protek



A Case Study: Senior Living Communities



Client: Confidential

Project: Air quality efficacy testing

Location: U.S. nationwide

Background:

The developer and manager of retirement communities across the U.S. was initiating a nationwide program to improve indoor air quality (IAQ) and assure the health and safety of staff and residents in their senior living facilities. They were considering significant investments in air cleaning technologies and an on-going IAQ monitoring system and wanted to confirm the efficacy of several options before implementing the program.

Scope of Services:

The client engaged Intertek to provide assessment of technologies and conduct comparative field efficacy testing of prospective technologies to inform their pending capital investment. Intertek developed and implemented air quality testing plans for two communities where the client was piloting both air cleaning and air monitoring technologies. We performed sampling of multiple indoor air quality parameters in properties located in two states, testing spaces before and after the air cleaning devices were installed to quantify the comparative performance. The testing was conducted in parallel with sample devices for a permanent IAQ monitoring system, to confirm the accuracy of these devices. In one community, testing was conducted in residential apartments and in the other, common areas were tested.

Results:

Intertek prepared a comprehensive report with testing results and recommendations. The data revealed several key findings, including:

- The proposed air cleaning technologies did not provide measurable improvements in key IAQ parameters, and in some cases made air quality slightly worse.
- The proposed on-going air monitoring system measured IAQ parameters with appropriate accuracy relative to the professional devices deployed by Intertek.
- The large dining room in one community had unexpectedly high readings of certain IAQ parameters, indicating that remediations were needed.

Intertek's presentation of testing data, interpretation and recommendations helped the client to prioritize the elements of its IAQ program to meet the desired goals and focus investments to achieve the greatest value.