

# HEALTHCARE

SOFT COVERING INSTALLATION SYSTEMS

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PAGE 02 **RECEPTIONS AND COMMUNAL AREAS**

PAGE 08 **CORRIDORS**

PAGE 14 **STEPS AND STAIRS**

PAGE 18 **CANTEENS AND BARS**

PAGE 22 **OPERATING THEATRES AND DIAGNOSIS ROOMS**

PAGE 28 **PATIENT WARDS**

PAGE 32 **BATHROOMS**

PAGE 36 **TREATMENT ROOMS**

PAGE 42 **ARCHIVES AND TECHNICAL ROOMS**

PAGE 46 **KITCHENS**

PAGE 48 **ADMINISTRATION OFFICES, CONFERENCE ROOMS  
AND AUDITORIUMS**

PAGE 54 **PUBLIC BATHROOMS**

PAGE 58 **TEMPORARY SOLUTIONS FOR EMERGENCIES**

PAGE 65 **INSTALLATION PROCEDURES**

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**When decorating areas and spaces in hospitals**, choosing the right flooring and wall coverings is a very important aspect that needs to take into consideration a number of different requirements. Their main characteristics are **resistance and hygiene**. At the same time, they must also help create **comfortable surroundings** for patients and hospital staff and be designed to reduce **maintenance costs** and their **impact on the environment** as much as possible. With these considerations in mind, therefore, the starting point for a well thought out design of these spaces is to opt for an **installation system that guarantees the best results in terms of aesthetics and functionality and that also maintains its durability over the years**. Resilient floor and wall coverings are often adopted by designers and chosen for various spaces and areas in hospitals.

Mapei has extensive experience and expertise in this particular field, as well as a portfolio of specific installation systems for these types of material, and is a **reliable partner for their design and installation for even the most complex applications**.

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## RECEPTIONS AND COMMUNAL AREAS

Foyers, reception areas and waiting areas are often a calling card for healthcare centres. They are the first point of contact between patients or visitors and hospital staff and must be designed to direct and channel the flow of people as they make their way into and around the building.

The reception area in particular must be easily identifiable, so such areas should be in bright colours with materials and forms that give it its own characteristic style. Access points to the main corridors branching off from the reception area must be easy to identify to make it easier for patients and visitors to find their way and for hospital staff to control their movements.

It is very important, therefore, to choose the most appropriate floor and wall covering to guarantee maximum comfort, safety and resistance to intense foot traffic and they should also have surfaces that are easy to clean and maintain.

To meet these design requirements, Mapei has the most extensive range of products for levelling off and skimming sublayers, adhesives and systems for installing any type of resilient or textile flooring and protective finishes to improve the non-slip properties of surfaces.





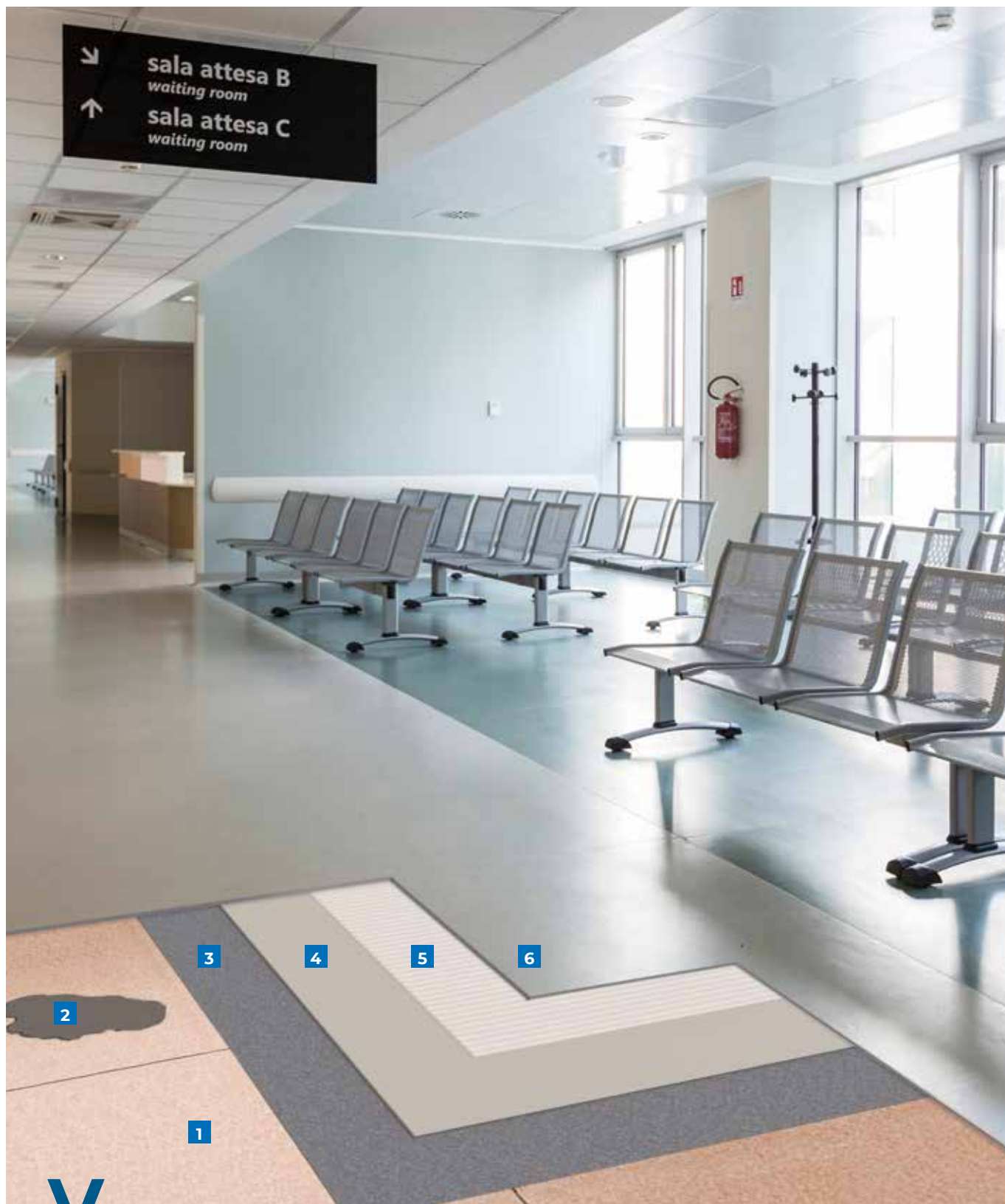
- 1** Concrete
- 2** Eco Prim T Plus
- 3** Planex HR
- 4** Ultrabond Eco MS 1
- 5** Resilient wall covering
- 6** Mapecoat Wet & Dry R11







- 1** Old levelling compound with traces of adhesive
- 2** **Planipatch Xtra**
- 3** **Eco Prim T Plus**
- 4** **Planiprep Fast Track**
- 5** **Ultrabond Eco Fast Track**
- 6** Resilient flooring

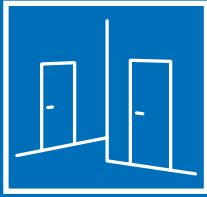


- 1** Existing flooring
- 2** Planipatch Xtra
- 3** Eco Prim Grip Plus
- 4** Ultraplan Xtra
- 5** Ultrabond Eco Fast Track
- 6** Resilient flooring



- 1 Topcem Pronto
- 2 Eco Prim T Easy
- 3 Ultraplan
- 4 Ultrabond Eco V4 SP
- 5 Resilient flooring





## CORRIDORS

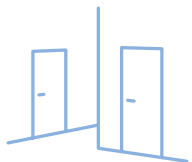
High resistance to intense traffic, high resistance to wear, scratches and stains and surfaces that are easy to maintain to reduce costs: these are the characteristics to look for when choosing flooring for these areas. “Seamless” flooring is the ideal solution to obtain maximum comfort and makes it much easier to move heavy hospital beds, while its soundproofing properties minimise noise and create less disturbance to other patients.

For this kind of setting, too, designers often go for resilient floor and wall coverings, which must be installed with systems that guarantee maximum functionality and durability over the years.





- 1 Concrete with high level of residual moisture
- 2 Eco Prim PU 1K
- 3 Eco Prim T Plus
- 4 Ultraplan
- 5 Ultrabond Eco V4 Evolution
- 6 Resilient flooring

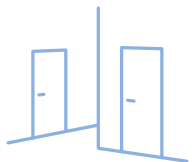


- 1 Old ceramic tiles
- 2 **Planipatch Xtra**
- 3 **Eco Prim Grip Plus**
- 4 **Ultraplan Contract**
- 5 **Ultrabond 333**
- 6 Resilient flooring
- 7 Resin
- 8 **Ultrabond Eco MS 4 LVT Wall&Floor**
- 9 Anti-impact panels
- 10 **Mapecontact Plus**
- 11 Sub-coving
- 12 Coving

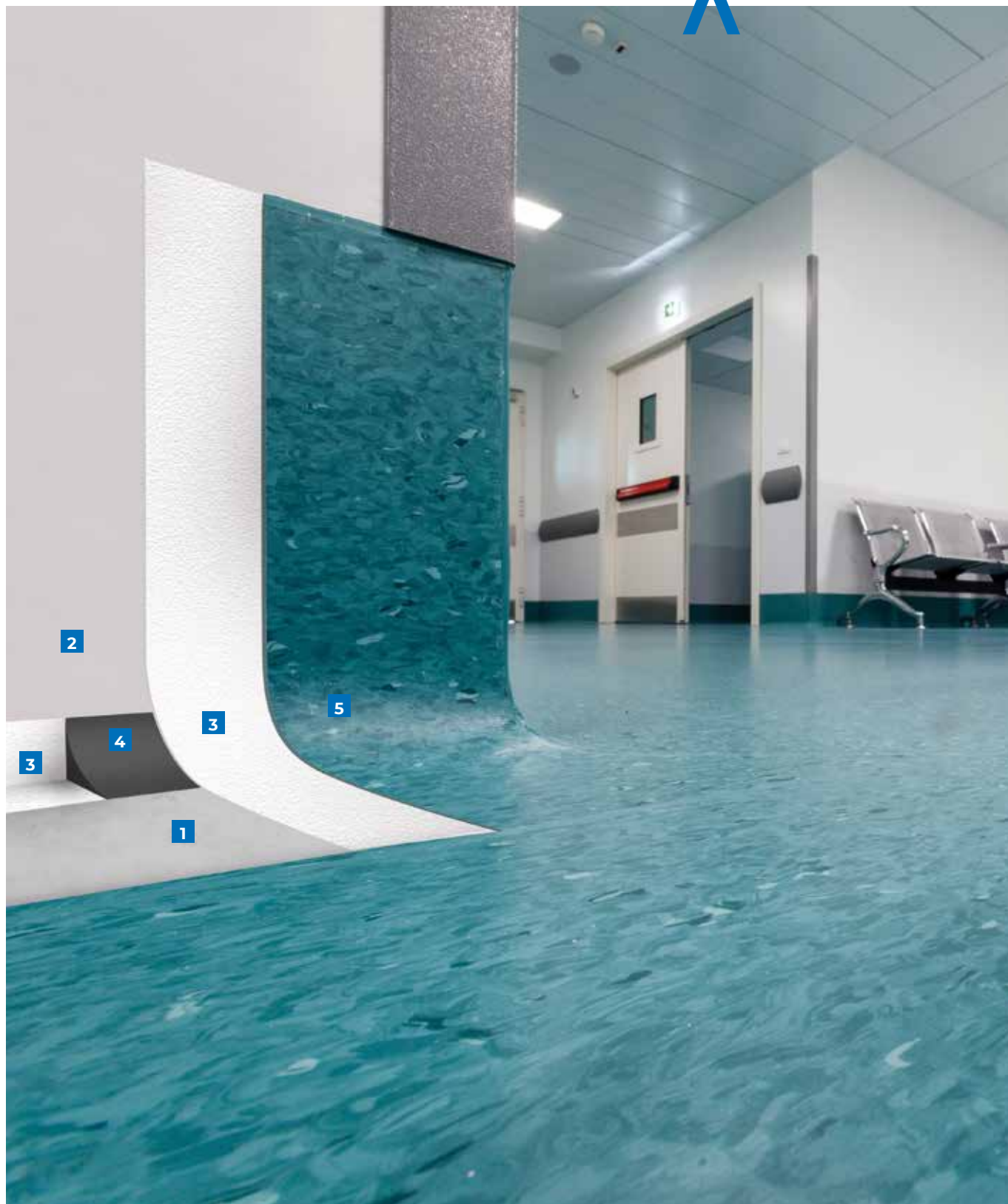


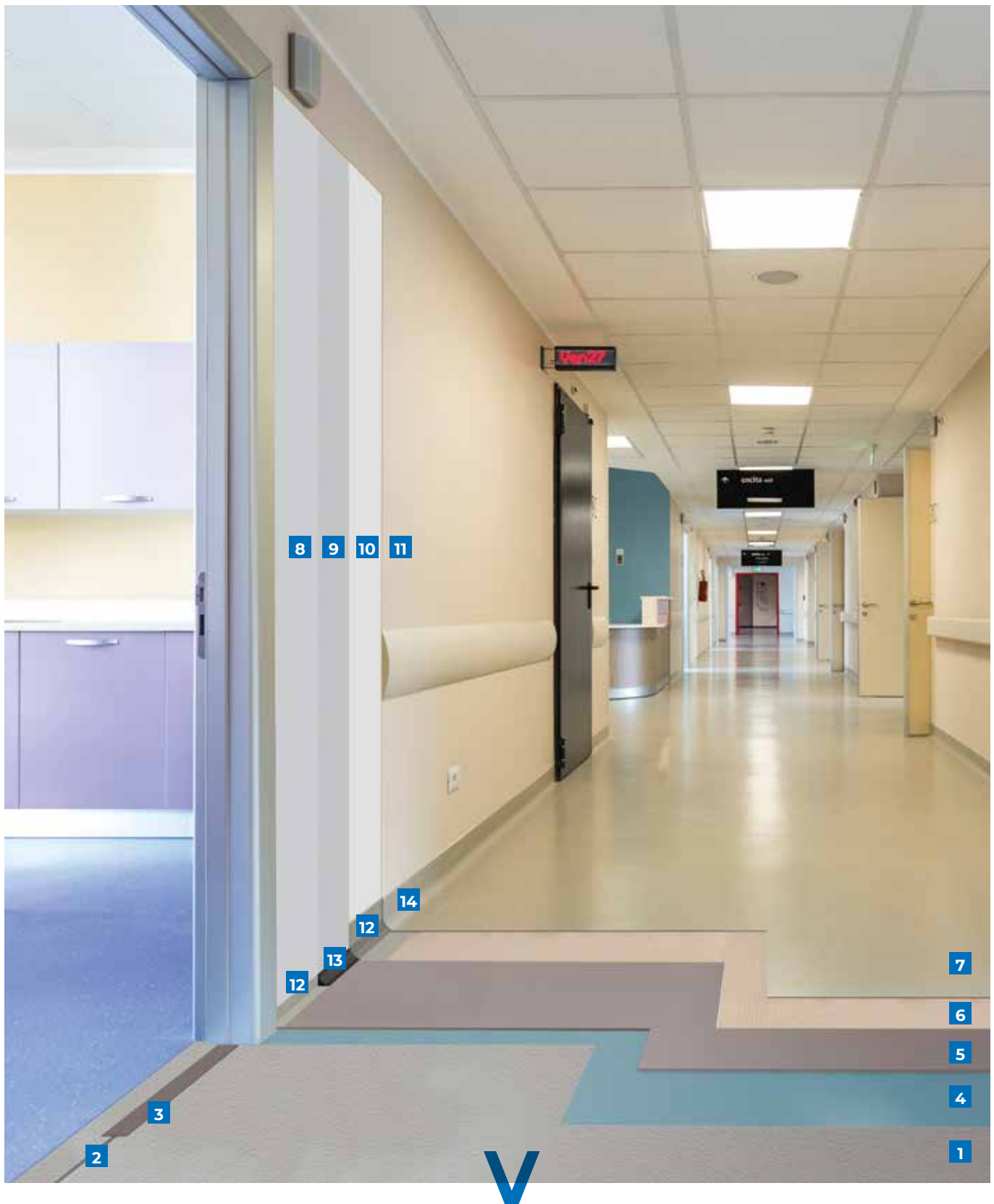




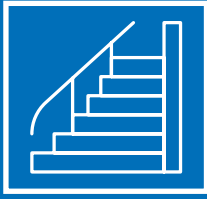


- 1** Levelling compound
- 2** Plasterboard
- 3** **Ultrabond Eco Contract**
- 4** Undercove
- 5** Cove





- |          |  |           |                         |
|----------|--|-----------|-------------------------|
| <b>1</b> | Cementitious screed with high level of residual moisture | <b>8</b>  | Plasterboard            |
| <b>2</b> | Control joint  | <b>9</b>  | <b>Eco Prim T Easy</b>  |
| <b>3</b> | <b>Planipatch + Latex Plus</b>                           | <b>10</b> | <b>Adesilex MT32</b>    |
| <b>4</b> | <b>Mapeproof Primer</b>                                  | <b>11</b> | Vinyl wallpaper         |
| <b>5</b> | <b>Ultraplan Contract</b>                                | <b>12</b> | <b>Mapecontact Plus</b> |
| <b>6</b> | <b>Ultrabond Eco 388</b>                                 | <b>13</b> | Undercove               |
| <b>7</b> | Resilient flooring                                       | <b>14</b> | Cove                    |

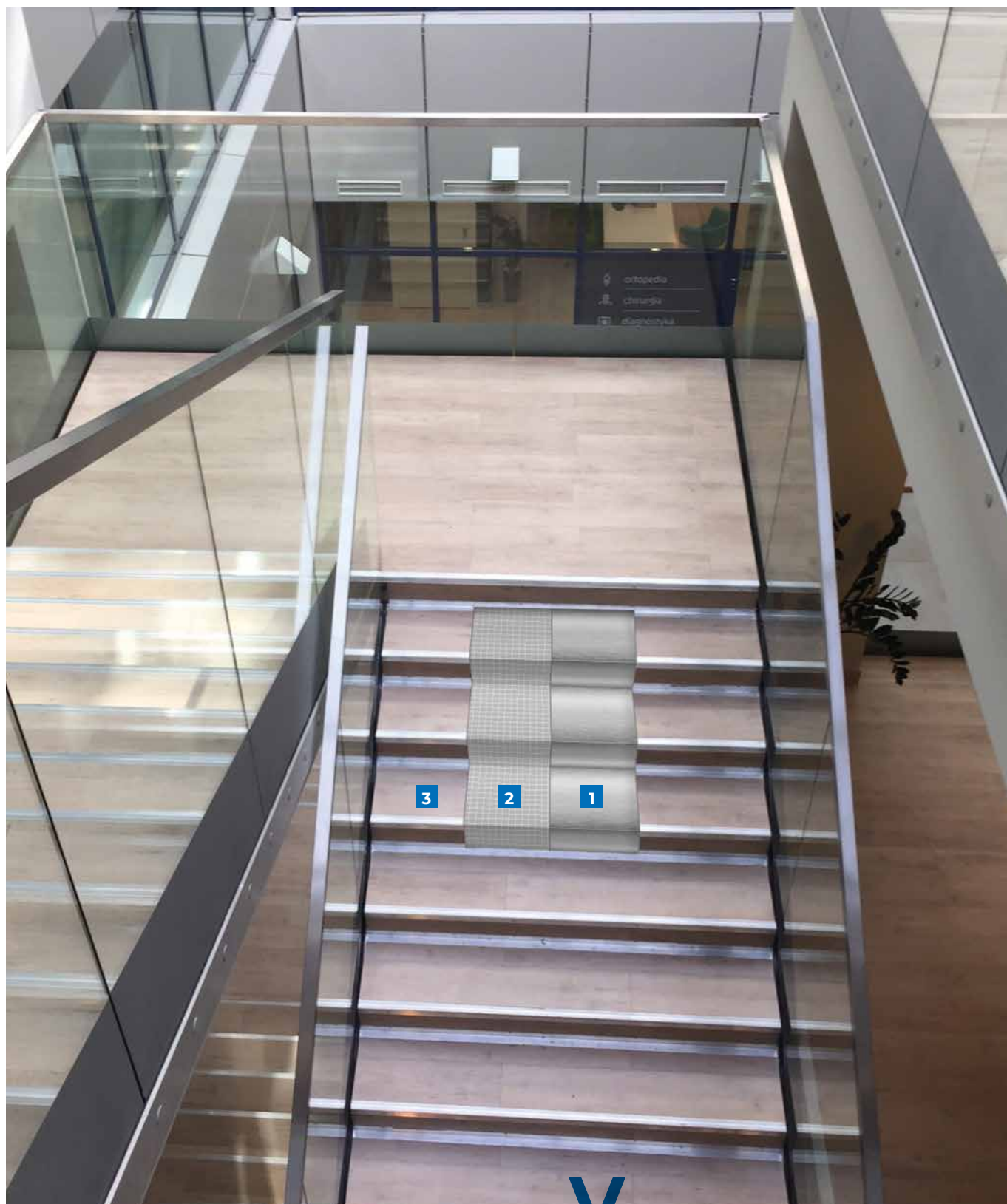


## STEPS AND STAIRS

Stairs with a non-slip finish or contrasting profiles which are also easy to access are what is required in such surroundings to ensure a certain level of safety.

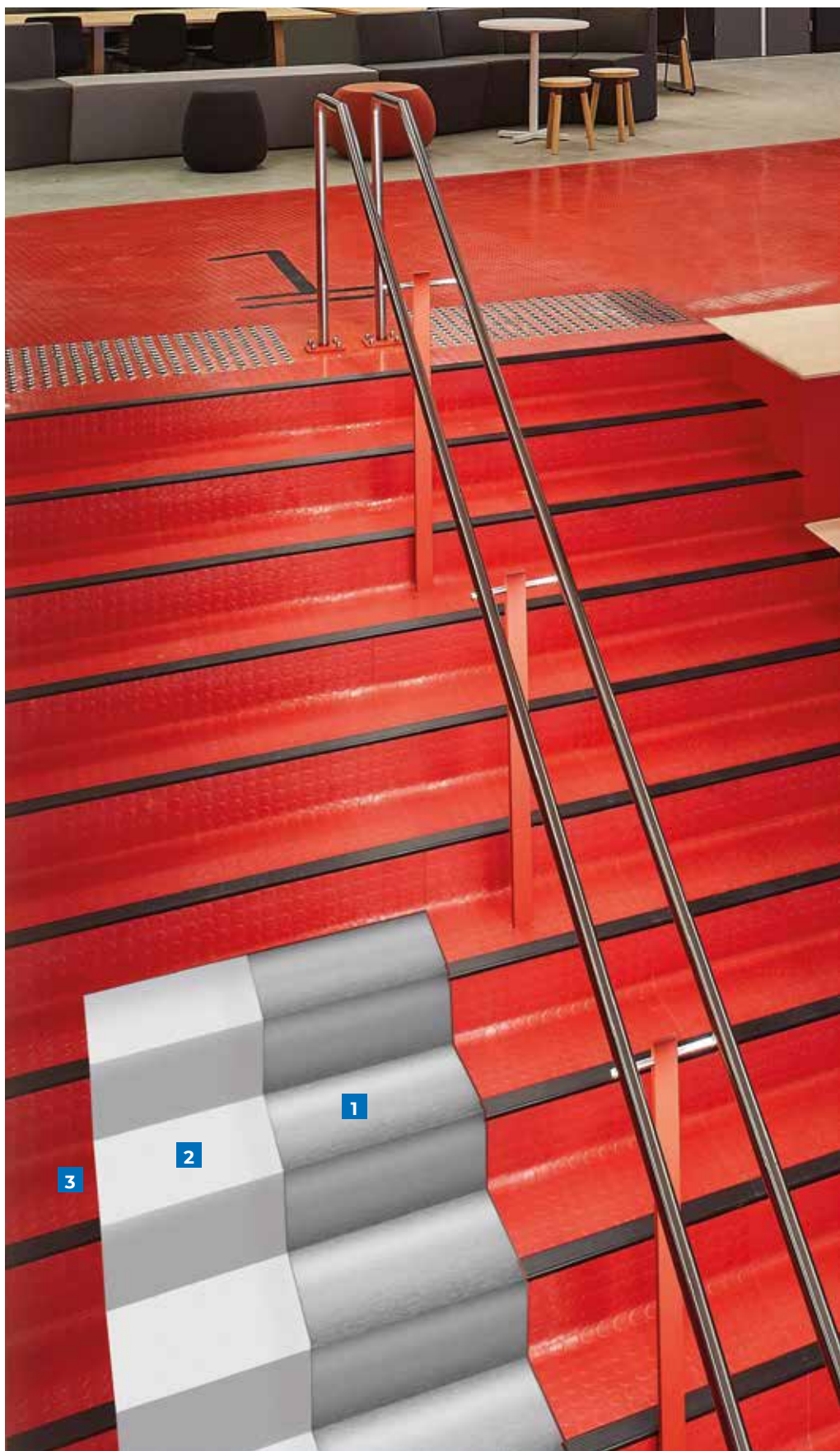
Mapei's range of products from the resilient line includes an extensive range of complementary items for installing finishing elements on steps and stairs, such as resilient coverings, skirtings, coves, cove basis, steps, corner profiles and nosing, on many types of substrate.





- 1** Metal
- 2** **Mapecontact Plus**
- 3** Resilient covering





- 1** Concrete
- 2** **Ultrabond Eco Contact**
- 3** Resilient covering







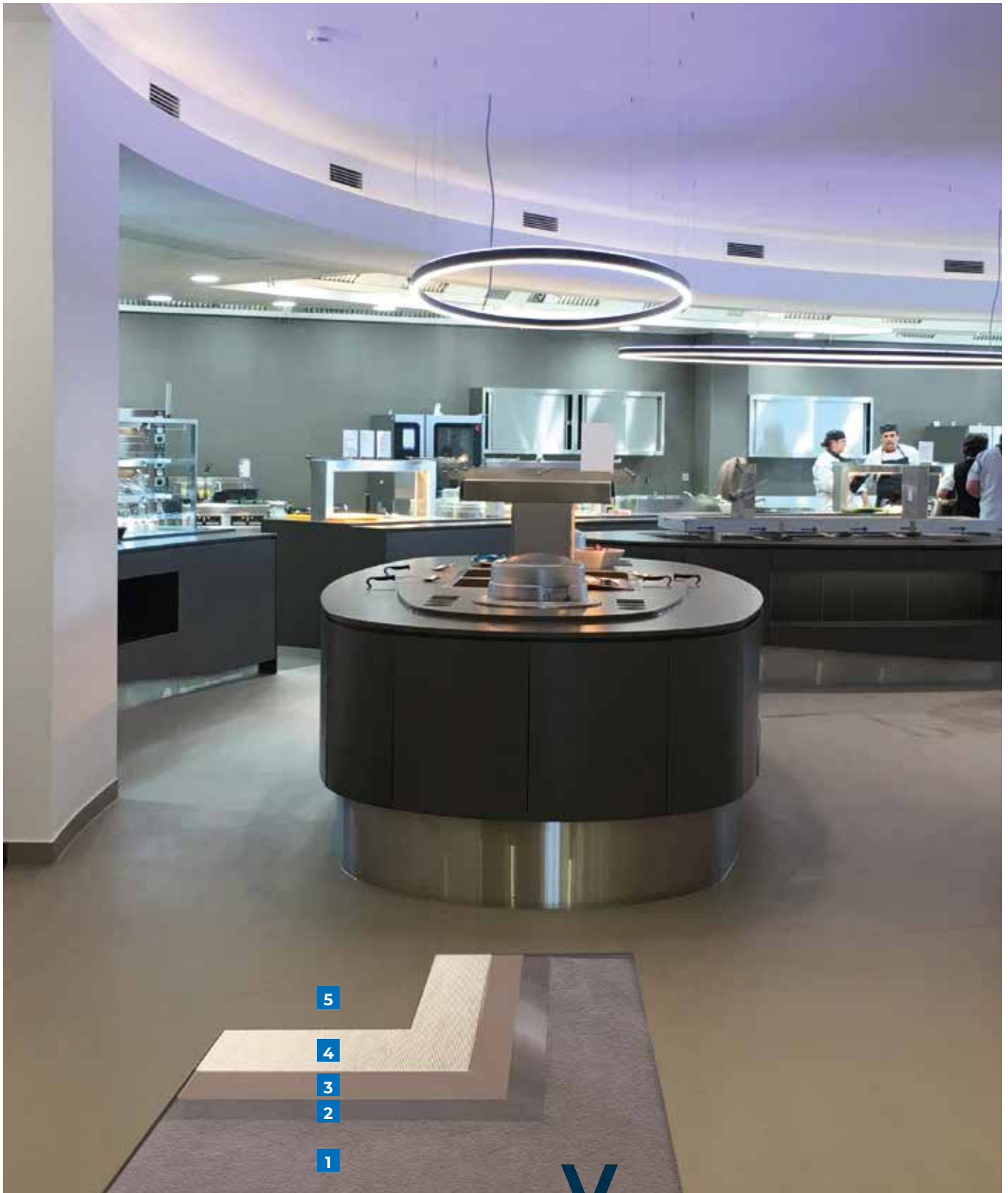
## CANTEENS AND BARS

Aesthetics and functionality are required to constantly work together to find the right balance, including in spaces and areas used for preparing and consuming food and drinks, such as restaurants, bars and canteens. In these spaces, and more so than in other areas, the surface of floor and wall coverings are at risk of coming into contact with substances that could damage them, or at least stain them, and they are also required to guarantee a high level of cleanliness and hygiene. When hygiene is one of the main requirements, resilient flooring has proven to be the ideal material, in that it creates a compact, hermetic, seamless surface that can be continued along the bottom part of walls, thereby eliminating sharp corners or gaps between floors and walls where food waste can collect or bacteria can form. The joints are sealed or hot-welded so that the floor and wall coverings can be completely disinfected.

Surfaces must also be highly resistant to indentation and abrasion and must maintain their durability over the years.

Mapei systems and products for preparing sub-layers and bonding this type of flooring help achieve the best results in terms of aesthetics and performance.





- 1** Topcem Pronto
- 2** Eco Prim T Plus
- 3** Planex HR
- 4** Adesilex G20
- 5** Resilient flooring



- 1 Old terrazzo flooring
- 2 Planipatch Xtra
- 3 Eco Prim Grip Plus
- 4 Ultraplan
- 5 Ultrabond Eco 4 LVT
- 6 LVT









## OPERATING THEATRES AND DIAGNOSIS ROOMS

In the most critical areas of hospitals, such as operating theatres and rooms for diagnostic imaging, floors and walls play an important role: they must comply with particularly high standards of hygiene, have proven safety levels and be able to control discharges of static electricity that could cause the extremely delicate medical equipment to malfunction. Floors must also meet stringent requirements regarding VOC emissions and guarantee a high level of resistance to chemical agents and disinfectants.

Resilient flooring has been shown to have the ideal characteristics for these areas and guarantees maximum hygiene by creating a compact, hermetic, seamless surface that can be continued along the bottom part of walls, forming a surface that is completely sealed with a limited number of joints and floor/wall fillets.

And Mapei, thanks to their extensive range of installation systems and adhesives for resilient flooring, offers the optimum solution for these types of application too.





- 1 Topcem Pronto
- 2 Primer G
- 3 Ultraplan
- 4 Adesilex G20 Fast
- 5 Resilient flooring



- 1 Cementitious screed
- 2 Planipatch Xtra
- 3 Eco Prim T Plus
- 4 Ultraplan Xtra
- 5 Copper Band
- 6 Ultrabond Eco V4 SP Conductive
- 7 Conductive and anti-static/dissipative resilient flooring





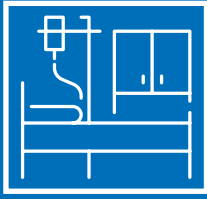




- 1** Self-levelling screed
- 2** Primer G
- 3** Planiprep Fast Track
- 4** Copper Band
- 5** Adesilex G19 Conductive
- 6** Conductive and anti-static/  
dissipative resilient flooring







## PATIENT WARDS

Resilient floors in patient wards must be chosen and designed to create comfortable surroundings and a sense of wellbeing. They must also guarantee maximum hygiene, be easy to clean and be resistant to chemical agents and disinfectants.

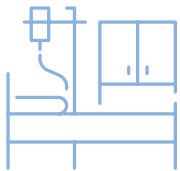
Floors also need to have a good level of soundproofing to minimise the transmission of noises that would otherwise disturb patients.

The Mapei solutions available for installing resilient materials in this type of setting also stand out from the rest for their completeness and the high performance properties offered by the systems proposed.





- 1** Topcem Pronto
- 2** Eco Prim T Easy
- 3** Ultraplan Contract
- 4** Ultrabond 333
- 5** Resilient flooring



- 1 Old ceramic tiles
- 2 Planipatch Xtra
- 3 Eco Prim Grip Plus
- 4 Ultraplan
- 5 Ultrabond Eco V4 Evolution
- 6 Resilient flooring

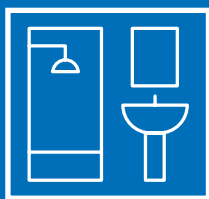






- 1** Old levelling compound with traces of adhesive
- 2** Eco Prim T Plus
- 3** Planiprep Fast Track
- 4** Ultrabond Eco 388
- 5** Resilient flooring

- 6** Plasterboard
- 7** Adesilex MT32
- 8** Glass fibre and vinyl wallpaper



## BATHROOMS

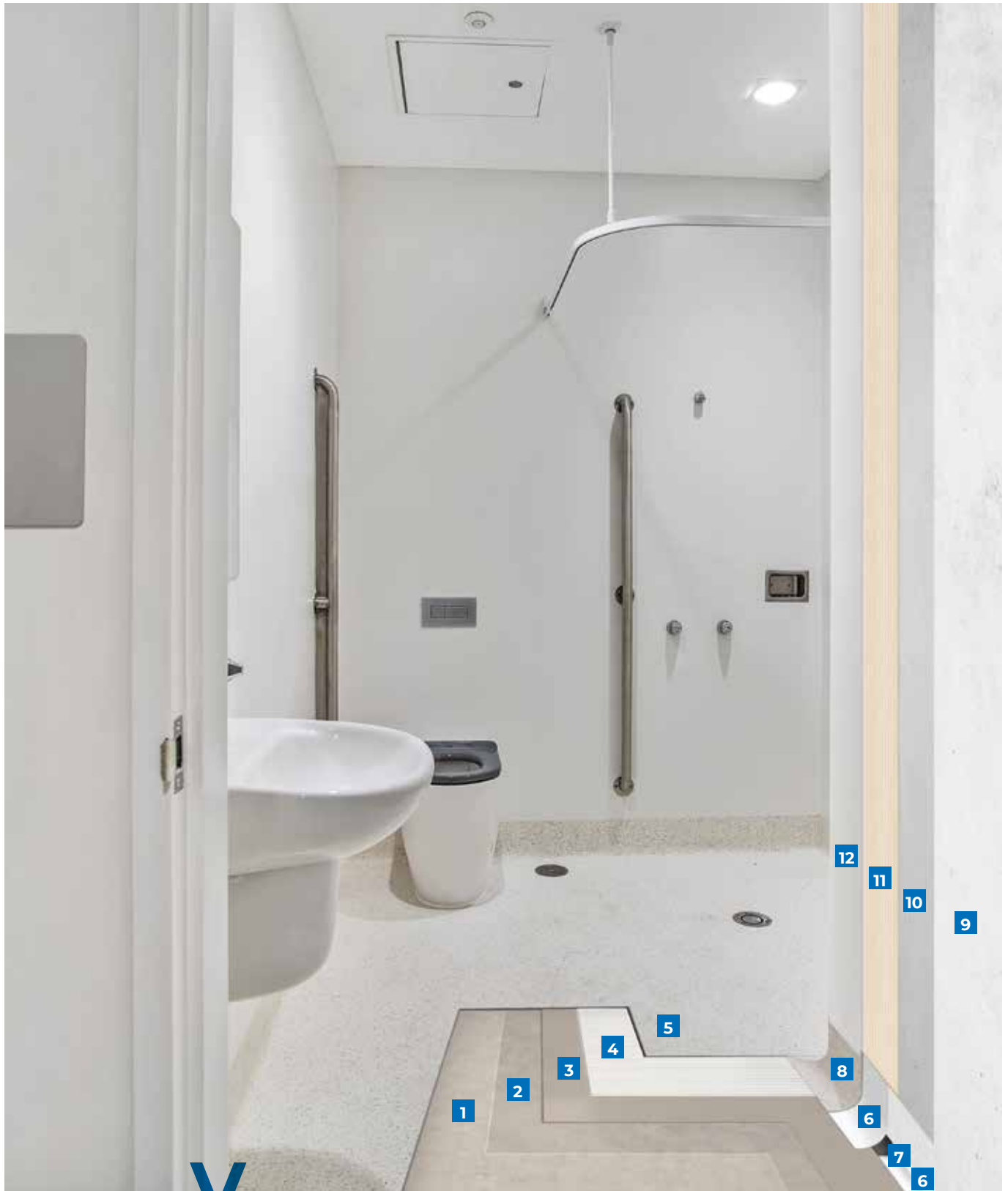
Ensuring the highest standards of comfort and safety, and guaranteeing that flooring has a comfortable feeling underfoot with non-slip properties to walk in complete safety, even when barefoot, are what designers are looking for when dealing with hospital bathrooms.

Showers exposed to intense use require installation and waterproofing systems that are resistant to the presence of water on surfaces and prevent infiltrations, thereby helping to protect their finish and pattern over the years.

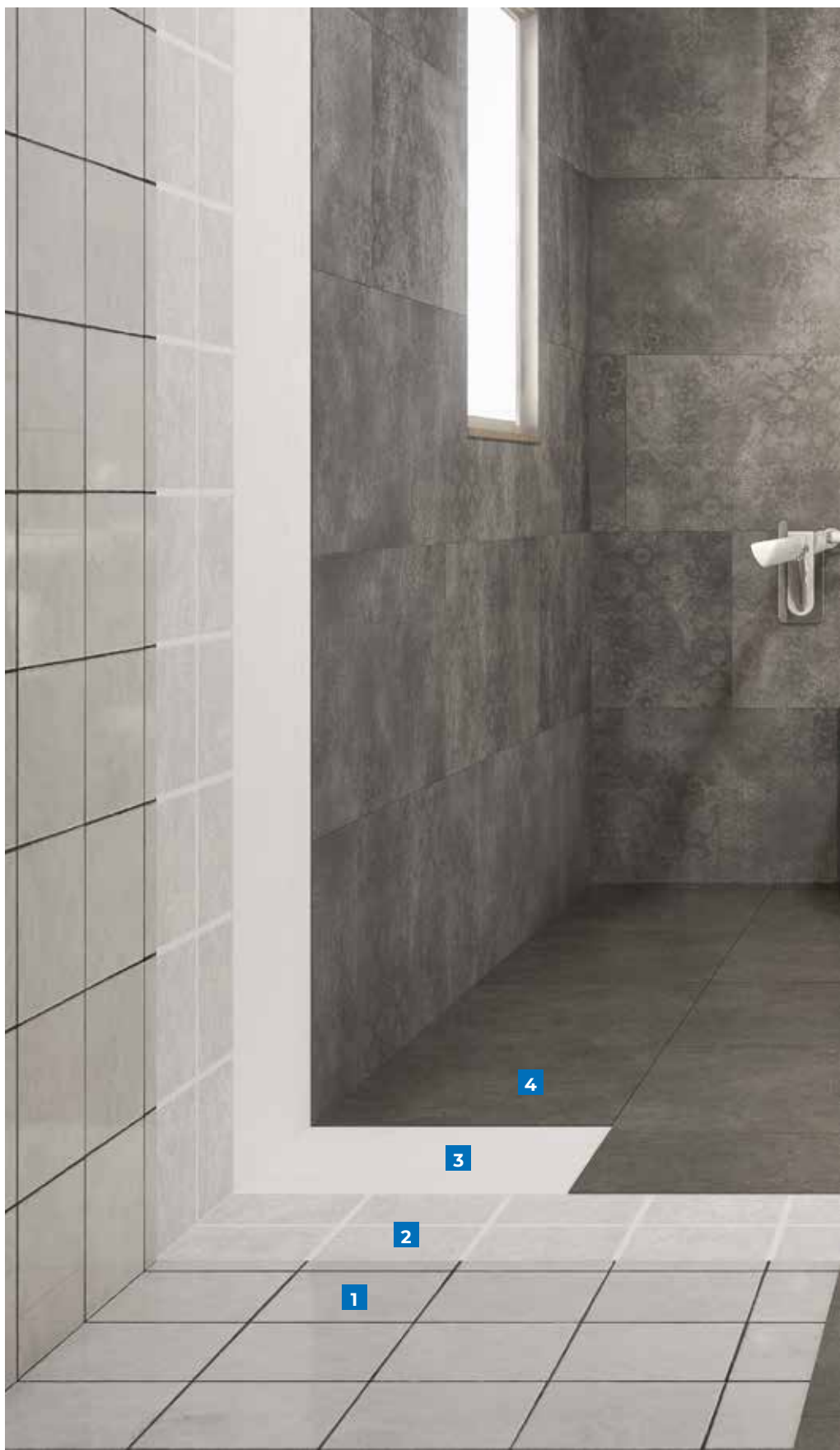
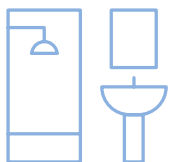
This translates into the use of only the highest quality floor and wall coverings which ensure comfort, safety and easy maintenance, as well as a high level of hygiene, thanks to the limited number of joints and the presence of coves between floors and walls.

Mapei systems are made up of adhesives and cutting-edge, high-performance products for preparing substrates and installing LVT and resilient materials, and help achieve all these results.





- |                                |                              |
|--------------------------------|------------------------------|
| <b>1</b> Topcem Pronto         | <b>7</b> Undercove           |
| <b>2</b> Eco Prim T Plus       | <b>8</b> Cove                |
| <b>3</b> Planex HR Maxi        | <b>9</b> Fibre-cement        |
| <b>4</b> Ultrabond Eco MS 1    | <b>10</b> Planiprep Contract |
| <b>5</b> Resilient flooring    | <b>11</b> Ultrabond Eco V4SP |
| <b>6</b> Ultrabond Eco Contact | <b>12</b> Resilient covering |



- 1** Old ceramic tiles
- 2** Planiprep 4 LVT
- 3** Ultrabond Eco MS 4 LVT Wall&Floor
- 4** LVT





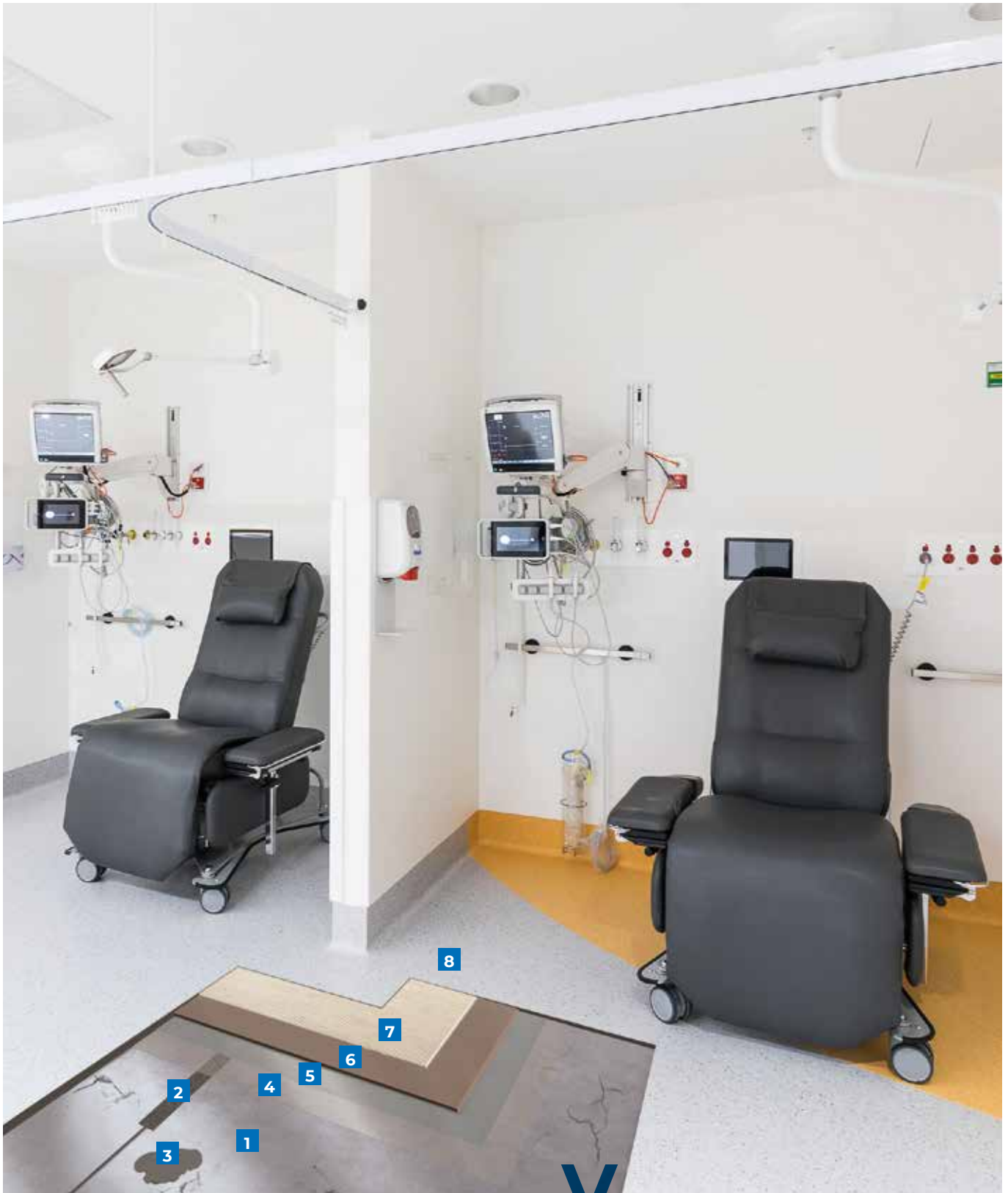


## TREATMENT ROOMS

Resilient flooring is the ideal solution for combining the need to create a calm relaxing atmosphere, thanks to the multitude of colours available for these kinds of material, with the need to have materials that guarantee maximum comfort, high resistance to loads and mechanical stresses and high resistance to chemical agents. All this, along with the possibility of creating smooth, impermeable surfaces that are easy to clean.

Mapei, thanks to their extensive range of installation systems and adhesives for resilient flooring, offers the optimum solution for these types of application too.





- 1 Concrete
- 2 Eporip
- 3 Planipatch Xtra
- 4 Primer MF EC Plus
- 5 Eco Prim T Plus
- 6 Ultraplan
- 7 Ultrabond Eco V4 Evolution
- 8 Resilient flooring

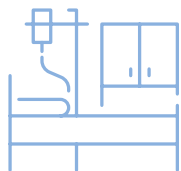


- 1 Old ceramic tiles
- 2 Triblock P
- 3 Planex HR
- 4 Adesilex G20
- 5 Resilient flooring
- 6 Mapecoat Wet & Dry R11

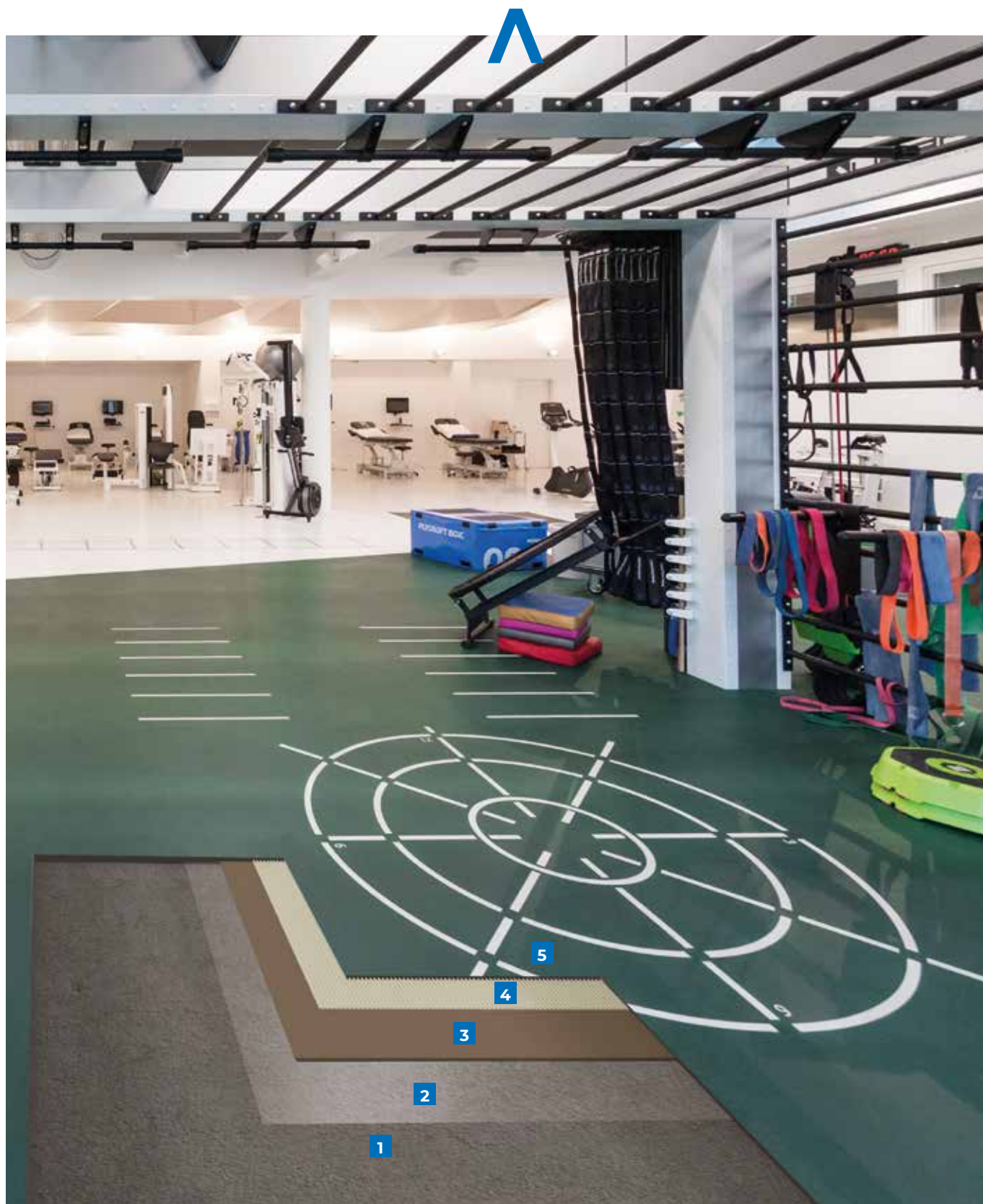


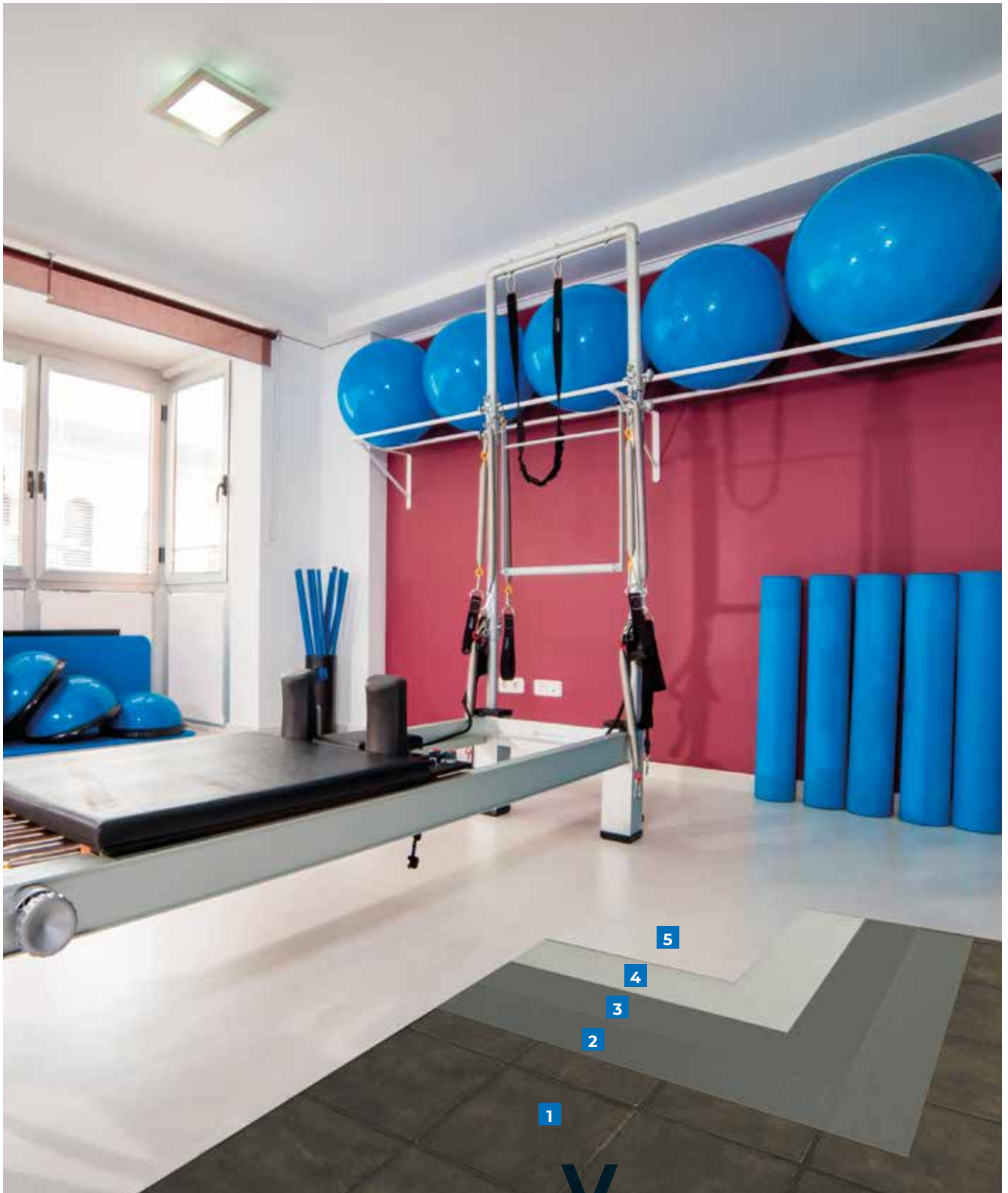






- 1 Topcem Pronto
- 2 Eco Prim T Pro
- 3 Ultraplan Contract
- 4 Ultrabond Eco V4 Evolution
- 5 Resilient flooring





- 1 Old ceramic tiles
- 2 Planiprep Contract
- 3 Planiprep Contract
- 4 Adesilex G19
- 5 Interlocking resilient tile flooring



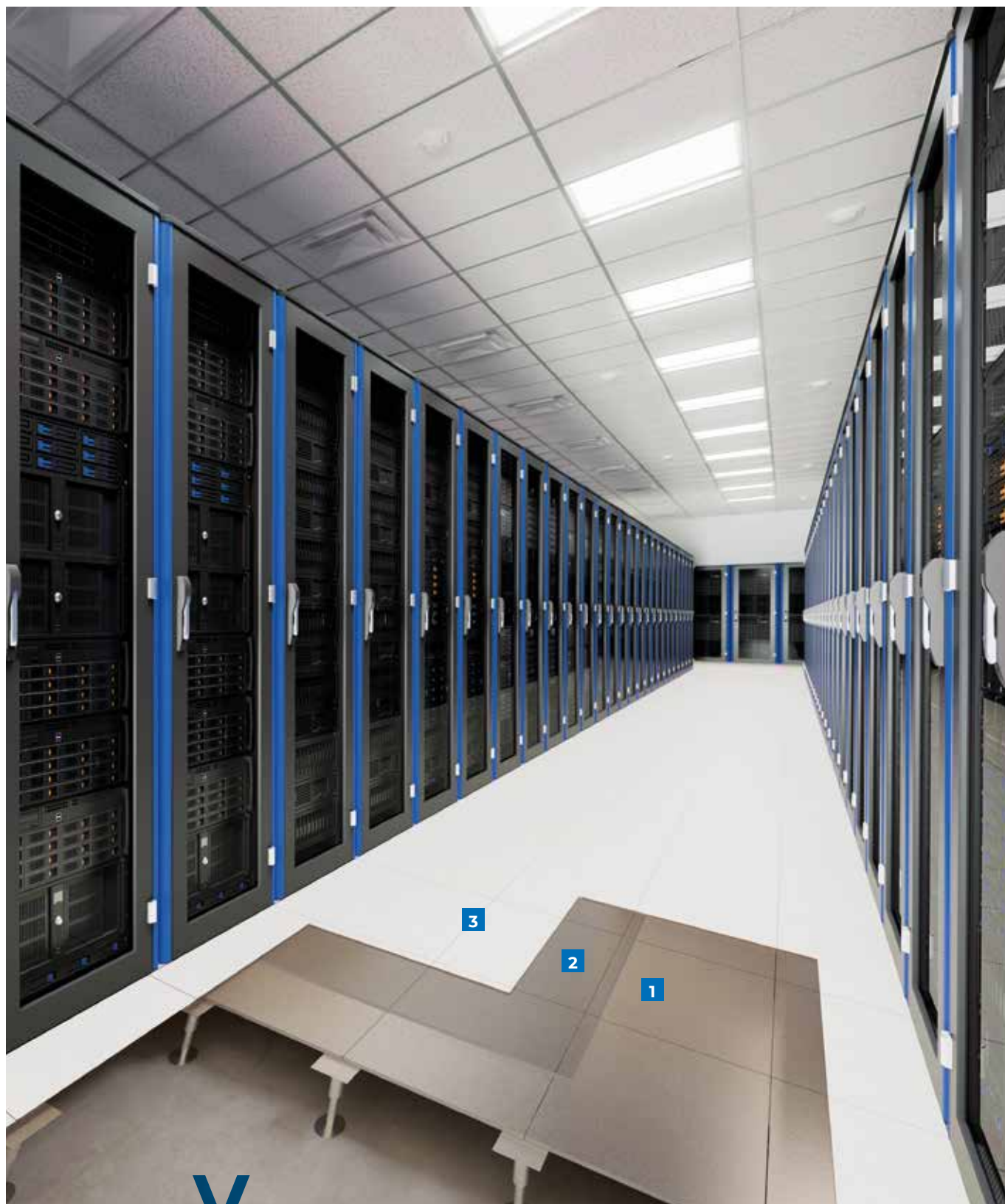
## ARCHIVES AND TECHNICAL ROOMS

When deciding on what to use in archives and technical rooms, the flooring of choice is often resilient or textile material, in either sheets or tiles.

The latter are particularly indicated for raised access floors, and are ideal for installation and maintenance in rooms housing services such as electrical networks, boilers and plumbing, air-conditioning systems, phone networks and IT systems.







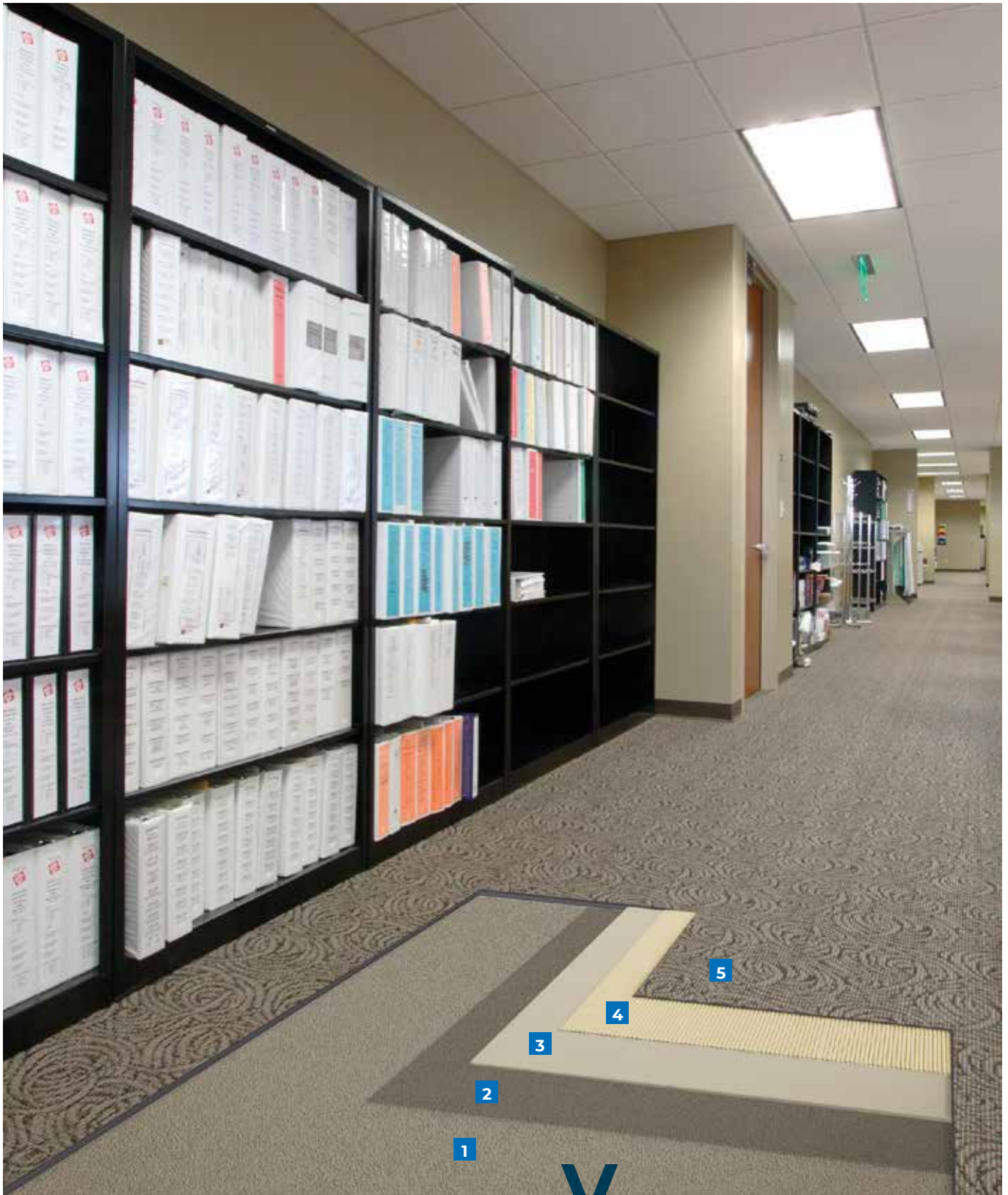
- 1 Raised flooring
- 2 **Ultrabond Eco Fix**
- 3 Loose lay resilient flooring



- 1 Old ceramic tiles
- 2 Planipatch Xtra
- 3 Eco Prim Grip Plus
- 4 Ultraplan Xtra
- 5 Ultrabond Eco 4 LVT
- 6 LVT







- 1** Sand/cement screed admixed with **Mapescreed Advance HR**
- 2** **Eco Prim T Plus**
- 3** **Ultraplan Contract**
- 4** **Ultrabond Eco TX2**
- 5** **Broadloom carpet**



## KITCHENS

Kitchens have surfaces that come into direct contact with food and drinks far more than in other areas. As a result, walls and floors are exposed on a daily basis to the aggressive action of various substances, high temperatures, steam and condensation.

Water, when combined with aggressive substances contained in detergents, is a key factor to take into consideration when designing kitchens.

When choosing floor and wall coverings for these areas, they must be able to guarantee a high level of hygiene and cleanliness and must also have certain non-slip properties.

Resilient floor and wall coverings, in combination with appropriate Mapei installation products, are your best ally when designing kitchens.

They can be applied on both horizontal and vertical surfaces and form a kind of seamless, impermeable “shell” that protects sub-layers.







- 1** Concrete
- 2** Primer MF
- 3** Mapegum EPX
- 4** Planopur
- 5** Adesilex G20
- 6** Resilient flooring



## ADMINISTRATION OFFICES, CONFERENCE ROOMS AND AUDITORIUMS

Flooring for these types of setting needs to prioritise the comfort of office staff and of others who frequently use such areas, while maximising safety and reducing noise levels.

For this kind of setting, too, designers often go for textile flooring in rolls or tiles, which must be installed with systems that guarantee maximum functionality and durability over the years.





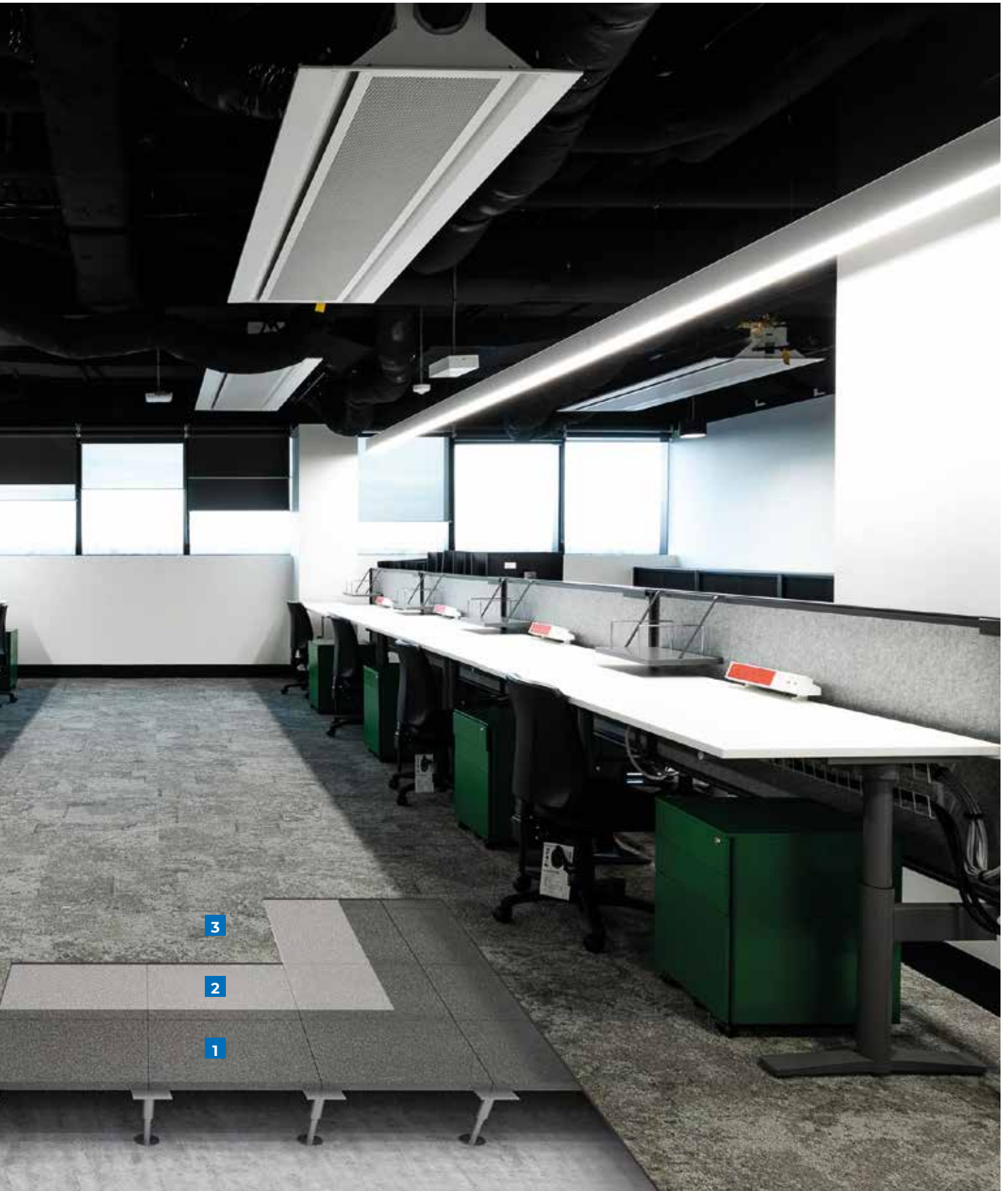
- 1 Topcem Pronto
- 2 Eco Prim T Pro
- 3 Ultraplan
- 4 Ultrabond Eco 4 LVT
- 5 LVT

- 6 Plasterboard
- 7 Planiprep Fast Track
- 8 Adesilex MT32
- 9 Wallpaper



- 1 Raised flooring
- 2 **Ultrabond Eco Tack TX<sup>+</sup>**
- 3 Loose lay carpet tiles

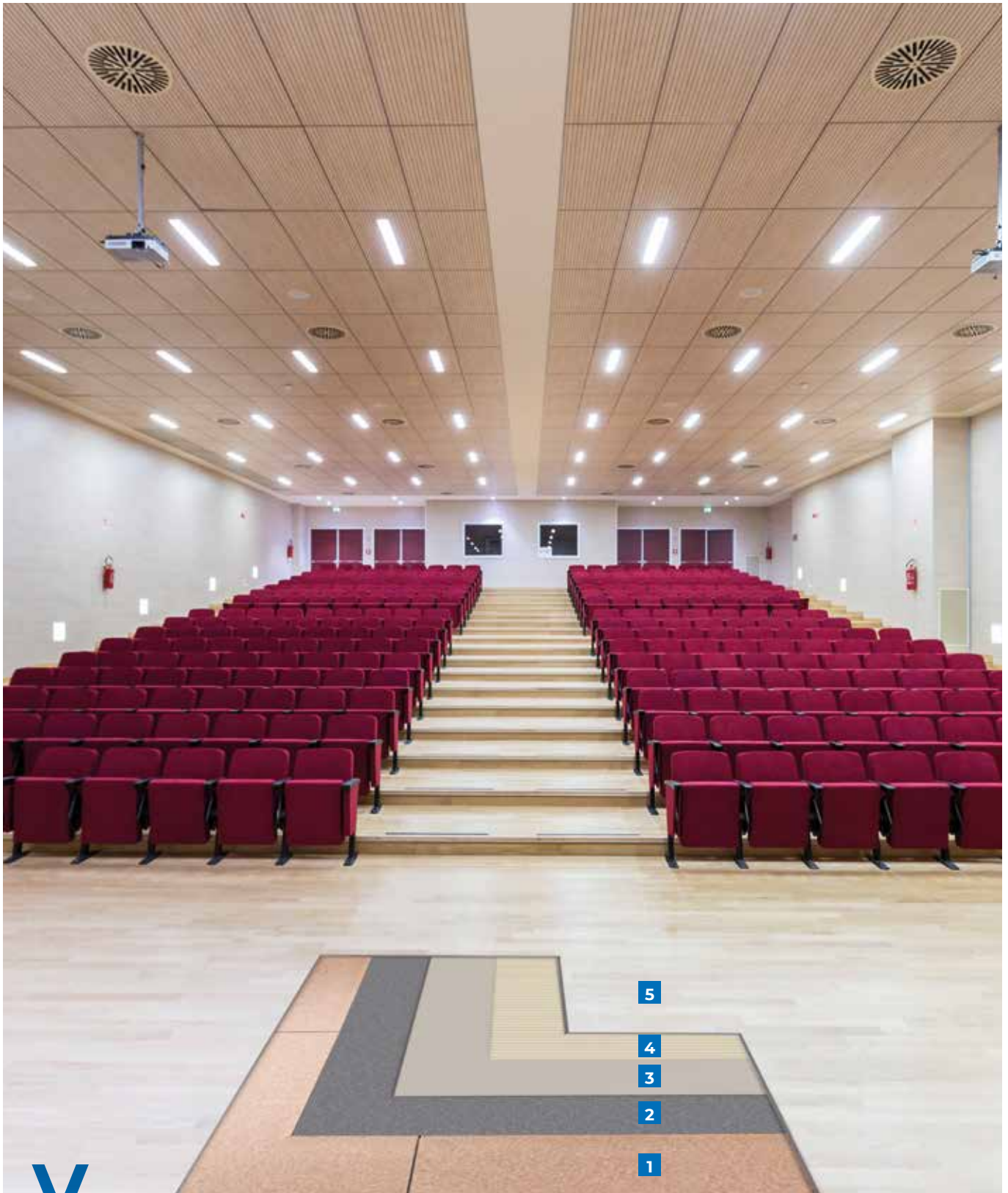




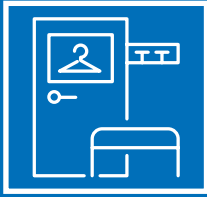


- 1 Raised flooring
- 2 **Ultrabond Eco Tack 4 LVT**
- 3 Loose lay LVT





- 1 Old ceramic tiles
- 2 Eco Prim Grip Plus
- 3 Ultraplan
- 4 Ultrabond Eco 4 LVT
- 5 LVT



## PUBLIC BATHROOMS

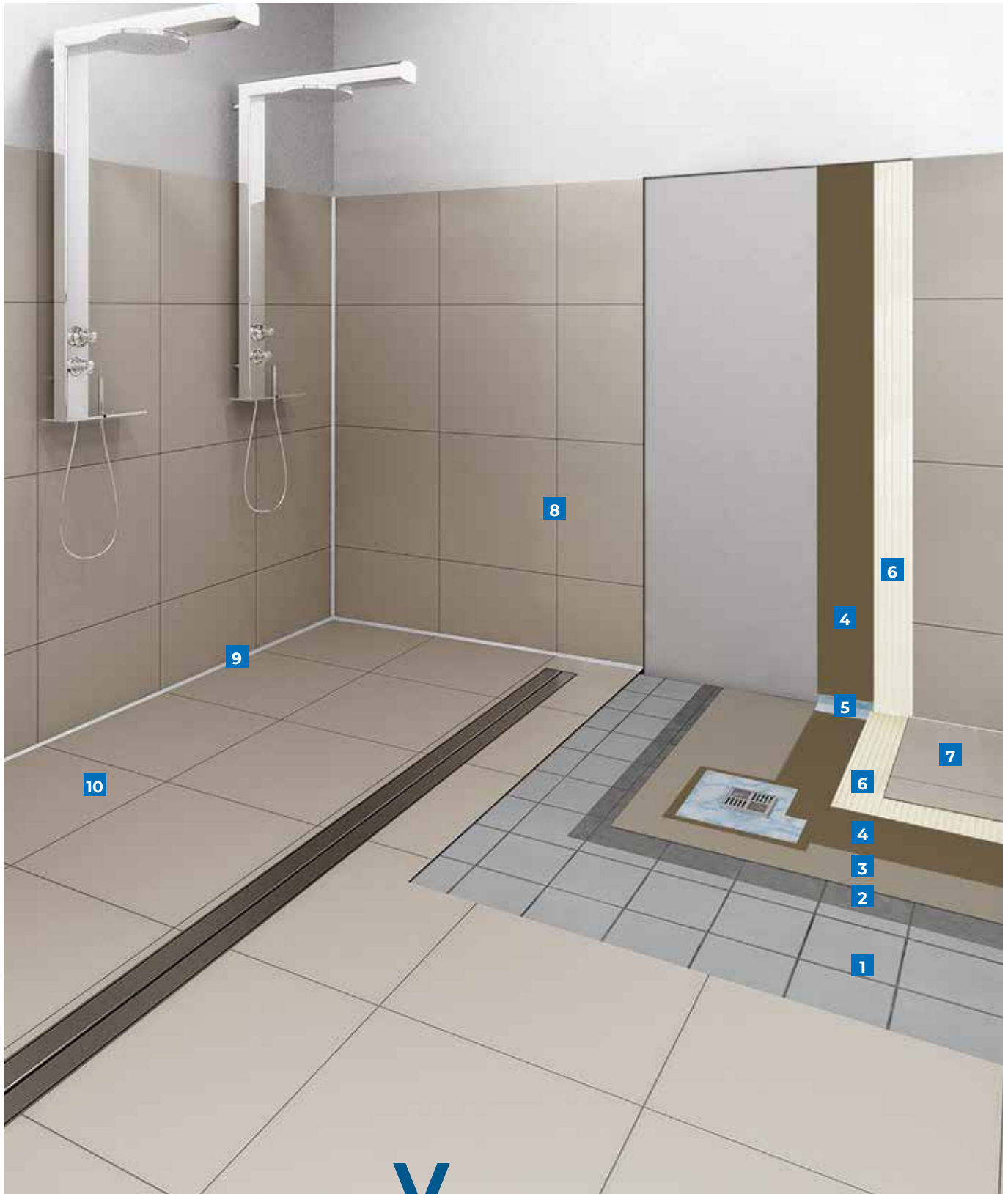
Cleanliness and hygiene are the requirements of floor and wall coverings in surroundings such as changing rooms and public bathrooms.

Exposed to intense use, they need installation and waterproofing systems with the capacity to resist any water that remains permanently on their surface and which maintain their aesthetic properties over the years.

In these kinds of area, too, resilient and LTV floor and wall coverings are the recommended choice and, apart from being impermeable and water-repellent, they are also easy to clean, whatever their type of use, and guarantee a high level of hygiene.





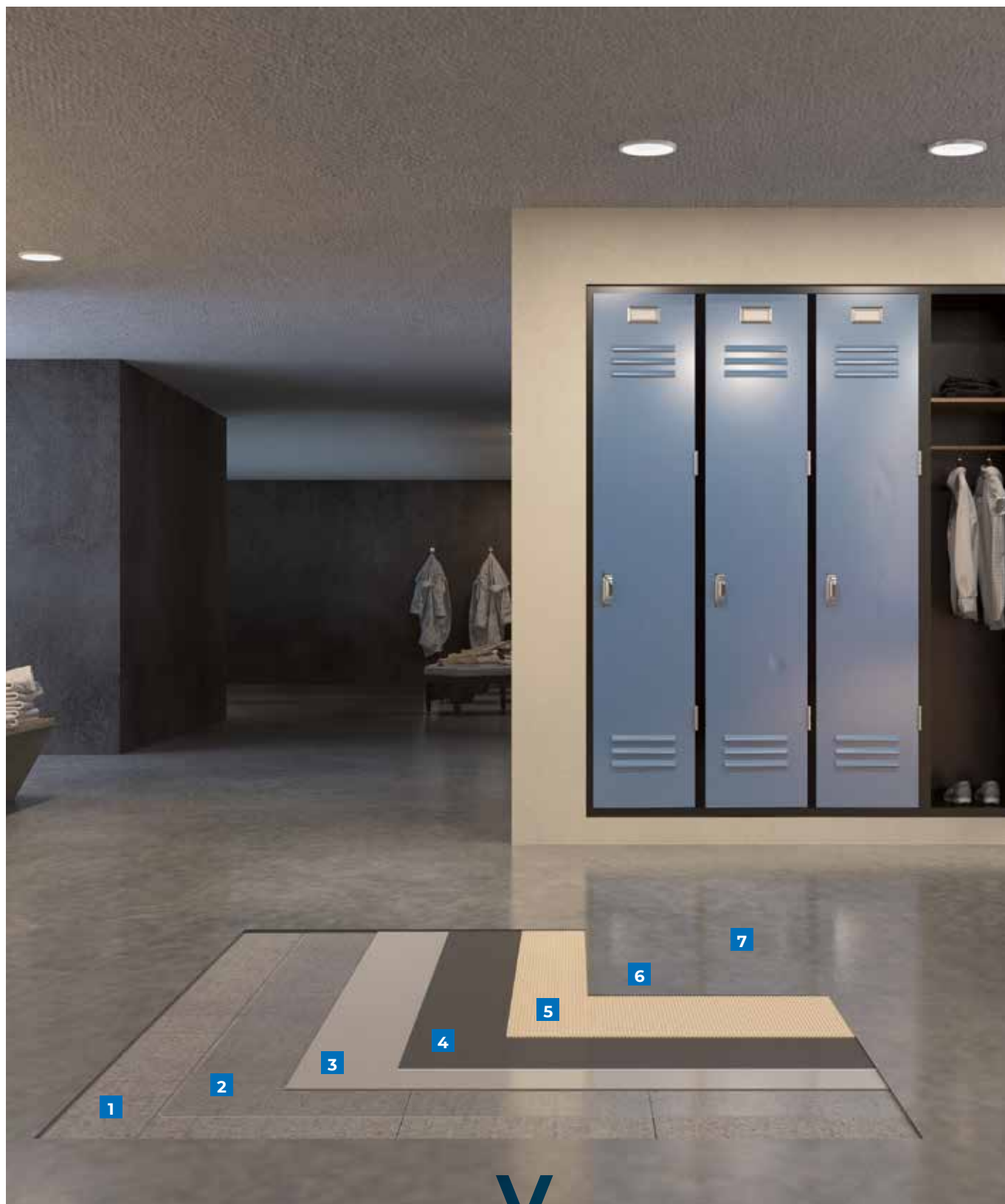


- |                            |   |
|----------------------------|---|
| <b>1</b> Existing flooring | <b>6</b> Ultrabond Eco MS 4 LVT Wall& Floor |
| <b>2</b> Eco Prim T Plus   | <b>7</b> LVT                                |
| <b>3</b> Planex HR Maxi    | <b>8</b> Flexcolor 4 LVT                    |
| <b>4</b> Mapelastic Turbo  | <b>9</b> Mapesil AC                         |
| <b>5</b> Mapeband Easy     | <b>10</b> Mapecoat 4 LVT                    |



- 1 Topcem Pronto
- 2 Eco Prim T Plus
- 3 Planex HR
- 4 Ultrabond Eco MS 1
- 5 Resilient flooring





- 1** Existing flooring
- 2** Eco Prim T Plus
- 3** Planex HR Maxi
- 4** Mapelay

- 5** Adesilex G20 Fast
- 6** Resilient flooring
- 7** Mapecoat Wet & Dry R11



## TEMPORARY SOLUTIONS FOR EMERGENCIES

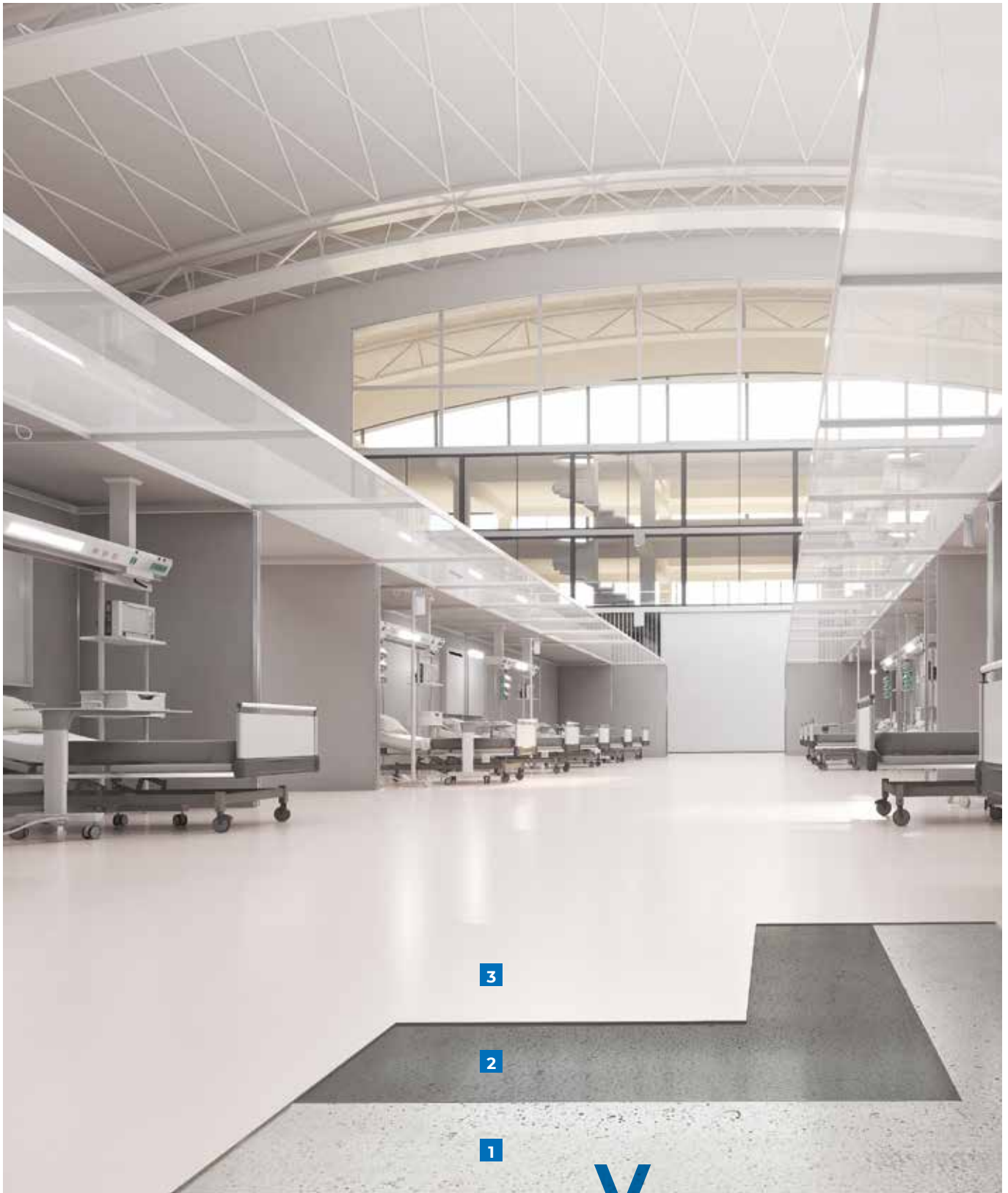
Temporary hospitals, reconversions of existing structures and field hospitals are typical examples of emergency healthcare situations and the places most commonly used in emergency situations often have large, open spaces.

Places such as sports pitches, gymnasiums, schools and other structures that can be converted quickly at a reasonable cost and with limited manpower are those typically favoured.

For these types of setting, too, designers tend to choose resilient flooring and opt for “fast track” installation systems, which allow floors to be put into service very quickly, while at the same time guaranteeing maximum functionality and durability over time.







- 1** Industrial concrete
- 2** **Ultrabond Eco Fix**
- 3** Self-laying resilient flooring



- 1** Industrial concrete
- 2** Planipatch Xtra
- 3** Ultrabond Eco V4 SP
- 4** Resilient flooring





Types of flooring	Norms	Adhesives in water dispersion																	
		ADESILEX MT32	ADESILEX V4	ADESILEX VS45	AQUACOL T	MAPECRYL ECO	ROLLCOLL	ULTRABOND 333	ULTRABOND ECO 4LVT	ULTRABOND ECO 375	ULTRABOND ECO 380	ULTRABOND ECO 388	ULTRABOND ECO 520	ULTRABOND ECO 530	ULTRABOND ECO 575	ULTRABOND ECO FAST TRACK	ULTRABOND ECO FIX	ULTRABOND ECO TACK	ULTRABOND ECO TACK 4LVT
Homogeneous PVC	EN ISO 10581					*	*	*		*	*	*							
Heterogeneous PVC	EN ISO 10582																		
Multi-layered PVC	EN ISO 11638																		
PVC cushion floor	EN ISO 26986																		
PVC cushion floor with textile backing	EN 650																		
PVC with cork backing	EN 652 EN 655																		
Semi-flexible PVC	EN 654																		
Antistatic-dissipative and conductive PVC	EN ISO 10581																		
Loose-lay PVC	EN 651 - EN ISO 10582 EN ISO 26986 - EN 652																		
LVT (Luxury Vinyl Tiles)	EN ISO 10582																		
Multi-layered cork with PVC backing	EN 651																		
Loose-lay LVT	EN ISO 10582																		
Smooth rubber	EN 1816 EN 1817 EN 14521																		
Textured rubber	EN 12199																		
Antistatic-dissipative and conductive rubber	EN 1816 EN 1817 EN 14521 EN 12199																		
Loose-lay rubber	EN 1816 EN 1817 EN 14521 EN 12199																		
Polyurefin	EN 14565																		
Polyurethane	EN 16776																		
Non-PVC	EN 14565																		
Linoleum with natural jute backing	EN ISO 24011																		
Linoleum with synthetic jute backing	EN ISO 24011																		
Linoleum with polyolefin or polyurethane backing	EN 686																		
Linoleum with cork backing	EN 687																		
Antistatic-dissipative linoleum	EN 548																		
Textiles	EN 1307 EN 15114																		
Needle-punch	EN13297 EN 1470																		
Loose-lay textile tiles	EN 1307 EN15114 EN 13297 EN 1470																		
Antistatic/dissipative textiles																			
Wallpaper																			
Textile wall coverings																			
Needle-punch wall coverings																			
Glass fibre textiles																			
Vinyl wall coverings																			
Coving, fillets, hems and steps																			
Profiles and skirting																			

\* welded sheets only



63



# INSTALLATION PROCEDURES

# INSTALLATION SYSTEM FOR RESILIENT FLOORING ON **NEW** AND **EXISTING** **CEMENTITIOUS SCREEDS**

## INSTALLATION SYSTEM

### 1.1 REFERENCE STANDARDS

#### 1. UNI 11515-1 - 2020

Resilient and laminate flooring

Part 1: Design, installation and maintenance instructions

#### 2. EN 13813

Screeds and screed materials

Screed materials

Properties and requirements

### 1.2 SUBSTRATE PREPARATION

1. Cementitious screeds and screeds made from special binders designed to receive resilient and laminate flooring must be classified according to EN 13813 as follows:

- C20 F5 for pedestrian use;
- C30 F6 for all other areas of use.

2. The minimum thickness of an isolated screed varies according to the area of use of the flooring: 4 cm for pedestrian use, 6 cm for all other areas of use.

Create the isolated screed to the design thickness by placing an isolating layer (which also acts as a vapour barrier) made from sheets of polythene at least 300 µm thick.

3. For existing screeds that do not have the performance properties specified in UNI 11515 section 6.1.1.2, check the screed to assess what work needs to be carried out in order for it to reach the minimum requirements, such as:

- consolidation;
- waterproofing treatment (for cementitious screeds and screeds made with special binders only);
- restoring the screed to the thickness and flatness required.

4. Substrates must be sound and free of all traces of dust, loose or detached areas, paint, wax, oil, rust and traces of gypsum.

5. Cementitious-based surfaces that are not sufficiently sound must be removed or, where possible, consolidated with a suitable MAPEI system (such as **Prosfas**, **Eco Prim PU 1K** or **Primer MF**).

6. Any cracks in the sub-layer must be repaired with **Eporip** or **Eporip SCR**.



### 1.3 PRIMER

Well-cured cementitious screeds with good mechanical properties and no cracks must be treated with suitable primer to fix any surface dust and to even out absorption of the sub-layer.

#### A. ECO PRIM T EASY

Primer for internal applications to improve adhesion of skim coats; suitable for all types of absorbent, cementitious-based screeds and anhydrite or gypsum-based screeds.

##### APPLICATION

- Apply **Eco Prim T Easy** diluted 1:1 with water or neat, generally on cementitious sub-layers with a brush or roller.
- A smoothing layer may then be applied around 30 minutes after applying the primer, according to surrounding conditions.

#### B. ECO PRIM T PLUS

Universal primer for internal applications to improve adhesion of skim coats on all absorbent and non-absorbent surfaces.

##### APPLICATION

- Apply **Eco Prim T Plus** diluted with water according to the level of absorption of the substrate on cementitious or anhydrite sub-layers with a brush or roller.
- A smoothing layer may then be applied 0-30 minutes after applying the primer, according to surrounding conditions.

### 1.4 SELF-LEVELLING SMOOTHING LAYER

After preparing the screed as specified and checking that it has the mechanical properties prescribed above, apply a levelling layer as follows:

#### A. ULTRAPLAN (CT - C30 F7 A2<sub>FL</sub>-s1)

Self-levelling ultra-rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

##### APPLICATION

- Pour a 23 kg bag of **Ultraplan** into a container with 5.75-6 litres (25-26%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

**B. ULTRAPLAN CONTRACT (CT- C30 F6 A1<sub>FL</sub>)**

Self-levelling ultra-rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

**APPLICATION**

- Pour a 24 kg bag of **Ultraplan Contract** into a container with 5.75-6 litres (24-25%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Contract** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

**C. ULTRAPLAN ECO (CT- C25 F7 A2<sub>FL-s1</sub>)**

Self-levelling ultra rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

**APPLICATION**

- Pour a 23 kg bag of **Ultraplan Eco** into a container with 5.5-5.75 litres (24-25%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Eco** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

## **1.5 ADHESIVES**

Installation of resilient flooring may be carried out with one of the following adhesives:

**A. ULTRABOND ECO V4 SP**

Universal high-performance adhesive in water dispersion for installing all types of resilient and textile flooring and wall coverings.

**B. ULTRABOND ECO V4 EVOLUTION**

Universal “all-in-one” adhesive in water dispersion with rapid high initial tack and extended open time for installing all types of resilient and textile flooring and wall coverings.

**C. ULTRABOND 333**

Multi-purpose adhesive with extended open time for installing vinyl, textile and linoleum flooring and wall coverings.

**D. ULTRABOND ECO 388**

Adhesive with a rapid strong initial bond and very long open time for PVC and LVT.

**E. ULTRABOND ECO 4 LVT**

Fibre-reinforced adhesive. Specific for LVT, SPC and rigid LVT with excellent adhesion and dimensional stability.

**F. ULTRABOND ECO MS 4 LVT WALL & FLOOR**

One-component silylated polymer-based adhesive for installing LVT on floors and walls.

**G. ULTRABOND ECO MSI**

One-component silylated polymer-based universal adhesive for resilient and textile flooring. Particularly recommended for static and dynamic loads, including intense loads.

**H. ADESILEX G20**

Two-component low viscosity epoxy-polyurethane adhesive for installing all types of resilient and textile flooring on absorbent and non-absorbent sub-layers, particularly when exposed to extreme temperatures due to direct sunlight, intense mechanical loads and stresses and frequent cleaning.

**APPLICATION**

- Spread the amount of adhesive required over the substrate with a suitable notched trowel.
- Install the resilient flooring, making sure the adhesive does not exceed its open time in order to guarantee sufficient wetting of the back of the flooring.

# 2

## “FAST TRACK” RAPID INSTALLATION SYSTEM FOR RESILIENT FLOORING ON NEW AND EXISTING CEMENTITIOUS SCREEDS

### INSTALLATION SYSTEM

#### 2.1 REFERENCE STANDARDS

**1. 11515-1 - 2020**

Resilient and laminate flooring

Part 1: Design, installation and maintenance instructions

**2. EN 13813**

Screeds and screed materials

Screed materials

Properties and requirements

#### 2.2 SUBSTRATE PREPARATION

**1.** Cementitious screeds and screeds made from special binders designed to receive resilient and laminate flooring must be classified according to EN 13813 as follows:

- C20 F5 for pedestrian use;
- C30 F6 for all other areas of use.

**2.** The minimum thickness of an isolated screed varies according to the area of use of the flooring: 4 cm for pedestrian use, 6 cm for all other areas of use.

Create the isolated screed to the design thickness by placing an isolating layer (which also acts as a vapour barrier) made from sheets of polythene at least 300 µm thick.

**3.** For existing screeds that do not have the performance properties specified in UNI 11515 section 6.1.1.2, check the screed to assess what work needs to be carried out in order for it to reach the minimum requirements, such as:

- consolidation;
- waterproofing treatment (for cementitious screeds and screeds made with special binders only);
- restoring the screed to the thickness and flatness required.

**4.** Substrates must be sound and free of all traces of dust, loose or detached areas, varnish, wax, oil, rust and traces of gypsum.

**5.** Cementitious-based surfaces that are not sufficiently sound must be removed or, where possible, consolidated with a suitable **Mapei** system (such as **Prosfas**, **Eco Prim PU 1K** or **Primer MF**).

**6.** Any cracks in the sub-layer must be repaired with **Eporip** or **Eporip SCR**.



## 2.3 PRIMER

Well-cured cementitious screeds with good mechanical properties and no cracks must be treated with suitable primer to fix any surface dust and to even out absorption of the sub-layer.

### A. ECO PRIM T EASY

Primer for internal applications to improve adhesion of skim coats; suitable for all types of absorbent, cementitious-based screeds and anhydrite or gypsum-based screeds.

#### APPLICATION

- Apply **Eco Prim T Easy** diluted 1:1 with water or neat, generally on cementitious sub-layers with a brush or roller.
- A smoothing layer may then be applied around 30 minutes after applying the primer, according to surrounding conditions.

### B. ECO PRIM T PLUS

Universal primer for internal applications to improve adhesion of skim coats on all absorbent and non-absorbent surfaces.

#### APPLICATION

- Apply **Eco Prim T Plus** diluted with water according to the level of absorption of the substrate on cementitious or anhydrite sub-layers with a brush or roller.
- A smoothing layer may then be applied 0-30 minutes after applying the primer, according to surrounding conditions.

## 2.4 SMOOTHING LAYER

After preparing the screed as specified and checking that it has the mechanical properties prescribed above, apply a levelling layer as follows:

### A. PLANIPREP FAST TRACK (C40-F7-A2<sub>FL-S1</sub>)

Self-levelling ultra rapid-hardening smoothing compound for layers 1 to 20 mm thick. Ideal for restoring floors that need to be put back into service very quickly; install flooring around 12 hours after application and after around 6 hours for layers up to 5 mm thick.

#### APPLICATION

- Pour a 23 kg bag of **Planiprep Fast Track** into a container with around 5.75-6.0 litres (25-26%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Planiprep Fast Track** over the surface in a single layer 1 to 20 mm thick with a large metal trowel or rake.

## 2.5 ADHESIVES

Installation of resilient flooring may be carried out with one of the following adhesives:

### A. ULTRABOND ECO FAST TRACK

Universal rapid-setting adhesive for rapid repairs to resilient and textile flooring. Also suitable for bonding coving and steps.

### B. ADESILEX G20 FAST

Two-component low viscosity epoxy-polyurethane adhesive for installing all types of resilient and textile flooring on absorbent and non-absorbent sub-layers, particularly when exposed to extreme temperatures due to direct sunlight, intense mechanical loads and stresses and frequent cleaning.

#### APPLICATION

- Spread the amount of adhesive required over the substrate with a suitable notched trowel.
- Install the resilient flooring, making sure the adhesive does not exceed its open time in order to guarantee sufficient wetting of the back of the flooring.

## 3

## RESTORATION WORK: **OVERLAYING EXISTING TERRAZZO OR CERAMIC FLOORING** WITH RESILIENT FLOORING

### INSTALLATION SYSTEM

#### 3.1 REFERENCE STANDARDS

##### 1. UNI 11515-1 - 2020

Resilient and laminate flooring

Part 1: Design, installation and maintenance instructions

#### 3.2 SUBSTRATE PREPARATION

1. Check that the existing flooring is well anchored to the substrate.
2. Thoroughly clean the surface with water and caustic soda or a de-waxing product.

#### 3.3 PRIMER

Particularly shiny floors may need to be lightly sanded and treated with an adhesion promoting primer such as:

##### A. ECO PRIM T PLUS

Universal primer for internal applications to improve adhesion of skim coats on all absorbent and non-absorbent surfaces.

###### APPLICATION

- Apply **Eco Prim T Plus** diluted with water according to the level of absorption of the substrate on cementitious or anhydrite sub-layers with a brush or roller.
- A Smoothing layer may then be applied around 30-60 minutes after applying the primer, according to surrounding conditions.

##### B. ECO PRIM GRIP PLUS

Universal adhesion promoter supplied ready to use with very low emission of volatile organic compounds and almost no odour for internal and external cementitious smoothing layers, render and adhesives.

###### APPLICATION

- Apply **Eco Prim Grip Plus** on the sub-layer with a brush or roller.
- A smoothing layer may then be applied around 30-60 minutes after applying the primer, according to surrounding conditions.

### 3.4 SELF-LEVELLING AND THIXOTROPIC SMOOTHING LAYERS

After preparing the screed as specified and checking that it has the mechanical properties prescribed above, apply a levelling layer as follows:

#### A. ULTRAPLAN (CT - C30 F7 A2<sub>FL</sub>-s1)

Self-levelling ultra rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

##### APPLICATION

- Pour a 23 kg bag of **Ultraplan** into a container with 5.75-6 litres (25-26%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

#### B. ULTRAPLAN CONTRACT (CT- C30 F6 A1<sub>FL</sub>)

Self-levelling ultra rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

##### APPLICATION

- Pour a 24 kg bag of **Ultraplan Contract** into a container with 5.75-6 litres (24-25%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Contract** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

#### C. ULTRAPLAN ECO (CT- C25 F7 A2<sub>FL</sub>-s1)

Self-levelling ultra rapid-hardening smoothing mortar applied in layers 1 to 10 mm thick.

##### APPLICATION

- Pour a 23 kg bag of **Ultraplan Eco** into a container with 5.5-5.75 litres (24-25%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Eco** over the surface in a single layer 1 to 10 mm thick with a large metal trowel or rake.

#### D. ULTRAPLAN XTRA (C40-F7-A2<sub>FL</sub>-s1)

Self-levelling ultra rapid-hardening smoothing mortar for layers 1 to 20 mm thick. Ideal for restoring floors that need to be put back into service very quickly; install flooring around 12 hours after application and after around 6 hours for layers up to 5 mm thick.

##### APPLICATION

- Pour a 23 kg bag of **Ultraplan Xtra** into a container with 5.75-6 litres (25-26%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Xtra** over the surface in a single layer 1 to 20 mm thick with a large metal trowel or rake.



**E. ULTRAPLAN RENOVATION (CT- C25 F6 A1<sub>FL</sub>)**

Self-levelling fibre-reinforced rapid-drying smoothing mortar applied in layers 3 to 40 mm thick.

Particularly recommended for smoothing over existing sub-layers including wood.

**APPLICATION**

- Pour a 25 kg bag of **Ultraplan Renovation** into a container with 4.25-4.50 litres (17-18%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Spread the **Ultraplan Renovation** over the surface in a single layer with a large metal trowel or rake.

*For localised repairs, restore the substrate with:*

**F. PLANIPATCH XTRA**

Thixotropic ultra rapid-drying skimming mortar applied in layers up to 25 mm thick for skimming internal floors, walls, corners and edges down to a feather edge when an ultra rapid-hardening and drying product is required.

**APPLICATION**

- Pour a 23 kg bag of **Planipatch Xtra** into a container with 6.5-6.7 litres (28-29%) of clean water while mixing and continue mixing with a paddle mixer at low-speed.
- Apply the mix with a long-bladed metal trowel.

**3.5 ADHESIVES**

Installation of resilient flooring may be carried out with one of the following adhesives:

**A. ULTRABOND ECO V4 SP**

Universal high-performance adhesive in water dispersion for installing all types of resilient and textile flooring and wall coverings.

**B. ULTRABOND ECO V4 EVOLUTION**

Universal “all-in-one” adhesive in water dispersion with rapid, high initial tack and extended open time for installing all types of resilient and textile flooring and wall coverings.

**C. ULTRABOND ECO 4 LVT**

Fibre-reinforced adhesive. Specific for LVT, SPC and rigid LVT with excellent adhesion and dimensional stability.

**D. ULTRABOND 333**

Multi-purpose adhesive with extended open time for installing vinyl, textile and linoleum flooring and wall coverings.

**E. ULTRABOND ECO 388**

Adhesive with a rapid strong initial bond and very long open time for PVC and LVT.

**F. ULTRABOND ECO FAST TRACK**

Universal rapid-setting adhesive for rapid repairs to resilient and textile flooring. Also suitable for bonding coving and steps.

**G. ULTRABOND ECO MS 4 LVT WALL & FLOOR**

One-component silylated polymer-based adhesive for installing LVT on floors and walls.

**H. ULTRABOND ECO MS1**

One-component silylated polymer-based universal adhesive for resilient and textile flooring. Particularly recommended for static and dynamic loads, including intense loads.

**I. ADESILEX G20**

Two-component low viscosity epoxy-polyurethane adhesive for installing all types of resilient and textile flooring on absorbent and non-absorbent sub-layers, particularly when exposed to extreme temperatures due to direct sunlight, intense mechanical loads and stresses and frequent cleaning.

**L. ADESILEX G20 FAST**

Two-component low viscosity epoxy-polyurethane adhesive for installing all types of resilient and textile flooring on absorbent and non-absorbent sub-layers, particularly when exposed to extreme temperatures due to direct sunlight, intense mechanical loads and stresses and frequent cleaning.

**APPLICATION**

- Spread the amount of adhesive required over the substrate with a suitable notched trowel.
- Install the resilient flooring, making sure the adhesive does not exceed its open time in order to guarantee sufficient wetting of the back of the flooring.

## OTHER USEFUL STANDARDS FOR RESILIENT AND LAMINATE FLOORING

**UNI 10329** Floor covering laying – Measurement of moisture content in cementitious or similar floor screeds

**EN 204** Classification of thermoplastic wood adhesives for non-structural applications

**EN 205** Adhesives – Wood adhesives for non-structural applications – Determination of tensile shear strength of lap joints

**EN 425** Resilient and laminate floor coverings – Castor chair test

**EN 438-5** High pressure decorative laminates (HPL) – Sheets based on thermosetting resins (usually called laminates) - Part 5: Classification and specifications for flooring grade laminates less than 2 mm thick intended for bonding to supporting substrate

**EN ISO 24011** Resilient floor coverings – Specification for plain and decorative linoleum

**EN ISO 10581 - 10582** Resilient floor coverings – Homogeneous and heterogeneous floor coverings based on polyvinyl chloride - Specification

**EN 650** Resilient floor coverings – Polyvinyl chloride floor coverings on jute backing or on polyester felt backing or on polyester felt with polyvinyl chloride - Specification

**EN ISO 26986** Resilient floor coverings – Expanded (cushioned) polyvinyl chloride floor covering - Specification

**EN 652** Resilient floor coverings – Polyvinyl chloride floor coverings with cork-based backing - Specification

**EN 653** Resilient floor coverings – Expanded (cushioned) polyvinyl chloride floor coverings - Specification

**EN ISO 10595** Resilient floor coverings – Semi-flexible/vinyl composition (VCT) polyvinyl chloride floor tiles - Specification

**EN 686** Resilient floor coverings – Specification for plain and decorative linoleum on a foam backing

**EN 687** Resilient floor coverings - Specification for plain and decorative linoleum on a corkment backing

**EN 1081** Resilient floor coverings – Determination of the electrical resistance

**EN 1372** Adhesives – Test method for adhesives for floor and wall coverings – Peel test

**EN 1373** Adhesives – Test method for adhesives for floor and wall coverings – Shear test

**EN 1816** Resilient floor coverings – Specification for homogeneous and heterogeneous smooth rubber floor coverings with foam backing

**EN 1817** Resilient floor coverings – Specification for homogeneous and heterogeneous smooth rubber floor coverings

**EN 1841** Adhesives – Test methods for adhesives for floor and wall coverings – Determination of dimensional changes of a linoleum floor covering in contact with an adhesive

**EN 1903** Adhesives – Test method for adhesives for plastic or rubber floor or wall coverings – Determination of dimensional changes after accelerated ageing

**EN 12199** Resilient floor coverings – Specifications for homogeneous and heterogeneous relief rubber floor coverings

**EN 13318** Screed material and floor screeds. Definitions

**EN 13329** laminate floor coverings – Elements with a surface layer based on aminoplastic thermosetting resins – Specifications, requirements and test methods

**EN 13501-1** Fire classification of construction products and building elements - Part 1: Classification using test data from reaction to fire

**EN 13813** Screed material and floor screeds – Screed material – Properties and requirements

**EN 13845** Resilient floor coverings – Polyvinyl floor coverings with particle based enhanced slip resistance – Specification

**EN 14041** Resilient textile and laminate floor coverings – Essential characteristics

**EN 14259** Adhesives for floor coverings – Requirements for mechanical and electrical performance

**EN 14521** Resilient floor coverings – Specification for smooth rubber floor coverings with or without foam backing with a decorative layer

**EN 14565** Resilient floor coverings – Floor coverings based upon synthetic thermoplastic polymers - Specification

**EN ISO 10874:2012** Resilient, textile and laminate floor coverings - Classification

## NOTES





*Our thanks go to Artigo S.p.A. and Gerflor S.p.A.  
for sharing these photos with Mapei*

# HEALTHCARE

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SOFT COVERING INSTALLATION SYSTEMS

# EVERYTHING'S OK WITH MAPEI

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