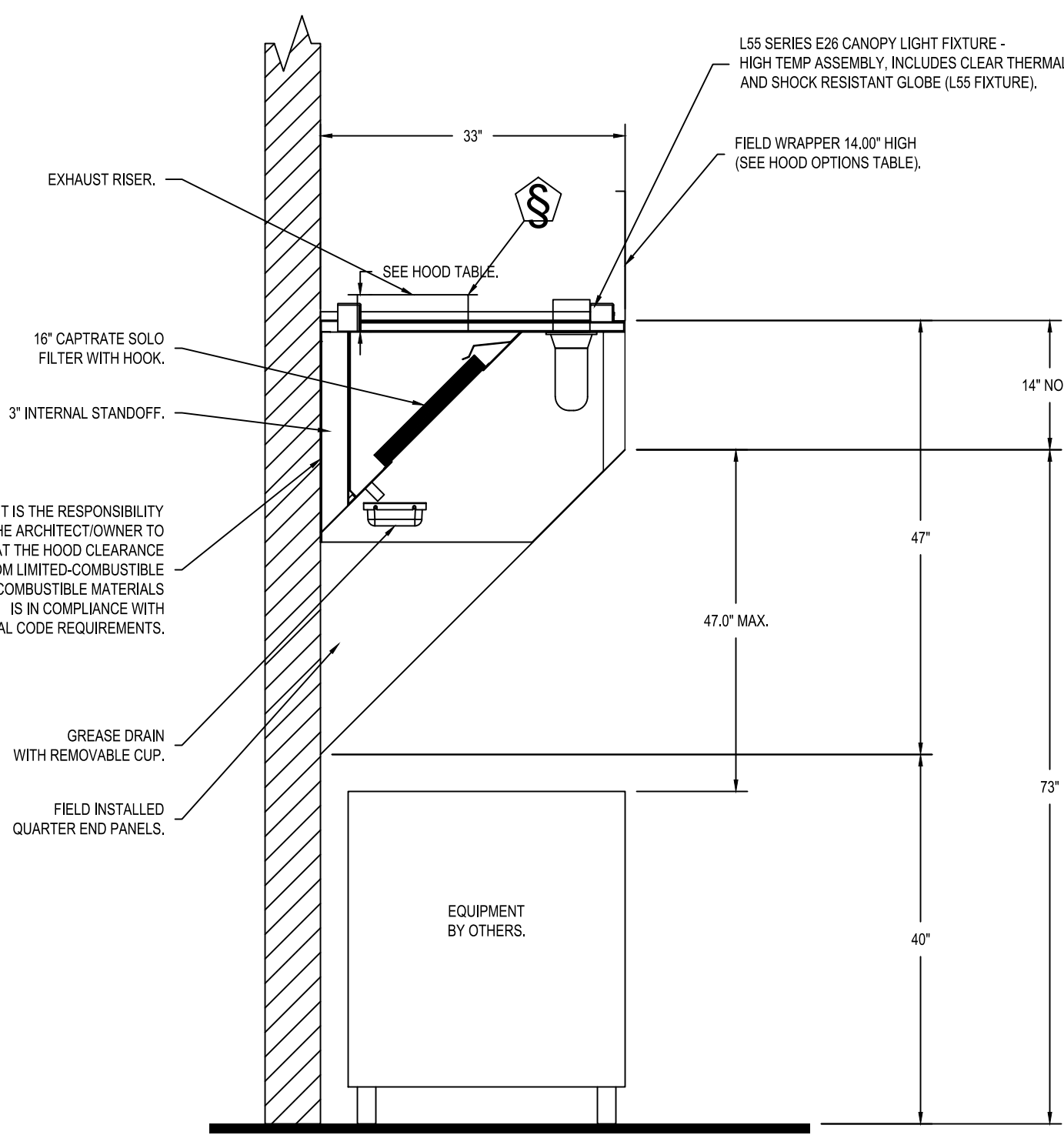
EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA #96.
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.



SECTION VIEW - MODEL 3347BD-2
HOOD - #1 & #2

REVISIONS	
DESCRIPTION	DATE

CAPTIVEAIRE

Florida National Accounts
www.captivaire.com
239 N Hunt Club Blvd., STE 201, Longwood, FL 32779 PHONE: (407) 682 - 3100 FAX: 9192275913 EMAIL: reg60@captivaire.com

CULVERS DESIGN

.0

DATE: 7/11/2024
DWG.#: 6912492
DRAWN BY: sluddyr
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
1

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LOWE'S ENGINEERING
DESIGN CENTER
AGRICULTURE
COUNTY
NO. 0010810
REVISED
DATE: 7/11/2024

NEW CULVER'S RESTAURANT
505 Northgate Mall Drive
Chattanooga, TN 37415
County of HAMILTON

OWNER:
BSJ ENTERPRISES, LLC
4737 County Road 101 #258
Minnetonka, MN 55345
Jack Hillen
612-940-2168

OWNER:
OLLMANN ERNEST MARTIN ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7190 Phone
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HVAC SCHEDULES & DETAILS
- KITCHEN HOODS

Date: 11-20-2024
Revision:

2024-137
M202

EXHAUST FAN INFORMATION - JOB#6912492

FAN UNIT NO.	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENDS	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	PRV-1 RESTROOM	1	DR13FA	CAPTIVEAIR	300	0.500	1288	TEACDCM	0.250	0.0802	1	115	2.9		50	6.1
2	PRV-2	1	DURSFA	CAPTIVEAIR	1500	1.412	1468	TEACDCM	1.000	0.5330	1	115	11.6	475 FPM	94	12.3
3	PRV-3	1	DURSFA	CAPTIVEAIR	1500	1.290	1348	TEACDCM	1.000	0.4700	1	115	11.6	475 FPM	94	11.3
4	EF-1	1	CFA 10CA	CAPTIVEAIR	75	0.125	483	GENERALPURPOSE	0.116	0.0610	1	115	1.1		27	NA

FAN OPTIONS

FAN UNIT NO.	TAG	QTY	DESCRIPTION
1	PRV-1 RESTROOM	1	ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL, ASC-TELECO, CCW ROTATION
		1	112BDD DAMPER
		1	2 YEAR PARTS WARRANTY
2	PRV-2	1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL - RTC-TELECO MOTOR, CCW ROTATION
		1	FAN BASE CERAMIC SEAL - DURS99FA - SHIP LOOSE - FOR GREASE DUCTS
		1	2 YEAR PARTS WARRANTY
3	PRV-3	1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL - RTC-TELECO MOTOR, CCW ROTATION
		1	FAN BASE CERAMIC SEAL - DURS99FA - SHIP LOOSE - FOR GREASE DUCTS
		1	2 YEAR PARTS WARRANTY
4	EF-1	1	MG1 - METAL GRILLE KIT
		1	WALL CAP - ACCEPTS 1" ROUND DUCT
		1	2 YEAR PARTS WARRANTY

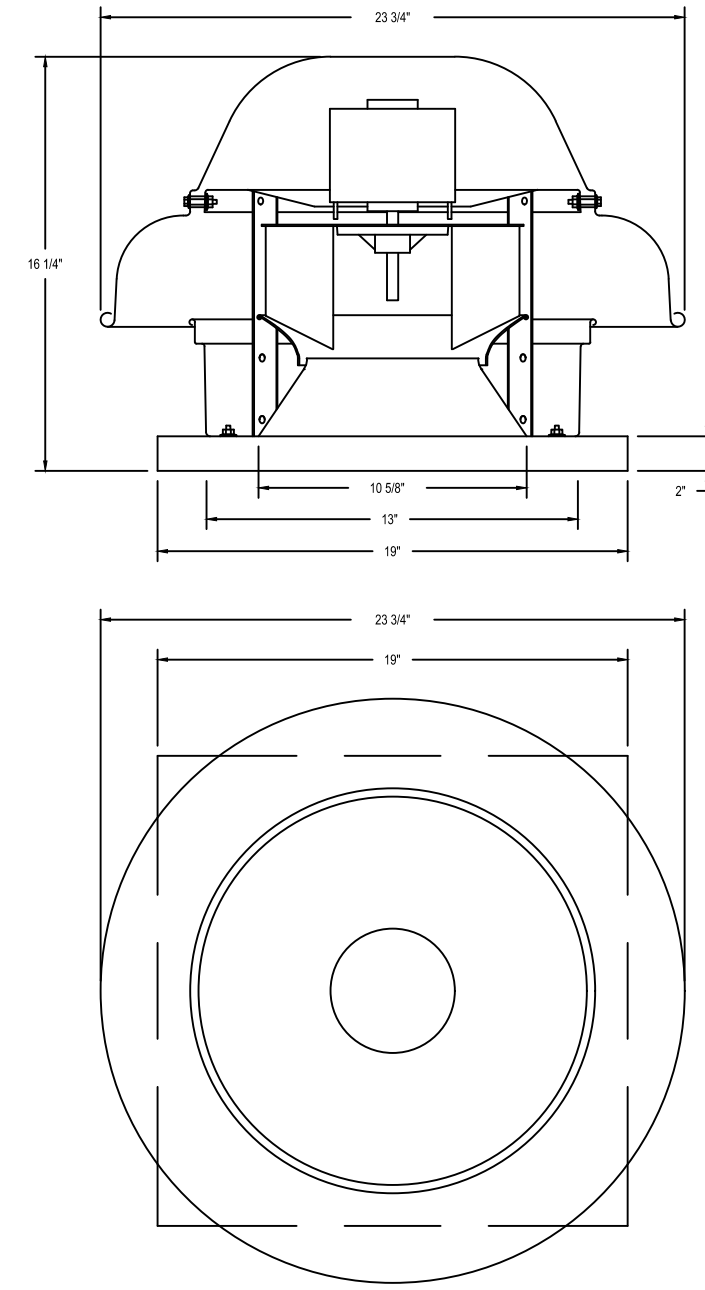
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST	SUPPLY				
		GRAVITY DAMPER	WALL MOUNT	SIZE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	PRV-1 RESTROOM						
2	PRV-2	YES					
3	PRV-3	YES					
4	EF-1						

CURB ASSEMBLIES

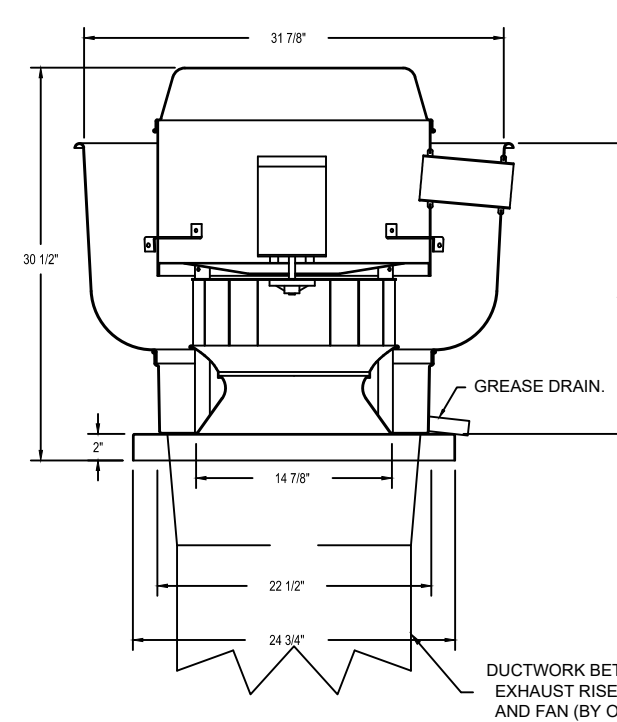
NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	#1	PRV-1 RESTROOM	22 LBS	CURB	17.500"W X 17.500"L X 20.000"H
2	#2	PRV-2	78 LBS	CURB	23.000"W X 23.000"L X 28.000"H VENTED HINGED 16 GAUGE
3	#3	PRV-3	78 LBS	CURB	23.000"W X 23.000"L X 28.000"H VENTED HINGED 16 GAUGE

FAN #1 (DR13FA) - EXHAUST FAN (PRV-1 RESTROOM)



TOP VIEW

FAN #2 (DURS-2) & #3 (DURS-3) - DURSIFA EXHAUST FAN



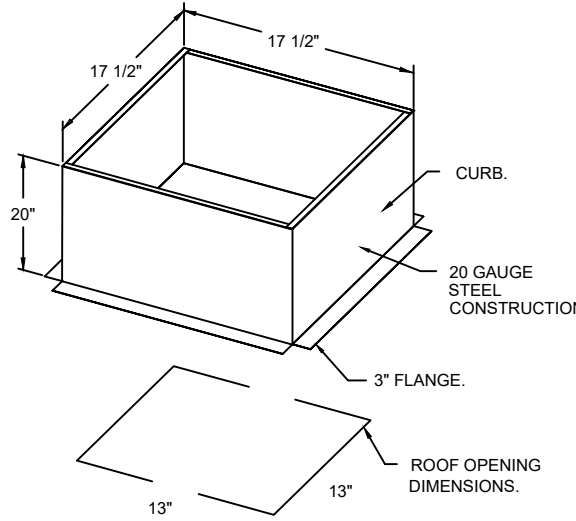
TOP VIEW

FEATURES:

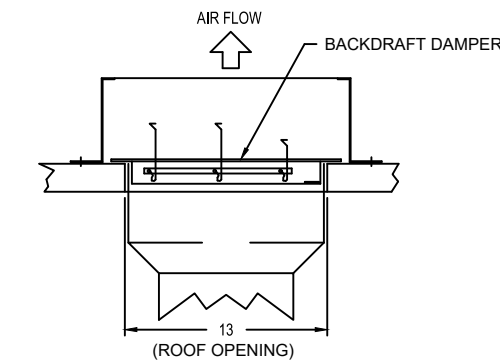
- DIRECT DRIVE CONSTRUCTION (NO BELT/PULLEYS)
- ROOF MOUNTED FANS
- UL705
- SAFETY DISCONNECT
- STANDARD BIRD SCREEN
- SPEED CONTROL
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)

OPTIONS:

- ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL, ASC-TELECO, CCW ROTATION
- 112BDD DAMPER
- 2 YEAR PARTS WARRANTY



BACKDRAFT DAMPER INSTALLATION



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELT/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL702 AND ULCS-8445
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING
- NEMA 3R SAFETY DISCONNECT SWITCH

NORMAL TEMPERATURE USE TEST:

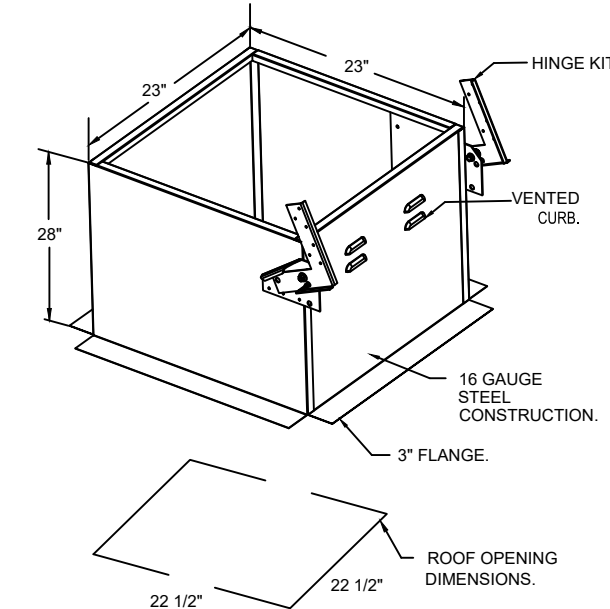
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETRIMENTAL EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST:

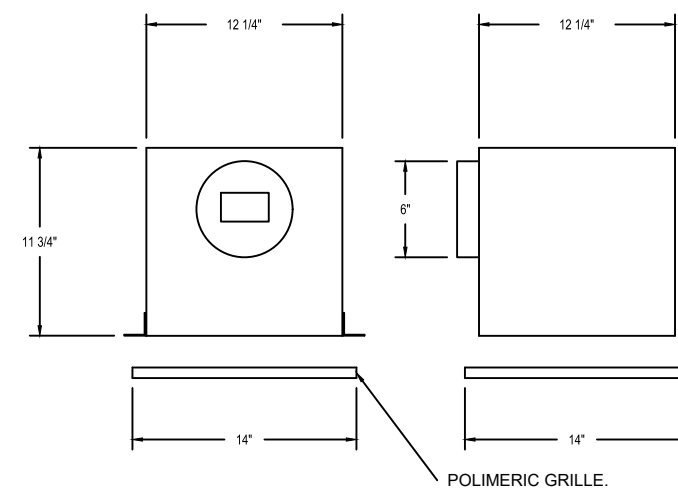
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 300°F (149°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS:

- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL, RTC-TELECO MOTOR, CCW ROTATION
- FAN BASE CERAMIC SEAL - DURS99FA - SHIP LOOSE - FOR GREASE DUCTS
- 2 YEAR PARTS WARRANTY



FAN #4 (CFA 10CA) - EXHAUST FAN (EF-1)

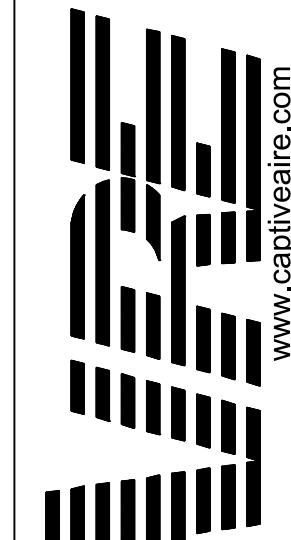


- FEATURES:**
- 1/2" ACOUSTIC HOUSING INSULATION
 - 20 GA. GALVANIZED STEEL HOUSING
 - PLUS TYPE DISCONNECT
 - BUILT IN AUTOMATIC BACKDRAFT DAMPER
 - AMCA SOUND & AIR CERTIFIED
 - UL LISTED
 - CAN BE INSTALLED IN CEILING OR WALL
 - 8 POSITION MOUNTING BRACKETS

- OPTIONS:**
- MG1 - METAL GRILLE KIT
 - WALL CAP - ACCEPTS 1" ROUND DUCT
 - 2 YEAR PARTS WARRANTY

REVISIONS

NO.	DESCRIPTION	DATE:



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Florida National Accounts

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CULVERS DESIGN

DATE: 7/11/2024

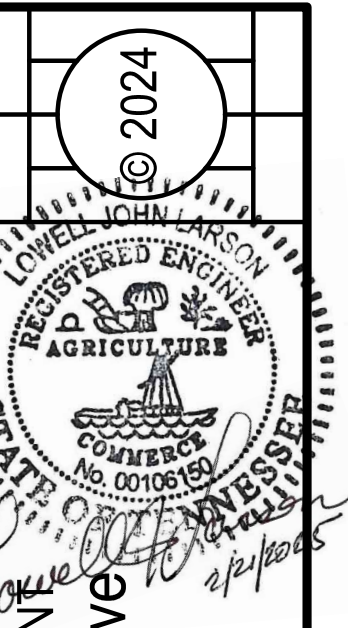
DWG.#: 6912492

DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

MASTER DRAWING

SHEET NO. 3



NEW CULVER'S RESTAURANT
505 Northgate Mall Drive
Chattanooga, TN 37415
County of HAMILTON

Culver's
Culver Franchising System, Inc.
1240 Water Street
Prairie du Sac, WI 53578
608-843-7880

OWNER:
BSJ ENTERPRISES, LLC
4737 County Road 101, #268
Minnetonka, MN 55345
Jack Hillen
612-940-2168

OLLMANN ERNEST MARTIN ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7190 Phone
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HVAC SCHEDULES & DETAILS -
EXHAUST FANS
Date: 11-20-2024
Revision:

2024-137

M204