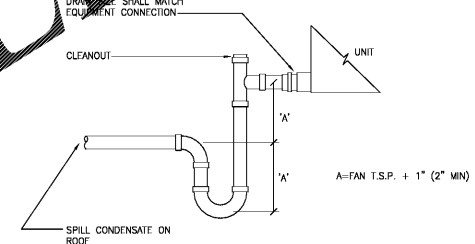
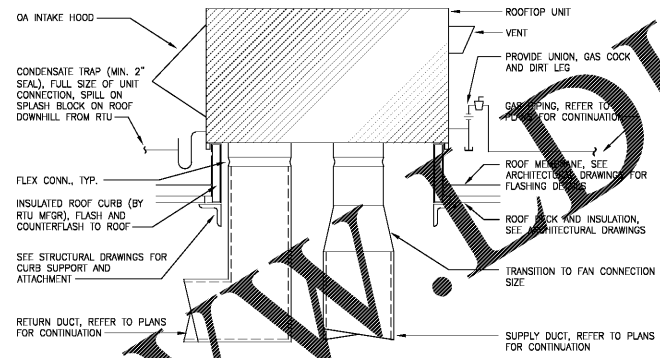


HVAC LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	FUTURE MECHANICAL CONSTRUCTION
[Symbol]	EXISTING MECHANICAL CONSTRUCTION TO BE REMOVED
[Symbol]	CONNECTION TO EXISTING CONSTRUCTION
[Symbol]	THROW / DIRECTION OF AIRFLOW
[Symbol]	AIR DEVICE TAG
[Symbol]	SUPPLY AIR DEVICE
[Symbol]	RETURN / EXHAUST AIR DEVICE
[Symbol]	SLOT AIR DEVICE
[Symbol]	SIDEWALL AIR DEVICE
[Symbol]	DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
[Symbol]	LINED DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
[Symbol]	FLEXIBLE DUCT OR CONNECTOR
[Symbol]	DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
[Symbol]	LINED DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
[Symbol]	FLEXIBLE CONNECTOR
[Symbol]	90 DEGREE ELBOW WITH TURNING VANES
[Symbol]	SMOOTH RADIUS ELBOW WITH FULL-LENGTH SPLUTTER VANES
[Symbol]	DUCT TRANSITION
[Symbol]	SQUARE-TO-ROUND DUCT TRANSITION
[Symbol]	DUCT OFFSET: (R)ISE, (D)ROP - ARROW SHOWS DIRECTION OF OFFSET.
[Symbol]	RETURN OPENING ABOVE CEILING, SIZED AS SPECIFIED
[Symbol]	FIRE DAMPER
[Symbol]	FIRE DAMPER - VERTICAL
[Symbol]	SMOKE DAMPER
[Symbol]	SMOKE DAMPER - VERTICAL
[Symbol]	MANUAL DAMPER
[Symbol]	MOTOR-OPERATED DAMPER
[Symbol]	(T)HERMOSTAT, (H)UMIDISTAT
[Symbol]	SENSOR: (T)EMP, (H)UMID, H2, CO, ΔP
[Symbol]	DUCT-MOUNTED SMOKE DETECTOR

HVAC ABBREVIATIONS			
ABBREV.	DEFINITION	ABBREV.	DEFINITION
A/C	ABOVE CEILING	IT	INFORMATION TECHNOLOGY
ASV	ABOVE	ID	INSIDE DIAMETER
AD	ACCESS DOOR	IE	INVERT ELEVATION
ADJ	ADJUSTABLE	L&S	LOUVER AND SCREEN
AF	ABOVE FINISHED FLOOR	LAHJ	LOCAL AUTHORITY HAVING JURISDICTION
AMB	AMBIENT	LAT	LEAVING AIR TEMPERATURE
ARCH	ARCHITECT(URAL)	LDB	LEAVING DRY BULB
B/F	BELOW FLOOR	LF	LINEAR FEET
B/G	BELOW GRADE	LWB	LEAVING WET BULB
BAS	BUILDING AUTOMATION SYSTEM	M&H	1000 BTUH
BB	BASE BUILDING	MD	MANUAL DAMPER
BD	BACKDRAFT DAMPER	MCH	MECHANICAL
BEL	BELOW	MGR	MANUFACTURER
BHP	BRAKE HORSEPOWER	MIN	MINIMUM
BLOG	BUILDING	MOD	MOTOR-OPERATED DAMPER
BOD	BOTTOM OF DUCT	MOV	MOTOR-OPERATED VALVE
BTUH	BRITISH THERMAL UNITS PER HOUR	MID	MOUNTED
CAF	CAPACITY	N/A	NOT APPLICABLE
CD	CONDENSATE DRAIN	NC	NOISE CRITERIA
CF(H/M)	CUBIC FEET PER (HOUR / MINUTE)	NC	NOT IN CONTRACT
CLG	CEILING	NOM	NOMINAL
CO	CARBON MONOXIDE or CLEANOUT	OA	OUTSIDE AIR
CONC	CONCRETE	OC	ON CENTERS
CONN	CONNECT(ION)	OD	OUTSIDE DIAMETER
CONT	CONTINUATION	OPNG	OPENING
CW	DOMESTIC COLD WATER	PH	PHASE
D	DRAIN	PLBG	PLUMBING
DB	DECEBEL or DRY BULB TEMPERATURE	PRV	PRESSURE REDUCING VALVE
DDC	DIRECT DIGITAL CONTROLS	PSI	POUNDS PER SQUARE INCH
DA	DIAMETER	R	R-VALUE or REFRIGERANT
DV 15	DIVISION 15000 (MECHANICAL)	RA	RETURN AIR
DV 16	DIVISION 16000 (ELECTRICAL)	RET	RETURN
DN	DOWN	RH	RELATIVE HUMIDITY
ΔP	PRESSURE DROP	R&L&G	REFRIGERANT LIQUID AND HOT GAS
DWG(S)	DRAWING(S)	RS&L	REFRIGERANT SUCTION AND LIQUID
EA	EACH or EXHAUST AIR	SA	SUPPLY AIR
EAT	ENTERING AIR TEMPERATURE	SAN	SANITARY
EDB	ENTERING DRY BULB	SD	SMOKE DAMPER or SMOKE DETECTOR
EFF	EFFICIENCY	SENS	SENSIBLE
ELEC	ELECTRICAL	SF	SQUARE FEET
ELEV	ELEVATION	SP	STATIC PRESSURE
ESP	EXTERNAL STATIC PRESSURE	SPEC(S)	SPECIFY or SPECIFICATIONS
EWB	ENTERING WET BULB	SQ	SQUARE
EXH	EXHAUST	SUP	SUPPLY AIR
EXIST	EXISTING	TBD	TO BE DETERMINED
FA	FREE AREA	THRU	THROUGH
FACP	FIRE ALARM CONTROL PANEL	TOD	TOP OF DUCT
FD	FIRE DAMPER	TSP	TOTAL STATIC PRESSURE
FLEX	FLEXIBLE	TSTAT	THERMOSTAT
FLR	FLOOR	TYP	TYPICAL
FP	FIRE PROTECTION	UNO	UNLESS NOTED OTHERWISE
FP(M/S)	FEET PER (MINUTE / SECOND)	VA	VOLT AMPERE
FSD	COMBINATION FIRE AND SMOKE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
GAL	GALLONS	W/	WITH
GP(D/H/M)	GALLONS PER (DAY / HOUR / MINUTE)	WB	WET BULB TEMPERATURE
H2	HYDROGEN	WC	WATER COLUMN
HD	HEAD	WG	WATER GAUGE
HP	HORSEPOWER	WT	WEIGHT
HWR	DOMESTIC HOT WATER (RECIRCULATION)	XFER	TRANSFER
HZ	HERTZ	XFRMR	TRANSFORMER

- ### GENERAL NOTES
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODES AND STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION AND ALL APPLICABLE LOCAL ORDINANCES.
 - CONTRACTOR SHALL OBTAIN ALL PERMITS, LICENSES, INSPECTIONS, ETC., AND PAY ALL INCIDENTAL FEES, AS REQUIRED TO OBTAIN A PERMIT AND A PERMANENT CERTIFICATE OF OCCUPANCY.
 - WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS. CONFLICTS WHICH ARISE DUE TO LACK OF PROPER COORDINATION SHALL BE CORRECTED AT THE CONTRACTOR'S COST.
 - DESIGN INDICATED IS SCHEMATIC AND MAY NOT REFLECT ALL CONSTRAINTS IMPOSED BY ACTUAL PROJECT CONDITIONS. CONTRACTOR SHALL VISIT SITE AND REVIEW CONSTRUCTION DOCUMENTS (INCLUDING ALL TRADES) TO FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BID. CONTRACTOR'S BID SHALL INCLUDE ANY AND ALL COSTS REQUIRED TO REWORK THE DESIGN TO FIT WITHIN THE PHYSICAL CONSTRAINTS WHILE ACHIEVING THE OVERALL DESIGN INTENT.
 - THE BASIS-OF-DESIGN PRODUCTS WERE USED TO DETERMINE DIMENSIONS, INSTALLATION AND ACCESS CLEARANCES, SUPPORTS, ELECTRICAL SERVICE, CONNECTION ARRANGEMENTS, ETC. WHERE ALTERNATE PRODUCTS ARE PROVIDED, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL REQUIREMENTS AND RECTIFY ANY CONFLICTS AT THE CONTRACTOR'S COST.
 - MECHANICAL CONSTRUCTION SHALL NOT BE INSTALLED WITHIN ELECTRICAL ROOMS, IT CLOSETS, TELEPHONE ROOMS, OR ELEVATOR EQUIPMENT ROOMS EXCEPT PORTIONS OF EACH SYSTEM SERVING THAT SPECIFIC ROOM. IN NO CASE, MAY PIPING BE INSTALLED DIRECTLY ABOVE EQUIPMENT WITHIN THESE ROOMS. ALL WORK SHALL BE INSTALLED TO AVOID CONFLICT WITH ELECTRICAL EQUIPMENT "DEDICATED SPACE" AS REQUIRED BY NEC AND LOCAL ORDINANCES. COORDINATE LOCATIONS OF ALL ELECTRICAL GEAR (DISTRIBUTION PANELS, TRANSFORMERS, SWITCHGEAR, ETC.) WITH ELECTRICAL CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION.
 - CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL EQUIPMENT AND DEVICES WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
 - ALL MATERIALS AND EQUIPMENT SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO ORDERING. CONTRACTOR ASSUMES LIABILITY AND COSTS FOR ANY PRODUCT WHICH IS ORDERED PRIOR TO RECEIPT OF APPROVED SUBMITTALS.
 - ALL MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE. ADDITIONAL WARRANTY SHALL APPLY WHERE SPECIFIED.
 - EQUIPMENT START-UP AND COMMISSIONING SHALL BE PERFORMED BY FACTORY-AUTHORIZED AGENTS ONLY. SUBMIT WRITTEN START-UP PROCEDURES TO OWNER AND ENGINEER FOR APPROVAL PRIOR TO PERFORMANCE OF START-UP ACTIVITIES. FINAL REPORTS SHALL BE APPROVED BY OWNER AND ENGINEER.
 - ALL PENETRATIONS OF FIRE AND/OR SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED WITH UL-LISTED SYSTEM APPROVED FOR THE APPLICATION.
 - FLASH AND SEAL ALL PENETRATIONS OF BUILDING EXTERIOR, WALLS AND ROOF WITH APPROVED SEALANT.
 - ALL WORK INSTALLED WITHIN HVAC PLENUMS SHALL BE PLENUM RATED (25/50 FLAME SPREAD/SMOKE DEVELOPED) AND, WHERE REQUIRED BY THE LAW, SHALL BE NON-COMBUSTIBLE.
 - ALL EQUIPMENT SHALL BE NEW. CONTRACTOR SHALL TEST EXISTING EQUIPMENT FOR PROPER OPERATION AND REPORT CONDITION TO OWNER. ALL UNREPORTED EQUIPMENT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED OR REPLACED IF NOT FUNCTIONAL AT THE DATE OF BENEFICIAL OCCUPANCY. NEW EQUIPMENT SHALL BE UL OR ETL LISTED AND LABELED. GAS-FIRED EQUIPMENT SHALL ALSO BE ASA OR CSA LISTED AND LABELED. INSTALL ALL EQUIPMENT PER THESE DOCUMENTS, MANUFACTURER'S RECOMMENDATIONS, AND CODE REQUIREMENTS FOR SPECIFIC APPLICATION.
 - EXCEPT WHERE SPECIFIED OTHERWISE, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS AND ELECTRICAL DISCONNECTS FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 - PROVIDE PERMANENT LABELS FOR ALL EQUIPMENT, CONTROLS, AND PIPING.



- NOTES:**
- SPILL CONDENSATE DRAIN ON SPLASH BLOCK ON ROOF ON DOWNHILL SIDE OF RTU.
- 2 ROOFTOP UNIT CONDENSATE DRAIN**
SCALE: NONE

PACKAGED ROOFTOP AIR CONDITIONING UNITS

MARK	NOM TONS	STAGES	EER / SEER	SUPPLY FAN		GAS HEATER		ELEC HEAT KW	ELEC		WEIGHT (LBS)	BASIS OF DESIGN		REMARKS	
				CFM	ESP (W.G.)	MBH	EFF		V/PH	DISC BY		MANUFACTURER	MODEL		
RTU-1B-LL	2	1	14.0	800	0.4	50	-	-	6.0	208/1	E.C.	450	TRANE	4TCC4024	(1)(2)(3)(4)
RTU-1B-1	8.5	2	11.2/12.7	3,400	1.0	200	150	80	-	208/3	E.C.	1,250	TRANE	YSC102	(7)
RTU-1B-2.5	7.5	2	11.2/12.7	3,000	1.0	200	150	80	-	208/3	E.C.	1,150	TRANE	YSC092	(1)(2)(3) (5)(6)
RTU-1B-3.4.6	6	1	11.2/12.7	2,400	1.0	200	120	80	-	208/3	E.C.	1,050	TRANE	YSC072	(7)

- SEE WP0.1 FOR SPECIFICATIONS.
- 7-DAY PROGRAMMABLE, AUTOMATIC CHANGEOVER COMBINATION THERMOSTAT AND HUMIDISTAT WITH SETPOINT OVERLAP PROTECTION, 5°F DEADBAND, SETBACK CONTROL WITH 4 OCCUPIED/UNOCCUPIED EVENTS PER DAY (75°F COOL/70°F HEAT OCCUPIED, 85°F COOL/55°F HEAT UNOCCUPIED), SYSTEM AUTO/HEAT/COOL/OFF HIGH-LIMIT CONTROL, AND 2-HOUR PROGRAM OVERRIDE. OPTIMUM START CONTROL; 24 HR BATTERY BACK-UP. PREPARE REMOTE TEMP SENSOR WHERE INDICATED.
- INSULATED 14" ROOF CURB.
- 2-POSITION MOTORIZED OUTSIDE AIR DAMPER WITH CLASS 1 SEALS.
- OA ECONOMIZER WITH CLASS 1 SEALS, ENTHALPY CONTROL, FAULT DETECTION AND DIAGNOSTICS, HIGH LIMIT SHUT OFF, INTEGRATED ECONOMIZER CONTROL, AND BAROMETRIC RELIEF.
- SMOKE DETECTOR IN SUPPLY DUCT TO SHUT DOWN UNIT UPON DETECTION OF SMOKE.
- SHOWN FOR REFERENCE, NOT INCLUDED IN SCOPE OF WORK.

FANS

MARK	TYPE	SERVICE	CFM	ESP (W.G.)	MOTOR	ELECTRICAL (V/PH)	MOUNTING	MATERIAL	BASIS OF DESIGN	REMARKS
EF-1B-LL	CEILING-MID	RESTROOMS	50	0.1	6	120	MC	0.6	GREENHECK	SP-80-VG (1)

- DIRECT DRIVE, GALVANIZED STEEL FORWARD CURVED FAN FROM MOTOR, SOUND CONSTRUCTION; HEAVY GAUGE CABINET INTERNALLY LINED WITH 1/2" ACOUSTICAL LINER; CEILING GRILLE; MOTOR DAMPER; ELECTRICAL DISCONNECT; INTERLOCK WITH LIGHTS

DIFFUSERS, REGISTERS AND GRILLES - LANDLORDS ROOM

MARK	TYPE	MOUNTING	NECK DAMPER	MAX NC	MAX AP	SIZE				MATERIAL	FINISH	BASIS		REMARKS
						NECK	FRAME	MATERIAL	FINISH			MFR	MODEL	
S1	LOUVERED DIFFUSER	LAY-IN	Y	30	0.1"	6x6	8x8	AL	WHITE	TITUS	250-AA			
S2	DOUBLE DEFLECTION	DUCT	Y	30	0.1"	PER PLANS	1"W	AL	WHITE	TITUS	272FL			



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Rev. No.	Description	Date
1	ISSUED FOR BID AND PERMIT	10/16/20

Salem Gate Market
RETAIL 1B

CONYERS, GEORGIA

HVAC GENERAL NOTES AND DETAILS