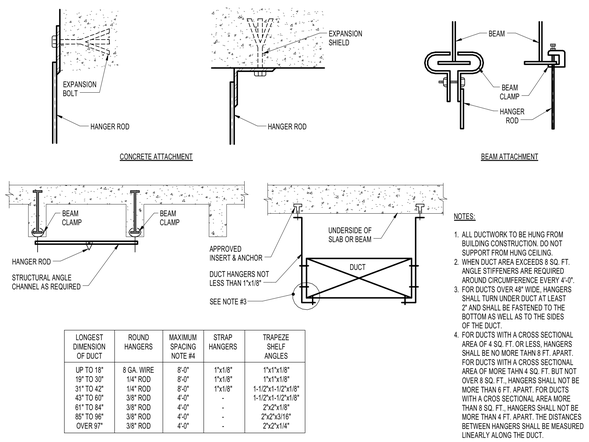


1 LOW PRESSURE BRANCH TAKE OFF
SCALE: NTS

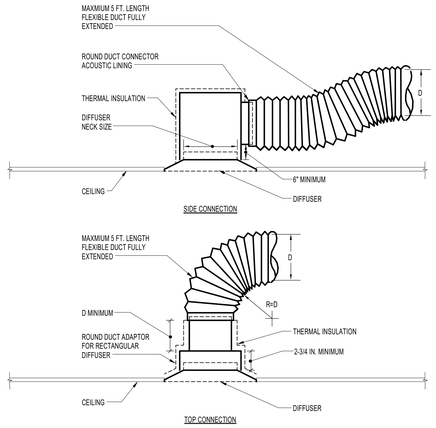


LONGEST DIMENSION OF DUCT	ROUND HANGERS	MAXIMUM SPACING NOTE #4	STRAP HANGERS	TRAPEZE SHELF ANGLES
UP TO 18"	8 GA. WIRE	8'-0"	1"x1/8"	1"x1"x1/8"
19" TO 30"	1/4" ROD	8'-0"	1"x1/8"	1"x1"x1/8"
31" TO 42"	1/4" ROD	8'-0"	1"x1/8"	1-1/2"x1-1/2"x1/8"
43" TO 60"	3/8" ROD	4'-0"	-	1-1/2"x1-1/2"x1/8"
61" TO 84"	3/8" ROD	4'-0"	-	2"x2"x1/8"
85" TO 96"	3/8" ROD	4'-0"	-	2"x2"x3/16"
OVER 97"	3/8" ROD	4'-0"	-	2"x2"x1/4"

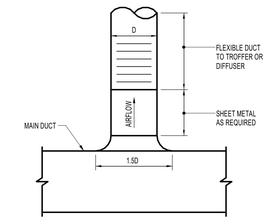
NOTES:

1. ALL DUCTWORK TO BE HUNG FROM BUILDING CONSTRUCTION. DO NOT SUPPORT FROM HUNG CEILING.
2. WHEN DUCT AREA EXCEEDS 8 SQ. FT. ANGLE STIFFENERS ARE REQUIRED AROUND CIRCUMFERENCE EVERY 4'-0".
3. FOR DUCTS OVER 48" WIDE, HANGERS SHALL TURN UNDER DUCT AT LEAST 2" AND SHALL BE FASTENED TO THE BOTTOM AS WELL AS TO THE SIDES OF THE DUCT.
4. FOR DUCTS WITH A CROSS SECTIONAL AREA OF 4 SQ. FT. OR LESS, HANGERS SHALL BE NO MORE THAN 8 FT. APART. FOR DUCTS WITH A CROSS SECTIONAL AREA OF MORE THAN 4 SQ. FT. BUT NOT OVER 8 SQ. FT., HANGERS SHALL NOT BE MORE THAN 6 FT. APART. FOR DUCTS WITH A CROS SECTIONAL AREA MORE THAN 8 SQ. FT., HANGERS SHALL NOT BE MORE THAN 4 FT. APART. THE DISTANCES BETWEEN HANGERS SHALL BE MEASURED LINEARLY ALONG THE DUCT.

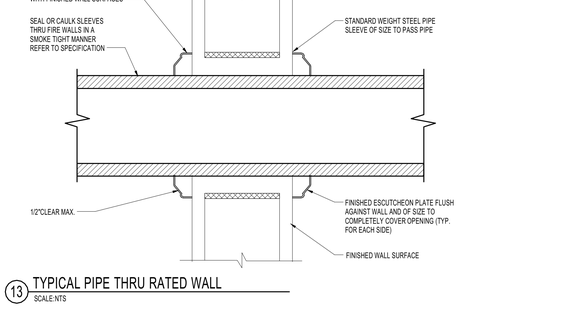
2 DUCT SUPPORT
SCALE: NTS



3 DIFFUSER CONNECTION
SCALE: NTS



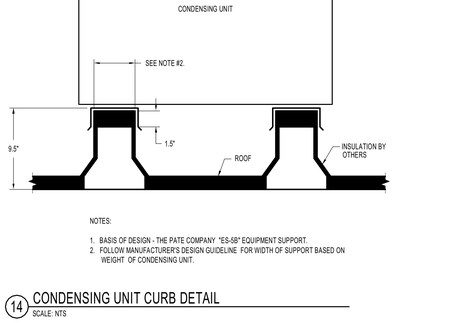
4 CIRCULAR BRANCH CONNECTION TO SINGLE OUTLET
SCALE: NTS



NOTES:

1. PROVIDE DRAIN PAN UNDER AC UNIT. OVERFLOW DETECTOR ON DRAIN PAN SHALL SHUTDOWN UNIT IN OVERFLOW CONDITIONS.
2. MAKE PAN 12" LARGER THAN AC UNIT ON ALL FOUR (4) SIDES.
3. MAKE UPSTANDING SIDES 1 1/2" WITH 1/2" HEM TURNED DOWN OUTSIDE OF PAN.
4. USE 16 GA. GALV. WITH SOLDERED CORNERS FOR WATERTIGHTNESS.

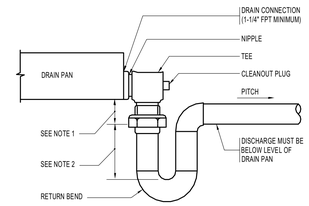
5 AC UNIT SUPPORT
SCALE: NTS



NOTES:

1. FURNISH THIS TYPE CONNECTION WHEN SINGLE LINE DUCTWORK IS INDICATED AS FOR LOW PRESSURE BRANCHES WITH LESS THAN 700 CFM AND MEDIUM PRESSURE BRANCHES WITH LESS THAN 1,000 CFM.
2. NOT TO BE USED AS A SUBSTITUTE FOR AN ELBOW.

6 RECTANGULAR DUCT ANGULAR TAP WITH VOLUME DAMPER
SCALE: NTS



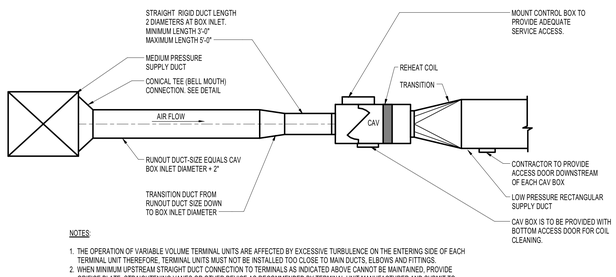
NOTES:

1. LOCATE PIPE UNIONS AND ARRANGE PIPING TO FACILITATE COIL REMOVAL.
2. FOR SIZES "A" SEE PLANS AND FLOW DIAGRAMS.

7 HOT WATER REHEAT COIL CONNECTIONS ONE HIGH
SCALE: NTS

WHERE STRUCTURAL SLAB DOES NOT PERMIT INSERTS. SUPPORT PIPING FROM STRUCTURE WITH AUXILIARY STEEL IF REQUIRED.

8 WATER PIPING HANGER
SCALE: NTS



NOTES:

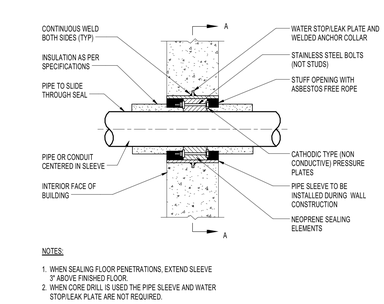
1. THE OPERATION OF VARIABLE VOLUME TERMINAL UNITS ARE AFFECTED BY EXCESSIVE TURBULENCE ON THE ENTERING SIDE OF EACH TERMINAL UNIT THEREFORE, TERMINAL UNITS MUST NOT BE INSTALLED TOO CLOSE TO MAIN DUCTS, ELBOWS AND FITTINGS.
2. WHEN MINIMUM UPSTREAM STRAIGHT DUCT CONNECTION TO TERMINALS AS INDICATED ABOVE CANNOT BE MAINTAINED, PROVIDE ORIFICE PLATE, STRAIGHTENING VANES OR OTHER DEVICE AS RECOMMENDED BY TERMINAL UNIT MANUFACTURER AND SUBMIT TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
3. MANUFACTURER OF TERMINAL UNIT SHALL PROVIDE CONTROLS ON LEFT OR RIGHT SIDE AS REQUIRED BY FIELD CONDITIONS.
4. ARRANGE ACCESS TO PERMIT EASY FIELD BALANCE AND MAINTENANCE OF TERMINAL UNIT.

9 TERMINAL REHEAT BOX CONNECTIONS (CAV OR VAV)
SCALE:NTS

NOTES:

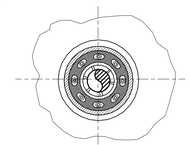
1. X" = MINIMUM DROP EQUAL TO NEGATIVE INTERNAL STATIC PRESSURE AT FAN INLET
2. X/2 + 1" = (MINIMUM 5 INCHES)
3. ADD STRUCTURAL STEEL TO RAISE THE BOTTOM OF THE UNIT TO ACCOMODATE DROP AND TRAP HEIGHT
4. PITCH DRAIN FOR PROPER RUN-OFF AND DISCHARGE TO APPROVED RECEPTACLE.
5. SUPPORT DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.
6. MANUALLY PRIME FILL TRAP BEFORE START-UP TO TO FORM INITIAL DRAIN SEAL.

11 DRAIN PAN WATER SEAL PIPING DRAW THRU UNIT
SCALE: NTS



NOTES:

1. WHEN SEALING FLOOR PENETRATIONS, EXTEND SLEEVE 3" ABOVE FINISHED FLOOR.
2. WHEN CORE DRILL IS USED THE PIPE SLEEVE AND WATER STOP/LEAK PLATE ARE NOT REQUIRED.



SECTION A-A

12 MOLDED RUBBER BOLTED SEAL ASSEMBLY
SCALE: NTS

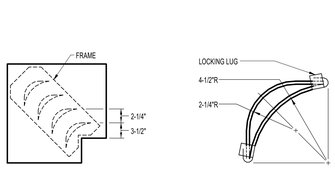
13 TYPICAL PIPE THRU RATED WALL
SCALE:NTS

NOTES:

1. BASIS OF DESIGN - THE PATE COMPANY "ES-58" EQUIPMENT SUPPORT.
2. FOLLOW MANUFACTURER'S DESIGN GUIDELINE FOR WIDTH OF SUPPORT BASED ON WEIGHT OF CONDENSING UNIT.

14 CONDENSING UNIT CURB DETAIL
SCALE: NTS

10 DOUBLE THICKNESS TURNING VANES FOR SQUARE ELBOWS
SCALE: NTS



NOTES:

1. LOCKING LUGS INTERNAL WITH VANE.
2. MAXIMUM UNSUPPORTED VANE LENGHT 48".
3. FRAMES - BOLTED OR RIVETED TO ELBOW.
4. VANES AND FRAMES - SAME GAUGE AS ELBOW.

Reviewed for Code Compliance
Planning & Urban Development Division
Approved with Conditions
Date: 10/16/15

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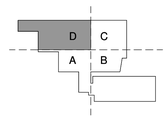
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Revisions

NO	ISSUE	DATE
	ISSUED FOR PERMIT	08.21.2015
1	ADDENDUM 1	08.21.2015

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Drawn	TU
Checked	DPR
Approved	DPR

Title

MECHANICAL DETAILS

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