

APPENDIX B

APPENDIX B



Property Management Manual General Standards

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Document History

Version	Date	Summary of Changes
1.0	2019-05-22	Existing content extracted from the Property Management Manual (Appendix II-3-1). New Standard created.

Table of Contents

1. Accessibility	page 4
2. Alarms	
2.1. Fire and Environmental	page 4
2.2. Intrusion Detection	page 5
2.3. Intrusion Detection and Access Control – Monitoring	page 6
2.4. Intrusion Detection and Access Control – Security	page 6
3. Antenna	page 6
Detailed Drawings	page 6
4. Building Air Supply	page 6
5. CCVE	page 7
6. Cell Fixtures/Equipment	page 7
7. Communication and Information Systems – UPS, Cabling, etc.	page 7
8. Doors – Pedestrian	page 8
9. Door Viewer	page 9
10. Emergency Power Supply	page 9
11. Lighting	page 10
12. Locks	page 10
13. Multi-Tenant Buildings	page 11
14. Oil Tank Security	page 12
15. Security Screening – General – Detailed Drawing	page 12
16. Signage	page 12
17. Smoke/Heat Detectors	page 13
18. Speech Privacy Construction	page 13

19. Sprinkler System	page 14
20. Walls	page 14
21. Water-Conditioning/Filtration	page 15
22. Windows	page 15

1. ACCESSIBILITY

Except where otherwise detailed in the RCMP position paper on accessibility, building designs must be barrier-free to permit access to, and use of, real property (owned or leased) by persons with disabilities, in compliance with Treasury Board of Canada policy on "Accessibility". (See Chapter 1-6 of the Real Property Volume, *Treasury Board Manual*.) An elevating device is generally required in multi-storey buildings to provide access to all floor areas which are normally occupied.

2. ALARMS

2.1. Fire and Environmental

General:

Fire alarm system design, modification and monitoring must comply with the Treasury Board of Canada Secretariat "Standard for Fire Alarm Systems", Chapter 3-4 of the Personnel Management Volume, *Treasury Board Manual*.

Detachment Buildings:

1. On the basis of an occupant load of two persons per cell, standard and holding, install:
 - a. a single-stage system if the total occupant load of detention cells does not exceed 10 persons; or
 - b. a dual stage fire alarm if the total occupant load of detention cells exceeds 10 persons.
2. Remote detachments which have only an outside bell or siren for the communication of the fire alarm system may have a secondary form of communication installed using the intrusion detection system. (NOTE: This provision requires the installation of a dry contact output on the fire alarm system to interconnect to the intrusion detection system, for transmission to a 24-hour manned location. This secondary form of communication is allowed as long as all fire alarm control unit operations are totally independent and unaffected by the intrusion detection system.)
3. Additional type of environmental sensors, e.g. DNA freezer and room temperature, water level, humidity and AC power, may be monitored by the intrusion detection system where there is a 24-hour service location.

Human Resources Development Canada (HRDC) - Fire Prevention Office Notification:

When planning to install or modify fire alarm systems, division property management or the project leader must officially notify the regional office of HRDC, Fire Prevention and provide any necessary details stipulated in the Fire Protection Standard for Design and Construction, Ch. 3-2, Personnel Management Volume, *Treasury Board Manual*.

2.2. Intrusion Detection

Procurement:

1. May be included as part of the building construction/renovation contract.
2. Hardware costs for security equipment and access systems must be charged to CEG/CI 920.
3. Installation costs for security equipment and access systems must be charged to:
 - a. CEG/CI 920 when equipment is installed as a project, or
 - b. CEG/CI 720 or 730 when work is performed concurrently with new construction or major renovations.

Requirements:

During the preliminary design phase to construct or renovate a secure facility, liaise with Protective Technical Services to determine the intrusion detection and mechanical security hardware, cabling and conduit requirements. The Protective Technical Services with the concurrence of the detachment commander will prepare a statement of work outlining wiring, installation and equipment requirements. All intrusion detection and security hardware equipment must be approved by Departmental Security.

Conduit:

Cables may be installed in conduit to protect them from physical damage in areas:

1. of high traffic;
2. having a high threat level;
3. which are public access zones, if wires must be run through a public access area to connect two or more areas in the same building/facility; or
4. having extreme environmental conditions.

NOTES:

1. The Canadian Electrical Code (CEC) does not require FT-6 rated, low-voltage alarm cabling to be enclosed in metal conduit when used in walls and above false ceilings. Intrusion detection installations must comply with the CEC or local building codes, whichever is most stringent.
2. In areas where explosive gases are present or explosive materials are stored, use threaded, rigid-metal conduit or cables approved for hazardous locations with associated termination fittings approved for the particular hazardous location. Refer to CEC requirements.

Protected Doors:

See Protective Technical Services, [Security Door Specifications](#) for RCMP security doors, installation specifications for intrusion detection and access control. Exact location of conduits to be determined by Protective Technical Services.

2.3. Intrusion Detection and Access Control – Monitoring

Monitoring equipment for protective Intrusion Detection and Access Control (IDAC), systems may be installed in RCMP-occupied buildings, provided:

1. there is no expense to the RCMP;
2. division property management and division telecommunications have reviewed the plans and specifications and concur with them; and
3. the requirements in [OM 1.1.F.2.](#) apply.

2.4. Intrusion Detection and Access Control – Security

In major buildings (minimum usable space of 2323 m²):

1. An energy management and fire (EM&F) system may be provided as part of the construction contract.
2. See [Intrusion Detection](#).
3. In consultation with Protective Technical Services, provide conduit layout for an IDAC system if such a requirement has been identified.
4. Purchase and install access control and intrusion detection security systems either as part of the building construction/renovation contract or as a separate project, whichever is the most practical and economical.
5. Hardware costs for security equipment and access systems must be charged to CEG/CI 920.
6. Installation costs for security equipment and IADC systems, including the supply and installation of conduit cables, and electrical hardware must be charged to:
 - a. CEG/CI 920 when equipment is installed as a project, or
 - b. CEG/CI 720 or 730 when installation is concurrent with new construction or major building renovations.

3. ANTENNA

Operational: Building Mounted (Whip) - if required, provide and install as per [Figure 0.1 – Antenna – Building Mounted \(Whip\)](#).

4. BUILDING AIR SUPPLY

Air intake must be a minimum of 2100 mm from ground level at building exterior. If design permits, locate air intake at gable end, soffit area or above roof line with insulated supply duct, as required, to prevent attack including deliberate introduction of foreign substances. Consult regional Departmental Security for additional safeguards which Threat and Risk Assessment (TRA) may require.

5. CCVE (CLOSED CIRCUIT VIDEO EQUIPMENT)

Approval Authority: As outlined in [OM 16.4](#). Closed Circuit Video Equipment.

Specifications: Protective Technical Services Section is responsible for the location and specifications of equipment as approved by the Protective Technical Services Br.

Procurement and Installation:

1. All equipment costs including cameras, monitors, housings and mountings must be charged to CEG/CI 920.
2. CCVE conduit installation (complete with pull chord end to end) to be included in the building construction/major renovation project and charged to CEG/CI 720 or 730. When CCVE is installed in existing facilities, installation costs must be charged to CEG/CI 920.
3. Temporary CCVE installations are the responsibility of Protective Technical Services Section.

Maintenance: Protective Technical Services Section responsibility.

Signs: When CCVE is installed in RCMP-owned, -leased or -controlled buildings for security purposes, signs must be posted in conspicuous locations, stating in both official languages.

Warning, this area is under video surveillance; your activities can be monitored and recorded. EXCEPTION: Posting of signs may be omitted with appropriate approval.

Procurement: Signs should be ordered through Regional Corporate Management.

6. CELL FIXTURES/EQUIPMENT

See [Fit-Up Standards – Section 1](#) for detailed information.

7. COMMUNICATION AND INFORMATION SYSTEMS – UPS, CABLING, ETC.

Responsibilities:

1. CIO Sector or the field telecommunications and EDP Sections are responsible for the provision (including the budgeting and the acquisition) of telecommunication and EDP systems, components and wiring (e.g. backbone wiring, dedicated UPS systems, servers).
2. Assets and Procurement Branch is responsible for providing base building accommodation elements such as:
 - a. telecommunications service entrance room, equipment rooms and telecommunications closets;

- b. lighting, HVAC and fire protection systems and controls in telecommunication/EDP facilities;
 - c. emergency power generators and UPS systems which supply power to more than one building system throughout the building (i.e. to more than one or two particular units within a division), and
NOTE: Portable UPS systems are recommended for most applications as they provide increased flexibility and economy.
 - d. conduit with pull cords for interconnecting telecommunications closets, equipment rooms and entrance facilities. Conduit and pull cords will also be provided for telecommunications outlets which are not otherwise accessible and serviceable by raceways, ceiling plenums, etc.
3. Regional Corporate Management, field telecommunications and EDP sections should coordinate the long-term accommodation and informatics plans.

Requirements:

1. The Project Leader must ensure the project-specific telecommunication/EDP requirements are clearly defined in the statement of user requirements (prepared during Phase 1 of the Project Delivery System.)
2. The supply arrangements for communication systems, equipment and wiring must be determined as early as possible for budgeting purposes and subsequent coordination of trades.
3. Installation arrangements should be coordinated through the Project Leader/Regional Corporate Management to protect building owner and occupant interests (e.g. safety, security, code compliance).
4. Supply and services installation arrangements should not compromise equipment and material warranties.

8. DOORS – PEDESTRIAN

General:

1. Hollow core metal doors must comply with the Canadian Manufacturing Standards for steel doors and frames.
2. Doors and frames which are required to have a fire-protection rating must comply with the NBC.
3. Exterior metal door frames providing access to heated building areas must have a thermal break to conserve energy and optimize door performance.

Procurement: The contractor will specify the type of lock and correct door swing upon ordering. The standard back set is 7 cm. Other backsets are by special order.

Security Requirements:

Alarm Provisions - see [ALARMS - Intrusion, Protected Doors.](#)

Astragals

1. Install full-length astragals on all emergency egress doors equipped with panic hardware.
2. Install partial or full-length astragals on exterior/interior secure doors as required.
3. Installation method must be as follows:
 - a. Full-length astragals: install using nonremovable screws, rivets and/or carriage bolts, bolted from the interior.
 - b. Partial astragals: install using carriage bolts, bolted from the interior.

Grilles

1. Grilles are not permitted in doors which form part of an enclosure providing physical security (i.e. exhibit storage room) or sound attenuation (i.e. interview rooms).

9. DOOR VIEWER

Where a door viewer is required, install any of the types (as identified in [Schedule "D" – Approved Product List](#)) 1.57 m above the floor level in perimeter pedestrian doors, fire doors (where a larger opening would negate the ULC rating), and doors which are security barriers dividing functions (e.g. cell block to general office).

10. EMERGENCY POWER SUPPLY

Provision:

1. Provide in division and subdivision headquarters and large special purpose building to operate:
 - a. a limited number of lights and electrical outlets, e.g. cells, offices, fire exit routes;
 - b. a limited number of exterior lights for perimeter security;
 - c. minimal heating equipment;
 - d. telecommunications and CPIC equipment;
 - e. elevators; and
 - f. fire and security alarms.
2. Determine the requirement in detachment buildings based on:
 - a. occupancy safety, e.g. employees, prisoners;
 - b. building size;
 - c. cell provision and capacity;
 - d. frequency of power failure; and
 - e. high risk security area.

Capacity: The size and capacity of emergency generators in large buildings should be determined by an engineer and be based upon a calculation of the electrical load intended to be powered.

11. LIGHTING

Exterior:

1. Building Perimeter Lighting - use sodium vapor pressure lamps or other efficient lighting fixtures which provide good color rendition. Protect fixture from all forms of damage by adapting a minimum mounting height of 2.7 m above ground and by locating fixtures away from falling ice, snow and runoff water.
2. Parking Area Lighting - light the police vehicle parking lot with pole-mounted, sodium vapor pressure lamps.
3. Controls - use photocells to control all exterior lights. For building perimeter lighting, mount the photocell near the upper portion of the building, to prevent vandalism, and provide a bypass switch.

Interior: Except in unheated building areas, use radio-frequency interference-suppression type fluorescent fixtures equipped with standard length (1.16 m) tubes throughout the building. Lighting systems and levels should complement the intended activities of each occupancy type. Exception: Garage and cell areas need not have radio-frequency interference-suppression type fixtures.

Emergency: Provide emergency lighting equipment and illumination levels in accordance with Treasury Board of Canada policies. If there is no emergency power supply, provide a battery-pack system ensuring fixtures in cell areas are recessed. See [Schedule "A" – RCMP Detachments - Fire Protection Design Requirements](#).

12. LOCKS (SEE SCHEDULE "B" FOR LOCK TYPES.)

General: All locks must be labelled or identified as having met the requirements of American National Standards for Bored and Preambled Locks and Latches ANSI/BHMA A156.2-1989, for Mortise Locks and Latches ANSI/BHMA 156.13-1987, and for Auxiliary Locks ANSI/BHMA A156.5-1984. These standards are amended frequently and the current Directory of Certified Products must be used as equivalent Canadian Standards, Test Procedures or Directory of Certified Products exist.

Lock Grades/Specifications:

1. Due to inherent design weaknesses, locks or cylinders having core removable functions must not be used.
2. Locks used in fire-rated doors must be labelled and have met the requirements of CAN/ULC-S104.
3. Locks with unique requirements, e.g. lever handles, must be rated equal or greater in grade.
4. High security locks or cylinders may be installed in facilities where the overall threat level (of the current TRA) is identified as medium or high, subject to OIC Departmental Security approval.

5. The same make and keyway must be used on all locks throughout the structure.
EXCEPTION: cell block, plate glass door and overhead garage door locks.
6. Detention and holding cell locks must be keyed alike. All other cell-block facility locks should be keyed alike, except that Division Sec. O. may require different keying in certain circumstances.
7. Cylinders must be of six-pin design and pinned to 444444.
8. Screwless escutcheon plates are to be used on exterior doors and doors in high security areas (e.g. exhibit rooms, communications rooms or rooms with access to cable runs.)
9. Two uncut key blanks must be supplied for each cylinder.
10. All hardware schedules including key controls must be reviewed and signed off by Protective Technical Services Section to ensure continuity of security and hardware compatibility with existing division hardware.
11. Ensure that the hardware chosen will meet the door thickness requirements.
12. Consult specific manufacturers' catalogues when ordering hardware to ensure the most up-to-date data is used and special products are properly specified. Refer to the required series section for the ordering example for the type of lock required.
13. Advise contractor through the contract specifications that special orders from outside the country could require up to 12 weeks delivery time.
14. Unless otherwise arranged within the division and stipulated in the contract, all cylinders and key blanks must be sent to the applicable division Protective Technical Services Section, identifying name and number of the project and for which location they are intended.

13. MULTI-TENANT BUILDINGS

General:

The demising wall between the RCMP space and other tenants must extend from slab-to-slab, constructed to secure room type SR-3, SR-2 or SR-1 specifications, see General Standards - [Walls](#), based on a TRA and in consultation with Regional Departmental Security Section.

Sub-panel:

Provide electrical sub-panel within RCMP space if controlled access of the main panel is not possible.

14. OIL TANK SECURITY

Protect and/or secure the oil filler and vent piping. See [Figure 0.2 – Oil Tank – Locking Mechanism \(Oil Filler Pipe\)](#) and [Figure 0.3 – Oil Tank – Locking Mechanism \(Secure Vent Cap\)](#).

15. SECURITY SCREENING – GENERAL – DETAILED DRAWING

See [Figure 0.4 – Security Screening](#).

16. SIGNAGE (SEE APPENDIX III-2-4 FOR EXTERIOR BUILDING SIGNS)

General:

1. All signs must be bilingual with both official languages in side-by-side format. The predominant official language spoken in the area must be shown first. See [AM 11.6](#).
2. Use glyphs/international symbols for room identification wherever possible.
3. Minimize the use of lettered signs. The design of lettered (office) signs should be both economical and flexible, allowing RCMP employees to create and print replacement inserts with existing word processing and printing equipment.
4. Minimize the use and costs of all signage.

Procurement:

1. Signs which are made available by PWGSC can be obtained under Standing Offer Agreement (SOA) by completing form DSS 942 "Call-up Against a Standing Offer" and indicating the intended method of installation. Contact the regional office of PWGSC, Signage Section to obtain a copy of the catalogue of signs.

Detachment Message Holder:

A plastic message holder may be mounted on the interior side of the glazing in exterior front entrance door of detachments not manned on a 24-hour basis. The standard holder is designed to take a 125 mm x 20 mm index card.

Lobby Directory and Signs:

1. Buildings exclusively occupied by the RCMP do not require directory signs due to building security measures.
2. Shared occupancy buildings will only have the following:
 - a. If a lobby directory exists, show the words "Royal Canadian Mounted Police" and "Gendarmerie royale du Canada" side by side and include the room number of the designated public reception area.
 - b. If no lobby directory exists, a lobby sign will show the words "Royal Canadian Mounted Police" and "Gendarmerie royale du Canada" side by side with the room number and/or a directional arrow to the designated public reception area.

Public Reception Areas:

The public entrance to interior space occupied by the RCMP will have a sign with the words "Royal Canadian Mounted Police" and "Gendarmerie royale du Canada" side by side.

Mission Statement:

Provide in each public reception area of operational buildings and display in a prominent location. Contact Materiel and Services Management Branch for details.

Official Languages Symbol: See [AM II.6.](#)

Signage Types:

Sensitive rooms must be identified by number only.

The following is a guide for the use, composition and source of procurement for signs commonly used within floor areas.

Office Signage - Used to identify private offices. The employee's name, rank, title and room number may be printed on to a paper insert and held in place by a plastic holder with a transparent face, installed at eye level.

Room Number - Used to identify rooms which do not have office signage. The room number may be painted/applied directly to the door or frame OR printed on to a paper insert and held in place by a plastic holder with a transparent face.

Directional Signs - Used to identify the route to a public reception zone or to identify the route to a room which is not apparent from a main corridor. Include a directional arrow with the room number.

Tactile Signs - Used to identify washrooms, emergency egress, elevators, stairwells and doors off main corridors. The use of tactile signage in operational areas is discretionary and dependent upon the application of the RCMP position paper on barrier free design. Tactile signs are available under National Master Standing Offer Agreement PWGSC No. EJ116-6-0001/001/CM. Tactile signage for existing elevators should be provided by the maintenance service contractor.

Caution, Danger, Emergency, Mandatory, Prohibition and Graphic Symbols - Used to identify public facilities, health facilities, security zones, building service rooms, hazardous areas, fire doors, fire protection equipment, etc. Details of common-use signage and their applications may be found in the PWGSC catalogue of signs, available from their Signage Section. These signs are available under an SOA.

17. SMOKE/HEAT DETECTORS

See [Schedule "A" – RCMP Detachments - Fire Protection Design Requirements.](#)

18. SPEECH PRIVACY CONSTRUCTION

Provision of sound privacy construction must meet or exceed the overall sound attenuation rating required in support of the room function, as specified in the

applicable Fit-Up Standards in [Fit-Up Standards – Section 1](#) and [Fit-Up Standards – Section 2 to 9](#), in compliance with the requirements of ASTM E336.

Comply with building code requirements for flame spread rating. Only services necessary to the facility may penetrate the sound attenuated room enclosure. See [Figure 0.5 – Speech Privacy Construction](#).

19. SPRINKLER SYSTEM

See [Schedule “A” – RCMP Detachments – Fire Protection Design Requirements](#) for detachment fire standards and requirements.

20. WALLS

Generally, the RCMP does not construct “Secure Rooms” that meet the definition in the [Physical Security Guide G1-029](#), developed by Technical Security Branch (TSB) for the Federal Government. The RCMP only uses the wall construction portion of the Secure Room specifications to fit up the Reception, Operational, Security and High Security Zones. Follow the standards outlined in [Fit-Up Standards – Section 1](#) and [Fit-Up Standards – Section 2 to 9](#), for all other fit-ups including but not limited to doors, locks, windows, lighting, electrical, HVAC.

RCMP Wall Construction Standards:

Secure Room 1 (SR-1) - (Formerly Secure Room “C”):

- 35 mm x 92 mm x 0.5 mm thick non load bearing steel studs @ 400 mm o.c.
- 19 mm #9/10 rolled, flattened steel mesh
- 16 mm type “X” gypsum wallboard
- walls extend slab-to-slab, from slab to structural ceiling above, steel studs with expanded metal mesh and drywall. Apply the metal mesh on the attack side of the wall. When slab-to-slab construction is too high, construct a ceiling to the same standards as the perimeter walls.

Secure Room 2 (SR-2) - (Formerly Secure Room “B”):

- 32 mm x 152 mm x 1.22 mm thick (18 ga.) galv. steel studs @ 300 mm o.c.
- 1.52 mm thick (16 ga.) HR commercial quality to ASTM A366, matte finish sheet steel filet welded @ 305 mm o.c. to steel studs
- 16 mm type “X” gypsum wallboard
- walls extend slab-to-slab, from slab to structural ceiling above, steel studs with hot rolled (HR) sheet steel and drywall. Apply the sheet steel on the attack side of the wall. When slab-to-slab construction is too high, construct a ceiling to the same standards as the perimeter walls.

Secure Room 3 (SR-3) - (Formerly Secure Room “D”): (RCMP - Use only)

- 35 mm x 92 mm x 0.5 mm thick non load bearing steel studs @ 400 mm o.c.
- 16 mm type “X” gypsum wallboard
- walls extend slab-to-slab, from slab to structural ceiling above

The RCMP still requires the use of the former construction, drywall slab to slab, which has been eliminated from the new TSB Secure Room standards. In keeping with TSB's name changes the RCMP has added Secure Room 3 (SR-3) to wall specifications.

21. WATER-CONDITIONING/FILTRATION

Conditioning Equipment

Ensure chemical and bacteriological tests are performed on the building water supply. Provide the necessary water conditioning equipment as required.

Water Filtering Equipment:

Identify and accommodate building user needs for water filtering equipment (e.g. Identification Section.)

22. WINDOWS

Type: Window frames should be low maintenance with a thermal break for optimum performance and economy. Windows should be double glazed as a minimum.

Security: Install windows such that the bottom frame is a minimum of 900 mm above floor level. If the building is air-conditioned, fixed windows should be used. Where operable windows are used, the window must be a minimum of 2100 mm from ground level (outside) and the opening distance must be restricted to 100 mm. Awning windows are to open out with screens provided on the inside.

Where a security threat has been identified at a specific location, one of the following defense mechanisms may be used to protect the exterior windows:

1. **Crime Shield:** suitable when aesthetics is a concern and the threat for vandalism is low. It is not recommended for use in remote areas. Product consists of perforated steel screening panels in a steel frame (perforation size and spacing can be adjusted to suit needs.) The product is constructed of electro-galvanized steel, finished with an electrostatically applied baked powder, exterior-grade coating. Contact Departmental Security for product material specifications and installation guidelines.
2. **Grilles:** suitable when physical penetration of the premises is the main concern (e.g. warehouses, garages). Install grilles on the interior side of the glazing. Secure the grille in a manner permitting easy removal for maintenance and repair of the glazing.
3. **Polycarbonate:** suitable where there is a need to provide protection against stones, bottles, sticks, and other projectiles. Secure the polycarbonate to the exterior of the window frame, where possible, using a sealing compound and screws or bolts through the polycarbonate into the window frame. For specific installations where metal grilles or screening are not desirable, some polycarbonate laminates have the ability to resist penetration, scratching, marring and heat damage. For general application, however, screening is generally

accepted as the most cost effective option, offering the widest spectrum of defense.

4. **Screening/Security Film:** suitable when vandalism is the main concern and the windows are readily accessible (e.g. grade level glazing, basement windows). Screening/security film is intended to thwart thrown projectiles such as stones, bottles, sticks, etc., while still permitting open windows. Screens/security film is effective only against amateur attack and vandalism. Provide in accordance with the following guidelines and drawing:
 - a. Components:
 1. Frame - steel angle iron measuring 25 x 25 x 3 mm (up to 900 mm in size), 30 x 30 x 5 mm (between 900 and 1800 mm in size) and 40 x 40 x 5 mm (over 1800 mm in size.) Unless otherwise specified, the angle iron frame must be square-cornered, mitred and fully welded as shown in the [Figure 0.4 – Security Screening](#).
 2. Screening (expanded steel mesh) - either 40 mm x 3.43 (10 ga.) for **standard duty** use in low risk areas like perimeter windows to general offices, detachment garages, etc. or 20 mm x 3.43 for **heavy duty** use in high-risk, secure storage areas. Weld screen to frame at each point of contact.
 3. Fasteners - square head lag bolts 10 mm (3/8") x 62 mm conforming to CGSB 1-GP-12C; color is optional. Use lag shields when attaching into masonry.
 - b. Installation:
 1. Since these screens are designed against amateur attack and vandalism, exterior mounting is preferred.
 2. The two installation methods shown on the detail drawing below apply to both exterior and interior installations.
 3. When screens are installed inside an opening, size the frames to within 6 mm (1/4") of the overall recess opening dimensions; to minimize their vulnerability to prying.
 4. Center the 11 mm (7/16") diameter screen mounting holes in the angle iron frame, at a maximum of 100 mm from the corners and 300 mm centres elsewhere.
 5. Have all electric arc welds cleaned and the preparation and screen finish must comply with CGSB 1-GP-71, 31-GP-105M, 106A, 107A.
 6. For exterior ground level or first floor installations, arc weld the heads of fasteners to the screen frame after installation.