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ISSUE:

Issued for Permit
08.05.2016

PROJECT: 16-018

Hampton Inn & Suites

New Stanton, PA 15672

OWNER:

Stanton Hospitality LLC

52 Blueberry Lane,
Grove City, PA 16127

No.	Issue Date	Project Status

DATE 2016.08.05

DRAWN BY HAB

CHECKED BY GWV

SCALE AS NOTED

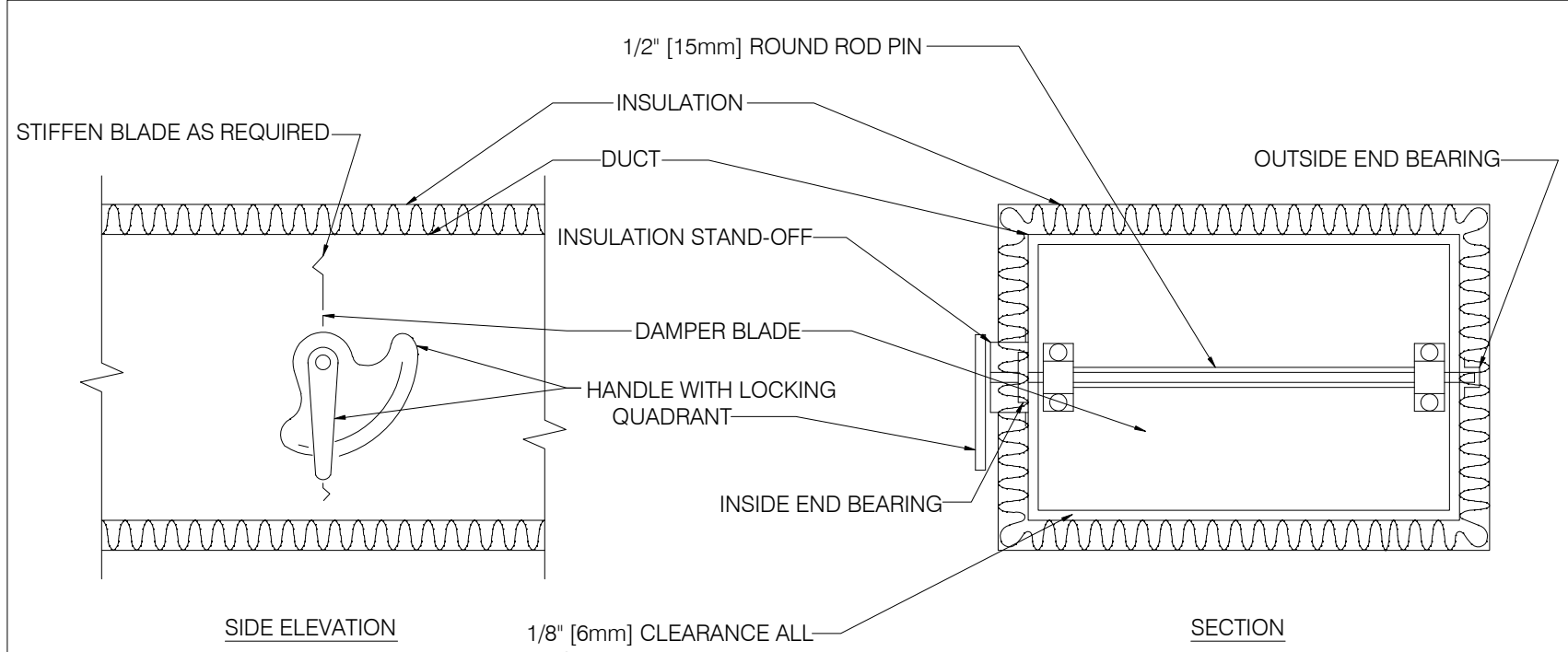
PROJECT NO. B4-67-1603

SHEET NAME

DETAILS-2

SHEET NO.

M102

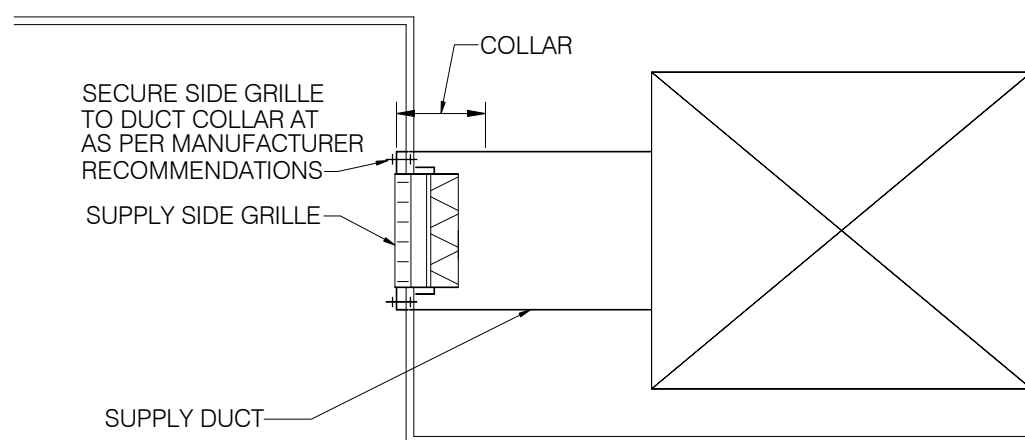


NOTE:

1. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

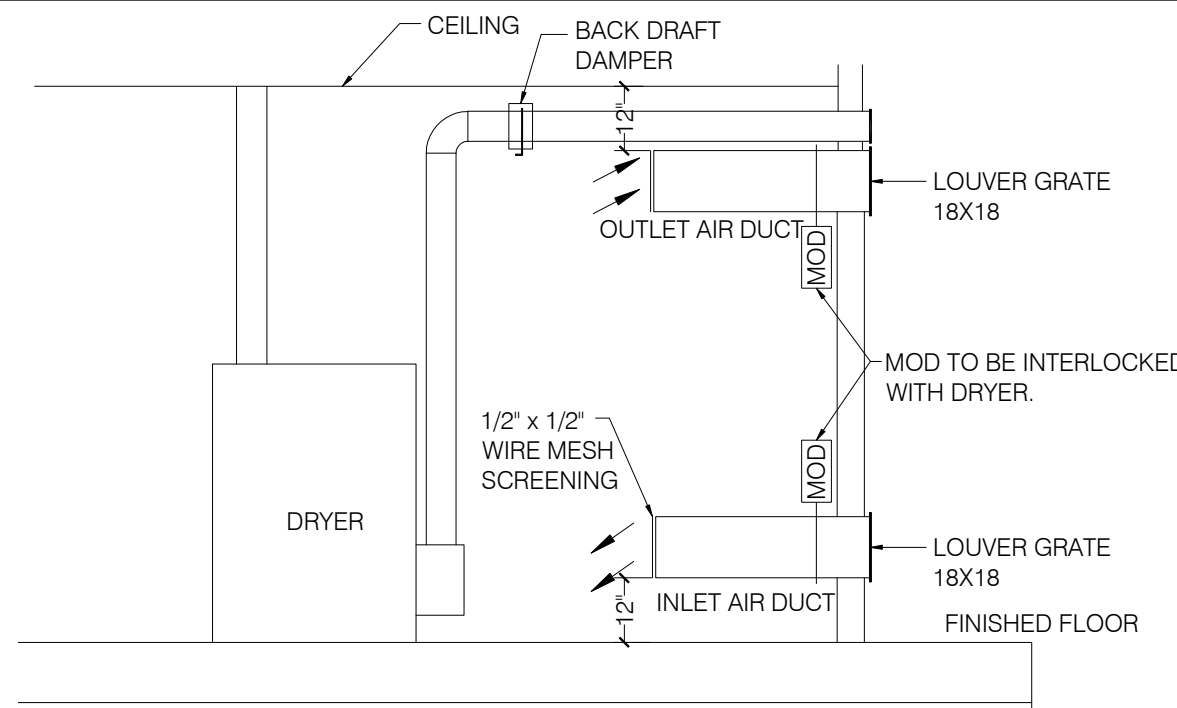
10 VOLUME DAMPER DETAIL

NOT TO SCALE



11 SIDE GRILLE MOUNTING DETAIL

NOT TO SCALE

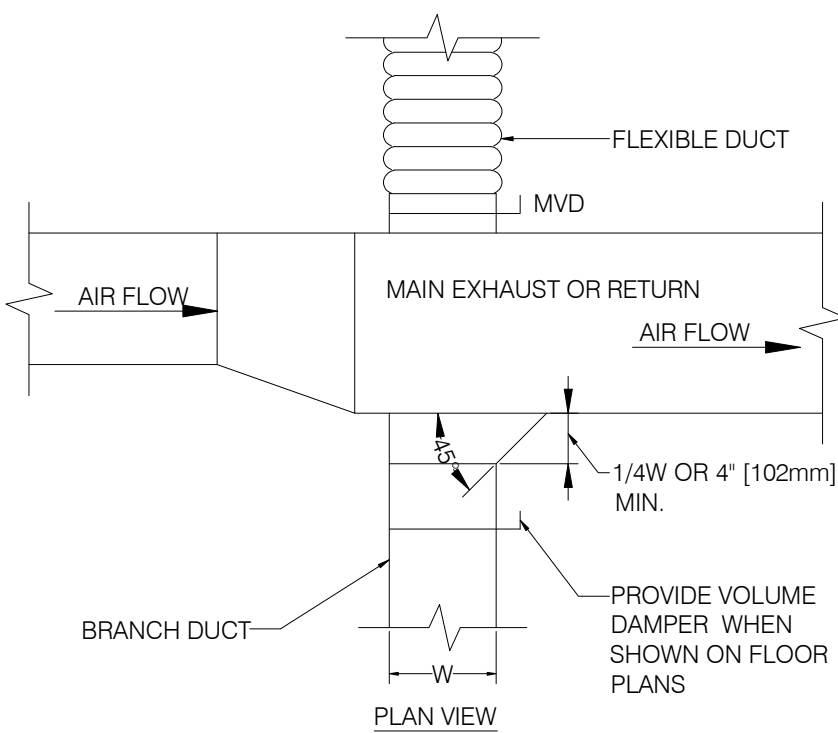


NOTE:

1. REFER TO MANUFACTURER'S RECOMMENDATION & IFC 304 FOR DUCT AND LOUVER SIZES.
2. WHERE THE SOURCE OF CONTAMINANT IS LOCATED WITHIN 10' HORIZONTALLY OF INTAKE OPENING, SUCH OPENING SHALL BE LOCATED A MINIMUM OF 2' BELOW THE CONTAMINANT SOURCE AS PER IMC 401.4.
3. THE INSTALLATION OF DRYER EXHAUST DUCTS SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND IMC 504.7.

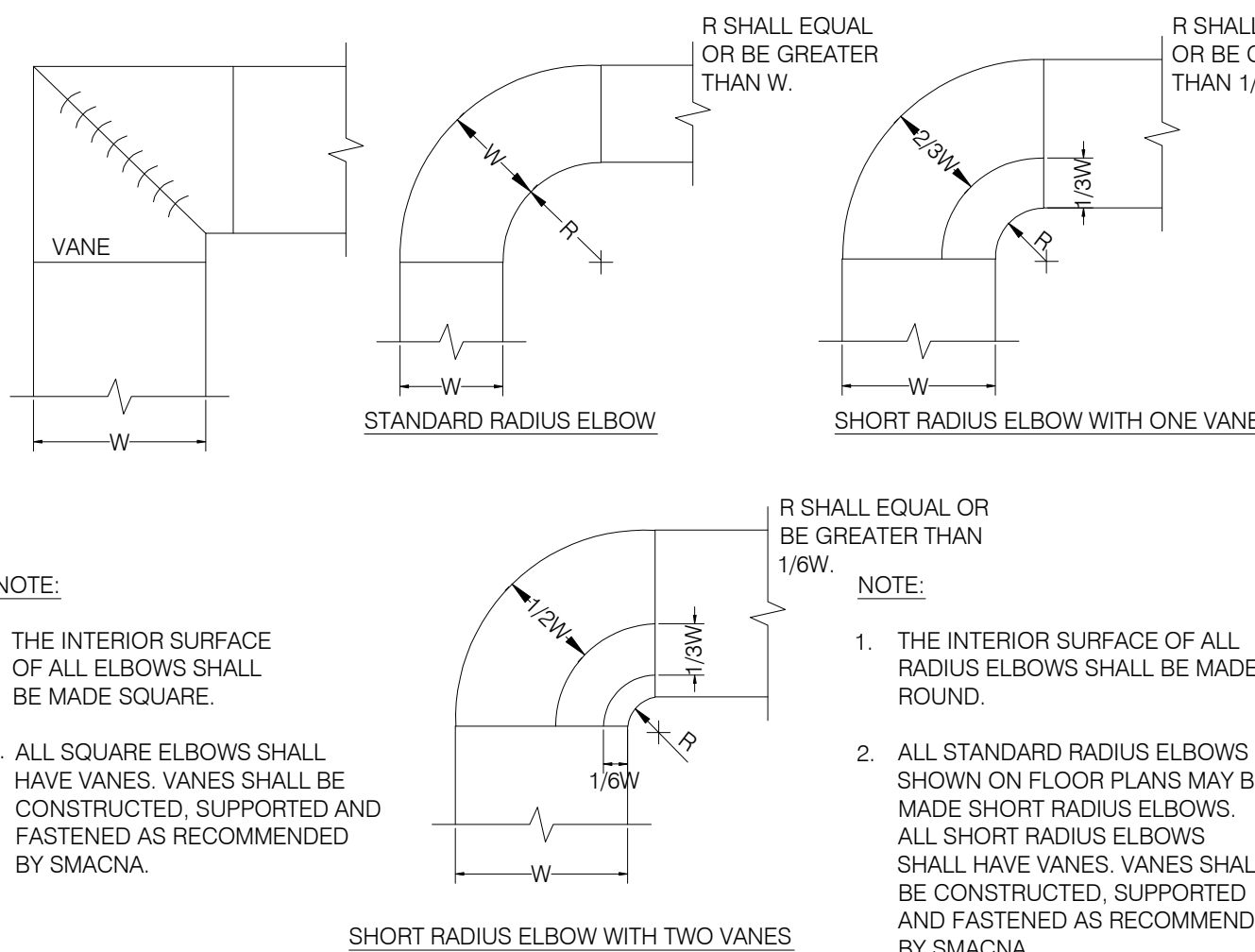
12 DRYER EXHAUST DETAIL

NOT TO SCALE



13 EXHAUST OR RETURN BRANCH DUCTWORK

NOT TO SCALE



NOTE:

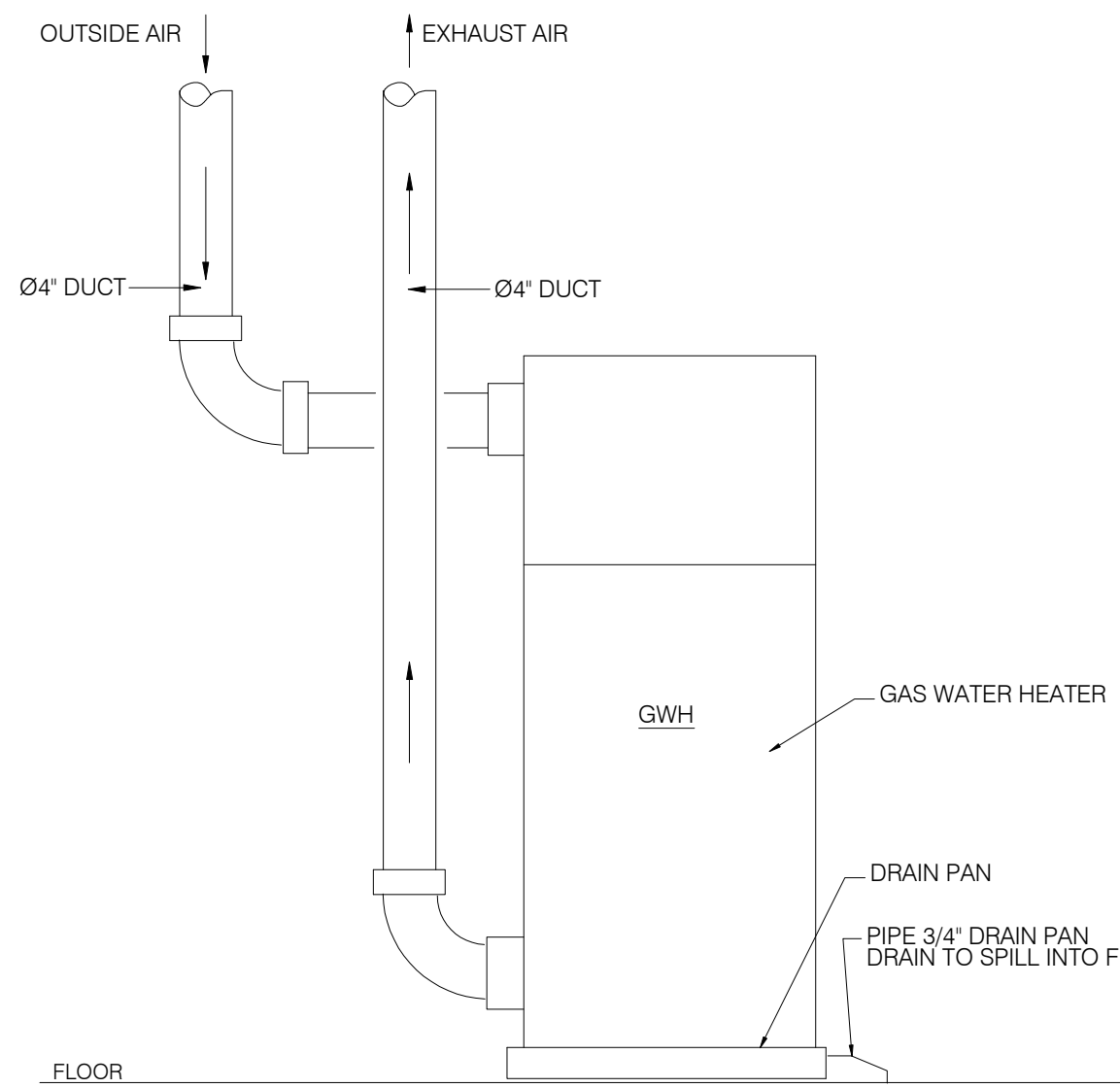
1. THE INTERIOR SURFACE OF ALL ELBOWS SHALL BE MADE SQUARE.
2. ALL SQUARE ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

NOTE:

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS SHOWN ON FLOOR PLANS MAY BE MADE SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

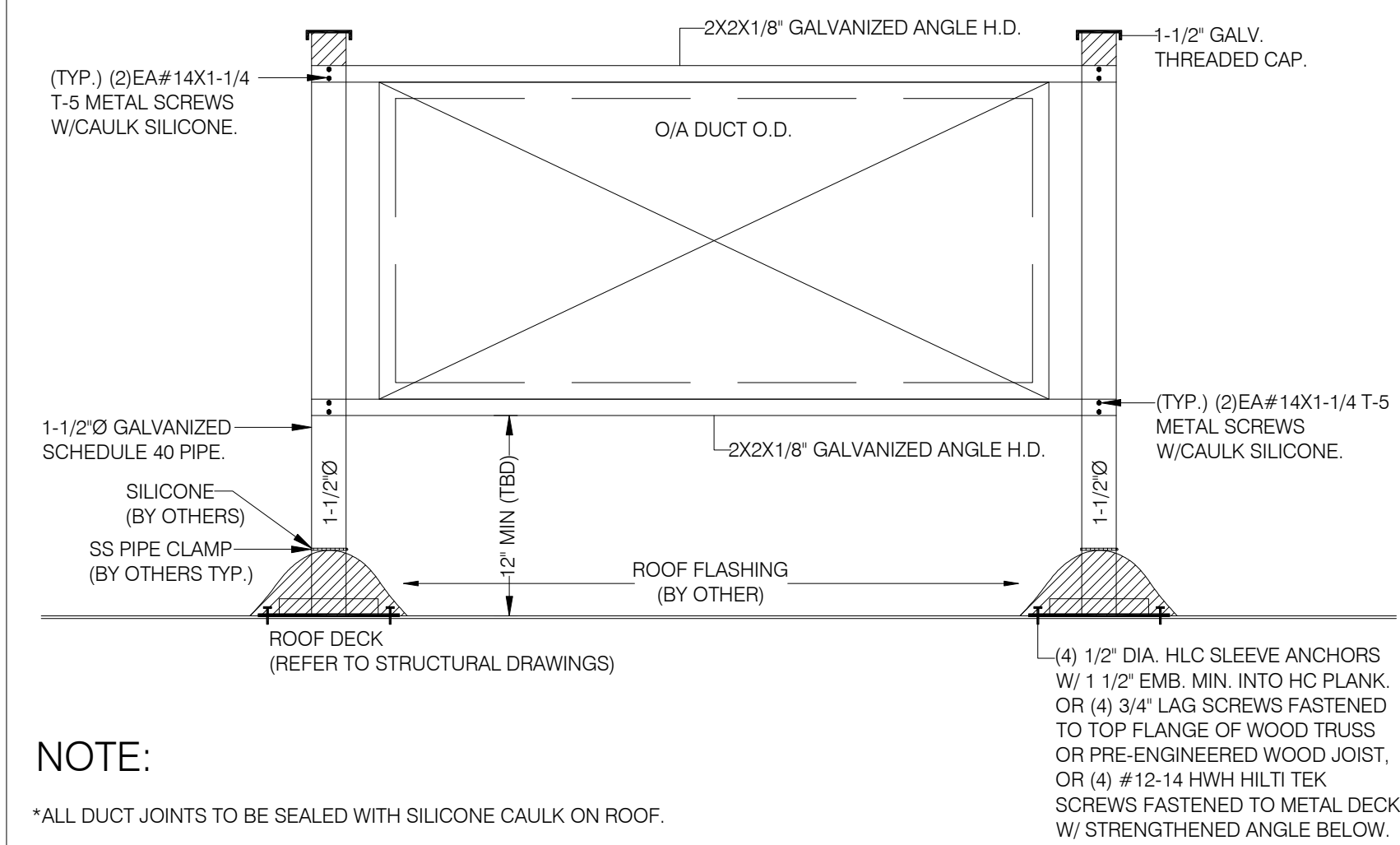
14 DUCTWORK SQUARE & RADIUS ELBOWS

NOT TO SCALE



15 WATER HEATER DETAIL

NOT TO SCALE

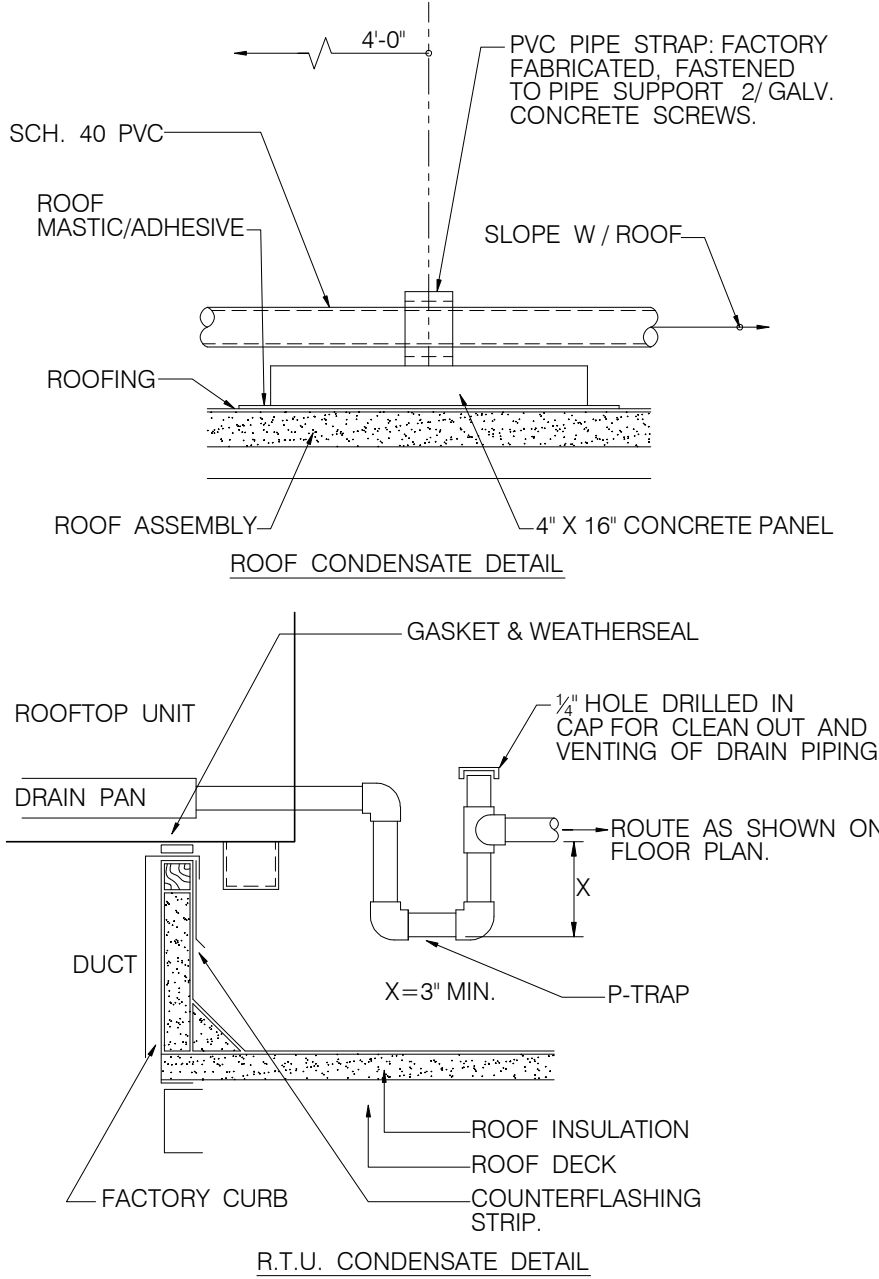


NOTE:

- *ALL DUCT JOINTS TO BE SEALED WITH SILICONE CAULK ON ROOF.
- *TOP OF DUCT TO BE PITCHED TO SHED WATER.

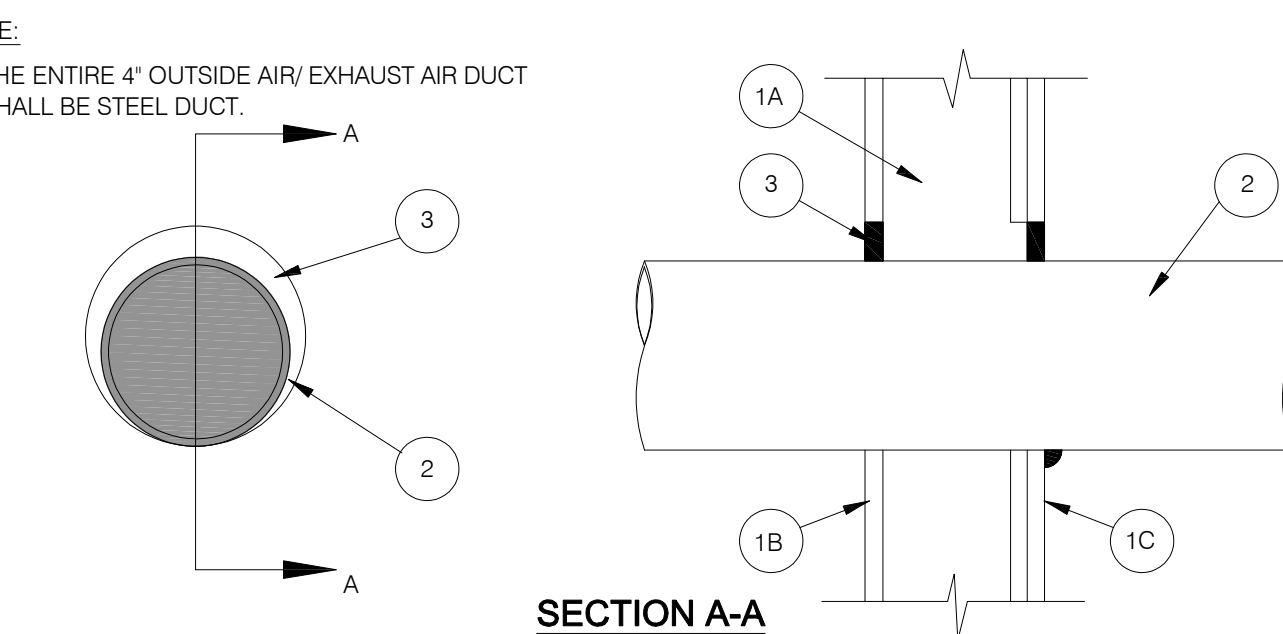
17 DUCT ROOF SUPPORT DETAIL

NOT TO SCALE



18 MAU CONDENSATE DETAIL

NOT TO SCALE



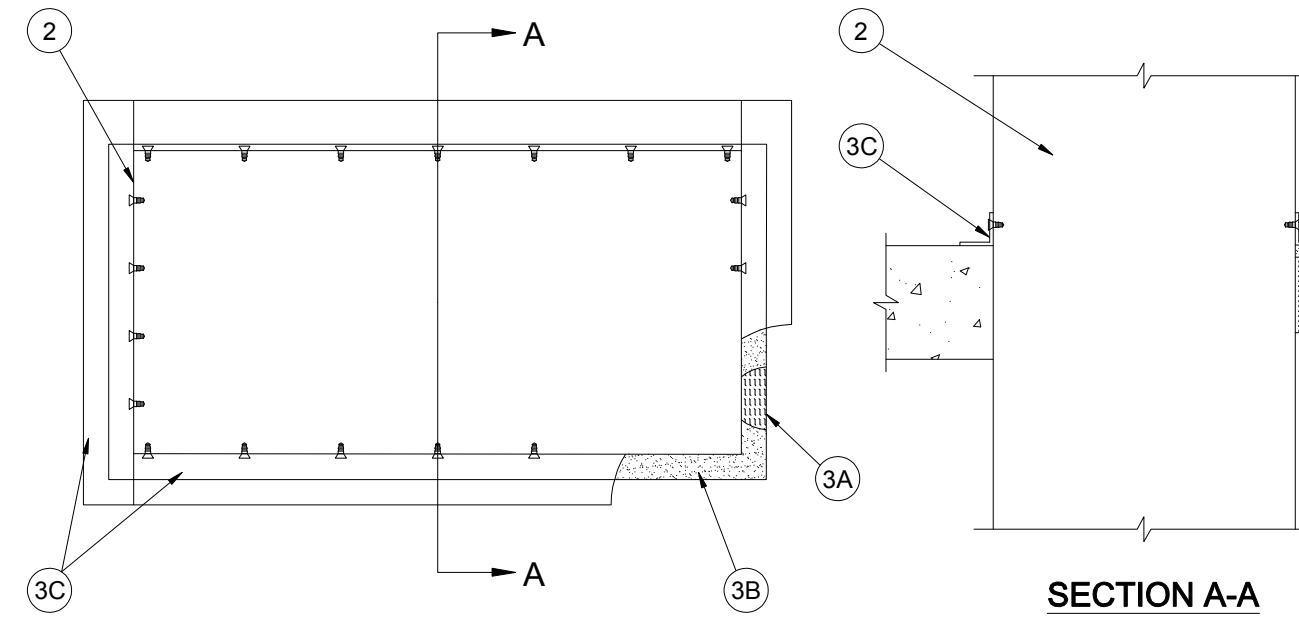
NOTE:

1. THE ENTIRE 4" OUTSIDE AIR/ EXHAUST AIR DUCT SHALL BE STEEL DUCT.

1. **WALL ASSEMBLY** - THE 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STUD SHAFT WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U400 OR V400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCORPORATE THE FOLLOWING CONSTRUCTION FEATURES:
A. **STEEL STUDS** - "C" OR "C-T" SHAPED STUDS, MIN 2-1/2 IN. (64 MM) WIDE BY 1-1/2 IN. (38 MM) DEEP, FABRICATED FROM MIN NO. 25 GAUGE (0.6 MM THICK) GALV STEEL, SPACED MAX 24 IN. (610 MM) OC.
B. **GYPSUM BOARD** - 1 IN. (25 MM) THICK, 24 IN. (610 MM) WIDE GYPSUM LINER PANELS INSTALLED VERTICALLY. MAX DIAM OF CIRCULAR CUTOUT IN GYPSUM LINER PANEL IS 6 IN. (152 MM).
C. **GYPSUM BOARD** - 1/2 IN. (12.7 MM) OR 5/8 IN. (15.9 MM) THICK, 48 IN. (1219 MM) WIDE GYPSUM BOARDS. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX DIAM OF CIRCULAR CUTOUT IN GYPSUM BOARD IS 6 IN. (152 MM).
THE HOURLY F-RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE-RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
2. **STEEL DUCT** - NOM 5 IN. (127 MM) DIAM (OR SMALLER) NO. 30 GAUGE (OR HEAVIER) GALV STEEL DUCT INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN DUCT AND PERIPHERY OF OPENING TO BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 1 IN. (25 MM), DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.
3. **FILL, VOID OR CAVITY MATERIALS** - **CAULK OR SEALANT** - MIN 1 IN. (25 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE GYPSUM BOARD LINER PANEL, FLUSH WITH THE FACES OF THE LINER PANEL. MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE GYPSUM BOARD ANNULUS, FLUSH WITH THE FINISHED SIDE OF THE WALL. MIN 1/2 IN. (13 MM) DIAM BEAD OF CAULK APPLIED TO THE PENETRANT/GYPSUM BOARD INTERFACE AT THE POINT CONTACT LOCATION ON THE FINISHED SIDE OF THE WALL.
3M COMPANY - CP25WB+ Caulk or FB-3000 WT Sealant

19 Ø4" OA / EX DUCT THROUGH RATED WALL DETAIL

NOT TO SCALE

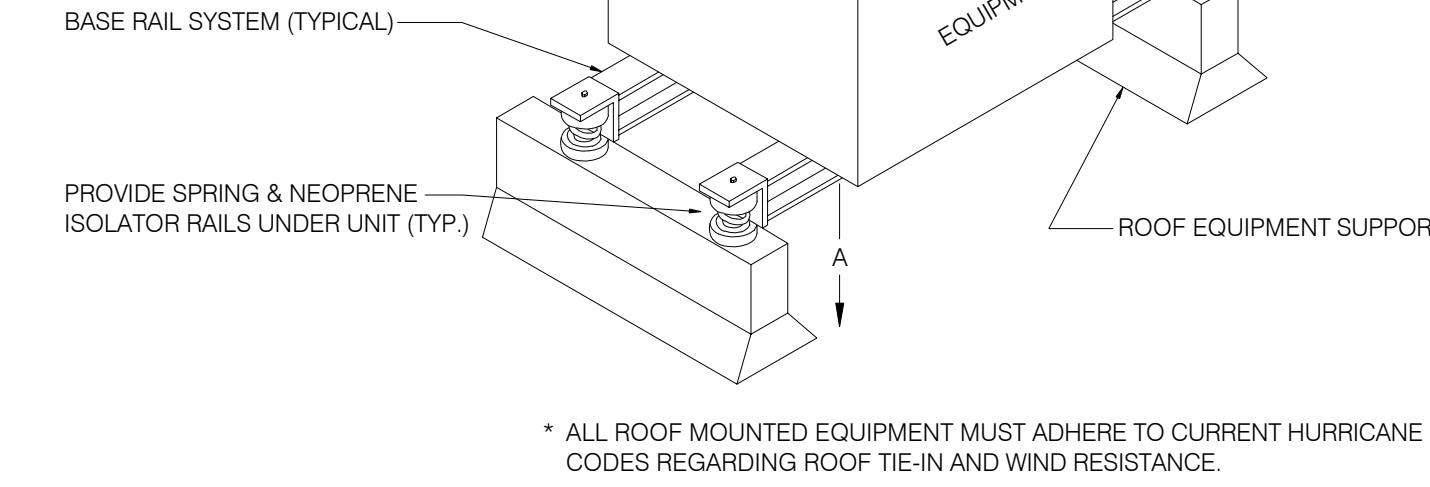


1. **FLOOR OR WALL ASSEMBLY** - MIN 4-1/2 IN. (114 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. FLOOR ASSEMBLY MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS*. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX AREA OF OPENING 640 SQ IN. (4129 CM2) WITH A MAX DIMENSION OF 32 IN. (812 MM). MAX AREA OF IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE IS 49 SQ IN. (316 CM2) WITH A MAX DIMENSION OF 7 IN. (178 MM). SEE CONCRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORIES IN FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. **STEEL DUCT** - NOM 30 BY 18 IN. (762 BY 457 MM) (OR SMALLER) STEEL DUCT TO BE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. THE DUCT SHALL BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH SMACNA CONSTRUCTION STANDARDS. ANNULAR SPACE BETWEEN DUCT AND PERIPHERY OF OPENING SHALL BE SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2 IN. (51 MM), DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
3. **FIRESTOP SYSTEM** - THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. **PACKING MATERIAL** - MIN 3 IN. (76 MM) THICKNESS OF MIN 4 PCF OR 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE, PACKING MATERIAL TO BE RECESSED FROM TOP AND BOTTOM SURFACES OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
A1. **FORMING MATERIAL*** - AS AN ALTERNATE TO THE PACKING MATERIAL IN ITEM 3A, NOM 4 IN. (102 MM) WIDE STRIPS OF MIN 1/2 IN. (13 MM) THICK COMPRESSIBLE MAT TO BE STACKED TO A THICKNESS GREATER THAN THE WIDTH OF THE ANNULAR SPACE AND COMPRESSION-FITTED, EDGE-FIRST, TO FILL THE ANNULAR SPACE TO A MIN 4 IN. (102 MM) DEPTH. TOP OF FORMING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS NECESSARY TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL. IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE, FORMING MATERIAL TO BE RECESSED FROM TOP AND BOTTOM SURFACES OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
3M COMPANY - FIRE BARRIER PACKING MATERIAL.
B. **FILL, VOID OR CAVITY MATERIALS*** - CAULK OR SEALANT - MIN 1/2 IN. (13 MM) THICKNESS OF CAULK APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL. IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE, MIN 1/2 IN. (13 MM) THICKNESS OF CAULK APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP AND BOTTOM SURFACES OF FLOOR. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO THE DUCT/CONCRETE INTERFACE AT THE POINT CONTACT LOCATION ON THE TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL OR HOLLOW-CORE CONCRETE.
3M COMPANY - IC 15WB+ , CP 25WB+ CAULK, OR FB-3000 WT SEALANT
C. **RETAINING ANGLES** - MIN 16 GA GALV STEEL ANGLES SIZED TO LAP DUCT A MIN OF 2 IN. (51 MM) AND LAP PERIPHERY OF OPENING A MIN OF 1 IN. (25 MM). ANGLES ATTACHED TO ALL FOUR SIDES OF STEEL DUCT ON TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL WITH NO. 10 (OR LARGER) STEEL SHEET METAL SCREWS SPACED A MAX 1 IN. (25 MM) FROM EACH END AND MAX 6 IN. (152 MM) OC.

16 TYP. OA DUCT CONNECTION DETAILS

NOT TO SCALE

CLEARANCE REQUIREMENT FOR CONDENSING UNITS (DIMENSION A)	
WIDTH OF EQUIP. (INCHES)	CLEARANCE (INCHES)
UP TO 24	14
25 TO 36	18
37 TO 48	24
49 TO 60	30
61 & WIDER	48



* ALL ROOF MOUNTED EQUIPMENT MUST ADHERE TO CURRENT HURRICANE CODES REGARDING ROOF TIE-IN AND WIND RESISTANCE.

20 ROOF MOUNTED EQUIPMENT

NOT TO SCALE