



## Ventilation Protocols by the Numbers

- **647** – This is the number of *instructional classrooms* district wide according to the District’s Long Range Facilities Plan (LRFP)
- **665** – This is the number of *exhaust fans* located throughout District buildings, mostly on roofs, that serve classrooms, bathrooms and large group areas such as all-purpose rooms, as detailed in the recently completed [NJBPJ Local Government Energy Audit \(LGEA\)](#). These exhaust fans create a negative air pressure within the building, thus pulling in fresh outdoor air-
- **1,000+** - This is the number of *air supply fans* district wide, most of which are located above the drop ceilings, also detailed in the LGEA. These fans circulate and mix the air within the building while limiting bioaerosol (fungi, pollen, bacteria and viruses for example) redistribution from settled aerosols.
- **100%** - of the District classrooms have a mechanical system to circulate filtered air and bring in fresh outdoor air, mostly through unit ventilators, with the remaining rooms utilizing units such as roof top ducted systems or split systems. Split systems are similar to the HVAC systems found in homes.
- **4 times per year** – Filters in unit ventilators and other HVAC systems are *changed quarterly*. Each building maintains a filter log. Keeping the units clean and filters changed regularly is the *most important part of the maintenance program*. Filters need to *conform to the manufacture’s specifications*. They are designed to capture particulates in the air without restricting air flow. In older units where air flow is particularly important, *increasing the filter rating beyond manufacturer recommendations can damage the unit*, causing fan burnout and failure, freeze ups of the piping in the winter, and false readings on sensors which open and close valves and dampers.

### *In order to enhance air flow in addition to the measures above...*

- Fresh air can be introduced by **opening windows**. 1-3 windows should be sufficient depending on the size of the room. All windows that are opened should have screens on them to prevent bugs, birds etc. from entering the room.
- Indoor air temperature should be maintained between **68 and 79 degrees**
- Rooms with **window air conditioning units** – these units, traditionally used during the warmer months, also can be turned on in **fan only mode** during the **colder months**.
- All fresh air dampers located in the unit ventilators will be open the maximum to allow the most outside air mixture while maintaining the mandatory indoor temperature, as well as not exposing the unit coils to freezing.