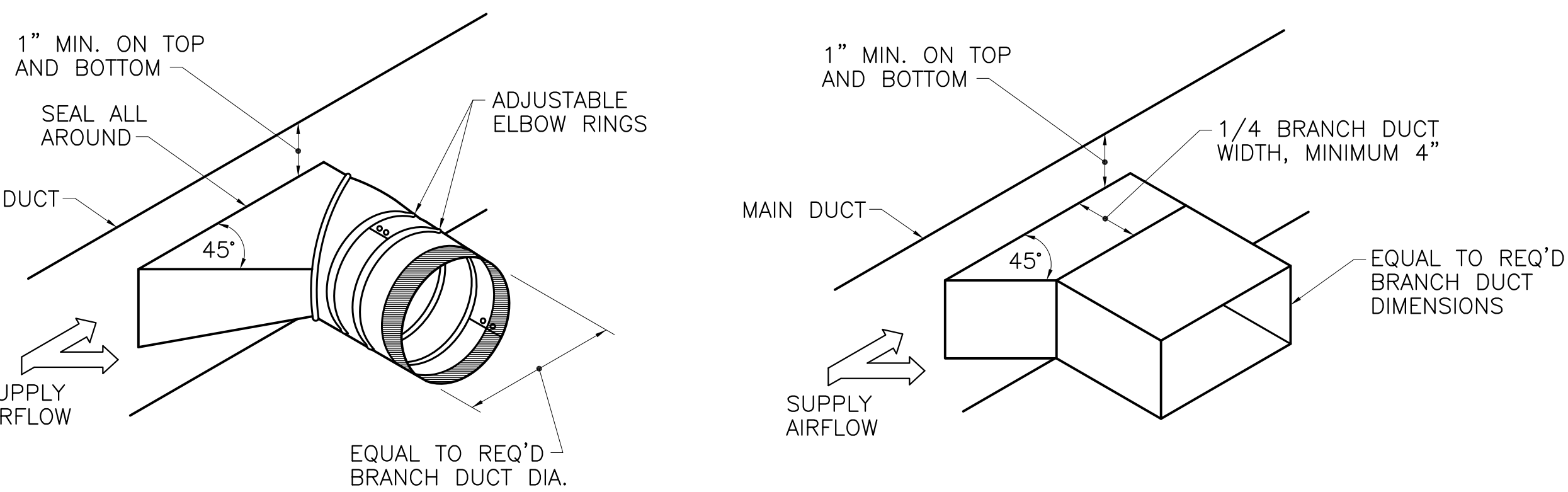


REGISTERS - GRILLES - DIFFUSERS (RGD) SCHEDULE										
TAG	PRICE MODEL	TYPE	NECK SIZE	FACE SIZE	CFM RANGE	MAX TOTAL P.D. (IN.W.C.)	MAX NC LEVEL	BORDER TYPE	BLOW	NOTES
S-1	520D	STEEL DOUBLE DEFL. SUPPLY REGISTER	6" X 6"	6" X 6"	0-130	0.10"	20	SURFACE MT.	ADJUSTABLE	
S-2	520D	STEEL DOUBLE DEFL. SUPPLY REGISTER	8" X 6"	8" X 6"	130-180	0.10"	21	SURFACE MT.	ADJUSTABLE	
S-3	520D	STEEL DOUBLE DEFL. SUPPLY REGISTER	8" X 8"	8" X 8"	181-240	0.10"	23	SURFACE MT.	ADJUSTABLE	
S-4	520D	STEEL DOUBLE DEFL. SUPPLY REGISTER	10" X 10"	10" X 10"	241-400	0.10"	25	SURFACE MT.	ADJUSTABLE	
S-5	520D	STEEL DOUBLE DEFL. SUPPLY REGISTER	12" X 16"	12" X 16"	401-700	0.10"	19	SURFACE MT.	ADJUSTABLE	
R-1	530	STEEL RETURN GRILLE, 3/4" SPACING, 35 DEG VANES	6" X 6"	6" X 6"	0-130	0.10"	20	SURFACE MT.	-----	
R-2	530	STEEL RETURN GRILLE, 3/4" SPACING, 35 DEG VANES	8" X 6"	8" X 6"	130-180	0.10"	21	SURFACE MT.	-----	
R-3	530	STEEL RETURN GRILLE, 3/4" SPACING, 35 DEG VANES	8" X 8"	8" X 8"	181-240	0.10"	23	SURFACE MT.	-----	
R-4	530	STEEL RETURN GRILLE, 3/4" SPACING, 35 DEG VANES	10" X 10"	10" X 10"	241-400	0.10"	25	SURFACE MT.	-----	
R-5	530	STEEL RETURN GRILLE, 3/4" SPACING, 35 DEG VANES	12" X 16"	12" X 16"	401-670	0.10"	25	SURFACE MT.	-----	

DUCT HEATING COIL SCHEDULE														
TAG	SERVES	AIRFLOW	LENGTH	HEIGHT	FACE VEL	EDB	LDB	MBH	MAX APD	GPM	EWT	LWT	MAX WPD	RUNOUT SIZE
RHC-011A	CLINICAL WORKSTATION G077C	800	18	12	533	55	95	34.6	0.2"	2.3	180	150	3'	3/4"
RHC-B12A	SECURITY G202	150	8	8	338	55	95	6.5	0.2"	0.4	180	150	3'	1/2"

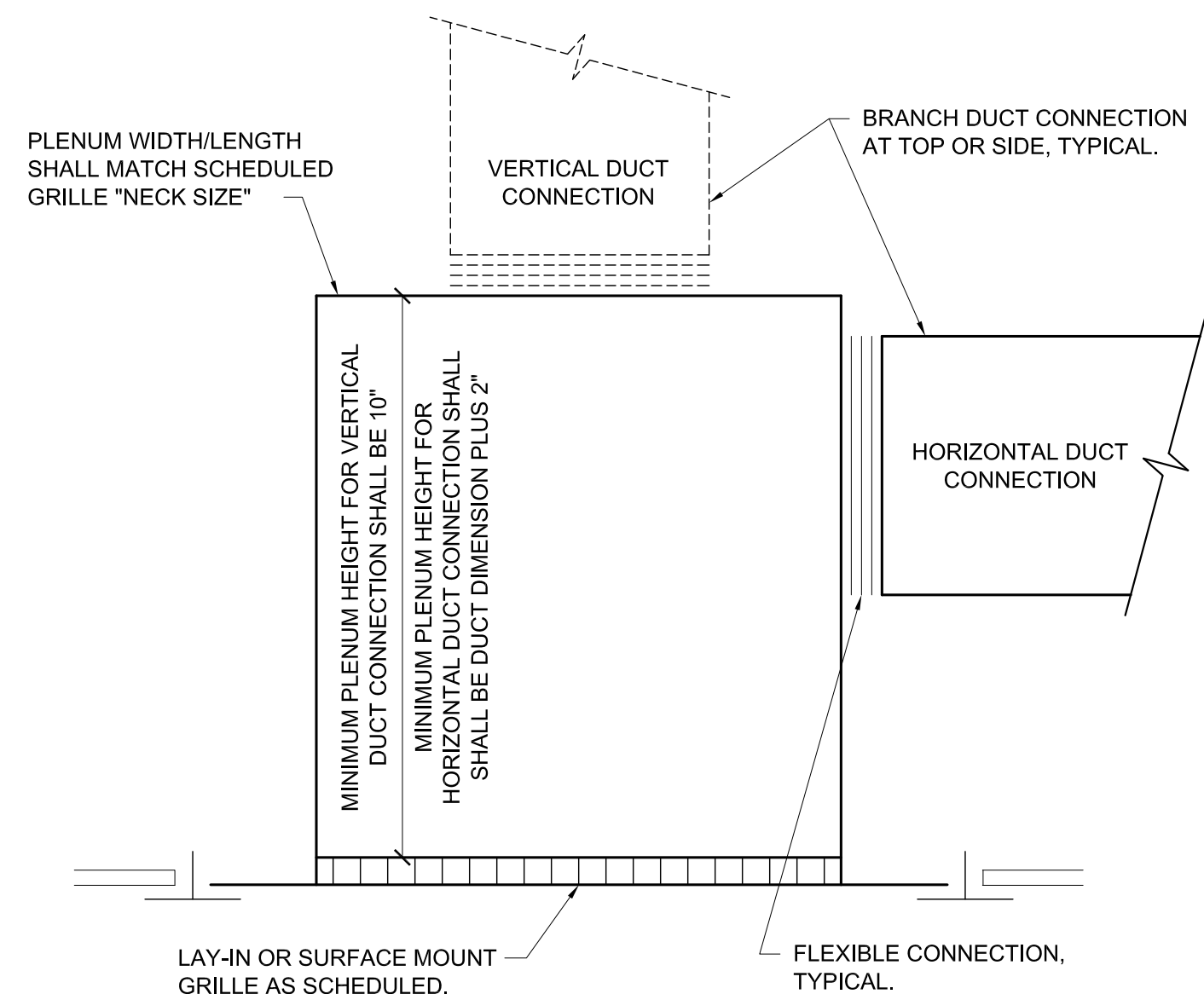
F1 SCHEDULES ~ MECHANICAL

NONE



D1 DETAIL ~ REHEAT COIL PIPING

NOT TO SCALE



SPECIFICATIONS AND NOTES

GENERAL

- CONTRACTOR SHALL VISIT THE SITE TO DETERMINE PRE-EXISTING CONDITIONS AND ALL WORK NECESSARY, PRIOR TO BIDDING. VERIFY MEASUREMENTS AND EXISTING CONDITIONS IN THE FIELD. GENERAL SCHEMATIC LAYOUT IS INDICATED; OFFSETS, OBSTRUCTIONS, AND EXISTING CONFIGURATIONS AND CONSTRAINTS MUST BE FIELD VERIFIED. PRIOR ARRANGEMENTS SHALL BE MADE FOR SITE VISITS.
- PERFORM WORK IN ACCORDANCE WITH LOCAL BUILDING CODES AND APPLICABLE AMENDMENTS, ALL LOCAL CODES, REGULATIONS, AND ORDINANCES.
- THE CONTRACTOR SHALL HOLD A LICENSE TO PERFORM THE WORK AS ISSUED BY THE LOCAL JURISDICTION. APPLY FOR AND OBTAIN ALL REQUIRED PERMITS AND INSPECTIONS, PAY FEES AND CHARGES INCLUDING SERVICE CHARGES.
- PERFORM WORK IN ACCORDANCE WITH BUILDING OWNER REQUIREMENTS.
- COORDINATE WORK WITH OTHER TRADES.
- INSTALL WORK SO THAT ALL ITEMS (BOTH EXISTING AND NEW) ARE OPERABLE AND SERVICEABLE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP CLEAN EQUIPMENT AND EXISTING CONDITIONS AFFECTED BY THE WORK FOR THE DURATION OF THE PROJECT. EACH TRADE SHALL KEEP THE PREMISES FREE FROM AN ACCUMULATION OF WASTE MATERIAL OR RUBBISH CAUSED BY HIS OPERATIONS. THE FACILITIES REQUIRE AN ENVIRONMENT OF EXTREME CLEANLINESS, AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADHERE TO THE STRICT REGULATIONS REGARDING PROCEDURES ON THE EXISTING PREMISES.
- REMOVED/ABANDONED ITEMS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- INSTALL, TEST, AND ADJUST COMPONENTS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS, ALL LOCAL CODES AND STANDARDS, AND OWNER REQUIREMENTS.
- THE INTENTION OF THESE CONTRACT DOCUMENTS IS TO CALL FOR FINISHED WORK, FULLY TESTED AND READY FOR OPERATION. ANY COMPONENTS OR LABOR NOT MENTIONED IN THE CONTRACT DOCUMENTS BUT REQUIRED FOR FUNCTIONING SYSTEMS SHALL BE PROVIDED. SHOULD THERE APPEAR TO BE ANY DISCREPANCIES OR QUESTIONS OF INTENT, THE CONTRACTOR SHALL REFER THE MATTER TO THE ENGINEER FOR DECISION BEFORE START OF ANY RELATED WORK.
- CONCEAL ALL CONTRACT WORK. PROVIDE REQUIRED SUPPORTS, ANGLES, HANGERS, RODS, BASES, BRACES, AND OTHER ITEMS TO PROPERLY SUPPORT CONTRACT WORK. SUPPORTS SHALL MEET THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- SUBMIT SUBMITTALS/SHOP DRAWINGS ON ITEMS OF EQUIPMENT AND MATERIALS TO BE FURNISHED AND INSTALLED.
- BEFORE FINAL ACCEPTANCE OF THE WORK, FURNISH NECESSARY SKILLED LABOR TO OPERATE ALL SYSTEMS BY SEASONS. INSTRUCT DESIGNATED PERSON ON PROPER OPERATION, AND CARE OF SYSTEMS/EQUIPMENT.
- PREPARE THREE (3) OPERATION AND MAINTENANCE MANUALS. INCLUDE IN EACH O&M MANUAL, A COPY OF EACH APPROVED SHOP DRAWING, WIRING DIAGRAMS, SPARE PARTS LISTS, AS-BUILT DRAWINGS AND MANUFACTURER'S INSTRUCTIONS.
- CONTRACTOR SHALL WARRANT WORKMANSHIP AND MATERIALS FOR A PERIOD OF NOT LESS THAN ONE-YEAR FROM THE DATE OF FINAL-COMPLETION.

EXISTING SYSTEMS

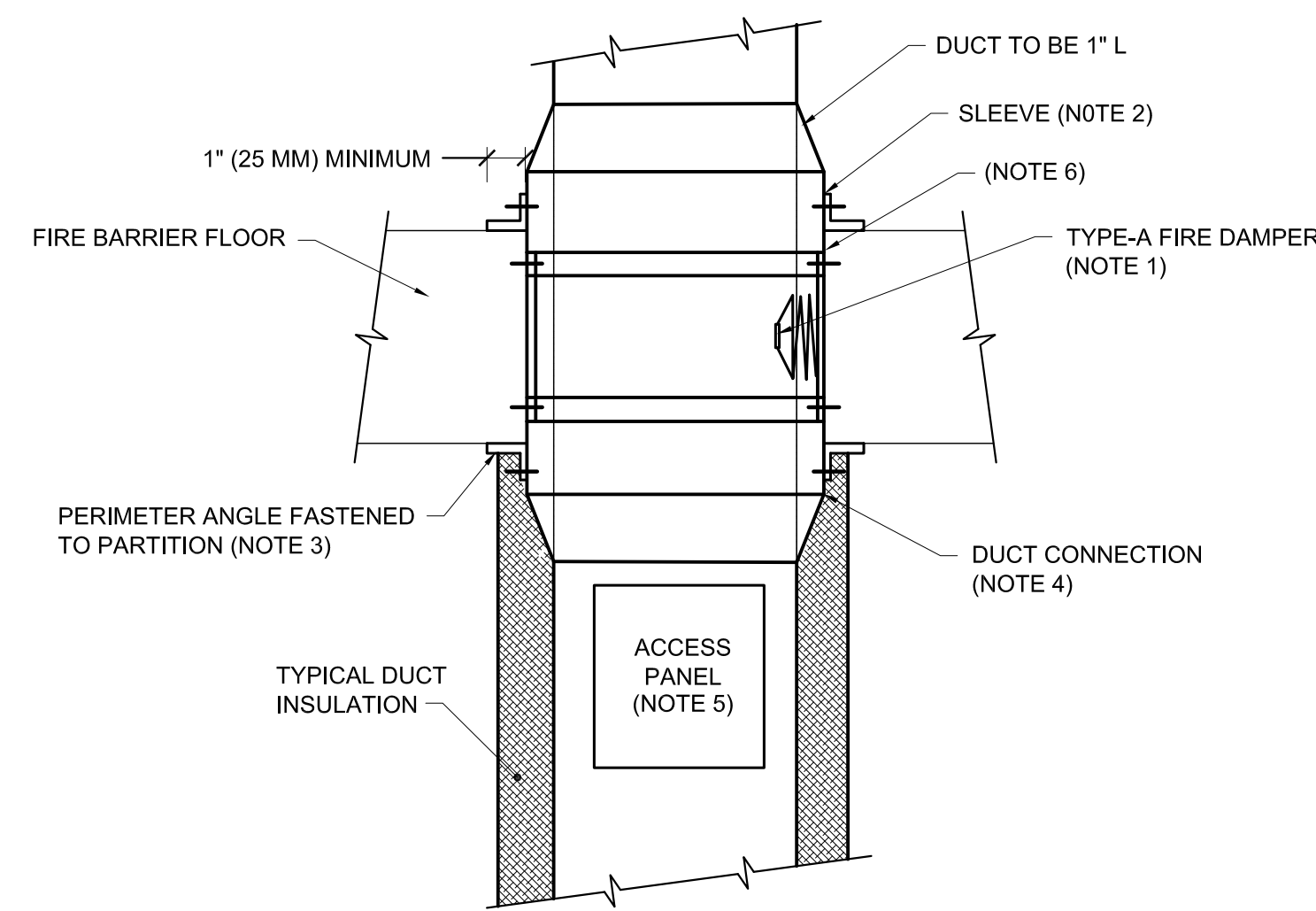
- THE BUILDING WILL BE IN USE DURING CONSTRUCTION OPERATIONS. MAINTAIN EXISTING SYSTEMS IN OPERATION AT ALL TIMES. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES AND WITH OWNER'S REPRESENTATIVE. PROVIDE, AS PART OF CONTRACT, TEMPORARY MECHANICAL AND ELECTRICAL CONNECTIONS AND RELOCATIONS AS REQUIRED TO ACCOMPLISH THE ABOVE.
- OBTAIN APPROVAL IN WRITING AS TO DATE, TIME, AND LOCATION FOR SHUT-DOWN OF EXISTING MECHANICAL/ELECTRICAL FACILITIES OR SERVICES. WORK SHALL BE PERFORMED DURING OFF-HOURS

DUCTWORK

- DUCTWORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS.
- GALVANIZED STEEL DUCTWORK SHALL BE GALVANIZED STEEL SHEET, LOCK-FORMING QUALITY, G60 ZINC COATING. SEAL DUCT JOINTS TO SMACNA CLASS A; 3" PRESSURE CLASS. SEALANTS SHALL BE WATER-BASED, WITH NO ODOR.
- INSULATED FLEXIBLE DUCTS (MAXIMUM LENGTH: 5 FEET) SHALL BE FLEXMASTER TYPE-4 OR APP'D EQUAL; U.L. 181 CLASS-1; R4.2; RATED TO +12" W.C. MAXIMUM LENGTH: 5 FEET.
- INSULATE SUPPLY DUCTWORK WITH 1-1/2" THICK KNAUF FIBER GLASS DUCT WRAP, OR APPROVED EQUAL, CONFORMING TO ASTM C 553, TYPE I, II OR III. FSK JACKET CONFORMING TO ASTM C 1136, TYPE II. SECURED IN PLACE USING OUTWARD CLINCH STAPLES AND APPROPRIATE PRESSURE SENSITIVE FOIL TAPE OR GLASS FABRIC AND VAPOR BARRIER MASTIC.

E5 PLUMBING AND HVAC SPECIFICATIONS

NONE



NOTES:

- FOLLOW MANUFACTURER'S INSTRUCTIONS, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND PERIMETER ANGLES. FIRE DAMPERS MUST BE INSTALLED IN THE FLOOR AND NOT OUTSIDE THE FLOOR.
- GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE TO DAMPER FRAME AND TO PERIMETER ANGLES.
- PERIMETER ANGLES: GALVANIZED STEEL, NOT LESS THAN 1-1/2" x 1-1/2" (40x40 MM), 14 GAGE, TO PROVIDE 1" (25 MM) MINIMUM OVERLAP OF OPENING ON ALL 4 SIDES.
- BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTION OF TYPES SHOWN IN SMACNA LPDS, FIG. 2-13, SEAL JOINTS.
- ACCESS PANELS: SIZE AND LOCATION TO PERMIT SERVICING THE FUSIBLE LINK OR LINKS.

PIPING:

- PIPING SHALL BE PRESSURE TESTED PER CODE. SUPPORT PIPING IN ACCORDANCE WITH MSS STANDARD PRACTICE SP-69. PROVIDE BAND HANGERS, WITH INSULATION SHIELDS, MAXIMUM HANGER SPACING: 6 FEET.
- HEATING PIPING: ASTM B 88, TYPE L, HARD-DRAWN COPPER. INSULATE WITH FIBERGLASS INSULATION WITH ALL SERVICE JACKET, 25/50. PROVIDE PROTO FITTING COVERS. PROVIDE TACO ACCU-FLO OR EQUAL BALANCING VALVES.
- DO NOT USE DIELECTRIC UNIONS, USE BRASS UNIONS INSTEAD.
- DUCT HEATING COIL: MCQUAY MODEL 5B OR EQUAL, 1/2" NPT WROUGHT COPPER CONNECTIONS; TESTED WITH 315 POUNDS AIR UNDER WATER AND SHALL BE SUITABLE FOR USE UP TO 250 PSIG AND 300°F.
- PLUMBING PIPING SHALL BE PER MAINE PLUMBING CODE.
- ARRANGE PIPING TO ALLOW INSPECTION AND SERVICE.
- FIELD TEST AND INSPECT PIPING ACCORDING TO CODE.
- PLUMBING PIPING PER MAINE CODE AND MMC STANDARDS. ACCORDING TO MMC, ACID WASTE PIPING IS NOT REQUIRED FOR LAB SINKS DRAINS.

PLUMBING FIXTURES

- P-1: HAND WASH LAVATORY - AMERICAN STANDARD 0955.001EC/0059.020EC; SEMI-PEDESTAL P-TRAP COVER, NOMINAL DIMENSIONS: 21-1/4" WIDE X 20-1/2" FRONT TO BACK X 6-1/2" HIGH. BOWL DIMENSIONS: 15-1/2" X 13-1/2" X 5"; MCQUIRE 155ASAN OPEN GRID DRAIN, TUBULAR 1-1/4" TAILPIECE. MCQUIRE LFBV170 FAUCET SUPPLIES, LOW LEAD. MCQUIRE 8872CB P-TRAP. WATTS TCA-411, BASIN CARRIER. PROVIDE SLOAN OPTIMA EAF-275-ISM HANDS FREE SOLAR BATTERY SINK FAUCETS WITH ACTIVATED SENSORS.

AUTOMATIC TEMPERATURE CONTROLS

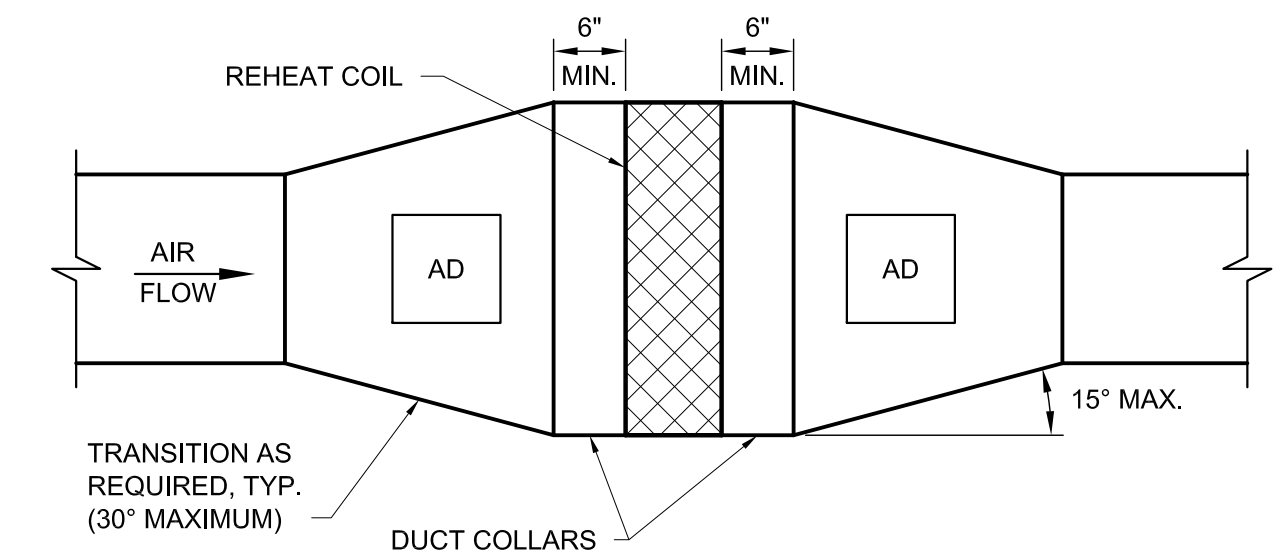
- EXTEND THE EXISTING JOHNSON CONTROL SYSTEM TO SERVE THE RENOVATED AREA. NEW CONTROLS SHALL BE DDC.
- REMOVE ALL UNUSED OLD CONTROLS, PNEUMATIC TUBING, DEVICES, WIRING AND EBI POINTS WHENEVER A PROJECT IS DONE. PNEUMATIC TUBING SHALL BE REMOVED TO THE MAIN AND MUST BE TIGHTLY CAPPED.
- PROVIDE REHEAT ZONES AS INDICATED.
- ZONES SHALL BE ALARMED FOR HIGH AND LOW TEMPERATURE.
- ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN HVAC INSTRUMENTATION AND CONTROLS.
- MMC TO SIGN OFF ON BAS GRAPHIC CHANGES AT PROJECT CLOSEOUT.
- CONFIRM LOCATION OF TEMP SENSORS. DO NOT LOCATE NEAR HEAT PRODUCING EQUIPMENT.

TESTING, ADJUSTING, AND BALANCING (T.A.B.)

- TEST, ADJUST, AND BALANCE EQUIPMENT AND DISTRIBUTION SYSTEMS IN ACCORDANCE WITH NEBB OR AABC PROCEDURAL STANDARDS. TESTS SHALL BE PERFORMED BY AND INDEPENDENT T.A.B AGENCY.
- PRE-BALANCE AIRFLOW TO EACH ZONE TO CONFIRM AVAILABLE AIRFLOW, REPORT ANY DEFICIENCIES.
- AIRFLOW: T-A-B EACH ZONE REHEAT COILS AND EACH REGISTER, GRILLE, & DIFFUSER.
- WATERFLOW: T-A-B EACH REHEAT COIL.

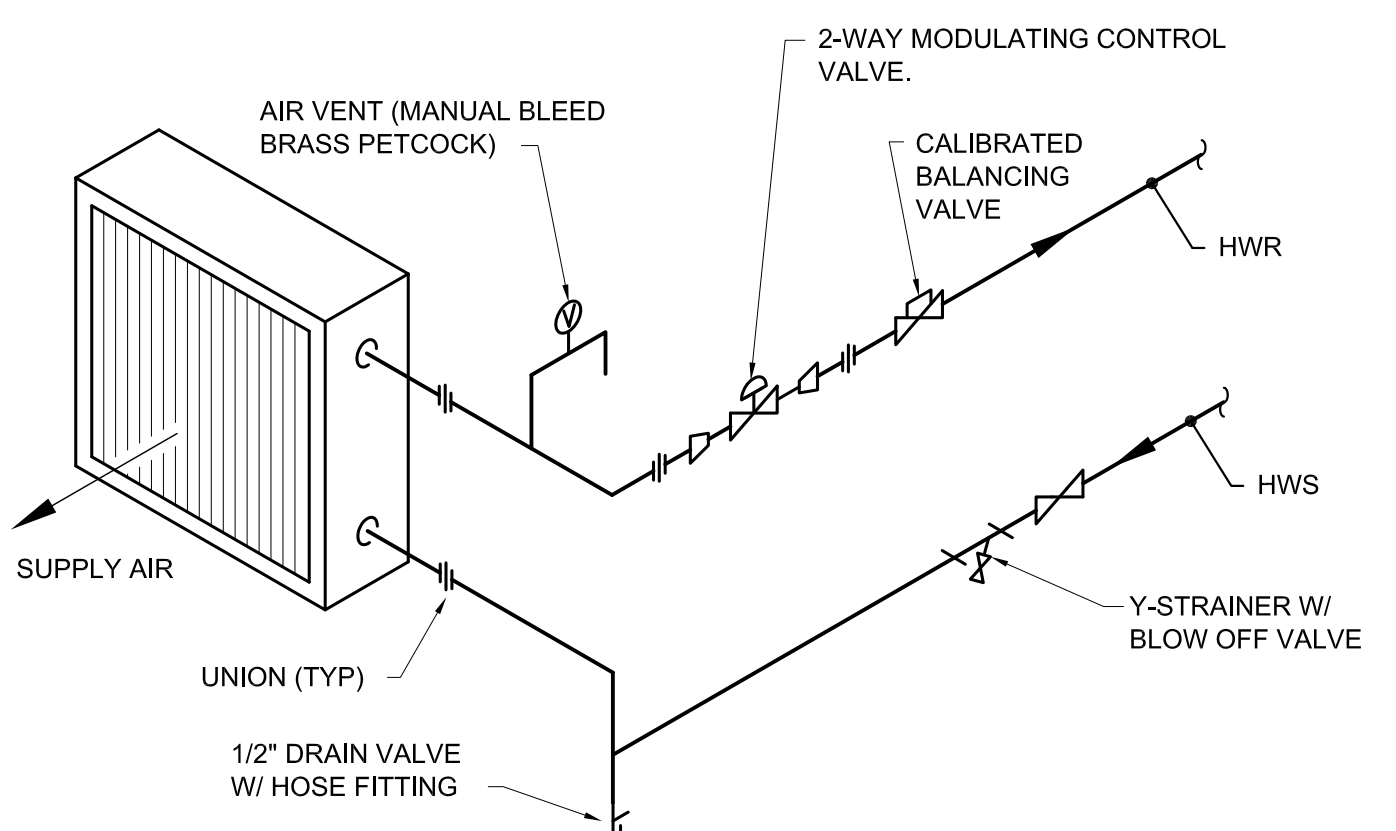
FIRE PROTECTION

- MODIFY THE EXISTING WET SPRINKLER SYSTEM TO SERVE THE NEW LAYOUT.
- ALL WORK SHALL BE IN ACCORDANCE WITH NFPA-13.
- PREPARE WORKING PLANS, HYDRAULIC CALCULATIONS, FIELD TEST REPORTS AND CERTIFICATES FOR APPROVAL BY THE AUTHORITY WITH JURISDICTION. PLANS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER OR A PERSON CERTIFIED BY THE NATIONAL INSTITUTE FOR THE CERTIFICATION IN ENGINEERING TECHNOLOGIES AT LEVEL III FOR FIRE PROTECTION AUTOMATIC SPRINKLER SYSTEMS LAYOUT
- COORDINATE FIRE DEPARTMENT CONNECTIONS WITH THE LOCAL FIRE DEPARTMENT.
- PROVIDE RELIABLE QUICK RESPONSE SPRINKLER HEAD; TYPE AND FINISH SHALL MATCH EXISTING.



C8 DETAIL ~ REHEAT COIL DUCTWORK CONNECTION

NOT TO SCALE



A1 DETAIL ~ EXHAUST GRILLE

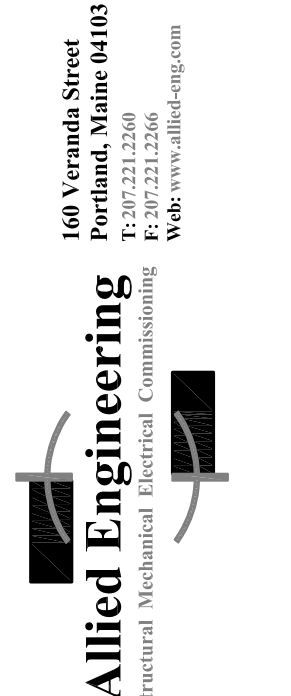
NOT TO SCALE

A5 DETAIL ~ FIRE DAMPER VERTICAL THROUGH FLOOR

NOT TO SCALE

A8 DETAIL ~ REHEAT COIL PIPING

NOT TO SCALE



REVISIONS	NUMBER	DATE	BY	DESCRIPTION
	0			

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Graphic Scale: 0	

MECHANICAL SCHEDULES, DETAILS AND NOTES

MAINE MEDICAL CENTER
PREP NORDX RENOVATIONS
PORTLAND, MAINE

MH-500