

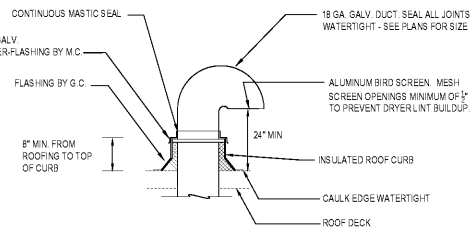
1 DRYER VENT DETAIL
NO.2 SCALE: NTS

DRYERBOX INSTALLATION

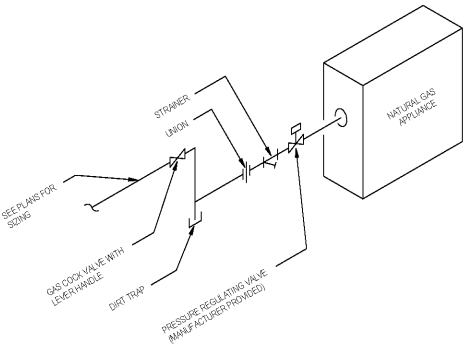
DRYER VENTING: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL DUCTWORK FOR THE DRYER EXHAUST SYSTEM. ALL CONCEALED DRYER DUCTING MUST BE 4" Ø RIGID METAL (GALVANIZED OR ALUMINUM), SMOOTH 30 GA. CLEAN, UNOBSTRUCTED, RIGID DUCT (NO FLEXIBLE DUCT ALLOWED IN CONCEALED AREAS). SEAL ALL JOINTS WITH POLY-BACKED PRESSURE SENSITIVE TAPE MEETING THE REQUIREMENTS OF UL 81. DUCT JOINTS SHALL BE NEEDED SO THAT THE MALE END OF THE DUCT POINTS IN THE DIRECTION OF THE AIRFLOW. DO NOT USE RIVETS OR SCREWS IN THE JOINTS OR ANYWHERE ELSE IN THE DUCT AS THESE ENCOURAGE LINT COLLECTION.

DRYERBOX RECEPTACLE SHALL BE METAL AND SHALL BE INSTALLED TO ALIGN WITH STACKED DRYER OUTLET CONNECTION. DRYERBOX SHOULD BE LOCATED AT OR NEAR THE CENTERLINE OF THE PROPOSED DRYER APPLIANCE EXHAUST OUTLET. RIGID DUCT SHALL PENETRATE DRYERBOX PORT 2 INCHES TO PROVIDE FOR FUTURE CONNECTION AND STORAGE OF TRANSITION HOSE. DRYERBOX SHOULD BE CAULKED AND THEN PAINTED WITH THE TRIM PAINT. FOR USAGE IN A 1-HOUR WALL ASSEMBLY, UL REQUIRES THAT BATT INSULATION BE STUFFED AROUND THE DRYERBOX AND IN THE ENTIRE WALL CAVITY CELL.

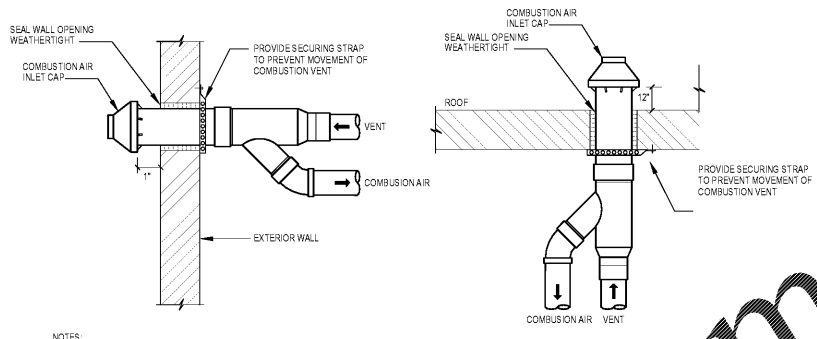
CONCEALED RIGID METAL DUCT ROUTING SHALL BE AS SHOWN ON PLANS WITHOUT VARIATION EXCEPT AS APPROVED BY THE ENGINEER. DRYER VENTING SHALL BE INDEPENDENT OF ANY OTHER SYSTEMS (RANGE HOOD EXHAUST VENTS). TERMINATION OF DRYER VENTING MUST BE TO THE EXTERIOR WITH VENT CAP EQUIPPED WITH A BACK-DRAFT DAMPER.



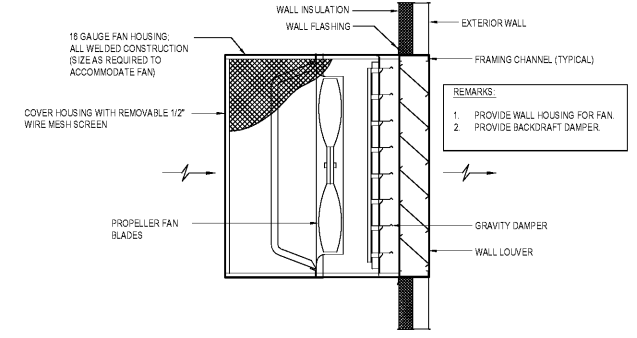
2 GOOSENECK VENT DETAIL
NO.2 SCALE: NTS



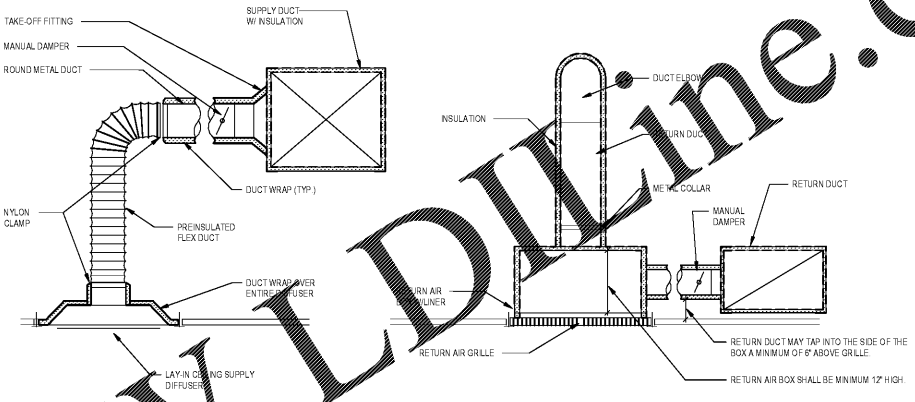
3 GAS FIRED APPLIANCE CONNECTION DETAIL
NO.2 SCALE: NTS



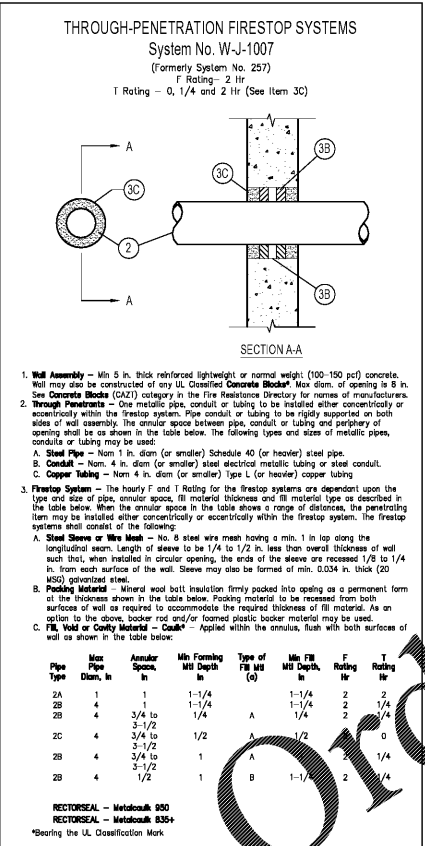
4 COMBUSTION VENT DETAIL
NO.2 SCALE: NTS



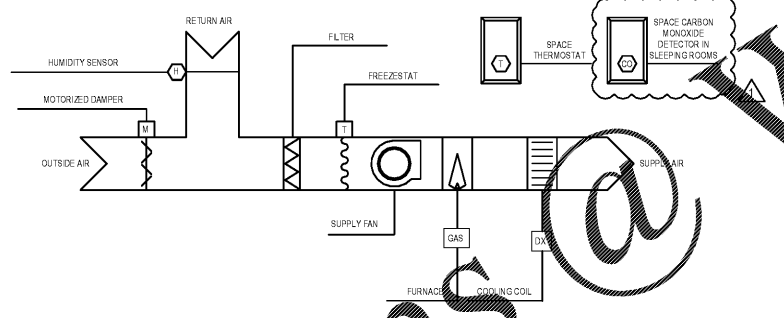
5 PROPELLER EXHAUST - FAN DETAIL
NO.2 SCALE: NTS



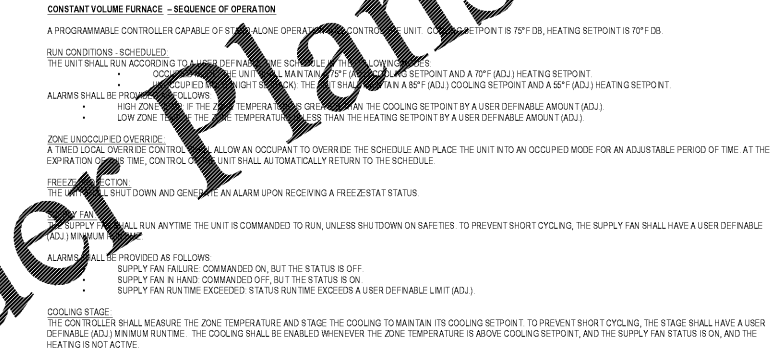
6 TYPICAL SUPPLY AND RETURN GRILLE INSTALLATION DETAIL
NO.2 SCALE: NTS



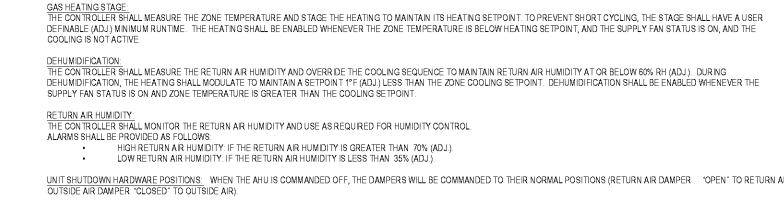
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8 PIPING SUPPORT DETAIL
NO.2 SCALE: NTS



9 CABINET EXHAUST FAN DETAIL
NO.2 SCALE: NTS



10 FIRE DAMPER WALL PENETRATION DETAIL
NO.2 SCALE: NTS

7 CONSTANT VOLUME FURNACE CONTROL DIAGRAM
NO.2 SCALE: NTS

CONSTANT VOLUME FURNACE - SEQUENCE OF OPERATION

A PROGRAMMABLE CONTROLLER CAPABLE OF STAN ALONE OPERATION CONTROLS THE UNIT. COOLING SETPOINT IS 75°F DB, HEATING SETPOINT IS 70°F DB.

RUN CONDITIONS - SCHEDULED

THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE SCHEDULE. THE SCHEDULE SHALL ALLOW FOR:

- OCCUPANCY SCHEDULE
- HIGH ZONE TEMPERATURE (TEMPERATURE GREATER THAN THE HEATING SETPOINT AND A 5°F (ADJ.) HEATING SETPOINT)
- LOW ZONE TEMPERATURE (TEMPERATURE GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.))

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH ZONE TEMPERATURE (TEMPERATURE GREATER THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.))
- LOW ZONE TEMPERATURE (TEMPERATURE GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.))

ZONE UNOCCUPIED OVERRIDE

A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME AT THE EXPIRATION OF THIS TIME, CONTROL SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

FREEZE PROTECTION

THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZE STAT STATUS.

COOLING STAGE

THE COIL CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT TO PREVENT SHORT CYCLING. THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME. THE COOLING SHALL BE ENABLED WHENEVER THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT AND THE SUPPLY FAN STATUS IS ON, AND THE HEATING IS NOT ACTIVE.

GAS HEATING STAGE

THE COIL CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE HEATING TO MAINTAIN ITS HEATING SETPOINT TO PREVENT SHORT CYCLING. THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME. THE HEATING SHALL BE ENABLED WHENEVER THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT AND THE SUPPLY FAN STATUS IS ON, AND THE COOLING IS NOT ACTIVE.

DEHUMIDIFICATION

THE COIL CONTROLLER SHALL MEASURE THE RETURN AIR HUMIDITY AND OVERRIDE THE COOLING SEQUENCE TO MAINTAIN RETURN AIR HUMIDITY AT OR BELOW 60% RH (ADJ.). DURING DEHUMIDIFICATION, THE HEATING SHALL MODULATE TO MAINTAIN A SETPOINT 1°F (ADJ.) LESS THAN THE ZONE COOLING SETPOINT. DEHUMIDIFICATION SHALL BE ENABLED WHENEVER THE SUPPLY FAN STATUS IS ON AND ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT.

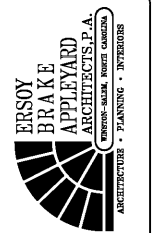
RETURN AIR HUMIDITY

THE COIL CONTROLLER SHALL MONITOR THE RETURN AIR HUMIDITY AND USE AS REQUIRED FOR HUMIDITY CONTROL.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH RETURN AIR HUMIDITY IF THE RETURN AIR HUMIDITY IS GREATER THAN 70% (ADJ.)
- LOW RETURN AIR HUMIDITY IF THE RETURN AIR HUMIDITY IS LESS THAN 35% (ADJ.)

UNIT SHUTDOWN HARDWARE POSITIONS: WHEN THE AHU IS COMMANDED OFF, THE DAMPERS WILL BE COMMANDED TO THEIR NORMAL POSITIONS (RETURN AIR DAMPER "OPEN" TO RETURN AIR, OUTSIDE AIR DAMPER "CLOSED" TO OUTSIDE AIR).



ENGINEERED DESIGNS INC.
North Carolina License #C-1729
1151 SE Cary Parkway, Suite 200 Cary, North Carolina 27518
P 919.851.9481 F 919.851.9703 www.engineereddesigns.com

City of Winston-Salem
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WINSTON-SALEM • NORTH CAROLINA



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