

## **New Mechanical Units in Attic or on Top of Roof For an Existing Structure**

Location of new units in existing structures must be reviewed and approved for their location and size. The Building Division checks if it is in conformance to the California Building Code and all state mandated requirements.

To obtain a Permit for a new Mechanical Unit at the Building Inspection Division:

- Complete a Building permit Application
- Provide 2 copies of construction details for the installation of the new Mechanical Unit

Details shall include:

- Provide a roof-framing plan showing clearly the size, span and the spacing of the different members existing and new and showing the location and size of the new unit.
- Provide a section showing clearly the size and type of all structural members, showing clearly the load path from the unit to the existing foundation specifying all connectors and their spacing.
- Provide an engineered design if the support of the new unit does not comply with CBC Sec. 2304 & CRC Sec. R802 for conventional framing:
  - Field-fabricated Trussed Rafters that span from exterior wall to exterior wall.
  - Pre-fabricated trussed Rafters.
  - Roof Framing systems that do not have Ceiling joists tying the tops of the Exterior walls together.
  - Beams and Girders systems.

**Smoke alarms shall be installed per CRC Sec. R314 and CBC Sec. 907.2.11.2 at all of the following locations:**

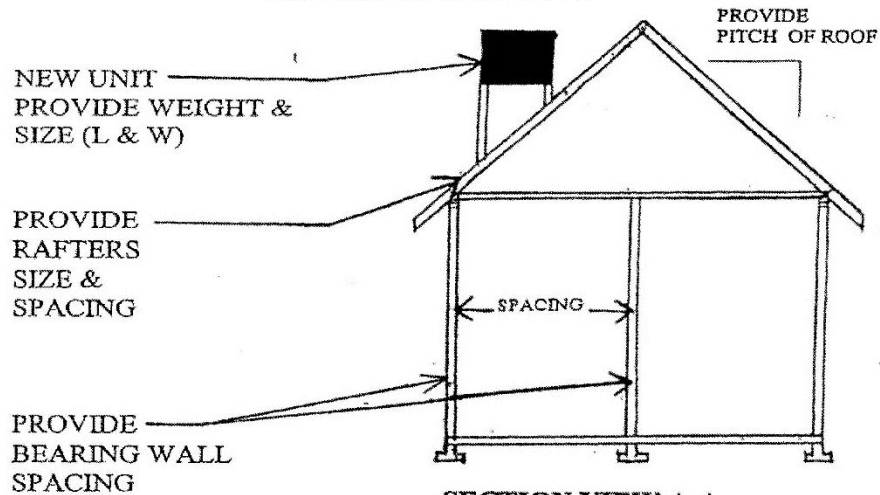
1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bed rooms.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Smoke alarms shall be installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by section R314.3.
5. In group R-3.1 occupancies, in addition to the above, smoke alarms shall be provided throughout the habitable areas of dwelling unit except kitchens.

**Carbon Monoxide Alarms shall be installed per CRC Sec. R315 and CBC Sec. 420 in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages in the following locations:**

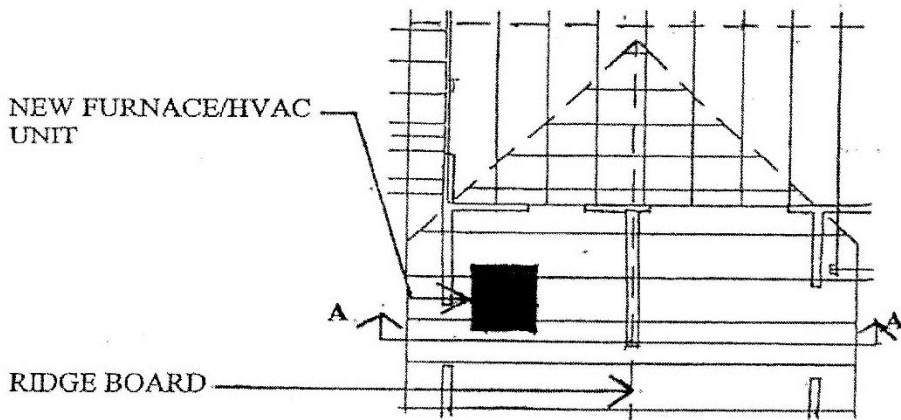
1. Outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s).
2. On every level of a dwelling unit including basements.
3. Where a fuel- burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

# SAMPLES OF NEW FURNACE/HVAC LOCATIONS & INFORMATION REQUIRED FOR A BUILDING PERMIT

## ROOF LOCATION

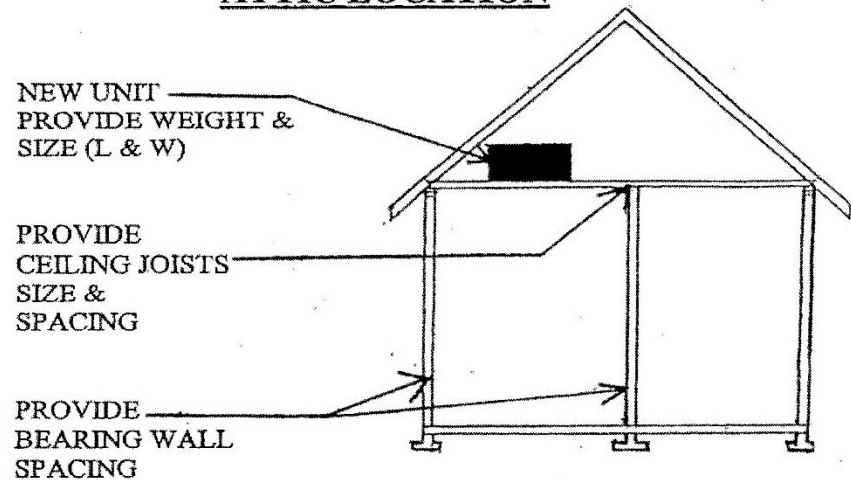


SECTION VIEW A-A

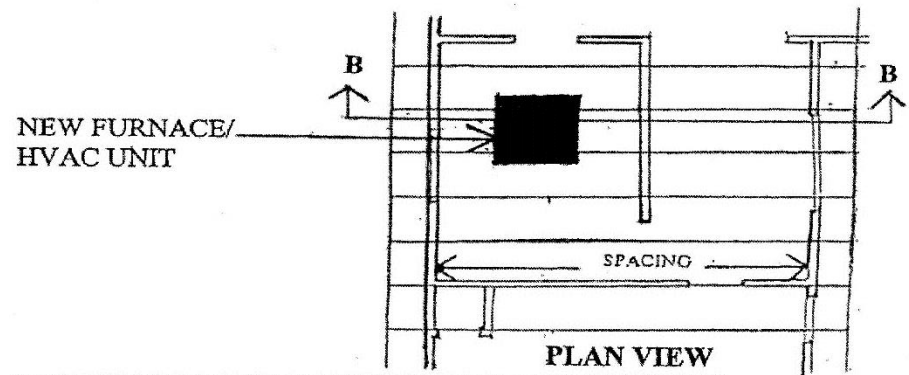


PLAN VIEW

## ATTIC LOCATION



SECTION VIEW B-B



PLAN VIEW

**NOTE: THIS SAMPLE IS NOT INTENDED TO SHOW ANY NEW ELEMENTS TO REINFORCE THE EXISTING SUPPORT. PLEASE INDICATE ALL NEW SUPPORTS THAT ARE PROPOSED**