

## GENERAL MECHANICAL NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE AND OPERABLE SYSTEM IN ACCORDANCE WITH THESE DOCUMENTS, THE APPLICABLE BUILDING CODES AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST EDITION OF THE FOLLOWING PUBLICATIONS: FLORIDA BUILDING CODE-MECHANICAL, SMACNA, ASHRAE, NFPA 90A, 90B, 91 & ANSI B-9.1 MECHANICAL REFRIGERATION.
- THE MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IN WRITING IF MECHANICAL SYSTEMS WILL NOT FIT IN AREA ALLOTTED.
- THE CONTRACTOR SHALL BE HELD TO HAVE VERIFIED ALL EXISTING CONDITIONS, INCLUDING REVIEW OF AS BUILT DOCUMENTATION IF APPLICABLE, PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT ON THIS PROJECT.
- THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
- THE GENERAL CONTRACTOR AND ALL OTHER SUBCONTRACTORS SHALL BE LICENSED IN THE STATE OF FLORIDA. GENERAL CONTRACTOR SHALL CONSIDER THE PROJECT AS ONE SET OF DOCUMENTS. GENERAL CONTRACTOR SHALL PROVIDE AN ENTIRE SET OF DOCUMENTS SHOWING ALL TRADES TO EACH SUBCONTRACTOR PRIOR TO BIDDING AND CONSTRUCTION. GENERAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS TO INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR POSSIBLE CONFLICTS ON THE DOCUMENTS PRIOR TO SUBMITTING FINAL BID AND COMMENCE ANY WORK. CONTRACTOR SHALL MAKE HIMSELF AVAILABLE FOR REVIEWING DOCUMENTS WITH ARCHITECT/ENGINEER UPON REQUEST.
- THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
- THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH "AS-BUILT" REDLINE DRAWINGS UPON COMPLETION OF THE PROJECT AND AUTOCAD SHOP DRAWING FILES (IF APPLICABLE).
- CONTRACTOR SHALL SUBMIT FOR APPROVAL ELECTRONIC PDF COPIES OF MANUFACTURER DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT. ALL MATERIAL SHALL BE NEW AND OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY SKILLED TRADESMEN.
- THE GENERAL CONTRACTOR SHALL PROVIDE IN WRITING AND ON COMPANY LETTERHEAD ALL ITEMS VALUE ENGINEERED OR OMITTED FROM PROJECT BIDS. THIS DOCUMENT SHALL HAVE DETAILED DESCRIPTION AND TRANSPARENCY OF ALL ITEMS IN EACH DISCIPLINE AND FOR EACH TRADE. INFORMATION SHALL BE PROVIDED TO ARCHITECT AND ENGINEER FOR REVIEW PRIOR TO SUBMITTING FINAL BID. CONTRACTOR SHALL MAKE HIMSELF AVAILABLE FOR REVIEWING DOCUMENTS WITH ARCHITECT/ENGINEER/OWNER UPON REQUEST.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ELECTRICAL CONTRACTOR THE REVIEWED MECHANICAL EQUIPMENT SUBMISSIONS TO ENSURE THAT ALL BREAKER SIZES ARE CORRECT AND MATCH THE SUBMISSIONS. IN THE EVENT THAT ALTERNATE EQUIPMENT IS PROVIDED, THE OWNER SHALL NOT INCUR ANY ADDITIONAL COSTS ASSOCIATED WITH DIFFERENT BREAKER OR CHANGES TO WIRE SIZES.  
DUCTWORK:
- ALL OUTSIDE AIR DUCT INTAKES SHALL BE LOCATED BEYOND 10'-0" OF ANY VENTILATION OUTLET OR SANITARY VENT PIPE AND SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL NOT LARGER THAN 1/2" MESH PER FMC 2017, 401.4 AND 401.5. ALL OUTSIDE AIR INTAKES SHALL BE MARKED WITH A PERMANENT PLATE TITLED "INTAKE FOR UNIT NUMBER(4)" (E.G. "INTAKE FOR AHU-1", "INTAKE FOR FCU-1-1", ETC.)
- ALL EXHAUST AIR FANS AND VENTS SHALL BE LOCATED BEYOND 10'-0" OF ANY OUTSIDE AIR INTAKE OR FAN. ALL EXHAUST AIR FANS SHALL BE MARKED WITH A PERMANENT PLATE TITLED "EXHAUST FAN FOR UNIT NUMBER(4) OR AREA" (E.G. "EF-1 FOR LOCKER ROOM", "EF-1-1 FOR GRD FL TOILET", ETC.)
- ALL AIR DEVICES (E.G., DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. PROVIDE STEEL GRILLES FOR FIRE RATED DIFFUSERS IN FIRE RATED CEILING. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS. PROVIDE REMOTE CABLE OPERATED VOLUME DAMPERS IN INACCESSIBLE AND HARD CEILING AREAS. "YOUNG REGULATOR" OR EQUAL. COMPLY WITH FMC 2017, 601.6 AND 603.18 FOR BALANCED AIR FLOW.
- PROVIDE MOLDED INSULATION BLANKET WITH R-6 RATING ON ALL LAY-IN STYLE DIFFUSERS. MOUNTING FRAMES SHALL BE PROVIDED FOR ALL STANDARD 24" X 24" LAY-IN STYLE DIFFUSERS LOCATED IN HARD CEILING. & FOR ALL 12" X 12" LAY-IN STYLE DIFFUSERS - REGARDLESS OF THE LOCATION. FAILURE TO INCLUDE THESE ITEMS DURING PRICING SHALL NOT INCUR ANY ADDITIONAL COSTS TO THE OWNER &/OR DESIGN ENGINEER.  
CONTROLS:
- CONTRACTOR SHALL PROVIDE A FULLY INTEGRATED BUILDING CONTROL SYSTEM TO CONTROL ALL OTHER SYSTEMS SHOWN ON CONTROL PLANS. PROVIDE BMS/EMS SYSTEMS AND/OR INTERFACES/GATEWAYS FOR ALL EQUIPMENT (WHERE APPLICABLE) TO BE CONNECTED TO CONTROL SYSTEMS. SYSTEM SHALL BE SIZED TO PROVIDE FUTURE EXPANSION AND ADDITIONAL CONTROL POINTS. MECHANICAL CONTRACTOR SHALL COORDINATE WITH CONTROL CONTRACTOR AND ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL CONTROL REQUIREMENTS FOR SYSTEM. (E.G. POWER SERVICE, PANELS, POWER WIRING, CONTROL WIRING, CONDUITS, TESTING, ETC.) CONTRACTOR SHALL SUBMIT CONTROL DRAWINGS AND SPECIFICATIONS FOR ENGINEERS APPROVAL PRIOR TO INSTALLATION. PROVIDE FINALIZED CONTROL PLANS AND SYSTEM TRAINING TO OWNER/OPERATOR PRIOR TO OWNER ACCEPTANCE.
- PROVIDE PHOTO ELECTRIC TWIST IN TYPE SMOKE DETECTORS WITH ACCESS DOORS IN ALL FANS AND AHUS SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER, AND SHALL COMPLY WITH UL 268A LOCATE THE SMOKE DETECTORS IN THE SUPPLY AND RETURN AIR DUCTS FOR INSTALLATIONS IN COMPLIANCE WITH THE FLORIDA BUILDING CODE & NFPA 72. THE DETECTORS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR & INSTALL IN THE DUCT BY THE MECHANICAL CONTRACTOR. PROVIDE REMOTE TEST STATION. ELECTRICAL CONNECTION SHALL BE BY ELECTRICAL CONTRACTOR. UPON SMOKE DETECTION ALL ASSOCIATED AIR MOVING EQUIPMENT SERVING A COMMON PLENUM WILL BE SHUT DOWN. THE FIRE ALARM DEVICES INTO EXISTING FIRE ALARM SYSTEM (IF APPLICABLE).
- FOR ELECTRICAL OR CONTROL PANELS PROVIDE A MINIMUM OF 30" CLEARANCE IN FRONT OF ALL 120-240 VOLT PANELS AND 40" CLEARANCE IN FRONT OF ANY 480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC. DUCTS, PIPES, AND OTHER EQUIPMENT ARE NOT ALLOWED TO RUN OVER PANELS PER NEC.
- THE GENERAL CONTRACTOR SHALL TEST AND BALANCE THE AIR SIDE SYSTEM UPON COMPLETION. THE FINAL TEST AND BALANCE MUST BE PERFORMED BY AN INDEPENDENT FIRM CONTRACTED BY THE GENERAL CONTRACTOR AND NOT THE MECHANICAL CONTRACTOR. THE TEST AND BALANCE FIRM SHALL HOLD A CURRENT CERTIFICATION FROM ASBC OR NEBB. THE TEST AND BALANCE OPERATION SHALL INCLUDE ALL AIR SIDE SYSTEMS REGARDLESS OF SIZE OF EQUIPMENT AND A TEST TO CONFIRM BUILDING IS NEUTRAL OR POSITIVELY PRESSURIZED. THE T & B FIRM SHALL PROVIDE A WRITTEN REPORT TO THE ARCHITECT AND THE ENGINEER UPON COMPLETION. FBC ENERGY CONSERVATION CODE, SECTION C408.2.2.
- ALL OPERATIONS / MAINTENANCE MANUALS FOR EQUIPMENT SPECIFIED SHALL BE PROVIDED TO OWNER UPON COMPLETION OF PROJECT.
- ALL ROOF CURBS SHALL BE A MIN OF 6" ABOVE FINISHED ROOFING SURFACE UNLESS OTHERWISE SPECIFIED ON DRAWINGS. MECHANICAL EQUIPMENT ON ELEVATED STRUCTURES OR ROOFS SHALL COMPLY WITH FBC SEC. 306.5 IF INSTALLED HIGHER THAN 16 FEET AFF. ROOF MOUNTED MECHANICAL EQUIPMENT INSTALLED WITHIN 10'-0" OF A ROOF EDGE OR OPEN SIDE OF A WALKING SURFACE 30" AFF SHALL BE PROVIDED WITH A GUARD COMPLY WITH FBC-MECH. SECTION 304.11. MECHANICAL EQUIPMENT INSTALLED IN ATTICS SHALL MEET THE REQUIREMENTS OF FBC SEC. 306.3 IF THE EQUIPMENT CAN NOT BE SERVICED/REMOVED THROUGH REQUIRED OPENING. MECHANICAL EQUIPMENT SHALL BE PROTECTED WITH MECHANICAL BARRIERS IF EXPOSED TO MECH. DAMAGE. ALL EQUIPMENT AT GRADE LEVEL SHALL BE INSTALLED ON 6" AFG CONCRETE PAD OR ON RAILS.
- ALL WIND LOAD AND OTHER COMPLIANCE CALCULATIONS AND/OR INSTALLATION DETAILS FOR ROOF MOUNTED EQUIPMENT REQUIRED BY FBC SEC. 1509, 1522 AND CHAPTER 16 SHALL BE PROVIDED BY STRUCTURAL ENGINEER, ARCHITECT, OR EQUIPMENT MANUFACTURER'S ENGINEER.
- MECHANICAL CONTRACTOR TO COORDINATE REQUIREMENTS OF FBC-R 1305.1.3 FOR ATTIC ACCESS OPENINGS AND PASSAGEWAYS WITH GENERAL CONTRACTOR. GENERAL CONTRACTOR TO PROVIDE CONTINUOUS SOLID FLOORING FOR SAME. THE NOTE FOR PLACEMENT INSIDE ELECTRICAL PANEL WILL BE COORDINATED WITH ELECTRICAL CONTRACTOR.
- MECHANICAL CONTRACTOR TO COORDINATE REQUIREMENTS OF FMC 2017 306.3 FOR ATTIC ACCESS OPENINGS AND PASSAGEWAYS WITH GENERAL CONTRACTOR. GENERAL CONTRACTOR TO PROVIDE CONTINUOUS SOLID FLOORING FOR SAME. THE NOTE FOR PLACEMENT INSIDE ELECTRICAL PANEL WILL BE COORDINATED WITH ELECTRICAL CONTRACTOR.

## MECHANICAL SYMBOL LEGEND

	NEW RIGID DUCT METAL OR FIBER (REF. KEY NOTES)
	SUPPLY DUCT VERTICAL TAPS
	NEW RETURN DUCT
	NEW FLEX DUCT
	CHILLED WATER RETURN - BLACK STEEL/COPPER
	CHILLED WATER SUPPLY - BLACK STEEL/COPPER
	REFRIGERANT LINE - COPPER
	CONDENSATE LINE
	MANUAL VOLUME DAMPER
	FIRE DAMPER
	FIRE SMOKE DAMPER
	SMOKE DAMPER
	SUPPLY DIFFUSER
	RETURN GRILLE
	EXHAUST GRILLE
	THERMOSTAT
	HUMIDISTAT
	CEILING MOUNTED EXHAUST FAN
	AIR HANDLER UNIT
	CONDENSING UNIT
	SMOKE DETECTOR / CUTOFF
	DIFFUSER/GRILLE SYMBOL
	CONNECT TO EXISTING
	POINT OF DEMO
	EQUIPMENT TAG
	EQUIPMENT NUMBER
	EQUIPMENT FLOOR/LOCATION
	ACCESS PANEL
	SUPPLY AIR
	RETURN AIR
	DOOR UNDERCUT

NOTE: NOT ALL SYMBOLS MAY APPLY TO PLANS

## MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	HOA	HAND OFF AUTOMATIC
AFG	ABOVE FINISHED GRADE	MAU	MAKE UP AIR UNIT
AHU	AIR HANDLING UNIT	NTS	NOT TO SCALE
BD	BACK DRAFT DAMPER	OA	OUTSIDE AIR
BCX	BLOWER COIL UNIT	OA-X	OUTSIDE AIR - OUTDOOR DUCT
CHP	CHILLED WATER PUMP	PUX	PUMP/HEAT EXCHANGER
CH	CHILLER	RA	RETURN AIR
CT	COOLING TOWER	RA-X	RETURN AIR - OUTDOOR DUCT
CWP	CONDENSER WATER PUMP	RD	RELIEF DAMPER
DHC	DUCT RE-HEAT COIL	RE	RELOCATE EXISTING
EDH	ELECTRIC DUCT HEATER	REF	REFERENCE
E	EXISTING	REF	REFRIGERANT
EIA	EXHAUST AIR	RG	RETURN GRILLE
EF	EXHAUST FAN	SD	SUPPLY DIFFUSER
EG	EXHAUST GRILLE	SA	SUPPLY AIR
ERV	ENERGY RECOVERY OIA PRECONDITIONER UNIT	SA-X	SUPPLY AIR - OUTDOOR DUCT
EX	EXISTING	SF	SUPPLY FAN
EXH	EXHAUST	VAV	VARIABLE AIR VOLUME TERMINAL
EXH-X	EXHAUST AIR - OUTDOOR DUCT	VIF	VERIFY IN FIELD
FCU	FAN COIL UNIT	VED	VARIABLE FREQUENCY DRIVE
HC	HEATING COIL	VRF	VARIABLE REFRIGERANT FLOW

NOTE: NOT ALL ABBREVIATIONS MAY APPLY TO PLANS

## MECHANICAL SHEET INDEX

M001	MECHANICAL NOTES, LEGENDS, & SHEET INDEX
M100	MECHANICAL SPECIFICATIONS
M110	MECHANICAL FLOOR PLAN - 1ST LEVEL
M210	MECHANICAL SCHEDULES & DETAILS

## APPLICABLE BUILDING CODES

FLORIDA BUILDING CODE, 7TH EDITION (2020)
FLORIDA BUILDING CODE MECHANICAL, 6TH EDITION (2020)
FLORIDA FIRE PREVENTION CODE, 6TH EDITION (2020)
FLORIDA ENERGY CONSERVATION CODE, 6TH EDITION (2020)
NFPA 90A, 2021 EDITION
NFPA 91, 2020 EDITION
NFPA 96, 2021 EDITION
NFPA 99, 2021 EDITION
ANSI/ASHRAE 15, 2019 MECHANICAL REFRIGERATION
ASHRAE 62.1, 2016 EDITION

## FLEX DUCT SIZING CHART

CFM VALUE	FLEX DUCT SIZE
0 - 30	4" Ø
31 - 90	6" Ø
91 - 175	8" Ø
176 - 300	10" Ø
301 - 420	12" Ø
421 - 620	14" Ø
621 - 940	16" Ø

MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES IN THEIR LATEST REVISIONS.

CONTRACTOR TO COORDINATE SPECIFIC REQUIREMENTS OF EQUIPMENT WITH MANUFACTURERS' SHOP DRAWINGS.

ALL EQUIPMENT SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS' WRITTEN INSTALLATION INSTRUCTIONS.

**RGD**  
CONSULTING  
ENGINEERS

JUPITER | ORLANDO  
561-743-0166 | 407-843-6630  
WWW.RGDENGINEERS.COM  
121 S ORANGE AVE #1230, ORLANDO, FL 32801  
CERT. OF AUTH. 9454

SEAL

**NOT FOR  
CONSTRUCTION**

**TOWN OF WINDERMERE**

**HEALTHY WEST ORANGE  
PAVILION**

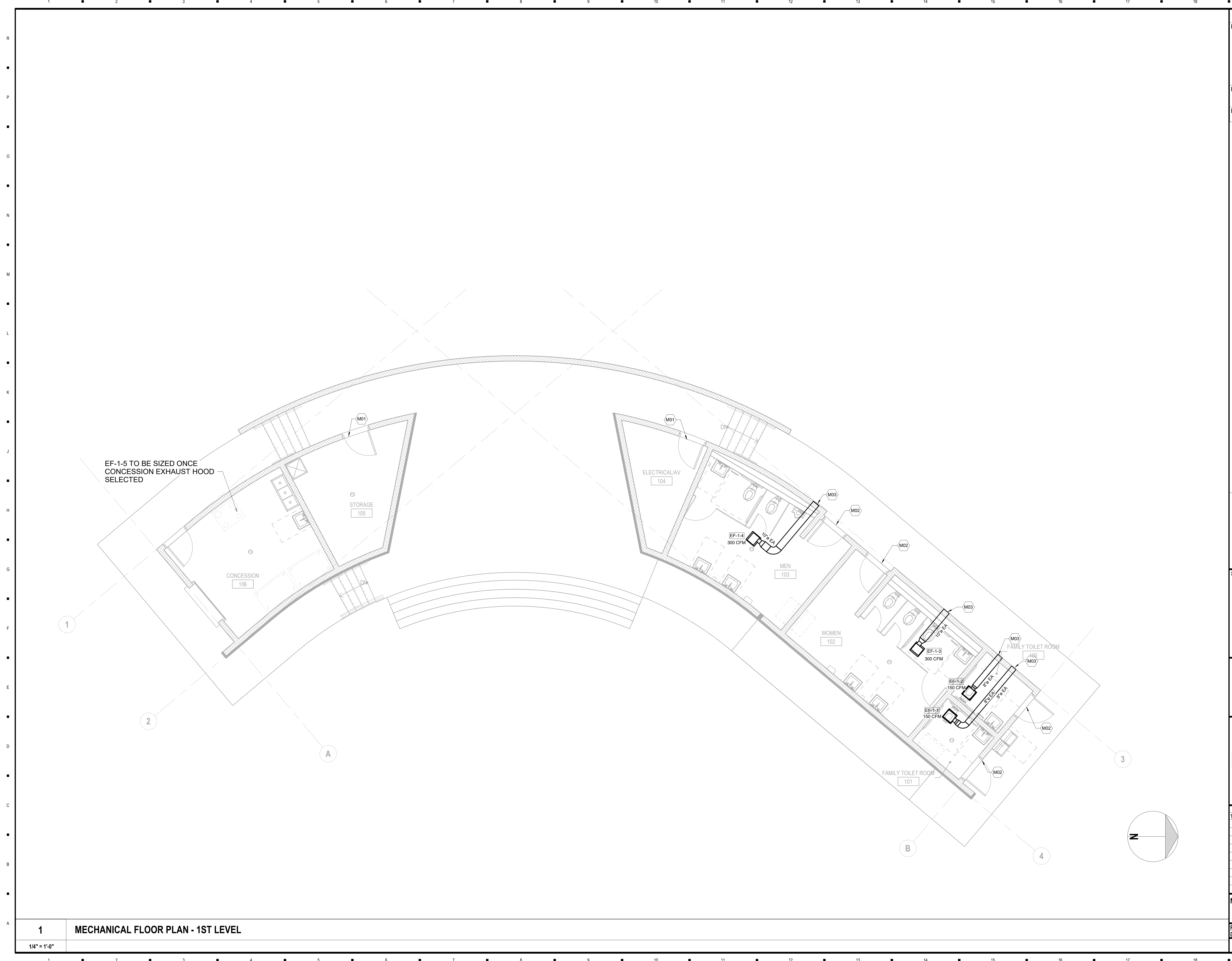
**Hunton Brady**  
ARCHITECTS

DATE	SUBMISSION	NO
12.02.22	45% CONSTRUCTION DOCUMENTS	

**MECHANICAL NOTES, LEGENDS, & SHEET  
INDEX**

PROJ. NO. S-21295.00 SHEET  
DRAWN Author

**M001**



MECHANICAL KEYNOTES	
M01	PROVIDE NATURAL VENTILATION AS DESCRIBED IN FBC MECHANICAL 7TH EDITION CH.4 SECTION 402. EXTERIOR DOOR CAN BE USED AS NATURAL VENTILATION MECHANISM PROVIDED THAT IT MEETS A MINIMUM OPENABLE AREA OF 4% OF THE FLOOR AREA TO BE VENTILATED, AS DESCRIBED BY SECTION 402.2.
M02	PROVIDE LOUVERED DOORS MINIMUM 18" X 18" GRATES WITH 50% FREE AREA FOR AIR FLOW.
M03	ALL EXHAUST OUTLETS MUST BE MINIMUM 10' ABOVE GROUND LEVEL.

**RGD**  
CONSULTING  
ENGINEERS  
JUPITER | ORLANDO  
561-743-0165 | 407-845-6630  
WWW.RGDENGINEERS.COM  
121 S ORANGE AVE #1250, ORLANDO, FL 32811  
CERT OF AUTH 5454

SEAL

**NOT FOR  
CONSTRUCTION**

**TOWN OF WINDERMERE**  
**HEALTHY WEST ORANGE  
PAVILION**

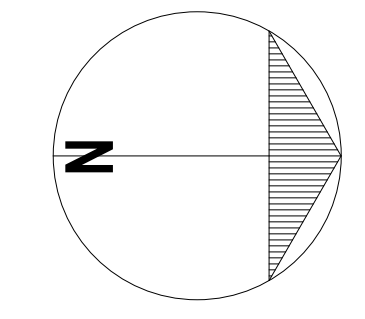
**Hunton Brady**  
ARCHITECTS

DATE	SUBMISSION	NO.
12.02.22	45% CONSTRUCTION DOCUMENTS	

**MECHANICAL FLOOR PLAN - 1ST LEVEL**

1	<b>MECHANICAL FLOOR PLAN - 1ST LEVEL</b>	PROJ. NO. S-21295.00	SHEET
		DRAWN Author	<b>M110</b>

1/4" = 1'-0"



FAN SCHEDULE						
MARK		EF-1-1	EF-1-2	EF-1-3	EF-1-4	EF-1-5
LOCATION		100 Family Restroom	101 Family Restroom	102 Women's Restroom	103 Men's Restroom	106 Concession
DUCT SIZE		8" Ø	8" Ø	10" Ø	10" Ø	
MOUNTING		CEILING	CEILING	CEILING	CEILING	
MANUFACTURER		GREENHECK	GREENHECK	GREENHECK	GREENHECK	
MODEL NUMBER		SP-B150	SP-B150	SP-A410	SP-A410	
STATIC PRESSURE	IN. WG.	0.362	0.362	0.368	0.368	
AIRFLOW	CFM	152	152	308	308	
RPM		1050	1050	1000	1000	
MOTOR INFORMATION	POWER (W)	128	128	121	121	
	CURRENT (A)	1.8	1.8	1.7	1.7	
	V	115	115	115	115	
	PH	1	1	1	1	
	Hz	60	60	60	60	
NOTES:		1,2,3,5	1,2,3,5	1,2,3,5	1,2,3,5	

NOTES:

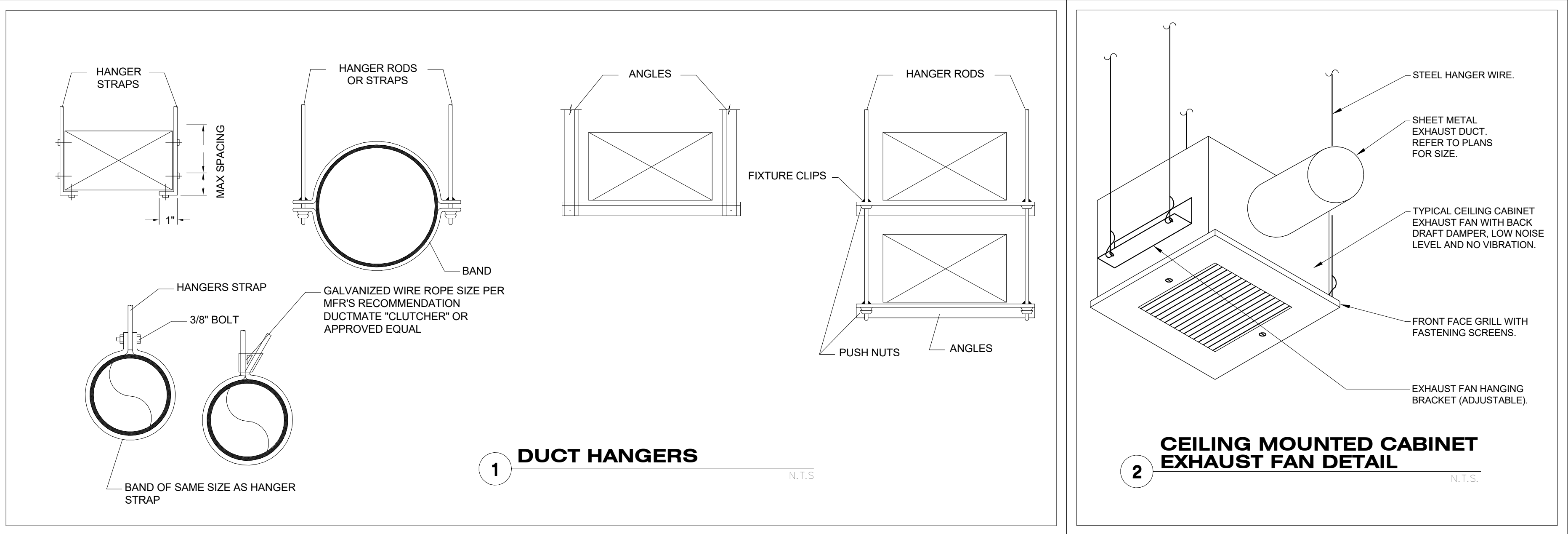
1. PROVIDE WITH BACKDRAFT DAMPER.
2. PROVIDE WITH SCR SPEED CONTROLLER OR VCM MOTOR.
3. INTERLOCK WITH ROOM LIGHTS.
4. PROVIDE WITH INDEPENDENT WALL SWITCH.
5. PROVIDE INTEGRAL MOTION SENSOR AND DELAYED TIMER FOR SHUT DOWN.

APPROVED ALTERNATES: NUTONE, FANTECH, PANASONIC

DUCT CONSTRUCTION SCHEDULE						
DUCTWORK SYSTEM	DUCTWORK SYSTEM ABBREVIATION	DUCTWORK LOCATION	DUCTWORK SHAPE	DUCTWORK MATERIAL	DUCTWORK INSULATION	DUCT CONSTRUCTION STANDARD
EXHAUST AIR	EXH	CONCEALED ABOVE THE CEILING (UNCONDITIONED SPACE)	SQUARE / ROUND	GALVANIZED SHEET STEEL; LOCK-FORMING QUALITY; ASTM A653/A 653M, G90 COATING DESIGNATION; MIL-PHOSPHATIZED FINISH FOR SURFACES OF DUCT EXPOSED TO VIEW	R6 EXTERNAL	HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE - ± 2" WG
KITCHEN HOOD GREASE EXHAUST AIR	EXH	CONCEALED ABOVE THE CEILING	SQUARE	CARBON STEEL COMPLYING WITH ASTM A 527, MINIMUM 16 GA. WELD ALL JOINTS AND PROVIDE LIQUID TIGHT SEAL. ALL COMPONENTS MUST COMPLY WITH NFPA 96.	2 - HOUR RATED ZERO CLEARANCE FIRE WRAP	HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE .

NOTES:

1. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
2. ALL OUTSIDE AIR DUCT INTAKES SHALL BE LOCATED BEYOND 10'-0" OF ANY VENTILATION OUTLET OR SANITARY VENT PIPE AND SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL NOT LARGER THAN 1/2" MESH PER FMC 2020, 401.4 AND 401.5. ALL OUTSIDE AIR INTAKES SHALL BE MARKED WITH A PERMANENT PLATE TITLED "INTAKE FOR UNIT NUMBER (H)" [E.G. "INTAKE FOR AHU-1", "INTAKE FOR UNIT NUMBER(H) OR AREA" (E.G. "EF-1 FOR LOCKER ROOM", "EF-1-1 FOR GRD FL TOILET", ETC.)
3. ALL EXHAUST AIR FANS AND VENTS SHALL BE LOCATED BEYOND 10'-0" OF ANY OUTSIDE AIR INTAKE OR FAN. ALL EXHAUST AIR FANS SHALL BE MARKED WITH A PERMANENT PLATE TITLED "EXHAUST FAN FOR UNIT NUMBER(H) OR AREA" (E.G. "EF-1 FOR LOCKER ROOM", "EF-1-1 FOR GRD FL TOILET", ETC.)
4. ALL DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. ALL BRANCH TAKE-OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. ALL ELBOWS AND TEE'S MUST BE FURNISHED WITH TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS.



**RGD**  
CONSULTING  
ENGINEERS

JUPITER | ORLANDO  
561-743-0165 | 407-845-6630  
WWW.RGDENGINEERS.COM  
121 S ORANGE AVE #1230, ORLANDO, FL 32811  
CERT OF AUTH 5454

SEAL

**NOT FOR  
CONSTRUCTION**

**TOWN OF WINDERMERE**

HEALTHY WEST ORANGE  
PAVILION

**Hunton Brady**  
ARCHITECTS

DATE	SUBMISSION	NO
12.02.22	45% CONSTRUCTION DOCUMENTS	

MECHANICAL SCHEDULES & DETAILS

PROJ. NO. S-21295.00 SHEET  
DRAWN Author

**M210**