

Preconstruction Meeting for Acid Stained Floors

Problems and Practice #3

Architects, designers, and owners recognize the inherent beauty of acid stain finished concrete floors. To provide the owner with a satisfactory floor, the architect should consult a decorative concrete contractor as early as possible. Project specifications written for unstained concrete floors may not provide the best surface for a stained floor because they don't include reference to requirements that are unique to stained floors. Also, a general contractor sometimes asks the decorative concrete contractor to stain a floor that has incurred significant damage during the work of other trades, but doesn't provide any written specifications for the staining. A preconstruction meeting is needed to ensure that the decorative concrete contractor can implement the architect's or general contractor's direction while satisfying the owner's needs. Establish the following controls in the preconstruction meeting:

MOCK-UPS

- Create a mockup; mockups are more important for staining applications than for any other type of decorative concrete application.
- Designate an area for mockups; when possible prepare the sample mockups on the same slab receiving the stain application, perhaps in an area that will receive other floor coverings.
- Construct a mockup that includes a repaired area to confirm that the appearance of both the original and repaired surfaces after staining is acceptable.
- Include joints, when possible, in the mockup to determine their effect on the final appearance.

PROTECTION, CLEANING, AND DRYING TIME

- Schedule the work of other trades before and after the staining.
- Establish responsibility for protecting the area to be stained.
- Establish responsibility for cleaning areas to be stained.
- Agree on the drying time needed for the slab to reach a moisture state that will produce acceptable staining results.

During the preconstruction meeting, specifically address expected variations in color for the completed project. Color variations occur because the acid stain reacts differently with the hydrated cement components and other natural surface deposits. Some color variation should be expected, even when the floor can be placed with only one truckload of concrete. The mockup should be large enough to show the expected variation. If small samples are used to show the stain color, expect variations from this color on the finished floor. To minimize color variation:

- Determine acceptable mix proportions, including any limits on the use of supplementary cementitious materials.
- State any limitations on the use of vapor retarders/barriers below slabs on grade.
- Decide on compatible curing methods, which may include dissipating curing compounds or water curing.
- Specify the finish for the floor; typically light hard trowel but not a burn finish.
- Determine the type of final sealer or coating to be used (include in mockup).

Also make recommendations to the owner for maintaining the color and color variation that is ultimately achieved.

Decorative concrete contractors will work with owners, architects and general contractors in developing specifications or creating a preconstruction meeting agenda for proper acid stain applications. If you have any questions, contact your ASCC/DCC concrete contractor or the ASCC Technical Hotline at (800) 331-0668.



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