



This is a photo of a leveling installation that went over existing mastic which was not properly removed...the mastic has profile...not just staining.

When we work on an existing building, there are several considerations that we need to consider when we need to change out the flooring material. What is the existing concrete type? What is the existing flooring materials? What are we replacing the flooring material with? What is our schedule and how much time have we allotted for floor preparation / abatement? There are a lot of questions that we must consider, and the sooner that we review all these items, the better prepared we will be to accurately prepare the flooring surface for a good quality flooring installation.



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**General Information:**

- As discussed in the concrete curing bulletin, if the concrete was known to have been cured with a curing compound, we must mechanically prepare (such as shot blasting) the slab for finishes.
  - A good and easy test to see if the curing compound has been removed is to place a few drops of water on the surface and see if the water is readily absorbed into the concrete. If it is NOT readily absorbed, then additional removal may be necessary.
- We must always review the manufacturer's requirements for proper substrate preparation prior to allowing the floor preparation contractor on site... always carefully review the submittals and discuss the options with the Quality Department.
- Always review each trades sweeping compounds prior to use...Do not use a wax based compound. If you have any questions, please contact the Quality Department.
- Review your concrete for any oil spills or oily substance prior to the floor preparation subcontractor arriving on site and point out the conditions with what information you know.
- Review the concrete material if possible. Look out for lightweight concrete, (mostly used on upper metal decks) most flooring and floor prep manufactures have special instructions when this concrete is the substrate.
- Always review the flooring (floor finish schedule) going in each room and their individual floor prep requirements.
- Review floor of cracks, expansion joints, control joints, etc. Discuss with the manufacture and install the process required for each condition and follow the manufacture recommendations.
- Review if existing floor leveling compound is gypsum based...if so...make sure the new floor leveling product is compatible. **Priming or double priming might be required.**
- Review if existing glue / mastic is water based...if so, special instructions might be indicated per manufacturer of new floor leveling compound.



Before and after shot blasting...the profile after should be a little rough. We should discuss with the contractor and make sure that we get the largest machine possible for the project...ask the question as this will impact your schedule if you allow a small machine on site...a small machine is 9"...a good size should just be able to fit through the door.

**Existing Concrete Slab Issues:**

- If possible, review the existing floor slab sub-grade...does it have an existing vapor barrier and its quality, is the slab resting directly on stone or earth?
- When the concrete slab rests on earth with no vapor barrier, capillary action will allow water 20' down to travel to the backside of the slab (which will be below the water table in our area) & water vapor will travel from 80' down!
- The existing condition might void any warrantee from the flooring manufacturer which we will need to alert the Owner so we do not have the liability for certain types of flooring failures. *The Quality Department will draft a letter identifying the issue and the risk that is being transferred to the Owner due to existing conditions.*

**Asbestos Abatement Issues:**

- Abated floors are always abated with chemicals.
- Chemicals may also modify the pH of the floor such that it exceeds the flooring pH maximum requirement.
- Chemicals also will get absorbed in the existing concrete and release itself after the new floor has been installed, compromising and breaking down the mastic or floor leveling compound.
- The floor prep and flooring manufactures call for mechanical preparation (such as shot blasting) when floors have been treated with chemicals.
- When abating existing mastic or tile, we must obtain the procedures from the company doing the abatement. This includes the procedures for chemical neutralization / clean-up. We must also make sure that the clean-up procedures agree with the chemical manufacture requirements. Always ask the question and get it in writing.
- Even if the floors have been properly neutralized, the floors still need to be mechanically prepared per the flooring and floor prep manufactures.

**Existing Flooring Issues:**

- Existing floor mastic may need to be removed such that the concrete floor only has STAINING. This means that the mastic should not have any profile (thickness).
- The mastic must be scraped off prior to the mechanical preparation.
- Prior to the flooring being installed, the flooring installer, per manufacture requirements of the flooring product, must test the floor for moisture. We must do this on an existing floor & the test must be in contact with the concrete...not the floor leveling product.
- The floor moisture tests must be done in strict accordance with the testing criteria, including quantities and timing.

**Floor Preparation Issues:**

- When using a floor leveling product on our projects, we should only consider a *cementitious* product...not a gypsum based material, such as "jif-set", unless specified by the Architect.
- Some flooring adhesives have an issue with a gypsum based leveling product due to absorptive qualities of the gypsum...always contact the flooring adhesive manufacturer to verify their capability.
- Have the floor leveling manufacture representative on site as soon as possible for their review and recommendations. A phone conversation is not enough...we need to have the representative on site and reviewing the actual concrete floor. This is a critical step in order to get a properly prepared floor for renovations.
- Discuss the need for a primer and the benefits and requirements with the installer AND the product manufacture.
- When painting an existing concrete floor, always have a Quality Pre-Construction meeting with the subcontractor and the Quality department several weeks prior to the start of the task. This will help avoid any delays due to improper preparation and installation.



The edges will need to be done with a grinder

**Make sure you discuss the electrical requirements with everyone upfront.**

