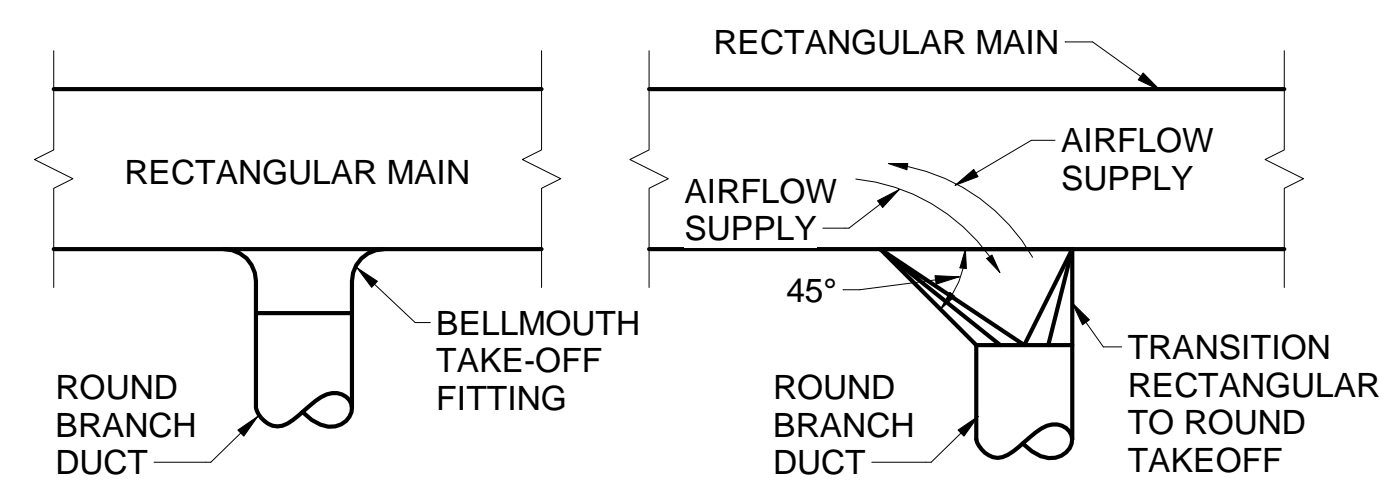
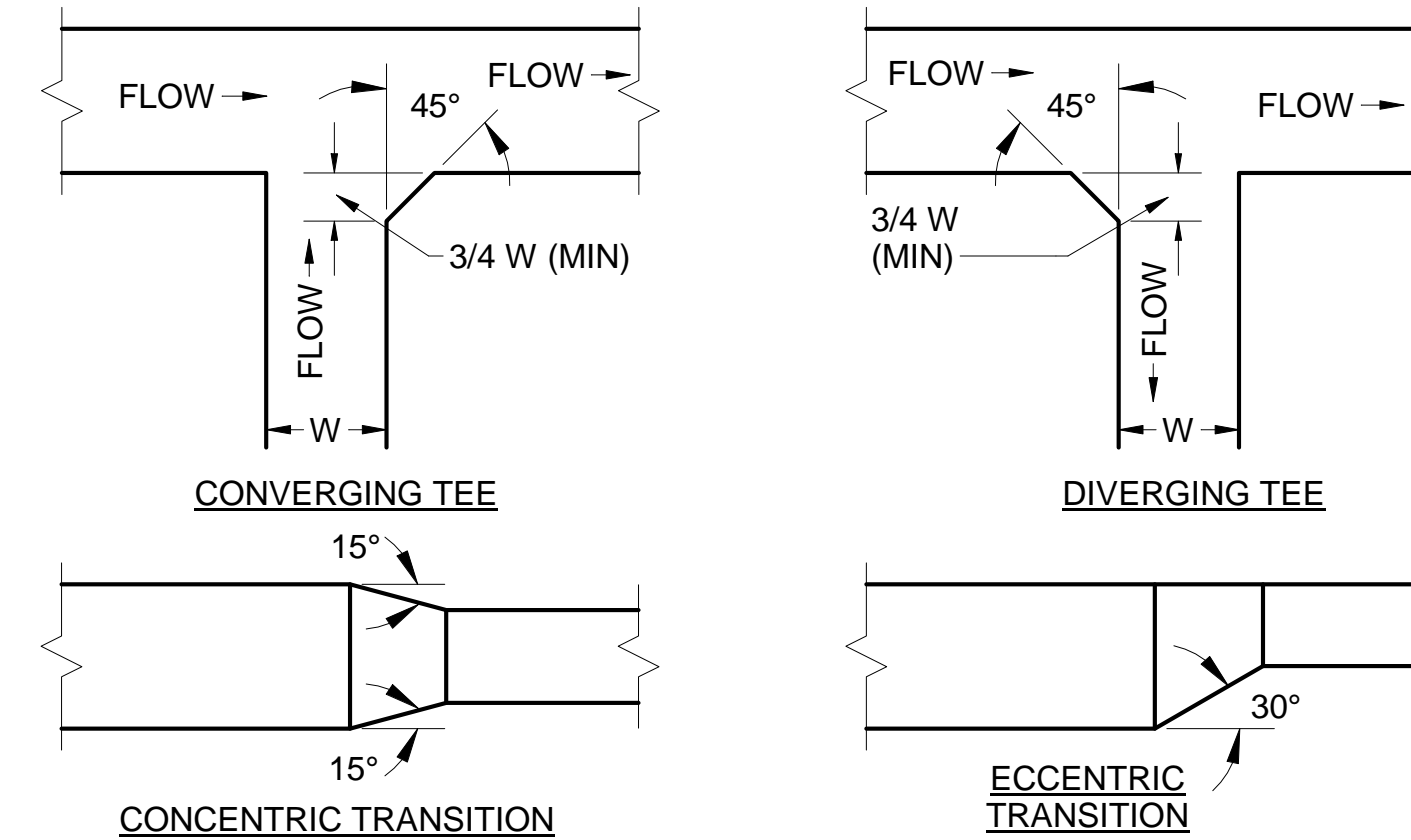


**1 TYPICAL ROUND DUCT FITTINGS DETAIL**  
M-501 / SCALE: N.T.S.

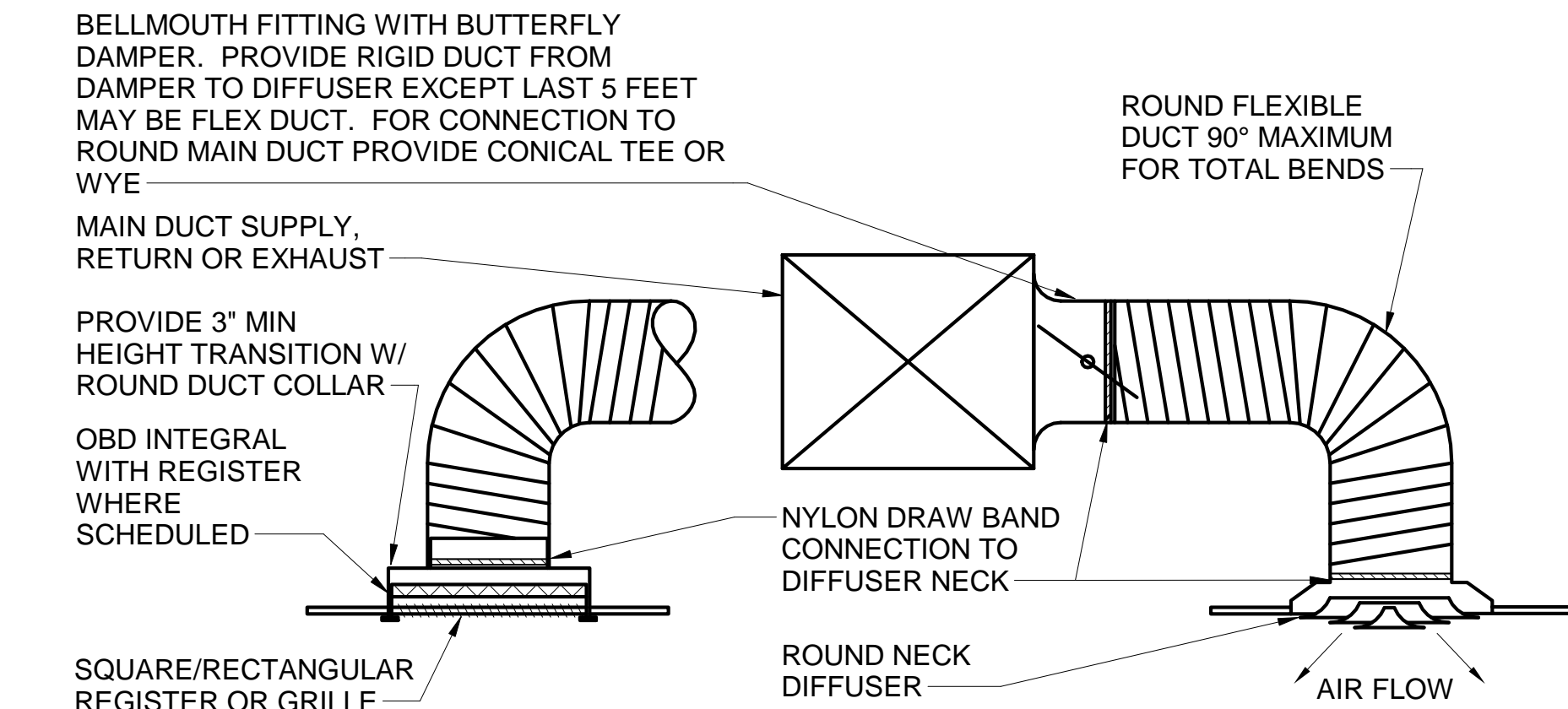


**NOTE**  
1. SPIN-IN TYPE STRAIGHT TAKE-OFF FITTINGS SHALL NOT BE PERMITTED.

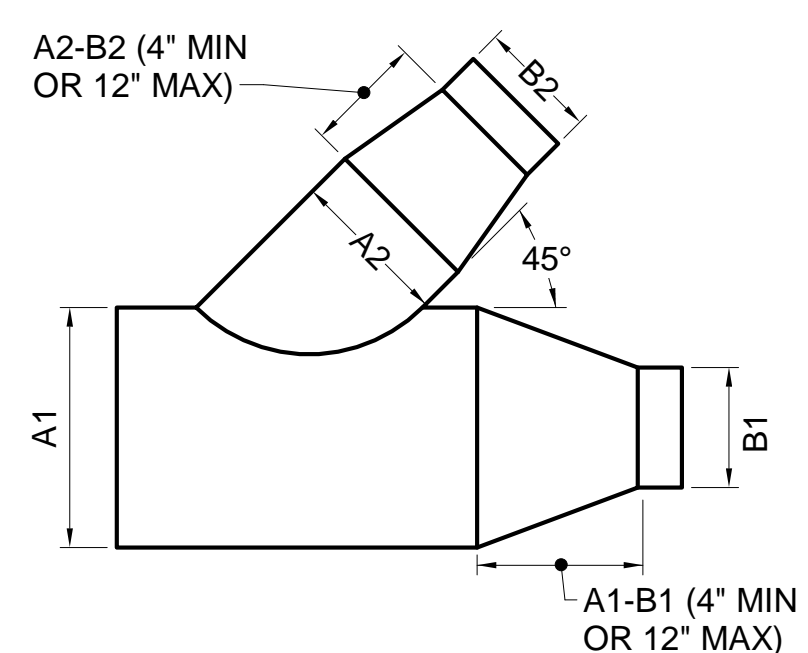
**2 TYPICAL ROUND BRANCH DUCT CONNECTIONS TO RECTANGULAR MAIN**  
M-501 / SCALE: N.T.S.



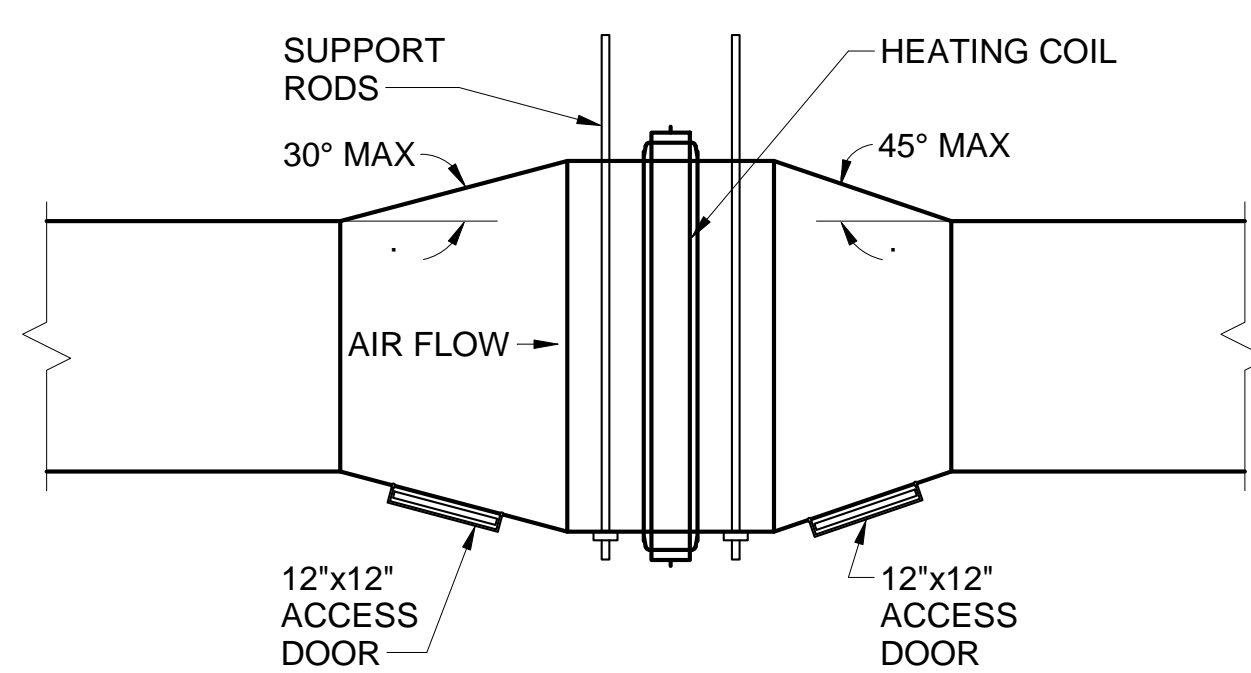
**3 RECTANGULAR DUCT TRANSITIONS DETAIL**  
M-501 / SCALE: N.T.S.



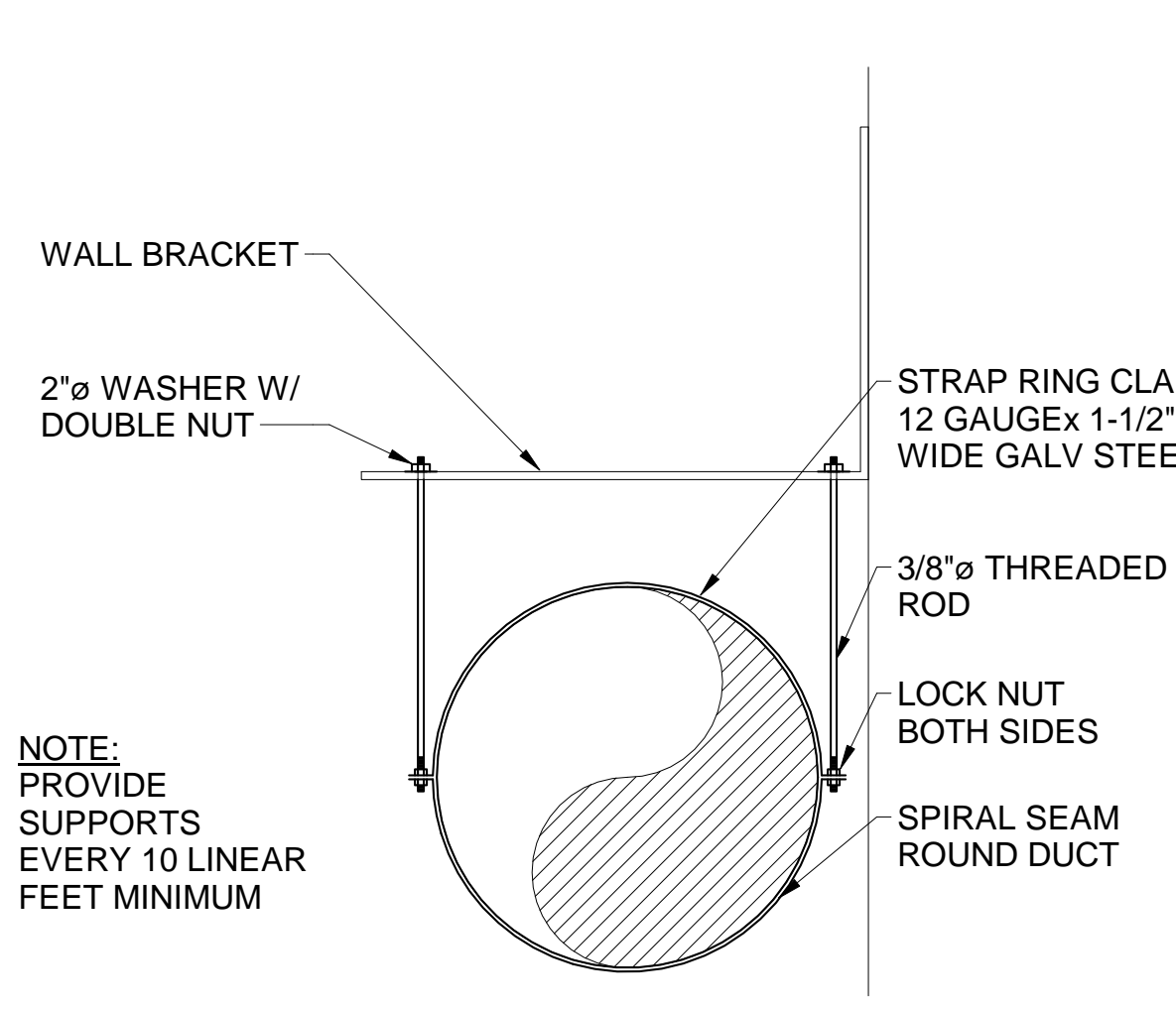
**4 DIFFUSER AND REGISTER RUNOUT DETAIL**  
M-501 / SCALE: N.T.S.



**5 ROUND DUCT-CONICAL REDUCING LATERAL**  
M-501 / SCALE: N.T.S.

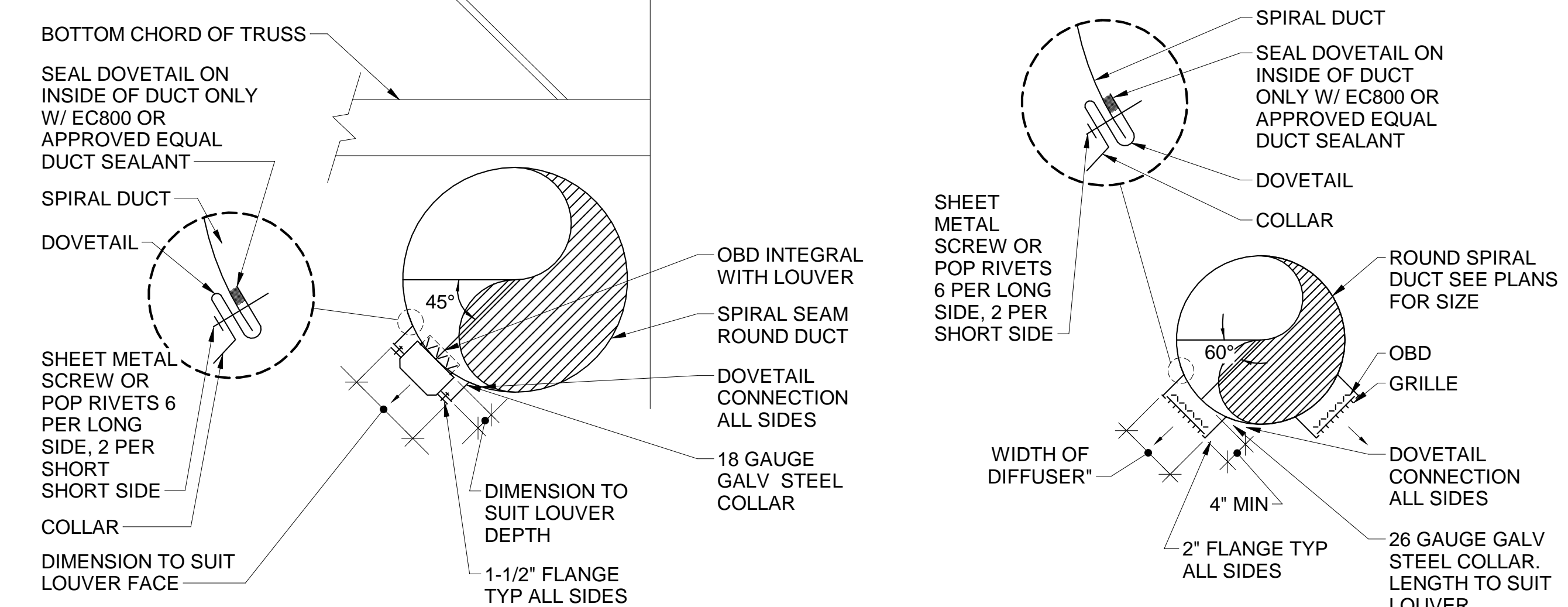


**6 DUCT MOUNTED HEATING COIL DETAIL**  
M-501 / SCALE: N.T.S.

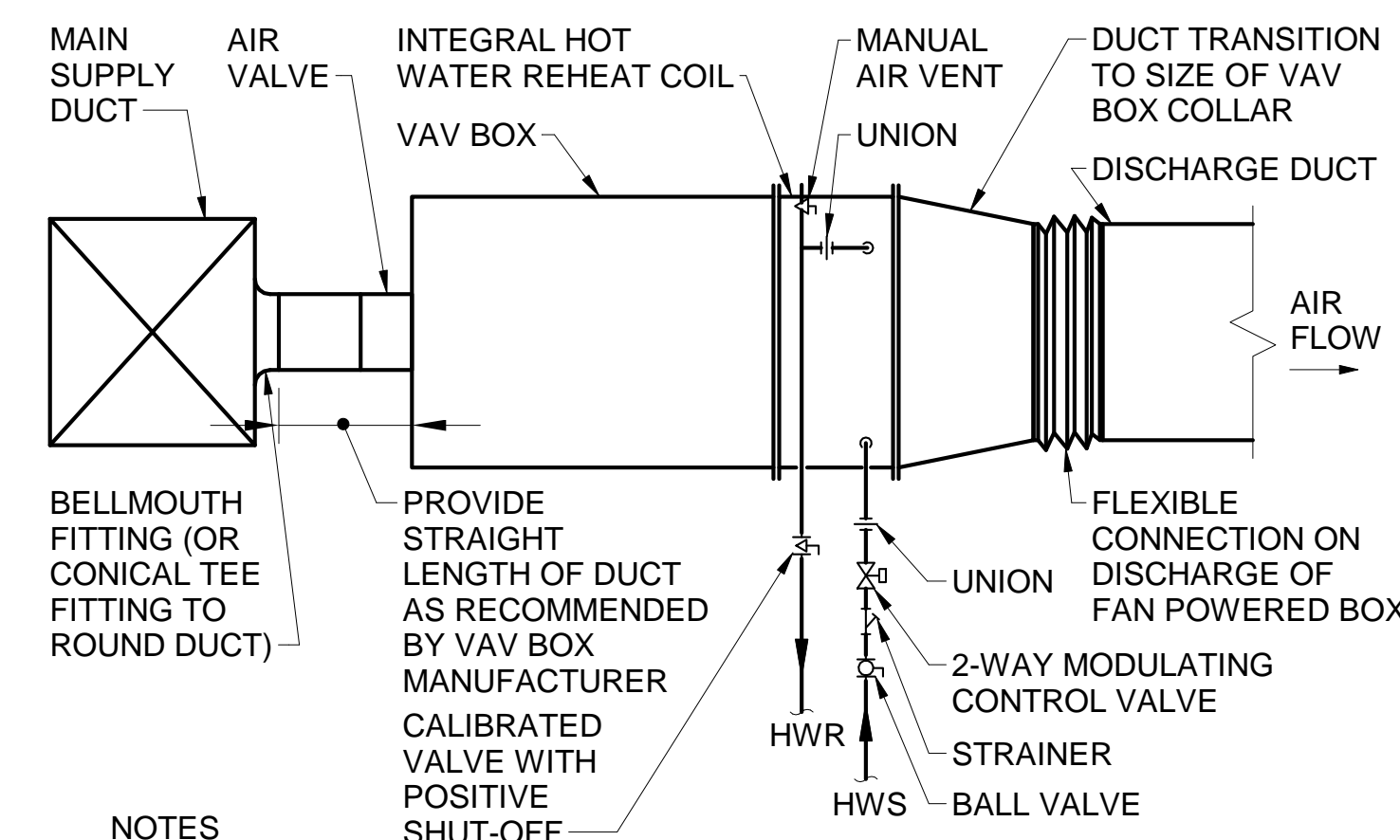


**NOTE:**  
PROVIDE SUPPORTS EVERY 10 LINEAR FEET MINIMUM

**7 EXPOSED SPIRAL DUCT SECTION**  
M-501 / SCALE: N.T.S.

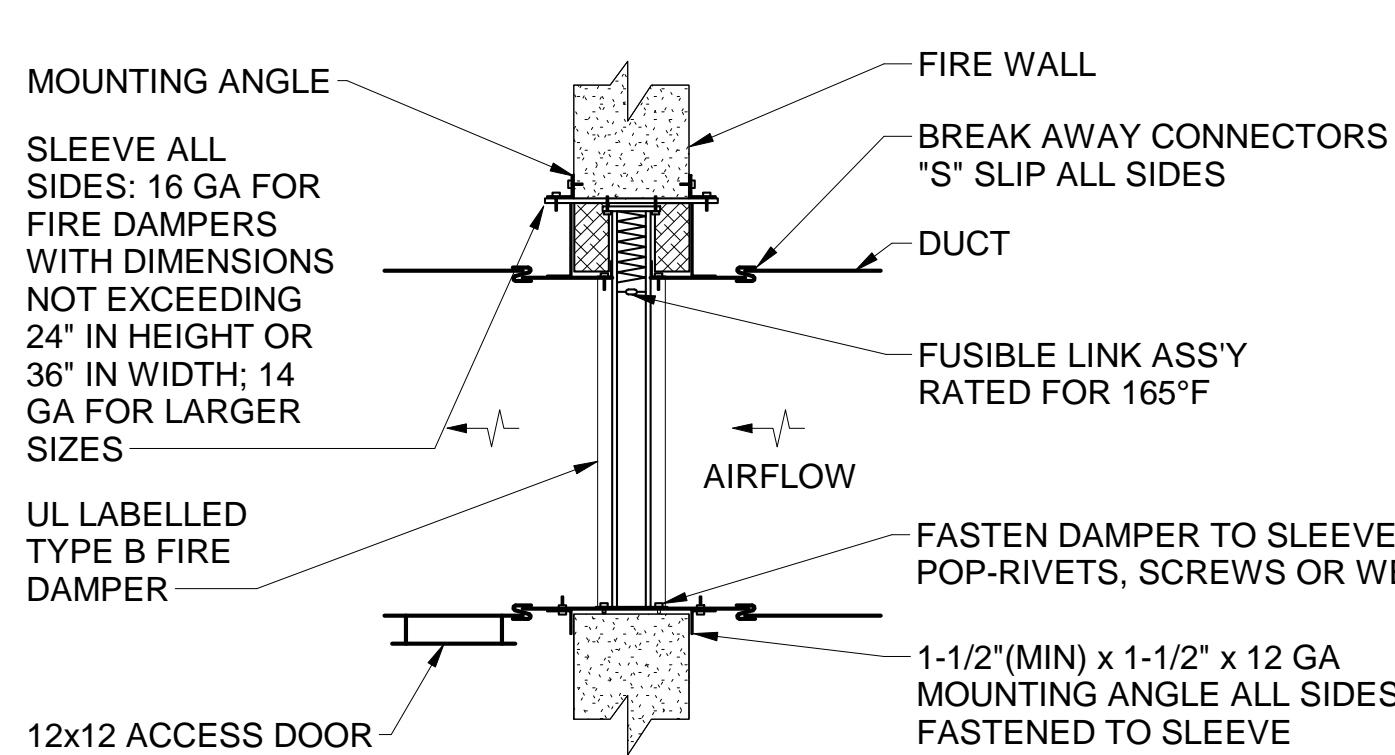


**8 DRUM SLOT LOUVER SECTION/TYPICAL DUCT MOUNTED REGISTER DETAIL**  
M-501 / SCALE: N.T.S.



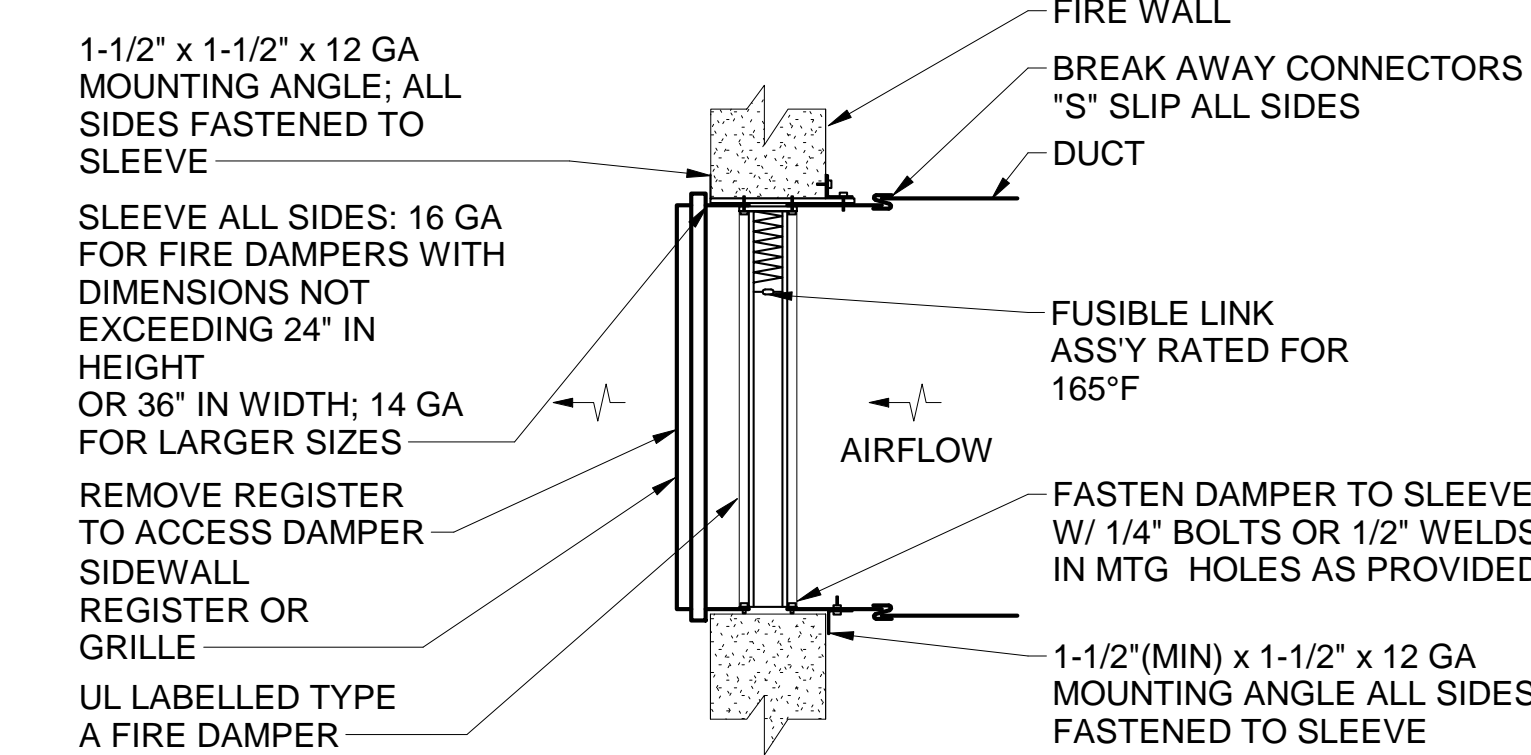
**NOTES**  
1. SUPPORT PIPE INDEPENDENTLY FROM COIL.  
2. SUPPORT DUCT INDEPENDENTLY FROM COIL.  
3. PIPING BRANCH RUNOUTS SHALL BE 3/4" UNLESS NOTED OTHERWISE.  
4. HEIGHT OF BRANCH TAKE OFF SHALL BE MINIMUM 2" LESS THAN HEIGHT OF MAIN DUCT. SUBSTITUTE RECTANGULAR TO ROUND TRANSITION IN LIEU OF BELLMOUTH FITTING WHERE NECESSARY.

**9 TYPICAL VAV BOX INSTALLATION DIAGRAM**  
M-501 / SCALE: N.T.S.

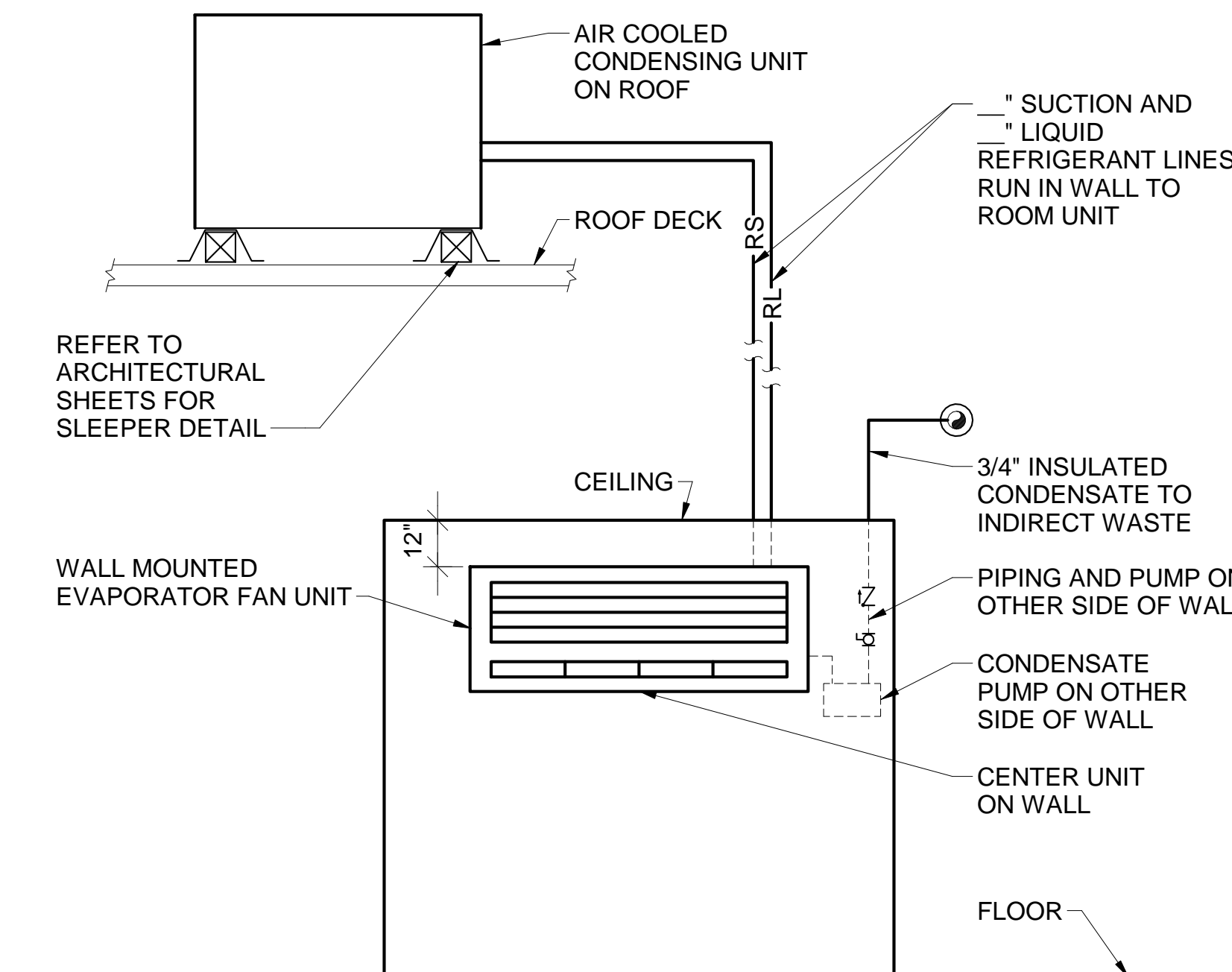


**NOTES**  
1. FOR HORIZONTAL FLOOR INSTALLATION PROVIDE FIRE DAMPER WITH SPRING LOADED DAMPER BLADES.  
2. FASTEN ANGLES TO SLEEVE WITH POP-RIVETS, SCREWS OR WELDS AT 8-INCH ON CENTER, MINIMUM 2 PER SIDE, 4 SIDES OF OPENING ON BOTH SIDES OF DAMPER.  
3. PROVIDE CLEARANCE BETWEEN DAMPER SLEEVE OR DAMPER AND THE FIRE-RATED WALL, PARTITION OR FLOOR IN ACCORDANCE WITH THE FIRE DAMPER MANUFACTURER. IF REQUIRED BY THE DAMPER MANUFACTURER, PROVIDE FIRESTOPPING IN THIS SPACE ON ALL SIDES TO MAINTAIN FIRE RATING.  
4. USE FOR GALVANIZED SHEET METAL DUCT ONLY.

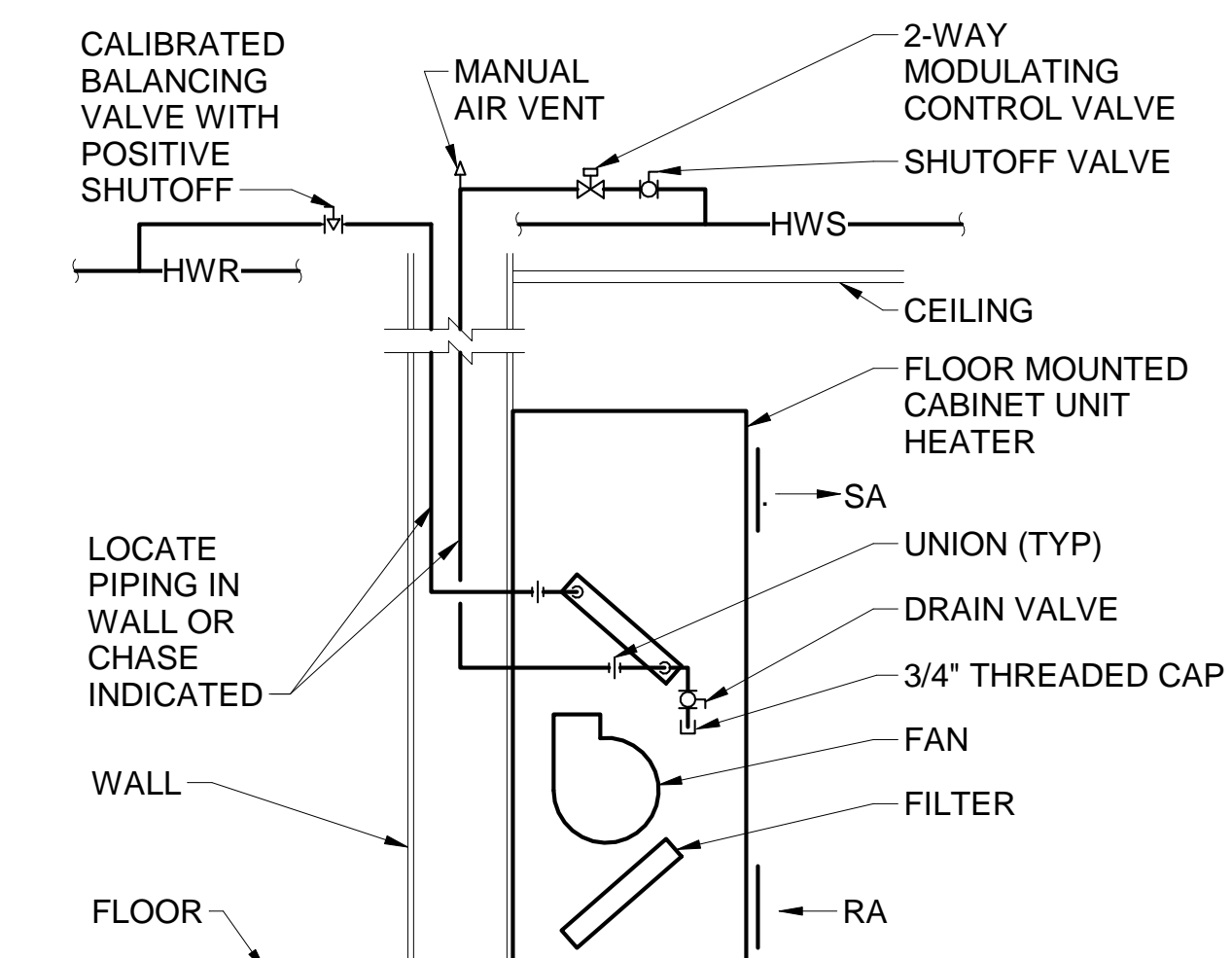
**10 FIRE DAMPER DETAIL**  
M-501 / SCALE: N.T.S.



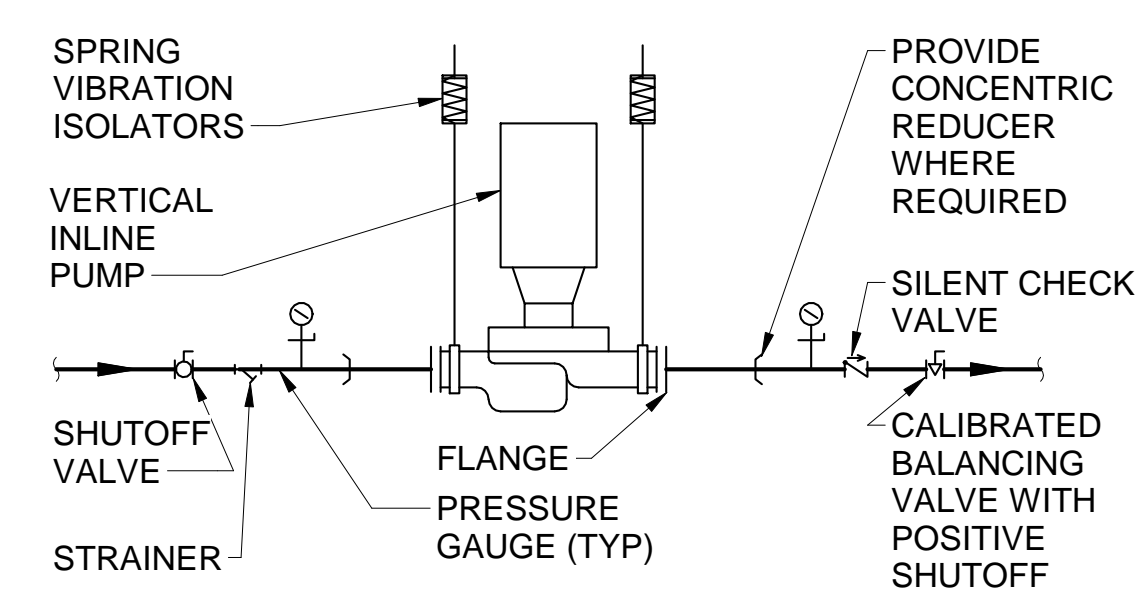
**NOTES**  
1. 1-1/2" x 1-1/2" x 12 GA MOUNTING ANGLE; ALL SIDES FASTENED TO SLEEVE.  
2. SLEEVE ALL SIDES: 16 GA FOR FIRE DAMPERS WITH DIMENSIONS NOT EXCEEDING 24" IN HEIGHT OR 36" IN WIDTH; 14 GA FOR LARGER SIZES.  
3. REMOVE REGISTER TO ACCESS DAMPER SIDEWALL REGISTER OR GRILLE.  
4. UL LABELLED TYPE A FIRE DAMPER.  
5. 1-1/2" (MIN) x 1-1/2" x 12 GA MOUNTING ANGLE ALL SIDES FASTENED TO SLEEVE.



**11 DUCTLESS SPLIT SYSTEM ELEVATION**  
M-501 / SCALE: N.T.S.

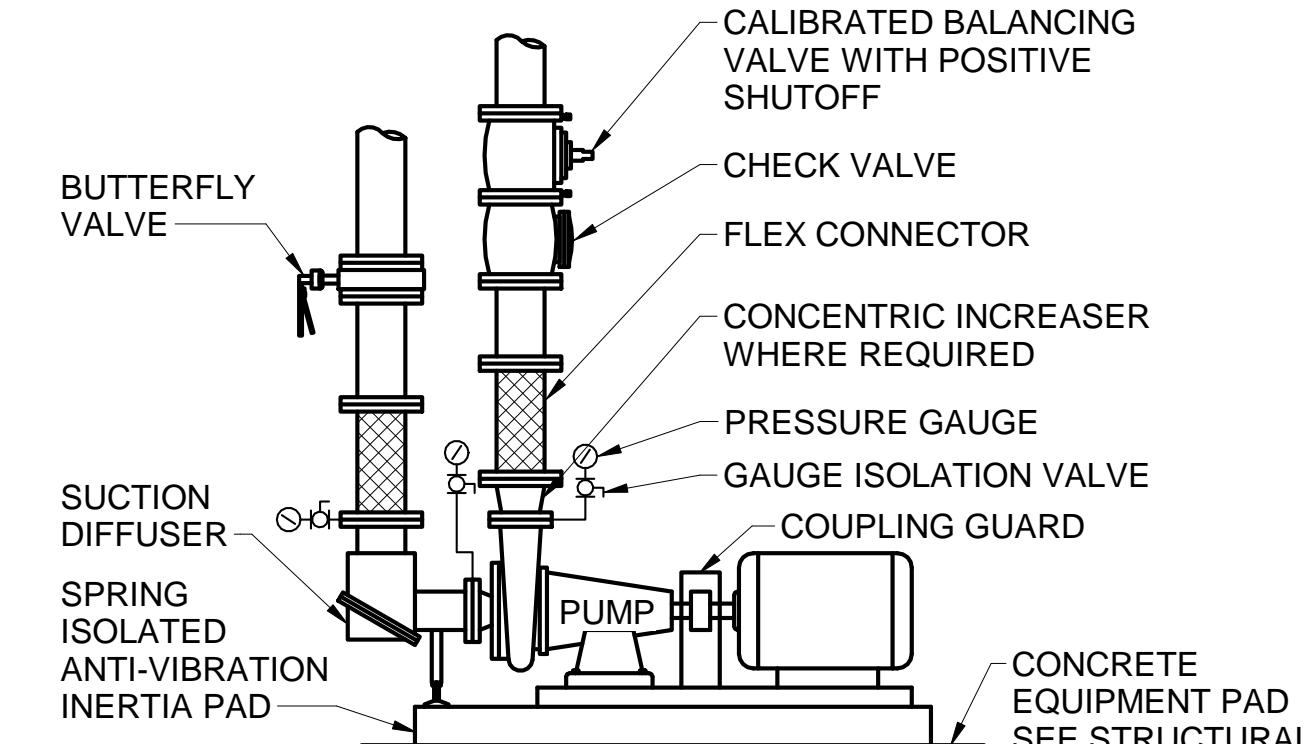


**12 CABINET HEATER PIPING SCHEMATIC**  
M-501 / SCALE: N.T.S.



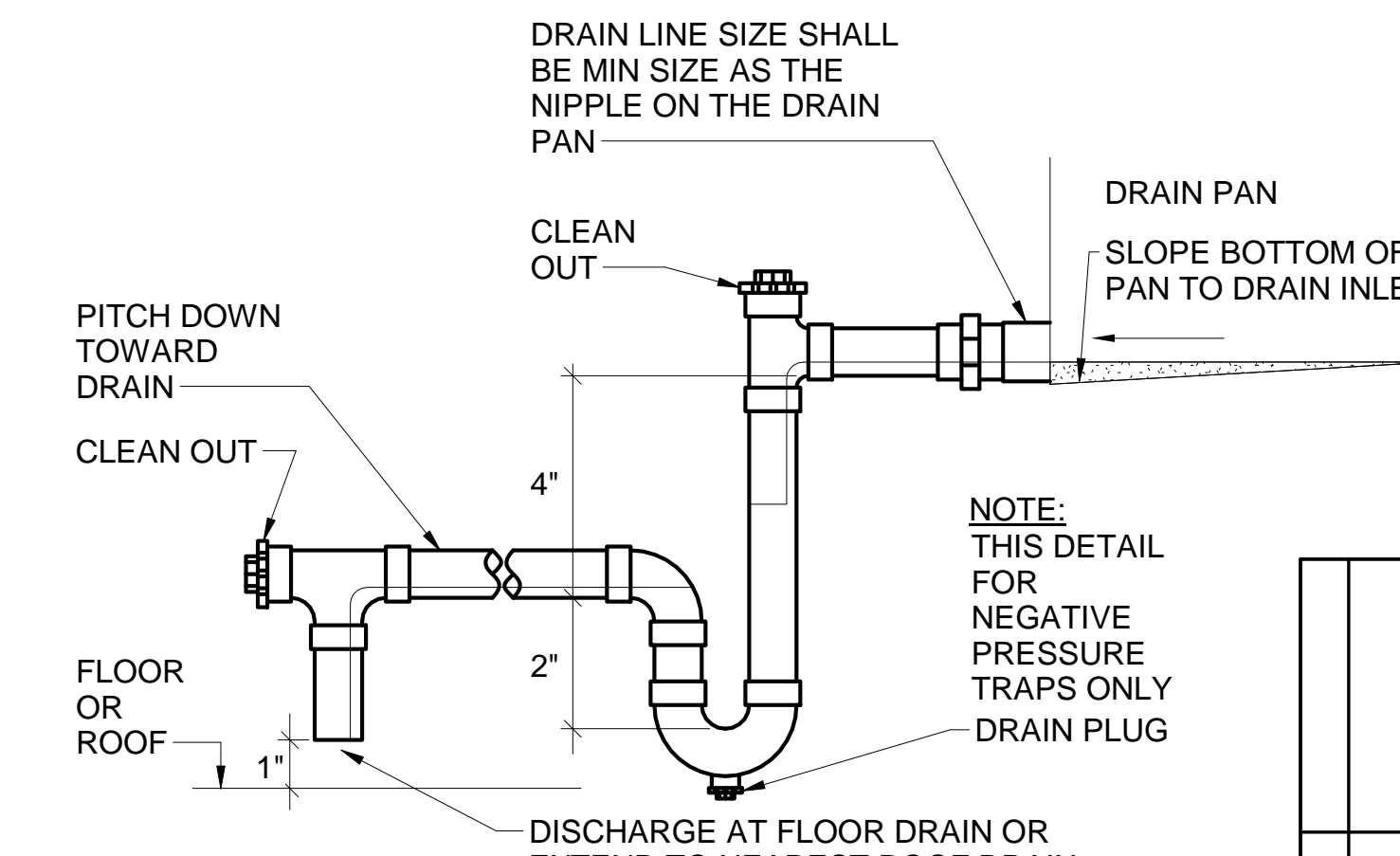
**NOTES**  
1. VALVES SHALL BE SAME SIZE AS PIPE.  
2. PROVIDE SPRING VIBRATION ISOLATORS FOR PUMP.

**13 INLINE PUMP PIPING DETAIL**  
M-501 / SCALE: N.T.S.



**NOTE:**  
VALVES AND SPECIALTIES SHALL BE SAME SIZE AS PIPE.

**14 SEPARATELY COUPLED END SUCTION PUMP DETAIL**  
M-501 / SCALE: N.T.S.



**NOTE:**  
THIS DETAIL FOR NEGATIVE PRESSURE TRAPS ONLY

**15 CONDENSATE TRAP DETAIL**  
M-501 / SCALE: N.T.S.

STATE OF MAINE PUBLIC SCHOOL PROJECT		DRAWN BY: KLG	
TITLE: PORTLAND PUBLIC SCHOOLS NEW FRED P. HALL ELEMENTARY SCHOOL LOCATION: 23 ORONO ROAD, PORTLAND, ME		CHECK BY: MSA	
MECHANICAL DETAILS 1		DATE: 03/17/17	
OAK POINT ASSOCIATES		M-501	
NO. DATE DESCRIPTION BY NO.		231 Main Street, Biddeford, Maine 04005	
REVISIONS		207.283.0191	