

CRIME IMPACT STATEMENT

Webster's Primary School, Denmark Road, Greenheys, Manchester, M15 6JU

Modular Primary School Building

FOR: Manchester City Council

VERSION A: 22nd September 2017

REFERENCE: 2017/0680/CIS/01

Greater Manchester Police

designforsecurity

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CPT
CRIME PREVENTION TEAM

Webster's Primary School, Denmark Road, Greenheys, Manchester, M15 6JU

2017/0680/CIS/01

EXECUTIVE SUMMARY

Development supported subject to recommendations

The proposed school building and car parking area are acceptable in principle, from a crime prevention perspective. The volume of crime in the local area is relatively high and, additionally, schools in the Manchester area have been targeted by criminals, with a burglary at a school in the Manchester area at a rate of almost every other day. There is a real risk of the proposed school building being and for this reason it is highly recommended that the recommendations made in this report are implemented.



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1 Visual Audit

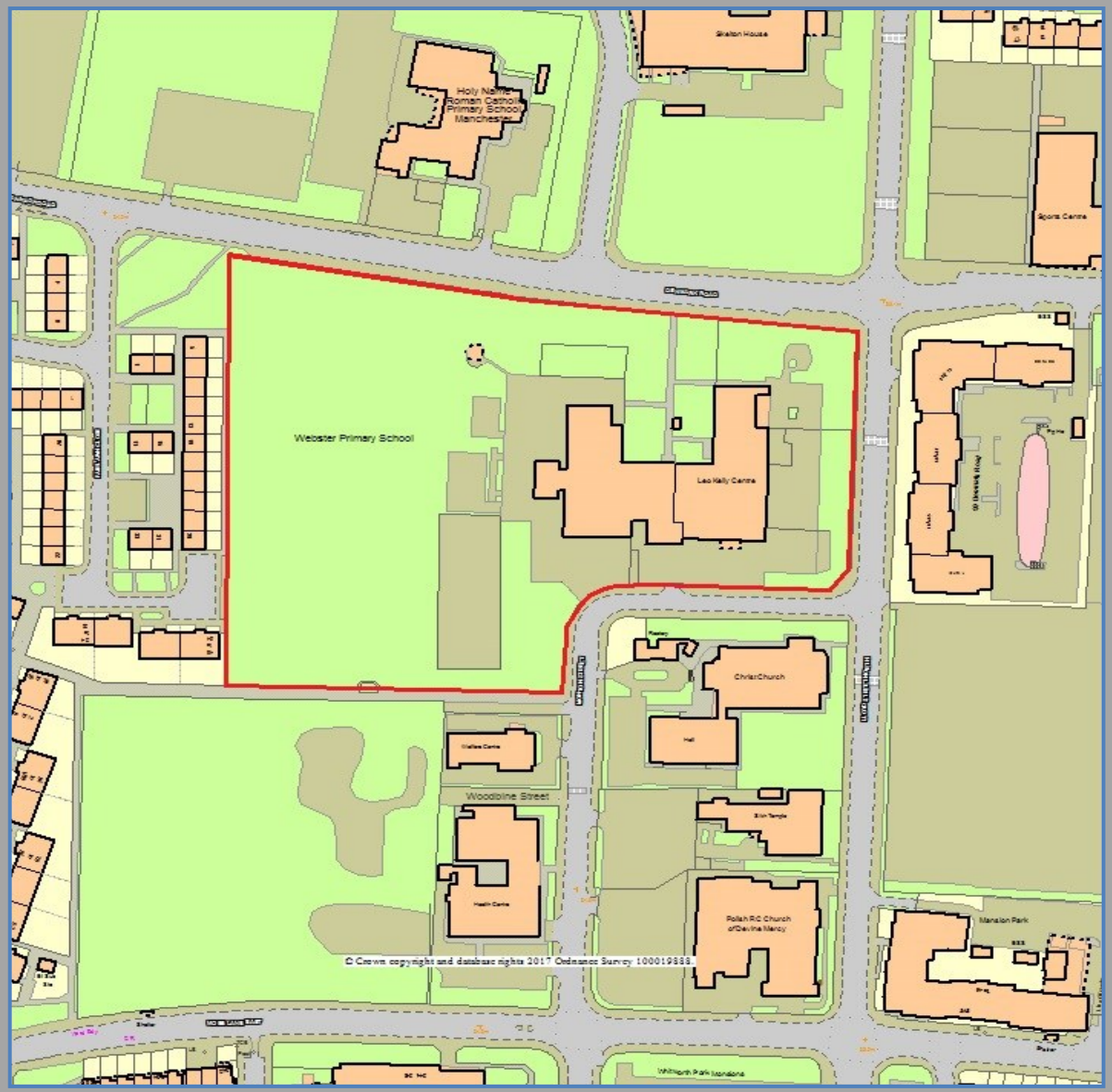
The proposed development site can be seen on the adjacent site, edged in red. The proposed building will be located in grounds of the existing school, Webster Primary School, to the South of the school site.

Primary entrance to the site taken from Denmark Road to the North of the site, which will remain the main entrance to the site and be used b pupils of the proposed modular building.

The site boundary is defined with a 2100mm high paladin fence, providing a high level of security to the site perimeter.

To the South of the site and close to where these is a local authority Welfare centre and to the West of the site is a Radburn style estate with a rear passageway adjacent to the site boundary.













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2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st August 2016 and 31st July 2017.

2.1 Crime Summary

Figure 1: Recorded Crime within 500m of Site

Burglary Dwelling	Burglary Other	Criminal Damage	Less Serious Wounding	Misc. Thefts	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Theft of Pedal Cycle
50	7	67	182	35	28	9	30	9	15

2.1.1 Overall crime in the local neighbourhood is relatively high, compared to other 1km areas. The most prevalent offences have been violence, criminal damage and residential burglary. Incidents of violence have been spread through the week, the majority of which have taken place in houses, on the street and in schools. Where there were incidents of criminal damage, these have predominantly occurred against vehicles as opposed to residential and commercial properties.

2.2 Common Use-Specific M.O.s (Modus Operandi)

2.2.1 Front and fire doors were forced open or the glazing smashed.

Possible Solution - All external doors should be certified to the relevant burglary resistant standards (see section 4.1) dusk-til-dawn lighting should be installed above external doors, and they should generally be positioned where they can be subject to natural surveillance from surrounding properties. To deter criminals there should be a secure site boundary, effective lighting to external spaces, and the buildings should be covered with a monitored alarm. Glazing in doors should be laminated glass (see section 4.3)

2.2.2 Implements were used to smash windows.

Possible Solution - Any glazing at ground floor, or in easily accessible areas, should include a laminated pane to prevent it from being smashed or shattered easily (see section 4.3).

2.3 Risk Factors

The typical security risks for a development of this nature are:

- Burglary
- Criminal damage to property
- Unauthorised access to buildings and private spaces
- Antisocial behaviour
- Loitering groups
- Internal theft
- Theft of staff/pupil belongings
- Staff, pupil and parent safety
- Acts of criminal damage during the construction period

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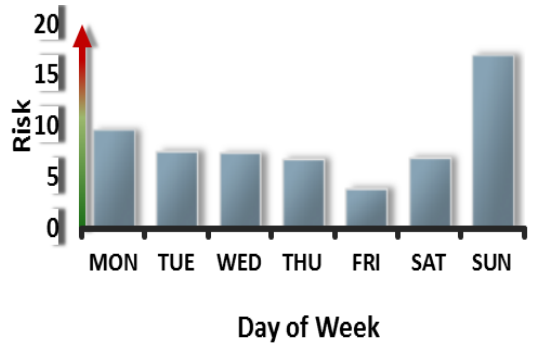
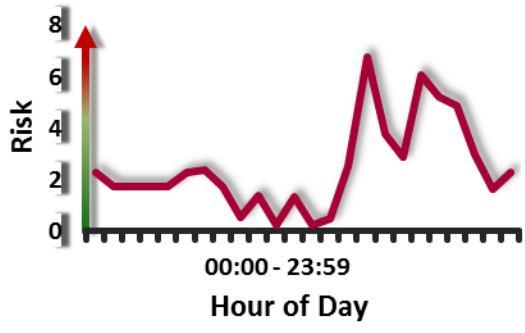
2.4 Burglary Other (Education): Risk Analysis

The data below relates to burglary other offences within/against schools, recorded in the Manchester area.

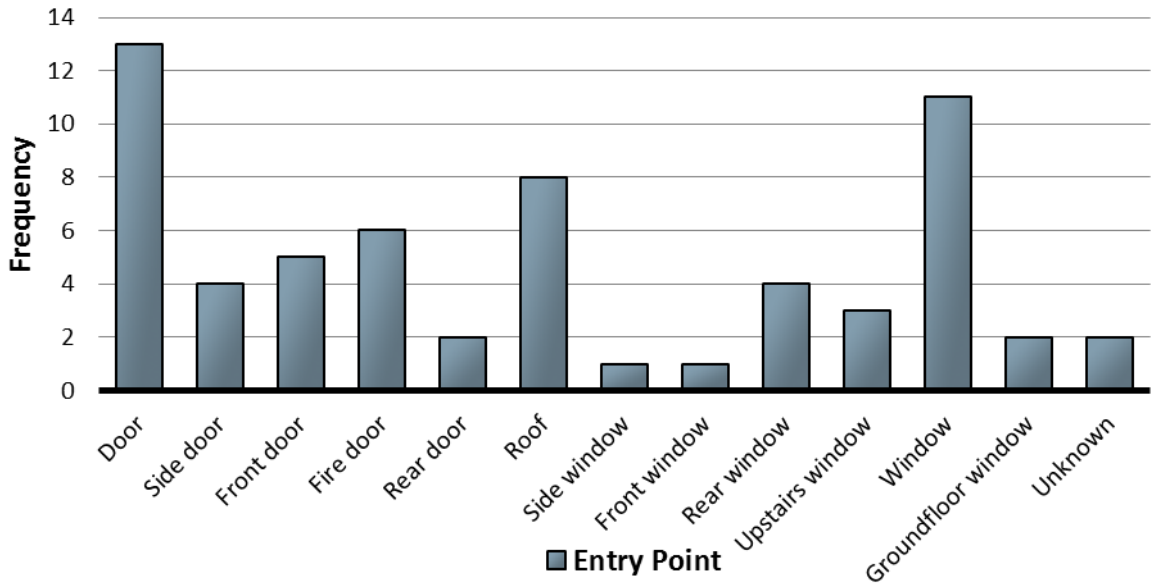
Burglary Other – Day Range



Burglary Other – Time Range



Burglary Other – Point of Entry



2.4.1 Day Range: During the week, the risk of burglary at Manchester schools is noticeably higher on Sundays; this is when most school premises are closed and unoccupied meaning offenders perceive a lower risk of being identified.

2.4.2 Time Range: The risk of burglary is concentrated from 14:00-22:00 when it is starting to get dark; therefore offenders can use the cover of darkness.

2.4.3 Point of Entry: At Manchester schools, the following point entries and MO's have been the most frequently occurring:

- Offenders gained entry to external doors posing as legitimate staff/visitors, before targeting restricted areas.
- Front doors and fire doors were frequently targeted when left insecure, or by offenders forcing them open using bodily pressure or implements.
- Implements were used to smash the glazing in windows (all kinds). Upper floor windows were targeted by offenders after climbing onto the roof to gain elevation.
- Fences and gates were also bypassed in a number of cases.

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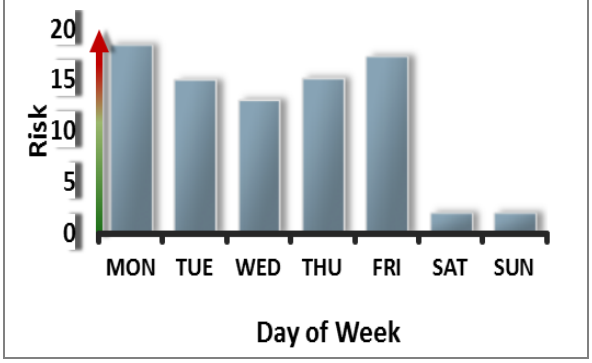
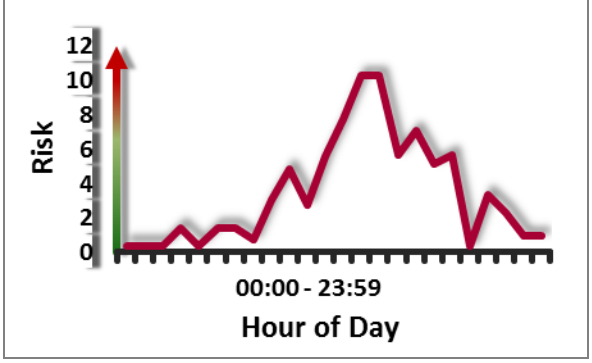
2.5 Misc Theft (Education): Risk Analysis

The data below relates to miscellaneous thefts within/against schools, recorded in the Manchester area.

Misc Theft – Day Range



Misc Theft – Time Range



2.5.1 Day and Time Range: Levels of theft are concentrated across weekdays (95%), from 11:00-19:00. This aligns with standard school opening and closing times and thus is when schools are their busiest; therefore there are more opportunities to offend.

2.5.2 The most routinely stolen items from pupils/staff's bags were mobile phones, cash and other items of technology particularly when left insecure and on view. There is also a high risk of cycle theft at Manchester schools.

3 Layout Appraisal

3.1 Proposed development

3.1.1 The proposed development is the erection of a 2 storey modular school building on the site of the existing primary school.

3.2 Positive Aspects of the Proposal

The following proposed features would make a positive contribution to the prevention of crime and fear of crime.

3.2.1 The building is two storeys in height and down water pipes are installed flush with the building leaving the potential of an intruder accessing the roof area extremely low.

3.2.2 Canopies above doorways will be high enough to prevent them being used as a potential climbing aid to the roof.

3.2.3 All elevations of the building will be illuminated to a high standard.

3.2.4 The building will be positioned where it can be seen from the public highway.

3.3 Changes Needed and Recommendations

The following points have been identified for further consideration and would need to be addressed for Design for Security to support the proposed scheme.

3.3.1 The main entrance to the building is taken from a recessed area and this could potentially provide concealment for offenders allowing them to target the main entrance without being seen, or present opportunities for antisocial behaviour such as congregation. It is recommended that access to the recessed area can be restricted when the school is closed with a roller shutter or a lockable gate.

3.3.2 An insecure boundary will increase the potential for the proposed building to be targeted. The school boundary should be inspected for any damage and repairs should be made where necessary.

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3.3.3 A monitored alarm system should be installed to cover the entire building, linked to contacts on all external doors and PIR detectors covering all ground floor areas with windows.

3.3.4 If the existing school building is covered by CCTV it should be extended to provide coverage of the proposed building.

3.3.5 Any new pedestrian routes should be illuminated in accordance with BS 5489.

4 Physical Security

The following checklist forms the physical security requirements for this scheme to achieve Secured by Design accreditation.

4.1 Doors

- ☐ External doors must be compliant with and certified to BS PAS 24, STS02, or LPS 1175 SR2.
- ☐ Sliding/revolving doors should be tested and certified to ENV 1627-30 (WK2+). If circumstances could prevent this, please consult with Design for Security.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, or LPS 1175 SR2. It is crucial that the door ironmongery is permitted for use on these doors under the security certification of the product.

4.2 Windows and Shutters

- ☐ Windows must be compliant with and certified to BS PAS 24 or BS 7950.
- ☐ Ground floor and easily accessible opening lights (escape requirements permitting) must be key-lockable, and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.
- ☐ Shutters must be tested and certified to LPS 1175 SR2 (or SR1 if perforated laths are required), and installed in accordance with manufacturer's instructions.

4.3 Glazing & Building Fabric

- ☐ Glazing to a height of 2400mm (or if otherwise accessible) must incorporate at least one pane of glass with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining pane in a double glazed unit may be toughened glass.
- ☐ Any curtain walling panels should include laminated glazing and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.

4.4 Alarms

- ☐ A monitored alarm system should be installed to cover the entire building, linked to contacts on all external doors and PIR detectors covering all ground floor areas with windows, with a signal terminating at a recognized Alarm Receiving Centre (ARC) or security control room.

4.5 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric key pads. The following areas/doors should operate on access control:
  - The internal doors taken off the main entrance lobby
  - Doors needed to provide internal zoning and restrict access to parts of the building not in use (e.g. during evenings/weekends or community use)
  - Doors to staff only areas
  - Rooms containing IT equipment

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- ☐ All internal doors/frames to classrooms, offices and stores should be solid core (minimum 44mm thick), with 3 hinges and a deadlock, so that the rooms can be secured when unoccupied

4.6 Landscaping

- ☐ In vulnerable locations such as entrances, parking areas and footpaths, low planting should not exceed 1000mm in height, and tree canopies should fall no lower than 2m from the ground. This is in order to allow people to see their surroundings better, make a rational choice of routes and eliminate hiding places. A maintenance agreement should stipulate that these planting dimensions would be adhered to.
- ☐ Loose surface materials in the publicly accessible areas of the scheme should be avoided. Small fragments of ground covering can be used as missiles against people and premises (both to gain entry and to commit criminal damage).
- ☐ Planting must be avoided that will aid climbing over boundary treatments. The security of fences can be compromised if trees or street furniture are placed close by.

4.7 Lighting

- ☐ External lighting must be provided to pedestrian routes and parking areas in accordance with BS 5489.
- ☐ Fittings should produce 'white' light, as opposed to yellow/orange light. Metal halide (or bulbs with a comparable output) should be used, as these offer superior colour rendition over alternatives such as high and low pressure sodium bulbs.
- ☐ Dusk 'til dawn lights, operated by photoelectric cell/daylight sensor, should be installed to all external doors.

4.8 CCTV

- ☐ Any CCTV system that may be used within this proposal will require certain specifications and intelligent placement of cameras to compliment the design of the development. Designers should consider the following points when planning a CCTV strategy:
- ☐ CCTV systems (and lighting that support them) require regular cleaning and maintenance to remain effective.
- ☐ Where necessary cameras that are vulnerable to damage should be protected from attack either by relocation to a higher level and using a bigger lens to achieve the view required or through the fitting of a vandal resistant housing.
- ☐ With regards to the retention of footage, the police prefer quality over quantity. The overall retention period should be dictated by what the system is designed to achieve, though it would be better to have good quality images over a 14-day period than poor ones over a 30-day period.
- ☐ Procedures for recovery of recordings are recommended to be established (e.g. trained staff / the CCTV system instruction manual to be readily available). This is to ensure that the images produced will be of an acceptable standard that will allow for identification of an individual which will stand up to scrutiny in court.
- ☐ **Acceptable Standard** - this generally requires a resolution of 720x576 pixels at a real time frame rate of 25 frames per second. (N.B. Both the camera and DVR must be capable of this – if the camera will only send low resolution images then it does not matter how high the resolution of the recording unit is).
- ☐ **Identification** – One of three levels of field of view. To identify an individual, the image must capture no less than 120% of the field of view (at least from the top of the individuals head to their knees). The remaining two levels of field of view are 'Overview' and 'Recognition', which whilst effective for observational purposes, are less likely to result in the identification of a person/offender.
- ☐ The intelligent placement of cameras helps to provide clear facial identification of individuals.

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4.9 Other

- ❑ There must be no features of the building envelope which create sheltered/hiding places or ledges, which could endanger passers-by or encourage loitering.
- ❑ Any rainwater pipes should be square in profile and fixed back to the building fabric to prevent climbing to upper floor windows.

5 Management & Maintenance

5.1.1 The upkeep of a development over its lifetime can be crucial to the level of security and safety within. Aspects of a development, which are left to deteriorate, have the potential to attract further crime – a process known as 'the broken window theory'. A maintenance plan should be drawn up to address issues such as:

- Litter removal
- Repair to communal areas (lighting, signage, access controls)
- Trimming and pruning to shrubs and trees

6 Construction

6.1.1 Untidy sites and their surroundings can be littered with debris accessible to vandals who often use loose materials as missiles to commit crime. The client should take measures appropriate to secure their site during construction, and control pedestrian and vehicular access in to and out of the site curtilage. It is also recommended that the contractor on this scheme is a member of the 'Considerate Constructors Scheme', who has committed to be a considerate and good neighbour, as well as clean, respectful, safe, environmentally conscious, responsible and accountable.

6.1.2 Site security contractors should be SIA (Security Industry Authority) approved to ensure professional standards are adhered to (please see http://www.sia.homeoffice.gov.uk/pages/acs-intro.aspx for more details).

7 Useful References

7.1 Secured by Design (SBD)

7.1.1 Secured by Design focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. To apply for Secured by Design certification for your development, visit our online application form at: http://www.designforsecurity.org/secured-by-design/sbd-accreditation/

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A Contact register

Date	Contact With	Summary of Contact
24/07/2017	Dan Booth	CIS application received
01/09/2017	Dan Booth	Site meeting
18/09/2017	Dan Booth	Progress update

B Associated Documents

This report is based on the following drawings and supplementary information submitted by the applicant.

RIY-LMA-01-XX-DR-A-9001	Site constraints	17/08/2017	-
EBN-LMA-01-ZZ-DR-A-9001	Sketch floor plans	17/08/2017	P1
EBN-LMA-01-XX-DR-A-9002	Sketch elevations	17/08/2017	P1
WPA-LMA-01-XX-DR-A-9001	Site constraints	17/08/2017	-

PLEASE NOTE - In the event of any subsequent material changes to the scheme, it will be necessary for Design for Security to reassess the comments made within this report.

C CIS Version History

Version	Revisions Made	Date
A		

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D Glossary

Burglary Resistance Standards

BS 7950, 1997

Specification for enhanced security performance of casement and tilt/turn windows.

BS 4873, 2005: Specification for aluminium windows.

BS 7412, 2007: Specification for plastic windows made from PVC-U extruded hollow profiles.

BS 644-1, 2003: Wood windows. Specification for factory assembled windows - various types.

BWF:TWAS: Timber window accreditation scheme.

BS 6510, 2005: Specification for steel windows, sills, window boards & doors.

BS PAS 23-1, 1999

General performance requirements for door assemblies.

A performance standard for door sets, which certifies that a particular door set is fit for purpose. Door products must also have BS PAS 24 certification.

BS PAS 24-1, 2012

General security performance requirements for door assemblies.

An attack test standard for door sets, which certifies that a particular door, frame, lock and hardware set has withstood a series of physical tests. This is the minimum police requirement for Secured by Design dwellings, and is also applicable to French/double doors, and sliding doors.

ENV 1627-30 (Security Ratings WK1 to WK6)

Windows, doors, shutters - Burglar resistance Requirements and classification

The classification system used in ENV 1627-30 is aimed at the commercial market and is based on five elements:

a) Resistance of glazing

b) Performance of hardware

c) Resistance to static loading

d) Resistance to dynamic loading

e) Burglary resistance by manual intervention

LPS 1175 (Security Ratings 1 to 6)

Specification for testing and classifying the burglary resistance of building components

This includes doors, shutters, garage doors and grilles typically for commercial premises and higher risk domestic premises and is acceptable to the ABI and the Police. The standard has 6 levels, 6 being the highest, with levels 1 and 2 equivalent in many respects to BS PAS 24 and BS 7950.

STS01 Issue 4: 2012

Enhanced security requirements for doorsets and door assemblies for dwellings to satisfy the requirements of PAS23 and PAS24

As the title suggests this is an equivalent test standard to PAS 24, incorporating PAS 23 (fitness for purpose), published by Warrington Certification.

STS02 Issue 3: 2011

Requirements for burglary resistance of construction products including hinged, pivoted, folding or sliding doorsets, windows, curtain walling, security grilles, garage doors and shutters.

This specifies a broadly similar range of attack tools and times to those specified at the lower levels of LPS1175. However, STS202 does not extend to cover the higher levels of risk addressed within LPS1175 and the attack methods used differ.

EN 356, 2000 (Ratings P1A to P8A)

Glass in building. Security glazing. Testing and classification of resistance against manual attack.

A performance standard for manual attacks on glazing. P2A is comparable to the performance of a 6.8mm laminated glass, and P4A to that of a 9.5mm laminated glass.

Commonly Used Acronyms

CIT

Cash in transit (refers to vehicles, personnel and routines).

CPTED

Crime Prevention Through Environmental Design
(Learn more at ***www.designforsecurity.org/about/cpted***)

CRS

Crime Reduction Specialist. Sometimes known as CPO (Crime Prevention Officer)

INPT

Integrated Neighbourhood Policing Team.

PVB/PolyVinyl Butyral (Glazing interlayer)

A commonly used interlayer used in the production of laminated glass.

LPCB (Loss Prevention Certification Board)

A brand of the BRE Global (Building Research Establishment) family. The LPCB work with insurers, Government, police, designers, manufacturers, contractors and end users to develop methods of assessing performance and reliability of security products to ensure their fitness for purpose.

UKAS (United Kingdom Accreditation Service)

The sole national accreditation body recognised by government to assess, against internationally agreed standards, organisations that provide certification, testing, inspections and calibration services.

Useful Websites

Design for Security
www.designforsecurity.org
Secured by Design
www.securedbydesign.com
RIBA Product Selector
www.ribaproductselector.com
LPCB – Red Book Live
www.redbooklive.com
Crime Reduction (Home Office)
www.crimereduction.homeoffice.gov.uk
DAC (Design Against Crime) Solution Centre
www.designagainstcrime.org
Building for Life
www.buildingforlife.org
CLG (Communities and Local Government)
www.communities.gov.uk

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