7.1 Confined Space Entry and Fall Protection

7.1.1 Confined and Restricted Spaces

1. For all new building construction and/or renovations, consideration must be taken to eliminate the creation of Restricted and Confined Spaces through building design. This may include designing them as intended for continuous worker occupancy e.g. adding ventilation and or lighting to spaces.

2. Where it is not practical to eliminate Restricted and Confined Spaces, the need for workers to enter the space will be engineered out where possible. Examples include designing a method of retrieval for equipment requiring maintenance without a worker entering the space.

3. Where it is not practical to engineer out the need for workers to enter a Restricted or Confined Space, systems to facilitate worker entries shall be included in the design. Examples include davit arms and fixed mounting brackets, Type 3 SRL's, intrinsically safe lighting, anchor points, engineered anchor points, etc.

4. Environment Health and Safety (EHS) shall be consulted prior to the design stage of projects involving or creating potential Restricted and/or Confined Spaces as defined by this COP.

7.1.2 Fall Protection

1. For all new building construction, fall hazards shall be eliminated, where at all possible, through the building design. This shall be achieved through the following design criteria:

   a. Guardrails or roof parapets protecting roof edges meeting the requirements of a guardrail in The Alberta OH&S Code

   b. Roof/ Ladder Access Points shall be designed to protect a worker from a fall hazard and/or falling through an opening. As per the OH&S Code 2009 Part 9 access ladders, platforms and hatches will have a self-closing double bar Safety gate, floor openings and roof hatches shall also have guardrails protecting the remaining 3 sides. Fixed Ladders shall over 3 metres in height shall incorporate an integral Fall Protection System.

   c. Mechanical Units – If guardrail or equivalent parapet is not used, shall be located within the building or, if on the rooftop, a worker will not be required to be within 2 meters from the roof edge to perform work

   d. Skylights – incorporate Fall Protection screens if not of sufficient strength to sustain the impact of a falling worker

   e. Where workers will be exposed to a Fall Hazard within 2 meters of an unguarded edge a Fall Protection system suitable for 2 workers, max 310 lbs each inclusive of tools and equipment shall be:

      i. Designed and installed to be utilized for Travel Restraint and Fall Arrest

      ii. Allow for continuous connection while exposed to a Fall Hazard, preference for Horizontal Lifelines wherever possible over Single Point anchors
2. Environment Health and Safety (EHS) shall be consulted prior to the design stage of Fall Protection and Suspension Systems.

3. Permanent anchorages meeting the requirements of The Occupational Health and Safety Code are installed or designated on
   a. all new structures
   b. existing structures that undergo significant physical alterations, renovations or repairs.

4. The U of C will ensure that a sufficient number of anchorage connectors for the number of workers performing the work are installed or designated
   a. to eliminate swing falls wherever it is reasonably practical to do so, or
   b. where it is not reasonably practical to prevent swing falls, the swing drop distance does not exceed 1.2m.

5. Temporary Anchorage for U of C workers shall be achieved through the use of portable ballasted anchors, supplied by the University.

6. Suspension Anchors shall be supplied where required independent of Fall Arrest Anchors, unless designed by a Professional Engineer so that a failure of one anchorage will not impact the other anchorage or connecting components.