

## Ventilation Review and Checklist

Ventilation is the process by which stale indoor air is exhausted from the interior of the building to the outside. At the same time, fresh outside air is drawn into the building to replace the exhausted air. Typically buildings may be ventilated mechanically (utilizing fans), or by passive ventilation systems such as operable windows or area vents. Ventilation systems that fail to perform their designed function(s) can be a significant contributor to building health complaints.

This checklist is designed to assist in the evaluation of the effectiveness of building ventilation systems. It is not intended to provide a comprehensive review of such systems but rather a simple overview of those systems. This overview may lead to obvious corrective actions, or may be used to guide a more thorough ventilation system evaluation. It is intended that site staff complete the checks in this guide.

The purpose of this guide is to: 1. Ensure the ventilation system is clean; 2. Ensure that an adequate amount of outdoor air is supplied to occupied areas.

### Outside Air Intakes

If outdoor air intakes are deliberately blocked or become clogged with dirt or debris, areas they serve are likely to get insufficient outdoor air. Students or staff might experience stuffy or stagnant air, or develop health problems from exposure to accumulated pollutants.

On a small floor plan (e.g., a fire escape floor plan), mark the locations of outdoor air intakes, based on mechanical plans (if available) and your observations while performing these activities.

Obtain chemical smoke (or, alternatively, a small piece of tissue paper or light plastic) before performing the listed checks. Ensure the ventilation system is on and operating in "occupied" mode.

- | Y   | N                        |   |
|---|--------------------------|---|
| <input type="checkbox"/>  | <input type="checkbox"/> | Outside air intakes are unobstructed  |
| <input type="checkbox"/>  | <input type="checkbox"/> | Observed obstructions have been removed   |
| <input type="checkbox"/>  | <input type="checkbox"/> | Outside air intakes are clear of nearby pollutant sources (e.g. dumpsters, loading docks, vehicle idle areas, etc.) |
| <input type="checkbox"/>  | <input type="checkbox"/> | Outside air is entering the system intake (can confirm w/chemical smoke or plastic strips)                          |
| <input type="checkbox"/>  | <input type="checkbox"/> | Condensate drain pans are clean and drain properly  |
| <input type="checkbox"/>  | <input type="checkbox"/> | Mechanical rooms are free of trash and chemicals  |
| <input type="checkbox"/>  | <input type="checkbox"/> | Outside air dampers are at least partially open during occupied hours   |
| <i>(for the following checks make sure the ventilation system is off)</i> |                          |   |
| <input type="checkbox"/>  | <input type="checkbox"/> | Filters are clean and installed in the proper direction of airflow  |
| <input type="checkbox"/>  | <input type="checkbox"/> | Heating and cooling coils are clean   |
| <input type="checkbox"/>  | <input type="checkbox"/> | Air mixing units, fan blades, duct interiors are clean  |

