

# **SAFETY OF WALLS, FENCES AND GATES ON SCHOOL SITES**

## **GUIDANCE DOCUMENT**

**DERBY CITY COUNCIL  
The Council House  
Corporation Street  
Derby DE1 2FS**

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## Derby City Council Guidance:

### 1.0 Safety of Walls, Fences and Gates in Schools

1.1 Derby City Council recognises its duty to ensure that assets are managed and to ensure, so far as is reasonably practicable, that they should not harm, or cause loss, to those who could be affected by its position, operation and/or failure.

1.2 This includes the management of boundary structures – walls, fences and gates. A boundary could be between the school site and neighbouring properties, or with the highway, or it could be an internal boundary, for example:

- Fences and gates separating play spaces, such as those between a Foundation Stage playground and the rest of a school site
- a fence and gate around a multi-use games area or tennis courts
- fences and gates to a bicycle storage shelter, compound or bin store

Any reference to **boundary** in this document will refer to **any fence, wall or gate, either around the outskirts of the school site, and/or those within the external grounds of the school site itself.**

1.3 The aim of this guidance is to set in place measures and procedures, in the form of inspections, risk assessments and compliance checks to ensure, as far as possible, that the Council and Community Schools discharge their duty.

1.4 Things to look out for include:

- Visible signs of damage, deterioration, corrosion or loose masonry or fixings
- Any risks of trapping or crushing of limbs (fingers, arms etc.) in gates, in which case a risk assessment must be completed and acted on
- Any risks of impalement
- Any physical features which could be used as an aid to climbing, such as trees, bins, lamp posts etc.

Further details are provided in Appendix 1, 2, 3 and 4.

1.5 There are essentially two types of checks in relation to walls, fences and gates. These are as follows:

- ① **Fence, Wall and Gate Lay-Survey Inspections**
- ② **Risk Assessment of spiked topped fences/gates**

This guidance document sets out the responsibilities of schools in relation to each of the above, and how schools should go about arranging surveys and checks.

- 1.6 Schools that are outside of the Council's responsibility (Academies, Foundation Schools and Voluntary Aided Schools) are strongly advised to adopt similar policies and procedures to ensure their walls, gates and fences are properly maintained in a safe condition.

## 2.0 Responsibilities

- 2.1 Schools and Headteachers are responsible for ensuring that fences, walls and gates are inspected at least annually and are maintained in a safe condition. Schools are also responsible for keeping records of inspection and any maintenance. Schools are also responsible for carrying out, or ensuring that, risk assessments are carried out for any new fencing and gates to be installed, and for carrying out risk assessments of any existing fencing/gates with pointed or spiked tops. Both risk assessments must include any risk of trapping limbs.
- 2.2 It is important to note that surveys and risk assessments give a snap shot of the condition of a boundary wall, fence or gate at a particular point in time. If the Headteacher, or any other designated responsible persons at the school, becomes aware of changes having taken place they should arrange for a re-inspection.
- 2.3 Where the school is maintained by the Council, and the school has purchased a sold service maintenance package from the Property Maintenance Team, the Council Surveyor will carry out one annual **① Fence, Wall and Gate Lay-Survey Inspection** of walls, fences and gates on behalf of the school per academic year, and will provide the records of inspections and maintenance to the school for their records as well as to inputting into SAM.Net, the Council's Asset Management system. If a Community School does not buy the Council's sold service maintenance package then you must arrange for this inspection to be undertaken by a competent individual.

This Council Package service to undertake the **① Fence, Wall and Gate Lay-Survey Inspection** excludes the **② Risk Assessment** of spiked topped fences/gates, which pose more of a risk to pupils and staff and therefore require a more detailed specialist check. This must be undertaken or arranged by the responsible person at each school site who will have a detailed understanding of the site from a day-to-day operational perspective, and potential risks to children. There is an option to purchase these on a one-off basis by contacting the Property Projects and Technical Services helpdesk on 01332 640212 or David Renshaw on 01332 640170.

- 2.4 For schools that have their maintenance undertaken outside of the Council's building maintenance package, by non-Council employed professionals, the Headteacher is responsible for ensuring that **① Fence, Wall and Gate Lay-Survey Inspections** of walls, fences and gates are undertaken by their professional advisor, or undertake inspections themselves via school staff, and make arrangements for any required maintenance work.

- 2.5 **All schools must maintain records of ① Fence, Wall and Gate Lay-Survey Inspections and ② Risk Assessments of Pointed or Spiked Fences and Gates.** It is the Headteacher and Chair of Governors responsibility to ensure that the person/s employed to undertake these checks are competent to undertake them.
- 2.6 Schools that have not purchased a Council maintenance package, but require additional inspections or re-inspections, do have the option to purchase these on a one-off basis by contacting the Property Projects and Technical Services helpdesk on 01332 640212 or Dave Renshaw on 01332 640170. The cost for this will be calculated for each individual school based on the quantity of inspections/re-inspections needed.
- 2.7 The Council will carry out compliance checks for all Community schools to ensure that all schools are discharging their legal duties regarding the maintenance of their premises where it may affect the safety and health of staff, pupils and the public. This will include checking that inspections have been undertaken, and records have been retained. Schools will be required to provide the Council with suitable documentation as evidence of their compliance in a timely manner.
- 3.0 ① Fence, Wall and Gate Lay-Survey Inspection of walls, fences and gates**
- 3.1 The ① **Fence, Wall and Gate Lay-Survey Inspection** of walls fences and gates must be carried out annually or more frequently if there are:
- Known issues which could deteriorate;
  - Alterations have been carried out;
  - Defects or damage is reported between annual inspections.
- 3.2 There are numerous styles of fence used and found on our sites, but only the more common ones will be mentioned in this document. They are chainlink, post and rail, close boarded, palisade and weldmesh security. Barbed wire must never be used on our sites. Care must be taken with the selection of sawn timber on sites involving children, to avoid harmful splinters. For examples and standards for each type of fence please refer to Appendix 5.
- 3.3 The annual inspection of walls, fences and gates is intended to be a visual inspection by a lay-person and is known as a ① **Fence, Wall and Gate Lay-Survey Inspection**. Guidance notes for these inspections are attached as Appendix 1. Schools appointing staff, or other contractors, to carry out inspections must ensure they have thoroughly read and understood this guidance. Following the initial ① Fence, Wall and Gate Lay-Survey Inspection it may be necessary to commission further detailed and/or intrusive surveys, if this is the case, schools must ensure they do so through their

package surveyor or non-package professional advisor and there will likely be an additional cost for this additional work.

- 3.4 An inspection report form for the ① Fence, Wall and Gate Lay-Survey Inspection of fences walls and gates must be completed and signed by the school's professional advisor and signed by the Headteacher. This form is attached in Appendix 2.
- 3.5 With regards to Fences and Gates the Derby City Surveyor will provide advice to the school in regards to the following:
- Health and Safety considerations, including entrapment
  - Security requirements
  - Planning Requirements
  - Maintenance Requirements
  - Idea on cost of repairs, maintenance or replacement.

Please refer to Appendix 5 and 6 for typical guidance and drawings as an aid when inspecting fences on school sites. For further information please see Appendix 7.

#### 4.0 ② Risk Assessments of Pointed or Spiked Fencing and Gates

- 4.1 All schools are responsible for identifying any hazards and taking action to control significant risks, this includes, trapping and from pointed or spiked fencing or gates on or within their site. Schools must assess the risk that may arise and take appropriate measures to remove, or control, that risk.
- 4.2 Schools may choose to appoint a professional advisor, or the Council's Property Projects and Technical Services, to carry out the ② **Risk Assessments for Pointed or Spiked Fences and Gates** on their behalf, or undertake the assessments themselves. Schools must ensure the person undertaking the risk assessment is competent\*<sup>1</sup> to do so, irrespective of whether this is a professional advisor, or a member of the school staff.

*\*1 You must get help from a competent person to enable you to meet the requirements of health and safety law. A competent person is someone who has sufficient training and experience or knowledge and other qualities that allow them to assist you properly.*

- 4.3 Further guidance on completing ② Risk Assessments of Pointed or Spiked topped Fences and Gates, and the form schools need to complete for the risk assessment, are attached in Appendix 3.
- 4.4 Records of the ② Risk Assessments of Pointed or Spiked topped Fences and Gates, and actions taken to control the risks, should be kept and be available as evidence that the school has taken reasonable steps to control the risk in

the event of an incident and any subsequent legal case. Records must be available to the Council when undertaking compliance checks.

- 4.5 The ② **Risk Assessment of Pointed or Spiked topped Fences and Gates is not automatically included in the Council's maintenance package.** The Council surveyor can assist the Headteacher, or other school designated responsible person, with any ② Risk Assessment of Pointed or Spiked topped Fences and Gates. Schools wishing to purchase this additional service should contact the Property Projects and Technical Services helpdesk on 01332 640212.

#### 5.0 **Frequently Asked Questions / Contact details**

To further support schools, frequently asked questions and guidance notes are included in Appendix 4.

Should schools require any additional information, please contact the Council's Property Maintenance and Helpdesk on 01332 640212 or David Renshaw on 01332 640170.

## Guidance Notes for the ① Fence, Wall and Gate Lay-Survey Inspection Form

### 1. Introduction

- This is an initial visual inspection – it is not necessary to touch any structures.
- It is not a technical inspection and you are not expected to identify everything that an expert may find.
- Inspection safety – Do not do anything that puts you at risk. Do not push, pull or dig into any structure.
- A common sense approach to filling in the ① Fence, Wall and Gate Lay-Survey Inspection Form as accurately as possible is required so that a follow-up expert technical inspection can be focussed where it is most needed.

### 2. Where to inspect

- Inspect all boundaries around and within the property and land, regardless of ownership issues.
- Record which boundaries you have inspected and any locations that appear to be dangerous.
- Include a record of boundaries that you are unable to inspect, e.g. where access is not available, covered with vegetation, or a location where it is potentially too dangerous to inspect.
- If the boundary construction changes, even within the same run, it should be recorded on a separate inspection form and given its own unique identification, referenced to a suitable site plan.
- Comment on the presence of spiked or pointed topped fencing, including barbed wire, spikes or glass to the top of walls. Should these items exist, a separate ② **Risk Assessment of Pointed or Spiked topped Fences and Gates** must be carried out.

### 3. What to look for:

#### Defects

- Loose and/or missing masonry, copings, panels, posts, or fixtures and fittings.
- Fractures (cracks) in masonry particularly adjacent to piers or openings such as gates.
- Excessive erosion of masonry and mortar joints, or excessive corrosion of metal.
- Any items that may be loose, or appear to have moved from their normal position.
- Any leaning or bulging walls / any leaning or unstable fences.
- Gates & Posts – Misalignment, excessive rust corrosion or rot, especially around hinges.

#### Trap Hazards (including manual and electric/automatic gates)

- Risk of arms or fingers becoming trapped or crushed when gates open or close against posts, fences, twin gate leaves or walls
- Gates which have no, or failing, drop bolts or ironmongery intended to hold the gate open or closed
- Gate hinges which could present a finger trap risk in opening or closing

### 4. How to assess the level of urgency or risk

- NO DEFECTS: **No visible** defects from the lay survey inspection.
- LOW: **Minor visible** defects, assessed as being stable and presently only requiring the continuation of annual lay-survey inspections.
- MEDIUM: **Moderate visible** defects requiring a **confirmatory** technical surveyor inspection from a competent surveyor.
- HIGH: **Considerable visible** defects requiring a **priority** technical surveyor inspection and/or action.

EMERGENCY:                **Excessive or multiple visible** defects creating an immediate risk of injury/danger requiring an **immediate** technical surveyor inspection and/or immediate remedial action.

5. If during your inspection you find a defect which you think causes an immediate danger please do all you can to barrier or rope off the area and contact your professional advisor for advice.
6. The school is responsible for retaining completed forms which will be checked by the Council as part of the compliance checks process. Data will also be retained and stored on Sam.Net and reviewed by Derby City Council Property Projects and Technical Services.

### ① Fence, Wall and Gate Lay-Survey Inspection Form

**Establishment / Site Name:** \_\_\_\_\_ **UPRN:** \_\_\_\_\_

**Fence Location:** \_\_\_\_\_ (referenced to a site plan is essential)

**PART 1 – Fences / Railings** (and fill in Part 2 if combined with a Wall)

**Height:** Less than 3ft / Between 3ft & 6ft / 6ft or over (please circle one choice) Or estimate \_\_\_ ft

**Fence Posts:** Timber  Concrete  Metal  Other

**Fence Panels:** Timber  Concrete  Wire Mesh  Railings / Palisade

Spiked or pointed tops: **Yes / No** If yes – ② **Risk Assessment of Pointed or Spiked topped Fences and Gates** required (see below)

Information to describe extent of any defects, including potential risk to the public (please specify):

\_\_\_\_\_ Risk of trapping limbs: **Yes / No**

**Level of Urgency** (please circle): **No Defects / Low / Medium / High / Emergency**

**Recommendations and Action Required:** What, in your opinion, needs to be done to reduce the risk to an acceptable level? e.g. removal, replacement, repairs, further investigations. Please be as specific as possible:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PART 2 - Walls** (and fill in Part 1 if combined with Fences / Railings)

**Height:** Less than 3ft / Between 3ft & 6ft / 6ft or over (please circle one choice) Or estimate \_\_\_ft

**Wall Type:** (a) Free Standing  (b) Retaining wall where the ground is higher on  
School Side   
Other Side

**Wall Construction:** (please tick one choice from each line)

(a) Brickwork  Blockwork  Stone  Rendered   
 (b) Brick coping  Concrete Coping  Stone coping  Coping not used   
 (c) Buttresses  Piers  Any other features:  
 (arches, openings, etc) \_\_\_\_\_

Barbed wire, spikes or glass **Yes / No** If yes – ② **Risk Assessment of Pointed or Spiked topped Fences and Gates** required (see below)

**Wall Defects:** (please tick each item that applies)

Wall is Visibly Bulging:  Wall is Visibly Cracked:  Wall is Visibly Leaning:

Information to describe extent of any defects, including potential risk to the public (please specify):

\_\_\_\_\_

**Level of Urgency** (please circle): **No Defects / Low / Medium / High / Emergency**

**Recommendations and Action Required:** What, in your opinion, needs to be done to reduce the risk to an acceptable level? e.g. removal, replacement, repairs, further investigations. Please be as specific as possible:

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**PART 3 - Gates** (If you find a danger with your School or Centre Gates please complete this form)

**Gate location** \_\_\_\_\_ (Please reference to the site plan)

**Gate Type** Vehicle.  Pedestrian  Material & Height \_\_\_\_\_

Spiked or pointed tops: **Yes / No** If yes – ② **Risk Assessment of Pointed or Spiked topped Fences and Gates** required (see below)

Risk of trapping limbs: **Yes / No** If yes – undertake a written Risk Assessment

Brief description of gate defect or safety issue (for example entrapment risk)

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**Level of Urgency** (please circle): **No Issue / Low / Medium / High / Emergency**

**Recommendations and Action Required:** What, in your opinion, needs to be done to reduce the risk to an acceptable level? e.g. removal, replacement, repairs, further investigations. Please be as specific as possible:

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**Inspection conducted by:**

**Print Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**School Headteacher /Centre Manager's Declaration:**

As head teacher, I confirm that I am aware of my duties, responsibilities and liabilities in respect to the Council's procedure on boundary inspections. I confirm that I understand that it is my responsibility to ensure works required as a result of the above inspections are completed.

**Print Name:** \_\_\_\_\_ **School Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Note: The school is responsible for retaining completed forms which will be checked by the Council as part of the compliance checks process.** Where the school is maintained by the Council, and the school has purchased a sold service maintenance package with the Council, the Council Surveyor will carry out one annual inspection of walls, fences and gates on behalf of the school per academic year, and will provide the records of inspections and maintenance to the school for their records.

## ② RISK ASSESSMENT OF POINTED TOPPED FENCE AND GATE FORM

RISK ASSESSMENT FOR POINTED TOPPED FENCES AND GATES ON AND NEAR SITE

SCHOOL OR CENTRE: \_\_\_\_\_

Please Complete either Section A or Section B:

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### SECTION A:

#### **NO FORESEEABLE RISKS IDENTIFIED/ NO POINTED TOPPED FENCES OR GATES ON SITE**

A lay risk assessment on the pointed topped fences and gates surrounding and immediately adjacent to my school or centre site has been conducted, and:

There are no pointed topped fences or gates surrounding and immediately adjacent to my School/Centre Site.

Or

As far as can be identified from the lay survey there are no foreseeable dangers which can be identified.

**Risk Assessment carried out by:**

**Print Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

#### **School Headteacher /Centre Manager's Declaration:**

As head teacher, I confirm that I am aware of my duties, responsibilities and liabilities in respect to the Council's procedure on boundary inspections. I confirm that I understand that it is my responsibility to ensure works required as a result of the above inspections are completed.

**Print Name:** \_\_\_\_\_ **School Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Note: The school is responsible for retaining completed forms which will be checked by the Council as part of the compliance checks process.**

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### SECTION B:

#### **FORESEEABLE RISKS IDENTIFIED/ POINTED TOPPED FENCES OR GATES ON SITE**

1. Are there any **trees growing through or so close** to any pointed topped fences which make the fences easy for a child to climb across? **Yes/No**

**If no** - move to next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

2. Are there any **posts or street furniture** such as road signs or litter bins located so close to any of your pointed topped fences to make the fences easy for a child to climb across? **Yes/No**

**If no** - move to next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

4. Are there any **buildings or structures** located so close to any of your pointed topped fences to make the fences easy for a child to climb across? **Yes/No**

**If no** - move to next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

5. Do any **children gain access to your site out of hours** by climbing across a pointed topped fence? **Yes/No**

(Be especially vigilant if you have any features on your site particularly attractive to children or if your site is adjacent to a play area where children could kick balls from the play area and be tempted to climb across fencing to retrieve them)

**If no** - move to next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

6. Are there any **risks associated with barbed wire or broken glass** on any of your boundary walls or fences which you can identify? **Yes/No**

**If no** - move to next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description (e.g. razor wire along top of boundary fence/Broken glass embedded on top of wall)

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

7. Are there **any other risks** associated with your boundary pointed topped fences which you can identify such as the risk of a child trespasser or a building maintenance worker falling from a roof of your building onto a pointed topped fence? **Yes/No**

**If no** - move to the next question.

**If yes** - to make it easier for anyone following up the problem to find its location please mark it on the attached plan with a brief description

- Give the risk you have spotted a location number so that the location on the plan can easily be linked to its risk assessment form.
- Complete a lay risk assessment form below for each risk.

8. Have you any pointed topped gates on your Site? **Yes/No**

**If no** - you have completed the risk assessment.

**If yes** - Please assess if they are easy to climb by looking for footholds etc.

- If you consider that they are relatively easy to climb please mark the location of the gates on the attached plan with a brief description of the problem, e.g. pointed topped gate easy to climb.
- Complete a lay risk assessment form below for each risk.

Continued over....

**SCHOOL OR CENTRE** \_\_\_\_\_

**② RISK ASSESSMENT FOR POINTED TOPPED FENCE AND GATE FORM**

Risk location number \_\_\_\_\_ on attached plan.

Brief description of risk:

\_\_\_\_\_  
\_\_\_\_\_

Who are the people at risk? \_\_\_\_\_

What is the worst case outcome? e.g. fatal accident, serious injury, minor injury

\_\_\_\_\_

What is the likely probability? e.g. likely, probable, possible, remote

\_\_\_\_\_

What in your opinion needs to be done to reduce the risk to an acceptable level? e.g. anti-climb paint on post, pruning of tree, moving fence away from climbable tree or structure.

\_\_\_\_\_  
\_\_\_\_\_

Date risk assessment carried out \_\_\_\_\_

**Risk Assessment carried out by:**

**Print Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**School Headteacher /Centre Manager's Declaration:**

As head teacher, I confirm that I am aware of my duties, responsibilities and liabilities in respect to the Council's procedure on boundary inspections. I confirm that I understand that it is my responsibility to ensure works required as a result of the above inspections are completed.

**Print Name:** \_\_\_\_\_ **School Signature:** \_\_\_\_\_

**Position:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Note: The school is responsible for retaining completed forms which will be checked by the Council as part of the compliance checks process.**

## **Frequently Asked Questions**

### **Q1. Why are regular inspections of fences, gates and walls and risk assessments of pointed topped fences necessary?**

Some years ago a child died in a Derby Park because of a fence collapse. More recently a 10 year old child suffered 19 stitches for a stomach wound when he was impaled on the fence of a Derby School while trying to recover his football after using a tree to climb across a pointed topped fence. There has also been an incident where a child suffered a partial amputation as a result of trapping a finger in a playground gate within a school site.

Any works on school sites must be managed by a professional advisor and undertaken by competent contractors, and all risks should be designed for and managed. However, undertaking works or changes creates an opportunity for risks to be introduced which were previously not present or fully identified. Undertaking regular inspections will introduce an additional safety check, on top of a school's routine day-to-day checks and observations.

### **Q2. What checks are necessary?**

Two separate checks are required:

- A recorded check to ensure that there are no risks presented by the condition of walls, fences and gates, including trap risks.
- A recorded risk assessment check on pointed topped fences to consider impalement risks to children and building staff maintaining buildings.

### **Q3. What would the implication be for Heads and for the Council if an accident occurred and the checks had not been done?**

Schools, and in the case of Community schools, there are legal responsibilities for the Council and the school governing body. It would be highly likely that the Head of the school or centre involved, and in the case of community schools the Council as well, may face prosecution and/or claims for damages.

### **Q4. The purpose of a fence is to prevent people entering a certain area and to protect property. What is the legal reason for conducting risk assessments on pointed topped fences?**

In the eyes of the law, as a minor, a child is less capable of assessing risk. If something obviously dangerous is left around and a child trespasser finds it easy and inviting to climb it, or play on it, and the child is injured the Head of the school or centre involved, and in the case of Council schools the Council, are legally responsible. Under the Occupiers Liability Act the Council and/or school has a 'duty of care' to protect visitors, including protecting trespassers, children etc.

### **Q5. Risk assessment of pointed topped fences is difficult. It is one person's judgement not a scientific assessment.**

There is a wide range of expertise and knowledge within our schools. A tree adjacent to a fence is not necessarily a risk. The risk assessment would be made on the type of tree, the climb ability of its trunk, its distance from the pointed topped fence, the nature of its branches, the height of the fence, if there are footholds or anything to climb onto on the opposite side of the fence and if the fence is protecting something inviting to children such as football goals on a school field.

**Guidance Notes (Gates/Fences)****1.1 CHAINLINK**

Available in two finishes, galvanised and plastic coated, and supported by either angle/'T' irons or concrete posts. This type of fencing is commonly found around the perimeter of educational sites, hard play areas, tennis courts, etc.

**a. Galvanised**

Minimum gauge 3.00mm, but preferably 3.55mm should be used on 3.15mm galvanised high tensile line wires. Stirrups to be 3mm galvanised mild steel. All fittings and fixings to be galvanised. Chainlink to be hung off top line wire by every third link and secured to intermediate and bottom line wires by hog-rings – tying wire is not to be used.

**b. Plastic Coated Chainlink**

Only the type of plastic coated chainlink which has a galvanised wire core is acceptable, and where the core wire has a minimum diameter of 3.00mm. Mild steel line wires to have a galvanised core size of 3.55. Stirrups with galvanised core 3mm MS. All fittings and fixings to be galvanised. Chainlink to be fixed as for galvanised finish in (a) above.

**c. Posts and Struts**

To be to Table 3 of BS1722 Part 1 2019.

**d. Steel Angles and Ts**

To be to BS EN 10056-1:1999 and other current British Standards relevant to the specifications for weldable structural steels. All steelwork to be hot dip galvanised after manufacture. Posts to be at a maximum of 3m centres.

**e. Gates**

To be constructed to match the fence line in which they appear. Steelwork to be hot dip galvanised after manufacture.

**1.2 POST AND RAIL**

The two most common types are oak morticed posts with oak or chestnut cleft rails, or posts (morticed or unmorticed) with sawn rails, both in oak or pressure treated softwood. The above types generally have 2/3 horizontal rails. Sawn rail fencing may be overlaid with chainlink or weldmesh to contain smaller children.

**1.3 CLOSE BOARDED**

To be found on many non-education sites and used in any location where privacy is required. In some locations we may have a legal obligation to erect and maintain such a fence. Supporting posts may be in timber (oak/treated softwood) or in concrete. Concrete posts generally have concrete gravel boards. Arris rails, pales and other members may be in oak or treated softwood. Oak arris rails are to be cut from a 75 x 75mm section and softwood are to be cut from an 87 x 87mm section. All close boarded fencing to have gravel boards, counter rails and cappings. Posts to be at a maximum of 3m centres

**1.4 PALISADE**

Generally used to enclose Early Learning Year play areas, are usually in pressure treated softwood free from splinters, 1M high with 100 x 100mm softwood posts at 2M centres which are 0.5M into ground and surrounded in concrete. Arris rails are cut from a 75 x 75mm section and pales are 75 x 25mm with semi-circular tops.

## **1.5 SECURITY**

In some circumstances planners consider galvanised steel palisade/weldmesh fencing in some circumstances to be unacceptable. The first consideration should be given to colour coated bow top, traditional vertical bar or similar railings where there are no footholds and narrower distances between the vertical bars. Where a mesh fence is considered acceptable then it should be colour coated. Green colour coating is generally acceptable for fencing surrounding playing fields and for a darker colour against buildings. Planning consent may be required if the height of an existing fence is to be increased or there is no fence there at present. It is important to acquire planning consent before undertaking any works.

## **1.6 TIMBER NURSERY & RECEPTION FENCES**

All timber fences to nursery and reception classes should be PAR (planed all round) finish to prevent the risk of splinters.

## **1.7 GATES**

To prevent trapping injuries hinge gaps should be no greater than 89 mm, with moving gaps not closing to less than 12 mm unless the gap never exceeds 8 mm during any point of its operation (see BS EN 1176-1: 2017).

The distance from the bottom edge of the gate pales to the surface of the road shall not exceed 70 mm when the gate is in the closed position. (BS 1722 – 12: 2016)

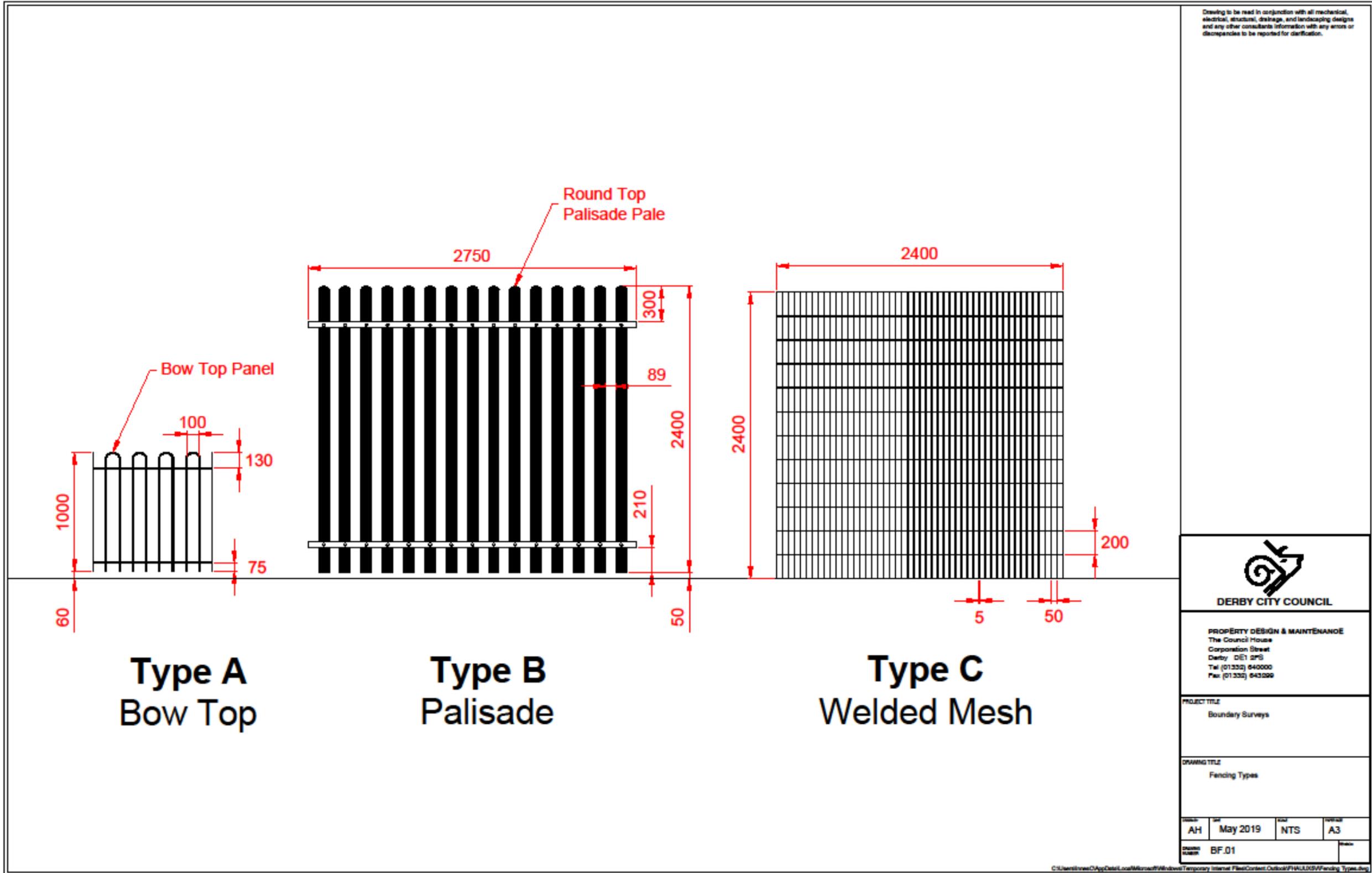
Drop bolts shall be fitted to all gate frames (and therefore to each leaf of a double gate) so that they cannot be removed. Corresponding sleeves to receive the bolts shall be set securely in the ground and concreted in to enable the gate to be secured in both the closed and opened position. The last closing leaf of double gates shall incorporate a stop that prevents one drop bolt being lifted when the gates are closed. (BS 1722 – 12: 2016) Low carbon (mild) steel drop bolts at least 20 mm diameter (BS 1722 – 1: 2019)

The gap between the locking bar and the frame shall not exceed 50 mm. Locking bars for single gates shall shoot into a socket on the gate post. Locking bars for pairs of gates shall shoot into a staple at least 25 mm x 5 mm and shall protrude by a minimum of 100 mm. The locking area shall be secured with mesh or plate so that hand or footholds are not formed. (BS 1722 – 10: 2019)

Hinges used shall be designed so that it is impossible to remove the gates by lifting at the hinges when they are in the shut and locked position. The hinges shall be provided with a simple and easily applied system of adjustment for the correction of sag, settlement or misalignment (BS 1722 – 12: 2016)

## **1.8 FINISHES TO FENCING ETC**

There shall be no protruding nails, projecting wire rope terminations or pointed or sharp-edged components. Rough surfaces should not present any risk of injury. Protruding bolt threads within any accessible part of the equipment shall be permanently covered, e.g. dome headed nuts. (BS EN 1176 – 1: 2017) Steel components shall be free from sharp edges or burrs. Tops of hollow steel posts shall be capped. (BS 1722 – 1: 2019)



**Index British Standards**

Fences: Specification for chain link fences

- [BS 1722-1:2019](#)

Fences: Specification for mild steel (low carbon steel) fences with round or square verticals and flat horizontals

- [BS 1722-9:2006](#)

Fences: Specification for anti-intruder fences in chain link and welded mesh

- [BS 1722-10:2019](#)

Fences: Steel palisade fences - manufacturing and installation - specification

- [BS 1722-12:2016](#)

Fences: Specification for open mesh steel panel

- [BS 1722-14:2017](#)

Playground equipment and surfacing: General safety requirements and test methods

- [BS EN 1176-1:2017](#)