

City of San Mateo
Building Division
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# Air Condition Guide for Residential 1 and 2 Dwelling Units

Revised 10/25/2019

# **GENERAL**

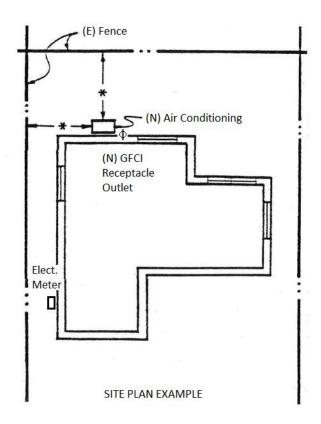
The purpose of this guide is to clarify the minimum building and municipal code requirements for a new residential air conditioning unit.

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

TIP! Failure to complete items below prior to inspection may result in a re-inspection fee.

# ITEMS REQUIRED FOR PERMIT:

- Provide three (3) sets of site plans (minimum size of plans 11x17) which include the following information:
  - Show on the plans a complete Scope of Work (include the equipment model #, capacity/BTU rating, maximum overcurrent device amps and specify the decibel level on the plans).
  - Show house layout with proposed A/C unit location. Specify the distance from A/C unit to property lines minimum 3' clearance.
  - Show location of electrical service panel & location of A/C unit disconnect.



# **INSTALLATION REQUIREMENTS**

- **Building Codes**: All work must comply with the 2016 California Building Code (CBC), 2016 California Residential Code (CRC), 2016 California Mechanical Code (CMC), 2016 California Electrical Code (CEC), 2016 California Plumbing Code (CPC), 2016 California Energy Code and San Mateo Municipal Code (SMMC).
- Equipment must be installed in accordance with the manufacturer's requirements (provide minimum two copies).
- Provide a minimum 3" slab underneath condenser and attach unit to the slab (show anchorage details).
- When the AC condenser installed in a side yard location, it must allow for a clear 3-foot path of travel (between condenser and property line).
- Keep in mind when choosing the unit location it must not block any required Egress, Emergency Escape or Rescue Opening Elements required per CRC R310 & R311.

#### **MECHANICAL REQUIREMENTS:**

- Condensate drain shall be discharged into an approved plumbing fixture via an indirect waste connection, or onto soil on the exterior of the building (soil must be sloped to drain away from the building), per CMC 310.

#### **ELECTRICAL REQUIREMENTS:**

- The existing electrical service must be adequate for the new air conditioning load.
- New circuit breakers must be listed and approved for installation in the panel.
- The panel must be labeled (CEC 408.4).
- A readily accessible approved disconnect must be installed on the electric supply adjacent to and in sight from the equipment (CMC 308.0). A clear working space 30" wide x 36" deep must be provided in front of the disconnect (CEC 110.26(A)(1)).
- A 15 or 20 amp receptacle outlet must be installed at an accessible location for the servicing of the heating and air-conditioning equipment. The receptacle shall be located on the same level and within 25 feet of the equipment. The receptacle outlet shall not be connected to the load side of the equipment disconnecting means (CEC 210.63).

#### **ENERGY REQUIREMENTS:**

- When located outdoors provide minimum 5' distance from the condensing unit to the termination of a clothes dryer vent (CEES 150.0(h)3(A)).
- Low-rise residential buildings must comply with all applicable mandatory measures of the California Energy Code. Refer to the attached form MF-1R for a list of the mandatory requirements.
- Equipment must comply with the minimum equipment efficiencies listed on the attached CF-1R-ALT-HVAC form.
  - Minimum cooling efficiencies for central air conditioners and heat pumps less than 65,000 Btu/Hr shall be a minimum of 14.0 SEER (Seasonal Energy Efficiency Ratio).
  - Central forced air system fans shall have airflow greater than 350 CFM/ton of nominal cooling capacity and a fan watt draw less than 0.58 W/CFM per Residential Appendix RA3.
- **Title 24 Energy Compliance Reports:** The following forms must be filled out and submitted with the permit application, attached to the permit:
  - Mandatory Measures form MF-1R.
  - Certificate of Compliance form CF-1R ALT-HVAC.
  - Installation Certificate CF-6R-MECH-04.

### **NOISE LEVEL REQUIREMENTS BY SMMC:**

Please reference the full version of SMMC available on the official City Website www.cityofsanmateo.org.

Chapter 7 of the SMMC section 7.30.040 MAXIMUM PERMISSIBLE SOUND LEVELS.

- It is unlawful for any person to operate or cause to be operated any source of sound at any location within the City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property to exceed decibel levels: as listed in this ordinance in accordance with the zones, areas and times listed.
- \* Source: Adapted from "The Model Community Noise Control Ordinance," Office of Noise Control, California Department of Health.
  - If the air conditioning unit is later determined by the City to exceed the limits of the noise ordinance, it must be relocated, replaced, or otherwise modified to achieve compliance with the noise ordinance.

# **INSPECTION PROCEDURES:**

A rough inspection shall be scheduled if any work is inside walls or ceilings and will be covered with finish materials. A final inspection should be scheduled after all work is complete. For each inspection, the Permit card with the Energy Compliance Report forms completely filled out and attached, and the Approved Job Copy of the Drawings (if any) must be presented to the inspector.

Permits expire 180 days after issuance or last inspection passed, whichever is the latest.