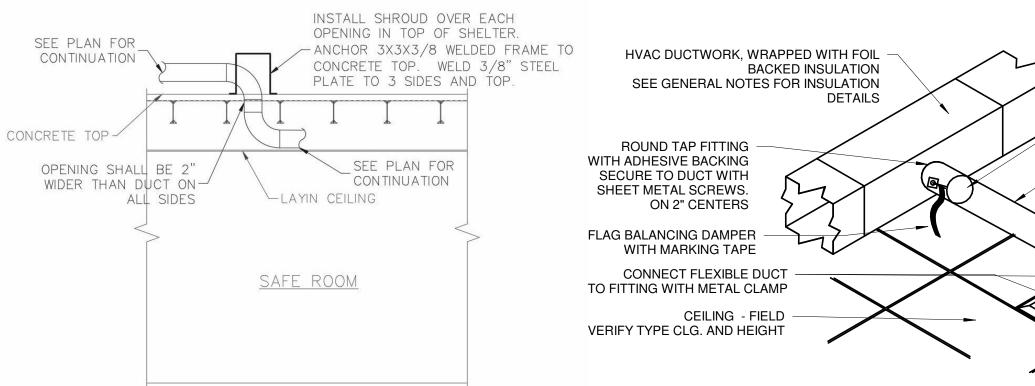
THE CONTRACTOR SHALL INCLUDE IN HIS QUOTATION ALL APPLICABLE SERVICE CHARGES, FEES, PERMITS, ROYALTIES, AND OTHER SIMILAR COSTS IN CONNECTION WITH THE

- WORK, OBTAIN PERMITS, AND REQUEST INSPECTIONS FROM AUTHORITY HAVING JURISDICTION. INSTALL WORK IN LOCATIONS SHOWN ON DRAWINGS, UNLESS PREVENTED BY PROJECT CONDITIONS. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC, AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHENEVER POSSIBLE, THE CONTRACTOR SHALL REVIEW THE STRUCTURAL, ELECTRICAL, ARCHITECTURAL, FIRE PROTECTIONS, ETC. DRAWINGS AND DETERMINE AREAS OF INTERFERENCE. THE CONTRACTOR SHALL NOTIFY THE
- THE DRAWINGS INDICATE REQUIRED SIZE AND POINTS OF TERMINATION OF PIPES AND DUCTS, AND SUGGEST PROPER ROUTES OF PIPE TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS AND PRESERVE CLEARANCES. HOWEVER, IT IS NOT INTENDED THAT DRAWINGS INDICATE ALL NECESSARY OFFSETS, AND IT SHALL BE THE WORK OF THIS SECTION TO INSTALL PIPING AND DUCTS IN SUCH A MANNER AS TO CONFORM TO STRUCTURE, AVOID ALL OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER INSTRUCTION OR COST TO THE OWNER.
- CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE
- YEAR FROM DATE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. MOTORS FOR ALL MECHANICAL EQUIPMENT SHALL BE FURNISHED BY SUPPLIERS OF SUCH EQUIPMENT AND SHALL BE THE TYPE THAT HAS CHARACTERISTICS SUITABLE FOR CONTINUOUS OPERATING CONDITIONS.
- TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

ARCHITECT/ENGINEER OF INTERFERENCE'S PRIOR TO FABRICATION OF DUCTWORK OR PIPING.

- STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, WITH SEALS AND LABELS INTACT AND LEGIBLE.
- ALL MECHANICAL EQUIPMENT, AS APPLICABLE, SHALL HAVE U.L. LISTING OR EQUIVALENT. VERIFY THAT EACH PIECE OF EQUIPMENT OR SYSTEM HAS BEEN CHECKED FOR PROPER LUBRICATION, DRIVE ROTATION, BELT TENSION, CONTROL SEQUENCE, OR FOR OTHER CONDITIONS THAT MAY CAUSE DAMAGE.
- DEMONSTRATE OPERATION AND MAINTENANCE OF PRODUCTS TO OWNER'S PERSONNEL ONE WEEK PRIOR TO DATE OF FINAL INSPECTION.
- EXECUTE FINAL CLEANING PRIOR TO FINAL PROJECT ASSESSMENT. SEISMICALLY RESTRAIN HVAC EQUIPMENT, GAS PIPING AND HYDRONIC PIPING AS REQUIRED BY LOCAL CODE. PROVIDE SUPPORT AND EQUIPMENT REQUIRED TO CONTROL
- EXPANSION AND CONTRACTION OF PIPING. PROVIDE LOOPS, PIPE OFFSETS, AND SWING JOINTS, OR EXPANSION JOINTS WHERE REQUIRED. ENTIRE HVAC SYSTEM AND HYDRONIC SYSTEM (AS APPLICABLE) SHALL BE BALANCED BY A CERTIFIED TEST & BALANCE CONTRACTOR. ALL AIR FLOW RATES SHALL BE WITHIN 5% OF SPECIFIED FLOW RATE. PROVIDE CERTIFIED TEST & BALANCE REPORT AT END OF PROJECT.
- DISPOSE OF CONDENSATE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS. PROVIDE TRAP IN CONDENSATE DRAIN LINE AT EACH COIL OR 90+ FURNACE IN ACCORDANCE WITH PUBLISHED MANUFACTURER'S INSTRUCTIONS. EACH TRAP SHALL BE PROVIDED WITH A TEE TO ALLOW FOR CLEANING. CONDENSATE PIPING SHALL BE SCH 40 PVC UNLESS NOTED OTHERWISE OR PROHIBITED BY CODES. INSULATE CONDENSATE DRAIN PIPING, SLOPE TO TRAIN, AND TERMINATE IN ACCORDANCE WITH CODE OR AS SHOWN ON THESE DRAWINGS
- PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS WHEREVER JOINTING DISSIMILAR METALS. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE 2005 EDITION "SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE".
- AND AS INDICATED. PROVIDE RADIUS ELBOW OR TURNING VANES IN ALL 90° ELBOWS. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED. DUCTWORK SHALL BE FABRICATED FROM ASTM A525 AND ASTM A527 GALVANIZED STEEL SHEET, LOCK-FORMING QUALITY, HAVING G90 ZINC COATING OF IN CONFORMANCE WITH ASTM A90. ALL DUCTS SHALL BE GALVANIZED STEEL UNLESS OTHERWISE NOTED ON DRAWINGS. DUCTBOARD WILL NOT BE ACCEPTED.
- PROVIDE TEMPORARY PROTECTION FOR EQUIPMENT DURING CONSTRUCTION TO PREVENT DAMAGE TO EQUIPMENT AND COILS. PROVIDE TEMPORARY FILTERS AT EACH RETURN AIR INLET DURING CONSTRUCTION. PROVIDE AND INSTALL A NEW, CLEAN SET OF FILTERS FOR EACH SYSTEM AT PROJECT COMPLETION.
- FLEXIBLE DUCTWORK SHALL BE EQUIVALENT TO THERMAFLEX WITH R-6.0 MINIMUM, R-8.0 IF IN ATTIC SPACE, FIBERGLASS INSULATION AND VAPOR BARRIER. FLEXIBLE DUCTWORK SHALL BE U.L. LISTED AND APPROVED.
- SEAL ALL LONGITUDINAL AND TRANSVERSE SEAMS BEFORE APPLYING INSULATION. SEALANT SHALL BE NON0HARDENING, WATER RESISTANT, FIRE RESISTIVE, COMPATIBLE WITH MATING MATERIALS, LIQUID USED ALONE OR WITH TAPE, OR HEAVY MASTIC.
- LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES.
- PROVIDE CANVAS, FLAME RETARDANT DUCT CONNECTORS AT ALL CONNECTIONS OF FANS TO DUCTWORK.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. CONTROL WIRING SHALL BE PROVIDED IN ACCORDANCE WITH ALL FEDERAL STATE AND LOCAL CODES. CONTROL WIRING CONCEALED IN WALLS, LOCATED OUTDOORS, OR INSTALLED IN RETURN AIR PLENUM SHALL BE INSTALLED IN CONDUIT. CONDUIT
- REFRIGERANT LINES FROM OUTDOOR UNITS TO COOLING COIL. SIZE PER MANUFACTURER'S RECOMMENDATIONS AND PROVIDE ADDITIONAL CHARGE AS REQUIRED. REFRIGERANT SUCTION PIPES LESS THAN 1 1/2" IN SIZE TO RECEIVE 1/2" ARMAFLEX INSULATION AND ALL LIQUID LINES TO RECEIVE 1" INSULATION. ALL EXPOSED REFRIGERANT PIPING INSTALLED OUTDOORS SHALL BE RIGID COPPER. ROUTE ALL REFRIGERANT PIPING PLUMB AND SQUARE WITH THE BUILDING AS POSSIBLE. EXTERIOR PIPING SHALL BE INSTALLED ON UNISTRUT AND SECURED WITH UNISTRUT CLAMPS. UNISTRUT SHALL BE ANCHORED TO CONCRETE PAD.
- ROUND DUCT BRANCH SIZE SHALL BE SAME AS NECK SIZE SPECIFIED FOR DIFFUSER, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL EXTERIOR WALL LOUVERS USED FOR MECHANICAL EXHAUST, MECHANICAL FRESH AIR INTAKE, OR MECHANICAL COMBUSTION AIR SHALL BE EXTRUDED ALUMINUM, WITH 1/4" INSECT SCREEN. COORDINATE COLOR WITH ARCHITECT.
- VERIFY FLOOR PLAN AND WALL/FLOOR/CEILING RATINGS WITH ARCHITECTURAL PLANS. PROVIDE RATED PENETRATIONS AT EACH INSTANCE WHERE MECHANICAL
- INSTALLATION PENETRATES A RATED ASSEMBLY. PENETRATIONS SHALL BE PER DETAILS ON THE DRAWINGS OR SOME OTHER U.L. LISTED DESIGN.
- NATURAL GAS PIPING, IF SHOWN ON THESE DRAWINGS, SHALL BE SCH. 40 BLACK STEEL ABOVE GROUND WITH EITHER WELDED OR THREADED FITTINGS. PAINT PIPING LOCATED OUTDOORS. ALL NATURAL GAS PIPING PERMANENTLY CONCEALED IN WALLS, CHASES, ETC. SHALL HAVE WELDED CONNECTIONS. IF APPROVED BY THE LOCAL GAS UTILITY, PIPE BELOW GRADE MAY BE DRISCOPIPE 6500, OR APPROVED POLYETHYLENE TYPE, INSTALLED TO CONFORM TO MANUFACTURER'S RECOMMENDATIONS AND LOCAL UTILITY REQUIREMENTS. PROVIDE YELLOW COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR INSTALLED ADJACENT TO END OF THE NONMETALLIC PIPING. THE TRACER WIRE SHALL NOT BE LESS THAN 18 AWG AND THE INSULATION TYPE SHALL BE SUITABLE FOR DIRECT BURIAL. ALL NEW OR MODIFIED NATURAL GAS SYSTEMS SHALL BE TESTED AND PURGED PER 2012 IFGC CHAPTER 406.
- UNLESS OTHERWISE NOTED ON DRAWINGS, AIR DISTRIBUTION SHALL BE AS FOLLOWS OR EQUAL:
- CEILING SUPPLY, LAY-IN CEILINGS NAILOR 6500 SERIES, TYPE L FRAME, FULLY LOUVERED FACE, NO FILLER PANEL, FLUSH WITH CEILING, LESS DAMPER.
- SIDEWALL OR DRYWALL CEILING SUPPLY NAILOR 61D SERIES, DOUBLE DEFLECTION, WITH DAMPER AND PLASTER RING (AS APPLICABLE)
- CEILING RETURN AND EXHAUST, LAY-IN CEILING NAILOR 4360 SERIES, FLUSH FACE, TYPE L FRAME. SIDEWALL OR DRYWALL CEILING RETURN - NAILOR 51FH-HD WITH PLASTER RING.
- LINEAR BAR SUPPLY GRILLES NAILOR 49-240, LESS DAMPER, WITH PLASTER RING.
- INSTALL AIR DISTRIBUTION SYMMETRICALLY WHERE POSSIBLE. ALL AIR DISTRIBUTION MOUNTING FRAMES SHALL MATCH CEILING TYPE. CERTIFY CEILING AND COLORS WITH ARCHITECTURAL DRAWINGS. ALL AIR DISTRIBUTION SHALL HAVE POWDER COAT FINISH. GRILLES INSTALLED IN SIDEWALL OF DUCT SHALL MATCH DUCT FINISH. AND COLOR. PROVIDE PREINSULATED SUPPLY GRILLE. WHERE ADAPTERS ARE USED, PAINT TO MATCH GRILLE.
- DUCT PENETRATIONS THROUGH 1 HR. FIRE RATED WALLS DO NOT REQUIRE FIRE DAMPERS PROVIDED THE FOLLOWING MINIMUM REQUIREMENTS ARE MET:
- THE DUCT DOES NOT EXCEED 100 SQ. INCHES.
- THE DUCT IS OF 0.0217 INCH MINIMUM STEELS. THE DUCT SHALL NOT HAVE OPENINGS THAT COMMUNICATE THE CORRIDOR WITH ADJACENT SPACES OR ROOMS.
- THE DUCT IS INSTALLED ABOVE A CEILING.
- THE DUCT SHALL NOT TERMINATE AT A WALL REGISTER IN THE FIRE RESISTANCE RATED WALL
- A MIN. 12" LONG BY 0.06" THICK STEEL SLEEVE SHALL BE CENTERED IN EACH DUCT OPENING. THE SLEEVE SHALL BE SECURED TO BOTH SIDES OF THE WALL AND ALL
- FOUR SIDES OF THE SLEEVE WITH MIN. 1 1/2" X 1 1/2" X 0.06" STEEL RETAINING ANGLES. SECURE RETAINING ANGLES TO THE SLEEVE AND WALL WITH NO 10 SCREWS. FILL ANNULAR SPACE BETWEEN THE WALL AND SLEEVE WITH MINERAL WOOL. UNLESS SHOWN OTHERWISE ON DRAWINGS, FRESH AIR DUCTWORK SHALL BE ROUND GALVANIZED DUCT WITH FOIL-BACKED INSULATION, R-6 MINIMUM. EXHAUST DUCTS DO
- NOT REQUIRE INSULATION. PROVIDE ACCESSIBLE BALANCING DAMPER. SIZE DUCT AS FOLLOWS: 1-100 CFM 6", 101-200 CFM 8", 201-400 CFM 10". SEE NOTE 25 FOR INTAKE LOUVER REQUIREMENTS. EACH FRESH AIR INTAKE DUCT SHALL BE PROVIDED WITH AN ACCESSIBLE BALANCING DAMPER CONDENSATE DRAINS, ELECTRICAL CONDUIT AND NATURAL GAS PIPING SHALL NOT BE ROUTED IN THE ROOF CURB OR UNIT HOUSING. CONDENSATE PIPING, ELECTRICAL
- CONDUIT AND NATURAL GAS PIPING SHALL PENETRATE THE ROOF, AS APPLICABLE, ADJACENT TO THE ROOF CURB AND CONNECT TO THE UNIT EXTERNALLY. PROVIDE AND INSTALL HARDWIRED THERMOSTATS FOR EACH SYSTEM, VERIFY EXACT LOCATION WITH OWNER EQUIPMENT PRIOR TO ROUGH-IN, THERMOSTAT INSTALLATION
- SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES. THERMOSTATS SHALL BE INSTALLED AT 48"AFF. THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE STYLE. MERCURY OPERATED THERMOSTATS ARE NOT ACCEPTABLE. ALL SHEETMETAL SURFACES VISIBLE BEHIND ANY HVAC GRILLE SHALL BE PAINTED FLAT BLACK.
- CONTRACTOR SHALL IDENTIFY ALL SCHEDULED EQUIPMENT AND ASSOCIATED THERMOSTATS. IDENTIFICATION SHALL BE ENGRAVED TAG PERMANENTLY ADHERED TO EQUIPMENT. THERMOSTATS MAY BE IDENTIFIED WITH PERMANENT INK ON INSIDE OF REMOVABLE COVER.
- THIS CONTRACTOR SHALL EXAMINE THE ENTIRE DRAWING PACKAGE AND INCLUDE ALL NECESSARY MATERIAL AND LABOR TO PROVIDE A COMPLETE AND OPERABLE SYSTEM AS INDICATED IN THE ENTIRE DRAWING SET FOR HIS RESPECTIVE SYSTEMS.
- ALL RECTANGULAR OR SQUARE ELBOWS OR TEES SHALL BE INSTALLED WITH TURNING VANES AS PER SMACNA GUIDELINES.
- ALL HYDRONIC PIPING SHALL BE TYPE L COPPER OR SCH 40 STEEL. 2" PIPE AND SMALLER MAY BE THREADED. ALL NEW CHILLED WATER PIPING (UP TO 8") SHALL HAVE 1" KRAFT BACK FIBERGLASS INSULATION. NEW HOT WATER PIPING UP TO 1 1/4" SHALL HAVE 1 1/2" KRAFT BACK FIBERGLASS INSULATION, 1 1/2" AND ABOVE SHALL HAVE 2" KRAFT BACK FIBERGLASS INSULATION.



TYPICAL BRANCH RUN DETAIL NOT TO SCALE

	FAN SCHEDULE										
TAG	AREA SERVED	USE	MANUFACTURER	MODEL NUMBER	CFM	STATIC PRESSURE (IN WC)	TYPE	ELECTRICAL	POWER	SONES	NOTES
F-1	RR	EXHAUST	GREENHECK	G-060-D	70	0.4"	CENTRIFUGAL	115/1/60	1/20 HP	6.3	1-6,10
F-2	RR	EXHAUST	GREENHECK	G-080-G	140	0.4"	CENTRIFUGAL	115/1/60	1/20 HP	6.3	1-6,10
F-3	RR	EXHAUST	GREENHECK	G-080-VG	200	0.4"	CENTRIFUGAL	115/1/60	1/20 HP	6.3	1-6,10
F-4	EVIDENCE	EXHAUST	GREENHECK	G-080-VG	260	0.4"	CENTRIFUGAL	115/1/60	1/20 HP	6.3	1-5,10,12

## NOTES:

- SPEED CONTROLLER PROVIDED BY DIVISION 23, MOUNTED AND WIRED BY DIVISION 26.
- INTEGRAL SERVICE DISCONNECT DIRECT DRIVE
- INSECT SCREEN ON WITH LIGHTS
- WALL SWITCH

BELT DRIVE

**ROOF CURB** 

- PROVIDE STATIONARY, DRAINABLE LOUVER. COORDINATE EXACT SIZE WITH FAN MANUFACTURER.
- SEISMICALLY RESTRAIN FAN AS PER CODE. PROVIDE 1/4" CABLE RESTRAINTS AT EACH CORNER (FOUR REQUIRED) ATTACH TO FAN WITH ANGLE CLIP BOLTED TO FAN. SPLAY CABLES AT 45° ANGLES AND LOOP AROUND NEARBY BUILDING
- STRUCTURAL STEEL. SECURE LOOP WITH CLEVIS CLAMPS. PROVIDE ENGINEER CERTIFIED SUBMITTAL FOR APPROVAL.
- INTERLOCK W/ RTU 7 AND WALL SWITCH

							RTL	JSCHED	ULE							
TAG	AREA SERVED	MANUFACTURER	MODEL NUMBER	NOMINAL TONS	SUPPLY AIR CFM	OUTSIDE AIR CFM	ENTERING AIR (DB/WB)	SENSIBLE COOLING (MBH)	TOTAL COOLING (MBH)	HEAT INPUT (MBH)	HEAT OUTPUT (MBH)	ELECTRICAL	MCA	MOCP	WEIGHT	NOTES
							, ,	, ,	, ,	, ,	, ,					
RTU-1	UTILITY/ LOBBY	TRANE	YSC048	4	1450	95	80/67	36.0 Btu/h	48.0 Btu/h	80	64	208/3/60	26	35	700	1,2,4,5,6,7,10,11
RTU-2	WEST	TRANE	YSC036	3	849	80	80/67	27.0 Btu/h	36.0 Btu/h	80	64	208/3/60	20	30	700	1,2,4,5,6,7,10,11
RTU-3	ADMIN INTERIOR	TRANE	4YCZ5024	2	704	95	80/67	18.0 Btu/h	24.0 Btu/h	80	64	208/1/60	19.5	30	600	1-7
RTU-4	COUNCIL	TRANE	YHC036	3	1050	200	80/67	27.0 Btu/h	36.0 Btu/h	80	64	208/3/60	21	30	700	1,2,4,5,6,7,8,9,10,11
RTU-5	BREAK	TRANE	YSC036	3	1049	85	80/67	27.0 Btu/h	36.0 Btu/h	80	64	208/3/60	20	30	700	1,2,4,5,6,7,10
RTU-6	EAST	TRANE	YSC036	3	1049	95	80/67	27.0 Btu/h	36.0 Btu/h	80	64	208/3/60	20	30	700	1,2,4,5,6,7,10
RTU-7	INTERIOR COPS	TRANE	YSC036	3	1049	100	80/67	27.0 Btu/h	36.0 Btu/h	80	64	208/3/60	20	30	700	1,2,4,5,6,7,10,11

RUSKIN, MDRS25, ROUND

MANUAL BALANCING DAMPER

2' MAX ON RETURN

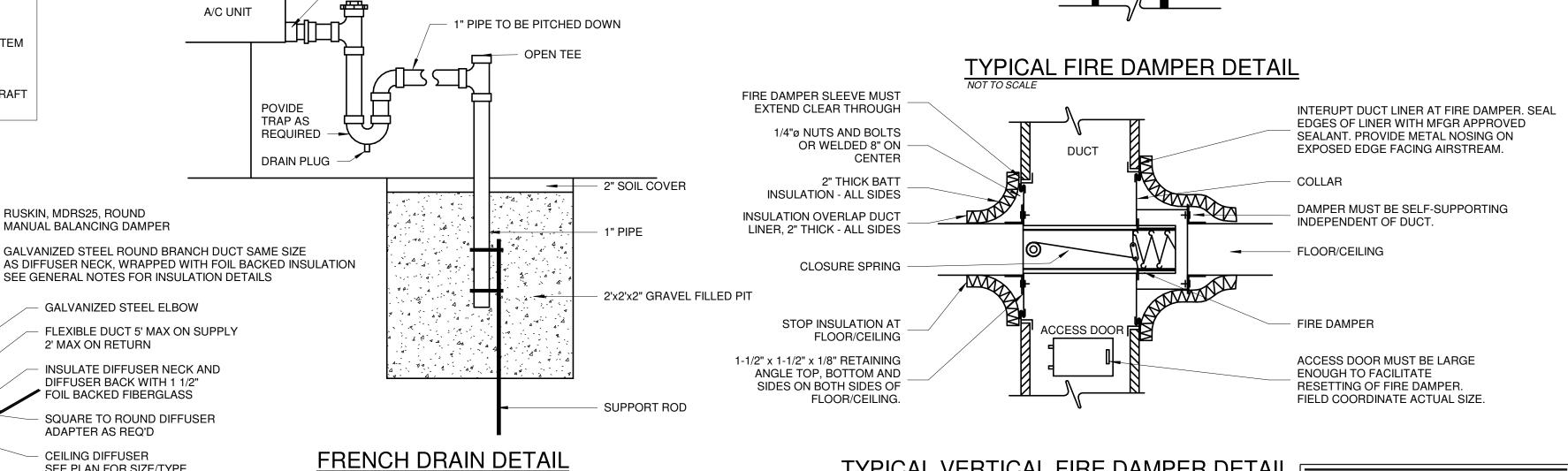
ADAPTER AS REQ'D

CEILING DIFFUSER

SEE PLAN FOR SIZE/TYPE

- INSTALL ON LEVEL, FACTORY PITCHED ROOF CURB VERIFY HEIGHT WITH ROOF INSULATION AND ROOF CONSTRUCTION. BUILT UP CURBS ARE NOT ALLOWED.
- HONEYWELL, VISION PRO 8000 MODEL TH8321WF1001 PROGRAMMABLE WI-FI THERMOSTAT. MANUAL OUTSIDE AIR DAMPER.
- RECTORSEAL EZ TRAP WITH BRUSH, LESS FLOAT SWITCH.
- 2" PLEATED RETURN AIR FILTER
- IN ADDITION TO 1-YEAR FULL WARRANTY, PROVIDE 5-YEAR COMPRESSOR PARTS-ONLY WARRANTY AND 10-YEAR PARTS ONLY HEAT EXCHANGER WARRANTY
- PROVIDE EQUIPMENT FROM MANUFACTURER AS SPECIFIED OR EQUAL. EQUIVALENT MANUFACTURERS ARE TRANE, CARRIER, JOHNSON CONTROLS, DAIKIN, AMERICAN STANDARD.
- WALL MOUNTED HUMIDISTAT AND CO2 SENSOR. HUMIDISTAT SHALL BE SET AT 60%RH (ADJ)

9. HOT GAS REHEAT 10. ECONOMIZER WITH POWERED EXHAUST 11. UNPOWERED CONVIENCE OUTLET		
AIR HAND	LING UNIT SCHEDULE	
TAG MANUFACTURER NUMBER TONS AIR CFM AIR CFM (DB)		WEIGHT NOTES
AHU-1 TRANE TPLA0A024 2 810 20 80/67	18.0 24 POWERED BY HP-1	8,9,10
HEAT PUMP S	SCHEDULE	
TAG AIR SYSTEM MANUFACTURER NUMBER TONS CON	ND'R ENTERING AIR TEMP ELECTRICAL MCA MOCP WEIGHT NOTES	
HP-1   AHU-1   TRANE   TRUZA024   2   98°F	208/1/60 19 25 150 1-7	
1. WIND BAFFLE 2. HIGH AND LOW PRESSURE SWITCHES 3. CRANKCASE HEATER 4. LOW AMBIENT CONTROL TO 0 DEGREES 5. 5-YEAR COMPRESSOR WARRANTY 6. INSTALL PER MANUFACTURER'S RECOMMENDATIONS FOR CLEARANCES 7. SIZE REFRIGERANT LINE IN EXCESS OF 50' AS PER MANUFACTURER'S RECORMANTER PROVIDE PROGRAMMABLE THERMOSTAT WITH LOCKING COVER 9. PROVIDE FACTORY CONDENSATE PUMP 10. SEISMICALLY RESTRAIN AHU AS PER CODE. PROVIDE 1/4" CABLE RESTRAIN ATTACH TO AHU WITH ANGLE CLIP BOLTED TO HEATER. SPLAY CABLES AT BUILDING STRUCTURAL STEEL. SECURE LOOP WITH CLEVIS CLAMPS. PROCESSED OF SOME PROVIDE OF SOME PROVI	NTS AT EACH CORNER (FOUR REQUIRED). 45° ANGLES AND LOOP AROUND NEARBY EVIDE ENGINEER CERTIFIED SUBMITTAL FOR APPROVAL.  FIRE DAMPER  STEEL SLEEVE, MUST EXTEND CLEAR	FOR RATED GYPSUM BOARD WALLS, FRAME OPENING WITH METAL STUDS PER NFPA AND FIRE DAMPER MFGR RECOMMENDATIONS  ACCESS DOOR MUST BE LARGE ENOUGH TO FACILITATE RESETTING OF FIRE DAMPER. FIELD COORDINATE ACTUAL SIZE.  1 1/2" x 1 1/2" x 1/8" RETAINING ANGLE TOP, BOTTOM AND SIDES, BOTH SIDES OF WALL. WELD TO STEEL SLEEVE OR FASTEN WITH 1/4" BOLTS EVERY 8" O.C.  WALL STOP INSULATION AT WALL
A/C UNIT  1" PIPE TO BE PITCH  OPEN	TFF	
POVIDE TRAP AS REQUIRED DRAIN PLUG	FIRE DAMPER SLEEVE MUST EXTEND CLEAR THROUGH  1/4"ø NUTS AND BOLTS OR WELDED 8" ON CENTER  2" THICK BATT INSULATION - ALL SIDES	DUCT  INTERUPT DUCT LINER AT FIRE DAMPER. SEAL EDGES OF LINER WITH MFGR APPROVED SEALANT. PROVIDE METAL NOSING ON EXPOSED EDGE FACING AIRSTREAM.



TYPICAL VERTICAL FIRE DAMPER DETAIL

NGINEERING, IN

DW COLLIER

COOPER MIXON

505 union street, 2nd flr jonesboro, ar 72401

phone 870.336.0536 www.coopermixon.com

CONSTRUCTION

DOCUMENTS

PROJECT NO.

PROJECT NAME

MUNICIPAL CENTER

BROOKLAND

DATE

04/19/2024

**CONTENTS** 

**HVAC NOTES** 

SHEET NUMBER

CE PROJECT NO. 23-135