1.0 GENERAL

1.1 Related UBC Guidelines

1 UBC Vancouver Campus Plan: Design Guidelines
2 Section 07 00 10 Building Envelope – General Requirements
3 Section 08 00 10 Openings - General Requirements

1.2 Coordination Requirements

1 Coordinate design with Building Envelope Professional.
2 Integrate design with design of windows, doors, flashing and other penetrations.
3 Identify all materials that form the cladding assembly and required support system.
4 Coordinate the Air tightness, drainage, venting, and insulation of enclosure assemblies.

1.3 Performance Standards

1 Cladding shall be designed to be weather tight under sustained conditions of combined wetting and 50 Pa wind pressure.
2 Cladding shall be designed to resist 1/30 return wind loading.
3 Cladding shall be designed to resist lateral and vertical deformations of the primary structure without loss of attachment to the building.
4 The cladding is to be integrated with all components of the building enclosure such as window and door frames, roof, foundation, and service penetrations to provide a weather tight system.
5 Choice of cladding materials governed by UBC Vancouver Campus Plan: Design Guidelines.
6 Masonry is a recommended cladding on campus. Stone or thin brick (20 mm or thinner tile) adhesively bonded to stucco or sheet materials are not to be substituted for masonry.
7 Design service life of claddings to be 75-Years.
8 All masonry accessories to have design service lives compatible with masonry.
9 Window and door installations should be designed to allow replacement of the units without dismantling masonry wall.
10 Cavities built behind the cladding shall be drained and ventilated to the exterior.
11 Cavities built behind the cladding shall be compartmentalized as required at least every second floor level, beneath the parapet, and at the outside corners of the building.

1.4 Quality Control and Assurance

1 Quality Assurance
   1 Construct mock-ups of all assemblies to check contractor’s procedures.
   2 Test mock-ups as required to verify water tightness and resistance to structural loading.
.2 Maintenance

.1 Windows have a shorter design service life than cladding. Make provision for replacement of windows and other penetrations before renewal of cladding is due.

2.0 MATERIALS

.1 Identify all materials that form the cladding assembly and closures to adjacent systems.

.2 Cladding materials considered to have sufficient design service life include:

.1 Masonry
.2 Concrete, precast
.3 Anodized aluminum composite panels, class I or thicker anodizing
.4 Stainless steel
.5 Terne coated stainless steel
.6 Zinc
.7 Exterior tile, glazed/unglazed
.8 Slate or clay tile
.9 Fiber cement boards

.3 Wall systems allowed:

.1 Vented rain screen systems with min 3/4" capillary break and cross cavity flashings at every second floor minimum.
.2 Unvented mass wall systems with insulation separating exterior wythe and interior moisture barrier or mass wall and vented rain screen joints
.3 Coated architectural concrete with interior insulation under 1:4 overhang ratio

.4 Prohibited wall systems:

.1 Exposed architectural concrete with interior insulation (unless coated and under a 1:4 overhang ratio). The recommended approach is to use exterior insulated precast concrete or precast sandwich panels
.2 EIFS
.3 Stucco
.4 Exposed glulam elements

***END OF SECTION***