



## SCHOOL SAFETY AND SECURITY BEST PRACTICE

From the fencing around its perimeter to the main entrance gates, a visitor gets a clear impression of a school's commitment to safety and security well before entering its grounds.

**Jacksons  
Fencing**

Designing an appropriate fencing solution for schools can be a challenging task. With [recent research](#) revealing that 23% of parents say their schools aren't designed for security, but 31% think schools are prison-like, the task of providing security for schools is a balancing act.

From the fencing around its perimeter to the main entrance gates, a visitor gets a clear impression of a school's commitment to safety and security well before entering its grounds.

In addition to defining its boundary and making a visual distinction between public and private property, the fencing and gates that surround and secure a school will typically meet a wide variety of other important criteria - from preventing unauthorised entry to the grounds, protecting pupils, staff and visitors from accidents and injury, deterring theft, truancy, anti-social behaviour and reducing the risk of malicious damage.

The type and condition of the fencing and gates along with its aesthetics also project the image of the school and its values to students, staff, visitors and its community.

### **Matching your boundary protection to the risks you face**

In some cases, such as areas with higher crime levels or where local circumstances dictate, there may be a need for perimeter fencing and gates which offer a higher level of security.

Secured by Design provide an excellent overview and guidance in their Schools Guidance document and interactive guide on securing a school against a comprehensive range of risks, including where higher security boundary protection is required. We are delighted to have made a contribution to their guidance on timber and steel fencing and gates and thoroughly commend its initiative.

But don't be too concerned, there's no need to project a fortress like image as there are fencing and gate options which are Secured by Design approved and LPS1175 certified which can be 'dressed' to look less imposing and even of architectural merit beyond their purpose.

### **The starting point**

It's relatively quick, easy and inexpensive to change the wall colours, light fittings or furniture in a school, but your choice of boundary protection and access points are a more permanent fixture of your site, so whether renewing, refurbishing or building from new, the fence, entrance gates and access control should be carefully considered in order to provide a realistic and appropriate level of physical security, commensurate with the risks it could face while either making a bold design statement in its own right or blending into its environment.

It's the first thing pupils, staff and visitors see and the last thing you'll want to replace.

Fitness for purpose, low maintenance, sustainability and image projection are the basic requirements you should look for.

### **Security audit**

The starting point in designing a perimeter is always to carry out a security audit which will take a number of site specific factors into consideration.

It is really important for the bulk of the audit to take place walking around the site and viewing it from an intruder's perspective rather than looking at it through a window from a desk; after all, in most cases, the primary function of your boundary protection will be to prevent unauthorised access to the school grounds.

You will find it useful to take photographs and make notes and drawings to remind you of the layout of the site, its access points and the position of existing buildings, structures, elevated ground, trees etc which will help in informing your selection of the right combination of fencing and gates to meet your needs.



### General guidelines:

It is preferable that the perimeter fencing allows clear views over the buildings and grounds from surrounding land and buildings to deter unauthorised entry and exit from the school, bullying and anti-social behaviour.

In some cases there might be a requirement to shield students from unwanted attention from outside the boundary or control the projection of noise into or from the school; these areas need to be identified as part of the risk assessment.

The height of the fence will ultimately be determined by your needs, your site, local circumstances, the function of the fencing required and the risk you are managing.

### Demarcation and controlling the flow of people and vehicles:

- Steel or timber fencing of between 1.2m and 1.6m in height.
- Security: Steel or timber fencing of between 1.8m and 2.4m in height.
- Whether of timber or steel construction, pales should be securely fixed to the frame/rails.
- Ensure all fixings employed in the panel or pale to rail construction are either welded or of galvanized steel or stainless steel with a design life to match the fence or gate.

### Fencing and gates for schools with lower and standard risks:

Fence panels of a pale/slat design in timber or steel should be oriented vertically to avoid step-up points for climbing and able to resist being pried off/away. If of timber construction, pales should be no less than 25mm thick or in the case of steel, a wall thickness of no less than 1.5mm. Whether of timber or steel construction, pales should be securely fixed to the frame/rails.

Fence panels of welded mesh design should feature small gaps between the horizontal and vertical mesh strands to resist climbing. The method of fixing between the panel and rails and posts should create a secure mechanical bond so that panels/slats cannot be easily removed and in addition should provide a linking effect where each panel and post acts with the next to resist attack by pushing and pulling.

Fence heights should be a minimum of 1.8m overall and be capable of raking or stepping to maintain its height over different ground levels without resulting in gaps underneath.

The tops of timber fences should finish flush with their neighbouring posts and a securely fixed capping rail employed to run across the fence and posts to effect a continuous chain.

The tops/top rail/capping of fencing and gates should be of a design able to accommodate a security topping where necessary to deter attempts to scale over into the school grounds.

Posts should allow the construction of an unbroken panel to post chain and be of a non-brittle material. The dimensions of the timber or steel post should be matched not only to the fence height and type but also to loading factors the fence will be subject to including wind and pushing. Consider whether the posts will be used to mount other security measures such as CCTV cameras or lighting as these will need to be specified at the design stage.



## Gates

Wherever practical, separate access points should be provided for people and vehicles to ensure the safe flow both to and from the boundary.

### Pedestrian gates:

Pedestrian gates should be of a framed design and employ galvanised adjustable hinges and fixings mounted behind the attack face. On outward opening gates, where the hinge/brace are mounted on the attack face, fixings should be of a galvanised 'blind' coach bolt design.

All pedestrian gates should be fitted with locks and fixing features should match that of the fence.

### Vehicular gates:

Vehicular gates should be inward opening, of substantial framed construction and employ galvanised adjustable hinges and fixings mounted behind the attack face. They should be fitted with galvanised drop bolts and the facility for padlocking (manual gates) or electro-mechanical locking (automated gates) and employ mechanical/electro-mechanical devices as applicable to hold gate leaves in the open position. The gate design and fixing features should match that of the fence.

Where automated gates are used, ensure they are CE marked and compliant with EU Directive 2006/42/EC; as important, the gates should be installed by Gate Safe Aware installers and maintained regularly for safe, reliable operation. It's worth noting that since January 2010, eight automated gate accidents involving children have been reported in the UK, two of which were fatalities while the remainder resulted in children being trapped by the gates. Two of these incidents occurred in schools.

## Fencing and gates for schools in higher risks areas:

Schools located in higher crime risk areas should employ fencing and gates designed to deter and resist more determined forms of attack employing more advanced methods.

In these instances, the fence and gates will need to be of a minimum height of 1.8m in a design certified to LPS 1175 Security Rating 1 (SR1).

Remember, an intruder will take the fastest and least resisting line to get beyond your boundary whether through, over or under the fencing or gate, so consider which is the most likely form of attack in different parts of the perimeter and employ appropriate counter-measures to ensure the boundary is not breached.

In exceptional cases, higher levels of security rating may apply and employ systems tested and approved by CPNI (Centre for the Protection of National Infrastructure) for use around government property. Where this is the case, you should contact CPNI for further guidance.

All gates installed within a higher security fencing system must be certificated to the same rating as the adjoining fencing and be of the same height and similar style. It should not be possible to lift the gate from its hinges or pass under the gate and the hinges and lock cylinder should be protected to prevent their use as climbing aids. Gates used for preventing access into a 'fire path' to the side and rear of a school should be certificated to either LPS 1175 SR 2 or STS 202 BR2.



If the gate forms part of an emergency escape route, the release mechanism will need to be of a keyless design and protected to prevent operation from the outside of the gate.

Where crime risks dictate that there is a realistic chance of a vehicular borne attack to enter the school grounds or penetrate school buildings, steel security bollards should be considered. There are many fixed and rising bollards available at different prices and while most will look very similar, you should only consider those which have been successfully tested to PAS 68-1:2013.

### Advice on best practice

The Crime Prevention Design Advisor or Architectural Liaison Officer at your local police station and [Secured by Design's New Schools Guidance document](#) are excellent sources of guidance on the design of your boundary protection while the experts at Jacksons additionally can offer a free security audit of your site alongside the CPDA and provide you with a range of appropriate options and an indication of the costs, timing and process involved from design to completion of the project.

### Safety, Security and Amenity within the School Boundary

#### Safety:

For safety within the school boundary, Jacksons offer a range of barriers, bollards and parking posts designed to keep pedestrians and vehicles safe from each other and a wide selection of timber fencing and gates to control the flow of people around the grounds, and reduce the areas where students can be hidden from view.



Junior schools offering play areas should ensure it is designed so equipment and activities do not interfere with each other and that safe access for able bodied and less able is provided. The fencing and gates to be employed in a play area should at least conform BS EN 1176 for play areas and be RoSPA approved. Jacksons offer RoSPA approved and BE EN 1176 compliant Anti-Trap Bow Top along with timber and steel versions of their fencing and gates specifically for play areas.

#### Security:

For security and the management of noise into and out from the school, Jacksons' Jakoustic® barriers provide a high performance (noise reduction of up to 32 decibels), attractive and extremely secure solution in and around the school.

Jacksons flexible, semi-enclosed or fully enclosed multi-purpose bicycle, waste, recycling, fuel and equipment stores provide an excellent solution to matching practical requirements and security within a matched design theme.

#### Amenity:

Playgrounds, sports fields and sports courts all require specialist fencing and gates. Jacksons offer a wide range of ball court, ball stop and Multi Use Games Area fencing and gates designed to minimise the risk of injury, bullying or accidental damage.

In response to the growing trend for schools to provide 'outside learning areas' within the grounds, Jacksons offer a wide variety of timber decking and covered learning areas that create safe, comfortable spaces for students and teachers.

#### Resources:

For further information or to arrange for a site visit and security audit, please contact us on 0800 41 43 43 or email [education@jacksons-fencing.co.uk](mailto:education@jacksons-fencing.co.uk)

To post a project enquiry to us, please [click here](#) to launch an online form.