

SECTION 030000 – CONCRETE

PART 1 - GENERAL

- A. A/E shall specify appropriate reference standards.
- B. Sustainability
 - 1. Assess product within State of Minnesota B3 Sustainability requirements for Environmentally Preferable Materials related to overall construction material compliance.

END OF SECTION 030000

SECTION 032000 - CONCRETE REINFORCEMENT

PART 1 - GENERAL

- A. Reinforcement Placement: The University shall retain an independent testing laboratory and special inspector to inspect reinforcing placement, material and/or welds and other items as required by the University Building Code Division.
- B. Coating: The A/E shall consider the corrosive nature of the environment on the reinforcement, support and exposed architectural conditions and specify coatings as appropriate.
- C. Execution: Perform concrete reinforcement work in accordance with appropriate reference standards.

END OF SECTION 030000

SECTION 033000 - CAST-IN-PLACE CONCRETE**PART 1 - GENERAL**

- A. A/E shall provide contract documents that specify concrete finish surfaces, critical tolerances, flatness and levelness as needed to support equipment, activity, and finishes.
- B. Exposed concrete stair treads and ramps shall have a uniform non-slip finish that meets the American with Disabilities Act requirements.
- C. Tests by Independent Testing Laboratory: The University shall retain an independent testing laboratory and special inspector to perform compression tests, and other tests and inspections as required.
- D. Construct mockup for architectural concrete surfaces receiving special treatment or finish.

PART 2 - PRODUCTS

- A. **PROHIBITED:** Cast-in Place nosings in concrete stair construction.
- B. **PROHIBITED:** Exposed aggregates.
- C. Avoid utilizing recessed walk off carpet system, proposals for their use require exception request.
- D. Mixes:
 - 1. A/E shall specify critical mix requirements. A/E shall approve the concrete mixes, including items such as high early strength cement admixtures and other special materials.
 - 2. Integral and applied colorants and specialty finishes are discouraged and proposals for their use require formal written application for an Exception to these Design Standards.
- E. Concrete Accessories: Ensure compatibility of all accessories and install in accordance with the manufacturer's specifications and technical data.
- F. Curing: Curing compound shall not be used on floor slabs to receive topping or setting beds for tile flooring. Compounds used for other slabs shall be compatible with floor sealer or adhesives used for finishing floors.

PART 3 - EXECUTION

- A. Construction Joints: The A/E shall design construction joint detail and review construction joint locations.
- B. Control Joints: The A/E shall specify and design control joint detail and location.
- G. Fiber reinforced concrete: Design and finishing of fiber reinforced concrete shall take measures to reduce the impact or visibility of fibers at the surface of concrete. Utilize reference guides and manufacturer's Finishing Tips for Fiber-Reinforced Concrete.
- H. Topping, sealers and topcoats:
 - 1. The finishing system applied shall not require special branded products to maintain the floor post occupancy.
 - 2. Utilize a finish that provides stain resistance.
 - 3. Concrete topcoat on exposed concrete shall be penetrating sealers, honed and polishes, or semi-permanent coatings. Do not apply topcoats that require regular re-application.

END OF SECTION 033000