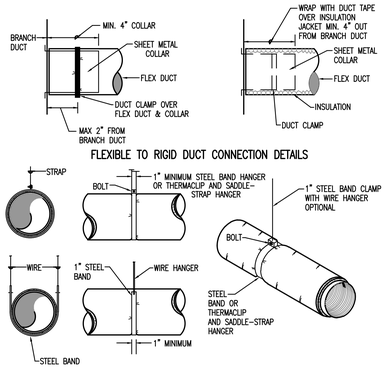
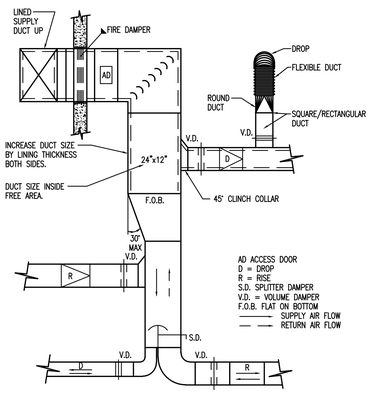


FLEXIBLE TO RIGID DUCT CONNECTION DETAILS

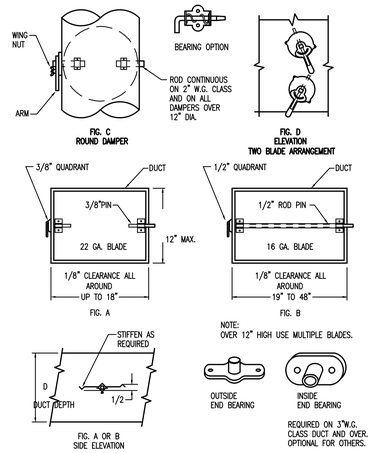
FLEXIBLE DUCT HANGER DETAILS

NOTE:
MAXIMUM PERMISSIBLE SAG PER FOOT 1/2" BETWEEN SUPPORTS.

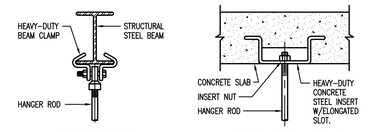
1 M3.00 **FLEXIBLE DUCT HANGER & CONNECTION DETAILS**
NO SCALE



2 M3.00 **TYPICAL FITTINGS & VOLUME DAMPER LOCATION IN SUPPLY OR RETURN DUCT SYSTEM**
NO SCALE



3 M3.00 **VOLUME DAMPERS - SINGLE BLADE TYPE**
NO SCALE



STEEL BEAM **CONCRETE INSERT**

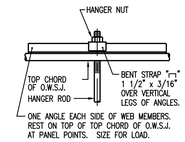
PIPE HANGERS AND SUPPORTS
SUPPORT HORIZONTAL STEEL AND COPPER PIPING AS FOLLOWS:

NOMINAL PIPE SIZE	DISTANCE BETWEEN SUPPORTS	HANGER ROD DIAMETERS
1/2"	6'	3/8"
3/4 TO 1-1/2"	8'	1/2"
2" TO 2-1/2"	10'	1/2"

PLACE HANGER WITHIN 1 FOOT OF EACH HORIZ. ELBOW.

PIPING 4 INCHES AND SMALLER (WITH INSULATION) TO BE MOUNTED TO NEW AND EXISTING CONCRETE/STRUCTURE WITH C-CLAMPS/STRAPS.

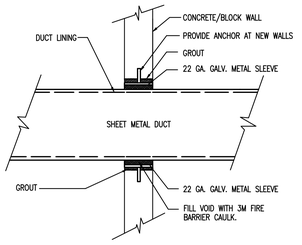
VERTICAL PIPING:
1. SUPPORT VERTICAL WATER PIPING AT EVERY FLOOR.
WHERE SEVERAL PIPES CAN BE INSTALLED IN PARALLEL AND AT SAME ELEVATION PROVIDE MULTIPLE OR TRAPEZE HANGERS.
WHERE PRACTICAL, SUPPORT RISER PIPING INDEPENDENTLY OF CONNECTED HORIZ. PIPING.



ONE ANGLE EACH SIDE OF WEB MEMBERS. REST ON TOP OF TOP CHORD OF O.W.S.J. AT PANEL POINTS. SIZE FOR LOAD.

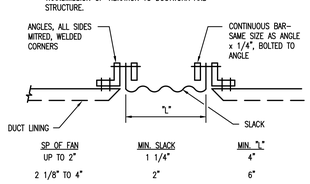
STEEL JOIST

4 M3.00 **PIPE HANGER DETAILS**
NO SCALE



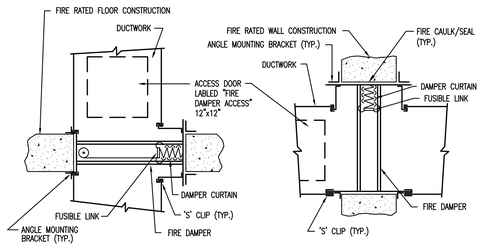
5 M3.00 **DUCT PASSING THROUGH WALL DETAIL**
NO SCALE

NOTE:
FLEXIBLE CONNECTION TO ISOLATE ALL DUCTS FROM ALL FANS AND FAN ENCLOSURES TO PREVENT TRANSMISSION OF VIBRATION TO DUCTWORK AND STRUCTURE.



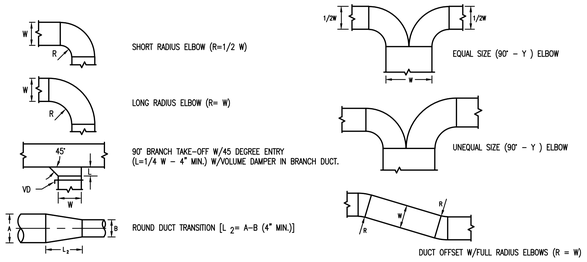
SP. OF FAN	MIN. SLACK	MIN. "L"
UP TO 2"	1 1/4"	4"
2 1/8" TO 4"	2"	6"

6 M3.00 **FLEXIBLE CONNECTION**
NO SCALE

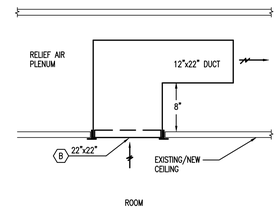


FLOOR DAMPER **WALL DAMPER**

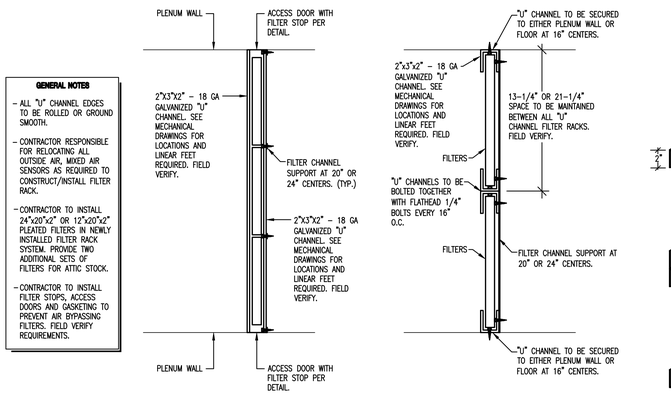
7 M3.00 **FIRE DAMPER DETAIL (FID)**
NO SCALE



8 M3.00 **TYPICAL DUCTWORK CONNECTIONS**
NO SCALE

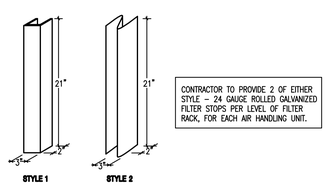


9 M3.00 **TYPICAL RELIEF GRILLE DETAIL**
NO SCALE



GENERAL NOTES
- ALL "U" CHANNEL EDGES TO BE ROLLED OR GROUND SMOOTH.
- CONTRACTOR RESPONSIBLE FOR RELOCATING ALL OUTSIDE AIR, MIXED AIR SENSORS AS REQUIRED TO CONSTRUCT/INSTALL FILTER RACK.
- CONTRACTOR TO INSTALL 24"x20"x2" OR 12"x20"x2" PLEATED FILTERS IN NEWLY INSTALLED FILTER RACK SYSTEM. PROVIDE TWO ADDITIONAL SETS OF FILTERS FOR ATTIC STOCK.
- CONTRACTOR TO INSTALL FILTER STOPS, ACCESS DOORS AND GASKETING TO PREVENT AIR BYPASSING FILTERS. FIELD VERIFY REQUIREMENTS.

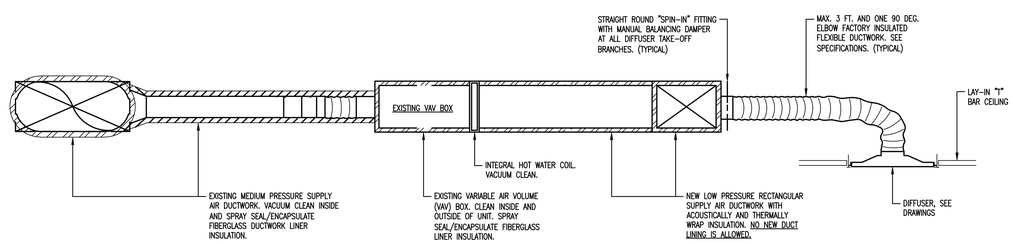
FILTER RACK DETAIL 1



CONTRACTOR TO PROVIDE 2 OF EITHER STYLE - 24 GAUGE ROLLED GALVANIZED FILTER STOPS PER LEVEL OF FILTER RACK, FOR EACH AIR HANDLING UNIT.

FILTER RACK DETAIL 3

10 M3.00 **FILTER RACK DETAILS**
NO SCALE



11 M3.00 **EXISTING VARIABLE AIR VOLUME BOX (VAV) DUCTWORK INSTALLATION DETAIL**
NO SCALE

TRIA ARCHITECTURE
MEP/FP CONSULTANT
(P) (630)538-1996
DAS
Douglas A. Arnold
Professional Engineer
No. 10010480 - STATE OF ILLINOIS

DUNELAND SCHOOL CORPORATION
2019 MECHANICAL RENOVATIONS AT:
JACKSON ELEMENTARY SCHOOL
811 N. 400 E. VALPARAISO, INDIANA 46383

REVISIONS
ISSUED FOR BID: 05/06/2019

PROJECT NUMBER: 18-0040
PROJECT MANAGER: TIG
DRAWN BY: DAS

DETAILS
MECHANICAL

DUNELAND SCHOOL CORPORATION
BUILDING CONSTRUCTION & MAINTENANCE

STATE REGISTERED MECHANICAL PROFESSIONAL ENGINEER
No. PE10911154
STATE OF INDIANA
EXPIRES 07/31/2020

M3.00

PLOTTED BY: LARRY ARNOLD DATE PLOTTED: 3/1/2019 11:14 AM FILE PATH AND NAME: P:\18-B-2 Jackson ES\M\18-B-2 - M300