Indoor Environmental Quality Checklist

Safety and
Industrial
Hygiene Unit

Building Description

Original construction date	
Renovation dates	
Number of floors above grade	
Number of floors below grade	
Number of occupants	
Number of occupants building was designed for	
Original construction documents available	❑ yes ❑ no
Carpeting present	❑ yes (date of install_____ ❑ no
Exterior wall construction	❑ Brick ❑ Sheetrock ❑ Plaster/lath ❑ vinyl wall covering ❑ Vapor barrier ❑ _____
HVAC system	❑ Heat pump ❑ terminal reheats ❑ VAV ❑ roof top ❑ CAV ❑ residential forced air ❑ Fan coil/induction
Supply duct work insulation	❑ internal ❑ not present ❑ external (vapor barrier intact ❑ yes ❑ no)

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Preventive Maintenance						
A preventative maintenance schedule exists and is followed.	☐	☐	☐	☐		
Cooling Tower						
Cooling tower does not leak.	☐	☐	☐	☐		
Cooling tower is equipped with mist eliminators.	☐	☐	☐	☐		
There is no slime or algae present in the cooling tower.	☐	☐	☐	☐		
Cooling tower has a biocide treatment schedule.	☐	☐	☐	☐		
Chillers						
Chiller is properly insulated and not experiencing condensation problems.	☐	☐	☐	☐		
Mechanical Rooms						
Mechanical room is in good condition and clean.	☐	☐	☐	☐		
Chemicals are properly stored.	☐	☐	☐	☐		
Mechanical room has been surveyed for asbestos and insulation is in good repair.	☐	☐	☐	☐		
Boilers and other combustion sources.						
Flues and breaching are sealed and not leaking into building.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Combustion air source exists.	☐	☐	☐	☐		
Outside Air Intake						
Located away from contamination sources such as restaurants, garages, road. **(use this space to describe those items that need attention)**	☐	☐	☐	☐		
Trash compactor within 100 feet? ☐ parking ☐ loading dock	☐	☐	☐	☐		
Dumpster?	☐	☐	☐	☐		
Unobstructed.	☐	☐	☐	☐		
There is no standing water, bird droppings in vicinity.	☐	☐	☐	☐		
Evidence of precipitation entering intake area?	☐	☐	☐	☐		
No cooling tower within 100 feet? (minimum of 40 feet horizontal distance)	☐	☐	☐	☐		
No exhaust outlet within: (small source 20 feet) (large source 40 feet)	☐	☐	☐	☐		
Bird Screen						
Intact and not plugged.	☐	☐	☐	☐		
Outside Air Dampers						
There is a minimum opening setting.	☐	☐	☐	☐		
Outside air damper is controlled by economizer which has been tested during the past year.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Actuators operational intact and operational.	☐	☐	☐	☐		
Mixing Plenum						
The mixing plenum is clean and free of debris.	☐	☐	☐	☐		
If a floor drain is present it is equipped with a trap and is wet.	☐	☐	☐	☐		
The mixing plenum is equipped with a freeze stat.	☐	☐	☐	☐		
Mixing plenum is under negative pressure? (*If it is under positive pressure, outdoor air may not be entering*)	☐	☐	☐	☐		
Filters						

Air filters are at a minimum 25 to 35 percent efficient pleated filters.
Type   pleated
         bag
         box
	☐	☐	☐	☐		

Filters completely cover air stream. (i.e., no bypassing)	☐	☐	☐	☐		
Correct pressure drop can be monitored? (*Compare to manufacturer's recommendations*)	☐	☐	☐	☐		
Filters are being changed with appropriate schedule? (pleated at least 3 times/yr.) (box and bag annually if using prefilters)	☐	☐	☐	☐		
Cooling Coil						
Cooling coils have access for inspection and cleaning.	☐	☐	☐	☐		
Cooling coils are cleaned twice per year.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
No evidence that water carry over is or has occurred.	☐	☐	☐	☐		
Internal duct insulation within 10 ft of coils has been cleaned and modified to create washable surface.	☐	☐	☐	☐		
Condensate Drip Pans						
Condensate drip pans have access for inspection and cleaning.	☐	☐	☐	☐		
Condensate drip pans are clean with no residue.	☐	☐	☐	☐		
Condensate drip pans do not contain excessive amounts of standing water and are not leaking.	☐	☐	☐	☐		
Condensate drip pans do not contain visible growth (e.g., slime).	☐	☐	☐	☐		
Condensate drip pans are equipped with a drain line that is working properly and has a trap in the line.	☐	☐	☐	☐		
There is no evidence that water has overflowed from the condensate drip pan (e.g. water stains in insulation).	☐	☐	☐	☐		
Supply Fans						
Number of supply air units for whole building Number of supply air units serving the complaint area Types of air handling units	☐	☐	☐	☐		
Fan blades are clean.	☐	☐	☐	☐		
Belt guards are in place.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
There is no excess vibration caused by the fan (e.g. rumble or building vibration).	☐	☐	☐	☐		
No corrosion present on fan and fan casing.	☐	☐	☐	☐		
There are no reports of excessive fan noise in occupied spaces.	☐	☐	☐	☐		
Fans are not cycled "off" while building is occupied?	☐	☐	☐	☐		
Are fans cycled "off" while building is unoccupied? ☐ Yes ☐ No Schedule	☐	☐	☐	☐		
Primary Heating Coil						
Coils are accessible for inspection and cleaning.	☐	☐	☐	☐		
Coils are clean and are cleaned at least two times per year.	☐	☐	☐	☐		
Humidification						
Humidifier type?	☐	☐	☐	☐		
Treated boiler water is not used.	☐	☐	☐	☐		
Humidification system is not creating standing water in air handling system.	☐	☐	☐	☐		
There is no visible microbial growth adjacent to or associated with the humidification system.	☐	☐	☐	☐		
Mineral deposits have not built up on the humidification system.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Internal duct liner within 10 feet of the humidification system has been modified to create a washable surface which is cleaned two times per year.	☐	☐	☐	☐		
Return Fan Chambers						
The return fan chamber is clean and free of debris.	☐	☐	☐	☐		
If a floor drain is present it is equipped with a trap.	☐	☐	☐	☐		
There is no standing water present.	☐	☐	☐	☐		
If a floor drain is present it is equipped with a trap and is wet.	☐	☐	☐	☐		
All doors close tightly and there are no air leaks in fan unit.	☐	☐	☐	☐		
Return Fans						
Number of return air fan units for whole building Number of return air fan units serving the complaint area	☐	☐	☐	☐		
Fan blades are clean.	☐	☐	☐	☐		
Belt guards are in place.	☐	☐	☐	☐		
There is no excess vibration caused by the fan (e.g. rumble or building vibration).	☐	☐	☐	☐		
No corrosion present on fan and fan casing.	☐	☐	☐	☐		
There are no reports of excessive fan noise in occupied spaces.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Supply Duct						
General cleanliness of supply ductwork is acceptable. Supply ductwork has been cleaned? ☐ Yes ☐ No	☐	☐	☐	☐		
Supply ductwork is sealed with no leaks.	☐	☐	☐	☐		
Fire dampers are open.	☐	☐	☐	☐		
All access doors and panels close and seal properly.	☐	☐	☐	☐		
Internal duct insulation is intact and in good condition.	☐	☐	☐	☐		
Internal duct liner within 10 feet of the water sources (cooling coils, humidification wands) has been modified to create a washable surface which is cleaned two times per year.	☐	☐	☐	☐		
Flex duct drops are in good condition and connected to diffusers.	☐	☐	☐	☐		
Supply systems was balanced after original construction. Balancing report is available? ☐ Yes ☐ No	☐	☐	☐	☐		
Supply systems was balanced after recent renovations? Balancing report is available? ☐ Yes ☐ No	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Short circuiting or other air distribution problems are not apparent. Note location(s)	☐	☐	☐	☐		
No indication of condensation problems on supply ductwork.	☐	☐	☐	☐		
Fan Coils/Heat Pumps						
Coils, drain pan, and adjacent areas within two feet of the coils are cleaned at least 2 times per year.	☐	☐	☐	☐		
Filtration is present and is changed at least three times per year.	☐	☐	☐	☐		
Internal duct liner within 10 feet of the cooling coils has been modified to create a washable surface which is cleaned two times per year.	☐	☐	☐	☐		
Condensate pan is clean and drains freely.	☐	☐	☐	☐		
There is no visible evidence of microbial contamination or past water damage within the unit.	☐	☐	☐	☐		
Reheat Coils						
Coils are accessible for inspection and cleaning.	☐	☐	☐	☐		
Coils are clean and are on a scheduled to be cleaned at least once each 10 years.	☐	☐	☐	☐		
Reheat coils are operational during…. ☐ Winter ☐ Summer	☐	☐	☐	☐		
Terminal Diffusers (supply)						
Diffusers are clean and unobstructed.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Diffusers are delivering rated volume.	☐	☐	☐	☐		
Type of diffuser.	☐	☐	☐	☐		
Return Air System						
Return air system is: ☐ open plenum ☐ ducted	☐	☐	☐	☐		
Ceiling tiles are in place and there are no unintentional openings in the return system.	☐	☐	☐	☐		
Return grilles exist in appropriate locations and are clean.	☐	☐	☐	☐		
Noticeable flow of air into return air diffusers.	☐	☐	☐	☐		
Transfer ducts exist where necessary (i.e. restrooms).	☐	☐	☐	☐		
Fire dampers open.	☐	☐	☐	☐		
Return air system balanced after original construction or renovation.	☐	☐	☐	☐		
Room Partitions						
Gap allowing airflow at top is at least 36 inches.	☐	☐	☐	☐		
Gap allowing airflow at bottom is 1-4 inches.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Each isolated room is equipped with a supply and return.	☐	☐	☐	☐		
Outdoor AIR (O.A.) Quantity (check against applicable codes and ASHRAE 62-1989)						
For VAV systems: O.A. is increased as total system airflow is reduced?	☐	☐	☐	☐		
Spot check for CO_2 is acceptable (<800 ppm).	☐	☐	☐	☐		
Thermostats						
Operated in continuous "fan on" mode.	☐	☐	☐	☐		
Are properly located.	☐	☐	☐	☐		
Thermostats respond on demand and appear to be functioning properly.	☐	☐	☐	☐		
Setpoints ^{o}F (summer) ^{o}F (winter)	☐	☐	☐	☐		
Space temperature is within acceptable range.	☐	☐	☐	☐		
Occupants using portable fans? ☐ Yes ☐ No	☐	☐	☐	☐		
Humidity						
Relative Humidity is within acceptable range.	☐	☐	☐	☐		
Stairwells						
Doors close and latch.	☐	☐	☐	☐		
No openings allowing uncontrolled airflow.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
No noticeable odors are present.	☐	☐	☐	☐		
Lighting sufficient.	☐	☐	☐	☐		
Exhaust Fans						
Laboratories have chemical hoods that are venting outside.	☐	☐	☐	☐		
Kitchens and cafeterias have dedicated exhaust that is venting outside.	☐	☐	☐	☐		
Occupant cooking areas are equipped with an exhaust fan.	☐	☐	☐	☐		
Building has a relief air system.	☐	☐	☐	☐		
Building is slightly positively pressurized.	☐	☐	☐	☐		
Toilet Exhausts						
Bathroom's air pressure is slightly negative relative to building?	☐	☐	☐	☐		
Fans are operational during occupied hours.	☐	☐	☐	☐		
Fans exhausting to exterior of building.	☐	☐	☐	☐		
Exhaust grilles are clean.	☐	☐	☐	☐		
Make-up air path or supply air exists.	☐	☐	☐	☐		
Volume meets code requirement.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Floor drain traps are wet.	☐	☐	☐	☐		
Smoking Lounge Exhaust						
Fans are operational during occupied hours.	☐	☐	☐	☐		
Fans exhausting to exterior of building.	☐	☐	☐	☐		
Exhaust grilles are clean.	☐	☐	☐	☐		
Make-up air path or supply air exists.	☐	☐	☐	☐		
Volume meets code requirement.	☐	☐	☐	☐		
Room runs negative relative to building?	☐	☐	☐	☐		
Copy Room Exhaust						
Copy room air pressure is slightly negative relative to building?	☐	☐	☐	☐		
Large copiers are vented to plenum or exterior of building.	☐	☐	☐	☐		
Garage Ventilation						
Garage air pressure is slightly negative relative to building.	☐	☐	☐	☐		
Microbial Concerns						
There have been no water infiltration episodes within 24-48 hours.	☐	☐	☐	☐		
There are no water stained or discolored ceiling tiles present.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
There are no water stained or discolored ceilings present.	☐	☐	☐	☐		
There are no water stained or discolored walls present.	☐	☐	☐	☐		
There are no water stained or discolored carpet present.	☐	☐	☐	☐		
There are no water stained or discolored stored items present.	☐	☐	☐	☐		
There is no vinyl wall covering present on exterior walls.	☐	☐	☐	☐		
There are no moldy odors present.	☐	☐	☐	☐		

Exterior walls do not contain moisture?
  Tested with
      ❑   probe meter
      ❑   surface meter
	☐	☐	☐	☐		

Occupants report that condensation does not occur on exterior windows during winter.	☐	☐	☐	☐		
Basement / crawl space dry with no standing water.	☐	☐	☐	☐		
Roof intact and not leaking.	☐	☐	☐	☐		
Attic space present and in good condition.	☐	☐	☐	☐		
Potted plants within building appear to be in good condition and not standing in water and are not a significant source of mold.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Lighting						
Lighting levels are appropriate for tasks. ☐ direct ☐ indirect	☐	☐	☐	☐		
Bulb color/temp rating ❑ 3000 ❑ 3500 ❑ 4100 ❑ _____	☐	☐	☐	☐		
Light diffusers provide good dispersion of light.	☐	☐	☐	☐		
Task lighting available and used	☐	☐	☐	☐		
Outdoor lighting present ☐ yes ☐ no	☐	☐	☐	☐		
Window treatments (blinds, shades) available and useable.	☐	☐	☐	☐		
Acoustics						
Ambient noise levels are acceptable and not reported to be a concern by occupants.	☐	☐	☐	☐		
Excessive HVAC noise is not present.	☐	☐	☐	☐		
White noise used in building. ☐ yes ☐ no	☐	☐	☐	☐		
Employee Work Stations						

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
Multi user workstations and chairs are adjustable.	☐	☐	☐	☐		
Single user workstations and chairs are adjusted to the user.	☐	☐	☐	☐		
Site has established a formal ergonomics program.	☐	☐	☐	☐		
Employees have received basic ergonomic training.	☐	☐	☐	☐		
Lighting levels appropriate for tasks being performed. (see lighting section)	☐	☐	☐	☐		
Employees responsible for material handling have received back safety and lifting training.	☐	☐	☐	☐		
House Keeping						
Scheduled service exists.	☐	☐	☐	☐		
Vacuums are equipped with high efficiency filtration.	☐	☐	☐	☐		
Occupant floor space is clear of clutter.	☐	☐	☐	☐		
Occupants clean work stations at least monthly.	☐	☐	☐	☐		
Deep cleaning of carpet based on schedule and area use. type of cleaning: ❑ "steam" ❑ hot water extraction ❑ dry clean	☐	☐	☐	☐		
Entry mats being used.	☐	☐	☐	☐		

Component	OK	Needs Attention	Not Applicable	Not Inspected	Comments	Completed (date)
High traffic areas vacuumed daily.	☐	☐	☐	☐		
Wall to wall vacuuming occurring at least weekly.	☐	☐	☐	☐		
Supplies available to employees to immediately clean stains.	☐	☐	☐	☐		
Upholstered furniture vacuumed/cleaned at least annually.	☐	☐	☐	☐		
Fleecy cubical walls vacuumed at east annually.	☐	☐	☐	☐		
General area dusting by housekeeping is occurring at least weekly.	☐	☐	☐	☐		
Air supply vents are being vacuumed at least annually.	☐	☐	☐	☐		
Recycling services available at site.	☐	☐	☐	☐		
Trash receptacles emptied daily.	☐	☐	☐	☐		

*   This Indoor Environmental Checklist was adapted from the State of Minnesota and EPA/NIOSH Building Air Quality Guides.