

Protected by



Cleanroom Systems

UltraTech Versatile

High Specification, Customisable, Cleanroom Systems



POWERED BY
QuadCore[™]
TECHNOLOGY

The Kingspan logo features a golden lion's head in profile, facing left, above the word "Kingspan" in a bold, blue, sans-serif font. A registered trademark symbol (®) is located to the right of the word.

Kingspan[®]

Overview



Innovative Cleanroom Systems by Kingspan

High-end, versatile cleanroom solutions tailored to your individual project requirements, delivered seamlessly by the technology experts.

With over 50 years' experience and exciting innovations behind us, we now bring that knowledge to the sector to offer you the ultimate cleanroom solutions.

UltraTech Cleanroom Systems are backed up by exceptional 360° support and service from initial concept, through detailed 3D design, manufacture, installation and project handover.

Our UltraTech Versatile system features our ground-breaking QuadCore™ insulation core technology, delivering superior fire, environmental and thermal lifetime performance.

Kingspan Group



More than
50
years experience

Operations in over
90
countries across the globe

More than
10,000
employees worldwide

Net-Zero by
2020
across all Kingspan businesses

It's all in the grey cells...

POWERED BY
QuadCore™
TECHNOLOGY

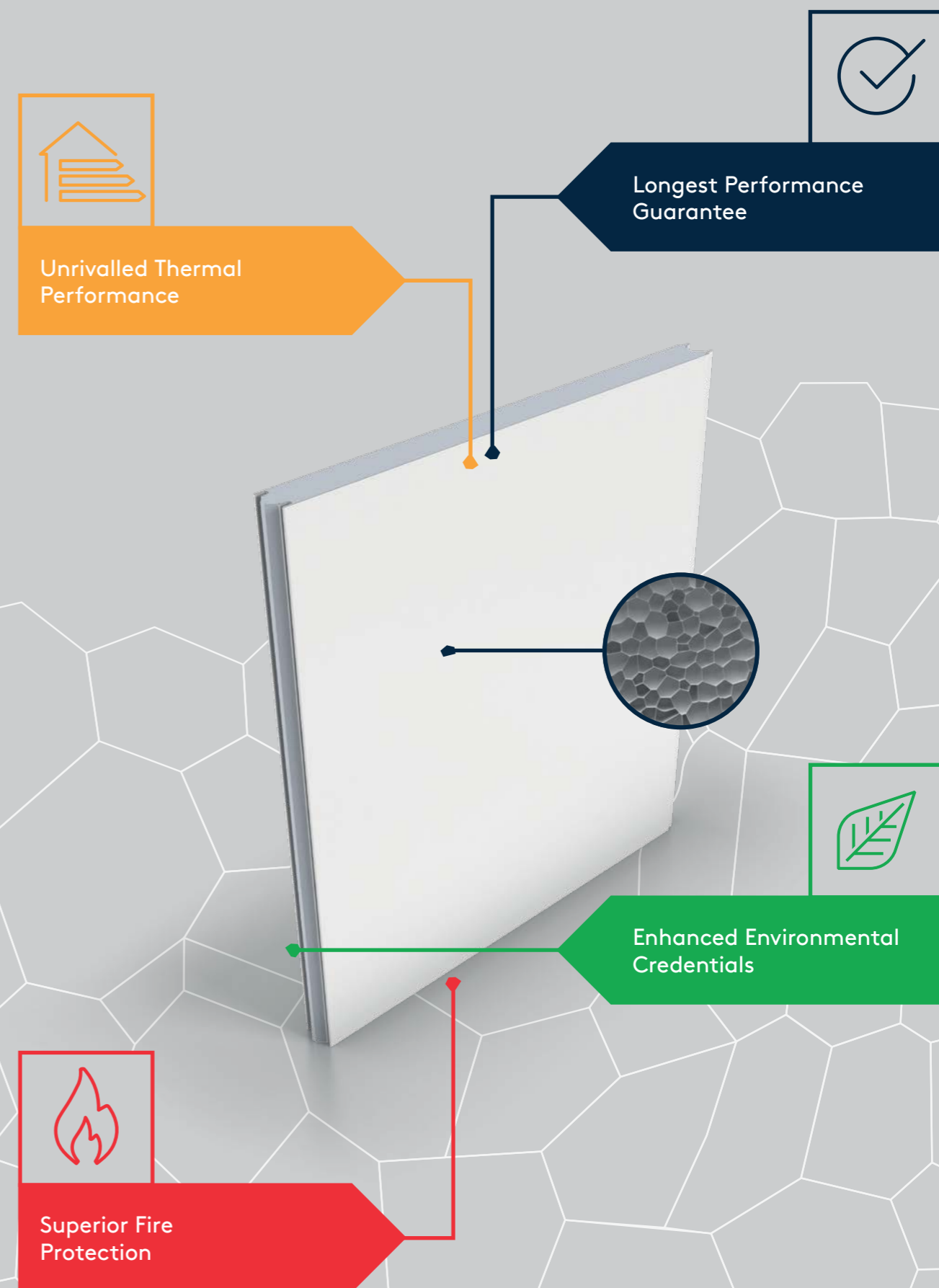
A Breakthrough in Insulated Panel Core Technology for Enhanced Performance

QuadCore™ is Kingspan's new hybrid insulation core technology with a unique formulation that creates microcells with unrivalled thermal performance, superior fire protection and enhanced environmental credentials.

FM 4882

The Highest Level of Certification and Approvals

What's more, QuadCore™ is the first closed-cell insulated panel approved to FM 4882 for smoke sensitive occupancies. (Depending on panel choice, refer to specific datasheets)



Value Proposition

Kingspan has over 50 years of experience in its industry the world over.

Our expertise in cleanrooms allows us to meet the precise needs of your particular sector, whether that is pharmaceutical, medical, semi-conductor, biotechnology, cosmetics or high-tech.

By increasing our know-how through constant contact with our clients, we can offer you bespoke envelope design, providing high quality solutions based on modular panels and walkable ceilings.



Expertise



Innovation

Across the globe, our name is synonymous with innovation in insulated panel systems and the development of advanced insulation technologies.

Now we bring that innovation to the cleanroom sector, creating something truly unique – a range of high performance, rapid build cleanroom solutions featuring a game-changing hybrid insulation core that is radically different from anything that has gone before it: QuadCore™.



Versatility

Our UltraTech cleanroom solutions are designed for both flexibility and economy.

With a choice of two interchangeable systems, we offer customisable solutions for your specific cleanroom environment requirements and aspirations.

Designs and materials depend on the application specified and special processes which need to be incorporated. We offer anti-bacterial coatings, fibre-free cores and enhanced fire performance.



Service

At Kingspan, we pride ourselves on our 360° service and support across a wide range of cleanroom applications, to provide you with the best possible customer experience.

We will be with you every step of the way, from concept to completion, and our dedicated and experienced team will support your project to give you total peace of mind.



Installation

With our UltraTech cleanroom solutions, installation is faster and simpler.

Our simple, modular solutions offer 'plug and play' integration to provide fast, efficient installation. Whether you choose one of our continuously trained and certified installers or your own preferred contractor, our unrivalled technical support is on hand to assist the process. We have a wealth of experience in various cleanroom installation methods and service delivery.



Compliance

We focus on continually delivering the best quality products.

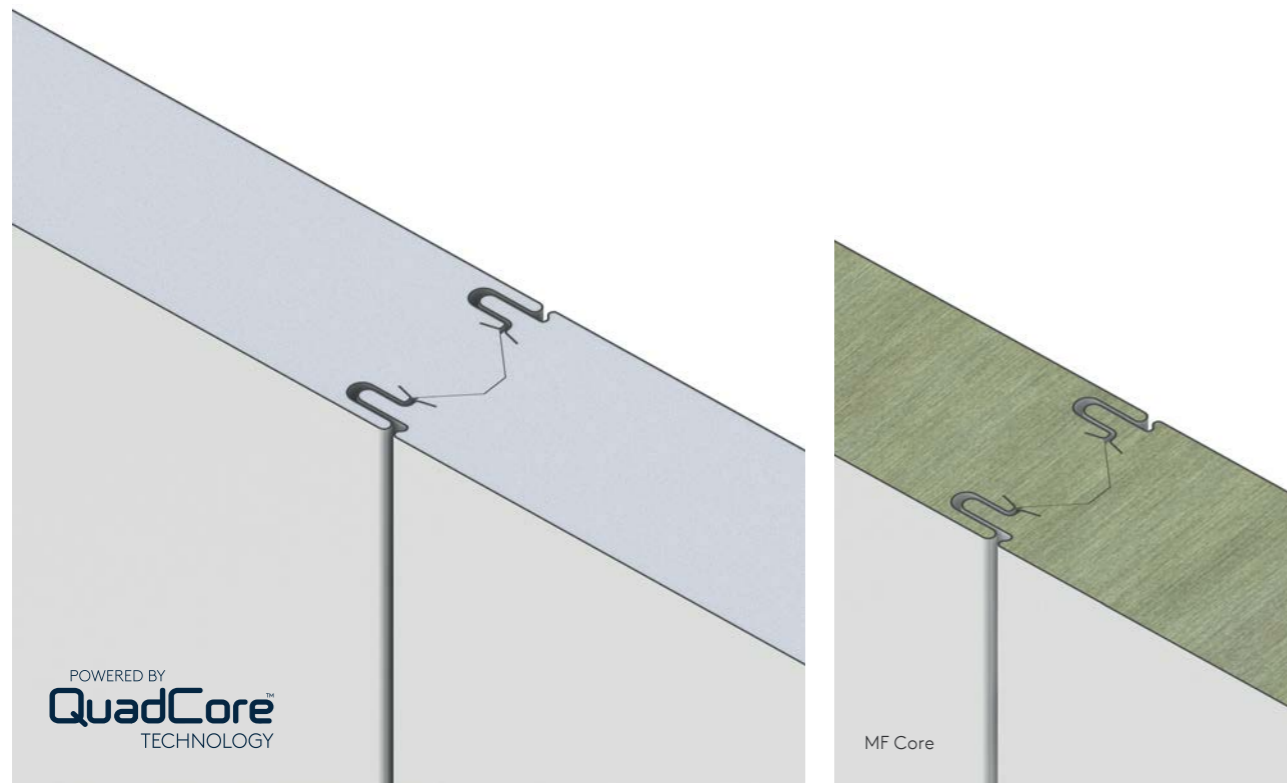
With this in mind, all our UltraTech systems are manufactured in production facilities which are certified to EN ISO 9001, EN ISO 14001: 2004 and OHSAS 18001.

UltraTech Versatile cleanroom panels comply with the appropriate standards, such as EN ISO 14644 and cGMP. They are also third party tested and certified to the highest industry standards by LPCB and FM.



System Selection

The UltraTech range offers flexible, high performance, engineered cleanroom solutions that deliver both cost and operational benefits, minimising risk and maximising return on investment.



UltraTech Versatile

UltraTech Versatile is our NEW revolutionary hybrid cleanroom system that offers the client high performance solutions to fulfil their every aspiration for cleanroom systems at much lower cost than traditional methods.

With the option to choose either flush, semi-flush or combination of both elements, UltraTech Versatile removes the boundaries to provide totally flexible cleanroom design.

- Thickness: 50, 60, 80, 100, 125, 150, 175, 200 or 220mm.
- Panel length: up to 19.5m.
- Panel core: QuadCore™ (approved to FM 4882) or mineral fibre.
- Panel coatings: Kingspan CLEANsafe 25, 55, 120, 316 and Kingspan HYGIENsafe 150.

Note: The above technical information relates to QuadCore™ only, please relate to our datasheet for mineral fibre technical information.



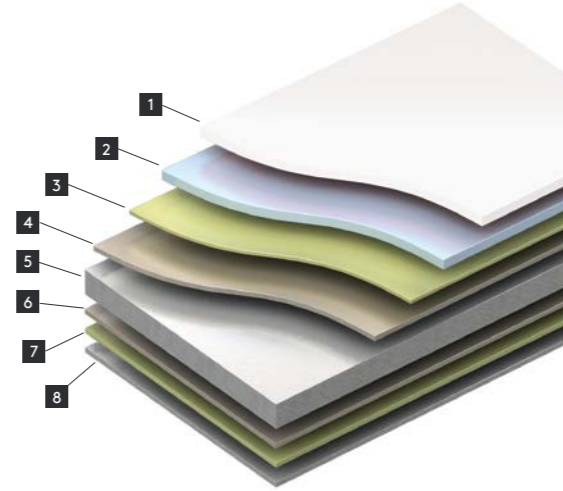
High Performance Coatings

Internal Applications

Kingspan CLEANsafe 25

Kingspan CLEANsafe 25 is a chemically inert polyester (PE) coating, applied to pretreated metal, suitable for moderately aggressive internal environments.

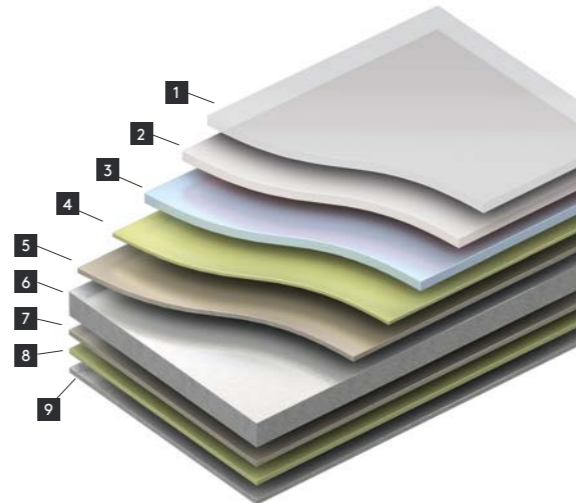
- 1 25µm polyester top coat
- 2 Primer
- 3 Pre-treatment
- 4 Metallic protection
- 5 Metal substrate
- 6 Metallic protection
- 7 Pre-treatment
- 8 Back coat



Kingspan CLEANsafe 55

Kingspan CLEANsafe 55 is a chemically inert colaminated polyethylene terephthalate (PET) film and polyester (PE) paint, applied to pre-treated metal, suitable for humid and chemically aggressive internal environments.

- 1 55µm PET film
- 2 Polyester
- 3 Primer
- 4 Pre-treatment
- 5 Metallic protection
- 6 Metal substrate
- 7 Metallic protection
- 8 Pre-treatment
- 9 Back coat

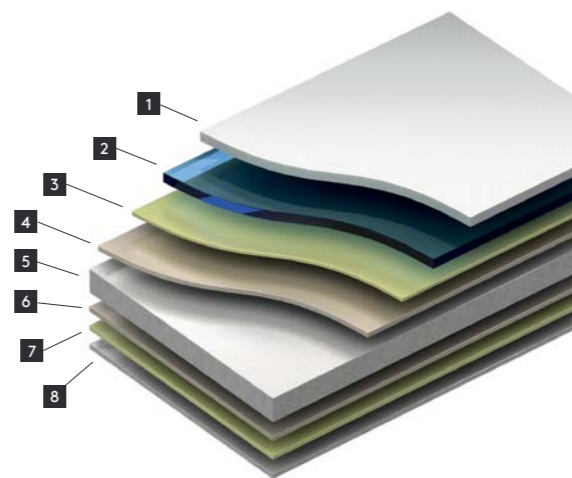


Kingspan CLEANsafe 120

Kingspan CLEANsafe 120 is a chemically inert polyvinyl chloride (PVC) film, laminated to pre-treated metal, suitable for internal for controlled environments.

Joints between panels can be either caulked or chemically cold-welded.

- 1 120µm PVC film
- 2 Adhesive
- 3 Pre-treatment
- 4 Metallic protection
- 5 Metal substrate
- 6 Metallic protection
- 7 Pre-treatment
- 8 Back coat

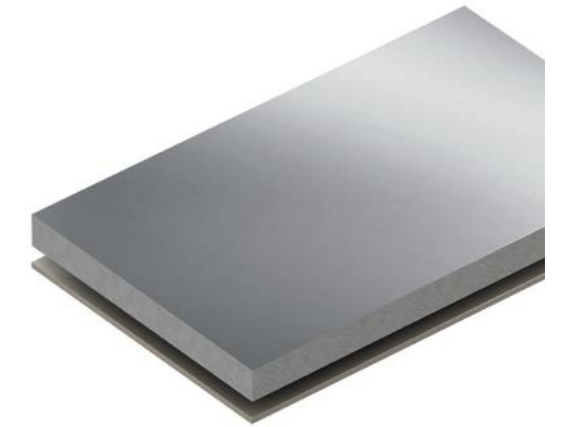


High Performance Coatings

Internal Applications

Kingspan CLEANsafe Stainless steel 316L

Kingspan CLEANsafe Stainless steel 316L is a chemically inert, gap-free austenitic stainless steel, specifically designed for conditioned environments and environments with a high corrosion factor.

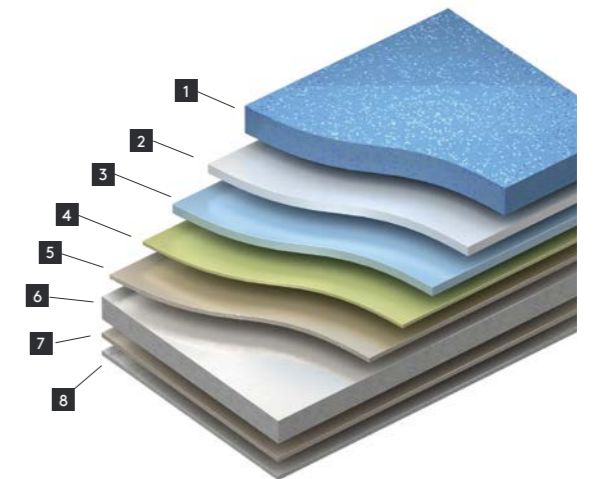


Kingspan HYGIENEsafe 150

Kingspan HYGIENEsafe 150 is a chemically inert polyvinyl chloride (PVC) film with antibacterial properties, laminated to pre-treated metal, suitable for internal for controlled environments.

Joints between panels can be either caulked or chemically cold-welded.

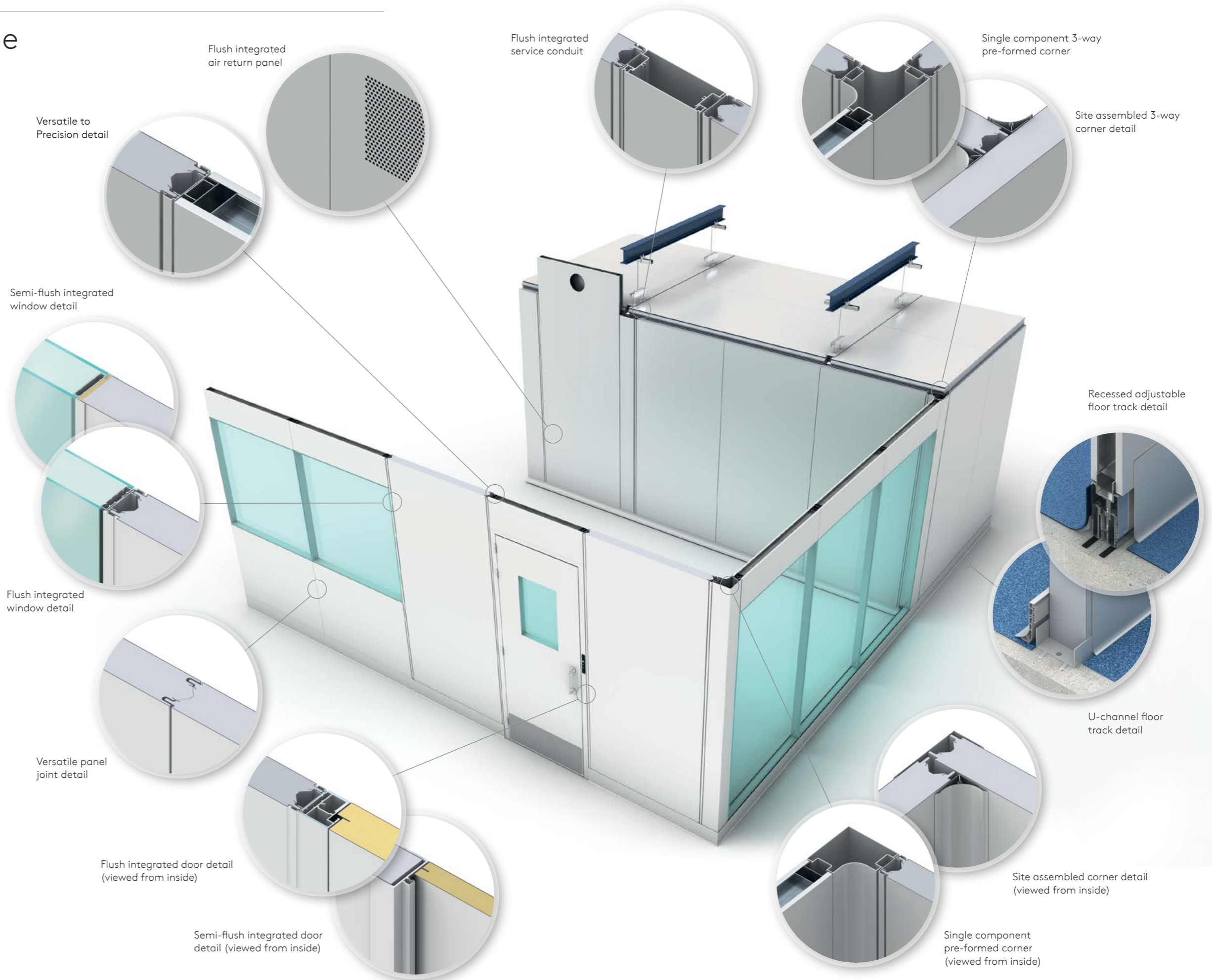
- 1 150µm PVC film
- 2 Adhesive
- 3 Primer
- 4 Pre-treatment
- 5 Metallic protection
- 6 Metal substrate
- 7 Metallic protection
- 8 Back coat



UltraTech Versatile

Why choose UltraTech Versatile?

- Unique fully flush hybrid system.
- Bespoke design flexibility combined with all the advantages of an insulated panel and its beneficial economies of scale
- Consistent high quality, factory engineered system
- Simple and fast construction
- Approved to FM 4882 for smoke sensitive occupancies (Dependent on panel choice. Please refer to product datasheets)
- cGMP compliant
- Interlocking tongue and groove joint system
- Integrated solution - doors, windows, corners, floor tracks, air return panels and other components
- Semi-Flush option provides slimmer ledges to achieve a superior aesthetic appearance compared to other equivalent systems
- Longer panel lengths - cleanroom heights over 6 metres
- HYGIENEsafe anti-bacterial coating option
- Ultra airtight system
- Wide range of CLEANsafe coating systems



Versatile to Precision detail

Flush integrated air return panel

Flush integrated service conduit

Single component 3-way pre-formed corner

Site assembled 3-way corner detail

Semi-flush integrated window detail

Flush integrated window detail

Versatile panel joint detail

Flush integrated door detail (viewed from inside)

Semi-flush integrated door detail (viewed from inside)

Recessed adjustable floor track detail

U-channel floor track detail

Site assembled corner detail (viewed from inside)

Single component pre-formed corner (viewed from inside)

360° Service & Support

With you all the way.

Our dedicated and experienced team can deliver a full service for a wide range of cleanroom applications.

With you from the outset, we will offer support on all necessary aspects of your cleanroom project, from conception and design, through installation, to completion and handover.



1 Concept Creation

We offer technical advice to make your cleanroom concept a reality, including design calculations and specification.

8 In-use

Our service continues on after the project is complete. With proven performance for a long and durable service life, backed by our Kingspan System warranty, you can rest assured you have chosen the ultimate cleanroom solution.

7 Completion and Handover

On completion, we will support you as required with all the relevant documentation at handover of your project, including data to support your operation and maintenance manuals that will ensure you get the best from your cleanroom solution.



6 Construction

Our simple, modular solutions offer 'faster, efficient' integration to provide fast, efficient installation.



3 Customer Approval and Order Placement

Once project drawings and details are agreed and approved, we rapidly create your order, and submit it for production, keeping you updated on progress.

4 Production

Our streamlined process, using state-of-the-art automated manufacturing equipment, combined with our highly skilled and experienced workforce, ensures consistently high quality and efficient production of your chosen solution.

5 Delivery

We work with you to quickly provide a professional delivery plan to suit your project needs. Trailer-mounted forklifts provide fast, safe unloading and site storage.



2 3D Design and Quotation

Unlike other cleanroom manufacturers, we produce detailed 3D models at the quotation stage, providing you with simple, clear drawings that include product costs.



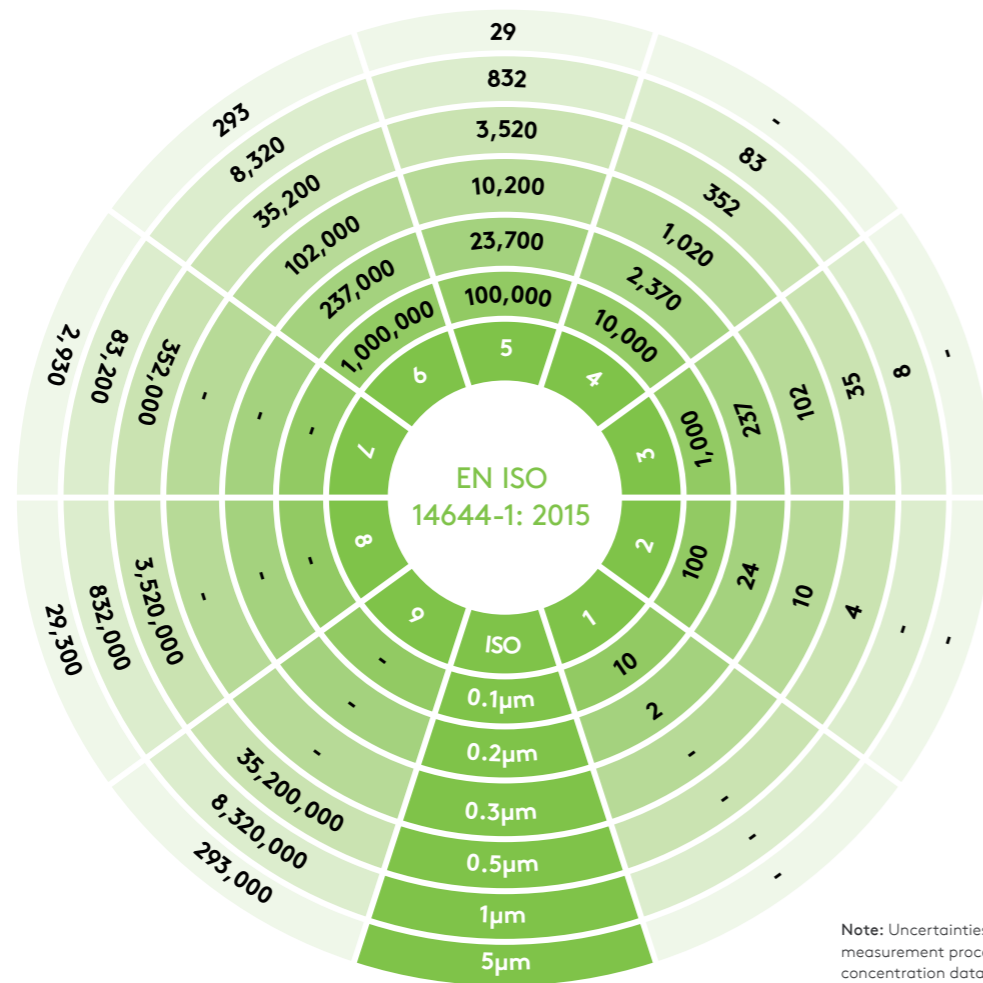
Cleanroom Systems Classifications

The classification of air cleanliness is governed by the European Standard EN ISO 14644-1: 2015 – cleanrooms and associated controlled environments Part 1.

The type and classification of the cleanroom you need depends on various factors:

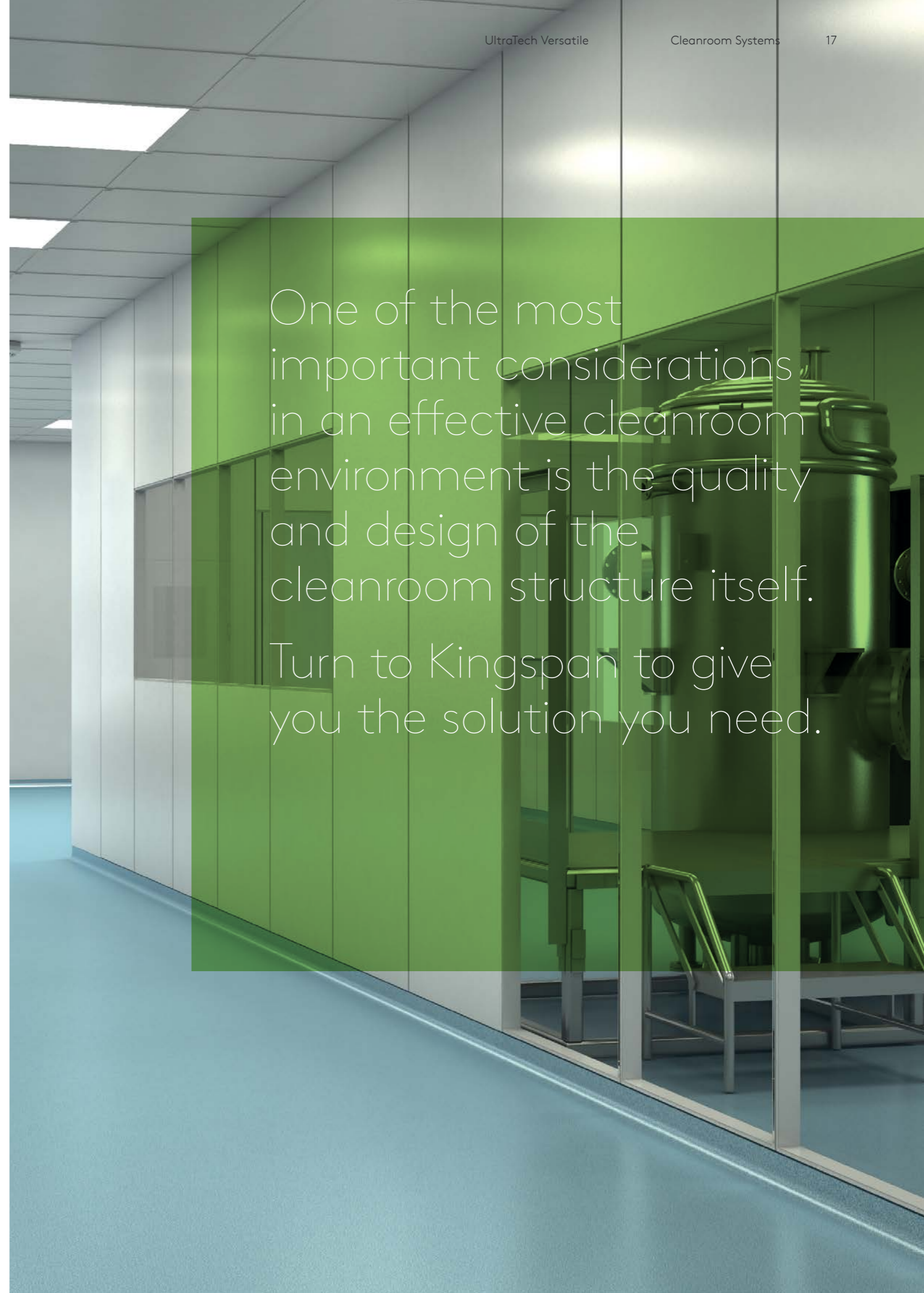
- Your particular industry and the specific operation that will be carried out under controlled conditions.
- The level of cleanliness required, and the condition in which that level of cleanliness has to be controlled and maintained.

- The air permeability characteristics of UltraTech Cleanroom Systems in association with other aspects of the cleanroom design and installation.



Maximum concentration limits (particles/m³ of air) for particles equal to and larger than the considered sizes shown above

Note: Uncertainties related to the measurement process require that concentration data with no more than three significant figures be used on determining the classification level.



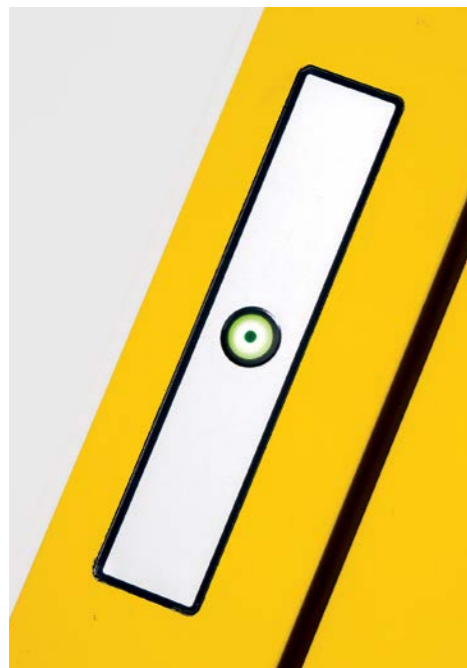
One of the most important considerations in an effective cleanroom environment is the quality and design of the cleanroom structure itself. Turn to Kingspan to give you the solution you need.

Cleanroom Systems Features



Our high quality, innovative UltraTech cleanroom solutions are ideal for a wide range of sectors.

Contact our dedicated team to find out how we could help you.



UltraTech Versatile is a unique cleanroom system that provides complete design flexibility and high performance combined with unparalleled cost-efficiency.



Cleanroom Systems Case Studies

Sonaca

Located in Gosselies, Belgium, Sonaca is an aerospace company specialising in the development, manufacturing and assembly of structures for the military, civil and space markets. This industrial cleanroom houses a crane for lifting heavy parts of aircraft wings.

Our long panel spans were used in the construction of the large cleanroom. 8.5 metre spans were used for the high walls, while our 10 metre spans were used to create a fully walkable ceiling. The industrial cleanroom is located in close proximity to an airport; meaning the fire and smoke performance of the panels were two essential criteria. Our ECOsafe PIR core achieves a Euroclass classification of B-s1,d0.



Cleanroom Systems Case Studies

Aspar

Aspar pharmaceuticals is a UK based supplier of analgesics to the British pharmacy and grocery sectors. On this project, Kingspan's structural products were used in conjunction with our cleanroom systems, bringing the cleanroom to the next level.

Our structural products enabled the ceiling grid system to be suspended - which provided support for the HVAC system.

Vertically integrated service conduits were installed within the wall assembly eliminating additional risers within the rooms.



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