

EDUCATION SESSIONS



12:00 PM

All Electric VRV/VRF Systems with Low GWP Refrigerants

DESCRIPTION: VRV/VRF systems provide a flexible, cost-effective, all-electric HVAC system that helps decarbonize buildings. However, the move to lower GWP refrigerants has raised concerns from owners, designers, and contractors about the future viability of this technology.

In this session, we will discuss the latest code landscape, low GWP refrigerant options, and the impact when designing a VRV/VRF system.

Presenting: Daikin Comfort Technologies (DCT)

2:00 PM

Optimizing Energy Efficiency & IAQ utilizing ASHRAE 62.1 IAQ Procedure

DESCRIPTION: Commercial building owners, designers, and service providers are looking for solutions to meet today's challenges with rising costs, push to decrease carbon emissions, and demand for healthy building environments. Many times, these challenges are in direct conflict with one another.

In this session, we will discuss recent updates to the commercial building ventilation standard, ASHRAE 62.1-2022, that encourage the use of the IAQ Procedure, and we will compare different ventilation design approaches and how they link to the above challenges. We will also compare IAQP-based design with approaches that use Demand Control Ventilation (DCV) and Energy Recovery.

Presenting: enVerid Systems

4:00 PM

ASHRAE Standard 241 "Control of Infectious Aerosols" *Updated (June 2023)*

DESCRIPTION: ASHRAE standard 241 acknowledges the crucial role of maintaining good indoor air quality (IAQ) in controlling the spread of infectious diseases. Its primary objective is to establish minimum requirements to substantially reduce the risk of disease transmission of infectious aerosols in various indoor spaces. The standard applies to new buildings, existing buildings, and major renovations, encompassing the design, installation, commissioning, operation, and maintenance of outdoor air systems and air cleaning systems.

In this session, we will discuss key areas covered by the standard including:

1. Ventilation
2. Filtration
3. Air Cleaning
4. HVAC System Operation and Maintenance
5. Building Occupancy

Presenting: ASHRAE 241 Committee member and ASHRAE Distinguished Lecturer

6:00 PM

Designing High-Efficiency Ventilation Systems for a Changing Climate

DESCRIPTION: Air to air heat exchangers help to significantly reduce the energy consumption of ventilation air for residential and commercial buildings. However, rising temperatures and humidity levels around the globe create the need to condition ventilation air even further.

In the first part of this session, we will discuss the different types of air-to-air heat exchangers and the integration of VRV/VRF systems to H/ERV units to control not just temperature, but also the humidity of ventilation air – in an all-electric way!

In the second part, we will discuss how ventilation systems must be proactive when unprecedented natural events occur, such as forest fires and pandemics. We will talk about different operation modes and the recipe for good IAQ under standard and extreme events.

Presenting: Oxygen8