

Instructions

- Read the IAQ
 Backgrounder and
 the Background
 Information for
 this checklist.
- 2. Keep the
 Background
 Information and
 make a copy of
 this checklist for
 each ventilation
 unit in your school,
 as well as a
 copy for future
 reference.
- Complete the Checklist.
 - Check the "yes,"
 "no," or
 "not applicable"
 box beside each
 item. (A "no"
 response
 requires further
 attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

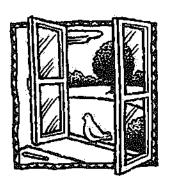
Ventilation Checklist

		-
Name: Eric Proia		
School: Coginchaug Regional High Sol	10	01
Unit Ventilator/AHU No: #-1-18		
Room or Area: Atto-Roof Date Completed: 01-10-2	.4	
20		
Signature:		
1. OUTDOOR AIR INTAKES		
	No	N/A
example, a fire escape floor plan)		
1b. Ensured that the ventilation system was on and operating in "occupied" mode		
ACTIVITY 1: OBSTRUCTIONS		
1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers		
ld. Installed corrective devices as necessary (e.g., if snowdrifts or leaves		
frequently block an intake)	ч	Ц
ACTIVITY 2: POLLUTANT SOURCES		
le. Checked ground-level intakes for pollutant sources (dumpsters, loading		
docks, and bus-idling areas)	_	_
toilet or laboratory exhaust fans; puddles; and mist from	_	
air-conditioning cooling towers)	u	Ш
1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe)		
ACTIVITY 3: AIRFLOW		
 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic). 1i. Confirmed that outdoor air is entering the intake appropriately		
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2. SYSTEM CLEANLINESS		
ACTIVITY 4: AIR FILTERS	_	
2a. Replaced filters per maintenance schedule twice Annually 2b. Shut off ventilation system fans while replacing filters (prevents dirt from		80.5
blowing downstream)		
2c. Vacuumed filter areas before installing new filters		
2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter		
around) the air filter	_	_

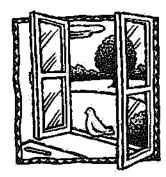
2e. Confirmed proper installation of filters (correct direction for airflow)..........

2. SYSTEM CLEANLINESS (continued)

	TIVITY 5: DRAIN PANS		
	Ensured that drain pans slant toward the drain (to prevent water from accumulating)		
2g.	Cleaned drain pans		
2h.	Checked drain pans for mold and mildew		
	TIVITY 6: COILS		
2i.	Ensured that heating and cooling coils are clean		
	TIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS		
	Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean		
2ķ.	Ensured that ducts are clean		
	TIVITY 8: MECHANICAL ROOMS	_	
21. 2m	Checked mechanical room for unsanitary conditions, leaks, and spills	Ü	
2.111.	chemical products, and supplies		. 🗀
3.	CONTROLS FOR OUTDOOR AIR SUPPLY		
3a.	Ensured that air dampers are at least partially open (minimum position)		
3b.	Ensured that minimum position provides adequate outdoor air for occupants		
	TIVITY 9: CONTROLS INFORMATION		
3c.	Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings,		
	and controls operations manuals (often uniquely designed)	<u> </u>	
AC	TIVITY 10: CLOCKS, TIMERS, SWITCHES		_
3d.	Turned summer-winter switches to the correct position		
3e. 3f.	Ensured that settings fit the actual schedule of building use (including		
	night/weekend use)	ū	_
AC	TIVITY 11: CONTROL COMPONENTS NO POLUMATICS		
Зg.	Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting		À
3h.	Checked that the line dryer prevents moisture buildup		. 3
31.	Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank)		Ą
3j.	Set the line pressure at each thermostat and damper actuator at the proper	_	T
	level (no leakage or obstructions)	ū	. 3
	CTIVITY 12: OUTDOOR AIR DAMPERS		
3k. 31.	Ensured that the outdoor air damper is visible for inspection		
	for inspection		
3m	Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range	, '	
370	OTE. It is recognized ancies that the downer is operating properly and within the	he nn	rmal

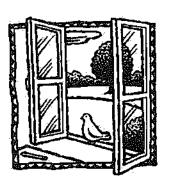


NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3.	CONTROLS FOR OUTDOOR AIR SUPPLY (continued)			
3n.	Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler		No	N/A □
3o.	Checked that the outdoor air damper opens (at least partially with no delay when the air handler is turned on)	<u>.</u>	
	If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F	. S		
	If in cooling mode, checked that the outdoor air damper goes to its minimu position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F	m		ā
3r.	The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight	_ _ _ ă		<u> </u>
	Moving parts are free of impediments (e.g., rust, corrosion)	., 🕮		ā
	 Electrical wire or pneumatic tubing connects to the damper actuator The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly)			
Pro	oceed to Activities 13–16 if the damper seems to be operating properly.	ş		
	TIVITY 13: FREEZE STATS			
	Disconnected power to controls (for automatic reset only) to test continuity across terminals	, □.		飌
OR	Confirmed (if applicable) that depressing the manual reset button (usually			
	red) trips the freeze stat (clicking sound indicates freeze stat was tripped)	y a		
3u.	Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats			
clo	OTE: HVAC systems with water coils need protection from the cold. The freez se the outdoor air damper and disconnect the supply air when tripped. The tage is $35^{\circ}F$ to $42^{\circ}F$	e-sta	t maj al trij	y. p
ΑŒ	CTIVITY 14: MIXED AIR THERMOSTATS			
	Ensured that the mixed air stat for heating mode is set no higher than 65°F	/	Ė	
	Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting	🙀	Ģ	<u> </u>
	CTIVITY 15: ECONOMIZERS Confirmed proper economizer settings based on design specifications or local practices	≱	□	a
NO	OTE: The dry-bulb is typically set at 65°F or lower.			
3y.	Checked that sensor on the economizer is shielded from direct sunlight Ensured that dampers operate properly (for outside air, return air,		□	· 🗅
	exhaust/relief air, and recirculated air), per the design specifications	⊌		
loa Di an	OTE: Economizers use varying amounts of cool outdoor air to assist with the aid of the room or rooms. There are two types of economizers, dry-bulb and e y-bulb economizers vary the amount of outdoor air based on outdoor tempe d enthalpy economizers vary the amount of outdoor air based on outdoor tend thumidity level.	nthai ratur	ру: е,	;

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued) **ACTIVITY 16: FANS** 3aa. Ensured that all fans (supply fans and associated return or relief fans) Yes No N/A that move outside air indoors continuously operate during occupied NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply 4. AIR DISTRIBUTION **ACTIVITY 17: AIR DISTRIBUTION** 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required 4b. Ensured that passive gravity relief ventilation systems and transfer grilles NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies. 4c. Made sure every occupied space has supply of outdoor air (mechanical NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents. 4e. Modified the HVAC system to supply outside air to areas without an outdoor X air supply 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ACTIVITY 18: PRESSURIZATION IN BUILDINGS NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity. 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, 5. EXHAUST SYSTEMS ACTIVITY 19: EXHAUST FAN OPERATION 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) \square If fans are running but air is not flowing toward the exhaust intake, check for the following: · Inoperable dampers · Obstructed, leaky, or disconnected ductwork · Undersized or improperly installed fan · Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kit and labs by keeping them under negative pressure (as compared to surrounding space		S,
5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces.	No ₩	N/A
Stand outside the room with the door slightly open while checking airflow high and the door opening (see "How to Measure Airflow").	low ti	17
5c. Ensured that air is flowing toward the exhaust intake		<u> </u>
ACTIVITY 21: EXHAUST DUCTWORK 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition	<u> </u>	a
6. QUANTITY OF OUTDOOR AIR		
ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS		
NOTE: Refer to "How to Measure Airflow" for techniques.		
6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit		
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration	ت.	
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c)	۵	
ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES		
6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1		ä
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1	٦	۵

NOTES