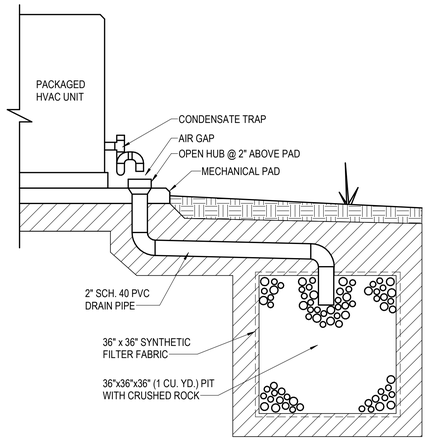
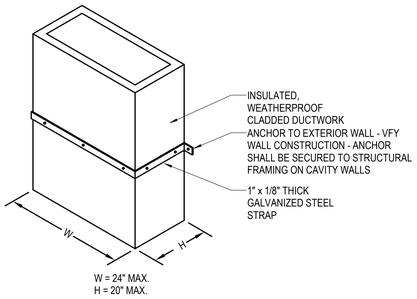


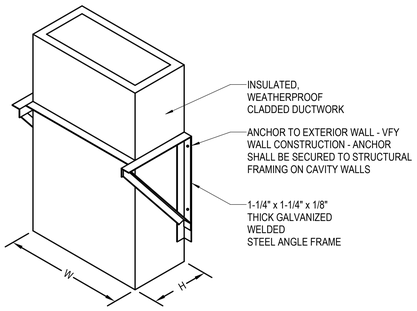

1 CONDENSATE PIPING - DRAIN TRAP - DRAW THROUGH
NOT TO SCALE



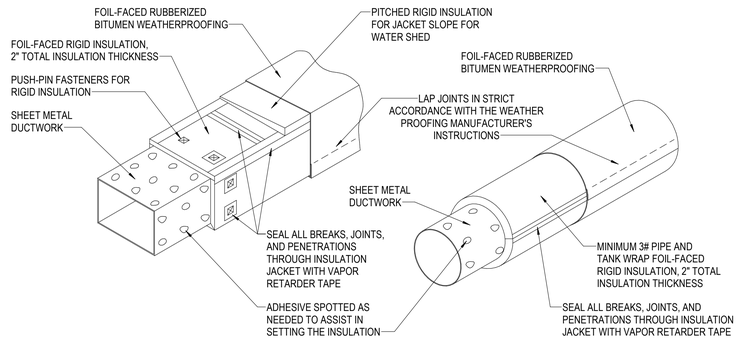

2 CONDENSATE PIPING - DRAIN PIT
NOT TO SCALE




NOTES:
1. PROVIDE SUPPORT AT 12' O.C. MAX.
2. ANCHOR ANGLE IRON SUPPORTS TO WALL AT 12" O.C. SPACING MAX.
3. ALL BRACE-TO-DUCT FASTENERS SHALL BE EQUALLY SPACED AT 8" O.C.

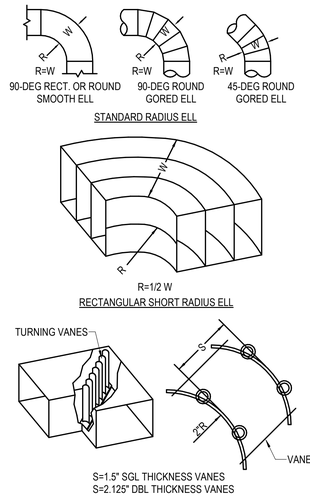



3 DUCT ACCESSORY - EXTERIOR VERTICAL RECTANGULAR DUCT SUPPORT
NOT TO SCALE



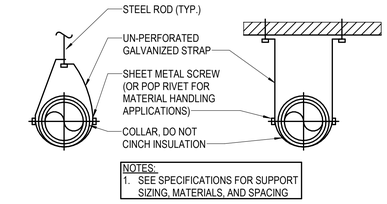

NOTES:
1. ALL SHEET METAL DUCT JOINTS AND SEAMS SHALL BE THOROUGHLY COATED WITH A U.L. 181 COMPLIANT SEALANT, SMACNA SEAL CLASS A, HARDCAST OR EQUAL.
2. COMBINATION VAPOR/WEATHER/UV BARRIER SHALL BE EQUAL TO POLYGUARD ALUMAGUARD RUBBERIZED BITUMEN FOIL FACED MEMBRANE WITH ASPHALT/ASPHALT LAP SEALS. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
3. WHERE THE DUCTWORK PENETRATED THE BUILDING ENVELOPE, THE EXTERIOR WEATHERPROOF INSULATION SHALL EXTEND MIN. 6" INTO THE BUILDING INTERIOR BEFORE TRANSITIONING TO THE INTERIOR DUCT INSULATION SPECIFICATION.

4 DUCT INSULATION - EXTERIOR DUCT INSULATION WEATHERPROOFING
NOT TO SCALE

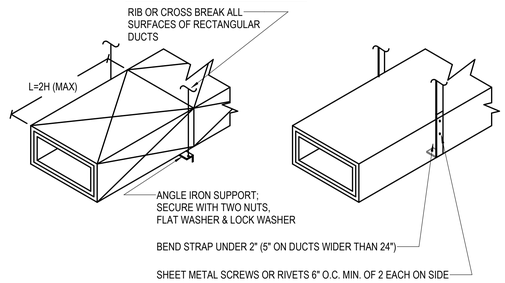



NOTES:
1. WHERE STANDARD RADIUS TURNS ARE NOT POSSIBLE, MITERED ELL'S WITH TURNING VANES SHALL BE PROVIDED FOR ALL CHANGES IN HORIZONTAL AND VERTICAL DUCT DIRECTION 45-DEGREEOR GREATER.
2. CONSTRUCT ELBOWS IN ACCORDANCE WITH SMACNA HVAC DUCTCONSTRUCTION STANDARDS - METAL AND FLEXIBLE.
3. AIR VELOCITIES 1200 FPM AND LESS:
   A. TURNING VANE ELBOW SHALL BE TURNING VANE ELBOW SHALL BE SINGLE WIDTH VANES FOR VANE LENGTHS UP TO 24"
   B. TURNING VANE ELBOW SHALL BE ASHRAE FITTING CR3-15 WITH DOUBLE WIDTH VANES FOR VANE LENGTHS OVER 24".
4. AIR VELOCITIES OVER 1200 FPM: TURNING VANE ELBOW SHALL BE ASHRAE FITTING CR3-15 WITH DOUBLE WIDTH VANES.
5. ROUND ELBOWS SHALL BE SMOOTH OR GORED. 90-DEGREE GORED ELL'S SHALL BE MINIMUM 5-PIECE AND 45-DEGREE GORED ELL'S SHALL BE MINIMUM 3-PIECE.
6. VANES SHALL BE WELDED TO THE VANE RAIL IN DUCT SYSTEMS WITH AIR VELOCITIES 3000 FPM AND HIGHER.
7. ELBOWS WITH MITERED THROATS/RADIUS HEELS AND ELBOWS WITH MITERED THROATS/CHAMFERED HEELS ARE NOT ACCEPTABLE.

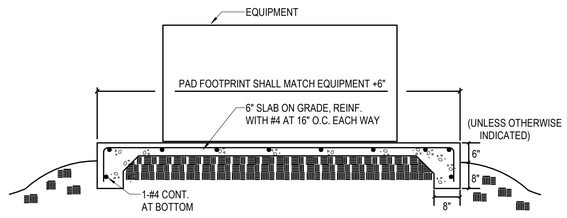
5 DUCT FITTING - DUCT ELBOW SPEC
NOT TO SCALE



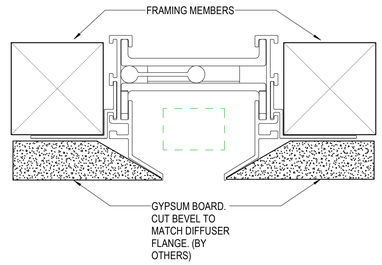

NOTES:
1. SEE SPECIFICATIONS FOR SUPPORT SIZING, MATERIALS, AND SPACING



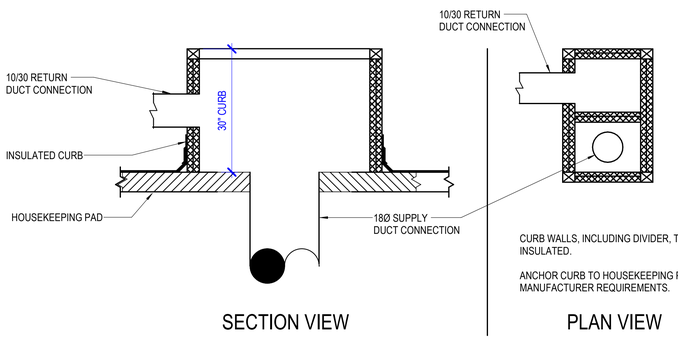

6 DUCT ACCESSORY - DUCT HANGERS
NOT TO SCALE



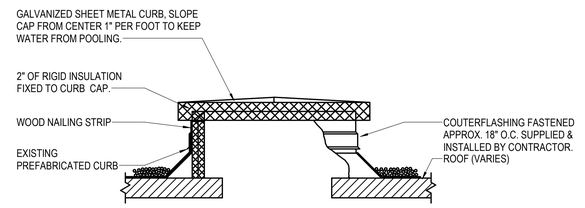

7 HOUSEKEEPING PAD - OUTDOOR
NOT TO SCALE




8 AIR TERMINAL - LINEAR SLOT - MOUNTING DETAIL CEILING
NOT TO SCALE




9 PLENUM CURB - GPU
NOT TO SCALE




10 ROOF CURB - CAP
NOT TO SCALE

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Project
PHILANDER SMITH UNIVERSITY

**PHILANDER SMITH UNIVERSITY**

M.L. HARRIS AUDITORIUM RENOVATION

Volume
**VOLUME 1**

Design Phase
**CONSTRUCTION DOCUMENTS**

Revisions

| No. | Date | Description |
|---|---|---|
| | | |

Stamp

CROMWELL ARCHITECTS/ ENGINEERS #5 — CERTIFICATE OF AUTHORIZATION — ARKANSAS ENGINEER

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 9386 — CHRISTOPHER A. CROMWELL

09-10-2026

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Sheet Title
**MECHANICAL DETAILS**

Sheet Number
**M-502**