

MECHANICAL GENERAL NOTES:

- PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT PROJECT AND REVIEW EXISTING CONDITIONS. NO ADDITIONAL MONIES WILL BE AWARDED FOR "UNFORESEEN PROJECT CONDITIONS" CONTRACTOR SHALL INCLUDE IN HIS BID ALL MONIES REQUIRED FOR THE EXISTING PROJECT CONDITIONS. CONTRACTOR SHALL INFORM ARCHITECT AT TIME OF BID PROJECT CONDITIONS IN WHICH HE HAS DIFFICULTY IN WORKING AROUND.
- REFER TO ALL OTHER DRAWINGS IN THIS PROJECT, INCLUDING TO BUT NOT LIMITED TO THE ARCHITECTURAL, INTERIOR DESIGN, LIGHTING DESIGN, AND ELECTRICAL AND PERFORM ALL SCOPE ITEMS IDENTIFIED WITHIN THOSE DRAWINGS AS IF THEY ARE DIRECTLY INCORPORATED INTO THE MECHANICAL SET.
- FURNISH AND INSTALL ALL NECESSARY LABOR AND MATERIALS FOR A COMPLETE SYSTEM. ANY ITEMS AND MATERIALS OBVIOUSLY NECESSARY FOR A COMPLETE WORKING SYSTEM ALTHOUGH NOT SHOWN WITHIN THESE DOCUMENTS SHALL BE PROVIDED AS PART OF THE INITIAL BID.
- WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
- OBTAINING PERMIT, INCLUDING LABOR AND FEES SHALL BE PROVIDED AS PART OF THE INITIAL BID.
- DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW FITTINGS AND OTHER SMALL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. INSTALL DUCTWORK, EQUIPMENT AND CONTROLS IN A MANNER TO MINIMIZE NOISE. PROVIDE APPROPRIATE MAINTENANCE CLEARANCE IN THE SPACE ALLOCATED.
- MATERIALS AND LABOR SHALL BE WARRENTIRED FOR ONE YEAR AFTER TAKEOVER.
- ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, LATEST EDITIONS.
- PRIOR TO ORDERING ANY EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE COORDINATION TO THE ELECTRICAL SUBCONTRACTOR AND STRUCTURAL REQUIREMENTS TO THE GENERAL CONTRACTOR. ANY COSTS DIFFERENCES WILL BE WORKED THROUGH THE GENERAL CONTRACTOR AT THIS TIME. PROVIDE TO THE ELECTRICAL SUBCONTRACTOR THE PHASE, AMPERAGE AND VOLTAGE OR EACH PIECE OF EQUIPMENT PRIOR TO ORDERING.
- CONTRACTOR SHALL REFER TO THE ELECTRICAL DRAWINGS, LIGHTING DESIGN DRAWINGS AND THE REFLECTED CEILING PLAN (RCP) WHEN INSTALLING THE CEILING DIFFUSERS AND RETURN GRILLS.
- COORDINATE WITH THE ELECTRICAL SUBCONTRACTOR IN REGARDS TO DISCONNECTS, BREAKERS, POWER WIRING, MOTOR CONTROL DEVICES, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS, TRANSFORMERS, ETC AND COORDINATE THE INSTALLATION WITH THE ELECTRICAL SUBCONTRACTOR.
- PROVIDE UL LISTED, HEAVY DUTY FIBERGLAS CONNECTOR AT FAN HANDLERS, FAN COIL UNITS, ROOFTOP UNITS AND OTHER MECHANICAL EQUIPMENT WHERE THEY CONNECT TO SHEET METAL DUCTWORK. THE FIBERGLAS CONNECTOR SHALL BE INSTALLED WITH APPROPRIATE LENGTH TO ALLOW FOR VIBRATION AND NOISE TRANSMISSION.
- DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH SMACNA GUIDELINES.
- ROUND FLEXIBLE CONNECTORS SHALL BE PROVIDED BETWEEN MAIN DUCT AND DIFFUSERS. PROVIDE THERMAFLEX PRO SERIES. UTILIZE SPIN-IN CONNECTORS WITH SCOOP AND ADJUSTABLE DAMPER FOR AIR CONTROL.
- FLEXIBLE DUCTWORK SHALL BE INSTALLED FREE OF KINKS AND SHALL BE LIMITED TO 3'-0" IN LENGTH. DIAMETER SHALL BE THE SAME AS THE DIFFUSER NECK.
- ALL PORTIONS OF DUCTWORK VISIBLE THROUGH DIFFUSER AND RETURN GRILL OPENINGS SHALL BE PAINTED FLAT BLACK. ALL PORTIONS EXPOSED IN AREAS WITHOUT CEILING SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- CONTRACTOR SHALL FIELD VERIFY SPACE REQUIREMENTS FOR DUCTWORK PRIOR TO MANUFACTURING. ADJUSTMENTS TO DUCT SIZES IS ACCEPTABLE AS LONG AS THE FOLLOWING FACTORS ARE MAINTAINED:  
 SUPPLY: 0.08"/100FT  
 RETURN: 0.06"/100FT.
- ALL THERMOSTATS UNLESS OTHERWISE NOTED SHALL BE INSTALLED AT 4'-0" AFF. REFER TO INTERIOR DESIGN DRAWINGS FOR ACTUAL LOCATIONS.
- ALL DUCT DIMENSIONS SHOWN IN THIS SET REFER TO CLEAR INSIDE DIMENSIONS. IF DUCTWORK IS ROUNDED, INTERIOR DIMENSION SHALL BE INCREASED TO ACCOUNT FOR THE LINEAR THICKNESS.
- THE OWNER, OPERATOR, ARCHITECTURAL NOR ENGINEER ARE RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS, MEANS AND METHODS, WORK TECHNIQUES, CONSTRUCTION SEQUENCE OR PROCEDURES REQUIRED TO COMPLETE THE WORK.
- ALL EXTERIOR WALL, AND ROOF PENETRATIONS SHALL BE SEALED WITH WATERPROOFING.
- ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR BARRIERS SHALL BE SEALED WITH FIREPROOFING.
- PROVIDE FIRE DAMPERS (FD) IN ALL FIRE RATED WALLS AS IDENTIFIED ON ARCHITECTURAL DRAWINGS. THE RATINGS OF THE FIRE DAMPERS SHALL MEET OR EXCEED THE RATING OF THE WALL IN WHICH IT IS INSTALLED. FIRE DAMPERS SHALL BE UL LISTED AND SHALL BE TYPE B (BLADES OUT OF THE AIR STREAM) OR TYPE C (100% FREE AREA). PROVIDE AND INSTALL DUCT MOUNTED ACCESS PANEL FOR ALL NON-ACCESSIBLE FIRE DAMPERS. DAMPERS TO BE RUSKIN MODEL DFD35 OR EQUAL BY GREENHECK.
- ALL ACCESS PANELS REQUIRED FOR EQUIPMENT MAINTENANCE SHALL BE FIELD COORDINATED WITH ARCHITECT. THESE DRAWINGS SHALL APPROXIMATE LOCATIONS, FINAL LOCATIONS SHALL BE COORDINATED IN THE FIELD.
- AT EACH BRANCH TAKEOFF, PROVIDE MANUAL VOLUME DAMPERS FOR BALANCING. FOR EACH DIFFUSER TAKEOFF, PROVIDE ADJUSTABLE SPIN-IN CONNECTION.
- PROVIDE DUCT LINER FOR THE FIRST TEN FEET OF SUPPLY AND THE LAST 10 FEET OF RETURN DUCTWORK FROM THE HVAC EQUIPMENT. THE REMAINING DUCTWORK SHALL BE WRAPPED WITH INSULATION.
- ALL THERMOSTATS SHALL BE PROGRAMMABLE AND HAVE A 4 DEGREE DEADBAND.
- INSTALL SMOKE DETECTOR IN THE SUPPLY AIR SYSTEM FOR ALL UNITS WITH CAPACITY GREATER THAN 2000 CFM. THE SMOKE DETECTOR SHALL BE INSTALLED PRIOR TO FIRST TAKEOFF.
- ALL MATERIAL INSTALLED WITHIN A RETURN AIR PLENUM SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- ALL WIRING INSTALLED WITHIN THE PLENUM SHALL BE PLENUM RATED OR INSTALLED WITHIN CONDUIT.
- ALL EQUIPMENT INSTALLED ABOVE THE CEILING SHALL BE ACCESSIBLE. CONTRACTOR SHALL SUPPLY ACCESS PANELS IN CEILING OR WALL AND SHALL COORDINATE WITH ARCHITECT FOR PROPER LOCATION. ACCESS PANELS IN CEILING SHALL BE A MINIMUM OF 24"x24" WITH HINGES. ACCESS PANELS SHALL HAVE SAME FIRE RATING AS CEILING IN WHICH THEY ARE INSTALLED.
- EACH PIECE OF EQUIPMENT SHALL BE PERMANENTLY LABELED WITH A NAMEPLATE OF SUFFICIENT SIZE TO CLEARLY INDICATE THE EQUIPMENT DESIGNATION IN ACCORDANCE WITH THE DRAWINGS (E: PU-1, RTU-1, ETC.). NAMEPLATES TO BE BAKED ENAMEL OR ALUMINUM WITH STAMPED LETTERS.
- EACH DUCT OR PIPE WHICH PENETRATES ANY FIRE OR SMOKE PARTITION SHALL HAVE THE WALL OPENING SEALED WITH HILTI FIRE STOP TO PREVENT THE SPREAD OF SMOKE.
- ANY EXISTING WALL, FLOOR, OR CEILING SURFACE DISTURBED DURING THE COURSE OF CONSTRUCTION, SHALL BE REPAIRED TO LIKE NEW OR PREVIOUS CONDITION TO THE SATISFACTION OF THE ARCHITECT.
- RECORD DRAWINGS:  
 THE CONTRACTOR SHALL MAINTAIN ON A DAILY BASIS AT THE PROJECT A COMPLETE SET OF "RECORD DRAWINGS", REFLECTING AN ACCURATE DIMENSIONAL RECORD OF ALL WORK OR CONCEALED WORK. THE "RECORD DRAWINGS" SHALL BE MARKED TO SHOW THE PRECISE LOCATION OF CONCEALED WORK, AND EQUIPMENT INCLUDING CONCEALED PIPING AND VALVES AND CONCEALED DEVICES. CHANGES FROM THE CONTRACT DOCUMENTS. THIS REQUIREMENT SHALL NOT BE CONSIDERED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES WORK WITHOUT APPROVAL FROM THE ARCHITECT.  
 "RECORD DRAWINGS" SHALL BE CLEARLY MARKED WITH "RECORD DRAWINGS" INDICATED IN THE LOWER RIGHT CORNER OF THE DRAWINGS.
- UPON THE COMPLETION OF THE HVAC SYSTEM INSTALLATION, PROVIDE A COMPLETE TEST AND BALANCE. THE TEST AND BALANCE SHALL MEASURE AIR FLOWS FOR EACH PIECE OF EQUIPMENT, DIFFUSER AND RETURN GRILL. SUBMIT TO ARCHITECT TEST AND BALANCE PLAN THREE DAYS PRIOR TO INTENDED START DATE.
- ALTERNATE MANUFACTURERS MAY BE USED AS LONG AS THE EQUIPMENT MEETS THE SAME STANDARDS AS THE BASIS OF DESIGN.

RTU SCHEDULE

MARK	CFM	MIN OA CFM	ESP IN WC	HP	COOLING CAP.		HEATING CAP.	BASIS OF DESIGN	MIN SEER /EER	WEIGHT	NOTES
					TOTAL	SEN	(KW @ 208V)				
RTU-1	2000	400	0.8	1.0	63.1	46.1	15.0	LENNOX KCA060S	SEER - 13.0	681 LB	①
RTU-2	3000	600	1.0	2.0	96.8	71.6	15.0	LENNOX KCA090S	EER - 11.4	851 LB	① ②
RTU-3	3000	600	1.0	2.0	96.8	71.6	15.0	LENNOX KCA090S	EER - 11.4	851 LB	① ②
RTU-4	2000	400	0.8	1.0	63.1	46.1	15.0	LENNOX KCA060S	SEER - 13.0	681 LB	①
RTU-5	1200	180	0.8	1.0	37.5	29.6	7.5	LENNOX KCA036S	SEER - 13.0	610 LB	①
RTU-6	1200	180	0.8	1.0	37.5	29.6	7.5	LENNOX KCA036S	SEER - 13.0	610 LB	①
RTU-7	1200	180	0.8	1.0	37.5	29.6	7.5	LENNOX KCA036S	SEER - 13.0	610 LB	①
RTU-8	2000	300	0.8	1.0	63.1	46.1	15.0	LENNOX KCA060S	SEER - 13.0	681 LB	①
RTU-9	2000	300	0.8	1.0	63.1	46.1	15.0	LENNOX KCA060S	SEER - 13.0	681 LB	①

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER FOR EQUIPMENT.  
PROVIDE ROOF CURB, MANUAL OUTSIDE AIR DAMPER AND PROGRAMMABLE THERMOSTAT.
- PROVIDE SMOKE DETECTOR IN THE SUPPLY AIR STREAM AFTER THE OUTSIDE AIR CONNECTION, FILTERS, FAN MOTORS AND UPSTREAM OF ANY BRANCH CONNECTIONS.

AIR DISTRIBUTION SCHEDULE

MARK	TYPE	SIZE IN INCHES		FINISH	O.B.D.	BASIS OF DESIGN	NOTES
		NECK	FACE				
A	SUPPLY	10"	24"x24"	WHITE	NO	TITUS TMS	①
B	SUPPLY	8"	24"x24"	WHITE	NO	TITUS TMS	①
C	RETURN	N/A	24"x24"	WHITE	NO	TITUS 50F	①
D	RETURN	N/A	12"x12"	WHITE	NO	TITUS 50F	①
E	SUPPLY	12"	24"x24"	WHITE	NO	TITUS TMS	①

- COORDINATE FRAME WITH CEILING TYPE. SEE ARCHITECTURAL DRAWINGS

FAN SCHEDULE

MARK	CFM	S.P. WG	POWER	TYPE	BASIS OF DESIGN	LOCATION/SERVICE	NOTES
	2000	0.25"	20 WATTS	CABINET	GREENHECK SP-B90	TOILET ROOM	① ②

- IN ACCORDANCE WITH ROOM LIGHT SWITCH.
- PROVIDE CEILING HANGER KITS AND SPEED CONTROLLERS FOR ALL OSCILLATING FANS. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.



COMcheck Software Version 4.1.1.0  
Mechanical Compliance Certificate

Project Information

Energy Code: 90.1 (2007) Standard  
 Project Title: Pop's Wine & Spirits  
 Location: Alpharetta, Georgia  
 Climate Zone: 3a  
 Project Type: New Construction

Construction Site: 2-1 764 TR A-B MCFARLAND  
 400 Inrd Park  
 Alpharetta, GA 30004  
 Designer/Agent: \_\_\_\_\_  
 Designer/Contractor: \_\_\_\_\_

Mechanical Systems List

- Quantity System Type & Description
- HVAC System 1 (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 51 kBtu/h  
 No minimum efficiency requirement applies.  
 Cooling: 1 each - Single Package DX Unit, Capacity = 53 kBtu/h, Air-Cooled Condenser  
 Proposed Efficiency = 13.00 SEER, Required Efficiency: 13.00 SEER  
 Fan System: FAN SYSTEM 1 | Sales Area -- Compliance (Motor nameplate I-P method) - Passes  
 Fans:  
 FAN 1 Supply, Constant Volume, 2000 CFM, 1.0 motor nameplate Hp
  - HVAC System 2 (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 51 kBtu/h  
 No minimum efficiency requirement applies.  
 Cooling: 1 each - Single Package DX Unit, Capacity = 57 kBtu/h, Air-Cooled Condenser  
 Proposed Efficiency = 11.40 EER, Required Efficiency: 11.20 EER  
 Fan System: FAN SYSTEM 2 | Sales Area -- Compliance (Motor nameplate I-P method) - Passes  
 Fans:  
 FAN 2 Supply, Constant Volume, 3000 CFM, 2.0 motor nameplate Hp
  - HVAC System 3 (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 36 kBtu/h  
 No minimum efficiency requirement applies.  
 Cooling: 1 each - Single Package DX Unit, Capacity = 30 kBtu/h, Air-Cooled Condenser  
 Proposed Efficiency = 13.00 SEER, Required Efficiency: 13.00 SEER  
 Fan System: FAN SYSTEM 3 | Sales Area -- Compliance (Motor nameplate I-P method) - Passes  
 Fans:  
 FAN 3 Supply, Constant Volume, 1200 CFM, 1.0 motor nameplate Hp

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2007) Standard requirements as COMcheck version 4.1.1.0 used to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Robbun Beard, PE LEED AP  
 Name Title Mechanical Engineer  
 Signature \_\_\_\_\_  
 Date 01/18/2019

Project Title: Pop's Wine & Spirits  
 Date filename: Untitled.docx

Report date: 01/18/19  
 Page 1 of 8

REVISIONS	NO.	DATE	DESCRIPTION

RETAIL DEVELOPMENT  
**POP'S WINE & SPIRITS**  
 2-1 764 TR A-B MCFARLAND 400 IND PARK  
 MCFARLAND PKWY ALPHARETTA GA 30004

HVAC NOTES & SCHEDULES  
 PROJ. NO: 201834  
 DATE: 01/18/2019

MO.1

Order Plans @