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# INDUSTRIAL FLOORING & COATING SOLUTIONS

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**SYSTEMARDEX**  
PREMIUM PERFORMANCE



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ARDEX HAS A HISTORY  
OF BREAKTHROUGH  
INNOVATIONS THAT  
HAVE CHANGED THE  
INDUSTRY

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# THIS IS ARDEX

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For more than 60 years, ARDEX has been the quality leader for an entire industry. ARDEX specialises in high-quality construction materials for substrate preparation, floor levelling, waterproofing and the fixing and grouting of surface materials. When it comes to floor levelling and adhesives, waterproofing membranes and decorative finishes, ARDEX is the brand of choice for specifiers, installers and wholesalers.

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# EPOXY / POLYURETHANE

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# INTRODUCTION TO EPOXY AND POLYURETHANE

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Epoxy resins are characterised by their good chemical resistance, good strength and low absorption of moisture. They are versatile resins, offering particularly excellent resistance to corrosion (solvents, alkalis and some acids), high strength / weight ratio, dimensional stability and adhesion properties. Epoxy resins can exhibit outstanding resistance to heat and electrical insulation properties.

Polyurethane resins allow the execution of systems similar to those provided by epoxy resins, but have advantages in terms of chemical resistance or resistance to ultraviolet radiation. There are two major families of polyurethanes: aromatic polyurethanes (not resistant to ultraviolet radiation) and aliphatic polyurethanes (resistant to ultraviolet radiation and therefore applicable outdoors).



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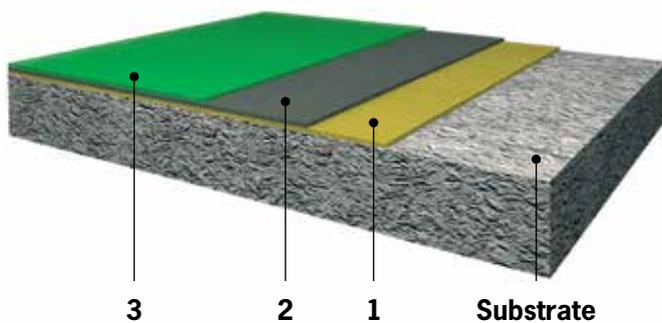
# SELF-LEVELLING SYSTEM

## EPOXY FLOORING ARDEX R 50 ES

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Achieve good hygienic properties with easy cleaning, physical and chemical resistance and an aesthetically pleasing appearance with this self-levelling resin. Applying with a notched trowel and de-aerating with a spiked roller creates a smooth, even surface. A fine silica aggregate can also be added. Approximate thickness: 1 – 2mm.

Ideal flooring for kitchens, cleanrooms and high traffic areas.



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Layer	Material
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1	ARDEX R 4 E / ARDEX R 5 E
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2	ARDEX R 50 ES
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3	ARDEX R 21 PU
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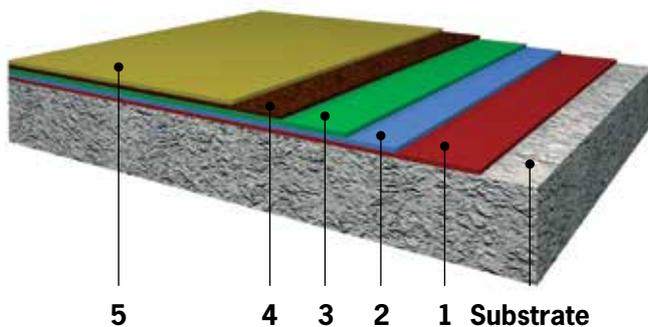
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# MULTILAYER SYSTEM

## EPOXY FLOORING ARDEX R 50 ES

Particularly suitable for application in areas where high mechanical and chemical resistance is required, the multilayer system is applied using a rubber trowel with fine quartz aggregate (0.6mm) dusted between layers to achieve high anti-slip properties. This method results in a notable saving in the consumption of 100% solids binders such as ARDEX R 50 ES. System thickness varies according to the number of layers, with a recommended minimum thickness of 3mm.

Ideal flooring for car parks and high traffic areas.



Layer	Material
5	ARDEX R 50 ES
4	Dust to saturation with aggregate
3	ARDEX R 50 ES
2	Dust to saturation with aggregate
1	ARDEX R 4 E / ARDEX R 5 E

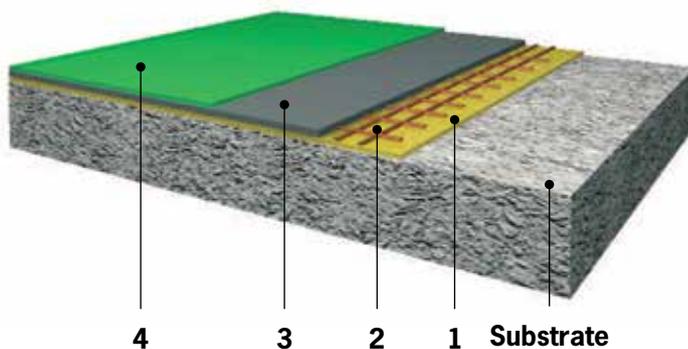
# CONDUCTIVE SELF-LEVELLING SYSTEM

## ARDEX R 77 E - INDENT ONLY

This system has been developed for sites such as electronic laboratories, operating theatres and warehouses storing inflammable materials where dissipating electrostatic charge is necessary. Approximate thickness: 2mm.

Mixed using epoxy binders loaded with conductive particles, a mesh of self-adhesive copper strips must be applied and connected in a 3x3 grid to electrical earth. There also must be at least two earth connections and one every 100m<sup>2</sup>.

**IMPORTANT:** Ensure the entire mesh is properly connected to earth and that the total area to be covered is connected without discontinuities in joints through the primer and copper mesh.



Layer	Material
1	ARDEX R 4 E / ARDEX R 5 E
2	Mesh of copper strips, 3x3m grid
3	ARDEX R 77 E
4	ARDEX R 77 E

# POLYURETHANE SCREEDS

## ARDEX R70 P & ARDEX R90 P

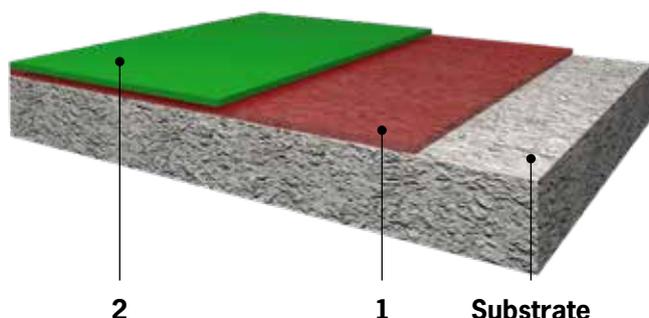
Specialist applied, Polyurethane resin floor finish, combining outstanding wearing properties with high chemical resistance and pleasing decorative properties. Ideally suited in aggressive areas where a seamless, joint free finish is required and maximum cleanliness is essential.

### ARDEX R 70 P MEDIUM DUTY POLYURETHANE SCREED

Factories and general heavy duty plant and traffic areas are just some of the environments that can benefit from this tough, chemically resistant system.

### ARDEX R 90 P HEAVY DUTY POLYURETHANE SCREED

Food processing and storage, abattoirs, drinks production, dairies and general heavy duty plant and traffic areas are just some of the environments that can benefit from this slip resistant system.



Layer	Material
1	ARDEX R 5 E
2	ARDEX R 70 P / ARDEX R 90 P

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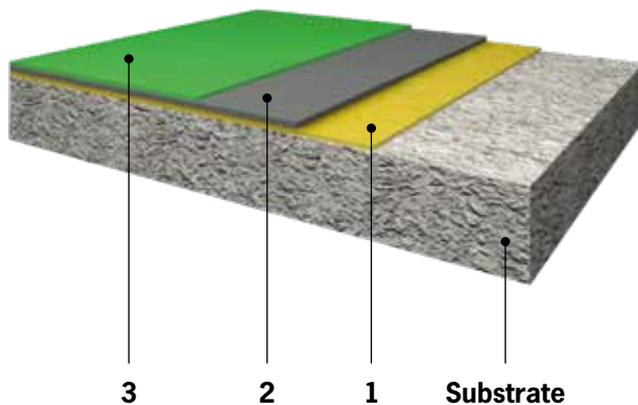
# WATERBASED POLYURETHANE MEMBRANE

## ARDEX WPM 170

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ARDEX WPM 170 is used as a single layer or multi-layer tanking membrane in horizontal or vertical applications, also for waterproofing balconies, terraces and roofs.

ARDEX WPM 170 is resistant to weathering and colour change due to UV radiation and is solvent free with low VOC. The membrane has permanent elasticity at any temperature, therefore absorbs standard substrate movement.



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Layer	Material
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1	ARDEX WPM 400 PRIMER
2	ARDEX WPM 170
3	ARDEX WPM 170

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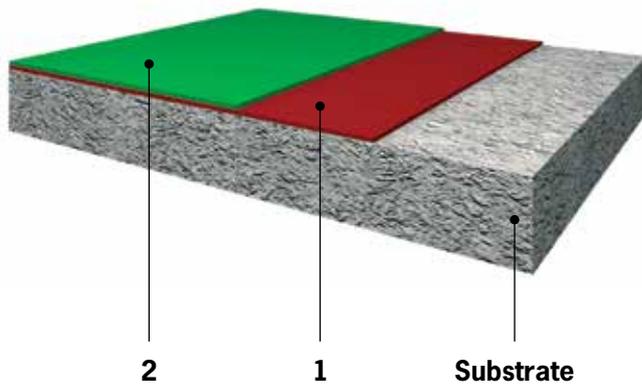
# POLYURETHANE ROLL COAT SYSTEM

## ARDEX R 20 PU

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Used to protect indoor and outdoor flooring subject to light and medium physical and chemical stresses (car parks, warehouses, of low impact production areas, etc.).

This system comprises of a primer coat first and one or two subsequent topcoats. Final coating consists of a low thickness resin usually applied by roller.



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Layer	Material
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1	ARDEX R 20 PU
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2	ARDEX R 20 PU
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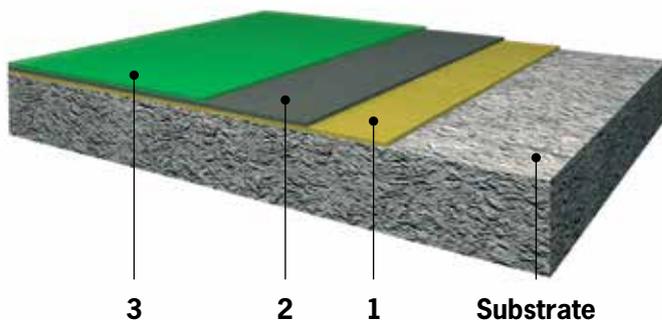
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# SELF-LEVELLING SYSTEM

## POLYURETHANE FLOORING ARDEX R 76 PU

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Achieve good hygienic properties with easy cleaning, physical and chemical resistance and an aesthetically pleasing appearance with this self-levelling resin. Applying with a notched trowel and de-aerating with a spiked roller creates a smooth, even surface. A fine silica aggregate can also be added. Approximate thickness: 1-2mm.



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Layer	Material
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1	ARDEX R 4 E / ARDEX R 5 E
2	ARDEX R 76 PU / ARDEX R 74 PU
3	ARDEX R 21 PU (Anti-scratch) (optional)

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# COMFORT SYSTEM

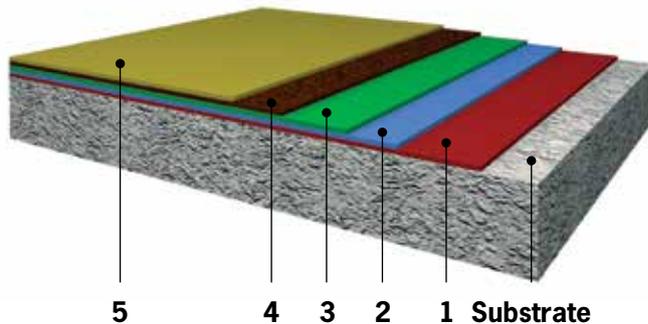
## ARDEX R 74 PU - INDENT ONLY

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This system generates continuous surfaces which are flexible, easy to clean and comfortable underfoot. It consists of a combination of a rubber mat and flexible resins and achieves great impact absorption rates.

An ideal flooring for gyms, hospitals, early childhood centres, or low impact requirements.

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Layer	Material
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1	ARDEX R 4 E / ARDEX R 5 E
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2	ARDEX AF 2525
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3	ARDEX DS70
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4	ARDEX R 74 PU
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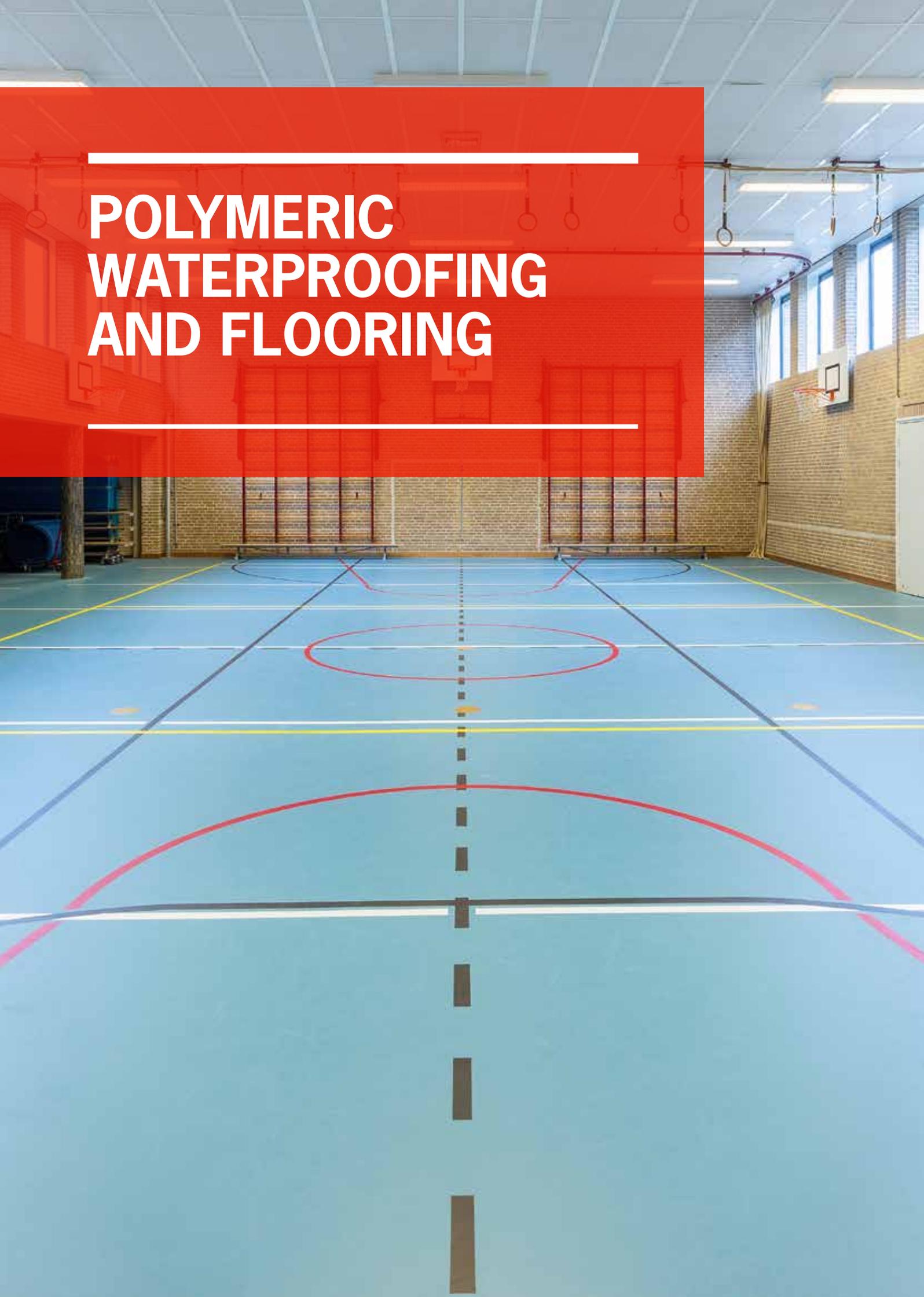
5	ARDEX R 21 PU
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# POLYMERIC WATERPROOFING AND FLOORING

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# INTRODUCTION TO POLYMERIC WATERPROOFING

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Polyurea spray coatings technology is a recent development in the polyurethane coatings industry. Polyurethane chemistry has been in existence for approximately 60 years, while elastomeric urethane coatings have been available since the 1970s. The Polyurea elastomer technology was introduced some 10 years later.

Polyurea coatings combine extreme application properties such as rapid cure, even at temperatures as low as 0°C, and insensitivity to humidity, with exceptional physical properties such as high hardness, flexibility, tear and tensile strength, chemical and water resistance. This results in good weathering and abrasion resistance. The systems are 100% solids, making them compliant with the strictest VOC regulations. Due to its specific curing profile and exceptional film properties, the polyurea spray coating technique has been introduced into many areas, including corrosion protection, containment, membranes, linings and caulks.



## WHY CHOOSE ARDEX

ARDEX Polyurea is a highly elastic waterproofing membrane, with a high level of resistance against wear, frost, weathering and chemicals. Once dry it forms a continuous membrane without joints or the need for overlaps or reinforcement. It provides permanent elasticity even at low temperatures and is able to absorb substrate movements. It has high mechanical strength and enhanced hardness and can be easily applied on uneven surfaces. Rapid setting makes its surface walkable after 24 hours.

ARDEX Polyurea can be applied using a number of different application methods such as hot spray, rolled or brushed.

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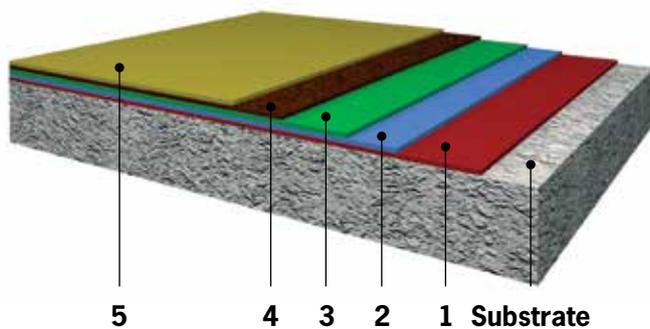
# VEHICLE TRAFFIC SYSTEM

## PURE POLYUREA - ARDEX WPM 400

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Waterproofing system suitable for areas where low and high intensity vehicle traffic is expected. Ideal for car parks.

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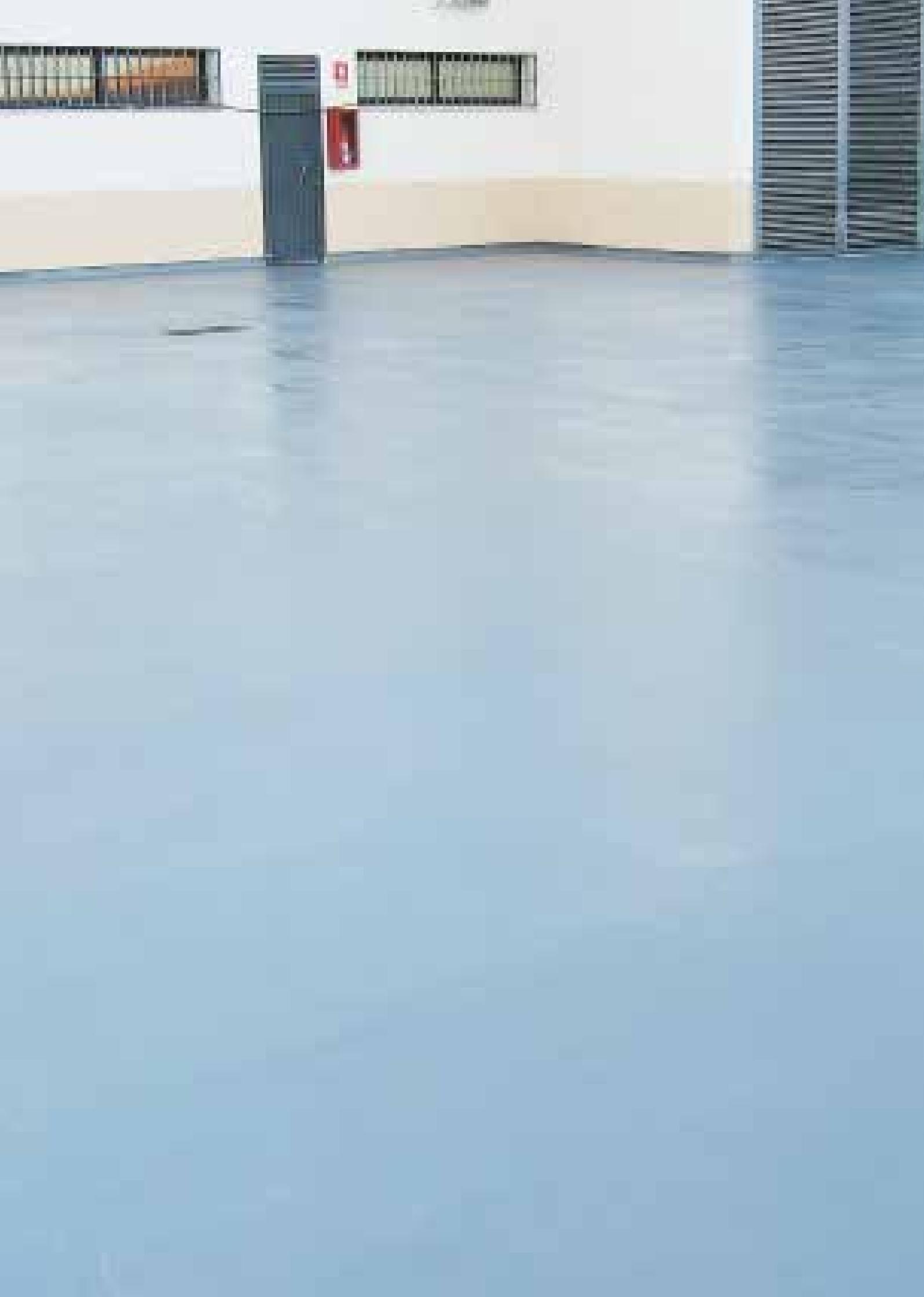


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Layer	Material
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1	ARDEX WPM 400 PRIMER
2	ARDEX WPM 400
3	ARDEX WPM 400 FINISH
4	Quartz Aggregate
5	ARDEX WPM 400 FINISH

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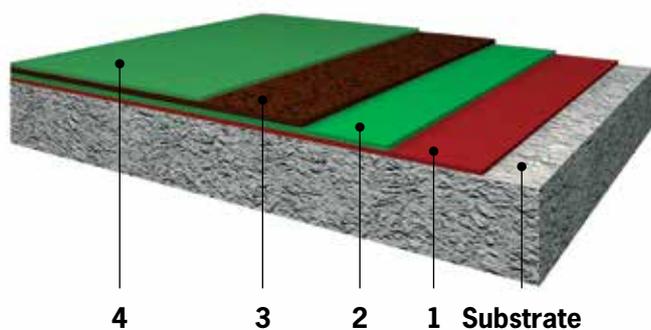


# WATERPROOFING MEMBRANE FOR GENERAL USE

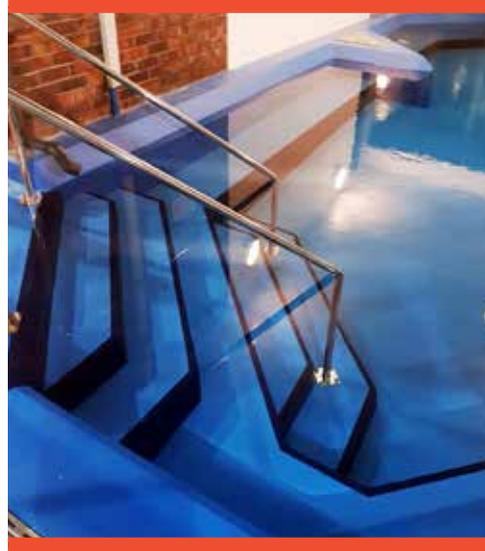
## PURE POLYUREA - ARDEX WPM 400

ARDEX Pure Polyurea is a continuous and seamless waterproofing membrane adaptable to any substrate geometry.

Pure Polyurea has many applications such as swimming pools, aquarium lining, roof coatings, tank coating, manhole and sewer linings, primary and secondary containment and many other uses.



Layer	Material
1	ARDEX WPM 400 PRIMER
2	ARDEX WPM 400
3	ARDEX WPM 400 (Anti-slip applications)
4	ARDEX WPM 400 FINISH / ARDEX R 20 PU



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# WARRANTIES

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The major point of difference between an ARDEX warranty and other warranties is the extent of the cover provided for the owner or builder. Most competitor product warranties cover only the replacement of the defective product. That is further reduced through a discounting structure based on years of service prior to the claim. And usually, no cover is provided for the costs incurred in removing the defective product and installing the replacement product.



An ARDEX warranty covers:

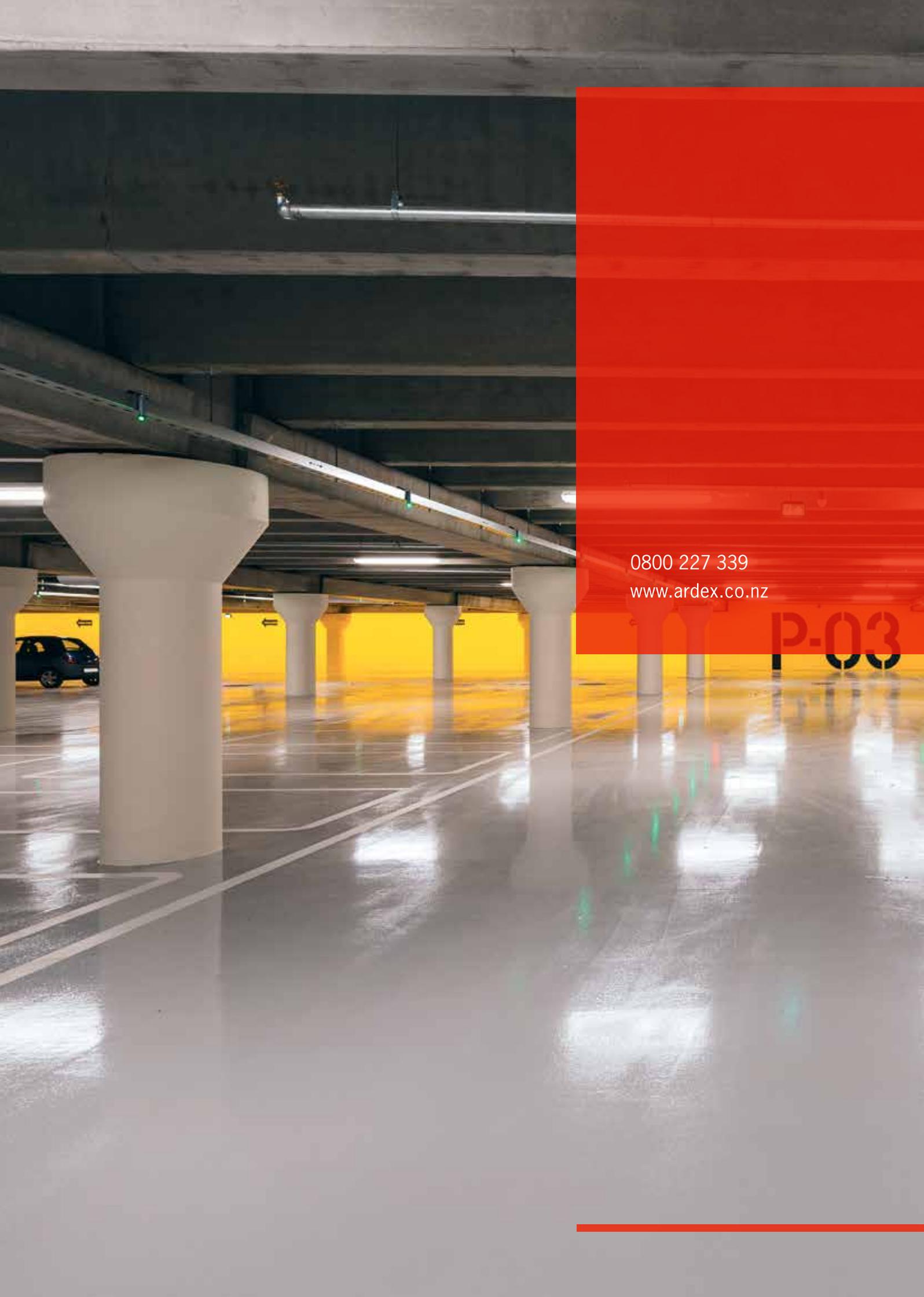
- The costs of repair to which the product is applied and damaged by removal of the defective product where such proves necessary.
- The cost of reinstating or repairing the product or system including material costs of equal or equivalent products.
- The costs of rectifying any material covering the product.

ARDEX warranty claims are NOT discounted by years of service of defective products or any damage to the surface or material.

The System ARDEX Warranty is project specific and warrants that the System ARDEX combination of products that forms the total system are free from defects, are 100% compatible and the system combination is suitable for the purpose intended.

To learn more please call 0800 227 339,  
email [info@ardexnz.com](mailto:info@ardexnz.com)  
or visit [www.ardex.co.nz](http://www.ardex.co.nz)





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