

"We are focused on becoming better, smarter, and more innovative than ever before."

Customer: ISG plc

Service Lines: Construction, Fit-Out and Technology

Sector: Offices; Technology, Science & Health; Retail; Hospitality & Leisure; Education & Public Sector

About ISG

For nearly three decades, ISG has been providing construction solutions to some of the world's most successful and enduring businesses, cities and institutions. Their customers trust them to deliver — and their repeat business and numerous industry accolades prove that.

With 2,800 worldwide specialists in fit out, technology, and construction ISG has a vision to become the world's most dynamic construction services company, delivering places that help people and businesses thrive.

The Challenge

Paul Pompili, Divisional Director, Engineering Services, Technology UK, ISG, says building a data centre has its own obvious challenges but handing it over to the end customer in a clinically clean state requires a specialist with all the necessary experience and ability:

"We were constructing two state of the art data centres with numerous ancillary plant areas on a six month build program in Crawley totalling 4,600 square meters. Our main challenges were keeping the high-tech site clean at all times throughout the construction phase and then handing these over to our customer, Digital Realty, in a clinically clean state."

"We don't do means to an end; instead, we believe in the open communication and collaboration that underpins strong relationships and creates enriching customer journeys."

Paul Pompili
Divisional Director, Engineering Services at ISG.

The Solution

Critical Facilities Solutions deployed a skilled team of technicians daily for a period of four months to manage and control contamination during the construction of the facility. This process is commonly known as maintenance cleaning, but we prefer to use the term 'proactive' cleaning.

The proactive cleaning technicians conducted a clean throughout all areas of the building on a continuous basis from the start of the fit-out phase right up to the end customers' acceptance. This consisted of high, mid and low-level cleaning.

The proactive cleaning team managed the bulk of the cleaning works and maintained the internal building environment for four consecutive months.

"On ISG completing the construction phase, we deployed a parachute team of skilled technicians to conduct the final clinical clean in preparation for the final handover to Digital Realty" says Gary Hall, Operations Director of Critical Facilities Solutions.

"The clinical clean consisted of removing all traces of particulate matter from the white spaces as well as the plant areas with proper filtration. All areas were cleaned using specialised filtration high-efficiency particulate air (HEPA) vacuums, capable of removing and containing 99.97% of particles 0.3 microns or larger, he continued."

Air quality testing was undertaken by Critical Facilities Solutions daily to trend the air quality and cleaning progress. Final air quality testing was undertaken post clean, to measure and verify the rating for air cleanliness in each of the data halls and plant rooms.

On this occasion an overall air quality of Class 7 (35,200 particles per cubic metre, or lower, at 0.5 micron) was achieved against the ISO 14644-1:2015 standards for air cleanliness within machine rooms. Class 8 is the OEM recommended standard for DC's meaning this site achieved one class better and in fact was 10 x cleaner than Class 8 (352,000 particles per cubic metre, or lower, at 0.5 micron).

