



IEA, INC.

## 2023 - 2024 Ventilation Assessment



### Contact Us:

**BROOKLYN PARK OFFICE**

9201 W. BROADWAY, #600  
BROOKLYN PARK, MN 55445  
763-315-7900

**MANKATO OFFICE**

610 N. RIVERFRONT DRIVE  
MANKATO, MN 56001  
507-345-8818

**ROCHESTER OFFICE**

210 WOOD LAKE DRIVE SE  
ROCHESTER, MN 55904  
507-281-6664

**BRAINERD OFFICE**

601 NW 5TH STREET SUITE #4  
BRAINERD, MN 56401  
218-454-0703

**MARSHALL OFFICE**

1420 EAST COLLEGE DRIVE  
MARSHALL, MN 56258  
507-476-3599

**VIRGINIA OFFICE**

5525 EMERALD AVENUE  
MOUNTAIN IRON, MN 55768  
218-410-9521

[www.ieasafety.com](http://www.ieasafety.com)

[info@ieasafety.com](mailto:info@ieasafety.com)

800-233-9513

## Saint Paul Public Schools Washington Technology Magnet

Assessment Date:  
Friday, April 14, 2023

---

## Project Description

---

IEA conducted a ventilation inspection in Washington Technology Magnet by IEA representative, Jack Skluzacek, with the intent of gathering visual observations and overall ventilation information which will assist the District in making informed and proactive decisions to improve and maintain acceptable air quality in the building. This inspection is based upon the Environmental Protection Agency's (EPA's) Tools for Schools IAQ guidelines and the recommended Minnesota Department of Education (MDE) portion of a school district's IAQ management plan. Ventilation verification is also recommended by American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Some observations gathered during the inspection may identify issues which may require additional testing, evaluation, further investigation, or maintenance on the ventilation systems.

The findings, conclusions and recommendations presented herein are believed to be accurate and representative of the building on the date and time of the inspection.

### **GENERAL COMMENTS**

The analysis and opinions expressed in this report are based upon data obtained from Saint Paul Public Schools at the indicated locations. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted indoor air quality practices. Other than as provided in the preceding sentence, no warranties are extended or made.

---

## Building Information

---

General information regarding the building was collected by IEA during an interview with building maintenance staff. The information gathered during this process is a vital component, as it is helpful in determining how these items may play a role in possible IAQ related issues.

**Below is a summary of the information gathered during the interview:**

- Automation controls are managed internally.
- A Building Automation System is present. The automation control software program is Tridium and controls can not be accessed remotely.
- Schedules:

Ventilation operation:

Day:	Occupied?	Start Time:	End Time:
Monday-Friday	Yes	5:30 AM	11:00 PM
Saturday	Yes	7:00 AM	3:00 PM
Sunday	No		
Holiday	No		

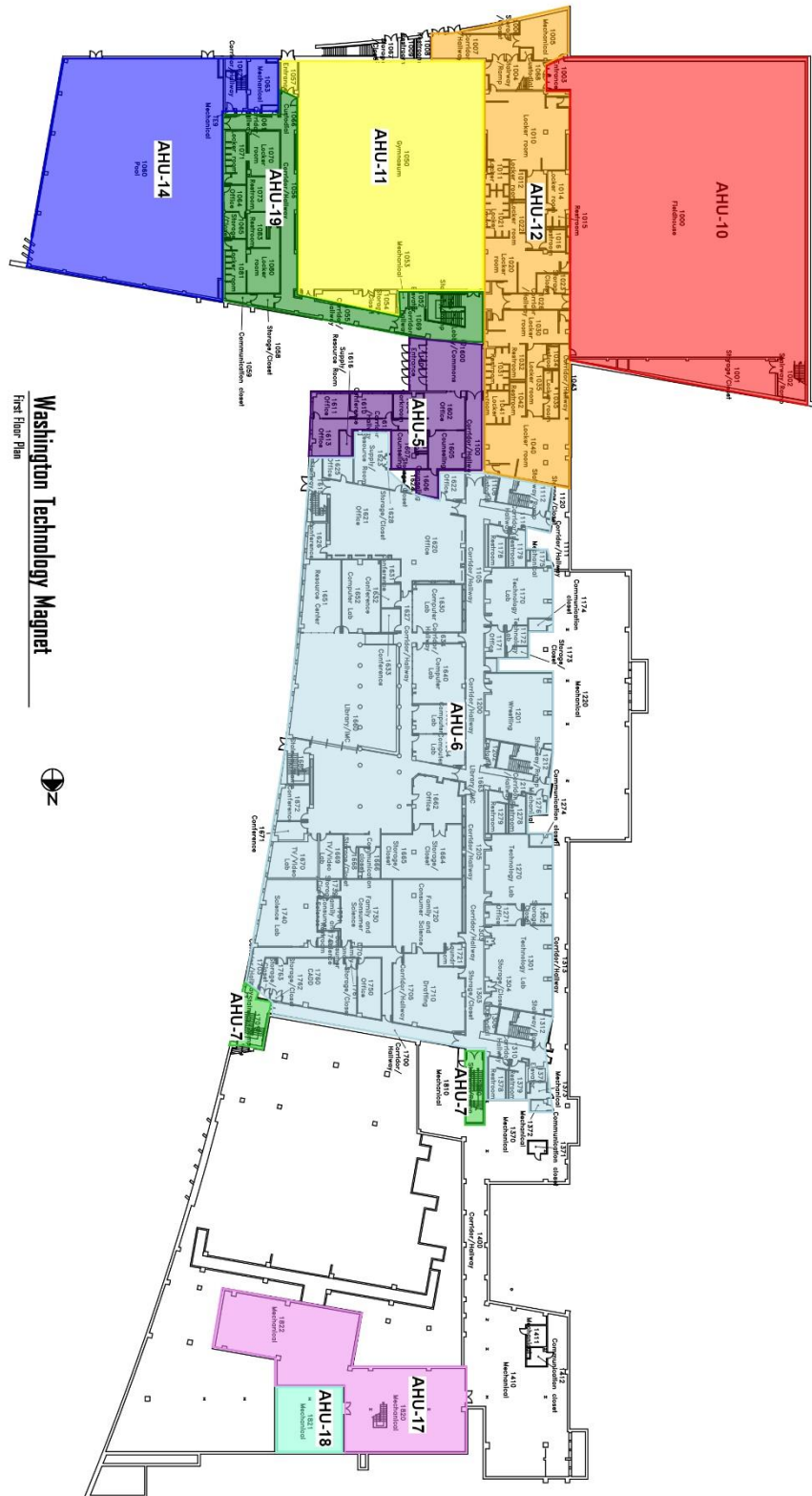
Typical occupancy:

Day:	Occupied?	Start Time:	End Time:
Monday-Friday	Yes	6:00 AM	10:00 PM
Saturday	Yes	7:30 AM	2:30 PM
Sunday	No		
Holiday	No		

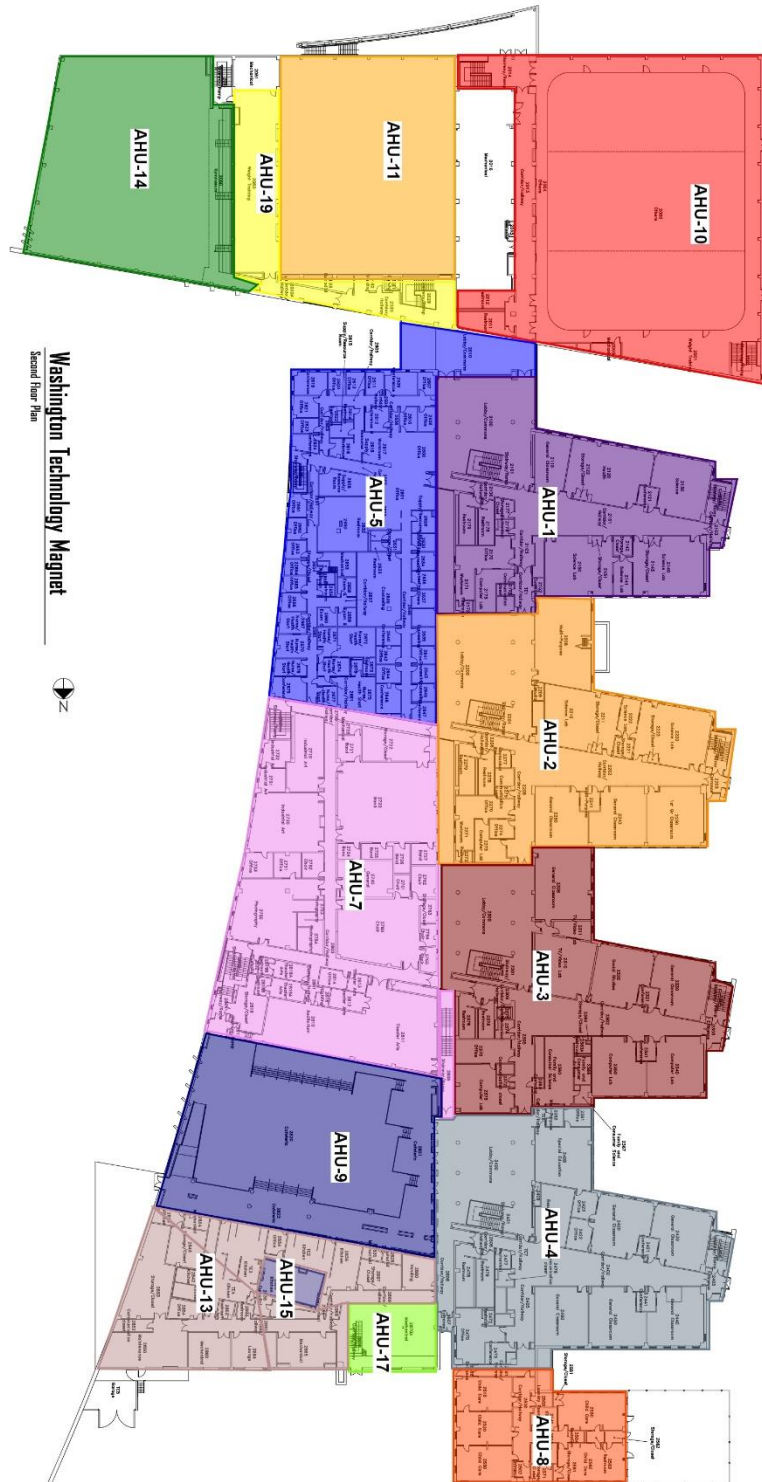
- CO2 sensors are not associated with the ventilation system.
- VAVs are present. They are fan powered with a None filter.
- Building has variable frequency drives (VFD).
- The heating system is a hot water boiler.
- A cooling system is present and is a chilled water (cooling tower) type system.
- Filters used are:

Filter Type	MERV Rating
Pleated	MERV 11
Pleated	MERV 13

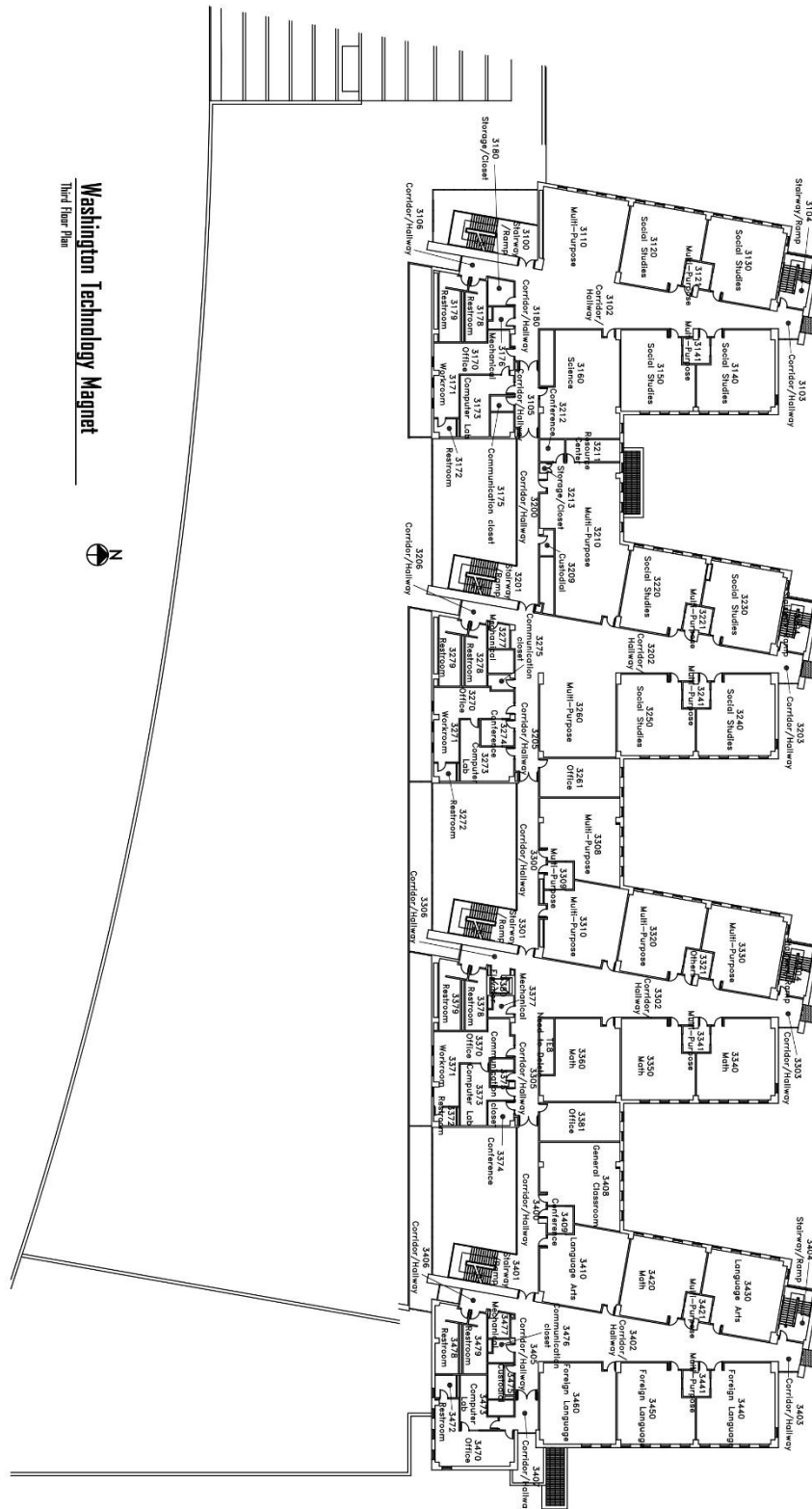
- Filters are changed quarterly.
- Energy Recovery Units are not present.
- Units do not contain system Enhancements.
- Personal air purifiers are supplied for individual rooms. They are of unknown make or model.
- It is not known whether or not the building was commissioned during the original construction.



## Air Handling Unit Designations & Service Zones: 2nd Floor



# Air Handling Unit Designations & Service Zones: 3rd Floor



The Fourth Floor Plan of Washington Technology Magnet is divided into four main sections, each color-coded and labeled as follows:

- AHU-1 (Pink):** Located at the top left, containing rooms such as Social Studies (4130), Multi-Purpose (4140), Language Arts (4120), Math (4150), Science (4160), and Communication (4170).
- AHU-2 (Orange):** Located in the middle left, containing rooms such as Social Studies (4230), Multi-Purpose (4220), Language Arts (4250), Math (4240), Science (4208), and Communication (4270).
- AHU-3 (Yellow):** Located in the middle right, containing rooms such as Social Studies (4330), Multi-Purpose (4320), Language Arts (4350), Math (4340), Science (4380), and Communication (4370).
- AHU-4 (Green):** Located at the bottom right, containing rooms such as Social Studies (4430), Multi-Purpose (4420), Language Arts (4450), Math (4440), Science (4410), and Communication (4470).

Other features include multiple stairways/ramps, restrooms, and specialized labs like the Science Lab (4408) and Communication Lab (4409). The plan also shows a north arrow pointing towards the top right.

## Assessment

### Ventilation System

The following information was gathered by IEA on Friday, April 14, 2023 with support from the district building representative during the on-site interview. The type of heating, ventilating and air-conditioning (HVAC) system and its assessment is included for each unit below:

<b>Unit Designation:</b>	AHU_01	
<b>Location of Unit:</b>	Mechanical Room 1220	
<b>Areas Served:</b>	See attached map.	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on an exterior wall.  No nearby pollution sources were found.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not plugged. Drain pan condition is good.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Cooling coils are clean.  Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.



<b>Unit Designation:</b>	AHU_02	
<b>Location of Unit:</b>	1220	
<b>Areas Served:</b>	See attached map.	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_03	
<b>Location of Unit:</b>	MECH ROOM 1370	
<b>Areas Served:</b>	HOUSE 3 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is closed, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_04	
<b>Location of Unit:</b>	MECH ROOM 1410	
<b>Areas Served:</b>	HOUSE 4 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_05	
<b>Location of Unit:</b>	1220	
<b>Areas Served:</b>	See attached map.	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_06	
<b>Location of Unit:</b>	MECH ROOM 1220	
<b>Areas Served:</b>	INFO CENTER See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_07	
<b>Location of Unit:</b>	MECH ROOM 1810	
<b>Areas Served:</b>	MUSIC, ARTS, HOME EC. See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p> <p>Outdoor air intake is in good condition.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p> <p>Heating coils are clean and cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is closed, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>		

<b>Unit Designation:</b>	AHU_08	
<b>Location of Unit:</b>	MECH ROOM 1410	
<b>Areas Served:</b>	CHILD CARE See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 13</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is closed, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_09	
<b>Location of Unit:</b>	Boiler Room	
<b>Areas Served:</b>	GREAT HALL/CAFETERIA See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p> <p>Outdoor air intake is in good condition.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not plugged. Drain pan condition is good.</p> <p>Heating coils are clean and cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is closed, and its condition is good.</p> <p>The general condition of the unit is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>		



<b>Unit Designation:</b>	AHU_10	
<b>Location of Unit:</b>	MECH ROOM 2020	
<b>Areas Served:</b>	MAIN GYM See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.  Outdoor air intake is in good condition.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not plugged. Drain pan condition is good.  Heating coils are clean and cooling coils are clean.  Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is of unknown cleanliness.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>		

<b>Unit Designation:</b>	AHU_11	
<b>Location of Unit:</b>	MECH ROOM 2020	
<b>Areas Served:</b>	AUXILIARY GYM See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not applicable or not present. Drain pan condition is good.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heating coils are clean.  Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.

<b>Unit Designation:</b>	AHU_12	
<b>Location of Unit:</b>	MECH ROOM 2020	
<b>Areas Served:</b>	MAIN LOCKER ROOMS See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.  Outdoor air intake is in good condition.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not plugged. Drain pan condition is good.  Heating coils are clean and cooling coils are clean.  Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is not present.  Return damper is not present.  The general condition of the unit is good.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>		

<b>Unit Designation:</b>	AHU_13	
<b>Location of Unit:</b>	Boiler Room	
<b>Areas Served:</b>	See attached map.	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - None</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air filters are not present.</p> <p>Return air filters are not present.</p> <p>Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.</p> <p>Drain pans are not applicable or not present. Drain pan condition is good.</p>
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Cooling coils are clean.</p> <p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is of unknown cleanliness.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is open, and its condition is good.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_14	
<b>Location of Unit:</b>	MECH ROOM 2020	
<b>Areas Served:</b>	POOL See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - Dx</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not plugged. Drain pan condition is good.  Heating coils are clean and cooling coils are clean.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.

<b>Unit Designation:</b>	AHU_15 (100% OA)	
<b>Location of Unit:</b>	boiler room	
<b>Areas Served:</b>	KITCHEN HOODS See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	<p>Outdoor air intake is accessible</p> <p>Outdoor air intake is located on an exterior wall.</p> <p>No nearby pollution sources were found.</p>	<p>Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.</p> <p>Return air filters are not present.</p> <p>Drain pans are not applicable or not present. Drain pan condition is not known.</p> <p>Heating coils are clean.</p>
<b>Filter Type - Outdoor</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	<p>Outdoor air intake is in good condition.</p>	<p>Heat wheels are not present.</p> <p>Exterior ducting is visible. Exterior ducting insulation is in good condition.</p> <p>Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.</p> <p>Air handling room is free of trash/chemicals.</p> <p>Outside damper is open, and its condition is good.</p> <p>Return damper is not present.</p> <p>The general condition of the unit is good.</p>

<b>Unit Designation:</b>	AHU_16 (100% OA)	
<b>Location of Unit:</b>	boiler room	
<b>Areas Served:</b>	GRILL AND FRYER See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on an exterior wall.  No nearby pollution sources were found.	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.  Return air filters are not present.  Drain pans are not applicable or not present. Drain pan condition is not known.  Heating coils are clean.
<b>Filter Type - Outdoor</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is not present.  The general condition of the unit is good.

<b>Unit Designation:</b>	AHU_18 (100% OA)	
<b>Location of Unit:</b>	BOILER ROOM CEILING	
<b>Areas Served:</b>	CHILLER See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on an exterior wall.  No nearby pollution sources were found.	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.  Return air filters are not present.  Drain pans are not applicable or not present. Drain pan condition is not known.  Heating coils are clean.
<b>Filter Type - Outdoor</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is not present.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.



<b>Unit Designation:</b>	AHU_19	
<b>Location of Unit:</b>	MECH ROOM 2020	
<b>Areas Served:</b>	POOL LOCKERS & CORRIDOR See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - Chilled Water</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.	Outdoor air filters are not present.  Return air filters are not present.  Mixed air pre-filters are not present. Mixed air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Mixed air main filters are installed correctly.  Drain pans are not plugged. Drain pan condition is good.  Heating coils are clean and cooling coils are clean.
<b>Filter Type - Mixed</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is in good condition.  Interior ducting is visible. Interior ducting insulation is in good condition. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is closed, and its condition is good.  Return damper is open, and its condition is good.  The general condition of the unit is good.

<b>Unit Designation:</b>	PRE-HEAT (AHU-1 & AHU-5)	
<b>Location of Unit:</b>	Mechanical room 4170 CEILING	
<b>Areas Served:</b>	4170 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.
	Outdoor air intake is located on the roof.	Return air filters are not present.
	No nearby pollution sources were found.	Drain pans are not applicable or not present. Drain pan condition is not known.
<b>Filter Type - Outdoor</b>		Heating coils are clean.
<ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.
		Exterior ducting is visible. Exterior ducting insulation is not present.
		Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.
		Air handling room is free of trash/chemicals.
		Outside damper is open, and its condition is good.
		Return damper is not present.
		The general condition of the unit is good.

<b>Unit Designation:</b>	PRE-HEAT (AHU-2 & AHU-6)	
<b>Location of Unit:</b>	Mechanical room 4270 CEILING	
<b>Areas Served:</b>	4270 4270	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.
	Outdoor air intake is located on the roof.	Return air filters are not present.
	No nearby pollution sources were found.	Drain pans are not applicable or not present. Drain pan condition is not known.
<b>Filter Type - Outdoor</b>		Heating coils are clean.
<ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.
		Exterior ducting is visible. Exterior ducting insulation is not present.
		Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.
		Air handling room is free of trash/chemicals.
		Outside damper is open, and its condition is good.
		Return damper is not present.
		The general condition of the unit is good.

<b>Unit Designation:</b>	PRE-HEAT (AHU-3)	
<b>Location of Unit:</b>	Mechanical room 4270 CEILING	
<b>Areas Served:</b>	4370 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.
	Outdoor air intake is located on the roof.	Return air filters are not present.
	No nearby pollution sources were found.	Drain pans are not applicable or not present. Drain pan condition is not known.
<b>Filter Type - Outdoor</b>		Heating coils are clean.
<ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.
		Exterior ducting is visible. Exterior ducting insulation is not present.
		Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.
		Air handling room is free of trash/chemicals.
		Outside damper is open, and its condition is good.
		Return damper is not present.
		The general condition of the unit is good.

<b>Unit Designation:</b>	PRE-HEAT (AHU-4 & AHU-8)	
<b>Location of Unit:</b>	Mechanical room 4470 CEILING	
<b>Areas Served:</b>	4470 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - VAV</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.  Return air filters are not present.  Drain pans are not applicable or not present. Drain pan condition is not known.  Heating coils are clean.
<b>Filter Type - Outdoor</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is not present.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is not present.  The general condition of the unit is good.

<b>Unit Designation:</b>	PRE-HEAT KITCHEN (AHU-9, AHU-13, AHU-15, & AHU-16)	
<b>Location of Unit:</b>	Mechanical room 2843	
<b>Areas Served:</b>	2843 See attached map	
<b>System Enhancements:</b>	None	
<b>Supply System</b>	<b>Outdoor Air</b>	<b>Cleanliness and Observations</b>
<b>Type</b> <ul style="list-style-type: none"> <li>Supply System - Constant Volume</li> <li>Heating - Hot Water</li> <li>Cooling - None</li> <li>Energy Recovery Unit (ERU) - None</li> </ul>	Outdoor air intake is accessible  Outdoor air intake is located on the roof.  No nearby pollution sources were found.	Outdoor air pre-filters are not present. Outdoor air main filters are clean and not in need of replacement (scoring 2 out of 5) and fit well. Outdoor air main filters are installed correctly.  Return air filters are not present.  Drain pans are not applicable or not present. Drain pan condition is not known.  Heating coils are clean.
<b>Filter Type - Outdoor</b> <ul style="list-style-type: none"> <li>Pre-filter: None</li> <li>Main filter: Pleated, MERV 11</li> </ul>	Outdoor air intake is in good condition.	Heat wheels are not present.  Exterior ducting is visible. Exterior ducting insulation is not present.  Interior ducting is visible. Interior ducting insulation is not present. Interior ducting is clean.  Air handling room is free of trash/chemicals.  Outside damper is open, and its condition is good.  Return damper is not present.  The general condition of the unit is good.

---

## Recommendations

---