RESIDENTIAL FURNACE INSPECTION REQUIREMENTS

A 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 Division for any questions or additional information.

Electrical Requirements

- ☐ An approved, independent means of disconnect for the electrical supply to each piece of equipment shall be provided in sight of the equipment served. (CMC 303.8.5, CEC 422.31, CEC 422.33(A))
- ☐ A dedicated circuit shall be provided for the furnace. (CEC 422.12)
- ☐ A 120-volt service receptacle shall be located within 25 feet of, and on the same level as, the equipment for maintenance. 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 for maintenance of equipment is required and shall be accessible. 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. (CEC 210.70 & CMC 304.4.4)

Duct Air Leakage Test (CEng Code 150.2(b)(1)(E)
An air leakage test, performed by a HERS rater, is required for existing ducts whenever the existing furnace is replaced. 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:
http://www.energy.ca.gov/HERS/providers.html

Furnace Equipment Efficiency (CEngCode 110.2(a))
Warm-air furnaces and unit heaters rated at less than 225,000 Btu/h shall have a minimum efficiency rating of 78% AFUE (Annual Fuel Utilization Efficiency).

Combustion Air (CMC Chapter 7)
Combustion air must be maintained as required by the California Mechanical Code.

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 303.5)
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.

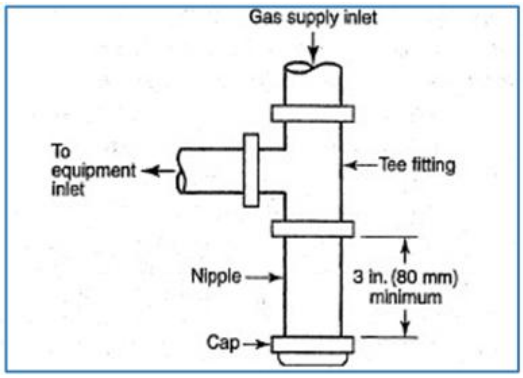
Located in a Crawl Space (CRC 302.13)
When a furnace is relocated to a crawl space, the underside of the floor joists shall be provided with a 1/2" gypsum or 5/8" wood structural panel or equivalent. This is not required for the replacement of an existing furnace already located in the crawl space.

Located in a Garage (CMC 308.1)
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). If subject to vehicular damage, adequate barriers must be installed (e.g. 4" diameter steel pipe filled with concrete installed in a footing measuring 12" in diameter and 3' deep and a minimum of 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.

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

Sediment Trap (CPC 1212.8)
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