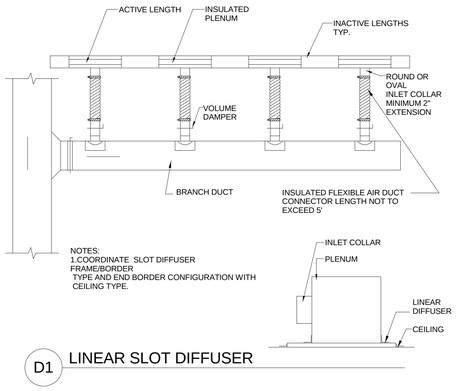
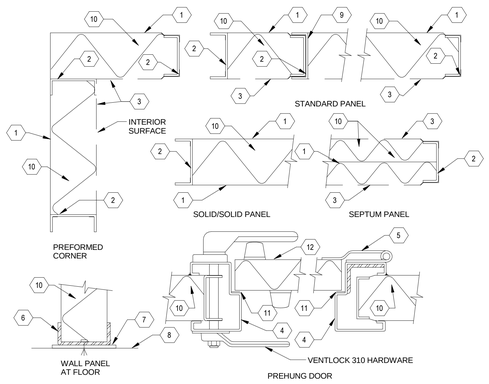



## D1 LINEAR SLOT DIFFUSER

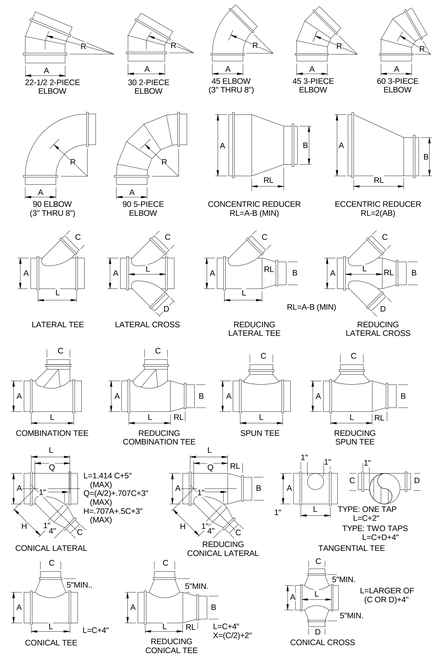



1. 18 GAUGE GALVANIZED SHEET METAL (MIN. GA.)
2. 16 GAUGE GALVANIZED SHEET METAL REINFORCING (MIN. GA.)
3. 22 GAUGE GALVANIZED PERFORATED SHEET METAL (MIN. GA.)
4. 16 GAUGE ALL WELDED FRAME (MIN. GA.)
5. 20 GAUGE GALVANIZED OFFSET HINGE.
6. CHANNEL ANCHORED SECURELY TO FINISH FLOOR.
7. GASKET MATERIAL FOR TIGHT SEAL, PER MFR. RECOMMENDATIONS.
8. FINISH FLOOR.
9. SEALING BEAD AT ALL LAP JOINTS FOR AIR TIGHT SEAL, (TYP.).
10. INSULATED PANELS, THICKNESS AS NOTED ON DRAWINGS.
11. GASKET, CONTINUOUS AROUND DOOR PERIMETER.
12. 20 GAUGE GALVANIZED SHEET METAL (MIN. GA.).

GENERAL NOTES:

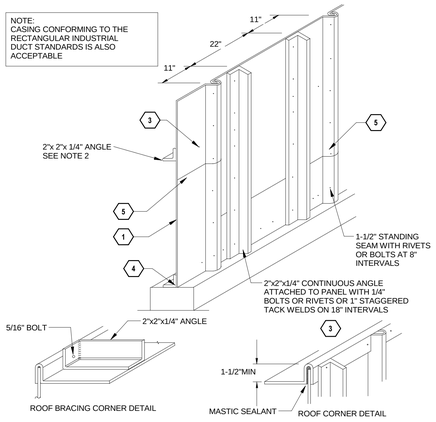
* SEPTUM PANELS SHALL BE INSTALLED AT INTERIOR PARTITIONS, AROUND COILS, AIR WASHERS, FILTERS, FAN DISCHARGE (INTERIOR) PLENUM PARTY WALLS.
* PIPING AND DUCT PENETRATIONS THRU WALLS AND CEILINGS OF PLENUM SHALL BE SEALED AIRTIGHT. FOLLOW MFR'S RECOMMENDATIONS.
* PANELS SHALL BE MFR'D BY SEMCO OR EQUIVALENT, UNITS HAVING CERTIFIED TEST DATA ON SOUND & THERMAL TRANSMISSION.
* ALL ACCESS DOORS SHALL BE 24" x 60" MIN. SIZE, UNLESS OTHERWISE NOTED

## A1 DOUBLE WALL PLENUM DETAIL
SCALE = NONE



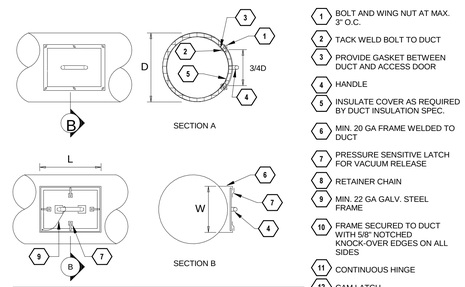

NOTE: SEE SPECIFICATIONS FOR DUCT MATERIALS AND CONSTRUCTION

## C2 MEDIUM VELOCITY AND ROUND DUCT FITTINGS
SCALE = NONE



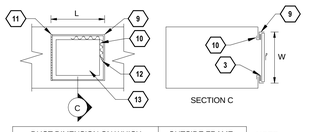

1. 6" W.G. CASING PANELS TO BE 18 GAUGE. 10" W.G. CASING PANELS TO BE 16 GAUGE.
2. THE MAXIMUM ROOF & WALL PANEL SPAN WITHOUT ANGLE BRACING PERENDICULAR TO THE PANEL SHALL BE AS FOLLOWS: UP THRU 6" S.P. TO BE 8'-0", OVER 6" THRU 10" S.P. TO BE 6'-0".
3. 5/16" BOLTS SHALL BE PLACED NEXT TO EVERY SEAM & THROUGH THE ANGLES & AT 8" MAX. INTERVALS.
4. ROOF & SIDE WALL ANGLES SHOULD BE TIED TO EQUIPMENT OR FILLER SHEETS. STAYS MAY BE REQUIRED DEPENDING ON EQUIPMENT SPACING.
5. PANELS CAN BE JOINED WITH A GROOVED SEAM STANDING SEAM TO THE INSIDE OF THE CASING, OR A BUTT WELD. REINFORCING ANGLES MUST BE CONTINUOUS.

## A2 PLENUM WALL DETAIL
SCALE = NONE




| W X L | ROUND DUCT DIAMETER | FLAT OVAL DUCT | |
|---|---|---|---|
| | | MAJOR AXIS WHEN MOUNTED ON MAJOR AXIS | MINOR AXIS WHEN MOUNTED ON MAJOR AXIS |
| 8" X 12" | 8" - 12" | 8" - 16" | 8" - 11" |
| 12" X 12" | 13" X 18" | 17" - 24" | 12" - 13" |
| 14" X 20" | 19" + | 25" + | 14" + |

ROUND OR FLAT OVAL DUCT, 8" +



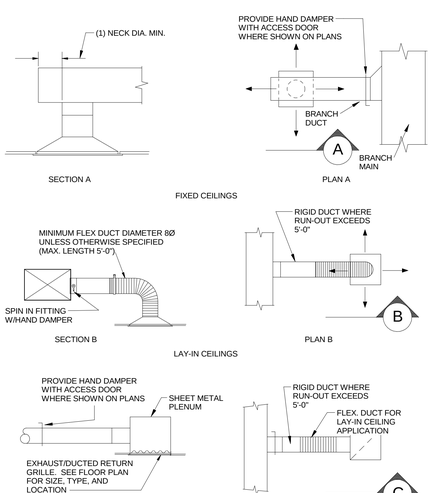

| DUCT DIMENSION ON WHICH ACCESS DOOR IS PLACED | OUTSIDE FRAME W X L |
|---|---|
| 6" - 8" | 5" X 12" |
| 9" - 12" | 8" X 8" |
| 13" - 15" | 12" X 12" |
| 16" - 33" | 14" X 14" |
| 34" - 66" | (2) 14" X 14" |
| 67" + | (3) 14" X 14" |

RECTANGULAR DUCTS

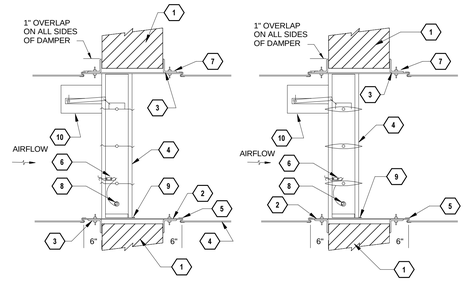
NOTE:
DUCT ACCESS DOORS SHALL BE PROVIDED AT EACH FIRE DAMPER, SMOKE DAMPER, DUCT MOUNTED EQUIPMENT, AND AS REQUIRED FOR DUCT CLEANING AND INSPECTION

1. BOLT AND WING NUT AT MAX. 3" O.C.
2. TACK WELD BOLT TO DUCT
3. PROVIDE GASKET BETWEEN DUCT AND ACCESS DOOR
4. HANDLE
5. INSULATE COVER AS REQUIRED BY DUCT INSULATION SPEC.
6. MIN. 20 GA FRAME WELDED TO DUCT
7. PRESSURE SENSITIVE LATCH FOR VACUUM RELEASE
8. RETAINER CHAIN
9. MIN. 22 GA GALV. STEEL FRAME
10. FRAME SECURED TO DUCT WITH 5/8" NOTCHED KNOCK-OVER EDGES ON ALL SIDES
11. CONTINUOUS HINGE
12. CAM LATCH
13. MIN. 22 GA DOOR

## C4 DUCT ACCESS DOOR DETAIL
SCALE = NONE



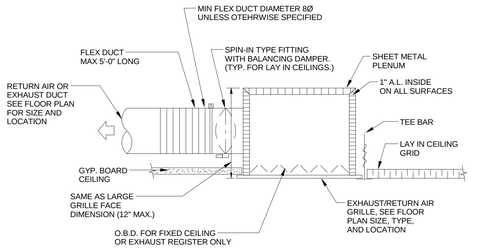

## A4 DIFFUSER AND REGISTER CONNECTION DETAIL
SCALE = NONE



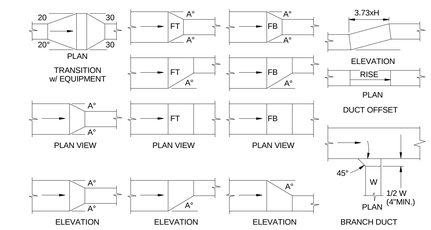

1. WALL OR FLOOR
2. SLEEVE - SEE INSTALLATION NOTES
3. MOUNTING ANGLES CONTINUOUS AROUND SLEEVE WITH MINIMUM 1" OVERLAP
4. SQUARE OR RECTANGULAR DAMPER FRAME FOR ROUND OR OVAL DUCTS, PROVIDE DUCT TRANSITION
5. BREAKAWAY DUCT CONNECTION - SEE INSTALLATION NOTES
6. FIRE DAMPER FUSIBLE LINK (NOT REQUIRED FOR COMBINATION FIRE/SMOKE DAMPERS OR SMOKE DAMPERS)
7. 1/4" MINIMUM EXPANSION CLEARANCE - SEE INSTALLATION NOTES
8. NEGATIVE SPRING (NOT REQUIRED FOR COMBINATION FIRE/SMOKE DAMPER OR SMOKE DAMPERS)
9. APPROVED CAULKING MATERIAL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS
10. U.L. APPROVED DAMPER ACTUATOR ASSEMBLY WITH MOUNTING BRACKET, ELECTRIC FUSE LINK, AND OPERATING JACK SHAFT LINKAGE. DAMPER ACTUATOR SHALL BE MOUNTED ON DUCT OUTSIDE AIR STREAM

* FUSIBLE ROD IS NOT REQUIRED FOR SMOKE DAMPER APPLICATION

## C5 FIRE DAMPER, SMOKE DAMPER, AND COMBINATION FIRE SMOKE DAMPER DETAILS
SCALE = NONE




## B5 RETURN AIR AND EXHAUST REGISTER DETAIL
SCALE = NONE




NOTES
1. ANGLE A=30 MAXIMUM WHEN AIR FLOWS IN DIRECTION OF ARROWS. (SUPPLY AIR)
2. ANGLE A=15 WHEN AIR FLOWS IN OPPOSITE DIRECTION OF ARROWS (R.A. OR EXHAUST)

## A5 LOW VELOCITY DUCT FITTING DETAIL
SCALE = NONE

COMPLETION ITEM NO. ____

FULLY SPRINKLERED

| # | Revisions | Date |
|---|---|---|
| | | |

**CONSULTANTS:**

Architect — Engineer

MICHAEL E. DEXTER STATE OF NEW MEXICO 7170 REGISTERED PROFESSIONAL ENGINEER
Date: 09/25/2014

**ARCHITECT/ENGINEERS**

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4600-C MONTGOMERY BLVD. NE ALBUQUERQUE, NEW MEXICO 87109 505/883-4111 FAX 505/888-1436
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| | |
|---|---|
| Drawing Title | MECHANICAL DETAILS |
| Approved: Project Director | |
| Project Title | MICU-SICU CONSOLIDATION & PACU BUILDING 41 |
| Location | NMVAHCS RAYMOND G. MURPHY VAMC |
| Date | SEPTEMBER 26, 2014 |
| Checked | ROS |
| Drawn | ACB |
| Project Number | 501-324 |
| Building Number | BUILDING 41 |
| Drawing Number | M501 |
| Dwg. Of | |

Office of Construction and Facilities Management
Department of Veterans Affairs

file path
9/25/2014 2:52:17 PM
three inches = one foot
three-quarter inch = one foot
one and one-half inches = one foot
one inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot