



Enhanced acoustical performance - exterior noise control

Possible 1 point

Intent

Reduce impact of environmental noise from building and/or site on community noise which can help mitigate sleep disturbance and general annoyance.

Requirements

- Conduct a site noise assessment. Perform qualitative assessments of nearby noise sources and noise-sensitive receivers, and/or a quantitative measurement of site noise in at least one location for at least 24-hours.
- Design and locate exterior noise sources¹ so that the following project noise levels are not exceeded at the project boundary:
 - For boundaries adjacent to residential buildings:
 - Maximum exterior noise level (Lmax) does not exceed existing ambient levels, and does not exceed 60 dBA
 - Average exterior noise level (Leq, 8h) of 45 dBA
 - For boundaries not adjacent to residential buildings:
 - Outdoor Day-Night Equivalent Level (Ldn) or Community Noise Equivalent Level (CNEL) of 60 dBA
- Additionally, for residential projects, do not exceed the following noise levels in bedrooms:
 - maximum interior noise level (Lmax) of 45 dBA
 - average interior noise level (Leq, 8h) of 30 dBA.

¹ Noise sources¹ are elements that may contribute to the resultant environmental noise levels that are within the purview of the project design team and site boundary. Noise sources may include building equipment (mounted on the rooftop, inside building but exterior venting, or located at grade), transformers, traffic associated with the building, and other sources. Emergency equipment (e.g. generators) do not need to meet these noise requirements, however, an operations plan must be included to describe their schedule for periodic testing.

General Pilot Documentation Requirements

[REGISTER FOR THE PILOT CREDIT](#)

- Participate in the [LEEDuser pilot credit forum](#)
- Complete the feedback survey:

[CREDITS 1-14](#)

[CREDITS 15-27](#)

[CREDITS 28-42](#)

[CREDITS 43-56](#)

[CREDITS 57-67](#)

[CREDITS 68-82](#)

[CREDITS 83-103](#)

Submittals/Documentation

- Narrative describing the site noise assessment conducted. Describe the boundary types (whether boundaries are adjacent to residential buildings) and for boundaries adjacent to residential buildings, include the existing ambient levels and explain how this level was determined.
- Calculations or measurements for noise levels, including description of noise sources included in the analysis.
- Operations plan for testing of emergency equipment, describing the reason a particular time of day was chosen for testing.

Changes

- Changes made 6/4/2015:
 - The credit intent has been revised to better reflect the purpose of the credit.
 - The exterior noise criteria have been revised to align with existing community noise guidelines
 - The requirements have been revised to separately address noise concerns for residential buildings, including a new requirement for noise levels in bedrooms.