

Shelton State Community College

Taking Measures to Help Reduce COVID-19

About SEA COVID-19 Retro-Commissioning Services

The COVID-19 virus was declared a global pandemic on March 11, 2020 by the World Health Organization. Since its inception, the virus has affected millions of people worldwide.

Airborne transmission through aerosols is thought to be the main transmission mechanism for the virus. Heating, Ventilation and Air Conditioning (HVAC) systems in buildings become a primary tool for reducing the risk of COVID-19 transmissions. SEA provides retro-commissioning services that help identify, and in some cases, implement strategies and projects that can help mitigate the risk of COVID-19 in facilities.

As all buildings are unique and have their own set of parameters, SEA does not use a "one-size-fits-all" approach. Instead, our team of certified energy managers and professional engineers employ a variety of both qualitative (thermography, audits, etc.) and quantitative (pressure measurements, traverses, etc.) methods to identify which strategies will work best when considering a building's particular design, function and occupancy.

SEA has implemented its approach to providing COVID-19 Retro-Commissioning Services by applying subject matter expertise and guidelines as provided by the Environmental Protection Agency (EPA,) Centers for Disease Control (CDC,) and ASHRAE.

As a result, organizations such as Shelton State Community College have contracted with SEA's Certified Energy Managers and Professional Engineers to conduct the proper assessments and equipment testing to ensure that buildings are operating at maximum air flow to help reduce overall virus transmission while complying with best practices.

This is especially important in commonly shared, and high-traffic areas as facilities prepare for increased occupancy. Additionally, work performed for COVID-19 prevention is also applicable to the overall general health initiatives for any other future viral variations.

Shelton State Community College has contracted with SEA to provide Retro-Commissioning Services to help reduce the viral transmission of COVID-19 for students, faculty and staff.

Scope of Work

Assessment of Current State:

- Determining the building's general healthy by collecting building measurements, such as temperature, carbon dioxide and humidity levels and more
- Ensuring the correct amount of ventilation was being brought into the building by using building pressure measurements
- Identifying areas where infiltration can occur through thermography of building exterior

Validation and Testing of Specific Equipment:

- Verifying adequate ventilation by performing outside air traverses
- Validating the use of proper filtration to capture airborne viruses
- Testing pressure drops across all coils and fans to determine if there are any clogging issues or if additional cleaning is needed

Ensuring Commonly Shared Areas Amplify Proper Ventilation:

- Adding automatic flush valves where feasible to restrooms for virus transmission reduction
- · Reducing aerosolization by checking exhaust fans
- Ensuring proper air exchanges within common areas by measuring exhaust rates



