The purpose of this Information Bulletin is to provide owners and contractors with the typical requirements to ensure the proper installation of forced air units in residential projects in accordance with the 2016 California Mechanical Code (CMC). The following information summarized in this Information Bulletin should be used as a checklist when installing forced air units. For additional installation requirements, please refer to CMC §311.0, §304.4 and §802.6.

- Obtain the appliance manufacturer’s installation and operating instructions and install the appliance in accordance with the manufacturer’s specifications. The appliance installer shall leave the installation and operating instructions attached to the appliance. (CMC §303.1 & §309.3)

- An approved accessible gas shut-off valve is required to be installed at the gas-piping outlet immediately ahead of the flexible connector. (CMC §1313.4)

- The appliance shall be fixed in position and securely fastened in place. (CMC §303.4)

- A positive means adjacent to and in line-of-sight shall be provided at the appliance to disconnect it from its power source for servicing. (CMC §301.4)

- Vent termination locations for listed caps 12” or less in size shall be at least 8’-0” from a vertical wall or similar obstruction. (CMC §802.6.2(1))

- All gas vents shall extend through the roof flashing, roof jack, or roof thimble and terminate with a listed cap or listed roof assembly. (CMC §802.6.2.5)

- Vent termination height above the roof with a pitch ranging from flat to 6/12 shall be a minimum of 1’-0”. (CMC §802.6.2)

- Double wall Type “B” vent shall require a minimum clearance to combustible materials as specified in Table 802.7.3.4 and a minimum 5’-0” in vertical height above the highest connected equipment draft hood or flue collar. (CMC §802.6.2.1 & §303.1)

- Using the manufacturer’s installation guide, determine the best location to install the appliance and vent. An attic in which an appliance is installed shall be accessible by an opening no smaller than 22” x 30" provided the largest piece of equipment can be removed through the opening. (CMC §304.4 & §304.3)

- Where the height of the passageway is less than 6’-0”, the distance from the passageway access to the appliance shall not exceed 20’-0” measured along the centerline of the passageway. The passageway shall be unobstructed and shall have solid flooring not less than 24” wide from the entrance opening to the appliance. (CMC §304.4 & §304.4.2)

- Install a work platform of not less than 30” in depth and width in front of the entire service side of the appliance. (CMC §304.4.3)
• A permanent 120-volt receptacle outlet and a lighting fixture shall be installed near the appliance. The switch controlling the lighting fixture shall be located at the entrance to the passageway. (CMC §304.4.4)

• A gas sizing diagram and calculations for all gas piping in the dwelling unit based on the actual appliances installed or to be installed shall be provided. A gas pressure test of the new gas piping shall also be provided. (CMC §1316 & §1314.0)

• Air ducts shall be installed, supported, and protected per CMC §603.0 and the manufacturer's field fabrication and installation instructions.

• Nonmetallic-sheathed cable (romex) shall be protected within 6'-0" of the nearest edge of the attic access. (CEC §334.23)

Figure 1 – Typical Installation of Forced Air Unit in Residential Project