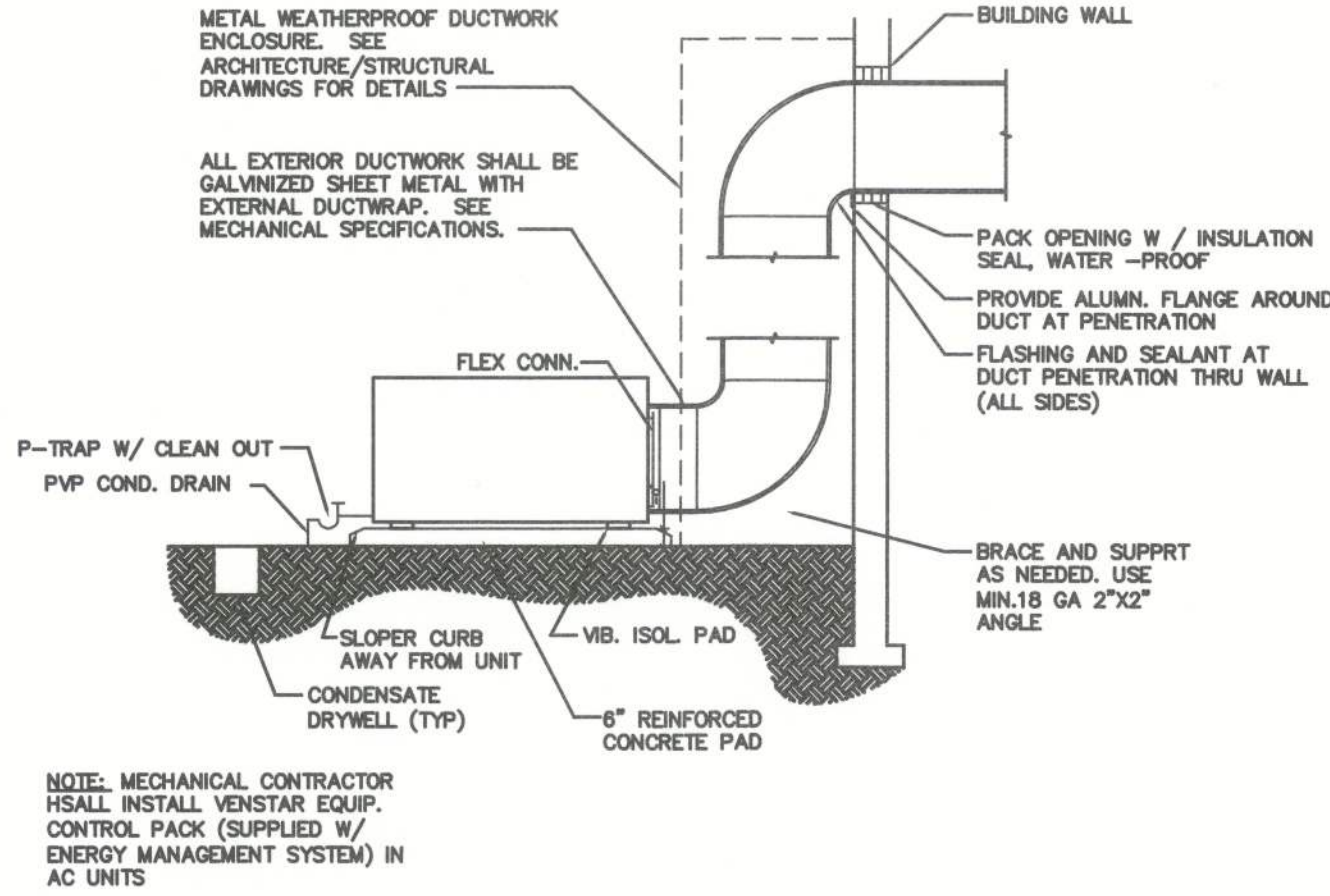


MECHANICAL SPECIFICATIONS

- I. DESCRIPTION OF THE WORK:
- A. THE EXTENT OF THE MECHANICAL WORK IS INDICATED ON THE DRAWINGS OR IN THE BID MANUAL.
- II. LOW PRESSURE DUCTWORK
- A. SUPPLY & RETURN AIR DUCTWORK AS INDICATED ON PLAN SHALL BE EXPOSED GALVANIZED SHEET METAL, GAUGES, REINFORCING AND JOINING CONNECTIONS SHALL BE IN STRICT ACCORDANCE WITH SMACNA LOW VELOCITY DUCT STANDARDS LATEST EDITION. ALL DUCTS WIDER THAN 18" SHALL BE CROSS BROKEN. PROVIDE ANGLE STIFFENERS AS REQUIRED TO AVOID DUCT VIBRATION.
- B. ALL DUCT SIZES INDICATED ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- C. ALL DUCTWORK TO BE HUNG WITH GALVANIZED STRAP HANGERS 16 GAUGE x 2" WITH A MAXIMUM SPACING OF 8'-0" O.C.
- D. WHERE SHOWN ON THE DRAWINGS, PROVIDE VOLUME DAMPERS WITH LOCKING QUADRANTS OR SPLITTERS WITH HINGE AND ROD THROUGH SIDE OF DUCT WITH SET SCREW. VOLUME DAMPER HANDLES SHALL BE INSTALLED ON THE BOTTOM OF THE SPIN-IN FITTING AND SHALL HAVE RING SET IN FULL OPEN POSITION.
- E. ALL FLEXIBLE DUCTS SHALL BE SUPPORTED EVERY 4'-0" WITH 2" WIDE GALV. STEEL BANDS. MINIMUM ONE PER EACH SECTION OF FLEXIBLE DUCT. MAXIMUM LENGTH OF FLEX DUCT SHALL BE 10'-0"
- III. MANUAL DAMPERS
- A. PROVIDE MANUAL LOUVER DAMPERS WHERE SHOWN ON THE PLANS AND WHERE NECESSARY FOR THE PROPER REGULATION OF THE AIR HANDLING SYSTEM, AND SO LOCATE AS TO BE ACCESSIBLE AFTER THE BUILDING IS COMPLETED, I.E. BY REMOVING A MARKED TILE, ACCESS PANEL OR OTHER APPROVED METHOD.
- IV. CONTROLS
- RELOCATE REMOTE TEMPERATURE SENSORS/THERMOSTATS AS SHOWN ON THE DRAWINGS.
- V. GRILLES, REGISTERS AND DIFFUSERS:
- A. ANY REQUIRED NEW SUPPLY, RETURN OR EXHAUST GRILLES SHALL MATCH EXISTING EQUIPMENT OF THE SAME TYPE.
- VIII. FLEXIBLE DUCT:
- A. FLEXIBLE DUCT SHALL BE EQUIVALENT TO GENFLEX TYPE SLR-25 FLEX DUCT.
- B. FITTINGS SHALL BE EQUIVALENT TO GENFLEX SPIN COLLAR WITH SCOOP AND DAMPER, MODEL SM-1 DEL. ALL FITTINGS SHALL BE INSULATED.
- X. TEST AND BALANCE:
- A. GENERAL
1. BUILDING AIR SYSTEMS SHALL BE BALANCED PER EXISTING CONDITIONS AND DATA FOR REVISED VALUES AS NOTED RELATIVE TO AIR VOLUME.
- B. PERFORMANCE
1. THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT AIR BALANCING AGENCY SUBSEQUENT TO THE APPROVAL OF THE OWNERS REPRESENTATIVE. THE TAB AGENCY CAN ONLY ACT AS HIS OWN REPORTING AGENCY IF SUITABLE INSTRUMENTS HEREINAFTER REQUIRED ARE DEMONSTRATED TO BE PART OF HIS NORMAL PROCEDURE TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. THE TAB AGENCY SHALL BE AABC OR NEBB CERTIFIED AND SHALL BE IN COMPLIANCE OF F.B.C. 13-410AB.4.6.
- C. MEASURING TECHNIQUES
1. A PITOT TUBE TRAVERSE SHALL BE PERFORMED TO DETERMINE THE TOTAL FLOW OF ALL HVAC SYSTEMS AND HOOD MAKE UP AIR FANS.
2. ALL DIFFUSERS, REGISTERS AND GRILLES WITH A FACE DIMENSION OF 24" OR LESS SHALL BE MEASURED BY UTILIZING A HOOD AXIAL VANE VELOMETER.
3. DUCT SMOKE DETECTORS : VERIFY OPERATION OF EXISTING. NOTE WHERE DEFICIENT.
- D. SUBMITTALS
- MAINTENANCE MANUALS AND INSTRUCTIONS: FURNISH THREE (3) SETS OF COMPLETE OPERATING INSTRUCTIONS COVERING ENTIRE HEATING, VENTILATING AND AIR CONDITIONING SYSTEM. INCLUDE A COPY OF THE CONTROL DIAGRAMS AND A COMPLETE DESCRIPTION OF THE OPERATION OF THE CONTROL SYSTEM. INSTRUCT OWNER'S DESIGNATED REPRESENTATIVE AS TO PROPER OPERATION AND CARE OF SYSTEM.

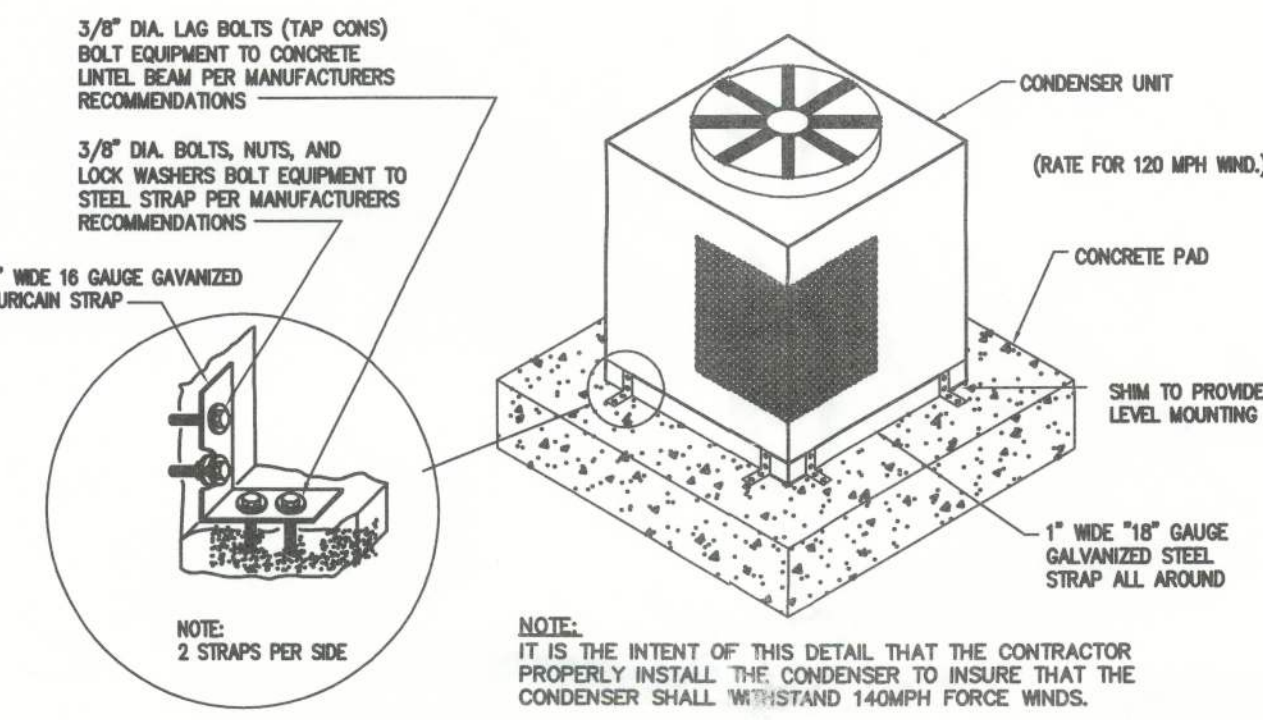
GENERAL NOTES

1. CONTRACTOR SHALL VERIFY THAT ALL EQUIPMENT, AS SHOWN ON THESE DRAWINGS, WILL NOT CONFLICT WITH ANY DRAINS, VENTS, MECH. PIPING OF ANY KIND, ELECTRICAL, ETC.
2. FIELD VERIFY EXACT LOCATION OF ALL EQUIPMENT WITH ARCHITECT/OWNER PRIOR TO INSTALLATION. INFORM OWNER OF ANY EQUIPMENT ITEMS THAT REQUIRE RELOCATION.
3. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADMINISTERING ALL WARRANTIES ON EQUIPMENT WHICH HE INSTALLS. THIS INCLUDES ALL CONDENSERS, REFRIGERANT LINES, AND OTHER ITEMS FURNISHED BY OTHERS AS WELL AS THOSE FURNISHED BY HIM.
4. PROVIDE VIBRATION ISOLATION DEVICES AND FLEXIBLE CONNECTIONS TO ALL MOVING MACHINERY.
5. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
6. THIS CONTRACTOR SHALL COORDINATE ALL DUCT AND DIFFUSER LOCATIONS WITH LIGHTING LAYOUTS AS REQUIRED.
7. THE CONTRACTOR SHALL PROVIDE COMPLETE INFORMATION AND COOPERATION TO THE OTHER CONTRACTORS & TRADES AS REQUIRED FOR COMPLETION AND COORDINATION OF THE COMPLETE PROJECT.
8. ALL ITEMS PROJECTING THROUGH ROOFS SHALL BE FLASHED THROUGH "PATE" CURBS OR PIPE SEALS A MINIMUM OF 12" ABOVE THE ROOF. BY ROOFING CONTRACTOR. PROVIDE AMPLE SUPPLY TO ACCOMMODATE ELECTRICAL CONDUIT PENETRATIONS .
9. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES, AND WITH LATEST ASHRAE PUBLICATIONS. WORK SHALL BE NEAT AND WORKMANSHIP SHALL BE ACCEPTABLE TO BUILDING STANDARDS.
10. DURING THE BIDDING PERIOD, EACH CONTRACTOR SHALL VISIT THE SITE AND VICINITY TO DETERMINE THE EXISTING CONDITIONS INVOLVED IN AND EXPECTED BY THE WORK INDICATED BY ALL CONTRACT DOCUMENTS. CONTRACTOR'S FAILURE TO REASONABLY DETERMINE AND/OR ANTICIPATE THE EFFECT OF EXISTING CONDITIONS AND INVOLVED THEREBY SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION. FAILURE TO REASONABLY DETERMINE AND/OR ANTICIPATE
11. ALL SUPPLY AND RETURN AIR DUCTWORK LOCATED A MINIMUM 10'-0" WITHIN BUILDING AND CONCEALED AREAS (RESTROOMS, STOCK AREA) SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL DUCTWORK WITH MINIMUM THICKNESS THAT CONFORMS TO STANDARDS FOR PARTICULAR LOCAL CODES AND IN NO CASE HAVE AN R-VALUE OF LESS THAN 8.0. ALL AIR OUTLETS SHALL HAVE VOLUME DAMPERS.
12. ALL EXHAUST AIR DUCTWORK SHALL BE A MINIMUM 24 GA. GALV. SHEET METAL DUCTWORK, DUCTBOARD IS NOT PERMITTED.
13. DUCT INSULATION CLOSURE SYSTEM SHALL CONSIST OF GLASSFIBRIC AND NON MIGRATING MASTIC, SEAL AIR TIGHT.
- BUILDING AIR SYSTEMS SHALL BE BALANCED PER DATA INCLUDED ON THE DRAWINGS TO ACHIEVE RELATIVE AIR VOLUMES AS INDICATED ON THE DRAWINGS AND SCHEDULED HEREIN.
14. THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT AIR BALANCING AGENCY SUBSEQUENT TO THE APPROVAL OF THE OWNERS REPRESENTATIVE. THE TAB AGENCY CAN ONLY ACT AS HIS OWN REPORTING AGENCY IF SUITABLE INSTRUMENTS HEREINAFTER REQUIRED ARE DEMONSTRATED TO BE PART OF HIS NORMAL PROCEDURE TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. THE TAB AGENCY SHALL BE AABC OR NEBB CERTIFIED.
15. IT SHALL BE THE RESPONSIBILITY OF THIS TAB AGENCY TO PROVIDE THE LOCAL BLDG. DEPT. AND OWNER WITH PROPER TEST & BALANCE DATA ON AABC OR NEBB FORMS.
16. ALL HVAC WORK SHALL BE ACCORDANCE WITH NEC 90A, 90B, 96, 54 AND NEC 101, LIFE SAFETY CODE.



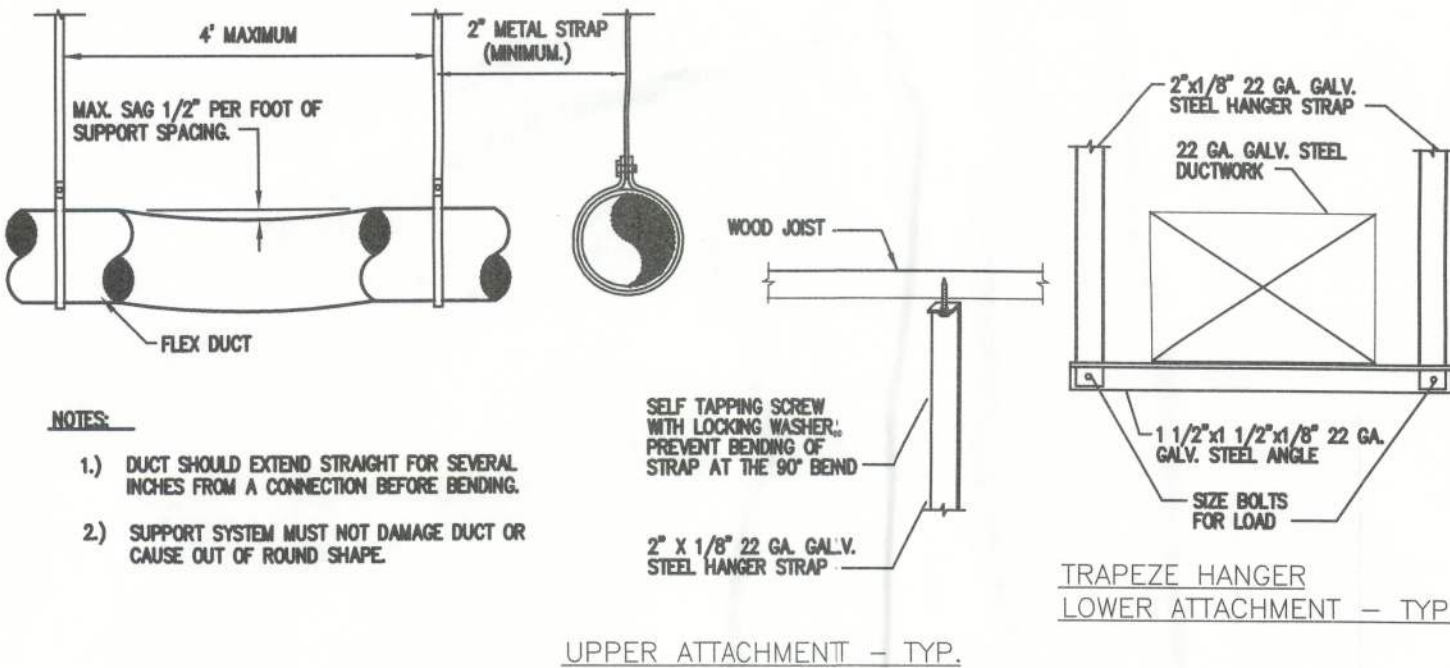
1 A/C UNIT DETAIL

NTS



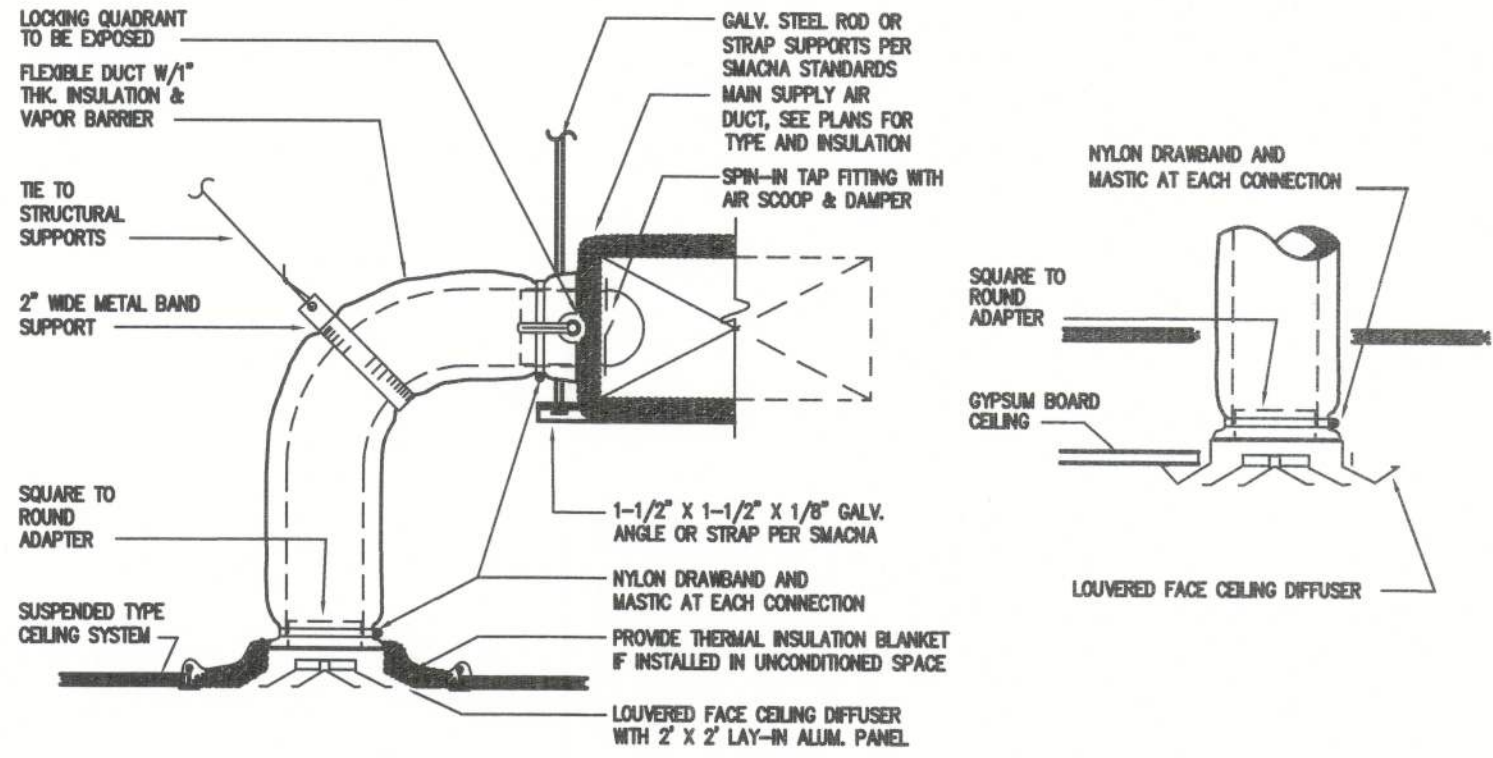
3 A/C UNIT MOUNTING DETAIL

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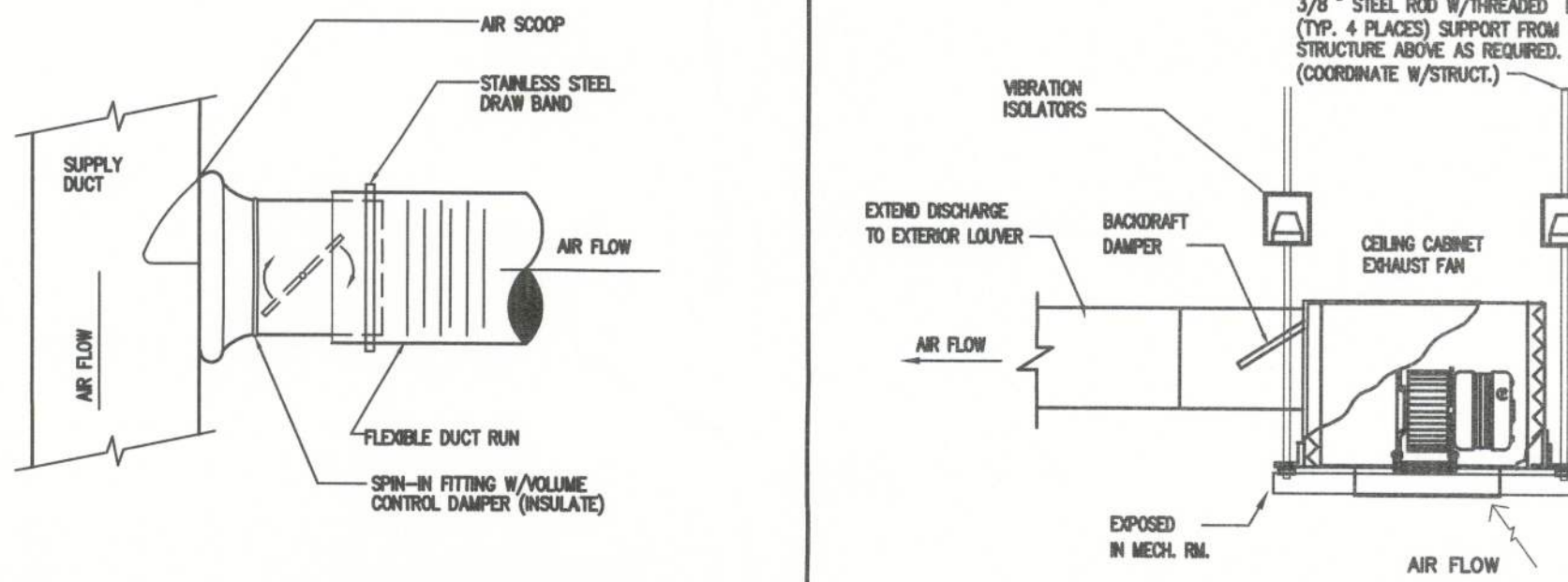
6 TYPICAL DUCT HANGING DETAIL

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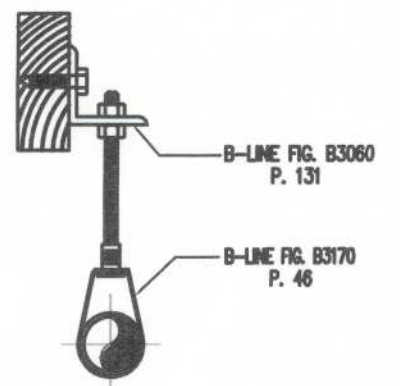
2 TYPICAL DIFFUSER DETAIL

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4 FLEX. DUCT CONN. DETAIL

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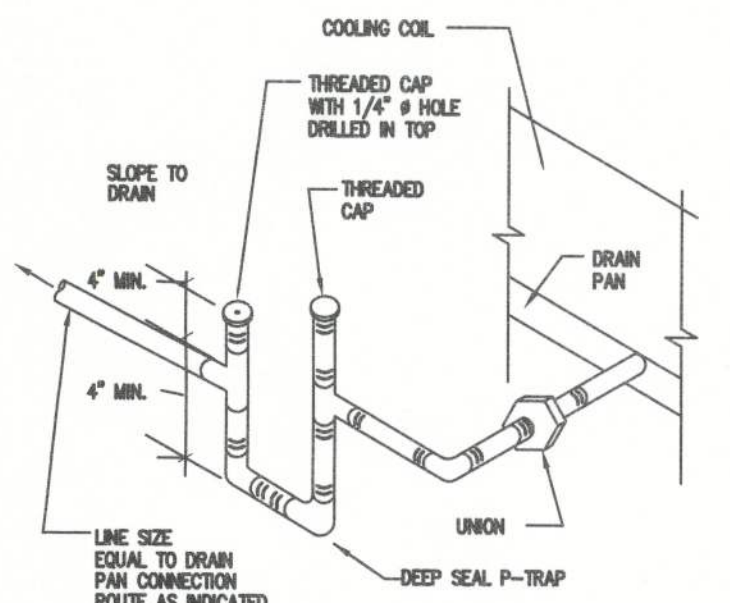


7 PIPE HANGING DETAIL

NTS

5 CEILING EXHAUST FAN DETAIL

NTS



8 COND. P-TRAP DETAIL

NTS

9 NOT USED

NTS

10 NOT USED

NTS

11 NOT USED

NTS

12 NOT USED

NTS

ARCHITECTURE
ENGINEERING
LAND SURVEYING

LIS

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ORLANDO, FLORIDA, 32803

FAMILY DOLLAR STORE

PLAN # 2011-04 / 104x80
FORT WHITE, FL



RELEASE	DATE
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PROJECT NO.

2012-001

ISSUE DATE

02/22/2012

DRAWN CHECKED
JC CS

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