MECHANICAL RENOVATION NOTES

1. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSAL SO AS TO BECOME FAMILIAR WITH EXISTING WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE BY DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. THE CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL EXISTING CONDITIONS, PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
2. THE CONTRACTOR SHALL FIELD VERIFY AND CONFIRM THE CONDITION AND FUNCTIONALITY OF ALL EXISTING FINISHES, EQUIPMENT AND SYSTEMS TO REMAIN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL EXISTING CONDITIONS SHALL BE DOCUMENTED WITH PHOTOGRAPHIC OR VIDEO RECORDS. ANY FINISHES, SYSTEMS OR EQUIPMENT DEFICIENCIES SHALL BE DOCUMENTED AND CONFIRMED WITH THE OWNER / ENGINEER UPON COMPLETION OF THE VERIFICATION EFFORT. UPON COMPLETION OF THE PROJECT, ALL EXISTING EQUIPMENT AND SYSTEMS SHALL BE FULLY FUNCTIONAL AND FREE OF ANY DEFECTS NOT DOCUMENTED IN PRE-CONSTRUCTION VERIFICATION EFFORTS. IT WILL BE ASSUMED THAT ALL EXISTING FINISHES, SYSTEMS OR EQUIPMENT WERE IN PROPER CONDITION PRIOR TO THE CONSTRUCTION AND WILL BE REQUIRED TO BE CORRECTED BY THE CONTRACTOR UNLESS DOCUMENTATION IS PROVIDED INDICATING OTHERWISE.
3. ALL EQUIPMENT AND MATERIAL REMOVED AND NOT REUSED SHALL BE TURNED OVER TO THE OWNER OR AT THE OWNER'S REQUEST DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST.
4. ALL EXISTING HVAC EQUIPMENT IS NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID, AND INCLUDE IN HIS BID THE REMOVAL OF ALL EQUIPMENT, PIPING AND DUCTWORK, ETC. THAT IS NOT BEING REUSED BACK TO ITS SOURCE.
5. ALL PATCHING AND REPAIR OF EXISTING WALLS, CEILINGS, ROOFS, EARTH, WALKWAYS, PAVEMENT, ETC. SHALL BE PROVIDED BY THE CONTRACTOR. ALL ELEMENTS OF THE PROJECT DISTURBED BY THE CONSTRUCTION SHALL BE RETURNED TO "LIKE NEW" CONDITION TO MATCH THE ADJACENT SURROUNDINGS.
6. THERE MAY BE ADJUSTMENTS REQUIRED TO EXISTING CONDITIONS TO ACCOMMODATE THE NEW SYSTEMS SUCH AS EXISTING PLUMBING PIPING, WIRING AND CONDUITS, ETC. ANY ADJUSTMENT TO THE SYSTEMS AND / OR ADJUSTMENTS TO EXISTING CONDITIONS SHALL BE PROVIDED AS REQUIRED TO ACCOMMODATE THE PROJECT SCOPE.

DEMOLITION SCOPE

ALL EXISTING HVAC EQUIPMENT, SUPPORTS, AIR DISTRIBUTION DEVICES, CONTROLS, HANGERS AND ACCESSORIES ARE TO BE REMOVED IN THEIR ENTIRETY.
ALL EQUIPMENT DESIGNATED IN THESE PLANS IS TO BE NEW FROM THE MANUFACTURER.

COMMISSIONING SCOPE

1. INDEPENDENT COMMISSIONING SERVICES WILL BE PROVIDED BY THE OWNER. THE CONTRACTOR AND ASSOCIATED SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION AND SUPPORT REQUIRED FOR ALL COMMISSIONING PROCEDURES AND ACTIVITIES.
2. ALL DEFICIENCIES OR ADJUSTMENTS NOTED AS REQUIRING CORRECTION BY THE OWNER'S COMMISSIONING AUTHORITY (CXA) SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST WITHIN FIVE CALENDAR DAYS OF NOTIFICATION.
3. PRIOR TO PASSING THE FINAL MECHANICAL INSPECTION, EVIDENCE OF THE MECHANICAL SYSTEM'S COMMISSIONING AND COMPLETION SHALL BE PROVIDED.
4. OWNER'S COMMISSIONING SERVICES REQUIREMENTS: COMMISSIONING SERVICES SHALL BE PROVIDED THROGH A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY IN ACCORDANCE WITH THE PROVISIONS OF THE FLORIDA BUILDING CODE, ENERGY CONSERVATION CODE SECTION C408. PRIOR TO PASSING THE FINAL MECHANICAL INSPECTION, EVIDENCE OF THE MECHANICAL SYSTEM'S COMMISSIONING AND COMPLETION SHALL BE PROVIDED. COPIES OF THE REQUIRED COMMISSIONING DOCUMENTATION SHALL BE PROVIDED TO THE OWNER AND MADE AVAILABLE TO THE CODE OFFICIAL UPON REQUEST.

MECHANICAL GENERAL NOTES

1. ALL MECHANICAL WORK SHALL BE GOVERNED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION AND APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
   - A. STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES -SEC 453 OF FBC 2014.
   - B. FLORIDA BUILDING CODE - 2020.
   - C. FLORIDA MECHANICAL CODE - 2020.
   - D. FLORIDA PLUMBING CODE - 2020.
   - E. FLORIDA ENERGY EFFICIENCY CODE - 2020.
   - F. FLORIDA FIRE PREVENTION CODE - 2017.
   - G. FLORIDA EXISTING BUILDING CODE - 2020.
   - H. NATIONAL ELECTRICAL CODE (NEC) - 2014.
   - I. NFPA 90A - INSTALLATION OF AIR CONDITIONING & VENTILATING SYSTEMS
   - J. NFPA 101 - LIFE SAFETY CODE
   - K. ASHRAE STANDARDS (INCLUDING 15, 55, 62.1, 90.1 & 129)
   - L. ANSI
   - M. SMACNA DUCTWORK STANDARDS
   - N. AMERICANS WITH DISABILITIES ACT (ADA)
   - O. ALL OTHER APPLICABLE FEDERAL, COUNTY AND CITY CODES REQUIRED BY LOCAL JURISDICTIONS
2. THE CONTRACTOR SHALL READ THE SPECIFICATIONS. THE SPECIFICATIONS AND DRAWINGS TOGETHER DEFINE THE FULL CONTRACT REQUIREMENTS. IN THE EVENT OF A DISCREPANCY BETWEEN THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT APPLIES UNLESS DIRECTION HAS BEEN PROVIDED THROUGH A FORMAL REQUEST FOR INFORMATION OR CLARIFICATION PRIOR TO THE CLOSE OF THE BIDDING.
3. ANY PROPOSED EQUIPMENT OR MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER AND ENGINEER OF RECORD PRIOR TO THE CLOSE OF BIDDING. NO EQUIPMENT OR MATERIAL SUBSTITUTIONS WILL BE CONSIDERED ONCE THE BIDDING HAS ENDED AND THE GMP HAS BEEN ESTABLISHED.
4. AIR HANDLING SYSTEMS SHALL NOT BE ENERGIZED UNTIL ALL OF THE DRYWALL FINISHING AND PAINTING SCOPES HAVE BEEN COMPLETED. CONFIRMATION THAT THOSE SCOPES ARE REQUIRED WITH WRITTEN APPROVAL FROM THE OWNER AND ENGINEER BEFORE AIR HANDLING UNIT AND FANS CAN BE ENERGIZED. FAILURE TO OBTAIN WRITTEN APPROVAL TO ENERGIZE THE FANS WILL RESULT IN THE CLEANING OF THE ENTIRE INTERIOR OF ANY AFFECTED AIR DISTRIBUTION SYSTEM BY A LICENSED THIRD-PARTY CONTRACTOR AT NO ADDITIONAL COST.
5. ALL TEMPORARY FILTRATION AT AIR HANDLING EQUIPMENT AND ANY RETURN AIR INTAKE GRILLE SHALL BE REPLACED A MINIMUM OF ONCE A MONTH DURING PERIODS OF OPERATION DURING CONSTRUCTION. A LOG MUST BE MAINTAINED AT EACH AIR HANDLING UNIT INDICATING DATES OF FILTER REPLACEMENTS FOR INSPECTION. FAILURE TO MAINTAIN THE REQUIRED LOGS WILL RESULT IN THE CLEANING OF THE ENTIRE INTERIOR OF ANY AFFECTED AIR DISTRIBUTION SYSTEM BY A LICENSED THIRD PARTY CONTRACTOR AT NO ADDITIONAL COST.
6. ALL EQUIPMENT, DUCTWORK AND MATERIALS STORED ON THE JOBSITE SHALL BE PROPERLY PROTECTED FROM THE ELEMENTS AND CONSTRUCTION DIRT AND DEBRIS. ANY MATERIAL EXPOSED TO THE ELEMENTS WITH EXPOSED INSULATION WILL BE REQUIRED TO BE REPLACED AT NO ADDITIONAL COST. ANY EQUIPMENT OR MATERIAL THAT IS EXPOSED TO THE ELEMENTS, DIRT AND DEBRIS THAT ARE DEEMED ACCEPTABLE TO REMAIN SHALL BE THOROUGHLY CLEANED AND DISINFECTED AND SIGNED OFF ON BY THE OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
7. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ALL REQUIREMENTS WITH EQUIPMENT SUPPLIED.
8. ALL EQUIPMENT HOUSINGS AND COMPONENTS INSTALLED OUTDOORS OR WITHIN UNCONDITIONED VENTILATED SPACES THAT ARE EXPOSED TO THE ELEMENTS SHALL BE SUITABLE FOR SEACOAST APPLICATION. ANY APPLIED CORROSION RESISTANT MATERIALS SHALL BE FACTORY APPLIED.
9. EVERY PIECE OF MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH AN ENGRAVED NAMEPLATE WITH MINIMUM 1" HIGH LETTERS INDICATING EQUIPMENT DESIGNATION. ANY EQUIPMENT INSTALLED WHERE CONCEALED ABOVE CEILINGS SHALL BE NOTED WITH CLEAR ADHESIVE LABEL AT NEAREST T-GRID OR ON ACCESS PANEL IN ADDITION TO THE ENGRAVED NAMEPLATE.
10. ALL EXTERIOR MECHANICAL EQUIPMENT AND THEIR FRAMES, APPURTENANCES, COMPONENTS, SUPPORTS AND ANCHORING DEVICES SHALL BE ANCHORED TO RESIST THE FORCES DUE TO WIND PRESSURE AS REQUIRED BY THE FLORIDA BUILDING CODE.
11. ALL EQUIPMENT AND MATERIALS INSTALLED THAT INTERFACE WITH THE ROOFING SYSTEM SHALL BE COORDINATED WITH THE ROOFING SYSTEM BEING PROVIDED. ALL MECHANICAL EQUIPMENT INSTALLATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROOFING MANUFACTURER TO MAINTAIN CONTINUITY AND WARRANTIES.
12. COORDINATE LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES WITH ARCHITECTURAL REFLECTED CEILING PLANS AND WORK OF ALL OTHER TRADES.
13. ALL LOW-PRESSURE SUPPLY, RETURN AND EXHAUST DUCTWORK ARE DESIGNED FROM A MINIMUM OF 0.05" TO A MAXIMUM OF 0.1" OF FRICTION PER 100 FT. OF DUCT.
14. UNLESS NOTED OTHERWISE, FLEXIBLE DUCT CONNECTORS AND RIGID DUCT RUNOUTS SERVING SINGLE DIFFUSER SHALL BE THE SAME SIZE AS DIFFUSER NECK.
15. UNLESS NOTED OTHERWISE, FLEXIBLE DUCT CONNECTORS FOR VAV BOXES AND FAN TERMINAL UNIT SHALL BE THE SAME SIZE AS UNIT INLET. VERIFY ACTUAL DIMENSIONS WITH EQUIPMENT SUPPLIED.
16. PAINT INTERNAL DUCTWORK VISIBLE THROUGH DIFFUSERS, GRILLE OR LOUVER FACE FLAT BLACK.
17. DUCTWORK LAYOUTS INDICATED ON PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO BE USED AS DUCT FABRICATION DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION EFFORTS BETWEEN TRADES AS OUTLINED IN THE SPECIFICATIONS.
18. ALL LOW-PRESSURE BRANCH DUCTS SHALL BE PROVIDED WITH A MANUAL VOLUME DAMPER FOR BALANCING. ALL MANUAL VOLUME DAMPERS SHALL BE PROVIDED WITH A MINIMUM 12" LENGTH OF FLUORESCENT ORANGE RIBBON TO AIDE IN VISIBILITY WHERE ABOVE CEILINGS.
19. ALL INSULATION / DUCT SEAMS SHALL BE SEALED WITH GLASS FAB, STAPLES AND MASTIC. PRESSURE SENSITIVE TAPE IS NOT AN APPROVED DUCT / INSULATION CLOSURE SYSTEM. ANY PRESSURE SENSITIVE TAPE USED WILL BE REQUIRED TO BE REMOVED AND REPLACED WITH A PROPER DUCT CLOSURE SYSTEM.
20. DUCT ACCESS DOORS SHALL BE PROVIDED WHERE ANY EQUIPMENT REQUIRING ACCESS IS INSTALLED ABOVE AN INACCESSIBLE CEILING. MINIMUM SIZE SHALL BE 12X12 OR AS LARGE AS NECESSARY TO ACCOMMODATE EQUIPMENT REPLACEMENT AND SERVICE.
21. THE FINISH OF ANY INTERIOR OR EXTERIOR EXPOSED MECHANICAL EQUIPMENT, DUCTWORK, FABRIC DUCT SYSTEMS, LOUVERS, ETC. SHALL BE CONFIRMED WITH THE ARCHITECT
22. ALL DOORS TO INDIVIDUAL TOILETS, JANITORS CLOSETS AND OTHER SMALL SPACES WITHOUT RETURN GRILLS ARE TO BE UNDERCUT MINIMUM 1/2".
23. MOUNT SPACE MOUNTED SENSORS AT 48" TO THE CENTER UNLESS NOTED OTHERWISE.
24. ALL WALL SENSORS INSTALLED IN PUBLIC SPACES SUCH AS CORRIDORS, DINING AND GYMNASIUM SHALL BE PROVIDED WITH LOCKABLE VANDAL RESISTANT COVERS.
25. ALL WALL SENSORS SHALL BE PROVIDED WITH ENGRAVED NAMEPLATE WITH 1/4" HIGH LETTERS INDICATING THE ASSOCIATED MECHANICAL EQUIPMENT IT SERVES.
26. ALL THREE PHASE MOTORS SHALL HAVE PHASE LOSS / ROTATION MONITORS.
27. PROVIDE MOTOR STARTERS FOR ALL MOTORS THAT ARE REQUIRED TO BE CONTROLLED THAT ARE NOT BEING PROVIDED WITH A VARIABLE FREQUENCY DRIVE.
28. ALL REFRIGERANT LINE RUNS SHALL BE SIZED AND INSULATED PER THE MANUFACTURER'S RECOMMENDATIONS. UNLESS NOTED OTHERWISE, PROVIDE PVC CHASES UNDERGROUND WITH DIRECT PATH TO CONDENSING UNIT TO MINIMIZE LINE SET LENGTHS AS MUCH AS POSSIBLE. ALL REFRIGERANT LINES INSTALLED EXPOSED OUTDOORS SHALL BE NEATLY RACK MOUNTED AND PROVIDED WITH ALUMINUM JACKETING.
29. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL OF THE ROOF MOUNTED PLUMBING VENTS WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. THE CODE MINIMUM SEPARATION BETWEEN OUTDOOR AIR.
30. ALL PIECES OF MECHANICAL EQUIPMENT REQUIRING ACCESS LOCATED ABOVE HARD CEILINGS SHALL BE PROVIDED WITH ACCESS PANELS SIZED PER DRAWINGS AND/OR MANUFACTURER'S RECOMMENDATION, WHICHEVER IS LARGER. COORDINATE STYLE/COLOR/LOCATIONS OF PANEL WITH A/E/O.

TEST AND BALANCE SCOPE

1. THE GENERAL CONTRACTOR / CONSTRUCTION MANAGER SHALL PROVIDE INDEPENDENT THIRD PARTY TEST AND BALANCE SERVICES.
2. THE CONTRACTOR AND ASSOCIATED SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION AND SUPPORT REQUIRED FOR ALL TEST AND BALANCE PROCEDURES AND ACTIVITIES.
3. ALL DEFICIENCIES OR ADJUSTMENTS NOTED AS REQUIRING CORRECTION BY THE OWNER'S TEST AND BALANCE CONTRACTOR SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST WITHIN FIVE CALENDAR DAYS OF NOTIFICATION.
4. REFER TO SPECIFICATIONS FOR PRELIMINARY AND FINAL PERFORMANCE VERIFICATION REQUIREMENTS.
5. A TEST AND BALANCE SHALL BE PERFORMED ON ANY SYSTEMS TO REMAIN THAT ARE UNDERGOING RENOVATION. THE EXISTING SYSTEM PERFORMANCE SHALL BE CONFIRMED PRIOR TO THE START OF THE RENOVATION. ANY SYSTEM OR PERFORMANCE DEFICIENCIES NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED.

GENERAL LEGEND AND SYMBOLS

- SUPPLY DIFFUSER
- SUPPLY PLAQUE DIFFUSER
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- X/X — RIGID DUCTWORK (WIDTH/DEPTH)
- ELBOW WITH TURNING VANES
- MANUAL SPLITTER DAMPER
- FLEXIBLE DUCT WITH SPIN-IN FITTING AND MANUAL VOLUME DAMPER
- MANUAL VOLUME DAMPER
- AREA TO DEMOLISH
- DUCTWORK/EQUIPMENT TO DEMOLISH
- CD — CONDENSATE DRAIN LINE
- RS/RL — REFRIGERANT LINES
- FD — FIRE DAMPER
- BDD — BACKDRAFT DAMPER
- MVD — MOTORIZED VOLUME DAMPER
- PIPE UP THROUGH PLAN
- PIPE DOWN THROUGH PLAN
- DIRECTION OF FLOW IN PIPE
- PIPE UP
- PIPE DOWN
- GATE VALVE
- UNION
- CAPPED LINE
- X — KEYNOTE DESIGNATION
- T — THERMOSTAT
- H — HUMIDISTAT
- DD — DUCT MOUNTED SMOKE DETECTOR
- S CO — CARBON MONOXIDE SENSOR (MOUNT @36" A.F.F.)
- S CO_2 — CARBON DIOXIDE SENSOR (MOUNT @60" A.F.F.)
- BP — BIPOLAR IONIZATION UNIT
- 1 — DETAIL OR RISER DESIGNATION
- M-0 — SHEET WHERE DETAIL OR RISER APPEAR

ABBREVIATIONS

SYMBOL	DESCRIPTION
AC	AIR CONDITIONING
ACS	AUTOMATIC CONTROL SYSTEM
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMP	AMPERES
AP	ACCESS PANEL
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
AUTO	AUTOMATIC
AUX	AUXILIARY
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BP	BIPOLAR IONIZATION UNIT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BWV	BACK WATER VALVE
CAM	COMMON AREA MAINTENANCE
CC	COOLING COIL
CCP	CENTRAL CONTROL PANEL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CHWP	CHILLED WATER PUMP
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COMB	COMBINATION
COMPR	COMPRESSOR
COND	CONDENSATE OR CONDENSER
CONT	CONTINUATION
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CU IN	CUBIC INCHES
CW	DOMESTIC COLD WATER
D	DRAIN LINE
DB	DRY BULB
DEG	DEGREES
DG	DOOR GRILLE
DHC	DUCT HEATING COIL
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRIC CONNECTOR
ECO	EXTERIOR CLEANOUT
EDB	ENTERING DRY BULB TEMPERATURE
EEW	EMERGENCY EYE WASHSHOWER
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC
EQ	EQUAL
EVAP	EVAPORATOR
EWB	ENTERING WET BULB TEMPERATURE
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST AIR
EXIST	EXISTING
EXP	EXPANSION
°F	DEGREES FAHRENHEIT
F	FIRE SPRINKLER PIPING
FA	FREE AREA
FC	FLEXIBLE CONNECTION
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDPR	FIRE DAMPER
FG	FINISHED GRADE
FHC	FIRE HOSE CABINET
FIN FL	FINISHED FLOOR
FLA	FULL LOAD AMPERES
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FTB	FAN POWERED TERMINAL BOX
FV	FACE VELOCITY
GA	GAUGE
GAL	GALLONS
GCHS	GLYCOL CHILLED WATER SUPPLY
GCHR	GLYCOL CHILLED WATER RETURN
GO	GAS OUTLET
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H_2O	WATER

SYMBOL	DESCRIPTION
HB	HOSE BIBB
HC	HEATING COIL
HD	HEAD
HGT	HEIGHT
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HRR	HEAT RECOVERY RETURN
HRS	HEAT RECOVERY SUPPLY
HW	DOMESTIC HOT WATER
HZ	HERTZ (FREQUENCY)
IN	INCH OR INCHES
INSUL	INSULATION
IPS	IRON PIPE SIZE
IST	ICE STORAGE TANK
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LBS/HR	POUNDS PER HOUR
LCP	LOCAL CONTROL PANEL
LDB	LEAVING DRY BULB TEMPERATURE
LIN FT	LINEAR FEET
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MB	MIXING BOX
MBH	THOUSANDS OF BTUH
MC	MECHANICAL CONTRACTOR
MIN	MINIMUM
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO.	NUMBER
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
OV	OUTLET VELOCITY
P	PRESSURE
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAUGE
PRESS	PRESSURE
PVC	POLYVINYL CHLORIDE
R	RISE
RA	RETURN AIR
RAF	RETURN AIR FAN
RD	ROOF DRAIN
REQ'D	REQUIRED
RHC	REHEAT COIL
R_{HC}	REFRIGERANT HOT GAS DISCHARGE
R_L	REFRIGERANT LIQUID
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
R_S	REFRIGERANT SUCTION
RV	RELIEF VALVE
S/FDPR	COMBINATION SMOKE AND FIRE DAMPER
SAN	SANITARY
SAU	SOUND ATTENUATION UNIT
SCW	SOFT COLD WATER
SGCHR	SECONDARY GLYCOL CHILLED WATER RETURN
SGCHS	SECONDARY GLYCOL CHILLED WATER SUPPLY
SMH	STORM MANHOLE
SP	STATIC PRESSURE
SDPR	SMOKE DAMPER
SPEC	SPECIFICATION
ST	STORM
TB	TERMINAL BOX
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
TES	THERMAL ENERGY STORAGE
TS	TIP SPEED
TYP	TYPICAL
TX	TOILET EXHAUST
UH	UNIT HEATER
V	VENT LINE
VAV	VARIABLE AIR VOLUME UNIT
VLV	VALVE
VTR	VENT THRU ROOF
W/	WITH
W/O	WITHOUT
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WCO	WALL CLEANOUT
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WP	WORKING PRESSURE

NOTE:
ALL STANDARD SYMBOLS AND ABBREVIATIONS MAY NOT APPEAR ON THE PROJECT DRAWINGS.

SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 171 RENOVATION

PROJECT LOCATION:
2351 PALM RIDGE ROAD
SANIBEL, FLORIDA 33957

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MARK	DESCRIPTION	DATE

COMM. NO.: 2025806
ISSUE DATE: 11.11.2025
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GENERAL NOTES - HVAC

M001

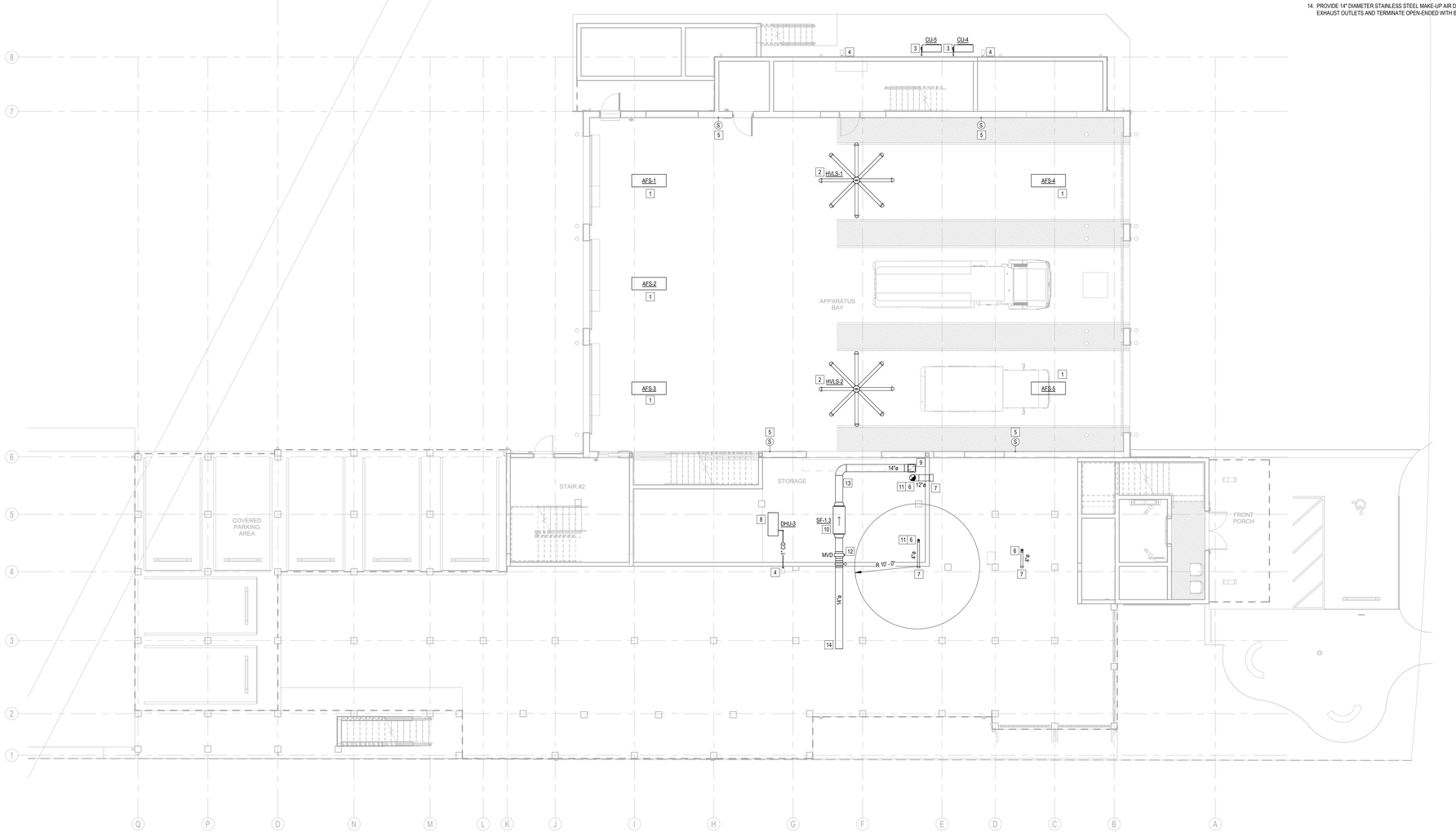
100% CONSTRUCTION DOCUMENTS

GENERAL NOTES:

A. COORDINATE ALL DUCTWORK AND PIPING ELEVATIONS AND ROUTING WITH STRUCTURAL AND PLUMBING TO MINIMIZE DUCTWORK TRANSITIONS.

H.V.A.C. KEYNOTES [x]:

1. PROVIDE AIR FILTER/SCRUBBER UNIT PER SCHEDULE FOR APPARATUS BAY. SEE SHEET M102 FOR CONTROLLER LOCATION.
2. PROVIDE HIGH VOLUME LOW SPEED FAN PER SCHEDULE. SEE SHEET M102 FOR CONTROLLER LOCATION.
3. PROVIDE MINI-SPLIT CONDENSING UNIT PER SCHEDULE. MOUNT FROM WALL ON SUPPORT RACK ABOVE FLOOD ELEVATION. SEE ARCHITECTURAL DRAWINGS FOR DETAIL OF WALL SUPPORT. PROVIDE REFRIGERANT PIPING UP EXTERIOR OF WALL IN GALVANIZED WEATHER SHROUD PAINTED TO MATCH ADJACENT BUILDING.
4. PROVIDE 1" CONDENSATE DRAIN LINE DOWN EXTERIOR OF WALL. PROVIDE CONCRETE SPLASH BLOCK AT GRADE AND TERMINATE CONDENSATE DRAIN AT SPLASH BLOCK. PAINT DRAIN LINE TO MATCH ADJACENT BUILDING.
5. PROVIDE COMBINATION CO/NO2 SENSOR 18" A.F.F.
6. PROVIDE DRYER VENT LINE DOWN FROM DRYER ON FLOOR ABOVE. SEE SHEET M102 FOR CONTINUATION. MOUNT TIGHT TO BOTTOM OF ELEVATED SLAB.
7. PROVIDE WALL CAP WITH BACKDRAFT DAMPER AT TERMINATION OF DRYER EXHAUST DUCT. MOUNT TO BOTTOM OF SLAB ABOVE.
8. PROVIDE DEHUMIDIFIER PER SCHEDULE. MOUNT FROM STRUCTURE ABOVE. PROVIDE 3/4" DRAIN LINE FROM DEHUMIDIFIER TO SPILL ON GRADE WITH CONCRETE SPLASH BLOCK.
9. MAKE-UP AIR DUCT UP TO DECON ROOM ABOVE. SEE SHEET M102 FOR CONTINUATION. PROVIDE FIRE DAMPER IN FLOOR OPENING TO ABOVE.
10. SUPPLY AIR FAN PER SCHEDULE. MOUNT TIGHT TO STRUCTURE ABOVE.
11. PROVIDE 2 HOUR RATED CHASE AROUND DRYER EXHAUST DUCT TO WALL.
12. PROVIDE ZERO LEAKAGE MOTORIZED DAMPER IN MAKE-UP AIR DUCTWORK, EQUAL TO TAMCO SERIES 1500 WITH SW OPTION.
13. PROVIDE 14" DIAMETER STAINLESS STEEL MAKE-UP AIR DUCT.
14. PROVIDE 14" DIAMETER STAINLESS STEEL MAKE-UP AIR DUCT. EXTEND AWAY FROM DRYER EXHAUST OUTLETS AND TERMINATE OPEN-ENDED WITH BIRD SCREEN OVER THE OPENING.



1 FLOOR PLAN - APPARATUS BAY - HVAC

1/8" = 1'-0"

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FLOOR PLAN - APPARATUS BAY - HVAC

M101

100% CONSTRUCTION DOCUMENTS

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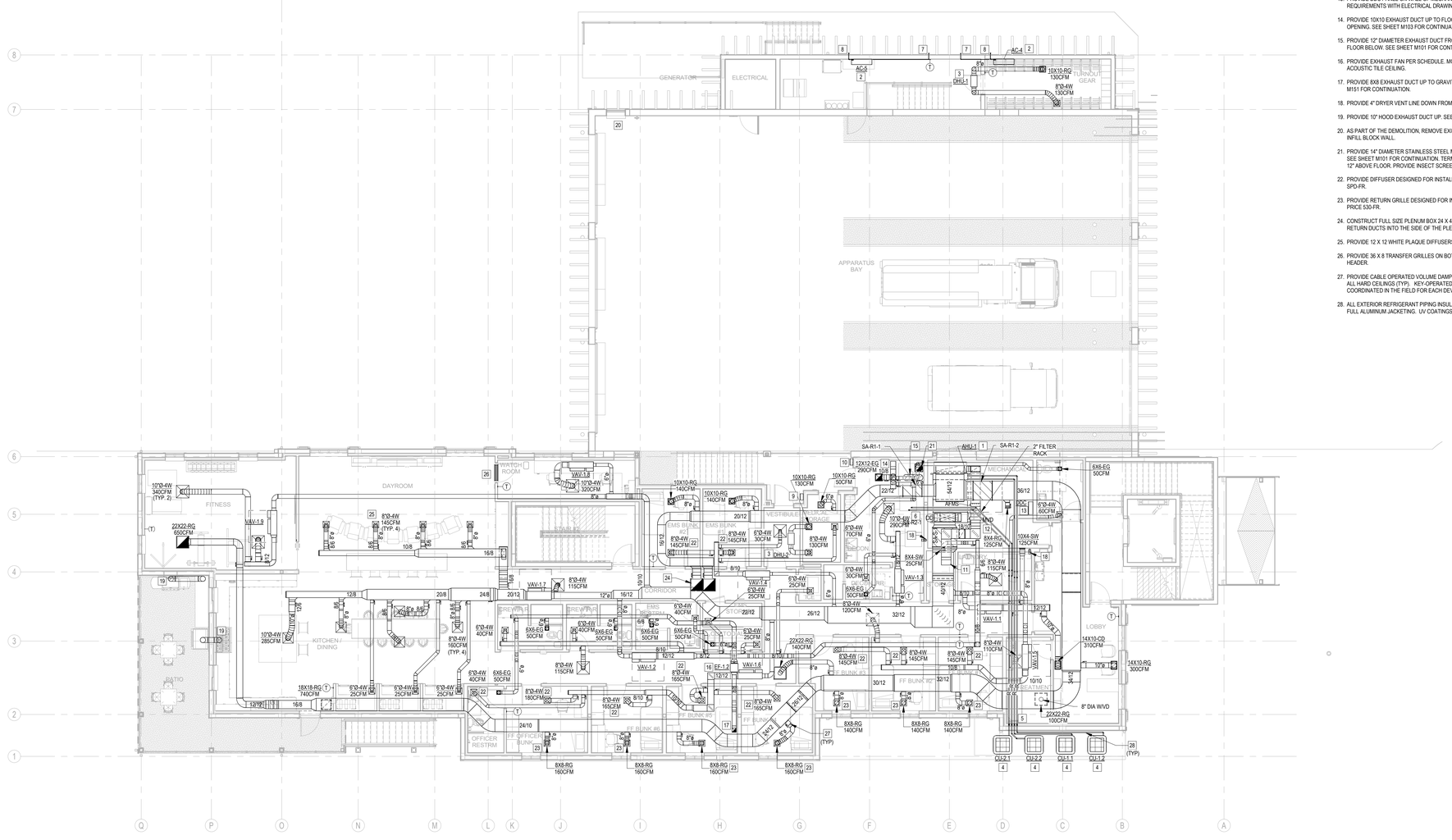

GENERAL NOTES:

A. COORDINATE ALL DUCTWORK AND PIPING ELEVATIONS AND ROUTING WITH STRUCTURAL AND PLUMBING TO MINIMIZE DUCTWORK TRANSITIONS.

B. PROVIDE DIFFUSERS EQUAL TO PRICE SPD-FR AND RETURN GRILLES EQUAL TO PRICE 530-FR IN ALL BUNK ROOMS.

H.V.A.C. KEYNOTES [X] :

1. PROVIDE MODULAR AIR HANDLER PER SCHEDULE. PROVIDE DX REFRIGERANT PIPING FROM CORRESPONDING CONDENSING UNITS TO AIR HANDLER AS INDICATED. PROVIDE 1-1/4" CONDENSATE DRAIN FROM AIR HANDLER DRAIN PAN TO HUB DRAIN IN MECHANICAL ROOM.
2. PROVIDE WALL-MOUNTED MINI-SPLIT AIR HANDLER PER SCHEDULE.
3. PROVIDE DEHUMIDIFIER PER SCHEDULE. MOUNT FROM STRUCTURE ABOVE. PROVIDE DUCTWORK FROM DEHUMIDIFIER TO GRILLES IN ROOM AS INDICATED. PROVIDE 3/4" DRAIN LINE FROM DEHUMIDIFIER TO NEAREST AIR HANDLER CONDENSATE DRAIN LINE.
4. PROVIDE CONDENSING UNIT PER SCHEDULE. MOUNT TO SUPPORT RACK ABOVE FLOOD ELEVATION. SEE ARCHITECTURAL DRAWINGS FOR DETAIL OF SUPPORT. PROVIDE REFRIGERANT PIPING FROM CONDENSING UNIT TO WALL AS INDICATED.
5. PROVIDE REFRIGERANT PIPING UP IN WALL FURRING TO CEILING CAVITY OF FIRST FLOOR. ROUTE TO MODULAR DX AIR HANDLER AS INDICATED.
6. PROVIDE REFRIGERANT PIPING UP TO MECHANICAL ROOM ABOVE. SEE SHEET M103 FOR CONTINUATION.
7. PROVIDE REFRIGERANT PIPING FROM WALL-MOUNTED MINI-SPLIT AIR HANDLER THROUGH WALL AND DOWN IN GALVANIZED WEATHER SHROUD PAINTED TO MATCH ADJACENT BUILDING. SEE SHEET M101 FOR CONTINUATION.
8. PROVIDE 1" CONDENSATE DRAIN LINE FROM AIR HANDLER THROUGH WALL AND DOWN EXTERIOR OF WALL. SEE SHEET M101 FOR CONTINUATION.
9. PROVIDE HIGH VOLUME LOW SPEED FAN CONTROLLER PER MANUFACTURER'S REQUIREMENTS. MOUNT TO WALL ABOVE CATWALK.
10. PROVIDE AIR SCRUBBER SYSTEM CONTROL PANEL PER MANUFACTURER'S REQUIREMENTS. MOUNT TO WALL ABOVE CATWALK.
11. PROVIDE 18X10 OUTSIDE AIR DUCTWORK DOWN FROM FLOOR ABOVE. PROVIDE FIRE DAMPER IN FLOOR OPENING. SEE SHEET M103 FOR CONTINUATION.
12. PROVIDE OUTSIDE AIR DUCTWORK WITH MANUAL VOLUME DAMPER, MOTORIZED VOLUME DAMPER AND AIR FLOW MONITORING STATION. ROUTE TO RETURN DUCT AS INDICATED.
13. PROVIDE DDC PANEL ON WALL OF MECHANICAL ROOM. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS (120V RECEPTACLE ASSUMED).
14. PROVIDE 10X10 EXHAUST DUCT UP TO FLOOR ABOVE. PROVIDE FIRE DAMPER IN FLOOR OPENING. SEE SHEET M103 FOR CONTINUATION.
15. PROVIDE 12" DIAMETER EXHAUST DUCT FROM DECON CABINET DOWN BEHIND CABINET TO FLOOR BELOW. SEE SHEET M101 FOR CONTINUATION.
16. PROVIDE EXHAUST FAN PER SCHEDULE. MOUNT FROM STRUCTURE ABOVE CORRIDOR ACOUSTIC TILE CEILING.
17. PROVIDE 8X8 EXHAUST DUCT UP TO GRAVITY VENTILATOR ON ROOF ABOVE. SEE SHEET M151 FOR CONTINUATION.
18. PROVIDE 4" DRYER VENT LINE DOWN FROM DRYER. SEE SHEET M101 FOR CONTINUATION.
19. PROVIDE 10" HOOD EXHAUST DUCT UP. SEE SHEET M151 FOR CONTINUATION.
20. AS PART OF THE DEMOLITION, REMOVE EXISTING WALL MOUNTED PROPELLER FAN AND INFILL BLOCK WALL.
21. PROVIDE 14" DIAMETER STAINLESS STEEL MAKE-UP AIR DUCT UP FROM FLOOR BELOW. SEE SHEET M101 FOR CONTINUATION. TERMINATE DUCT OPEN-ENDED APPROXIMATELY 12" ABOVE FLOOR. PROVIDE INSECT SCREEN OVER DUCT TERMINATION.
22. PROVIDE DIFFUSER DESIGNED FOR INSTALLATION IN RATED CEILING EQUAL TO PRICE SPD-FR.
23. PROVIDE RETURN GRILLE DESIGNED FOR INSTALLATION IN RATED CEILING EQUAL TO PRICE 530-FR.
24. CONSTRUCT FULL SIZE PLENUM BOX 24 X 48 X HEIGHT REQUIRED TO TAP TWO 16 X 8 RETURN DUCTS INTO THE SIDE OF THE PLENUM BOX. BALANCE AT 585 CFM EACH.
25. PROVIDE 12 X 12 WHITE PLAQUE DIFFUSERS WITH ROUND NECK AS INDICATED (TYP.4).
26. PROVIDE 36 X 8 TRANSFER GRILLES ON BOTH SIDE OF THE OPENING ABOVE THE DOOR HEADER.
27. PROVIDE CABLE OPERATED VOLUME DAMPER CONTROLLED BY YOUNG REGULATOR AT ALL HARD CEILINGS (TYP). KEY-OPERATED CONTROLLER LOCATIONS SHALL BE COORDINATED IN THE FIELD FOR EACH DEVICE.
28. ALL EXTERIOR REFRIGERANT PIPING INSULATION SHALL BE MIN. 1-1/2" ELASTOMERIC WITH FULL ALUMINUM JACKETING. UV COATINGS ARE NOT ACCEPTABLE.

1 FLOOR PLAN - FIRST FLOOR - HVAC

1/8" = 1'-0"

SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 171 RENOVATION

PROJECT LOCATION:
2351 PALM RIDGE ROAD
SANIBEL, FLORIDA 33957

SCHENKEL SHULTZ

9510 Corkscrew Palms Circle,
Unit 1
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voice (239) 208-4846

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JASON L. SMITH, P.E.
600 S. ORLANDO AVE.
WINTLAND, FL 32751
FL. REG. NO.: PE57143

REVISIONS		
MARK	DESCRIPTION	DATE

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FLOOR PLAN - FIRST FLOOR - HVAC

M102

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GENERAL NOTES:

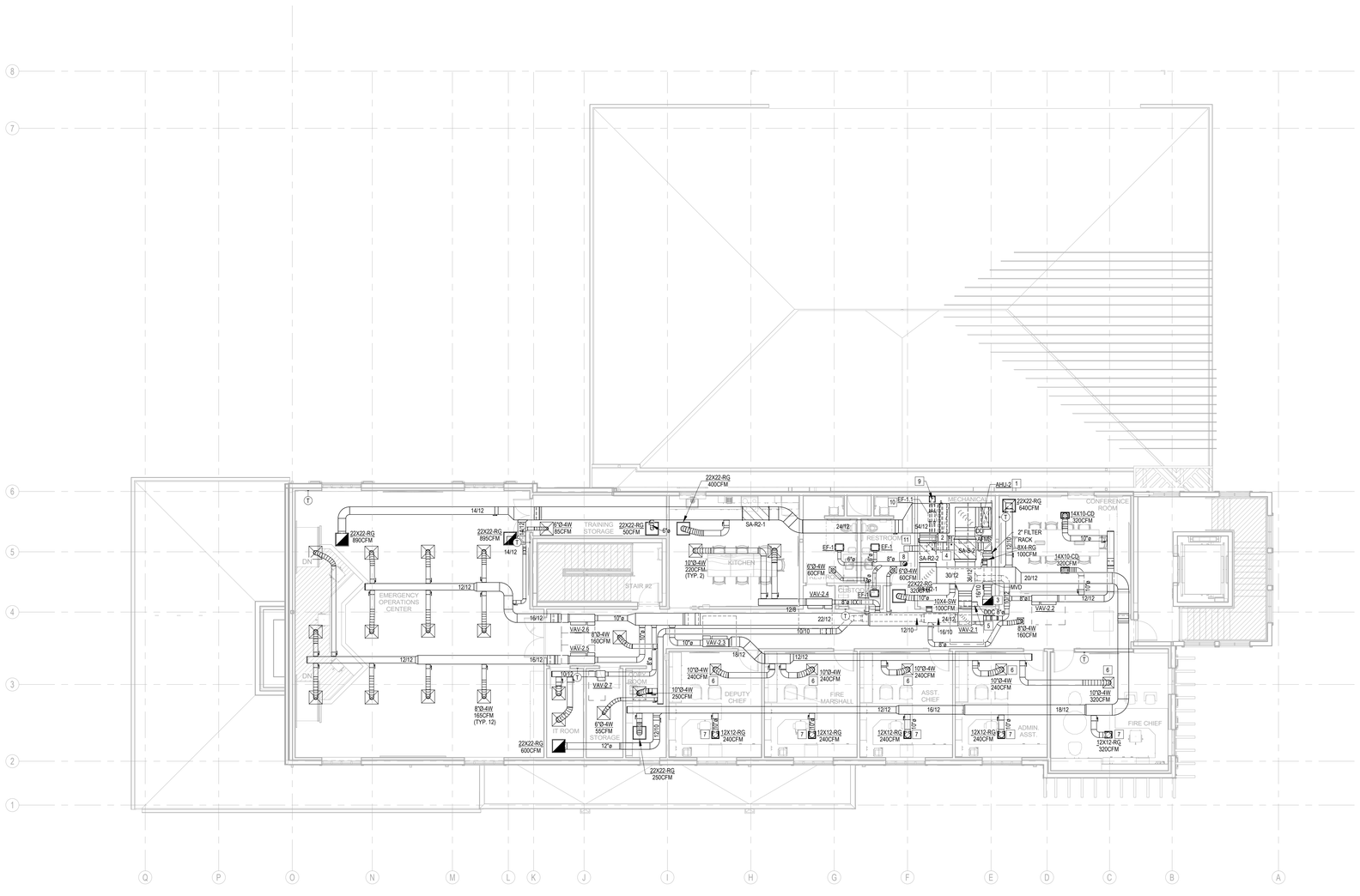
A. COORDINATE ALL DUCTWORK AND PIPING ELEVATIONS AND ROUTING WITH STRUCTURAL AND PLUMBING TO MINIMIZE DUCTWORK TRANSITIONS.

B. PROVIDE DIFFUSERS EQUAL TO PRICE SPD-FR AND RETURN GRILLES EQUAL TO PRICE 530-FR IN ALL BUNK ROOMS.

H.V.A.C. KEYNOTES [X]:

1. PROVIDE MODULAR AIR HANDLER PER SCHEDULE. PROVIDE DX REFRIGERANT PIPING FROM CORRESPONDING CONDENSING UNITS TO AIR HANDLER AS INDICATED. PROVIDE 1-1/4" CONDENSATE DRAIN FROM AIR HANDLER DRAIN PAN TO HUB DRAIN IN MECHANICAL ROOM.
2. PROVIDE REFRIGERANT PIPING UP FROM FLOOR BELOW. ROUTE TO MODULAR DX AIR HANDLER AS INDICATED. SEE SHEET M102 FOR CONTINUATION.
3. PROVIDE A 24 X 24 S.S. OUTSIDE AIR DUCTWORK UP THROUGH THE ROOF TO THE GRAVITY INTAKE VENTILATOR.

   24 X 24 OUTSIDE AIR DUCTWORK SHALL EXTEND DOWN PAST THE 16 X 10 S.S OIA BRANCH DUCT SERVING AHU-2 TRANSITION THE OIA DUCT TO 18 X 10 VERTICALLY DOWN THROUGH THE FLOOR SLAB WITH A 1-1/2 HOUR FIRE DAMPER. REFER TO FIRST FLOOR PLAN SHEET M102 FOR CONTINUATION OF OIA DUCTWORK TO AHU-1.
4. PROVIDE OUTSIDE AIR DUCTWORK WITH MANUAL VOLUME DAMPER, MOTORIZED VOLUME DAMPER AND AIR FLOW MONITORING STATION. ROUTE TO RETURN DUCT AS INDICATED.
5. PROVIDE DDC PANEL ON WALL OF MECHANICAL ROOM. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS (120V RECEPTACLE ASSUMED).
6. PROVIDE DIFFUSER DESIGNED FOR INSTALLATION IN RATED CEILING EQUAL TO PRICE SPD-FR.
7. PROVIDE RETURN GRILLE DESIGNED FOR INSTALLATION IN RATED CEILING EQUAL TO PRICE 530-FR.
8. PROVIDE 8" EXHAUST DUCT UP TO GRAVITY VENTILATOR ON ROOF ABOVE. SEE SHEET M151 FOR CONTINUATION.
9. PROVIDE 10X10 EXHAUST DUCT DOWN TO FLOOR BELOW. PROVIDE FIRE DAMPER IN FLOOR OPENING. SEE SHEET M102 FOR CONTINUATION.
10. PROVIDE EXHAUST FAN PER SCHEDULE. MOUNT BELOW RETURN DUCTWORK IN MECHANICAL ROOM.
11. PROVIDE 10X10 EXHAUST DUCT UP TO GRAVITY VENTILATOR ON ROOF. SEE SHEET M151 FOR CONTINUATION.



1 FLOOR PLAN - SECOND FLOOR - HVAC

1/8" = 1'-0"

SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 171 RENOVATION

PROJECT LOCATION:
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SANIBEL, FLORIDA 33957

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FLOOR PLAN - SECOND FLOOR - HVAC

M103

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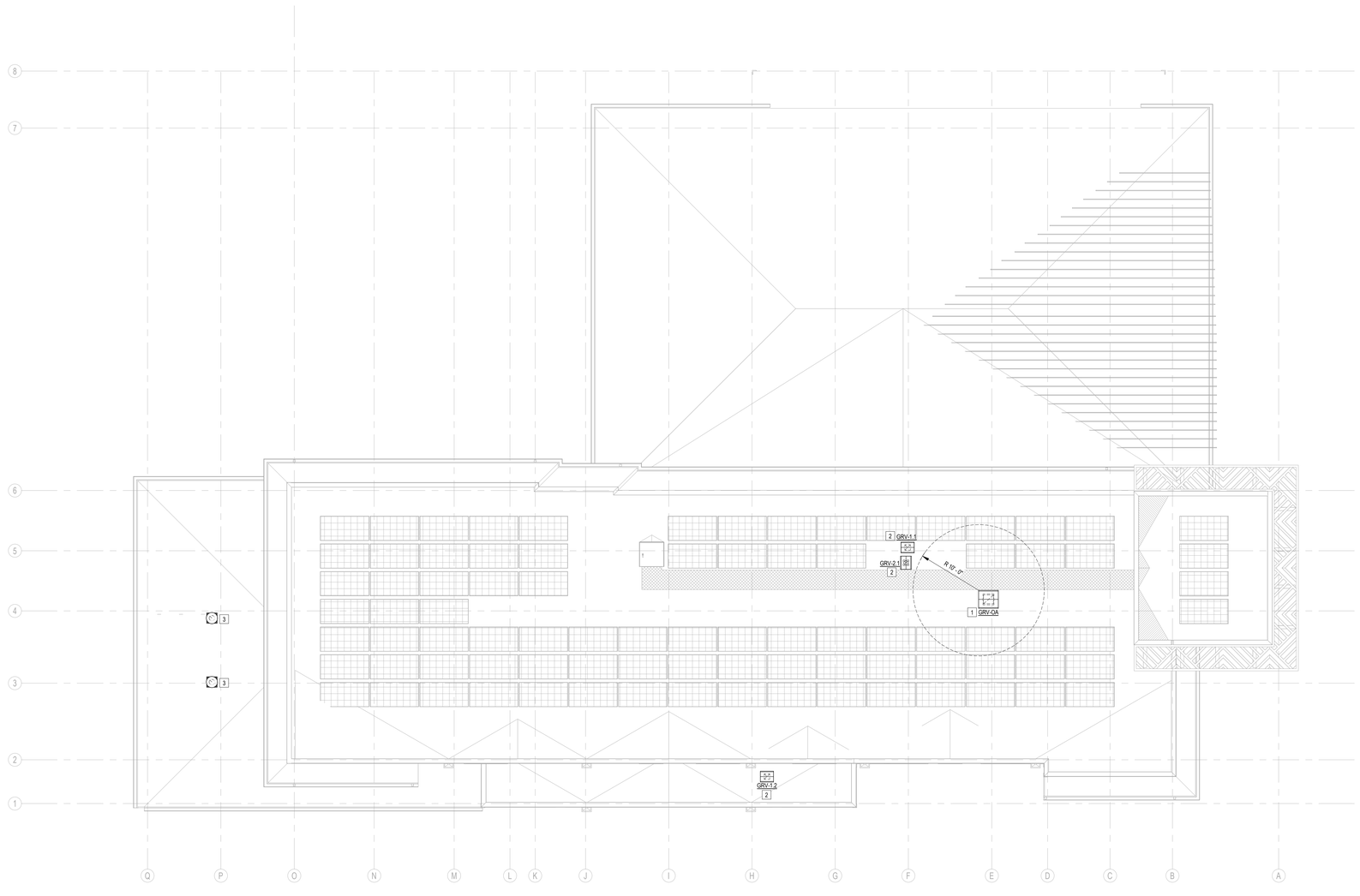
H.V.A.C. KEYNOTES [X]:

1. PROVIDE GRAVITY VENTILATOR FOR OUTSIDE AIR INTAKE PER SCHEDULE. PROVIDE 10 FEET OF CLEARANCE FROM EXHAUST OR PLUMBING VENTS PER CODE.
2. PROVIDE GRAVITY VENTILATOR FOR EXHAUST PER SCHEDULE.
3. PROVIDE 10" KITCHEN HOOD EXHAUST VENT CAP PER DETAIL WITH SLOPED ROOF CURB.



1	ROOF PLAN - HVAC
1/8" = 1'-0"	

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ROOF PLAN - HVAC

M151

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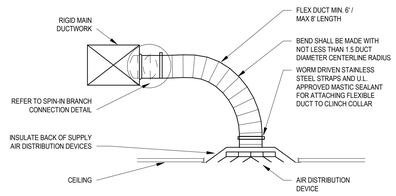
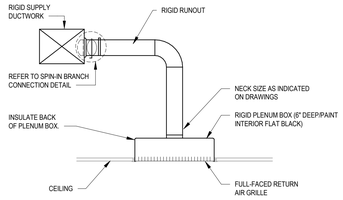
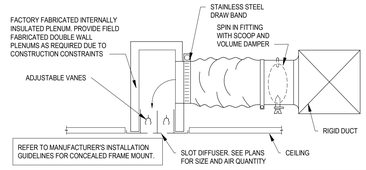


1 DIFFUSER AND FLEX DUCT DETAIL
SCALE: NTS



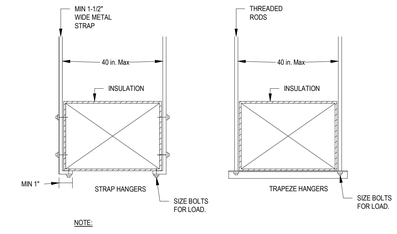
2 PLENUM BACKED RETURN GRILLE DETAIL
SCALE: NTS



NOTES:

1. OFFSETS WITH FLEX DUCT SHALL NOT EXCEED 30° AND SHALL BE GRADUAL. OFFSETS IN EXCESS OF 30° SHALL BE HARD DUCTED.
2. FLEX DUCT SHALL NOT HAVE MORE THAN 1/2" SAG PER FOOT.
3. CONNECT FLEXIBLE DUCT TO SUPPLY MAIN WITH SPIN-IN FITTING WITH VOLUME DAMPER.
4. REFER TO SPECIFICATIONS FOR MAXIMUM ALLOWABLE LENGTH OF FLEXIBLE DUCT.
5. PLENUM SHALL BE MIN. 2" WIDER THAN SLOT AND MIN. 4" TALLER THAN BRANCH DUCT.
6. LININGS SHALL BE FOILED FOIL FACED.

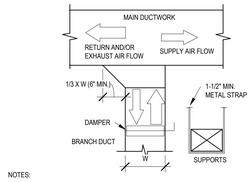
3 LINEAR DIFFUSER FLEX CONNECTION TO PLENUM BOOT
SCALE: NTS



NOTE:

1. DUCTWORK TRAPEZE HANGERS SUPPORT SHALL NOT BE COVERED BY DUCTWORK INSULATION.

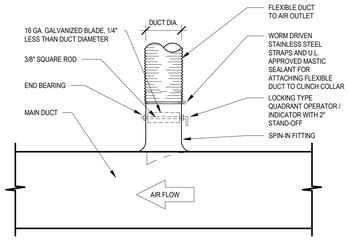
4 DUCTWORK SUPPORT
SCALE: NTS



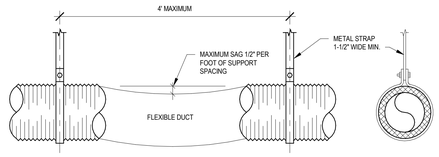
NOTES:

1. ALL SUPPLY, EXHAUST AND RETURN AIR BRANCH DUCTS SHALL BE SUPPLIED WITH A MANUAL VOLUME DAMPER FOR BALANCING. DAMPERS NOT SHOWN ON PLAN FOR CLARITY.
2. AIR FLOW ARROWS ABOVE INDICATE NEGATIVE (RETURN OR EXHAUST) OR POSITIVE AIR FLOW (SUPPLY) TO DELINEATE THE DUCT CONNECTION BOOT ORIENTATION FOR EACH DUCT SYSTEM.

5 RECTANGULAR DUCT BRANCH
SCALE: NTS



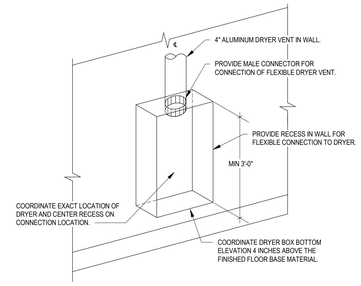
6 TYPICAL SPIN-IN BRANCH CONNECTION
SCALE: NTS



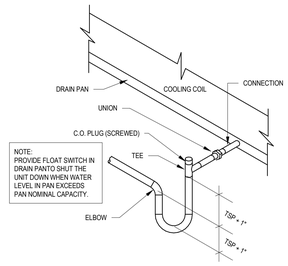
NOTES:

1. DUCT SHOULD EXTEND STRAIGHT FOR SEVERAL INCHES FROM A CONNECTION BEFORE BENDING.
2. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.

7 FLEX DUCT SUPPORT
SCALE: NTS

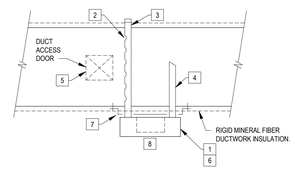


8 DRYER VENT BOX
SCALE: NTS



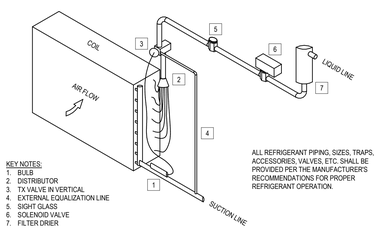
NOTE:
PROVIDE FLOAT SWITCH IN DRAIN PANTO SHUT THE UNIT DOWN WHEN WATER LEVEL IN PAN EXCEEDS PAN NOMINAL CAPACITY.

9 CONDENSATE DRAIN - ISO
SCALE: NTS



1. INSTALL DUCT SMOKE DETECTOR ON SIDE OF DUCT AS SHOWN.
2. INLET TUBE HOLES SHALL FACE UPSTREAM.
3. SUPPORT INLET TUBE IN DUCT OPENING WHEN DUCT WIDTH EXCEEDS 32".
4. EXHAUST TUBE LENGTH 1/2 OF DUCT WIDTH.
5. ACCESS DOOR IN DUCT FOR INSPECTION AND TESTING. REFER TO FIRE DAMPER DETAIL FOR ACCESS DOOR SIZE.
6. MEASURE DIFFERENTIAL PRESSURE ACROSS INLET TUBE AND EXHAUST TUBE. VERIFY THAT DIFFERENTIAL PRESSURE SATISFIES MINIMUM REQUIREMENTS AS SPECIFIED IN MANUFACTURERS INSTALLATION REQUIREMENTS.
7. PROVIDE STANDOFF BRACKET FOR INSULATED DUCTWORK. INSTALL INSULATION BETWEEN DUCT AND DETECTOR.
8. INSTALL DUCT SMOKE DETECTORS IN ACCORDANCE WITH DETECTOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND REQUIREMENTS INDICATED ABOVE. WHERE REQUIREMENTS ARE IN CONFLICT, THE MORE STRINGENT WILL GOVERN.

10 DUCT SMOKE DETECTOR DETAIL
SCALE: NTS

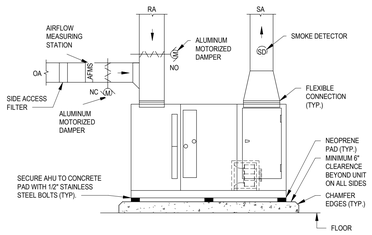


KEY NOTES:

1. BULB
2. DISTRIBUTOR
3. TX VALVE IN VERTICAL
4. EXTERNAL EQUALIZATION LINE
5. SIGHT GLASS
6. SOLENOID VALVE
7. FILTER DRIER

ALL REFRIGERANT PIPING, SIZES, TRAPS, ACCESSORIES, VALVES, ETC. SHALL BE PROVIDED PER THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER REFRIGERANT OPERATION.

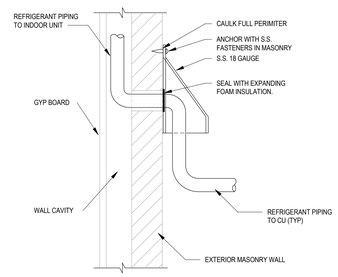
11 DX COIL PIPING
SCALE: NTS



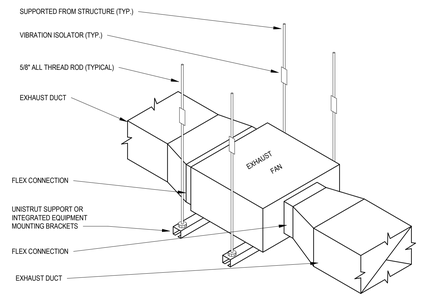
NOTES:

1. ACCESS DOORS AND AHU SECTIONS SHOWN ARE DIAGRAMATIC. COORDIANTE QUANTITIES AND LOCATIONS WITH ENLARGED MECHANICAL ROOM PLANS.
2. VERIFY CONDENSATE P-TRAP DIMENSION REQUIREMENTS PRIOR TO EQUIPMENT FABRICATION. PROVIDE WITH BASE RAIL HEIGHT AS REQUIRED TO ACCOMMODATE P-TRAP DEPTH WITH 4" THICK CONCRETE HOUSEKEEPING PAD.

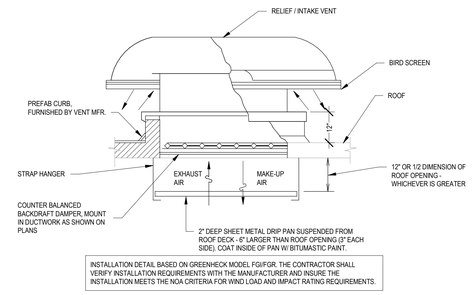
12 TYPICAL VAV AHU DETAIL
SCALE: NTS



13 REFRIGERANT PIPING THRU EXTERIOR WALL
SCALE: NTS

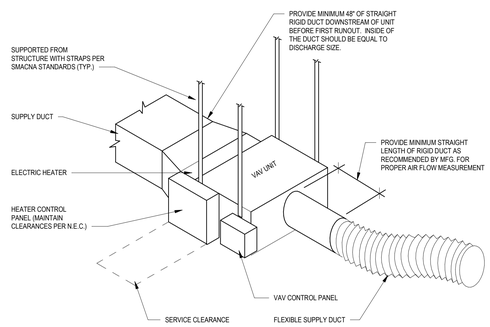


14 IN-LINE EXHAUST FAN - ISO
SCALE: NTS



INSTALLATION DETAIL BASED ON GREENHECK MODEL FGI/FGR. THE CONTRACTOR SHALL VERIFY INSTALLATION REQUIREMENTS WITH THE MANUFACTURER AND INSURE THE INSTALLATION MEETS THE NOA CRITERIA FOR WIND LOAD AND IMPACT RATING REQUIREMENTS.

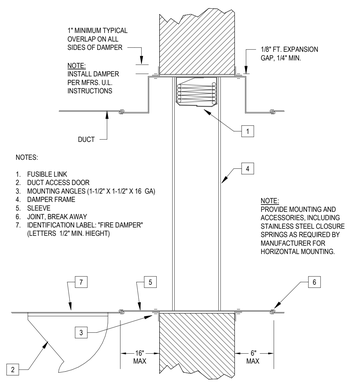
15 DETAIL - ROOF EXHAUST/INTAKE HOOD
SCALE: NTS



NOTE:

- VERIFY LEFT/RIGHT ORIENTATION WITH THE PLANS.
- FOR VAV TERMINALS WITH ELECTRIC HEAT, PROVIDE SUPPLY AIR TEMPERATURE SENSOR.

16 VAV TERMINAL UNIT
SCALE: NTS

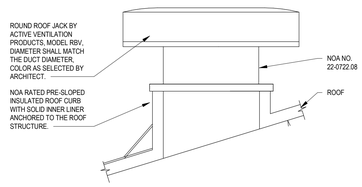


NOTES:

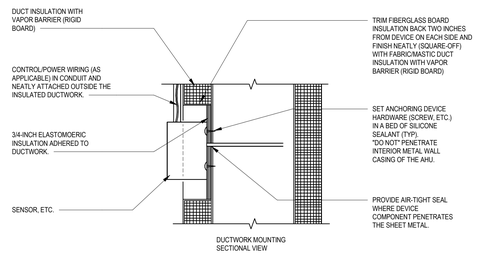
1. FUSIBLE LINK
2. DUCT ACCESS DOOR
3. MOUNTING ANGLES (1-1/2" X 1-1/2" X 16 GA)
4. DAMPER FRAME
5. SLEEVE
6. JOINT, BREAK AWAY
7. IDENTIFICATION LABEL: "FIRE DAMPER" (LETTERS 1/2" MIN. HIEGHT)

NOTE:
PROVIDE MOUNTING AND ACCESSORIES, INCLUDING STAINLESS STEEL CLOSURE SPRINGS AS REQUIRED BY MANUFACTURER FOR HORIZONTAL MOUNTING.

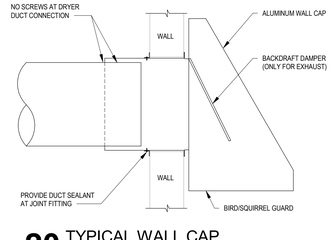
17 FIRE DAMPER DETAIL
SCALE: NTS



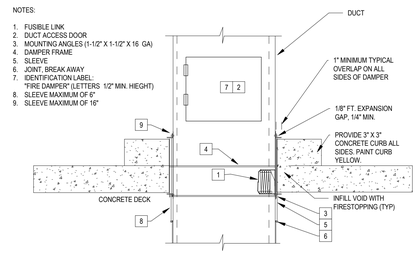
18 ROOF EXHAUST JACK DETAIL
SCALE: NTS



19 DEVICE/J-BOX MOUNTING DETAIL
SCALE: NTS



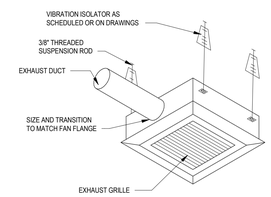
20 TYPICAL WALL CAP
SCALE: NTS



NOTES:

1. FUSIBLE LINK
2. DUCT ACCESS DOOR
3. MOUNTING ANGLES (1-1/2" X 1-1/2" X 16 GA)
4. DAMPER FRAME
5. SLEEVE
6. JOINT, BREAK AWAY
7. IDENTIFICATION LABEL: "FIRE DAMPER" (LETTERS 1/2" MIN. HIEGHT)
8. SLEEVE MAXIMUM OF 6"
9. SLEEVE MAXIMUM OF 16"

21 DUCT THRU FLOOR SLAB DETAIL
SCALE: NTS



NOTE:
CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ANY CEILING ACCESS OPENINGS, WITH MANUFACTURER.

22 CEILING EXHAUST FAN DETAIL
SCALE: NTS

SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 171 RENOVATION

PROJECT LOCATION:
2351 PALM RIDGE ROAD
SANIBEL, FLORIDA 33957

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JASON L. SMITH, P.E.
600 S. ORLANDO AVE.
MAITLAND, FL 32751
FL REG. NO.: P6371743

REVISIONS		
MARK	DESCRIPTION	DATE

COMM. NO.: 2025806
ISSUE DATE: 11.11.2025
DRAWN BY: JI

DETAILS - HVAC

M501

100% CONSTRUCTION DOCUMENTS

AIR DISTRIBUTION DEVICE SCHEDULE

MARK / LEGEND	TYPE	MANUFACTURER	MODEL	NOTES
NECK SIZE 8"Ø-4W THROW PATTERN / AIR FLOW 200CFM	CEILING MOUNTED SQUARE PLAQUE FACE DIFFUSER	PRICE	ASPD	1 - 7
NECK SIZE 12X8-SW / AIR FLOW 200CFM	SIDEWALL MOUNTED SUPPLY REGISTER	PRICE	22D-CL	1-3, 5
NECK SIZE 12X8-CD / AIR FLOW 200CFM	CEILING MOUNTED SUPPLY REGISTER	PRICE	22D-CL	1-3, 5
NECK SIZE 12X12-RG / AIR FLOW 200CFM	CEILING/SIDEWALL MOUNTED RETURN AIR GRILLE	PRICE	630D-FL	1-3, 5, 8
NECK SIZE 12X12-TG / AIR FLOW 200CFM	CEILING/SIDEWALL MOUNTED TRANSFER AIR GRILLE	PRICE	630D-FL	1-3, 5, 8
NECK SIZE 12X8-EG / AIR FLOW 200CFM	CEILING/SIDEWALL MOUNTED EXHAUST AIR GRILLE	PRICE	630D-FL	1-3, 5, 8

NOTES:

1. PROVIDE ALUMINUM DIFFUSER.
2. COORDINATE FINISH WITH ARCHITECT.
3. PROVIDE WITH OPPOSED BLADE OR BUTTERFLY STYLE VOLUME DAMPER.
4. PROVIDE 24X24 LAY-IN MODULE WHERE LOCATED IN LAY-IN CEILING.
5. COORDINATE BORDER TYPES WITH ARCHITECTURAL FLOOR PLAN AND REFLECTED CEILING PLAN.
6. COORDINATE THROW PATTERN WITH FLOOR PLANS.
7. PROVIDE INSULATED BACK PAN WHERE LOCATED IN ACOUSTIC TILE CEILING.
8. PROVIDE 24X24 FULL LOUVERED FACE GRILLE WHERE LOCATED IN LAY-IN CEILING. PROVIDE WITH A 6" DEEP FULL PLENUM BOX TO ACCEPT THE RUN-OUT DUCT CONNECTION.

SOUND ATTENUATOR SCHEDULE

MARK	WIDTH	HEIGHT	LENGTH	VELOCITY	MANUFACTURER	MODEL	NOTES
SA-S-1	46	16	36	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2
SA-S-2	40	16	36	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2
SA-R1-1	22	12	36	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2
SA-R1-2	36	12	36	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2
SA-R2-1	24	12	48	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2
SA-R2-2	30	12	36	+2000	VIBROACOUSTICS	RD-HV-F3	1 - 2

NOTES:

1. ANY CHANGE FROM BASIS OF DESIGN MUST MEET INSERTION LOSS VALUES AND DIMENSIONS INDICATED.
2. OCTAVE BANDS (HZ): 125, 250, 500, 1000, 2000, 4000. INSERTION LOSS (DB): 5, 8, 13, 14, 11, 9.

GRAVITY ROOF VENTILATOR SCHEDULE

MARK	SERVES	CFM	THROAT SIZE (IN)	THROAT AREA	PRESSURE DROP (IN-WG)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	NOTES
GRV-OA	OUTSIDE AIR	1850	24 x 24	2.8	0.08	Greenheck	FGI	1 - 4
GRV-1.1	EF-1.1	390	12 x 12	0.7	0.05	Greenheck	FGR	1 - 4
GRV-1.2	EF-1.2	250	12 x 12	0.7	0.02	Greenheck	FGR	1 - 4
GRV-2.1	2ND FLR TOILETS	150	12 x 12	0.7	0.01	Greenheck	FGR	1 - 4

NOTES:

1. PROVIDE MANUFACTURER'S STANDARD ROOF CURB, MINIMUM 18" IN HEIGHT.
2. GRAVITY VENTILATOR SHALL MEET FLORIDA PRODUCT APPROVAL WITH NOA RATING.
3. PROVIDE WITH ALUMINUM BIRD SCREEN.
4. PROVIDE ROOF CURB WITH SOLID INNER METAL LINER.

MODULAR DX AIR HANDLING UNIT SCHEDULE

MARK	AREA SERVED	UNIT CONFIGURATION	SUPPLY FAN DATA: SUPPLY AIR (CFM)	OUTDOOR AIR (CFM)	FAN TYPE	NO. OF FANS (ECM)	ELECTRICAL DATA: ESP (IN. WC)	HP (EACH)	FLA (EACH)	MCA	MOCP	VOLTS/PH.	COOLING COIL DATA: TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT DB/WB (°F)	LAT DB/WB (°F)	NO. OF ROWS	FINS PER INCH	FACE VELOCITY (FPM)	MAX APD (IN. W.C.)	BASIS OF DESIGN: MANUFACTURER	MODEL	WEIGHT (LBS.)	NOTES
AHU-1	FIRST FLOOR	VAV	5,730	1,100	ECM	2	2.5	3.5	8.8	20	25	208/3	235.7	158.4	80.0/67.2	54.15/3.0	6	8	500	0.9	DAIKIN APPLIED	CAH013GDCM	1,900	1 - 13
AHU-2	SECOND FLOOR	VAV	5,125	750	ECM	2	2.5	3.5	8.8	20	25	208/3	222	146.6	80.0/67.2	53.25/2.2	5	10	500	0.9	DAIKIN APPLIED	CAH011GDCM	1,750	1 - 13

NOTES:

1. PROVIDE UNIT WITH INTEGRAL DIGITAL CONTROLS READY FOR INTERFACE INCLUDING 24-VOLT TRANSFORMER AND TERMINAL CONNECTIONS FOR FAN MOTOR CONTROL.
2. PROVIDE WITH STAINLESS STEEL DRAIN PAN WITH DRAIN PAN OVERFLOW ALARM SWITCH AND STAINLESS STEEL COIL CASINGS. ALL CHILLED WATER COILS SHALL BE ELECTRO-FIN PROTECTIVE COATED.
3. PROVIDE UNIT WITH 6" BASE RAILS. FOAM INJECTED DOUBLE WALL CONSTRUCTION (R-13 MIN INSULATION) AND FOAM-FILLED DOUBLE-WALLED ACCESS DOORS, DOUBLE HINGED, WITH DOOR-INTERLOCK HANDLES.
4. PROVIDE UNIT WITH SINGLE POINT CONNECTION TO THE UNIT.
5. PROVIDE UNIT WITH 2" MERV-8 PRE-FILTERS AND 4" MERV-13 FINAL FILTERS AND (2) SETS OF REPLACEMENT MEDIA.
6. PROVIDE UNIT WITH ENGRAVED NAMEPLATE SHOWING UNIT DESIGNATION.
7. PROVIDE ALL UNITS WITH DUCT MOUNTED SMOKE DETECTOR IN THE SUPPLY DUCTWORK.
8. PROVIDE SINGLE PATH VAV AIR HANDLING UNIT WITH THE FOLLOWING SECTIONS: FLAT FILTER SECTION WITH 2" PREv4" FINAL FILTERS, 20" DX COIL SECTION WITH 2-CIRCUITS FOR SEPARATE CONDENSING UNITS, MIN. 16" ACCESS SECTION, AND TOP OUTLET FAN SECTION WITH ALUM TREADPLATE FLOOR.
9. ALL AHUS SHALL BE FACTORY-PAINTED.
10. PROVIDE LED LIGHTS FOR THE FAN AND COIL SECTIONS, 120/1/60 POWER.
11. PROVIDE ECM FAN ARRAY AND ECM BACNET CONTROL PANEL WITH 5 YEAR PARTS AND LABOR WARRANTY.
12. PROVIDE WITH BI-POLAR IONIZATION SYSTEM SIZED FOR THE GIVEN AIRFLOW, PLASMA AIR SERIES 7000 OR APPROVED EQUIVALENT.

DUCTLESS SPLIT SYSTEM INDOOR UNIT SCHEDULE

MARK	AREA SERVED	AIR FLOW (CFM)	WATTS	VOLTS/PH.	FAN FLA	WEIGHT (LBS)	MANUFACTURER	MODEL #	NOTES
AC-4	TURNOUT GEAR	716	35	208/1	0.5	35	Dakin	FTK18NMVJU	1 - 4
AC-5	CASCADE	716	35	208/1	0.5	35	Dakin	FTK18NMVJU	1 - 4

NOTES:

1. PROVIDE WITH WALL MOUNTED, HARDWIRED THERMOSTAT CONTROLLER.
2. PROVIDE WITH CONDENSATE PUMP WITH MINIMUM 5 FEET OF LIFT.
3. PROVIDE WITH ALL REQUIRED ACCESSORIES FOR SPECIFIC INSTALLATION.
4. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. SEE CONDENSING UNIT SCHEDULE THIS SHEET.

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

MARK	UNIT SERVED	COOLING: TOTAL CAPACITY (MBTUH)	SENSIBLE CAPACITY (MBTUH)	CONDENSER FANS: QTY	FLA	COMPRESSOR(S): QTY	RLA (EACH)	LRA (EACH)	ELECTRICAL: VOLTS/PH.	MCA	MOCP	WEIGHT (LBS.)	SEER [EER] (MINIMUM)	BASIS OF DESIGN: MANUFACTURER	MODEL	NOTES
CU-1.1	AHU-1	118	82.6	1	7.0	2	17.3	155.0	208/3	45.9	60	390	[11.4]	Dakin	DGSTE12030AA	1 - 5
CU-1.2	AHU-1	118	82.6	1	7.0	2	17.3	155.0	208/3	45.9	60	390	[11.4]	Dakin	DGSTE12030AA	1 - 5
CU-2.1	AHU-2	118	82.6	1	7.0	2	17.3	155.0	208/3	45.9	60	390	[11.4]	Dakin	DGSTE12030AA	1 - 5
CU-2.2	AHU-2	118	82.6	1	7.0	2	17.3	155.0	208/3	45.9	60	390	[11.4]	Dakin	DGSTE12030AA	1 - 5
CU-4	AC-3	18	14.5	1	1.0	1	13		208/1	13.4	20	100	18.5	Dakin	RK18AXVJU	1 - 6
CU-5	AC-3	18	14.5	1	1.0	1	13		208/1	13.4	20	100	18.5	Dakin	RK18AXVJU	1 - 6

NOTES:

1. PROVIDE CONTROLS PER THE CONTROLS DRAWINGS.
2. COORDINATE REFRIGERANT PIPING LENGTH WITH MANUFACTURER. PROVIDE MANUFACTURER'S ACCESSORIES RECOMMENDED FOR LONG LINE APPLICATIONS WHEN THE EQUIVALENT LENGTH EXCEEDS 75 FT. UPSIZE THE VAPOR LINE TO MINIMIZE THE COOLING CAPACITY LOSS TO LESS THAN 3%.
3. PROVIDE WITH ALL REQUIRED ACCESSORIES FOR SPECIFIC INSTALLATION.
4. PROVIDE WITH TIME DELAY RELAY.
5. PROVIDE SEACOAST PROTECTIVE COATINGS AND OPTIONS.
6. POWER FOR AIR HANDLER IS FED FROM CONDENSING UNIT.

VAV UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	INLET SIZE	PRIMARY AIR CFM: MAX.	MIN.	HEATING CFM	ΔP (IN. W.G.)	AUXILIARY ELECTRIC HEAT: kW	VOLTS/PH.	STEPS	NOTES
VAV-1.1	DAIKIN APPLIED	MQTH1508	8	605	275	275	0.25	2.5	120/1	1	1 - 7
VAV-1.2	DAIKIN APPLIED	MQTH1508	8	685	310	310	0.25	2.5	120/1	1	1 - 7
VAV-1.3	DAIKIN APPLIED	MQTH1506	6	320	145	145	0.25	1.5	120/1	1	1 - 7
VAV-1.4	DAIKIN APPLIED	MQTH1506	6	390	180	180	0.25	1.5	120/1	1	1 - 7
VAV-1.5	DAIKIN APPLIED	MQTH1508	8	435	200	200	0.25	2	120/1	1	1 - 7
VAV-1.6	DAIKIN APPLIED	MQTH1508	8	715	325	325	0.25	3	120/1	1	1 - 7
VAV-1.7	DAIKIN APPLIED	MQTH1512	12	1580	715	715	0.25	6	208/1	2	1 - 7
VAV-1.8	DAIKIN APPLIED	MQTH1506	6	320	145	145	0.25	1.5	120/1	1	1 - 7
VAV-1.9	DAIKIN APPLIED	MQTH1508	8	680	310	310	0.25	2.5	120/1	1	1 - 7
VAV-2.1	DAIKIN APPLIED	MQTH1508	8	845	385	385	0.25	3.5	120/1	1	1 - 7
VAV-2.2	DAIKIN APPLIED	MQTH1508	8	640	290	290	0.25	2.5	120/1	1	1 - 7
VAV-2.3	DAIKIN APPLIED	MQTH1510	10	1280	580	580	0.25	5	208/1	2	1 - 7
VAV-2.4	DAIKIN APPLIED	MQTH1508	8	440	200	200	0.25	2	120/1	1	1 - 7
VAV-2.5	DAIKIN APPLIED	MQTH1510	10	990	450	450	0.25	4	208/1	2	1 - 7
VAV-2.6	DAIKIN APPLIED	MQTH1510	10	1075	485	485	0.25	4	208/1	2	1 - 7
VAV-2.7	DAIKIN APPLIED	MQTH1508	8	600	270						1 - 8

NOTES:

1. PROVIDE WITH INTEGRAL STEP DOWN TRANSFORMER FOR CONTROL POWER. COORDINATE VOLTAGE WITH ELECTRICAL CONTRACTOR.
2. VAV BOX SHALL BE MINIMUM 22 GAUGE G-60 GALVANIZED STEEL CONSTRUCTION.
3. PROVIDE DOUBLE WALL CONSTRUCTION WITH MINIMUM 3/4" (R-4.6) INSULATION.
4. VAV BOX SHALL HAVE PRESSURE INDEPENDENT DDC CONTROLS (FACTORY INSTALLED).
5. VAV BOX SHALL BE PROVIDED WITH MAGNETIC DISCONNECTING CONTACTORS.
6. VAV BOXES SHALL BE PROVIDED WITH INTEGRAL CIRCUIT BREAKER DISCONNECT.
7. PROVIDE WITH NORMALLY OPEN SPRING LOADED DAMPER.
8. PROVIDE 24V CONTROL POWER FOR VAV TERMINAL WITHOUT ELECTRIC HEAT.

VENTILATION REQUIREMENT SCHEDULE - AHU-1

SERVED BY	ROOM	SPACE TYPE	Number of People	Outdoor Airflow Rate Req'd Per Person (R_p)	Area (sf)	Outdoor Airflow Rate Req'd Per SF (R_a)	Number Of People/ 1000 SF (Default Value)	CFM/ Person (Default Value)	Breathing Zone Outdoor Airflow (V_{bz})	R_p x P_z	R_a x A_z	Air Distribution Configuration	Zone Air Dist. Effect. (E_z)	Zone Outdoor Airflow ($V_{oz}=V_{bz}/E_z$)	Zone Primary Airflow (Zone Minimum, V_{pz})	Zone Primary Outdoor Air Fraction (Z_p)	Max (Z_p)	System Vent. Efficiency (E_v)	Occupant Diversity (D, Typ = 1))	Uncorrected Outdoor Air Intake (V_{ou})	Total Outdoor Air Intake Flow (V_{ot})	Fixture Units	Exhaust Airflow per fixture (CFM)	Exhaust Airflow per square foot (CFM)	Total Required Exhaust
VAV-1.1	LOBBY	OFFICE MAIN ENTRY LOBBIES	0	5	296	0.06	10	11	33	0	18	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	33	310	0.11	0.15	0.93	1	33	36		0	0	0
	TREATMENT	OFFICE SPACE	0	5	95	0.06	5	17	17	0	6	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	17	110	0.15	0.15	0.93	1	17	19		0	0	0
	MECH	UNOCCUPIED	0	0	245	0	0	0	0	0	0	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	0	125	0.00	0.15	0.93	1	0	0		0	0	0
	RESTROOM	TOILETS, CONTINUOUS	0	0	70	0	0	0	0	0	0	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	0	60	0.00	0.15	0.93	1	0	0	1	50	0	50
				System Area	706							Uncorrected OA	50						Total OA Required		55		Total EA Required		50
												Analyzed Condition Airflow	605							Provided	116			Provided	50
VAV-1.2	CORRIDOR	CORRIDORS	0	0	707	0.06	0	0	42	0	43	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	42	350	0.12	0.17	0.94	1	42	46		0	0	0
	RESTROOMS	TOILETS, CONTINUOUS	0	0	219	0	0	0	0	0	0	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	0	120	0.00	0.17	0.94	1	0	0	3	50	0	150
	CUSTODIAL	STORAGE ROOMS	0	0	28	0.12	0	0	3	0	4	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	3	25	0.13	0.17	0.94	1	3	4		0	0	0
	STORAGE	STORAGE ROOMS	0	0	71	0.12	0	0	9	0	9	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	9	50	0.17	0.17	0.94	1	9	10		0	0	0
	ICE	STORAGE ROOMS	0	0	18	0.12	0	0	2	0	3	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	2	25	0.09	0.17	0.94	1	2	3		0	0	0
	LAUNDRY	COMMERCIAL LAUNDRY	0	5	91	0.12	10	17	17	0	11	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	17	115	0.15	0.17	0.94	1	17	19		0	0	0
				System Area	1134							Uncorrected OA	73						Total OA Required		82		Total EA Required		150
												Analyzed Condition Airflow	685							Provided	132			Provided	200
VAV-1.3	VESTIBULE	CORRIDORS	0	0	48	0.06	0	0	3	0	3	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	3	30	0.10	0.12	0.99	1	3	3		0	0	0
	DECON	OFFICE SPACE	0	5	224	0.06	5	17	34	0	14	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	34	290	0.12	0.12	0.99	1	34	35		0	0	0
	DECON RR	TOILETS, CONTINUOUS	0	0	57	0	0	0	0	0	0	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	0	30	0.00	0.12	0.99	1	0	0	1	50	0	50
	MEDICAL STORAGE	STORAGE ROOMS	0	0	71	0.12	0	0	9	0	9	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	9	70	0.12	0.12	0.99	1	9	9		0	0	0
				System Area	400							Uncorrected OA	45						Total OA Required		47		Total EA Required		50
												Analyzed Condition Airflow	420							Provided	81			Provided	320
VAV-1.4	EMS BUNK 1	HOTEL BEDROOM/LIVING ROOM	0	5	115	0.06	10	11	22	0	7	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	145	0.15	0.15	1.00	1	22	22		0	0	0
	EMS BUNK 2	HOTEL BEDROOM/LIVING ROOM	0	5	114	0.06	10	11	22	0	7	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	145	0.15	0.15	1.00	1	22	22		0	0	0
				System Area	229							Uncorrected OA	44						Total OA Required		44		Total EA Required		0
												Analyzed Condition Airflow	290							Provided	56			Provided	0
VAV-1.5	FF BUNK 1	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	145	0.15	0.15	1.00	1	22	22		0	0	0
	FF BUNK 2	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	145	0.15	0.15	1.00	1	22	22		0	0	0
	FF BUNK 3	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	145	0.15	0.15	1.00	1	22	22		0	0	0
				System Area	360							Uncorrected OA	66						Total OA Required		66		Total EA Required		0
												Analyzed Condition Airflow	435							Provided	84			Provided	0
VAV-1.6	FF BUNK 4	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	165	0.13	0.13	0.99	1	22	23		0	0	0
	FF BUNK 5	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	165	0.13	0.13	0.99	1	22	23		0	0	0
	FF BUNK 6	HOTEL BEDROOM/LIVING ROOM	0	5	120	0.06	10	11	22	0	8	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	165	0.13	0.13	0.99	1	22	23		0	0	0
	FF OFFICER BUNK	HOTEL BEDROOM/LIVING ROOM	0	5	143	0.06	10	11	22	0	9	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	22	180	0.12	0.13	0.99	1	22	23		0	0	0
	OFFICER RR	TOILETS, CONTINUOUS	0	0	61	0	0	0	0	0	0	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	0	40	0.00	0.13	0.99	1	0	0	1	50	0	50
				System Area	564							Uncorrected OA	88						Total OA Required		92		Total EA Required		50
												Analyzed Condition Airflow	715							Provided	137			Provided	50
VAV-1.7	KITCHEN DINING	HOTEL BEDROOM/LIVING ROOM	0	5	670	0.06	10	11	77	0	41	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	77	1000	0.08	0.09	0.99	1	77	78		0	0	0
	DAYROOM	HOTEL BEDROOM/LIVING ROOM	0	5	455	0.06	10	11	55	0	28	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	55	580	0.09	0.09	0.99	1	55	56		0	0	0
				System Area	1125							Uncorrected OA	132						Total OA Required		134		Total EA Required		0
												Analyzed Condition Airflow	1580							Provided	303			Provided	300
VAV-1.8	WATCH ROOM	OFFICE SPACE	0	5	135	0.06	5	17	17	0	9	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	17	320	0.05	0.05	1.00	1	17	17		0	0	0
				System Area	135							Uncorrected OA	17						Total OA Required		17		Total EA Required		0
												Analyzed Condition Airflow	320							Provided	61			Provided	0
VAV-1.9	FITNESS	HEALTH CLUB/YOGA ROOM	0	20	416	0.06	10	26	130	0	25	CEILING OR FLOOR SUPPLY OF COOL AIR	1.0	130	680	0.19	0.19	1.00	1	130	130		0	0	0
				System Area	416							Uncorrected OA	130						Total OA Required		130		Total EA Required		0
												Analyzed Condition Airflow	680							Provided	131			Provided	0

NOTE:

REQURIED OUTSIDE AIR CFM VALUES BASED ON FLORIDA MECHANICAL CODE, 8TH EDITION.

		BUILDING AIR BALANCE	
TOTAL OA REQUIRED	667	PROVIDED OUTSIDE AIR	1100
TOTAL AHU-1 AIRFLOW	5730	TOTAL EXHUAST AIR	920
		TOTAL BUILDING PRESSURE	180

DEHUMIDIFICATION SYSTEM SCHEDULE

MARK	AREA SERVED	PERFORMANCE DATA: AIRFLOW (CFM)	WATER REMOVAL (PINTS PER DAY)	EFF. FACTOR (PINTS/KHW): 80F/60% RH	70F/60% RH	ELECTRICAL DATA: WATTS @ 80F/60% RH	FLA	VOLTS/PH.	WEIGHT (LBS.)	BASIS OF DESIGN: MANUFACTURER	MODEL	NOTES
DHU-1	TUNROUT GEAR	130	70	5.5	4.3	492	4.1	120/1	55	SANTA FE	ULTRA70	1 - 5
DHU-2	MED STORAGE	130	70	5.5	4.3	492	4.1	120/1	55	SANTA FE	ULTRA70	1 - 5
DHU-3	STORAGE	385	125	5.9	5.2	800	10.2	120/1	125	SANTA FE	ULTRAV125	1 - 5

NOTES:

1. WATER REMOVAL PERFORMANCE BASED ON 70 DEGREE F @ 60% RH.
2. PROVIDE STANDARD CORD RATED FOR 115V WITH 3-PIN CORD.
3. PROVIDE MERV-13 FILTER.
4. PROVIDE UNIT WITH BUILT-IN ON-OFF SWITCH AND HUMITY LEVEL SELECTOR.
5. DDC CONTROLS SHALL PROVIDE HUMIDISTAT IN THE ROOM SERVED TO MONITOR ROOM R.H. LEVELS. SIGNAL ALARM OVER 65% R.H.

FAN SCHEDULE

MARK	AREA SERVED	FAN TYPE	FAN: CFM	ESP (in-wg)	RPM	SONES	MOTOR: HP [WATTS]	VOLTS/PH.	AMPS	BASIS OF DESIGN: MANUFACTURER	MODEL	NOTES
EF-1	RESTROOM	CEILING	75	0.25	875	0.4	[14]	120/1	0.17	Greenheck	SP-A90	1 - 4, 6
EF-1.1	1ST FLR TOILETS	INLINE	390	0.50	1614	6.9	0.1	120/1	1.38	Greenheck	SQ-90-VG	1 - 3, 5
EF-1.2	1ST FLR TOILETS	INLINE	250	0.50	1470	6	0.1	120/1	1.38	Greenheck	SQ-90-VG	1 - 3, 5
SF-1.3	DECON SUPPLY	INLINE	1200	0.25	937	4.8	0.75	120/1	8.8	Greenheck	SQ-140-VG	1 - 3, 7, 8

NOTES:

1. PROVIDE DISCONNECT SWITCH MOUNTED AT THE UNIT.
2. PROVIDE WITH BACKDRAFT DAMPER.
3. DIRECT DRIVE HIGH EFFICIENCY MOTOR WITH THERMAL OVERLOAD PROTECTION AND EC MOTOR (SOLID SATE SPEED CONTROL ONLY IF EC MOTOR IS NOT AN OPTION).
4. FAN SHALL BE CONTROLLED VIA LIGHT OCCUPANCY SENSOR CONTROL WITH CONTROLS TO OPERATE MINIMUM 5 MINUTES AFTER LIGHTS TURN OFF.
5. FAN SHALL RUN CONTINUOUSLY.
6. PROVIDE FAN WITH HUMIDITY SENSOR.
7. FAN SHALL BE INTERLOCKED WITH GEAR DRYER IN DECON ROOM TO BE ENERGIZED WHEN GEAR DRYER IS IN OPERATION. SEE CONTROL DIAGRAM FOR MORE INFORMATION.
8. PROVIDE FILTER INTAKE AND ALUMINUM CONSTRUCTION FOR SF-1.3.

HIGH VOLUME LOW SPEED (HVLS) FAN SCHEDULE

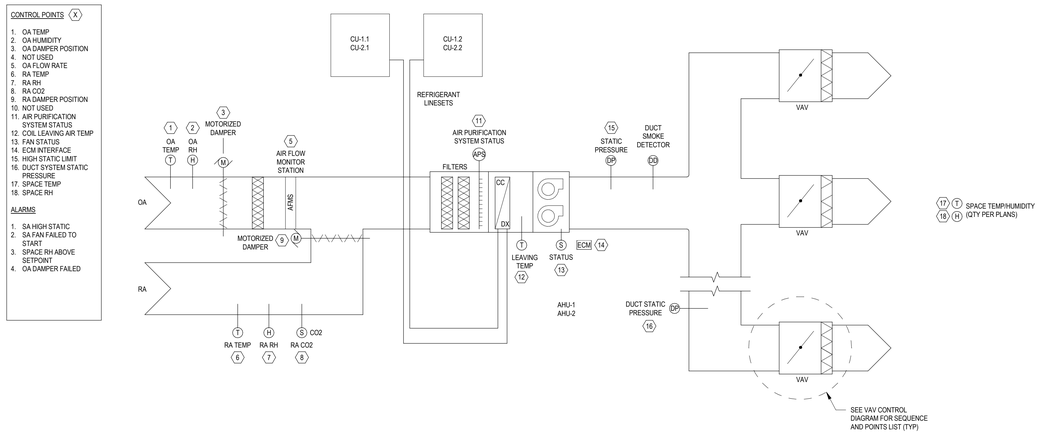
MARK	AREA SERVED	FAN: TYPE	DIA. (FT.)	RPM	MOTOR: HP	VOLTS/PH.	AMPS	WEIGHT (LBS.)	BASIS OF DESIGN: MANUFACTURER	MODEL	NOTES
HVLS-1	APPARATUS BAY	CEILING	12	107	0.75	120/1	16	140	MACROAIR	AIRLITE	1 - 5
HVLS-2	APPARATUS BAY	CEILING	12	107	0.75	120/1	16	140	MACROAIR	AIRLITE	1 - 5

NOTES:

1. PROVIDE ONE DIGITAL TOUCHSCREEN CONTROLLER, REPEATER, AND BACNET INTERFACE. SHALL BE POWERED BY FAN DRIVE.
2. PROVIDE MOUNTING DROPS AND BEAM MOUNTING HARDWARE FOR CONNECTION TO STRUCTURE.
3. FAN CONTROLS SHALL INTERFACE WITH BUILDING FIRE ALARM SYSTEM.
4. PROVIDE WITH FUSED DISCONNECT SWITCH.
5. COLOR SHALL BE SELECTED BY ARCHITECT/OWNER FROM MANUFACTURER'S STANDARD COLORS.

AIR SCRUBBER SCHEDULE

MARK	AREA SERVED	FAN: CFM	HP	MOTOR: VOLTS/PH.	AMPS	BASIS OF DESIGN: MANUFACTURER	MODEL	NOTES
AFS-1	APPARATUS BAY	3000	1	208/1	7.5	AIRMATION ATS	AMB302-GM	1 - 5
AFS-2	APPARATUS BAY	3000	1	208/1	7.5	AIRMATION ATS	AMB302-GM	1 - 5
AFS-3	APPARATUS BAY	3000	1	208/1	7.5	AIRMATION ATS	AMB302-GM	1 - 5
AFS-4	APPARATUS BAY	3000	1	208/1	7.5	AIRMATION ATS	AMB302-GM	1 - 5
AFS-5	APPARATUS BAY	3000	1	208/1	7.5	AIRMATION ATS	AMB



AHU OPERATION:

1. THE SPLIT SYSTEM SHALL BE OPERATIONAL 24/7 TO MAINTAIN THE INDOOR SETPOINT CONDITIONS.
2. THE AUTHORIZED END-USER SHALL HAVE OPERATIONAL TEMPERATURE SETPOINT CONTROL FOR THE AHU AND ASSOCIATED VAV TERMINALS.
3. COOLING TEMPERATURE SETPOINTS MUST BE LOCKED-OUT FOR LIMITING THE LOWEST VAV ZONE COOLING SETPOINT OF 72° F.
4. BASE VAV TERMINAL PROGRAMMING SETPOINT TEMPERATURES SHALL BE 75° F COOLING/65° F HEATING.

WHEN THE FAN IS INDEXED TO START VIA THE OPERATIONAL MODE SELECTION, THE ECM SMALL INCREASE THE SUPPLY FAN(S) SPEED SLOWLY OVER A PERIOD OF 1 MINUTE (ADJ.) TO ACHIEVE THE DUCT STATIC PRESSURE SETPOINT. THE ECM SHALL CONTINUE TO MODULATE THE FAN SPEED AS REQUIRED TO MAINTAIN THE CURRENT STATIC PRESSURE SETPOINT. THE ASSOCIATED EXHAUST FANS ARE STARTED, OUTDOOR AIR DAMPERS WILL MODULATE OPEN (SEE BELOW) AND THE UNIT CONTROL LOOPS ARE ENABLED.

STATIC PRESSURE CONTROL:

WHEN THE SUPPLY FAN PROOF OF FLOW HAS BEEN DETERMINED THE SUPPLY FAN STATIC LOOP IS ALLOWED TO CONTROL. THE SUPPLY FAN SPEED IS RAMPED UP ON FAN START-UP AND THEN MODULATED TO MAINTAIN DISCHARGE STATIC PRESSURE SETPOINT DEPENDING IF IN THE OCCUPIED MODE OR NOT.

FAN STATIC PRESSURE SETPOINT RESET:

THE EMS SYSTEM SHALL CONTINUOUSLY MONITOR THE DAMPER POSITION AND AIRFLOWS OF ALL VAV TERMINALS SERVED BY THE AIR HANDLING UNIT. THE SYSTEM SHALL EVALUATE THE DUCT STATIC PRESSURE CONDITIONS EVERY 10 MINUTES (ADJ.)

THE SYSTEM SHALL HAVE A MINIMUM AND MAXIMUM SETTING FOR THE SUPPLY AIR STATIC SETPOINT TO BE ADJUSTABLE AND DETERMINED DURING TEST AND BALANCE. UPON FAN INITIAL STARTUP THE MINIMUM SETPOINT SHALL BE THE STARTING POINT FOR FAN CONTROL.

IN THE EVENT THAT ALL VAV TERMINALS ARE SATISFIED (I.E. ALL VAV TERMINALS ARE AT LESS THAN 100% MAXIMUM OPEN POSITION AND ANY THAT ARE AT 100% MAXIMUM POSITION ARE DELIVERING AT LEAST 95% (ADJ.) OF THE SUPPLY AIR FLOW MAXIMUM SETPOINT) THE DUCT STATIC PRESSURE SETPOINT SHALL DECREASE BY 0.1" W.C.

IN THE EVENT THAT ANY VAV TERMINAL IS NOT SATISFIED WITH VALVE AT THE 100% MAXIMUM OPEN POSITION AND IS DELIVERING LESS THAN 95% (ADJ.) OF THE SUPPLY AIR FLOW MAXIMUM SETPOINT, THE DUCT STATIC PRESSURE SETPOINT SHALL INCREASE BY 0.1" W.C.

THE ABILITY SHALL BE PROVIDED TO BLACKLIST ANY PROBLEM ZONE THAT WILL NOT BE CONSIDERED IN THE STATIC PRESSURE SETPOINT ADJUSTMENT.

AHU MAIN COOLING COIL CONTROL:

WHEN COOLING IS ENABLED, THE COMPRESSOR(S) ARE STAGED TO MAINTAIN THE UNITS DISCHARGE AIR TEMPERATURE SETPOINT (ADJ.) THE DDC SHALL CONTINUOUSLY MONITOR THE ZONE SPACE TEMPERATURE, RETURN AIR HUMIDITY AND ZONE SPACE HUMIDITY (WHERE APPLICABLE). THE SYSTEM SHALL EVALUATE THE SUPPLY AIR LEAVING CONDITIONS EVERY 5 MINUTES (ADJ.).

IF THERE ARE NO RELATIVE HUMIDITY ALARMS IN EXCESS OF THE HUMIDITY ALARM SETPOINT (ADJ.) AND ALL ZONES SPACE TEMPERATURES ARE WITHIN 1/2F (ADJ) ABOVE THE SPACE TEMPERATURE SETPOINT, THE SUPPLY AIR LEAVING TEMPERATURE SETPOINT SHALL BE DECREASED BY 1F. LEAVING AIR TEMPERATURE SHALL NOT EXCEED 60 DEGF.

IF THERE ARE ANY RELATIVE HUMIDITY ALARMS IN EXCESS OF THE HUMIDITY ALARM SETPOINT (ADJ.) OR ANY ZONE SPACE TEMPERATURES THAT ARE MORE THAN 1/2F (ADJ) ABOVE THE SPACE TEMPERATURE SETPOINT, THE SUPPLY AIR LEAVING TEMPERATURE SETPOINT SHALL BE DECREASED BY 1F.

THE ABILITY SHALL BE PROVIDED TO BLACKLIST ANY PROBLEM ZONE THAT WILL NOT BE CONSIDERED IN THE STATIC PRESSURE SETPOINT ADJUSTMENT.

AIR PURIFICATION CONTROL:

THE AIR PURIFICATION SYSTEM SHALL BE ENABLED WHENEVER THE SUPPLY FAN IS ENABLED.

RELATIVE HUMIDITY OVERRIDE CONTROL:

IF THE SPACE RELATIVE HUMIDITY RISES TO ABOVE 65% (ADJ.) THE LEAVING AIR DISCHARGE SETPOINT IS RESET DOWN TO THE DESIGNED DISCHARGE TEMPERATURE.

FIRE PROTECTION:

DUCT SMOKE DETECTORS SHALL BE LOCATED IN THE MAIN SUPPLY DUCT IN ACCORDANCE WITH NFPA 72. UPON SENSING OF SMOKE A DETECTOR SHALL SHUT "OFF" THE UNIT FAN(S) AND THE ASSOCIATED EXHAUST FAN(S), THE SMOKE DETECTOR SHALL BE MANUALLY RESET FROM THE FIRE ALARM PANEL.

HIGH STATIC ALARM:

AN ALARM SHALL BE GENERATED IN THE EVENT THE HIGH DUCT STATIC PRESSURE SWITCH IS TRIPPED (WITH MANUAL RESET).

SAFETIES:

THE FOLLOWING SAFETIES SHALL SHUT DOWN THE UNIT UPON ALARM CONDITION:

1. A FIRE ALARM CONDITION.
2. THE HIGH DISCHARGE STATIC PRESSURE SWITCH TRIPS (W/ MANUAL RESET) AND AN ALARM IS GENERATED.

AIR PURIFICATION FAILURE:

UPON AN AIR PURIFICATION FAILURE, AN ALARM SHALL BE GENERATED AT THE DDC FRONT END SYSTEM.

SHUTDOWN:

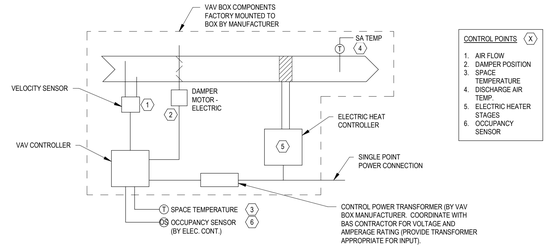
THE FOLLOWING OCCURS WHEN THE RTU FAN(S) IS STOPPED EITHER BY SAFETIES AS NOTED ABOVE OR IF IN ITS UNOCCUPIED MODE:

1. THE OA DAMPER CLOSES AND THE RETURN AIR DAMPER OPENS.
2. THE COMPRESSOR(S) ARE DE-ENERGIZED.
3. THE INTERLOCKED EXHAUST FANS PER ITS SCHEDULE ARE STOPPED.

IF THE SUPPLY STATIC PRESSURE FAILS TO INCREASE ABOVE A MINIMUM SETPOINT, THE DDC SYSTEM USES THIS TO CONFIRM THE FAN IS IN THE DESIRED STATE AND GENERATES AN ALARM IF THE STATUS DEVIATES FROM THE DDC START/STOP CONTROL.

TYPICAL FOR AHU-1 AND AHU-2

1 VARIABLE AIR VOLUME SPLIT SYSTEM AHU CONTROL SCHEMATIC
SCALE: NTS



VAV SEQUENCE:

EACH VAV SHALL BE PROVIDED WITH INDEPENDENT SETPOINTS FOR THE FOLLOWING CONDITIONS:

SYSTEM MODE	COOLING TEMP	HEATING TEMP	MINIMUM AIRFLOW
OCCUPIED	75 (ADJ.)	69 (ADJ.)	AS SCHEDULED

WHEN THE ASSOCIATED AIR HANDLING UNIT IS ENABLED THE VAV TERMINAL SHALL OPERATE PER THE FOLLOWING:

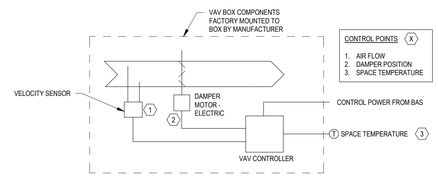
UPON RISE IN SPACE TEMPERATURE ABOVE THE SPACE COOLING SETPOINT, AIR VALVE SHALL OPEN TO INCREASE SUPPLY AIR FLOW. UPON FALL IN SPACE TEMPERATURE THE REVERSE SHALL OCCUR UNTIL THE AIR VALVE REACHES THE MINIMUM AIRFLOW SETPOINT. IF SPACE TEMPERATURE CONTINUES TO FALL BELOW THE SPACE HEATING SETPOINT THE ELECTRIC HEAT SHALL STAGE ON TO RAISE SUPPLY AIR TEMPERATURE AS REQUIRED TO MAINTAIN THE SPACE HEATING SETPOINT.

SYSTEM MINIMUM FLOW VAV OVERRIDE: WHEN COMMANDED FROM THE AHU CONTROLLER, THE VAV MINIMUM SETPOINTS SHALL BE OVERRIDDEN AS OUTLINED IN THE VAV AIR HANDLING UNIT CONTROL SEQUENCE.

VAV-1.7

VAVS SHALL BE ENABLED TO MAXIMUM CFM WHEN THE VENTILATION HOOD OVER THE COOKTOP IS ENERGIZED. PROVIDE THE REQUIRED INTERLOCKS FOR THIS OPERATION. REHEAT COILS SHALL ENERGIZE TO MAINTAIN ROOM TEMP/RH SETPOINT DURING THIS OPERATION.

2 TYPICAL VAV W/ ELEC HEAT CONTROL SCHEMATIC
SCALE: NTS



VAV SEQUENCE:

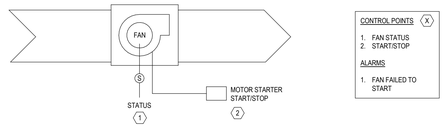
THE BAS SHALL CONTINUOUSLY MONITOR THE SPACE TEMPERATURES OF SPACES SERVED WITH TEMPERATURE SENSORS.

THE VAV TERMINAL SHALL MODULATE AIRFLOW AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE COOLING SETPOINT(S). THE SPACE SETPOINTS (ADJ.) ARE AS FOLLOWS IN PRIORITY OF THE ORDER LISTED:

1. IT - 75°F

IN THE EVENT ANY ONE SPACE TEMPERATURE DROPS BELOW 68°F (ADJ.) THE VAV CONTROL SHALL BE OVERRIDDEN TO MAINTAIN THE WORST CASE MINIMUM TEMPERATURE.

3 TYPICAL VAV W/O HEAT CONTROL SCHEMATIC
SCALE: NTS



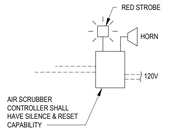
FANS INTERLOCKED WITH AHUS / OCCUPIED MODES (EF-1.1, EF-1.2):

WHEN ASSOCIATED AIR HANDLING UNIT IS IN OCCUPIED MODE, THE FAN SHALL BE ENERGIZED. WHEN THE ASSOCIATED AIR HANDLING UNIT IS IN UNOCCUPIED MODE THE FAN SHALL BE DE-ENERGIZED.

FANS INTERLOCKED WITH LIGHT SWITCH:

NO CONTROL OR STATUS ARE REQUIRED FOR ANY SMALL FAN INDICATED TO BE INTERLOCKED WITH LIGHT SWITCH FOR CONTROL. UNLESS NOTED OTHERWISE, ALL EXHAUST FANS SHALL BE INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT DOWN UNDER FIRE ALARM CONDITION.

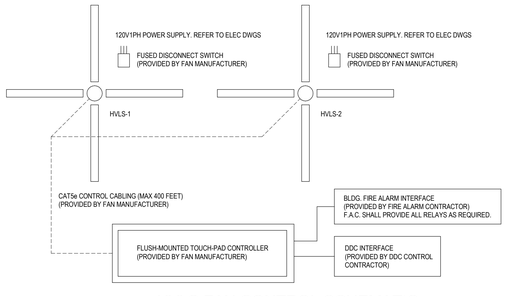
4 TYPICAL EXHAUST FAN CONTROL SCHEMATIC
SCALE: NTS



EMERGENCY VENTILATION CONTROL SYSTEM SEQUENCE:

1. GENERAL: PROVIDE A CONTROL SYSTEM INCLUDING ALL EQUIPMENT, SENSORS, TRANSMITTERS, RELAYS, WIRING, ETC. FOR A COMPLETELY OPERATIONAL SYSTEM.
2. SHOP DRAWINGS: SUBMIT COMPLETE SUBMITTAL PACKAGE INCLUDING PRODUCT DATA, SCHEMATIC/WIRING DIAGRAMS, POWER REQUIREMENTS, ETC. FOR REVIEW AND APPROVAL.
3. SEQUENCE: WHEN THE APPARATUS BAY DOORS ARE OPEN, THE AIR SCRUBBER SYSTEM SHALL BE DE-ENERGIZED. UPON DETECTION OF CO/NO2 IN THE APPARATUS BAY, THE AIR SCRUBBER CONTROL SYSTEM AND EQUIPMENT SHALL ENERGIZE UNTIL SUCH TIME AS THE CO/NO2 LEVELS ARE REDUCED BELOW DETECTION LEVEL.

5 EMERGENCY VENTILATION SYSTEM (ECM)
SCALE: NTS



BUILDING FIRE ALARM INTERFACE:

THE BUILDING FIRE ALARM SYSTEM CONTRACTOR SHALL DISABLE FAN OPERATION THRU THE FAN CONTROLLER UPON ACTIVATION OF THE BUILDING'S FIRE ALARM SYSTEM.

FAN/CONTROLLER WIRING REQUIREMENTS:

ALL WIRING SCHEMATICS AND FINAL WIRING TO THE FANS, BLDG. HVAC CONTROL SYSTEM, AND FIRE ALARM SYSTEM SHALL BE COMPLETELY COORDINATED. PROVIDE ALL RELAYS, WIRING (IN CONDUIT), ETC. AS REQUIRED TO PROVIDE COMPLETE INTERFACE.

DDC CONTROL SEQUENCE:

DDC SHALL ONLY BE REQUIRED TO ENABLE/DISABLE THE CEILING FAN CONTROLLER BASED UPON THE OCCUPIED/UNOCCUPIED SCHEDULE FOR THE FAN OPERATION.

6 HVLS FAN CONTROL SCHEMATIC
SCALE: NTS

CONTROL SYSTEM REQUIREMENTS

1. ALL STAND ALONE DX SPLIT SYSTEMS SHALL BE MONITORED THROUGH THE BAS AND SHALL PROVIDE EQUIPMENT STATUS. ALARMS SHALL BE GENERATED IF SYSTEMS ARE NOT MAINTAINING SPACE CONDITIONS, SETPOINTS OR ARE IN ALARM CONDITION (I.E. DRAIN PAN FLOAT SWITCHES, ETC.). PROVIDE EXTERNAL WALL MOUNTED TEMPERATURE SENSORS.
2. DDC SHALL INTERFACE WITH THE EMERGENCY GENERATOR TO PROVIDE ON/OFF AND ALARM CONDITIONS..
3. EACH AIR HANDLING UNIT SHALL BE PROVIDED WITH A TROUBLESHOOTING AND TESTING MODE THAT CAN MANUALLY OVERRIDE ALL VAV TERMINALS SERVED BY THE AHU. THE MODE SHALL BE ABLE TO COMMAND ALL VAV TERMINALS FED BY THE AHU TO A ENTERED PERCENTAGE OF MAX AIRFLOW SETPOINTS. MODE SHALL BE ENABLED AND ADJUSTED THROUGH THE WEB PAGE GRAPHICS.
4. ALL ADJUSTABLE SETPOINTS SHALL BE ORGANIZED IN A WAY THAT EACH INDIVIDUAL PIECE OF EQUIPMENT'S ADJUSTABLE SETPOINTS CAN BE DISPLAYED ON A SINGLE WEB PAGE. NO ADJUSTABLE SETPOINTS SHALL BE PROGRAMMED INTO THE CODE DIRECTLY.
5. COORDINATE WITH OWNER AS TO ACTIONS REQUIRED BY ALL ALARM CONDITIONS (I.E. STATUS ON CONTROL GRAPHICS, EMAIL NOTIFICATION, ETC.)
6. ELEVATOR SUMP PUMP STATUS SHALL TIE AND BE MONITORED BY THE BAS. AN ALARM SHALL BE GENERATED AT BAS WHEN SUMP PUMP CONTROL SYSTEM IS IN ALARM MODE.
7. PROVIDE CONTROL INTERLOCKS TO ENERGIZE SF-1.3 WHEN DECON GEAR DRYER IS IN OPERATION.
8. THE VAV'S SERVING THE KITCHEN AND DAYROOM SHALL OPEN FULLY WHEN THE KITCHEN HOOD IS PLACED INTO OPERATION. PROVIDE INTERFACE VIA DDC AND THE KITCHEN HOOD CONTROLLER.

SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 171 RENOVATION

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CONTROLS - HVAC

M701

100% CONSTRUCTION DOCUMENTS