

Insulated Panels
UK & Ireland

Protected by



Cleanroom Systems UltraTech Precision

High Specification, Customisable, Modular, Flush Cleanroom System



POWERED BY
QuadCore[®]
TECHNOLOGY



Overview



Kingspan Group



More than

50

years experience

Operations in over

80

countries across
the globe

More than

22,000

employees worldwide

More than

210

manufacturing sites
across the globe



High-end, modular cleanroom solutions tailored to your individual project requirements, delivered seamlessly by one of 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.

Our team provides 360° support from specification, technical advice, 3D representation and manufacture.

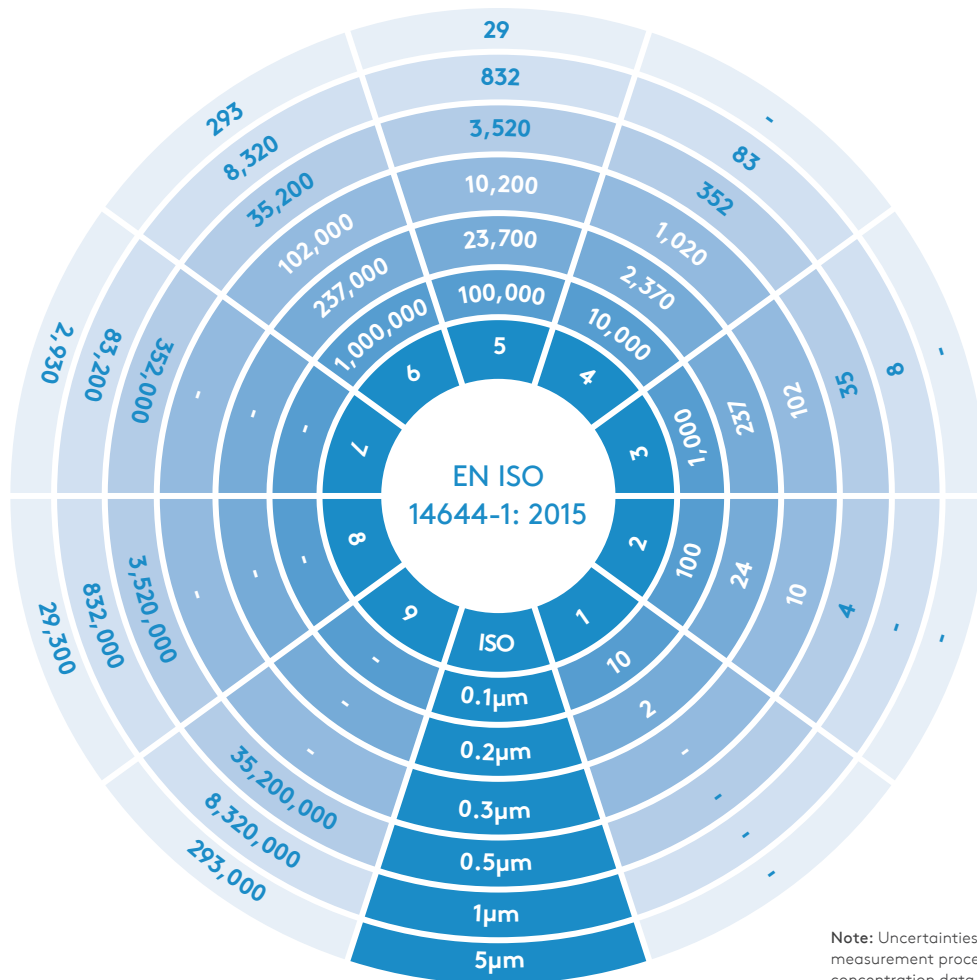
Our UltraTech Precision system features our high-performing QuadCore® insulation core technology, delivering a high level of fire, environmental and lifetime thermal performance.

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.



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.

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

Cleanroom Sectors Applications

There are a variety of reasons why a company needs to have a Clean Controlled Environment.

For example, you may be manufacturing a material that is easily contaminated by airborne particles, but cleanliness is only one of the aspects controlled within a cleanroom. Cleanrooms can also control temperature, humidity, sound, lighting, and vibration when necessary. The operations being conducted will determine which variables must be controlled.

Industries which commonly need cleanrooms include:



LIFE SCIENCE



FOOD
TECHNOLOGY



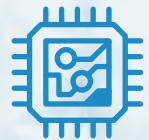
PHARMACEUTICAL



AUTOMOTIVE



BIO-TECHNOLOGY



ELECTRONICS
& SEMI-CONDUCTOR



HEALTHCARE



COSMETICS



MEDICAL
DEVICES



AEROSPACE



AGRI-TECH



BATTERY
PLANT

QuadCore[®]: Performance & Protection

Single Component

Accelerated build speed can
reduce time on site

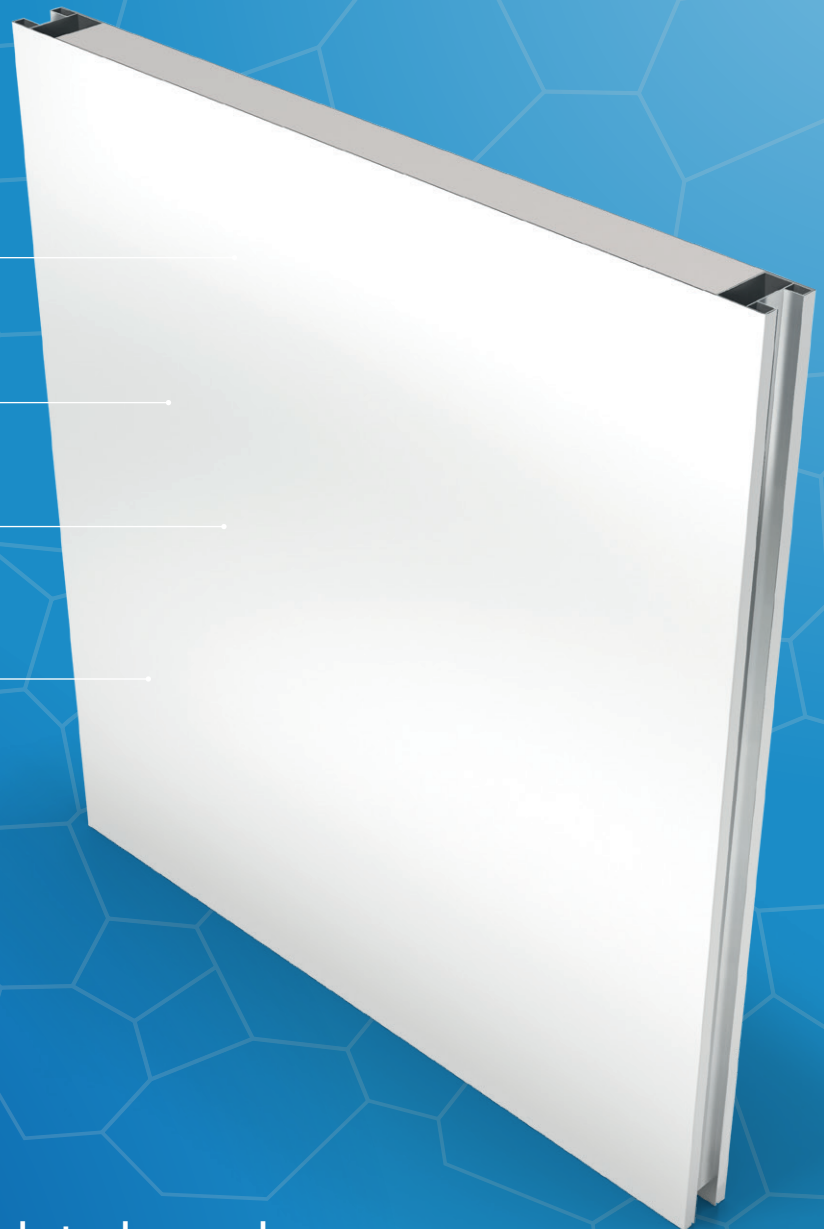
Durability

Performance

Exterior / Interior Metal Skin

High Performance Insulation

Low U-values



POWERED BY
QuadCore[®]
TECHNOLOGY

QuadCore[®] takes insulated panel
technology to a high level of performance.

QuadCore® is an insulation core, self-blended and unique to Kingspan, that delivers the highest performance of any closed cell insulation core across four factors: fire, thermal, environmental and longevity.

Insulated panels are single-component, factory-engineered systems that, when compared with traditional built-up systems, deliver very fast build speed while minimising risks associated with installation quality issues.

25 Year Thermal Performance



QuadCore® delivers leading thermal performance as it is more than twice as thermally efficient as mineral fibre, allowing thinner and lighter walls.

High Level of Fire Performance



QuadCore® insulated panels have been subjected to rigorous large-scale tests. For more information, refer to individual product data sheets.

QuadCore® Assured Warranty



Our QuadCore® Assured System Warranty gives you one warranty from one manufacturer for your complete insurer approved QuadCore® system.

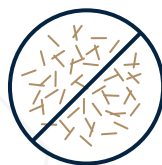
It includes an unequivocal warranty for system U-value performance for the duration of the stated warranty period.

High Environmental Performance



QuadCore® is a low Global Warming Potential solution which is also CFC and HCFC free.

FibreFREE



QuadCore® is non-sensitising (does not cause skin irritation when handled) and non-hazardous.

Your 'End-to-End' Solutions Partner

Kingspan has over 50 years of experience in the construction industry worldwide.

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 support in envelope design, providing high quality solutions based on modular panels and walkable ceilings.

We develop innovative solutions in order to provide our customers with the most 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 hybrid insulation core that is our most advanced insulation core yet - **QuadCore®**.

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QuadCore®
TECHNOLOGY

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.



**KNOWLEDGE
& EXPERTISE**



INNOVATION



**SERVICE &
SUPPORT**

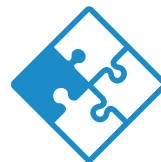


QUALITY & COMPLIANCE

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: ISO 9001: 2015, ISO 14001: 2015, ISO 50001: 2018 and ISO 45001: 2018.

UltraTech Precision cleanroom panels comply with the appropriate standards, such as EN ISO 14644 and cGMP.



VERSATILITY & FLEXIBILITY

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

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.



BUILD SPEED & SIMPLICITY

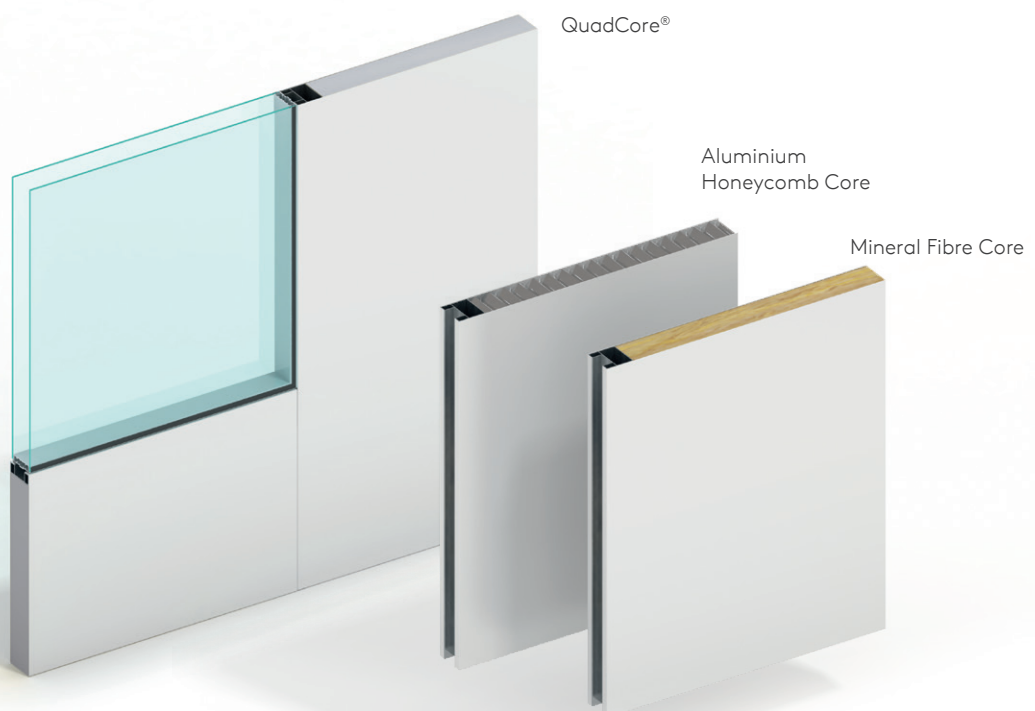
With our UltraTech cleanroom solutions, installation is faster and simpler.

Our modular solution offers simple integration to provide fast and efficient installation.

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.

The Flexibility to Customise

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



High Performance Core Materials

UltraTech Precision is a conventional flush modular system for specialist cleanroom applications.

With a choice of three core options - QuadCore®, Mineral Fibre Core and Aluminium Honeycomb (AHC) - UltraTech Precision is suitable for cleanrooms with a wide range of performance requirements.

AHC UltraTech Precision Panels are tested to:

- FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials under the certified name UltraTech Precision for 60 mm thickness and panel widths of 300 mm to 1200 mm.
- FM 4882 approval standard for class 1 interior wall and ceiling materials or systems for smoke sensitive occupancies under the certified name UltraTech Precision for 60 mm thickness and panel widths of 300 mm to 1200 mm.

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UltraTech Precision

UltraTech Precision is a customisable, modular flush cleanroom system that features a demountable joint with an aluminium extrusion to all sides.

UltraTech Precision is suitable for specialist cleanroom applications that demand specific core performance or compliance.

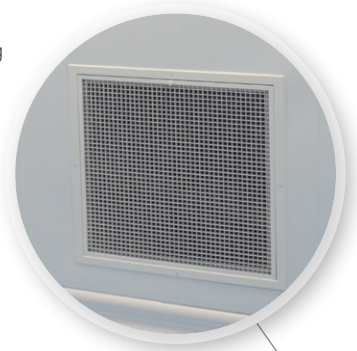
Why choose UltraTech Precision?

- cGMP compliant.
- Choice of cores – QuadCore®, Mineral Fibre core or Aluminium Honeycomb.
- Wide range of CLEANsafe coating systems.
- Available in both 60 mm and 80 mm thicknesses providing superior load bearing capacity and stability.
- Flexibility – variable widths to suit layout.
- 60 mm panel joint features an optional service cavity for incorporation of services.
- Integrated envelope solution – doors, windows, corners, floor tracks and other components.
- AHC UltraTech Precision Panels are tested to:
 - FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials under the certified name UltraTech Precision for 60 mm thickness and panel widths of 300 mm to 1200 mm.
 - FM 4882 approval standard for class 1 interior wall and ceiling materials or systems for smoke sensitive occupancies under the certified name UltraTech Precision for 60 mm thickness and panel widths of 300 mm to 1200 mm.

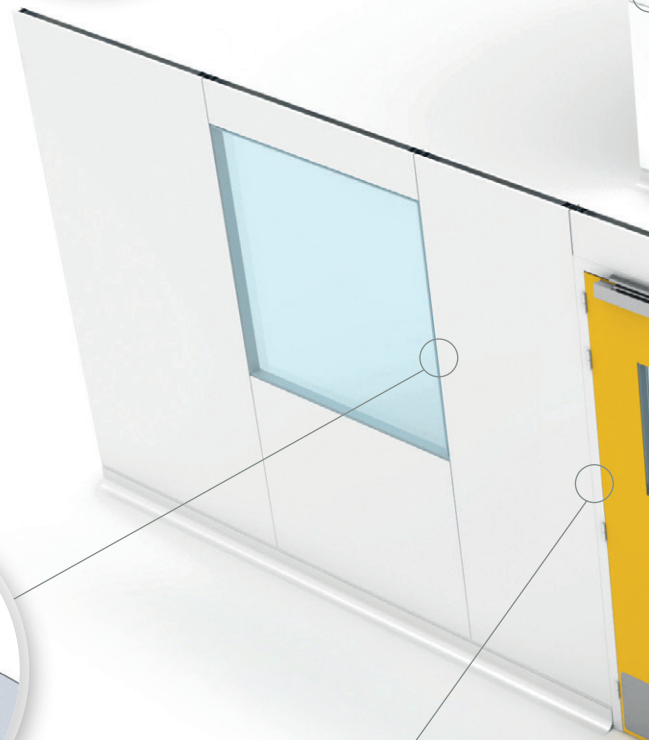
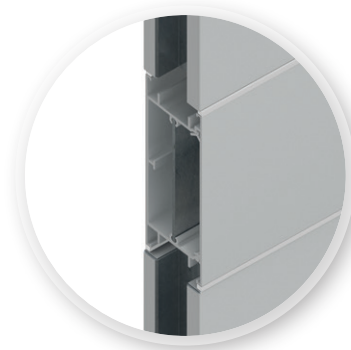


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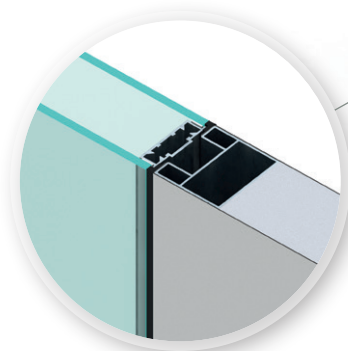
Factory cut opening
(grille by others)



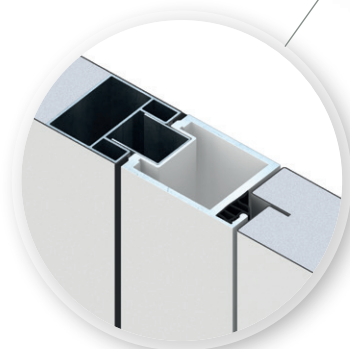
Precision integrated
service conduit

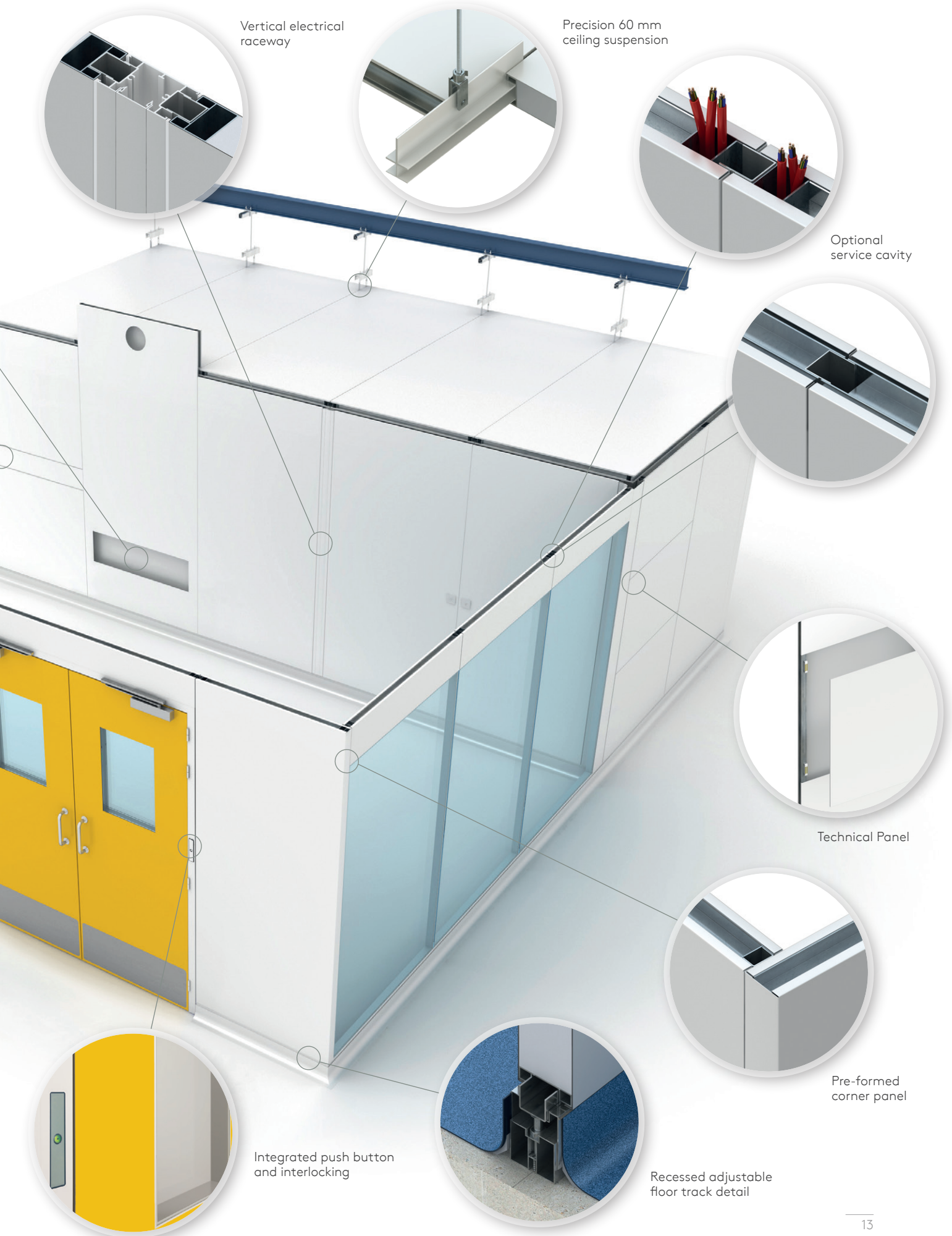


Precision integrated
window detail



Precision UltraTech UTF60
integrated door detail
(viewed from inside)





Vertical electrical raceway

Precision 60 mm ceiling suspension

Optional service cavity

Technical Panel

Pre-formed corner panel

Integrated push button and interlocking

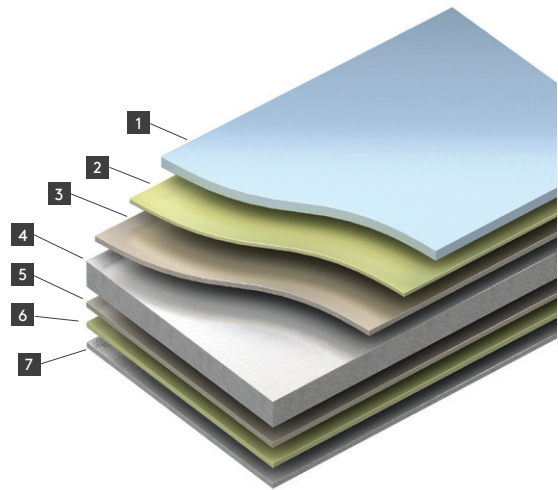
Recessed adjustable floor track detail

High Performance Coatings Internal Applications

Kingspan CLEANsafe 15

Kingspan CLEANsafe 15 is a chemically inert polyester (PE) coating, applied to pre-treated metal, suitable for non-aggressive internal environments.

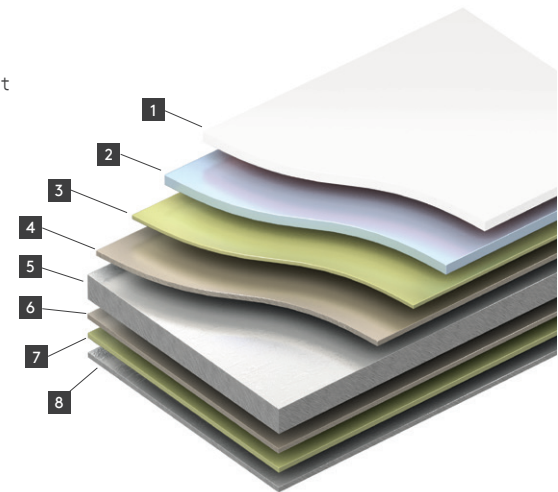
- 1 Top coat
- 2 Pre-treatment
- 3 Metallic protection
- 4 Metal substrate
- 5 Metallic protection
- 6 Pre-treatment
- 7 Back coat



Kingspan CLEANsafe 25

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

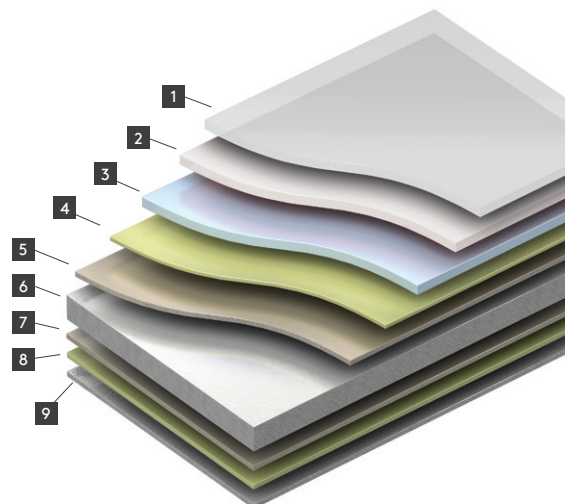
- 1 25µm polyester top coat
- 2 Primer
- 3 Pre-treatment
- 4 Metallic protection
- 5 Metal substrate
- 6 Metallic protection
- 7 Pre-treatment
- 8 Back coat



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



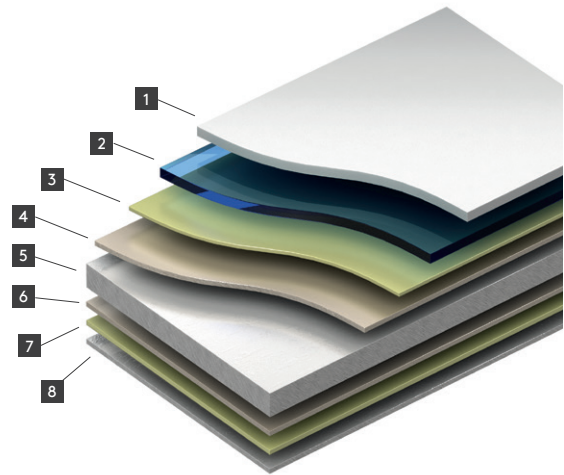
High Performance Coatings Internal Applications

Kingspan CLEANsafe 120

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

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

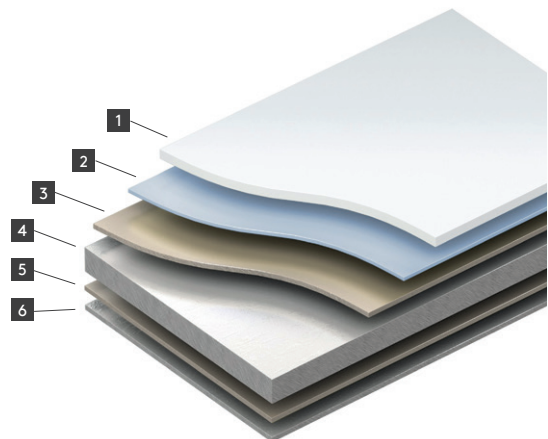
- 1 120µm PVC film
- 2 Adhesive
- 3 Pre-treatment
- 4 Metallic protection
- 5 Metal substrate
- 6 Metallic protection
- 7 Pre-treatment
- 8 Back coat



Kingspan CLEANsafe Anti-Static 25

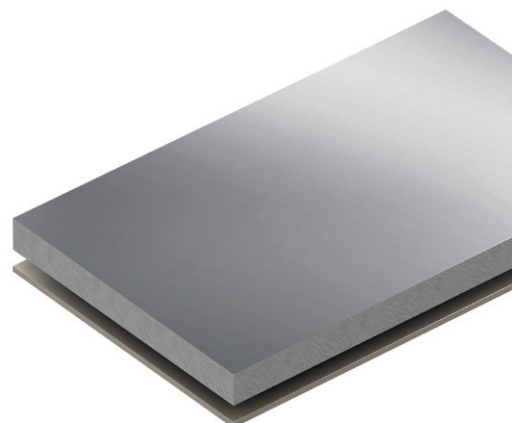
Kingspan CLEANsafe Anti-Static 25 is a chemically inert polyester (PE) coating with a surface resistivity of 1 to 300 x 10⁶Ω/square, applied to pre-treated metal, suitable for moderately aggressive internal environments.

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



Kingspan CLEANsafe Stainless Steel 304 & 316L

Kingspan CLEANsafe Stainless Steel 304 and 316L is a chemically inert, gap-free austenitic stainless steel, specifically designed for conditioned environments and environments with a high corrosion factor.



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, through installation, to completion and handover.

Technical Support

Our Cleanroom Technical Team provides dedicated support throughout the design and construction process for our customers. With our specialist team we are here to offer support on ISO and GMP cleanroom standard compliance. We provide installation guidance and offer product layouts using our in house BIM software capabilities upon order, subject to customers product selection and project demands.

Customer Service

Our dedicated customer service advisers will be with you every step of the way.

Production

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



1



2



3



4

Specification

Our specialist Cleanroom Sales Team are here to support you with the appropriate selection and specification of our comprehensive product range, providing quotations and cost support.

Warranty

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



Cleanroom Systems Features

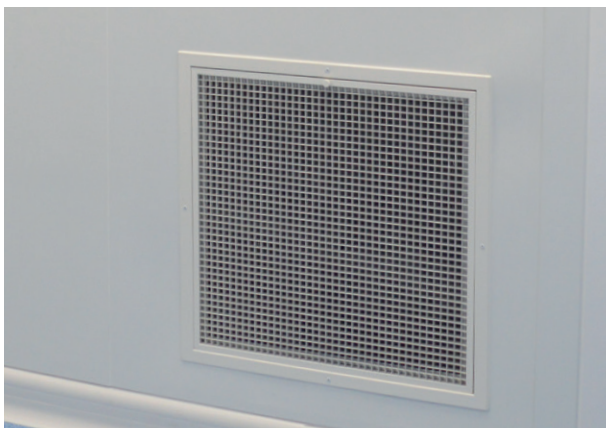


Our high quality, innovative UltraTech cleanroom solutions are ideal for a wide range of sectors.

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



UltraTech Precision is a unique cleanroom system that combines complete design flexibility and high performance with cost-efficiency.



Case Studies

Convatec

Convatec, a global medical products and technologies company, with leading market positions in ostomy care, wound therapeutics, critical care and infusion devices had requirement for a cleanroom to house multiple bonding machines and to assist with the manufacture of wound dressings.

High-performance panels, doors and windows featuring the UltraTech Precision modular system by Kingspan were used internally. The system uses the CLEANsafe 55 coating, which boasts superior durability and chemical resistance. The UltraTech system allows for fully flush details, integrated cleanroom doors, glazed flush units and air return panels. This was used in conjunction with a Kingspan UltraTech Versatile fully walk on ceiling with factory cut openings for lights and HVAC system to speed up installation on site.





Case Studies

St. Vincent's University Hospital

St. Vincent's University Hospital, one of the world's leading academic teaching hospitals, through an expansion of services, established the need for a state of the art aseptic compounding unit (ACU).

Kingspan's UltraTech Precision system was selected as the cleanroom fabric owing to its fully flush details, ensuring ease of maintaining a sterile environment, along with the many flexible options including a horizontal service raceway providing flush power sockets and data points. UltraTech flush doors installed as part of the design strategy are colour-coded to differentiate the internal room areas within the compounding suite.

Kingspan's CLEANsafe 55 coating, already pre-approved for use with many Biocidal and Virucidal agents, gave the hospital the confidence of a long lifespan for the cleanroom fabric.





Contact Details

United Kingdom

Kingspan Limited

Greenfield Business Park No. 2
Greenfield | Holywell | Flintshire
North Wales | CH8 7GJ

T: +44 (0) 1352 716100

F: +44 (0) 1352 710161

E: kingspancleanrooms@kingspan.com

Your local contacts

Find your local contact to the cleanroom systems team on our website: www.kingspan.com



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For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

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