

Dalhousie University - Security & Access Control

Application Guidelines For New Buildings

I. Access Control - Building Perimeter:

Applies to: i) building perimeter doors, ii) doors separating Dalhousie occupied portions of a building from public areas or from areas under the control of an outside entity (e.g. in a building not owned by Dal, separating space rented by Dal from other building spaces).

- 1) All building perimeter doors will be equipped with a door contact (DC) and request to exit (REX) device, which will allow the door position to be monitored by Dal Security through the campus Access Control System (ACS).
- 2) All building perimeter entrance doors will be equipped with an electric locking mechanism controlled by the ACS, to allow the doors to be locked and unlocked automatically on a predetermined schedule by the ACS. The electric locking mechanism will have a manual keyed over-ride feature, which is reserved for the use of Dal Security.
- 3) The building "main" entrance will have one door equipped with a Proximity Device (Prox) card reader & PIN pad connected to the ACS, and an automatic door opener. Other building entrance doors will not have a card reader and PIN pad installed unless approval is given by Dalhousie's Director of Security Services.
- 4) The building administrator may request that specific building perimeter door locations ** be equipped with an audible and visible alarm (siren/strobe pair) initiated by the ACS for any unauthorized opening of the doors in that area (i.e. door forced open & door held open).
- 5) Exit only doors will have a manual keyed lock, which is reserved for the use of Dal Security, and will be locked from the outside at all times.

** Note: A "door location" means an area within easy sight and hearing range of single siren/strobe pair such that alarm output(s) for one or more doors in that area may use the same pair of devices as their audible and visible alarm devices.

II. Access Control - High Security Areas:

Applies to high security areas within a building (e.g. animal care areas; regulated areas requiring maximum security such as research reactors or Biohazard Level 3 labs).

- 1) All perimeter doors of a high security area will be equipped with a DC and request to exit REX device, which will allow the door position to be monitored by Dal Security through the campus ACS.

- 2) All entrance doors of a high security area will be equipped with a Prox card reader & PIN pad connected to the ACS, and an automatic door opener where necessary.
- 3) The area administrator may request that specific perimeter door locations ** be equipped with an audible and visible alarm (siren/strobe pair) initiated by the ACS for any unauthorized opening of the doors in that area (i.e. door forced open & door held open).
- 4) Exit only doors will have a manual keyed lock, which is reserved for the use of Dal Security, and will be locked from the outside at all times.

III. Access Control - Administrative or Academic Spaces:

Applies to: i) doors of large common pool auditoriums/teaching labs, ii) large office suites, iii) doors separating building spaces which have different functional uses and user groups (e.g. separating student commons or residential space from food service or administrative space; separating a building atrium with food services from academic space; separating one faculty's space from another; etc) ^^.

- 1) All perimeter doors of an access controlled space will be equipped with a door contact (DC) and request to exit (REX) device, which will allow the door position to be monitored by Dal Security through the campus ACS.
- 2) All entrance doors will be equipped with an electric locking mechanism controlled by the ACS, to allow the doors to be locked and unlocked automatically on a predetermined schedule by the ACS. The electric locking mechanism will have a manual keyed over-ride feature.
- 3) One door at each entrance location will be equipped with a Prox card reader connected to the ACS, and an automatic door opener.
- 4) The building administrator may request that specific perimeter door locations ** be equipped with an audible and visible alarm (siren/strobe pair) initiated by the ACS for any unauthorized opening of the doors in that area (i.e. door forced open & door held open).
- 5) Exit only doors will have a manual keyed lock, which is reserved for the use of Dal Security, and will be locked from the outside at all times.
- 6) Department controlled classrooms/labs/seminar rooms, individual offices, storage areas, etc. will generally not have access control equipment installed on the entrance doors. In certain instances (e.g. where an area or room is frequently accessed by many people, or where it is important to identify who has entered the space) the Dept may request that the entrance be equipped, **at its expense**, with a Prox card reader connected to the ACS.

^^ Note: The Project Manager will identify the doors that require Access Control.

IV. Access Control - Building Services Spaces:

Applies to **main** mechanical/electrical/telecom rooms, service tunnels, mechanical penthouses, rooftops.

- 1) The entrance door will be equipped with a Prox card reader connected to the ACS, and the electric locking mechanism will have a manual keyed over-ride feature. (Note: the card reader will be installed on the building side of a service tunnel entrance).
- 2) Exit only doors will have manual keyed locks and will be locked from the unsecure side at all times.
- 3) Local building services (mechanical/electrical/telecom) or custodial closets, storage areas, etc. will generally not have access control equipment installed.
- 4) Doors leading to rooftop areas will generally manual keyed locks with the door locked from the inside only to prevent persons from becoming stranded on the roof.

V. Access Control – Student Apartments & Bedrooms:

Applies to **private** residential living spaces, not hallways, and other common areas.

- 1) All entrance doors to an apartment or suite of bedrooms, and all bedroom doors, will be equipped with a combined card reader/electric lock set connected to an Off-Line Access Control System (OLACS); the electric locking mechanism will have a manual keyed over-ride feature. Dalhousie's Housing & Conference Services will specify the OLACS that is to be used in a residence building.
- 2) Where applicable, other student residence building doors will be equipped as in I. II. III. or IV. above.

VI. Access Control - Elevators and Lifts:

Applies to all elevators and lifts that provide entry to areas which have access control installed.

- 1) Elevator doors are to be considered as main entrance doors, and therefore they must be equipped to provide the appropriate level of access control as specified in I. II. III. or IV. above. All access control functions will be performed by the building ACS, and not by the elevator control system.
- 2) When an elevator provides access to areas that have **different** functional uses, security requirements, or user groups, the elevator control system must be capable of:
 - a. providing access only to floors for which the individual user has access rights, as determined by the building ACS when the users presents their card to the elevator card reader.
 - b. and providing confirmation to the ACS of the actual floor selection.

In this application, because control of individual floor selection **is required**, a special ACS Elevator Interface Panel will be installed in a location that facilitates wiring connections to/from the elevator control system, and

the Prox card reader, and PIN pad if required, will be installed inside the elevator cab. In addition, the elevator controller must have the capability to:

- use individual dry contact inputs from the building ACS to separately supervise each of the elevator cab's floor selection buttons;
- provide an individual dry contact output to the building ACS, to provide confirmation that a particular floor has been selected.

- 3) When an elevator provides access to areas within a building that have the **same** functional use and user groups, access control can be achieved by one of two methods:
- a. using a dry contact from the ACS to supervise the elevator controller functions (Note: the Prox card reader, and PIN pad if required, will be installed inside the elevator cab)
 - b. using a dry contact from the ACS to supervise the elevator lobby call buttons (Note: the Prox card reader, and PIN pad if required, will be installed on the lobby wall next to the elevator call buttons).

In this application, because control of individual floor selection **is not required**, a standard ACS Multi-Door Control Panel can be used.

VII. Security Alarm Systems:

Applies to rooms where items of high value are used or stored.

- 1) Each room or suite of rooms that constitutes a single Alarm Partition, and will have the following equipment installed to detect a forced entry:
 - a) an alarm system keypad for arming and disarming the areas partitions, located inside the main entrance door ;
 - b) DCs on all perimeter doors;
 - c) motions sensors to ensure coverage of all forced entry routes points such as doors, windows, hollow gypsum board walls, solid walls that do not extend above the drop ceiling, etc;
 - d) a siren/strobe pair for local alarm annunciation , located outside the protected area;
 - e) an alarm partition will typically have have an auto- disarm/arm scheduled to disable the perimeter alarms during normal "open" hours, and restore the protection at a set time after normal "open" hours in case the partition is not manually armed by the last person leaving the area.
- 2) The valuables within the room or suite of rooms will be protected by separate partitions, that are normally armed 24/7, and will have the following equipment installed to detect tampering with the valuables:
 - a) PC Tabs on all valuables that are fixed in place such as computer lab PCs (maximum 10 tabs per zone), ceiling projectors, etc;
 - b) tamper switches on all cabinets or cupboards used for storage of valuables;
 - c) these partitions will also trigger the siren/strobe pair (see 1.d. above).

VIII. Video Surveillance:

Applies to: i) building perimeter entrances (including parkade entrances), ii) building perimeter doors which have local audible and visible alarms installed, iii) exterior spaces where there is a security concern such as parking lots, loading bays, etc, iv) interior "public" spaces with high pedestrian traffic levels such as the elevator main lobby, atriums, interiors of student residence elevators, v) the entrance to a high security area (see section II. above), vi) the entrance to an interior "public" space that is located in an isolated area such as the building basement or parkade (e.g. bicycle storage areas and related change/shower rooms), where single individuals may be at risk, vii) retail areas, where the presence of significant amounts of cash or valuables may create a significant risk of theft or holdup.

- 1) All building perimeter entrance/exit doors will be monitored by 2 cameras, located to capture face-on images of persons entering and leaving the building.
- 2) When exterior spaces are being monitored care must be taken to limit camera coverage, as far as practicable, to Dal property and to avoid inadvertent viewing of adjacent building windows.
- 3) When interior public spaces are being monitored cameras should be located to provide:
 - a) complete coverage of pedestrian traffic flow within the area, to ensure all persons entering and exiting the area will be recorded;
 - b) coverage of most of the useable space within the area.
- 4) Cameras mounted inside of residence elevators should be located to:
 - a) capture face-on images of all persons entering the elevator;
 - b) capture the floor being accessed;
 - c) avoid views down hallways and toward student room doors, when the elevator doors are open.
- 5) High Security areas and isolated interior public spaces will be monitored by 2 cameras at each entrance, located to capture face-on images of all persons entering and exiting the area.
- 6) Retail areas may have video surveillance cameras installed, **at the retailers expense**, upon written request to the Dalhousie Project Leader and the approval of the Dalhousie's Director of Security Services.
- 7) Cameras should be located to avoid vandalism and to be accessible by maintenance staff using a step ladder.