

Project Summary

Upon arrival at the site, it was found that the space was warmer than expected. The thermostats were both on and displaying a temperature of 72F. The actual space temp was 75F-77F. It was also discovered that the cookline and serving areas of the kitchen do not receive any conditioned air. They are both served only by the make-up air unit (MUA), which is not conditioned. The dining area temperature sensor is currently installed at ceiling height. When measuring the average space temperature, and then the temperature at the sensor, there is always at least a 3F difference. The restroom exhaust fan was also found to not be running at this time.

To mitigate these issues, the MUA motor pulley was minimized to reduce the amount of unconditioned air entering the space. The RTU economizers were both cracked open to ensure the building pressure remained positive. A schedule was created for both thermostats to target a cooling temperature of 72F and a heating temperature of 68F during occupied hours. A temperature offset was also set on each thermostat to allow the thermostats to better control the average space temperature. The Dining RTU was found to be supplying an appropriate amount of air, while the Kitchen RTU is deficient. The Kitchen RTU return system was found to be heavily restrictive, consisting of just a singular air device. It was decided to not increase the fan speed of this unit, as the restrictive return system would likely negate the effect.