

Infection control and prevention in healthcare environments

Infection prevention is a core requirement in the design and operation of healthcare environments. This data sheet summarises key infection prevention principles aligned with national and international standards to support hygiene compliance and contribute to safer outcomes for patients and staff.

Effective infection control begins with proactive design decisions: selecting appropriate materials, surfaces and design details that reduce contamination risks and support thorough cleaning processes to help prevent infection outbreaks before they occur. This includes specifying finishes that are non-porous, durable and easy to clean, and incorporating features that minimise dust traps and hard-to-reach areas. However, no material choice or antimicrobial treatment replaces the essential requirement for regular cleaning using approved methods and products.

Surface Materials

Surface materials suitable for HBN-compliant environments include melamine and high-pressure laminate-faced boards (where core materials are fully edged and protected), compact grade laminates (e.g. Trespa, Fundermax), solid surface materials (e.g. Corian, HIMACS) and stainless steel.

All exposed surfaces must be fully sealed, non-porous and resistant to frequent cleaning and disinfection, with materials selected according to clinical risk and chemical exposure (e.g. chose compact grade laminate worktops and Grade 316 stainless steel for laboratories).

Design Features

Simple, flush, and continuous forms such as sloping cabinet tops and uniform cabinet depths reduce dust traps, improve cleanability, and support effective infection control.



Clear Worktops

Keeping work surfaces clear of clutter enables thorough cleaning and reduces contamination risk, supported by integrated storage solutions such as swing-glide under-unit drawers.



Shelving Systems

EasyRail closed-profile shelving systems should be used in clinical areas, as they eliminate holes and slots that can harbour dirt and microorganisms.



Rear Upstands

Moulded rear upstands with smooth, radiused internal corners provide superior cleanability compared to sharp-angled or lay-on upstands.



Door Hinges

270-degree exposed knuckle hinges allow full access to door edges and hinge components, ensuring all contact surfaces can be effectively cleaned and disinfected.



Floor Interface and Plinths

Although flooring dressed up a plinth box is sometimes chosen, installing cabinets on a fully finished floor with a sealed plinth interface offers greater resilience by limiting damage from leaks, enabling easier cabinet replacement, and maintaining floor and room integrity.



Panel Edging

High-impact 2mm ABS edging is preferred over thinner options as it provides improved impact protection and effective sealing, safeguarding absorbent core materials such as chipboard and MDF from moisture ingress.

