

Laborers Cement Mason
Decorative Concrete Syllabus

Time: 40 hours

Maximum Class Size: 12

Prerequisites: LCM Construction Math, LCM Concrete Placement & Finishing Tech 1, LCM Concrete Placement & Finishing Tech 2

Course Description: This course presents an overview of the types of Decorative Concrete available today and covers some of the methods and techniques that are used for decorative finishes on concrete. The history of decorative concrete is also discussed. The types of decorative finishes included in this course are exposed aggregate, colored concrete, stenciling concrete, stamped concrete, staining concrete, sealing, and spray-top overlay. Extensive hands-on training is an essential part of this course.

Goals/Objectives/Student Learning Outcomes:

- Describe the basic process of exposing aggregate in concrete using the seeding, brushing, and washing method.
- Given the proper tools, equipment and PPE, demonstrate the seeding method for creating an exposed aggregate finish on a freshly placed slab of concrete.
- Describe the three finishing techniques used to enhance the appearance of colored concrete.
- Describe the basic process of stenciling freshly placed concrete.
- Given the proper tools, equipment and PPE, demonstrate the process of concrete stenciling on a slab of freshly placed concrete.
- Describe the process of stamping freshly placed concrete.
- Given the proper tools, equipment and PPE, demonstrate the process of stamping concrete on a slab of freshly placed concrete.
- Describe four factors that may affect the appearance of a stained concrete finish.
- Describe the three applications for spray-top finishes.

Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE

Standards

- California Code of Regulations, Title 8, Section 1720 (4)(29) for the placement of concrete.

Laborers Training School

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- OSHA Subpart E: Personal Protective Equipment
- OSHA 29 CFR 1926 (Construction Safety Regulations)
- OSHA 29 CFR 1926.700 Subpart Q (Concrete & Masonry Construction)

Textbooks/Readings/Materials

- *YouTube videos* (3)
- *Classic Coating Handouts:*
 1. Microfiber Bond,
 2. FX Nano Water Base Stain
 3. Traditional Acid Stain
 4. 100% Epoxy Solid Pigments
 5. CE500 Clear 2-part Epoxy 100% Solid
 6. Satin Medium Gloss Sealer
- *Brickform* Handout book

Tools/Equipment/Other Materials:

- Tools: 25 ft. recoil tapes
- Shovels (long & short handles)
- Floats
- Edgers
- Darby
- Bull float
- Fresno float trowel
- Groovers/jointers
- Steel Trowels
- Broom/Brush
- Buckets
- Margin
- Pea gravel
- Stenciling material
- Stamping mats
- Coloring agents
- Release agent
- Power trowel.
- Trowels
- Nylon brushes
- Hand-tampers

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Personal Protective Equipment

- 12 pairs of rubber gloves
- 12 pair of rubber boots
- 12 pairs of safety glasses
- 20 pairs of ear plugs
- 12 hard hats

Course Requirements

To receive credit for the course, participants must:

- Be present for full forty hours
- Participate in all classroom exercises
- Pass a written exam
- Pass a hands-on exam

Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment
- Participants who are on "light duty" are not allowed to take this course due to the physically demanding requirements.

Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.

Safety

Failure to maintain and use PPE may result in dismissal from the course.