

# NOISE ELEMENT



Land Use Category	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB						
	55	60	65	70	75	80	85
Single Family Residential			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Infill Single Family Residential			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Commercial- Motels, Hotels, Transient Lodging			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Schools, Libraries, Churches, Hospitals, Nursing Homes			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Amphitheaters, Concert Hall, Auditorium, Meeting Hall	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Sports Arenas, Outdoor Spectator Sports	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Playgrounds, Neighborhood Parks				Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Golf Courses, Riding Stables, Water Rec., Cemeteries				Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Office Buildings, Business, Commercial, Professional			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Industrial, Manufacturing Utilities, Agriculture				Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)
Freeway Adjacent Commercial, Office, and Industrial Uses.			Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)	Diagonal lines (top-left to bottom-right)





**Nature of the noise environment where the CNEL or Ldn level is:**

**Below 55 dB**  
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

**55-65 dB**  
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

**65-75 dB**  
Very noisy urban areas near arterials, freeways or airports.

**75+ dB**  
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

 <b>Normally Acceptable</b> Specific land use is satisfactory, based on the assumption that any building is of normal conventional construction, without any special	 <b>Conditionally Acceptable</b> New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems	 <b>Normally Unacceptable</b> New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.	 <b>Clearly Unacceptable</b> New construction or development should generally not be undertaken.
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The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

SOURCE: STATE DEPARTMENT OF HEALTH.  
AS MODIFIED BY THE CITY OF RIVERSIDE

Figure N-10

## NOISE/LAND USE NOISE COMPATIBILITY CRITERIA