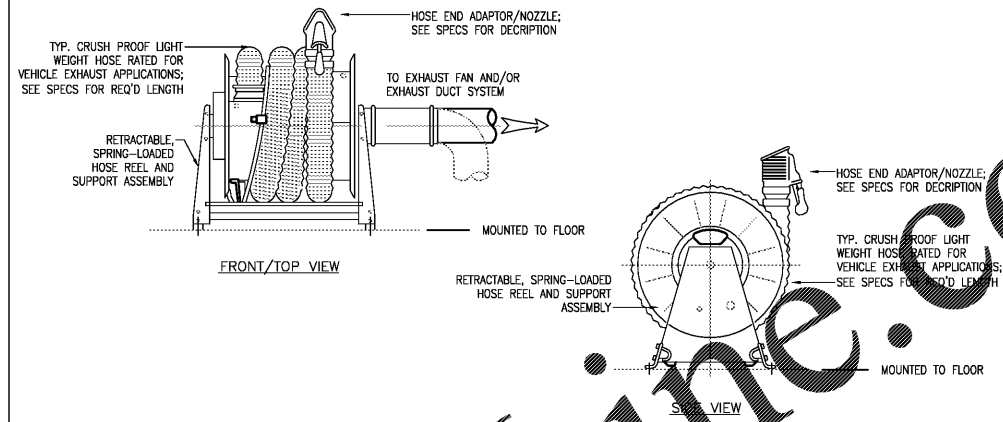
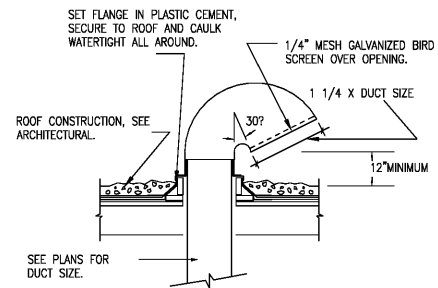
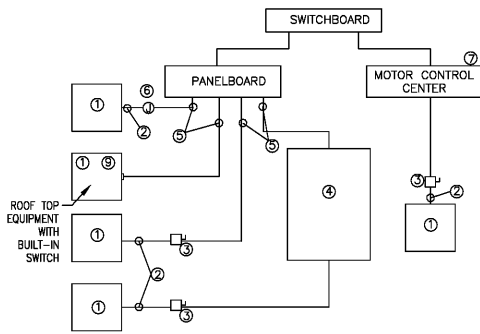
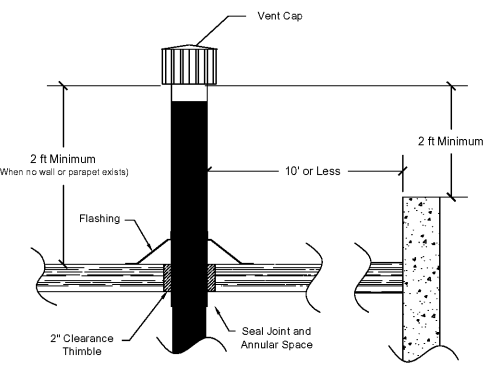


KEYED NOTES

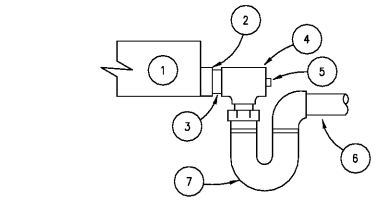
- 1 EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
- 2 CONDUIT & WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
- 3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
- 4 A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
- 5 FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- 6 JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
- 7 PROJECT UTILIZING ANY MCC, THE STARTER, CN, OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 8 IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
- 9 IN THE ROOF TOP FAN IN NOT PROVIDED WITH BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.
- 10 IN A SINGLE CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.



SEPARATION OF WORK DETAIL



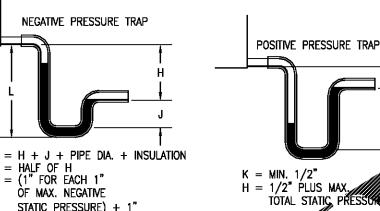
VERTICAL THROUGH THE ROOF



PIPE SIZE (INCHES)	UNIT SIZE
1/4"	NOT RECOMMENDED
3/8"	NOT RECOMMENDED
1/2"	NOT RECOMMENDED
3/4"	UP TO 2 TONS
1"	UP TO 5 TONS
1-1/4"	UP TO 30 TONS
1-1/2"	UP TO 50 TONS

KEYED NOTES

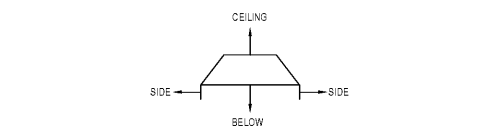
1. DRAIN PAN.
2. DRAIN CONNECTION.
3. NIPPLE.
4. TEE.
5. CLEANOUT PLUG. DISCHARGE MUST BE BELOW LEVEL OF DRAIN PAN.
6. RETURN BEND.



INSTALLATION NOTES

- A. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP.
- B. PITCH DRAIN FOR PROPER RUN OFF.
- C. MANUALLY PRIME FILL TRAP BEFORE START-UP TO FORM INITIAL DRAIN SEAL.
- D. SUPPORT DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

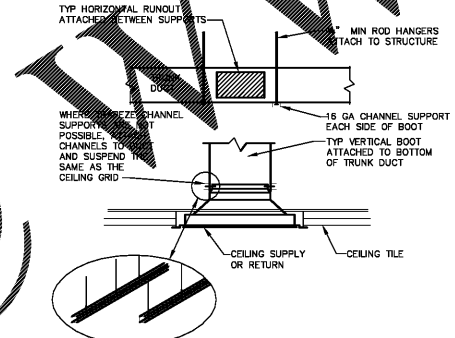
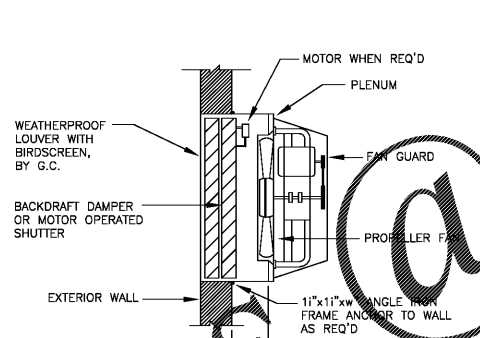
RADIANT HEATER VENTING DETAIL



HEATER MODEL	SIDES	CEILING	BELOW	ENDS	MINIMUM MOUNTING HEIGHT
ETS 40	24"	6"	40"	15"	10"
ETS 50	24"	6"	40"	15"	11"
ETS 60	24"	6"	60"	15"	12"

THE CLEARANCES SPECIFIED ABOVE MUST BE MAINTAINED TO COMBUSTIBLES AND OTHER MATERIALS THAT MAY BE DAMAGED BY TEMPERATURES 90°F ABOVE AMBIENT TEMPERATURE. CLEARANCES TO COMBUSTIBLES ARE POSTED ON THE REFLECTOR NEAR THE CONTROL END OF THE HEATER. IN LOCATIONS USED FOR STORAGE OF COMBUSTIBLE MATERIALS WHERE THEY MAY BE STACKED BELOW THE HEATER, NFPA 54 REQUIRES THAT THE INSTALLER MUST POST SIGNS THAT WILL SPECIFY THE MAXIMUM PERMISSIBLE STACKING HEIGHT TO MAINTAIN THE REQUIRED CLEARANCES FROM THE HEATER TO COMBUSTIBLES.

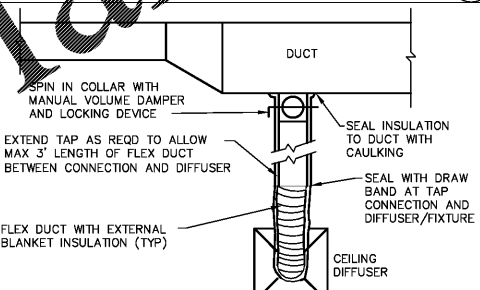
CONDENSATE TRAP DETAILS



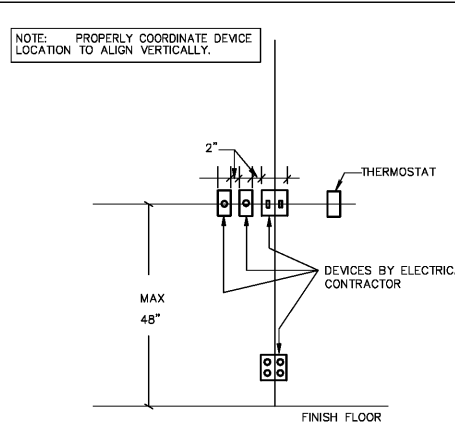
RADIANT HEATER MOUNTING DETAIL



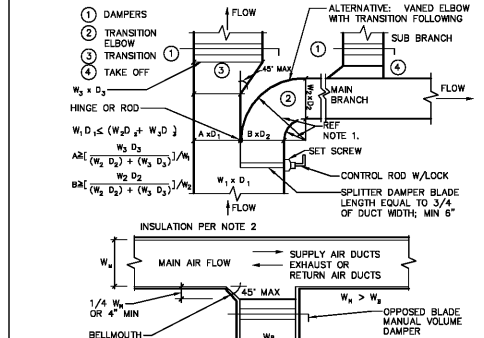
SIDEWALL MOUNTED PROPELLER FAN



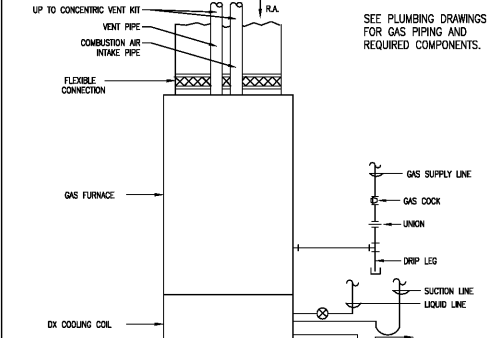
DUCT SUPPORT AT AND ABOVE CEILING SUPPLY OR RETURN



RECT. SHEETMETAL ELBOWS



CONCENTRIC VENT KIT



CONNECTIONS BETWEEN MAIN DUCT AND AIR SUPPLY OR RETURN DIFFUSERS & FIXTURES

SCALE: NONE 1

THERMOSTAT ALIGNMENT

SCALE: NONE 2

FLEXIBLE DUCT SUPPORTS

SCALE: NONE 3

RADIANT HEATER GAS PIPING DETAIL

SCALE: NONE 4

DOWNFLOW FURNACE W/ DX COIL

SCALE: NONE 9

Order Plans

BIDDING DOCUMENTS

DESIGNED BY: **FACILITIES DESIGN ARCHITECTS & ENGINEERS**

CONSULTANT: **DEVITA**

MECHANICAL DETAILS

PROJECT TITLE: **LUMBERTON EQUIPMENT SHOP**

SITE: **NC DOT HIGHWAY DIVISION 6**

STATE CONSTRUCTION ID: **16-12916-01A**

ASSET NUMBER: **78-06-00**

DATE ISSUED: **12/15/2017**

DRAWN BY: **JML**

CHECKED BY: **WLA**

SHEET NO. **M0.3**