DIVISION 03—CONCRETE

FORMAT
1. Technical specifications content and numbering system shall be based on the 2004 version of CSI MasterFormat (numbering herein corresponds with 2016 Edition).

BASIS OF DESIGN
1. BGSU Design standards shall not replace fully developed, project and market specific technical specification. Architect/Engineer(A/E) shall utilize the Standards as a minimum standard to guide the design and execution in the field. Exceptions to these standards are allowed provided they are approved by Design & Construction.
2. In instances where fewer than 3 manufacturers are indicated, the A/E shall insert “or approved substitute” in the Products section of the technical specifications.
3. All submitted substitute products shall be brought to the attention of Design & Construction, prior to approval.

RELATED SECTION
1. 32-Exterior Improvements

GENERAL PROVISIONS
1. Do not use ground granulated blast-furnace slag as an additive or substitute aggregate for exposed concrete.
2. Exterior concrete shall be 4,000 psi compressive strength after 28 days
3. Exterior concrete shall be air-entrained.
4. Apply non-staining, non-yellowing curing and sealing compound to all exterior horizontal concrete surfaces and stairs. When using a two-step process where a film-forming curing compound is applied, follow up with a sealing compound after curing compound is removed; or a single-step curing and sealing application.
5. Wood in contact with concrete shall be pressure treated with an approved preservative to meet AWPA Standards.
6. Concrete testing shall be conducted by a testing agency agreed to by the Project Manager if the quantity of the pour merits it.
   a. A/E shall include contractor testing responsibilities in the technical specifications.
   b. Tests shall be for (at minimum)
      i. base compaction
      ii. slump
      iii. air content
      iv. strength

03 21 00 – REINFORCEMENT BARS
1. Exterior concrete stairs noses and other horizontal surfaces areas prone to
de-icing salts shall use fiber reinforced polymer (FRP) or epoxy-coated reinforcing bars.

**03 30 00 – CAST-IN-PLACE CONCRETE**

1. Concrete slabs, where curing may be an issue due to demanding project schedules, may utilize a moisture vapor reduction admixture (example: Barrier One Admixture System) or similar surface applied system. This may be necessary in applications where flooring warranties are affected. Use of this type of admixture shall be approved by BGSU PM.

2. In addition to notes in General Provisions above, BGSU design details shall be obtained from Design & Construction and be implemented for the following items (also see Division 32):
   a. Site light pole bases
   b. Concrete aprons
   c. Sidewalks

**03 33 00—ARCHITECTURAL CONCRETE**

1. Stairs, architectural retaining walls, and other exposed concrete surfaces integral to the building shall have an ACI 301 Smooth-Rubbed Finish.

End of Section