



# CASE STUDY

## Georgetown Preparatory School

North Bethesda, Maryland

### CHALLENGE

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Founded in 1789, Georgetown Preparatory School is an independent, boarding and day school for young men in grades 9-12. The school occupies a beautiful, 93-acre campus situated just outside the Capital Beltway, in North Bethesda, Maryland.

Georgetown Prep's campus includes two dormitories, state-of-the-art academic center and student commons featuring a library, study rooms, fully wired classrooms, student lounges, and administrative offices. In addition, The Hanley Center for Athletic Excellence, built in 2006, offers collegiate-level facilities and includes a basketball arena, four full-size practice courts, a 200-meter indoor track, a double-ring wrestling room, a fitness center, and a state-of-the-art pool with a diving well.

In response to the emerging COVID-19 pandemic, and to enhance the health and well-being of their community, Georgetown Prep took proactive steps to safely return students and faculty to campus.

### SOLUTION

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Boland worked with Georgetown Prep's campus facilities team to minimize the spread of viruses and to improve Indoor Air Quality (IAQ) through the heating, ventilation, and air conditioning (HVAC) systems. The team developed an HVAC assessment and enhancement program to ensure that facilities meet CDC COVID-19 guidance and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards for improvement of air quality.

Upgrades to the campus systems included installation of Dynamic 2" Panels in twenty-nine air handling units (AHUs) across the campus, which serve high density areas with student interaction or common areas. The upgraded Dynamic panels provide a MERV-13 equivalent rating, 15-25% first pass total volatile organic compound (TVOC) removal, media life of twelve months versus the existing filter life of three months. The capture rate of particles and gases is 90-99%, versus the existing passive filters with a capture rate of less than 20%.

### RESULTS

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As a result of the work of this team, Georgetown Prep's indoor air quality systems now provide:

- *99% effectiveness against pollen, mold, and dust*
- *98% effectiveness against lead, dust, and large bacteria*
- *97% effectiveness against small bacteria and fine dust (.3 – 1 micron)*
- *Maintenance savings and sustainable practices with fewer passive filter changes*

... all while ensuring a comfortable environment for the campus community!

