

- GENERAL NOTES:
- ALL DIMENSIONS TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
  - STACK/PLATE SUPPORT ASSEMBLIES ARE TO BE SUPPORTED BY CHANNEL OR ANGLE IRON (BY OTHERS). SEE INSTALLATION INSTRUCTIONS FOR SIZE SPECIFIC DETAILS. SUPPORTS/GUIDES MUST BE SECURED TO NONCOMBUSTIBLE STRUCTURES. INTENDED SURROUNDINGS ARE UNENCLOSED OR NONCOMBUSTIBLE ENCLOSURE APPLICATIONS ONLY. FIELD PAINT EXTERIOR EXPOSED SUPPORTS/GUIDES.
  - DRAIN FLUGS ARE FOR REMOVAL OF RAIN/CONDENSATE. PLUMBING BY OTHERS.
  - VARIABLE & ADJUSTABLE LENGTHS CAN BE FIELD TRIMMED TO FIT IF NECESSARY, NOT TO BE USED FOR GEN/ENGINE EXHAUST APPS-SEE INSTALL INSTRUCTIONS.
  - P-2000 SEALANT MUST BE APPLIED TO ALL INNER WALL JOINTS ABOVE 600 DEG F (ENGINE EXHAUST). P-600 SEALANT TO BE USED BELOW 600 DEG F (GAS DUCT, BOILER FLUE, ETC).
  - P-800 SEALANT MUST BE APPLIED TO TOP EDGE OF ALL OUTER CHANNEL BANDS FOR VERTICAL EXTERIOR PIPE. APPLY P-800 TO BOTH SIDES OF OUTER CHANNEL BAND WHEN EXTERIOR PIPE IS RUNNING HORIZONTAL OR SLOPING.
  - AMPCO 1050-4 IS LISTED UNDER UL 103, 441, 1978 & UL C 5604 & CONFORMS TO NFPA 31, 37, 54, 96, AND 211. MATERIAL BETWEEN WALLS TO BE 6# DENSITY, 4" THICK CERAMIC INSULATION.
  - MATERIAL TO BE 20 GAUGE (.035") T304 STAINLESS STEEL INNER LINER WITH 24 GAUGE (.025") T304 STAINLESS STEEL OUTER WALL FOR DIAMETERS 36" AND SMALLER AND 20 GAUGE (.035") T304 STAINLESS STEEL OUTER WALL FOR 34" AND LARGER.
  - MAINTAIN ALL CLEARANCES TO COMBUSTIBLES.
  - STACK GUYING, IF ANY, BY OTHERS. CONSIDER THERMAL EXP FOR HALL OR HIGH TEMP STACKS. SEE INSTRUCTIONS.
  - STACK MUST BE AT LEAST 2 FEET HIGHER THAN ANY PORTION OF A STRUCTURE WITHIN A HORIZONTAL DISTANCE OF 10 FEET.
  - SYSTEM SIZED BY OTHERS.
  - THIS SYSTEM IS NOT FOR CONDENSING APPLIANCES (IE, CAT 2,4).
  - FOR DIESEL FUEL GEN/ENGINE APPS: A FLEXIBLE ISOLATION CONNECTOR (BY OTHERS) & AN EXPLOSION RELIEF VALVE MUST BE USED, OTHERWISE WARRANTY MAY BE VOIDED.

THE ITEM(S) CONTAINED IN THIS BILL OF MATERIALS WILL BE BUILT SOLELY FOR THIS JOB. THEREFORE, THIS DOCUMENT MUST BE FIELD VERIFIED AND/OR APPROVED BEFORE THE ORDER WILL BE ENTERED FOR MANUFACTURING.

APPROVAL SIGNATURE: \_\_\_\_\_

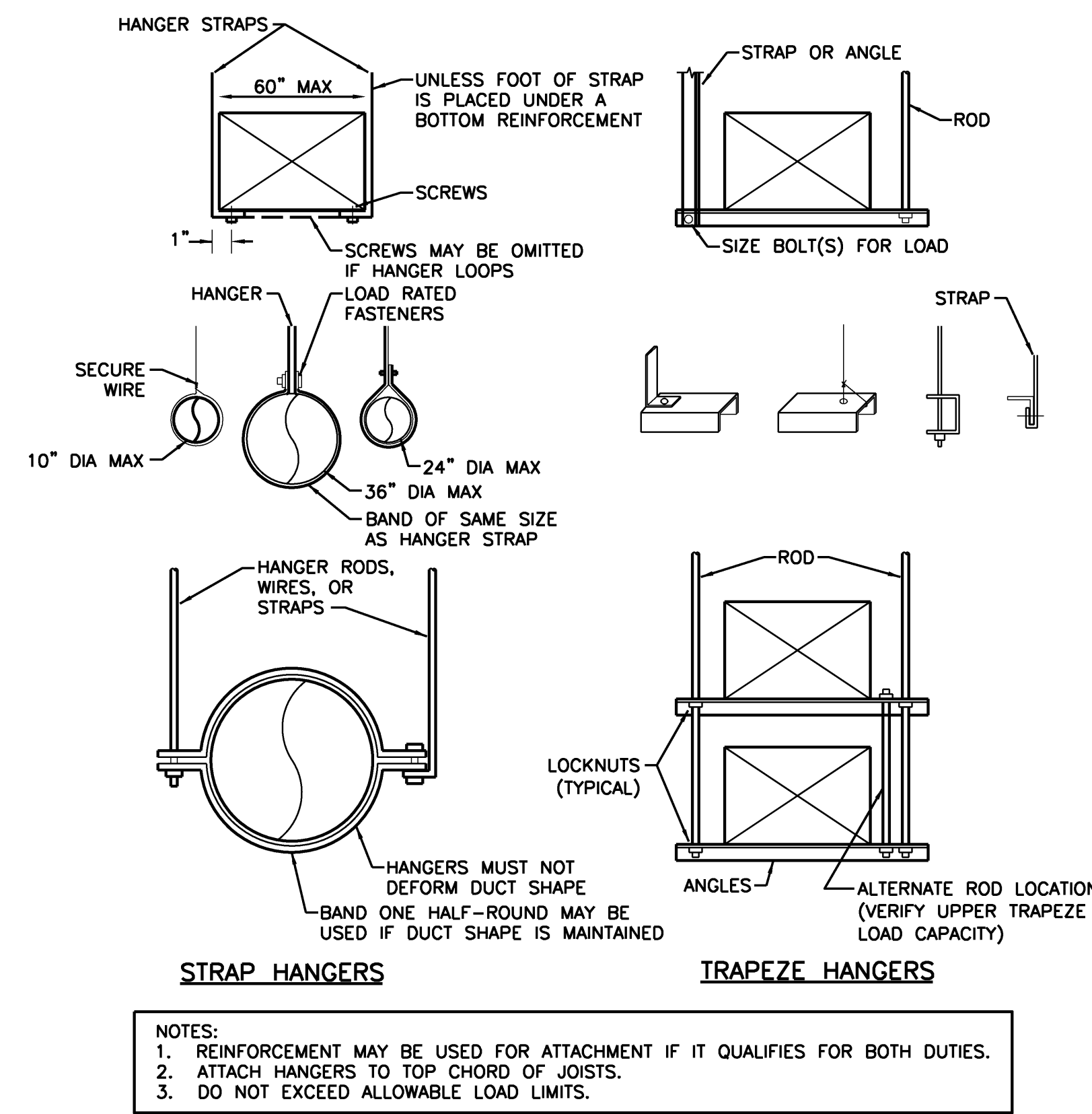
TITLE HELD \_\_\_\_\_

DATE OF APPROVAL \_\_\_\_\_

TOLERANCE UNLESS SPECIFIED	COMMERCIAL/INDUSTRIAL AIR CONDITIONING SYSTEMS	MINNESAPOLIS, MINN.
ANGULAR ± 2°	HVAC PRODUCTS	
FRACTION 1/16	10633 USM GENERATOR FLUE	
X .000	OWN BY: KP	APP: _____
.XX .000	DATE: 4/28/11	DATE: _____
.XXX .010	SCALE: 3/8"	DWG. NO.: 14666-1

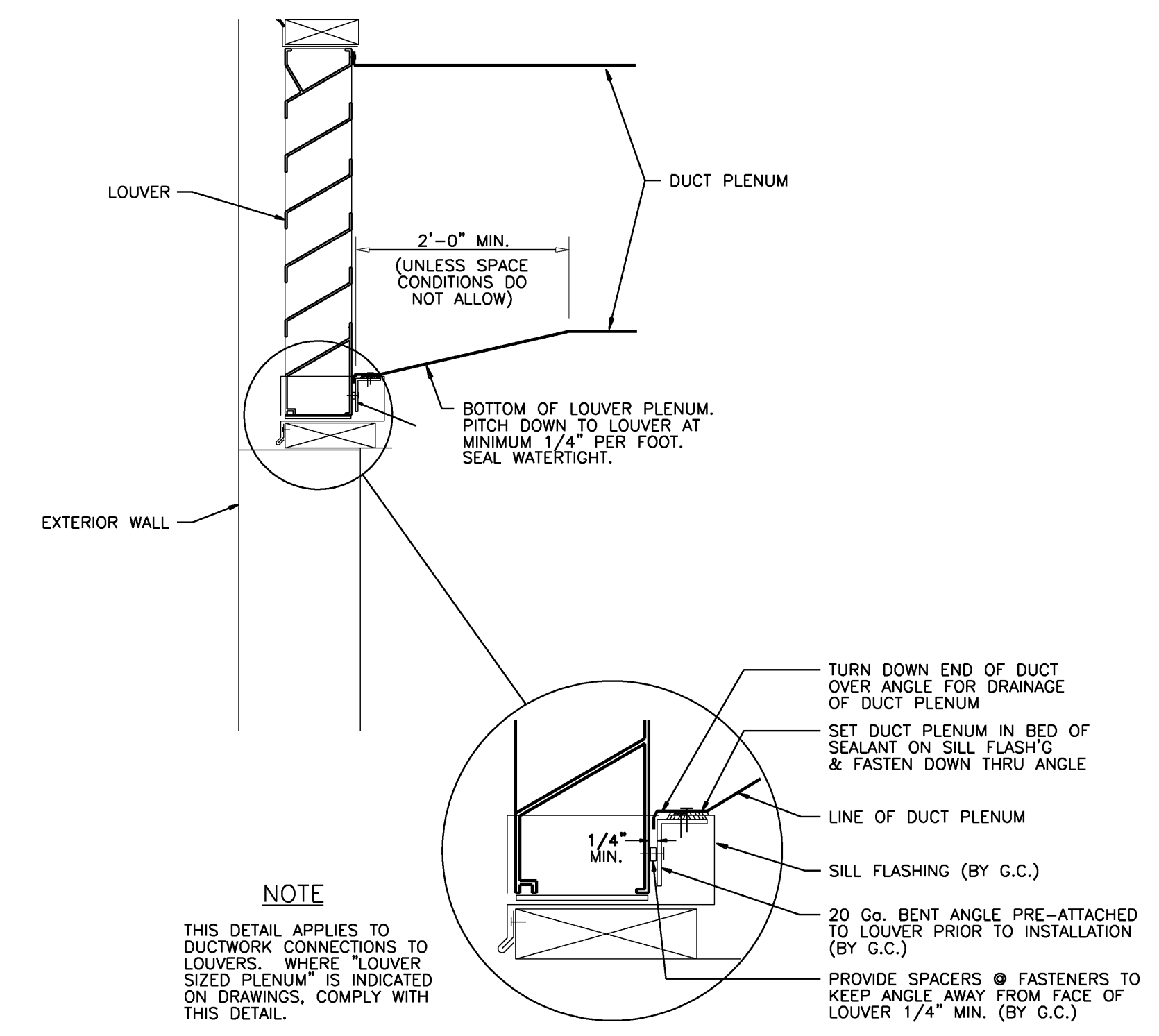
- NOTES:
- THESE NOTES TAKE PRECEDENCE OVER THE SCHEMATIC ABOVE, AS APPLICABLE.
  - THIS IS SCHEMATIC ONLY. VERIFY COMPONENTS AND DIMENSIONS BEFORE ORDERING. PROVIDE COMPONENTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - PLATE SUPPORTS, BASE SUPPORT BRACKET, AND WALL GUIDE ASSEMBLIES LOCATED IN THE AREAWAY AND/OR OUTDOORS SHALL BE TYPE 304 STAINLESS STEEL. SHOP-FABRICATE ANY OF THESE COMPONENTS WHICH ARE NOT AVAILABLE FROM THE FACTORY IN THIS MATERIAL, TO EQUAL THE DESIGN AND STRENGTH OF THE FACTORY STANDARD ITEMS.
  - AT INDOOR SUPPORT RINGS AND ASSEMBLIES, PROVIDE STEEL ANGLE SUPPORTS ATTACHED TO THE BUILDING STRUCTURE. BRACE THEM TO DIRECT THE EXPANSION INTO THE BELLOW ASSEMBLIES.
  - SEE FLOOR PLAN FOR ACTUAL ORIENTATION OF THE MITERED OUTLET.

CHIMNEY SCHEMATIC REF: NA B2



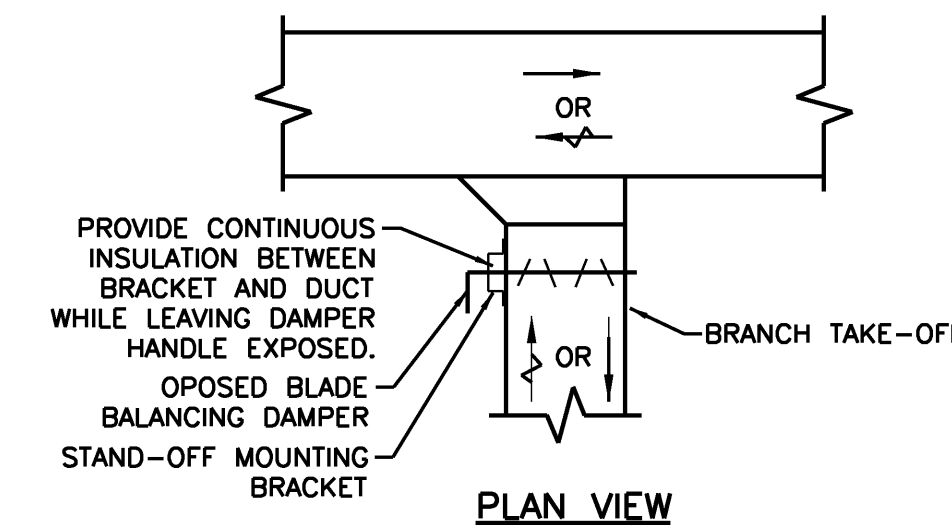
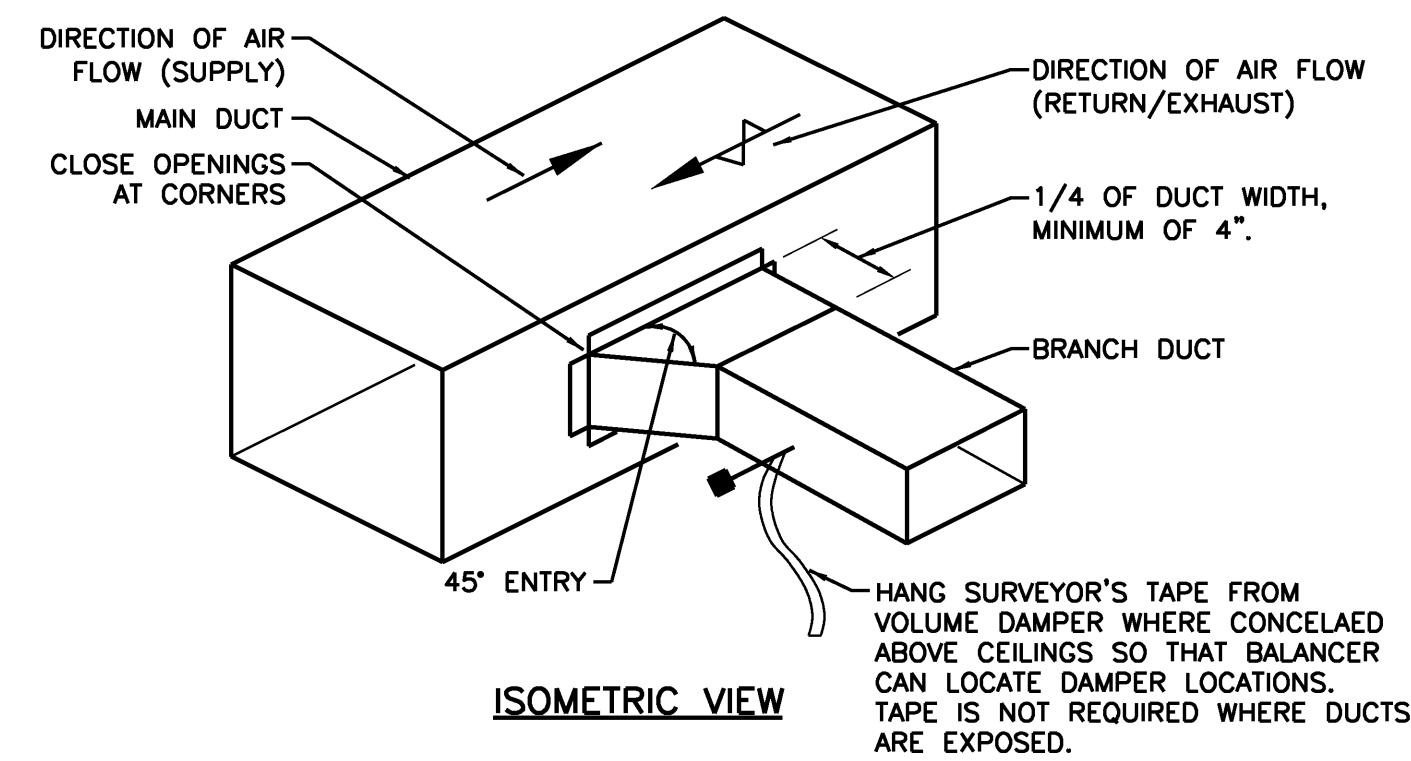
- NOTES:
- REINFORCEMENT MAY BE USED FOR ATTACHMENT IF IT QUALIFIES FOR BOTH DUTIES.
  - ATTACH HANGERS TO TOP CHORD OF JOISTS.
  - DO NOT EXCEED ALLOWABLE LOAD LIMITS.

DUCT HANGER DETAILS REF: NA B2



- NOTE:
- THIS DETAIL APPLIES TO DUCTWORK CONNECTIONS TO LOUVERS WHERE LOUVER SIZED PLENUM IS INDICATED ON DRAWINGS, COMPLY WITH THIS DETAIL.
- TURN DOWN END OF DUCT OVER ANGLE FOR DRAINAGE OF DUCT PLENUM
  - SET DUCT PLENUM IN BED OF SEALANT ON SILL FLASHING & FASTEN DOWN THRU ANGLE
  - LINE OF DUCT PLENUM
  - 20 Gg. BENT ANGLE PRE-ATTACHED TO LOUVER PRIOR TO INSTALLATION (BY G.C.)
  - PROVIDE SPACERS @ FASTENERS TO KEEP ANGLE AWAY FROM FACE OF LOUVER 1/4" MIN. (BY G.C.)

LOUVER CONNECTION DETAIL REF: NA B1

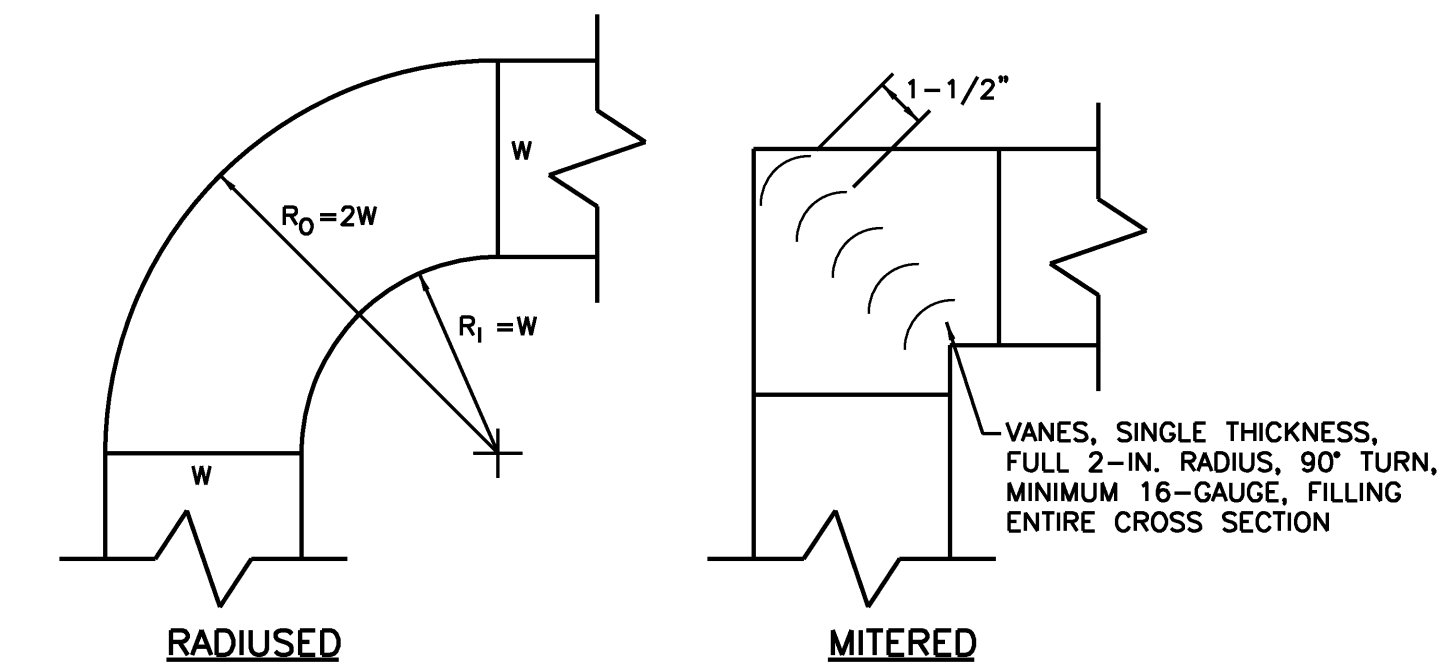


- VOLUME DAMPERS:
- PROVIDE STAND-OFF BRACKETS ON INSULATED DUCTS.
  - INSULATE UNDER BRACKETS, SEAL VAPOR BARRIER TO BRACKETS.
  - PROVIDE LOCKING, INDICATING QUADRANTS.

BRANCH DUCT TAKE-OFF REF: NA A2

ADJUSTABLE SWIVEL "STOVEPIPE" ELBOWS FOR ROUND DUCT, WITH SHORT RADIUS AND MINIMUM 4 "GORES", MAY BE USED IN SUPPLY DUCT BRANCHES DOWNSTREAM OF VAV BOXES ONLY, WITH SEAMS AND JOINTS SEALED. THEIR USE ELSEWHERE IS PROHIBITED.

USE MITERED ONLY WHERE SPACE IS TOO TIGHT FOR RADIUS. HALF RADIUS (R = 1/2 W) ELBOWS ARE AN ACCEPTABLE ALTERNATIVE TO MITERED ELBOWS.



- PRIOR TO INSTALLATION OF ANY ELBOWS, SUBMIT TO THE ENGINEER A SAMPLE OF EACH TYPE OF 90-DEGREE ELBOW, AT LEAST 12x12 DUCT SIZE, BUT MAY BE LARGER IF IT IS TO BE USED IN THE PROJECT. DELIVER TO THE ENGINEER'S OFFICE, AND PROVIDE RETURN SHIPPING. ALLOW AT LEAST 1 WEEK NOTICE FOR REVIEW.

DUCT ELBOW DETAIL REF: NA A1

Project Title

**UNIVERSITY OF SOUTHERN MAINE  
GENERATOR REPLACEMENT**

Portland, Maine

NA Project No. 10633

Key Plan

Mark	Date	Description
05-09-2011	ISSUED FOR BID	
04-05-2011	ISSUED FOR 100% REVIEW	
01-24-2011	ISSUED FOR 75% REVIEW	
Issue Dates		

Drawing Status

Drawing Title

**DETAILS**

PA / PE: \_\_\_\_\_ Drawn By: \_\_\_\_\_

Drawing Number

**M30.1**