Form 36

DPC: 17 / 30359172 DC

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Date: 17 July 2017
Origin: National

Latest date for receipt of comments: 19 September 2017

Project No. 2017/01225

Responsible committee: B/201 Fences and gates

Interested committees: B/201/-/4, B/201

Title: Draft BS 5709 Gaps, gates and stiles - Specification

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Introduction

Your comments on this draft are invited and will assist in the preparation of the resulting British Standard. If no comments are received to the contrary, this draft may be implemented unchanged as a British Standard.

Please note that this is a draft and not a typeset document. Editorial comments are welcome, but you are advised not to comment on detailed matters of typography and layout.

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BS 5709:201X

Gaps, gates and stiles – Specification

BS 5709:201X

BRITISH STANDARD

Publishing and copyright information

Published by BSI Standards Limited 201X

ISBN 978 0 580 98210 1

ICS 91.090

The following BSI references relate to the work on this document:
Committee reference B/201
Draft for comment 17/30359172 DC

Publication history

First published at BS 5709 March 1979
Second edition June 2001
Third edition April 2006
Fourth (current) edition MONTH 201X

Amendments issued since publication

Date

Text affected

Contents

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on XX MONTH 201X. It was prepared by Technical Committee B/201, *Fences and gates*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 5709:2006, which is withdrawn.

Information about this document

Country walking, cycling and riding have continued to increase since the first edition of this British Standard was published in 1979. Recent thinking and legislation has focused on the need for less able bodied and disabled people to be able to access the countryside.

This revision continues to place emphasis on the requirements of the Equality Act [1] and on the safety of all path users, in the context of the land management needs of the landowners. The experience gathered from the many years of use of the standard has been applied to clarify meaning and wording throughout.

More recently, the trial of bridlegates in York (see *A trial of self-closing bridlegates* [2]) has enabled the incorporation of requirements which improve the safety and the ease of use of these structures.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of The Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Introduction

The United Kingdom is noted for the variety of structures which enable crossings to be made of boundaries where animals need to be contained. Whilst local, traditional forms of structures should not be lightly discarded for a standard design, it should be borne in mind that the main objective is for structures to be effective for the purpose for which they are installed, while providing good access for all legitimate users. Accordingly, this British Standard specifies structures by their functional performance, thus allowing many designs of structure to conform to the requirements. However, it also tries to meet the need for actual buildable designs by means of examples that meet the functional performance criteria.

This British Standard provides specifications for gaps, gates and stiles to ensure that they cause the minimum of inconvenience to users whilst fulfilling the requirement for substantially preventing the passage of animals that need to be controlled and, for all structures, where appropriate and lawful, preventing access to some of those not entitled to use the path.

NOTE Attention is drawn to the Equality Act 2010 [1], which requires local authorities authorizing the installation of gates, stiles and other works on footpaths and bridleways to have regard to the needs of people with disabilities.

This standard is an ongoing standard in that, in order to continue to conform to it, the structure might need to be modified, replaced or removed if the land usage changes.

When authorizing structures, "to BS 5709" means to the latest version of this standard, "to BS 5709:20xx" refers to a particular version of this standard.

1 Scope

This British Standard specifies field-measurable performance requirements for gaps, gates and stiles for footpaths, bridleways, restricted byways and other routes used by the public. It can also be used on wholly private ways. It provides a hierarchy of performance requirements to enable choices to be made as to which type of structure is most appropriate in given circumstances.

In regard to stiles, this standard is aimed at the repair and refurbishment of existing ones. It does not apply to stiles with moving parts.

This British Standard is intended to be used by:

a) those planning, specifying, or approving new structures on paths (e.g. highway authorities, highways agencies, district councils, landowners, tenants, user groups, and others handling diversions, creations or dedications of paths subject to gaps, gates and stiles);

b) those making and buying path structures or kits;

c) those installing path structures; and

d) those replacing, maintaining and inspecting path structures.

Most of the functional performance criteria are field measurable but this standard also gives guidance on design where field measurement is physically difficult or subjective.

NOTE This British Standard confines itself to the main structure across boundaries (e.g. hedge, fence, wall). Where the path is wider than this structure an additional structure is needed to fill the rest of the width. This could be the original hedge or fence or a new one.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 barbed wire

any kind of wire with sharp protrusions

3.2 bridle gate

device hinged at one side installed in a boundary such as a fence, hedge or wall which acts as a barrier to controlled animals and motor vehicles, but which allows the passage of horse-riders, cyclists, pedestrians and their dogs, and mobility vehicles

3.3 bridleway

any route where horses are allowed

3.4 controlled animals

animals such as cattle, sheep (including lambs), pigs, llamas, deer and horses, even rabbits

3.5 cycle

wheeled, non-motorized, pedal- or hand-powered vehicle

NOTE A cycle could also be electrically powered if this is legal on the route in question.

3.6 cyclist

user of wheeled, non-motorized, pedal- or hand-powered vehicle

3.7 dog gate

device allowing the passage of a dog, whilst preventing the passage of controlled animals

3.8 enclosure

area within which the gate of a kissing gate swings or the area between a pair of gates comprising one structure

NOTE Also known as a refuge.

3.9 footpath

any route where walkers are allowed

NOTE For example, access land.

3.10 gap

unimpeded way through a boundary together with any side structure

3.11 horse stile

non-moving structure designed to allow horses to pass whilst forming a deterrent to motorcycles

3.12 kissing gate

device consisting of a hinged gate that is constrained to swing between two posts at the opening of an enclosure forming part of the structure, and which allows the passage of legitimate users, whilst preventing the passage of controlled animals, etc.

3.13 land manager

owner, user or occupier managing land on which there is, or might be, a structure

3.14 manoeuvring space

space needed by persons, horses, cycles and mobility vehicles to traverse the gap or structure conveniently and safely

3.15 mobility vehicle

wheeled vehicle such as a wheelchair, invalid carriage or children's pushchair or pram

NOTE Invalid carriages of Classes 1, 2 and 3 are defined in Road Traffic – the Use of Invalid Carriages on Highways Regulations 1988 [3].

3.16 path

public and private routes, as well as ways through fences onto and from land such as commons and access land where no specific paths exist

3.17 pedestrian gate

device hinged at one side, installed in a boundary such as a fence, hedge or wall which acts as a barrier to controlled animals, etc., but which allows the passage of pedestrians and their dogs, and mobility vehicles

3.18 RADAR lock

lock operated by a key (RADAR key), normally only available to disabled people

3.19 self-closing gate

gate which returns without intervention to a position touching, or in line with, the closing post

3.20 stepover

rail in a horse stile, on the ground surface, which horses need to step over

3.21 step-through gate

openable barrier allowing horses to step through when closed

NOTE This is also known as a horse-friendly barrier.

3.22 stile

fixed device allowing the passage of pedestrians over or through a fence, wall or hedge, while forming a barrier to controlled animals or other animals, cycles and vehicles

NOTE The term stile does not include horse stile.

3.23 stockproof

structure intended to prevent the passage of controlled animals

NOTE Some controlled animals, including wild animals, might require specially designed structures (e.g. tall kissing gates to prevent the passage of deer, fine mesh into the ground to prevent the passage of rabbits).

3.24 structure

object including a gap, within a path, designed to physically restrict access

4 Initial selection of path structure

4.1 General

The selection of a structure, which permits people to use a path crossing a boundary such as a hedge, fence or stone wall, shall result in as little restriction as possible for potential users, including users of mobility vehicles, while meeting the actual needs of the land manager (this is the principle of the least restrictive option, see **4.4**).

NOTE Regarding stiles, this standard is only applicable to repair or replacement of existing lawful stiles except in exceptional circumstances.

4.2 Rights of Way users

Structures shall be assessed for suitability, as a minimum, for the following legitimate path users with respect to categories of rights of way (see Highways Act 1980 [4] and the Countryside Act 1968 [5]):

a) footpaths:
   1) walkers (pedestrians);
   2) walkers with dogs under control;
   3) mobility vehicles (pushchairs/wheelchairs);

b) bridleways:
   1) all footpath users;
   2) horse riders;
   3) cyclists;
   4) persons leading horses;

c) restricted byways:
   1) all bridleway users;
   2) horse drawn vehicles;

d) byways open to all traffic;
   1) all restricted byway users;
   2) motor vehicles.

Where a structure becomes more restrictive than is necessary to its purpose, then it shall be removed or modified to be least restrictive within a reasonable period.

NOTE 1 Where a landowner grants access by concession there is scope to define the range of users differently from those in right of way legislation for public paths. For example, a permissive path could allow walkers and horse riders but preclude cyclists.

Care shall be taken when planning and installing gaps, gates and stiles on all routes where restrictions to mobility vehicle users might thereby be created.

NOTE 2 Attention is drawn to the Equality Act 2010 [1], which requires consideration of people with a wide range of disability on public paths. See also the Defra guidance Authorising structures (gaps, gates and stiles) on rights of way *[6].*

4.3 Reasonableness

If a structure is to be provided on a path, an assessment shall be made of whether such action is reasonable. The assessment shall, as a minimum, include evaluation of the following:

a) what alternative measures might be taken to avoid the need for a structure or a particular type of structure;

   NOTE For example, a swathe of land including the path might be fenced-in so as to keep controlled animals completely off the path's surface thus negating the need for any structure.

b) the likelihood of the structure, taken in the context of its environment, causing some restriction to users (e.g. if a gate would be difficult for some people with reach or dexterity difficulties); and

c) the extent of any restriction which is to be created (e.g. a stile would create an absolute barrier to mobility vehicle users and many walkers with pushchairs as well as those with limited mobility).

4.4 Least restrictive option

Where there are no explicitly identified and cogent counter-reasons in choosing a structure which conforms to this standard, the type of structure chosen shall be the least restrictive option.

NOTE 1 See the Defra guidance Authorising structures (gaps, gates and stiles) on rights of way *[6].*

NOTE 2 An example of a cogent counter-reason could be where a landholder wishes to dedicate a new path for public use but wishes to have a right to erect a kissing gate even though there is no requirement to control farm animals. Here the benefit to the public might outweigh the added inconvenience.

In general terms, the principle of applying the least restrictive option means that a path crossing a boundary shall in the first instance be unrestricted or, failing that, be restricted to the least possible extent consistent with the need for a structure on the land.

The requirement to be the least restrictive is an ongoing requirement and in order to conform to this standard when the purpose of the structure changes (for example, when the land use changes from pasture to arable) the appropriateness of the structure as the least restrictive shall be reviewed and changes to the structure made accordingly.

4.5 Choice of structure to be least restrictive

4.5.1 General

New structures shall not be stiles other than in exceptional circumstances. Where this applies, the reason behind the decision shall be made publically available.

The fact that there might be a more restrictive structure or ground condition further along the path shall not be taken as a reason for not choosing a less restrictive structure.

NOTE 1 As no single structure provides access across boundaries that is satisfactory in all situations, this standard provides a hierarchy of performance requirements to enable choices to be made as to which structure is most appropriate.

NOTE 2 In all cases, in order to be able to show that a structure conforms to the requirement of being the least restrictive, it is strongly recommended that the land manager (and the Authority, if applicable) retain a record of the reasons for the choice of structure and, in the case of public paths, make the record available to the public.

4.5.2 Choice of structure on footpaths

Least restrictive option for footpaths shall be in accordance with Table 1.

NOTE "Latched" includes latched by means of a loop.

Table 1 – Accessibility of structures conforming to BS 5709 on footpaths in least restrictive order

Section of BS 5709	Structure (in order of preference)	Performance
6.1	Gap	Allows all users
6.3	Gate unlatched, self-closing two way	Allows most users
6.3	Gate latched, non-self-closing, two way	Allows most users but can inhibit some, e.g. those with difficulty with dexterity and reach. This gate might with certain latches be less restrictive than one way unlatched non-self-closing gate
6.3	Gate, latched, Self-closing two way	Allows most users but can impede some, e.g. those with difficulty with dexterity and reach.
6.3	Gate, latched, Non Self closing one way	Allows most users, but can impede some users, e.g. those with difficulty with dexterity and reach.
6.3	Gate unlatched Self closing one way	Allows most users but can impede some users of mobility vehicles
6.4	Kissing gate, unlatched, dimensions that allow use by trampers and pushchairs	Allows most users but requires more effort than most gates
6.4	Kissing gate, latched dimensions that allow use by trampers and pushchairs	Allows most users but requires more effort than most gates and can impede some users, e.g. those with difficulty with dexterity and reach.
6.4	Kissing gate with RADAR bypass	Allows most users but requires more effort than most gates and can impede some users, e.g. those with difficulty with dexterity and reach, and those with pushchairs.
6.3	Gate, latched, Self-closing one way	Prevents most mobility vehicle users
6.4	Kissing gate, unlatched, dimensions insufficient for mobility trampers and pushchairs	Prevents some users (e.g. mobility vehicle users and pushchairs)
6.4	Kissing gate, latched, dimensions insufficient for mobility trampers and pushchairs	Prevents some users (e.g. disabled users) and is generally more difficult to use than latchless ones
7	Stile (existing and, exceptionally, new) with RADAR gate and dog gate	Allows most wheelchairs but not most pushchairs. Impedes or prevents the less able
7	Stile (existing and, exceptionally, new) with dog gate	Prevents most push-chairs and all wheelchairs. Impedes or prevents the less mobile
7	Stile (existing) without dog gate	Prevents most push-chairs and all wheelchairs. Impedes or prevents the less agile, and many dogs

4.5.3 Choice of structure on bridleways

NOTE 1 The least restrictive options for bridleways cannot be so clearly listed in sequence as for footpaths.

The choice of structure on bridleways shall be made in accordance with Table 2. Where there are reasons for deviation (for example, where a bridlegate separates a field with controlled animals from a busy road), those reasons shall be stated.

NOTE 2 "Latched" includes latched by means of a loop.

Table 2 – Accessibility of structures conforming to BS 5709 on bridleways

Section of BS 5709	Structure (in order of preference)	Performance
6.1	Gap	Allows all users
6.2	Kent carriage gap	Allows all users
6.5	Horse stile with bypass	Allows all users but shall be well set back from a vehicular highway.
6.6	Step through gate with bypass	Allows all users but shall be well set back from a vehicular highway.
6.3	Bridle gate, two way unlatched self-closing	Allows most users but can impede some riders, manoeuvring space is important.
6.3	Bridle-gate, two way, non-self-closing, latched	Allows most users but can impede some, e.g. those with difficulty with dexterity and reach,
6.3	Bridle-gate, one way, non-self-closing, latched	Allows most users but can impede some, e.g. those with difficulty with dexterity and reach, manoeuvring space is important.
6.3	Bridle-gate, two way, self-closing, latched	Allows most users but can impede some riders and those with difficulty with dexterity and reach. Manoeuvring space is important.
6.3	Bridle gate, one way unlatched self-closing	Allows most users but can impede some riders and some users of mobility vehicles. Manoeuvring space is important.
6.3	Bridle-gate, two way, self-closing, latched with stock proof handle	Allows most users but impedes some riders and those with difficulty with dexterity and reach. Manoeuvring space is important. Design of the stockproof handle is important, so some might be less restrictive than one way unlatched self-closing gates
6.3	Bridle-gate, one way, self-closing, latched	Allows most users but impedes riders, many users of mobility vehicles and those with difficulty with dexterity and reach. Manoeuvring space is important.
6.3	Bridle-gate, one way, self-closing, latched with stock proof handle	Allows most users but impedes riders, many users of mobility vehicles and can prevent access for those with difficulty with dexterity and reach. Manoeuvring space is important.

4.5.4 Choice of structure on restricted byways and byways open to all traffic

Accessibility shall follow the order of preference of Table 2 substituting “gate” for “bridlegate” and omitting “gap”.

NOTE Attention is drawn to section 24 of the Deregulation Act 2015 [7], which, when brought into effect, allows gates to be authorized on restricted byways and on byways open to all traffic.

5 General performance requirements for structures

5.1 The structure shall be built and maintained with adequate strength and rigidity and quality of material and design to meet the requirements in this British Standard and to ensure the safe and convenient passage of users, as well as providing a reliable barrier to controlled animals if required to do so.

Where a public path is wider than an authorized structure, then some form of cross-fencing or hedging shall be authorized.

5.2 There shall be no barbed wire, or other scratching or injurious object, or electric fencing capable of giving a shock, inside the structure or within 1 m of the structure or of the

manoeuvring space. Similarly, there shall be no scratching, stinging or common rash-making plant within 1 m of the structure.

NOTE 1 Annex A gives guidance on the use of barbed wire.

NOTE 2 The provision of safe manoeuvring space is important for safety, especially where structures are used by horses. On public rights of way this should be considered jointly by the landowner and the highway authority. Significant improvements to safe manoeuvring space can be achieved by the relatively simple process of clearing spaces around gates, removing man-made obstructions and ensuring that new obstructions are not created. Improving the manoeuvring space might not be possible in all situations due to the physical location of the right of way and existing ditches, hedges and other features. The ability to re-locate gates can be complicated by legal considerations (see A trial of self-closing bridlegates *[2]).*

5.3 The structure shall contain no projections such as bolts likely to catch on the clothing of path users, the harness of ridden or led horses, or likely to injure people or animals. All edges likely to come into contact with the user shall be rounded to a radius no sharper than 2 mm or chamfered with at least a 2 mm flat. Protrusions integral to the design (e.g. latches) shall be rounded, e.g. using "D" loop latch pins (see Figure 4).

5.4 Any finger or direction post carrying a protruding direction sign shall not form part of the structure, but shall be mounted separately so that the direction arm cannot overhang the structure or intrude into the manoeuvring space.

5.5 The path within 2 m of the structure and the ground through the structure as well as that part of the manoeuvring space beyond 2 m shall be kept free of surface water (except immediately after rain) and provide a firm surface.

5.6 Except for gaps and except at or near a cul-de-sac, where the structure abuts a vehicular road the structure shall be set back at least 4 m from the carriageway for bridleways and at least 2 m for footpaths to allow users to access and traverse the structure without risk of being struck by vehicles. For footpaths likely to be used by groups of walkers and in all cases where a footpath directly crosses a road (i.e. to another path), the structure shall be set back at least 4 m from the carriageway.

5.7 The ground slope along the route for 2 m either side of the structure shall be less than 1 in 6 unless explicitly specified otherwise.

5.8 The assessment of the design of a structure shall include evaluation of the needs of users with visual impairment.

NOTE This might involve highlighting structures with contrasting colours.

5.9 If the structure fails to conform to any one or more of the requirements of this British Standard it shall be repaired, replaced or removed.

5.10 The requirements shall be checked in accordance with Clause **8**.

6 Specific performance requirements for foot, horse and cycle (excluding pedestrian stiles and dog gates)

6.1 Plain gap

Plain gaps shall be selected in accordance with Clause **4**. Gaps shall conform to Clause **5** and to the following requirements (see example in Figure 1).

a) The minimum clear width of gaps shall be 1 100 mm for footpaths, 1 525 mm for bridleways and 2 500 mm for restricted byways and byways open to all traffic (when authorizable), measured along the line of the path.

   NOTE 1 Many path maintenance vehicles can gain access to paths through a 1 525 mm gap.

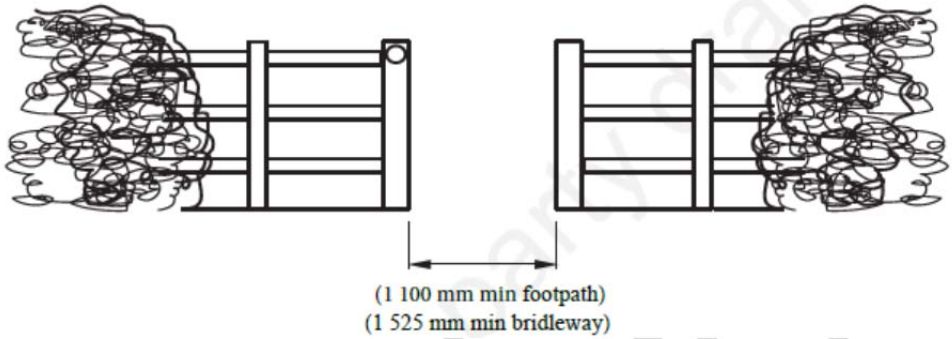
b) The gap shall be at right angles to the path within 20 degrees.

c) For bridleways, any bounding posts should minimize the risk of catching rider or harness.

NOTE 2 Bollards may be used as bounding posts.

Figure 1 – Example of a plain gap constructed in a hedge

Dimensions in millimetres



Here the post and fence is kept clear 1.5 m to 2 m either side of the two posts which define the gap width, ensuring that any sharp hedge does not need to be cut back, clear of the gap, as frequently as if the hedge formed the edge of the gap. If the hedge is not sharp growth it could be allowed to grow nearer to the actual gap.

This example is illustrative of one design of a gap which, if selected in accordance with Clause **4**, and if it meets the requirements specified in Clause **5** and **6.1** would conform to this British Standard (e.g. Clause **5** includes rounded or chamfered edges, firm dry ground surface, and checking after installation. **6.1** includes specifications for width and orientation, and for bridleways non-catching for harness).

Other designs which conform to these clauses are possible.

6.2 Kent carriage gap

The Kent carriage gap (KCG), for horse-drawn carriages, shall be selected in accordance with Clause **4**. KCGs shall conform to Clause **5**. and to the following requirements (see example in Figure 2).

NOTE 1 The Kent carriage gap can legally be used to enforce a Traffic Regulation Order made under the Road Traffic Regulation Act 1984 [8] to prevent the use of a route by cars, vans and lorries. It might also be used on a bridleway if the landowner has given permission for carriages, but was concerned that the path might be used by unauthorized motor vehicles. This layout does not stop motorcycles, and very small cars might be able to pass through. There are some horse carriages that might find the system obstructive, e.g. those based on car wheels and axles; those with a low fixed backstep, those with a pair or team of horses to a big carriage.

NOTE 2 The shorter-post-height tolerance is fairly tight and therefore the surface should normally be hardened in order to avoid the need for frequent repair.

a) The basic structure shall consist of a pair of posts.

b) One of the posts (the first post) shall be (340 ±40) mm high and shall be between 1 525 mm and 1 600 mm from the second post, measured at the shortest distance, above ground, between the posts. The second post shall be at least 330 mm high.

c) No other structure, man-made or natural, shall come within 600 mm of the first post, but further posts, structures, banks or fences could be used beyond this to prevent other vehicles bypassing the KCG.

NOTE 3 Up to three pairs of posts, satisfying the above dimensions, can be used together along the line of the path. This might help prevent forced access by large vehicles.

d) In order to ensure the minimum restriction to carriages where more than one pair of posts is used along the length of the path, the first post [see b)] in each pair shall be on

the same side of each of the pairs when viewed by someone about to enter the structure along the direction intended. The line joining the posts in each pair shall be perpendicular to the line joining the first posts.

e) Manoeuvring space shall be provided before and after the pairs of posts to allow the carriage to be driven straight through the structure.

f) The posts shall be conspicuous by day and by night, furnished with a reflective strip or strips all round and with a total height of not less than 25 mm and/or shall be finished at least 50% by area in a light colour or 100% of the area equally yellow and black, in all cases with the top 200 mm having at least 50% light reflectance when viewed from any direction.

g) The posts shall be rounded to not less than 10 mm radius.

h) The surface on the line of the path through the structure shall be hard and with a slope of less than 1 in 6.

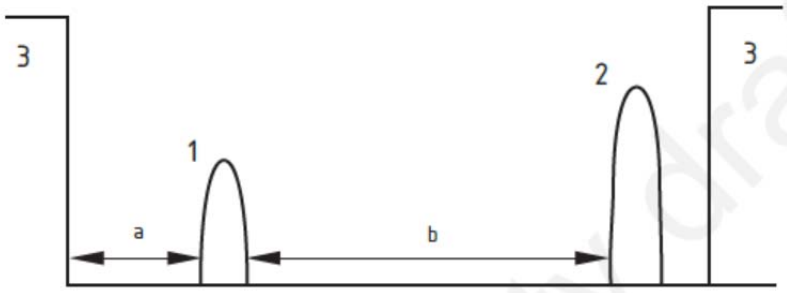
NOTE 4 Domed tops and round or oval cross-section posts are recommended so as to cause minimum damage to carriage wheels and minimum risk of injury to people.

NOTE 5 In some locations, depending on, for example, importance and cost, the force withstood would need to be substantially more than 5000 N.

NOTE 6 Joining the posts under the surface with steel and concrete could greatly increase the strength.

Figure 2 – Example of a Kent carriage gap

Dimensions in millimetres



Key
1 Bollard 300 mm to 380 mm high (the first post)
2 Bollard typically 750 mm high minimum 300 mm (the second post)
3 Fencing, wall, etc.
a 600 mm min, no max
b 1 520 mm to 1 600 mm

This example is illustrative of one design of a Kent carriage gap which would conform to this British Standard if selected in accordance with Clause **4** and if it meets all the relevant requirements specified in Clause **5** and **6.2**. Requirements include: **6.2** a) A straight run of 4 m; **6.2** g) Posts rounded to not less than 10 mm radius, fully rounded preferred; **6.2** e) Posts with a specified reflective strip.
Other designs which conform to these clauses are possible.

6.3 Pedestrian gates and bridle gates

6.3.1 General

Pedestrian and bridle gates shall only be used if they are the least restrictive structure (see **4.4**) and then the least restrictive among this class shall be used.

*NOTE 1 A field gate (farm gate) may be used as a pedestrian or bridle gate, if it conforms to this British Standard, but **6.3.13** should be taken into account.*

NOTE 2 Consideration should be given to additional features which might help specific users, e.g. a smooth push-plate on gates at height of bumper or footrests of mobility vehicles to assist passage.

Pedestrian gates and bridle gates shall be selected in accordance with Clause **4**. Pedestrian and bridle gates shall conform to Clause **5** and to the following requirements (see examples in Figures 3, 4 and 5).

NOTE 3 Where required to control animals, gates should normally open into the land used by them. "Handed" gates to enable this are sometimes available from manufacturers or gates can be modified.

NOTE 4 Battens, mesh, or other means of animal control may be used according to agricultural requirements.

6.3.2 Self closing

a) **Bridle gates.** Self-closing bridle gates shall have a closing time from fully open (without wind) of 8 s minimum.

NOTE 1 This timing derives from field trials conducted in 2015 (see A trial of self-closing bridlegates *[2]).*

NOTE 2 It is recommended that hydraulic or pneumatic two stage closers (slow from fully open, faster part way through closure) are used. Failing that, purpose-made offset hinges can be used.

b) **Pedestrian gates.** For self-closing pedestrian gates, springs without speed control, or torsion springs used as tension springs, shall not be used as a means of closing.

NOTE 3 It is recommended that purpose-made offset hinges are used as other constant force arrangements such as weight and cable are easily vandalized. Properly designed and installed torsion springs might be satisfactory if speed control is included but the practice of using these springs as tension springs is both ineffective and unacceptable.

6.3.3 Tying open

Where they are not needed for animal control on a holding for a significant time, then (in line with the least restrictive option) gates for animal control shall be tied open or temporarily removed.

NOTE There are benefits from this action for wear and tear on the gate and for surface quality due to less ground poaching.

6.3.4 Minimum clear width

The minimum clear width of pedestrian gates shall be 1 100 mm and the minimum clear width of bridle gates shall be 1 525 mm.

NOTE 1 Bridle gates that are somewhat wider than the minimum are generally easier for riders to pass through and 1.7 m is recommended.

NOTE 2 Many path maintenance vehicles can usefully gain access to paths through a 1 700 mm spacing.

6.3.5 Latches

Latches, including loop latches, on pedestrian and bridle gates shall only be fitted if needed and shall be visible, accessible and smoothly and easily operable with one hand from both sides of the gate by all path users.

Latches shall also be operable by a stick, by persons in mobility scooters.

NOTE Many users of mobility scooters cannot get off their scooter to open gates but want to be able to go out without more mobile helpers. If the latch is operable by a stick it can be lifted and the scooter driven slowly forwards against the gate until the user can reach the gate to open it fully. The gate can then self-close or be pushed shut.

The operating part of the latch shall be coloured yellow. Where the latch or latch operation is not obvious a notice shall be fixed nearby identifying the latch or giving instructions where necessary. The notice shall be black on yellow. Shutting the gate shall automatically fasten the latch except where a throw-over loop is used. The force needed to operate a latch normally operated by a grasped hand shall not in any event exceed 30 N (representing approximately 3 kg on a spring balance scale) and the force needed to operate a latch normally operated by finger tips shall not exceed 10 N (representing approximately 1 kg on a spring balance).

If a throw-over loop (loop latch) is used it shall be the only means of latching and it shall be attached to the moving gate.

Stockproof latches (latches requiring an extra movement to reduce accidental release by animals) shall only be used if the need is demonstrable, or the consequences of controlled animals opening it is likely to be substantial.

6.3.6 Opening force

Pedestrian and bridle gates shall swing freely and a force no greater than 18 N shall be needed to open them fully in the absence of wind forces.

NOTE 1 This was derived from field trials conducted in 2015 (see A trial of self-closing bridlegates *[2]).*

NOTE 2 18 N is approximately represented by 1.8 kg on a spring balance scale.

6.3.7 Two way opening

Self-closing pedestrian gates and bridle gates which do not adjoin roads shall be two-way.

NOTE Gates are normally easier to use for all users if they open in the direction of travel, i.e. they are two-way. This avoids back-tracking to open the gate. It also avoids the risk with self-closing gates of the horse or mobility vehicle being jammed by the closing gate. And it could reduce the amount of manoeuvring space required to be provided.

6.3.8 Manoeuvring space

A substantial manoeuvring space shall be provided either side of pedestrian gates and bridle or field gates to allow path users to operate the latch (if fitted) as well as to pass through the gateway.

NOTE The opening side of one-way gates normally need substantially more manoeuvring space than two-way gates owing to the need for the user to keep out of the way of the gate as it opens. Some horses and mobility vehicles need at least 3 m diameter to turn around in. See A trial of self-closing bridlegates *[2]).*

6.3.9 Straining posts

Gateposts shall not be used as straining posts for a fence.

6.3.10 Shearing action

In order to reduce shearing action on fingers etc., where two-way gates swing past a post, gates shall be at least 30 mm from the post they swing past (except for any latch area). See Figure 4.

6.3.11 Trapping

For one-way opening gates which close on to a closing post rather than onto a latch, to avoid trapping, the overlap at the closing line on the closing post shall be at least 30 mm (see Figure 3, key 5).

NOTE This trapping can be avoided by preventing the gate closing completely, for example by installing a block of resilient material on a part of the closing line. On metal gates such a block might also resolve noise issues. See Figure 3, key 6.

6.3.12 Visibility

Every part of a gate above 1 200 mm from the ground shall be of open construction so as to allow a clear sight of the route beyond the gate.

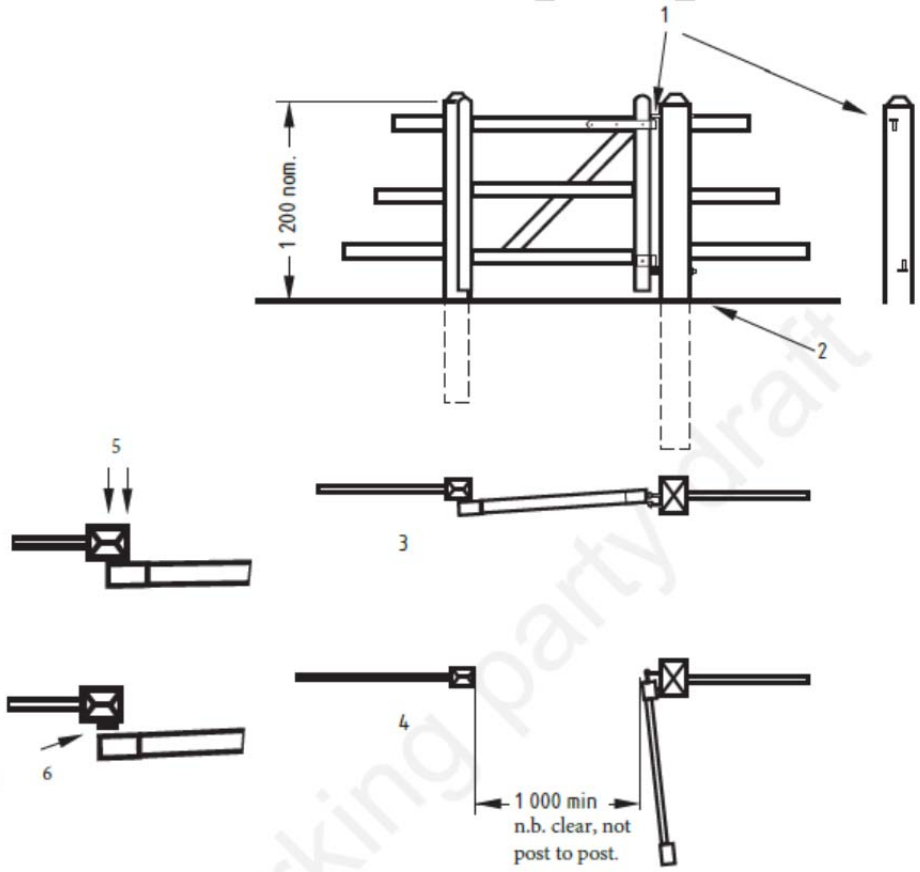
6.3.13 Heavy gates

For hinged gates individually weighing more than 75 kg, the failure of any single hinge fitting shall not result in the gate falling down.

NOTE A chain through the gate and round the hanging post might protect against top hinge failure.

Figure 3 – Example of a one-way opening timber, self-closing, unlatched, pedestrian gate

Dimensions in millimetres



Key

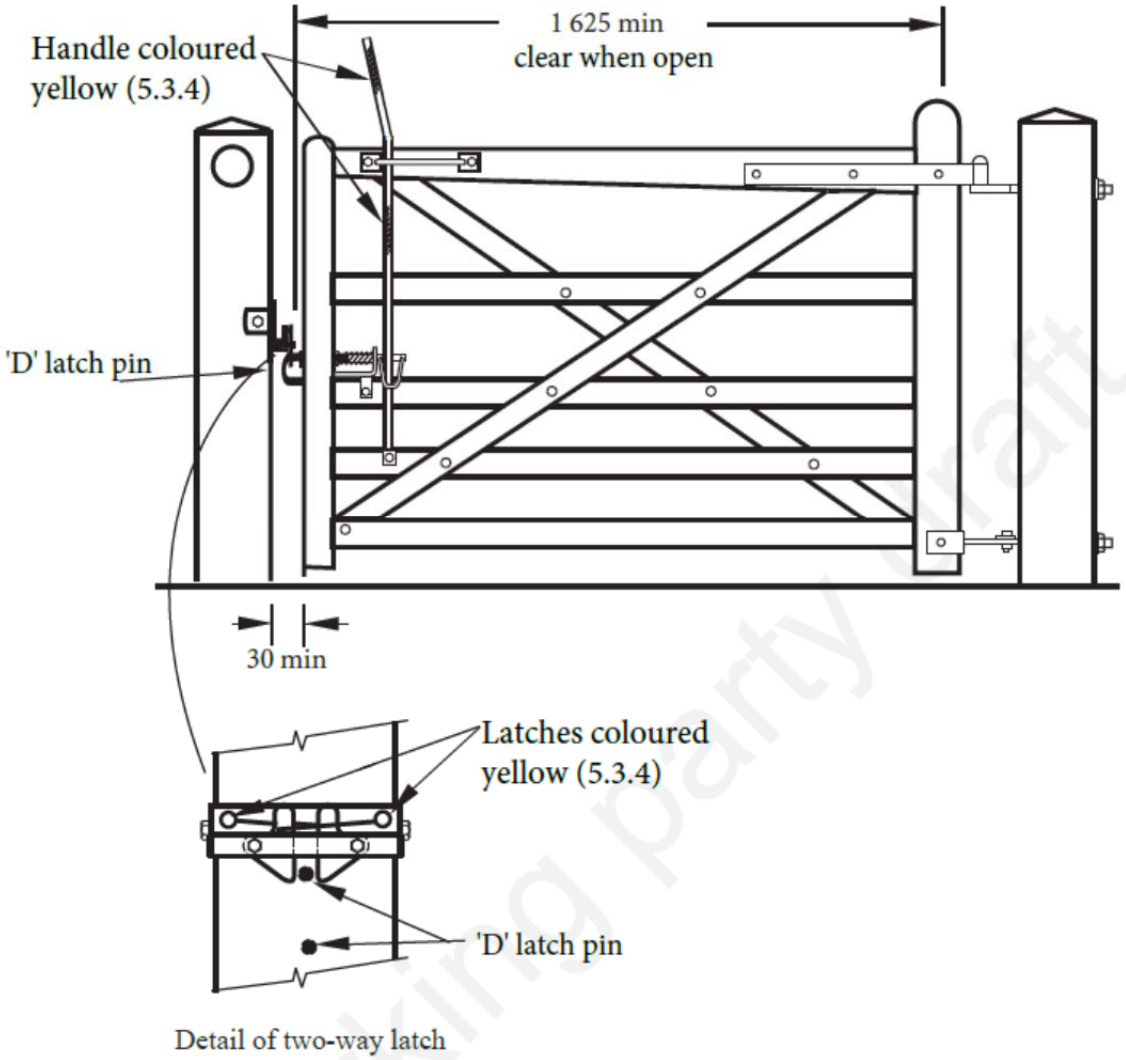
1 Offset hinge designed for 90° opening
2 Ground
3 Closed
4 Open
5 30 mm minimum overlap, see **6.3.11**
6 Optional resilient block to reduce noise and reduce trapping, see **6.3.11**

This example is illustrative of one design of a pedestrian gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** (e.g. manoeuvring space, chamfered or rounded edges, firm dry ground, set back 2 000 mm/4 000 mm from any carriageway) and **6.3**.

Other designs which conform to these clauses are possible.

NOTE A ground (or other) stop might be needed to prevent opening the gate beyond the point where self-closing functions correctly.

Figure 4 – Example of a two-way opening bridle gate with handle

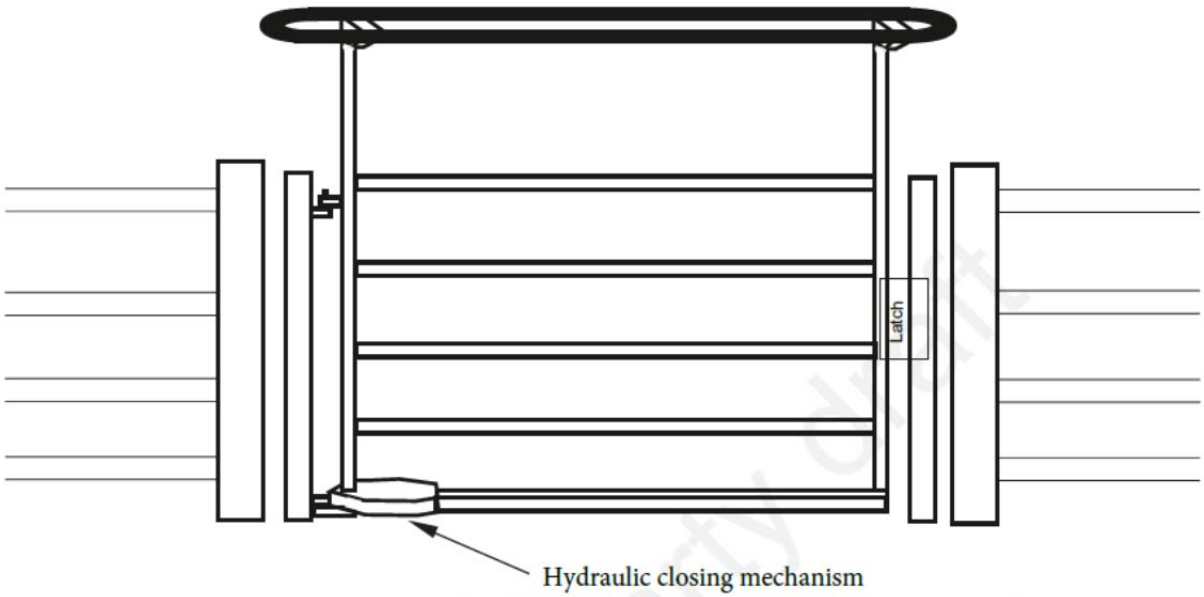


This example is illustrative of one design of a bridle gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.3**. Other designs which conform to these clauses are possible.

NOTE 1 The handle cranked towards the closing post was found in the bridlegate trial (see A trial of self-closing bridlegates *[2]) to be easier for some riders.*

NOTE 2 This type of latch can allow some mobility vehicle users to open the latch with a stick and simultaneously with the same stick push the gate open.

Figure 5 – Example of a two-way opening bridle gate with a ring



This example is illustrative of one design of a bridle gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.3**. Other designs which conform to these clauses are possible.

This gate is operated by pulling down or pushing up the top ring or by means of the side latch.

It is fitted with a hydraulic closing mechanism which closes slowly at first and then faster, thus giving a horse rider time to get through and when through to close quickly to prevent controlled animals slipping through.

6.4 Kissing gates

NOTE 1 Kissing gates are by their inherent design more restrictive for many users than pedestrian gates and should only be used when there are specific requirements.

NOTE 2 If the gate is constructed so the gatepost, gate, and closing post are in line with the fence, then that might allow the refuge/enclosure to be removed when local conditions allow. See Figure 6B.

NOTE 3 Where required to control animals, kissing gates should normally open into the land used by-animals. "Handed" gates to enable this are sometimes available from manufacturers or gates can be modified.

NOTE 4 Where the length from the gate to the end of the refuge/enclosure is less than 1 600 mm, provision of a RADAR bypass allowing full opening of the gate, or an adjacent RADAR lock operated gate (which could be an existing field gate) is strongly recommended to ensure access for users of Class III mobility vehicles. Attention is drawn to the Equality Act 2010 [1].

Kissing gates shall be selected in accordance with Clause **4**. They shall conform to Clause **5** and to the following requirements (see examples in Figure 6 and Figure 7).

a) A minimum internal manoeuvring space shall be provided so as to allow a 1 m diameter cylinder to pass through the kissing gate with its flat end on the ground.

NOTE 5 This minimum requirement allows many mobility vehicles, including most pushchairs and some wheelchairs, to pass through the gate but deters motorcycles.

NOTE 6 A self-closing-and-latching feature is desirable on all kissing gates where there are controlled animals in adjacent fields particularly when they are on both sides. Lambs, calves etc. might be able to get through when a non-self-closing gate is provided.

b) Latches shall only be fitted if needed; if fitted, they shall be visible, accessible and easily operable with one hand from both sides of the kissing gate by all path users. The latch shall automatically fasten when the gate is shut. The force needed to operate the latch shall not exceed 10 N.

NOTE 7 10 N is roughly equivalent to a spring balance reading of 1 kg.

c) Gates shall swing freely and a force no greater than 18 N shall be needed to open them fully.

NOTE 8 18 N is approximately represented by 1.8 kg on a spring balance.

d) Where moving parts of the structure could trap fingers, for instance at the gate closure line, the area shall be maximized to increase the overlap. See Figure 3, key 5.

NOTE 9 This trapping can be avoided by preventing the gate closing completely, for example by installing a block of resilient material on a part of the closing line. On metal gates such a block could also resolve noise issues. See Figure 3, key 6 and, for a metal gate, figure 7, key 3.

e) A manoeuvring space shall be provided on either side of the gate to allow path users to operate the latch (if fitted) as well as to pass through the gateway.

NOTE 10 Some mobility vehicles need at least 3 m diameter to turn around.

f) The gate overlap at the closing line on the closing post (whether the whole gate or just the locking tongue) shall be at least 30 mm.

g) Where use of a mobility vehicle is practicable, the ground within the gate, and the manoeuvring space shall either be level or shall be on a slope all in one plane and less than 1 in 10 gradient.

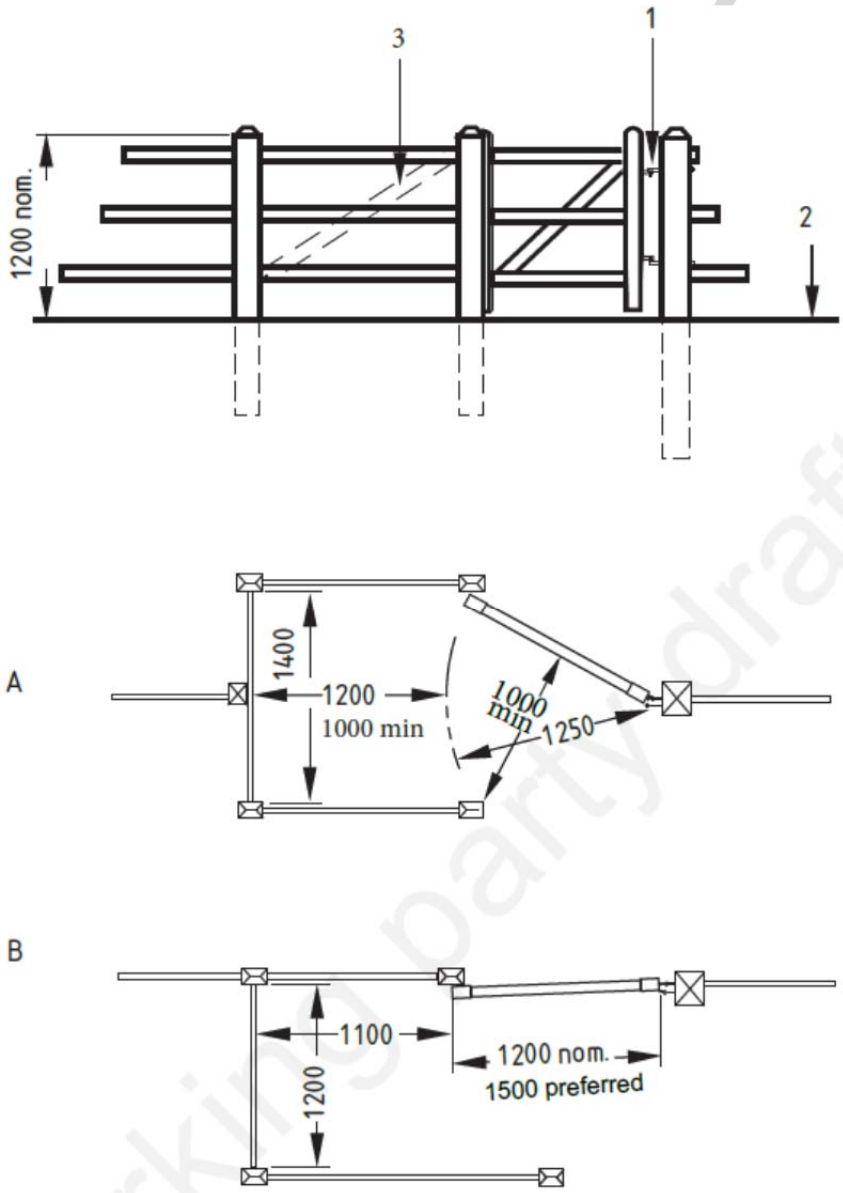
h) Every part of a gate above 1 200 mm from the ground shall be of open construction so as to allow a clear sight of the route beyond the gate.

i) For gates individually weighing more than 75 kg the failure of any single hinge fitting shall not result in the gate falling down.

j) Where a kissing gate is fitted with a RADAR lock that could give the impression that the gate is locked, a notice (black text on yellow background) shall be displayed near the lock informing users that it is not locked.

Figure 6 – Example of a timber kissing gate

Dimensions in millimetres



Key
1 Offset hinge optional
2 Ground
3 Optional strengthening cross-brace(s)

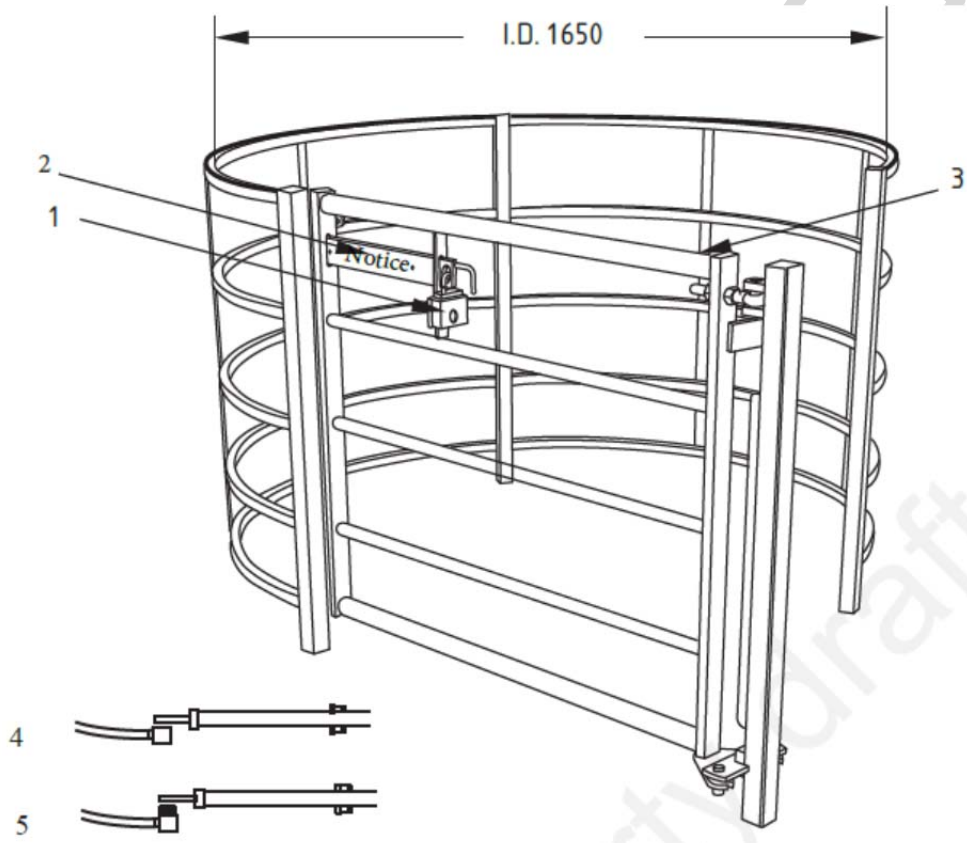
This example is illustrative of designs of kissing gates which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.4** (e.g. no barbed wire or thorns near or sharp places on the structure, 2 000 mm from vehicular road junction, sufficient manoeuvring space). Other designs which conform to these clauses are possible.

See **6.4**, Note 3 regarding additional RADAR gate.

Plan B shows an alternative plan view for gate flush with a boundary fence (one side construction). This design (B) might be useful on land ownership boundaries, requiring only one approval. If the enclosure becomes redundant it may be removed, leaving the gate in place in the fence line.

Figure 7 – Example of a curved metal kissing gate with RADAR bypass

Dimensions in millimetres



Key

1 Captive padlock, RADAR key operated, fixed to structure
2 Notice, black on yellow, stating gate is not locked **5.4.1**
3 Gate. 1 200 mm nominal length (gate can be either latched or unlatched type)
4 Plan view of closure (non-latched type shown for clarity)
5 Plan view with silencing rubber buffer (see **5.3.11**, Note)

This example is illustrative of one design of a kissing gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.4** (e.g. no barbed wire or thorns near or sharp places on the structure, 2 000 mm from vehicular road junction, sufficient manoeuvring space). Other designs which conform to these clauses are possible.

Gate operates in two modes.

- As a conventional self-closing kissing gate suitable for pedestrians, dogs and most mobility vehicles (children's pushcahirs, wheelchairs). The design prevents most motorcycles and can afford a high degree of stockproofing.
- With the release of the sliding latch by the use of a RADAR key the gate can be opened beyond the normal closing point allowing larger mobility vehicles and some path maintenance vehicles to pass through the gate.

6.5 Fixed horse stiles

NOTE 1 A horse stile can be used on paths where there is a proven need to deter use by motorcycles and prevent use by cars.

NOTE 2 A horse stile does not prevent the passage of controlled animals.

Horse stiles shall be selected in accordance with Clause **4**. They shall conform to Clause **5** and to the following requirements (see example in Figure 8).

a) There shall be a gap, pedestrian gate or RADAR kissing gate that conforms to this British Standard to the side of the step through gate or close nearby.

b) Two or three stepovers shall be installed on the ground across the path with a space between them and with no gap between the ground and the stepovers. The height of the top of the stepovers above ground shall be (190 ±60) mm.

NOTE 3 Some users have found the third stepover improves the ability to deter motorcycles.

c) The thickness of the stepover in the direction of travel shall be between 80 mm and 160 mm.

d) The minimum clear width of the stepover across the path shall be 1 525 mm.

e) The distance between the centre lines of the stepovers on the ground shall be (1 200 ±100) mm.

f) The space between the stepovers shall be free draining and generally level.

g) In order not to startle horses, the stepovers shall be constructed of a material that does not make a sudden ring or noise when struck by horses' hooves.

h) There shall be side-bars or planks on the inside of the posts.

i) The ends of all side-bars or planks, the inside corners of the posts and the top edges of the stepovers shall be fully chamfered to at least 5 mm flat, or rounded to a 5 mm radius, so as not to injure horse or rider if knocked against.

j) A clear manoeuvring space 4 m high, between 4 m and 5 m long and at least the same width as the horse stile shall be provided immediately before and after the horse stile.

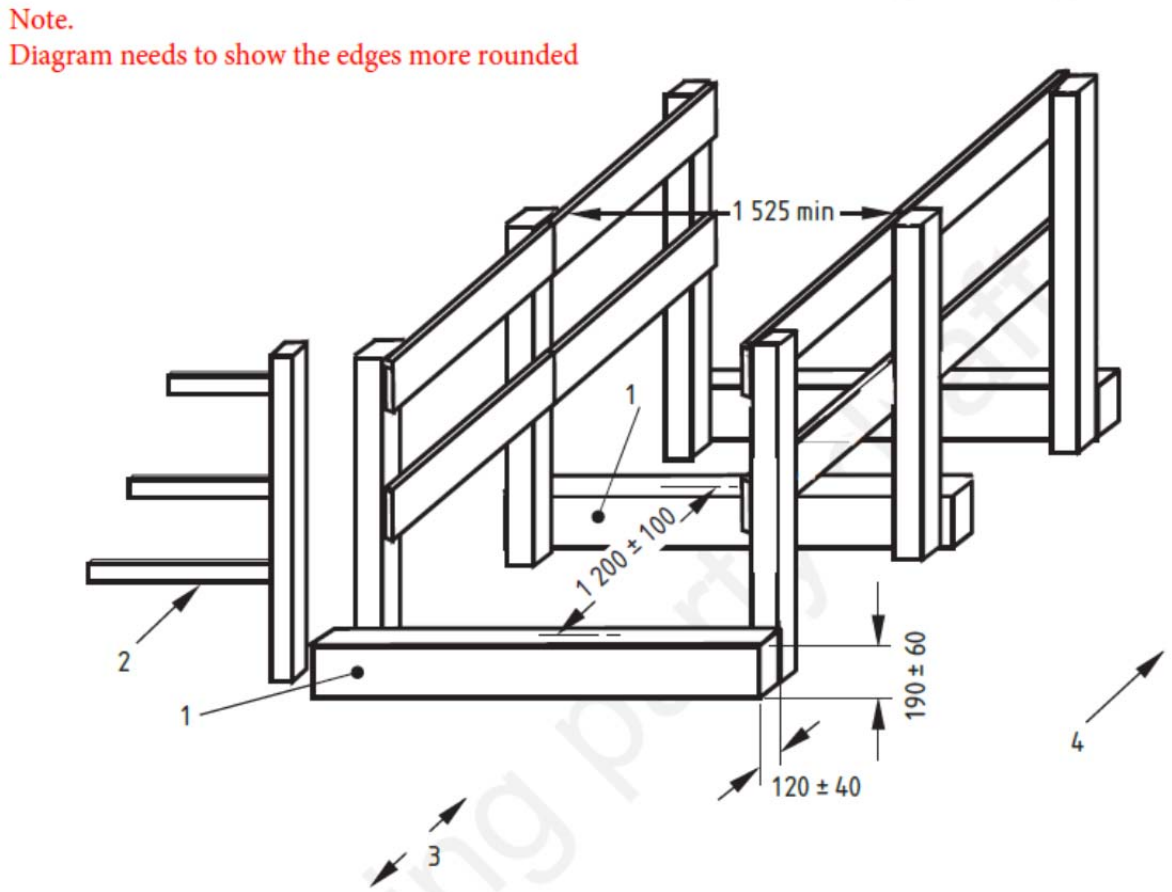
k) The uprights shall not protrude above the side fence or rails. To avoid catching on harness.

l) The ground surface within the horse stile shall be unbound and extend unbound for 3 m either end.

m) The stepovers shall be conspicuous and kept clear of vegetation.

Figure 8 – Example of a horse stile

Dimensions in millimetres



Key
1 Stepover
2 Adjacent fence
3 Direction of motion of horse
4 Access for other users, e.g. kissing gate with radar gate is required at one side

This example is illustrative of one design of a horse stile which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.5** (e.g. manoeuvring space, horse accessible corners to be well rounded). Other designs which conform to these clauses are possible.

6.6 Step through gate

NOTE 1 Step through gates allow horses and most pedestrians to pass whilst allowing the gate to be locked against vehicles.

Step through gates shall be selected in accordance with Clause **4**. They shall conform to Clause **5** and to the following requirements (see example in Figure 9).

a) There shall be a gap, pedestrian gate or RADAR kissing gate that conforms to this British Standard to the side of the step through gate or close nearby.

b) The top surface width of the gate intended for stepping-over shall be straight, at least 1 525 mm wide and between 130 mm and 250 mm above the surface of the way.

c) The edges of the part intended for stepping over and 300 mm on both sides of it shall be well rounded to a radius of at least 10 mm.

d) The material at the surface shall be of a material that does not make a sudden ring or noise when struck by horses' hooves.

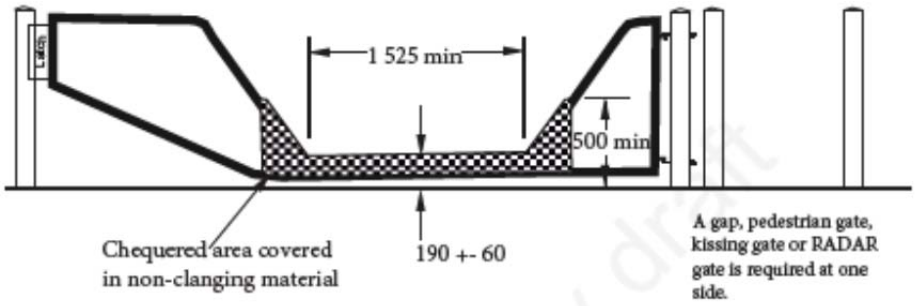
NOTE 2 Timber or rubber might be suitable.

e) There shall be no spaces in the structure likely to catch horses' feet or legs.

f) The surface on both sides of the structure, underneath and within 3 m along the route shall be level, even, well-drained and unbound.

Figure 9 – Example of a horse step through gate

Dimensions in millimetres



This example is illustrative of one design of a horse step-through gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **6.6** (e.g. manoeuvring space, horse accessible corners to be well rounded, acoustic properties, ground surface). Other designs which conform to these clauses are possible.

7 Specific performance requirements for pedestrian stiles and dog gates

*COMMENTARY ON CLAUSE **7***

The term "stiles" is used in this clause for pedestrian stiles.

7.1 General

Stiles shall not be used as new structures, other than in exceptional circumstances. Where stiles are used as new structures there shall be a dog gate adjacent and the reasons for a stile shall be made publically available.

NOTE Many old stiles on public paths exist in the countryside and have never been required to conform to this British Standard. The Highways Act 1980 [4] at section 146 requires them to be maintained to a reasonable standard. This British Standard might be of assistance in meeting that obligation.

7.2 Post and rail (pedestrian) stile

NOTE 1 This structure came top for both estimated stockproofness and ease of use in competition with many other designs at the Countryside Commission trials in 1996. In use the top rail, if any, is normally stepped over.

Post and rail stiles shall be selected in accordance with Clause **4**. They shall conform to Clause **5** and to the following requirements (see example in Figure 10).

a) Stiles shall have a maximum of two steps except on sloping ground when a third step, forming a stepping platform, of double step-width on one side of the stile only, is permitted if it is needed in order to conform with the step height requirements specified.

b) The maximum distance between the ground and the top of the bottom step shall be 300 mm. The distance between the tops of the steps shall be a maximum of 300 mm.

c) The distance between the top of the top step and the top of the top rail (if any rail is fitted above the top step) shall be a maximum of 300 mm.

d) The thickness of the top rail (if any) in plan view shall not exceed 80 mm.

e) The width of the stile measured along the top rail shall be between 600 mm and 700 mm between the stile posts.

f) Where the stile is required to be stockproof the height of the top rail from the ground (measured at the side of the steps) shall be between 800 mm and 900 mm.

NOTE 2 For the stile to be stockproof some infilling might be required, for example 300 mm gaps between rails can be used for cattle, 150 mm for sheep, or sheep netting could be installed.

NOTE 3 Where the stile is not required to be stockproof the specification allows the use of only one step so long as it is not more than 300 mm from the ground.

g) Either two stile side-posts shall extend above the top step by between 800 mm and 1000 mm or hand hold poles shall be attached securely to the stile posts, extending the same distance. The cross section of the handposts shall be between 70 mm and 100 mm in diameter or across faces, a round cross section is preferred.

h) Neither the hand posts nor any other posts of the main structure shall be used as straining posts for the adjoining fence.

i) The width of the steps shall be no less than 200 mm. The length of step shall be 1 000 mm min. Steps shall be crossed over at 45° ±10° to the fence line (or stile rails). Steps shall be centred between the posts within 60 mm.

j) Steps shall not have a slope in any direction greater than 1 in 30 (i.e. over any 300 mm of the step surface it shall not be more than 10 mm out of level). Posts shall also be vertical to 1 in 30 (i.e. over 1 m a post shall be not more than 33 mm away from the vertical).

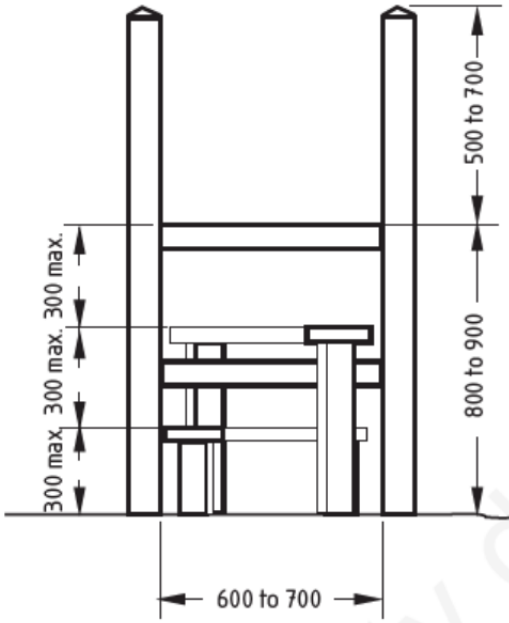
k) When a mass of 75 kg (a typical person's mass) is placed anywhere on a step or top rail a maximum deflection of 15 mm shall occur. When a mass of 150 kg (the mass of two typical people) is placed anywhere on a step or top rail acting through an area of no greater than 0.01 m^2 (approximately 100 mm^2 or 80 mm diameter circle) no visible permanent deformation or cracking shall take place.

l) Where steps are likely to become slippery due to mud, organic growth, or other reason, action shall be taken to reduce the risk of users slipping.

NOTE 4 Chicken wire can deteriorate, cause trip hazards and pierce dogs' paws and should not normally be used. Welded mesh and expanded metal are better. Abrasive filled paint can sometimes be appropriate.

Figure 10 – Example of a post and rail stile, showing optional top rail

Dimensions in millimetres



This example is illustrative of one design of a narrow stile which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **7.1** (e.g. top rail chamfered and smoothed all edges, edges of the posts above the top rail well rounded off). Other designs which conform to these clauses are possible.

Steps: 1 100 mm long (min. 1 000 mm) × 250 mm wide (min. 200 mm).

7.3 Flat topped stile

NOTE Flat top stiles include those crossing stone walls or earth banks. They normally involve standing on the top with both feet whilst crossing.

For stone stiles and stiles in which the top rail is a flat surface at least 300 mm along the line of travel and 650 mm across it, the requirements of Clause **5** and **7.2** apply but with the following variations (see example in Figure 11).

a) The stile posts shall extend above the flat surface by at least 1 000 mm. These shall be either be both half way across the flat top or one each end of the flat top. They shall be within 200 mm laterally of the flat surface.

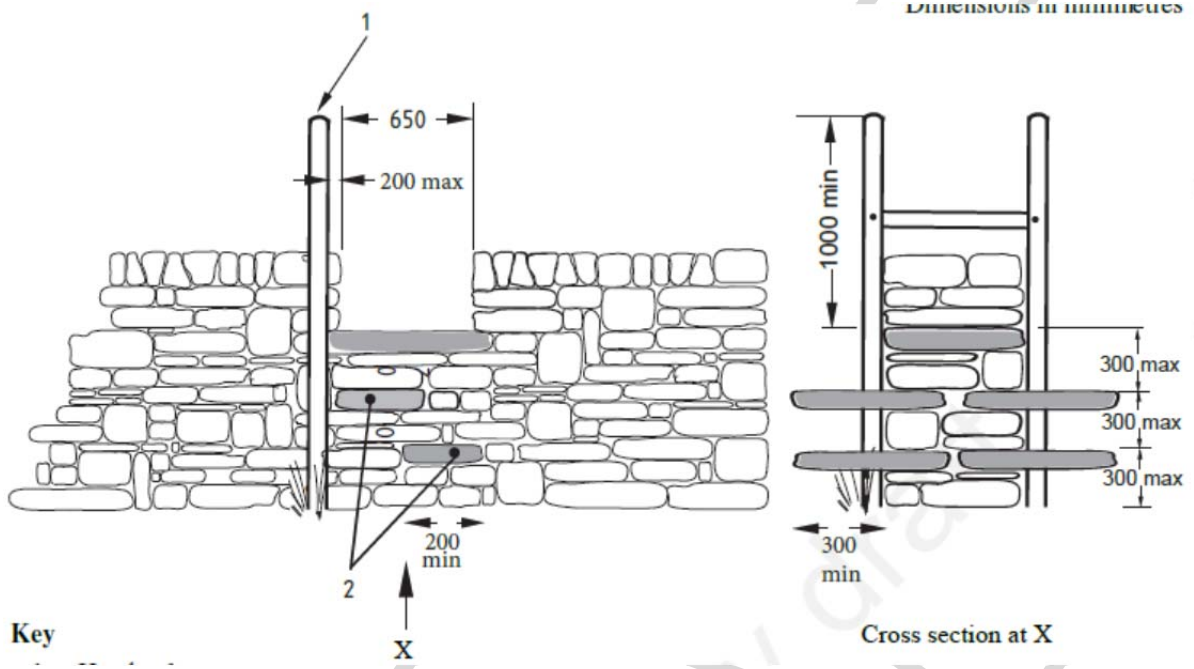
b) For stiles of cantilevered stone and similar material (see Figure 11) the length of each step shall be at least 300 mm from the cantilever face. The width of each step shall be at least 200 mm and vertically within the width of the top platform.

c) The width of the steps (at right angles to the usual line of the foot) shall be no less than 300 mm.

d) It is recognized that full conformity is sometimes difficult for this type of stile and it might have to be "To BS 5709 with [specified] exceptions".

Figure 11 – Example of a stone flat topped stile

Dimensions in millimetres



Key
1 Hand poles
2 Steps

This example is illustrative of one design of a stile which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5**, **7.2** and **7.3**. Other designs which conform to these clauses are possible.
Two hand-poles, one on each side, are joined by a crosspiece for rigidity. Steps protrude a minimum of 200 mm from the wall and measure at least 300 mm along the line of the wall.

7.4 Dog gates

Dog gates shall conform to the following requirements in addition to those of Clause **5** (see example in Figure 12).

a) Dog gate doors shall be of the vertical lift-up-door type. Dog gate doors shall not be capable of being lifted out of the structure and shall automatically close after use.

b) The gap when the door is fully open shall be a minimum of 300 mm in width and a minimum of 500 mm in height.

c) When the door is in the closed position, a gap no greater than 75 mm shall exist between the gate and the side posts.

d) The door shall have a lower edge of at least 50 mm thick by 100 mm wide with rounded edges of at least 4 mm radius.

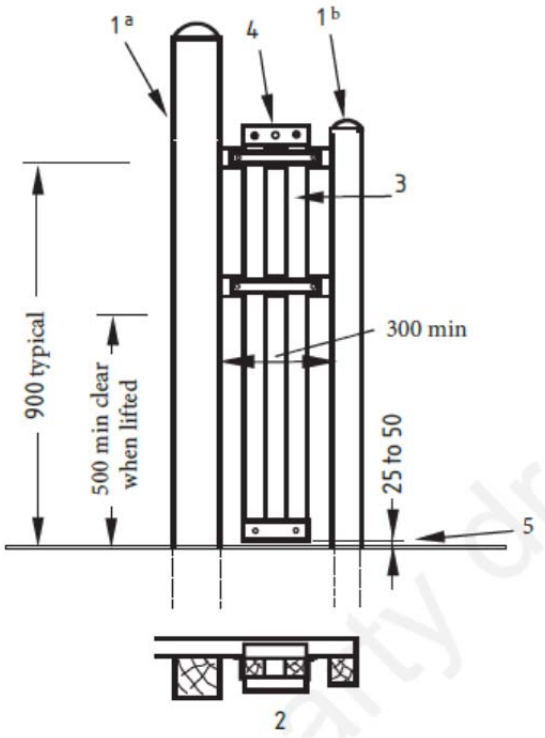
e) The mass of the door shall be a maximum of 3.5 kg.

f) A dowel or handle shall be attached to the door. It shall be visible and not obstruct the use of any adjacent stile or gate and shall allow easy operation from both sides of the structure.

g) When shut, the door shall be not less than 25 mm or more than 50 mm from the ground.

Figure 12 – Example of a dog gate attached to a timber post and rail stile

Dimensions in millimetres



Key
1a Stile post
1b Dog gate post
2 Plan view
3 Door
4 Dowel or handle to assist in lifting door
5 Ground clearance when closed

This example is illustrative of one design of a dog gate which would conform to this British Standard if selected in accordance with Clause **4** and if it meets dimensional and other requirements as specified in Clause **5** and **7.4** (e.g. door maximum mass 3.5 kg, lower edge of door rounded, no barbed wire near).

Top rail holds door off ground surface when not in use. Lower rail rises to be stopped by the lower metal strap or lower rail.

8 Conformity checks

8.1 General

Structures shall be both installed and maintained in accordance with this British Standard.

NOTE Structures specified to conform to BS 5709 in Statutory Orders (e.g. path diversions) or Statutory Powers (e.g. Highways Act 1980 [4] s147) could become unlawful if they fail to conform at installation or afterwards.

8.2 Post-installation conformity checks

The following post-installation checks shall be carried out as a minimum.

a) user-access dimensions required by the standard;

b) manoeuvring spaces;

c) surface quality, evenness, dryness and slope;

d) barbed wire or sharp plants or electric fence within 1 m of path or manoeuvring space;

e) chamfering;

f) protrusions;

g) closing overlap, if relevant;

h) opening and closing and latch operating forces (spring balance), if relevant;

i) general soundness – push and pull at structure. For stiles, stand on step for deflection (consider 75 kg in relation to weight), jump on step for strength.

The results of these checks, with photographs as appropriate, shall be recorded and the report kept. Reports on public paths shall be put in the public domain.

8.3 Ongoing checks

*COMMENTARY ON **8.3***

Since BS 5709 is an ongoing performance-based standard, there is a need to verify that structures continue to conform to it, for example where authorization is via a public path order some basic checks should be made, preferably annually but not less often than every two years.

If the structure has been replaced or significantly altered, then the post-installation conformity checks (see **7.2**) shall all be made. If it has not been replaced or significantly altered, then as a minimum checks shall be carried out, checking the following:

a) look for surface quality;

b) barbed wire or sharp plants etc., on or near;

c) sharp edges;

d) drainage;

e) ground surface;

f) manoeuvring space; and

g) seizing up of latches or hinges.

The results of these checks, with photographs as appropriate, shall be recorded and the report kept.

Annex A (informative)
Guidance on the use of barbed wire, razor wire and farm type electrical fences

Barbed wire, razor wire, farm type electric fences and suchlike should not normally be used in the vicinity of structures covered by this British Standard, but where these wires are necessary then assessment should be made of the effect they have on the safety and convenience of people in their vicinity.

For example, where they follow the line of a public highway (e.g. footpath, cycleway, bridleway) or abut areas to which the public has access, then generally such wire should not be used, but if it is necessary then the wire should either only be installed on any non-public-access side of the fence or structure, or fixed above the fence line. For example:

a) Any barbed wire on a post and rail fence abutting a public path should be on the far side and if wrapped round straining posts should be debarbed on the public side.

b) Any barbed wire on a post and wire fence abutting a public path should have a protective plain wire on the path side except where stock control requires otherwise.

c) Razor wire might be expected normally to be used only at a height out of reach of ordinary lawful activity.

d) Farm electric fences might be expected to be 1 000 mm from any narrow path so that the whole path can be used, and say 500 mm from wider paths. Warning signs should be erected.

Barbed wire, razor wire, farm type electric fences and suchlike should not cross or occupy any part of a public path except where a legally valid limitation on the path allows. In the case of electric fences, the wire may cross the area that is accessible to the public, but only if enclosed in all-weather insulation preventing shocks.

NOTE Certain barbed wire on land adjoining a highway might be removed in accordance with the Highways Act 1980 [4], Section 164, and might be prohibited in some circumstances under Section 147.

Bibliography

Standards publications

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Other publications

[1] GREAT BRITAIN. Equality Act 2010. London: The Stationery Office.

[2] LANGFORD P., HARPER N., HILL A., WESTON M., BENEY C., BINDOFF T., CUTHBERTSON J., FENTON B., RIACH A., ROGERS M. and SLADE S. *A trial of self-closing bridlegates. JP018*. Worcester: Natural England, 2015.

[3] GREAT BRITAIN. Road Traffic – the Use of Invalid Carriages on Highways Regulations 1988 (SI No. 2268 1988). London: The Stationery Office.

[4] GREAT BRITAIN. Highways Act 1980. London: The Stationery Office.

[5] GREAT BRITAIN. Countryside Act 1968. London: The Stationery Office.

[6] DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS. *Authorising structures (gaps, gates and stiles) on rights of way*. London: DEFRA, 2010.

[7] GREAT BRITAIN. Deregulation Act 2015. London: The Stationary Office.

[8] GREAT BRITAIN. Road Traffic Regulation Act 1984. London: The Stationery Office.