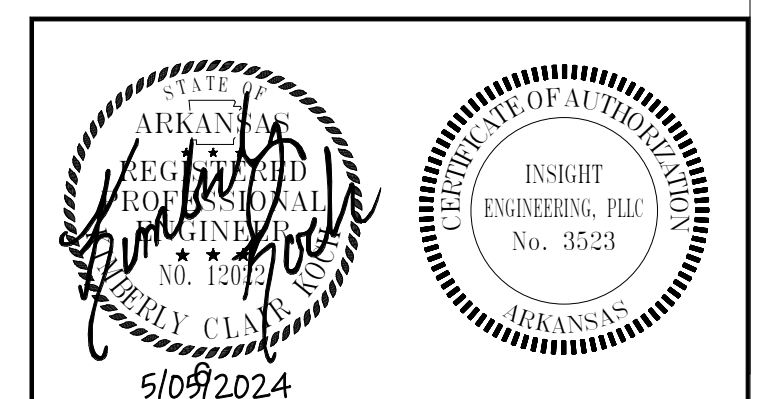




NO.	DESCRIPTION	DATE

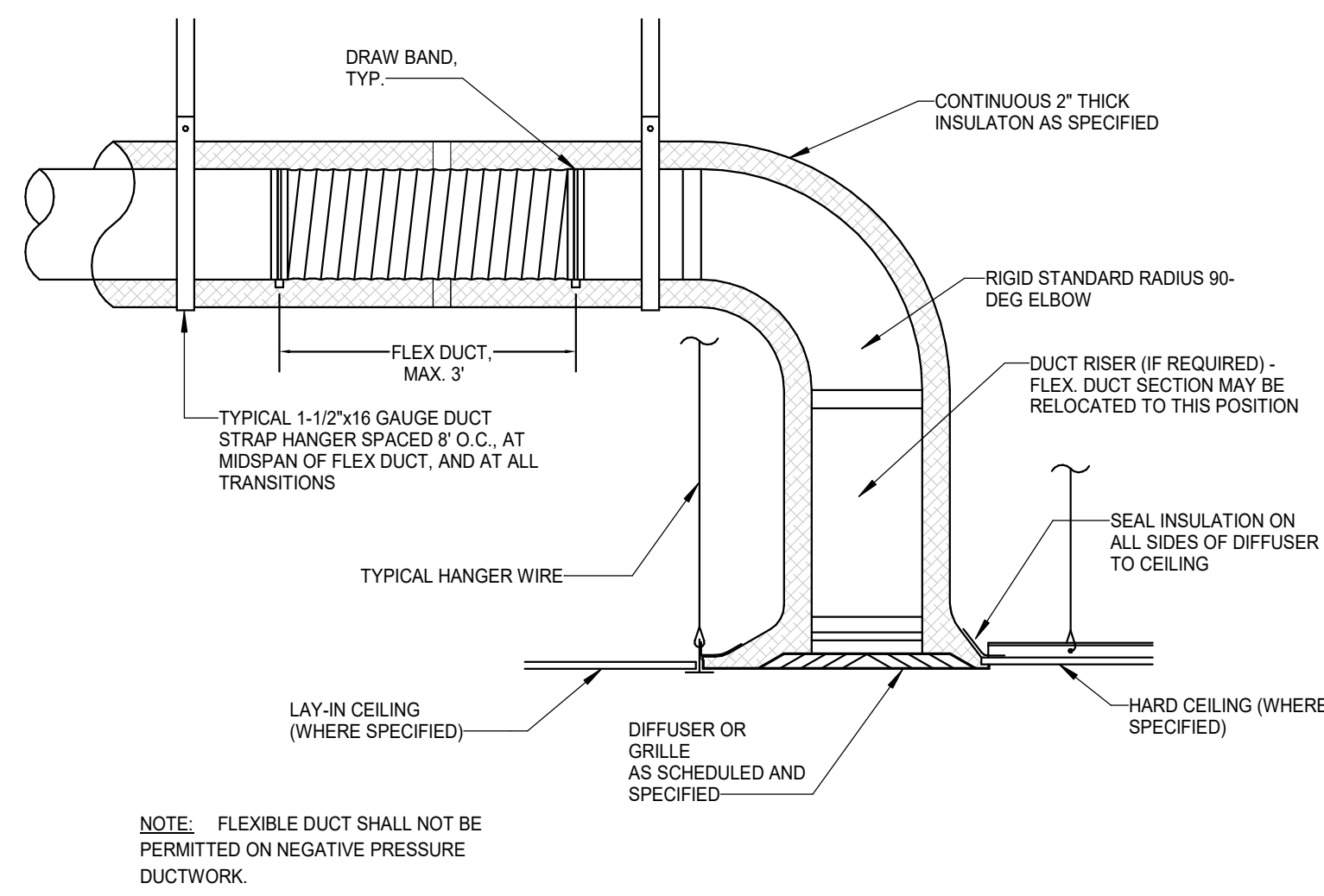


MECHANICAL GENERAL NOTES

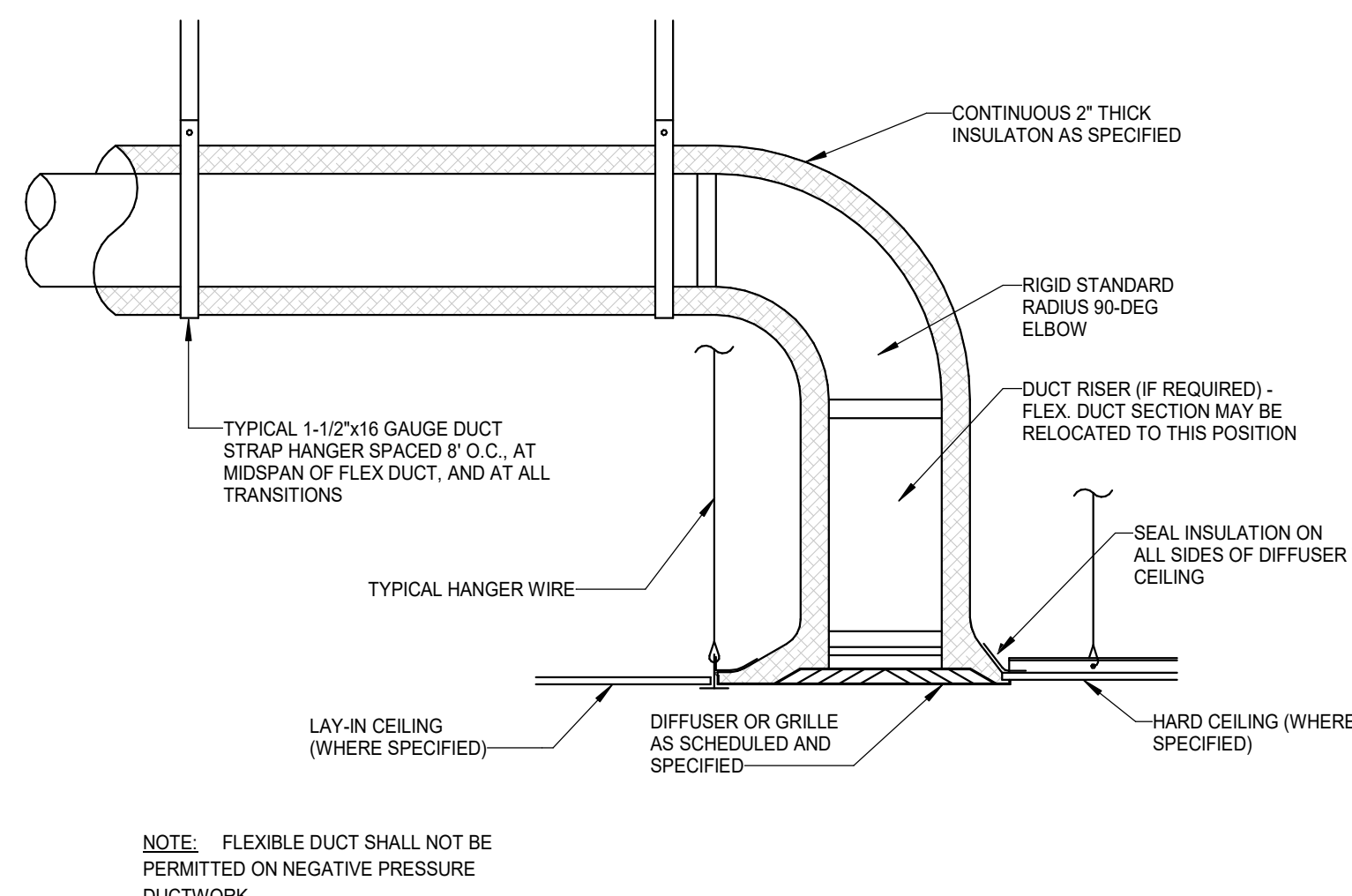
- ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE A HARD SUSPENDED CEILING.
- THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. DUCT SIZE ARE NET INSIDE DIMENSIONS.
- ACCESS PANELS IN HARD SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. COORDINATE LOCATION OF PANELS WITH MECHANICAL INSTALLATION AND DEMONSTRATE ACCESS TO EQUIPMENT SERVED.
- ALL DUCT AND PIPE ROUTING AND CONSTRUCTION SHOWN ON THE DRAWINGS IS DIAGRAMMATIC IN NATURE AND MAY NOT BE SHOWN IN EXACT LOCATIONS OR WITH ALL ANGLIARY ITEMS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. CONTRACTOR SHALL COORDINATE ROUTING OF ALL DUCTWORK AND PIPING PER TYPICAL CONSTRUCTION PRACTICE IN THE MOST EFFICIENT WAY POSSIBLE WHILE ADHERING AS CLOSELY TO THE DRAWINGS AS POSSIBLE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSTALLATION WITH THE WORK OF OTHER TRADES. FIELD MODIFICATIONS SUCH AS OFFSETS IN PIPING OR DUCTWORK NEEDED DUE TO OBSTRUCTIONS OR INTERFERENCES SHALL BE PROVIDED AT NO ADDITIONAL COST.
- ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER WITHIN STANDARD OF CARE FOR PROFESSION. ALL LABOR, MATERIAL, TOOLS, PERMITS, INSPECTIONS, TESTING, CERTIFICATION, ETC. REQUIRED FOR A COMPLETE AND SATISFACTORY INSTALLATION TO DESIGN INTENT SHALL BE FURNISHED BY CONTRACTOR. PROVIDE AT NO ADDITIONAL COST, INCLUDING INCIDENTAL ITEMS NOT SHOWN WHEN REQUIRED FOR TYPICAL COMPLETION OF WORK.
- DRAWINGS NOT BEARING THE STAMP OR SEAL AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES UNLESS EXPRESSLY APPROVED IN WRITING BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DRAWINGS AND SPECIFICATIONS BEING USED FOR BIDDING AND CONSTRUCTION PURPOSES ARE OF THE LATEST REVISION AVAILABLE AND ALL ADDENDUM DOCUMENTS HAVE BEEN INCORPORATED EITHER BY REVISION RELEASE OR DRAWING SPECIFICATIONS OR ATTACHMENT OF SCHEDULES OR OTHER ADDENDUM INFORMATION.
- THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW PRODUCTS OF ESTABLISHED AND REPUTABLE MANUFACTURERS. NO EQUIPMENT SUBSTITUTIONS SHALL BE MADE THAT WOULD LEAVE INADEQUATE OPERATING OR SERVICE SPACE. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND IN AN ARRANGEMENT THAT WILL GIVE THE GREATEST PRACTICALEase OF OPERATION AND SERVICE TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION.
- ACCESS PANELS IN DUCTWORK AND CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING OR MAINTENANCE OF ALL MECHANICAL EQUIPMENT. ACCESS PANELS SHALL BE CONVENIENTLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING. COORDINATE LOCATION OF ACCESS PANELS WITH ARCHITECT.
- DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD CLASS A.
- COORDINATE DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND EQUIPMENT OF ALL TRADES.
- VERIFY FINISH WITH ARCHITECT PRIOR TO PURCHASING GRILLES, REGISTERS, DIFFUSERS, LOUVERS AND OTHER AIR DISTRIBUTION DEVICES.
- ALL EQUIPMENT, DUCTWORK, ETC. SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
- DUCTWORK DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS. DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
- DAMPERS AND INSIDES OF DUCTS VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS SHALL BE PAINTED FLAT BLACK.
- PROVIDE AND INSTALL SMOOTH TURN RADIUS ELBOWS IN ALL RECTANGULAR 90° ELBOWS AND TEES, UNLESS NOTED OTHERWISE.
- EXHAUST DUCTS SHALL TERMINATE IN ACCORDANCE WITH ASHRAE 170-2013 AND BE EQUIPPED WITH A BACKDRAFT DAMPER.
- PENETRATIONS OF WALLS OR FLOORS FOR THE PASSAGE OF PIPING, DUCTWORK, OR OTHER EQUIPMENT SHALL BE PROPERLY SEALED AFTER INSTALLATION OF ITEMS AND EQUIPMENT.
- PIPING, DUCTWORK, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO ELECTRICAL SWITCHBOARDS, PANELBOARDS, DISTRIBUTION BOARDS, OR MOTOR CONTROL CENTERS SHALL NOT BE INSTALLED WITHIN THE REQUIRED SPACE FOR WORKING CLEARANCES OR DEDICATED SPACES OF THE ELECTRICAL EQUIPMENT, EXTENDING IN FRONT OF AND FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC-110.26.

LEGEND

SYMBOL	DESCRIPTION
	EXISTING EQUIPMENT TO BE DEMOLISHED
	EXISTING EQUIPMENT TO REMAIN
	NEW EQUIPMENT
	EXISTING DUCTPIPING TO BE DEMOLISHED
	EXISTING DUCTPIPING TO REMAIN
	NEW DUCTPIPING
	THERMOSTAT
	POINT OF CONNECTION TO EXISTING
	POINT OF DEMOLITION
	REVISION DELTA
	SIDE WALL GRILLE
	GRILLE DESIGNATION (GRILLE SCHEDULE DESIGNATION (CFM, ASB, CW))
	SUPPLY DIFFUSER
	RETURN GRILLE
	EXHAUST GRILLE
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	RECT. AND/OR ROUND DUCT 90° 1X RADIUS ELBOW
	RECT. AND/OR ROUND DUCT 90° 1.5X RADIUS ELBOW
	RECT. AND/OR ROUND DUCT 45° 1X RADIUS ELBOW
	RECT. ELBOW (WITH TURNING VANES)
	RECT. ELBOW (WITHOUT TURNING VANES)
	SINGLE LINE CONTINUATION
	AIR FLOW ARROW
	SUPPLY AIR DUCT
	RETURN AIR DUCT
	EXHAUST AIR DUCT
	CUBIC FEET PER MINUTE
	ROUND DIAMETER



1 AIR DEVICE INSTALLATION (W/ FLEX DUCT) DETAIL
NOT TO SCALE



2 AIR DEVICE INSTALLATION (W/O FLEX DUCT) DETAIL
NOT TO SCALE

AIR DEVICES									
DESIGNATION	REFERENCE PRODUCT	CONFIGURATION	MAXIMUM AIRFLOW (CFM)	TOTAL PRESSURE (IN. WATER)	NECK SIZE (IN.)	PANEL SIZE (IN.)	MAX. N.C.	FINISH	REMARKS
A	TITUS: OMNI AA	LAY-IN PLAQUE	100	0.099	6	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
B	TITUS: OMNI AA	LAY-IN PLAQUE	220	0.112	8	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
C	TITUS: OMNI AA	SURFACE MOUNT	220	0.112	8	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
D	TITUS: OMNI AA	LAY-IN PLAQUE	400	0.168	10	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
E	TITUS: OMNI AA	SURFACE MOUNT	400	0.168	10	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
F	TITUS: OMNI AA	LAY-IN PLAQUE	630	0.191	12	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
G	TITUS: OMNI AA	SURFACE MOUNT	630	0.191	12	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
H	TITUS: OMNI AA	LAY-IN PLAQUE	100	0.303	6	12 x 12	30	WHITE	PROVIDE WITH INSULATION BLANKET.
J	TITUS: OMNI AA	SURFACE MOUNT	220	0.303	8	12 x 12	30	WHITE	PROVIDE WITH INSULATION BLANKET.
K	TITUS: OMNI AA	LAY-IN PLAQUE	220	0.303	8	12 x 12	30	WHITE	PROVIDE WITH INSULATION BLANKET.
1	TITUS: 50F	LAY-IN EGGRATE	100	0.095	6 x 6 or 6"	12 x 12	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
2	TITUS: 50F	SURFACE MOUNT	180	0.095	8 x 8 or 8"	12 x 12	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
3	TITUS: 50F	LAY-IN EGGRATE	180	0.095	8 x 8 or 8"	12 x 12	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
4	TITUS: 50F	LAY-IN EGGRATE	300	0.095	10 x 10 or 10"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
5	TITUS: 50F	LAY-IN EGGRATE	500	0.022	12 x 12 or 12"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
6	TITUS: 50F	LAY-IN EGGRATE	750	0.022	14 x 14 or 14"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
7	TITUS: 50F	LAY-IN EGGRATE	1050	0.022	16 x 16 or 16"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
8	TITUS: 50FF	LAY-IN EGGRATE	2200	0.022	22 x 22	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE FILTER RETURN GRILLE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS
9	TITUS: 350RL	LINEAR SIDEWALL	-	-	20 x 30	22 x 32	-	WHITE	VERIFY NECK SIZE AND FINISH PRIOR TO ORDERING
10	TITUS: 350RL	LINEAR SIDEWALL	-	-	20 x 20	22 x 22	-	WHITE	VERIFY NECK SIZE AND FINISH PRIOR TO ORDERING