



1 1ST FLOOR PLAN
SCALE: 3/16" = 1'-0"

DIFFUSER AND GRILLE SCHEDULE								
PHYSICAL DATA					PERFORMANCE DATA			
MARK	MFG.	MODEL	SIZE (INCHES)	NOM. CFM	THROW		PRESS. DROP (IN H2O)	SOUND RATING (NC)
					FT. AT 50 FPM	DIR.		
A	TITUS	121RL	16 x 6	265	13	1-WAY	0.02	-
B	TITUS	121RL	12 x 6	100	7	1-WAY	0.01	-
C	TITUS	121RL	12 x 4	80	8	1-WAY	0.02	-
D	TITUS	121RL	10 x 6	140	12	1-WAY	0.03	-
E	TITUS	121RL	18 x 6	170	8	1-WAY	0.01	-
F	TITUS	121RL	8 x 6	70	5	1-WAY	0.01	-
G	TITUS	121RL	20 x 8	450	16	1-WAY	0.02	-
H	TITUS	121RL	24 x 6	460	19	1-WAY	0.03	12
I	TITUS	121RL	6 x 6	110	10	1-WAY	0.04	11
J	TITUS	121RL	12 x 12	130	10	1-WAY	0.01	-
K	TITUS	121RL	30 x 6	180	11	1-WAY	0.01	-
TG	TITUS	56R	30 x 30	1900			0.02	18

TITUS GRILLES USED AS BASIS FOR DESIGN. MVD 2 REGISTER OR @ DUCTS

SPLIT SYSTEM AIR HANDLER UNIT SCHEDULE													
MARK	MANUFACTURER	MODEL	COOLING CAPACITY (BTU/HR)	SENSIBLE (BTU/HR)	LATENT (BTU/HR)	SENSIBLE HEAT RATIO (SHR)	SEER	AIR FLOW (CFM)	VOLTAGE/PHASE/HERTZ	MCA	FLA	HEATING ELEMENT PART	HEATING PART RATING
AHU-1	GOODMAN	ASPT61D14A	57,000	39,900	17,100	0.7	14	1900	208V / 1 / 60	8.6A	6.9 A	HKSX05XC	4.5 KW
AHU-2	GOODMAN	ARUF61D14A	55,500	38,850	16,650	0.7	13	1850	208V / 1 / 60	6 A	4.6 A	HKSX05XC	4.5 KW
AHU-3	GOODMAN	ARUF49D14A	45,000	31,500	13,500	0.7	13	1500	208V / 1 / 60	4 A	3.5 A	HKSX05XC	4.5 KW

SPLIT SYSTEM AIR CONDENSER UNIT SPECIFICATIONS						
MARK	MANUFACTURER	MODEL	VOLTAGE / PHASE / HERTZ	REFRIGERANT	MCA	FLA
ACU-1	GOODMAN	GSX140601KA	230V / 1 / 60	R410A	32.8 A	1.5 A
ACU-2	GOODMAN	GSX130611A	230V / 1 / 60	R410A	34.5 A	1.5 A
ACU-3	GOODMAN	GSX130481B	230V / 1 / 60	R410A	28.4 A	1.5 A

MINI SPLIT SPECIFICATIONS						
MARK	MANUFACTURER	MODEL	VOLTAGE / PHASE / HERTZ	REFRIGERANT	MCA	INPUT
OU-1	ECOX	EACM009CLLB	230V / 1 / 60	R410A	14.0	3.2 KW

OUTSIDE AIR CALCULATIONS A/C UNIT-1		
TOTAL PEOPLE = 9 OFFICE x 5 CFM =		45 CFM
CFM/SF 1875 x 0.06 =		113 CFM
TOTAL OUTSIDE AIR CALCULATED =		158 CFM

NOTES: I-CALCULATIONS ARE BASED ON ESTIMATED MAX OCCUPANCY RATES PER ARCHITECTURAL PLANS AND FMC SECTION: 403.3.1.1 USING EQUATION 4-1 AND TABLE 403.3 FBCM 2020

OUTSIDE AIR CALCULATIONS A/C UNIT-2		
TOTAL PEOPLE = 14 VIDEO STUDIO x 5 CFM =		70 CFM
CFM/SF 1402 x 0.12 =		168 CFM
TOTAL OUTSIDE AIR CALCULATED =		238 CFM

NOTES: I-CALCULATIONS ARE BASED ON ESTIMATED MAX OCCUPANCY RATES PER ARCHITECTURAL PLANS AND FMC SECTION: 403.3.1.1 USING EQUATION 4-1 AND TABLE 403.3 FBCM 2020

OUTSIDE AIR CALCULATIONS A/C UNIT-3		
TOTAL PEOPLE = 17 VIDEO STUDIO x 5 CFM =		85 CFM
CFM/SF 1705 x 0.12 =		205 CFM
TOTAL OUTSIDE AIR CALCULATED =		290 CFM

NOTES: I-CALCULATIONS ARE BASED ON ESTIMATED MAX OCCUPANCY RATES PER ARCHITECTURAL PLANS AND FMC SECTION: 403.3.1.1 USING EQUATION 4-1 AND TABLE 403.3 FBCM 2020

- REMARKS AND ACCESSORIES:
- FURNISH DIFFUSERS WITH SQUARE-TO-ROUND NECK TRANSITIONS AS REQUIRED
 - FURNISH ALL DIFFUSERS AND GRILLES WITH POWDER-COATED FINISH IN COLOR AS SELECTED BY ARCHITECT FROM ALL AVAILABLE OPTIONS.
 - TITUS GRILLES WERE UTILIZED AS THE BASIS FOR THE DESIGN.
 - OUTDOOR UNIT WILL HAVE LOCKING PORT CAPS IN ACCORDANCE WITH FBC M1411.8
 - ALL DOORS SHALL HAVE A ONE(1) INCH UNDERCUT

- NOTES
- ALL CONDENSER UNITS ARE EXISTING.
 - ACU-1 AND ACU-2 INSTALLED ON EXISTING WALL MOUNT BRACKETS SOUTH MOST WALL.
 - ACU-3 INSTALLED ON ROOF
 - SET OU-1 INDOOR UNIT ON HIGH FOR MAX CFM
 - FOR CONDENSATE DRAINS PROVIDE GOOSENECK MIN 12" AWAY FROM BUILDING FOUNDATION.

PUMP					
MANUFACTURER	MODEL	VOLTAGE / PHASE / HERTZ	AMPERAGE	GPM	VERTICAL LIFT(FT)
EVERBILT	EB-PUMP-T	120V / 1 / 60	1.9	1.6	20

WIND DATA
ALL MECHANICAL PLUMBING AND ELECTRICAL EQUIPMENT RESTRAINT SYSTEM SHALL BE ADEQUATE FOR WIND FORCES SPECIFIC FOR THIS PROJECT LOCATION, AND SHALL CONFORM TO HVHZ PROTOCOLS AND/OR BEAR ALL ACTIVE NOTICE OF ACCEPTANCE.
WIND BASE SPEED: $V_{ULT} = 170MPH$

HVAC DESIGN REQUIRES:	YES	NO
DUCT SMOKE DETECTOR		X
FIRE DAMPER(S)		X
VOLUME DAMPER(S)	X	
SMOKE DAMPER(S)	X	
FIRE RATED ENCLOSURE		X
FIRE RATED ROOF CEILING ASSEMBLY	X	
FIRE STOPPING		X
SMOKE CONTROL		

NOTE
EXTRACTOR FAN TERMINATION THROUGH WALL

EXHAUST FAN				
MANUFACTURER	MODEL	VOLTAGE / PHASE / HERTZ	AMPERAGE	CFM
BROAN	NUTONE	120V / 1 / 60	2.4	80

ISSUE	DATE
3. CITY OF MIAMI COMMENTS	12/23/2022
4. CITY OF MIAMI COMMENTS	01/27/2023

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DATE
11/04/2022

SHEET
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