



3

Flooring System



MUHTAWA
For Contracting



Flooring System

1

Epoxy Flooring :

- 100% solids epoxy, self-leveling or roll-on
- High chemical and abrasion resistance
- Used in factories, workshops, car parks, hospitals

2

Self-Leveling Screed and Epoxy :

- Cementitious or Epoxy resin-based
- Creates smooth, level substrate

3

Traffic coating system (PU coating) :

- Flexible, UV-resistant, impact-resistant
- Ideal for commercial kitchens, food plants, cold stores

4

Ucrete / Heavy-Duty PU Concrete :

- High chemical and thermal resistance
- Used in food/beverage industry and heavy-duty zones

5

Anti-Static (ESD) Flooring :

- Controls electrostatic discharge
- Used in electronics, labs, clean rooms

6

MMA Flooring :

- Fast curing, UV stable
- Used in car parks, outdoor areas



3 **A**

Epoxy Flooring



MUHTAWA
For Contracting

3 (A) Epoxy Flooring

We provide integrated, high-performance industrial epoxy flooring solutions engineered to withstand the most demanding operational conditions in industrial and commercial facilities.

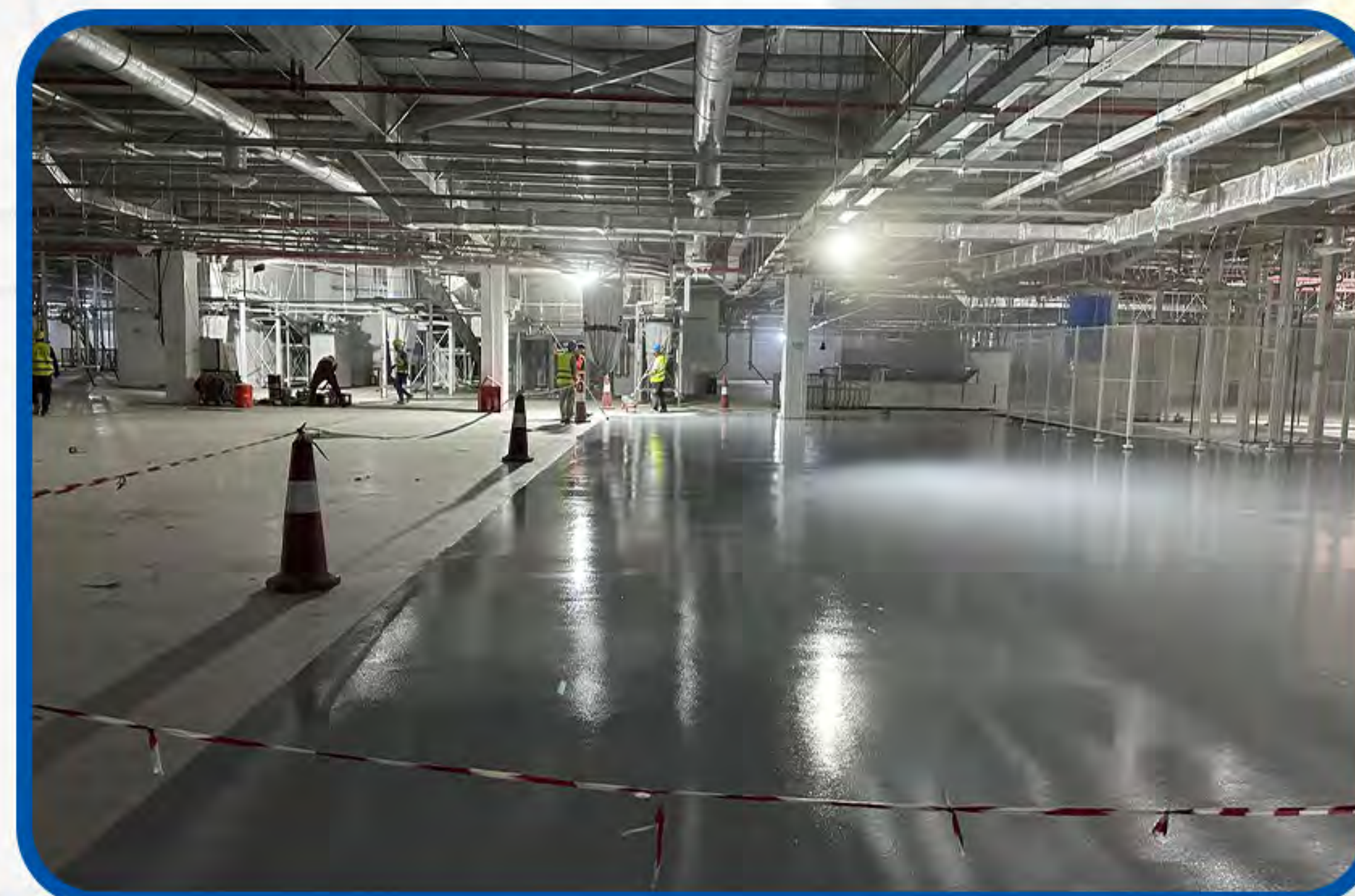
Our epoxy systems form a robust barrier against chemical attack and corrosion while delivering exceptional mechanical

Epoxy Flooring System

A two-component, 100% solids resin system that forms a hard, seamless, fully bonded coating over concrete. It is available in both self-leveling and roller-applied formulations depending on project requirements.

Key Advantages:

- 1 Extremely high resistance to chemicals and corrosion, making it ideal for factories and laboratories.
- 2 Outstanding mechanical strength against abrasion, impact, and heavy traffic loads.
- 3 Seamless and easy-to-clean surface that supports hygiene standards in hospitals and food or pharmaceutical processing areas.
- 4 Multiple finish options (glossy, semi-gloss, matte) with the ability to incorporate anti-slip treatments.



Epoxy Anti Static

Typical Applications:

- Industrial facilities and factories
- Workshops and storage warehouses
- Parking areas and garages
- Hospitals and laboratories
- Food and beverage processing plants (according to specific hygiene standards)

Professional Application

We adhere to the highest quality standards throughout the application process, starting with:

1 Optimal Surface Preparation:

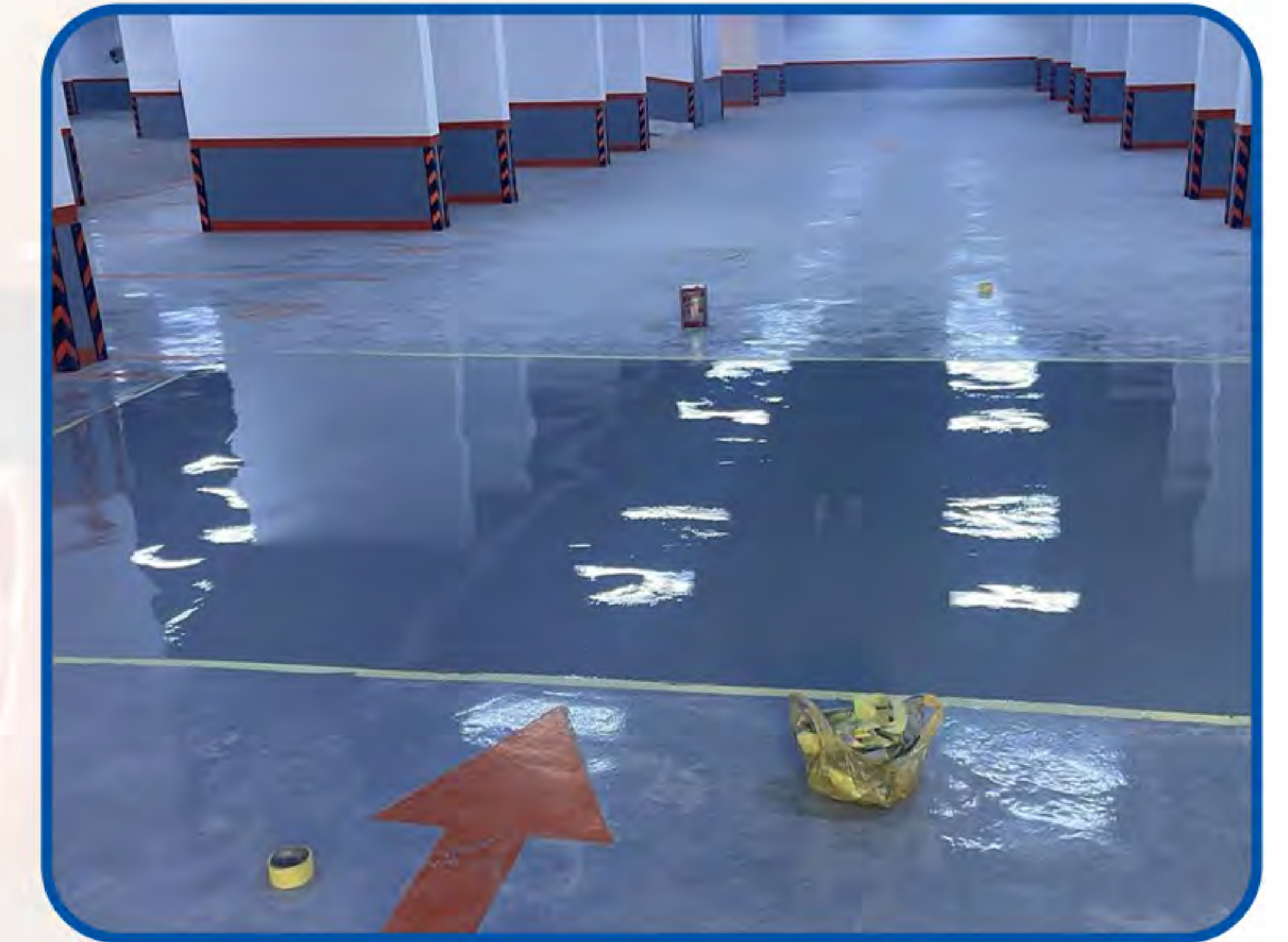
Concrete surfaces are mechanically prepared (sandblasting or grinding) according to ICRI CSP 2–3 or SSPC-SP13 to ensure superior adhesion.

2 Environmental Condition Monitoring:

We ensure that the temperature is above 5°C, relative humidity is below 85%, and concrete moisture content is less than 4% before application.

3 Integrated System Application:

We apply the system according to project requirements, ensuring the correct Dry Film Thickness (DFT) to achieve the expected performance.



We deliver epoxy flooring not merely as a coating, but as a comprehensive engineering solution that enhances asset lifespan, protects investment value, and improves operational efficiency and workplace safety.



3 **B**

Self-Leveling Screed



MUHTAWA
For Contracting

3 (B) Self-Leveling Screed

We provide advanced self-leveling screed systems high-performance, cement-based materials that are pumped or poured over concrete surfaces to achieve an exceptionally smooth and level finish before applying final flooring systems such as epoxy, PU, MMA, or tile.

Professional Application Methodology

1 Surface Preparation:

Cleaning, dust removal, and repairing any voids or surface defects to ensure optimal adhesion.

2 Primer Application:

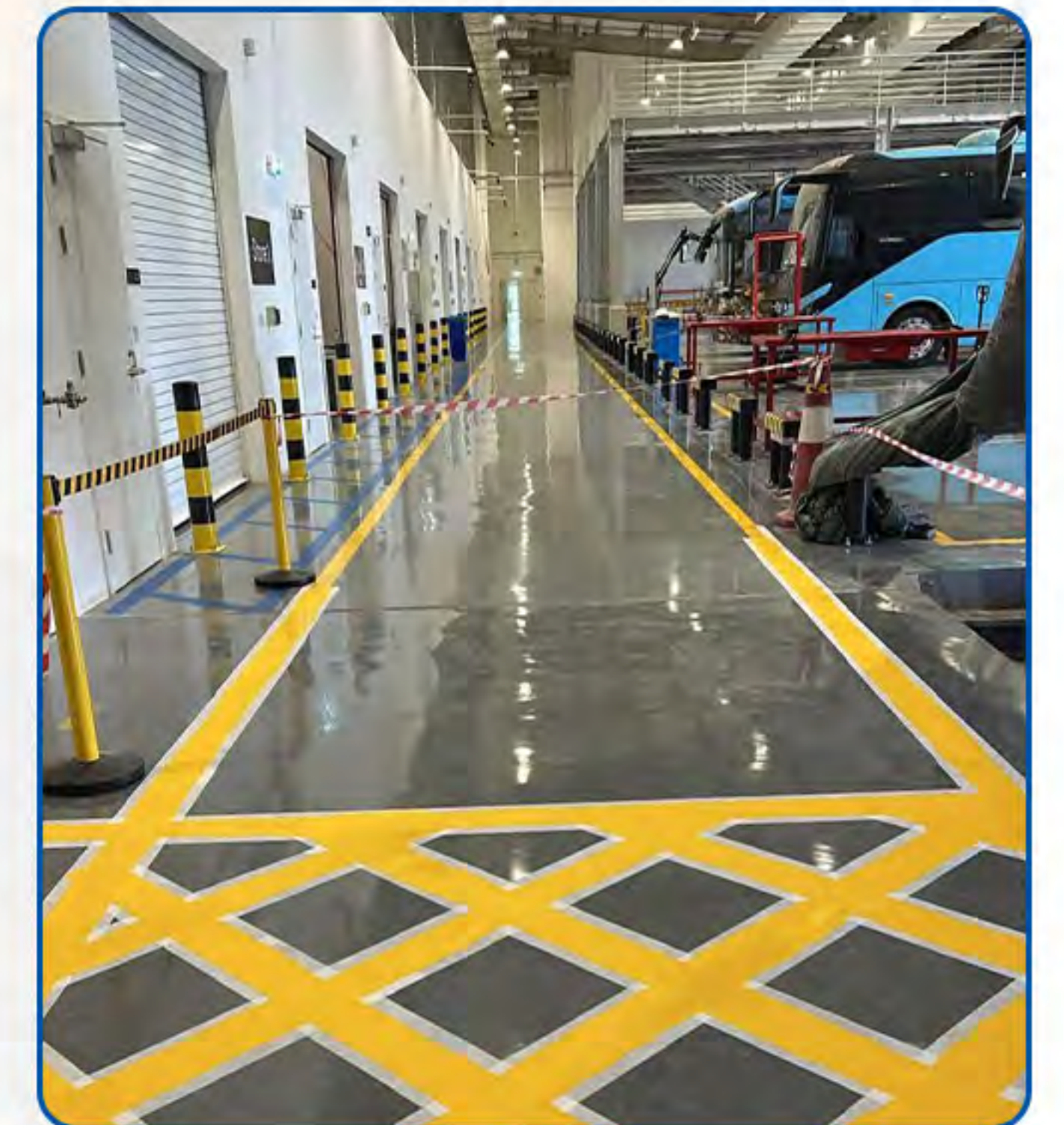
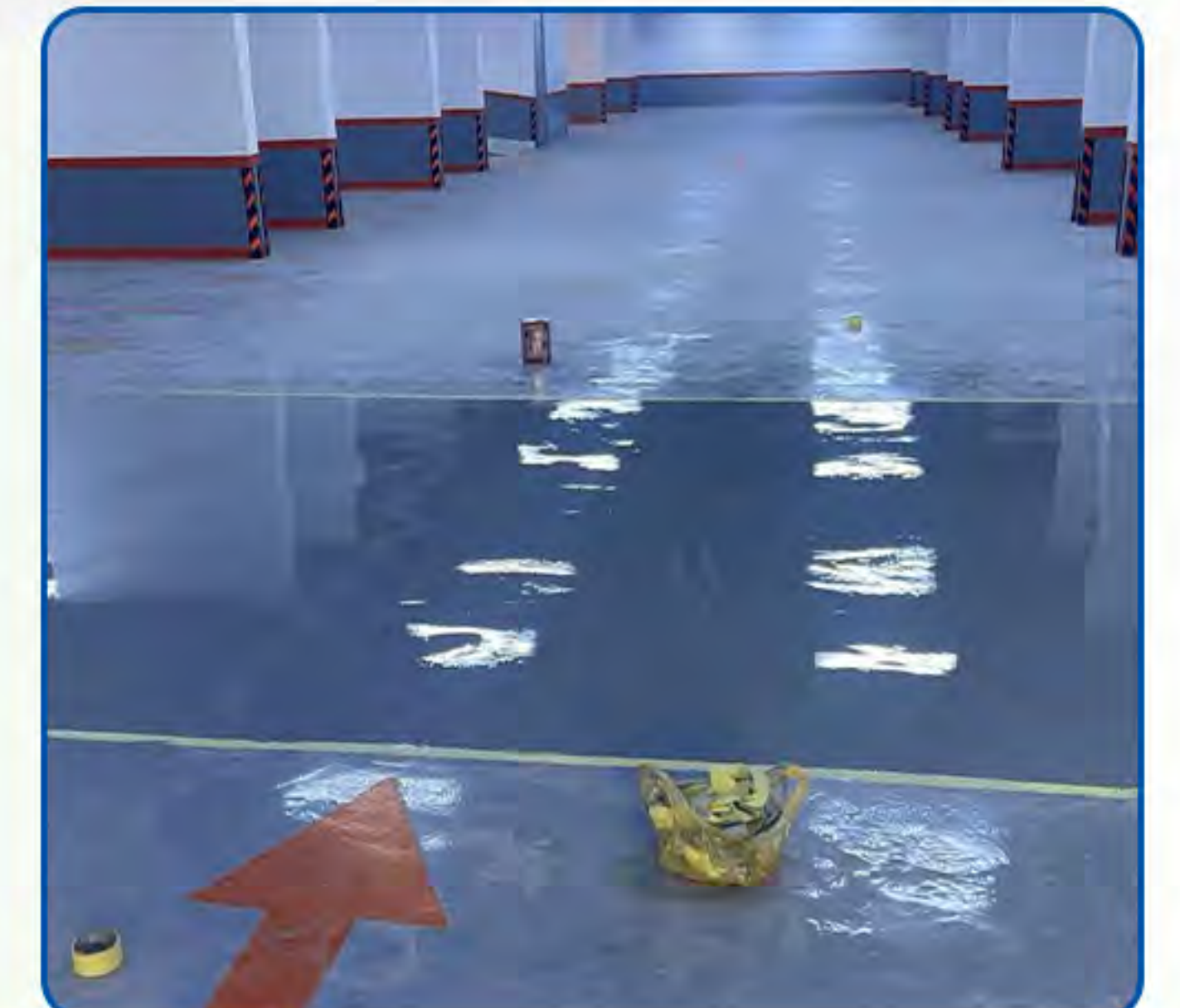
Enhancing adhesion and preventing moisture absorption from the concrete substrate.

3 Self-Leveling Screed Application:

Pouring and evenly distributing the material, allowing it to level automatically.

4 Curing:

Ensuring the surface is fully dried and ready before applying the final flooring system.





3 

**traffic coating system
(PU coating)**



MUHTAWA
For Contracting

3 (C) traffic coating system (PU coating)

PU Flooring is a high-performance resin flooring system known for its flexibility, chemical resistance, UV stability, and thermal shock resistance. It is commonly used in industrial, commercial, and food-grade facilities where hygiene and durability are critical.

Key Technical Features

1

High resistance to abrasion and wear, ensuring long service life

2

Exceptional flexibility that withstands expansion and contraction without cracking

3

Excellent resistance to weather conditions (UV radiation, rain, and humidity)

4

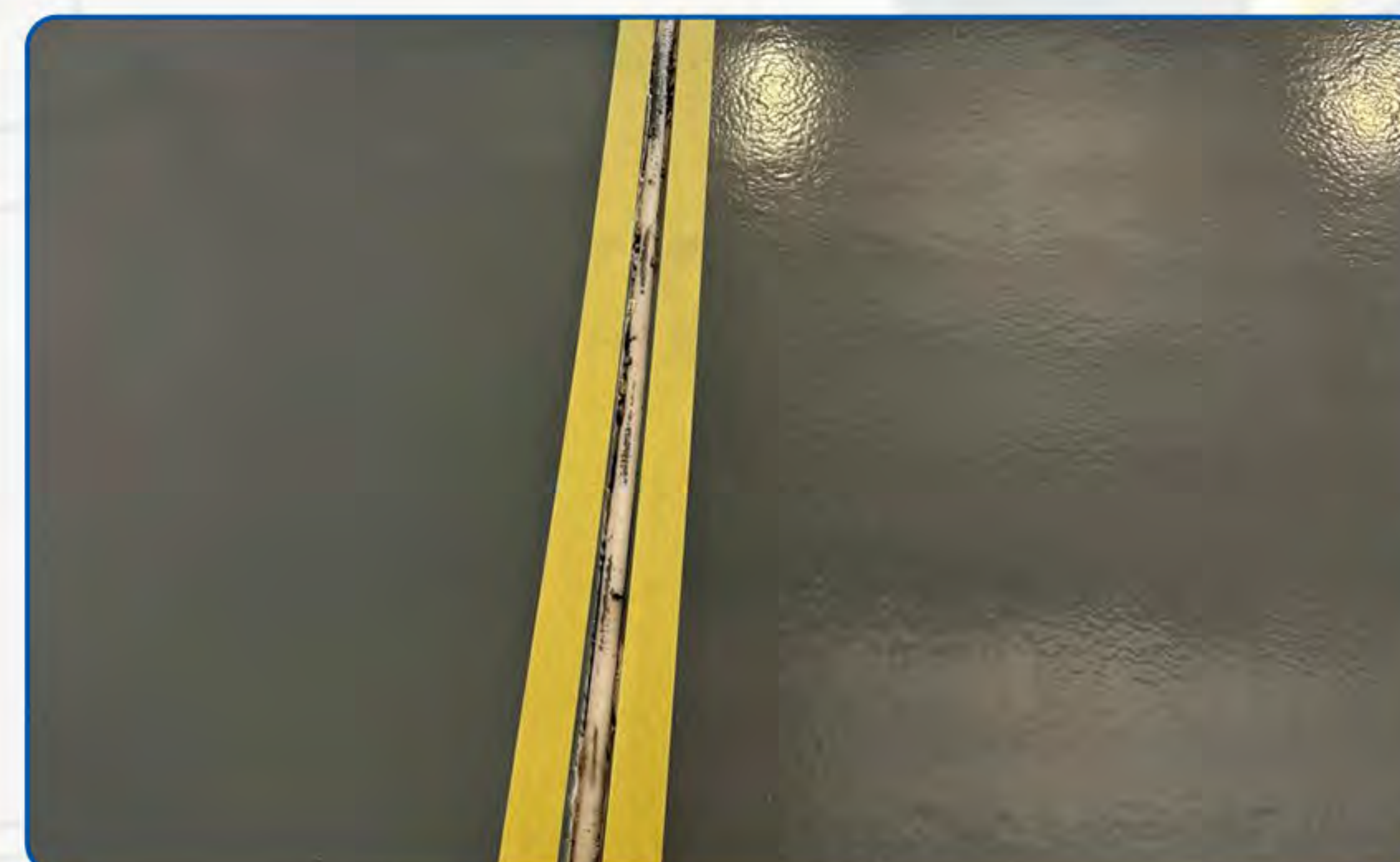
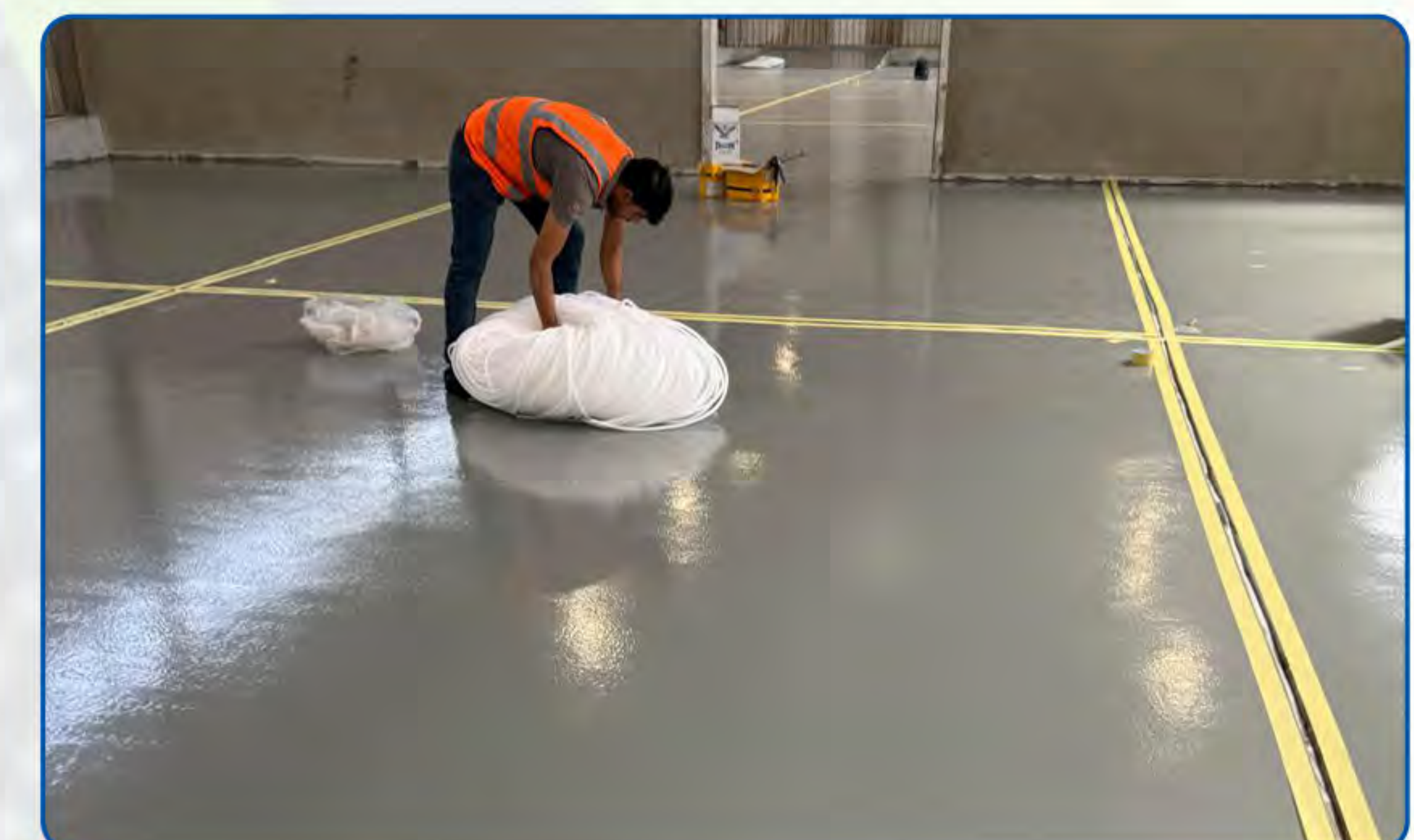
Anti-slip properties to enhance safety

5

Resistant to chemicals, oils, and fuels

6

Easy to clean and maintain with reduced maintenance costs



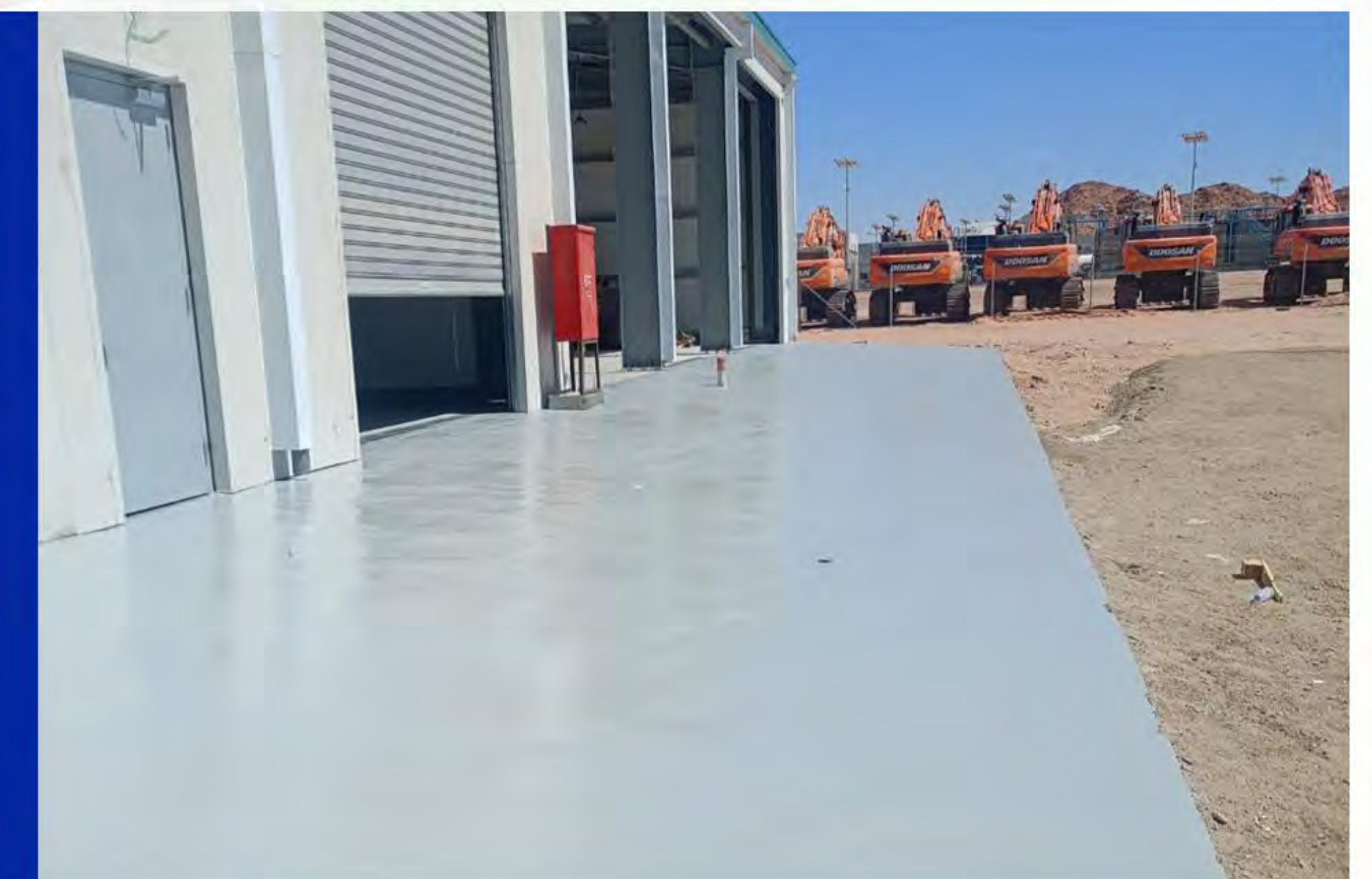
Main Application Areas

1. Car parking areas (basement and rooftop levels)
2. Bridges and highways
3. Pedestrian walkways and sports tracks
4. Factory and warehouse flooring
5. Airports and aircraft loading platforms
6. Shopping malls and commercial complexes
7. Hospitals and educational institutions
8. Industrial areas and workshops



Why Choose the PU Coating System?

PU traffic coating is a smart and cost-effective solution that provides comprehensive surface protection while minimizing the need for frequent repairs. Our system delivers high-quality performance in compliance with international standards, applied by a trained professional team using specialized equipment to ensure durability and long-lasting results.





3 **D**

**Ucrete / Heavy-Duty
PU Concrete**



MUHTAWA
For Contracting

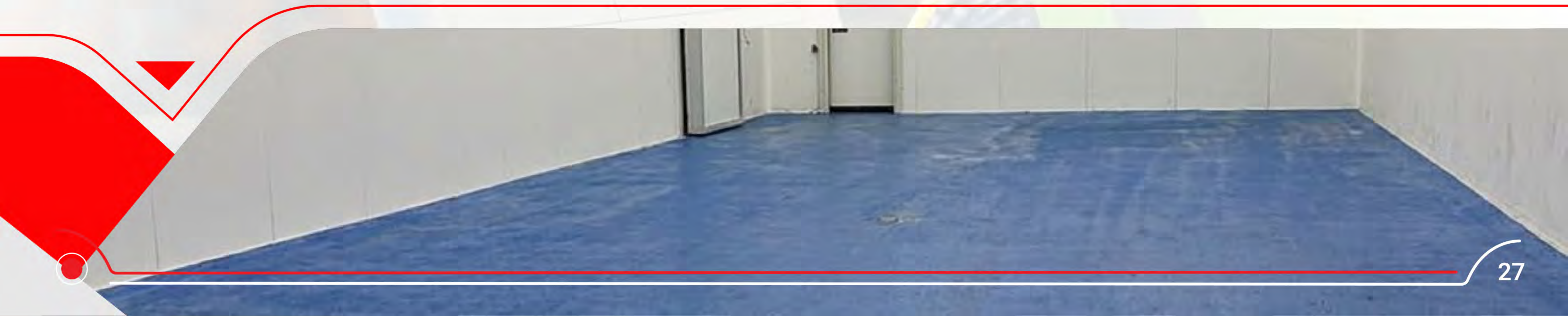
3 (D) Ucrete / Heavy-Duty PU Concrete

We offer the advanced Ucrete system, also known as Heavy-Duty Polyurethane Concrete or Polyurethane–Cement Flooring, a highly durable industrial flooring solution engineered to withstand the most demanding industrial and commercial environments. Ucrete is widely recognized as the toughest and most resilient resin flooring system available globally, thanks to its unique properties that deliver exceptional performance under extreme operational stresses.

The Ucrete system is formulated from an integrated engineering blend consisting of:

- 1 High-performance polyurethane resins
- 2 Portland cement for strength and structural rigidity
- 3 Special aggregates to provide exceptional mechanical resistance
- 4 Advanced hardeners ensuring optimal curing and long service life

This unique composition makes Ucrete the ideal choice for heavy-duty industrial environments exposed to severe chemical, thermal, and mechanical stresses, positioning it as the preferred flooring solution for facilities that require the highest levels of protection and durability.



Key Features & Performance

- 1 Exceptional chemical resistance
- 2 Outstanding mechanical strength
- 3 Fast return to service
- 4 High thermal shock resistance
- 5 Ideal for hygienic environments
- 6 Available in slip-resistant finishes

Professional Application Methodology

1 Surface Preparation:

Complete removal of laitance, mechanical blasting or grinding to achieve an ICRI CSP 2–3 profile, ensuring a clean surface with $\leq 4\%$ concrete moisture.

2 Primer Application:

A bonding layer designed to enhance adhesion and secure a strong interface with the concrete substrate.

3 Ucrete Layer Application:

Applied at a thickness of 6–12 mm, depending on site requirements, to deliver the intended performance characteristics.

4 Surface Finishing:

Selection of slip-resistance level according to operational needs (smooth, medium, or heavy texture).

5 Curing & Inspection:

Protecting the surface during curing, monitoring environmental conditions, verifying film thickness, and completing final inspection and handover with maintenance guidelines.



Primary Industrial Applications

1 Food & Beverage Facilities

production areas, packaging zones, cold rooms, washing and sanitation areas.

3 Pharmaceutical & Chemical Industries

production plants, chemical storage areas, clean rooms, and R&D laboratories.

5 Critical Infrastructure:

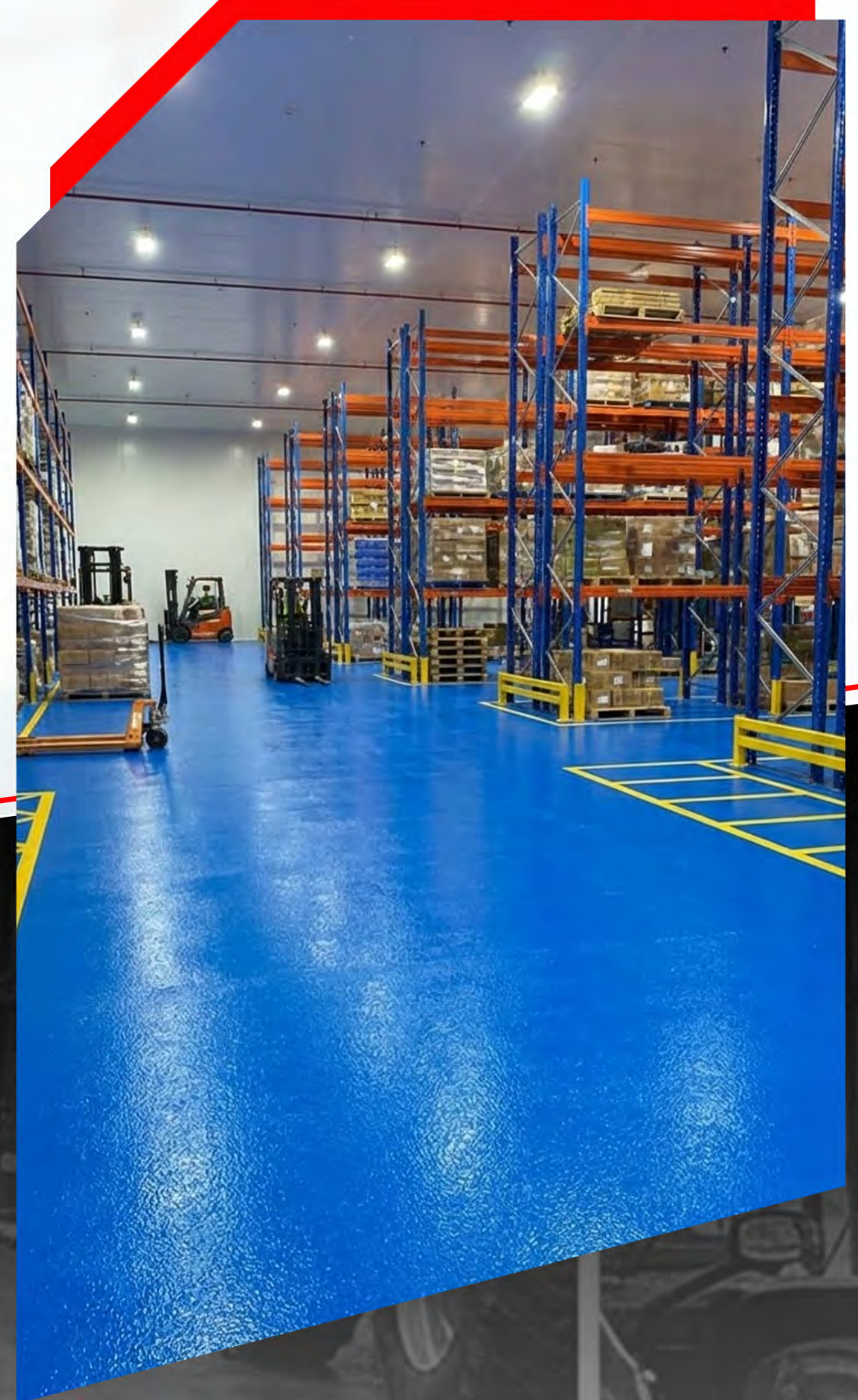
fuel stations, logistics hubs, water treatment and wastewater facilities.

2 Heavy-Duty Zones

truck loading/unloading areas, pallet storage warehouses, workshops, and heavy equipment traffic zones.

4 Commercial & Service Facilities

industrial kitchens, restaurants, slaughterhouses, and food processing facilities.





3 **E**

Anti-Static (ESD) Flooring



MUHTAWA
For Contracting

3 (E) Anti-Static (ESD) Flooring

ESD flooring systems are specialized solutions designed to control electrostatic charges by dissipating or grounding them safely. These systems protect sensitive electronic equipment, prevent hazardous sparks, and ensure safe operation in high-sensitivity environments.

Key Technical Advantages of ESD Systems

1

Safe Charge Dissipation:

Prevents the buildup of static electricity, reducing the risk of equipment damage or spark-related incidents.

2

Consistent Performance:

Provides precise electrical resistance in accordance with international standards (ANSI / ESD / IEC) and delivers reliable performance in various conditions.

3

High Durability:

Withstands heavy traffic and is resistant to scratches and light chemicals.

4

Easy to Clean:

Smooth, dust-free surface that supports cleanroom-level hygiene and operational efficiency.



Professional Application Methodology

1 Surface Preparation:

Cleaning the concrete surface, repairing cracks or defects, and ensuring the substrate is dry.

3 Copper Tape Installation:

Installing copper strips to create a continuous conductive pathway to the grounding point.

5 Final Topcoat:

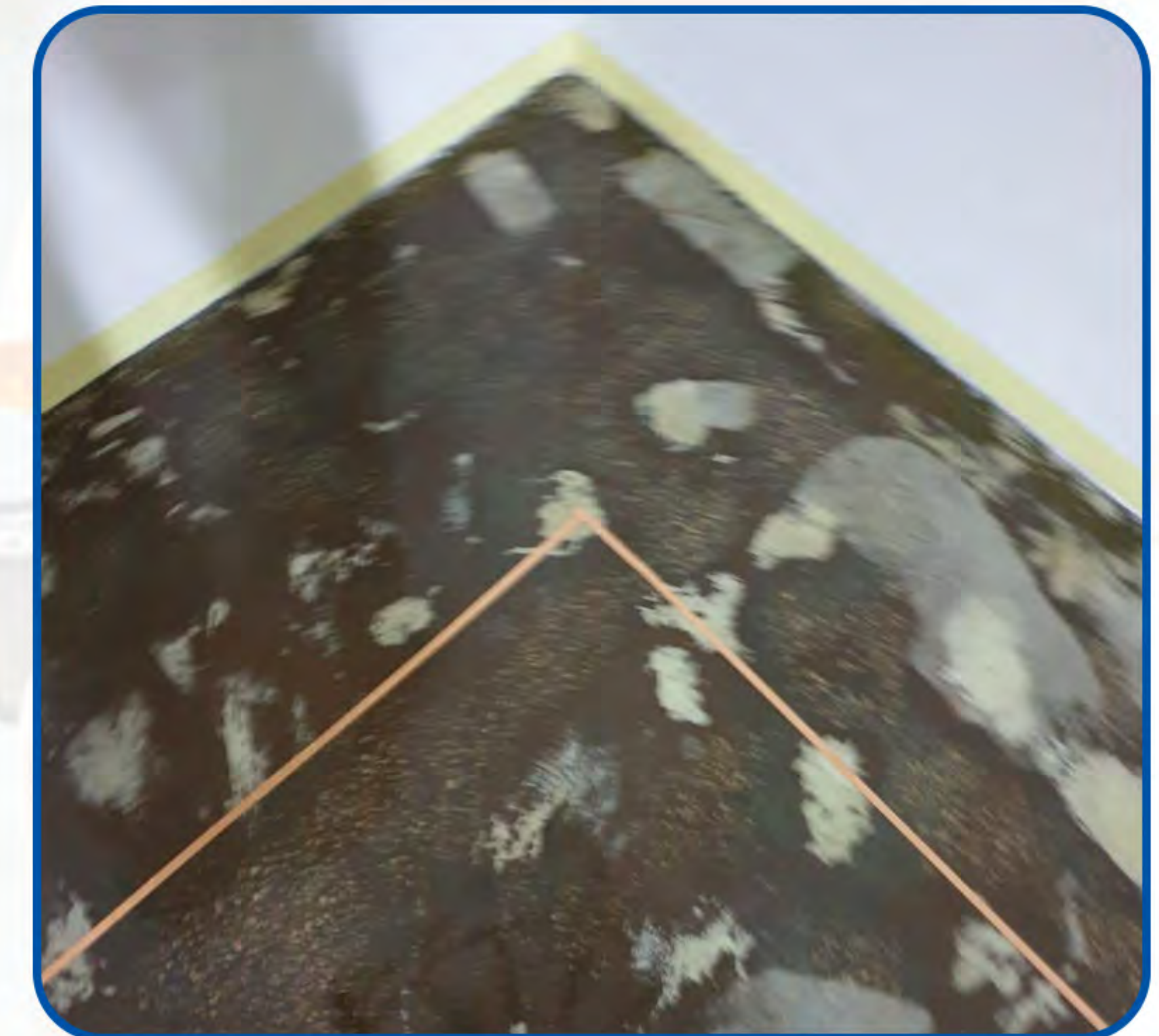
Adding a protective top layer resistant to wear, traffic, and chemicals, with a finish tailored to the environment.

2 Conductive Primer Application:

Applying a special conductive primer that ensures strong bonding and effective charge transmission.

4 ESD Coating Application:

Applying the conductive or dissipative ESD coating layer.



Primary Applications

- 1 Precision electronics manufacturing
- 2 Server rooms
- 3 Clean rooms
- 4 Research and development laboratories
- 5 Sensitive device production lines
- 6 Pharmaceutical plants and advanced laboratories
- 7 Military and defense manufacturing
- 8 Warehouses handling flammable materials



3 (F) MMA Flooring Systems (Methyl Methacrylate)

We provide advanced MMA flooring systems, high-performance resin floors known for their ultra-fast curing capability and excellent resistance to chemicals and weathering. These systems are the ideal solution for projects requiring immediate installation without operational downtime, offering strong performance in both indoor and outdoor environments.

Key Technical Advantages of MMA Flooring :

1

Very fast curing:

Ready for use within hours, ideal for urgent projects and overnight maintenance.

2

Excellent UV resistance:

Color-stable and perfectly suited for outdoor applications.

3

Superior low-temperature performance:

Can be installed and used in environments as low as -10°C .

4

Easy to Clean:

Multiple finish options (smooth, textured, anti-slip) and wide color availability.

5

Strong chemical resistance:

Withstands oils, fuels, industrial chemicals, and cleaning agents.

3 (F) MMA Flooring Systems (Methyl Methacrylate)

We provide advanced MMA flooring systems, high-performance resin floors known for their ultra-fast curing capability and excellent resistance to chemicals and weathering. These systems are the ideal solution for projects requiring immediate installation without operational downtime, offering strong performance in both indoor and outdoor environments.

Key Technical Advantages of MMA Flooring :

1

Very fast curing:

Ready for use within hours, ideal for urgent projects and overnight maintenance.

2

Excellent UV resistance:

Color-stable and perfectly suited for outdoor applications.

3

Superior low-temperature performance:

Can be installed and used in environments as low as -10°C .

4

Easy to Clean:

Multiple finish options (smooth, textured, anti-slip) and wide color availability.

5

Strong chemical resistance:

Withstands oils, fuels, industrial chemicals, and cleaning agents.

Professional Application Methodology

1 Surface Preparation:

Mechanical cleaning, removal of oils and grease, and repair of cracks to ensure optimal adhesion.

3 MMA Basecoat Application:

Applied at the required thickness, typically 2–5 mm, with optional aggregates for enhanced mechanical strength.

5 Curing & Return to Service:

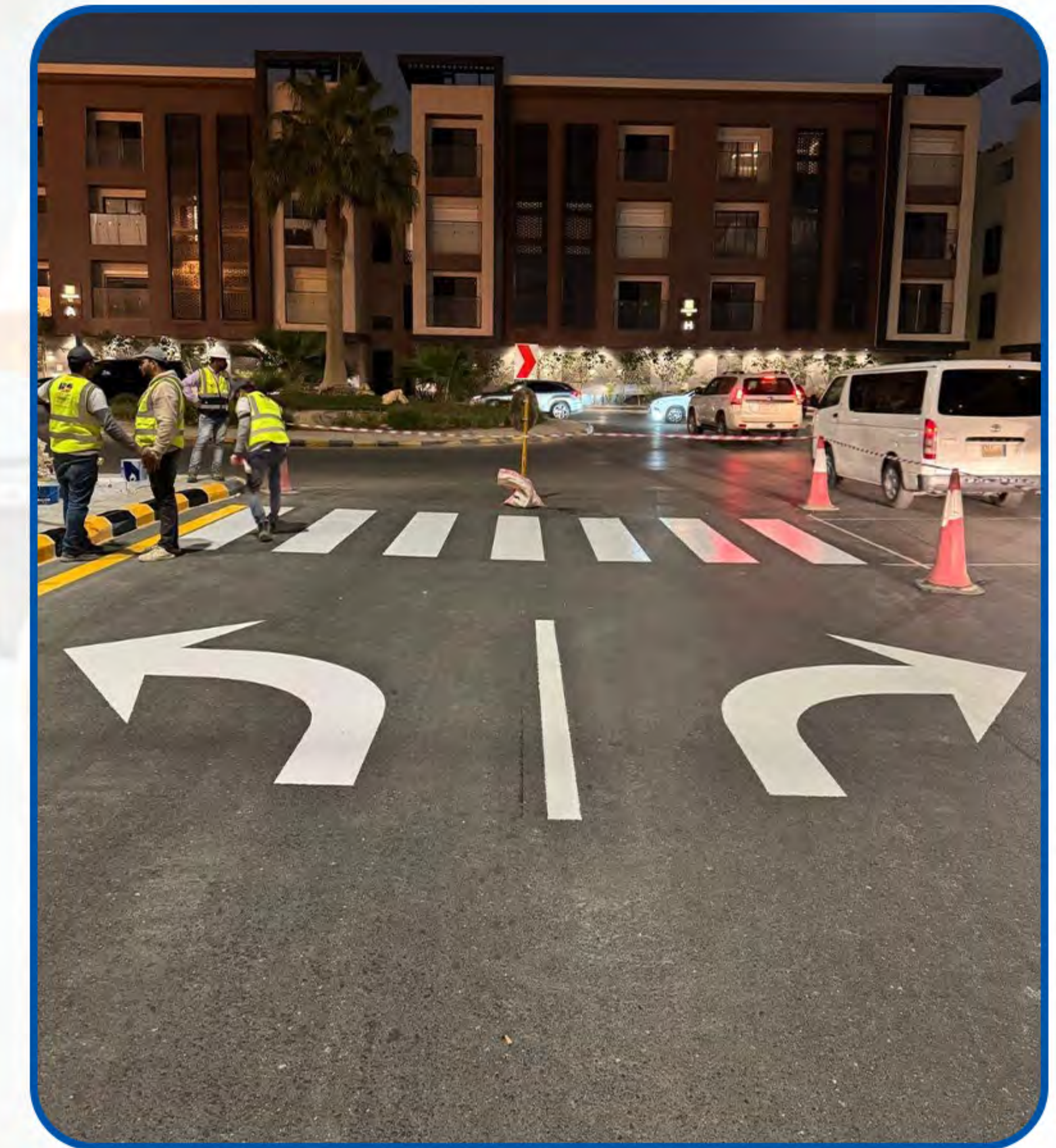
The surface becomes fully operational within hours, minimizing downtime.

2 Primer Application (MMA Primer):

Fast-reacting primer that bonds the base layer securely to the concrete.

4 Topcoat Layer:

UV-resistant and weather-resistant coating, with the option to add anti-slip properties.



Main Application Areas

- 1 Car parks and outdoor areas
- 2 Industrial zones and warehouses
- 3 Fuel stations and exterior walkways
- 4 Commercial areas and public corridors
- 5 Cold rooms and low-temperature environments

