1.0 **GENERAL**

1.1 **Related Technical Requirements**

.1 [Section 03 00 00 Concrete]
.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]

1.2 **Co-ordination Requirements**

.1 Building Envelope Consultant.

1.3 **Performance Standards**

.1 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.

.2 Stainless steel is to be used where reinforcement or other embedded metal has less cover than 40 mm.

.3 The concrete mix and placement and curing procedures are to be designed to provide the required quality of surface appearance and texture.

.4 Concrete structure that penetrates through the building enclosure constitutes a large thermal bridge and requires 2D or 3D heat transfer modeling. Refer to Building Envelope Thermal Bridging Guide latest edition for further details.

1.4 **Quality Control and Assurance**

.1 Submittals

.1 Construct mock-ups of all assemblies to check contractor’s procedures as best practice.

.2 Contractor to submit mix designs and placement procedures for architectural panels.

2.0 **MATERIALS**

2.1 **Performance Requirements**

.1 Maintenance

.1 No maintenance for 100 years, except for cleaning.

2.2 **Prescriptive Requirements**

.1 Materials

.1 Components

.1 Concrete components to be certified compliant to CSA A23.1 for alkali aggregate reactivity.

.2 Finishes

.1 Architectural concrete surfaces are important to SFU and all architectural concrete finishes should be reviewed by SFU Facilities during design stage.

.2 In selecting concrete finishes for any project, cleaning requirements of materials should be considered. All cleaning equipment/ processes/ materials must be submitted to SFU Facilities for approval.
.3 Surfaces of exterior concrete to be treated with opaque paint coatings or a clear silane/siloxane type sealer after final cleaning.

.4 Consideration must be given for surfaces of exterior concrete near grade to be treated with a sealant and/or clear anti-graffiti type coating. Anti-graffiti coating systems with a wax top coat are preferred.

***END OF SECTION***