RESIDENTIAL FURNACE INSPECTION REQUIREMENTS

A Mechanical permit is required to replace an existing furnace and is required prior to installation. Following is a listing of general requirements based on the City of East Palo Alto Adopted Codes. Please contact the Building Services Division for any questions or additional information.

Electrical Requirements

- A readily accessible electrical disconnecting means within sight of the appliance that completely deenergizes the appliance. (CMC 301.4)
- A dedicated circuit shall be provided for the furnace. (CEC 422.12)
- A 120-volt service receptacle shall be installed near the appliance but no more than 25 feet away. The service receptacle shall not be connected on the load side of the required means of disconnect. (CMC 304.4.4)
- A permanent switch-controlled lighting fixture shall be installed near the appliance, on the control side. Such fixture shall provide sufficient illumination to safely approach the equipment and perform the tasks for which access is provided. Control of the lighting shall be provided at the access entrance. (CMC 304.4.4)

Duct Air Leakage Test (California Energy Code 150.2(b)(1)(D) & (E)
An air leakage test, performed by a HERS rater, is required for existing ducts whenever the existing furnace is replaced, or for new duct installations. At the final inspection, the CF-3R form completed by a HERS rater is required to be provided to the building inspector. A listing of certified HERS raters may be found at https://www.energy.ca.gov/programs-and-topics/programs/home-energy-rating-system-hers-program/home-energy-rating-system

Combustion Air (CMC Chapter 7)
Combustion air must be maintained as required by the California Mechanical Code for Category I appliances. Category II, III, and IV appliances shall be provided with combustion, ventilation, and dilution air in accordance with the appliance manufacturer's instructions.

Clearance from Combustible Materials (CMC 904.2)
The clear space and distance to combustible materials around the furnace unit shall comply with the manufacturer's installation instructions.

Anchorage of Equipment (CMC 303.4)
The furnace shall be properly anchored and supported to sustain vertical and horizontal loads within the stress limitations specified in the California Building Code.

Plastic Vent Piping (CMC 802.4.2)
Plastic pipe and fittings used to vent appliances shall be installed in accordance with the appliance manufacturer's installation instructions. When primer is required, it shall be of a contrasting color.

Located in a Crawl Space (CRC 302.13)
When a furnace is relocated to a crawl space, the underside of the floor joists shall be provided with a 1/2" gypsum or 5/8" wood structural panel or equivalent. This is not required for the replacement of an existing furnace already located in the crawl space.
Note: a modification may be considered if impractical

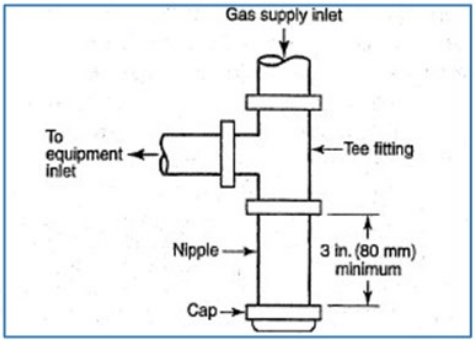
Located in a Garage (CMC 305.1)
Furnaces located in a garage must be elevated so the pilot light and controls are at least 18" above the garage floor surface (unless the unit is listed as flammable vapor ignition resistant, which all listed furnaces are now required to be). If subject to vehicular damage, adequate barriers must be installed (4" diameter steel pipe filled with concrete installed in a footing measuring 12" in diameter and, 2' deep, with a minimum 2'-9" above the finished floor).

Located in Attic (CMC Chapter 9)
Furnaces located in an attic area shall comply with the diagram at the bottom of this page. Additionally, if the attic and roof is conventionally framed, ceiling joist under the location of the FAU unit shall be doubled with a minimum 2X6 joists depending on the span and the load.

IMPORTANT NOTE: If the attic and roof framing is a prefabricated engineered truss system, an engineering report (stamped and signed by a licensed engineer) shall be submitted for review and approval prior to issuance of a permit.

Sediment Trap (CPC 1212.9)

A sediment trap shall be provided on the gas line downstream of the appliance shut-off valve and as close to inlet of the equipment as practical.



Inspections

- One final inspection is required after all work has been completed. Provide a copy of the duct leakage test performed by a HERS rater.

Attic Furnace Diagram