

FUTURE FARMERS OF AMERICA - KITCHEN HOOD AND DUCT SYSTEM:

GENERAL:

THE VENTILATION SYSTEM IN GENERAL, SHALL PROVIDE SELF-CONTAINED SUPPLY AND EXHAUST AIR FOR VENTILATION OF KITCHEN COOKING PROCESSES. A CONSTANT AMOUNT OF FRESH AIR SHALL BE TAKEN INTO THE SYSTEM AND ALL AIR SHALL BE FILTERED.

KITCHEN HOOD WITH EXHAUST AND SUPPLY:

FURNISH AND INSTALL A PACKAGED WALL COOKING VENTILATION SYSTEM WITH INTEGRATED EXHAUST AND SUPPLY DUCTWORK, INCLUDING ALL BLOWERS, ALL WIRING, MASTER ELECTRIC CONTROL PANELS, FILTER SECTIONS AND CONTROLS FOR SYSTEM PERFORMANCE PER DRAWINGS AND SPECIFICATIONS. MOUNTING HEIGHT OF HOOD SHALL BE 80" ABOVE FINISHED FLOOR.

HOOD SHALL BE U.L. CLASSIFIED, WITH FABRICATION OF SYSTEM COMPONENTS IN ACCORDANCE WITH NFPA NO. 96 REQUIREMENTS, AND BEAR THE NSF SEAL, BOCA AND INTERNATIONAL BUILDING CODE SEAL OF APPROVAL. HOOD SHALL BE RATED FOR 0" CLEARANCE OR SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 96.

SYSTEM SHALL BE A COMPLETE PACKAGED TYPE WITH ALL COMPONENTS ASSEMBLED BY A MANUFACTURER REGULARLY ENGAGED IN THE PRODUCTION OF THIS TYPE OF EQUIPMENT. ALL FEATURES CONSIDERED STANDARD BY THE MANUFACTURER AND WHICH ARE REQUIRED TO COMPLETE THE SYSTEM AND TO MAKE IT FUNCTIONAL SHALL BE INCLUDED (WITHOUT RESPECT TO SPECIFIC DETAILING IN THESE SPECIFICATIONS).

THE HOOD SHALL BE A DOUBLE SHELL TYPE, 18 GAUGE STAINLESS STEEL INNER LINER WITH 18 GAUGE STAINLESS STEEL OUTER LINER. AIR SHALL BE SUPPLIED THROUGH THE VENTILATOR DOWNWARD TO THE VICINITY OF THE COOKING EQUIPMENT, UNDER CONTROLLED BALANCED CONDITIONS, PERMITTING A VELOCITY OF NO HIGHER THAN 50/80 FPM AT THE COOKING SURFACE. SUPPLY SLOTS TO INCLUDE FULLY ADJUSTABLE AIRFOIL DEFLECTORS FOR OPTIMUM AIR CONTROL. THE INNER CANOPY SHALL BE REINFORCED AND STIFFENED, AND ALL JOINTS AND SEAMS WELDED. DOWNWARD AIR VELOCITY WILL NOT EXCEED APPROXIMATELY 300-450 FEET PER MINUTE (PLUS OR MINUS 10% CROSS THE ENTIRE AIR SUPPLY SLOT), DEPENDING ON COOKING EQUIPMENT TO BE VENTILATED. THE VENTILATOR SHALL BE HUNG FROM THE ROOF STRUCTURE WITH SOLID STEEL RODS WITH TURNBUCKLES PER MANUFACTURER'S RECOMMENDATIONS OR SUPPORTED ON STRUCTURE. SPRING ISOLATORS SHALL BE FURNISHED WITH HOOD; OTHER ROD SUPPORTS, ETC. SHALL BE FURNISHED BY INSTALLATION CONTRACTOR. HANGING POINTS AND WEIGHTS SHALL BE FORWARDED TO OWNER WITH SHOP DRAWINGS. PROVIDE 18 GAUGE STAINLESS STEEL HOUSING FROM TOP OF HOOD TO FINISHED CEILING. VERIFY SIZE WITH ARCHITECTURAL DRAWINGS.

HOOD SHALL BE FURNISHED WITH FIRE DAMPERS IN HOOD CANOPY AS REQUIRED BY NFPA 96 AND LOCAL AUTHORITY HAVING JURISDICTION.

A HOOD MOUNTED CONTROL PANEL (24 VOLT - PRE-WIRED FLUSH) SHALL CONTAIN SEPARATE SWITCHES WITH SIGNAL LIGHTS FOR EXHAUST AND MAKE-UP AIR WITH A CONTROL VOLTAGE SWITCH FOR INTERNAL LIGHTING. ALL VENTILATOR LIGHTING WILL BE U.L. APPROVED, VAPOR, INCANDESCENT TYPE, AND WIRED 110 VOLT TO A JUNCTION BOX AT THE TOP OF THE VENTILATOR WITH ONE REQUIRED FOR EVERY THREE (3) FEET OF HOOD.

LOW VOLTAGE WIRING, IN CONDUIT, CONFORMING TO NFPA NO. 70, SHALL BE PROVIDED IN THE FORM OF A WIRING HARNESS. THIS IS THE ONLY INTERNAL WIRING THAT MUST BE COMPLETED BY THE ELECTRICAL SUB.

ALL GREASE FILTERS, 20"x16"x2", SHALL BE PROVIDED ALONG WITH APPROPRIATE FILTER BLANKS TO PROVIDE 98% GREASE REMOVAL EFFICIENCY AND SHALL BE AFI RATED. FILTERS WILL BE OF STAINLESS STEEL CONSTRUCTION AND SHALL BE FIRE RETARDANT PER NFPA NO. 96. DESIGN CFM THROUGH DUCTWORK AND FILTERS SHALL MEET ALL APPLICABLE CODES FOR SYSTEM PERFORMANCE AND GREASE REMOVAL EFFICIENCY. FILTERS SHALL BE PROVIDED WITH HANDLES FOR EASY REMOVAL.

GREASE TROUGHS AND HOLDING CUP SHALL BE INTEGRAL WITH HOOD AND DESIGNED FOR EASY REMOVAL.

FOR CLEANING PURPOSES, CLEANOUT OPENINGS SHALL BE PROVIDED AT EACH CHANGE IN DIRECTION OF THE DUCT AND AT ANY OTHER PORTION OF THE SYSTEM NOT ACCESSIBLE FROM THE DUCT INLET OR DISCHARGE. ALL CLEANOUT OPENINGS SHALL BE LOCATED ON THE SIDES OF THE DUCT AND SHALL BE OF SUFFICIENT SIZE TO PERMIT A THOROUGH CLEANING OF THE ENTIRE SYSTEM. CLEANOUT OPENINGS SHALL BE EQUIPPED WITH TIGHT FITTING DOORS AND COVERS, CONSTRUCTED OF METAL WHICH IS EQUAL TO OR GREATER IN THICKNESS THAN THAT OF THE DUCTS. SUCH DOORS OR COVERS SHALL BE EQUIPPED WITH A SUBSTANTIAL METHOD OF LATCHING, SUFFICIENT TO MAKE THEM GREASE TIGHT. DOORS OR COVERS SHALL BE DESIGNED SO THAT THEY CAN BE OPENED OR REMOVED WITHOUT THE USE OF A TOOL.

A FACTORY WIRED MASTER CONTROL PANEL MOUNTED ON WALL WHERE SHOWN ON PLANS SHALL CONTAIN IN ADDITION TO TERMINALS AND WIRING FOR THE ABOVE: MAGNETIC STARTERS WITH THREE LEG OVERLOAD, AND CONTACTS FOR DISCONNECT SWITCHES FOR SUPPLY AND EXHAUST FANS, ELECTRICAL SHUNT BREAKER, AND INTERCONNECTION TO FIRE ALARM/PROTECTION SYSTEM AND CONTROL TRANSFORMER. ALL ELECTRICAL WORK SHALL BE DONE BY HOOD MANUFACTURER, IN ACCORDANCE WITH SYSTEM DESIGN AND IN STRICT ADHERENCE TO NFPA 70 AND OTHER APPLICABLE CODES. SUPPLY FAN AND FILTER SECTIONS, SHALL BE ONE INTEGRATED UNIT, MOUNTED ON ADJUSTABLE SUPPORTS FOR POST MOUNTING. AN INSULATED STEEL WALL ROOF CURB SHALL BE PART OF THE FURNISHED SYSTEM.

MASTER DISCONNECT SWITCH, WIRING TO THE MASTER ELECTRICAL PANEL, AND PROVISIONS FOR FIRE ALARM SYSTEM CONNECTION SHALL BE PART OF THE HOOD SYSTEM.

ALL DUCTWORK SHALL BE FURNISHED AND SHALL BE U.L. LISTED GREASE DUCT ACCORDING TO THE MANUFACTURER'S LISTING, CONFORMING TO NFPA NO. 96 AND BUILT TO LENGTHS REQUIRED. EXHAUST DUCT CONNECTING COLLARS SHALL BE THE HEAT EXPANSION TYPE, CONFORMING TO NFPA NO. 96 RECOMMENDATIONS. EXHAUST DUCT TO BE MINIMUM 14-GAUGE BLACK IRON OR CARBON STEEL AND SUPPLY DUCT MINIMUM 18-GAUGE CARBON STEEL. ALL EXHAUST DUCT SEAMS AND JOINTS SHALL BE MADE LIQUID-TIGHT WITH A CONTINUOUS EXTERNAL WELD.

DUCTWORK SHALL BE DESIGNED TO CONNECT DIRECTLY TO HOOD AND ROOF PACKAGE WHEN SYSTEM IS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ALL SECTIONS OF THE DUCT SHALL BE CONSTRUCTED AND INSTALLED WITHOUT FORMING DIPS AND TRAPS AND SHALL SLOPE NOT LESS THAN 1 INCH PER FOOT TOWARD EITHER THE HOOD OR AN APPROVED RESIDUE TRAP.

EXTERIOR SURFACES OF ALL ROOF EQUIPMENT WILL BE WEATHERPROOF EPOXY COATED.

MANUFACTURER SHALL SUBMIT ADJUSTED AIR QUANTITIES FOR APPROVAL TEN (10) DAYS PRIOR TO BID IF REQUIRED FOR REFERENCED HOOD TO PERFORM AS SPECIFIED FOR TYPE OF EQUIPMENT LOCATED BELOW THE HOOD.

HOOD SUPPLIER SHALL COORDINATE HIS WORK WITH THE FIRE EXTINGUISHING SYSTEM CONTRACTOR ON EACH PROJECT.

FACTORY AUTHORIZED REPRESENTATIVE SHALL BE COMPLETELY RESPONSIBLE FOR START-UP AND TESTING OF THE ENTIRE HOOD SYSTEM AND ALL ADJUSTMENTS REQUIRED FOR HOOD TO PERFORM ACCORDING TO ENGINEER'S REQUIREMENTS; INCLUDING A SMOKE TEST, INSTRUCTIONS TO OWNER ON OPERATION AND MAINTENANCE, ETC. TEST AND BALANCE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY HOOD REPRESENTATIVE.

AUTOMATIC FIRE PROTECTION SYSTEM - KITCHEN HOOD:

INSTALLATION SHALL BE IN ACCORDANCE WITH APPENDIX D (STANDARD FOR RESTAURANT HOOD FIRE PROTECTION SYSTEM) AND NFPA PAMPHLET NO. 96. U.L. STANDARD 300, AS WELL AS APPLICABLE LOCAL, STATE AND INSURANCE COMPANY REQUIREMENTS.

ALL COOKING GREASE EXHAUST HOODS, DUCTS AND THE COMPLETE RANGE TOP SHALL BE PROTECTED AGAINST FIRE BY THE INSTALLATION OF AN AUTOMATIC LINK WET CHEMICAL FIRE EXTINGUISHING SYSTEM AS MANUFACTURED BY KIDDE OR ANSUL. SUCH SYSTEM SHALL BE INSTALLED BY A QUALIFIED FIRE PROTECTION CONTRACTOR.

THE SYSTEM SHALL BE OF THE STORED PRESSURE TYPE OF SUFFICIENT CAPACITY, AS DETERMINED BY UNDERWRITER'S LABORATORIES, INC. LISTING, TO PROVIDE A HIGH CONCENTRATION OF CHEMICAL IN THE PLENUM AREA(S), COOK SURFACES AND EXHAUST DUCT SYSTEM. THE CHEMICAL SHALL BE STORED IN A TESTED CYLINDER. NOZZLES LOCATED IN THE PLENUM(S) AND GREASE EXHAUST DUCT SHALL BE CAPABLE OF FUNCTIONING WITH A HEAVY ACCUMULATION OF GREASE. SYSTEM SHALL BE SELF-PURGING.

ALL SYSTEMS ARE TO INCLUDE REMOTE MANUAL PULL STATIONS.

PROVIDE THREE (3) NORMALLY OPEN CONTACTS ON HOOD FOR ACTIVATION OF ELECTRICAL SHUT-OFF (SHUNT BREAKERS) AND INTERLOCK INTO FIRE ALARM PANEL/FIRE PROTECTION SYSTEM.

PROVIDE ONE (1) NORMALLY OPEN CONTACT ON HOOD FOR DEACTIVATION OF HOOD SUPPLY FAN. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INTERLOCK WIRING BETWEEN EXTINGUISHING SYSTEM AND HOOD. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE ALARM CONNECTION BETWEEN EXTINGUISHING SYSTEM AND FIRE ALARM CONTROL PANEL AND ELECTRICAL SHUNT BREAKERS.

AUTOMATIC OPERATION OF SYSTEM SHALL BE BY MEANS OF 360°F FUSIBLE METAL LINKS OR 500°F QUARTZOID BULB LINKS, DEPENDING ON OPERATING TEMPERATURE OF THE VENTILATING SYSTEM. RELEASING DEVICE SHALL BE THE ANSUL "AUTOMAN" BY THE ANSUL COMPANY. RELEASING DEVICE SHALL BE CAPABLE OF REVERSING THE AGENT MANUALLY BY MECHANICAL MEANS AT UNIT LOCATION OR REMOTE LOCATION WITHOUT USE OF ELECTRICAL POWER.

CHEMICAL TANK(S) SHALL BE STEEL CONSTRUCTED AND TESTED IN ACCORDANCE WITH DEPARTMENT OF TRANSPORTATION AND U.L. REQUIREMENTS. HYDROTESTED TO 600 PSI. LOCATE AS INDICATED ON PLANS OR AS DIRECTED BY OWNER.

WET AGENT SHALL BE POTASSIUM BASED FIRE SUPPRESSION AGENT. THE AGENT PH SHALL NOT EXCEED 9.5. THE AGENT SHALL NOT ADVERSELY AFFECT ALUMINUM OR STAINLESS STEEL DURING EXPOSURE PERIODS OF UP TO 24 HOURS.

DISCHARGE NOZZLES SHALL BE SELECTED FOR THE HAZARD THEY ARE DESIGNED TO PROTECT. PROVIDE BLOW-OFF CAPS TO KEEP FOREIGN MATTER FROM ENTERING NOZZLES FOR DEEP FAT FRYERS AND OTHER ASSOCIATED COOKING EQUIPMENT.

WET CHEMICAL NOZZLES SHALL BE EQUIPPED WITH STRAINERS TO PREVENT FOREIGN MATTER INSIDE THE DISTRIBUTION TUBING FROM CLOGGING THE NOZZLE ORIFICE.

WET CHEMICAL SYSTEM SHALL UTILIZE TYPE 304 STAINLESS STEEL, FITTINGS SHALL BE STAINLESS STEEL. AT CONTRACTORS OPTION BLACK IRON PIPING AND FITTINGS MAY BE USED.

AUXILIARY EQUIPMENT:

REMOTE MANUAL PULL STATION LOCATED IN KITCHEN AS SHOWN ON THE DRAWINGS.

THREE (3) NORMALLY OPEN CONTACTS FOR INTERLOCK OF ELECTRICAL EQUIPMENT SHUT-OFF (SHUNT BREAKERS) FIRE ALARM INTERLOCKS, AND DEACTIVATION OF SUPPLY FAN.

UPON COMPLETION OF THE WORK, THIS SUB-CONTRACTOR SHALL COMPLETE THE INSTALLATION CERTIFICATION FORM AND PROVIDE THE APPLICABLE PORTIONS TO THE AUTHORITIES HAVING JURISDICTION, SUCH AS THE OWNER, INSURANCE SERVICES OFFICE, AND THE STATE FIRE MARSHAL.

FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INVOLVED IN ROUGHING-IN ANY CONDUIT OR WIRE IN ADDITION TO THAT SHOWN ON THE PLANS AND REQUIRED TO MAKE THE SYSTEM COMPLETE.

THE FIRM RECEIVING THE BID SHALL ESTABLISH WITH THE OWNER, AFTER THE WARRANTY PERIOD IS OVER, A MAINTENANCE CONTRACT TO KEEP THE EQUIPMENT IN WORKING ORDER.

THE WHOLE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS OF THE LOUISIANA RATING AND FIRE PREVENTION BUREAU. A MAINTENANCE CONTRACT MUST BE FILED WITH THE ABOVE BUREAU.

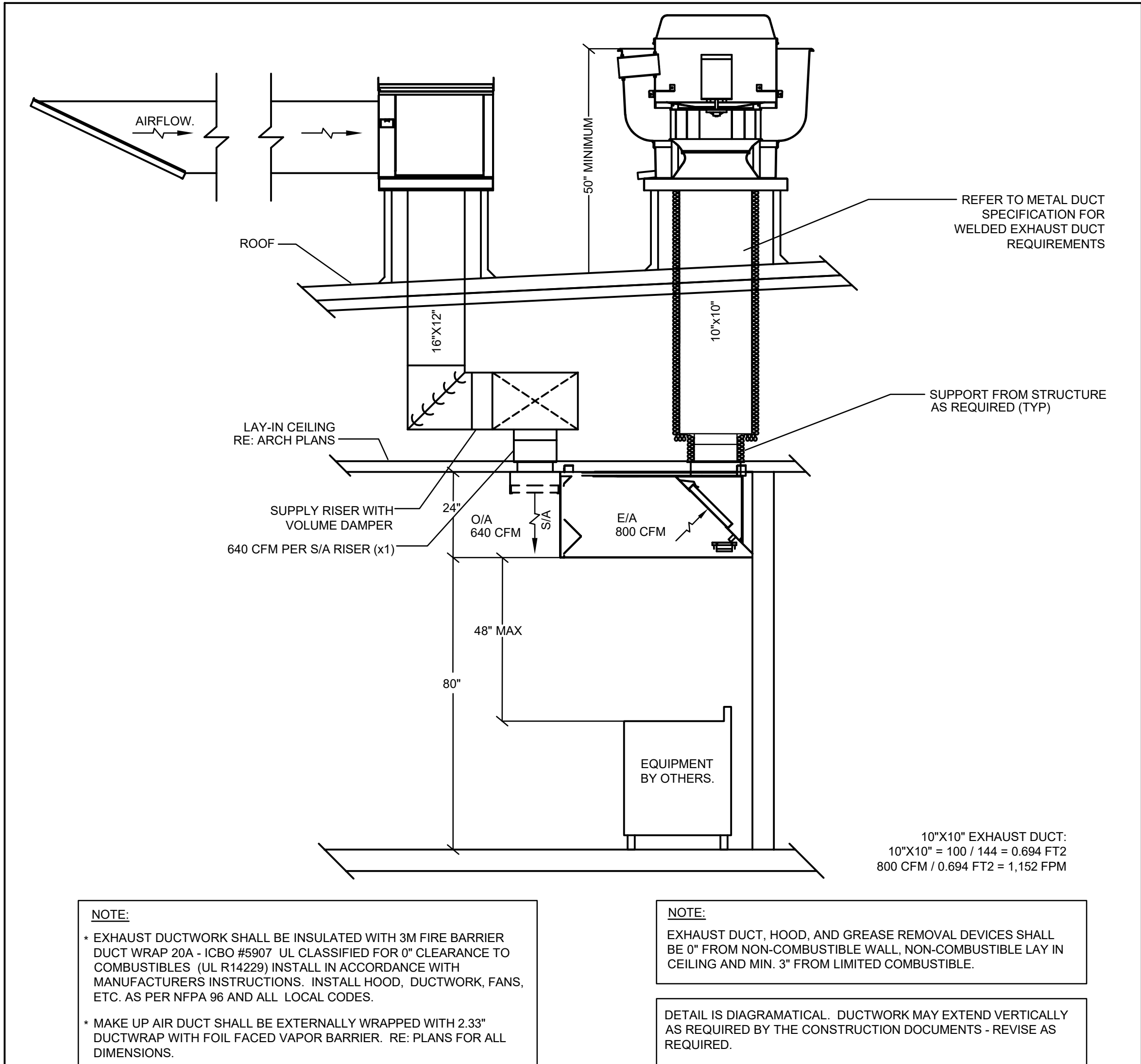
CONTRACTOR SHALL PAY ALL FEES ASSOCIATED WITH THE FIRE PROTECTION SYSTEMS SHOP DRAWINGS REVIEW BY STATE FIRE MARSHAL, LOCAL AND STATE AGENCIES THROUGHOUT THE DURATION OF THE PROJECT TO OBTAIN FIRE MARSHAL REVIEW.

CONTRACTOR SHALL PROVIDE ALL INTERLOCKING CONTROL WIRING BETWEEN FIRE PROTECTION SYSTEM AND HOOD SYSTEM (EXHAUST AND SUPPLY FANS) TO START OR STOP APPROPRIATE FANS UPON ACTUATION OF THE FIRE PROTECTION SYSTEM.

ACCEPTANCE WILL NOT BE GIVEN UNTIL THE FOLLOWING PROVISIONS ARE MET:

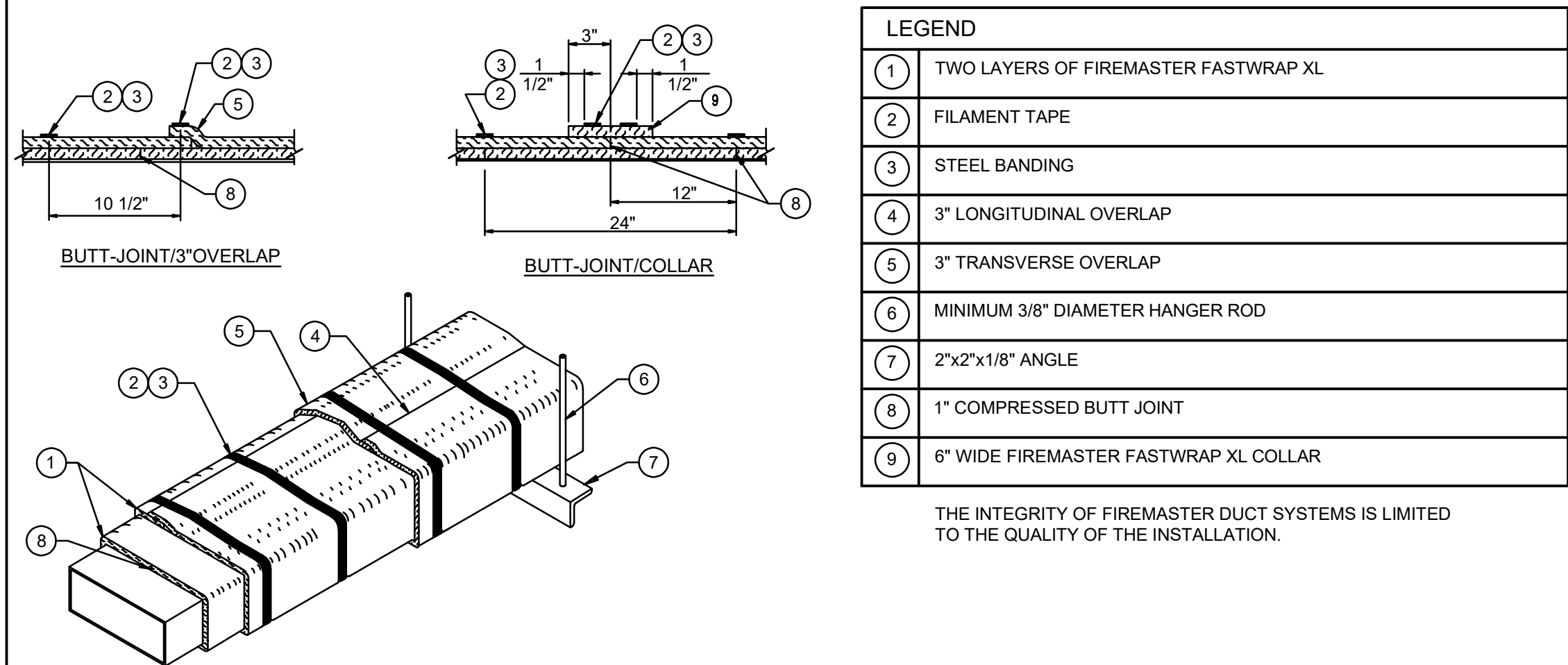
A DETAILED DIAGRAM OF THE SYSTEM AND A LETTER OF APPROVAL FROM THE FIRE RATING BUREAU SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

STATE FIRE MARSHAL AND LOCAL FIRE PROTECTION BUREAU HAS APPROVED SYSTEM.



KITCHEN HOOD AND ROOF CURB PACKAGE DETAIL

NO SCALE



GREASE DUCT INSULATION DETAIL

NO SCALE

FAN SCHEDULE										
No	SERVICE	MIN. CFM	EXT. SP	RPM	SONES	FAN HP	ELECTRIC SERVICE	CONTROL	REMARKS	NOTES
KEF-1	207 KITCHEN	800	1.25	1,331	11	0.75	240/1/60	SWITCH ON HOOD	CAPTIVEAIRE MODEL EADU8SH OR APPROVED EQUAL	1,2
KSF-1	207 KITCHEN	640	0.50	1,079	8.6	1.00	240/1/60	SWITCH ON HOOD	CAPTIVEAIRE MODEL EA-A1-15D OR APPROVED EQUAL	1,2

NOTES:

- ROUTE STAINLESS STEEL SKIRT FROM TOP OF HOOD TO ABOVE CEILING HEIGHT. COORDINATE EXACT HEIGHT WITH ARCHITECTURAL DRAWINGS.
- HOOD SHALL HAVE SINGLE POINT ELECTRICAL CONNECTION.



ASSOCIATED DESIGN GROUP,  
301 Jackson Street, Suite 204  
Alexandria, Louisiana 71301  
Phone: (318) 445-8870  
Email: adginc@adginc.org

Project No. 26019



Project No.	0225
Drawn By:	EM
Approved By:	CC
Preliminary Date:	MARCH 31, 2026
Release Date:	
File:	

WAYNE LAWRENCE COCO, AIA, ARCHITECT, L.L.C.

Coco & Company

P.O. BOX 111 - 510 MAIN ST.  
SIMMESPORT, LOUISIANA 71369  
318.359.3732 / FAX 318.941.2821

a professional architectural company

FUTURE FARMERS OF AMERICA  
CONFERENCE CENTER

MANSURA, LOUISIANA AT OLD RIVER

Sheet Number:

M3.2

27 of 40