



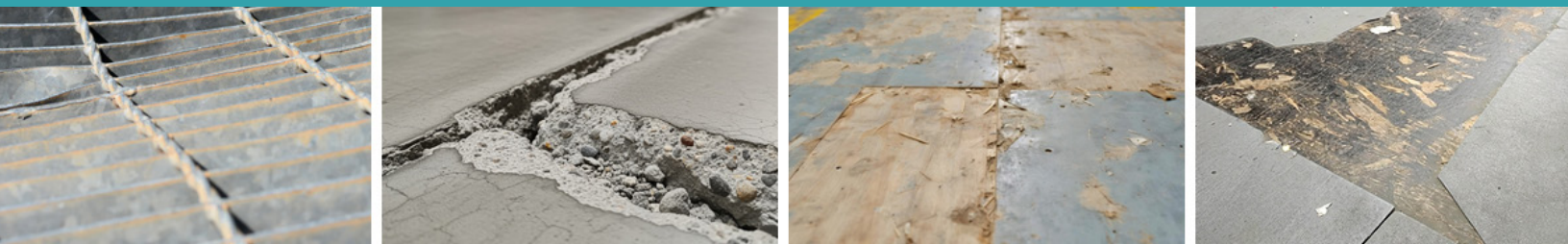
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Industrial Floor Upgrades: When Retrofitting Makes More Sense vs. Full Replacement



Tearing out and replacing industrial flooring is one of the most disruptive and expensive upgrades a facility can undertake. Whether it's a mezzanine system or a ground-floor concrete slab, full replacement often means extended downtime, lost productivity, and significant labor costs.

A smarter approach is to retrofit existing flooring systems—upgrading performance without removing the underlying structure. Retrofit solutions using ResinDek® engineered flooring panels allow facilities to modernize surfaces, improve safety, and support automation without the time and cost of full replacement.

From retrofits of mezzanine bar grating, plywood, and poly deck to covering concrete flooring on work platforms and at ground level, ResinDek solutions adapt to a wide range of industrial replacement floor needs.

Why Retrofit Industrial Flooring Instead of Replacing It?

In many facilities, the structural framework of a mezzanine or slab is still sound. The issue lies in the surface material, which may no longer meet operational demands. Choosing to retrofit instead of replace a floor delivers several key advantages:

- **Reduced downtime:** Retrofit installations avoid demolition and eliminate concrete curing time.
- **Lower total cost:** Less labor, fewer materials, and minimal structural modifications are less expensive.
- **Faster project timelines:** ResinDek flooring panels install quickly, often while a facility continues operations.
- **Improved performance:** ResinDek panels deliver enhanced durability, ergonomics, and load capacity.
- **Automation support:** Operations looking to deploy autonomous mobile robots (AMRs) or automatic guided vehicles (AGVs) can quickly achieve optimal surface conditions to support robotic movement.

Retrofit flooring solutions are particularly valuable in high-throughput distribution centers, manufacturing plants, and facilities transitioning to automation. Rather than rebuilding from the ground up, operators can upgrade surfaces to meet modern requirements.

Retrofit Mezzanine Bar Grating for a Safer, Solid Surface

Bar grating is commonly used in elevated work platform construction due to its strength and open design. However, it introduces several operational challenges that often lead facilities to pursue a retrofit mezzanine bar grating solution. Open grating allows dust, debris, and small items to fall through to lower levels, creating safety risks. It also produces uneven rolling surfaces that can disrupt carts, pallet jacks, and robotic systems.

A retrofit over bar grating with ResinDek panels creates a smooth, solid work surface without removing the existing structure. This approach:

- Eliminates falling object hazards.
- Improves mobility for carts and equipment.
- Reduces vibration and worker fatigue.
- Supports robotic and automated traffic.

By covering the grating rather than replacing it, facilities can complete upgrades faster while significantly improving safety and usability.

Retrofit Concrete Flooring to Improve Performance

Concrete is often seen as a permanent flooring solution, but it comes with limitations—especially in modern, high-performance environments. A retrofit concrete flooring system using ResinDek panels offers a compelling alternative for both industrial work platforms and ground-floor applications.

Traditional concrete flooring presents several challenges in industrial environments. Its heavy weight increases structural demands, particularly on elevated systems, which can drive up engineering and material costs. Installation and repairs often require long curing times, delaying operations and extending downtime. Over time, concrete is also prone to cracking and dusting, which can impact durability and require ongoing maintenance. In addition, surface inconsistencies can create problems for automation systems, where flatness and uniformity are critical for efficient performance.

Benefits of retrofitting concrete with engineered ResinDek floor panels include:

- Panels are significantly lighter than concrete.
- No curing time—installation is immediate.
- Improved flatness and levelness.
- Reduced dust and maintenance requirements.

On the ground floor, retrofit concrete flooring is especially valuable for facilities deploying AGVs and AMRs. These systems require consistent, predictable surfaces to operate efficiently. Uneven or worn concrete can reduce the efficiency of robotic systems and increase maintenance costs.

Installing ResinDek panels over existing ground-floor slabs transforms existing concrete into a high-performance surface. This uniformity reduces vibration, improves navigation accuracy, and extends the lifespan of mobile automated technologies.

Retrofit Plywood Mezzanine Floors for Long-Term Durability

Plywood is widely used in elevated work platform construction due to its low upfront cost, but it is not designed for long-term performance in demanding industrial environments. Over time, plywood floors can warp or splinter, delaminate under load, and gradually lose structural integrity. As wear accelerates, facilities often face frequent repairs or full replacement, leading to ongoing maintenance costs and operational disruption.

A retrofit plywood mezzanine flooring solution replaces or overlays existing plywood with ResinDek panels engineered specifically for industrial use. These panels provide higher load

capacity and greater resistance to wear and impact, making them better suited for high-traffic applications. They also deliver a longer service life while improving overall safety and stability. By retrofitting plywood floors instead of replacing the entire mezzanine system, facilities can extend the life of their structure while reducing maintenance demands and avoiding repeated replacement cycles.

Retrofit Poly Deck Flooring to Handle Heavy-Duty Operations

Poly deck and similar materials are often used in lighter-duty applications. However, they may not hold up under increasing operational demands. As facilities scale throughput or introduce automation, these surfaces can degrade quickly.

A retrofit poly deck flooring solution with ResinDek panels provides a more durable, high-performance alternative. Benefits include:

- Improved resistance to wear and deformation.
- Better support for rolling loads.
- Enhanced durability under continuous use.
- Compatibility with automation systems.

Rather than replacing the entire mezzanine, retrofitting allows facilities to upgrade surface performance while maintaining the existing structure.

ResinDek: A Versatile Retrofit Solution for High-Traffic Industrial Environments

Across all applications, ResinDek retrofit solutions are engineered to meet the demands of modern material handling while adapting to a wide range of existing flooring conditions. Whether retrofitting mezzanine bar grating, upgrading concrete mezzanine floors, covering ground-floor concrete slabs, or replacing worn plywood and poly deck systems, these panels provide a consistent, high-performance surface without requiring full replacement.

The result is a flooring system designed for durability and efficiency. ResinDek panels deliver consistent, flat surfaces that support smooth movement for carts, pallet jacks, and automated systems. They also help reduce noise compared to steel or concrete while improving ergonomics for workers operating in high-traffic environments. Built to handle heavy loads and continuous use, they offer reliable long-term performance across both mezzanine and ground-level applications.

Because no two facilities are exactly alike, this flexibility is critical. A retrofit approach allows operators to standardize flooring performance across different areas of a facility without starting from scratch. Instead of removing existing structures, facilities can preserve what is already in place while upgrading the surface to meet current operational demands.

Full flooring replacement is always an option, of course. But it is rarely the most efficient one. By choosing to retrofit, facilities can minimize downtime, reduce capital expenses, and improve safety and performance—all while keeping operations running.