

1.0 **GENERAL**

1.1 **Related Scope of Work and UBC Guidelines**

- .1 Section 03 00 00 Concrete – General Requirements
- .2 Section 07 00 10 Building Envelope – General Requirements
- .3 Section 07 40 00 Cladding
- .4 Section 07 62 00 Sheet Metal Flashing and Trim
- .5 UBC LEED Implementation Guide

1.2 **Related External Documents**

- .1 Latest edition of the British Columbia Building Code (BCBC).

1.3 **Description**

1. Section includes architectural concrete and accessories.

1.4 **Coordination**

1. In instances where conflicts are found between the UBC Technical Guidelines and provincial regulations or codes, please notify the UBCV Technical Review Team Architect or UBCO Facilities Management.
2. These guidelines are intended to be read by design consultants and their content integrated into construction drawings and specifications. Construction documents are not to reference the technical guidelines directly.
3. The Coordinating Registered Professional (CRP) is required to coordinate these requirements with other disciplines.

1.5 **Submittals**

- .1 Submit required documents to consultants in accordance with Section 013300 Submittal Procedures
- .2 Provide low-carbon concrete mix test results to the UBC Sustainability Dept. for review during construction.
- .3 O&M Submittals
 - .1 Concrete mix specifications and type.
 - .2 Final reviewed shop drawings for control joint locations signed and sealed by a professional engineer registered in the Province of BC.

1.6 **Quality Control & Assurance**

- .1 Construction of mock-ups, mix designs and placement procedures to be as per project specifications.

2.0 **DESIGN AND PERFORMANCE REQUIREMENTS**

2.1 **Design Requirements**

- .1 Minimum concrete cover for reinforcing steel to be as per Part 4 of the BCBC for concrete cast against earth, walls or for fire-rating purposes.
- .2 Reinforcing and other steel requiring corrosion protection shall be embedded so that the minimum depth of concrete cover is in all cases greater than 40 mm and 50mm for exterior stairs.
- .3 Placement and curing procedures for low carbon concrete mixes are to be reviewed by the project team to ensure the desired concrete strength and finish are maintained.
- .4 Concrete strengths must be verified by independent concrete testing.

- .5 Exposed concrete walls to be provided with cap flashing with proper drip edges extending at least 10mm beyond the face of the wall to avoid drip lines.

2.2 Performance Requirements

- .1 Finishes should not require regular maintenance and should be durable.

3.0 MATERIALS

3.1 *Product Selection*

- .1 Components
 - .1 Concrete components to be certified compliant to CSA A23.1 for alkali - aggregate reactivity.
- .2 Finishes
 - .1 Provide an elastomeric paint finish for exposed concrete walls.
 - .2 Where a natural concrete look is desired for exterior walls, a clear water-based and penetrating silane/siloxane type coating can be used after final cleaning.
 - .3 Exterior concrete wall surfaces to be treated with a water-based sacrificial anti-graffiti coating to a height of 8' minimum.

END OF SECTION