

SECTION 15737 - VARIABLE REFRIGERANT FLOW HVAC SYSTEMS

Part 1 - GENERAL

- 1.1 SUMMARY
- A. Section Includes:
    - 1. Mini-Split and/or VRF style heat-pump units and air handling units.
- 1.2 SUBMITTALS
- A. Product Data: Submit data including, cooling and heating capacities, dimensions, rough-in connections and connection requirements, duct connections, electrical requirements with electrical characteristics and connection requirements, controls and accessories.
  - B. Manufacturer's Installation Instructions: Submit assembly, support details, connection requirements, and include start-up instructions.
- 1.3 CLOSEOUT SUBMITTALS
- A. Record of actual locations of equipment, lineset routing and controls installed remotely from units.
  - B. Operation and Maintenance Data: Submit manufacturer's descriptive literature, operating instructions, installation instructions, and maintenance repair data to owner's representative.
  - C. Maintain one copy of each document on site.
- 1.4 DELIVERY, STORAGE, AND HANDLING
- A. Accept equipment on site in factory packaging. Inspect for damage.
  - B. Comply with manufacturer's installation instructions for rigging, unloading and transporting units.
  - C. Protect equipment from damage by providing temporary covers until construction is complete.
- 1.5 COORDINATION
- A. Coordinate piping rough-in locations, and electrical rough-in locations to accommodate work of this section.
  - B. Coordinate installation of condensing units with roof structure.
  - C. Coordinate installation of air handling units with building structure.
- 1.6 WARRANTY
- A. Furnish 5-year manufacturer's warranty for compressors.
- Part 2 - PRODUCTS
- 2.1 MINI-SPLIT, AND/OR VRF SYSTEMS:
- A. Manufacturers:
    - 1. As shown on Mechanical Schedules Sheet.
    - 2. Substitutions: None Permitted
  - B. Furnished and installed in accordance with local Authority Having Jurisdiction's standards.
  - C. Product description: Mini-Split or VRF system consisting of air handling unit(s), and condensing unit including, but not limited to, evaporator fan, refrigerant cooling/heating coil, compressor, refrigeration circuit, condenser, refrigerant controller, air filters, controls, accessories, and refrigeration specialties.
- 2.2 AIR HANDLING UNIT:
- A. Configuration: As shown on plans and Mechanical Schedules.
  - B. Evaporator Coil: Constructed of copper tubes expanded onto aluminum fins. Factory leak tested under water.
  - C. Refrigeration System: As shown in Mechanical Schedules controlled by factory installed thermal expansion valve.
  - D. Accessories: As shown in Mechanical Schedules.
- 2.3 CONDENSING UNIT:
- A. General: Factory assembled and tested air cooled condensing unit consisting of casing, compressors, condensers, coils, condenser fans and motors, and unit controls.
  - B. Compressor: As shown in Mechanical Schedules with rotary or hermetic reciprocating type compressors, resiliently mounted, with positive lubrication, and internal motor overload protection.
  - C. Condenser Coil: Constructed of copper tubing mechanically bonded to fins, factory leak and pressure tested.
  - D. Controls: Furnish operating and safety controls including high and low pressure cutouts. Control transformer. Furnish magnetic contactors for compressor and condenser fan motors.
  - E. Condenser Fans and Drives: Direct drive propeller fans statically and dynamically balanced. Wired to operate with compressor. Permanently lubricated ball bearing type motors with built-in thermal overload protection.
  - F. Accessories: As shown in Mechanical Schedules.
  - G. Refrigeration Specialties: Furnish the following for each circuit. Charge of compressor oil, holding charge of refrigerant, Replaceable core type filter drier, Liquid line sight glass and moisture indicator, shut-off valves on suction and liquid piping, liquid line solenoid valve, charging valve, oil level sight glass, crankcase heater, hot gas muffler, pressure relief device.
  - H. Refrigerant: Furnish charge of refrigerant.
- 2.4 CONTROLS:
- A. Thermostat: 7 day programmable electronic space thermostat with single stage heating, and single stage cooling with automatic changeover and heating/cooling setback.
- 2.5 ELECTRICAL CHARACTERISTICS AND COMPONENTS:
- A. Disconnect switch: As noted on mechanical schedules, and electrical plans.

Part 3 - EXECUTION

- 1.1 INSTALLATION - AIR HANDLING UNITS
- A. Provide equipment per the manufacturer's installation instructions.
  - B. Install unit on drain pan on units where specified.
  - C. Install air handling units on vibration isolators.
  - D. Connect air handling units to supply and return ductwork (where applicable) with flexible connections.
  - E. Install condensate piping with trap and route from drain to location shown on plans.
  - F. Arrange all piping for easy dismantling to permit tube cleaning.
  - G. Install components furnished loose for field mounting.
  - H. Install connection to electrical power wiring in accordance with Section 16100.
- 1.2 INSTALLATION - CONDENSING UNITS
- A. Install condensing units on vibration isolators.
  - B. Install refrigerant piping from air handling unit to condensing unit or heat recovery unit (refer to mechanical plans). Install refrigerant specialties furnished with unit.
  - C. Evacuate refrigerant piping and install initial charge of refrigerant. Install electrical devices furnished loose for field mounting.
  - D. Install control wiring between air handling units, heat-pump unit, field installed accessories and heat recovery unit (if applicable).
  - E. Install connection to electrical power in accordance with Section 16100.
- 1.3 INSTALLATION - HEAT RECOVERY UNIT
- A. Install unit on vibration isolators.
  - B. Install refrigerant piping from unit to air handling unit and condensing unit.
  - C. Evacuate refrigerant piping and install initial charge of refrigerant. Install electrical devices furnished loose for field mounting.
  - D. Install control wiring between air handling units, heat-pump unit, field installed accessories and heat recovery unit.
  - E. Install connection to electrical power in accordance with Section 16100.
- 1.4 MANUFACTURER'S FIELD SERVICES
- A. Furnish initial start-up and shutdown.
- 1.5 CLEANING
- A. After construction is complete, including painting, clean exposed surfaces of units.
  - B. Vacuum clean coils and inside of cabinets.
  - C. Touch up marred or scratched surfaces of factory finished cabinets.
  - D. Install new throwaway filters in units after Substantial Completion.
- END OF SECTION 15737

SECTION 15810 - DUCTS AND ACCESSORIES

PART 1 - GENERAL

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data for fire and smoke dampers.
  - B. Comply with NFPA 90A for systems serving spaces more than 25,000 cu. ft. in volume or building Types II, IV, and V construction more than 3 stories in height.
  - C. Comply with NFPA 90B for systems serving spaces in 1 or 2 family dwellings or serving spaces less than 25,000 cu. ft..
  - D. Comply with NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations," for kitchen hood ducts.
  - E. Comply with UL 181 and UL 181A for ducts and closures.
  - F. Testing, Adjusting, and Balancing Agency Qualifications: AABC certified (to be furnished by Tenant).
- PART 2 - PRODUCTS
- 2.1 DUCTS
- A. Spiral Duct: Spiral Lock Seam, without insulation, G90 galvanized finish, ASTM A-653/924
    - 1. Basis of Design Manufacturers: Lindab SPIROsafe, alternates to the basis of design must be submitted for review.
    - 2. Fittings: Factory produced standing seam construction with internal sealing. Fittings with a major axis of 37" - 48" or smaller shall be 20 gauge. Fittings with a major axis of 37" - 48" shall be 18 gauge.
  - B. Galvanized Steel Sheet: Forming steel, ASTM A 653/653M, G90 coating designation.
  - C. Duct Liner: ASTM C 1071, Type II, with an airstream surface coated with a temperature resistant coating. Thickness: 1-1/2 inch. R-value: 8.
    - 1. Adhesive: ASTM C 916, Type I.
    - 2. Mechanical Fasteners: Galvanized steel pin, length as required to penetrate liner plus a 1/8 inch projection maximum into the airstream.
  - D. Joint and Seam Tape: Comply with UL 181A.
  - E. Joint and Seam Sealant: Comply with UL 181A.
  - F. Rectangular Metal Duct Fabrication: Comply with SMACNA's "HVAC Duct Construction Standard" for metal thickness, reinforcing types and intervals, tie rod applications, and joint types and intervals.

2.2 ACCESSORIES

- A. Volume-Control Dampers: Factory fabricated volume control dampers, complete with required hardware and accessories. Single blade and multiple opposed blade, standard leakage rating, and suitable for horizontal or vertical applications.
  - B. Fire Dampers: Factory-fabricated fire dampers, complete with required hardware and accessories. UL labeled according to UL 555, "Fire Dampers".
  - C. Flexible Connectors: Flame retardant or noncombustible fabrics, coatings, and adhesives complying with UL 181, Class 1.
  - D. Flexible Ducts: Factory fabricated, insulated, round duct, with an outer jacket enclosing 2 inch thick, glass fiber insulation, R-value: 6.0, around a continuous inner liner.
- PART 3 - EXECUTION
- 3.1 INSTALLATION
- A. Duct System Pressure Class: Construct and install each duct system with 2 inch positive and negative duct pressure classifications.
  - B. Conceal ducts from view in finished and occupied spaces. Except where noted as exposed.
  - C. Avoid passing through electrical equipment spaces and enclosures.
  - D. Support and connect metal ducts according to SMACNA's "HVAC Duct Construction Standard".
  - E. Install duct accessories according to applicable portions of details of construction as shown in SMACNA standards.
  - F. Install liner and/or insulation on ductwork per the material schedule on sheet M010.
  - G. Install volume control dampers in lined duct with methods to avoid damage to liner and to avoid erosion of duct liner.
  - H. Install fire and smoke dampers according to manufacturer's UL approved written instructions.
  - I. Install fusible links in fire dampers.
    - 1. Provide saddle tape at tees for exposed ductwork.
- 3.2 TESTING, ADJUSTING, AND BALANCING
- A. The Tenant will supply an independent balance agent to to balance and adjust the HVAC installation. The balance agent will be responsible for any pulley or belt changes required.
  - B. The GC is to have trained staffed available during the balancing to correct issues noted by the balance agent.
  - C. The balance agent is to balance airflow within distribution systems, including submains, branches, and terminals to indicated quantities +/- 10%. The hood exhaust system shall be balanced to a tolerance of -0+10% and the make-up air system to a tolerance of -10+0%.
  - D. The balance agent is to supply a copy of the balance report to the Tenant, engineer and general contractor for review.
- END OF SECTION 15810

SECTION 15855 - DIFFUSERS, REGISTERS, AND GRILLES

PART 1 - GENERAL

- 1.1 SECTION REQUIREMENTS
- A. Submittals: None.
- PART 2 - PRODUCTS
- 2.1 OUTLETS AND INLETS
- A. All air terminal devices:
    - 1. Refer to Grills, Registers, and Diffusers Schedule for equipment schedule
    - 2. Manufacturer: As scheduled (NO SUBSTITUTIONS)
    - 3. Material: As scheduled.
    - 4. Finish: As scheduled.
    - 5. Mounting: As scheduled.
- PART 3 - EXECUTION
- 3.1 INSTALLATION
- A. Coordinate location and installation with duct installation and installation of other ceiling and wall mounted items.
  - B. Locate ceiling diffusers, registers, and grilles, as indicated on the architectural "reflected ceiling plans." Unless otherwise indicated, locate units in center of acoustical ceiling panels.
- END OF SECTION 15855

CALIFORNIA GREEN BUILDING STANDARDS CODE

- 5.410 BUILDING MAINTENANCE AND OPERATION
- 5.410.4 TESTING AND ADJUSTING:
- Testing and adjusting of systems installed shall be required for buildings less than 10,000 square feet or new systems to swerve an addition or alteration subject to Section 303.1.
- 5.410.4.2 SYSTEMS:
- Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:
1. HVAC systems and controls
  2. Indoor and outdoor lighting and controls
  3. Water heating systems
  4. Renewable energy systems
  5. Landscape irrigation systems
  6. Water reuse systems
- 5.410.4.3 PROCEDURES:
- Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.
- 5.410.4.3.1 HVAC BALANCING:
- In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards, Associated Air Balance Council National Standards or as approved by the enforcing agency.
- 5.410.4.4 REPORTING:
- After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.
- 5.410.4.5 OPERATION AND MAINTENANCE MANUAL:
- Provide the building owner or representative with detailed operating and maintenance instructions and copies of guarantees/warranties for each system. O&M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.
- 5.410.4.5.1 INSPECTIONS AND REPORTS:
- Include a copy of all inspection verifications and reports required by the enforcing agency.

5.504 POLLUTANT CONTROL

- 5.504.1 TEMPORARY VENTILATION:
- The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992. Replace air filters immediately prior to occupancy, or, if the building is occupied alteration, at the conclusion of construction.
- 5.504.3 COVERING OF DUCT OPENINGS OF MECHANICAL EQUIPMENT DURING CONSTRUCTION:
- At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal, or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may collect in the system.

5.508 OUTDOOR AIR QUALITY

- 5.508.1 OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS:
- Installations of HVAC, refrigeration, and fire suppression equipment shall comply with Section 5.508.1.1 and 5.508.1.2.
- 5.508.1.1 CHLOROFLUOROCARBONS (CFCS):
- Install HVAC, refrigeration and fire suppression equipment that do not contain CFCS.
- 5.508.1.2 HALONS:
- Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

HVAC MATERIAL SCHEDULE		
CATEGORY	APPLICATION	ALLOWABLE MATERIAL
DUCT	EXPOSED SUPPLY	RECT. LINED OR ROUND AS SHOWN, NO EXPOSED DUCT-SEALING MASTIC
	EXPOSED RETURN	RECTANGULAR, NO EXPOSED DUCT-SEALING MASTIC
	EXPOSED GEN. EXHAUST	RECTANGULAR OR ROUND AS SHOWN, NO EXPOSED DUCT-SEALING MASTIC
	CONCEALED, SUPPLY	RECT. OR ROUND AS SHOWN, LINED OR INSULATED
	CONCEALED, RETURN	RECT. OR ROUND AS SHOWN, LINED OR INSULATED
	CONCEALED, GEN. EXHAUST	RECT. OR ROUND AS SHOWN
	CONCEALED, TYPE I HOOD EXHAUST	RECTANGULAR 16 GA. BLACK IRON W/ WRAP OR UL 1978 FACTORY-MANUFACTURED DUCT W/ WRAP (SUBMIT SHOP DRAWINGS FOR FACTORY-MANUFACTURED DUCT PRIOR TO ORDERING FOR APPROVAL)

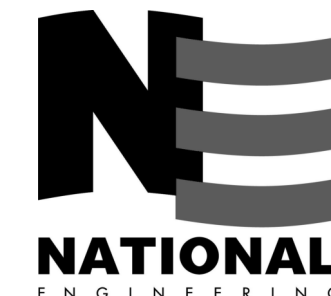
HVAC ABBREVIATIONS

- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- CD CEILING DIFFUSER
- CU CONDENSING UNIT
- (E) EXISTING
- EF EXHAUST FAN
- ER EXHAUST REGISTER
- EXT'G EXISTING
- HD HOOD
- MUA MAKEUP AIR UNIT
- OBD BLADE DAMPER
- RG RETURN GRILLE
- RTU ROOFTOP UNIT
- SR SUPPLY REGISTER
- VSC VARIABLE SPEED CONTROL
- COZAS TENANT'S CO2 ALARM SUPPLIER
- GC GENERAL CONTRACTOR
- HES TENANT'S HVAC EQUIPMENT SUPPLIER
- HS TENANT'S HOOD SUPPLIER
- KES TENANT'S KITCHEN EQUIPMENT SUPPLIER
- TAB TENANT'S TEST AND BALANCE VENDOR
- TCC TENANT'S CABLING CONTRACTOR
- TDC TENANT'S DUCT CLEANER
- TEMS TENANT'S ENERGY MANAGEMENT SYSTEM SUPPLIER
- TLS TENANT'S LIGHT/LAMP SUPPLIER
- TMB TENANT'S MENU BOARD SUPPLIER
- TMS TENANT'S MILLWORK SUPPLIER
- TP TENANT'S PHONE SUPPLIER
- TRS TENANT'S RAILING SUPPLIER
- TSV TENANT'S SIGN VENDOR
- TUV TENANT'S UV SANITIZER SUPPLIER
- WCS TENANT'S WALK-IN COOLER SUPPLIER
- WHS TENANT'S WATER HEATER SUPPLIER

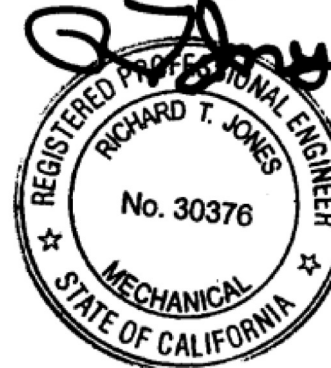
HVAC SYMBOLS

- CEILING DIFFUSER
- CEILING-MOUNTED RETURN OR EXHAUST REGISTER
- SUPPLY REGISTER
- RETURN GRILLE
- FLEXIBLE DUCT
- MITERED CORNER WITH TURNING VANES
- DUCTWORK INTERNAL FREE DIMENSIONS (WIDTH/HEIGHT) RECTANGULAR TO ROUND DUCT TRANSITION
- DUCT-MOUNTED SMOKE DETECTOR
- MOTOR-OPERATED DAMPER
- MANUAL VOLUME DAMPER
- GREASE DUCT CLEANOUT
- MITERED CORNER WITHOUT TURNING VANES
- GRIDPOINT THERMOSTAT
- GRIDPOINT ZONE SENSOR MODULE
- GRIDPOINT SUPPLY PROBE
- PLAN NOTE: SEE PLAN NOTES LISTED ON THE SAME SHEET FOR NOTE MEANING
- CONNECT TO EXISTING
- EQUIPMENT TAG: SEE EQUIPMENT SCHEDULE ON SHEET M600 FOR EQUIPMENT INFORMATION
- AUDIO/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET
- GRILL, REGISTER, OR DIFFUSER TAG: TAG, NECK SIZE, AIRFLOW [CFM]

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Contents:

HVAC SPECIFICATIONS

M010

STATE OF CALIFORNIA  
**Mechanical Systems**  
 NRCC-MCH-E (Created 9/21) CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE**  
 This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 1 of 11  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**A. GENERAL INFORMATION**  
 01 Project Location (city) Oakland 04 Total Conditioned Floor Area 2,258  
 02 Climate Zone 3 05 Total Unconditioned Floor Area 0  
 03 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade) 1  
 Office (R)  Retail (M)  Non-refrigerated Warehouse (S)  
 Hotel/ Motel Guest Rooms (R-1)  School (F)  Healthcare Facility (H)  
 High-Rise Residential (R-2/R-3)  Relocatable Class Bldg (E)  Other (Write In): Restaurant (A-2)  
 \* FOOTNOTES: Climate zone can be determined on the California Energy Commission's website at [http://www.energy.ca.gov/maps/renewable/building\\_climate\\_zones.html](http://www.energy.ca.gov/maps/renewable/building_climate_zones.html)

**B. PROJECT SCOPE**  
 Table Instructions: Include any mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.  
 My project consists of (check all that apply)  
 01 Air System(s) 02 Wet System Components 03 Dry System Components  
 Heating Air System  Water Economizer  Air Economizer  
 Cooling Air System  Pumps  Electric Resistance Heat  
 Mechanical Controls  Hydronic System Piping  Fan Systems  
 Mechanical Controls  Cooling Towers  Dustwork  
 Chillers  Ventilation  
 Boilers  Zonal Systems/ Terminal Boxes

**C. COMPLIANCE RESULTS**  
 Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, for guidance.  
 System Summary: 01 02 03 04 05 06 07 08 09  
 §110.1 AND §110.2 AND §140.4 (See Table F) AND §140.4 (See Table G) AND §140.4(c) (See Table H) AND §110.2, §120.2, §140.4(f) (See Table I) AND §120.1 (See Table J) AND §140.4(d) (See Table K) AND §110.12 and §120.2(b) (See Table L) AND §110.2(e)2 (See Table M) **COMPLIANCE RESULTS**  
 Yes AND AND AND AND Yes AND AND AND AND **DOES NOT COMPLY**  
 Mandatory Measures Compliance (See Table Q for Details) **COMPLIES**

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

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01 02 03 04 05 06 07 08 09  
 System Name System Zoning Conditioned Floor Area Being Served (ft²) Thermostats §110.2(b) & (c)1, §120.2(a) or §141.0(b)2e Shut-Off Controls §120.2(c) Isolation Zone Controls §120.2(c) Demand Response §110.12 and §120.2(b) Supply Air Temp. Reset §140.4(f) Window Interlocks per §140.4(n)  
 CU-3 SA Temp Reset: Exempt because zone complies with 140.4(d) & Exception 1 to 140.4(f)

**J. VENTILATION AND INDOOR AIR QUALITY**  
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(e)3 for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflow may be shown on the plans or the calculations can be presented in a spreadsheet.  
 01  Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.  
 02  Check this box if the project includes new or altered high-rise residential dwelling units.  
 03  Check the box if the project is using natural ventilation in any spaces to meet required ventilation rates per §120.1(c)2.  
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

STATE OF CALIFORNIA  
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**N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCC/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/)  
 YES NO Form/Title Field Inspector Pass Fail  
  NRCC-MCH-01-E - Must be submitted for all buildings.

**O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**  
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCC/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/)  
 YES NO Form/Title Field Inspector Pass Fail

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

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**D. EXCEPTIONAL CONDITIONS**  
 This table is auto-filled with unedited comments because of selections made or data entered in tables throughout the form.  
 Transfer air is being used in at least one zone to meet minimum ventilation requirements. See Table J for detail. Please review Table J for compliance; all fields which are not gray must be completed; either column 01 must indicate that ventilation calculations are attached to the permit application or each system must demonstrate that Outside Airflow + Transfer Air > Required Min. Outside Airflow. Selections made in Table O have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

**E. ADDITIONAL REMARKS**  
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

**F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)**  
 Table Instructions: Complete the following equipment schedules to show compliance with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4(a), §140.4(b) and §140.4(c) or §141.0(b)2 for alterations.  
 Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)  
 01 02 03 04 05 06 07 08 09 10 11  
 Name or Item Tag Equipment Category per Tables 110.2 Equipment Type per Tables 110.2 & Title 20 Smallest Size Available<sup>1</sup> §140.4(a) Sensible Per Design (kBtu/h) Rated (kBtu/h) Supp. Heating Output (kBtu/h) Sensible Per Design (kBtu/h) Rated (kBtu/h) Total Heating Load (kBtu/h) Total Sensible Cooling Load (kBtu/h)  
 CU-3 Variable Refrigerant Flow VRF heat pump, air cooled Yes 229 270 0 186 240 229 223

<sup>1</sup> FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(d). Healthcare facilities are exempted.  
<sup>2</sup> It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.  
<sup>3</sup> If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.  
<sup>4</sup> Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).  
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

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**CERTIFICATE OF COMPLIANCE**  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 5 of 11  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

Table Continued  
**Nonresidential and Hotel/ Motel Ventilation Systems**  
 04 05 06 07  
 System Name: CU-3 System Design OA CFM Air Flow<sup>1</sup> 1,500 System Design Transfer Air CFM: 150 Air Filtration per §120.1(c) and §141.0(b)2<sup>2</sup> Provided per §120.1(c) (NR & Hotel/ Motel)

08 09 10 11 12 13 14 15 16  
 Space Name or Item Tag Occupancy Type\* Conditioned Floor Area (ft²) # of showerheads/toilets # of people<sup>3</sup> Required Min OA CFM Required Minimum CFM Provided per Design CFM DCV or Occupant Sensor Controls per §120.1(d)3, §120.1(d)5 & §120.2(e)3<sup>4</sup>  
 DINING ROOM Cafeteria/ fast-food dining 720 360 DCV NA: Not required per §120.1(d)3  
 Occ Sensor  
 KITCHEN Kitchen (cooking) 1,186 177.9 830.2 3,200 DCV NA: Not required per §120.1(d)3  
 Occ Sensor  
 RESTROOMS Toilet (public) 352 3 52.8 210 450 DCV NA: Not required per §120.1(d)3  
 Occ Sensor

17 Total System Required Min OA CFM 590.7 18 Ventilation for this System Complies? Yes

<sup>1</sup> FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.  
<sup>2</sup> Air filtration requirements apply to the following three system types per §120.1(c)1: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.  
<sup>3</sup> Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.  
<sup>4</sup> Air Filtration requirements apply to the following three system types per §120.1(c)1: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

STATE OF CALIFORNIA  
**Mechanical Systems**  
 NRCC-MCH-E (Created 9/21) CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE**  
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**P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**  
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCC/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/)  
 YES NO Form/Title Field Inspector Pass Fail  
  NRCC-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. NOTE: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.    
  NRCC-MCH-03-A Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".    
  NRCC-MCH-04-A Air Distribution Duct Leakage    
  NRCC-MCH-05-A Air Economizer Controls    
  NRCC-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.    
  NRCC-MCH-07-A Supply Fan Variable Flow Controls    
  NRCC-MCH-08-A Valve Leakage Test    
  NRCC-MCH-09-A Supply Water Temperature Reset Controls    
  NRCC-MCH-10-A Hydronic System Variable Flow Controls    
  NRCC-MCH-11-A Automatic Demand Shed Controls    
  NRCC-MCH-12-A FDD for Packaged Direct Expansion Units    
  NRCC-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance    
  NRCC-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".    
  NRCC-MCH-15-A Thermal Energy Storage (TES) System Acceptance NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice-Slurry, Eutectic Salt, Chathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".    
  NRCC-MCH-16-A Supply Air Temperature Reset Controls    
  NRCC-MCH-17-A Condenser Water Temperature Reset Controls    
  NRCC-MCH-18 Energy Management Control Systems    
  NRCC-MCH-19 Occupancy Sensor Controls    
  NRCC-MCH-20 Multi-Family Ventilation    
  NRCC-MCH-21 Multi-Family Envelope Leakage

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**Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP))**  
 01 02 03 04 05 06 07 08 09  
 Name or Item Tag Size Category (Btu/h) Rating Condition (°F) Heating Mode Efficiency Unit Min Efficiency Required per Tables 110.2/ Table 20 Design Efficiency Efficiency Unit Min Efficiency Required per Tables 110.2/ Table 20 Design Efficiency  
 CU-3 2240,000 COP Heating Mode EER 9.5 IEER 12.7 23.9

**G. PUMPS**  
 This Section Does Not Apply

<sup>1</sup> FOOTNOTE: Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document.  
<sup>2</sup> The unit used for HP must be consistent for all fans within a system.

**I. SYSTEM CONTROLS**  
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(f) and (g) or requirements in §141.0(b)2e for altered space conditioning systems.  
 01 02 03 04 05 06 07 08 09  
 System Name System Zoning Conditioned Floor Area Being Served (ft²) Thermostats §110.2(b) & (c)1, §120.2(a) or §141.0(b)2e Shut-Off Controls §120.2(c) Isolation Zone Controls §120.2(c) Demand Response §110.12 and §120.2(b) Supply Air Temp. Reset §140.4(f) Window Interlocks per §140.4(n)  
 CU-3 multi-zone ≤ 25,000 ft² Setback Thermostat Auto Timeswitch NA: Continuous Heat/Cool Other\* NA: Single Zone NA: No operable windows

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

STATE OF CALIFORNIA  
**Mechanical Systems**  
 NRCC-MCH-E (Created 9/21) CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE**  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 6 of 11  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**K. TERMINAL BOX CONTROLS**  
 This Section Does Not Apply

**L. DISTRIBUTION (DUCTWORK AND PIPING)**  
 Table Instructions: Complete the following tables to show compliance with mandatory pipe insulation requirements found in §120.3 and prescriptive requirements found in §140.4(f) for duct leakage testing.  
 Duct Leakage Sealing  
 The answers to the questions below apply to the following duct system(s): CU-3 Duct leakage testing triggered for these systems? No  
 11 No The scope of the project includes only duct systems serving healthcare facilities.  
 12 Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.  
 13 Yes The space conditioning system serves less than 5,000 ft² of conditioned floor area.  
 14 No The combined surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system:  
 Outdoors  
 In a space directly under a roof that has a U-factor greater than the U-factor of the ceiling, or if the roof does not meet the requirements of §140.3(a)18 or if the roof has fixed vents or openings to the outside/unconditioned spaces  
 In an unconditioned crawlspace  
 In other unconditioned spaces  
 15 No The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.  
 16 No The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.  
 17 Duct system shall be sealed in accordance with the California Mechanical Code.

**M. COOLING TOWERS**  
 This Section Does Not Apply

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

STATE OF CALIFORNIA  
**Mechanical Systems**  
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**CERTIFICATE OF COMPLIANCE**  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 9 of 11  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**  
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCC/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/)  
 YES NO Form/Title Field Inspector Pass Fail  
  NRCC-MCH-04-H Duct Leakage Test NOTE: Must be completed by a HERS Rater    
  NRCC-MCH-24 Enclosure Air Leakage Worksheet NOTE: Must be completed by a HERS Rater    
  NRCC-MCH-27 High-rise Residential NOTE: Must be completed by a HERS Rater    
  NRCC-MCH-32 Local Mechanical Exhaust NOTE: Must be completed by a HERS Rater

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2021

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STORE NO.: 4110  
 1300 BROADWAY  
 1302-1304 Broadway  
 Oakland, CA 94612

Issue Record:

DATE	DESCRIPTION
09.17.2021	PERMIT ISSUE

Revisions:

NO.	DATE	DESCRIPTION
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Drawn: CEJ  
 Checked: CEJ

Project No:  
 2102007

Contents:  
 MECHANICAL TITLE  
 24 COMPLIANCE

M020



STATE OF CALIFORNIA  
**Domestic Water Heating System**  
 NRCC-PLB-E (Created 11/19) CALIFORNIA ENERGY COMMISSION NRCC-PLB-E

CERTIFICATE OF COMPLIANCE  
 This document is used to demonstrate compliance for nonresidential occupancies with requirements in §110.1, §110.3, §120.3, and §140.5, and with requirements in §141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §110.1, §120.3, §150.0 and §150.1(c)(8), and with requirements in §150.2 for additions and alterations.

Project Name: Chipotle - 1300 Broadway Report Page: Page 1 of 5  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**A. GENERAL INFORMATION**

01 Project Location (city) Oakland 02 Climate Zone 3  
 03 Occupancy Types Within Project (select all that apply):  
 Nonresidential  High-Rise Residential  Hotel/ Motel  
 State Building  Healthcare Facility  Other (Write In): Restaurant (A-2)

**B. PROJECT SCOPE**

Table Instructions: Include any domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in §140.5, §150.1(c)(8), and §141.0(a), or §141.0(b)(2) for additions or alterations. Solar water heating systems should be documented on the NRCC-SRA compliance document. Combined hydronic water heating systems should be documented on the NRCC-MCH compliance document.

My project consists of (check all that apply):  
 New System (DHW system being installed for the first time in newly constructed building) Individual System (serving nonresidential spaces)  
 System Alteration (equipment, distribution or controls) Equipment Distribution Controls

<sup>1</sup> FOOTNOTE: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.  
<sup>2</sup> Dwelling units refers to hotel/ motel guest rooms and units in a high-rise residential occupancy.

**C. COMPLIANCE RESULTS**

Table Instructions: Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
(See Table F)	(See Table G)	(See Table H)	
Yes	Yes	Yes	COMPLIES

STATE OF CALIFORNIA  
**Domestic Water Heating System**  
 NRCC-PLB-E (Created 11/19) CALIFORNIA ENERGY COMMISSION NRCC-PLB-E

CERTIFICATE OF COMPLIANCE  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 2 of 5  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**D. EXCEPTIONAL CONDITIONS**

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.  
 No exceptional conditions apply to this project.

**E. ADDITIONAL REMARKS**

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

**F. DOMESTIC HOT WATER EQUIPMENT**

Table Instructions: Complete the following table to demonstrate compliance with mandatory equipment requirements in §110.1 and §110.3. For high-rise residential and hotel/motel occupancies, compliance with prescriptive requirements in §150.1(c)(8) must also be demonstrated and with §150.2 for addition and alteration scopes.

Equipment Schedule: Individual Systems

01	02	03	04	05	06
Name or Item Tag	Equipment Type	Volume (gal)	Max GPM/ First Hour Rating (FHR)	Rated Uniform Energy Factor (UEF)	Minimum Required Uniform Energy Factor (UEF) <sup>1</sup>
DWH-1.8	Gas-Fired Instantaneous (50,000-200,000 BTUH)	≤2	GPM ≥ 4.0	0.96	0.81

<sup>1</sup> FOOTNOTE: Compliant equipment may be found in the Modernized Appliance Efficiency Database System (MAEDBS) on the Energy Commission website: <https://caertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx>

**Water Heating Equipment All Occupancies**

Yes	No	Not Applicable	Requirement
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Unfired storage tank insulation shall have Internal + External ≥ R-16 OR External ≥ R-12. Label required per §110.3(c)(3)
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per §110.3(c)(5)
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Isolation valves for instantaneous water heater with input rating > 6.8 kBTHU or 2 kW has been specified per §110.3(c)(6)

**G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM**

Table Instructions: Complete the following table to demonstrate compliance for nonresidential occupancies with distribution requirements in §120.3 and §140.5. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §110.3(c), §120.3, §150.0, §150.1, and §150.2.

Table Continued

STATE OF CALIFORNIA  
**Domestic Water Heating System**  
 NRCC-PLB-E (Created 11/19) CALIFORNIA ENERGY COMMISSION NRCC-PLB-E

CERTIFICATE OF COMPLIANCE  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 4 of 5  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCV/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/)

YES	NO	Form/Title	Field Inspector
			Pass Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCI-PLB-01-E - Must be submitted for all buildings	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCI-PLB-02-E - Must be submitted for high-rise residential and hotel/ motel central hot water distribution systems to be recognized for compliance.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCI-PLB-03-E - Must be submitted for high-rise residential and hotel/ motel single dwelling unit hot water distribution systems to be recognized for compliance.	<input type="checkbox"/> <input type="checkbox"/>

**J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

There are no Certificates of Acceptance applicable to service water heating requirements.

**K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

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YES	NO	Form/Title	Field Inspector
			Pass Fail
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-PLB-21-H High-rise Residential Central Hot Water Distribution HERS Verification	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-PLB-22-H High-rise Residential Individual Dwelling Unit Hot Water Distribution HERS Verification	<input type="checkbox"/> <input type="checkbox"/>

STATE OF CALIFORNIA  
**Domestic Water Heating System**  
 NRCC-PLB-E (Created 11/19) CALIFORNIA ENERGY COMMISSION NRCC-PLB-E

CERTIFICATE OF COMPLIANCE  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 3 of 5  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

Table Continued

**Mandatory Pipe Insulation All Occupancies**

12	13	Requirement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3.1 (see below) per §120.3: - Recirculating system piping, including supply and return piping of the water heater - The first 8 ft of hot and cold outlet piping for a nonrecirculating storage system - Pipes that are externally heated
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per §120.3(b) and §150.0(i)(3)

**TABLE 120.3-A PIPE INSULATION THICKNESS**

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft <sup>2</sup> per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)		
			<1	1 to < 1.5	1.5 to < 4
105-140	0.22-0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11

**H. DOMESTIC HOT WATER SYSTEM CONTROLS**

Table Instructions: Complete the following table to demonstrate compliance with controls requirements in §110.1 for all occupancies. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §150.1(c)(8)

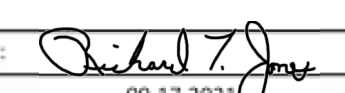
	Yes	No	Not Applicable	Requirement
01	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per §110.3(a)
02	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per §110.3(c)(1) unless covered by California Plumbing Code Section 613.0.
03	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)(2) unless system serves healthcare facility.
04	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per §150.1(c)(8B) or §150.2 for additions or alterations
05	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA 4.4.2 per §150.1(c)(8)
06	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	For replacement single heat pump water heaters serving individual dwelling units in climate zones 1-15, design includes communication interface that meets demand responsive control requirements of §110.12(a) per §150.2(b)(1) and (2)

STATE OF CALIFORNIA  
**Domestic Water Heating System**  
 NRCC-PLB-E (Created 11/19) CALIFORNIA ENERGY COMMISSION NRCC-PLB-E

CERTIFICATE OF COMPLIANCE  
 Project Name: Chipotle - 1300 Broadway Report Page: Page 5 of 5  
 Project Address: 1302-1304 Broadway, Oakland, CA 94612 Date Prepared: 09.17.2021

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

I certify that this Certificate of Compliance documentation is accurate and complete

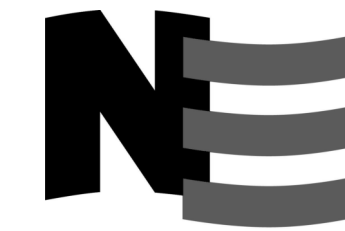
Documentation Author Name: Richard T. Jones, PE Documentation Author Signature:   
 Company: National Engineering, Ltd. Signature Date: 09.17.2021  
 Address: 4635 Trueman Blvd, Suite 250 CEA/ HERS Certification Identification (if applicable):  
 City/State/Zip: Hilliard, OH 43026 Phone: 614-751-9610

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Richard T. Jones, PE Responsible Designer Signature:   
 Company: National Engineering, Ltd. Date Signed: 09.17.2021  
 Address: 4635 Trueman Blvd, Suite 250 License: 30376  
 City/State/Zip: Hilliard, OH 43026 Phone: 614-751-9610

Consultant:  
  
**NATIONAL ENGINEERING**  
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 Hilliard, Ohio 43026  
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STORE NO.: 4110  
 1300 BROADWAY  
 1302-1304 Broadway  
 Oakland, CA 94612

Issue Record:  
 09.17.2021 PERMIT ISSUE

Revisions:

Drawn: CEJ Checked: CEJ

Project No:  
 2102007

Contents:  
 MECHANICAL TITLE  
 24 COMPLIANCE

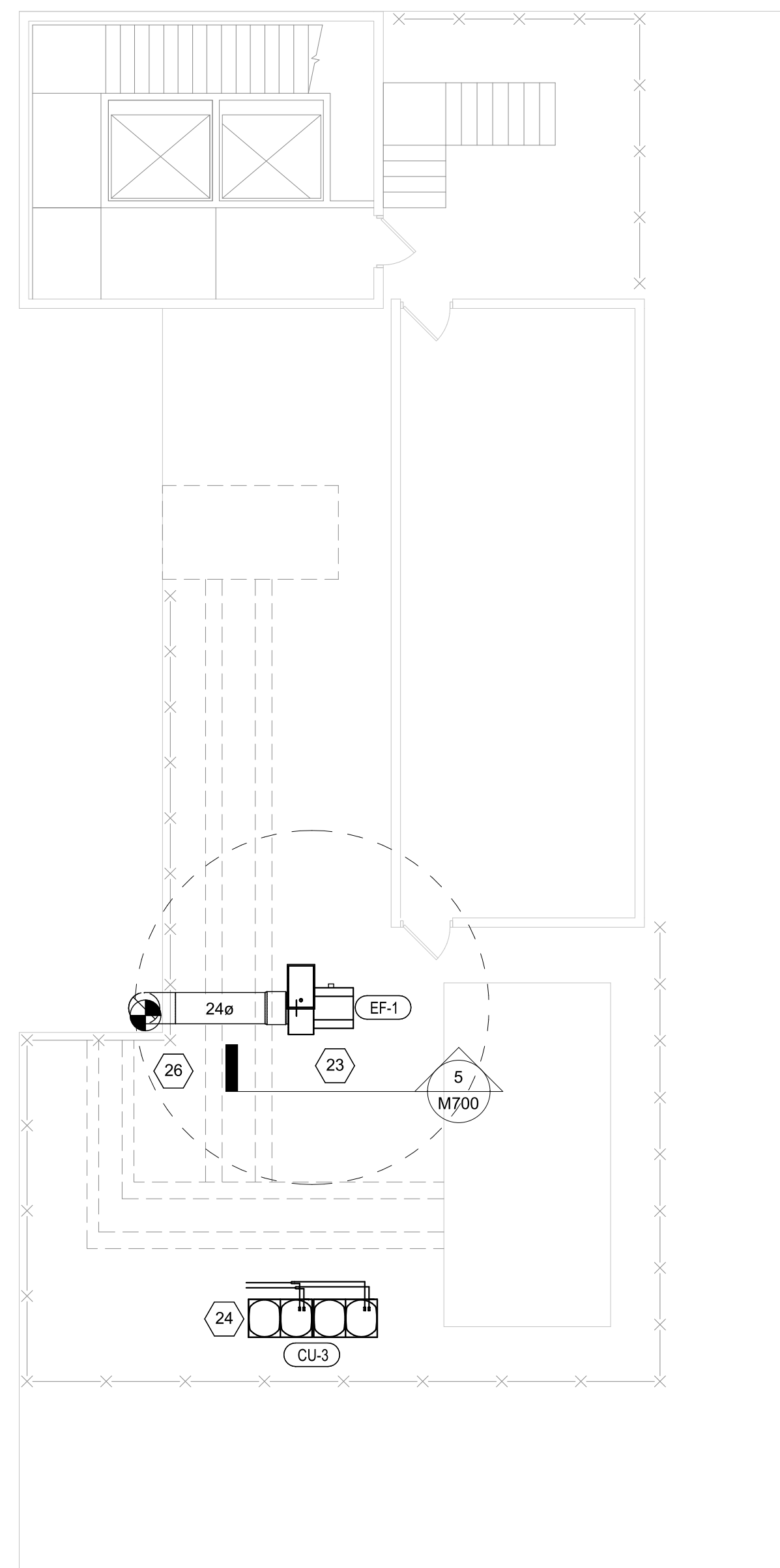
M022

### HVAC PLAN NOTES

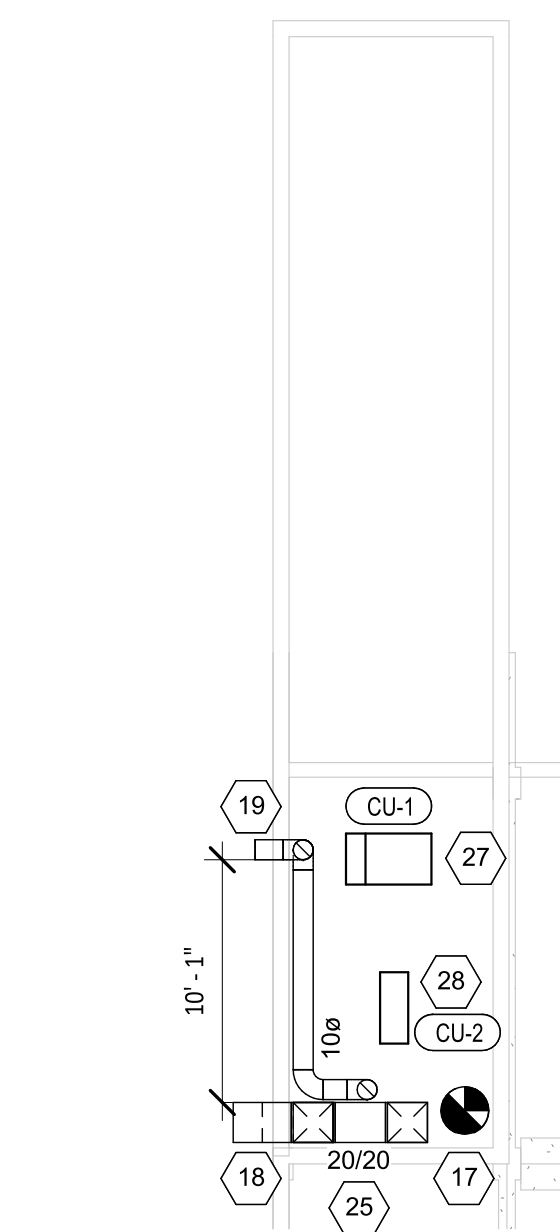
- 1 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATION. TYPICAL.
- 2 PAINT DUCTWORK VISIBLE THROUGH DINING ROOM SUPPLY REGISTERS AND RETURN GRILL BLACK. TYPICAL.
- 3 REFER TO ARCHITECTURAL SHEETS FOR SUPPLY REGISTER ELEVATIONS AND LOCATIONS.
- 4 14" DIA PRE-FABRICATED DUCTS UP FROM HOOD TO 24" DIA PRE-FABRICATED DUCT TO EXISTING VERTICAL PREFABRICATED EXHAUST DUCT RUN TO ROOF COMPLIANT WITH NFPA 96. PROVIDE RADIUS ELBOWS WITH AN INSIDE RADIUS OF 0.5W AT ELBOWS IN GREASE DUCT. INSTALL EXHAUST DUCT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 5 28/10 DUCT DOWN TO MAKEUP AIR PDP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL FOR 3.
- 6 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR DINING VRF UNITS AT THIS LOCATION 60" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 7 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR KITCHEN VRF UNITS AT THIS LOCATION 66" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 8 20/20 DUCT INTO TRANSITION TO MAU-1 SUPPLY CONNECTION.
- 9 INSTALL GRIDPOINT THERMOSTATS FURNISHED BY TEMS FOR DINING AND KITCHEN VRF EQUIPMENT AT THIS LOCATION AT 48" AFF. COORDINATE WITH ELECTRICAL SWITCHING IN THIS AREA. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 10 10" DIA DUCT INTO EF-2.
- 11 INSTALL REMOTE TEMPERATURE SENSOR FOR HOOD HD-1 AT THIS LOCATION 60" AFF. COORDINATE LOCATION WITH EQUIPMENT. PROVIDE (2) #18 G. THERMISTOR CABLE FROM TEMPERATURE SENSOR TO HOOD CONTROL PANEL.
- 12 8" DIA. DUCT DOWN TO AC PDP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL. CAP UNUSED DUCT CONNECTIONS.
- 13 INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TEMS FOR AIR HANDLING SYSTEM IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 14 INSTALL KITCHEN HOOD, HD-1. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOOD ACCORDING TO THE REQUIREMENTS OF ITS LISTING, IN COMPLIANCE WITH NFPA 96, THE BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT COLLAR TEMPERATURE SENSOR TO AUTOMATICALLY ENERGIZE THE EXHAUST AND MAKEUP AIR FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE WELDED OR FACTORY-MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANOUTS PER CODE AND AS SHOWN. INSTALL HOOD PER DETAILS 2 AND 4/M700. CHIPOTLE WILL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.
- 15 PROVIDE SUPPLY DIFFUSER CONNECTION TO SUPPLY SYSTEM PER DETAIL 1/M700. TYPICAL.

### HVAC PLAN NOTES

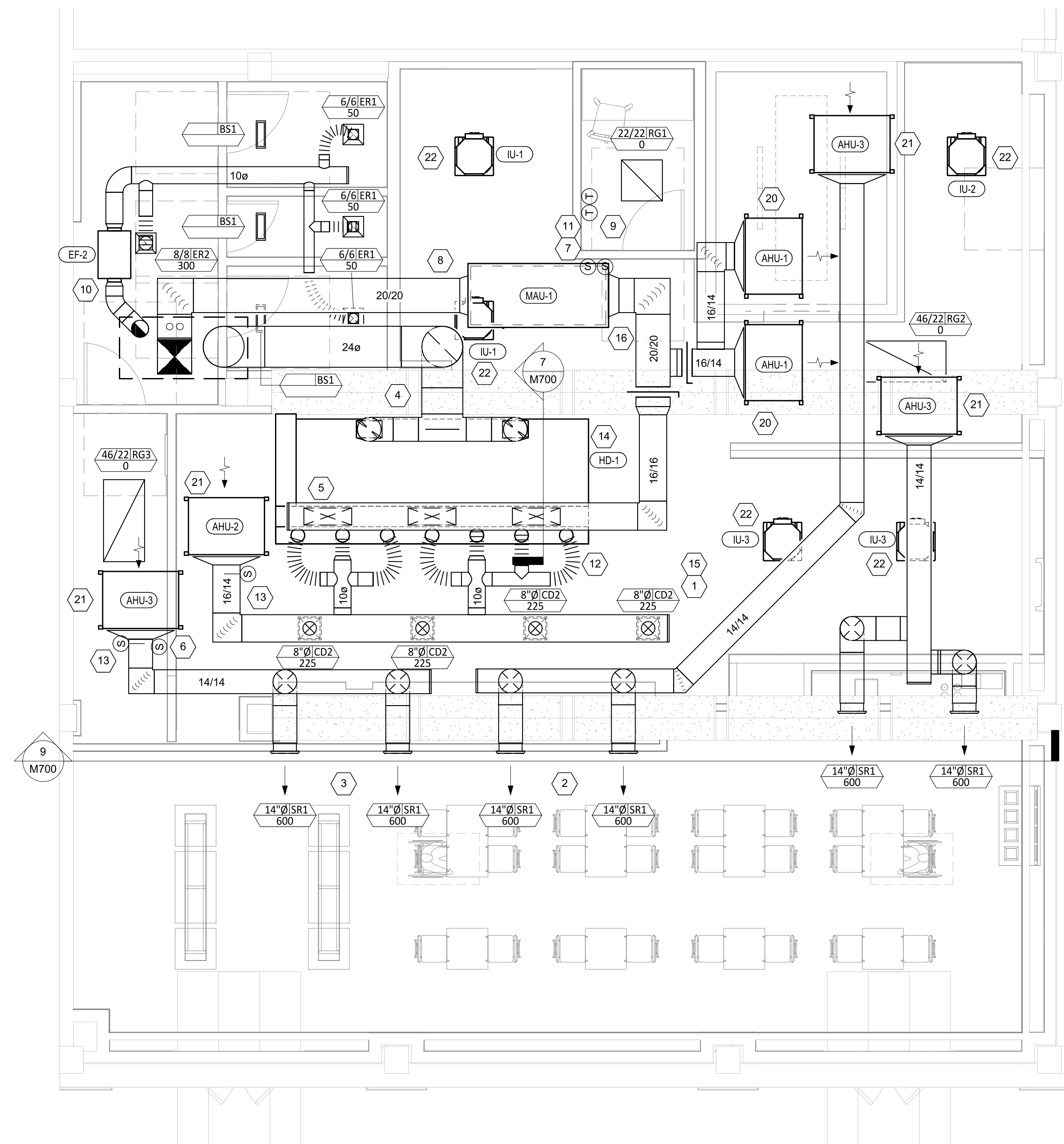
- 16 INSTALL REME HALO AIR PURIFIER FURNISHED BY TUV IN SUPPLY AIRSTREAM IMMEDIATELY DOWNSTREAM OF MAKEUP AIR. SEE ELECTRICAL DRAWINGS FOR POWER CONNECTION INFORMATION. INSTALL UV WARNING STICKERS ON FACE OF ENCLOSURE PER DETAIL AND ON ANY ACCESS DOOR(S) THROUGH WHICH THE REME HALO WOULD BE VISIBLE IF OPENED.
- 17 CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING TYPE I PRE-FABRICATED EXHAUST DUCT BEFORE CONNECTING.
- 18 20/20 DUCT FOR MAU. DUCT TO EXTEND ABOVE EXISTING ADJACENT WALL. DUCT IS TO BE SUPPORTED BY SCAFFOLDING AND IS NOT TO BE MOUNTED TO EXISTING BUILDING. TERMINATE DUCT WITH A BIRDSCREEN AT AN ANGLE FACING DOWNWARD.
- 19 10" DIA DUCT FOR EF-2. DUCT TO EXTEND ABOVE EXISTING ADJACENT WALL. DUCT IS TO BE SUPPORTED BY SCAFFOLDING AND IS NOT TO BE MOUNTED TO EXISTING BUILDING. TERMINATE DUCT WITH A BIRDSCREEN AT AN ANGLE FACING DOWNWARD.
- 20 INSTALL VRF OUTSIDE AIR DUCTED AIR HANDLER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DIAGRAMS.
- 21 INSTALL VRF DUCTED AIR HANDLER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DIAGRAMS.
- 22 INSTALL VRF CEILING CASSETT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DIAGRAMS.
- 23 INSTALL EXHAUST FAN EF-1 PER DETAIL 5/M700 AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL GREASE VIROGUARD SYSTEM FURNISHED BY CHIPOTLE ON EXHAUST FAN, EF-1.
- 24 INSTALL VRF CONDENSING UNIT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 25 MAINTAIN 10' CLEARANCE BETWEEN WATER HEATER FLUE TERMINATION AND OUTSIDE AIR INTAKES. MAINTAIN 10' CLEARANCE BETWEEN WATER HEATER COMBUSTION AIR INTAKE AND EXHAUST FAN EF-1 DISCHARGE. SEE PLUMBING DRAWINGS FOR MORE INFORMATION ON WATER HEATER FLUE AND COMBUSTION AIR TERMINATIONS.
- 26 CONNECT TO EXISTING 24" DIA PRE-FABRICATED GREASE DUCT. VERIFY LOCATION PRIOR TO CONNECTION.
- 27 INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER IN LIGHT WELL AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 3' OF THE CONDENSING UNIT. CUT 2-1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND SEAL PER THE COOLER MANUFACTURER'S INSTALLATION INSTRUCTIONS AFTER LINE SET IS INSTALLED.
- 28 INSTALL REMOTE CONDENSER FOR ICE MACHINE IN LIGHT WELL AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. SEAL PIPING PENETRATIONS THROUGH ROOF. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 3' OF THE REMOTE CONDENSER. IF REFRIGERANT PIPING TO ICE MAKER IS EXPOSED TO PUBLIC VIEW CONCEAL WITHIN A STAINLESS STEEL SHROUD AS SHOWN IN THE ARCHITECTURAL DRAWINGS.



**HVAC UPPER ROOF PLAN**  
1/8" = 1'-0"



**HVAC LOWER ROOF PLAN**  
1/8" = 1'-0"



**HVAC FLOOR PLAN**  
1/4" = 1'-0"

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**GRILLS, REGISTERS, AND DIFFUSERS SCHEDULE**

TAG	DESCRIPTION	FACE SIZE	MATERIAL	FINISH	MOUNTING	FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		NOTES
								MANUFACTURER	MODEL	
BS1	BATHROOM AIR PURIFICATION UNIT	5.44" X 16"	ALUMINUM	STAINLESS STEEL	GYP CEILING	TUV	GC	RGF ENVIRONMENTAL GROUP	BRU ASSEMBLY	SEE ELECTRICAL SHEETS FOR CONNECTION INFORMATION
CD2	PERFORATED CEILING DIFFUSER	12" X 12"	ALUMINUM	WHITE	GYP CEILING	GC	GC	NAILOR	4320A TYPE S	PROVIDE INTEGRAL OBD, REMOVE 4-WAY DEFLECTOR
ER1	PERFORATED CEILING EXHAUST	12" X 12"	ALUMINUM	WHITE	GYP CEILING	GC	GC	NAILOR	4330R TYPE S	PROVIDE INTEGRAL OBD
ER2	PERFORATED CEILING EXHAUST	12" X 12"	ALUMINUM	WHITE	GYP CEILING	GC	GC	NAILOR	4330R TYPE S	PROVIDE INTEGRAL OBD
RG1	PERFORATED CEILING RETURN	24" X 24"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4330R TYPE L	
RG2	PERFORATED CEILING RETURN	48" X 24"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4330R TYPE L	
RG3	PERFORATED CEILING RETURN	48" X 24"	ALUMINUM	WHITE	GYP CEILING	GC	GC	NAILOR	4330R TYPE S	
SR1	ADJUSTABLE TURBO NOZZLE	SEE NECK SIZE	ALUMINUM	WHITE	WALL	GC	GC	SEIHO	NT14	PROVIDE FACE-ACCESSIBLE OBD

**FAN SCHEDULE**

TAG	DRIVE TYPE	EXHAUST FLOW [CFM]	E.S.P. [in. W.C.]	WEIGHT [lbs]	ELECTRICAL		FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		REMARKS
					MOTOR POWER	V/P/H			MANUFACTURER	MODEL	
EF-1	DIRECT	3200 CFM	2.00 in-wg	650	5 HP	208/3/60	HS	GC	CAPTIVE-AIRE	USB24DD-RM	WITH DISCONNECT, GREASE BOX, VFD, AND RAIN CAP
EF-2	DIRECT	450 CFM	1.00 in-wg	115	0.5	120/1/60	HS	GC	CAPTIVE-AIRE	SIF1DD	WITH DISCONNECT, VARIABLE SPEED CONTROLLER, BACKDRAFT DAMPER, AND INLINE ADAPTER KIT

**MAKEUP AIR UNIT SCHEDULE**

TAG	DESCRIPTION	AIRFLOW		HEATING CAPACITY				APPROXIMATE WEIGHT [lbs]	ELECTRICAL		FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		REMARKS
		SUPPLY FLOW [CFM]	E.S.P. [in. W.C.]	INPUT [MBH]	OUTPUT [MBH]	MAXIMUM TURNDOWN	EAT		MOTOR POWER	V/P/H			MANUFACTURER	MODEL	
MAU-1	MAKEUP AIR UNIT	3450	1.00	132	122	12.5:1	42 °F	775	3 HP	208/3/60	HS	GC	CAPTIVE-AIRE	A2-D.250-20D	FURNISHED WITH DISCONNECT, MOTORIZED DAMPER, INLINE KIT, UNISTRUT BASE, VIBRATION ISOLATORS, AND WASHABLE ALUMINUM FILTERS

**CONDENSING UNIT SCHEDULE**

TAG	DESCRIPTION	NOMINAL CAPACITY [TONS]	NUMBER OF COMPRESSORS	NUMBER OF CIRCUITS	REFRIGERANT TYPE	REFRIGERANT CHARGE	WEIGHT	ELECTRICAL			FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		REMARKS
								MOCP	FLA	V/P/H			MANUFACTURER	MODEL	
CU-1	WALK-IN COOLER REMOTE CONDENSING UNIT	--	1	1	R-404A	80	200	15 A	6.5 A	208/3/60	WCS	GC	HARFORD	PCL99MOP-3	FURNISHED WITH WALK-IN COOLER
CU-2	ICE MAKER - REMOTE CONDENSER	--	0	1	R-404A	11 lbs 7.4 oz	100			120/1/60	KES	GC	-	-	FURNISHED WITH ICE MAKER
CU-3	OUTDOOR VRF HEAT PUMP WITH HEAT RECOVERY SYSTEM	20	4	2	R-410A	34 lbs 4 oz	1245	60 A	41.0 A	208/3/60	HES	GC	mitsubishi	PURY-EP240TSNU-A	FURNISHED WITH BC CONTROLLER, TWINNING KIT, LOW AMBIENT KIT, AND COATED HAIL GUARD

**VRF AIR HANDLING UNITS**

TAG	QTY	DESCRIPTION	NOMINAL CAPACITY [TONS]	AIRFLOW		COOLING CAPACITY		HEATING CAPACITY		APPROXIMATE WEIGHT [lbs]	ELECTRICAL			BASIS FOR DESIGN		REMARKS	
				TOTAL [CFM]	OA [CFM]	TOTAL [MBH]	COND. EAT [Deg. F]	NUMBER OF CIRCUITS	HEATING CAPACITY [MBH]		HEATING EAT [Deg. F]	MOCP	FLA	V/P/H	MANUFACTURER		MODEL
AHU-1	2	OUTSIDE AIR VRF AIR HANDLING UNIT	4	600	600	23	80	1	24	70	110	15 A	3.3 A	208/1/60	MITSUBISHI	PEFY-P48NMHU-E-OA	FURNISHED WITH VIBRATION ISOLATORS, DRAIN PUMP, AND FILTER BOX
AHU-2	1	KITCHEN VRF AIR HANDLING UNIT	4	1500	0	48	75	1	54	70	90	15 A	3.4 A	208/1/60	MITSUBISHI	PEFY-P48NMHU-E2	FURNISHED WITH VIBRATION ISOLATORS, DRAIN PUMP, AND FILTER BOX
AHU-3	3	DINING VRF AIR HANDLING UNIT	3	1200	0	36	75	1	48	70	90	15 A	3.2 A	208/1/60	MITSUBISHI	PEFY-P36NMHU-E2	FURNISHED WITH VIBRATION ISOLATORS, DRAIN PUMP, AND FILTER BOX
IU-1	2	2x2 VRF 4-WAY CEILING CASSETTE	0.67	300	0	8	75	1	7	70	35	15 A	0.3 A	208/1/60	MITSUBISHI	PLFY-P08NCMU-E	
IU-2	1	2x2 VRF 4-WAY CEILING CASSETTE	1	400	0	12	75	1	10	70	50	15 A	0.4 A	208/1/60	MITSUBISHI	PLFY-P12NCMU-E	
IU-3	2	2x2 VRF 4-WAY CEILING CASSETTE	1.25	500	0	15	75	1	12	70	50	15 A	0.4 A	208/1/60	MITSUBISHI	PLFY-P15NCMU-E	

**KITCHEN HOOD SCHEDULE**

TAG	DESCRIPTION	MAX COOKING TEMP.	EXHAUST PLENUM						PERFORATED SUPPLY PLENUMS						NUMBER OF LIGHT FIXTURES	APPROXIMATE WEIGHT [lbs]	FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		REMARKS					
			AIRFLOW [CFM]	SP [in. W.C.]	DUCT COLLARS				SUPPLY PLENUM LENGTH	SUPPLY PLENUM WIDTH	MAU PLENUM			AC PLENUM					MANUFACTURER	MODEL						
					NO.	WIDTH	LENGTH	LENGTH			WIDTH	SP [in. W.C.]	AIRFLOW [CFM]	NO.								WIDTH	LENGTH	AIRFLOW [CFM]	NO.	DIAMETER
HD-1	TYPE I CANOPY HOOD WITH PERFORATED MAU AND AC SUPPLY PLENUMS	600°F	3200	0.86	2	10"	15"	14' - 3"	4' - 3"	0.2	15' - 3"	22"	2250	3	10"	28"	800	7	8"	10	1200	HS	GC	CAPTIVE-AIRE	5424 ND-2-ACPSP-F	MAT'L: 18 GA. TYPE 430 SS. PROVIDE WITH 16" TALL HE SS FILTERS, INTEGRAL UTILITY CABINET, ANSUL SYSTEM, DUCT COLLAR TEMPERATURE SENSOR, PREWIRE PACKAGE, SPARE FIRE SYSTEM DRY CONTACT, AND 4-POLE 20A CONTACTOR

**AIR BALANCE SCHEDULE**

Tag	Supply Flow [CFM]	Return Flow [CFM]	Exhaust Flow [CFM]	Subtotal [CFM]
EF-1	0	0	3200	-3200
EF-2	0	0	450	-450
MAU-1	3450	0	0	3450
Net Pressurization [CFM]				-200

**VRF PRE-INSTALLATION REQUIREMENTS**

- INSTALLING CONTRACTORS **MUST BE CERTIFIED** TO INSTALL MITSUBISHI VRF SYSTEMS THROUGH THE CITY MULTI ESSENTIALS 3-DAY TRAINING COURSE. SUCCESSFUL COMPLETION OF THE COURSE FROM THE INSTALLING CONTRACTOR **EXTENDS** THE STANDARD 5-YEAR WARRANTY ON THE INSTALLED EQUIPMENT TO 10 YEARS. COST AND DETAIL CAN BE FOUND AT: WWW.MITSUBISHIPRO.COM/TRAINING
- CONTRACTOR TO VERIFY AS-BUILT PIPING LENGTH TO PROVIDE TO TRANE PRIOR TO RELEASE OF EQUIPMENT. AS-BUILT PIPING LENGTHS ARE REQUIRED TO ENSURE PROPER PIPE SIZE, ACCURATE ADDITIONAL REFRIGERANT CHARGE AND ARE REQUIRED FOR EXTENDED WARRANTY.

**CONTROL FUNCTIONS**

- THE MAIN COOKING EXHAUST FAN AND MAKE-UP AIR UNIT SHALL BE INTERLOCKED TO OPERATE TOGETHER. THIS CONTROL CIRCUIT IS ACTIVATED BY A SWITCH AND INCLUDES A FIRE PROTECTION OVERRIDE.
- THE TEMPERATURE IN EACH ZONE IS CONTROLLED BY SPACE TEMPERATURE SENSORS CONNECTED TO THE THERMOSTATS LOCATED IN THE OFFICE. ALL ZONES SHALL OPERATE WITH CONTINUOUS FAN OPERATION DURING OCCUPIED TIMES AND INTERMITTENTLY AS NEEDED TO MAINTAIN SET POINTS DURING UNOCCUPIED TIMES. OUTSIDE AIR DAMPERS SHALL BE OPEN CONTINUOUSLY WHEN EITHER IN OCCUPIED MODE OR WHEN THE HOOD SYSTEM IS ON AND SHALL BE CLOSED DURING UNOCCUPIED PERIODS.
- THE THERMOSTATS SHALL DETERMINE OCCUPIED/UNOCCUPIED STATUS BASED ON THE SCHEDULE IN THE ENERGY MANAGEMENT SYSTEM.

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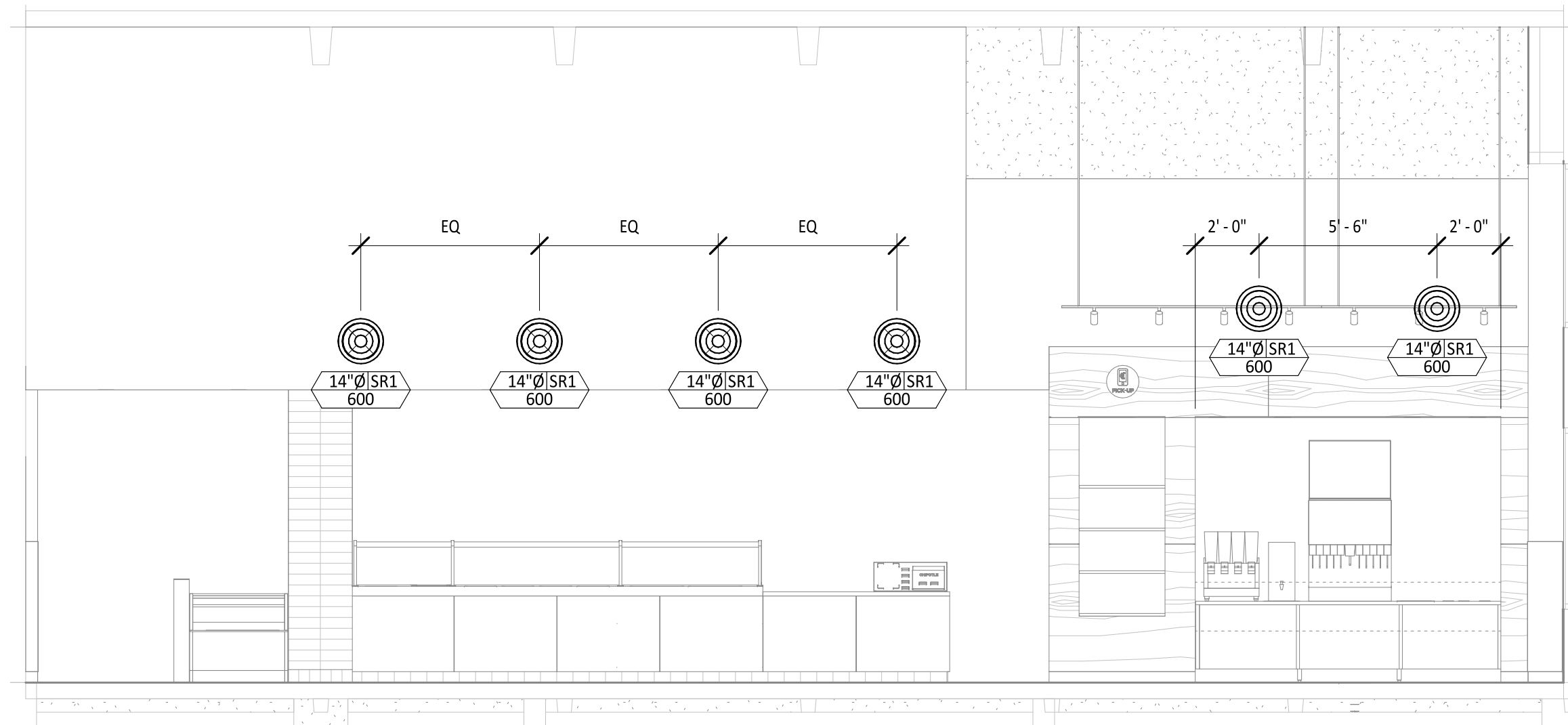
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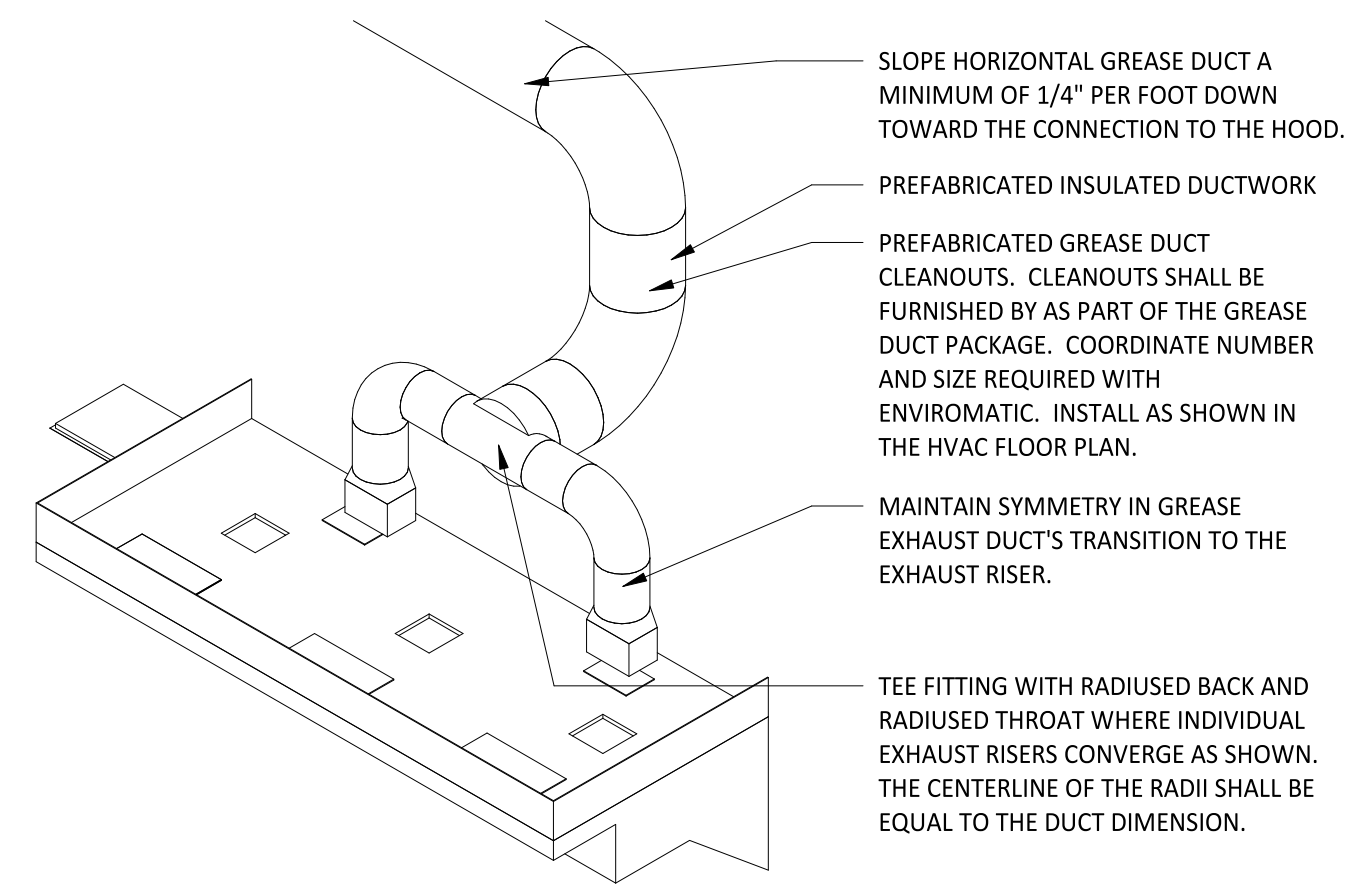
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 HVAC SCHEDULES

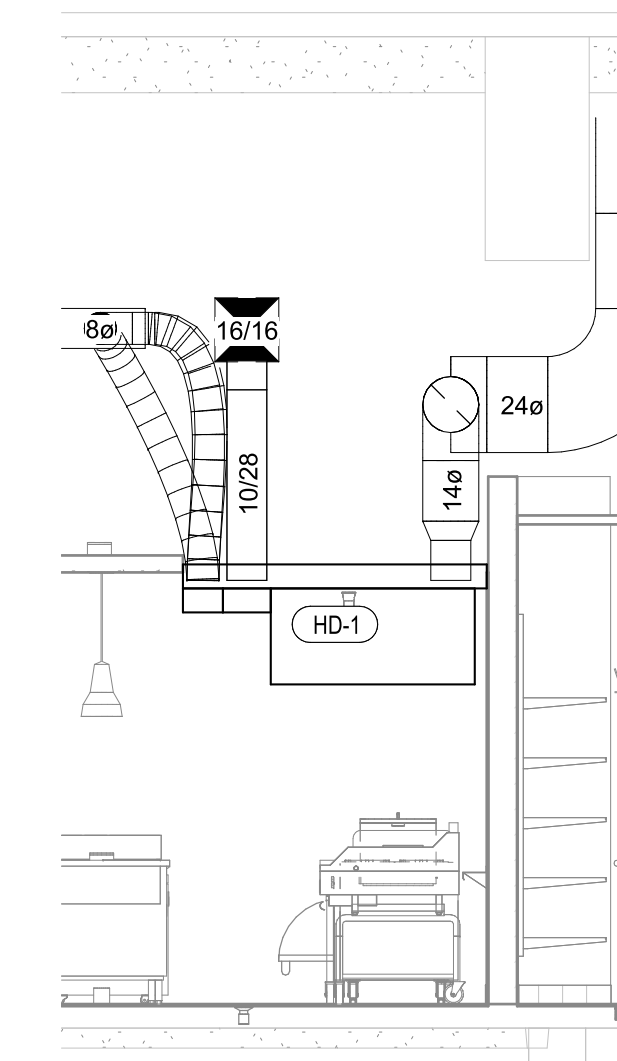
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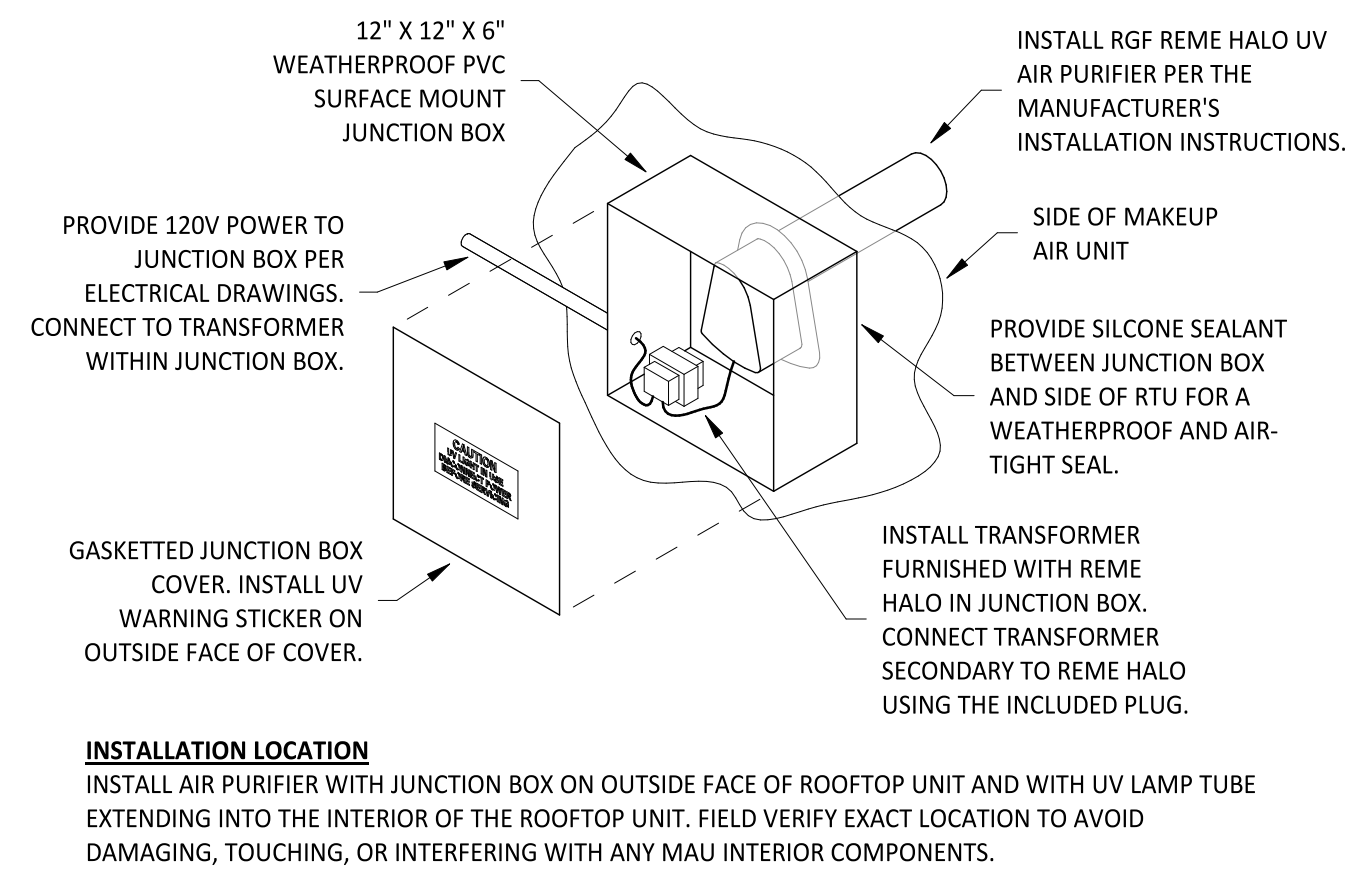
9 HVAC DINING ROOM SECTION  
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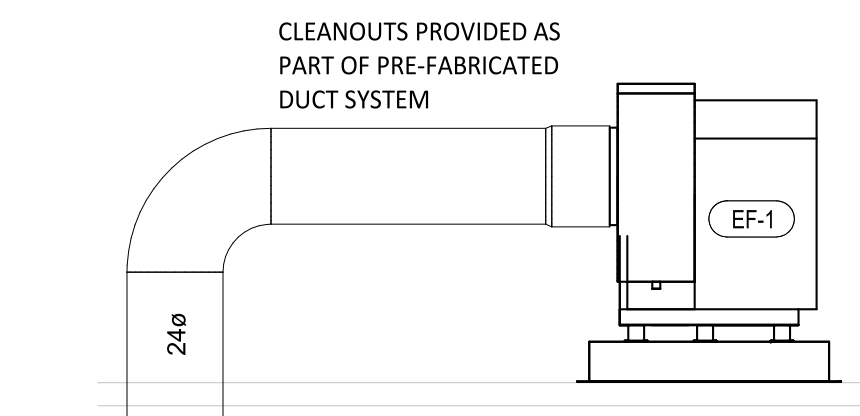
8 HOOD EXHAUST ISOMETRIC  
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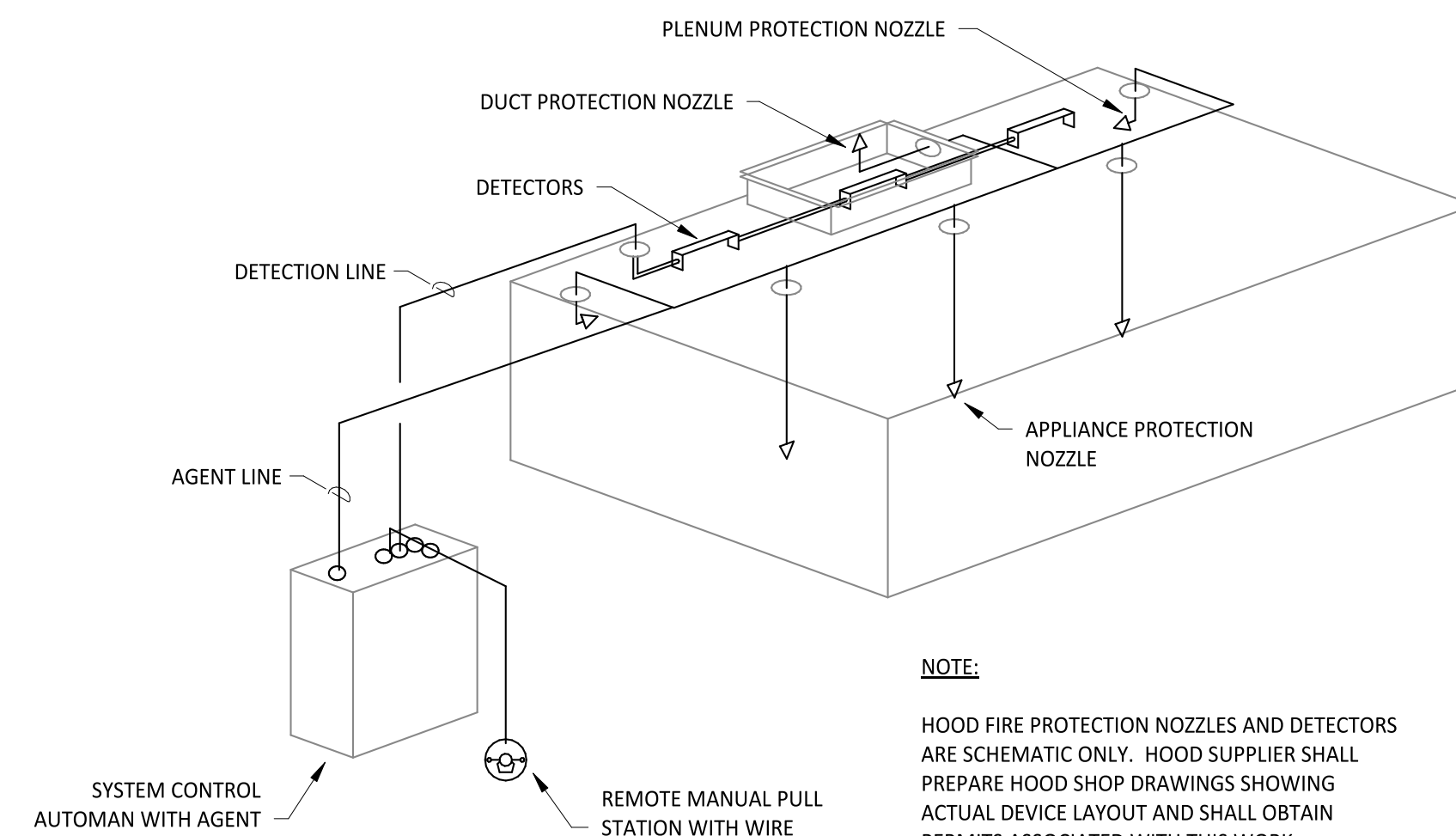
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1/4" = 1'-0"



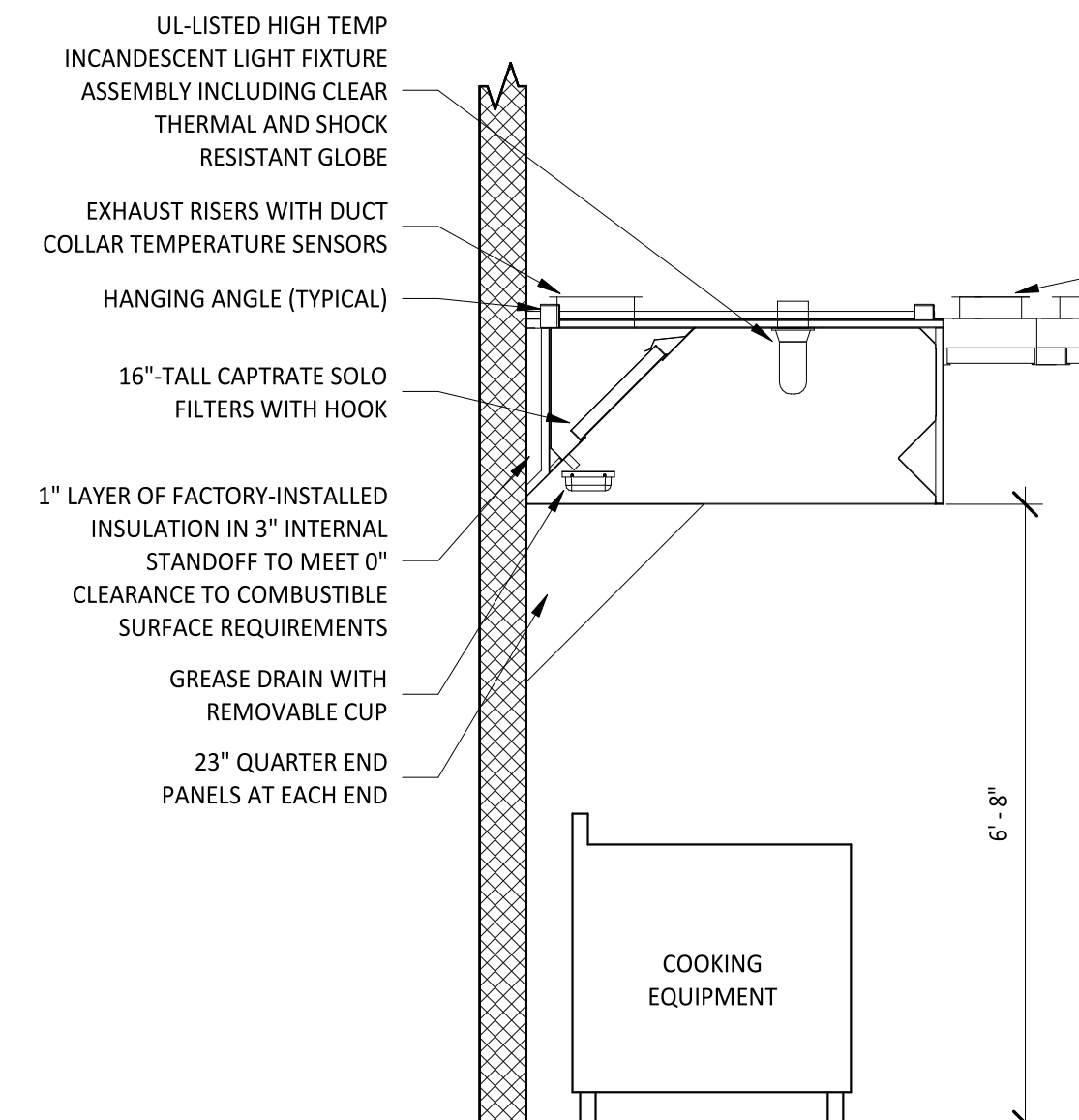
6 UV AIR PURIFIER INSTALLATION  
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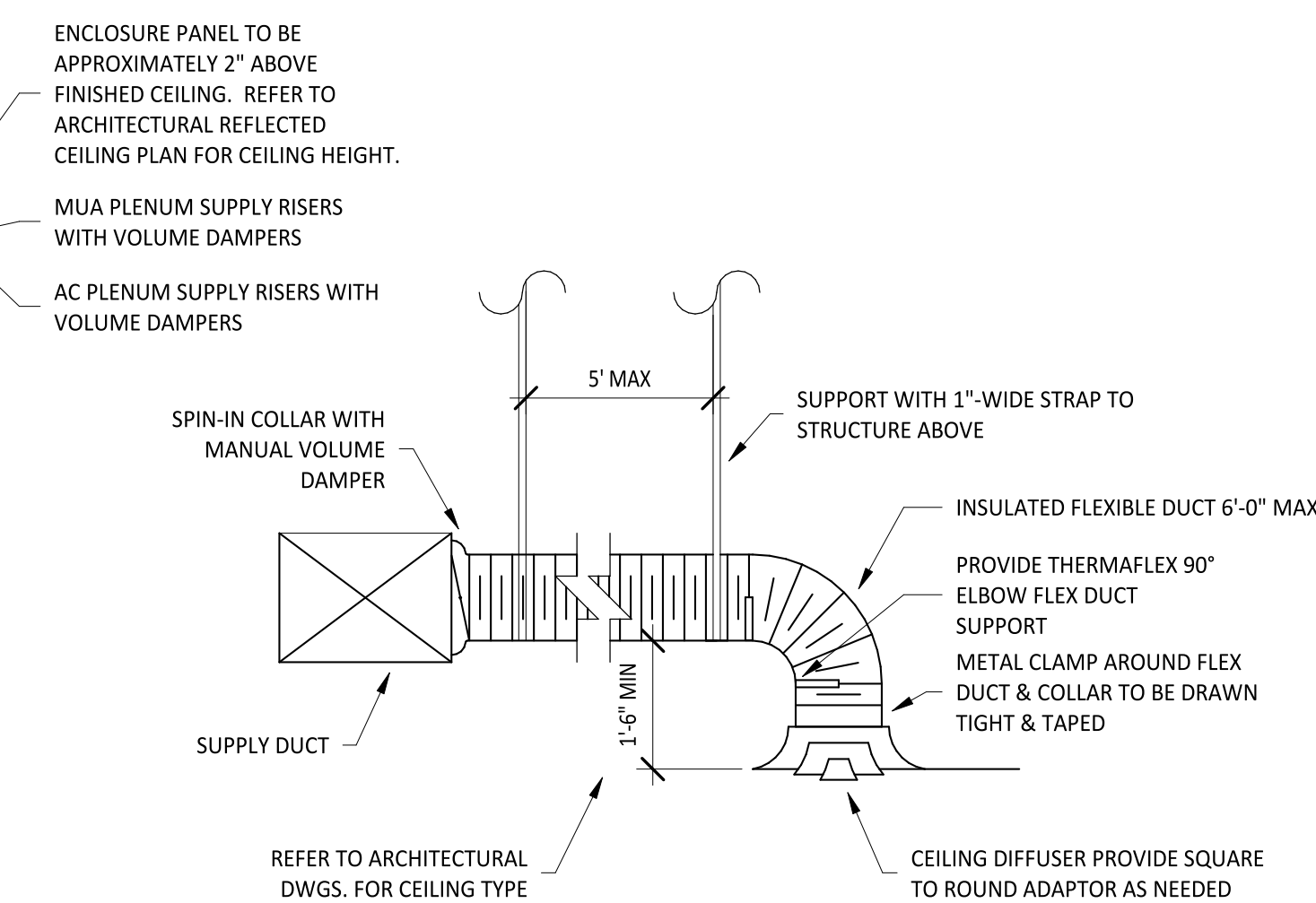
5 HOOD EXHAUST FAN DETAIL  
N.T.S.



4 FIRE SUPPRESSION SYSTEM SCHEMATIC  
N.T.S.



2 HOOD SECTION VIEW  
N.T.S.



1 DIFFUSER CONNECTION  
N.T.S.

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