

Division 03 - Concrete

03 30 00 Cast-In-Place Concrete

1. Testing: Specify that the Contractor is to retain and pay for the services of a George Mason University approved laboratory to perform concrete testing and inspections. For floors, use ASTM E1155 "Standard Test Methods for Determining Floor Flatness and Levelness Using the F Number System."
2. Specify air-entrained concrete where concrete is exposed to the weather. With the exception of air-entrained agents, no antifreeze or other admixtures are permitted. Concrete additives containing more than 0.1 percent chloride ions are not permitted.
3. Specify that the Contractor protect newly placed concrete exposed to the public to insure that concrete is not defaced prior to complete setting up. This includes concrete floors intended to be left exposed to the public. Replacement of defaced concrete and concrete floors that are stained or otherwise damaged is included in the Contract Sum.
4. Specify clear sealer at all concrete floors which will be exposed within the finished building and which are not scheduled to receive an applied finish.
5. Specify a hardener where floor surfaces are subject to heavy loads, impact loads, or rolling loads.
6. Specify the finish of exposed concrete floors to meet a slip resistance requirement acceptable to the authorities having jurisdiction.
7. If using color in concrete floors, specify integral color additive. Surface-applied color may be used only with written approval from George Mason University.
8. Architectural (exposed) concrete shall be included in mock-up requirements as specified in Division 01. Specify the specific requirements and criteria for review of architectural concrete in Division 03.
9. Sandblasted finishes for interior or exterior structural concrete are not permitted unless specifically approved by the George Mason University.
10. Rubbed finishes for interior concrete to be painted is not permitted. Interior concrete may instead be specified with veneer plaster.
11. Detail concrete structural frames exposed to the exterior with insulation and finish systems minimizing thermal loss and gain.
12. Additional requirements for exterior concrete paving are included in Division 32.

03 40 00 Precast Concrete

1. Provide protection from rust stains and damage during construction of exposed pre-cast concrete.
2. Design precast concrete so that no portion of it touches grade or is below-grade.