

ASK US HOW OUR PRODUCTS CAN HELP REDUCE THE TRANSMISSION OF COVID-19 THROUGH THE BUILT ENVIRONMENT

Thermal Equipment Sales would like to present you with some of our technologies that may be effective in preventing the spread of COVID-19. Unfortunately, the newness of this pathogen means that there is very limited access to test data or a testable pathogen. However, while testing has not been able to be proven specific to COVID-19, research suggests that these technologies and strategies below may be effective against the virus. These products and strategies include *UV-C lights, bi-polar ionization, humidifiers, airflow measurement, room pressurization, air filtration, and dedicated outside air systems*.

Please reach out if you would like to schedule a webinar presentation or if you have any questions about how we may be able to assist you in this time of uncertainty!



UV RESOURCES: UV-C Lights

- Kills all known-microorganisms including bacteria, viruses, molds, and other pathogens even antibiotic-resistant superbugs.
- Improves airflow and heat exchange efficiency by eliminating 90% of growth on HVAC coils.
- Effective in killing other varieties of coronaviruses, such as MERS and SARS.
- ASHRAE states that it can kill 90% or more of all microorganisms living on HVAC air ducts and evaporator coils.
- Upper-room germicidal fixtures can inactivate microbes in under a second including measles, mumps, TB, and cold viruses.
- Has been in use for over 100 years and was invented to combat influenza and tuberculosis.
- http://www.uvresources.com/



GLOBAL PLASMA SOLUTIONS: Bi-Polar Ionization

- Third party testing with ELITE rated labs confirmed that within just 30 minutes, GPS technology demonstrated substantial reductions in common pathogens including C Diff, Staph, MRSA, E. Coli, and Legionella.
- Reduces particles, odors, pathogens, and energy consumption.
- https://globalplasmasolutions.com/



NEPTRONIC: Humidifiers

- Maintaining a relative humidity between 30-60% has been shown to influence the survivorship of viruses and reduce the transmission and infectiousness of viral diseases.
- Keeping a relative humidity level of 50% kills 100% of airborne viruses within 24 hours.
- http://www.neptronic.com/home.aspx



EBTRON: Airflow Measurement Systems

- Ebtron's airflow measurement technologies paired with control strategies optimize ventilation air, which is critical for a healthy indoor environment.
- Occupant well-being is directly affected by the amount of fresh air being circulated in the space.
- Ensure that your building satisfied ASHRAE standards and is compliant with current building codes.
- Reduce your IAQ liability and operating risks.
- <u>https://ebtron.com/benefits/occupants/</u>



TSI: Room Monitoring

- Monitor room pressure differentials to ensure that viruses and bacteria is contained to critical spaces and does not spread to unwanted areas.
- Monitor temperature and humidity to guarantee they are at levels that don't encourage the spread of viruses and bacteria.
- https://tsi.com/solutions/#application



PURAFIL: Filtration Systems

- Air filtration is an important component in the fight against COVID-19 as it has been proven that infectious viral particles can float or drift around the air for up to three hours.
- Offers filtration cabinet air scrubbers that are antimicrobial and utilize multi-stage filtration that destroys viruses and bacteria on contact.
- Offers KN95 healthcare particulate respirator masks that are FDA class 1 approved.
- https://www.purafil.com/solutions/pathogen-removal/viruses/



UNITED COOL AIR: Dedicated Outside Air Systems

- Fresh air being brought into a building is a critical piece in creating a healthy indoor environment.
- Deliver cleaner air to the space to dilute the contaminated air in the space.
- Ensure that ASHRAE standard IAQ minimum ventilation rates are achieved.
- The Alpha Aire unit is self-contained DOAS unit designed for a quick and easy installation
 - No exterior mounting space required
 - Horizontal or vertical
 - Air-source heat pump
 - Dual energy recovery devices
- https://unitedcoolair.com/100-percent-doas/

www.ThermalEQ.com

Thermal Equipment Sales, Inc.

HVAC Manufacturer's Representatives











AIR SOLUTIONS GOVERNAIR

AIR SOLUTIONS HUNTAIR

AIR SOLUTIONS MAMMOTH



















DAIKIN AC: VRV Multi-Zone Split & Large Capacity Ductless Split Systems

DAIKIN APPLIED: RTU, AHU, PTAC, WSHP, Geothermal, Chillers & Coils

BIG ASS FANS: Industry Leader in Overhead and Directional Fans

DELTA CONTROLS: HVAC Controls

SERESCO: Pool / Industrial Dehumidification & Water Heating



GOVERNAIR: Custom Air Conditioning Units, Air Handlers & Chillers

HUNTAIR: Custom Air Handlers, Fanwall Technology & Clean Room Equipment

MAMMOTH: Custom RTU, VAV A/C, AHU, Penthouse Systems & Energy Recovery

NOVELAIRE: Dehumidifiers, Desiccant Wheels & Energy Conservation Wheels

DATA AIRE: Data Center & Computer Room Customizable Precision Cooling

RAPID ENGINEERING: Industrial Process & **Finishing Equipment**

Q-PAC: Replacement Fan Arrays

EBTRON: Airflow Measuring Systems

UV RESOURCES: Full line of UV-C products



COLMAC: Domestic Water Heaters, Water Source Heat Pump & Heat Pipes

STERLING HEATING: Direct / Indirect Gas Heating & Industrial Make-Up Air

STERLING RADIATOR: Fin Tube, Unit Heaters, Convectors & Radiant Ceiling Panels





























WATER FURNACE: Geothermal Systems, Water Source Heat Pump Systems & Modular Chillers

JOHNSON AIR-ROTATION: Options to Heat, Cool & Ventilate Open-Spaces

GLOBAL PLASMA SOLUTIONS: Ionization

United CoolAir: Commercial Packaged & Split Modular Indoor Systems

ENVIROTEC: Constant / VAV Boxes, FCU & Small Air Handlers

TEMTROL: Custom Air Handlers & Coils

VENMAR: Packaged / Custom ERV, Vertical UV & Energy Recovery

VENTROL: Custom AHU, Knock-Down Construction & Hybrid Foam Thermal Break

TEMSPEC: UV & Heat Pump Products for High-Rise & Classroom Applications

ADDISON: Custom & Semi-Custom HVAC-R

ALDES: Heat & Energy Recovery & Make-Up Air Equipment

CLIMACOOL: Modular Chillers & Packaged **Rooftop Units**

DADANCO: Active Chilled Beams

NEPTRONIC: Electric, Gas-Fired, Steam, Atonomizing & Evaporative Humidifiers

IMI FLOW DESIGN: AutoFlow, FlowSet / VersaFlow Self-Balancing & Flexible Hoses

TSI: Precision Measurement Instrumentation with Unsurpassed Accuracy and Reliability

EATON: Electrical, Hydraulic & Mechanical Power Management

RAYWALL: Electric Heaters / TPI Company





ENVIRO-TEC®









