Electrical and Mechanical Equipment Handout

All proposals for new outdoor electrical and mechanical equipment are subject to approval by the Planning and Building Department. When reviewing building permits for installation of outdoor mechanical equipment, City Staff shall insure new, or replacement equipment complies with applicable setback and noise limits of the Municipal Code. Noise generated by outdoor mechanical equipment such as HVAC units, generators, and pool equipment can become a divisive issue between neighbors and may result in requests for the City to initiate code enforcement actions to gain compliance with local noise regulations. The City encourages property owners to exercise consideration for their neighbors when selecting the equipment itself, how it is housed, and where you place it on your property.

Outdoor electrical and mechanical equipment units are subject to the City's exterior noise standards, which set maximum during daytime and nighttime limits for residential and commercial zones, measured from the closest point to an activity area (yard, deck, or patio) of an affected neighbor's property, as provided in the table below.

Chapter 7.16.060 Exterior Noise Limits provides the following limits:

TABLE A-2		
Zone	**Time**	**Noise level (dBA)****
Single family Residential and Open Areas (RS, RP, OA)	9:00 p.m.—7:00 a.m.	45
	7:00 a.m.—9:00 p.m.	50
Multi-family Residential (all RM)	9:00 p.m.—7:00 a.m.	50
	7:00 a.m.—9:00 p.m.	55
Professional-Administrative (PA)	9:00 p.m.—7:00 a.m.	55
	7:00 a.m.—9:00 p.m.	60
Commercial (CG and CR)	9:00 p.m.—7:00 a.m.	55
	7:00 a.m.—9:00 p.m.	65
** In the case of an elevated or directional sound source, compliance with the noise limits is to be maintained at any location or elevation along and beyond the property line. (Ord. 899 § 1, September 19, 1977; Ord. 1174 § 1, February 5, 2001)		

Application Requirements: The applicant must prepare a site plan showing the proposed location of the electrical and mechanical unit and all required setbacks. Per Section 20.60.070.B. of the Mill Valley Zoning Code, mechanical equipment (and any required sound attenuation structure) may encroach a maximum of 30% within a side or rear yard setback but must also maintain a minimum 5-foot clearance from all property lines. **Note:** Mechanical equipment is not allowed in the exterior "front" setback (including the side yard facing street on a corner).

Submittal Materials - (2) copies to be included in addition to information required for a Building Permit:

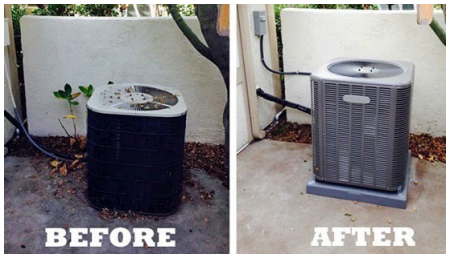
1. Scaled Site Plan: Demonstrating proposed location of equipment in relation to property lines and existing structure(s)
2. Manufacturer's Equipment Information: Information should include the equipment's dBA
3. Sound Attenuation Method(s): If applicable, should include information demonstrating method

For example: if your required side yard setback is 8', the 30% projection provision provides a 2'4" side yard encroachment. However, electrical, and mechanical equipment must demonstrate compliance with the noise requirements of the Mill Valley Municipal Code, meaning additional setbacks may be necessary beyond the minimum setback to meet prescribed noise requirements. The 30% projection provision does not apply to window units.

Sound Attenuation Techniques

Techniques to Mitigate Noise: Electrical and mechanical equipment can often exceed the City's Noise Ordinance levels; however, manufacturers or contractors may provide sound attenuation measures to reduce noise levels to an acceptable level.

For electrical and mechanical equipment located closer than 15-feet to a side or rear property line, additional steps are required to ensure maximum allowable noise levels are met (e.g., sound reduction covering, sound proofing material installed on fencing/walls, physical enclosures, or barriers).



The City requires definitive measures and assurances that noise standards shall be met (such as an acoustical calculation using the manufacturer's specifications), and the Planning Department will require a noise reading before the final permit is signed-off. If the unit exceeds the noise standard, additional measures will be necessary including an acoustical study that demonstrates proposed equipment complies or the unit would need to be relocated.

Example Sound Attenuation Techniques Physical enclosures (fencing with insulation):

These are typically made with fiberglass, foam, or other materials that can absorb or deflect noise emanating from the unit. The enclosure is placed around the unit (allowing for adequate air flow) and can reduce noise by five to ten decibels

Shock absorption base:

The concrete foundation underneath most air conditioning units can amplify vibration-related noise. Vibration pads are made of rubber and can be inserted underneath the unit to eliminate direct contact with the foundation and absorb vibrational energy.

**Inquire with air conditioning manufacturer before installing any of these sound attenuation techniques.*