1.0  **GENERAL**

1.1  **Concrete Construction – Structural Requirements**

.1  Design building structures and their structural components for a 100 year service life.

.2  Structural design shall conform to Part 4 of the BC Building Code.

.3  Ensure that drawings include a summary of the structural systems and provide supplementary information as required.

.4  Ensure that sustainable design principles have been considered for the project. Ensure that LEED requirements selected by UBC have been satisfied. (Phone UBC Sustainability Office – Phone: 604-827-5641).

.5  Increase live loads for specific UBC occupancies.

.6  UBC has a unique snow loading factor that differs from Vancouver’s under 4.1.6.3 of the BC Building Code.

[http://www.technicalguidelines.ubc.ca/technical/structural_design_snow_loads.html](http://www.technicalguidelines.ubc.ca/technical/structural_design_snow_loads.html)

.7  Design light roofs for a minimum net factored uplift of 1.0 kPa.

.8  Ensure that the design and field review of non-structural components is covered in the contract documents (drawings and/or specifications).

1.2  **Materials**

.1  Treat exposed concrete elements with beveled edges or tooling, as appropriate.

.2  Slabs-on-grade are to be 150 mm minimum thickness, reinforced and provided with well spaced control joints in an approximately square pattern, spacing less than 4000 mm on centre.

.3  Reinforcing steel, which is part of the seismic load-resisting system, must be weldable conforming to CAN/CSA G30.18W.

.4  Do not use calcium chloride (in any form) in concrete mixes.

.5  Post-tensioned floor systems are strongly discouraged by UBC. Obtain any pre-approval and acceptance from UBC Technical Services, (Phone: 604-822-0852), before considering post-tensioning. (It appears that unofficial drilling into slabs continues even after all warnings and signage has been installed to the contrary).

***END OF SECTION***