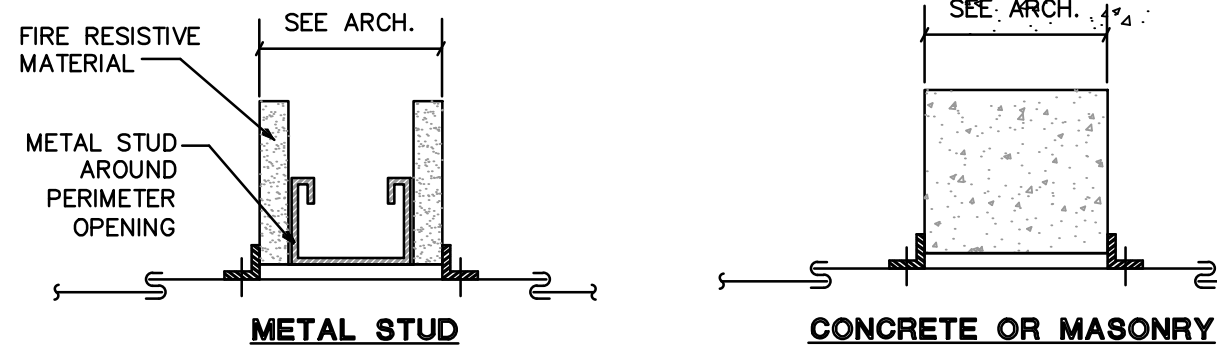
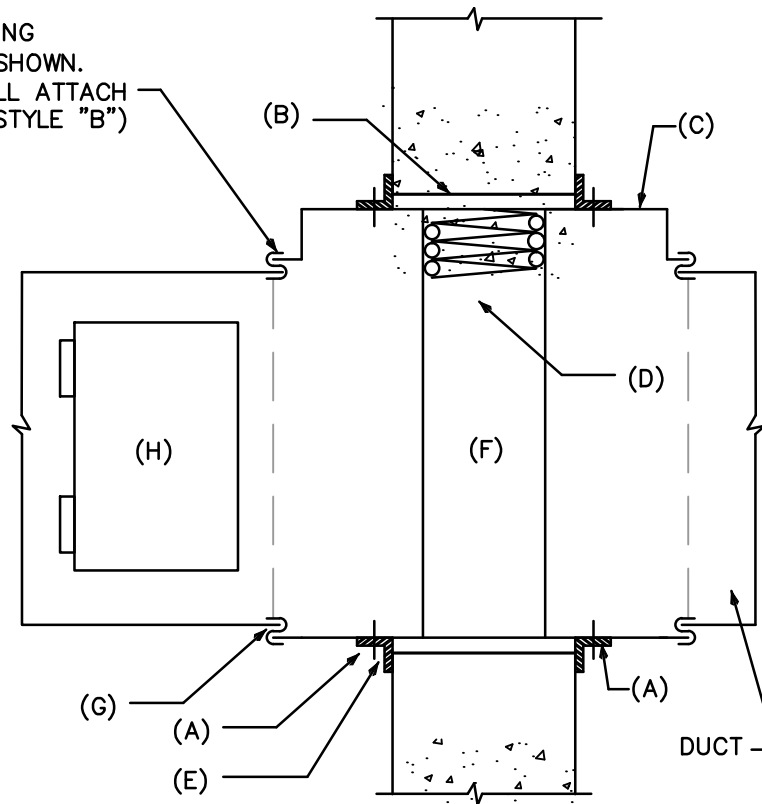


TYPICAL INSTALLATION NOTES

- (A) RETAINING ANGLES: MINIMUM 1-1/2" X 1-1/2" X 0.054 (16 GA.) RETAINING ANGLES MUST OVERLAP STRUCTURE OPENING 1" MINIMUM AND COVER CORNERS OF OPENINGS AS SHOWN.
- (B) CLEARANCE: 1/8" PER LINEAR FOOT TO SLEEVE (STYLE "B") BOTH DIMENSIONS
- (C) STEEL SLEEVE:
- (D) APPROVED FIRE DAMPER, CURTAIN BLADE TYPE WITH 165° FUSIBLE LINK
- (E) SECURE RETAINING ANGLES TO SLEEVE NO. 10 STEEL SCREWS
- (F) SECURE DAMPER TO SLEEVE ON 8" CENTERS WITH NO. 10 STEEL SCREWS
- (G) CONNECT DUCT TO SLEEVE WITH BREAKAWAY CONNECTION
- (H) FULLY GASKETED HINGED CAM LOCK FIRE DAMPER ACCESS DOOR. LABEL "FIRE DAMPER ACCESS".



STYLE "B" DYNAMIC FIRE DAMPER DETAIL
NOT TO SCALE

MECHANICAL NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE FLORIDA BUILDING CODE 2010 AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS: SMACNA-85, 92, 95; ASHRAE 15-01, 34-01, 62-04; NFPA 70-02, 72-02, 90A-02, 90B-02, 91-99, 96-01; ANSI Z10.1-98, Z10.3-98, Z21.8-94, Z21.83-98.
 - THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
 - THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
 - THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS.
 - CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE (5) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
 - ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED. ALL INSTALLATIONS SHALL COMPLY WITH FMC 2010, CH. 3, GENERAL REGULATIONS, BUILDINGS LOCATED WITHIN 3,000 FT FROM THE OCEAN SHALL UTILIZE NON-FERROUS MATERIALS FOR ALL OUTDOOR EXPOSED SUPPORTS, STANDS, FASTENERS, ETC.
 - DUCTWORK:
 - ALL DUCTWORK SHALL BE GALVANIZED SHEETMETAL WITH SEALED SEAMS AND JOINTS WITH EXTERNAL BLANKET INSULATION R-6 MIN. THE CONTRACTOR SHALL PROVIDE ALL SHEETMETAL DUCTWORK, HANGERS, AUX. SUPPORT STEEL, ETC., ALL FLEX DUCT SHALL BE RATED CLASS I, UL-181 LISTED WITH METALLIZED INNER AND OUTER FOIL LINERS, MIN. R-6 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX". ALL METAL DUCTS SHALL BE FABRICATED IN ACCORDANCE WITH LATEST EDITION OF S.M.A.C.N.A.
 - ALL OUTDOOR EXPOSED DUCTWORK SHALL BE GALVANIZED, DOUBLE WALL SHEETMETAL EQUAL TO UNITED MCGILL "K-27", WITH MIN. R-8 INSULATION AND SEALED SEAMS AND JOINTS. THE CONTRACTOR SHALL PROVIDE ALL SHEETMETAL DUCTWORK, HANGERS, AUX. SUPPORT STEEL, ETC. PROVIDE SOLID LINER AND COAT WITH TWO COATS OF CORROSION-RESISTANT PAINT OR EQUIVALENT. PROVIDE OPTIONAL (OWNER'S DECISION) ALUMINUM OR STAINLESS STEEL CONSTRUCTION.
 - ALL FLEX DUCT SHALL BE RATED CLASS I, UL-181 LISTED WITH METALLIZED INNER AND OUTER FOIL LINERS, MIN. R-6 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".
 - ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 MIN.
 - ALL AIR CONDITIONING DUCT WORK ENCLOSED IN A CHASE SHALL BE SHEETMETAL GALVANIZED WITH EXTERNAL BLANKET INSULATION R-6 MIN. PROVIDE INNER LINER FOR THE FIRST 10 FEET OF THE MAIN TRUNKS CONNECTING TO THE UNIT AND INCLUDING THE FIRST ELBOW OR AS INDICATED ON THE PLANS.
 - THE CONTRACTOR SHALL PROVIDE ALL SHEETMETAL DUCTWORK, HANGERS, AUX. SUPPORT STEEL, ETC. ALL METAL DUCTS SHALL BE FABRICATED IN ACCORDANCE WITH LATEST EDITION OF S.M.A.C.N.A.
- SPECIAL NOTE**
SMACNA DUCT PRESSURE CLASSES BASED ON OPERATING PRESSURE ARE: 1/2", 1", 2", 3", 4", 6", and 10". EACH DUCT SYSTEM SHALL BE CONSTRUCTED FOR THE SPECIFIC DUCT PRESSURE CLASS SHOWN ON PLANS. WHERE NO PRESSURE CLASS IS SPECIFIED FOR CONSTANT VOLUME SYSTEMS, 1" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS REGARDLESS OF VELOCITY. WHERE NO PRESSURE CLASS IS SPECIFIED FOR VARIABLE VOLUME SYSTEMS, 2" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS FOR DUCTWORK UPSTREAM OF VAV BOXES. ALL DUCTWORK SHALL BE SEALED TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR ITS PRESSURE CLASS SEALING METHODS.
- ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. ALL OUTSIDE AIR DUCT SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION R-6 MIN. ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 MIN.
 - OUTSIDE AIR INTAKES SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL NOT LARGER THAN 1/2" MESH. AIR INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10 FT. FROM ANY CHIMNEY, VENT OUTLET OR SANITARY SEWER VENT OUTLET, UNLESS SUCH VENT IS NOT LESS THAN 24 INCHES ABOVE THE OUTSIDE AIR VENT. OUTSIDE AIR INTAKE VENTS LOCATED ON ROOFS WILL BE PROPERLY MARKED WITH A UNIVERSAL MARKING "INTAKE", PERMANENTLY ATTACHED PER FMC 2010, SEC. 401.5.1.
 - DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
 - ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE AS SPECIFIED OR EQUAL TO TITUS OR METALAIR. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS FOR ALL SUPPLY AND RETURN DIFFUSERS AND REGISTERS TO ENSURE COMPLIANCE WITH FMC 2010, PAR. 601.4 AND PAR. 603.15 FOR BALANCED AIR FLOW.
 - TEMPERATURE CONTROLS/THERMOSTAT: - COLOR WHITE. A. SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. THERMOSTATS AND CONTROLS SHALL BE INTEGRATED TO THE JOHNSON'S METASYS BUILDING CONTROL SYSTEM
 - THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER, ENGINEER AND USER BEFORE INSTALLATION. INSTALL THERMOSTAT 48" TO 54" A.F.F. PER A.D.A REQUIREMENTS WHERE APPLICABLE. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO ANY PURCHASING OR INSTALLATION. WHENEVER THERE ARE MORE THAN ONE SENSOR OR THERMOSTAT, SIDE BY SIDE, THEY SHALL BE GANGED TOGETHER WITHIN THE SAME COVER PLATE WHEREVER POSSIBLE. CONTRACTOR SHALL COORDINATE THIS ISSUE WITH ARCHITECT/OWNER PRIOR TO INSTALLATION AND SHALL BRING ANY DISCREPANCY TO THE ENGINEER'S ATTENTION.

HVAC CONTROLS NOTE

AIR CONDITIONING CONTRACTOR SHALL PROVIDE OR CAUSE TO BE PROVIDED ALL CONTROLS, CONTROL WIRING AND CONDUIT, POWER WIRING AND CONDUIT, AND ALL OTHER ITEMS NECESSARY FOR INSTALLATION AND CONTROL OF VARIABLE AIR VOLUME TERMINAL UNITS. IN ADDITION CONTRACTOR SHALL PROVIDE INTERFACE WITH THE EXISTING EMS SYSTEM COMPUTER GRAPHICALLY DEPICTING MECHANICAL LAYOUT WITH ON SCREEN DISPLAYS THAT ARE CONTROLLED BY THE EXISTING STAEFA MS-1800 ENERGY MANAGEMENT SYSTEM(EMS). PROGRAMMING IS TO ALSO INCLUDE INTERFACE TO EXISTING PROGRAM DESIGNED TO CALCULATE TENANT OVERTIME USAGE OF THE AIR CONDITIONING SYSTEM. CONTRACT BUILDING CONTROLS SERVICE CONTRACTOR THERMAL CONCEPTS AT 1-800-953-2503 (NEIL CAPORALE) FOR SPECIFICATIONS AND DETAILS. A COMPLETE AND OPERATIONAL CONTROL SYSTEM IS TO BE PROVIDED FOR THE ENTIRE TENANT SPACE. VERIFY WITH THERMAL CONCEPTS, ANY ADDITIONAL DETAILS WHICH MUST BE INCLUDED. PRIOR TO BID.

CONTRACTOR IS TO PROVIDE CONTROLS AS NOTED ABOVE FOR ALL VAV TERMINAL BOXES SHOWN ON THESE PLANS, INCLUDING ANY EXISTING BOXES.

NOTE: EXISTING AIR CONDITIONED BUILDING ENERGY CALCULATIONS NOT REQUIRED PER FLORIDA ENERGY CODE 101.5.1.

- REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER BRAZING-JOINT TYPE FITTINGS, USE BRAZING MATERIALS FOR HIGH PRESSURE PIPING PER AWS A5.8; BOUP SERIES COPPER-PHOSPHORUS ALLOY OR BA91 SILVER ALLOY. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. SOFT COPPER TYPE "M" SHALL BE ALLOWED FOR RISER PIPING INSIDE CHASE TO LIMIT NUMBER OF JOINTS. COORDINATE WITH ENGINEER FOR PRIOR APPROVAL. ALL EXPOSED INSULATION SHALL BE PROTECTED WITH UV RESISTANT PAINT OR ALUMIN. SHIELD.
 - ARMAFLEX INSULATION SHALL BE USED FOR SUCTION LINES (1/2" FOR ABOVE 40° F AND 1" FOR BELOW 40° F) PER FLORIDA ENERGY CODE TABLE 4-11 FOR PIPING INSULATION. FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
 - ALL BRANCH TAKE-OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE. SQUARE ELBOWS AND TEE'S SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. 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.
 - PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START-UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
 - PROVIDE SMOKE DETECTORS WITH SERVICE ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. FOR SMOKE DETECTORS NOT VISIBLE, IN CONCEALED SPACES, PROVIDE REMOTE ANNUNCIATION/TEST STATION AS REQUIRED BY AUTHORITY HAVING JURISDICTION. COORDINATE PRIOR TO INSTALLATION. DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
 - PROVIDE TYPE "B" DYNAMIC FIRE DAMPERS WITH SERVICE ACCESS DOORS IN ALL DUCTS AND OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, TENANT SEPARATION, PARTITIONS, FLOOR OR ROOF SLABS AND AT OUTSIDE AIR INTAKES AS REQUIRED. PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY. PROVIDE LOW-LEAKAGE CLASS DAMPERS FOR ALL SITUATIONS WHERE THE AIRFLOW CFM HAS TO BE CONTROLLED. VERIFY AND REPLACE AS REQUIRED FOR EXISTING SYSTEMS.
 - HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER F.B.C. 2010, CH. 13, 410.1.ABCD.4 (THE T & B REPORT SHALL BE INDEPENDENT FOR SYSTEMS OVER 15 TONS) FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE (°F) FROM SUPPLY GRILLES AND EVAPORATORS. FOR (EXISTING) SMOKE EVACUATION SYSTEMS HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PRIOR TO ANY NEW WORK, PROVING THAT THE SMOKE EVACUATION SYSTEM PERFORMS PER ORIGINAL DESIGN DOCUMENTS AND IS COMPLIANT WITH LOCAL CODE REQUIREMENTS.
 - RUN INSULATED FIRE RATED CONDENSATE DRAINS AS REQUIRED.
 - ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
 - MECHANICAL EQUIPMENT ON ROOF OR ELEVATED STRUCTURES SHALL COMPLY WITH FBC 2010 PAR. 306.5 IF INSTALLED HIGHER THAN 16 FEET A.F.F. MECHANICAL EQUIPMENT INSTALLED IN ATTICS SHALL MEET THE REQUIREMENTS OF FBC 2010 PAR. 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 SHALL BE INSTALLED ON 6" CONCRETE PAD AT GRADE LEVEL.
- SPECIAL NOTE**
ALL WIND LOAD AND OTHER COMPLIANCE CALCULATIONS AND/OR INSTALLATION DETAILS FOR ROOF MOUNTED EQUIPMENT AS REQUIRED BY FBC 2010, SEC. 1509, 1522 AND CHAPTER 16, SHALL BE PROVIDED BY STRUCTURAL ENGINEER/ARCHITECT.
- PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120-208 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 240-480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC.
 - MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL 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 IF DUCT AREA WILL NOT FIT.
 - THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT, IN ORDER TO PROVIDE A FULLY INTEGRATED MECHANICAL AND CONTROLS SYSTEMS WITH THE EXISTING ONES. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND PLANS, OR ADDITIONAL CLARIFICATION REQ'D SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO FINAL BIDDING AND WORK.
 - NO COMBUSTIBLE MATERIALS ARE ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILINGS USED AS RETURN AIR PLENUM. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS, AIR TRANSFER DUCTS MUST BE INSTALLED. WHEN CPVC PIPING IS USED FOR FIRE SPRINKLER SYSTEMS, THE R/A GRILLES LAYOUT SHALL BE (FIELD) COORDINATED WITH SUCH PIPING SO THAT NO PORTION OF THE GRILLES WILL BE DIRECTLY BELOW THE CPVC PIPING.
 - CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS, IF NOT SPECIFIED TO BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH 1/2" ARMAFLEX INSULATION. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2010, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
 - MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF (1) ONE YEAR AFTER BUILDING C.O. FOR ALL MECHANICAL SYSTEMS, DUCTWORK, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON-OPERATIONAL PERIODS OR AS AGREED WITH OWNER.

MECHANICAL SHEET INDEX

| SHEET# | DESCRIPTION |
|--------|----------------------------------|
| M0.1 | MECHANICAL NOTES, LEGEND & INDEX |
| M2.1 | MECHANICAL FLOOR PLAN |

MECHANICAL LEGEND

| | | | |
|--|-------------------------------------|--|--|
| | SUPPLY AIR CEILING DIFFUSER | | CEILING OR INLINE EXHAUST FAN |
| | RETURN AIR CEILING GRILLE | | STANDARD SINGLE DUCT VAV BOX (30" SERVICE CLEARANCE) |
| | WALL LOUVER / WALL DIFFUSER. | | THERMOSTAT |
| | LINEAR DIFFUSER | | HUMIDISTAT |
| | MANUAL VOLUME CONTROL DAMPER | | REFRIGERANT SENSOR |
| | MOTORIZED DAMPER | | STATIC PRESSURE SENSOR |
| | FIRE DAMPER | | DUCT SMOKE DETECTOR |
| | REDUCER OR INCREASER | | AP - ACCESS PANEL |
| | FLEX DUCT | | AD - ACCESS DOOR |
| | EXISTING FLEX DUCT | | VOLUME CONTROL DAMPER |
| | EXISTING DUCTWORK | | MANUALLY OPERATED DAMPER |
| | SUPPLY & OUTSIDE AIR SECTION (UP) | | SUPPLY AIR DIFFUSER OR GRILLE DESIGNATION |
| | SUPPLY & OUTSIDE AIR SECTION (DN) | | RETURN/EXHAUST AIR DIFFUSER OR GRILLE DESIGNATION |
| | RETURN OR EXHAUST DUCT SECTION (UP) | | VARIABLE FREQ. DRIVE CONTROL PANEL |
| | RETURN OR EXHAUST DUCT SECTION (DN) | | SUPPLY AIR |
| | ROUND UP | | RETURN AIR |
| | SHOE TAP DAMPER | | DOOR UNDER CUT |
| | ROOFTOP UNIT | | EQUIPMENT TAG |
| | SOLENOID VALVE. | | OARTU- OUTSIDE AIR ROOF TOP UNIT |
| | RELOCATE | | RTU- ROOF TOP UNIT |
| | | | VAV- VARIABLE VOLUME BOX |
| | | | EF - EXHAUST FAN |

NOT ALL SYMBOLS MAY APPLY TO THESE PLANS

HVAC ABBREVIATION LEGEND

| | | | |
|------|-----------------------------|-------|--|
| AC | AIR CONDITIONING | MCA | MINIMUM CIRCUIT AMPS (FOR WIRE SIZING) |
| AFF | ABOVE FINISH FLOOR | MOD | MANUALLY OPERATED DAMPER |
| BDD | BACK DRAFT DAMPER | MOCPC | MAXIMUM OVERCURRENT PROTECTION DEVICE AMPS |
| CD | CONDENSATE DRAIN | NC | NOISE CRITERIA |
| COP | COEFFICIENT OF PERFORMANCE | O/A | OUTSIDE AIR |
| DB | DRY BULB | OBD | OPOSITE BLADE DAMPER |
| DIA. | DIAMETER | PD | PRESSURE DROP. |
| E | EXISTING TO REMAIN | R | EXISTING TO BE RELOCATED |
| EER | ENERGY EFFICIENCY RATIO | R/A | RETURN AIR |
| EDH | ELECTRIC DUCT HEATER | RLA | RATED LOAD AMPS. |
| EF | EXHAUST FAN | SEER | STANDARD ENERGY EFFICIENCY RATIO |
| ESP | EXTERNAL STATIC PRESSURE | TSP | TOTAL STATIC PRESSURE |
| F | FILTER | VD | VOLUME CONTROL DAMPER |
| FD | FIRE DAMPER | VFD | VARIABLE FREQUENCY DRIVE |
| FLA | FULL LOAD AMPS. | WB | WET BULB |
| FMS | FLOW MEASURING STATION | | |
| IPLV | INTEGRATED PART-LOAD VALUE. | | |

NOTE: NOT ALL SYMBOLS MAY APPLY TO THESE PLAN.

MECHANICAL NOTES

Bd

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PROJECT NUMBER 711119

REVISIONS

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