



## HVAC EQUIPMENT SCHEDULE

AHU-1  
AIR HANDLER  
EQUAL TO RUNTRU A4AH5E19A1B3  
MULTI-POSITIONAL, HIGH-EFFICIENCY AIR HANDLER WITH A 4 SPEED DIRECT DRIVE BLOWER AND FACTORY INSTALLED TXV KIT FOR OPTIMAL REFRIGERANT MANAGEMENT.  
NOMINAL COOLING CAPACITY: 1.5 TON  
CONDENSATE: PRIMARY + SECONDARY PAN; FLOAT SWITCH REQUIRED

CU-1  
OUTDOOR CONDENSING UNIT  
EQUAL TO TRANE 5TTR4018A1000 (XR14)  
1.5 TON, 18,000 BTU, 14.3 SEER2, COMPATIBLE WITH R-454B REFRIGERANT  
LOCATION: EXTERIOR PAD

### GENERAL NOTES

- CONTRACTOR SHALL PROVIDE FINAL AHRI CERTIFICATE FOR COMPLETE SYSTEM.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENTS PRIOR TO INSTALLATION.
- REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S GUIDELINES.
- PROVIDE DISCONNECTS AT ALL EQUIPMENT PER NEC.
- PROVIDE SECONDARY DRAIN PAN AND SAFETY SWITCH WHERE INSTALLED ABOVE FINISHED SPACES.
- CONTRACTOR SHALL VERIFY CLEARANCES AND SERVICE ACCESS IN FIELD.

## DUCTWORK SCHEDULE

SUPPLY AIR PLENUM (SAP)  
TYPE: INSULATED SHEET METAL PLENUM  
MATERIAL: GALVANIZED SHEET METAL, 26 GA ( $\leq 12"$ ) / 24 GA ( $\geq 14"$ )  
INSULATION: R-8 (MIN.) EXTERIOR WRAP (ATTIC INSTALLATION)  
SEAL CLASS: A (MASTIC + UL-181 TAPE)  
PRESSURE CLASS: +1" W.G.  
NOTES: PLENUM TO BE FABRICATED IN FIELD; CONNECT DIRECTLY TO AHU-1.

SUPPLY AIR FLEX DUCT (SA-FX)  
TYPE: UL-181 CLASS 1 FLEXIBLE DUCT  
INSULATION: R-8 (ATTIC)  
MAX LENGTH: 6 FT TO EACH DIFFUSER (TYP.)  
INSTALLATION: FULLY EXTENDED; NO COMPRESSION; SUPPORT EVERY 4 FT  
NOTES: FLEX DUCT ONLY PERMITTED FOR BRANCH RUNS FROM PLENUM TO DIFFUSERS.

RETURN AIR PLENUM (RAP)  
TYPE: INSULATED SHEET METAL PLENUM OR DUCTBOARD  
MATERIAL: 1"-2" DUCTBOARD OR 26 GA SHEET METAL  
INSULATION: R-8 (ATTIC)  
SEAL CLASS: A  
PRESSURE CLASS: -1" W.G.  
NOTES: PROVIDE FULLY LINED RETURN PLENUM AT AHU-1.

RETURN AIR FLEX DUCT (RA-FX)  
TYPE: UL-181 CLASS 1 FLEXIBLE DUCT  
INSULATION: R-8 (ATTIC)  
MAX LENGTH: 6 FT (TYP.)  
INSTALLATION: FULLY EXTENDED; SUPPORT EVERY 4 FT  
NOTES: FLEX DUCT ONLY FOR RETURN BRANCHES; NO FLEX FOR MAIN RETURN TRUNK.

DIFFUSERS / REGISTERS (SD/RD)  
TYPE: CEILING SUPPLY DIFFUSERS & CEILING RETURNS  
MATERIAL: STEEL, WHITE POWDER COAT  
NECK SIZE: PER PLAN  
CFM: PER AIR BALANCE SCHEDULE  
NOTES: BALANCING DAMPERS REQUIRED AT EACH BRANCH TAKEOFF.

TRANSITIONS / FITTINGS  
TYPE: SHEET METAL, SMOOTH RADIUS WHERE POSSIBLE  
CONSTRUCTION: 26-24 GA  
NOTES: TRANSITIONS TO BE 1:4 TAPER MINIMUM; NO ABRUPT CHANGES.

### GENERAL DUCT NOTES

- ALL DUCTWORK SHALL BE INSTALLED PER SMACNA STANDARDS.
- ALL DUCTS IN ATTIC SHALL BE INSULATED TO R-8 MINIMUM.
- FLEX DUCT SHALL NOT BE USED FOR MAIN SUPPLY OR RETURN TRUNKS.
- PROVIDE BALANCING DAMPERS AT ALL BRANCH RUNS.
- ALL DUCT CONNECTIONS SHALL BE SEALED TO SEAL CLASS A.
- CONTRACTOR SHALL VERIFY DUCT SIZES AND ROUTING IN FIELD.

## WATER HEATER GENERAL NOTES

Attic Access — Provide a permanent, code compliant access opening and a service platform large enough for safe maintenance and full unit replacement.

Drain Pan — Install a corrosion resistant drain pan under the heater with a minimum  $\frac{3}{4}$  inch drain line routed to an approved exterior termination.

Leak Protection — Provide a water leak detection device with automatic shutoff valve where required by code or project specifications.

Structural Support — Verify attic framing can support the full operating weight of the heater (tank + water). Reinforce framing as needed.

Clearances — Maintain manufacturer specified clearances around the unit for service.

Electrical Circuit — Provide a dedicated branch circuit sized per NEC and manufacturer requirements. Include a lockable disconnect within sight of the unit.

Bonding and Grounding — Bond metallic piping and ground the unit per NEC Article 250.

Thermostat Settings — Set thermostats to manufacturer recommended temperature unless otherwise specified.

T&P Valve Discharge — Route the temperature and pressure relief valve discharge to an approved location with continuous downward slope and no valves or traps.

Insulation — Insulate all hot and cold water piping in the attic to reduce heat loss and prevent condensation.

Freeze Protection — Protect piping and equipment from freezing using insulation and routing away from exterior surfaces.

Shutoff Valves — Provide full port shutoff valves on cold water supply and any recirculation lines.

Startup Verification — Verify proper electrical connections, leak free piping, T&P valve operation, and correct thermostat settings before turnover.