

Site Security Briefing Note Layout



INTRODUCTION

Relatively few sites are ever chosen or developed with their intended user's inherent security needs in mind. Nevertheless, considerable improvements may be possible at many sites retrospectively, or as part of phased alterations, and the information provided in this document is intended to guide those who have a responsibility for a site's protection and to help achieve cost effective security improvements. Whilst physical and other security measures are not addressed in any depth in this particular guide, more detailed information is to be found in other RISCAuthority documents - the most relevant being listed at the end of the document.

PLANNING SITES WITH SECURITY IN MIND

Although security will rarely be a deciding factor during the selection of a site, the opportunity should be taken to expertly review security at every stage of the site's development.

A good security strategy is:

EFFECTIVE – ECONOMIC – WORKABLE

and, thoughtfully introduced during planning, it is usually less expensive than modifying an existing regime later.

Those responsible for planning a site in the security context can benefit from taking note of the basic principles and recommendations to be found in various publications on the subject of Crime Prevention Through Environmental Design (CPTED), particularly if the site location is within an urbanised built environment and a level of security must be achieved without the benefit of a physical perimeter. A web search will yield links to various sources of information, of which the following is an example:

<http://designforsecurity.org/about/crime-prevention-through-environmental-design>

THE RISK

Analyse the risk by considering the following factors:

Environmental vulnerability

Adjacent derelict premises, parks and other traditional play areas will attract children and may encourage the fly-tipping of rubbish and toxic waste. Easy access to sites for skateboarding, ball games

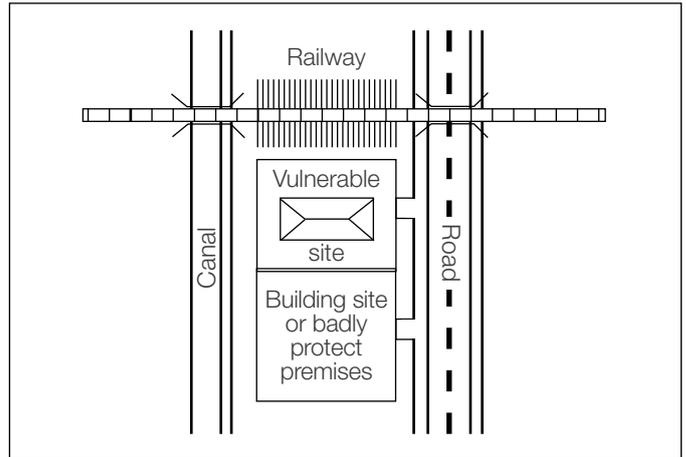


Fig 1. Take account of the immediate surroundings

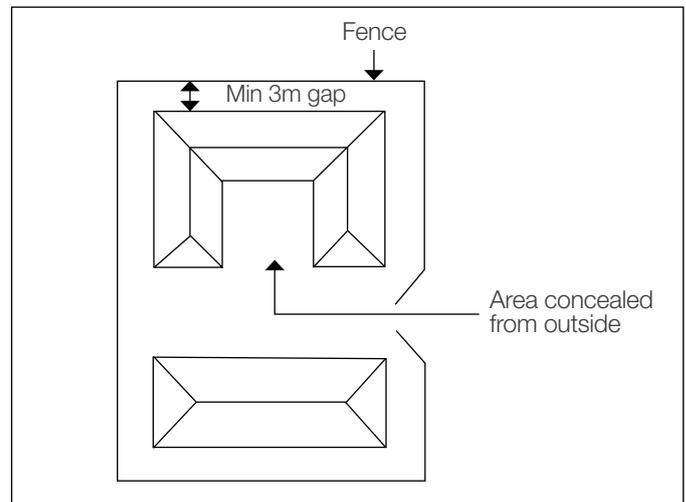


Fig 2. Avoid restricting natural surveillance

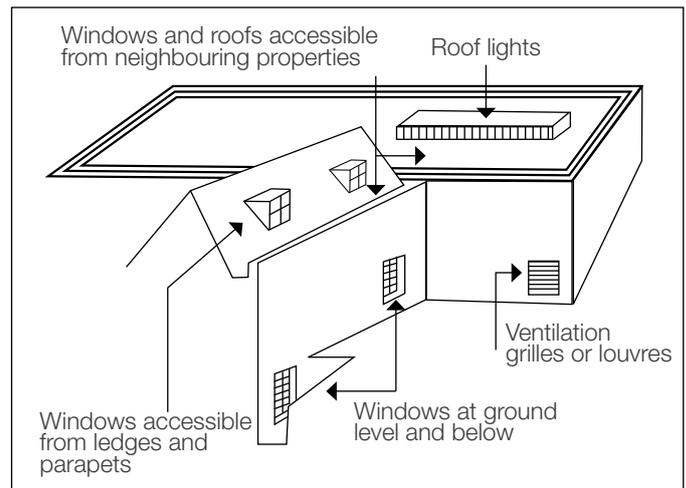


Fig 3. Consider how access can be gained

or activities involving climbing (aka free-running and 'parkour') may result in serious damage - even arson and possibly liability issues. Access for illegal tipping may cause serious business interruption.

Crime patterns

Consultation with police, insurers and trade associations about the attraction premises or their contents are expected to have for criminals can reveal the frequency of problems and attacks the premises are likely to attract, and the tactics and skills of potential intruders – thus helping to suggest an appropriate defensive strategy.

Local economic and social conditions

Rural sites may be less vulnerable to vandalism than inner-city or urban areas but could provide adult criminals with better opportunities, depending on site use. Any potential threat to female staff or those working late should be considered, together with the current crime patterns in the area.

General site design

Even if future use is unknown, aim to avoid:

- locating buildings on the site boundary (ideally, allow at least 3m between fences and buildings, plant and fuel stores)
- screening external doors and windows from the 'natural surveillance' of passers-by
- overhanging trees or shrubs – which may provide climbing aids that reduce the efficacy of fences, or the intended view of electronic security systems, such as CCTV
- earth banks which lessen the height from ground level to fence limits or upper floors of buildings
- walls and fences which may be easy to climb
- ornamental brickwork or fixtures (e.g. air conditioning units) on facias which provide footholds to windows and balconies
- lighting systems which cast shadows and conceal intruders

Access

As well as considering immediate surroundings and perimeter fences, note that some criminals will travel long distances to steal attractive goods in quantity, especially if there is easy access to a site via motorways and trunk roads.

Is there space to:

- manoeuvre vehicles on or adjacent to a site to act as a battering ram?
- use vehicles/devices to pull out building windows or doors?
- wield axes and sledgehammers on doors, windows or vital services?

Consideration should be given as to whether these are vital factors in a particular case, as security needs will vary with risk.

PERIMETER PROTECTION

Security begins at the perimeter of a site, wherever that perimeter may be - it may be the walls of a building, i.e. the boundary of land, or the boundary of land enclosing buildings.

A perimeter fence or wall is the first line of defence and should:

- present a psychological deterrent to potential intruders as well as forming a formidable obstacle
- be substantial enough to cause delay and not be easy to climb
- have gates or doors of quality and strength equivalent to the remainder of the perimeter and commensurate with those of the buildings on site
- enable guards to carry out patrols, controls and identity checks with efficiency and economy
- ideally be of the type that affords those on either side of the perimeter a view of the scene either side

RISCAuthority guide to 'Site security: fences, walls and gates' includes information on security fencing including steel palisade and expanded metal mesh, and it should be referred to when perimeter protection is being designed. In general, for high-risk sites consider the possibility of:

- clear areas on either side of the fence
- establishing a lighted defence zone between two fences several metres apart, ideally viewed by detector, or fence alarm activated, CCTV
- electronic detectors on boundary fences or in defence zones

See RISCAuthority documents 'Site Security: external alarm protection' and 'S23 Guidance for specifiers of CCTV in security applications' for information on CCTV and 'Detector Activated CCTV'.

Note: Not every site will merit all such measures.

VEHICLE PARKS

It is important to separate convenience parking (for staff and visitors) and operational vehicle enclosures, with the former usually only needing to be secure enough to prevent trespassers.

Where fear of terrorism, kidnap or personal violence is a factor, carefully consider whether identification of allotted (named) spaces will increase vulnerability of personnel.

Convenience parking – CHECKLIST:

- parking should not be provided within a secure area (except in special circumstances)
- entrances and exits should lead through the perimeter and not into an internal secure area
- adequately mark bays and traffic flow
- do not allow access from finished goods areas and stores
- consider the use of vehicle and pedestrian barriers

Vehicles are important business equipment and protecting them from the attention of thieves is good business. Providing adequate safe parking for staff also improves morale.

Vehicle enclosures and loading bays – CHECKLIST:

- parking areas should be well lit
- adequate fencing at least to perimeter standards should be installed
- open loading bays encourage pilfering of goods awaiting dispatch
- consider isolating bays by designing them to leave no extraneous opening whilst loading or unloading is in progress
- separate areas should be used for incoming and outgoing goods where possible

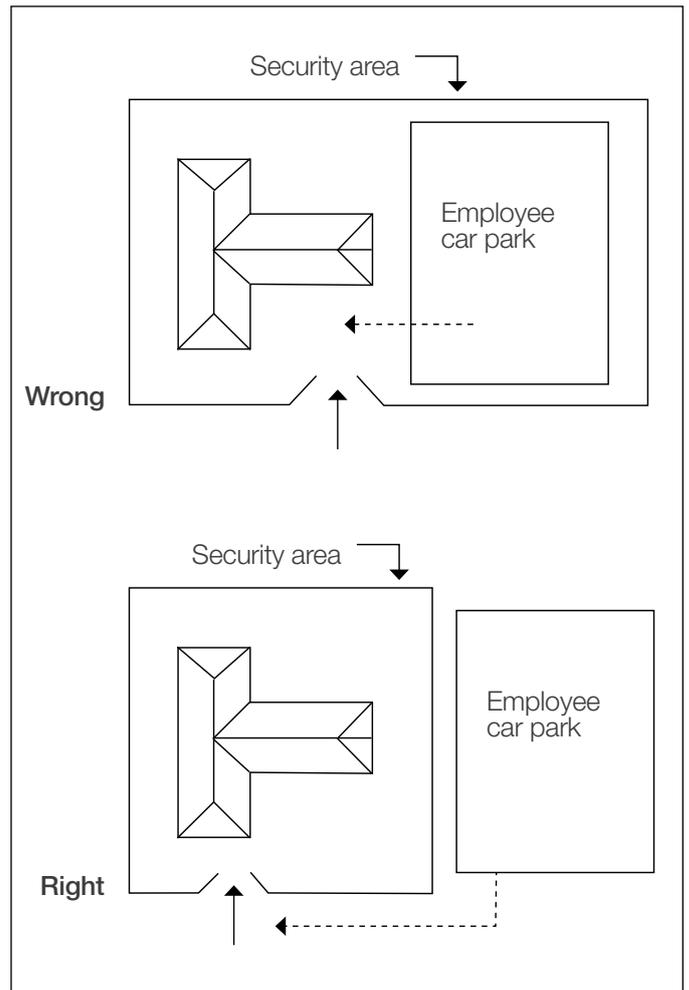


Fig 4. Exclude vehicles from the secure area

- consider secure areas within the loading complex for valuable or dangerous goods, damaged and returned items
- avoid rubbish removal via a loading bay to bins near car parks. It may provide a convenient means of taking out pilfered goods
- separate entrances and exits to enclosures aids checking
- no private vehicle parking should be allowed within a secure enclosure
- driver rest rooms should be sited away from loading bays and routes to them should be clearly marked to discourage drivers from wandering to packing or shipping areas
- consider monitoring entrances, exits, vehicle parks and loading bays with electronic security measures such as CCTV cameras

GATEHOUSES, CHECKPOINTS AND RECEPTION AREAS

Judicious siting of points for observing, checking and stopping vehicles and pedestrians are of paramount importance if the best use is to be made of guarding and reception staff. Their presence should be a visible deterrent to trespassing, vandalism, staff pilfering and other forms of crime.

- aim to control people and vehicles effectively and economically without causing delays or impeding operations
- channel those needing legitimate access past the checkpoint and deny entry elsewhere by suitable barriers
- reduce the number of building entrances to a minimum and ensure emergency exits are alarmed and carry notices to that effect
- carefully locate staff locker rooms e.g. adjacent to the security office and distant from production and storage areas
- provide reception areas with lavatories and other necessary facilities, so as to segregate visitors from staff and the remainder of the site
- also consider providing a small meeting room at reception for brief discussions with visitors, as this can enable staff to deal with visitors without the need for the more elaborate security procedures necessary for full site admittance
- on large or complex sites such as hospitals or hotels consider coloured route stripes for the benefit of visitors. Additional stripes can be incorporated for the use of staff
- install adequate communication systems and automatic emergency lighting
- provide gatehouses with all-round visibility
- when illuminating the gatehouse, ensure that lighting outside is brighter than the internal illumination – an intruder should not have an advantage over the guard
- consider providing an area in the gatehouse for searching staff when necessary
- lay-bys in which to search vehicles may be necessary to avoid entrance congestion

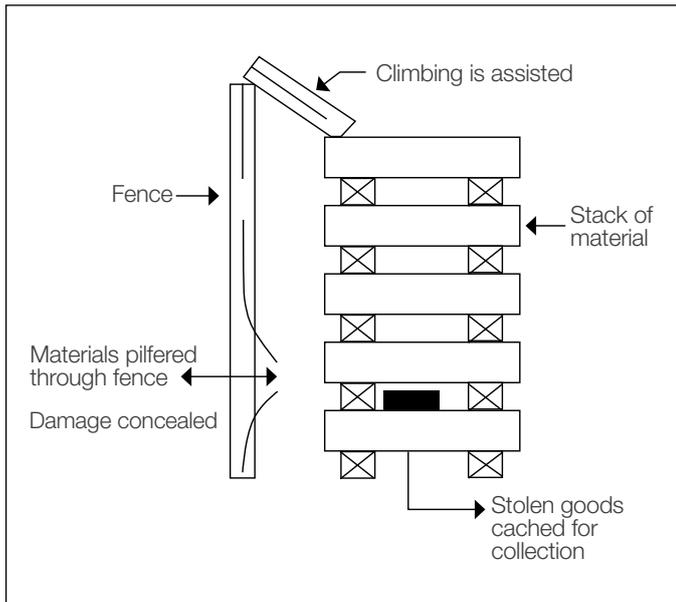


Fig 5. Avoid storage close to the perimeter

EXTERNAL STORAGE AREAS

- avoid stacking finished goods near site boundaries to reduce pilfering or damage to fences. Such stacks may assist climbing and provide a hiding place for stolen goods
- avoid providing intruders with easy access to tools, forklift trucks, tractors and trailers. Most thieves do not bring their own large equipment with them to assist in committing crime
- ensure flammable liquids and gases are secure and stored in safe areas away from key buildings
- fuel pumps, oil tanks, transformers and similar plant are often operationally essential and breakdowns/business interruption, e.g. following vandalism, can be avoided by secure siting - preferably in a locked building. All taps, switches, inlets and outlets should be protected from impact and locked off if appropriate

Comment: Every year arsonists and mischievous young adults cause damage valued in many millions of pounds.

LIGHTING

Lighting is one of the most effective aids to security. It should be installed with careful attention to wattage and type and siting of luminaires, to enable it to complement physical security measures.

Ensure that:

- security lighting is considered separately from display, safety or general illumination (although there may be duplication)
- the supply, luminaires and connections are tamper-resistant

Note: In high-risk areas of large sites not under close human supervision, voltage drop alarms should be considered to provide a remote indication of lamp failure.

- lighting illuminates the intruder rather than the defender
- shadows are not cast in vulnerable places, i.e. where intruders could most readily operate unseen

The need to integrate lighting with CCTV and other electronic security measures should also be considered. More information can be found in RISCAuthority document 'Site Security Briefing Note: security lighting'.

LANDSCAPING, WALKWAYS & ROADS

Users of buildings and sites usually want to go from point to point by the shortest and easiest route. They may also want to deposit litter and store rubbish at convenient places even if, as a result, such areas/bins appear intrusive. Paying attention to these requirements can reduce damage to trees and fences, lessen the chance of rough pathways or tracks being formed and protect the aesthetic appearance of a site.

- consider constructing walkways between buildings using a spoked configuration
- design paths and roads to follow the shortest route
- avoid derelict or waste ground between or near buildings
- make use of prickly/thorny bushes in landscaping to channel pedestrians towards designated entrances and exits

- avoid planting vegetation which could provide cover for intruders, or obscure the field of view of surveillance cameras or guards/staff

GENERAL

This guide has been prepared in the knowledge that few commercial buildings are planned for specific uses and many are speculative developments. Security is unlikely to have been a prime consideration, nevertheless the security principles listed in this guide are applicable to many situations and highly desirable in most of them.

For more information see RISCAuthority guides:

BDM10 code of practice for the protection of empty buildings – Fire safety and security

S6 Electronic security systems: guidance on keyholder selection and duties

S10 Guidance for the protection of premises against attacks using vehicles (ram raids)

S11 Security of emergency exit doors in non-residential premises

S12 Police response intruder alarm systems: ten-step guide for purchasers

S14 Police response intruder alarm systems: summary of insurers' typical requirements

S20 Essential principles for the protection of property

S21 Measures for the control of metal theft

S23 Guidance for specifiers of CCTV in security applications

S29 Guide to electronic access control systems

S30 Terrorism – sources of guidance and support

S31 Unauthorised occupation of non-residential premises – guide to managing the risk

Site Security Briefing Note: fences, walls and gates

Site Security Briefing Note: security lighting

Site Security Briefing Note: external alarm protection

Site Security Briefing Note: manned guarding

Notes



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