

## 1 Formal CPD point

Please be aware you are required to manage your own CPD records. We will provide you with your participation certificate and answer sheet once you have attended the full seminar.

The below answer sheet is for your own self-assessment. Please keep your completed questionnaires and answers on file for your record. These do not need to be sent to CPD Live. CPD-Live will send you certificate.

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## REDUCING NOISE POLLUTION -CONSIDERATIONS & SOLUTIONS

## **ACOUSTIC** BLINDS AND CURTAINS

1) How does sound travel?

Sound is energy, created by vibrations, transmitted through the air in sound waves.

2) What are the ways that sound interacts with other objects, such as a blind, curtain, window or table?

When sound comes into contact with other an object, it either passes through the object (which is known as transmission), is reflected by the object (reflection), or is absorbed by the object (absorption).

3) Apart form acoustic blinds and curtains, identify the various other noise reduction solutions available to specifiers.

Acoustic panels - which absorb, deaden or dampen sounds, and are typically placed on walls and ceilings.

Sound insulation – Featuring glass wool or other materials installed into walls or ceiling systems, this is used to reduce sound transmission from one area to another.

Double glazing - Considered the "gold standard" of acoustic treatments, this delivers up to 57% traffic noise reduction and up to 46% voice noise reduction.

4) What are acoustic blinds and curtains? How do they reduce environmental noise?

Combining raw materials known for their sound absorbing qualities, with unique fabric construction, acoustic blinds and curtains are designed and scientifically tested to reduce noise and absorb sound.

5) How is the performance of noise of noise reduction solutions measured?

Noise reduction performance can be measured using the Weighted Sound Reduction Index (Rw) or transmission loss (TL).

6) In Australia and New Zealand, what are the relevant regulations relating to acoustic design?

AS/NZS 2107:2016 "Acoustics—Recommended design sound levels and reverberation times for building interiors".

The National Construction Code includes sound insulation and acoustic performance requirements to address both airborne and impact noise.

The Association of Australasian Acoustical Consultants publishes performance-based acoustic guidelines for a range of developments – from apartments and townhouse to commercial and educational buildings.

Competency Codes: PC 24, PC 28, PC 33 - Performance Criteria For Project Initiation And Conceptual Design PC 46 - Detailed Design And Construction Documentation