Epoxy Flooring System for – Industrial Warehouses with Heavy Forklift Traffic

By Ressichem Private Limited

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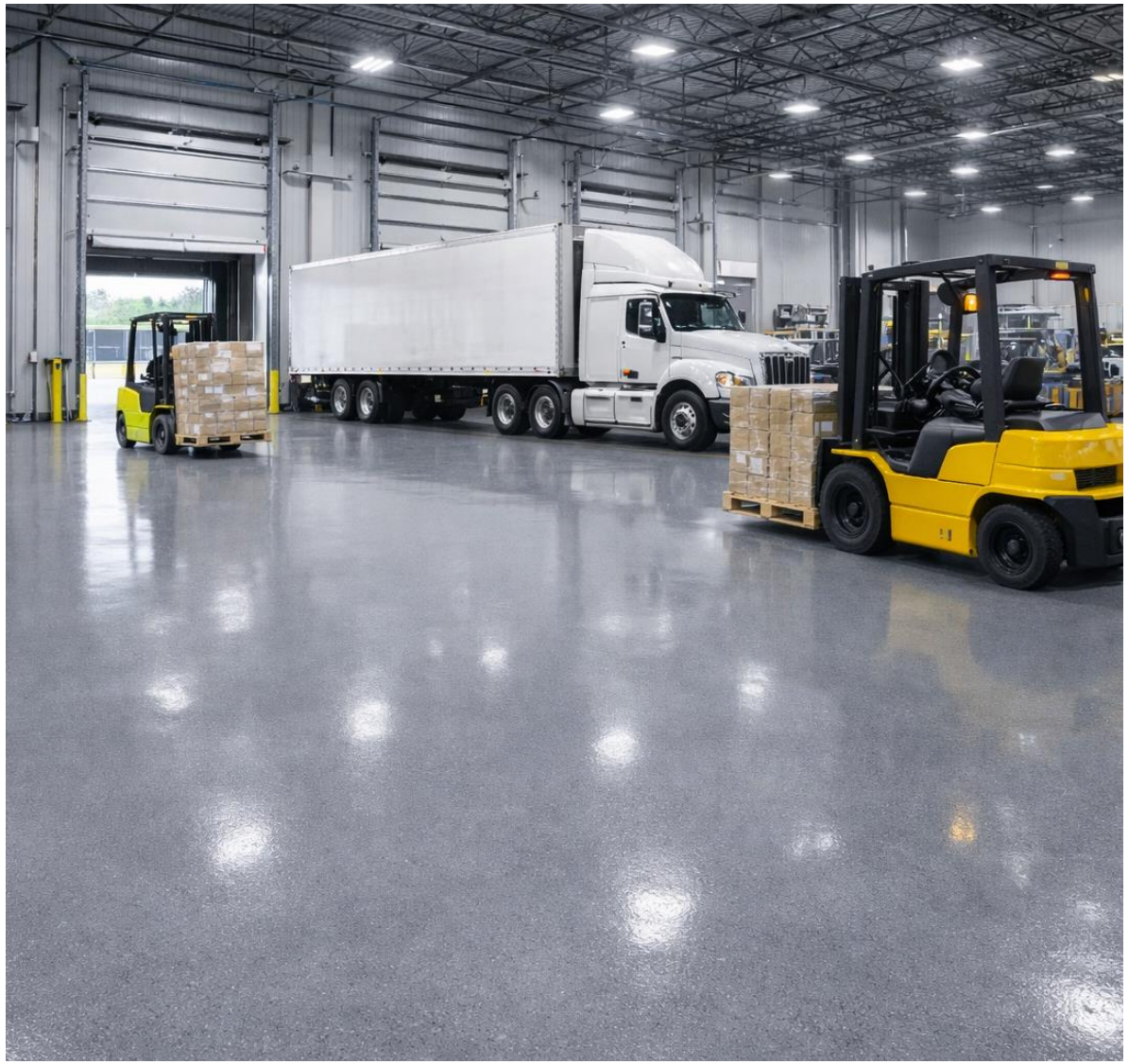
Why Epoxy Floorings at **Industrial Warehouses with Heavy Forklift Traffic**

Industrial warehouses endure **high mechanical stress**, especially from **continuous forklift operations, pallet trucks, and heavy storage systems**. The flooring in such environments must be engineered to resist **abrasion, impact, and surface wear** while maintaining long-term performance under heavy loading cycles.

The **Epoxy Flooring System for – Industrial Warehouses with Heavy Forklift Traffic** is a **high-build, heavy-duty flooring system** developed to provide **superior mechanical durability, seamless finish, and ease of maintenance**. It ensures smooth vehicle movement and long-lasting performance under continuous industrial usage.



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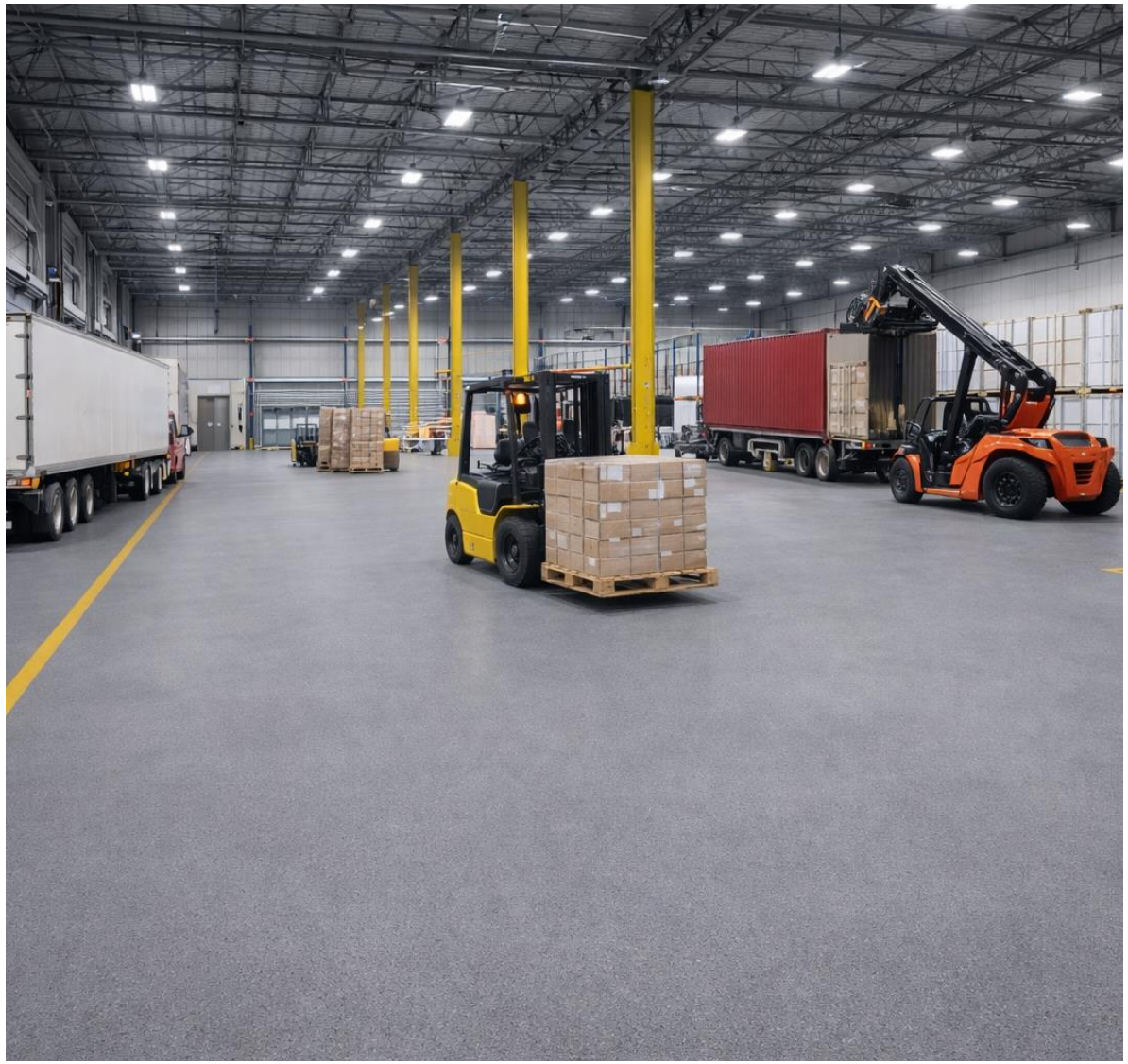
This System is Ideal For

- Industrial warehouses and storage depots
- Logistic centers and freight terminals
- Forklift and pallet movement zones
- Equipment repair and dispatch bays
- Industrial production floors with vehicular loading



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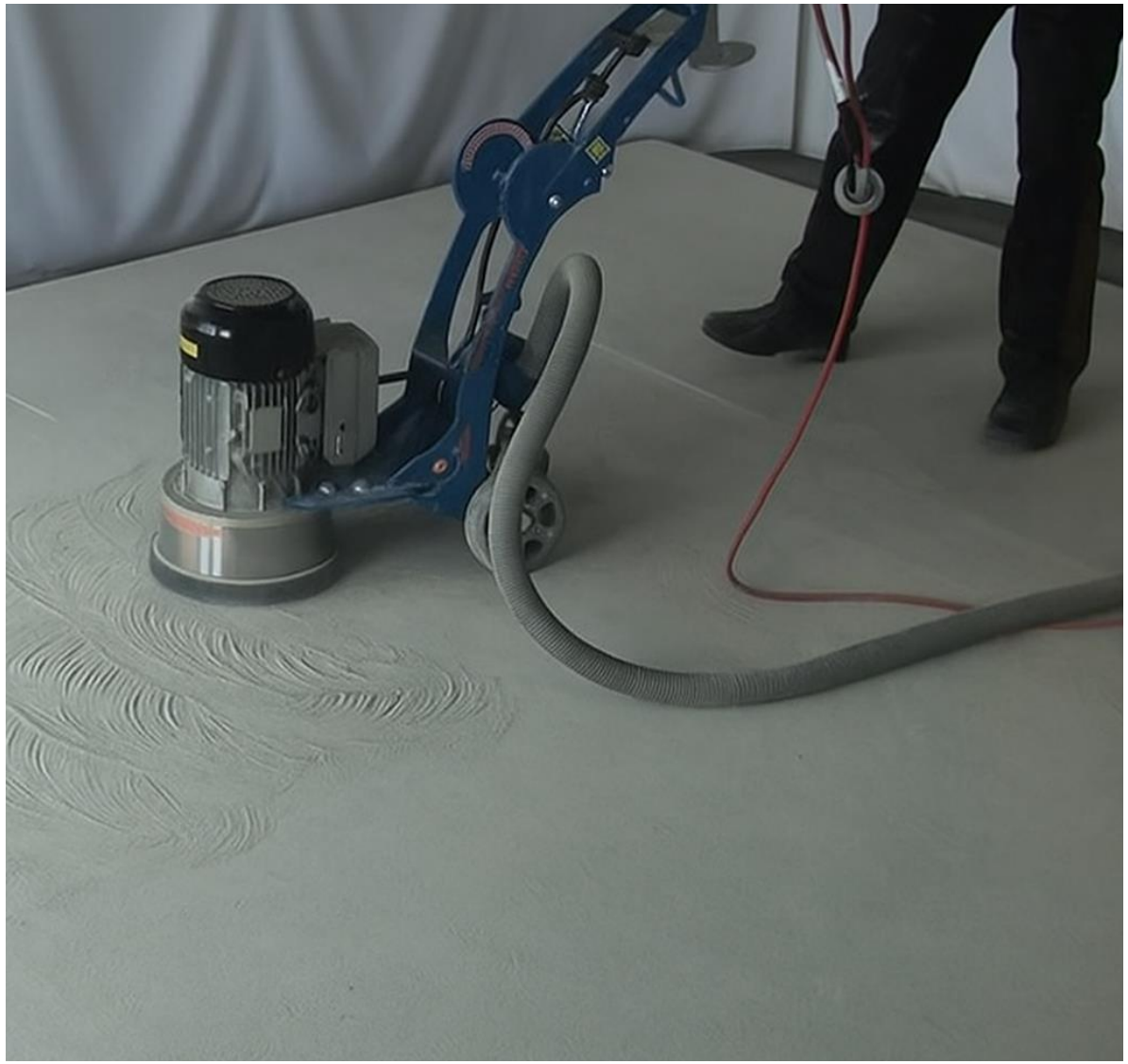
Step 1: Surface Preparation (1 of 2)

Proper surface preparation is essential for a long-lasting epoxy flooring system, particularly under heavy traffic conditions.

All necessary surface repairs, including crack filling or substrate restoration, must be completed prior to the application of any epoxy flooring materials. Ressichem offers a range of suitable crack fillers and repair compounds, including non-shrink cementitious grouts, specifically designed for surface preparation and repair.

- The **concrete strength requirement** should be defined by the consultant in line with operational loading.
- Assess substrate quality using both **destructive (core sampling)** and **non-destructive (Schmidt Hammer)** testing methods.



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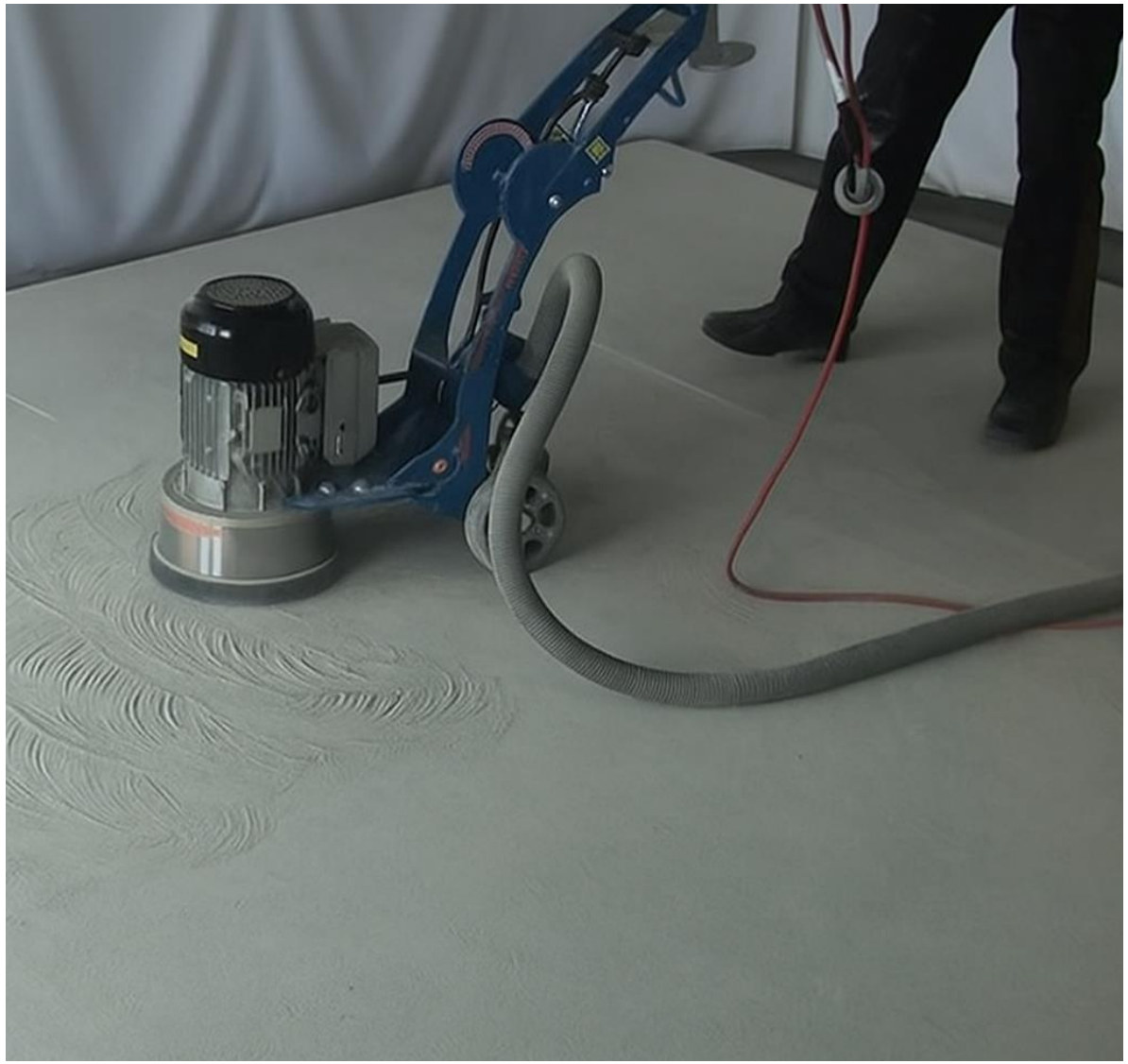
Step 1: Surface Preparation (2 of 2)

- For **major repairs (≥12 mm)**, use **Ressi NSG 710**, a **high-strength, non-shrink cementitious repair mortar**.
- For **minor voids or surface imperfections**, prepare a blend of **Ressi EPO Primer LV** with **Ressichem's washed, graded, and completely dried (zero-moisture) silica sand** to create a dense epoxy-sand repair mortar.
- Mechanically prepare the surface by **shot blasting or diamond grinding**, ensuring it is **clean, dust-free, and free of oil or grease contaminants**.
- This step is **especially critical for older floors** that have experienced **oil staining or grease penetration**; thorough degreasing and cleaning must be conducted before application.



Step 2: Application of Ressi EPO Primer LV

Apply **Ressi EPO Primer LV**, a **low-viscosity, solvent-free epoxy primer** offering excellent adhesion and deep substrate penetration.

- Mix resin and hardener precisely according to the product datasheet.
- Apply using a **trowel or epoxy squeegee** for uniform coverage.
- Allow full curing before proceeding to the next step.

Step 3: Application of Ressi EPO Mid Coat S – GP

Apply **Ressi EPO Mid Coat S – GP**, a **high-build, general-purpose epoxy mid-layer** formulated to enhance mechanical strength and system thickness.

- Apply with a **notched trowel or epoxy squeegee** to achieve even distribution.
- Minimum recommended thickness is **1000 microns**, with **2000 microns preferred** for heavy forklift areas.
- Allow full curing before the application of the topcoat.

Step 4: Application of Final Epoxy Topcoat

Apply **Ressi EPO Floor Plus**, a **high-build, wear-resistant epoxy topcoat** designed to withstand continuous forklift movement and industrial wear.

- For applications requiring color customization and higher aesthetic value, use **Ressi EPO Floor Plus**.
- For economical projects where color variety is not required, use **Ressi EPO Floor Plus Econo** in standard grey.
- Both versions deliver identical performance; only color customization differs.
- Apply at a **minimum thickness of 2000 microns** using a **trowel or epoxy squeegee**.
- Allow **48–72 hours** for light movement and **7 days** for full mechanical cure.

Step 5: Floor Markings *(If Required)*

Where required, apply **Ressi EPO Gloss Might** in contrasting colors for demarcation or safety zones.

- Apply using a **roller** after full system cure.
- For economical solutions, **Ressi EPO Roll Coat** may be used in alternate colors.

Note:

- The **total system thickness must be a minimum of 3000 microns**.
- Epoxy flooring must be applied **only in ambient (room temperature) conditions**. Once fully cured, **the temperature of the area can be gradually reduced** to operational levels.
- Always refer to **Ressichem Technical Datasheets (TDS)** for detailed product guidelines and curing information.

System Summary Table

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Parameter	Description
System Name	Epoxy Flooring System for – Industrial Warehouses with Heavy Forklift Traffic
Area Type	Heavy-Duty Industrial Warehouses
Traffic Exposure	Continuous Forklift and Pallet Jack Operations
Primary Requirements	High Mechanical Strength, Abrasion Resistance, Durability
Primer	Ressi EPO Primer LV
Mid Coat (Compulsory)	Ressi EPO Mid Coat S – GP (1000–2000 microns)
Topcoat (Mandatory)	Ressi EPO Floor Plus / Floor Plus Econo (2000 microns)
Marking Coat (Optional)	Ressi EPO Gloss Might / Ressi EPO Roll Coat
Silica Used	Washed, graded, and completely dried (zero moisture content) silica sand
Total System Thickness	Minimum 3000 Microns
Application Method	High-Build Trowel or Epoxy Squeegee (Roller Only for Markings)
Finish Type	Smooth, Gloss, High-Wear Resistant
Curing Time Before Use	48–72 Hours (Light Use) / 7 Days (Full Cure)
Key Benefits	Mechanical Endurance, Abrasion Resistance, Long-Term Durability

System Summary Diagram

A) Cementitious Surface: (Concrete slab or screed)

B) Cracks and surface damage

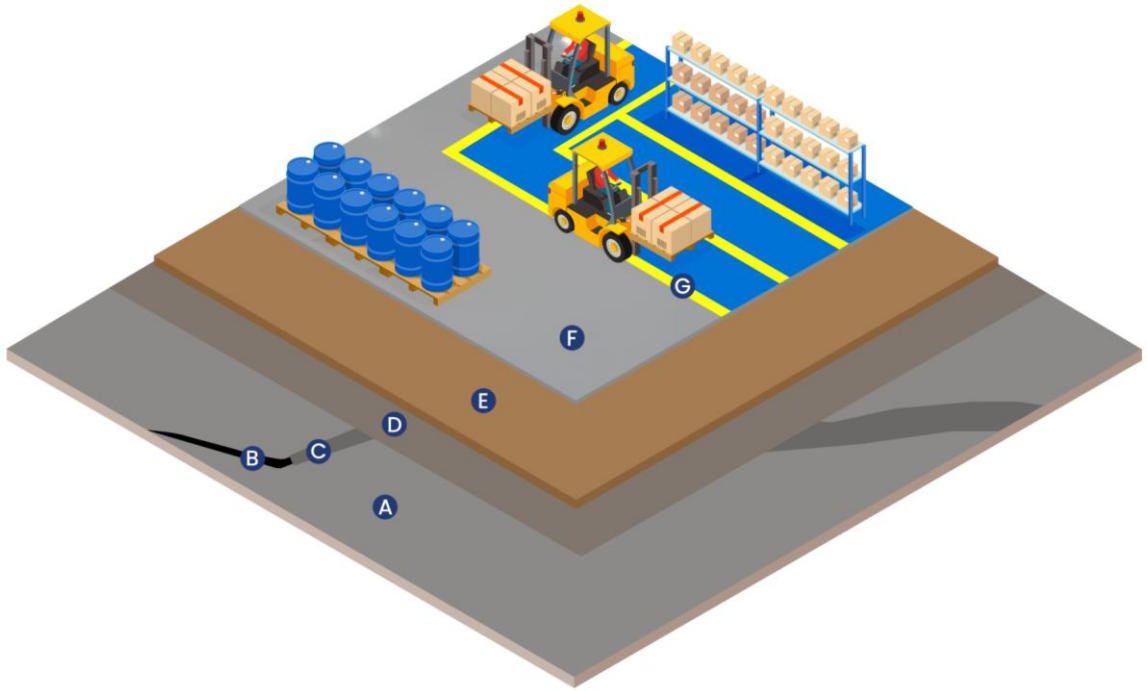
C) Crack Filler and Repairing Materials

D) Ressi EPO Primer LV

E) Ressi EPO Mid Coat S – GP

F) Ressi EPO Floor Plus / Ressi EPO Floor Plus Econo

G) Ressi EPO Gloss Might / Ressi EPO Roll Coat (Marking)



Thank You

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