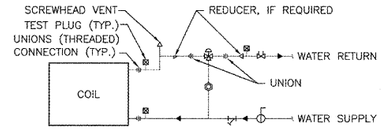


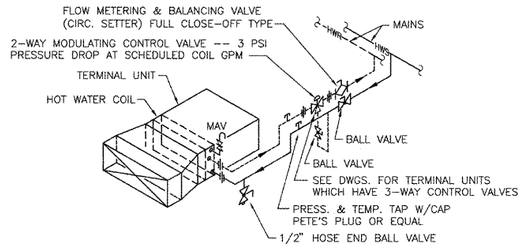
NOTE:

A STRAIGHT-THRU MODULATING CONTROL VALVE IS SHOWN BY SOLID PIPING. WHEN CONTROL DIAGRAM INDICATES THAT A THREE-WAY MODULATING CONTROL VALVE IS REQUIRED, PROVIDE DASHED PIPING AND FITTINGS ALSO.

B1 TYPICAL COIL PIPING CONNECTIONS TO VAV BOXES

SCALE: NONE

UNIT HW COIL FLOW RANGE	PIPE RUNOUT SIZE
0 – 2.3 GPM	3/4"
2.4 – 5.0 GPM	1"
5.1 – 8.6 GPM	1-1/4"
8.7 – 14.0 GPM	1-1/2"
14.1 – 30.0 GPM	2"

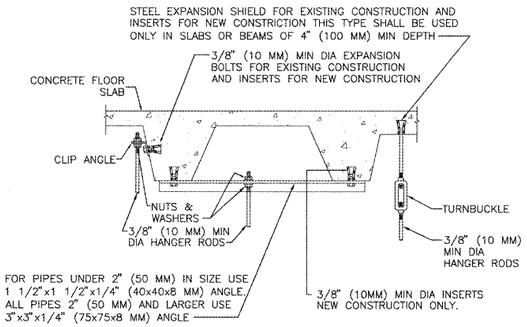


NOTE: LOCATE MANUAL VENT PIPE AND DRAIN VALVE WHERE ACCESSIBLE FOR BUCKET.

ALL VALVES, BAL. DEVICES, ETC., SHALL BE LINE SIZE, MIN.

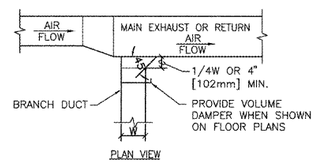
C3 AIR TERMINAL UNIT COIL PIPING SCHEMATIC

SCALE: NONE



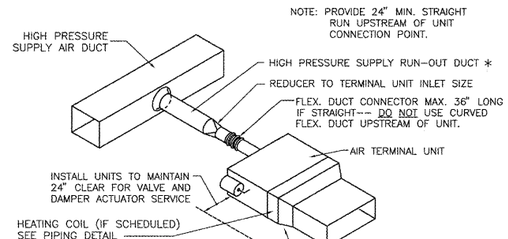
C1 TYPICAL METHOD OF SECURING HANGER RODS IN CONCRETE SLABS AND BEAMS

SCALE: NONE



C3 EXHAUST/RETURN BRANCH DUCTWORK

SCALE: NONE

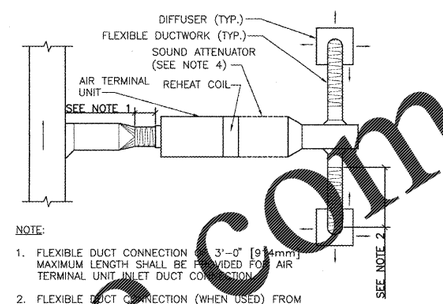


* IF RUNOUT LENGTH EXCEEDS 5 FT. AND IS NOT SIZED ON THE DRAWINGS, THE RUNOUTS SHALL BE SIZED BY THE FOLLOWING SCHEDULE:

SCHED. MAX. CFM	RUNOUT SIZE	SCHED. MAX. CFM	RUNOUT SIZE
0–100	5"ø	380–520	9"ø
110–170	6"ø	530–690	10"ø
180–270	7"ø	700–890	11"ø
280–370	8"ø	900–1100	12"ø

C6 AIR TERMINAL UNIT INSTALLATION DETAIL

SCALE: NONE

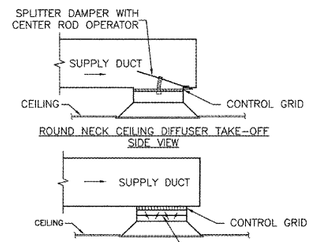


NOTE:

1. FLEXIBLE DUCT CONNECTION MAX. 3'-0" [914mm] MAXIMUM LENGTH SHALL BE PROVIDED FOR AIR TERMINAL UNIT INLET DUCT CONNECTION.
2. FLEXIBLE DUCT CONNECTION (WHEN USED) FROM TERMINAL UNIT SUPPLY AIR OUTLET TO DIFFUSER SHALL NOT EXCEED 5'-0" [1524mm].
3. BENDS SHALL BE MADE WITH NOT LESS THAN ONE DUCT DIAMETER CENTER LINE RADIUS.
4. USE SOUND ATTENUATOR ONLY IF REQUIRED TO MEET DESIGN ROOM NC LEVEL.

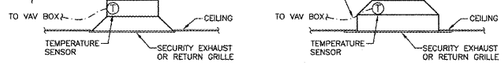
B9 FLEXIBLE DUCT CONNECTION FOR AIR TERMINAL UNITS

SCALE: NONE



D9 CEILING DIFFUSER DUCTWORK TAKE-OFFS

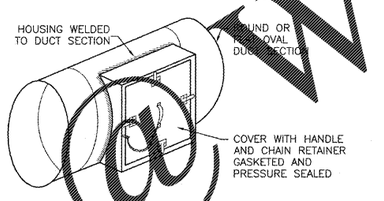
SCALE: NONE



ROUND AND/OR SQUARE NECK RETURN OR EXHAUST GRILLE SIDE VIEW

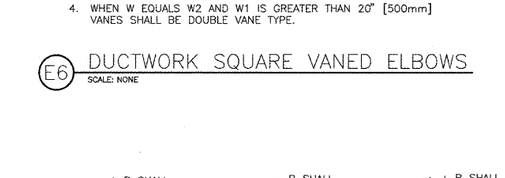
E1 TEMPERATURE SENSOR MOUNTING DETAIL

SCALE: NONE



E2 ACCESS SECTION FOR ROUND DUCT

SCALE: NONE

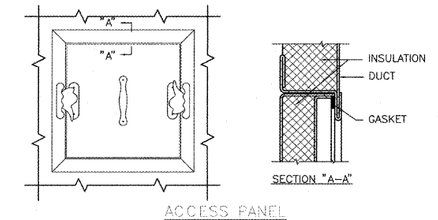


NOTES:

1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE VANES SHALL HAVE A 2" [50mm] RADIUS, 1 1/2" [40mm] MAXIMUM SPACE BETWEEN VANES AND A 3/4" [20mm] TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" [500mm] VANES SHALL BE DOUBLE VANE TYPE.

E6 DUCTWORK SQUARE VANED ELBOWS

SCALE: NONE

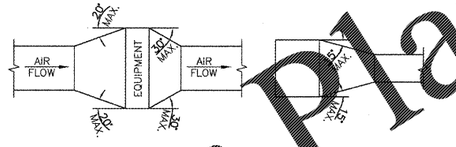


NOTES:

1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.
2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.

F9 ACCESS PANELS/DOORS

SCALE: NONE



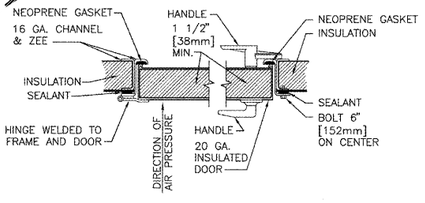
TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT PLAN OR SIDE VIEW

TYPICAL DUCTWORK TRANSITION PLAN OR SIDE VIEW

NOTE:
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT

SCALE: NONE



F3 ACCESS PANEL FOR HIGH PRESSURE DUCT SYSTEMS

SCALE: NONE

F6 DUCTWORK RADIUS ELBOWS

SCALE: NONE

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2. ASSISTANT DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COR

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Checked | Reviewed | Const. Contract No.

Date: February 10, 2017
Project Number: 509-12-104
DRAWING No.: M501

Veterans Affairs