

Saint Elizabeth University Air Handling Systems by Building

SUMMARY

Air handling units serving building sections could be turned off in three buildings to isolate areas impacted by potential COVID-19 exposure, without shutting down the entire building's HVAC systems. The following buildings have multiple air handling units, other buildings do not for reasons described below.

Mahoney Library: 6 separate air handling units

Annunciation Center: 6 separate air handling units

Saint Joseph Hall: 7 separate air handling units

Henderson Hall

Heating

- Baseboard radiant heating on perimeter walls throughout, no ductwork

Cooling

- Renovated labs/rooms have newer ceiling units (i.e. Mitsubishi)
- Older window a/c units also exist
- No central a/c in building

Air Handling Units

- No central air circulation inside building rooms or hallways
- Exhaust air to outside only, no outside air introduced into building rooms
- No ductwork for cooling or heating, only exhaust air taken from building

Air Filter Replacements

- All ceiling a/c unit filters replaced recently
- Window a/c unit filters being washed

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- None since no central air being fed into rooms or hallways
- Isolate those rooms where exposure may have taken place, turn off ceiling a/c units in those rooms, C&W disinfects rooms after 2 days

Santa Rita

Office Heating/Cooling

- Individual room units for both heating and cooling using hot and cold water coils in each room
- No central a/c or heating
- No ductwork connecting the offices

Hallway Ceiling Air Intake

- Ductwork in hallway ceilings is 100% outside air intake only

Hallway Heating/Cooling

- Units behind the wall grills directly across from the elevator doors on each floor provide both heating & cooling
- There is no ductwork to/from these units

Riordan

- Separate system provides both cooling/heating
- Not connected to other offices or common area
- Outside air is mixed with inside air for comfort

Cooling

- No central a/c in building

Air Handling Units

- No central air system

Air Filter Replacements

- Offices: each room unit has its own air filter. Inspected periodically, not believed to need replacement at this time, but could be if needed. Filter sizes are not standard.

- Hallways: filters replaced
- Riordan: filters replaced

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- None since is no central air being fed into rooms or hallways
- Isolate those rooms where exposure may have taken place, turn off room a/c units in those rooms, C&W disinfects rooms after 2 days

Mahoney Library & Rainis

Heating & Cooling

- Centralized heating/cooling throughout building using ceiling ductwork
- Six separate air handling units located in basement and on roof provide heating and cooling distribution through ducts out the building
- Outside air is introduced for comfort and efficiency
- One centralized “chiller” in basement provides cooling for entire building
- Windows not designed to open by building occupants, but can be by Facilities if needed

Air Filter Replacements

- All filters replaced recently

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- Shutdown air handler for the exposed floor/wing
- Isolate rooms where exposure may have taken place, C&W disinfects rooms after 2 days

Annunciation Center

Heating & Cooling

- Heating & cooling delivered to each room using approximately 30 individual VAV (variable air volume) boxes located above the ceiling that are

controlled by individual wall thermostats. This included Dolan, flex, classrooms and all offices.

- Several offices are connected to the same thermostat and VAV box.
- Each VAV box takes cooled air from one of the 6 rooftop RTU units and tempers the air using a hot water line to deliver air at the temperature setting on the wall thermostat. Each VAV box has its own fan motor for delivering air to the room it connects to.

Air Handling Units

- There are 6 rooftop air handling units (RTUs)
- No centralized ductwork in building, all air through the 30 VAV boxes distributed throughout building

Air Filter Replacements

- All filters in 6 RTUs recently replaced

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- Shutdown the RTU unit servicing the infected area (i.e. flex classrooms, art wing, music wing, Theology wing, etc.)
- Isolate those rooms where exposure may have taken place, C&W disinfects rooms after 2 days

Santa Maria

Heating

- Baseboard radiant heating on perimeter walls throughout, no ductwork

Cooling

- Some classrooms have dedicated a/c for just that one room, controlled by a wall thermostat
- Older window a/c units exist, mostly in faculty offices
- No central a/c in building

Air Handling Units

- None
- No central air circulation inside building rooms or hallways
- No common ductwork for cooling or heating

Air Filter Replacements

- Filters recently replaced in every classroom
- All window a/c units were thrown away as part of the renovation due to age and condition. Any window unit replacements will be new with new filters

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- None since no central air being fed into rooms or hallways
- Isolate those rooms where exposure may have taken place, turn off a/c units in those rooms, C&W disinfects rooms after 2 days

Saint Joseph Hall

Heating

- Heat is distributed from air handling units located in a rooftop Equipment Room
- Outside air is introduced to the units

Cooling

- No central a/c in building
- Some rooms have window units, others have room specific wall mounted units
- Rose dining has ceiling a/c units that have filters (replaced)

Air Handling Units

- Multiple units servicing different areas of the building (i.e. gym, offices, etc.)
- No common ductwork for cooling

Air Filter Replacements

- All filters recently replaced

Options for Isolating Air Flow Inside Building if COVID-19 Exposure Identified

- Shut down the air handling unit serving the impacted area if necessary, but will create issues with heating if in colder weather
- Isolate those rooms where exposure may have taken place, turn off a/c units in those rooms, C&W disinfects rooms after 2 days