



RESIDENTIAL AIR CONDITIONING UNITS

THESE REQUIREMENTS APPLY TO BUILDING PERMITS SUBMITTED ON OR AFTER JANUARY 1, 2023 FOR SINGLE FAMILY HOMES, DUPLEXES, AND TOWNHOUSES

PLANNING DIVISION REQUIREMENTS

No planning permit is required for air conditioning units. The standards listed below are verified through the building permit process.

Setback Requirements

The condenser unit shall meet the zoning district setbacks for the property. For all residentially zoned properties, the minimum rear yard setback is 10 feet. For properties in the R-0, R-1.5 and R-2 Zoning Districts, the minimum side yard setback is 4 feet. All other residential zoning districts require a 6 foot minimum side yard setback. Corner lots must have a 9-foot setback along the longer street frontage. You may obtain the Zoning District for your lot on-line at www.e-OneStop.net or by contacting a Planner at the One-Stop Permit Center.

Noise Requirements

All air conditioning units must meet the noise standards of Sunnyvale Municipal Code Section 19.42.030. Noise shall not exceed 50 dBA during the hours of 10:00 p.m. and 7:00 a.m. or 60 dBA during 7:00 a.m. and 10:00 p.m. at any point on adjacent residentially zoned property.

Screening Requirements

All air conditioning units must be screened on all four sides. In most cases, air conditioning units located in private yards meet this requirement. If the proposed air conditioning unit is located on the roof, on a corner lot between the fence and the street, or in private homeowner's association area, please speak with Planner regarding the required screening.

BUILDING DIVISION REQUIREMENTS

A permit is required to install a new residential air conditioning unit and for the replacement of existing air conditioning units. Permits are required prior to installation or replacement of air conditioning units.

Following is a listing of the general requirements based on the 2022 California Electrical Code, 2022 California Mechanical Code, 2022 California Plumbing Code, 2022 California Energy Code and the Sunnyvale Municipal Code. This brochure is intended to provide general information, contact the Building Safety Division for any questions or additional information.

- **Duct Air Leakage Test** - An air leakage test, performed by a HERS rater, is required for existing ducts. At the final inspection, the HERS report completed by a HERS rater is required to be provided to the building inspector. (Ca Energy Code 150.2(b)1(E))
A listing of certified HERS raters is on-line at the California Energy Commission website.
- **Condensing Unit Efficiency** - Condensing units rated less than 45,000 Btu/h shall have a minimum efficiency rating of 14.3 SEER2 and 11.7 EER2.
- **Disconnect** - An electrical disconnect for the unit shall be provided within sight of the unit and readily accessible (not mounted behind the unit). The main electrical panel shall be labeled with the circuit for the new equipment. (Ca Electrical Code 440.11, 440.14, and 408.4(A))
- **Slab or platform** - The condenser unit shall be located and secured to a minimum 3-inch thick slab or approved platform. (CMC 1105.2 exception 2)
- **Receptacle** - Provide a 15- or 20-amp receptacle at an accessible location within 25 feet of the condenser unit. If located outside, the receptacle shall be GFCI protected, water-

resistant, and in a weatherproof cover (bubble cover). (Ca Electrical Code 210.63, 210.8, and 406.9).

- **Condensate Drainage** - The condensate line shall drain to a landscaped area or to the tail piece of a sanitary sewer line. (CMC 310.1, 310.6, 1105.7)
- **Insulation** - Insulation on the suction line (cooling refrigerant line) shall be protected from physical damage and weather including sunlight by an aluminum or metal shroud, painted canvas or plastic cover. (Ca Energy Code 150.0(m)9)
- **Refrigerant Port Protection** - The refrigerant circuit access port shall be protected from unauthorized access with a locking-type tamper resistant cap. (CMC 1105.11)
- **Clearance to Clothes Dryer Vent** - When located outdoors, the condensing unit shall be a minimum of five feet from the termination of a clothes dryer vent. (Ca Energy Code 150.0(h)3(A))

PERMIT PROCESS

Building Permit Review

1. Building permits for most air conditioning units are available on-line at the [Permit Center](#). Permits can also be obtained at the One-Stop Permit Center. The One-Stop Permit Center is open between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Inspections

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

Building Permit Application Requirements (3 copies of each item)

- ☐ A completed Building Permit Worksheet application (available at the One-Stop Permit Center or on-line at Sunnyvale.ca.gov - *only one copy of this item needed*)
- ☐ An approval letter from the Homeowner's Association (if applicable).
- ☐ Site plan showing the location of the property lines, existing building(s), and location of the air conditioning condenser unit with setbacks to all property lines. See back of this handout for a sample.
- ☐ Equipment located on a roof top requires structural calculations, attachment details, roof framing plan, and roof screen details.
- ☐ Fee _____