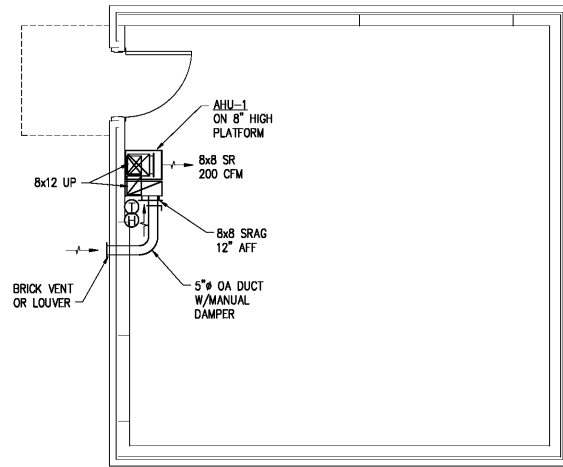


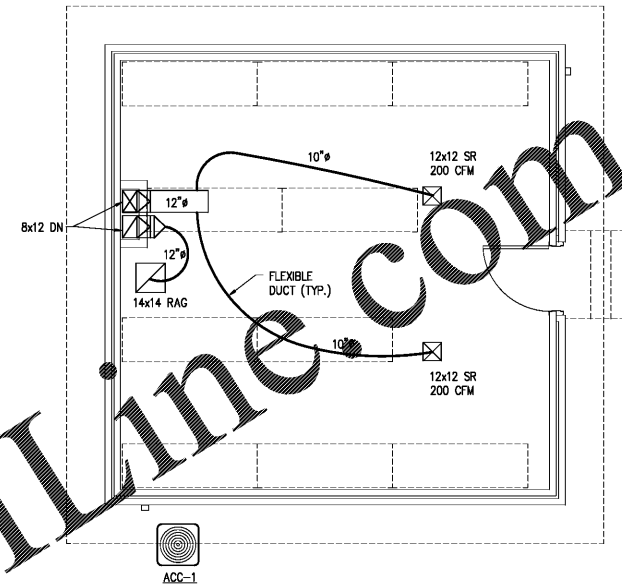
MECHANICAL NOTES AND SPECIFICATIONS

- 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:

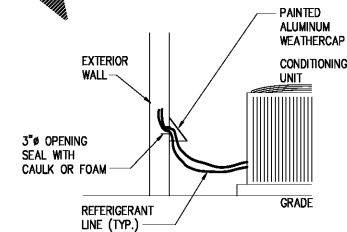
A. ASHRAE/ANSI	E. AMCA STANDARD HANDBOOK 99
B. SBCCI/ASME	F. AIR DIFFUSION COUNCIL TEST
C. SMACNA	CODE 1062R3
D. NFPA	G. ANY LOCAL CODES NOT COVERED ABOVE
- ALL DUCT SIZES ARE CLEAR NET INSIDE DIMENSIONS.
- ALL LOW PRESSURE ROUND DUCT AND FLEXIBLE DUCT SHALL BE CONNECTED TO LOW PRESSURE DUCT WITH SPIN-IN FITTINGS AND MANUAL DAMPERS.
- LOW PRESSURE INSULATED FLEXIBLE DUCT SHALL BE SIZED AS SHOWN. USE R-6 IN CONDITIONED AREAS AND R-8 IN UNCONDITIONED AREAS.
- ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK NOT LINED SHALL BE INSULATED WITH 1-1/2", 3/4# DENSITY FOIL BACKED EXTERNAL INSULATION.
- ALL THERMOSTATS SHALL BE INSTALLED 4'-0" AFF.
- ALL MITERED SUPPLY DUCT ELBOWS SHALL BE PROVIDED WITH TURNING VANES.
- SUPPLY REGISTER (SR) SHALL BE ACCORD MODEL 203 OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- RETURN AIR GRILLE (RAG) SHALL BE ACCORD MODEL 185 OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- REFRIGERANT PIPING SHALL BE SIZED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR LIQUID, VAPOR HORIZONTALS AND VAPOR RISERS. JOINTS SHALL BE MADE WITH SILVER SOLDER.
- INSULATE REFRIGERANT SUCTION LINES WITH ARMAFLEX OR EQUAL. INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. RUN IN WALLS AND ABOVE CEILINGS AS MUCH AS POSSIBLE.
- MANUAL DAMPERS SHALL BE INCLUDED IN OUTSIDE AIR INTAKE DUCTS TO REGULATE OUTSIDE AIR TO THE AIR HANDLING UNITS.
- CONDENSATE DRAIN MUST TERMINATE AT AN APPROVED POINT: AS NOTED 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, UL 255 & UL 723).
- PROGRAMMABLE THERMOSTATS AND OTHER CONTROL ITEMS SHALL BE COMPATIBLE WITH THE EQUIPMENT MANUFACTURER. CARRIER SYSTEMS: CO1-A W/W-FI CONTROLS AND HUMIDISTAT.
- PROVIDE SMOKE DETECTOR IN ALL SUPPLY TAKE-OFFS, OF UNITS SERVING EGRESS CORRIDORS OR GREYS WITH 2,000 CFM, ARRANGED TO SHUT DOWN AT BLOW-OUT AND ACTIVATE BUILDING ALARM.
- PROVIDE EXTINGUISHERS AT DUCT TAKE-OFFS AS REQUIRED FOR AIR BALANCE.
- BALANCE ALL AIR SYSTEMS TO PRODUCE THE VOLUMES AND QUANTITIES SHOWN ON THE DRAWINGS OR SPECIFIED.
- 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 2015 IMC TABLE 403.3. SEE CALCULATIONS.



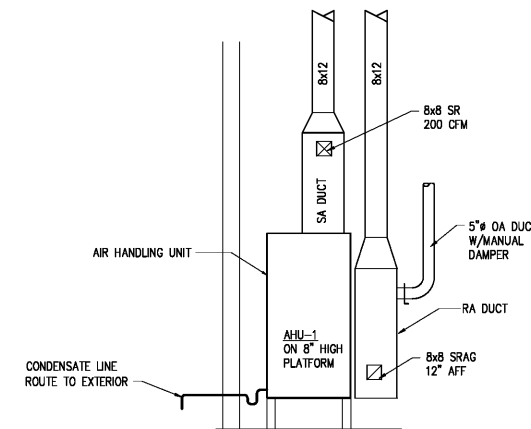
2 MECHANICAL LOWER FLOOR PLAN
M-1 1/4" = 1'-0"



1 MECHANICAL UPPER FLOOR PLAN
M-1 1/4" = 1'-0"



4 REFRIGERANT LINE ENTRY DETAIL
M-1 NOT TO SCALE



3 AIR HANDLER DETAIL
M-1 NOT TO SCALE

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
STORAGE	AHU-1	800	800	N/A	N/A	N/A	N/A	0.06	48	50	50

AIR HANDLING UNITS

MARK	SERVICE	TONS	CFM	OA CFM	COOLING CAPACITY		HEATING CAPACITY	MAX HP	ELECTRICAL			UNIT WT (LBS)	BASIS OF DESIGN CARRIER	REMARKS
					TOTAL MBH	SENS. MBH			MCA	MOCP	VOLTAGE			
AHU-1	GENERAL	1.5	600	3	17.1	11.8	5 KW	1/3	31.2	35	208/1	135	FE4A-002	① ②

AIR CONDITIONER

MARK	ELECTRICAL			SEER	UNIT WT (LBS)	BASIS OF DESIGN CARRIER
	MCA	MOCP	VOLTAGE			
ACC-1	11.7	20	208/230/1	16	217	24ANB-018

① DISCONNECT ② SMOKE DETECTOR ③ SEE CALCULATIONS ④ DRAIN CONDENSATE TO EXTERIOR



Beta Design Group, Inc.
 Architecture
 2634 Royal Place Suite "C" Tucker, GA. 30084
 Phone: 770 491 9250
 Email: mikes@betadesigngroup.com

Client:

Project: STORAGE BUILDING
 442 HARBINS ROAD
 Dacula, Georgia

Issue Date	Initial	Rev.	Description

Project No.: 20088
 Drwg. Date: 03/27/20
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 Checked By: RK
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Sheet Title:
 MECHANICAL FLOOR PLANS

Sheet No.:
 M-1

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