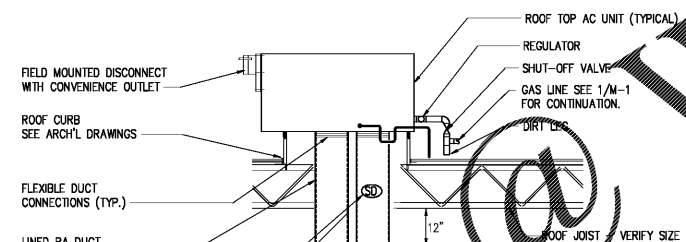
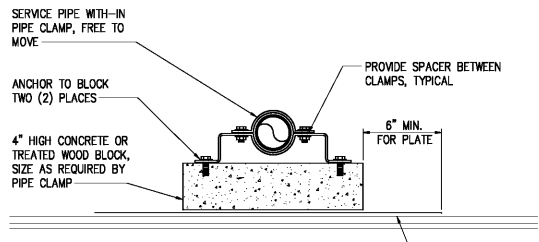
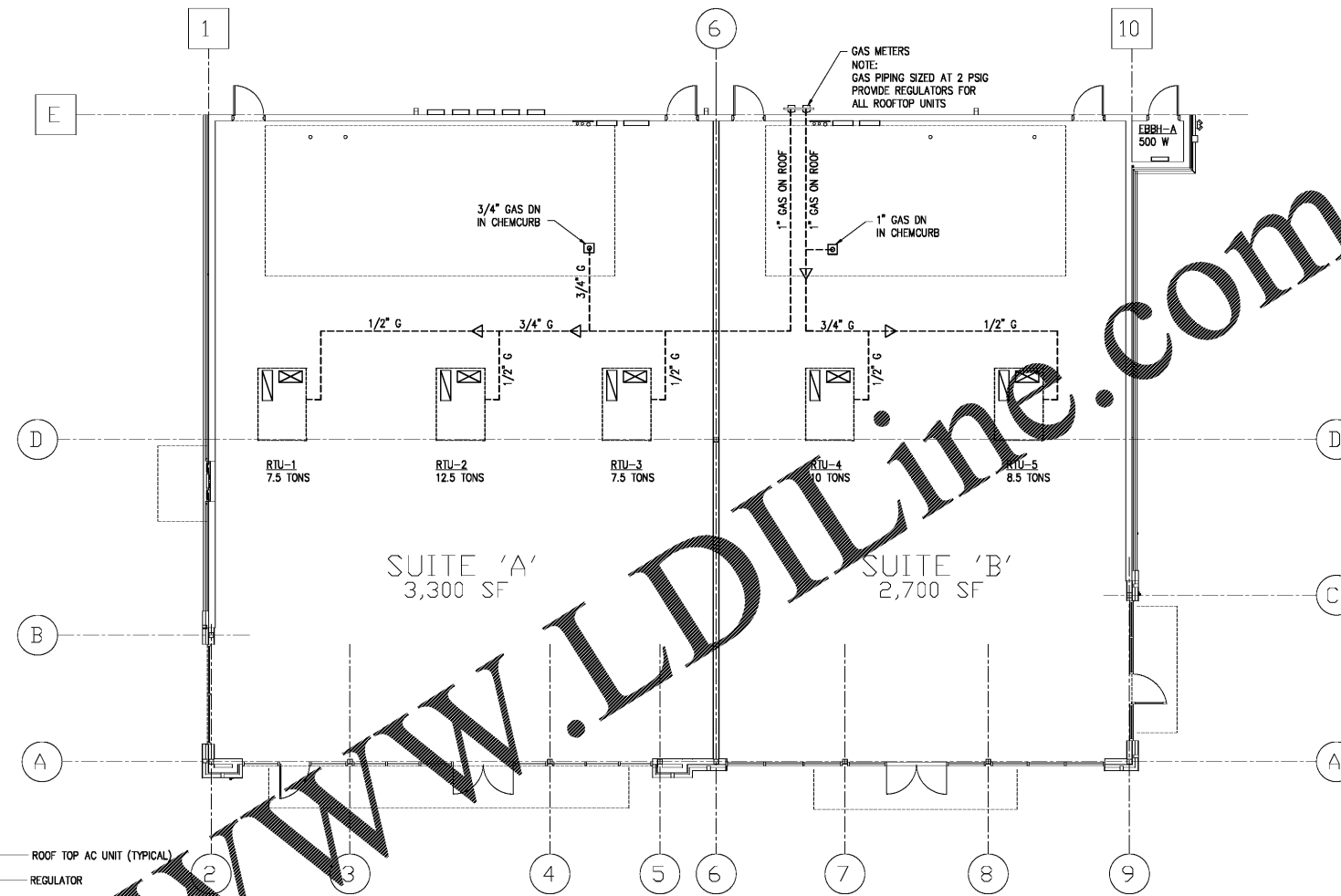


**MECHANICAL NOTES AND SPECIFICATIONS**

- THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT.
- DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING. APPROVAL WILL NOT BE GIVEN UNLESS THE PROPOSED SYSTEM IS EQUAL IN PERFORMANCE, DURABILITY, LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES, LAWS, AND ORDINANCES.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND THE CONDITIONS AND SHALL VERIFY DIMENSIONS AND CLEARANCES AND BE ASSURED THAT THE EQUIPMENT PURCHASED WILL FIT INTO THE AVAILABLE SPACE.
- SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS, SPECIFICATIONS, AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO BIDS FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS DIFFICULTIES COULD NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- THE CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.
- ALL HARD DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL OF THICKNESS AND GAUGES TO CONFORM TO SMACNA DUCT CONSTRUCTION STANDARDS. (RECTANGULAR OR EQUIVALENT ROUND)
- ALL DUCT SHALL BE AIRTIGHT, FREE OF LEAKS, AND SHALL BE INSPECTED FOR LEAKS PRIOR TO INSTALLATION OF FINISHED CEILING SYSTEM.
- DUCTWORK, DAMPERS, LOUVERS, DIFFUSERS, AND OTHER DISTRIBUTION EQUIPMENT AND MATERIALS SHALL CONFORM TO THE FOLLOWING:
 

A. ASHRAE/ANSI	E. AMCA STANDARD HANDBOOK 99
B. SBCCI/ASME	F. AIR DIFFUSION COUNCIL TEST
C. SMACNA	CODE 1062R3
D. NFPA	G. ANY LOCAL CODES NOT COVERED ABOVE
- ALL DUCT SIZES ARE CLEAR NET INSIDE DIMENSIONS.
- ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE LINED WITH 1" 1-1/2" DENSITY FIBERGLASS 5'-0" DOWNSTREAM FROM UNIT.
- ALL THERMOSTATS SHALL BE PROVIDED WITH 100 FEET THERMOSTAT WIRE COILED AND LOCKING COVERS.
- CONDENSATE DRAIN MUST TERMINATE AT AN APPROVED POINT. VERIFY AT SITE.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE UNDER THIS CONTRACTOR.
- ALL INSULATING MATERIALS SHALL HAVE A COMPOSITE FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50 (ASTM E-84, NFPA 255 & UL 723).
- PROGRAMMABLE THERMOSTATS AND OTHER CONTROL ITEMS SHALL BE A COMPATIBLE WITH THE EQUIPMENT MANUFACTURER.
- PROVIDE SMOKE DETECTORS IN ALL SUPPLY AIR DUCTS, OF UNITS SERVING EGRESS CORRIDORS OR GREATER THAN 2,000 CFM, ARRANGED TO SHUT DOWN UNIT BLOWER.
- THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL CHARACTERISTICS WITH ELECTRICAL DRAWINGS BEFORE PURCHASING EQUIPMENT.
- ALL MECHANICAL EQUIPMENT WHICH HAVE ELECTRICAL CONNECTIONS SHALL BE SUPPLIED WITH DISCONNECT (PROVIDED BY ELECTRICAL CONTRACTOR.)
- OUTSIDE AIR TO AIR HANDLING UNITS SHALL CONFORM 2012 IMC TABLE 403.3. SEE CALCULATIONS.
- GAS PIPING SHALL BE SCHEDULE 40 ASTM A120-84 BLACK STEEL WITH 150# BLACK MALLEABLE FITTINGS AND DART #0832 UNIONS. PROVIDE DRIP LEGS AND CAPS FOR MOISTURE REMOVAL. PROVIDE UNIONS AND LUBRICATED PLUGS FOR ALL EQUIPMENT.
- UPON COMPLETION OF THE WORK, TEST ALL PIPING SYSTEMS AS FOLLOWS:
  - GAS PIPING: 20 PSIG AIR PRESSURE TEST. MAINTAIN THIS PRESSURE FOR A MINIMUM OF EIGHT (8) HOURS WITHOUT A LOSS OF PRESSURE. FOLLOW INSTRUCTIONS 2.11 AND 2.12 IN NFPA MANUAL 54.
  - RETESTING: RETEST PIPING FAILING INITIAL TESTS FOLLOWING CORRECTION OF DEFECTIVE WORK. REQUIREMENTS OF INITIAL TESTS SHALL APPLY.



**UNIT HEATER SCHEDULE**

MARK	SERVICE	CFM	MAX HP	HEATING CAP. (KW)	ELECTRICAL			UNIT WT (LBS)	BASIS OF DESIGN MARKEL	REMARKS
					VOLTAGE	MCA	MOCP			
EBBH-A	GENERAL	N/A	N/A	500 W	120/1	4.5	15	4	SERIES RPH	① ②

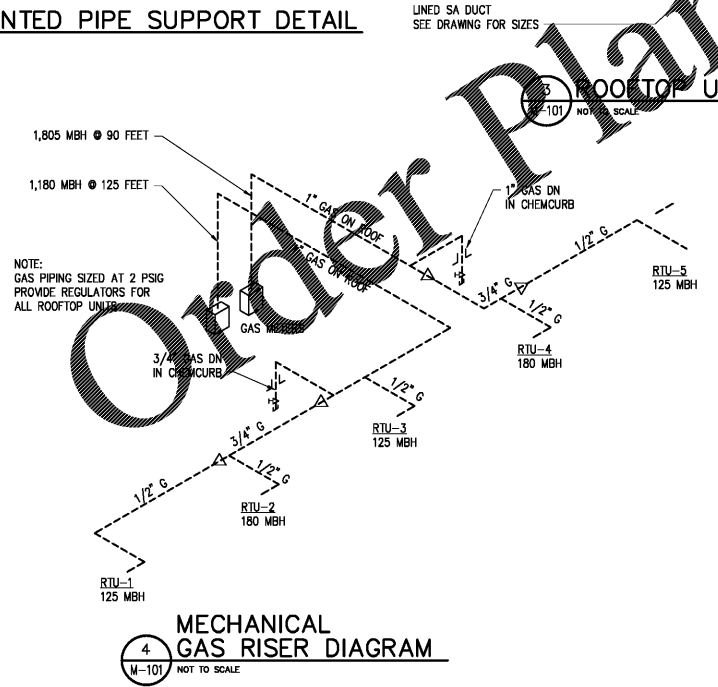
① DISCONNECT ② INTEGRAL THERMOSTAT

**VENTILATION REQUIREMENTS**

SPACE	EQUIPMENT	GROSS SQ.FT.	NET SQ.FT.	PEOPLE PER 1000 SQ.FT.	PEOPLE	VENTILATION PER PERSON	V/P	VENTILATION PER SQ.FT.	V/A	TOTAL CFM V/P + V/A	SET AHU OA TO
SALES	RTU-1	860	430	15	7	7.5	53	0.12	52	105	110
SALES	RTU-2	1460	730	15	11	7.5	83	0.12	88	171	180
SALES	RTU-3	860	430	15	7	7.5	53	0.12	52	105	110
SALES	RTU-4	1200	600	15	9	7.5	68	0.12	72	140	140
SALES	RTU-5	1440	720	15	11	7.5	83	0.12	87	170	170

**PACKAGED ROOFTOP UNIT (GAS)**

MARK	SERVICE	TONS	SEER/EER	CFM	MIN OA CFM	ESP IN WC	MAX HP	COOLING CAPACITIES (MBH)		HEATING CAPACITY	GAS SERVICE	ELECTRICAL VOLTAGE	ELECTRICAL		UNIT WT (LBS)	BASIS OF DESIGN CARRIER	REMARKS
								TOTAL	SENSIBLE				MCA	MOCP			
RTU-1,3	GENERAL	7.5	11.7	3,000	②	0.6	3.0	86.5	59.0	125 MBH	7" W.C.	208/3	38.0	50	780	48TC008	① ③ ④ ⑤ ⑥ ⑦
RTU-5	GENERAL	8.5	11.2	3,400	②	0.6	3.0	97.9	67.6	125 MBH	7" W.C.	208/3	40.0	50	920	48TC009	① ③ ④ ⑤ ⑥ ⑦
RTU-4	GENERAL	10	11.8	4,000	②	0.6	3.0	119.0	87.2	180 MBH	7" W.C.	208/3	44.0	50	930	48TC012	① ③ ④ ⑤ ⑥ ⑦
RTU-2	GENERAL	12.5	11.7	5,000	②	0.6	5.0	145.5	100.4	180 MBH	7" W.C.	208/3	63.0	80	1240	48TC014	① ③ ④ ⑤ ⑥ ⑦



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PROFESSIONAL SEAL:

PROJECT TITLE:

**BUTLER CREEK RETAIL BUILDING**

ACWORTH, GEORGIA

PROJECT INFO:

3330 COBB PARKWAY NW  
ACWORTH, GA 30144

**PRINT RECORD**

Description	Date
PERMIT SET	01/17/2020

**REVISION**

No.	Description	Date
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**MECHANICAL FLOOR PLAN**

Project number: D19-127  
Date: 1/17/2020  
Drawn by: RK  
Checked by: RK

**M-101**

Scale: AS INDICATED

ISSUED FOR CONSTRUCTION

① ROOF CURB ② SEE CALCULATIONS ③ DISPOSABLE 30/30 AIR FILTERS ④ SMOKE DETECTOR INTERLOCKED WITH FIRE CONTROLS  
⑤ FACTORY INSTALLED PACKAGE WITH UNIT DISCONNECT AND DUAL 115 VOLT GFCI TYPE SERVICE ⑥ ENTHALPY ECONOMIZER ⑦ DUAL COMPRESSOR