

5.15 Elevators

5.15.1 General

5.15.1.1 ~~GENERAL~~

1. Any deviation to the items in this section are to be reviewed and accepted in writing by FM&D.
2. Do all work in compliance with latest edition of the CSA B44, Safety Code for Elevators including Appendix E (Barrier Free Access).
3. Comply with Alberta Building Code, latest edition.
4. The decision as to the type of elevator equipment provided must be arrived at through a thorough load analysis and traffic study. This study and all of the information used to generate it must be reviewed with the University of Calgary Elevator coordinator before approval of the type(s) and quantity of Electric Elevator that will be used for the particular application. Under-elevating or proposing equipment which must operate at or near its maximum potential is not acceptable.
5. Only elevator mechanical installers, approved by the elevator equipment manufacturer and licenced by all necessary bodies in the province of Alberta are to install elevating devices.
6. Only allow elevator equipment to be installed that can be maintained by any competent and licenced maintenance provider (select non-proprietary equipment).
7. The approved installer is to be experienced in the installation of elevators and is to furnish proof of at least five (5) years experience with elevators similar to these specified for this project.
8. Include selective collective automatic operation of elevating devices.
9. Selected Elevator Contractor to pay all patent licence fees and royalties necessary for the

wiring, necessary power, special labor or equipment needed to permit this temporary usage. The general Contractor shall pay for the cost of power and operations.

5.15.2 Elevator Equipment Requirements

5.15.2.1 ~~Fb~~Fb

1. All exposed finished metal surfaces are to be stainless steel #4 with a brushed finish.
2. U of C Standard Telephone - AdamsA940P3.
3. U of C Standard independent service key - Best A4 (key and lock supplied by U of C).
4. Provide three sets of keys for each elevator; keys must match existing keys in use at the U of C (list available upon request).
5. Vandal proof pushbuttons in COP and Hall call stations c/w Red LED illumination.
6. The Dupar US100 button or equivalent in vandal resistance is acceptable.
7. Ceiling - Install stainless steel panels to the roof of the cab. No suspended ceilings are allowed unless approved in writing by the U of C.
8. Lighting - Install one light trough on each side of the car cab (total of two light troughs). Wrap the lighting troughs in stainless steel. The stainless steel is to wrap under and on the exposed vertical side of the light source to allow light out the top of the fixture.
9. Handrails shall be provided on all non-access walls.
10. Each car operating panel is to include:
 - a. Pushbuttons to correspond with landings served
 - b. A lockable service cabinet containing switches and key switches for cab light, fan, independent service (BEST A4 with key and lockset supplied by UofC), emergency stop keyswitch, 15A receptacle and hoistway inspection access.
 - c. Engraving shall include car capacity, building name, car number.
 - d. Fire service controls as required by code.
 - e. All switches and keyswitches to meet code requirements for security and be Dupar brand or equivalent.
11. Each hall station is to include:
 - a. Single pushbutton at each terminal landing.
 - b. Two buttons at each intermediate landing.
 - c. Controls for fire service and emergency power as required by code.



5.15.2.5

1. Include automm



- a. Means to stop the elevator in the event the error exceeds five percent of the signal.
 - b. Means to stop the elevator in the event the acceleration exceeds the normal acceleration by more than fifteen percent.
 - c. A circuit to cut off power in the event of excessive power module switching time.
 - d. Means to cut off power in the event of overheating of the solid state components.
 - e. A circuit to initiate a slowdown and stop at the next floor in the event of a disagreement between the position as derived from the integration of the velocity feedback signal.
4. Arrange the response of the system so that the elapsed time between the detection of a fault and the cut off of power does not exceed 100 milliseconds.
 5. Provide protective devices so arranged that any one fault will not cause risk of injury to the passengers.
 6. Arrange that, if a fault occurs such that a subsequent fault could cause an unsafe condition, the fault will be detected and the elevator shut down.

5.15.5 Wheelchair Stair Lift

5.15.5.1 ~~GLP~~

1. Do platform lift work to CAN/CSA B355, local codes and regulations except where specified otherwise. Arrange and pay for all required tests and inspections.
2. Installer's qualifications: Installation shall be carried out by manufacturer's approved installers.
3. Acceptable manufactured wheelchair stairlift units:
 - a. Garaventa (Canada) Ltd.
 - b. Savaria

