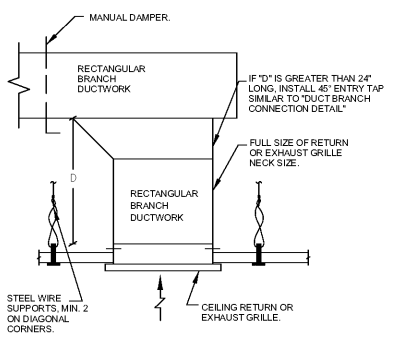
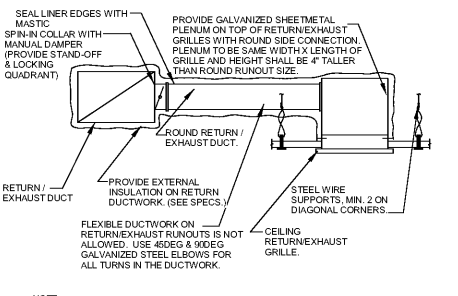


**NOTE:**  
 WHEREVER THE SUPPLY DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT. REFER TO SPECIFICATION FOR MAXIMUM TURNS IN FLEX DUCT.

**CEILING DIFFUSER INSTALLATION DETAIL**  
 NO SCALE

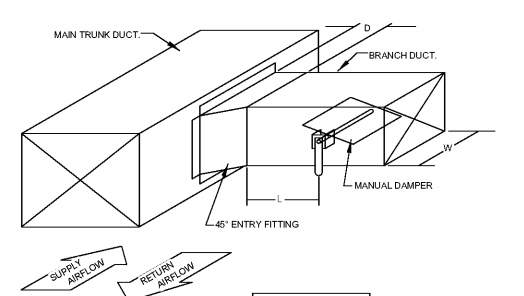


**CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL**  
 NO SCALE

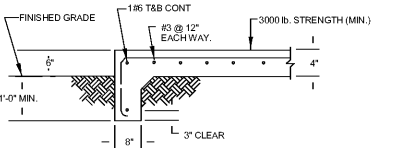


**NOTE:**  
 WHEREVER THE RETURN/EXHAUST DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE RECTANGULAR BRANCH DUCT CONNECTION (SEE DETAIL) OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT.

**CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL (FOR BRANCH CONNECTIONS 12" & SMALLER)**  
 NO SCALE

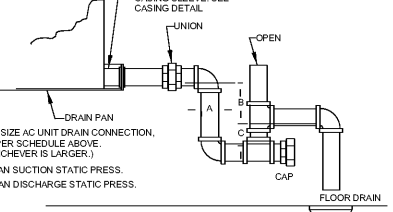


**DUCT BRANCH CONNECTION**  
 NO SCALE

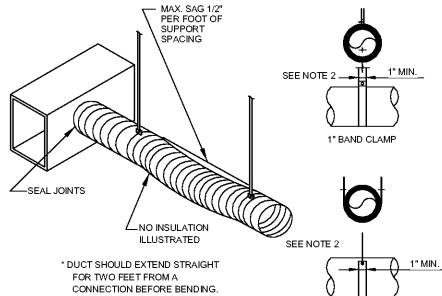


**CONCRETE PAD DETAIL**  
 NO SCALE

AC TONS	MIN. DRAIN SIZE
0 TO 20	1"
21 TO 40	1-1/4"
41 TO 60	1-1/2"
61 TO 100	2"
101 TO 250	3"
251 & LARGER	4"

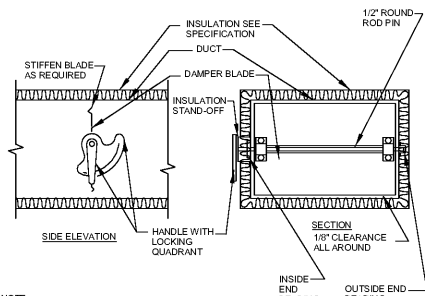


**AC UNIT DRAIN TRAP DETAIL**  
 NO SCALE



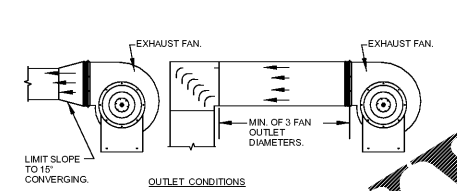
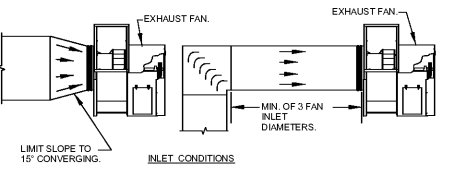
- NOTES:**
- SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
  - DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
  - MIN. CENTER LINE BEND RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D2).
  - FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 LINEAR FEET.

**FLEXIBLE DUCT SUPPORT DETAIL**  
 NO SCALE



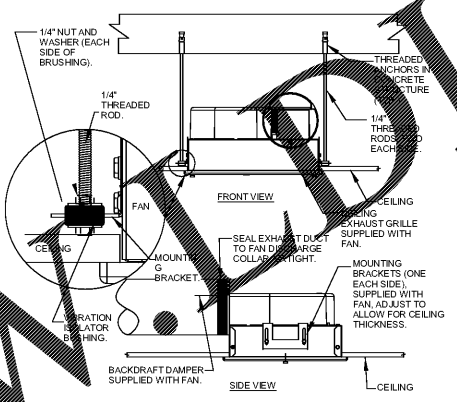
- NOTE:**
- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
  - DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.
  - MANUAL DAMPERS SHALL BE EQUAL TO RUSKIN MD35 (FOR RECTANGULAR DUCTS) AND SHALL BE EQUAL TO RUSKIN MD35S (FOR ROUND DUCTS).

**MANUAL DAMPER DETAIL**  
 NO SCALE

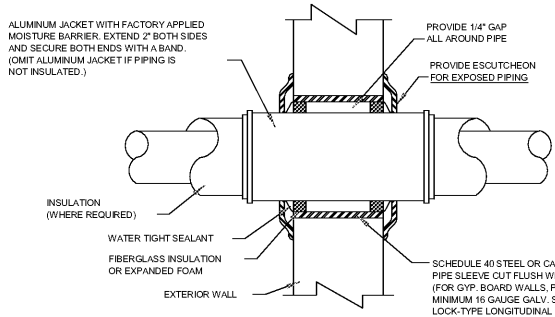


- NOTES:**
- INLET AND OUTLET CONDITIONS ARE FOR DUCTWORK CONNECTED TO ANY FAN AT AIR HANDLERS, ENERGY RECOVERY VENTILATORS, PACKAGED AC EQUIPMENT, EXHAUST FANS, SUPPLY FANS, ETC.

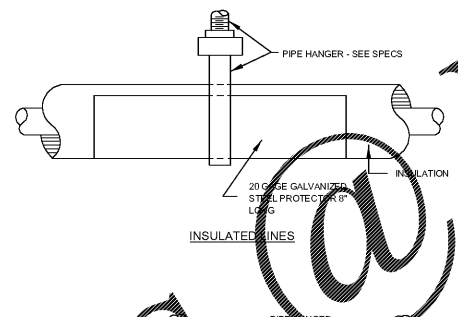
**DUCTWORK CONNECTION AT FAN DETAIL**  
 NO SCALE



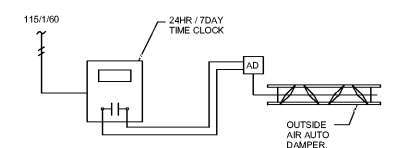
**CEILING EXHAUST FAN DETAIL**  
 NO SCALE



**PIPE WALL PENETRATION DETAIL**  
 NO SCALE



**REFRIGERANT PIPE SUPPORT DETAIL**  
 NO SCALE



**OUTSIDE AIR AUTO DAMPER CONTROLS**  
 NO SCALE

**OUTSIDE AIR AUTO DAMPER CONTROL SEQUENCE**

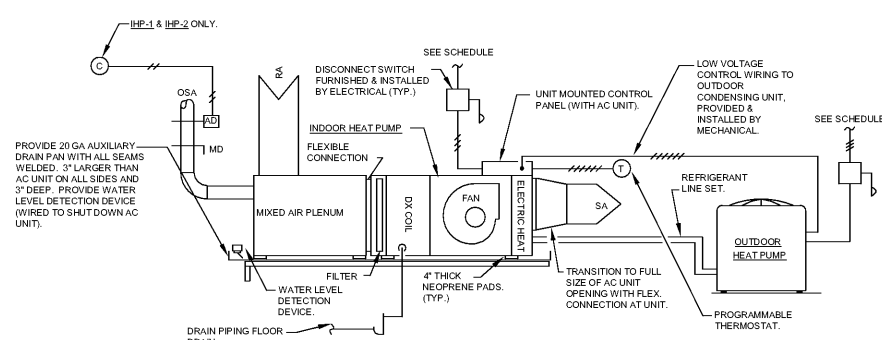
EACH OUTSIDE AIR AUTO DAMPER SHALL BE CONTROLLED BY A WALL MOUNTED, 24 HOUR PER DAY, 7 DAY PER WEEK, TIME CLOCK. DURING OCCUPIED HOURS, THE AUTO DAMPER SHALL BE OPEN. DURING UNOCCUPIED HOURS, THE AUTO DAMPER SHALL BE CLOSED. OCCUPIED HOURS TO BE DETERMINED BY THE OWNER. RECOMMENDED OCCUPIED HOURS ARE: MONDAY THRU FRIDAY, 8 A.M. TO 5 P.M.



**REFRIGERANT PIPING HANGER DETAIL**  
 NO SCALE



**COIL PIPING DETAIL**  
 NO SCALE



**SPLIT SYSTEM CONTROL SEQUENCE**

AC UNIT SHALL BE STARTED AND STOPPED BY WALL MOUNTED PROGRAMMABLE THERMOSTAT, SUBJECT TO FACTORY SAFETIES. WHEN AC UNIT AND CORRESPONDING OUTDOOR HEAT PUMP IS ENERGIZED, THE AC UNIT SUPPLY FAN SHALL START. DURING OCCUPIED HOURS, THE THERMOSTAT SHALL ENERGIZE THE OUTDOOR HEAT PUMP CONTROLS UPON A RISE IN ROOM TEMPERATURE PROVIDE COOLING BY LOADING AND UNLOADING COMPRESSORS IN STAGES AS NEEDED TO SATISFY SPACE TEMPERATURE SETPOINT (74°F - ADJUSTABLE) DURING SUMMER MONTHS. UPON A DROP IN SPACE TEMPERATURE DURING WINTER MONTHS, THE OUTDOOR HEAT PUMP SHALL STAGE ON TO MAINTAIN SPACE TEMPERATURE SETPOINT (70°F - ADJUSTABLE). IF THE HEAT PUMP CANNOT SATISFY SPACE TEMP, THE ELECTRIC HEAT SHALL STAGE ON. OCCUPIED HOURS TO BE DETERMINED BY THE OWNER. RECOMMENDED OCCUPIED HOURS ARE MONDAY THRU FRIDAY, 7 A.M. TO 6 P.M.

PROVIDE NIGHTTIME SETBACK TEMPERATURE THRU PROGRAMMABLE THERMOSTAT TO MAINTAIN 78°F (SUMMER), 66°F (WINTER), AFTER HOURS. UPON ACTIVATION OF NIGHT LOW LIMIT THERMOSTAT UNIT SHALL OPERATE IN OCCUPIED MODE UNTIL SATISFIED.

OUTSIDE AIR AUTO DAMPER SHALL BE CONTROLLED BY A WALL MOUNTED CO2 MONITOR. AUTO DAMPER TO OPEN WHEN CO2 RISES ABOVE 1000 PPM (HP-1 & HP-2 ONLY).

**SPLIT SYSTEM INSTALLATION AND CONTROLS**  
 NO SCALE

**Order Plans @**

Oneonta Community Development Center  
 100 1st Ave W.  
 Oneonta, AL 35121  
 GMC # ABHM170022

