4 REASONS
WHY FLOOR LEVELING FAILS
FLOOR LEVELS FAIL

RHENATEC®

REASON 1
INADEQUATE SURFACE PREPARATION

The number one reason why floor leveling tends to fail is due to lack of optimum surface preparation. Prior to leveling, the condition of the base substrate needs to be evaluated to be properly treated. It must be determined what is required for a high bond of the leveling mortar and deliver the final level to be coated.

To do this, the base substrate must be free of false adhesions, protruding joints, debris, dust, grease and other possible contaminants. In addition, if there are any, spines must be roughened.

The treatment of cavities also contemplates the use of repairing mortars according to previously evaluated damages. Once these obstacles have been eliminated, the surface must be primed to achieve a high adherence during the curing process of the leveling mortar. The final objective of this preparation work is to prevent blowholes, fissures and cracks from appearing once the leveling is ready to be coated and subsequently placed in service.

REASON 2
HUMIDITY AND ATMOSPHERIC CONDITIONS

Moisture in the substrate and atmospheric conditions inside and in connection with the exterior space cause damage during the leveling process and once the surface is leveled. High ambient humidity makes proper installation impossible, affecting workability and setting times, preventing the leveling mortar from setting properly. This hinders the development of its final resistance because water remains occluded in its interior,

lengthening its exit and drying of the surface. As the leveling is exposed to high humidity, cracked or ground surfaces may result, causing the floors to fail. Therefore, leveling in spaces with ambient humidity above 75% is not recommended. To deal with the presence of high humidity in the substrate, moisture barriers should be provided to prevent capillary rise, protecting the proper development of the leveling.

REASON 3
INSUFFICIENT CURING

The curing process of the substrate to be leveled is an essential factor in construction since it implies a high development of cohesion and resistance for the reception of the leveling. In order for the leveling to reach its optimum construction conditions, the setting must be carried out correctly, respecting the water/powder ratio in the mixture indicated by the manufacturer, no more and no less, in addition to respecting the curing times. However, if there is pressure on site to advance quickly and/or reduce curing times, it will only cause a floor to fail. The curing process must be thorough for a perfect installation. The level surface must allow the adhesives to chemically and mechanically anchor into the level pores, creating a monolithic bond. If the process is accelerated, it will not wet the surface, reducing its adhesion.

REASON 4
CONTRACTOR'S ERRORS

From an inexperienced crew to carelessness and human error, faulty leveling installation is unfortunately all too common in this industry. As new companies emerge looking to gain market share in construction, they bring in unqualified installers and even deliver mediocre work. Surface leveling requires experience, precision and a thorough knowledge of all aspects of both the technology of application and surface treatment. Without this, there is a risk of poor quality leveled floors and subsequent repair work that affects the profitability of the business. Engineering and installing the right solution comes from years of experience and ongoing training.

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