

INSTALLING FLOORING OVER PAINTED SUBSTRATES AND MARKED SURFACES

The Importance of Proper Substrate Preparation

A successful flooring installation, whether carpet, resilient flooring, or otherwise, begins with a clean, well-prepared substrate. Industry guidelines, including those from the Carpet and Rug Institute (CRI) and ASTM F710, along with individual manufacturer instructions, stress the need for surfaces to be free from contaminants that could interfere with adhesive bonding.

The substrate must be free of old adhesives, paint, sealers, curing agents, grease, oil, dirt, plaster, or other incompatible materials. Any remaining residues effectively become the bonding surface, which can compromise adhesion if not sound or clean.

Challenges with Painted Floors

Painted concrete or wood floors—often coated with epoxy, oil-based, or acrylic paints—can present complications during flooring installation. In many cases, it's difficult to identify the type of paint without advanced testing. Regardless of the paint type, the surface's integrity and bond strength are crucial.

If the paint is chipping, flaking, or not firmly adhered, it must be removed mechanically (e.g., grinding or shot-blasting) to ensure the new adhesive bonds to a stable surface. Even glossy, intact coatings may need to be roughened or abraded to improve adhesive bond and minimize movement or slippage.

Additionally, painted surfaces are generally non-porous, which affects adhesive behavior. Installers may need to adjust open and working times. For non-permeable floor coverings, extra care should be taken to follow the flooring manufacturer's guidelines on adhesive selection and surface preparation.

Industry Expectations for Resilient Flooring

Manufacturers of resilient flooring (e.g., sheet vinyl, LVT) typically require all painted finishes to be fully removed before installation. The goal is to allow the flooring to adhere directly to the bare, solid substrate beneath the paint.



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Using chemical or solvent-based adhesive removers is discouraged, as these can leave behind residues that affect bonding and indoor air quality.

Addressing Contaminated and Marked Surfaces

Substrates with paint drips, spills, spray markings, chalk lines, permanent markers, crayons, or grease pencil marks should be treated as potential staining hazards. These contaminants can bleed into resilient flooring materials, causing permanent discoloration over time.

Even if covered by a skim coat or cement patch, such markings may migrate through the layers and stain the final flooring surface. Therefore, mechanical removal is the preferred method to eliminate these risks.

⚠ Note: After mechanical removal, the concrete may have an elevated pH level, which can interfere with adhesive performance. Applying a suitable primer may be necessary to neutralize the surface before proceeding with installation.

Health and Safety: Lead-Based Paint Warning

When dealing with older buildings, be aware that some paints may contain lead. Dust from the removal of lead-based coatings can pose serious health risks. Compliance with federal, state, and local regulations—such as those provided by the U.S. Department of Housing and Urban Development (HUD)—is required. These regulations include guidelines for testing, safe removal, certification, and worker training.

Refer specifically to ASTM F710-11, Section 7.1.2 for additional requirements related to identifying and addressing hazardous paint conditions during substrate preparation

⚠ Note:

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