

EPOXY FLOORING SYSTEM FOR LIGHT MANUFACTURING PLANTS



Introduction

Light manufacturing facilities require flooring systems that can endure **moderate mechanical stresses, foot traffic,** and occasional equipment movement while maintaining a **clean, organized, and professional appearance.** The flooring must also resist light chemical exposure and be easy to maintain.

The **Epoxy Flooring System for – Light Manufacturing Plants** is a **medium-duty, high-build flooring solution** engineered to provide an optimal balance between durability, functionality, and aesthetics for precision manufacturing and assembly environments.

Recommended Use Cases

- Electrical and electronic component assembly areas
- Plastic, rubber, and polymer product manufacturing units
- Medical device and packaging facilities
- Consumer goods assembly and testing areas
- Printing and finishing workshops
- Light metal fabrication and tool maintenance zones

Step-Wise System Description

Step 1: Surface Preparation

A clean, sound, and properly profiled surface is vital for long-term epoxy performance.

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.

- Mechanically grind or shot-blast the concrete surface to remove weak or contaminated layers.
- Repair cracks and surface imperfections using Ressichem's epoxy-based crack fillers.
- Clean thoroughly and vacuum all loose debris.
- Ensure the substrate moisture content is **below 5%** before primer application.

Step 2: Application of Ressi EPO Primer LV

Apply **Ressi EPO Primer LV**, a low-viscosity, solvent-free epoxy primer (primer) that ensures strong bonding and surface sealing.

- Mix resin and hardener in the correct ratio as per the technical datasheet.
- Apply evenly using a roller or brush to achieve full substrate coverage.
- Allow the primer to cure fully before applying subsequent coats.

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

Where improved levelling or additional build thickness is required, apply **Ressi EPO Mid Coat S – GP.**

- Recommended minimum thickness: **1000 microns; 2000 microns preferred** for smooth, level surfaces.
- Apply using a notched trowel or squeegee and finish with a spike roller to remove trapped air.
- Allow curing overnight before topcoat application.
- This step is **optional** and may be skipped if the surface is already even and within tolerance.

Step 4: Application of Ressi EPO Tough Might or Ressi EPO Floor Plus

Apply **Ressi EPO Tough Might** as the final wear layer for robust performance and aesthetic finish.

- If **Ressi EPO Mid Coat S – GP** is used, apply **Ressi EPO Tough Might at 1000 microns.**
- If **no mid coat** is used, apply **Ressi EPO Floor Plus** at a **minimum of 2000 microns** to achieve the required film build.
- Apply using a roller or flat squeegee to achieve a smooth, uniform finish.
- Allow **48–72 hours** before light traffic and **7 days** for full cure.

Step 5: Floor Markings (If Required)

Apply **Ressi EPO Gloss Might** in contrasting colors to create clear, functional zoning and workflow demarcation.

- Apply markings after full curing of the base epoxy system.
- Use masking tape for precise lines.
- Apply as a **roller coat** at the desired thickness and allow complete curing before traffic exposure.

Note:

- The **total system thickness must be a minimum of 2000 microns** for durability and wear performance.
- Always refer to the product **Technical Datasheets (TDS)** for detailed mixing, coverage, and curing guidelines before execution.

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System Advantages

- **Durable and Functional:** Withstands mechanical wear from machinery and foot traffic.
- **Customizable Thickness:** Adaptable to different operational loads and floor conditions.
- **Chemical Resistance:** Suitable for light exposure to cleaning agents and maintenance chemicals.
- **Smooth and Seamless Finish:** Promotes cleanliness and a professional work environment.
- **Ease of Maintenance:** Non-porous and dust-free surface simplifies cleaning.
- **Optional Floor Markings:** Supports workflow zoning and safety identification.

Maintenance Guidelines

- Clean regularly using neutral pH cleaning agents.
- Avoid harsh solvents and abrasive cleaning tools.
- Inspect periodically for wear and schedule recoating as required.
- Ensure prompt repair of any surface damage to maintain coating integrity.

System Summary Table

Parameter	Description
System Name	Epoxy Flooring System for – Light Manufacturing Plants
Area Type	Light Manufacturing, Assembly, and Fabrication Zones
Traffic Exposure	Medium Duty
Primary Requirements	Durability, Smooth Finish, Easy Maintenance, Mild Chemical Resistance
Primer	Ressi EPO Primer LV
Mid Coat (Optional)	Ressi EPO Mid Coat S – GP (1000–2000 microns)
Topcoat	Ressi EPO Tough Might (with Mid Coat) / Resi EPO Floor Plus (without Mid Coat)
Marking Coat (Optional)	Ressi EPO Gloss Might (Roller Applied, Alternate Color)
Total System Thickness	Minimum 2000 Microns
Finish Type	Smooth, Gloss
Curing Time Before Use	48–72 Hours for Mild Traffic / 7 Days Full Cure
Key Benefits	Durable, Seamless, Easy to Clean, Professional Finish

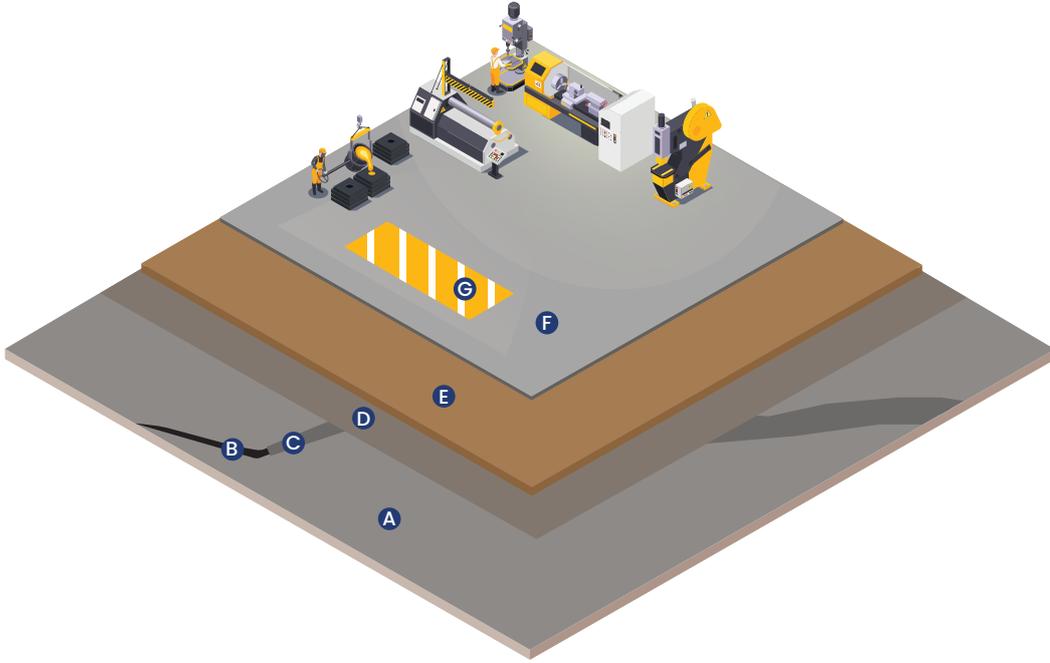
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Conclusion

The Epoxy Flooring System for – Light Manufacturing Plants provides a robust, cost-effective, and easy-to-maintain flooring solution ideal for precision and assembly-oriented industries.

The process — Surface Preparation, Ressi EPO Primer LV, (Optional) Ressi EPO Mid Coat S – GP, Ressi EPO Tough Might or Ressi EPO Floor Plus, (Optional) Ressi EPO Gloss Might — ensures a smooth, long-lasting surface that meets both functional and aesthetic requirements of light manufacturing environments.

System Summary



- 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 Tough Might / Ressi EPO Floor Plus
- G) Ressi EPO Gloss Might