CPD Overview

Internal Air Quality

Enhancing Comfort in Living and Working Spaces through Effective Air Terminal Selection



Overview

This CPD session explores the critical role of air terminal devices in delivering high-quality internal environments. Attendees will gain insight into how ventilation design impacts comfort, air quality, energy use, and compliance with UK regulations. With a balance of technical content and practical examples, the session supports better design decisions across a wide range of building types and projects.

What delegates will learn

After completing this CPD, participants should be able to:

- Understand key UK regulations and industry standards for indoor air quality.
- Identify HVAC system components and how they influence air distribution.
- Apply ventilation and ductwork principles to improve occupant comfort and system efficiency.
- Recognise the impact of grille and diffuser selection on performance, acoustics, and air mixing.
- Use design data and nomograms to select suitable terminal devices for various applications.

Key Topics and Frameworks Covered

- Building Regulations: ADF, BB101, COSHH, Workplace Reg. 6
- CIBSE Guides B2, KS17, TM42
- WHO and Public Health England IAQ Guidance
- BESA BS40102 (IEQ Benchmarking)
- Air distribution theory (buoyancy, throw, pressure, velocity, acoustics)
- Grille and diffuser selection and placement
- Practical case studies and application examples

Why it matters

This session is suitable for building services professionals involved in the design, specification, or assessment of ventilation systems. Whether working on offices, residential schemes, education, healthcare, industrial, retail or public sector buildings, attendees will benefit from deeper insight into optimising air terminal device selection and placement.