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Gaps, gates and stiles – Specification

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Contents

Summary of pages
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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 28 February 2018. 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This British Standard supersedes BS 5709:2006, which is withdrawn.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

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

This revision notes the requirements of the Equality Act 2010 [1] and the safety of path users, taking account of the needs of land management. The experience gathered from the many years of use of this British Standard has been applied to clarify meaning and wording throughout.

More recently, the trial of bridle gates in York (see *A trial of self-closing bridle gates* [2]) has informed the incorporation of functional attributes into this standard, 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 on routes with public access, and historic structures should be respected. New structures need to be effective for the purpose for which they are installed, and traditional forms of structure may be used if they provide 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 and encouraging innovation. However, it also tries to meet the need for 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 preventing the passage of animals that need to be controlled and, for all structures, where lawful, preventing access to 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 public rights of way to have regard to the needs of people with disabilities.

This British 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.

Authorizing bodies are expected to specify the edition of the standard which applies and the initial structure to be installed.

When authorizing structures, "to BS 5709" means to the latest edition of this standard and "to BS 5709:20xx" refers to a particular edition of this standard. See Annex A for clarification.

1 Scope

This British Standard specifies field-measurable performance requirements for new gaps, gates and stiles for footpaths, bridleways, restricted byways and other routes used by the public. It can also be used for structures to be installed on permissive paths, wholly private ways and on commons. It includes a hierarchy of accessibility performance requirements to raise awareness of the characteristics of different structures. It does not attempt to provide performance requirements in relation to land management need, to be individually assessed according to the circumstances. It can be used to establish and maintain a quality in all new structures that represents good practice.

This British Standard does not automatically apply retrospectively to most existing structures. It can be used as guidance for those who wish to repair or improve existing structures.

This British Standard does not allocate decision making, installation, maintenance or record keeping to any particular organization or person.

This British Standard is intended to be used by:

a) those planning, specifying or authorizing 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 British Standard also gives guidance on design where field measurement is physically difficult or subjective.

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 animals and motor vehicles, but which allows the passage of horse riders, riders of cycles, pedestrians and their dogs, and mobility vehicles

3.3 bridleway

any route where horses are allowed

NOTE This includes routes on access land.

3.4 cycle

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

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

3.5 dog gate

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

3.6 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.

3.7 footpath

any route where walkers are allowed

NOTE This includes routes on access land.

3.8 gap

unimpeded way through a boundary together with any side structure

3.9 horse stile

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

3.10 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 animals, etc.

3.11 land manager

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

3.12 manoeuvring space

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

3.13 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].

3.14 path

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

3.15 pedestrian gate

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

3.16 RADAR lock

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

3.17 self-closing gate

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

3.18 stepover

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

3.19 step-through gate

openable barrier allowing horses to step through when closed

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

3.20 stile

fixed device allowing the passage of pedestrians over or through a fence, wall or hedge, while forming a barrier to farmed animals and many dogs, as well as cycles and mobility vehicles

NOTE The term stile does not include horse stile.

3.21 stockproof

structure intended to prevent the passage of farmed animals

NOTE Keeping some farmed animals in, as well as some wild animals out, might require special structures, e.g. tall kissing gates for deer or buried mesh for rabbits.

3.22 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 meet the needs of the land manager and shall cause as little restriction as possible for all lawful users (this is the principle of the least restrictive option, see **4.4**).

NOTE 1 Attention is drawn to the legislation which allows the authorization of structures on public rights of way. See Annex B for a non-exhaustive list of such legislation.

NOTE 2 Attention is drawn to Section 4 of the Animals Act 1971 [4], which makes an owner or person in possession of livestock "strictly liable" for any damages caused or expenses incurred as a result of livestock trespassing on land owned or occupied by another.

Structures may be authorized to BS 5709 subject to exceptions to meet, for example, topographical or other constraints; reasons for exceptions shall be recorded and made available on request.

4.2 Public 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 the Highways Act 1980 [5] and the Countryside Act 1968 [6]). On all routes listed below, care shall be taken when planning and installing gaps, gates and stiles where restrictions to mobility vehicle users might be created:

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

b) bridleways:
   1) all footpath users;
   2) horse riders;
   3) riders of cycles; and
   4) persons leading horses; and
   5) sometimes persons driving animals;

c) restricted byways:
   1) all bridleway users; and
   2) vehicles other than mechanically propelled vehicles;

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

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

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 [7].

4.3 Suitability for land management purposes

If a structure is to be authorized on a path, an assessment shall be made of its intended purpose. The assessment shall, as a minimum, include evaluation of the following:

a) the land management need for the structure;

NOTE 1 For example, to prevent the ingress or egress of animals, or to prevent unauthorized access.

b) the need for the control of animals;

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

NOTE 2 For example, a swathe of land including the path might be fenced-in so as to keep farmed animals completely off the path's surface thus negating the need for any structure.

d) whether the structure can meet its intended land management purpose (e.g. installing stockproof handles, where necessary); and

e) ongoing land management needs, for example structures might be required to prevent the ingress or egress of animals during an agricultural rotation.

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 which also meets the land management needs.

NOTE 1 See the Defra guidance Authorising structures (gaps, gates and stiles) on rights of way [7].

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.

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 assessment shall include an evaluation of 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). New structures shall not be stiles other than in exceptional circumstances; where this applies, the reason behind the decision shall be recorded and made available on request.

NOTE 3 For example, the use of more than one structure at a single crossing of hedge or ditch is unlikely to be the least restrictive. But sometimes double or tandem gates can enhance stock security, protect structures and benefit some path users.

The requirement to be the least restrictive option 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 (whether less or more restrictive) made accordingly.

The presence/siting of an existing more restrictive structure or ground condition further along the path shall not be taken as a reason for not choosing a less restrictive structure.

4.5 Accessibility of structures

4.5.1 General

As no single structure provides access across boundaries that is satisfactory in all situations, this standard prompts an evaluation of accessibility to enable choices to be made as to which structure is the least restrictive; this shall be balanced with the land management needs.

4.5.2 Accessibility of structures on footpaths

Table 1 provides a list of structures which shall be taken into account; however, this is not an exhaustive list (see **4.1** for exceptions). Other structures not included in this table might conform to this standard.

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

Section of BS 5709	Structure (in order of accessibility for users)	Performance, as related to accessibility
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 mobility vehicles	Allows most users, but requires more effort than most gates
6.4	Kissing gate, latched dimensions that allow use by mobility vehicles	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 large pushchairs
6.3	Gate, latched, self-closing one way	Prevents some mobility vehicle users
6.4	Kissing gate, unlatched, dimensions insufficient for mobility vehicles	Prevents some users, e.g. mobility vehicle users and pushchairs
6.4	Kissing gate, latched, dimensions insufficient for mobility vehicles	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

NOTE 1 See 6.3.5 for information about latches.

NOTE 2 This table does not reflect the order of performance for land management purposes which need to be assessed according to site conditions.

4.5.3 Choice of structure on bridleways

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

Table 2 provides a list of structures which shall be taken into account; however, this is not an exhaustive list (see **4.1** for exceptions). Other structures not included in this table might conform to this standard.

Table 2 — *Accessibility of structures conforming to BS 5709 on bridleways*

Section of BS 5709	Structure (in order of accessibility)	Performance, as related to accessibility
6.1	Gap	Allows all users
6.2	Kent carriage gap	Allows all users
6.5	Horse stile with bypass	Allows all users, but is well set back from a vehicular highway
6.6	Step-through gate with bypass	Allows all users, but is well set back from a vehicular highway
6.3	Bridle gate, two way, self-closing, unlatched	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, self-closing, unlatched	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 stockproof 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.

*NOTE 1 See **6.3.5** for information about latches.*

NOTE 2 This table does not reflect the order of performance for land management purposes which need to be assessed according to site conditions.

4.5.4 Accessibility of structures on restricted byways and byways open to all traffic

The order of accessibility set out in Table 2 shall be taken into account, substituting “gate” for “bridle gate”.

NOTE Attention is drawn to section 24 of the Deregulation Act 2015 [8], which, when brought into effect, will allow 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 sufficient strength and rigidity and quality of material and design to meet the requirements in this British Standard and to meet the requirements of land managers, and provide a safe and convenient passage for rights of way users.

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

NOTE Where a public path is narrower than an authorized structure there might be a need to dedicate the extra width.

5.2 There shall be no barbed wire, or other sharp or injurious object, or unsheathed electric fencing inside the structure or within 1 000 mm of the structure, or within the manoeuvring space. Similarly, there shall be no scratching, stinging or common rash-making plant within 500 mm of the structure.

NOTE 1 Annex C 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 relocate gates can be complicated by legal considerations (see A trial of self-closing bridle gates [2]).

5.3 The structure shall contain no projections, such as bolts, likely to catch on the clothing of path users, or the tack/harness on horses, or likely to injure people or animals. All edges likely to come into contact with the user shall be rounded to a radius not 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. On bridle gates, finger or direction posts shall not be within 1 000 mm of the latch post.

5.5 The path within 2 000 mm of the structure and the ground through the structure as well as that part of the manoeuvring space beyond 2 000 mm shall be kept free of surface water (except during and immediately after heavy rain) and provide a firm surface. Where this is not practical, the reasons shall be recorded and made available on request.

5.6 Except for gaps and at or near a cul-de-sac, where the structure abuts a vehicular road, the structure shall normally be set back at least 4 000 mm from the edge of the metalled surface for bridleways and 2 000 mm 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 (e.g. promoted routes and routes to school) and in all cases where a footpath directly crosses a road (i.e. to another path), the structure shall be set back at least 4 000 mm from the edge of the metalled surface. For byways the structure shall be set back at least 8 000 mm.

NOTE This requirement might be partly or wholly satisfied by the width of the roadside verge.

5.7 The ground slope along the route for 2 000 mm either side of the structure shall be less than 1 in 6. Where this is not practical, reasons shall be recorded and made available on request.

NOTE For example, if the topography prohibits this requirement from being practically achievable.

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 Except where exceptions have been authorized, 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 structures (excluding pedestrian stiles and dog gates)

6.1 Gap

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

a) The minimum clear width of gaps shall be 1 100 mm for footpaths, 1 525 mm for bridleways and 3 050 mm for restricted byways and byways open to all traffic (when authorizable).

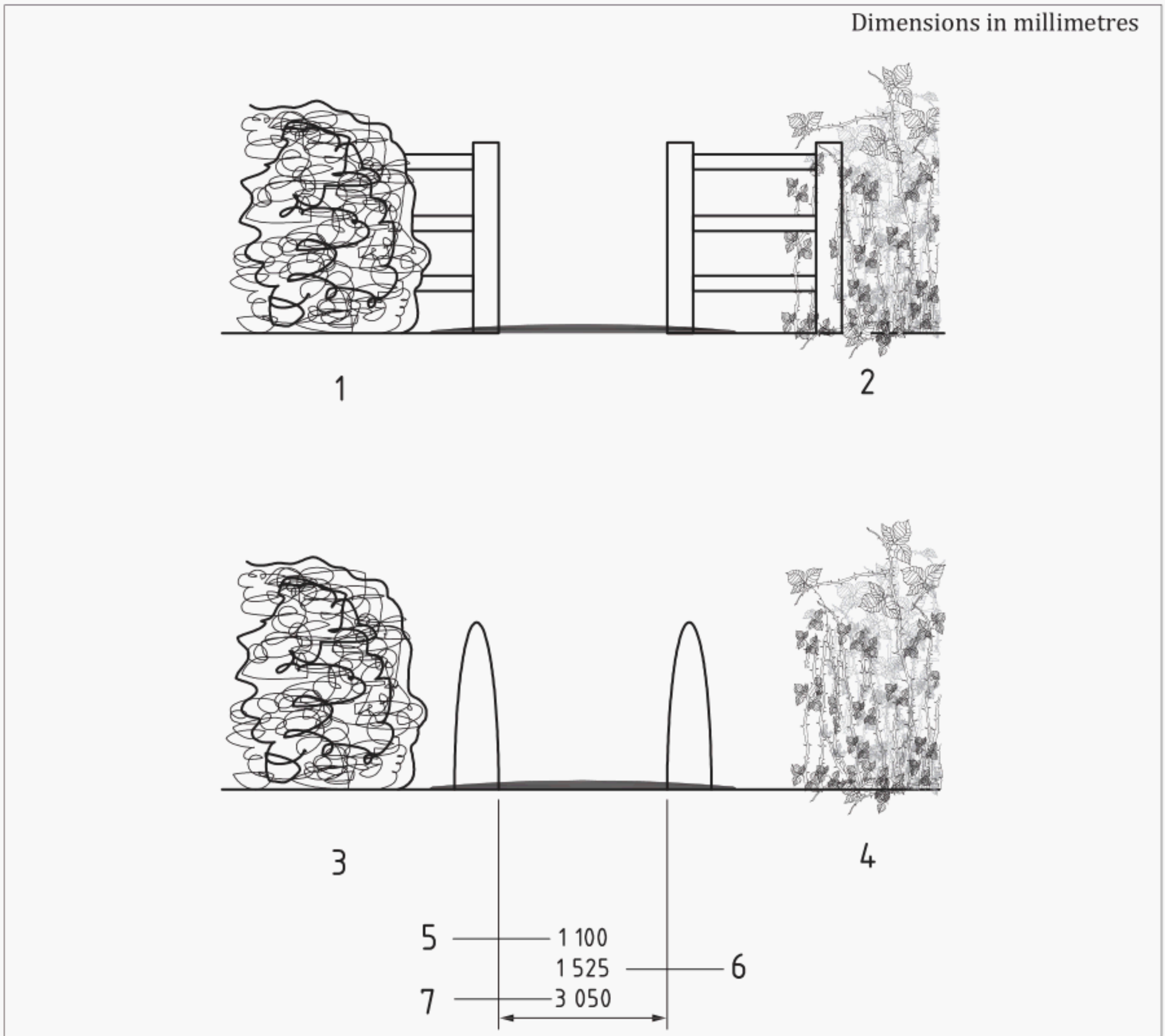
NOTE 1 Many path maintenance vehicles can gain access to paths through a 1 525 mm gap.

NOTE 2 Bollards may be used as bounding posts. Multiple bollards serve on wide paths.

b) The gap shall be at right angles to the line of the path to within 20°.

c) For bridleways, any bounding posts shall minimize the risk of catching a horse rider or tack.

Figure 1 — *Examples of a gap constructed in a hedge*



Key

1 Non-scratching hedge
2 Scratching hedge (min 500 mm from gap)
3 Non-scratching hedge
4 Scratching hedge (min 500 mm from gap)
5 1 100 mm min. footpath
6 1 525 mm min. bridleway
7 3 050 mm min. byways

Above are two examples of gaps which conform to this British Standard and are required to prevent vehicles such as cars and vans from passing through. If there is no such requirement then the fencing or bollards are unnecessary and can be omitted. In all cases, a scratching or stinging-type hedge requires an additional 500 mm clear on each side that it is grown (see **5.2**). A further allowance should be made for growth between trimmings.

These examples are illustrative of one design of a gap which, if selected in accordance with Clause **4** and meets the requirements of Clause **5** and **6.1** would conform to this British Standard (e.g. Clause **5** specifies 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 tack). 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 [9] 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 is concerned that the path might be used by unauthorized motor vehicles. This layout does not stop motorcycles or very small cars from passing 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 having 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.

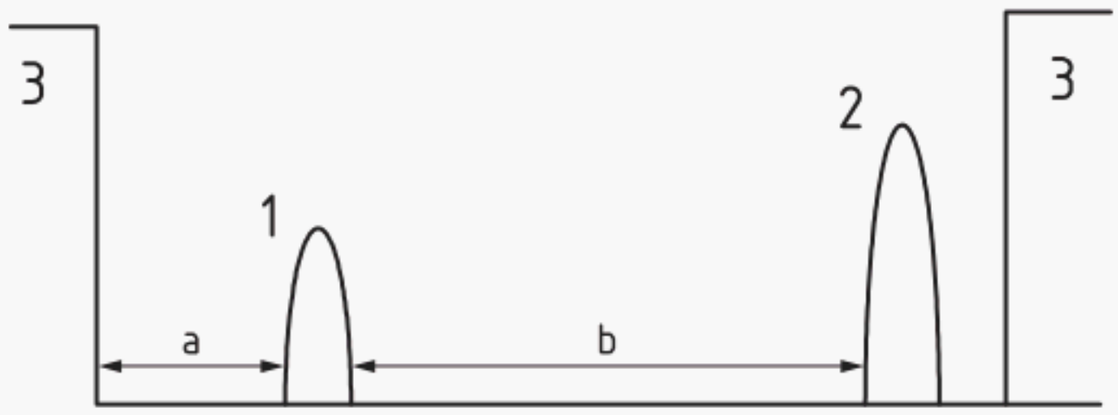
h) The surface on the line of the path through the structure shall be hard and extend at least 2 000 mm along the way either side of the structure.

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 5 000 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*



Key

1 Bollard 300 mm to 380 mm high (the first post)

2 Bollard typically 750 mm high, min. 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** h) A straight run of 4 000 mm; **6.2** g) Posts rounded to not less than 10 mm radius, fully rounded preferred; **6.2** f) 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 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 Figure 3, Figure 4 and Figure 5).

*NOTE 1 A field gate (farm gate) may be used as a pedestrian or bridle gate if it conforms to this British Standard, but **6.3.14** 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 foot rests of mobility vehicles to assist passage.

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 applied to the gate to meet agricultural requirements.

6.3.2 Self-closing

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

NOTE 1 This timing derives from field trials conducted in 2015 (see A trial of self-closing bridle gates [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.** Self-closing pedestrian gates, springs without speed control and 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 in situations where 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, gates for animal control shall be tied open or temporarily removed (in line with the least restrictive option).

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 1 800 mm is recommended.*

NOTE 2 *Many path maintenance vehicles can usefully gain access to paths through a 1 800 mm spacing.*

NOTE 3 *This requirement is not applicable to structures authorized prior to this edition of BS 5709.*

6.3.5 Latches

Latches, including loop latches, on pedestrian and bridle gates shall only be fitted if needed and shall be visible and accessible.

Stockproof latches (which include a handle requiring an additional movement to release the latch and therby reduce the accidental ingress and egress of animals) shall be used in any situation where they are required for land management purposes.

NOTE 1 *See 4.3, which specifies the situations where structures preventing the movement of animals are required.*

Latches shall be smoothly and easily operable with one hand from both sides of the gate by all path users, including mounted horse riders. These latches shall also be operable by a stick, by persons in mobility scooters.

NOTE 2 *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 by grasping with the 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 operated by finger tips shall not exceed 10 N (representing approximately 1 kg on a spring balance).

Any one latch (including loop latches) shall allow the gate to be opened without involving any other latch, except in the case of a RADAR lock.

6.3.6 Opening force

Pedestrian and bridle gates shall swing freely and a force not 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 bridle gates [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 or ownership boundaries 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 a horse or mobility vehicle being jammed by the closing gate. It could also reduce the amount of manoeuvring space required.

6.3.8 Manoeuvring spaces

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 3 000 mm diameter to turn around in. See A trial of self-closing bridle gates [2].

6.3.9 Cattle grids

When used as a bypass for a cattle grid a guard fence shall be provided to separate the grid from the gate.

6.3.10 Straining posts

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

6.3.11 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).

6.3.12 Trapping

For one-way opening gates which close onto 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.

6.3.13 Visibility

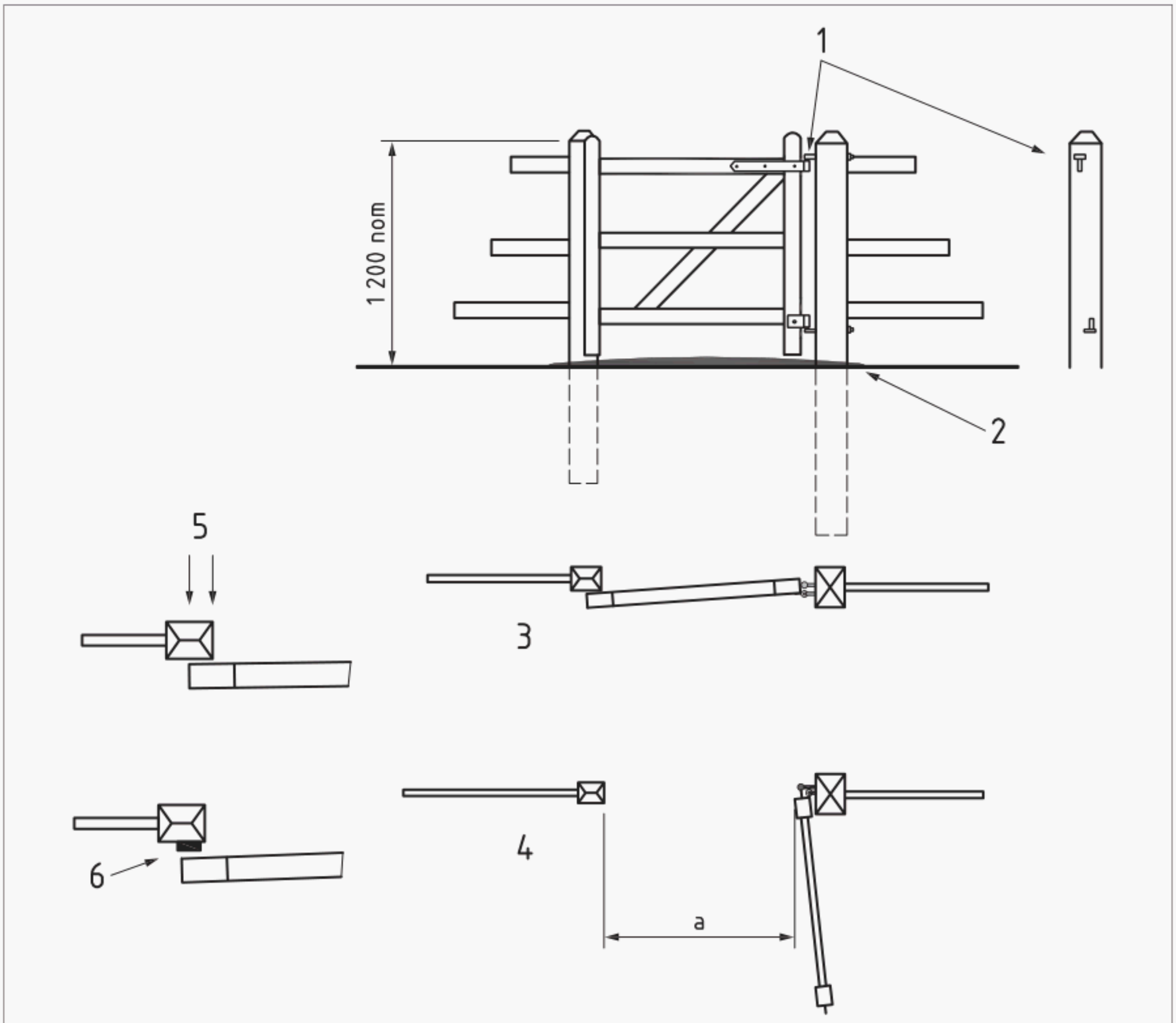
Every part of a gate above 1 200 mm from the ground shall be of open construction so as to allow a clear sight of the route beyond the gate.

6.3.14 Heavy gates

For hinged gates individually weighing more than 80 kg, the failure of any single hinge fitting shall not result in the gate falling down. A force of 800 N applied vertically at the latch end shall not ground the gate.

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*



Key

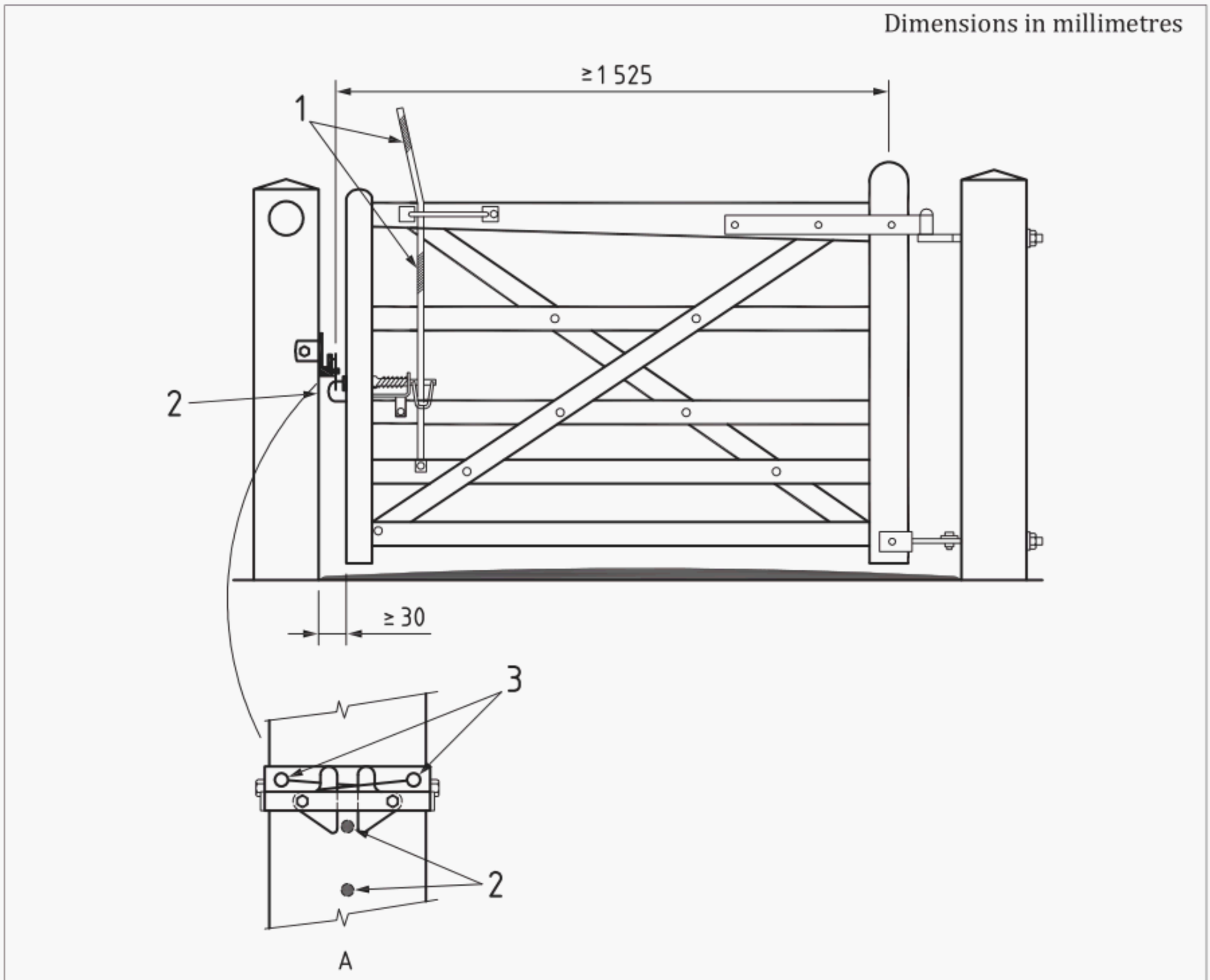
1 Offset hinge designed for 90° opening
2 Ground
3 Closed
4 Open
5 30 mm min. overlap, see **6.3.12**
6 Optional resilient block to reduce noise and reduce trapping, see **6.3.12**, Note
a 1 100 mm min., n.b. clear, not post-to-post

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 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*



Key

1 Handle coloured yellow (see **6.3.5**)

2 "D" latch pin

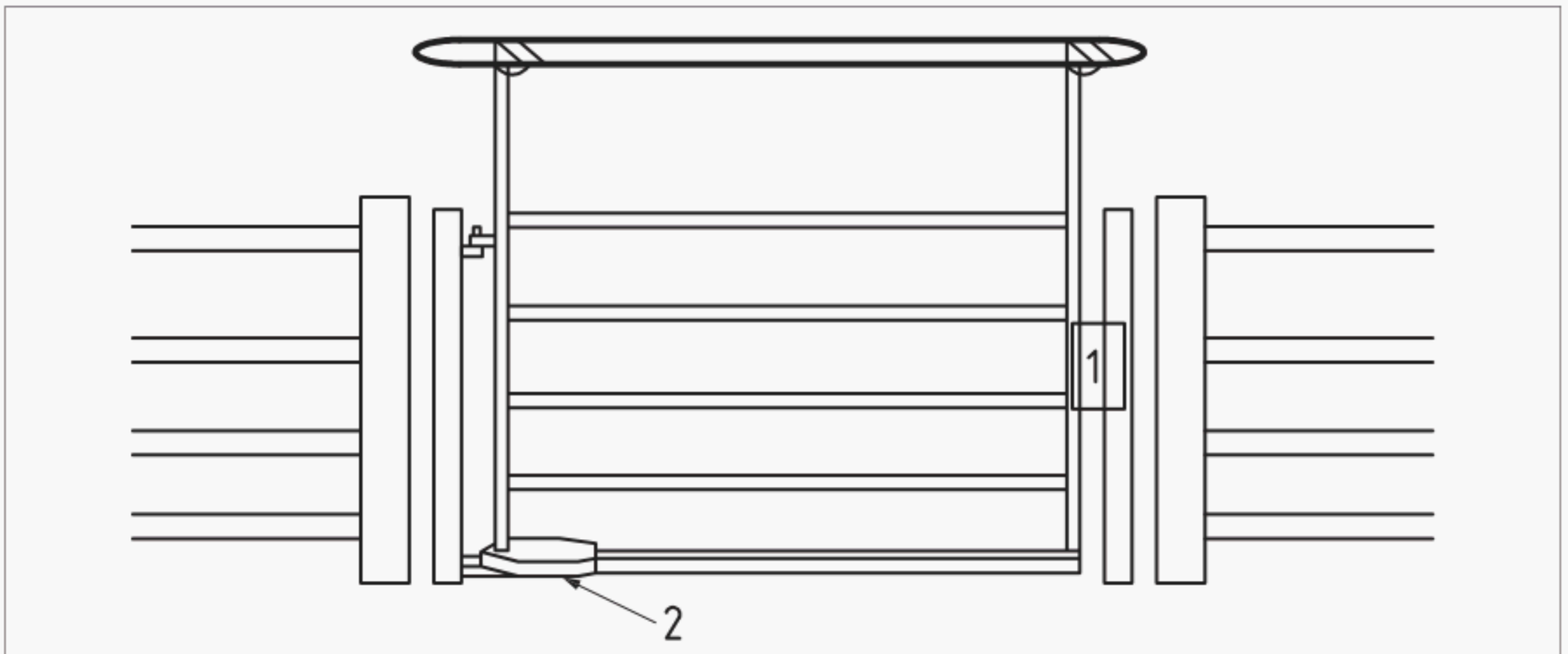
3 Latches coloured yellow (see **6.3.5**)

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 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 bridle gate trial (see A trial of self-closing bridle gates [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*



Key

1 Latch

2 Hydraulic closing mechanism

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 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 then, when through, to close quickly to prevent farmed 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, this might allow the refuge/enclosure to be removed when local conditions allow. See Figure 6B.

NOTE 3 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 1 000 mm diameter cylinder to pass through the kissing gate with its flat end on the ground.

NOTE 4 This minimum requirement allows many mobility vehicles, including most pushchairs and some wheelchairs, to pass through the gate but deters motorcycles.

NOTE 5 A self-closing-and-latching feature is desirable on all kissing gates where there are farmed 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 on kissing gates shall conform to **6.3.5**.

c) Gates shall swing freely and a force not greater than 18 N shall be needed to open them fully.

NOTE 6 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 7 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 8 Some mobility vehicles need at least 3 000 mm 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.

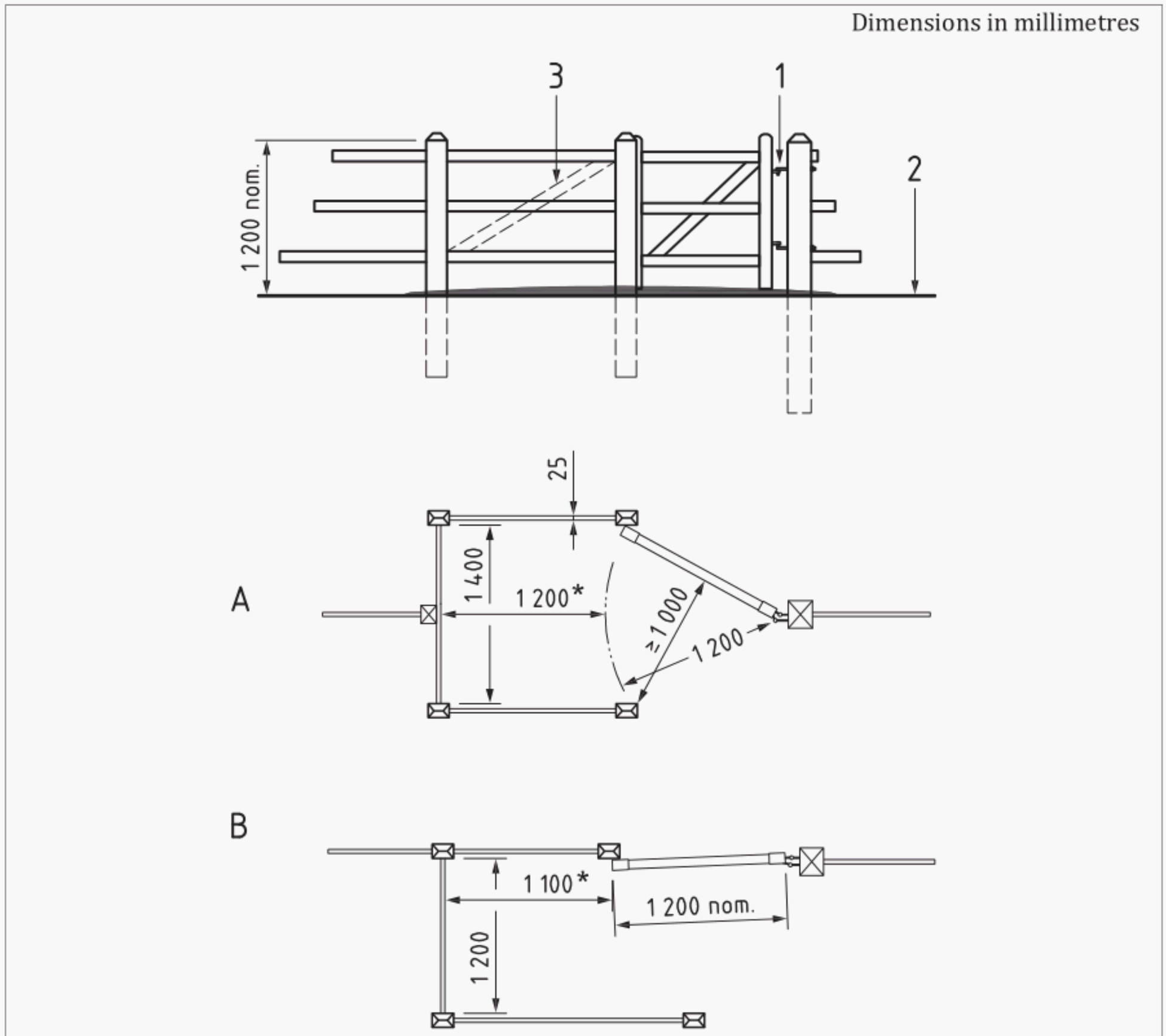
g) Where use of a mobility vehicle is practicable, the ground within the gate and the manoeuvring space shall either be level or shall be on a slope all in one plane.

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 80 kg the failure of any single hinge fitting shall not result in the gate falling down. A force of 800 N applied vertically at the latch end shall not ground the gate.

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*



Key

1 Offset hinge optional

2 Ground

3 Optional strengthening cross-brace(s)

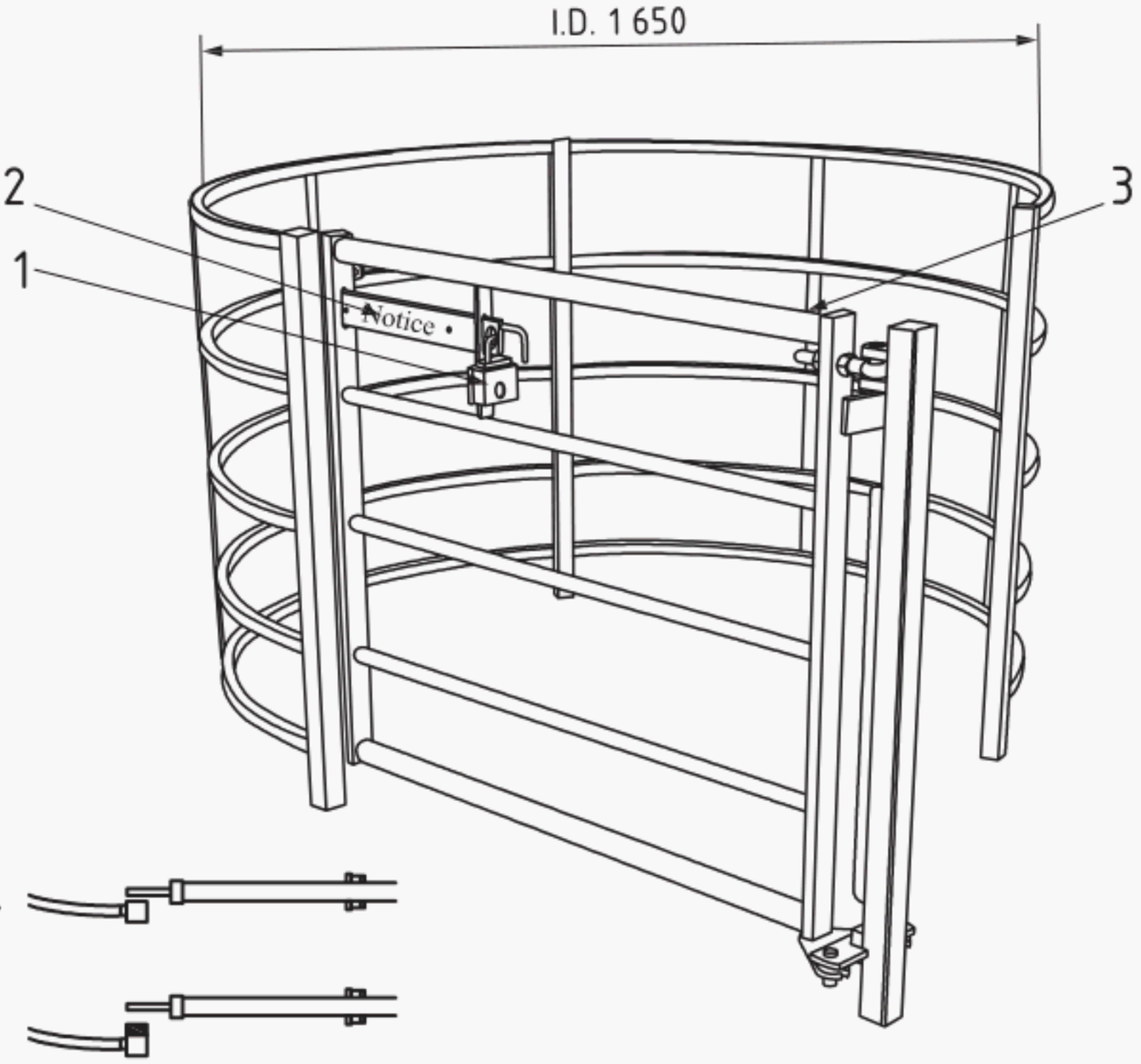
This example illustrates designs of kissing gates which would conform to this British Standard if selected in accordance with Clause **4** and meet dimensional and other requirements as specified in Clause **5** and **6.4** (e.g. no barbed wire or thorns nearby or catching places on the structure, 2 000 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.

*NOTE * For larger mobility vehicles this needs to be at least 1 600 mm.*

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



Key

1 Captive padlock, RADAR key-operated, fixed to structure

2 Notice, black on yellow, stating gate is not locked (see **6.4**j)

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 **6.3.12**, 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 nearby and no 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 pushchairs, wheelchairs). The design prevents most motorcycles and can provide 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 Horse stiles

NOTE 1 Horse stiles can be used on paths where there is a need to deter use by motorcycles and prevent use by cars.

NOTE 2 Horse stiles do not prevent the passage of 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 or a gate with a RADAR lock that conforms to this British Standard to the side of the horse stile 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 The third stepover can improve 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.

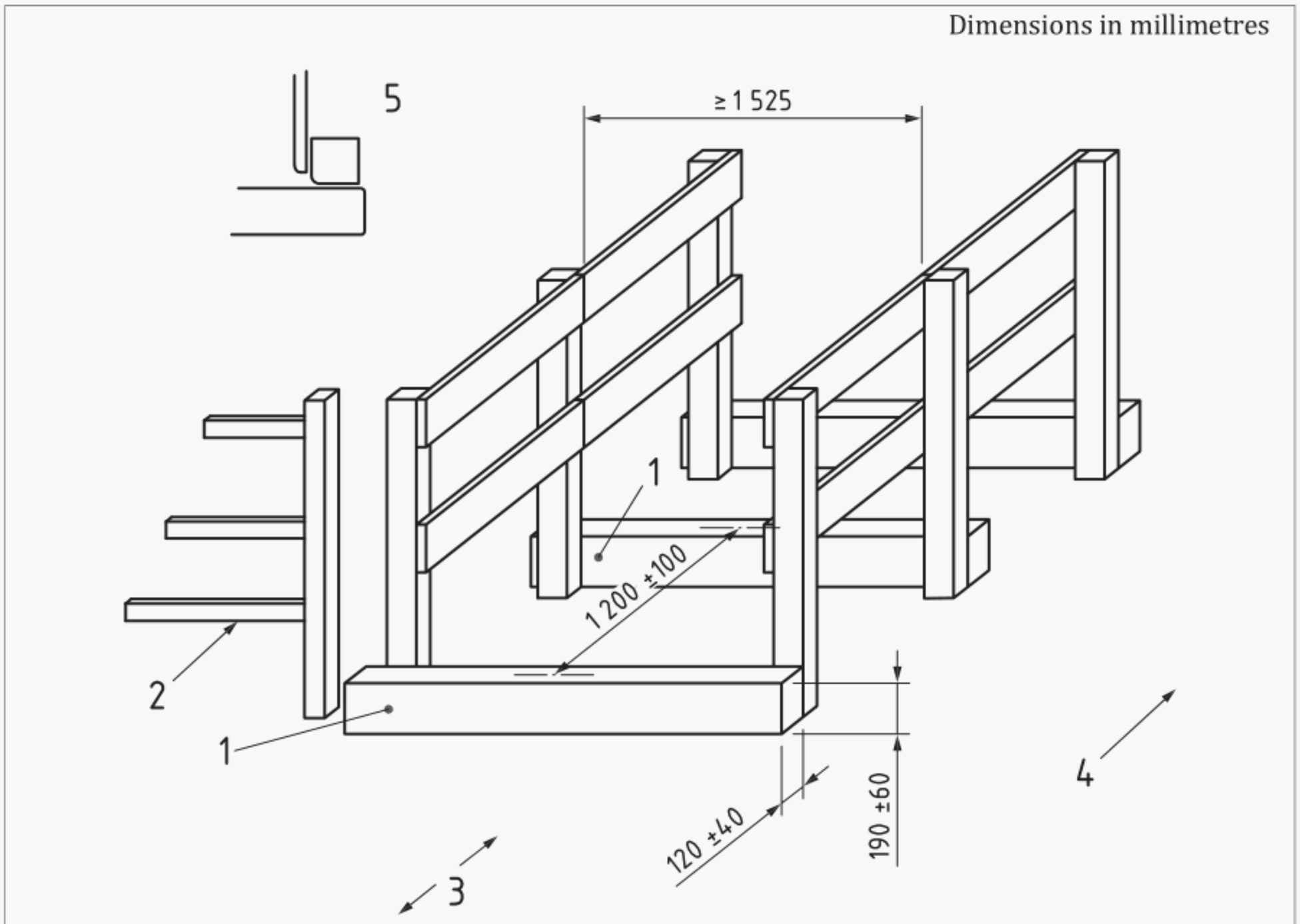
j) A clear manoeuvring space 4 000 mm high, between 4 000 mm and 5 000 mm long and at least the same width as the horse stile shall be provided immediately before and after the horse stile.

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

l) The ground surface within the horse stile shall be unbound and extend unbound for 3 000 mm either end.

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

Figure 8 — *Example of a horse stile*



Key

1 Stepover
2 Adjacent fence
3 Direction of motion of horse
4 Access for other users, e.g. a gap or a gate with a RADAR lock
5 Plan view showing round corners

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 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.

NOTE 2 Step-through gates do not prevent the passage of animals.

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 or a gate with a RADAR lock 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.

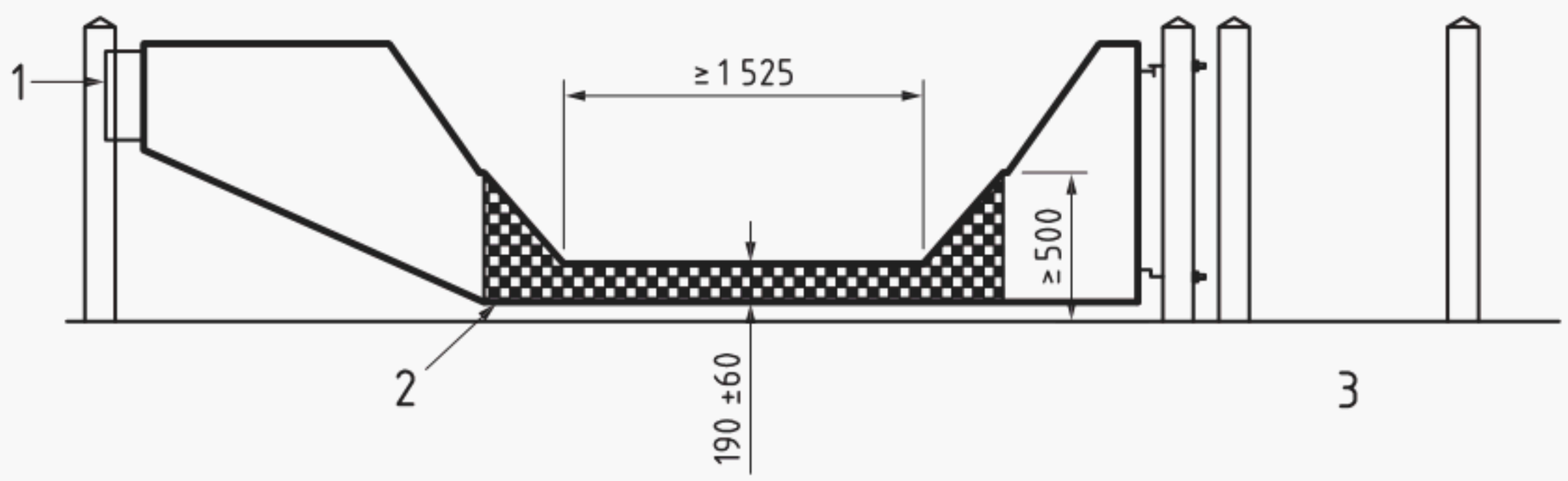
NOTE 3 Timber or rubber might be suitable.

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 3 000 mm along the route, shall be level, even, well-drained and unbound.

Figure 9 — *Example of a horse step-through gate*

Dimensions in millimetres



Key

1 Latch

2 Chequered area covered in non-clanging material

3 A gap or gate at one side

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 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, set well back from any carriageway). 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 on public paths, 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 recorded and made available on request.

NOTE Many old stiles on public paths exist in the countryside and have never been required to conform to this British Standard. It is recognized that historical and traditional structures should be respected. The Highways Act 1980 [5] 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 to the step height requirements specified.

b) The maximum distance between the ground and the top of the bottom step shall be 350 mm. The distance between the tops of the steps shall be a maximum of 350 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 350 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 1 050 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 350 mm from the ground.

g) Either two stile side-posts shall extend above the top step by between 800 mm and 1 000 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-hold 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 not 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.

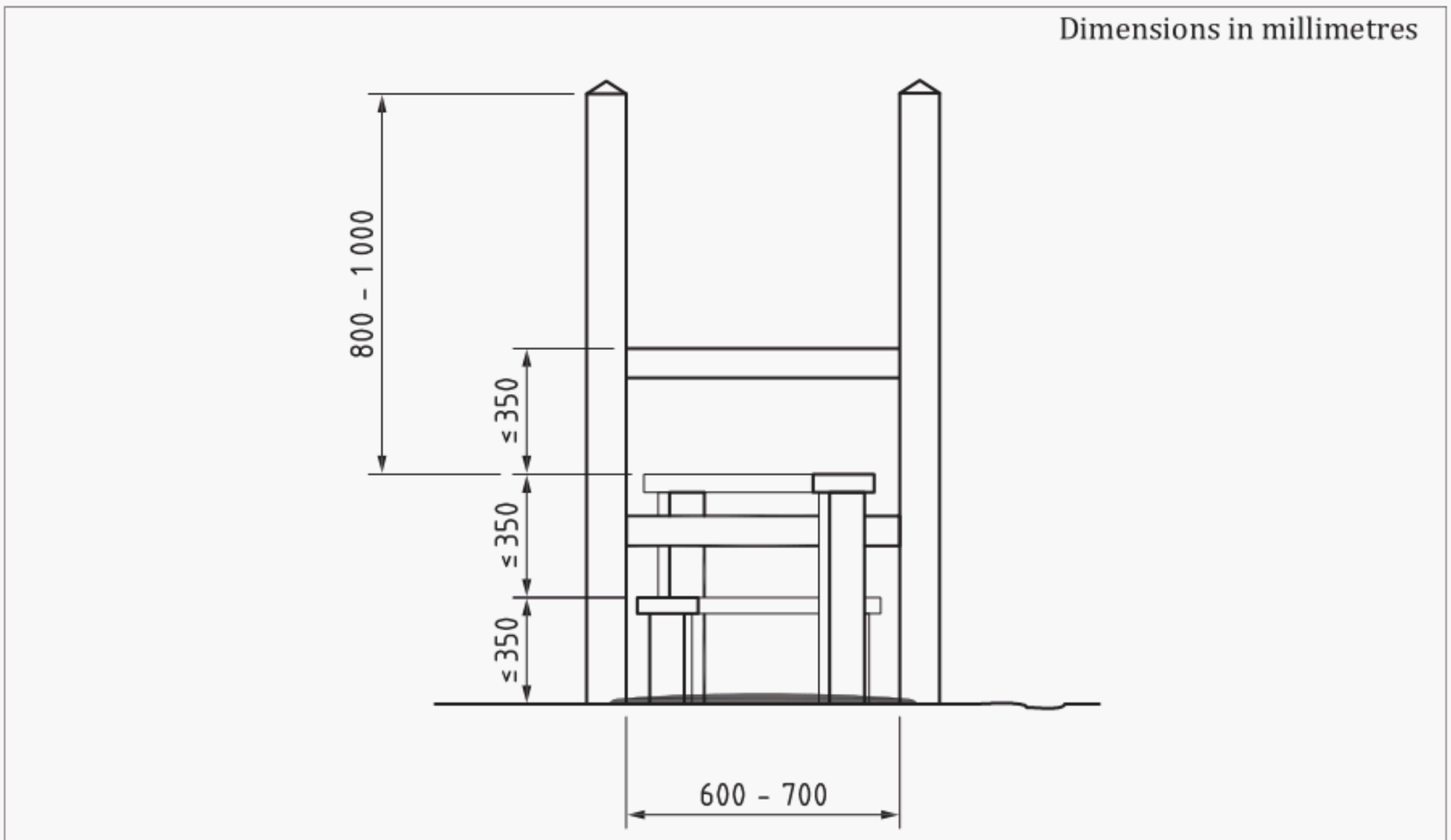
j) Steps shall not have a slope in any direction greater than 1 in 30 (i.e. over any 300 mm of the step surface it shall not be more than 10 mm out of level). Posts shall also be vertical to 1 in 30 (i.e. over 1 000 mm a post shall be not more than 33 mm away from the vertical).

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 not 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*



The top rail is optional.

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 meets dimensional and other requirements as specified in Clause **5** and **7.2** (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 1 Flat-topped stiles include those crossing stone walls or earth banks. They normally involve standing on the top with both feet whilst crossing.

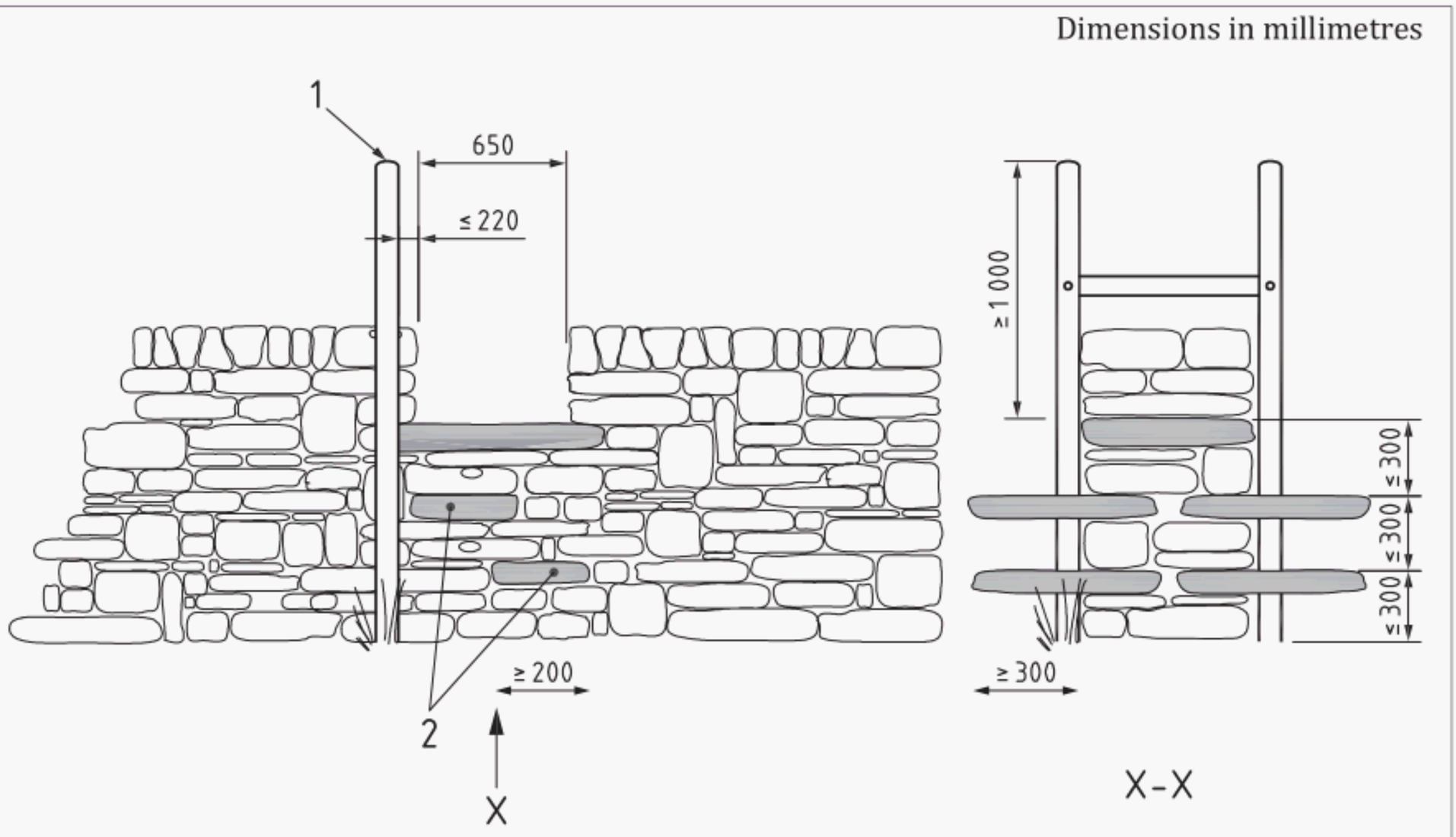
For stone stiles and stiles in which the top rail is a flat surface at least 300 mm along the line of travel and 650 mm across it, the requirements of Clause **5** and **7.2** apply but with the following variations (see example in Figure 11).

a) The stile posts shall extend above the flat surface by at least 1 000 mm. These shall be either 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.

NOTE 2 It is recognized that full conformity is sometimes difficult for this type of stile and it might have to be authorized as "To BS 5709 with [specified] exceptions".

Figure 11 — *Example of a stone flat topped stile*



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**, **7.1**, **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 not greater than 75 mm shall exist between the gate and the side posts.

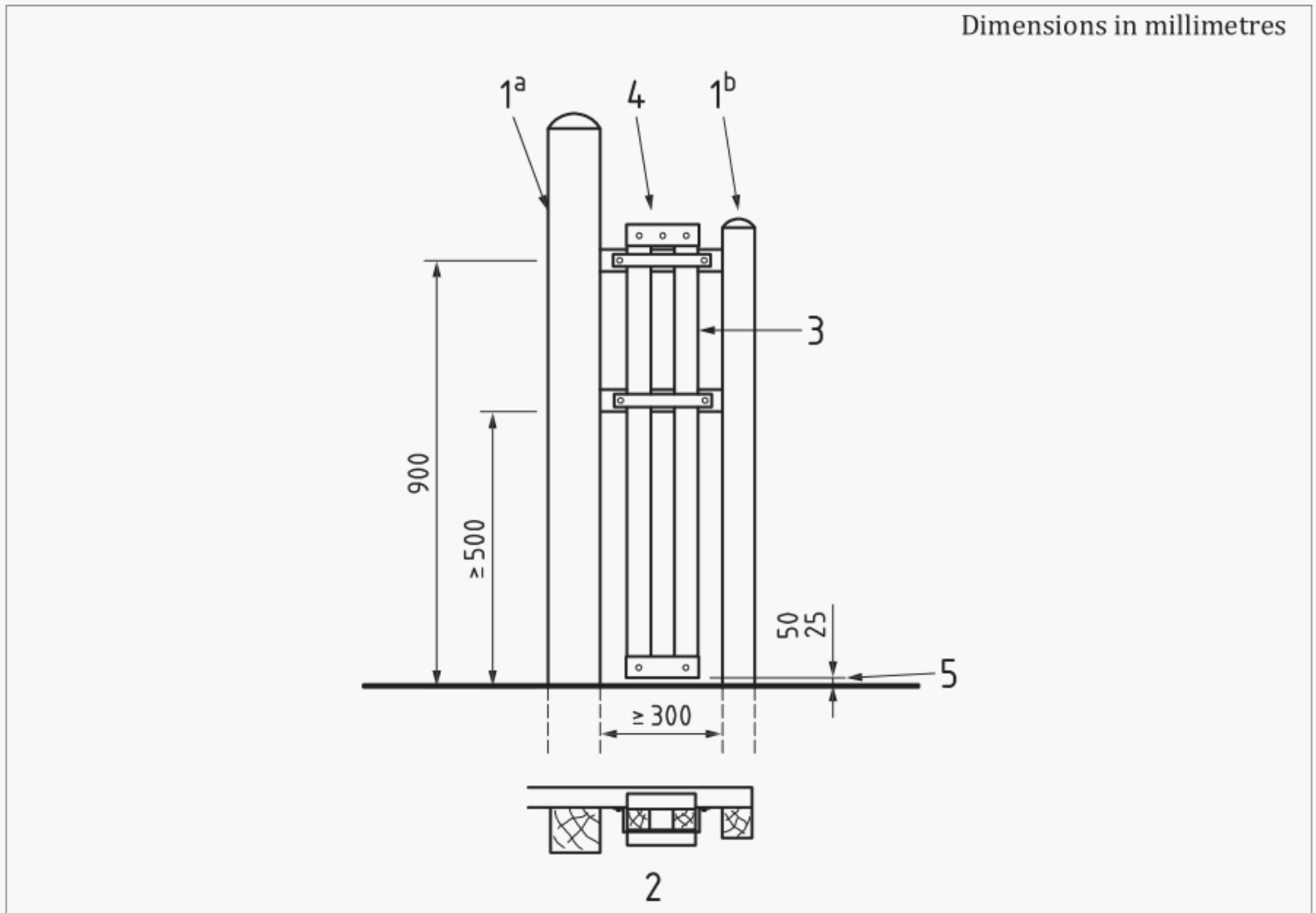
d) The door shall have a lower edge of at least 50 mm thick by 100 mm wide with rounded edges of at least 4 mm radius.

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 closed, 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*



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 meets dimensional and other requirements as specified in Clause **5**, **7.1** 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 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. the Highways Act 1980 [5] s.147) 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 this British Standard;

b) manoeuvring spaces;

c) surface quality, evenness, dryness and slope;

d) barbed wire or electric fence within 1 000 mm of the structure or manoeuvring space, or potentially injurious vegetation within 500 mm of the structure;

e) chamfering;

f) protrusions;

g) closing overlap, if relevant;

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

i) closing time of bridle gates; and

j) 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 made available on request.

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 8.2) shall all be made. If it has not been replaced or significantly altered then, if it remains the least restrictive, taking account of the ongoing land management needs (see 4.3) as a minimum the following shall be checked:

a) general appraisal of changes and/or deterioration;

b) that there is no barbed wire or sharp plants etc., on or near;

c) adequate ground surface quality;

d) adequate manoeuvring space;

e) closing time of 8 s or near if it is a self-closing bridle gate; and

f) no stiffening of latches, hinges or RADAR locks.

The results of these checks, with photographs as appropriate, shall be recorded and the report kept. If the structure is not still the least restrictive option then it shall be modified accordingly.

NOTE These ongoing checks may be carried out by anyone competent to do so.

Annex A (informative)
Nomenclature for authorizations

When specifying structures, the requirement to remain compliant while ensuring the structure meets the land management needs means that the structure might have to change. Land use that at the time of an authorization requires an unlatched kissing gate for farming reasons might later change and require a latched one or only require a gap. Therefore, words in an authorization such as "An unlatched kissing gate to BS 5709 at point X" become confusing. If the authorization is phrased as "A structure to BS 5709 at point X, initially an unlatched kissing gate" the confusion disappears.

Highways Act 1980 [5] s.147 authorizations can use these words or, as is currently quite often done, being a written document, have separate explicit clauses to the same effect. Commons Act 2006 [10] authorizations can do this too.

Structures authorized in diversion or creation orders can also use these words.

Highways Act 1980 [5] s.66 authorizations are within the ongoing ownership and control of the highway authority and the authority is free to alter the structure to match the needs at the time or to remove it entirely.

Annex B (informative)
Legislation

The following is a non-exhaustive list of legislation allowing authorization of structures:

a) the Highways Act 1980 [5], s.26(4), s.66(3), s.119(4), s.119A(4)(b), s.119B(9), s.129B(6), s.147(2);

b) the Commons Act 2006 [10], s.38;

c) the National Trust Act 1971 [11], s.23;

d) the Greater London Parks and Open Spaces Order 1967 [12], art. 12; and

e) the Civil Aviation Act 1982 [13], s.48(4).

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

Where wires are necessary then assessment should be made of the effect they have on the safety and convenience of people in their vicinity.

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 wires should not be used, but if it is necessary then

the wires 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; and

d) farm-type 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 and farm-type electric fences 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 to prevent shocks.

NOTE Certain barbed wire on land adjoining a highway might be removed in accordance with the Highways Act 1980 [5], Section 164, and might be prohibited in some circumstances under Section 147.

Bibliography

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., et al. *A trial of self-closing bridle gates. JP018*. Worcester: Natural England, 2015.

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

[4] GREAT BRITAIN. Animals Act 1971. London: HMSO.

[5] GREAT BRITAIN. Highways Act 1980. London: HMSO.

[6] GREAT BRITAIN. Countryside Act 1968. London: HMSO.

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

[8] GREAT BRITAIN. Deregulation Act 2015. London: The Stationery Office.

[9] GREAT BRITAIN. Road Traffic Regulation Act 1984. London: HMSO.

[10] GREAT BRITAIN. Commons Act 2006. London: The Stationery Office.

[11] GREAT BRITAIN. National Trust Act 1971. London: HMSO.

[12] GREAT BRITAIN. Greater London Parks and Open Spaces Order 1967. London: HMSO.

[13] GREAT BRITAIN. Civil Aviation Act 1982. London: HMSO.

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