

DON'T TAKE  
**THE RISK**

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ISO 9001:2008



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## CONTAMINATION CONTROL **FLOORING**



FOOT



WHEEL



AIR

# STOP CONTAMINATION IN ITS TRACKS



SCIENTIFICALLY PROVEN TO PREVENT  
**99.9%**  
 OF ALL VIABLE AND NON-VIABLE FOOT  
 AND WHEELBORNE CONTAMINATION  
 FROM ENTERING A CRITICAL AREA

# DYCEM - CONTAMINATION CONTROL FLOORING YOU CAN TRUST

Dycem is a world leading manufacturer and supplier of contamination control floor solutions for critical environments. The products are solely manufactured in the UK at its Bristol site and are sold globally in more than 50 countries to many of the world's leading corporations.

Today thousands of clean rooms, critical areas and controlled environments are protected by Dycem polymeric contamination control mats and flooring, enabling all organisations to reduce particle counts by up to 99.9%. This contributes to eradicating contamination and cross contamination and through this increases product yields and ultimately profit.

Dycem has been manufacturing contamination control zones since 1966 with headquarters in Bristol, England, Muntinlupa City, Philippines, Warwick, Rhode Island, USA and Houston, Texas USA.

Dycem also manufactures to all relevant International Standards with the minimum carbon footprint.

Dycem's commitment to quality, total customer satisfaction and product innovation has earned the company recognition across the globe and today Dycem operates in most markets serving a variety of industries including: Pharmaceutical, Aerospace, SemiConductor, Bio Medical, Hospitals, Medical Device, Fibre Optic,

Data Centres, Optical, Automotive, Packaging and Food. In addition by Managing for Continuous Improvement Dycem has developed and improved the design and ability of its materials to trap and retain particles down to a Nanoscale

The company's user base of thousands includes Blue Chip companies such as Sony, GlaxoSmithKline, Lilly, Abbott, Johnson and Johnson, Motorola, Roche, IBM, Pfizer, Rolls Royce, Nestle, Bombardier, Intel, Seagate, Nokia, Honda, BMW, Heinz and Texas Instruments. Notwithstanding this, Dycem is suitable for the smallest to the largest company as it is flexible, versatile and can be bespoke installed to individual needs.

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## WHY DYCEM?

80% of contamination entering your critical environment does so on feet or wheels. (Source: 3M). Therefore, controlling contamination and cross contamination at or near floor level is an essential and fundamental part of any integrated risk management policy.

Regulatory bodies such as the FDA, MHRA, EMEA and other professional auditing teams using Risk Management Systems such as HACCP, FMEA, GAMP, FMECA, all recognise the importance of controlling contamination by implementing an effective Contamination Control Flooring System.

Addressing the growing concern and urgency for better and more stringent contamination control in critical environments, Anne Marie Dixon, an independent consultant at Cleanroom Management Associates, who has tested the system, said:

*“Contamination from personnel and wheeled carts and forklifts is a major concern in cleanrooms and controlled environments. In addition to personnel gowning and sanitisation of carts and wheels, Dycem offers products that assist companies in reducing risk in these transitional areas by providing additional reduction from floor contamination.”*

Dycem’s polymeric flooring has been scientifically proved to be the most effective, long lasting and high performance method of minimising foot and wheel borne contamination.

In independent tests carried out by Microbiologist Caroline Clibbon at GlaxoSmithKline it was proven that Dycem prevents

over 99% of all viable and non-viable foot and wheel borne contamination from entering a critical area.

In comparison with other products on the market, levels of particles removed from footwear and retained on flooring were highest for polymeric flooring when compared with a range of different adhesive mats, (Source: Dr. T. Sandle, Controlled Environments/ PHSS Journal).

Additionally, using Dycem inside the critical area adjacent to products and processes dramatically reduces air borne contaminants by up to 60% (source: L. Ranta, MconLabs).

The successful inhibition of microbial contamination is attributable to the antimicrobial additive incorporated in all of Dycem’s CleanZones.

The silver based anti-microbial is effective in attracting and trapping microbial contamination and has been proven to inhibit the growth of over 50 organisms including E.Coli, Salmonella & MRSA.

With an outstanding global reputation for quality, reliability and efficiency, Dycem’s range of products has been progressively refined and developed to cover every kind of contamination control application.

All of the Dycem satisfied Customer base use Dycem at all critical control points (CCP’s) including all entrances( to prevent the ingress of microbial contamination), all exit ways (to reduce the risk of cross infection) and inside the critical areas (to reduce the amount of airborne microbes).

## OUR GLOBAL LOCATIONS

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## THE SOLUTION – HIGH PERFORMANCE CONTAMINATION CONTROL FLOORING

The Dycem CleanZone is the most effective, scientifically proven solution and provides a simple, long lasting and high performance method of minimising foot and wheel borne contamination. In independent tests carried out at GlaxoSmithKline it was proven that Dycem CleanZones prevent over 99% of all viable and non-viable foot and wheel borne contamination from entering a critical area.

**99.9%**  
OF FOOT AND WHEEL-BORNE CONTAMINATION IS PREVENTED BY DYCEM



### PROTECTION

The most effective solution available, trapping up to 99.9% of foot and wheelborne particulates.



### ENVIRONMENTAL

Dycem CleanZones can be recycled into less critical applications at the end of their life-cycle.



### SIZE

Dycem comes in a range of sizes to meet individual needs, even accommodating small corridors or large cleanrooms.



### PERFORMANCE

Dycem performance is maintained even after several overstrikes.



### PARTICLE RETENTION

The polymeric surface attracts, collects and retains particles and is easy to clean.



### RETURN OF INVESTMENT

Dycem provide controllable and proven lower running costs directly and indirectly.



### WHEELED TRAFFIC

The only solution for heavy wheeled traffic areas.



### AUDITING

Dycem is included in Standard Operating Procedures (SOPs) & meets requirements of regulatory bodies.



### CUSTOMISABLE PRINTING

Dycem products are customisable to suit your needs: whether for branding or visual protocol identification.

Customise with company logos or safety instructions, as well as install dates to help towards audit objectives.



# THE INVISIBLE ENEMY

Switching from peel-off mats to Dycem has been proven to reduce airborne particles by **75%**

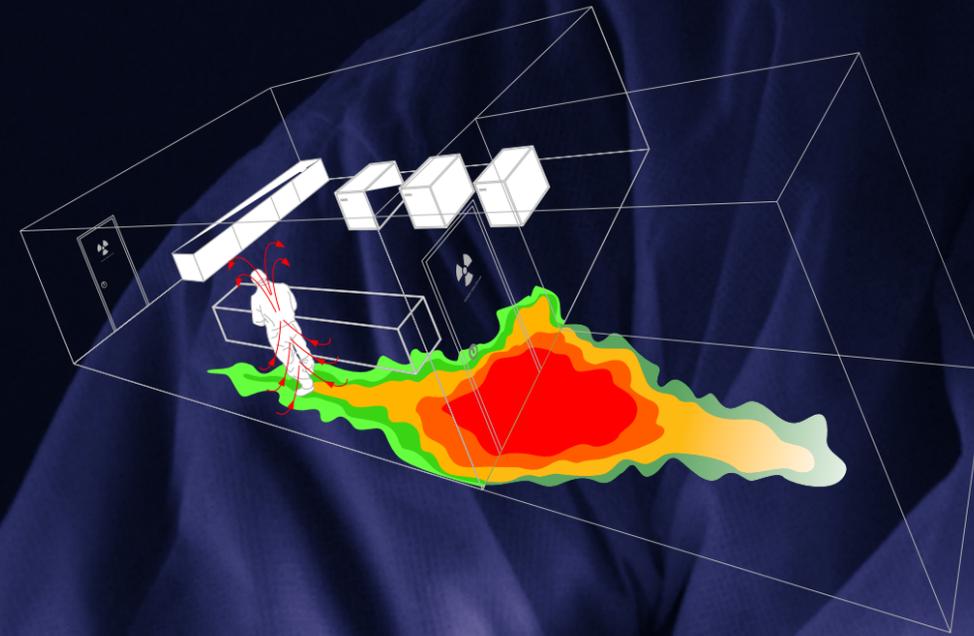
Source: A Global Manufacturer

## REDUCE THE RISK

It's not what we can see, it's what we can't see.... the small light particles (<5um) normally invisible to the naked eye are commonly called Airborne Molecular Contaminants (AMCs). They can become suspended for hours in the surrounding environment where they are quickly spread, polluting the atmosphere.

Dycem Clean Zones dramatically reduce the risk of airborne contaminants by 75%.

## CONTAMINATION & CROSS CONTAMINATION... A **COSTLY PROBLEM** IN MORE WAYS THAN ONE



- █ High level contamination
- █ Medium level contamination
- █ Low level contamination

Air, foot and wheel contamination in manufacturing, processing and storage areas can have an impact on many aspects of business, interrupting production, reducing product yields and in serious cases, ruining reputations.

The focus for conventional contamination control is airborne and personnel movement – the real problem lies at floor level so the need to control contamination is vital.

## THE **RISK** TO HEALTH & SAFETY

The health and safety of your employees and customers will be endangered by a contaminated environment and contaminated products.

## THE **RISK** TO YOUR PROFITS

Your bottom line – your company's ultimate financial well-being – will suffer every time you have to recall a product.

## THE **RISK** TO YOUR BRAND

Your company's reputation will be tarnished, perhaps irreparably, if you have to recall a contaminated product.

## WHY CONTAMINATION CONTROL IS **IMPORTANT** FOR YOUR BUSINESS

From pharmaceutical laboratories to automotive manufacturing, hospitals to food processing units, optical clinics, nutraceuticals to IT research centres and many more, there's a growing problem in critical environments. Contamination and cross contamination from foot, wheel and airborne microbial particles are

something we often dismiss as "dust". The dangers it poses can be devastating. A single microbe in a batch of aseptic drugs could cause the entire batch to be quarantined or scrapped, leading to supply shortages, financial consequences, product recalls, FDA warning letters or even company shutdown.

# THE VISIBLE AND INVISIBLE RISK

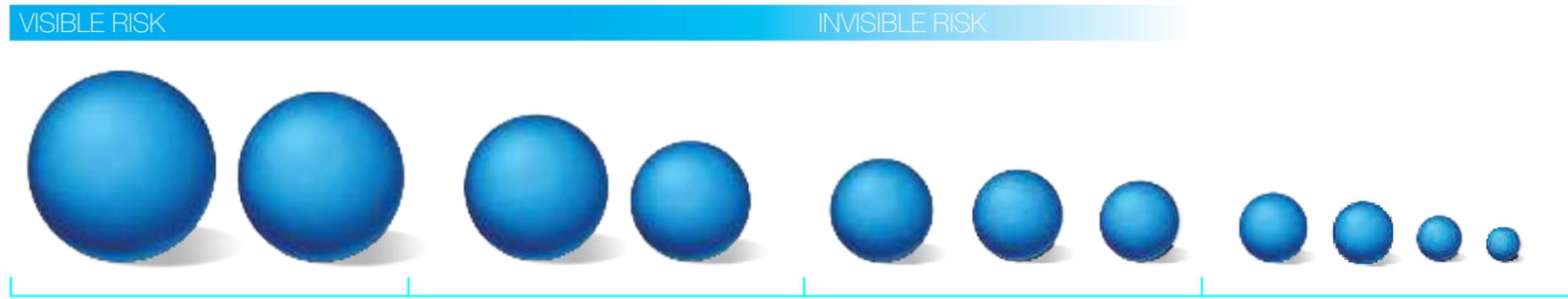
Contamination control is a major and growing concern in cleanrooms, critical areas and controlled environments.

Cleanrooms are markedly cleaner than a hospital operating room and require an extremely stringent approach to controlling possible contamination and ensuring an environment is free from bacteria, viruses or other pathogens.

Particulate contaminants are known to adversely affect quality, product yield, operational effectiveness and profitability. Therefore protecting these areas is vital.

Whether the environment you operate is industrial, controlled, critical or sterile, Dycem enables all organisations to reduce particle counts by up to 99.9%.

The illustration below identifies the types of particulates present in these environments and how Dycem uses these groups to assess and address your facility's decontamination needs.



**INDUSTRIAL (SUPERCOARSE)**  
100 micron +

Environments include heavy wheeled pallet trucks, trolleys and forklifts.

**Typical locations include:**  
Warehouses, Factories, Goods in/out

**CONTROLLED (COARSE)**  
10 - 100 micron

Environments include heavy wheeled forklifts, medium to light wheeled pallet trucks, trolleys and pedestrian traffic.

**Typical locations include:**  
Transfer Areas, Loading Bays, Granulation Bays

**CRITICAL (FINE)**  
0.5 - 10 micron

Environments include light weight trolleys and pedestrian traffic.

**Typical locations include:**  
Changing Rooms, Air Showers, Gowning Areas

**STERILE (ULTRAFINE)**  
0.5 micron <

Environments include pedestrian traffic.

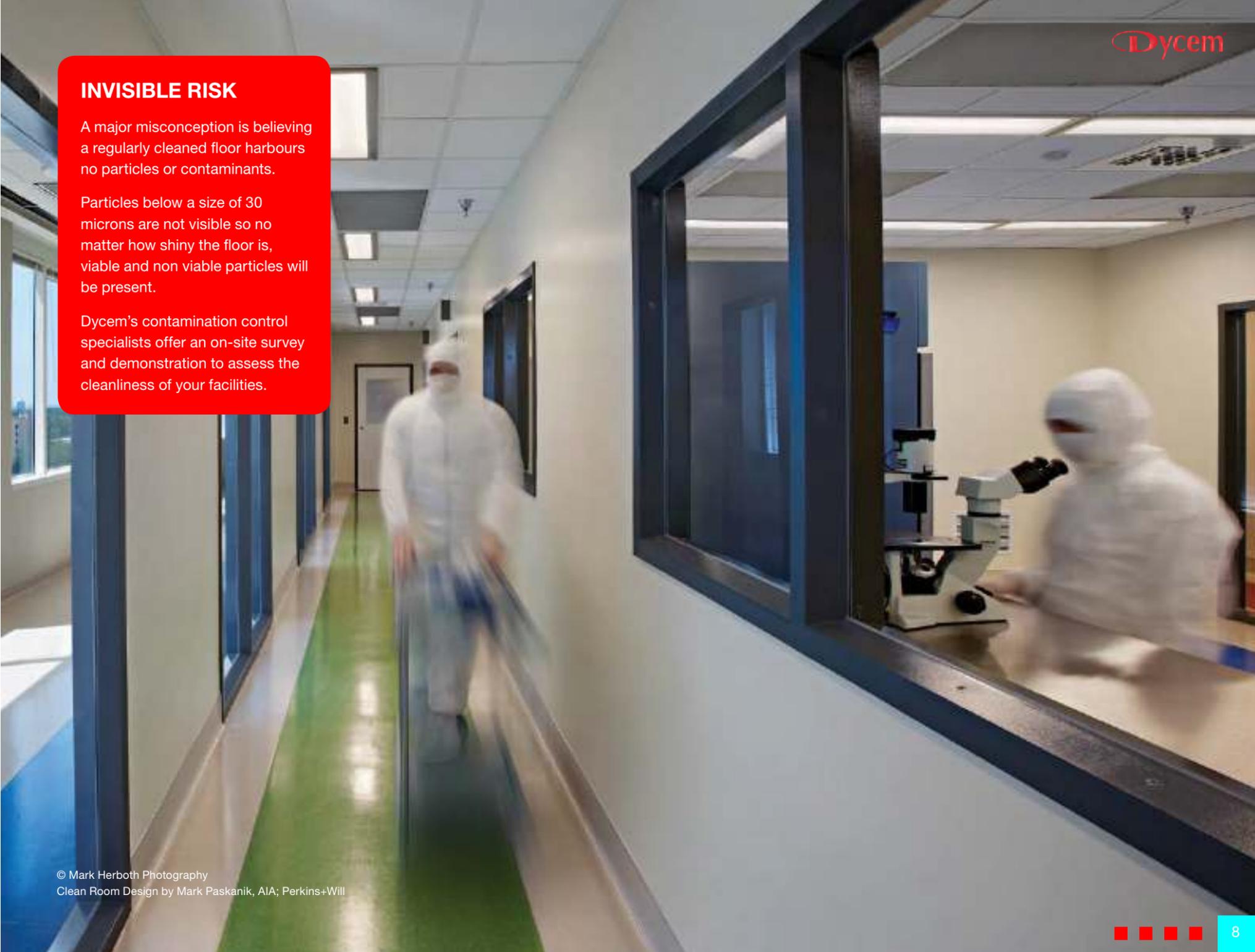
**Typical locations include:**  
Pedestrian Airlocks, Isolation Chambers, Aseptic Processing

**INVISIBLE RISK**

A major misconception is believing a regularly cleaned floor harbours no particles or contaminants.

Particles below a size of 30 microns are not visible so no matter how shiny the floor is, viable and non viable particles will be present.

Dycem's contamination control specialists offer an on-site survey and demonstration to assess the cleanliness of your facilities.



© Mark Herboth Photography  
Clean Room Design by Mark Paskanik, AIA; Perkins+Will



# CRITICAL + CONTROLLED CONTAMINATION

Dycem's comprehensive range of Contamination Control Flooring reduces particulate counts in all your critical areas:

Auditors, such as the FDA, MHRA and other professional bodies such as HACCP, FMEH, GAMP, FMECH, IPSE recognise the importance of controlling contamination and implementing an effective Contamination Control Flooring System.

Using Dycem inside the critical area adjacent to products and processes dramatically reduces air borne contaminants by up to 60% (source: L. Ranta, Mcon Labs).

### CROSS CONTAMINATION AND POTENT COMPOUNDS

Extensive areas of Dycem's contamination control Flooring eliminate the risk of cross contamination by trapping foot, wheel and air borne contamination on their surface.

**TIP**

Why not colour code your critical areas to provide clear demarcation and zone guidance to differentiate clean and dirty areas.

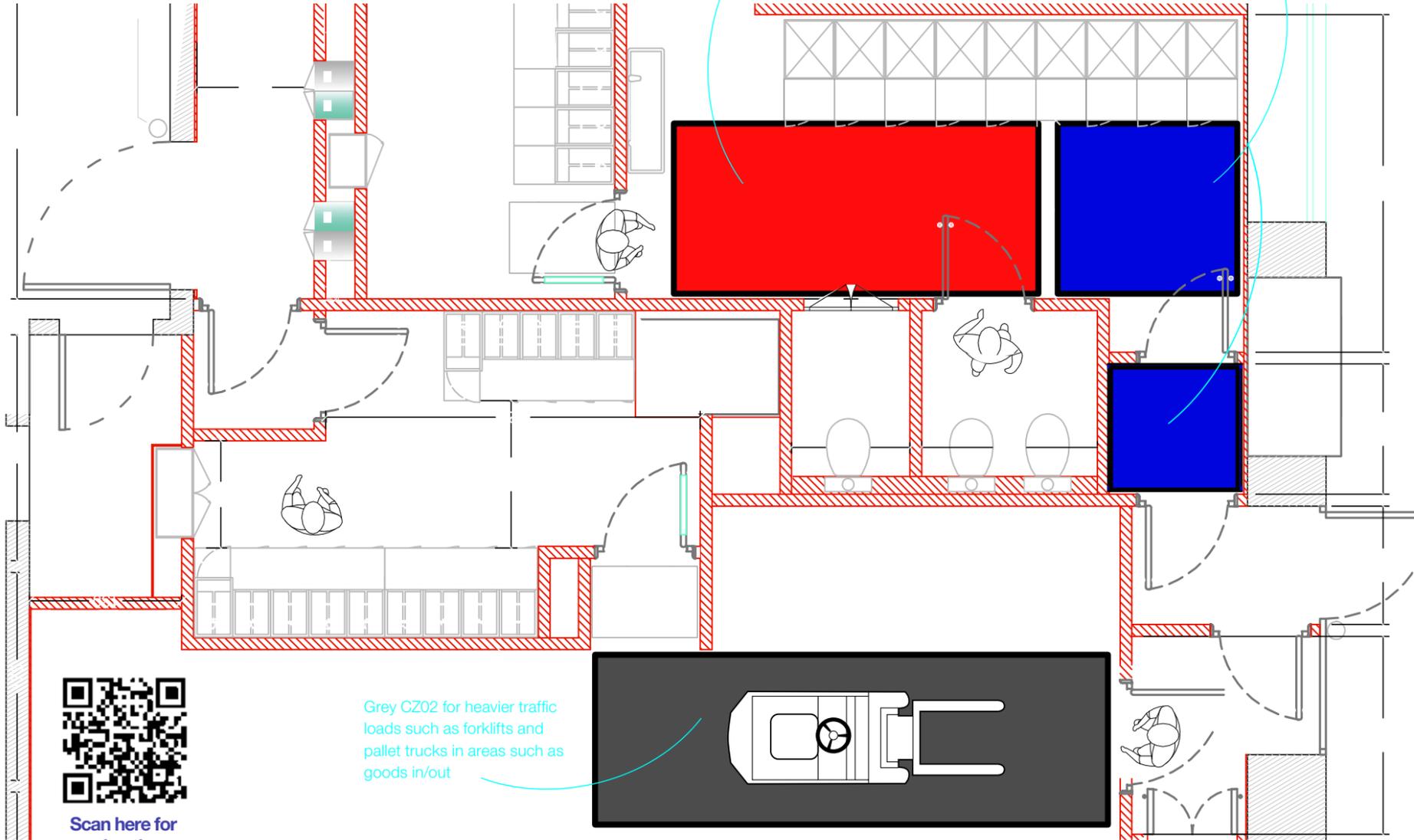
Colour-coded zones are clearly visible to staff and provide an effective health and safety management visual communication tool.

- All entrances to critical areas to prevent ingress of contamination.
- All exits to prevent contamination leaving the critical area.
- In corridors to prevent cross contamination.
- Inside the critical area adjacent to critical products and processes.
- Inside airlocks, gowning rooms, warehouses and product transfer rooms to control contamination.
- Can also be installed on ceilings and walls providing **360° contamination control solution.**

**FORKLIFT OR HEAVY WHEELED TRAFFIC**

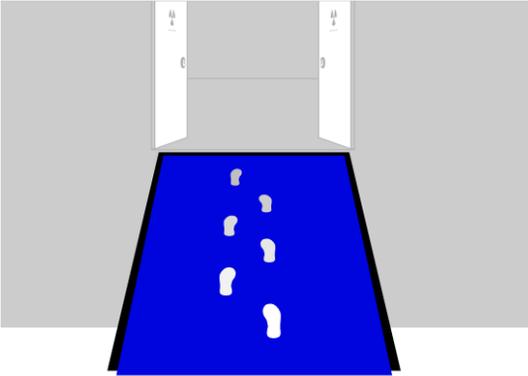
If using forklift trucks or heavy wheeled traffic please ensure that they drive in straight lines without twisting, turning or prolonged pauses which may cause damage and is outside of your warranty.

# COMPLETE CONTAMINATION CONTROL

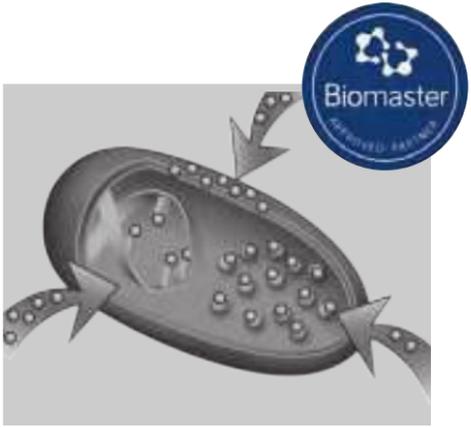


# CLEANZONE TECHNOLOGY – STOPS CONTAMINATION IN ITS TRACKS

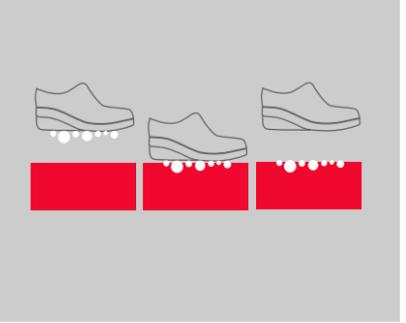
Dycem's unique 5 way action is the only effective way to minimise foot, wheel and airborne contamination; Size, Silver, Suppleness, Smoothness and Service define the complete CleanZone technology package.



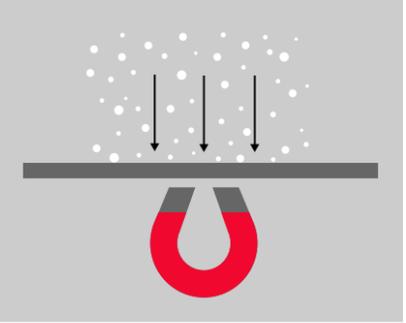
**SIZE**  
It is well accepted that to effectively remove contamination from feet and wheels, it takes a total of six footfalls or three full wheel rotations. Only Dycem delivers this.



**SILVER**  
Silver ion-based antimicrobial products from BioMaster are being used in Dycem's products and have been proven to be effective on more than 50 different organisms including MRSA.



**SUPPLENESS**  
Dycem's unique polymeric surface is soft and supple, conforming to shoe and wheel profiles and collecting particles between 0.1 and >100 microns.



**SMOOTHNESS**  
Dycem's exceptionally smooth surface creates a natural tack and a high degree of short-range electromagnetic forces (Van der Waals).  
This enables it to attract, collect and retain over 99% of particles, ranging from over 100 microns to less than 0.2 microns.  
This contamination is held on the surface until cleaned off.



**SERVICE**  
Dycem offer complete customer support and help you to define your contamination control needs with a free on-site survey. We can also provide a demonstration, technical support, installation, cleaning training and warranties.  
We also offer highly responsive telephone support and are on-hand to answer any questions or queries you may have about your Dycem product. Servicing and replacement schedules can be tied in with audits.



Our unique 5 way action stops **99.9%** of contaminants

**MRSA**  
Dycem inhibits the growth of MRSA by **99.2%** over a 3 hour period

**E. Coli**  
Dycem inhibits the growth of E. coli by **99.9%** over a 3 hour period

**80%** OF CONTAMINATION ENTERING YOUR CRITICAL ENVIRONMENT DOES SO ON FEET OR WHEELS

# SIZE MATTERS

## CHOOSING THE RIGHT SIZE

It is important to choose the right sized Zone, as size optimises both performance and life cycle.

There are several factors to consider including:

- Level of contaminants.
- Number of operators and carts.
- How often wet cleaning takes place.
- Physical size available.

For effective decontamination, at least 3 meters of Dycem is recommended to provide a sufficient surface area to allow for six foot falls (three of each foot) or three full wheel rotations before reaching critical areas.

Using peel off mats as an example below, illustrates that using an inferior solution with a small surface area can endanger your critical environments.

**FACTS**  
Dycem creates an unavoidable area to create a 99.9% contamination control solution.

## IT'S ABOUT THE RIGHT LENGTH AND WIDTH

With Dycem, it is about the right length and width, so you are able to get enough foot steps and wheel rotations in order to fully decontaminate.

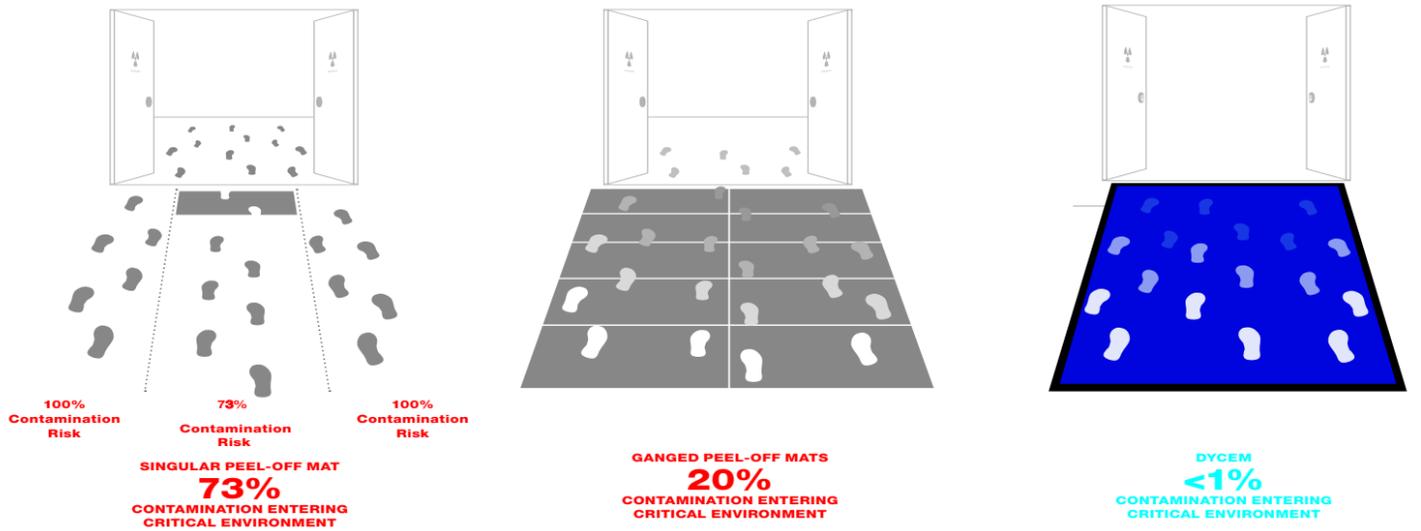
Having insufficiently sized methods of contamination control allows easy

avoidance and increases the risk to your critical environments.

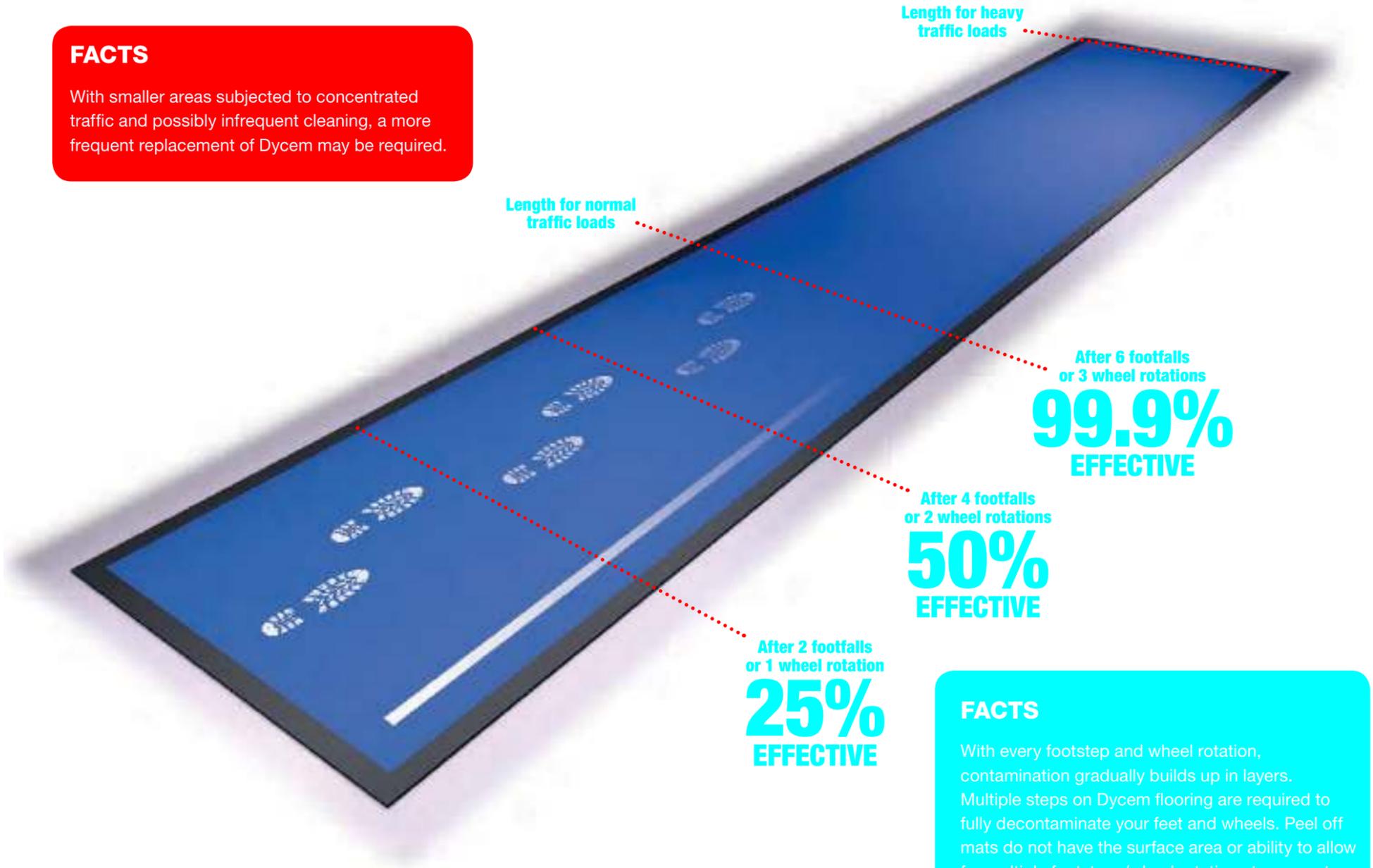
If the area is small and/or restrictive and installing a small area of Dycem is the only option, Dycem is still an effective method of contamination control.

Overstriking in areas such as gowning rooms (where space is restricted), Dycem is still effective and will offer up to 99.9% contamination control.

Dycem has a Replacement Program option that can ensure 99.9% of contamination control is maintained.



**FACTS**  
With smaller areas subjected to concentrated traffic and possibly infrequent cleaning, a more frequent replacement of Dycem may be required.



**FACTS**  
With every footstep and wheel rotation, contamination gradually builds up in layers. Multiple steps on Dycem flooring are required to fully decontaminate your feet and wheels. Peel off mats do not have the surface area or ability to allow for multiple footsteps/wheel rotations to guarantee effective decontamination from the built up layers of contamination.





## IT'S NOT ALWAYS A STRAIGHT RUN

Whether it is a long corridor or a small changing room, all facilities differ in design, workflows, shift patterns and production.

Various solutions can be implemented in these areas and fail at effectively decontaminating and protecting the environments due to reasons including traffic type and overstriking.

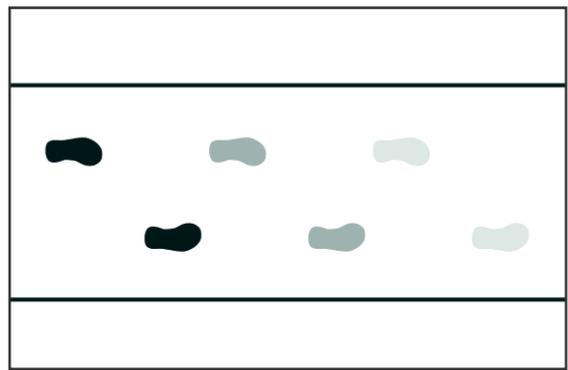
Independent studies have proven that Dycem has the capability of decontaminating your feet and wheels effectively in both straight areas of high traffic and loading weights, and in confined areas where overstriking on the same area is continual.

“When overstriking on Dycem a further 90.3% of particles are removed from overshoes.” Source: Dr Tim Sandle.

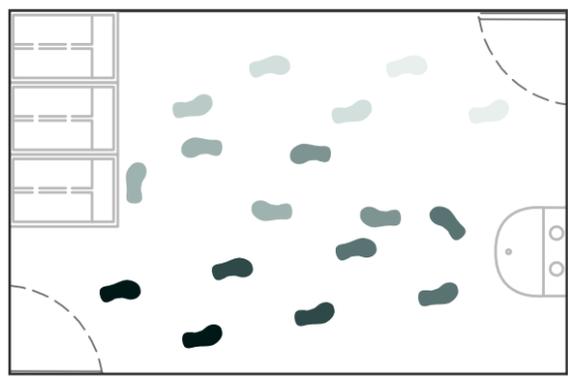
**FACTS**

Smaller areas can lose efficiency faster. Our **Product** offering is only warrantied for 12 months. Our **Replacement Program** ensures a guaranteed 99.9% efficiency for the length of the 3-5 year program.

### Typical straight runs include corridors



### Typical areas of congestion and confined space include changing rooms



Peel-off mats wrap around the wheels of trolleys and carts

## DYCEM - YOUR ONLY SOLUTION FOR WHEELED TRAFFIC

The usage of heavy forklifts, pallet trucks (automated and manual) and trolleys are increasing in all sectors and are vital for the every day running of a facility. Dycem's CZ02 product range is the only sustainable option that can withstand the rigours of a wheeled/larger particle transfer environment.

The CZ02 product range offers a tougher, reinforced backing and comes complete with two different edging options; Available in food grade stainless steel, the heavy-duty edging has been developed to provide a hard wearing solution for heavy wheeled traffic or harsh conditions - resisting high levels of corrosive attack.

# CLEANZONE

## FOR PEDESTRIAN AND LIGHT WHEELED TRAFFIC

CZ01 is a high performance contamination control zone suitable for light wheeled traffic and heavier pedestrian flows. Permanently installed, it is the most effective way of controlling all forms of foot, wheel and air borne contamination. Dycem CleanZone is available in a range of attractive designs which means it still looks good between wet cleaning.

### OPTIONS

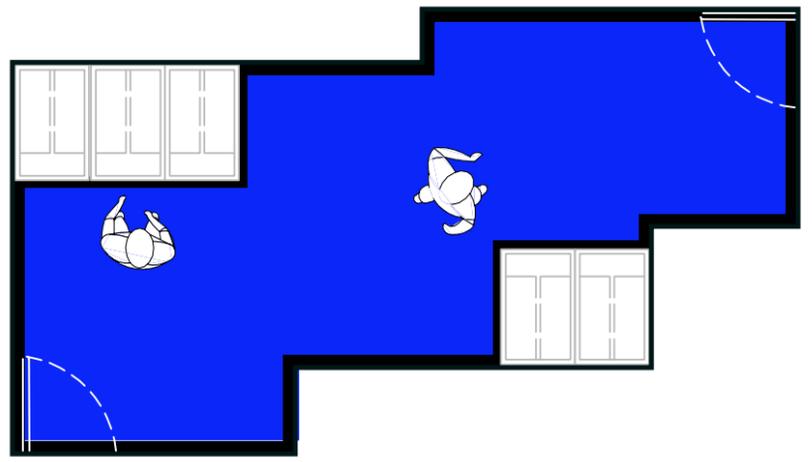
CZ01 has the flexibility to be installed into in a variety of different sized and shaped areas, it is accompanied by a number of edging system choices that will be illustrated in this brochure and can be demonstrated by our contamination control specialists.

### BENEFITS

- Prevents over 99% of contamination from entering your critical area.
- Reduced floor and air particle / microbial counts.
- Improved yield, cost savings and profit ability.
- Reduced risk of high product rejection rates.
- Dycem products cannot be bypassed and require no overt action.
- Available in a range of low profile edging systems.
- Flame retardent option available.
- Coving and inlaid options available.

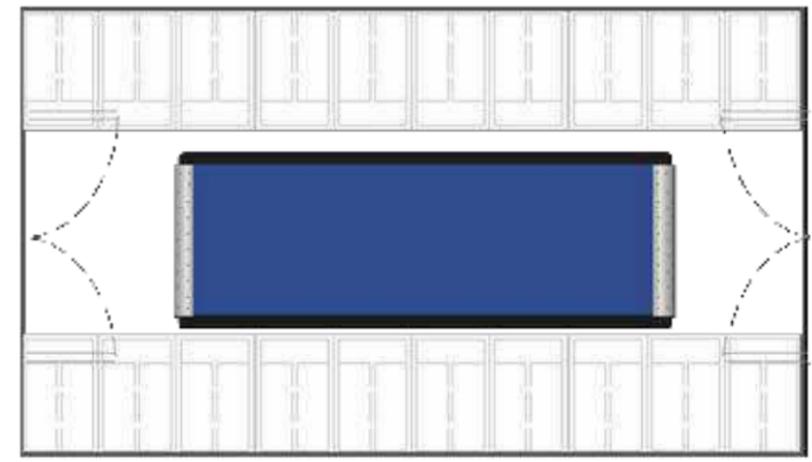


# PRODUCT OPTIONS AVAILABLE



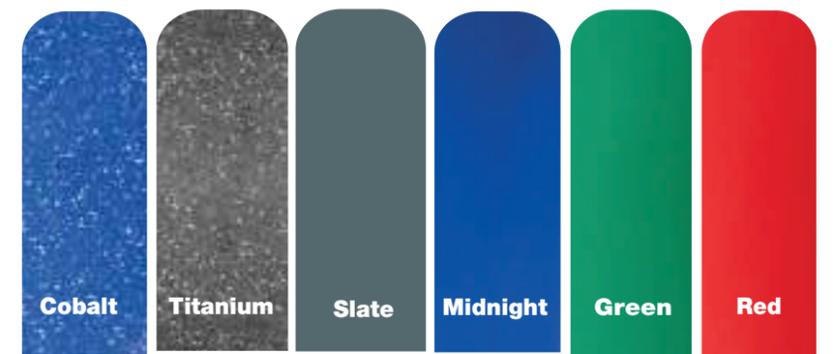
### CUSTOM PRODUCT OPTION

- Suitable for areas that are complex in shape and construction.
- Ideal for inlaid or wall to wall installations.
- Ideal for facilities that require multiple installations at any one time.
- Available with a range of edging options that helps tailor Dycem to your individual needs.
- Expected life cycle efficiency (if maintained correctly as per manufacturer's instructions) for 3 - 5 years.
- **Standard 12 month product warranty offered from date of installation.**



- Simple centred solution
- Dirty/Clean side two - tone options
- Ideal for Airlocks, Air showers and Step over benches
- Perfect for CNC to ISO 4 +

CZ01 Colours



# CZ02 WORKZONE

## FOR LARGE TROLLEYS, PALLET TRUCKS AND FORK LIFTS

CZ02 has been specially designed to remove contamination from areas subject to heavy wheeled traffic. It effectively attracts, collects and retains contamination from the wheels of forklifts, pallet trucks, large trolleys and carts, preventing particles and microbes from getting into your critical areas.

### OPTIONS

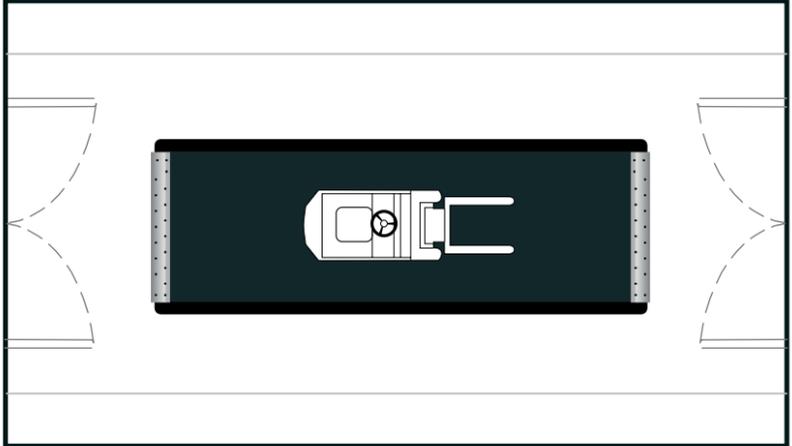
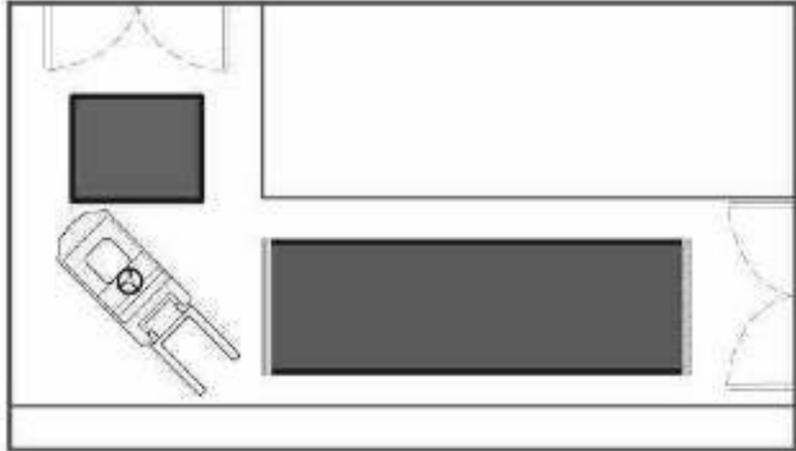
CZ02 has the flexibility to be installed into in a variety of heavy duty areas, it is accompanied by either a heavy duty aluminium or low profile food grade stainless steel option. These are illustrated in this brochure and can be demonstrated by our contamination control specialists.

### BENEFITS

- Prevents over 99% of contamination from entering your critical area.
- It effectively attracts, collects and retains contamination from the wheels of forklifts, pallet trucks, large trolleys and carts.
- Large sizes available to ensure maximum decontamination of wheels.
- Flame retardant option available.
- Comes complete with two different edging options: heavy duty aluminium edging or a lower profile stainless steel option.
- Coving and inlaid options available.
- Periodic replacement or service contract available.
- Masking available - to hide contamination once on Dycem.



# PRODUCT OPTIONS AVAILABLE

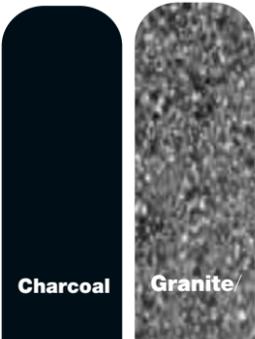


### CUSTOM PRODUCT OPTION

- Suitable for areas that are complex in shape and construction.
- Ideal for complex inlaid or wall to wall installations.
- Ideal for facilities that require multiple installations at any one time.
- Available with a range of edging options that helps tailor Dycem to your individual needs.
- Expected lifecycle efficiency (if maintained correctly as per manufacturer's instructions) for 3 - 5 years.
- **Standard 12 month product warranty offered from date of installation.**

- Centred Solution
- Ideal for heavy duty zones
- Ideal for facilities that require multiple installations at any one time.
- Material Airlocks, Primary Packaging and Goods/Warehouse
- Can be fitted into CNC - ISO 4 +

### CZ02 Colours



# CZ01 CZ02 Floating System

## FOR PEDESTRIAN AND LIGHT WHEELED TRAFFIC

CZ01/CZ02 Floating System is installed onto a 1.2mm (1/16") thick isolator membrane, the floating floor system allows the flexibility of having Dycem self installed or laid loose.

The underside of the floating floor system is an impervious, non-absorbent vinyl layer, resistant to moisture and containing multiple peduncles in order to minimise subfloor show-through, maintain rigidity of the Dycem product and ensure firm grip to the subfloor when in use.

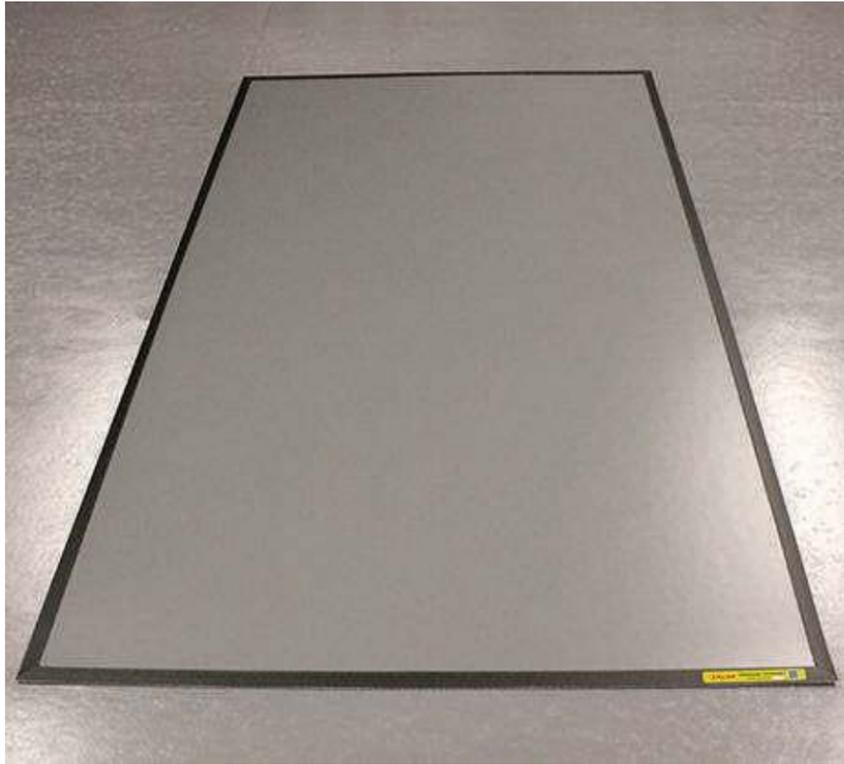
### APPLICATION

This application is suitable in locations more suited to a product where long term adhesion to the subfloor is not possible. The floating floor system is ideal for a range of smooth and rough subfloors and is easily self installed in a matter of minutes, eliminating the need for any lengthy installations.

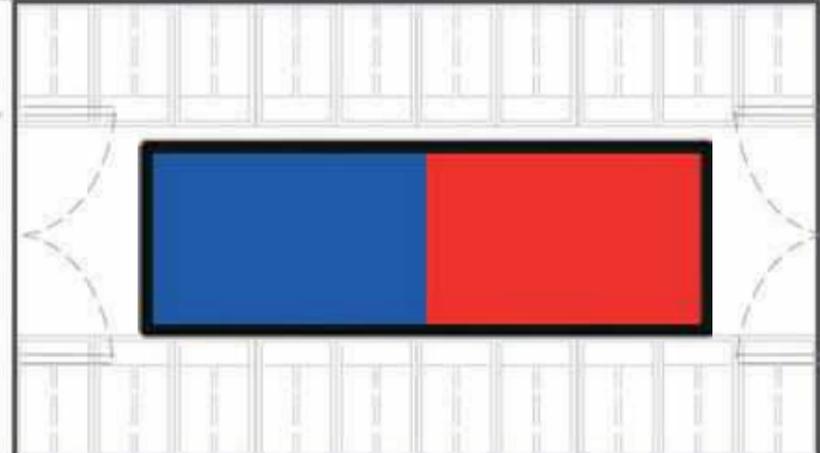
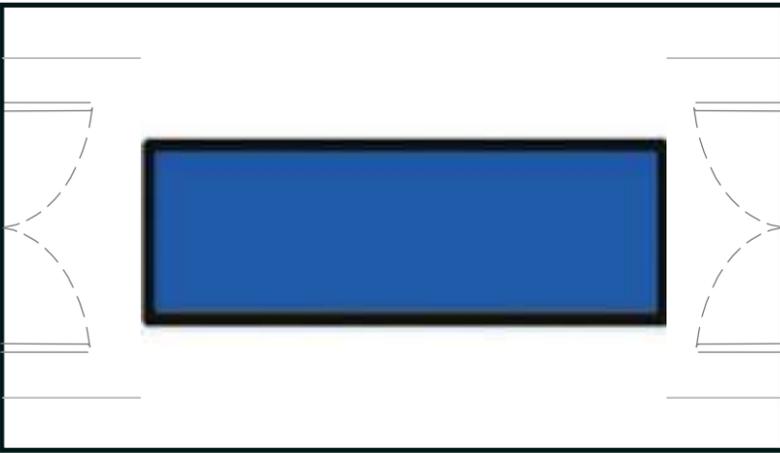
Tip: When using this system within your facility, it is extremely important to regularly clean not only the surface of the Dycem, but also the underneath. This will ensure that no microbial growth occurs underneath the system whilst in use.

### BENEFITS

- Available in two tone
- Ideal for areas that can't be wet cleaned
- Easily removed to other areas for cleaning and drying



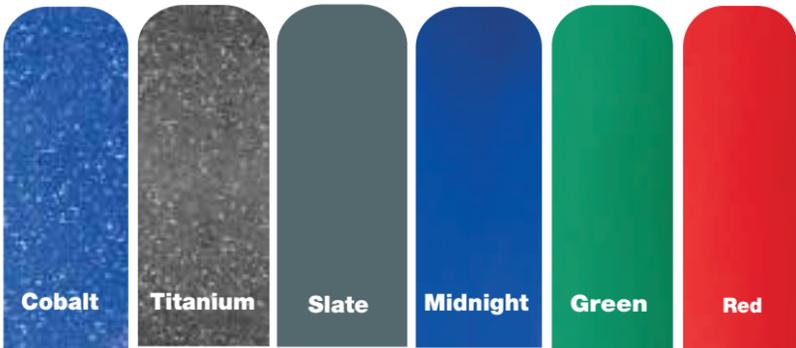
## PRODUCT OPTIONS AVAILABLE



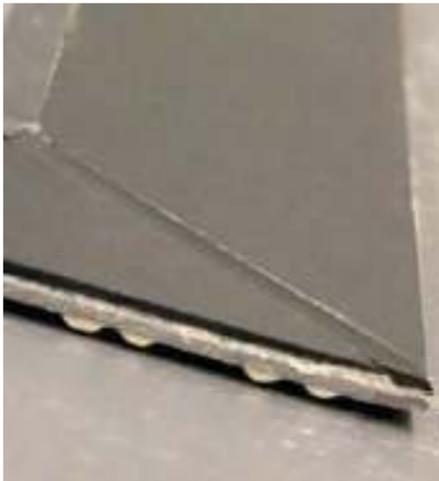
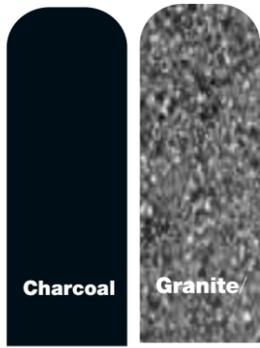
### STANDARD OPTION

- Set- Sized, ready-made, self installed system
- ideal for temporary project based scenarios and sites under construction
- ideal for controlled environments
- Perfect for transitional periods in between fitting of CZ01/CZ02 fixed solutions

### CZ01 Colours



### CZ02 Colours



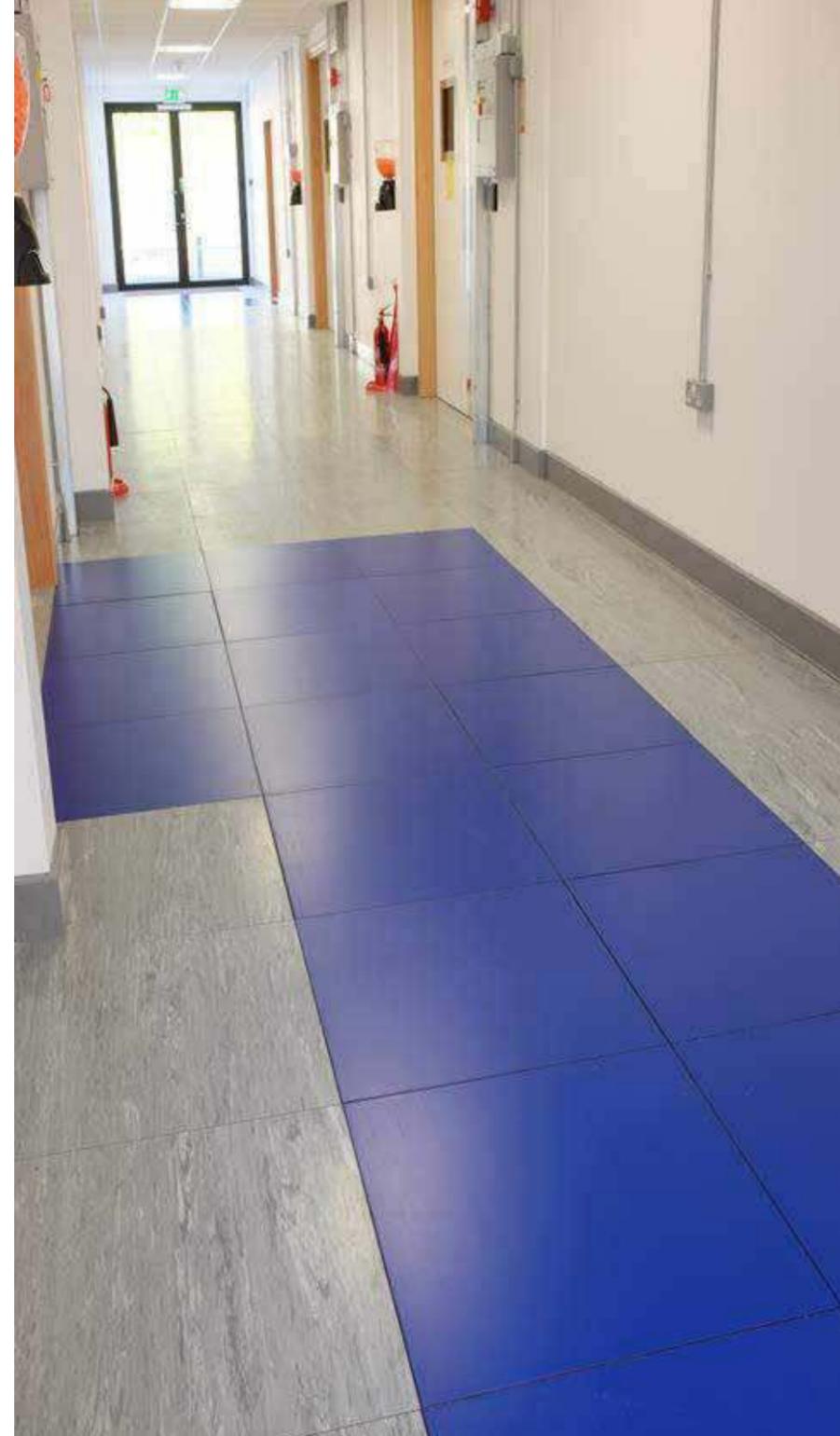
## OTHER SOLUTIONS



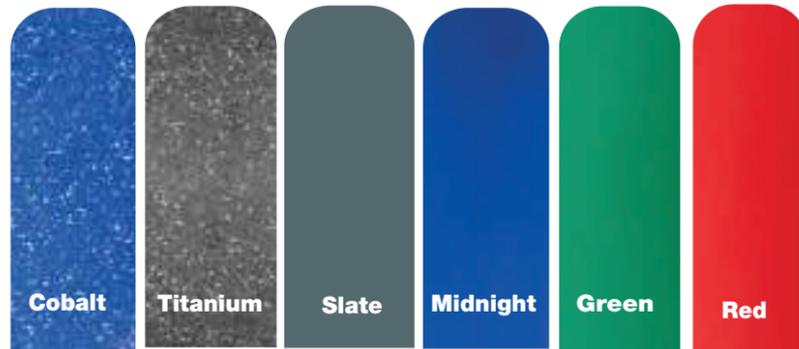
### RETRO-FIT PANELS/IT TILES

A retro fit access tile option where Dycem can be easily and quickly installed on top of your existing raised access flooring and comes complete with an outer edge system to allow unnoticeable transition on and off the area.

- An inlaid access tile option where tiles containing pre applied Dycem replace existing tiles in your facility. This is an ideal solution if there is a need for a seamless flooring solution and access to cabling is required regularly.
- A retro fit access tile option where Dycem can be easily and quickly installed on top of your existing tiles and comes complete with an outer edging system to allow unnoticeable transition on and off the area.



CZ04 Colours



## OTHER SOLUTIONS

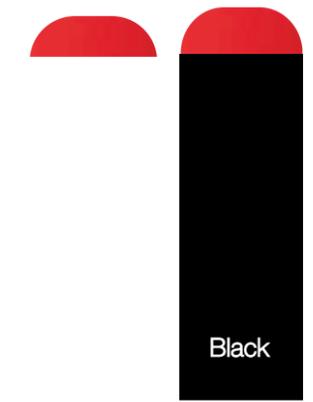


### BENCH MAT

- Non-slip mats prevent the movement and loss of small components.
- Improves accuracy, precision and assembly time.
- ESD option available
- Non-particulating -HelmkeDrum Test.
- Set size or available in rolls
- Approved for use in all classes of cleanrooms, including microelectronics, micro mechanics, semi-conductor, pharmaceutical, biotech and medical device and watch manufacturing companies



CZ01 Colours



# STANDARD FINISHING SYSTEM WITH INLAY

CZ 01 CZ 02

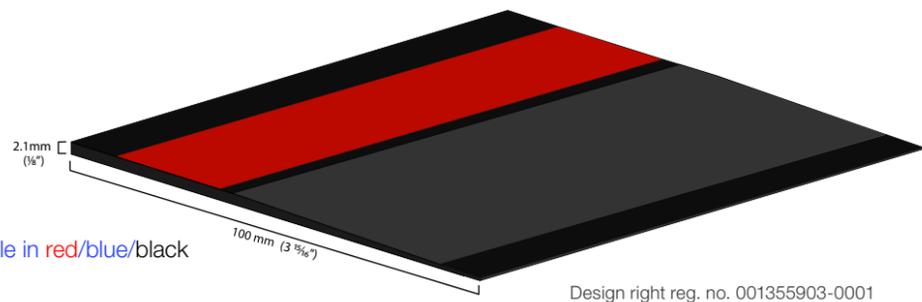


## DESCRIPTION

Our standard edging strip is anti-microbial and comes in a 100mm (3 15/16") width. Additionally, the edging comes with an anti-slip feature to ensure safe usage when installed within your facility.

## APPLICATION

Dycem standard edging system is fitted with a double sided adhesive. It can be hot or cold welded and sealed.

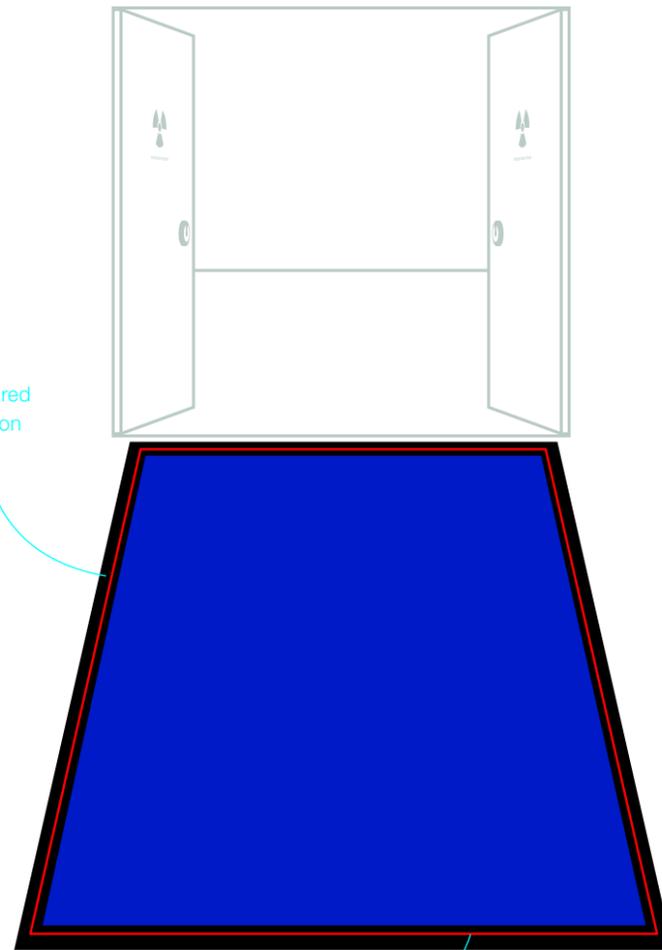


Available in red/blue/black

Design right reg. no. 001355903-0001



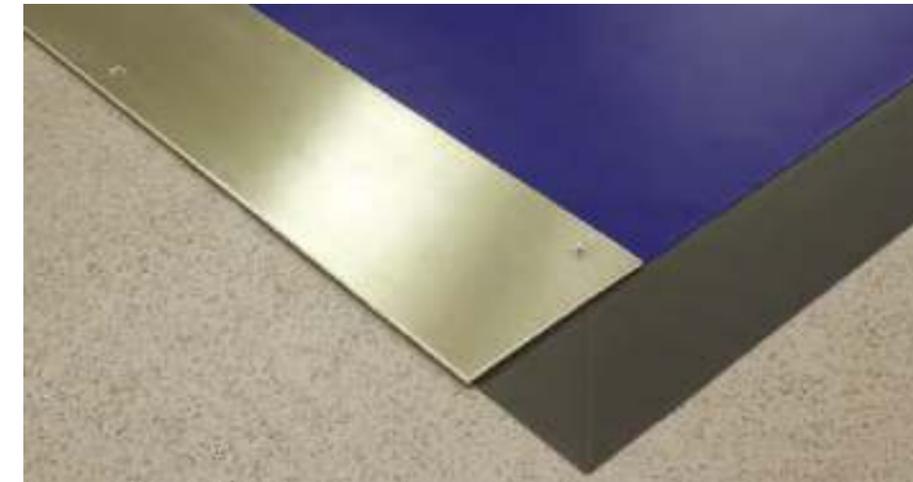
Diminishing edging strip with a co-extruded solid red band for clear demarcation



Edging no wider than 100mm (3 15/16") and sealed edge to edge - giving you 100% contact area with Dycem

# HEAVY DUTY FINISHING SYSTEM

CZ 02



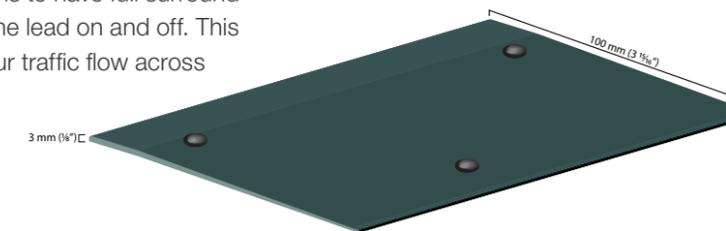
## DESCRIPTION

The food grade 3mm (1/8") thick stainless steel option is a great complement to the CZ02 product offering. Due to its low profile nature, travelling on and off Dycem is seamless for any wheeled traffic type.

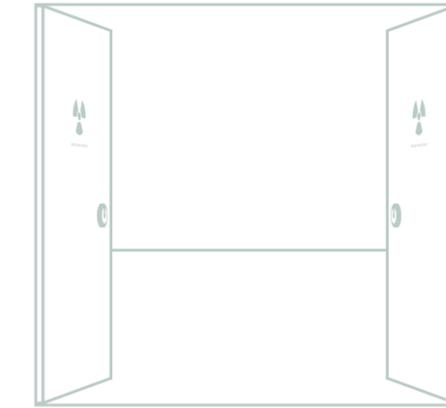
## APPLICATION

Screwed firmly to your subfloor this edging solution is best applied in areas of high traffic flows and weight i.e. Pump trucks and forklifts.

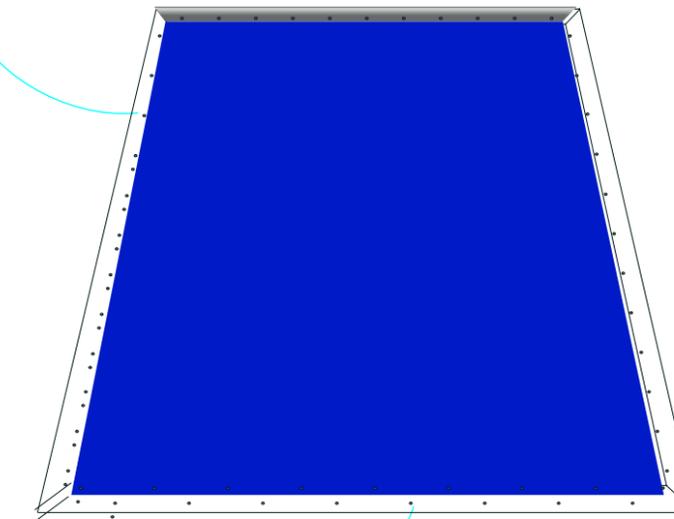
There are options to have full surround edging or just the lead on and off. This depends on your traffic flow across the Dycem.



Mechanically fixed through the Dycem and subfloor at two separate points. Making the area strong and durable through its life cycle.



Low profile, ensuring transition on and off the Dycem area is seamless.



## OUR INLAID SOLUTION

### INLAID SOLUTION (IS1)

Dycem inlaid and hot weld sealed into a colour matched retro fitted vinyl or safety floor. This solution offers the most seamless transition on and out of Dyce's contamination control flooring system.

**TIP:** Ideal solution for installations at design and build phase of a facility.

### COLOUR

Standard Dyce colours and colour matched vinyl or safety flooring.

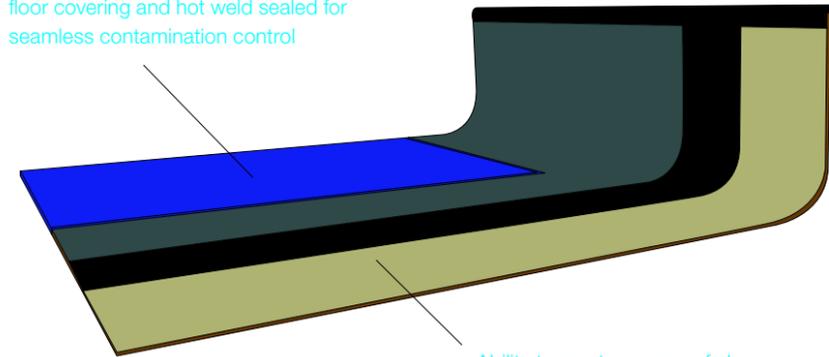
### APPLICATION

Colour matched vinyl or safety flooring is fitted to the existing subfloor using double sided adhesive. Dyce is inlaid, hot welded and covered up existing walls to create a water tight solution. The area is finished off with a gentle diminishing edge to create a seamless transition onto the area (if required).

### EDGING PRINT OPTIONS

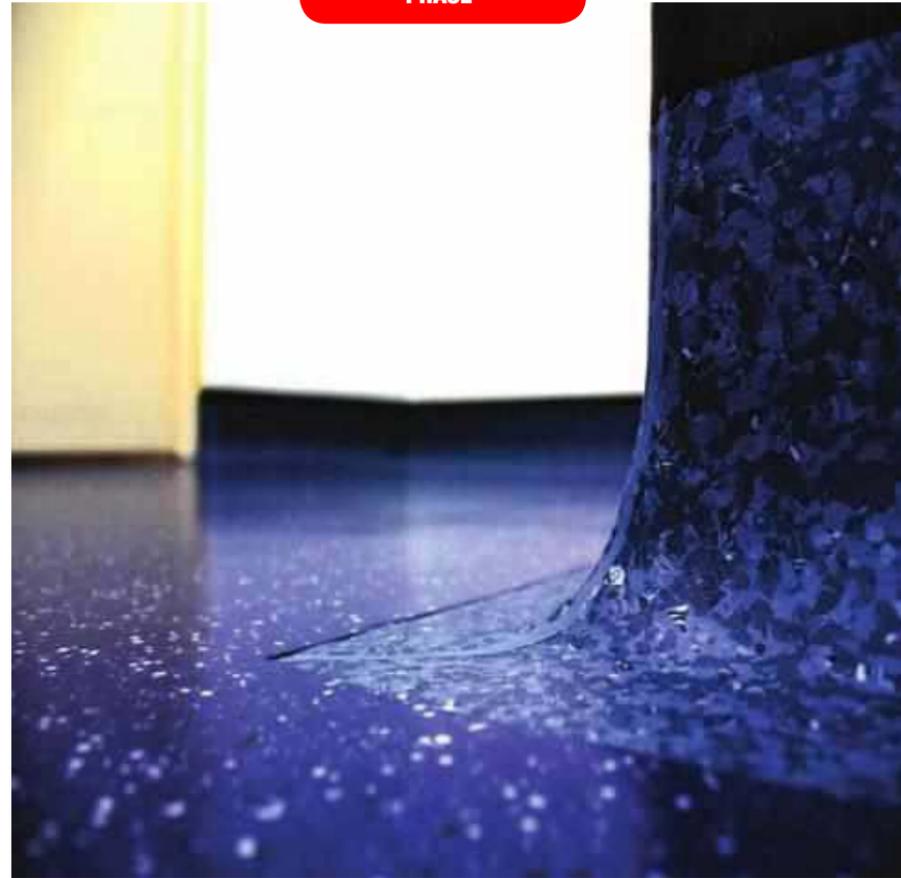
Standard Black, White and Red Diminishing edging. Bespoke options available.

Dycem inlaid into applied secondary floor covering and hot weld sealed for seamless contamination control



Ability to create an area of clear demarcation - installed, causing no damage to your subfloor

**IDEAL FOR NEW BUILDS**  
OUR INLAID SOLUTION IS WHERE DYCEM CAN BE SPECIFIED INTO THE FLOOR AT THE ARCHITECTURAL/BUILD PHASE

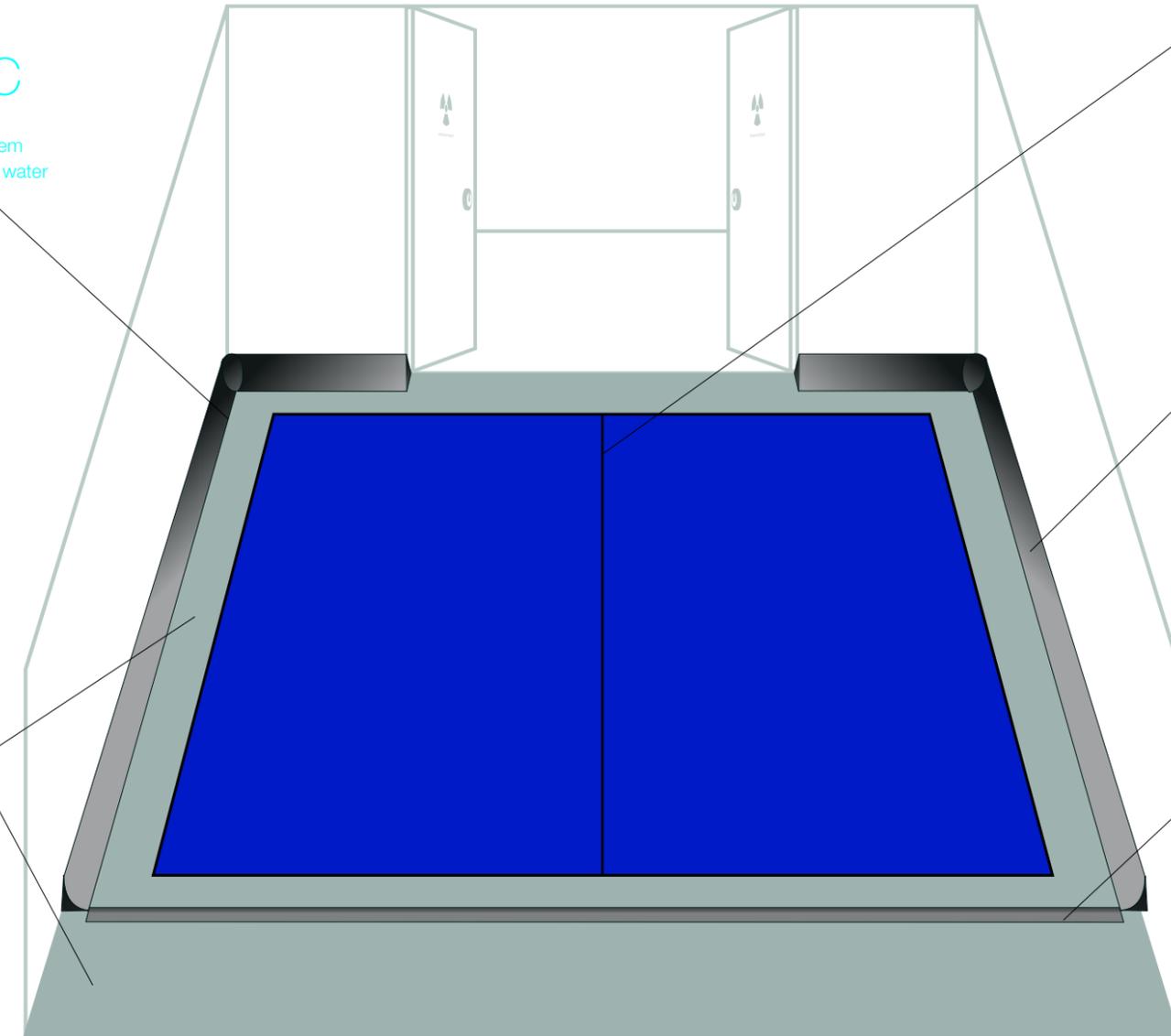


CZ 01 CZ 02

## INLAID SCHEMATIC

Hot welded joint between Dyce and matched vinyl to create a water tight and impervious seal

Either a colour and floor type match to blend in with existing subfloor or completely different to create a demarcation zone



Hot welded joints on areas wider than 2m to create a water tight and impervious seal

Coving constructed from existing wall to floor OR Moulded to the existing floor to wall coving

Diminishing strip for seamless transition onto your existing subfloor

# SERVICE CONTRACT AND EXTENDED WARRANTY

## LET US TAKE CARE OF YOUR DYCEM SYSTEM

With Dycem Contamination Control Zones in place you can relax in the knowledge that the threat of contamination is greatly reduced.

Dycem is internationally recognised under the ISO 9001: 2008 and ISO 14001: 2015 standards, assuring you of top quality products, services, continuity of supply and support.

To maximise the effective working life of Dycem, we recommend our total service package.

The Dycem total service package comprises of:

- Assistance throughout the life cycle of the Dycem.
- Dedicated and experienced Dycem service technicians.
- Our recommended cleaning products.
- Training for your cleaners (cleaning regimes and procedures).
- Regular particle collection efficiency tests and reports.
- Deep clean to rejuvenate particle collection efficiency.
- Highly responsive telephone customer support.
- Minor repairs to your Dycem system if damaged.

### TIP

For any inquiries - Please contact our customer services department for more information.



BOOK YOUR FREE AFG TEST HERE



# CLEANING Support



### CLEANING DYCEM

Cleaning Dycem is a very quick and easy process. Simply clean as part of your regular wet cleaning schedule.

We have specially researched and tested cleaning solutions compatible to use with Dycem to ensure longevity of your installation throughout its lifecycle.

Please contact us for more information on our cleaning solutions or other recommended products.

### CLEANING WIPES

At times some areas of Dycem may become more heavily saturated and ingrained with contamination than others.

Dycem offers specially designed cleaning wipes which help the removal of heavily ingrained contamination.

Just agitate the contamination on the surface with a damp mop and squeegee dry. This physically removes the dirt and water residue leaving Dycem immediately ready for further use.

### STEAM CLEANING

In areas of extremely high traffic where gross saturation occur, Dycem offers a steam cleaning service to help eliminate and lift ingrained contamination (Only available in certain countries, please ask for more details).

**TIP**  
Between cleaning Dycem can look dirty. This is good news - otherwise particles and microbes would be in your critical areas with the risk of contaminating your products and processes.

# RECOMMENDED INSTALLATION GUIDE

	Inlaid	Loose laid	Access tile installation	Temporary Solutions	Dycem coving	Underlayment	Standard Finishing System with Inlay (FSIN)	Protective Overlap Finishing System (PRO V4)	Heavy Duty Finishing System (HDV1)
CZ 01 Cleanzone	●			●	●	●	●	●	
CZ 01 Floating System		●		●	●	●	●	●	
CZ 02 Workzone	●				●	●	●		●
CZ 02 Floating System		●			●	●	●		●
CZ 04 Panels			●						

NOTE: All Dycem must be installed onto/into smooth, dry subfloors and installations are subject to a site survey  
\*Flame retardant options available

### A SOLUTION FOR EVERY SCENARIO

The installation guide above demonstrates which product and finishing system is compatible and suitable for your facility.

Not sure which combination is best for you? Allow our contamination control specialists to visit and conduct a site survey to ensure the best solution is used and tailored to your individual needs.



# FINISHING SYSTEMS

Dycem provides a range of finishing systems of varying sizes for an added high exterior appearance and to further address the needs of your facility. The finishing systems have the ability to be supplied plain or with our standard print.

Where colour coded zones are required the edging can be printed in any colour and it can also be fully branded with company logos and details.

# AUDIT COMPLIANCE GIVING YOU TOTAL PEACE OF MIND

With audit compliance an important commercial factor in critical environments, Dycem has developed technology that can reverse print the edging system with full audit details. Clear demarcation and zone guidance signage is also printed on the edging so that decontamination zones are visible to staff and offer full health and safety compliance.

Dycem manufacture labels which can be printed complete with your next date of installation and full audit details. The labels ensure optimal compliance with Standard Operating Procedures (SOPs).



# VISUAL COMMUNICATION

Floor graphics are a vital communication tool positioned just before a Dycem zone to warn personnel they are entering a decontamination zone.

Available in a range of languages, the graphics can be manufactured to your specification, bespoke printed with your company logo. The signage is made from the same material as the floor edging and is also fully sealed to the floor. All our logos are Antislip, R10 and DOA compliant.

### ORDER IN 6 EASY STEPS

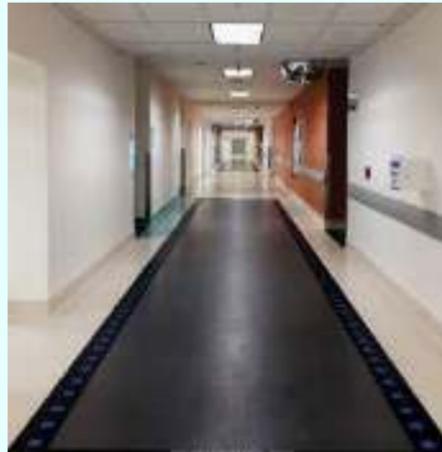
- You supply us with an illustrator or EPS file of your image at a minimum resolution of 300dpi.
- Tell us the size of the area you need to cover and how many you need.
- We advise you of the price and payment.
- You place your order and receive a PDF.
- You approve the PDF and choose either a satin or gloss finish.
- Your graphics are ready within 14 working days of being approved.



## DYCEM FLOORING IN USE

Having confidence in a well-proven and accepted product provides peace of mind. So does knowing that so many companies around the world have been using CleanZone technology from Dycem for many years. Here are some case studies from six different industries.

### Pharmaceutical



**Challenge** To maintain high standards in a number of Class 100 clean areas within a large facility producing a range of diabetic-related products with 24-hour shift patterns and a high volume of pedestrian traffic.

**Solution** Dycem



### Semi Conductor



**Challenge** Phillips' camera division uses Dycem WorkZone to help prevent contamination being brought into the gowning areas and assembly areas.

**Solution** Dycem



### Medical Device



**Challenge** Ensuring a industry innovator, whose firm's products are continually developing to become more and more versatile for their end-users, a system in a facility changing booth

**Solution** Dycem



### Automotive Component



**Challenge** As manufacturers and suppliers to the automotive industry, procedures are required to control contaminants which have a dramatic effect in terms of product yield and reduced reworks.

**Solution** Dycem



### Food Hygiene Production



**Challenge** To find a cost effective solution to help prevent contamination from going into the critical dairy product production areas.

**Solution** Dycem



### Data Centre



**Challenge** A challenge RBS was looking for ways to help prevent dust from entering the data centre. Without protection, there is a huge risk of data loss and hardware failure. Dust can cause irreversible harm to computers.

**Solution** Dycem



## CLEANZONE TECHNOLOGY IN SUMMARY

- Dycem's High Performance Contamination Control Flooring are easy to use and provide a simple, long lasting and highly effective method of minimising foot and wheelborne contamination.
- We have a comprehensive sales, service and distribution network covering more than 50 countries.
- We are confident of offering you genuine assistance on the products most suited to your facilities.
- Dycem is internationally recognised under the ISO 9001:2015 standard.
- Dycem is proud to have attained the ISO 14001:2015 standard demonstrating that an effective environmental management system has been successfully implemented.

### SOME OF THE COMPANIES THAT ARE BENEFITTING FROM DYCEM

British Airways : Teva: Infineon : Addenbroskes Hospital : BMW Group : Samtel Electronics : Bristol Myers Squibb : Lexmark : Novartis : Aventis : Sanofi-Synthelabo : HP Invent Amcor Technologies : Bookham Technology : Lilly : Orchid Chemicals : Pioneer Electronics : Pfizer : Rolls Royce : Honeywell : Omron : Kodak : Astra Zeneca : BAE Systems G E Healthcare : University of Cambridge : Abbott Laboratories : Ethicon : Baxter Healthcare : Moser Baer : Fujitsu : Hitachi Display : Boots plc : Atmel Semiconductors : Intel Boston Scientific : Tyco Healthcare : Millipore : Schering Plough : Elan : Transitions Optical : Alcon Laboratories : Skyworks : Zyco : University of London : St Bartholomews Hospital International Rectifier : Papworth Hospital : Charm Sciences : Mitsubishi : Ford Motor Company : Closure Medical : National Blood Services : B Braun : Oxford University : Parker Hannifin Boehringer Ingelheim : Carl Zeiss : Bio Products Limited : QMC Biomedical Services : Epcos : Bosch : Haupt Pharma : Becton Dickinson (BD) : Merck Sharp & Dohme : Akzo Nobel : Schwarz Pharma : Fresenius : Wilson Cook : QE Hospital Welwyn : Osram : National Semiconductors : Williams Formula 1 : St Gobain : Hoffman LaRoche : Merck Electronic : Matsushita (Panasonic) : CTS Microelectronics : Meddimune : BPAS : Tyco Electronics : Micronclean : Wellcome Trust : Cambridge Antibodies Technology : Chartered Semiconductors : Behring : Roxanne Laboratories : ST Microelectronics : Hoya : Plastic Omnium : Hutchinson Technology : Clariant : Oxoid : Fisher Scientific : Nypro : Ortho Clinical Diagnostic : De Puy : Tutogen Medical US Inc. : Applied Materials : Astrium : Sanmina : Valeant : Coopervision : Bausch & Lomb : Freescale : Hynix : Chi Mei Optoelectronics Corporation : TSMC : Janssen : Rentschler Biotechnology : AEA Technologies : Atmel Smartcard : University of Wales : Singleton Hospital : St Georges Hospital Tooting : SSL International : Ipsen Biopharm : Wokhard :

AMD Biomerieux : Cisco Systems : Ericsson : Stryker Howmedica : Covance Laboratories : Leo Laboratories: Fujisawa : Seagate : Allergan : Organon : Macfarlane Smith : AMI Semiconductor Analog Devices : Hella Manufacturing Ltd : ISRO : Biomet Merck : University of Glasgow : Southern General Hospital : IBM : Timex Philippines : Reckitt & Benckiser Dow Corning : Velindre Hospital : University of Bath : Moog Controls : G & M Procter : Aston Martin : Dominik Hunter : Patheon : Western General Hospital : Zarlink Semiconductors Autotype International Ltd : Photonics : Saad Specialist Hospital (Saudi Arabia) : Philips Semiconductor : Guardline Technology : X Fab : Smiths Industries : Cardinal Health Hammersmith Hospital : University of Bristol : Serum Institute (India) : West Pharmaceuticals : Smith & Nephew : AIS/Countdown Ltd : University of Edinburgh : Merial Animal Health Ltd Alpha : Procter & Gamble : Chiron Vaccines : Jaguar Cars Ltd : Vikram Space Centre : JCT Electronics : Ecover FM : Johnson & Johnson : Rohm & Dass : E Merck : Vetter-Pharma Heinz : Stoke Mandeville Hospital: Orange : H M Government : National Space Laboratories UK : NASA : Nokia : Bayer : Arla : Sigma Aldrich : Lockheed : Dowty Aerospace : Johnson Matthey : Mercedes : Wacker Semiconductors : Canon : Racal : Nestle : Medtronic : Dumex (Indonesia) : Tower Semiconductors : Raytheon Systems : Fairchild Semiconductors : 3M Healthcare : Genzyme : Marconi : NEC : Samsung : Texas Instruments : RPL Containers : Komag : Genetech : Kabi Pharma : Abbott Murex : Thomson : Maxell Europe : Du Pont : Remel Leica Microsystems : Vistacom : Excel Logistics : Astra Zeneca : BAE Systems



## TESTIMONIALS



“Independent tests carried out at GlaxoSmithKline prove that Dycem High Performance Contamination Control Zones prevent over 99% of all viable and non-viable foot and wheel borne contamination from entering a critical area.”

*Dr Caroline Clibbon, Senior Microbiologist, GlaxoSmithKline, UK*



“We have recognized that the Dycem Zones work very well - confirmed by measurements made by the manufacturer’s representative - our powder remains in the zone and does not spread outside the production areas. I can only recommend the installation of Dycem zones—if you adhere to the rules for cleaning them, the effect is really noticeable.”

*Sylva Balcárková, a Teva shift leader*



“Dycem High Performance Contamination Control Zones are great at trapping contamination and helping to clean-up various areas in the paint department, preventing contamination from affecting the paint finish.”

*Gary Appleton, Ford*



“Dycem is the most cost effective means of controlling contamination at floor level and preventing contamination from getting into critical development work.”

*David Williams, Honda*



“We have used Dycem for over 6 years, it is the most effective and cost effective method of preventing contamination down to less than 5 microns and stops it from getting into our photo mask manufacturing facility.”

*Susan Jaynes, Project Engineer Photonics, Wales*



“We have calculated that even a short time after installation we have saved money by using these products. I would like to add that the customer service has also been exceptional.”



“Since replacing Peel off Mats we have seen a noticeable improvement in static charge within the labs and surrounding areas. We also found that a lot of dirt was building in between where mats were ganged together. A much more effective method of prevention.”



“We invested in Dycem some five years ago to protect our critical environments i.e cleanrooms and camera assembly. Owing to the success of our manufacturing we have now built new cleanrooms and improved the cleanliness of our controlled areas. The improvement in those areas is very much down to the Dycem product.”

*Mark Wells, Sony, Wales*



“Dycem is used outside of theatres and all the users, especially orthopaedic staff are very happy with it, seeing the levels of dust and dirt it removed prior to their critical environments.”

*Gerry Vellers, Royal Marsden Hospital, Surrey*



“We have used Dycem for many years in our aseptic processing areas. We use it in transfer hatches (for wheels) and at entrances and exits to restrict the outside micro-organisms from getting into the facility.”

*David Cope, Kings College Hospital*



“We have been using and testing Dycem in our Pharmacy, Sterile and Aseptic areas. The tests carried out have established the effectiveness of Dycem in controlling microbial contamination and potential cross contamination from feet and wheels.”

*Christina Lowe, Singleton Hospital, Swansea*

## INDEPENDENT STUDIES SCIENTIFICALLY PROVEN TO BE THE BEST

Dycem has an extensive library of studies written independently. Here are just a few:

An evaluation of the effectiveness of polymeric flooring compared with “peel-off” mats to reduce wheel- and foot borne contamination within cleanroom areas.

*Caroline Clibbon, Research Microbiologist at GlaxoSmithKline, Ware, Hertfordshire, UK*

The nature and the environmental impact of control of floor level contamination.

*Gerry Prout, Kennet Bioservices Ltd, Swindon, Wiltshire, UK*

An evaluation of polymeric flooring and its effectiveness in controlling airborne particles and microbes.

*Larry S Ranta, M-Con Technologies, Mission Viejo, CA 92691*

A comparative Study of peel off mats and polymeric flooring assessing their particle removal properties.

*Dr. Tim Sandle, Microbiologist*

A final floor show for bugs.

*Dr. Tim Sandle, Microbiologist*

A comparative study of two floor-cover materials in control of foot- and wheel-borne contamination.

*Gerry Prout, Kennet Bioservices Ltd, Stratton St Margaret, Wiltshire, UK*

Boehringer Ingelheim Manufacturing Site, Bracknell, Berks Installation of Dycem Polymeric Flooring.

*S. Faizi - QC Microbiologist L.Southerby - QZ Microbiologist Team Leader*

Particle Shedding from Tacky Mats.

*John F. O'Hanlon Colleen E. McGowan Lisa M.Gustafson, Department of Electrical and Computer Engineering, University of Arizona*

Clean Manufacturing: High Tack Polymeric Flooring.

*Thomas Mulligan, May 2003*

Stamping out particles

*Dr. Geoffrey Barrett*

Polymeric flooring demonstrates particle retention properties.

*Dr. Geoffrey Barrett*

The evaluation of the Dycem screen for removal of microbial contamination from dust-laden surfaces.

*Dr. N.A Hodges B.Pharm. Ph.D.M.P.S Department Of Pharmacy, Brighton Polytechnic, Brighton*

Bacterial contamination control mats: a comparative study.

*Microbiology Department, St David's Hospital, Cardiff*

A new concept in foot borne contamination control.

*Journal of the Society of Environmental Engineers, December 1976*

The use of polymeric flooring to reduce contamination in a clean room area.

*Dr. Tim Sandle, Microbiologist*



Call Dycem now for a site survey or to request a copy of one of the studies mentioned above:

### Dycem Ltd Europe

Ashley Trading Estate, Bristol BS2 9BB, United Kingdom  
Tel: +44 (0)117 955 9921, Fax: +44 (0)117 954 1194  
uk@dycem.com

### Dycem Corporation

83 Gilbane Street, Warwick, RI 02886, USA  
Tel: +1 1-800 458 0060, Fax: +1 401 739 9634  
info@dycemusa.com

1725 Hughes Landing Blvd,  
Suite 865, The Woodlands,  
Texas 77380 USA,  
info@dycemusa.com

### Dycem Asia

Unit 1205 ALPAP II building, Trade st. cor.,  
Investment drive Madrigal Business Park, Brgy. Ayala,  
Alabang, Muntinlupa City, Philippines  
Tel: +63 2 586 8705  
info@dycemasia.com



							
Fire Rating EN ISO 9239-1, EN ISO 11925-2, EN 13501-1	Slip Resistance EN 13893	Electrical Rating EN 1081, EN 1815	Thickness EN 428	Tile Size EN 427	Roll Width EN 426		
							
Total Weight EN 430	Indentation Residual EN 433	Flexibility EN 435	Density EN 436	Abrasion Resistance EN 660-2	Colour Fastness BS EN 20105	Seam Strength EN 684	Castor Chair Resistance EN 1425

### CERTIFICATION



**CE** All Dycem installed floor coverings are CE - conform in accordance with EN 14041

## ENVIRONMENT

### REDUCE YOUR CARBON FOOTPRINT WITH DYCEM

Dycem is a world leading manufacturer and supplier of contamination control floor coverings. Our flooring products are solely manufactured in the UK at our Bristol site. We recognise that environmental issues are of fundamental importance to a successful and responsible business strategy and strive to develop new and existing products with sustainability in mind, never compromising on value or performance.



### RECYCLING

- Dycem products are 100% recyclable at no charge at the end of their working life and can be recycled into less critical applications.
- All Dycem products are washable & re-usable systems. This means less wastage and a reduced carbon footprint.



### HEALTH & SAFETY

Dycem polymeric flooring is widely used in pharmaceutical, biomedical, automotive, food and healthcare industries. Dycem uses high grade raw materials to produce its floor coverings to standards that exceed all prescribed health and safety requirements.

- Safe raw materials: no heavy metals, no solvent based inks, no phthalates and components rated as carcinogenic, no formaldehydes, no PCP.
- Non-toxic, no Silicon, latex or DOP outgassing.
- There are no known hazardous components above regulatory thresholds in this product.
- Dycem materials are compliant with both REACH and the state of California proposition 65 legislation.



### ISO 14001:2015

Dycem products are certified to the environmental management standard, ISO 14001:2015 and we ensure that all of our raw material suppliers are also ISO 14001 registered or have demonstrated their commitment to the environment.



