To All Members:  

June 12, 2020


The ADVISORY applies to commercial/non-residential property management entities and related activities – both essential and non-essential- in operation during the COVID-19 public health emergency until rescinded or amended by New York State. The building owner/manager, or another party as may be designated by the building owner/manager (in either case, "the Responsible Parties") shall be responsible for meeting the standards set forth in the ADVISORY.

Pursuant to the ADVISORY, before occupants return to a building that has been entirely closed, Responsible Parties must complete pre-return checks, tasks, and assessments to ensure a healthy and safe environment. These systems include, but are not limited to, mechanical systems, water systems, elevators and HVAC systems.

**N.B. BEFORE OCCUPANTS CAN RETURN TO A BUILDING THAT HAS REMAINED OPENED, RESPONSIBLE PARTIES, MUST RECEIVE VERIFICATION OF SUITABILITY FOR OCCUPANCY FROM BUILDING ENGINEERS.**

In anticipation of the re-opening of New York City’s office buildings, Local 94 has been in discussions with representatives of the RAB, REBNY and BOMA with regard to the new and significant verification obligations which the ADVISORY has created and put upon building owners, managers and, of course, our members to get New York City’s commercial office buildings back in business.

Our discussions and negotiations have led to the collaborative development of a check list of items (attached) that all parties believe are appropriate to undertake to ensure that building systems are appropriately operating and that buildings are suitable for occupancy.
Our discussions and negotiations have now stalled, however, over Local 94’s demand that the building owners/managers agree to full indemnification (including legal defense costs) of each of our members, as against any personal liability that might arise out of lawsuits filed against our members, individually or otherwise, by third parties seeking damages for the contraction of the COVID-19 virus in buildings where “verification of suitability for occupancy” is made by our members.

The building owners and managers have refused to agree to such indemnification.

Each of you is bound by our labor contract with the RAB to comply with lawful directives of your employer, and you are obligated to verify that you have performed all of the operational items set forth in the attached checklist.

YOU SHOULD NOT MAKE A VERIFICATION THAT YOUR BUILDING IS SUITABLE FOR OCCUPANCY, UNLESS AND UNTIL YOUR BUILDING OWNER OR MANAGER AGREES IN A WRITING, APPROVED BY LOCAL 94, TO FULLY INDEMNIFY YOU IN CONNECTION WITH YOUR VERIFICATION.

Please see the attached verification form that you may use in connection with the ADVISORY.

Please contact your business representative should you have any questions.

Fraternally,

Kuba J. Brown
Business Manager/Financial Secretary

cc: Ray Macco
    Vincent F. Pitta, Esq.
    Jane Lauer Barker, Esq.
    Vito R. Pitta, Esq.
VERIFICATION

1. The undersigned is employed as a building engineer at:

   (insert address of building)

2. The aforementioned building is owned and managed by:

   (insert name of building owner)
   (insert name of building manager)

3. I hereby verify that I have read the attached checklist and have performed the necessary/required work delineated in the checklist, unless as otherwise stated herein and for the following reasons:

   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

4. I do not verify that the above-named building is suitable for occupancy.

   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

   Signature of Member               Print Name of Member

   Union Register Number               Date
Operate and Maintain the HVAC system in COVID-19
As per ASHRAE

Consider PPE when maintaining ventilation materials including filters, condensate. Consult additional guidance before duct cleaning. Check specifically:

✓ Dampers, filter, and economizers seals and frames are intact and clean, are functional and are responding to control signals.

✓ Zone and air temperature, humidity and CO2 system sensors, as applicable, are calibrated and accurately reporting environmental conditions to the BAS or local controllers.

✓ Air Handling systems are providing adequate airflow, there are no blockages in the duct system (for example – closed fire/smoke dampers) and air from the air handling system is reaching each occupied space.

✓ Exhaust fans are functional and venting to the outdoors.

✓ Check outside air intake regularly for any potential risk such as exhaust nearby and provide proper clearance if accessible by pedestrians, etc.

✓ Update or replace existing HVAC air filtration to a minimum of MERV 13 (MERV 14 preferred) or the highest compatible with the filter rack, and seal edges of the filter to limit bypass.

✓ Make sure the air handling systems and fans can overcome the additional pressure drop of the new filters and still maintain air flow at acceptable levels.
Operate and maintain the HVAC system – Air conditioning and ventilation systems

✓ Continued operation of all systems is recommended.

✓ Outside air for ventilation be increased to as much as the HVAC system can accommodate and still maintain acceptable indoor conditions during occupied hours.

✓ Flushing sequence or mode may be implemented to operate the HVAC system with maximum outside airflows for two hours before and after occupied times.

✓ Systems may be operated at minimum outside air settings when the building is unoccupied or not operating in the flushing mode.

Centralized and floor-by-floor Variable Air Volume (VAV) systems: General information

✓ In floor-by-floor VAV systems that have only minimum outside air damper positions or openings, open outside air damper to its maximum position (the same cautions and concerns stated above apply).

✓ If outside air is supplied centrally from outside air handling units (typically at mechanical levels) to all floors, and there are unoccupied tenant floors, divert the outside air to the occupied floors.

✓ Consider changing the floor level VAV air handling units' discharge air temperature setpoint the maximum (typically no higher than 60° F)
This will cause VAV terminal units (boxes) to open to try and satisfy space cooling loads which will increase the number of air changes in the space being served.

**Centralized and floor-by-floor Variable Air Volume (VAV) systems:**

**Heat or energy recovery**

☑️ When heat or energy recovery devices such as heat wheels or enthalpy wheels used in air handling systems and DOAS and the systems serves more than one space, care should be taken to determine whether the energy recovery device should remain in operation or be shut down.

☑️ Some energy wheels have the potential of cross contamination between the intake and exhaust air stream.

☑️ Other heat recovery devices that decouple the intake and exhaust air steams such as run around coils, plate heat exchanges, and heat pipes can continue to operate.

☑️ Heat wheels may continue operation if the unit serves only one space.

**Centralized and floor-by-floor Variable Air Volume (VAV) systems:**

**Cooling coils**

☑️ Cooling coils, heating coils, condensate drain pans, and humidifiers inside air handling equipment can become contaminated.

☑️ Consider adding UVGI (Ultraviolet germicidal irradiation light) for coil surface and drain pan disinfection are encouraged as it will reduce the needs and frequency for in-person coil surface disinfection.

☑️ These devices and systems should be monitored often, and regular and emergency maintenances should continue.
✓ Provide PPE protection for building operators, maintenance technicians and anyone else who must inspect or come in contact with the device or equipment.

Centralized and floor-by-floor Variable Air Volume (VAV) systems:
Operable windows

✓ In buildings with operable windows, when outside air thermal and humidity conditions and outdoor air quality are acceptable, open windows where appropriate during occupied hours.

✓ Disabling the interlock between opening windows and air conditioning system lockout or shut down if this feature is provided for in the Building Automation System.

✓ Monitor indoor spaces for possible contaminants entering through the windows such as toilets exhaust located nearby or for windows accessible to public and high traffic on adjacent streets and walkways.

✓ Exposure to seasonal and other outdoor allergens (pollen and mold spores) may occur with windows opened.

✓ Check duct and filters. Special ductwork cleaning, or, changing filters more often than normal is not necessary.

Heating Water systems

✓ Keep heating water systems circulating and maintain temperatures above 140°F to avoid microbial incursion. Do not let water temperature to drop below 120°F.
Operate and maintain the HVAC system - Exhaust systems

✓ Exhaust system for toilets should run 24/7. Do not open operable windows in toilets.

✓ Garage exhaust systems should run two hours before occupancy. It is preferred to run garage exhaust systems continuously during occupied hours. Continue to operate garage exhaust systems 2 hours after the building becomes unoccupied. These measures may require disengage the demand ventilation controlled by Carbon Monoxide.

✓ Other exhaust systems should continue to run as normal. Run exhaust systems 2 hours before and after occupied periods.

✓ If there are exhaust outlets located in pedestrian areas outside, provide warning signs and consider diverting or rearranging the exhaust air discharge locations so that they would pose no opportunity to cause harm.

Temporary and Special exhaust systems

✓ Consider installing temporary and special exhaust systems if there are rooms that may accommodate infected people or have the opportunity generate and entrain harmful particulates in the air. Particulates or aerosols should be captured and filtered or disinfected as close to the source as possible. Particulates can possibly be a means where the virus can adhere to become aerosol.

Pressure Control

✓ Maintain equal pressures on all the floors in multi-floor buildings.

✓ Maintain slightly positive pressure as compared to outside in both single story and multistory buildings.
✓ Shut off return air to the central air conditioning systems in the spaces where infected people may be present and use exhaust fans discharging air directly to the outside away from outdoor public gathering spaces, outdoor air intakes and operable windows.

✓ Consider HEPA filter, or, UVGI lamps with exhaust fan if exhaust can cause harm to public.

✓ In tall buildings, pressurizing the building will need to take into consideration of stack effect and wind effects.

✓ Stack effect direction can be reversed between summer and winter; therefore, settings likely will need to be adjusted throughout the year to maintain the above recommended conditions.

✓ To help mitigate stack effect, close all the doors in public areas along the path of least resistance where stack effect is strongest such as at elevator shafts connecting all floors, atriums, open stairs, escalators, etc. to isolate air transfer between floors.

✓ Consider providing signage to inform occupants to keep these spaces closed off.

✓ Tenants and visitors should use revolving doors and properly designed vestibules in buildings that have these types of entrance and exit ways rather than using single swinging doors to enter the building.

✓ Caution should be taken when going through air-locks by allowing social distance to “air” the space after the passage of a person.

✓ Consider providing signage to inform and direct occupants as to what entrances and exits to use.

✓ Wind speed and pressure in the upper part of a tall building can be significantly higher than lower levels.
✓ Pressure control, especially the upper part of a tall building, needs to consider the wind pressure.

✓ Buildings with operable window in mild weather can increase the air changes more in the higher levels.

Elevator Control

✓ Turn on elevator cab (lift) ventilation fans, where possible

✓ Encourage occupants to take stairs, where possible, especially when elevator lobbies are crowded.

✓ Allow elevators to run at high speed to minimize time in elevator.

✓ Close elevator lobby vestibule doors, if available.

✓ Consider local air treatment devices in frequently used lifts.

Building Automation System and Access Control System Programming

✓ Automate the control sequences in this document as a "Epidemic Mode" operation that can be turned on, shut down or override, if needed, by manual selection of the operator.

✓ Monitor and trend indoor humidity if the system has the capability and setup alerts and notifications to building operators and maintenance personnel when conditions occur beyond the recommended range of 40%-60% RH.

✓ Consider adding humidity sensors and monitoring if the system can accommodate adding this feature.

✓ Consider using local data loggers that monitor temperature and humidity if the BAS cannot.
✓ Place loggers in high occupancy spaces such as lobbies, atriums, conference rooms, and spaces deemed critical by facility managers to building function and safety etc.
✓ For HVAC system that use Demand-controlled ventilation sequences we recommend disabling this feature for the duration of the crisis.
✓ Regularly check battery backup and generator backup power supplies for BAS, Security, Fire Alarm, Life Safety, Lighting Control, and IT systems and IOT devices that must remain in operation.

**Boilers (Monthly):**

1) For systems with Steam Boilers, develop a schedule that provides minimum supervision on-site
2) Perform chemical testing of system water.
3) Verify water treatment target levels are being maintained.
   1) For systems using fuel oil
   2) Check fuel pump for proper operation.
   3) Inspect fuel filter; clean and verify proper operation.
   1) For systems using natural gas
   2) Check gas pressure, gas valve operation, and combustion fan operation.
   3) Check for evidence of leakage of fuel supply, heat transfer fluid, and flue gas.
      Verify proper operation of safety devices per manufacturer’s recommendations.

**Chillers (Monthly):**

1) Perform chemical testing of system water. Verify water treatment target levels are being maintained.
2) Check control system and devices for evidence of improper operation
   Check variable-frequency drives for proper operation.
Cooling Towers and Evaporative-Cooled Devices (Monthly):

1) Perform chemical testing of system water. [Verify water treatment target levels are being maintained.]
2) Check chemical injector device for proper operation
3) Check conductivity and other sensors for proper readings
4) Check water system ultraviolet lamp, replace bulbs as needed (if applicable)
5) Check control system and devices for evidence of improper operation
6) Check variable-frequency drive for proper operation
7) Check for proper fluid flow and for fluid leaks
8) Check for proper damper operation
9) Inspect pumps and associated electrical components for leaks and normal operation

Steam Distribution Systems (Monthly):

1) Perform chemical testing of system condensate and feed water
2) Check piping for leaks
3) Check steam traps and condensate return units for proper operation
   Check safety devices per manufacturer's recommendations

HVAC Water Distribution Systems (Monthly):

1) Perform chemical testing of system water. Verify water treatment target levels are being maintained.
2) Check for proper fluid flow and for fluid leaks. If necessary, vent air from system high points and verify backflow preventers and pressure regulating valves on makeup water lines are functioning properly.
3) Check expansion tanks and bladder type compression tanks have not become waterlogged

Pumps:

1) Inspect pumps and associated electrical components for proper operation
2) Check variable-frequency drive for proper operation
3) Check control system and devices for evidence of improper operation
Air Handling Units (Monthly):

1) Check for particulate accumulation on filters, replace filter as needed
2) Check ultraviolet lamp, replace bulbs as needed (if applicable)
3) Check P-trap
4) Check control system and devices for evidence of improper operation
5) Check variable-frequency drive for proper operation

Water-Source Heat Pumps:

1) Check for particulate accumulation on filters, replace filter as needed
2) Check P-trap
3) Check control system and devices for evidence of improper operation

Roof Top Units (Monthly):

1) Check for particulate accumulation on outside air intake screens and filters, replace filter as needed
2) Check ultraviolet lamp, replace bulbs as needed (if applicable)
3) Check P-trap
4) Check control system and devices for evidence of improper operation
5) Check variable-frequency drive for proper operation
6) Check refrigerant system for leaks
7) Check for evidence of leaks on gas heat section heat-exchanger surfaces
8) Check variable-frequency drives. For fans with belt drives, inspect belts and adjust, as necessary

Plumbing Systems

1) Water features and fountains - shutdown per manufacturer’s instructions and drain.

Plumbing Rounds (Weekly):

1) Flush piping systems through drinking fountains, lavatories, urinals, water closets and sinks to prevent stagnation
2) Verify wet floor sinks and drains remain wet
3) Check for proper fluid flow and for fluid leaks
4) Inspect booster pumps system for proper operation
5) Inspect Domestic Hot Water heater for production of hot water at 140°F
6) Inspect pumps and associated electrical components for proper operation
7) Check the recirculation system for proper flow and for fluid leaks
8) Inspection of secondary disinfection system for proper operation (if applicable)

9) Do not let it drop below 120°F. If circulation must stop, try to circulate once every two weeks for two hours at temperature. If the hot water recirculating system goes down for extended duration, do a high temperature flush and pull the strainers before going back online.

- Check and review and follow steps recommended in the CDC’s “Guidance for Building Water Systems.” This includes the following steps:
  - Inspect flushing of hot water at plumbing fixtures
  - Raise hot water temperature to at least 120 degrees if possible
  - Flush hot water at all sinks and showers. Run for 5-15 minutes
  - Check water for pH and disinfectant levels

**Special Systems**

1) Inspect fire alarm master panels and other life safety equipment with battery backup power supplies are functioning.

2) Inspect the battery backup power supplies for IT and IOT devices and mission critical systems.

3) Run emergency or backup generators, test transfer of power, per manufacturer's recommendations.