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ISSUE/REVISION RECORD

Table with 2 columns: DATE, DESCRIPTION. Includes entries for COORDINATION SET, HEALTH SUBMITAL, HEALTH RESPONSE, and PERMIT/BD SET.

HVAC GENERAL NOTES

- 1. ALL RECTANGULAR, ROUND AND FLEXIBLE DUCTS SHALL BE SIZED AS SHOWN ON THESE DRAWINGS. MINIMUM INTERNAL DIMENSIONS ARE GIVEN.
2. ALL SUPPLY AND RETURN DUCTS ARE SIZED FOR AIR VOLUME AND STATIC PRESSURE DROP WITHOUT INTERIOR INSULATION. SHOULD INTERIOR INSULATION BE USED, THE CONTRACTOR SHALL INCREASE THE DUCT SIZE ACCORDINGLY.
3. ALL SUPPLY & RETURN AIR DUCTS SHALL BE INSULATED. EXTERIOR INSULATION SHALL BE USED ON CONCEALED DUCTWORK ONLY. CONCEALED INSULATION SHALL BE JOINS MANUALLY WROUGHT, STANDARD DUCT WRAP, TYP 75, 1-1/2" THICK / 80 POUND PER CUBIC FOOT DENSITY, R-VALUE 4.3 OR APPROVED EQUAL. EXPOSED DUCTWORK (MAIN TRUNK) SHALL BE INTERNALLY INSULATED WITH JOHN MANVILLE UNACOUSTIC RC 1" THICK, R-VALUE 4.2 OR APPROVED EQUAL. EXPOSED ROUND BRANCH DUCTS ARE NOT REQUIRED TO BE INSULATED.

ROOFTOP UNIT NATIONAL ACCOUNT

THE ROOFTOP UNITS SPECIFIED ARE PURCHASED THROUGH TRANE/HANSHAW TRANE NATIONAL ACCOUNTS BY OWNER. SUCCESSFUL CONTRACTOR SHALL CONTACT TRANE/HANSHAW TRANE NATIONAL ACCOUNTS FOR DELIVERY INFORMATION. FOR DELIVERY INFORMATION CONTACT JIM AIGNER @ (404)303-1433. FAX (540)69-7823. MAIL: jaigner@trane.com.

COMMISSIONING AND COMPLETION REQUIREMENTS

PROVISIONS FOR COMMISSIONING AND COMPLETION REQUIREMENTS IN ACCORDANCE WITH 2015 IECC SECTION C408 AND ARE PERMITTED TO REFER TO SPECIFICATIONS. FURTHER REQUIREMENTS, COPIES OF WHICH SHALL BE GIVEN TO THE OWNER OR OWNER'S AUTHORIZED AGENT AND MADE AVAILABLE TO THE CODE OFFICIAL UPON REQUEST IN ACCORDANCE WITH SECTION C408.2.4 AND C405.2.5.

HVAC UNIT SPECIFICATIONS

UNITS FURNISHED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR SHALL BE BY TRANE COMPANY AND SHALL BE SINGLE PACKAGE TYPE, COMBINATION AIR TO AIR COOLING AND GAS HEATING. EACH UNIT TO BE MOUNTED ON A FULL PERIMETER INSULATED ROOF CURB. THROWAWAY 2" THICK FILTERS SHALL BE BY FARR AIR SYSTEMS COMPANY AND SHALL BE CHANGED AT THE COMPLETION OF CONSTRUCTION. FIELD INSTALLED ECONOMIZER WITH BAROMETRIC RELIEF DAMPER AND ENTIRELY CONTROL AS SPECIFIED. INSTALL UNITS ON MOUNTING CURBS WITH ALL DUCTWORK PENETRATING INSIDE PERIMETER OF CURB. UNITS ALSO TO BE FURNISHED WITH AUTOMATIC ELECTRIC IGNITION SYSTEM, INTEGRAL STARTERS AND DISCONNECTS. (NOTE: UNITS AND ROOF CURBS SHALL BE PROVIDED BY OWNER AND INSTALLED BY GC.)

SEQUENCE OF OPERATION

THE MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED COMPONENTS AND WIRING DIAGRAMS FOR THE FOLLOWING SEQUENCE OF OPERATION FOR EACH HVAC UNIT. FACTORY INSTALLED DISCONNECTS SHALL BE WIRED AS REQUIRED BY THE ELECTRICAL CONTRACTOR.

- A. UNIT SHALL BE STARTED AND STOPPED THROUGH ITS RESPECTIVE THERMOSTAT AND/OR REMOTE SENSOR.
B. ROOM THERMOSTATS SHALL ENERGIZE COOLING AND HEATING SYSTEMS TO MAINTAIN DESIRED SPACE TEMPERATURE ON UNOCCUPIED MODE UNIT O.A. DAMPERS/ECONOMIZER SHALL BE SHUT & OPEN TO MINIMUM POSITION ON OCCUPIED CYCLE.
C. SMOKE DETECTOR FURNISHED AND INSTALLED BY OWNER'S SECURITY SYSTEMS CONTRACTOR. DETECTOR SHALL BE PHOTOELECTRIC TYPE AND SHALL BE INSTALLED IN THE RETURN AIR SECTION AND IN THE SUPPLY AIR FAN COMPARTMENT. THE DETECTOR WILL BE WIRED FOR CONTINUOUS POWER WHENEVER THE UNIT IS ENERGIZED.

CONTROLS (PROVIDED BY OWNER, INSTALLED BY GC)

- A. THERMOSTAT SHALL BE TRANE MODEL BAYSNS110A DUAL SET POINT A THERMOSTAT W/SYSTEM LIGHT SENSOR. PROVIDE WITH BAYSNS077A REMOTE ROOM SENSOR. THERMOSTAT AND ROOM SENSOR SHALL BE PART OF THE ROOFTOP UNIT PACKAGE. ALL THERMOSTATS SHALL BE WIRED WITH TWISTED SHIELDED CABLE.
B. ROOFTOP UNIT SMOKE DETECTOR FURNISHED AND INSTALLED BY OWNER'S SECURITY SYSTEMS CONTRACTOR. DETECTOR WILL BE WIRED TO SHUT DOWN ALL UNIT OPERATIONS ON DETECTION OF SMOKE. THERMOSTATS SHALL PROVIDE CONSTANT FAN OPERATION DURING OCCUPIED PERIODS AND INTERMITTENT FAN OPERATION DURING UNOCCUPIED PERIODS. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR.
C. ALL CONTROL WIRING SHALL BE BY THE MECHANICAL CONTRACTOR. PROVIDE PHENOLIC LABEL ON ALL THERMOSTATS AND REMOTE SENSORS INDICATING ROOFTOP UNIT SERVED.

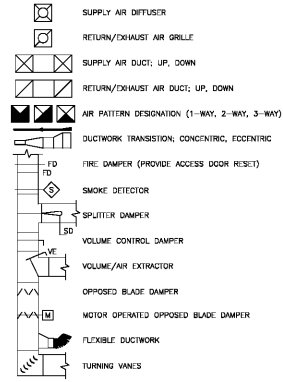
HVAC TEST AND BALANCE (PROVIDED BY OWNER, GC TO COORDINATE)

G.C. TO FURNISH HVAC SYSTEM BALANCE REPORT AND COORDINATE ACTUAL PROCEDURE BY SUPPLYING ALL PARTIES WITH (4) DAY ADVANCE NOTICE. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADJUSTMENTS TO THE SYSTEM AS DETERMINED BY THE REPORT. ONLY MELUNK CORPORATION IS APPROVED BY THE CODE TO PROVIDE THIS REPORT. CONTACT TAMMY MUNCY @ (513)271-1615. FAX: (513)271-1603.

OUTSIDE AIR CALCULATION BASED ON 2018 NORTH CAROLINA MECHANICAL CODE

Calculation block showing LOBBY/WAITING, DINING, KITCHEN, and SYSTEM OUTDOOR AIR INTAKE FLOW RATE calculations based on code formulas.

MECHANICAL LEGEND



GA OUTSIDE AIR DUCTWORK
INDICATES TAG NOTE
RTU-1 THERMOSTAT ASSOCIATED ROOFTOP UNIT
RHU-1 HUMIDISTAT ASSOCIATED ROOFTOP UNIT
A/100 AIR DEVICE / CFM
E-1 EXHAUST FAN DESIGNATION
S-1 SUPPLY FAN DESIGNATION
RTU-1 ROOFTOP UNIT DESIGNATION
ATF ABOVE FINISHED FLOOR
ATG ABOVE FINISHED GRADE
ATC ABOVE FINISHED CEILING
BTF BELOW FINISHED FLOOR
BFG BELOW FINISHED GRADE
BFC BELOW FINISHED CEILING
ET-1 MECHANICAL CONTRACTOR
G.C. GENERAL CONTRACTOR
TBC FURNISHED BY OTHER
RS REMOTE SENSOR

AIR DEVICE SCHEDULE

Table with columns: MARK, NECK SIZE, FACE SIZE, TYPE, CFM, MITG, THROW, DUTY, FT. THROW AT 150 FPM, TITUS/PRICE MODEL NO., MAX. NC, NOTES.

NOTES FOR AIR DEVICE SCHEDULE

- 1. OPPOSED BLADE DAMPER W/ TAMPER PROOF ADJUSTERS. PROVIDE WITH EXTRACTOR AND GRILLE-MOUNTED BALANCE DAMPERS.
2. SEE MOUNTING DETAIL 11W-4 FOR METAL CEILING INSTALLATION.
3. PAINTED TO MATCH CEILING.
4. PRINTED BLACK IN LUNGEON AND WAITING AREA.
5. PROVIDE A REDUCER WHERE THE DUCT AND THE NECK SIZE DO NOT MATCH.

AIR BALANCE SCHEDULE

Table with columns: UNIT, AREA SERVED, O.A. CFM / % OF SUPPLY, RETURN AIR, SUPPLY AIR, EXHAUST AIR, PRESSURE.

ROOF TOP UNIT SCHEDULE

Table with columns: MARK, AREA SERVED, BASIS OF DESIGN, NOMINAL TONS, TYPE OF SYSTEM, UNIT WEIGHT, TYPE OF UNIT, CFM, MIN. O.A., MOTOR, HEATING CAPACITY, COOLING CAPACITY, ELECTRICAL DATA, NOTES.

- NOTES: 1. FULL PERIMETER ROOF CURB; 2. MICROPROCESSOR CONTROLS; 3. NOT USED; 4. STANDARD PANEL 2" PLATED FILTERS SERV 7; 5. STANDARD CONDENSER COIL WITH FLOPS HAL GUARD 10; 6. POWERED CONDENSER OUTLET; 7. FROST; 8. DISCHARGE AIR SENSING TUBE; 9. DRAIN SEPARATOR MANUAL OR AUTOMATIC CHANGEOVER; 10. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.

EXHAUST FAN SCHEDULE

Table with columns: EQUIPMENT TAG, AREA SERVED, MANUFACTURER, MODEL, TYPE, DRIVE, CFM, SP. (IN. WC), MAX. RPM, SONE, WEIGHT (FAN/CURB), H.P., MOTOR, H.P., PHASE, VOLTS, NOTES.

- NOTES: 1. REFER TO HOOD DRAWINGS. 2. FURNISHED BY HOOD SUPPLIER. 3. INSTALLED BY MECHANICAL CONTRACTOR. 4. PROVIDE GRATE BACKDRAFT DAMPER. 5. NOT USED. 6. REFER TO LC SYSTEMS DRAWINGS FOR MAX. RPM AND SONES. 7. 13-1/2" x 13-1/2" ROOF OPENING WITH 20-1/2" x 20-1/2" CURB. 8. PROVIDE DISCONNECT. 9. PROVIDE BRISCREEN. 10. RELIEF HOOD WITH BACKDRAFT DAMPER THROUGH ROOF FOR PAHO BAR AIR PRESSURE RELIEF.

PROFESSIONAL SEAL
PROFESSIONAL IN CHARGE
R. SMITH
PROJECT MANAGER
A. HOLLOW
QUALITY CONTROL
A. HOLLOW
DRAWN BY
Y. YANG

PROJECT NAME
BUBBA'S 33

GASTONIA
NORTH CAROLINA
3287 E. FRANKLIN BLVD.



PROJECT NUMBER
20181046.0

SHEET TITLE

MECHANICAL SCHEDULES

SHEET NUMBER

M3

Vertical text on the left margin: 20181046.0 - Bubba's 33 - Mechanical Schedule - 3/20/2018