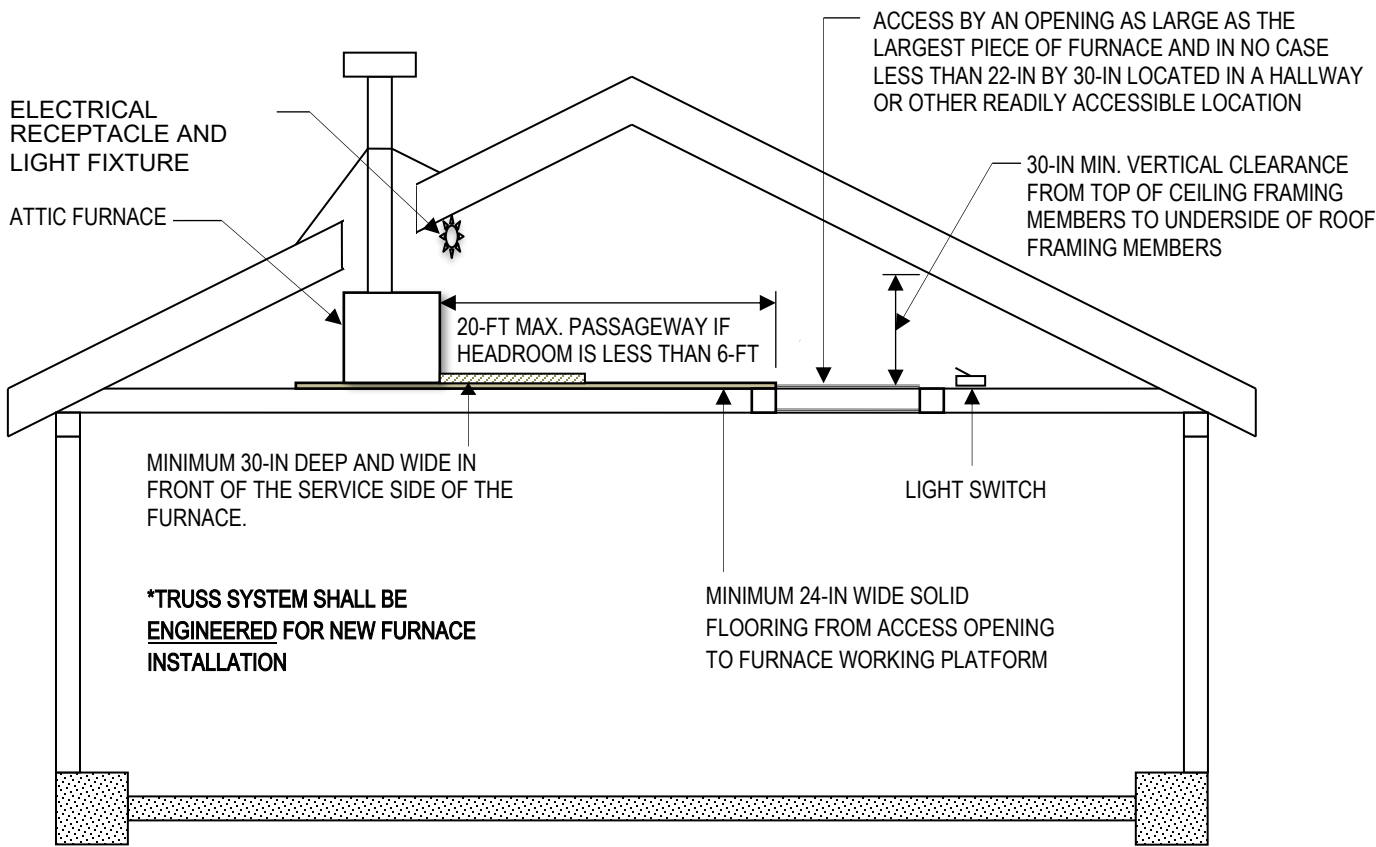




CITY OF COSTA MESA

77 Fair Drive, Costa Mesa, California 92626

Building Division (714) 754-5273



SITE PLAN

Furnace installation in the attic shall be in accordance with 2022 CRC, 2022 CMC, 2022 CEC, 2022 CPC, 2022 CFC, 2022 California Energy Code, and City of Costa Mesa Ordinances. The information provided in this handout is general and intended as a **guide only**. Each project is unique and additional requirements may be enforced as deemed appropriate for code compliance.

Mechanical and Plumbing:

- Access.** At least as large as the largest component of the appliance and not less than 22-in x 30-in. (CMC 304.4 & CRC R807.1)
- Passageway.** Shall be unobstructed, have solid flooring not less than 24-in wide from entrance opening to the appliance. When the height of the passageway is less than 6-ft, distance from the passageway access to the furnace shall not exceed 20 ft. (CMC 304.4)
- Work Platform.** A level working platform 30-in deep x 30-in wide at front of service side of the unit. (CMC 304.4)
- Furnaces.** Furnaces may be installed in an attic or furred space more than 5-ft in height, provided the required listings and furnace and duct clearances are observed. Horizontal furnaces may be installed in an attic or furred space provided the required listings and furnace and duct clearances are observed. (CMC 904.10)
- Termination.** Vent termination located not less than 8' from vertical surfaces above roof line shall terminate 12" minimum above roof if roof pitch not greater than 6/12, steeper roofs require additional height per CMC Table 802.6.1. All combustibles to be at least 1" from double wall type B vent or in accordance with the product's listing, whichever is greater. Overall vent height to be 5' min above vent collar of the FAU in the attic. (CMC 802.6)
- Combustion Air.** Adequate combustion air to be provided to the attic area. (CMC 701)

Mechanical and Plumbing: (Continued)

- **Clearances.**Vent shall be maintained a minimum clearance from mechanical and gravity outdoor air intake openings in accordance with CRC R303.5 and CMC 311.3.
- **Shutoff valve.**An approved shutoff valve is required within 6' of appliance and must be accessible. (CPC 1212.6)
- **Pressure Test.**Gas line air test is required if new gas line piping is added. (CPC 1213.3)
- **Sediment trap.**Shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. (CPC 1212.9)
- **Condensate wastes and control** shall be installed in accordance with CMC 310.0 and CPC 814.0.

Electrical:

- **Lighting and Outlet.** A permanent 120-volt receptacle and light located near the unit with the switch controlling the lighting fixture located at access opening.
- **Disconnecting means.** A means shall be provided to disconnect the FAU from the power source for servicing the appliance. See manufacturer's installation instructions for approved disconnecting method. (CEC Article 422)
- **Dedicated Circuit.** Furnace shall be on a separate dedicated branch circuit. (ORD. 2019-1065, CEC Article 422.10 Amended)
- All electrical wiring within 6' of the attic access scuttle (or within 7' if accessible by permanent stairs or ladders) must be secured and protected by a guard strip to prevent damage to the cable. (CEC 334.23 and 320.23)
- Identify breaker at meter panel/ proper conductor size. (CEC 110-22 and Table 310.15(B)(16))
- Retrofit smoke and carbon monoxide alarms required. (CRC R314 & R315)

Framing Requirements:

The following requirements are for Furnace less than 350 lbs installed on existing conventional roof framing only:
(Engineering Design will be required if unit weight is greater than 350 lbs or existing roof framing is on trusses system.)

- The contractor or installer shall strengthen existing framings as needed in supporting additional loads from the Furnace.
- Furnace shall be located close to at least two (2) adjacent walls.
- If one (1) existing ceiling joist is modified or cut for attic access opening, adjacent ceiling joists shall be doubled up.

T24 Energy Compliance:

- All heating (or cooling system) not controlled by a central energy management control system shall have setback thermostat. (T24, 110.2(c)) & 150.0(i)).
- On existing systems if more than 40 feet of new ducting is installed during a replacement or extension project, the minimum insulation value of R-6 is required on the new ducting and a duct leakage test is required. (T24 Section 150.2(b)(D))
- When an FAU is replaced, the ducts (existing and/or new), require R-6 duct insulation and a duct leakage test is required.(T24, 150.2(b)1E)

Owner's Name: _____

Project Address: _____

Phone No: _____

Applicant's Name: _____

Applicant's Signature: _____