



AAPS Ventilation Study Overview

In accordance with AAPS' commitment to health and safety for students and staff, we are preparing our classrooms and buildings across the district for a COVID-informed return to in-person learning. To that end, and concurrent with robust building preparation work in accordance with CDC guidelines and other resources, the AAPS has completed a number of steps to improve indoor air quality, including:

Building Controls Programming, Filter Replacements and HVAC Systems Commissioning

- Programmed a new sequence of operations for the HVAC controls system (Enhanced Indoor Air Quality Mode (EIAQ)) to provide increased ventilation, intake of outside air, and filtration above our typical operating mode, and well beyond code minimum.
- Replaced all filters and increased their density as much as the equipment will allow
- Commissioned all HVAC units (approximately 1,000) including opening the unit, cleaning everything, and verifying the proper operation of items like dampers and actuators.

Room by Room Ventilation Rate Study and Mitigation Actions

- The district has commissioned Fishbeck, a professional engineering firm, to conduct a detailed room-by-room ventilation study for all AAPS buildings. The deliverables of this study include floor plans indicating air changes per hour (ACH) levels by room as well as a summary in the form of an Excel chart. Air changes per hour (ACH) is a measure of how many times the air in a room is replaced, by either outside air or recirculated filtered air, within one hour.
- The Harvard School of Public Health sets ACH levels of five (5) and above to have excellent ventilation.
- Those spaces that fall below 5 ACH will be provided portable air cleaners and/or fans to provide additional air changes to raise the ACH above 5.

Below you will find the results of the ventilation engineering study conducted at your school. The report documents existing ventilation rates in Air Changes per Hour (ACH) as well as any mitigation actions that will be completed prior to a return to in-person instruction.

Community HS

Equipment	Space	Area (ft ²)	Ceiling Height (ft)	Supply Air Flow (cfm)	Supply Air Changes per Hour (ACH)	Supply Air Changes per Hour (ACH) with Corrective Actions
HV-1	Overall System	25,500	10	40000	9.4	9.4
HV-1	Rm #104 (Typ.)	700	12	690	4.9	6.8
HV-1	Fitness Rm #106	1,869	16	5000	10	10.0
HV-1	Rm #105 (Typ.)	661	12	690	5.2	5.2
HV-1	Rm #107 (Typ.)	1,340	12	1500	5.6	5.6
HV-1	Rm #111 (Typ.)	600	12	460	3.8	6.0
HV-1	Rm #152 (Typ.)	890	10	840	5.7	5.7
HV-1	Rm #150 (Typ.)	870	10	840	5.8	5.8
HV-1	Rm #207 (Typ.)	1,635	12	1920	6.1	6.1
HV-1	Rm #252 (Typ.)	890	10	840	5.7	5.7
HV-1	Rm #202 (Typ.)	1,030	12	1380	6.7	6.7
HV-1	Rm #204 (Typ.)	370	12	375	5.1	5.1
HV-1	Rm #221 (Typ.)	310	12	345	5.6	5.6
HV-1	Rm #255 (Typ.)	805	10	840	6.3	6.3
HV-1	Rm #312 (Typ.)	460	12	450	4.9	7.8
HV-1	Rm #310 (Typ.)	655	12	810	6.2	6.2
HV-1	Rm #353 (Typ.)	880	10	840	5.7	5.7
HV-1	Rm #352 (Typ.)	880	10	840	5.7	5.7
HV-1	Rm #350 (Typ.)	860	10	840	5.9	5.9
HV-1	Rm #311 (Typ.)	970	12	1125	5.8	5.8
HV-1	Rm #309 (Typ.)	670	11	780	6.7	6.7
HV-1	Rm #305 (Typ.)	670	12	810	6.3	6.3
HV-1	Rm #303 (Typ.)	830	12	810	4.9	6.5

Corrective Action(s)

HV-1	Rm #104 (Typ.)	700	12	690	4.9
Add (1) 265 CFM Trio Portable Air Cleaners		700	12	955	6.8
HV-1	Rm #111 (Typ.)	600	12	460	3.8
Add (1) 265 CFM Trio Portable Air Cleaners		600	12	725	6.0
HV-1	Rm #312 (Typ.)	460	12	450	4.9
Add (1) 265 CFM Trio Portable Air Cleaners		460	12	715	7.8
HV-1	Rm #303 (Typ.)	830	12	810	4.9
Add (1) 265 CFM Trio Portable Air Cleaners		830	12	1075	6.5