WEBINAR

HVAC System Considerations with COVID-19

Speakers:
- Alan Pong
- Angel Robles
- Jeremy Goodland
- Richard Almini

Moderator: Katy Scott
COVID-19 and Airborne Transmission

Particle Settling in Still Air

- 0.5µm = 41 hours
- 1µm = 12 hours
- 3µm = 1.5 hours
- 10µm = 8.2 minutes
- 100µm = 5.8 seconds
HCAC Measures to Combat COVID-19

How do I know which option is best for my building???
AHU’s, Packaged Units, Built-Up System & System Distribution

Air Handler

Package Unit

AHU Cabinet Schematic

System Diagram
Filters

MERV Rating: Minimum efficiency reporting value

**MERV 8**

~70% efficient at particle sizes ranging from 3-10 microns (µm) in diameter

~20% efficient at particle sizes ranging from 1-3 microns (µm) in diameter

~2% efficient at particle sizes ranging from .3µm-1 microns (µm) in diameter

**MERV 13**

~90% efficient at particle sizes ranging from 3-10 microns (µm) in diameter

~85% efficient at particle sizes ranging from 1-3 microns (µm) in diameter

~50% efficient at particle sizes ranging from .3µm-1 microns (µm) in diameter
Ventilation

TYPICAL ECONOMIZER

Fresh Air In

Exhaust Out

Economizer Outside Air Hood

EF & EF1 On Economizer Logic

Access Panel

Knock Outs (Pressure Tube & 24V yellow Wire)

Molex Plug (Power Exhaust Power)

Key Hole 2 Each Side
Ventilation

- Damper or Relief Fan 1,500 cfm
- Return Damper 8,500 cfm
- 1,500 cfm (15%)
- Fresh Air Intake Damper
- Cooling Coil Fan
- 10,000 cfm return air
- Core Zone
- South Zone
- East Zone
- North Zone
- West Zone
- VAV Box: 1000 cfm, 150 is OSA
Ultraviolet Germicidal Irradiation (UVGI)

Air-Handler “In-Duct” Installation

Downstream coil surface/air installation
Needle Point Bi-Polar Ionization (NPBI) Components
QUESTIONS? Please Type into the Q&A

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