SECTION 3: CONCRETE

This section of the Standards establishes minimum requirements only and is to be used to guide, and not replace, the complete project specification section. The Architect and/or Engineer shall further produce project specifications in line with industry standards that incorporate these University requirements.

- PROJECT GUIDELINES

  - Structural Elements: The University requires the standard ACI 318, designed for calculated structural requirements. A/E's may use their own office standards for details such as chamfered vs. square edges.

  - Floor Flatness: The University requires the use of floor flatness and levelness “F-numbers” as described in ASTM E 1155-87 and ACI 117, unless specified otherwise based on project type. Job-site quality control shall be provided by a testing firm engaged and paid for by the Owner, unless otherwise determined.

  - Slab Thickness - Comply with the following:
    - General: 4 inches, or greater if required by expected live load.
    - Mechanical Rooms: 5 inches, or greater if required by expected live loads.
    - Strength: As required, but not less than 3000 psi at 28 days
    - Equipment Bases and Foundations: Minimum Compressive Strength: 4000 psi at 28 days.

  - Finishing
    - Chamfer exterior corners and edges of permanently exposed concrete.
    - Rooms that are typically unoccupied and have an exposed concrete floor, such as mechanical, electrical and storage rooms, shall be sealed for easier maintenance.
    - Include moisture, alkalinity and adhesion testing in specifications to verify concrete is cured appropriately to accept finishes.

  - Floor and Trench Drains: Design professional shall provide details, of sufficient scale, for each type of floor or trench drain. Detail shall include termination of surface finish materials, crack isolation membranes, and waterproofing materials.

  - Vapor retarder or moisture barrier shall be required for all below grade work.

- END OF SECTION