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Report for: Margaret Sergent
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Subject: **School Inspection**
School 29 Rochester, NY
88 Kirkland Rd, Rochester, NY

On Monday December 21, 2020, Ed Olmsted and Jennifer Long as well as Margaret Sergent, representing the Rochester NY Teachers Association inspected representative classrooms at School 29 located at 88 Kirkland Rd in Rochester, NY. The survey team included representatives of the Rochester City School District (RCSD) including Stacie Darby, Environmental Health and Safety, Matthew Seeger, Schools Facilities Management, and Tom Keysa of Schools Facilities Management. The survey was done as part of the exposure control program for pandemic SARS-CoV-2. The Rochester City Schools District instituted many exposure control measures for the coming year including mandatory wearing of masks, distancing of occupants (reduced occupancy), enhanced cleaning, operating the ventilation systems with a maximum fraction of outside air, and installation of ASHRAE MERV 13 filters, where the HVAC units can accommodate them. Each school will temperature screen entrants and have a nurse's office. Students with symptoms or suspected of having COVID-19 will be isolated in an isolation room (room 104).

School 29 is an older building and does not have a central ventilation system but has an univent system. Univents have a heating coil and outside air inlet and are located under the windows in each classroom. These univents are direct cooled and have a heating coil that is provided hot water by the boiler and each classroom also is heated by baseboard perimeter heat. Each classroom has a bank of windows on the exterior walls that can be opened for outside air. Room 151, the OT/PT room, will be used this January and is served by a rooftop ventilation unit. The school building has a masonry exterior and is of concrete and steel construction. There are also exhaust fans that serve the bathrooms located in each classroom as well as the bathrooms in the common hallway.

The building will be utilized this January for in-school classes starting with special education students and phasing in elementary and middle school students. This inspection was requested prior to the students return. The survey was done on December 21, 2020 and included the following:

1. A visual inspection of a number of representative classrooms, nurse's office and isolation room as well as the mechanical room;
2. Taking airflow measurement at supply outlets, return/exhaust grilles, univents, and open windows using a TSI 9515 VelociCalc Air Velocity Meter (anemometer); and,
3. A visual inspection of the building ventilation system(s).

The findings include:

1. The univent located under the window in each classroom draws return air through the base of the unit and also draws outside air through a sleeve that penetrates through the wall to the outside. These units have a heating coil and are direct cooled. The units have a filter installed at the base that have the maximum MERV rating for the equipment. The filters inspected indicated MERV 10 but a mechanic reported that there are MERV 13 filters for the univents and fan coil units.
2. The nurse's office (Room 102) has operable windows and exhaust ventilation. This is sufficient to provide outside air exchanges. There are also mini-split heat pump units mounted on the wall that provide heating and cooling. These units have minimal filtration capacity. The bathroom exhaust grill did not have any detectable airflow. There is a HEPA filter air cleaner in the nurse's office.
3. The isolation room (room 104) has operable windows and a univent. The bathroom exhaust grill did not have any detectable airflow.
4. Room 140, a classroom, has operable windows and a univent. The bathroom exhaust grill did not have any detectable airflow.
5. Room 151 is the OT/PT room, which will be operational in early January. This room is served by a rooftop air handler. All four ceiling supply outlets had good airflow.
6. In room 110 the univent was not running.
7. Room 115's univent was also not running. However, the room has operable windows and exhaust ventilation. This is sufficient to provide outside air exchanges. There are also mini-split heat pump units mounted on the wall that provide heating and cooling.
8. In some rooms, teachers stacked many materials on the univent outlet. This blocks airflow.

CONCLUSIONS

The school has operable windows in the classrooms and this is sufficient to provide natural ventilation. The classrooms also have univents that provide outside air. The classrooms have sufficient ventilation capacity to be occupied. If necessary, teachers can open two windows in each room to an opening of two inches. This will provide natural ventilation without causing the room to become cold. Opening the window at the top is adequate to provide sufficient ventilation to the room. The air moves through the open windows with the classroom door either open or closed. Teachers should be instructed to not store materials on the univent.



Univents draw outside air through the wall



Typical uninvent is blocked by stored materials.