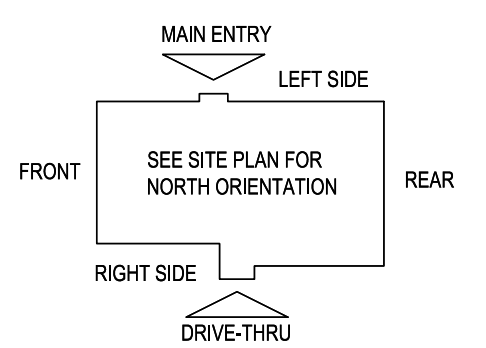


E5 HVAC PLAN
SCALE: 1/4" = 1'-0"



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 DEGF, COOLING 72 DEGF
2. KITCHEN: HEATING 68 DEGF, COOLING 74 DEGF

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	CARNES SFP24	2, 4
SD-2 - NOT USED									
SD-3	SUPPLY	LOUVERED	STEEL	3-WAY	SEE PLAN	SEE PLAN	SURFACE	CARNES SKSA	2, 4
SD-4	SUPPLY	LOUVERED	STEEL	4-WAY	12X12	SEE PLAN	SURFACE	CARNES SKSA	1, 2, 4
SD-5	SUPPLY	PERFORATED	STEEL	PERFORATED	24X24	SEE PLAN	LAY-IN	CARNES SPRB24	2, 4
RG-1	RETURN	SQUARE EGGRATE	ALUMINUM	N/A	24X24	22X22	LAY-IN	CARNES RAMPF	2, 3, 4
EG-1	RETURN	LOUVERED GRILLE	STEEL	N/A	12X12	SEE PLAN	SURFACE	CARNES RTLAH	1, 2, 4
TG-1	TRANSFER	LOUVERED GRILLE	STEEL	N/A	SEE PLAN	SEE PLAN	SURFACE	CARNES RTLAH	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.									

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NEW CULVER'S RESTAURANT
1180 NW Buckner Tarsney Road
MERCADO PLAZA
Grain Valley, MO 64029 County of JACKSON

OWNER:
1180 PROPERTY
2751 NE Douglas Street
Lee's Summit, MO 64064
Joy Connaughy, President
608-666-5506

ARCHITECT:
JULMANN ASSOCIATES ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7790 Phone

ENGINEER:
LOWELL JOHN LARSON - ENGINEER
MO# 2013005415

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HVAC PLAN, DIFFUSER SCHEDULE

Date: 10-4-2022 Revision:

2022-106
M101

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 APPARATUS).
- PROVIDE SHOP DRAWINGS TO THE ARCHITECT/DESIGNER FOR EQUIPMENT, FANS, REGISTERS, ETC. PRIOR TO PROCUREMENT.
- PROVIDE OWNER W/ COLOR CHOICES FOR SWITCHES & OTHER APPARATUS 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.
- HVAC CONTRACTOR TO INSTALL #2 GAS W/ 1/4" WATER COLUMN MAX. PER STATE CODE & AGA GUIDELINES (LABEL AS REQUIRED).
- CONTRACTOR TO VERIFY GAS METER CAPACITY W/ LOCAL GAS SUPPLIER.
- 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 APPARATUS).
- INSULATE DUCT WORK TO SMACNA GUIDELINES & STATE CODES.
- INSTALL VOLUME CONTROL DAMPERS AS INDICATED ON PLANS.
- FLEXIBLE ROUND DUCT WORK NOT TO EXCEED 8 FEET IN LENGTH. AVOID UNNECESSARY TURNS & SLACK.
- VERTICAL RETURN AIR DUCT WORK DOWN FROM RTU'S 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.

RTU SCHEDULES		COOLING											HEATING					ELECTRICAL		OTHER													
		UNIT No	AREA SERVED	NOM TON	VAV OR CAV	MODULATING HGRH	SA FAN VFD	SUPPLY CFM	MIN OA CFM	ESP	OA TEMP		ROOM TEMP		SUPPLY TEMP			GAS OR ELEC	MBH/KW	SUPPLY CFM	OAT °FDB	EAT °FDB	LAT °FDB	MODULATING SS HEAT EXCH	VOLTAGE	PHASE	POWER EXHAUST	EF	BUILDING PRESS CONTROL	ERV	ERV RA/EA CFM	AVERAGING ROOM SENSORS	ACCEPTABLE MANUFACTURERS
											°FDB	°FWB	°FDB	%RH	COIL LAT °FDB	COIL LAT °FWB	MODULATING COMPRESSOR																
RTU-1	Dining Room	18.47	CAV	YES	YES	6,150	1,750	0.75"	94	75	75	51	55.0	54.6	YES	GAS	217	6,150	-8	49.4	83	YES	208	3	NO	-	NO	NO	-	NO	NO	ACCUREX, CAPTIVEAIRE	
RTU-2	Kitchen	18.51	CAV	YES	YES	6,225	1,700	0.75"	97	75	75	52	55.0	54.8	YES	GAS	167	6,225	-8	50.3	75.81	YES	208	3	NO	-	NO	NO	-	NO	NO	ACCUREX, CAPTIVEAIRE	

ADDITIONAL OPTIONS FOR BOTH UNITS -

- 2" MERV 13 FILTERS
- MODULATING CONDENSER FANS
- TOUCHSCREEN CONTROLLER
- REMOTE TEMPERATURE AND HUMIDITY SENSORS
- WEATHERPROOF DISCONNECT
- ECONOMIZER CONTROL WITH FAULT DETECTION & DIAGNOSTICS
- 14" TALL INSULATED CURB
- SERVICE OUTLET
- CONDENSATE OVERFLOW SWITCH
- RETURN AIR SMOKE DETECTOR
- BAROMETRIC RELIEF
- HAIL GUARD
- CONDENSATE TRAP KIT

- 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 EXHAUST FAN - REFER TO SHEET M204
- ITEM #49A GRIDDLE HOOD - REFER TO SHEET M202
- ITEM #59A FRYER HOOD - REFER TO SHEET M203

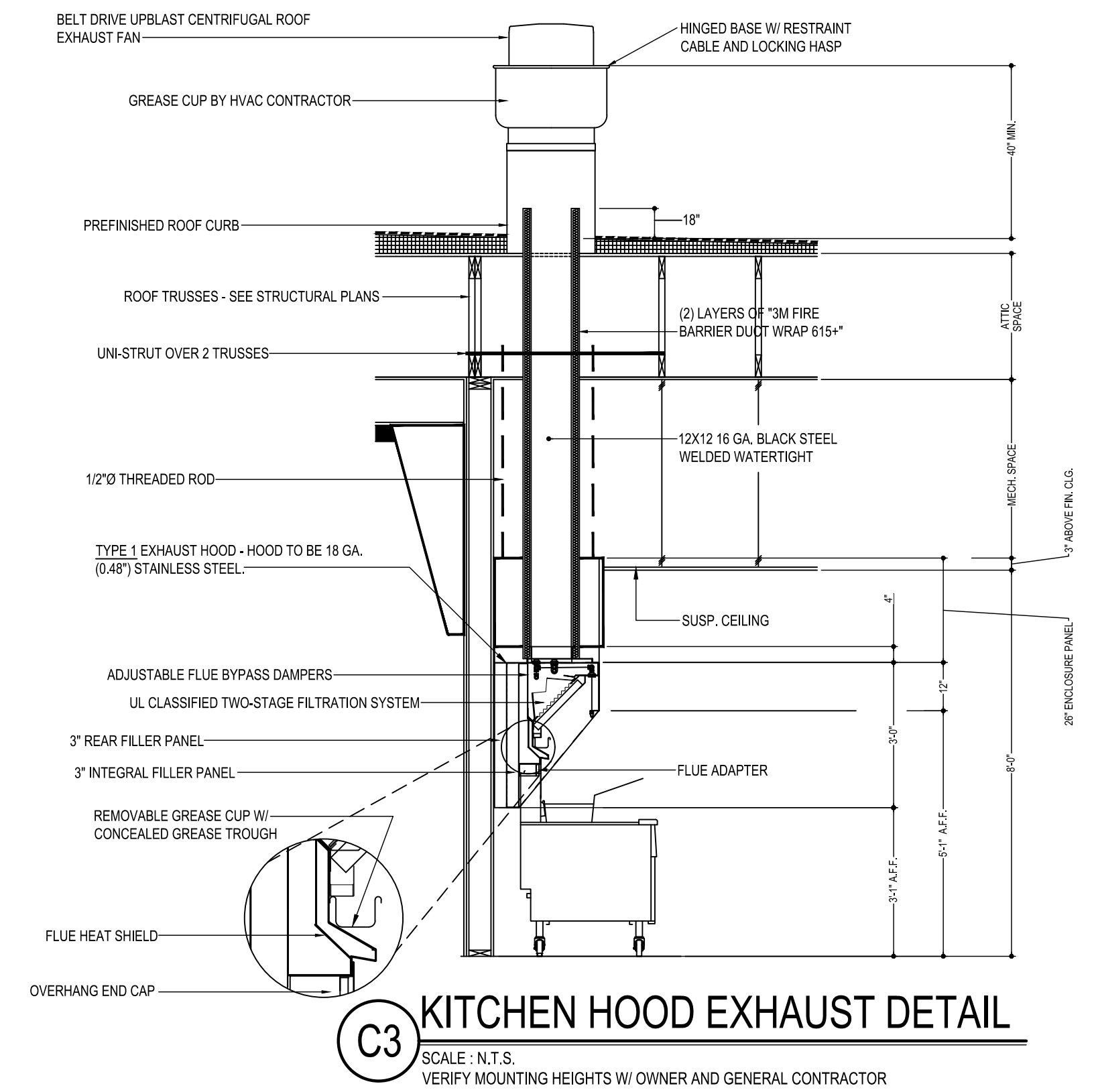
COOKING APPLIANCE / TYPE 1 HOOD INTERLOCK

- 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.

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 (x2)	MOP ROOM	150		
TOTAL =		3,450		
VENTILATION REQUIRED PER 2015 INTERNATIONAL MECHANICAL CODE				
EQUIPMENT TAG	SERVICE	CFM		
RTU-1	DINING ROOM	1,477		
RTU-2	KITCHEN	223		
TOTAL =		1,700		
3,450 > 1,700 -> USE 3,450 CFM FOR OUTSIDE AIR CFM				
OVERALL AIRFLOW SUMMARY				
EQUIPMENT TAG	SERVICE	SUPPLY CFM	RETURN CFM	OUTSIDE AIR CFM
RTU-1	DINING ROOM	6,150	4,400	1,750
RTU-2	KITCHEN	6,225	4,525	1,700
TOTAL OUTSIDE AIR CFM =		3,450		



NATIONAL ACCOUNT PROGRAM

- ACCUREX / GREENHECK FAN CORPORATION - KITCHEN HOODS, EXHAUST FANS, ROOF CURBS, ANSUL SYSTEMS, ACCESSORIES AND TEST AND BALANCE
CONTACT PHILIP KRAFT: 1-262-227-7865 philip.kraft@accurex.com
SECONDARY CONTACT BRAD BORCHARDT: 1-715-551-0809 brad.borchardt@accurex.com
SECONDARY CONTACT ANDY JACOBS: andy.jacobs@accurex.com
ACCUREX WILL PROVIDE BALANCED AIRFLOW AND FUNCTIONAL CHARACTERISTICS OF THE HVAC AS THEY RELATE TO AIRFLOW AND RESISTANCE ONLY. SERVICES TO BE PERFORMED BY A CERTIFIED NEBB FIRM AND ITS MANAGING GROUP - NATIONAL TAB
- CARNES COMPANY - DIFFUSERS AND GRILLES
NATIONAL ACCOUNTS SALES: CHRIS STRATTON - (608) 945-6411 cstratton@carnes.com
NATIONAL ACCOUNTS REP: BRIAN BAKER - (608) 945-6411 bbaker@carnes.com

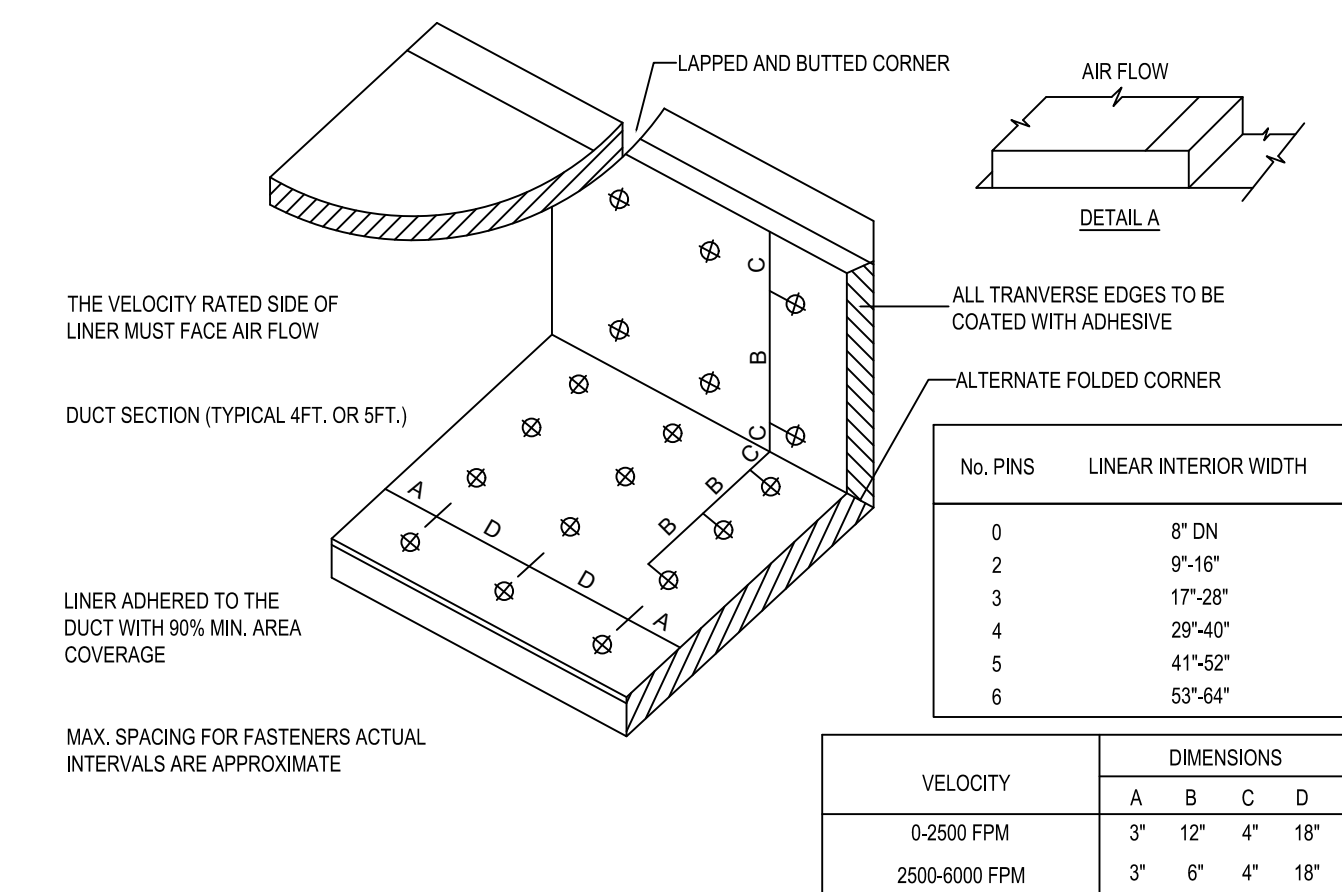
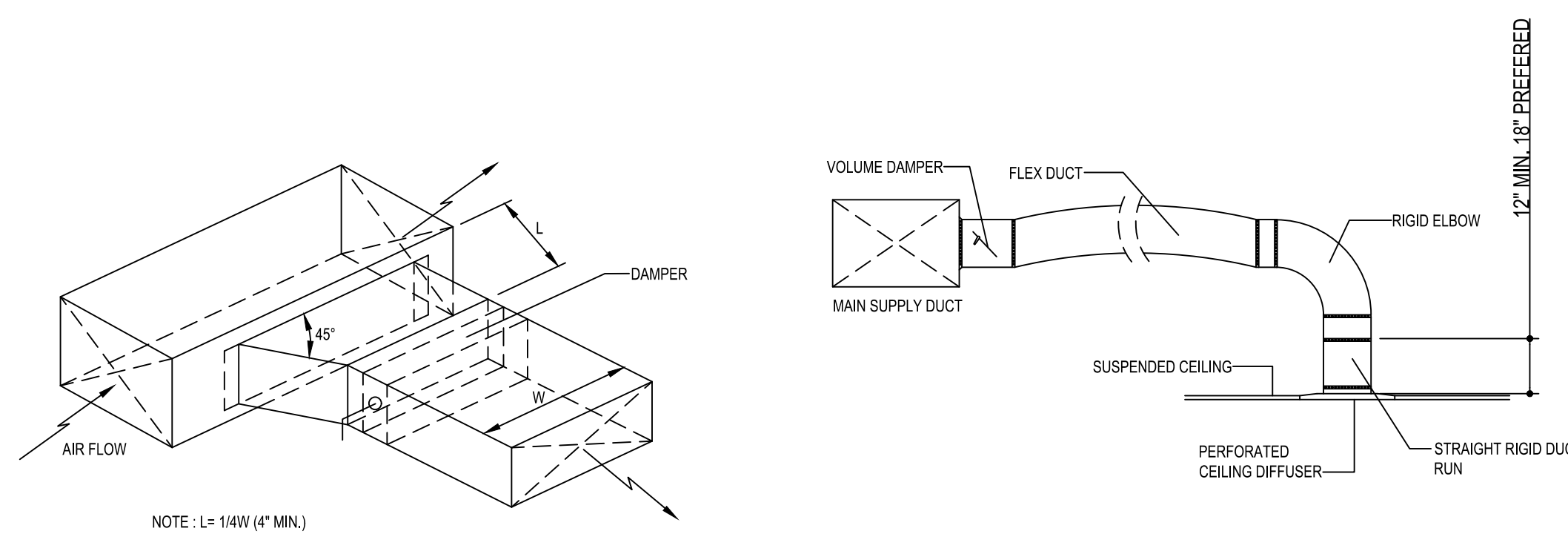
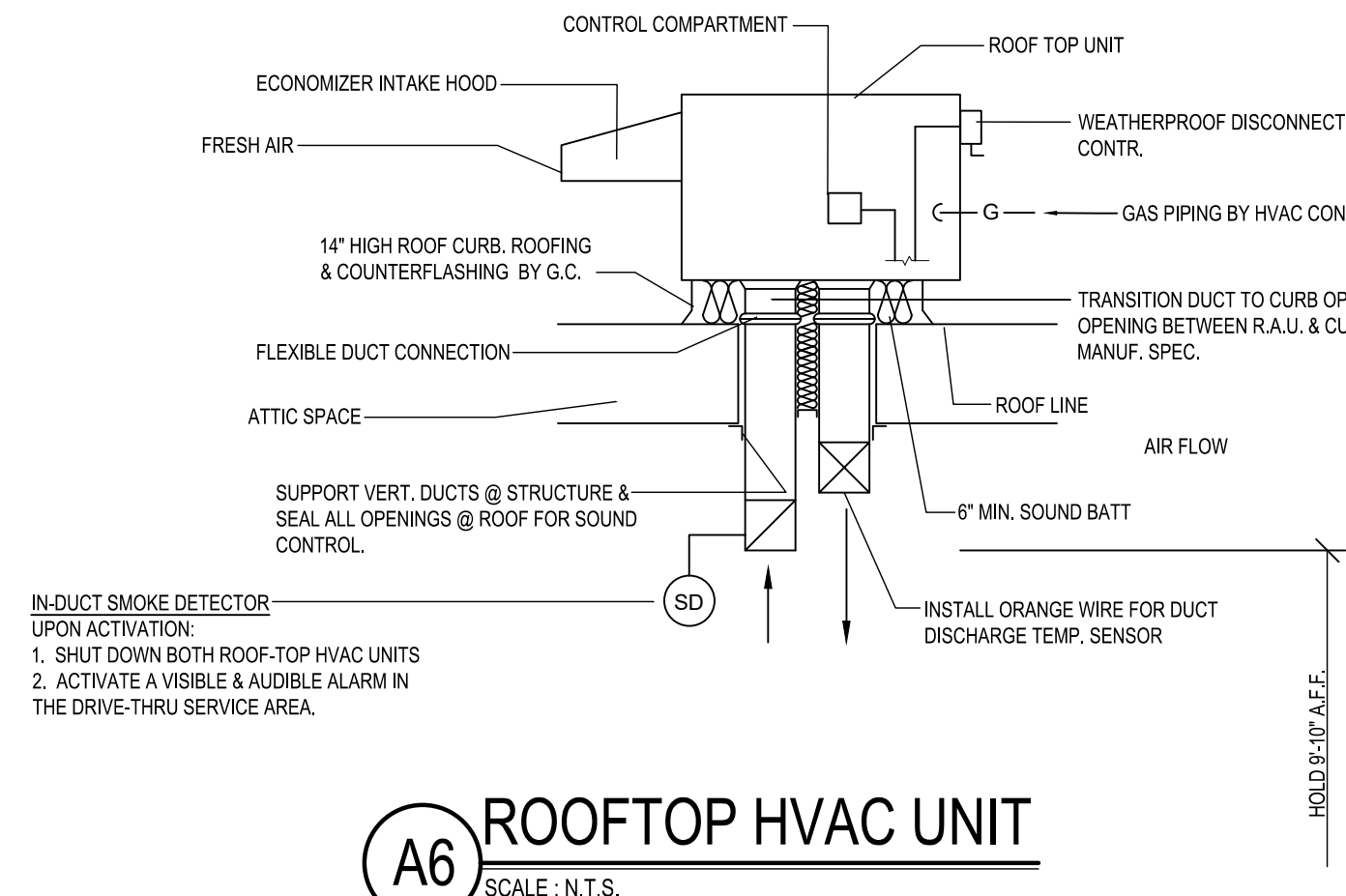
CONTROL NOTES

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

- ACCUREX WILL PROVIDE BALANCED AIRFLOW & FUNCTIONAL CHARACTERISTICS OF THE HVAC SYSTEM AS THEY RELATE TO AIRFLOW & AIR PRESSURE ONLY. SERVICES TO BE PERFORMED BY A CERTIFIED NEBB FIRM & ITS MANAGING GROUP NATIONAL TAB.
- SERVICES NOT INCLUDED: PULLEY / SHEAVE CHANGES, MOTOR CHANGE OUTS, OR RETURN TRIPS DUE TO DELAYS CAUSED BY JOB INCOMPLETENESS.



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NEW CULVER'S RESTAURANT
1180 NW Buckner Tarsney Road
MERCADO PLAZA
Grain Valley, MO 64029 County of JACKSON

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

OWNER:
1180 PROPERTY
2751 NE Douglas Street
Lee's Summit, MO 64064
Joy Conaughy, President
608-566-5506

ARCHITECT:
JEFREY W. ERNEST - ARCHITECT
MO# 2013005415

ARCHITECTS:
OLLMANN ASSOCIATES ARCHITECTS
200 South State Street
Belleville Illinois 61008
815-544-7790 Phone
MO State Certificate of Authority #W00957886

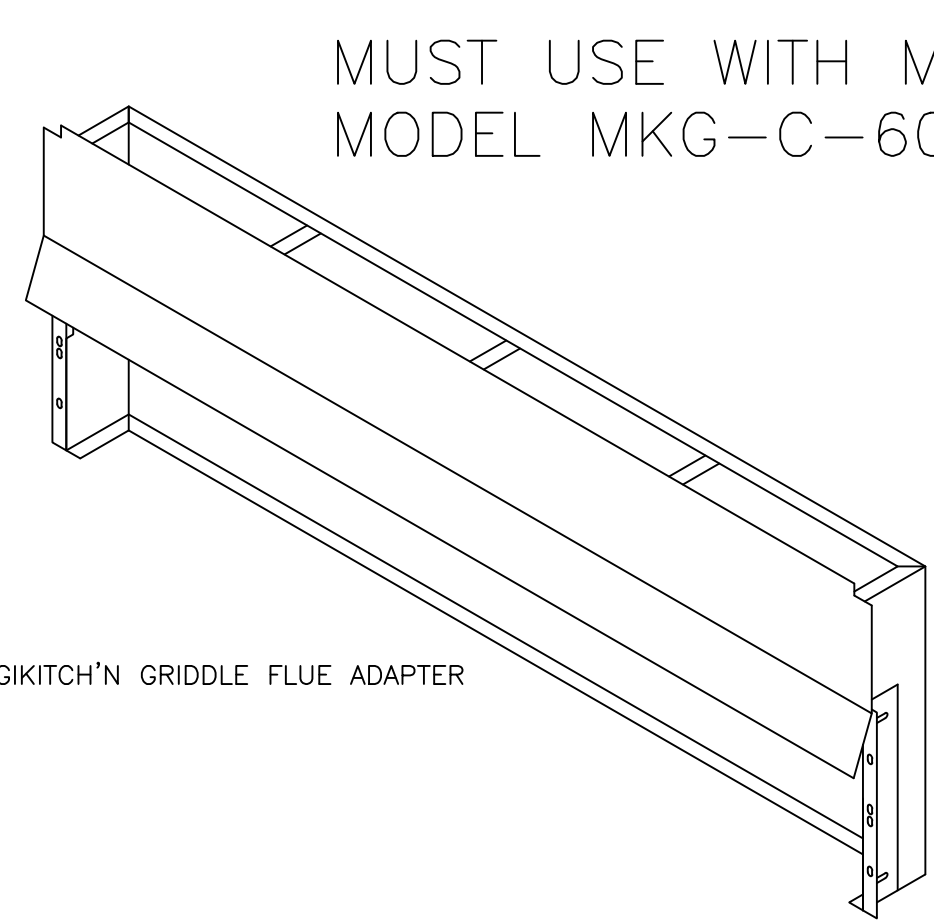
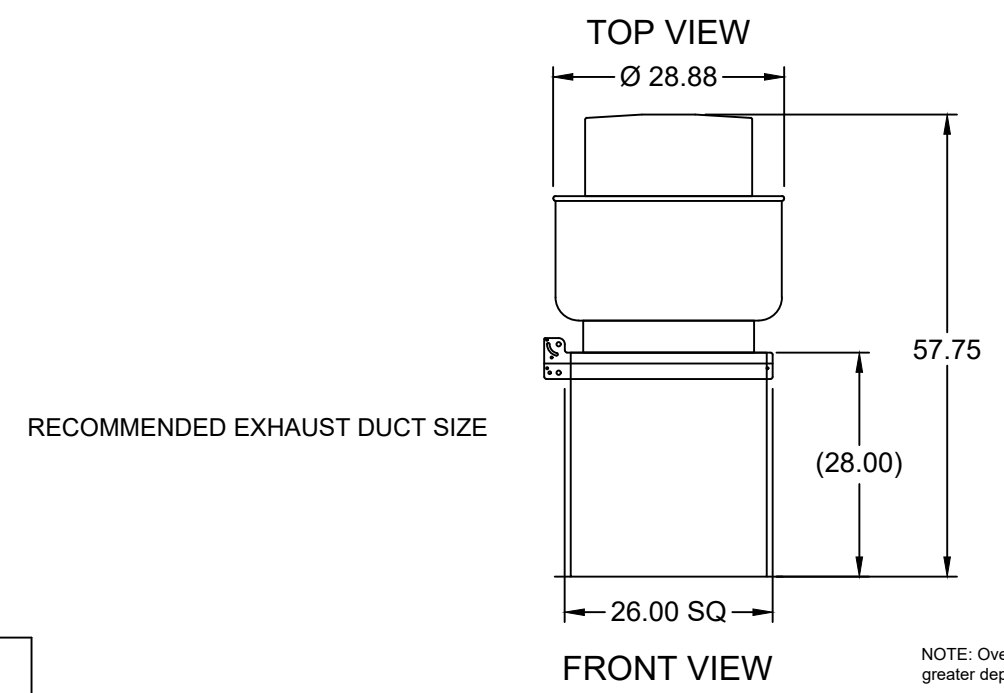
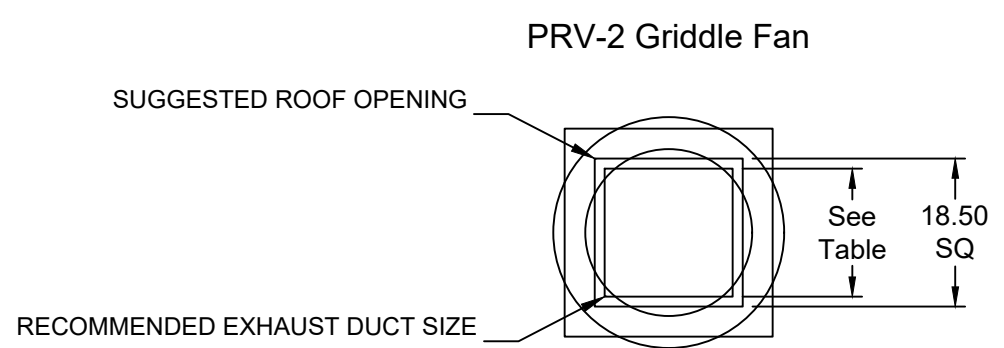
ENGINEER:
LOWELL JOHN LARSON - ENGINEER
MO# 2013005415

HVAC SCHEDULE & DETAILS

Date: 10-4-2022
Revision:

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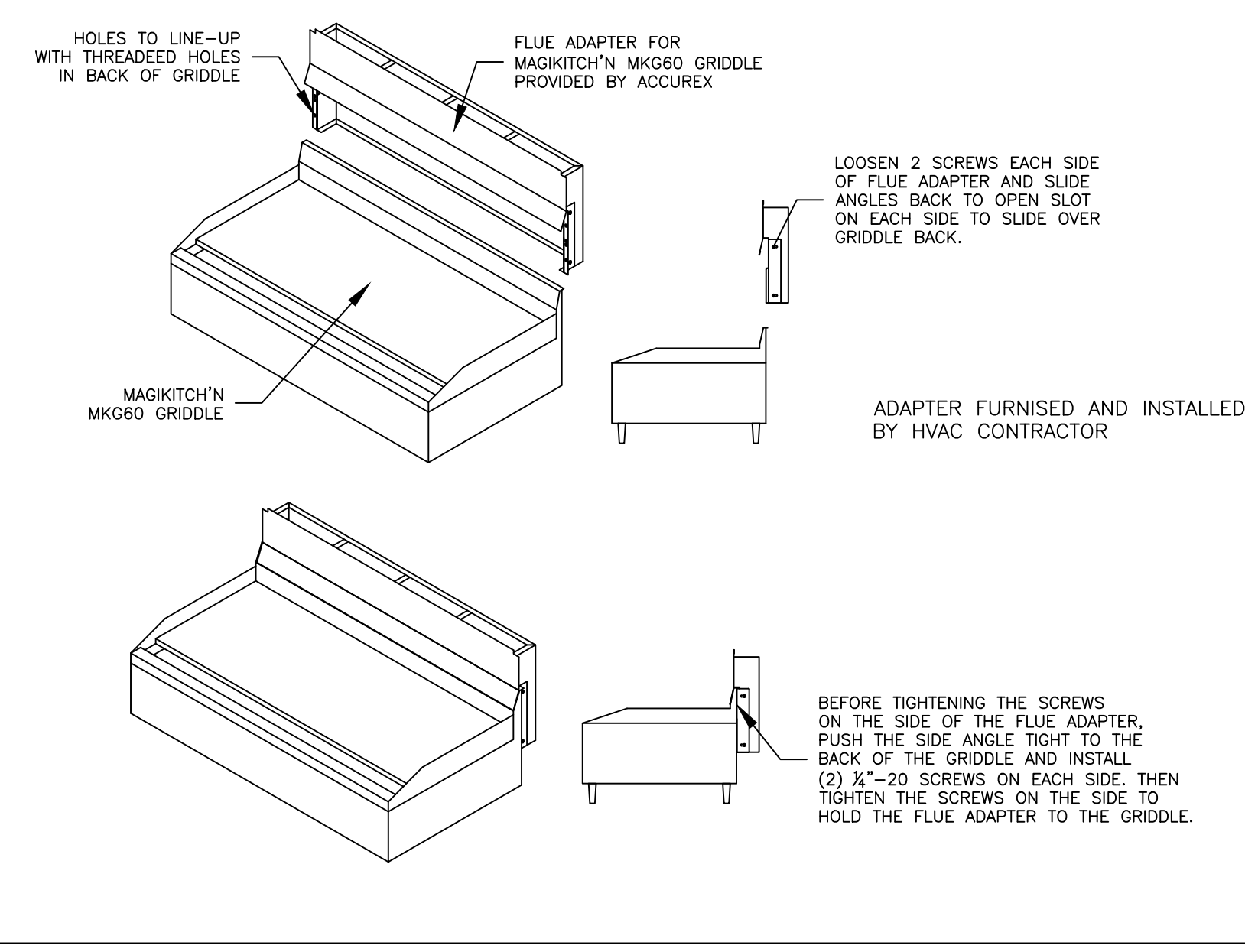
2022-106
M201



MUST USE WITH MAGIKITCH'N MODEL MKG-C-60

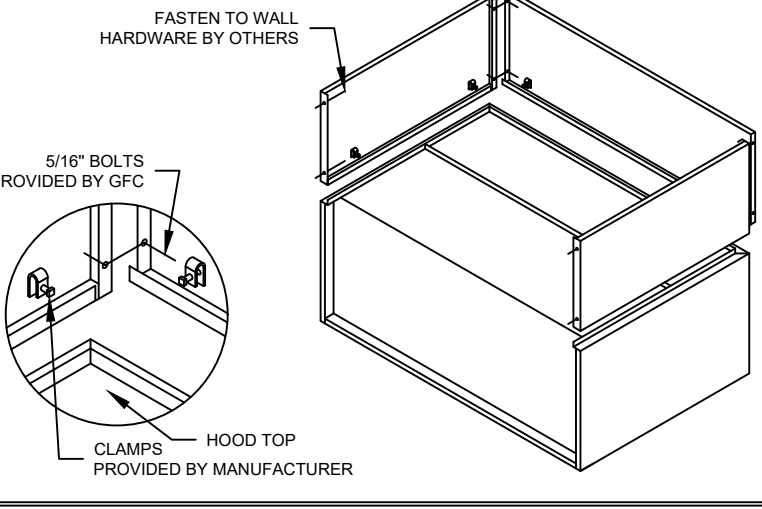
60" MAGIKITCH'N GRIDDLE FLUE ADAPTER

MAGIKITCH'N MKG-C-60 GRIDDLE FLUE ADAPTER MOUNTING INSTRUCTIONS



EQUIPMENT SCHEDULE												
TYPE 1 KITCHEN HOOD					MARK: ITEM#49							
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	HOOD DIMENSIONS			GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION				
1	XGEP-66-S SINGLE WALL EXHAUST ONLY LOW PROXIMITY	64 IN.	TOP 23 IN. FRONT 12 IN. BOT 8 IN. BACK 36 IN.	RIGHT	600 DEG F	136.0 LBS.	SINGLE					
ILLUMINATION DETAILS					GREASE FILTRATION DETAILS							
HOOD NO.	FIXTURE TYPE	QTY	INTENSITY FT CANDLES	TYPE / MODEL MATERIAL	QTY	LENGTH	HEIGHT					
1	NONE	NA	0 / 0 IN. OC	GREASE GRABBER STAINLESS STEEL	4	16 IN.	16 IN.					
HOOD SECTION # COLLAR #		EXHAUST PLENUM COLLARS										
1.1		DISTANCE TO END (IN.)	WIDTH (IN.)	LENGTH (IN.)	DIAMETER (IN.)	VOLUME (CFM)	S.P. (IN. WC)	VELOCITY (FT/MIN)				
		32	12	12	NA	1500	1.918	1500 = 281 CFM / FT				
TOTAL EXHAUST CFM - SECTION 1												
OPTIONS AND ACCESSORIES												
430 STAINLESS STEEL WHERE EXPOSED UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625 BACK NON-INTEGRAL AIR SPACE - 3 IN WIDE 28 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED FACTORY MOUNTED EXHAUST COLLAR(S) THIS HOOD IS PART OF A TEMPERATURE INTERLOCK CONTROL SYSTEM INCLUDES PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH EMBOSSED STAINLESS STEEL FINISH FOR HIGH CORROSION RESISTANCE EQUIPMENT SPECIFIC S/S FLUE ADAPTER												
SPECIAL DESIGN REQUESTS												
SDR #K1100145 - FLUE BYPASS HOOD												
FIRE SUPPRESSION SYSTEM												
MARK: FS FOR GRILL HOOD												
MANUFACTURER / MODEL	SUPPRESSANT TYPE	FLOW POINTS	SUPPLY LINE	DETECTION	MOUNTING							
ANSUL R-102 WET CHEMICAL	WET CHEMICAL	6 UTILIZED 11 AVAILABLE	CONTINUOUS	FUSIBLE LINK	REMOTE MOUNTED							
FULL INSTALLATION (INCLUDES PRE-PIPED HOODS) WITH DETECTION AND FACTORY COORDINATED INSTALL CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED SUPPRESSION AGENT - INCLUDED - 3 GAL. - (1) 3 TANK(S) GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE SUPPLIED UP TO 2" REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS METAL BLOW-OFF CAPS - INCLUDED FIRE SYSTEM PERMIT - REQUIRED - FEE INCLUDED 360°F. FUSIBLE LINK OR AS TESTED AND INSTALLED BY LOCAL INSTALLER PER UL MANUAL												
FIRE SYSTEM PROTECTED HOOD(S) (UL-300) (MARK NAME / SECTION)												
GRILL HOOD SECTION 1 - (LENGTH 64.0 IN.) - LOW PROXIMITY HOOD - GREASE GRABBER FILTRATION SYSTEM												
Belt Drive Upblast Centrifugal Roof Exhaust Fan												
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (lb.)	Size (hp)	V/CP	Encrt.	Motor RPM	Windings	FLA
1	XRUB-160XP-15	1500	2.337	2,411	1.29	171	1.5	208/60/3	CP	1725	1	6.6
OPTIONS AND ACCESSORIES												
UL/GUL 762 Listed - "Power Ventilators for Rest. Exh. Appliances" Switch, NEMA-1, (PN N1TSND-3-30) Toggle, Shipped with unit Larger curb cap size - 28" Square Roof curb-Galv., GPF-26-G28, Under sized 1.5" Total Hinged Base (Attached) High Temp Curb Seal Rated for Continuous duty at 2000F (Attached) Clean-out Port Grease Trap with Drain Connection (PN 475538) Heat Baffle (Attached) Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs)												

ENCLOSURE PANEL INSTALLATION DETAIL



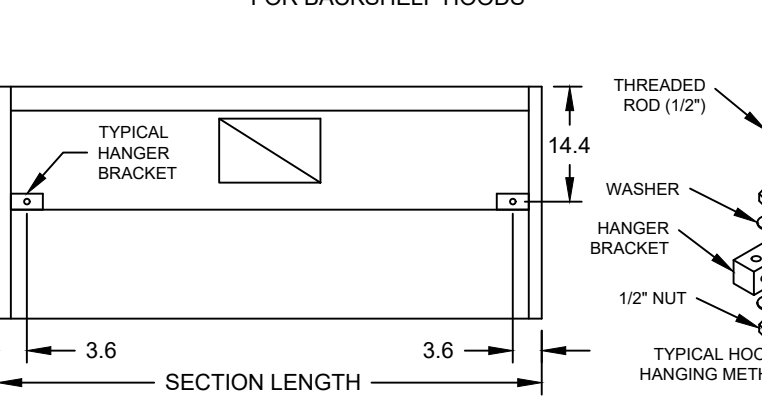
HOOD HANGING HEIGHT FOR FIRE SYSTEMS

VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

RECOMMENDED HANGING HEIGHT = 60" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.

OTHER HANGING HEIGHT = _____ FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

HOOD HANGER BRACKET DETAIL FOR BACKSHELF HOODS



GENERAL DRAWING NOTES

Verify building entry conditions or limitations for equipment access to space.

Verify type and height of finished ceiling and if hood(s) may extend above finished ceiling (if required).

Seismic installation and bracing of equipment is by others.

Greenheck will not accept liability for problems that result from sub-standard installation. Including field electrical wiring that deviate from supplied diagrams, globe conditions (ductwork, fuel types and structural conditions) that GFC has not been notified of at the time of ordering. Or use of this equipment other than that for which it is designed.

It is the responsibility of the purchaser to hire qualified personnel for installation and start-up of all equipment. Installation and start-up information is shipped with all equipment via the Installation, Operation and Maintenance Manual (IOM), also included is a troubleshooting guide. Have all start-up info available prior to any warranty claims and/or factory technical support.

VENTILATION SYSTEM NOTES

Greenheck ventilators are designed in compliance with all national codes: NFPA # 96, national electric code, BOCA, uniform mechanical code, international mechanical code, and southern building conference. See national evaluation report #436 for allowable values, and/or conditions of use concerning material presented in this document. Local codes may vary. It is the responsibility of the purchaser to submit drawings to local authorities.

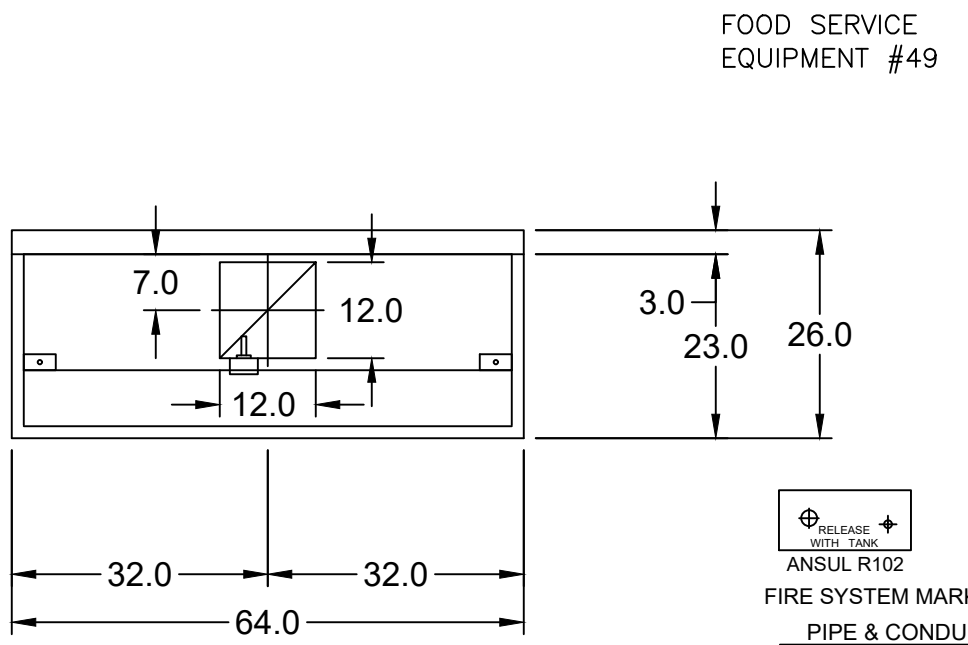
Exhaust and supply air volumes are to be maintained within -5% to +10% tolerance of values indicated. Static pressure(s) indicated are for the ventilator at the duct connection(s) only.

The grease filter face velocities are based on the filter manufacturers recommendations for maximum grease extraction. Inlet opening air velocities for waterwash, dry cartridge and high velocity cartridge filters manufactured by Greenheck are designed to deliver maximum grease extraction.

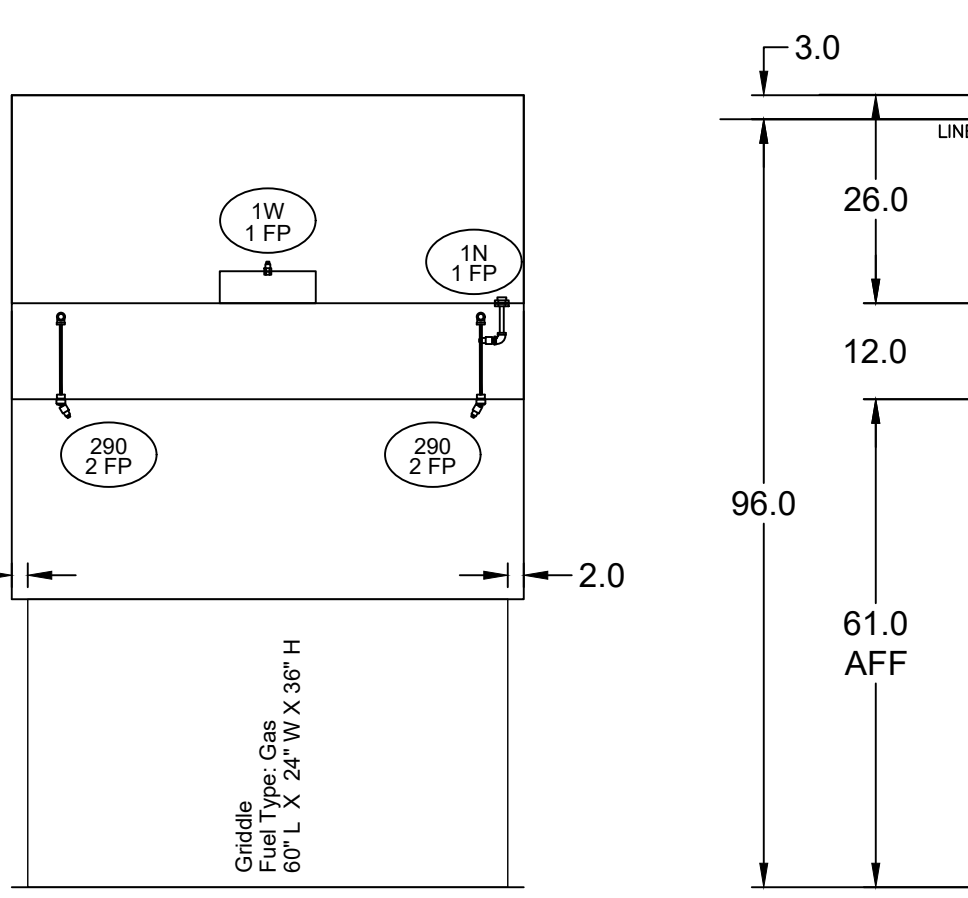
Hoods installation (by others unless otherwise noted) shall be in accordance with NFPA # 96 and applicable building codes.

PROPRIETARY INFORMATION NOTICE

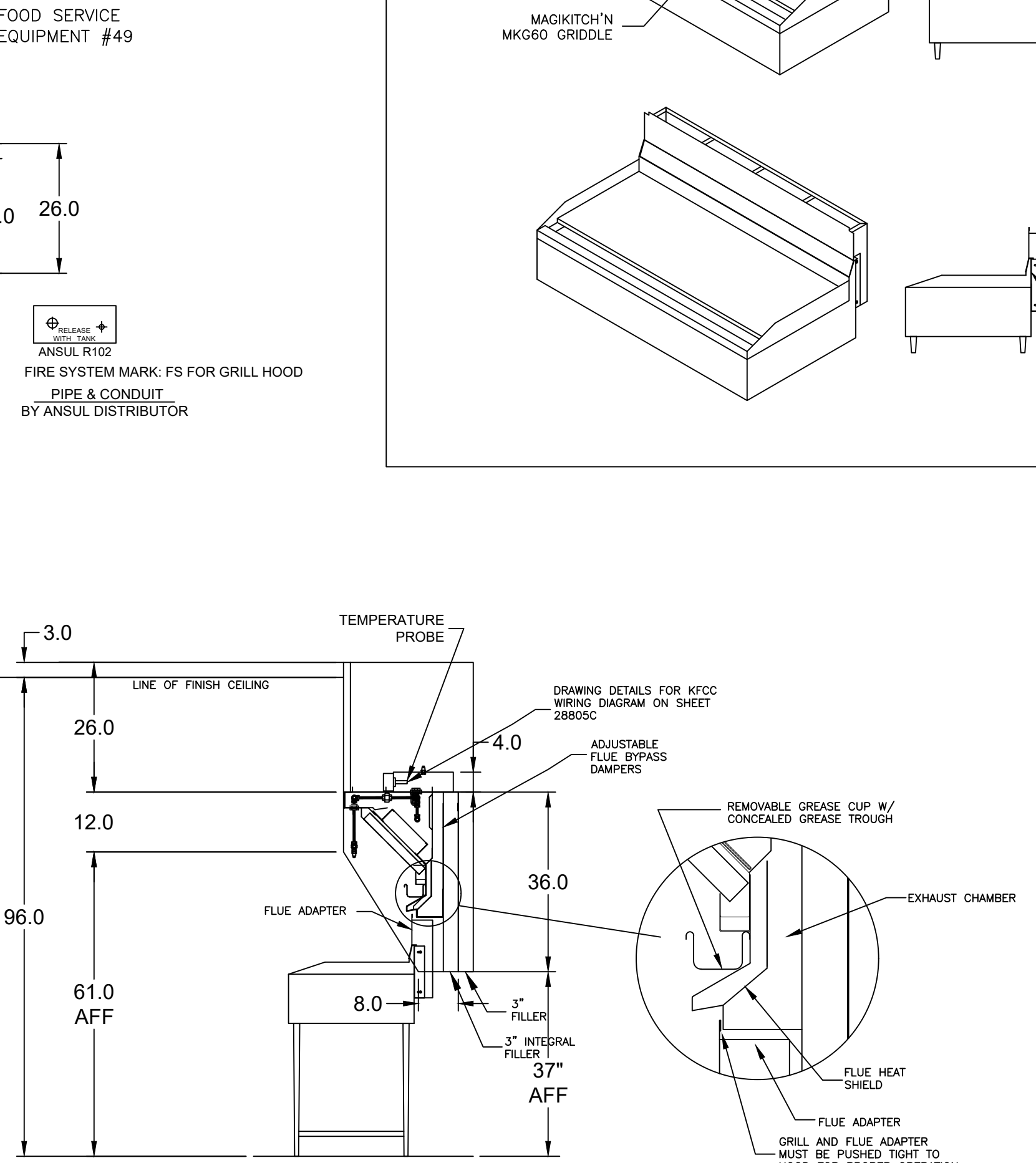
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MARK: ITEM #49 PLAN VIEW

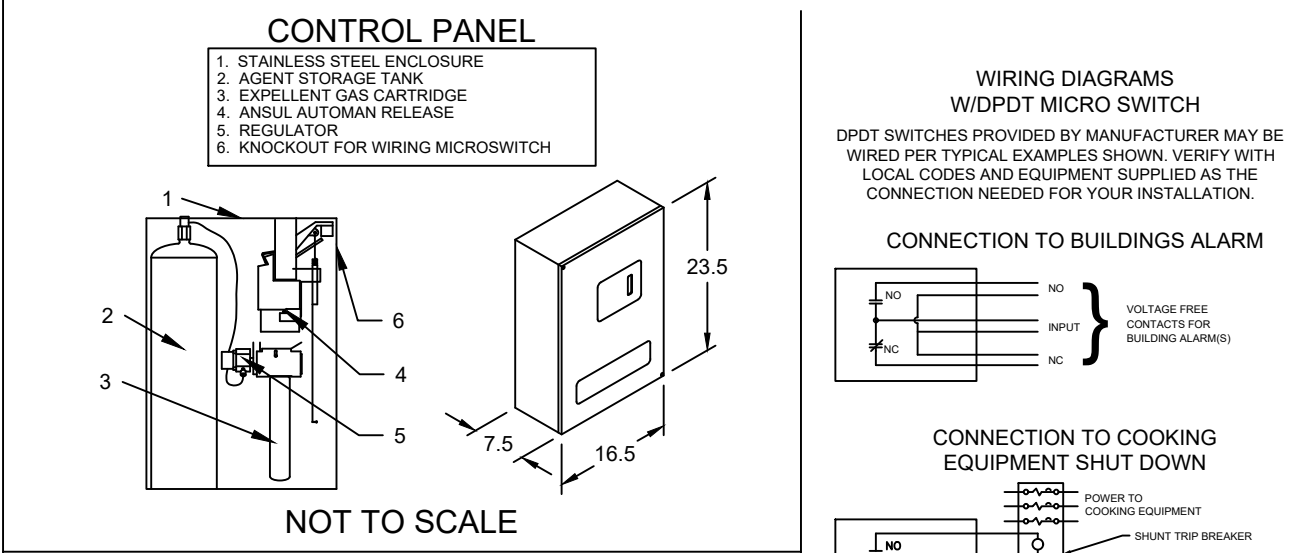


MARK: ITEM #49 ELEVATION VIEW



MARK: ITEM #49 SECTION VIEW

ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC



CONTROL PANEL

1. STAINLESS STEEL ENCLOSURE
2. AGENT STORAGE TANKS
3. EXPELLENT GAS CARTRIDGE
4. ANSUL AUTOMAN RELEASE
5. REGULATOR
6. KNOCKOUT FOR WIRING MICROSWITCH

NOT TO SCALE

NOTES:

Wet chemical fire protection system to be Ansul R-102, designed in compliance with UL 300 requirements.

- Verification of all cooking equipment make, model and location required for all fire protection systems.
- All fire system piping is standardly to the right end of the hood unless a wall is located on the right end.
- Ansil Automan Release to be located within 60" of hood.

The basic fire system will include the following:

- Gas shut-off valve, if required, to be supplied by Manufacturer (up to 2" diameter as standard), and installed by a licensed plumber.
- Micro switch to be supplied by Manufacturer for connection to, but not limited to, building alarm system(s), exhaust and supply fans and electrical power shut-down. Field wiring and connections to be performed by a licensed electrician.

The basic fire system does NOT include the following:

- Full dump test other than what is specified per the installation manual, or to satisfy a state or local code. Permit and testing fees are not included unless noted under the equipment schedule for the fire system.
- More than two trips to the jobsite or special transportation, or overnight lodging requirements in remote areas. Normal travel distance is first 50 mi. (80.5 km) from office.
- Special classes or additional labor for access to security sensitive areas.
- Installation of gas shut-off valve.
- Special drawings required to satisfy state or local code. Plan examination fees, PE or FS Approval Stamp.
- Union labor, Government labor, or Prevailing wages required for final field hook-up.
- Any and all electrical components/connections required to shut down fans, shut off device for electric cooking equipment (shunt trip breaker), or activate an alarm system, etc.
- Any dismantling or reassembly required to gain access to the fire suppression piping located on the top of the hood.
- Rough-in hidden conduit for remote pull station or gas valve (flush mounted pull station)
- Installation of more than (1) remote pull station or distances greater than 20 ft (6.1M).
- Parts or labor required to correct piping due to cooking equipment changes or deviation from plans. OR Any changes for missing or additional parts other than those indicated on the Fire Suppression Detail.

CONNECTION TO BUILDINGS ALARM

CONNECTION TO COOKING EQUIPMENT SHUT DOWN

CONNECTION TO FAN SHUT DOWN

DO NOT SHUT DOWN EXHAUST FANS WITH THIS METHOD OF WIRING, IF PROHIBITED BY LOCAL CODES.

NOTES:

1. DENOTES FIELD INSTALLATION.
2. DENOTES FACTORY INSTALLATION.
3. DO NOT USE THIS WIRING IN SHIP-OUT CONDITION IN NORMAL INSTALLATION. BLACK WIRE TO BE USED ONLY FOR EXHAUSTS ALARM, LIGHT CIRCUITS, ETC.

Thank you for your interest in Accurex

SUBMITTAL

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APPROVED AS SUBMITTED

APPROVED AS NOTED

REJECTED - REVISE AND RESUBMIT

SIGNATURE _____ DATE _____

REV	DESCRIPTION	DATE

ACCUREX

CULVER'S MASTER TEMPLATE

SCALE: 1/24

CAD DRAWING NO. C28805A

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NEW CULVER'S RESTAURANT
1180 NW Buckner Tarsney Road
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Grain Valley, MO 64029
County of JACKSON

OWNER:
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815-544-7799 Phone

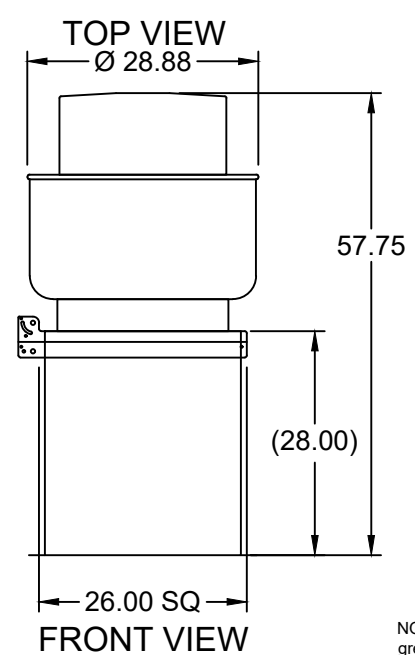
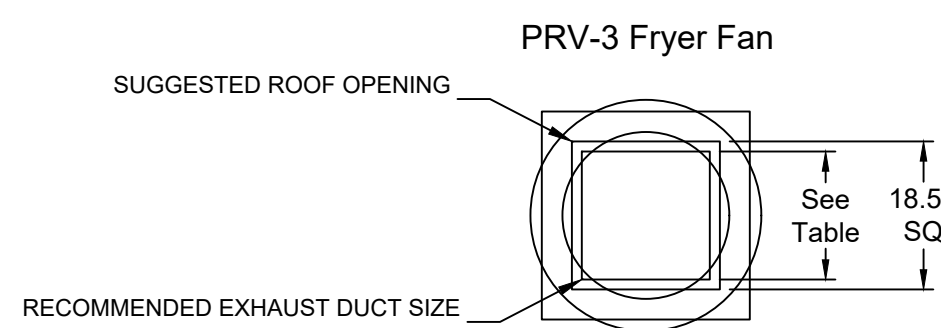
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GRIDDLE HOOD/EXHAUST SCHEDULE & DETAILS

2022-106

M202

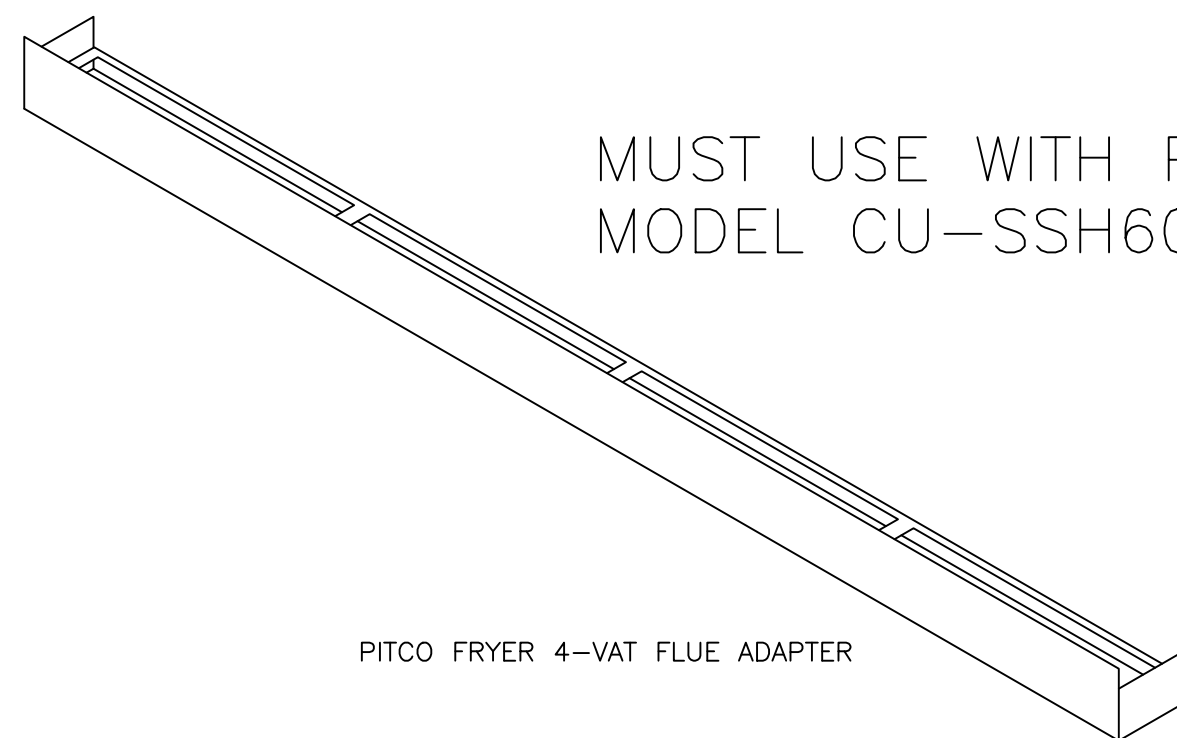
Date: 10-4-2022
Revision:



FOOD SERVICE EQUIPMENT #59

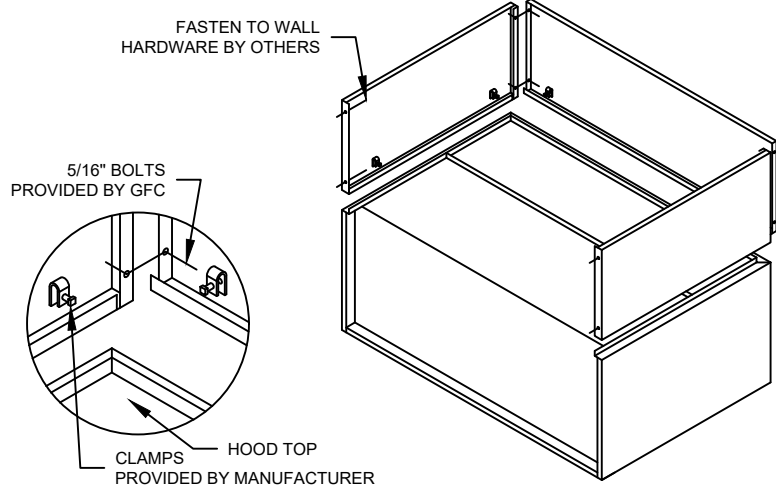
4-VAT FRYER BATTERY

MUST USE WITH PITCO MODEL CU-SSH60W



PITCO FRYER 4-VAT FLUE ADAPTER

ENCLOSURE PANEL INSTALLATION DETAIL

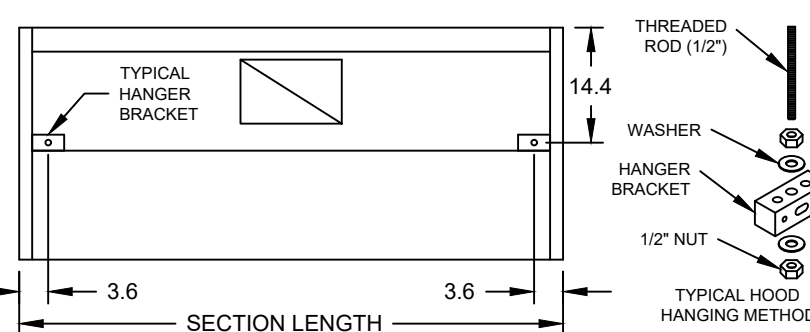


HOOD HANGING HEIGHT FOR FIRE SYSTEMS

VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

- RECOMMENDED HANGING HEIGHT = 60" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.
- OTHER HANGING HEIGHT = _____ FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

HOOD HANGER BRACKET DETAIL FOR BACKSHELF HOODS



GENERAL DRAWING NOTES

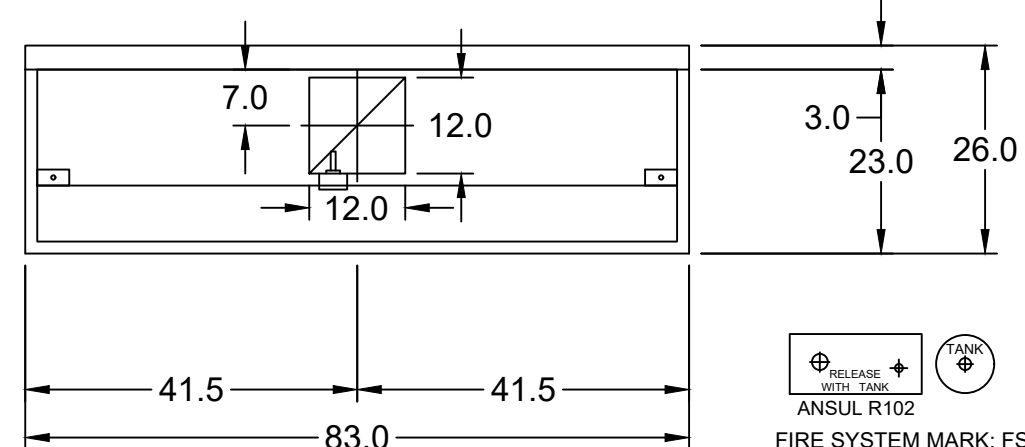
Verify building entry conditions or limitations for equipment access to space.
Verify type and height of finished ceiling and if hood(s) may extend above finished ceiling (if required).
Seismic installation and bracing of equipment is by others.
Greenheck will not accept liability for problems that result from sub-standard installation. Including field electrical wiring that deviate from supplied diagrams, globe conditions (ductwork, fuel types and structural conditions) that GFC has not been notified of at the time of ordering. Or use of this equipment other than that for which it is designed.
It is the responsibility of the purchaser to hire qualified personnel for installation and start-up of all equipment. Installation and start-up information is shipped with all equipment via the Installation, Operation and Maintenance Manual (IOM), also included is a troubleshooting guide. Have all start-up info available prior to any warranty claims and/or factory technical support.

VENTILATION SYSTEM NOTES

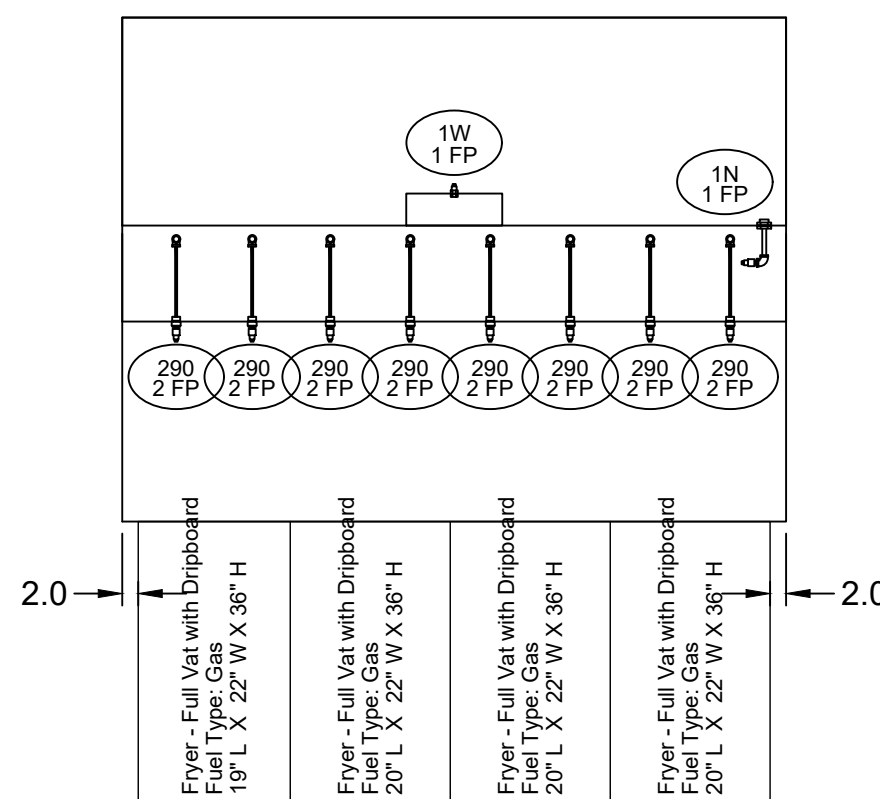
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Exhaust and supply air volumes are to be maintained within -5% to +10% tolerance of values indicated. Static pressure(s) indicated are for the ventilator at the duct connection(s) only.
The grease filter face velocities are based on the filter manufacturers recommendations for maximum grease extraction. Inlet opening air velocities for waterwash, dry cartridge and high velocity cartridge filters manufactured by Greenheck are designed to deliver maximum grease extraction.
Hoods installation (by others unless otherwise noted) shall be in accordance with NFPA # 96 and applicable building codes.

PROPRIETARY INFORMATION NOTICE

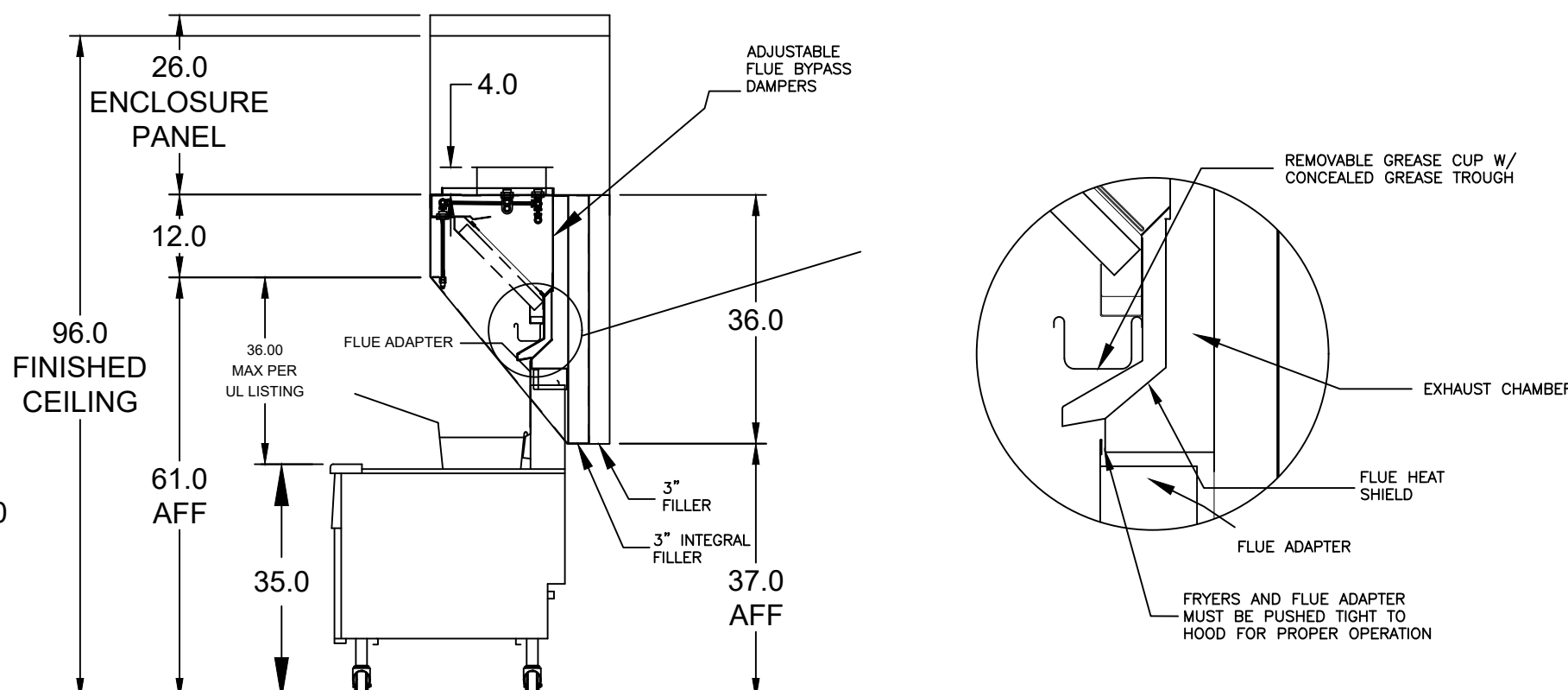
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MARK: ITEM #59
PLAN VIEW

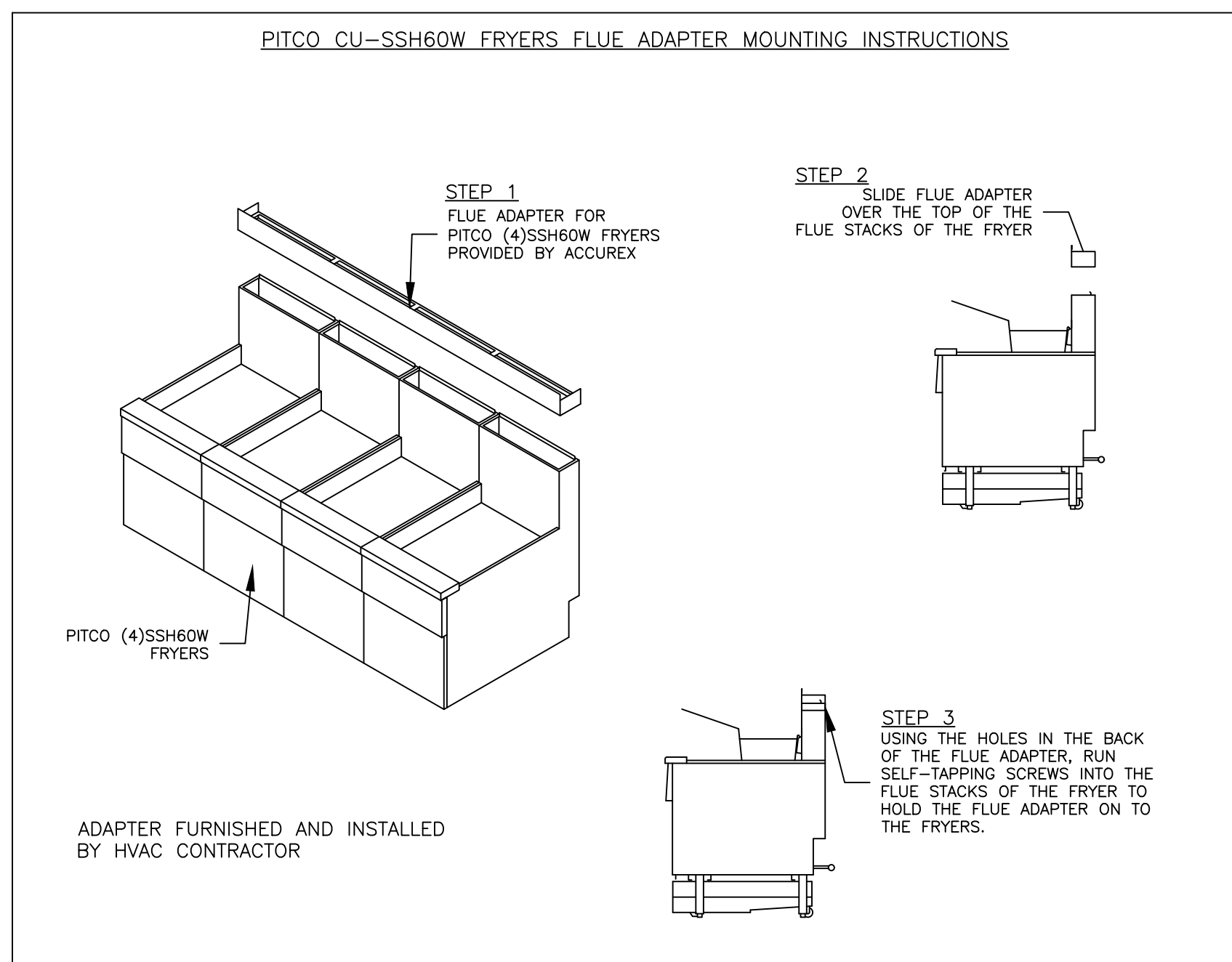


MARK: ITEM #59
ELEVATION VIEW



MARK: ITEM #59
SECTION VIEW

PITCO CU-SSH60W FRYERS FLUE ADAPTER MOUNTING INSTRUCTIONS



EQUIPMENT SCHEDULE

TYPE 1 KITCHEN HOOD		HOOD DIMENSIONS			GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT				
1	SINGLE WALL EXHAUST ONLY LOW PROXIMITY	83 IN.	TOP 23 IN. FRONT 12 IN. BOT 3 IN. BACK 36 IN.	RIGHT	600 DEG F	169.0 LBS.	SINGLE	

ILLUMINATION DETAILS		GREASE FILTRATION DETAILS					
HOOD NO.	FIXTURE TYPE BULB / LAMP INFO	QTY	INTENSITY FT CANDLES	TYPE / MODEL MATERIAL	QTY	LENGTH	HEIGHT
1	NONE	NA	0 / 0 IN. OC	X-TRACTOR STAINLESS STEEL	5	16 IN.	16 IN.

HOOD SECTION # COLLAR #		EXHAUST PLENUM COLLARS				
DISTANCE TO END (IN.)	WIDTH (IN.)	LENGTH (IN.)	DIAMETER (IN.)	VOLUME (CFM)	S.P. (IN. WC)	VELOCITY (FT/MIN)
11.1	12	12	NA	1500	0.518	1500
TOTAL EXHAUST CFM - SECTION 1		1500 = 217 CFM / FT				

OPTIONS AND ACCESSORIES
430 STAINLESS STEEL WHERE EXPOSED
UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R2625
BACK NON-INTEGRAL AIR SPACE - 3 IN WIDE
26 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED
FACTORY MOUNTED EXHAUST COLLAR(S)
THIS HOOD IS PART OF A TEMPERATURE INTERLOCK CONTROL SYSTEM
INCLUDES PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH
EMBOSSED STAINLESS STEEL FINISH FOR HIGH CORROSION RESISTANCE
EQUIPMENT SPECIFIC S/S FLUE ADAPTER

SPECIAL DESIGN REQUESTS

SDR #K1100559 - NEW 4L FRYER SYSTEM

FIRE SUPPRESSION SYSTEM

MANUFACTURER / MODEL SUPPRESSANT TYPE	FLOW POINTS	SUPPLY LINE	DETECTION	MOUNTING
ANSUL R-102 WET CHEMICAL	18 UTILIZED 22 AVAILABLE	CONTINUOUS	FUSIBLE LINK	RIGHT END REMOTE MOUNTED

FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)
CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED
SUPPRESSION AGENT - INCLUDED @ 4 GAL - (2) 3.0 TANK(S)
GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, SUPPLIED UP TO 2"
REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS
METAL BLOW-OFF CAPS - INCLUDED
FIRE SYSTEM PERMIT - REQUIRED - FEE INCLUDED
500' F. FUSIBLE LINK OR AS TESTED AND INSTALLED BY LOCAL INSTALLER PER UL MANUAL

FIRE SYSTEM PROTECTED HOOD(S) (UL-300) (MARK NAME / SECTION#)

FRYER HOOD SECTION 1 - (LENGTH 83.0 IN.) - LOW PROXIMITY HOOD

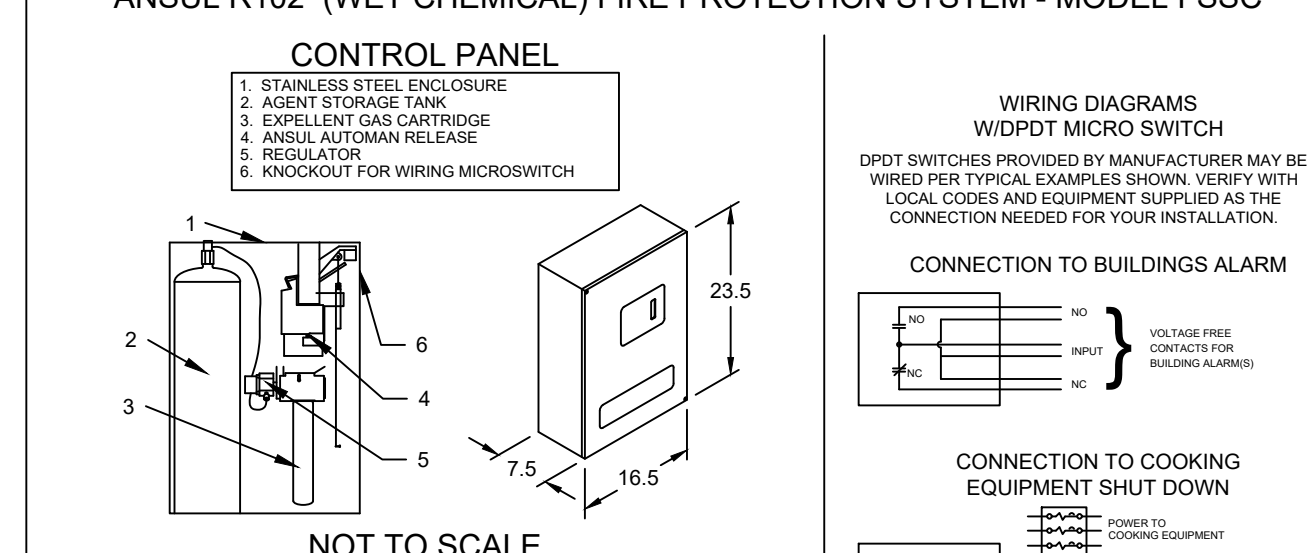
EQUIPMENT SCHEDULE

Belt Drive Upblast Centrifugal Roof Exhaust Fan		MARK: PRV-3										
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	VICIP	End.	Motor RPM	Windings	FLA
1	XRUB-140-7	1500	1	1377	0.5	160	0.75	208/60/3	OP	1725	1	3.9

OPTIONS AND ACCESSORIES

UL/UL 782 Listed - "Power Ventilators for Rest. Esh. Appliances"
Switch, NEMA-1, Toggle, Shipped with unit
Larger curb cap size - 26" square
Roof curb-Galv. GPF-26-G28, Undersized 1.5" total
Hinged Base (Attached)
Curb Seal (Attached)
Clean-out Port
Grease Trap with Drain Connection (PN 475538)
Heat Baffle (Attached)

ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC



NOTES:

Wet chemical fire protection system to be Ansul R-102, designed in compliance with UL 300 requirements.
-Verification of all cooking equipment make, model and location required for all fire protection systems.
-All fire system piping is standardly to the right end of the hood unless a wall is located on the right end.
-Ansul Automan Release to be located within 60" of hood.
The basic fire system will include the following:
-Gas shut-off valve, if required, to be supplied by Manufacturer (up to 2" diameter as standard), and installed by a licensed plumber.
-Micro switch to be supplied by Manufacturer for connection to, but not limited to, building alarm systems, exhaust and supply fans and electrical power shut down. Field wiring and connections to be performed by a licensed electrician.
The basic fire system does NOT include the following:
-Full dump test other than what is specified per the installation manual, or to satisfy a state or local code. Permits and testing fees are not included unless noted under the equipment schedule for the fire system.
-More than two trips to the jobsite or special transportation, or overnight lodging requirements in remote areas. Normal travel distance is first 50 mi. (80.5 km) from office.
-Special classes or additional labor for access to security sensitive areas.
-Installation of gas shut-off valve.
-Special drawings required to satisfy state or local code. Plan examination fees, PE or FS Approval Stamp.
-Union labor, Government labor, or Prevailing wages required for final field hook-up.
-Any and all electrical components/connections required to shut down fans, shut off device for electric cooking equipment (shunt trip breaker), or activate an alarm system, etc.
-Any dismantling or reassembly required to gain access to the fire suppression piping located on the top of the hood.
-Rough-in hidden conduit for remote pull station or gas valve (flush mounted pull station).
-Installation of more than (1) remote pull stations or distances greater than 20 ft (6.1 m).
-Parts or labor required to correct piping due to cooking equipment changes or deviation from plans. OR Any charges for missing or additional parts other than those indicated on the Fire Suppression Detail.
NOTES:
1 - DENOTES FIELD INSTALLATION.
2 - DENOTES FACTORY INSTALLATION.
3 - DO NOT USE BLACK WIRE OR GREEN WIRE ON SHUNT-TYPE SWITCHES IN NORMAL INSTALLATION. BLACK WIRE TO BE USED ONLY FOR EXTRANEOUS ALARM, LIGHT CIRCUITS, ETC.

Thank you for your interest in Accurex

SUBMITTAL

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- APPROVED AS NOTED
- REJECTED - REVISE AND RESUBMIT

SIGNATURE DATE

REV	DESCRIPTION	DATE

ACCUREX
CULVER'S MASTER TEMPLATE
1/24
C28805B

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County of JACKSON

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Joy Conaughy, President
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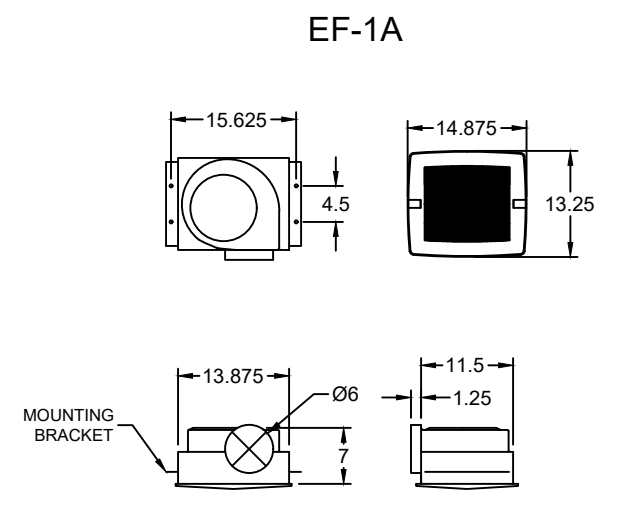
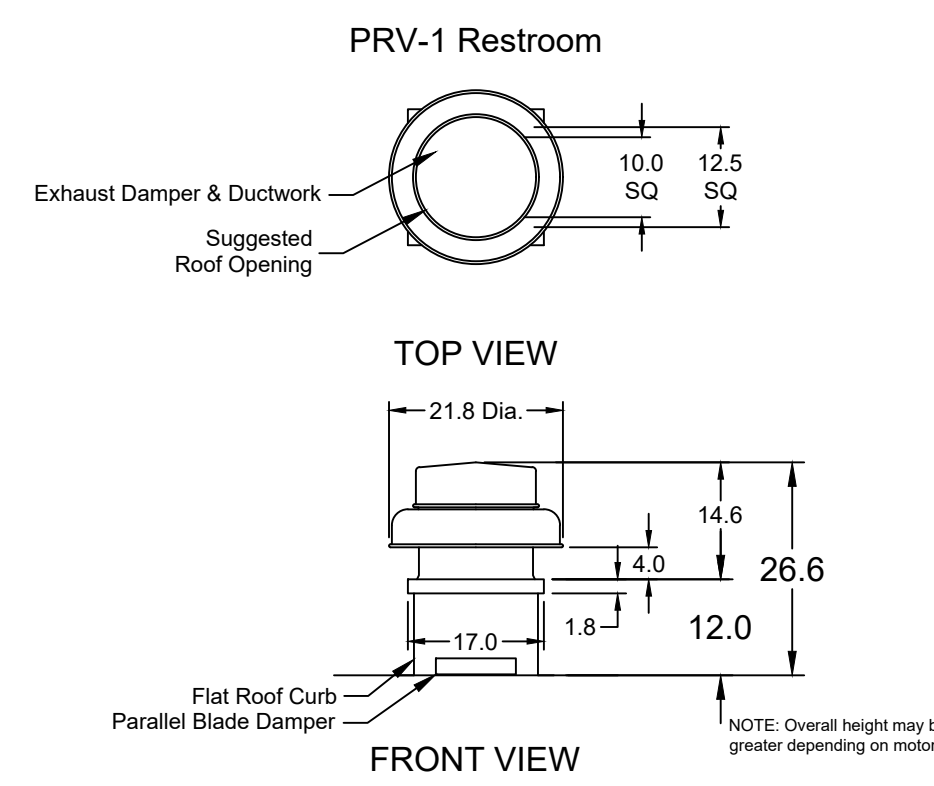
LOWELL JOHN LARSON - ENGINEER
MO# 2013005415

JEFFREY W. ERNEST - ARCHITECT
MO# A-2008031863
O'LLMANN ASSOCIATES ARCHITECTS
200 South State Street
Belleville Illinois 61008
815-544-7790 Phone
MO State Certificate of Authority #W00997866

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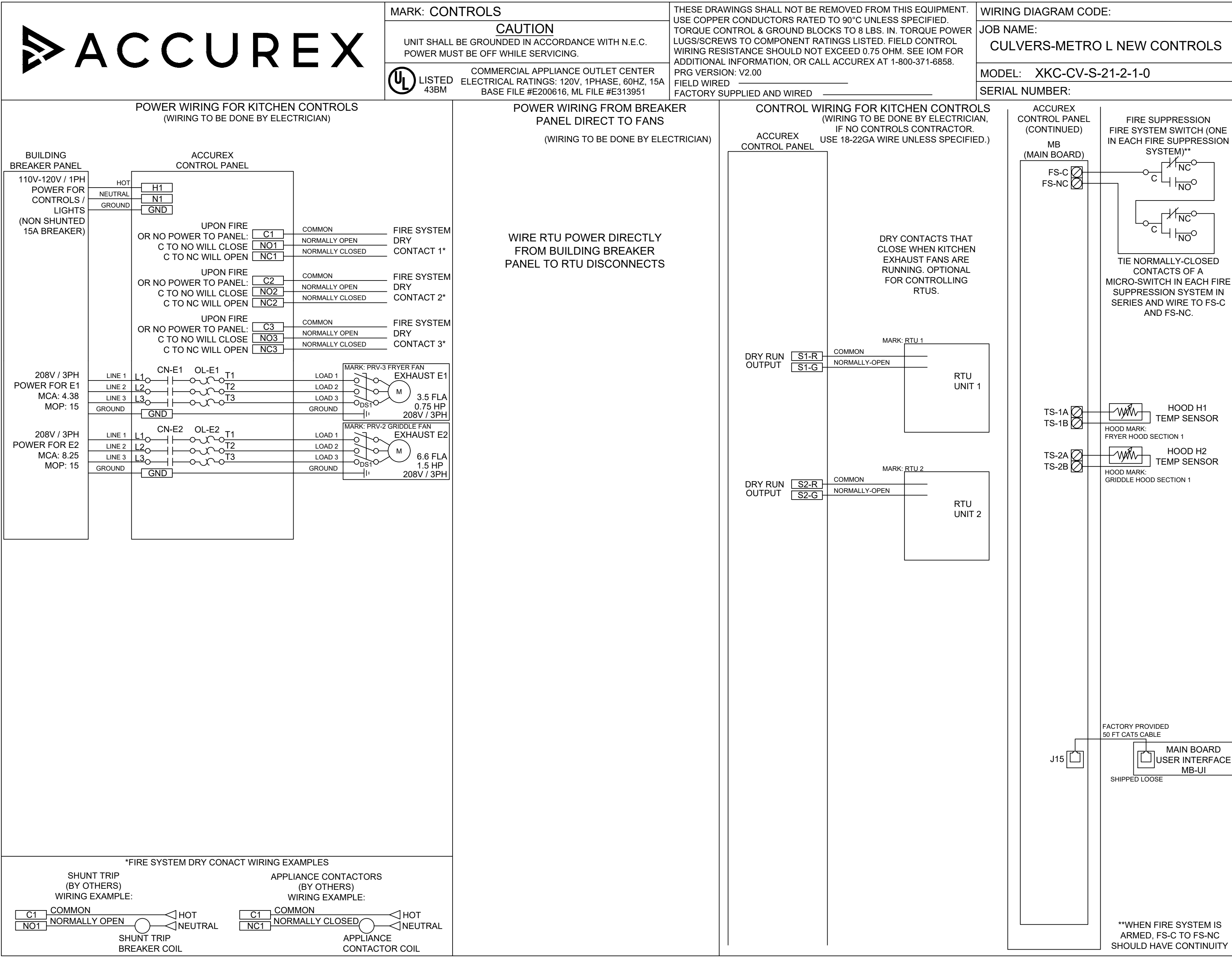
Revision: 10-4-2022

2022-106
M203



EQUIPMENT SCHEDULE			
ELECTRICAL CONTROL BOX			
DESCRIPTION / ACCUREX MODEL	EXHAUST FAN QTY	SUPPLY FAN QTY	MARK: KXC
MOUNTING LOCATION (CONTROL PANEL / SWITCHES)			
KITCHEN FAN CONTROL CENTER / XKC SHIP LOOSE / SHIP LOOSE FOR REMOTE MOUNTING	2	0	60 CYCLE
CONTROL PANEL ENCLOSURE - 16 GA 304 STAINLESS STEEL ENCLOSURE (NEMA-1) - DIMENSIONS 18 X 20 X 6			
WIRING DIAGRAM # T100-2 - 20			
STARTERS PROVIDED IN CONTROL PANEL - QTY 2			
USER INTERFACE CONTROL - QTY 1			
INTEGRATED EXHAUST TEMPERATURE INTERLOCK SYSTEM			
-FACTORY MOUNTED EXHAUST TEMPERATURE SENSORS - QTY 2			
-COMPLIES WITH INTERNATIONAL MECHANICAL CODE 2006 SECTION 507.2.1.1			
TURN ON EXHAUST IN FIRE			
THERMAL OVERLOADS IN CABINET			
SPECIAL DESIGN REQUESTS			
SDR #K080240 - USE KIT #852883, WIRING DIAG. #Z2905338			

EQUIPMENT SCHEDULE												
Direct Drive Centrifugal Roof Exhaust Fan MARK: PRV-1 Restroom												
City	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	Encr.	Motor RPM	Windings	FLA
	XRED-090-VG	300	0.5	1465	0.060	30	0.1	11560/1	OP	1725	1	NA
OPTIONS AND ACCESSORIES												
UL/ULC 705 Listed - "Power Ventilators"												
Switch, NEMA-1, Toggle, Shipped with unit												
Curb Seal (Attached)												
Damper, WD-100-PS-10X10, Gravity Operated (Loose)												
Van-Green electronically commutated motor, speed dial adjustment on motor												
Roof Curb-Galv., GPI-17-10-G12, Undersized 1.5" total												



EQUIPMENT SCHEDULE												
Ceiling Exhaust Fan MARK: EF-1A Exhaust Fan												
City	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	Encr.	Motor RPM	Windings	FLA
	XCR-B80	75	0.125	855	0.01	10	0.0	11560/1	OP	900	1	NA
OPTIONS AND ACCESSORIES												
UL/ULC 705 Listed - Electric fan												
Solid State Speed Control, 6.0 amp, mounted and wired												
Round Hooded Wall cap, (PK-WC-6) Mounted and Wired												
Designer Grille												
Round duct connection												
Polypropylene Wheel Material												
Energy Star Rated												

FOR TECHNICAL SUPPORT ON ACCUREX CONTROLS PLEASE CALL ACCUREX TECHNICAL SUPPORT: 1-800-371-6858

SECONDARY CONTACTS ARE:
AARON VAN KREY 715.841.8521
TYLER SCHILLING 715.841.8749

Thank you for your interest in Accurex

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SIGNATURE _____ DATE _____

REV	DESCRIPTION	DATE

ACCUREX

CULVER'S MASTER TEMPLATE

SCALE: 1/24

C28805C

VENTILATION SYSTEM NOTES

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Hoods installation (by others unless otherwise noted) shall be in accordance with NFPA # 96 and applicable building codes.

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FAN SCHEDULE & DETAILS

Date: 10-4-2022 Revision: _____

2022-106

M204