CODE REFERENCE (ALL MAY NOT APPLY)

THE LATEST EDITIONS OF THE ESTABLISHED STANDARDS OF THE FOLLOWING

LEGEND

ALL MAY NOT APPLY

THERMOMETER

CONNECT TO EXISTING

and men

Consultant Civil **Dlainsman**



MECHANICAL GENERAL NOTES

1.ONLY NEW EQUIPMENT SHALL BE PROVIDED UNLESS INDICATED AS EXISTING TO REMAIN.

ALL MAY NOT APPLY



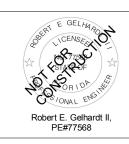


GENERAL NOTES

1.THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY MISUSE AND/OR

ALL MAY NOT APPLY





MECHANICAL NOTES &

LEGENDS

MECHANICAL DEMOLITION GENERAL NOTES

1. UNLESS NOTES OTHERWISE, ALL EXISTING SYSTEMS SHALL REMAIN TO BE REUSED. REPORT ANY SYSTEM MALFUNCTIONS TO CLIENT AND EOR

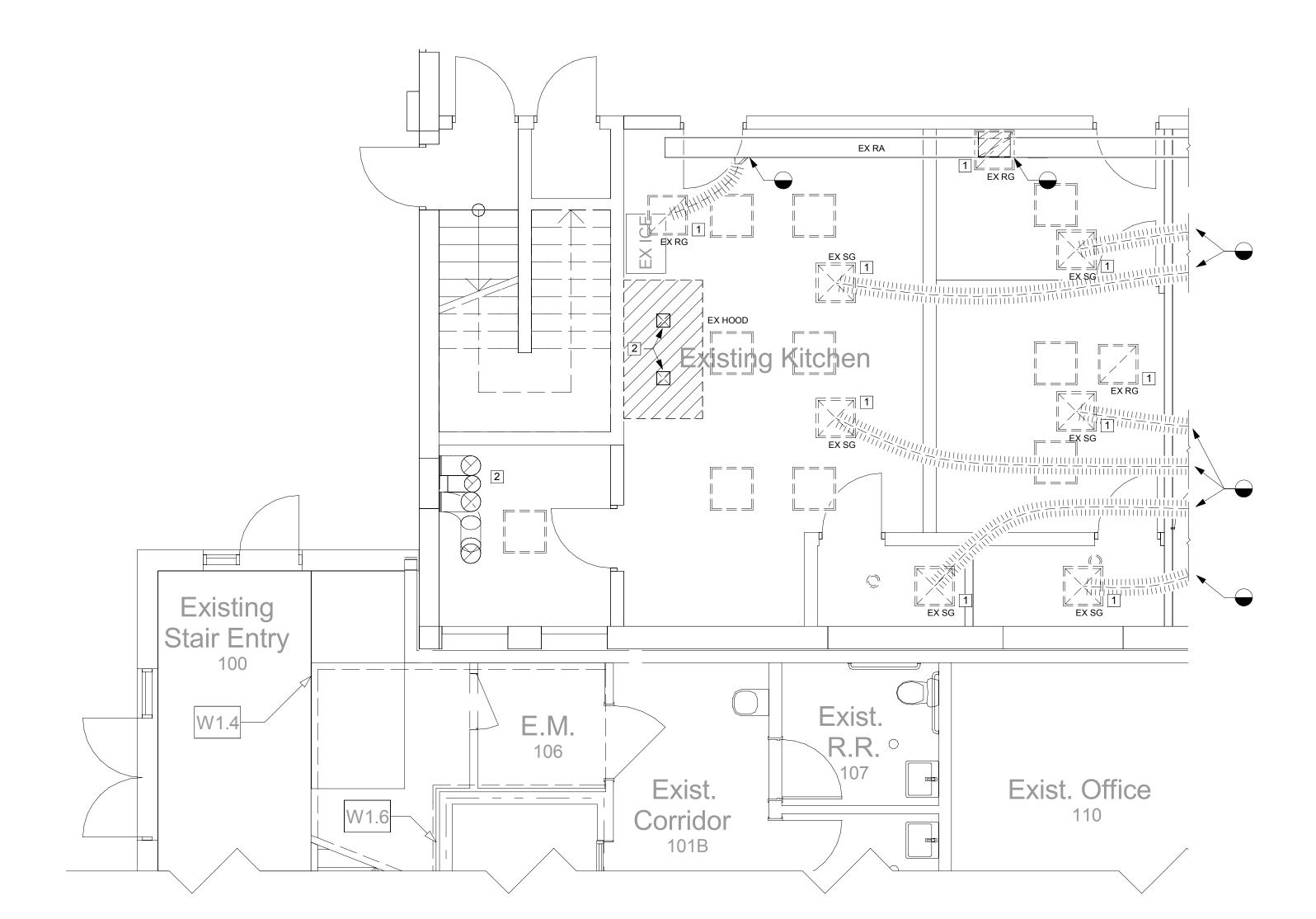
2. PATCH AND SEAL UNUSED DUCT TAPS.

3. SEE ELECTRICAL FOR LIGHTING DEMO SCOPE.

4. DEMOLISH EXISTING KITCHEN HOOD AND ASSOCIATED COMPONENTS.

MECHANICAL DEMOLITION KEYED NOTES

- DEMOLISH EXISTING DIFFUSER AND ASSOCIATED DUCTWORK BACK TO DUCT TRUCK. CLEAN AND STORE INDICATED DIFFUSER FOR POTENTIAL REUSE BY OWNER.
- CAP DEMOLISHED KITCHEN MAKEU AIR PENETRATION AND CAP DEMOLISHED KITCHEN EXHAUST PENETRATIONS, WEATHER-PROOF AND WATER TIGHT. ALL NON-KITCHEN PENETRATIONS SHALL REMAIN TO BE REUSED.





MECHANICAL RENOVATION GENERAL NOTES

1. EXISTING UNIT, CONDENSATE DISPOSAL, AND REFRIGERANT ROUTING SHALL REMAIN TO BE REUSED. REPAIR OR REPLACE LIKE-FOR-LIKE IF ANY COMPROMISES ARE DETECTED. CONFIRM SYSTEM OPERATION, CAPACITY, AND INTEGRITY BEFORE COMMENCEMENT OF WORK. BRING ANY ISSUES TO THE EOR'S ATTENTION IMMEDIATELY. OFFSET PROPOSED DUCTWORK AS REQUIRED BY SITE CONDITIONS.

2. PATCH, SEAL, AND INSULATE ALL EXISTING DUCTWORK WITH NOTICABLE DEFECTS OR DEFICIENCIES. SEE FRONT PAGE NOTES.

3. CLEAN EXISTING DUCTS AND GRILLES, SEE NOTES.

4. SUSPEND OR MUD-IN AIR DEVICES AS REQUIRED PER SPACE, SEE ARCHITECTURAL PLANS FOR CEILING TYPES.

5. SUBMIT EXISTING CONDITION DRAWINGS AND FINAL AS-BUILTS TO OWNER AND EOR BY PROJECT COMPLETION.

6. INSTALL NEW TAPS ON EXISTING SYSTEMS FOR NEW SUPPLY AND RETURNS SHOWN. THE NEW TAPS SHOULD BE IN THE SAME APPROXIMATE LOCATION AS THE PREVIOUSLY DEMO'ED TAPS. INSTALL EACH NEW TAP WITH BALANCING DAMPER.

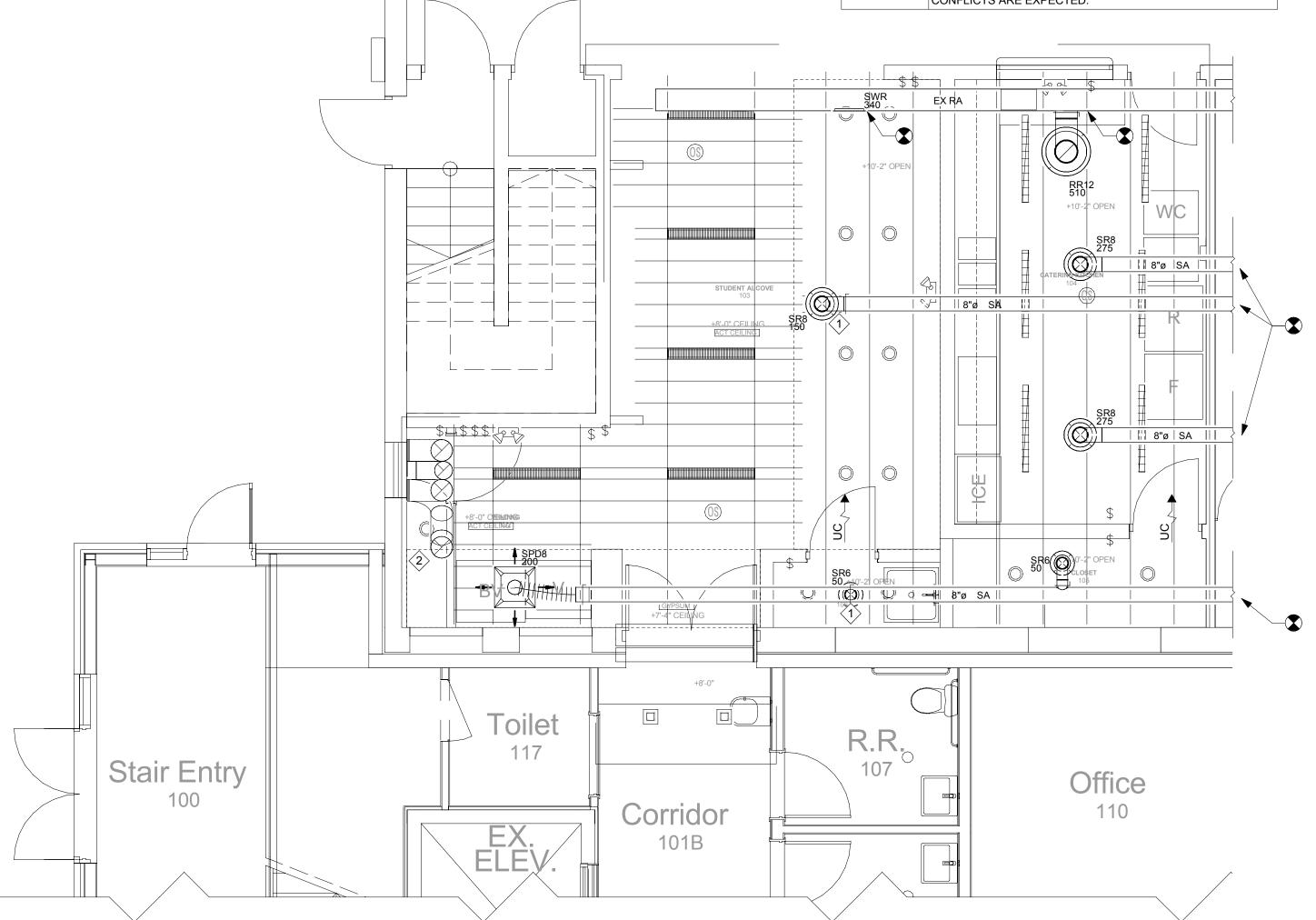
7. BALANCE AIR DEVICES AS SHOWN, AND OUTSIDE AIR RATES AS SCHEDULED, FOR THIS RENOVATION PORTION OF THE EXISTING SYSTEMS. PROPORTIONALLY ADJUST SUPPLY AIR RATES AS NEEDED, BASED ON OTHER SPACES' COOLING NEEDS AND EXISTING SYSTEM CAPACITY.

8. NEW EXPOSED CIRCULAR DUCT SHALL BE DOUBLE-WALL, INSULATED, PAINTED MATTE BLACK. PAINT EXISTING EXPOSED DUCT MATTE BLACK TO

MECHANICAL RENOVATION KEYED NOTES

COORDINATE CEILING TYPES WITH ARCHITECTURAL PLANS. PROVIDE WITH MEANS FOR THROUGH-FACE FLOW BALANCING WHERE MAIN DUCTWORK MANUAL DAMPERS ARE MISSING, VCR9 OR EQUIV, TYPICAL FOR ALL.

CONTAIN EXISTING DUCTWORK WITHIN ARCHITECTURAL CLOSET. ALERT ARCHITECT IMMEDIATELY IF SPACE CONFLICTS ARE EXPECTED.



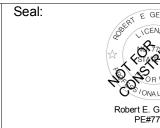
2 MECHANICAL RENOVATION FLOOR PLAN

Plainsman

904-382-2286 5404 Appledore LaneTallahassee, FL 32309









HVAC Sheet No. DRAWING NAME

M101

Canopy and Corridor Improvements

Celebration Baptist (3300 Shamrock St. E, Tallahassee, FL 32309

PRICE AIR TERMINAL SCHEDULE									
MARK	COUNT	MFG	MODEL	SERVICE	NECK SIZE	FACE SIZE	MATERIAL	FINISH	ACCESSORIES
RR12	1	PRICE	RCD	RETURN	12"ø	27" Ø	ALUMINUM	WHITE	MANUAL BALANCING
SPD8	1	PRICE	SPD	SUPPLY	8"ø	24 x 24	ALUMINUM	WHITE	MANUAL BALANCING
SR6	2	PRICE	RCD	SUPPLY	6"ø	13 1/2" Ø	ALUMINUM	WHITE	VCR9 OR EQUIV
SR8	3	PRICE	RCD	SUPPLY	8"ø	18" Ø	ALUMINUM	WHITE	VCR9 OR EQUIV
SWR	1	PRICE	635	RETURN	16"x10"	-	ALUMINUM	WHITE	MANUAL BALANCING

RENOVATION PRESSURIZATION TABLE								
MARK	MARK TOTAL CFM		RA CFM EA CFM		AIR BALANCE			
				•				
EX-AHU	1000	850	0	150	150			
TOTAL	1000	850		150	150			

		SINGLE 2	ZONE VENTII	_ATION SC	HEDULE		
		R	ENOVATION POR	TION OF EX-AH	U		
Space No. Name	Zone Area, Az (ft²)	Zone Population, Pz (People)	People Outdoor Airflow Rate, Rp (CFM/Person)	Area Outdoor Airflow Rate, Ra (CFM/ft²)	Unoccupied Zone Outdoor Airflow Rate (CFM)	Breathing Zone Outdoor Airflow Rate, Vbz (CFM)	Zone Outdoor Airflow Rate, Voz (CFM)
VENDING	90	1	5	0.06	7	10	13
ALCOVE	200	0	0	0.06	15	12	15
ALCOVE	170	3	5	0.06	13	25	32
CATERING KITCHEN	235	4	7.5	0.12	35	58	73
CLOSET	50	0	5	0.06	4	3	4
Max	235	4	7.5	0.12	35	58	73
Totals	745	8			74	109	136
	136						
Notos:							

Ventilation calculations are formatted to satisy FBC Mech Section 403. Refer to Section 403 for more details.

Equation 4-1: Vbz = Rp*Pz + Ra*Az Equation 4-2: Voz = Vbz/Ez

Zone Effectiveness, Ez: 0.8 Ceiling supply of warm air and ceiling return has an Ez of 0.8. Refer to Table 403.1.1.1.2 for Zone Effectiveness Values. Equation 4-3: Vot = Voz

HVAC REMEDIATION & CLEANING REQUIREMENTS

1. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, SUPERVISION, AND NECESSARY EQUIPMENT TO PERFORM THE WORK LISTED BELOW. THESE SPECIFICATIONS ARE BASED ON LIMITED FIELD INSPECTION OF HVAC SYSTEM. AS-BUILT MECHANICAL HVAC DRAWINGS PART OF THE PROJECT SPECIFICATIONS FOR LOCATION AND EXTENT OF HVAC SYSTEMS.

2.ALL REMEDIATION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NATIONAL AIR DUCT CLEANERS ASSOCIATION (NADCA) STANDARD -NADCA ACR 2021 – "ASSESSMENT CLEANING AND RESTORATION OF HVAC SYSTEMS; AND SPECIFICATIONS.

3.REMEDIATION OF CONTAMINATION OF INTERNAL SURFACE OF ANY REMAINING COMPONENTS; SUPPLY AND RETURN DUCTS, REMOVAL, AND REPLACEMENT OF SUPPLY FLEX DUCTS. REMEDIATION OF ALL INTERIOR SURFACES SUPPLY DUCTS, SUPPLY DIFFUSERS, RETURN DUCTS, RETURN GRILLES FOR ALL HVAC SYSTEMS. REMOVAL OF ALL SUPPLY FLEX DUCTS AND REPLACEMENT WITH NEW SIMILAR TYPE AND SIZE IN ACCORDANCE WITH THE CURRENT REGULATIONS AND STANDARDS.

4.COORDINATE WITH THE OWNER AND THE PROJECT CONSULTANT FOR APPROVAL OF ALL CHEMICALS, CLEANING METHODS AND MATERIALS USED IN THE PERFORMANCE OF THIS

5.ALL WORK SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

6.CONTRACTOR QUALIFICATIONS

6.1.ALL WORK SHALL BE PERFORMED BY FLORIDA LICENSED MECHANICAL CONTRACTOR WITH AT LEAST FIVE YEARS OF EXPERIENCE IN HVAC AND MICROBIAL REMEDIATION PROJECTS WITH SIMILAR SCOPE OF WORK.

7. CHANGE ORDERS

7.1. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY THE LOCATION AND QUANTITY OF WORK PRIOR TO BID. LACK OF KNOWLEDGE OF THE FACILITY, SCOPE OF WORK, SPECIFICATION REQUIREMENTS WILL NOT CONSTITUTE A CHANGE ORDER. FOR UNFORESEEN WORK OR ALTERATIONS IN SPECIFICATIONS WHICH COULD NOT REASONABLY HAVE BEEN CONTEMPLATED OR FORESEEN IN THE ORIGINAL PLANS AND SPECIFICATIONS; NOTIFY IN WRITING TO PROJECT CONSULTANT AND THE OWNER'S PROJECT MANAGER PRIOR TO ANY ADDITIONAL WORK.

8.SAFETY REQUIREMENTS

8.1.THE CONTRACTOR MUST COMPLY WITH APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND ANY STANDARD THERE UNDER. THE SPECIFIED SAFETY REGULATIONS WILL BE ENFORCED DURING THE PERFORMANCE OF

8.2. HEALTH AND SAFETY PROGRAMS: THE CONTRACTOR, IN COORDINATION WITH TENANT AND THE PROJECT CONSULTANT, SHALL DEVELOP A PLAN FOR ASSURING SAFE OPERATION OF THE BUILDING DURING PERIODS WHEN THE DETECTION EQUIPMENT IS OFF-LINE OR DISABLED AND SUBSEQUENT REACTIVATION OF THE SYSTEMS. THE SAFETY PLAN SHALL CONFORM TO LOCAL FIRE SAFETY REGULATIONS AND BE APPROVED BY CITY AND LOCAL FIRE MARSHAL. THE PLAN SHALL DEFINE THE RESPONSIBILITIES OF EACH ORGANIZATION INVOLVED WITH EXECUTING THE PLAN FOR THE DURATION OF THE AIR HANDLING UNIT REMEDIATION.

8.3. CONTRACTOR SHALL PROVIDE A STATEMENT, SIGNED BY AN OFFICER OF THE COMPANY. CONTAINING THE FOLLOWING INFORMATION: 8.3.1.ASSURANCE THAT THE COMPANY IS IN COMPLIANCE WITH AND HAS ESTABLISHED

APPLICABLE HEALTH AND SAFETY PROGRAMS AND PRACTICES AS DESCRIBED IN OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR GENERAL INDUSTRY 29 CFR PART 1910 AND 1926. 8.3.2.THE CONTRACTOR HAS IMPLEMENTED A COMPREHENSIVE PERSONAL PROTECTIVE

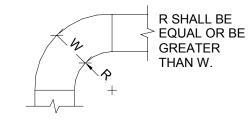
EQUIPMENT (PPE) PROGRAM THAT INCLUDES A RESPIRATORY PROTECTION PROGRAM (SEE 29 CFR 1910, SUBPART 1, SECTIONS 132 TO 139, AS AMENDED APRIL 8, 1998). 8.4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS AND WILL PROVIDE COPIES UPON REQUEST OF WRITTEN PROGRAMS TO ADDRESS 8.4.1. CONTROL OF HAZARDOUS ENERGY: LOCKOUT/TAG OUT (29 CFR 1910.147) 8.4.2. PERMIT-REQUIRED CONFINED SPACES (29 CFR 1910.146)

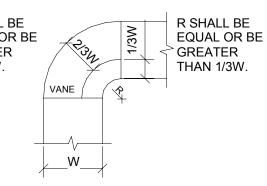
8.4.3. FALL PROTECTION (29 CFR 1926 SUBPART M) 8.4.4. HAZARD COMMUNICATION (29 CFR 1910.1200)

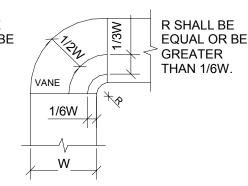
8.5.APPROPRIATE ENVIRONMENTAL ENGINEERING CONTROLS SHALL BE EMPLOYED TO MAINTAIN A SAFE BUILDING ENVIRONMENT AND TO CONTROL ADVERSELY EFFECTED EQUIPMENT DURING HVAC SYSTEM REMEDIATION PROCESSES.

9.WARRANTY - THE CONTRACTOR MUST PROVIDE TO OWNER A ONE (1) YEAR WRITTEN WARRANTY FOR ALL LABOR AND MATERIALS. IN ADDITION TO THE WARRANTY ISSUED FOR SPECIFIC PRODUCTS OR EQUIPMENT. THE WARRANTY PERIOD MUST BEGIN ON THE DATE OF FINAL COMPLETION AND ACCEPTANCE BY CITY OF EACH HVAC SYSTEM COMPLETED. CONTRACTOR MUST WARRANTY FOR ONE (1) YEAR THAT ANY RECURRING FUNGAL CONTAMINATION OF CLEANED AND TREATED SURFACES WITHIN THE HVAC SYSTEM SHALL BE RE-CLEANED WITHOUT COST TO THE OWNER, OR THE PROJECT CONSULTANT.

10.EXCLUSION OF OWNER FROM LIABILITY INDEMNIFICATION: 10.1.TO THE FULLEST EXTENT PERMITTED BY LAW, THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE CLIENT AND ITS AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEY'S FEES, ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THIS CONTRACT, PROVIDED THAT ANY SUCH CLAIM, DAMAGE, LOSS OR EXPENSE (1) IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OF DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF) INCLUDING THE LOSS OF USE RESULTING THERE FROM, AND (2) IS CAUSED IN WHOLE OR IN PART BY ANY NEGLIGENT ACT OR OMISSION OF THE CONTRACTOR, ANY SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, REGARDLESS OF WHETHER OR NOT IT IS CAUSED IN PART BY A PARTY INDEMNIFIED HEREUNDER. SUCH OBLIGATION SHALL NOT BE CONSTRUED TO NEGATE, ABRIDGE, OR OTHERWISE REDUCE ANY OTHER RIGHT TO OBLIGATION OF INDEMNITY WHICH WOULD OTHERWISE EXIST AS TO ANY PARTY OR PERSON DESCRIBED IN THE CONTRACT.







SHORT RADIUS ELBOW WITH TWO VANES

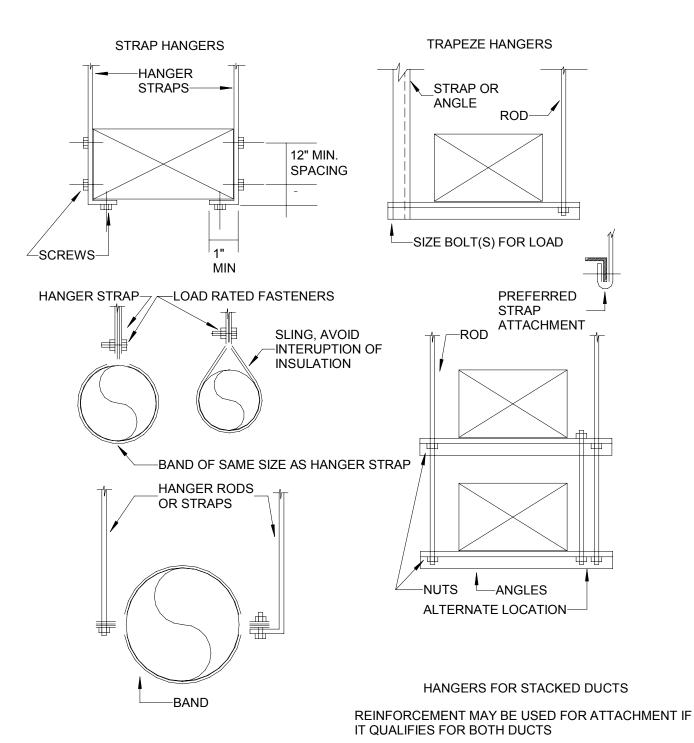
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.

2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.



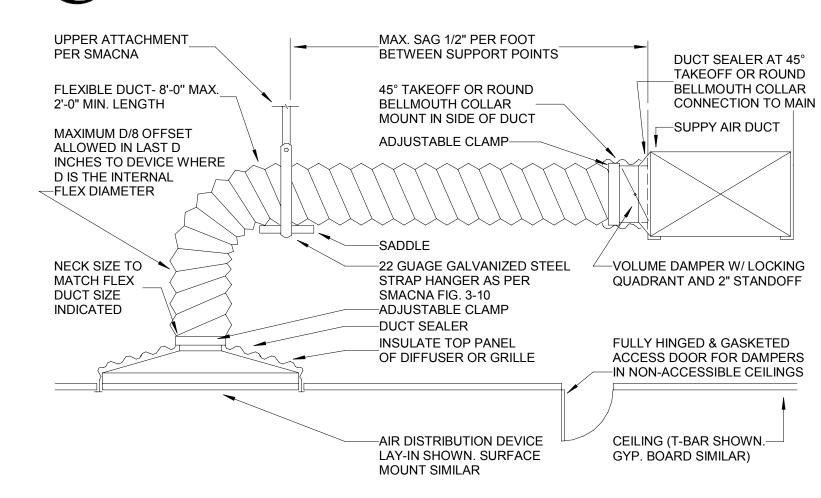
1 DUCTWORK RADIUS ELBOW DETAIL

DUCT HANGER DETAILS





DO NOT EXCEED LOAD RATING FOR METHOD USED.



NOTES:

Architect:

- 1. FLEXIBLE DUCTS SHALL BE IN ONE PIECE AND SHALL NOT BE SPLICED TOGETHER.
- 2. EXTEND FLEXIBLE DUCT INSULATION TO DUCT/DIFFUSER PANEL INSULATION AND SEAL WITH MASTIC.
- 3. FLEXIBLE AIR DUCT SHALL NOT EXCEED 8 FT. WHEN EXTENDED. ELBOW RADIUS SIZED FOR NO LESS THAN R/D = 1.0.
- 4. FLEXIBLE AIR DUCT SHALL NOT BE LESS THAN 5 FEET FOR ACOUSTICAL PURPOSES.



M601 SCALE: NTS

HVAC

DRAWING NAME

M601

and

Canopy Improve

Sheet No.

Dlainsman

Consultant: Civil

904-382-2286 5404 Appledore LaneTallahassee, FL 32309

FSM Engineering

850-727-5367 kevermckee.com 1624 Metropolitan Blvd KEVERI MCKEE Tallahassee, FL 32308 ENGINEERING

Consultant: Structural

Hays Layerd Architecture 1221 Summer Haven Cı 850-559-3613 hays@hayslayerd.com FL License: AR96759 ARCHITECTURE IN COLLABORATION WITH J. HUGHES DESIGN

HVAC SCHEDULES