

# SLOVENSKI STANDARD SIST-TS CEN/TS 14383-4:2006

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Prevention of crime - Urban planning and design - Part 4: Shops and offices

Vorbeugende Kriminalitätsbekämpfung - Stadt- und Gebäudeplanung - Teil 4: Laden und Bürogebäude

# iTeh STANDARD PREVIEW

Prévention de la malveillance - Urbanisme et conception des bâtiments - Partie 4: Commerces et bureaux

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# TECHNICAL SPECIFICATION

# CEN/TS 14383-4

# SPÉCIFICATION TECHNIQUE

# TECHNISCHE SPEZIFIKATION

May 2006

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# **English Version**

# Prevention of crime - Urban planning and design - Part 4: Shops and offices

Prévention de la malveillance - Urbanisme et conception des bâtiments - Partie 4: Commerces et bureaux

Vorbeugende Kriminalitätsbekämpfung - Stadt- und Gebäudeplanung - Teil 4: Laden und Bürogebäude

This Technical Specification (CEN/TS) was approved by CEN on 14 April 2006 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# **Foreword**

This document (CEN/TS 14383-4:2006) has been prepared by Technical Committee CEN/TC 325 "Prevention of crime by urban planning and building design", the secretariat of which is held by SNV.

The status of Technical Specification was proposed to give all countries the opportunity to compare experiences and to harmonize procedures.

This Technical Specification is one of a series for « *Prevention of crime - Urban planning and design* », that consists of the following parts:

Part 1 – Definition of specific terms

Part 2 – Urban planning

Part 3 – Dwellings

Part 4 – Shops and offices

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this CEN Technical Specification: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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# Introduction

The nature, cost and scale of crime against retailers and other businesses can be hard to quantify and many factors can influence whether or not an offence is committed. For the purpose of this document three basic criminological approaches are adopted:

### **Rational Choice**

This approach assumes that potential offenders undertake their own risk assessment before deciding to commit a crime. They consider the chances of being seen, the ease of entry and the chance of escape without detection.

#### **Routine Activities**

This theory assumes that for an offence to take place there needs to be three factors present; a motivated offender, a suitable target or victim and a lack of capable guardian. To affect the potential for crime, it is necessary to consider each of these factors. An offender can be deterred by increasing surveillance or making access more difficult. A target can be made less attractive by increasing the security or removing escape routes. The presence or influence of a capable guardian, either real or implied, can be improved by office and shop design and the location of staff.

# Defensible space

This approach applies to the different levels of acceptance that exist for people to be legitimately in different types of space. Anyone has a right to be in a public space, for example a street, but not in a private space such as the rear yard of a shop or office storeroom. dards.iteh.ai

Understanding these three principles can affect the desire and ability to commit a crime. The majority of property crimes are committed because offenders have been given opportunities. Easy access to a shop or office, concealed areas, no demarcation between public and private space, pooledighting or landscaping features can all assist the potential offender. All of these features can be designed to benefit legitimate users and not potential offenders.

By helping to understand the thinking of the offender and balancing this against both symbolic and real design features, combined with specific physical security measures, the document aims to assist designers, planners, shop and office owners or managers and crime prevention practitioners. In the most simple of terms, the more vulnerable and at risk a potential offender feels, the less inclined they are to commit a crime.

# 1 Scope

This document provides guidance and a recommended strategy for combating burglary, theft, arson and other crimes committed against retailers and other businesses. It applies to both new and existing shops and offices.

Recommended levels of security for commodities stocked in retail outlets are given in Annex A.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14383-1:2006, Prevention of crime - Urban planning and building design - Part 1: Definition of specific terms

#### 3 Terms and definitions

For the purposes of this Technical Specification, the terms and definitions given in EN 14383-1:2006 and the following apply.

# 3.1 iTeh STANDARD PREVIEW

## **Burglar resistance**

Property of door, window or shutter assembly that enables it to resist attempts at forced entry into a protected room or area.

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# 4.1 General

Building security can broadly be defined as the use of the site layout, fabric and form of a building to protect the occupants and their possessions from harm. Key design factors include physical layout, location of doors and windows, control of access and movement, formal and informal human surveillance. Manipulating these elements of architectural design with an awareness of their impact on security at the design stage, can achieve significant gains in controlling crime and nuisance behaviour.

Professionals with appropriate crime prevention expertise should be included in the design team (see 4.2) and should be involved to ensure that crime prevention factors are included in the design.

# 4.2 Designing to include safety and security

The design team should consider the various factors that can influence the opportunity to commit crime. Amongst the most important of these are:

- a) ownership;
- b) human presence;
- c) conflict minimisation.

It is essential that the design of public space be such that people begin to regard it as their own and take responsibility for it. If this can be achieved, crime and antisocial behaviour are less likely to occur, or continue without the public reacting to it.

One of the strongest crime prevention factors is the risk of being seen and identified. Therefore, human presence and natural surveillance are very important. Where possible, mixed usage of units should be encouraged as it prolongs life and movement throughout an extended period of the day. Street furniture should be designed to enable clear sight lines and provide wide natural surveillance. For the same reasons, buildings should front onto public space.

Fear of crime, whether real or perceived needs to be considered and the design of the environment should reflect this. Any design feature that could possibly give rise to a potential conflict situation should be avoided. Safe and integrated environmental design will encourage the use of spaces by engendering a feeling of security.

# 4.3 Risk analysis

### 4.3.1 General

Any crime prevention strategy is essentially one of risk management. Consequently, before an effective strategy can be developed, it is important to identify and understand the risk factors involved.

### 4.3.2 Local factors

When assessing the level of risk it is essential to give high priority to local factors by carrying out a diagnosis. This may involve carrying out an analysis survey of crime in the immediate neighbourhood, to identify the type of crime reported, where and when incidents occurred and who the victims were. This may be achieved by spatial mapping to identify crime clustering or hot spots.

It is also important to be aware that factors which may influence the opportunity for crime may not necessarily be in the immediate locality. For example, a convenient route linking two features attractive to young people may pass through a commercial area. Although the features themselves may be some distance away from the shops or offices, the presence of relatively large numbers of people using the route may influence the possibility of crime.

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Where the development is on a new site, it may be that there has been no previous crime problem or records do not exist. In these cases it is important to consider the proposed development in terms of potential crime generation, i.e. what crime or antisocial behaviour could reasonably be anticipated after completion?

Guidance on methods for assessing the risk of crime and methods aimed at reducing these risks in neighbourhoods, town centres and industrial estates, is given in ENV 14383-2 (see also Clause 5).

# 4.4 Image of the neighbourhood

The first impressions gained by a potential offender have the greatest influence on their decision to offend or not. Although a shopping or commercial centre that appears well maintained may give an impression of affluence it is also true that it can give an equally strong impression that the people who work there take pride in the area and are more likely to be vigilant and protective.

A commercial development that encourages the occupants to work together as a community, to take combined action to improve the environment against potential offenders, is likely to result in less crime and an improvement in the quality of life for the users. There are two good ways to achieve this:

- a) By defining the development to give it a clear identity;
- b) By ensuring the maximum permissible surveillance from property to property. Potential offenders do not like to be seen. Wherever possible it is also advisable to try and obtain a mix of types of usage and occupant. This may result in a variation in occupancy patterns that allow more people to be in any particular area, exercising informal surveillance.

# 4.5 Security

Security provisions should be considered in the building design stage. It is important to take account of present and planned future developments in the area when deciding the specific location of a shop or office.

A clear and uncluttered design for both the exterior and interior of the building can assist security surveillance, especially when combined with good natural and artificial lighting.

#### 4.6 The site

Consideration should be given to the following:

- a) The extent to which the selection of the location of premises may be pre-determined by other factors, for example market requirements, and the extent to which the selection of a site can be influenced by security factors.
- b) The extent to which security provisions are influenced by a proposed location, taking into account:
  - types of crime that may occur in high crime areas, or where buildings are known crime generators;
  - and the different types of crime in, for example, a suburban area.
- c) Existing or potential levels of burglary, theft, arson and criminal damage in the locality.
- d) Proximity to areas of public gathering, for example football and other sports grounds, licensed premises or playgrounds.
- e) The extent to which security problems may be influenced by natural features such as rivers, stream and rugged ground, the weather, the season, or seasonal factors such as influx of tourists.

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- f) Advantages that can be obtained from proximity to police, fire and ambulance stations or from the existing secure perimeters of well maintained premises with high walls or fences.
- g) Illumination and coverage provided by existing street lighting.
- h) Levels of security that owners and occupiers of other premises in the district apply to their premises.
- i) Natural surveillance, i.e. the extent to which property can be seen from other premises.

# 5 Opportunities for crime

# 5.1 General

It is necessary to analyse the type of crime that could reasonably be expected to occur as a result of the new development. It is essential to research the existing crime and antisocial behaviour of the locality and analyse any opportunities for crime that could result from the development.

The primary aim is always to try and prevent crime happening in the first instance.

### 5.2 Types of crime that occur most frequently

#### 5.2.1 General

Shops and offices suffer very similar crime to dwellings but differ dramatically in the times when the crime is committed. By definition shops and offices are most frequently occupied during the day whilst the majority of dwellings may be empty. Offences such as burglary usually occur during the times when premises are closed,

most likely at night, but theft and shoplifting (see 5.2.2 to 5.2.3.) occur during the day. Offices and shops should therefore have different types of protection against different types of crimes at different times of the day.

It should also be remembered that work practices are changing and both shops and offices are having longer periods of occupation or staying open later. The risk assessment should therefore allow for these variations.

# 5.2.2 Burglary

Burglary from offices and shops occurs mainly when premises are unoccupied, and can be divided into two types:

- a) High risk premises are those which are likely to be targeted by well organised and determined professional potential offenders who undertake premeditated attacks, e.g. stealing in bulk, stealing high value goods or stealing equipment, information or data. For example a tobacco warehouse is broken into and a lorry load of cigarettes is stolen.
- b) Opportunist burglars exploit weaknesses in security precautions and commit lesser value burglaries; these are more frequent than premeditated attacks. An example might be a 'smash and grab' attack on a window display.

# 5.2.3 Theft of goods / Shoplifting

Goods on display in shops are particularly vulnerable to theft. Careful thought should be given to the orientation and internal layout of both shops and offices to reduce the easy opportunity for theft.

Office reception areas should be designed so as to give both a welcoming impression to business people but be formal enough to deter an opportunist thief. Shops should be laid out to give the staff the maximum opportunities for surveillance

Theft such as pick-pocketing may also occur in public areas. This can be reduced by appropriate layouts both inside and outside the premises. Theft of personal property belonging to office and shop staff is more likely to occur when facilities are not provided for keeping property secure. The security in storerooms, delivery areas and yards and parking areas in particular should be carefully considered.

# 5.2.4 Theft of information and data

Special security measures should be taken to reduce the risk of theft of information in order to maintain the company's effectiveness.

The greatest risk is theft of data held in computer systems; therefore protection should be provided for computers and terminal links.

The following security measures should be taken in order to prevent theft of information or corruption of data:

- a) PC locking devices, software protection by the use passwords, electronic firewalls etc;
- b) Control of access to the computer environment, by for example a restricted electronic card entry system or other appropriate means;
- c) Protection against electronic eavesdropping.

NOTE It is becoming increasingly important to safeguard information and data from theft or corruption. Whilst a company may be able to replace goods that are stolen or damaged, it is often far more damaging to lose commercially confidential information, which can cover all aspects of the company operation.

# 5.2.5 Damage by arson

The following security measures should be considered to deter arsonists:

- a) A secure perimeter should be provided to deter potential offenders.
- b) Gaps beneath doors should either be as small as possible or sealed where practicable.
- Letter boxes should comply with the requirements of EN 13724, preferably located outside the building and should be fire resistant if fitted inside the building.
- d) Companies with sensitive operations should consider mail-scanning machines.
- e) Automatic fire detection and extinguishing systems, e.g. sprinklers, with an automatic alarm transmission facility, should be installed to provide early warning of fire to the fire services.
- f) Hazardous goods such as flammable liquids and gas cylinders should be locked in special stores, particularly outside working hours.
- g) Unprotected inflammable goods and combustible waste should be stored away from buildings in order to reduce the risk of an external fire spreading into the building.

NOTE All offices and shops are potentially at risk from arson. Properties at the greatest risk are often isolated or unattended premises or those with little or no physical security.

### 5.2.6 Product contamination

When the threat of product contamination is a serious risk, stringent security precautions should be taken. There should be a whole company emergency action plan available to deal with threats of product contamination.

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# 6 Security management

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# 6.1 General

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The overall strategy for preventing burglary, theft and arson in offices and shops should cover situations when the premises are open for business and when they are closed. All technical and human prevention measures to be taken against crime should be analysed on the following four aspects, which are internationally recognised:

- a) Deterrence (dissuasion of attack).
- b) Denial (blocking the attack).
- c) Delay (slowing down the attack).
- d) Detection (emergency devices to advise law-enforcement agencies that an attack is in progress).

The result of this analysis should be incorporated into the overall security plan. It is essential that all units, whether a single shop, an office, a major shopping centre or commercial development have a security plan. This procedure should cover all contingencies, and be shown to, and understood by, all employees.

# 6.2 Risk analysis

To formulate a security plan it is first necessary to complete an in-depth risk assessment. In order to assess the degree of security needed for a particular office or shop, the following factors are amongst those that should be considered:

a) Type of business.

- b) Attractiveness to the potential offender in terms of goods, cash and confidential data.
- Potential escape routes for the removal of stolen goods. The escape route may not be the same as the entry route.
- d) Ease of access from the street, open areas, adjacent roofs, floors above and below the premises concerned if not under single occupancy, and from adjoining premises.
- e) Degree of inherent security of the premises in relation to its construction.
- f) Vulnerability relative to local trends in crime.
- g) Surveillance provided either by normal public activity, routine police patrol of the area or by security patrolling of the premises and/or its surroundings.

# 6.3 Vulnerability of site and building

In addition to the criteria given in 6.2, the analysis should also include consideration of the following three types of space around the building. Each type of space has special conditions requiring assessment before incorporation into the overall security plan:

- a) Peripheral space: land outside the perimeter boundary of the site.
- b) Perimetric space: area between the perimeter boundary and the building envelope.
- c) Volumetric space: enclosed space within the building RD PREVIEW (standards.iteh.ai)

# 6.4 Security concept

A security plan should be formulated taking the risk analysis into account, together with the building design in the case of a new-build development. For an existing building, the risk analysis will have focussed on past, present and projected incidents and information. In addition to the guidance in 6.2, the following points should be considered:

- An assessment of the risk should be carried out in relation to the value of the property and the items to be protected, including fire and insurance requirements
- b) The design of the building and the security measures employed should ensure as far as possible that potential intruders cannot gain entry to the premises unseen.
- The interior layout of offices and shops should be planned so as to minimize losses due to theft.
- d) The access and egress control arrangements for staff, goods vehicle drivers, contractors, cleaners, maintenance and visitors should be monitored.
- Adequate perimeter barriers and security devices on external doors, windows and other possible points of entry should be provided and maintained.
- f) Security staff and security cameras should be employed where appropriate.
- g) Facilities should be provided for the protection of high value goods, information and cash.
- Secure telephone lines and cables for transmitting alarm signals for emergency use should be installed if necessary.
- i) Vehicles should be kept away from secure areas but kept under surveillance for their own security.
- j) Precautions should be put in place for hazardous goods.