



September 2021

Manalapan Englishtown Regional School District

Commitment to In Person Learning Through Indoor Air Quality

School systems across the country displayed superhuman creativity and resolve to make distance learning possible during the pandemic. Despite the herculean effort, **97% of educators believe students have suffered at least some learning disruption, with more than half believing that loss was significant.** In-person learning remains the most productive K12 educational environment.

Well-being issues will gain greater attention in a post-COVID19 world. Going forward, the viability of schools will depend just as much on the quality of their indoor environments as their curriculum, staff, and facilities. To help students and families feel good about in-person learning, Manalapan Schools have partnered with Trane to implement the following strategies.

Increased Air Changes per Hour

The Manalapan Facilities team has leveraged their Trane HVAC controls system to raise the minimum outdoor air flow rate to exceed ASHRAE 62.1 standards. Additionally, some areas have also had 100% Outside Air equipment installed, meaning no air is recirculated.

Real Time Ventilation Changes Based on Occupancy

Many large spaces within the district have added sensors and controls programming that allow for real time changes in fresh air flow rates in response to variable occupancies. These strategies promote balance between energy efficiency and optimized ventilation.

Advanced Air Cleaning Technologies

Several high-traffic areas have been equipped with a unique air cleaning process that holistically controls the broad range of airborne contaminants commonly found in buildings. This process leverages a combination of High-efficiency particle capture, Ultraviolet germicidal irradiation (UVGI), and Photo-catalytic oxidation (PCO).

Monthly Data Reviews of System Performance

The Trane and Manalapan facilities teams meet monthly to review data trends on mechanical systems such as fresh air flow, space temperature and humidity, and equipment performance. The team prioritizes balancing efficiency with occupant safety and comfort.