Understanding the British Standard for Gaps Gates and Stiles

BS5709:2018 explained

The Standard covers gaps, pedestrian gates, bridle gates, kissing gates, dog gates, horse stiles of two kinds, kent carriage gaps, and step over and flat top pedestrian stiles.

These explanatory pages cover ten 'rules' applicable to all compliant structures. Examples are then given of a gap, a bridle/pedestrian gate, three kissing gates and a stile with dog gate. Rules specific to each structure type are referenced beside them. The Standard also covers horse step through gates, horse stile and the kent carriage gap.

The full Standard
BS5709:2018
(ISBN 978 0 580 98210 1)
is available from some libraries & bookshops and BSi British Standards
at 389 Chiswick High Road
London W4 4AL
www.bsi-global.com

'BS5709:2018 Explained' version Sept 2024 a

Produced to assist anyone involved with gaps gates or stiles: highways officer, path order maker, landowner, contractor, gate and stile manufacturer, path user and user group.
by
The Pittecroft Trust (registered charity) and Tom Bindoff
https://www.pittecroft.org

© 2024 but may be freely reproduced if done in full

What are the key changes in the 2018 version?

The needs of land managers have been made rather more explicit without losing sight of the overall need for the structures to be as least restrictive as practicable.

The trial of self-closing bridle gates at York in September 2015 has directed some changes, notably time-of-closure of these gates and the need for enhanced visibility (yellow) of latches and handles.

Very few new requirements have been introduced, beyond the two in the paragraph above. But several requirements have been spelled out more explicitly, for example there is now a check-list for conformance with some key mandatory requirements at installation and regularly thereafter (in the new Section 8 of the standard).

Some examples have changed. An illustration is given in the standard of a new type of bridle gate with a high-level ring latch. The trapezial kissing gate diagram has been dropped, a horse step-through gate has been added, the wide stile has been dropped and the narrow one made a little more stock-proof.

Barbed wire restrictions have been slightly reduced but it remains banned from being closer than 1m from a structure, plants capable of doing harm can now come closer, 500mm, to a structure, before the structure becomes non-compliant.

Latches are now more closely defined and the throw-over loop (rope or chain) is now included.

The set-back distances from vehicular roads have been revised.

The requirements for the surface quality at and near structures have been revised as have the ground-slopes for some structures. In some cases exceptions may be allowed but they now need to be documented with reasons.

Some dimensions have changed eg minimum footpath gap width was 1m is now 1.1m. Bridle gates must be minimum clear width 1.525m, previously that was 'between posts' (those authorised under earlier versions are exempt from the change).

As a result of a fatality, there are extra requirements for the very few gates weighing more than 80kg.

And last but not least, the new version in the introduction and in a new Annex A tries to clarify the wording to be used when referring to the standard in orders and other documents.

What has **not** changed is the failure to explicitly define maneuvering space, but it must be provided all the same.

INTRODUCTION

BS5709:2018 was drawn up by representatives of Natural England, CLA, NFU, OSS, BHS, Disabled Ramblers, IPROW, Highway Authority and a gate designer in a long process involving opportunity for public comment. It is, as in the two previous versions, performance based. The act of choosing which structure is suitable for a given situation is itself a requirement of the standard. Having made those choices, so long as the specified functional requirements and checks are met, then no matter what material is used in construction or what size or shape some parts of it may be, the conformance with the standard will be satisfied.

Ten key rules are described on the following pages, these 'rules' are not referred to as such in the standard but are used here as a checklist of the main requirements of the standard. Note the numbers do not correspond with the pre-2018 versions of this guide.

At the public consultation stage of this revision it emerged that some people misunderstood and thought it would automatically apply to all existing structures. That is not so, it only applies where it is explicitly said to do so, for example in a path diversion order or a Highways Act s147 authorisation. But following it would be good practice in many other situations.

DIMENSIONS The standard is concerned only with the functionally relevant dimensions of the structures. So for example the clear width through gates is specified but not their height or material.

Note: in rare cases it may not be practicable to keep to all of the BS5709 requirements. The standard can still be cited but with the exception spelled out. See 4.1 in the standard. This action is likely to be both better and simpler than not citing the BS at all and/or relying on some other local standard.

History of this British Standard:

- First published for 'stiles and gates' in 1979.
- The 2001 version was a major update. It included gaps. It moved from fixed designs to functional criteria. Countryside Commission, landowners, highway officers, user groups, manufacturers, all worked together on it.
- The 2006 version was a modest revision of the 2001 version.
- The 2018 version is a substantial re-write for clarity and for evenhandedness between the various people involved in implementing it. It takes account of the bridlegate trials near York in 2014.

Other relevant Pittecroft Trust publication:
Understanding the Defra guidance on Public Path Structures
and the Defra guidance itself can be found at www.pittecroft.org

This document is aimed at enhancing understanding of the principles and salient features of the standard, for the full and authoritative details the official document, BS5709:2018 (ISBN 978 0 580 98210 1) should be consulted.

RULE 1: LEAST RESTRICTIVE OPTION FOR THE LAND MANAGEMENT NEEDS

Least restrictive option must be chosen. The standard's words are:

The selection of a gap, gate or stile, 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. [4.1]

On public paths ***lawful users*** includes people of all ages and abilities, including users of mobility vehicles (wheelchairs and pushchairs) etc and dogs. There will be very few paths on which these users, including those with mobility vehicles, would not be able to travel, were it not for impassable structures. Just because other parts of the path are impassable to mobility vehicles perhaps because of existing stiles, does not, under this standard [4.4], allow stiles or non-mobility-vehicle-passable gates to be put elsewhere on the path. To do so would be to make it harder in future to give access for all. This is especially true of structures at the start of paths, where they leave a road. Some people with disabilities may get no further than the first field in the short term, but that is so much better than not getting anywhere at all.

The standard [Tables 1 and 2] lists various types of structure in order of accessibility for users, for footpaths that is basically Gap, Gate, Kissing Gate, Stile but is dependent on latching arrangements. So where something beyond a gap is needed then a two-way-opening self-closing gate is the preferred option (except adjoining roads where safety and vehicle exclusion may indicate a kissing gate).

Ideally the least restrictive is no structure at all and where there might be some other measure that would remove the need for any structure then that measure should be taken. An example would be where some side fencing or rerouting of cattle paths might allow elimination of the need for any cattle barriers at all on the path [4.3 c) Note 2].

Stiles. The standard also says **new structures on public paths shall not be stiles other than in exceptional circumstances** [7.1].

RULE 2: MANOEUVRING SPACE. [eg 5.2 Note 2]

This is the space needed to be kept clear so as to allow users to get into position to open, pass through, and close a gate or to negotiate a fixed structure. This is something that is a requirement of the standard but was found too difficult by the writers of that standard to specify clearly. A great deal more space is needed than is commonly assumed. One-way opening gates need more manoeuvring space than two-way opening ones and some horses and mobility vehicles (wheel or pushchairs) may need a three metre diameter space [6.3.8 Note]. Horse stiles need a 4 metre long space to meet the standard [6.5.j)]. It is desirable that those involved have some training involving users with wheelchairs, pushchairs or horses as appropriate. Best to get it right before installation, since just one or two potential users who are unable to manoeuvre through the structure might serve to prove non-compliance.

RULE 3: LOCATION OF STRUCTURES.

At vehicular roads, structures other than gaps must be set back at least four metres (some footpaths two metres) from the (usually metalled) carriageway. [5.6]

RULE 4: VISIBILITY OF LATCHES AND HANDLES [6.3.5].

All latches and opening-handles must be coloured yellow.

RULE 5: ONGOING & CHECKS.

The standard requires **continuous and ongoing compliance**. Thus even if at installation the structure is fully compliant, as soon as any of the functional requirements are no longer satisfied (for example by the placing of barbed wire on it or a broken hinge) it is no longer compliant with the BS and must be repaired or replaced. Also if the land use changes then the appropriateness of the structure has to be reconsidered and any changes to the structure made accordingly [4.4]. Time scales are not spelled out but barbed wire or a broken hinge might be expected to be corrected in a few days, whereas a change of land use would have a substantially

longer time scale (months) which could be affected by whether the change is expected to be permanent or not.
A new Section [8.2] 'Post-installation conformity checks' has ten mandatory checks which must be satisfied and recorded after installation, with photographs as necessary and all made available on request. Whilst anyone competent can do this check, the highway authority might be expected to do it and many already do. It only has to be done once.

Another new section [8.3] 'Ongoing checks' aids confirmation that the ongoing nature of conformance is satisfied. It has six checks. It sets a low bar of up to two years between these formal checks. Again anyone can do it, the landowner has the greatest incentive but user group, highway officer, or anyone else competent can do it; it simply has to be done, recorded and made available.
If these checks are not done, then the structure loses its compliance status which may render it unlawful and liable to removal or the owner to legal action.

RULE 6: GROUND. [5.5, 5.7]

The path within two metres of the structure and the ground through the structure as well as any part of the manoeuvring space beyond that has to be **free of surface water and provide a firm surface**. Except immediately after rain.
The ground slope for two metres either side of the structure must be **less than 1 in 6** unless it is not practical. Any exceptions to have the reason recorded and made available.

RULE 7: BARBED WIRE ETC. [5.2]

No barbed wire, electric fence etc within one metre of the structure or within the manoeuvring space. **No injurious plants within 500mm of the structure.**

RULE 8: PROTRUSIONS. [5.3]

No protrusions likely to catch clothes or cause injury, edges radiused to 2mm or chamfered to 3mm minimum.
And certain other requirements about protruding direction posts [5.4], trapping of fingers by moving parts [6.3.12].

RULE 9: SELF CLOSING BRIDLE GATES.

Self closing bridle gates are required to have a minimum closing time from fully open (and without wind) of 8 seconds. This requirement was derived from the York trials.

RULE 10: NOMENCLATURE FOR AUTHORISATIONS. [Introduction & Appendix A]

Description in documents.
1. BS5709 v BS5709:2018. 'To BS5709' on an order means 'to the latest version of BS5709' and 'to BS5709:2018' means to the 2018 version of BS5709 [Introduction]**.**
2. Type of structure in **orders**. Since the BS is an ongoing standard – the structure has to remain least restrictive – then sometimes the initial structure has to change either to a less restrictive or more restrictive one to meet landowners' or public's needs. If an order says 'an unlatched kissing gate to BS5709 at Point X' and later the least restrictive becomes a latched one or just a gap then it is hard to change the words. By putting 'a structure to BS5709 at point X, initially an unlatched kissing gate' the issue is resolved. It can be changed to any structure so long as it remains genuinely the least restrictive necessary. One might expect a highway authority certification of any such change.
3. Type of structure in **authorisations**. Authorisations, such as under Highways Act 1980 s147 should be written as rescindable at any time so the same phrase would do. In both orders and authorisations one could add (eg) 'any changes required by BS compliance to be approved by the highway authority'. Note 2 and 3 above are in the standard as informative only.

Examples of some structures compliant with BS5709:2018 so long as they remain 'least restrictive'.

For full information on these and various other types of structure see BS5709:2018 itself, details are on the front cover of this 'understanding' document. The diagrams here are examples of compliant structures, not simply the BS ones. **References thus:** (6.3.8) **are to sections of the BS**.

Note 1. Selection of type of structure: BS5709 always requires the structure giving the least restriction to the passage of users consistent with the demonstrable needs of the landholders (4)**.**
Note 2. All structures must be checked at installation and at regular intervals (8.2) (8.3)**.**
Note 3. Latches spring-balance-measured maxima are specified as 3kg grasping (e.g. moving handles) 1kg fingers (e.g. lifting latches). And gate opening 1.8kg maximum.
Note 4. Suggested words in Order or Authorisation: The right for the landholder to erect a structure to BS5709 at Point A, initially a Gap [or Bridlegate or whatever]. And one could usefully add (eg) 'any changes required by BS compliance to be approved by the highway authority'. Note the words 'the right for the landholder to erect' are intended to make it clear that the landholder is not obliged to keep any structure there. Even with these words an inspector in 2017 seemed to suggest otherwise!



Example 1: GAP (5) (6.1)

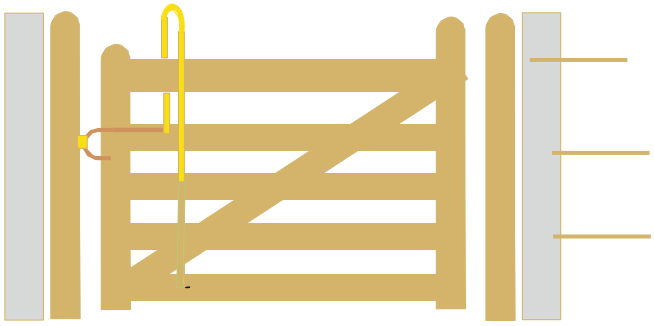
How a new gap on a recently diverted footpath might look.

Bollards define the width (minimum 1.1 metre) scratchy hedge is cut back at least 500mm from the gap

Gaps to be at least 1.1m Footpath, 1.525m Bridleway, 3.05m Byway. No barbed wire within 1 m or potentially injurious plant within 0.5 m. Adequate manoeuvring space for all users. Bollards or posts are not a requirement, but a 1.1 m gap would need a total of 3.1m barbed wire free or 2.1 m injurious plant free but only 1.1 m clear if hedge is say laurel and there was no barbed wire.
Ground through the gap and 2 m either side to be a firm surface and normally free of water unless formally recorded.

Suggested words in order or Authorisation: see Note 4 above.
Selection and checks, see Notes 1 and 2 above.

Example 2: Wooden non-self-closing or self-closing pedestrian or bridle gate



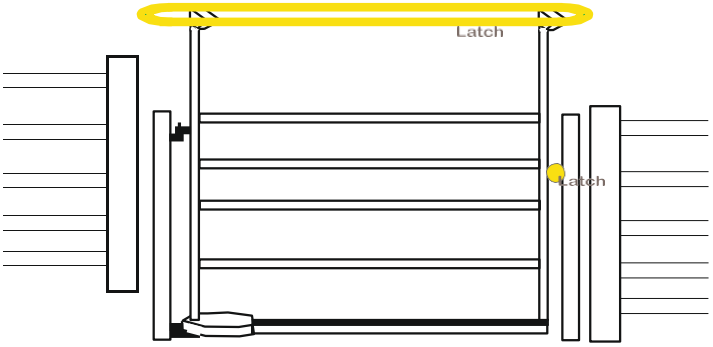
Selection and checks, see notes 1, 2, 3, and 4 above.



Both methods of unlatching must be marked yellow.

Installation of structure:
(5.2) barbed wire 1 metre injurious plants 500mm. (5.3) no projections on structure. (5.5) firm dry surface in and around. (5.6) set back from roads. (6.3.8) all users' manoeuvring space. (6.3.10) gateposts not used for fence straining. (6.3.11) clearance between gate and closing post. Etc.

Example 3a and 3b: Self closing two-way bridle gates
The examples chosen here both may need their hydraulic closures to meet the closing-time requiremment established at the York trial.



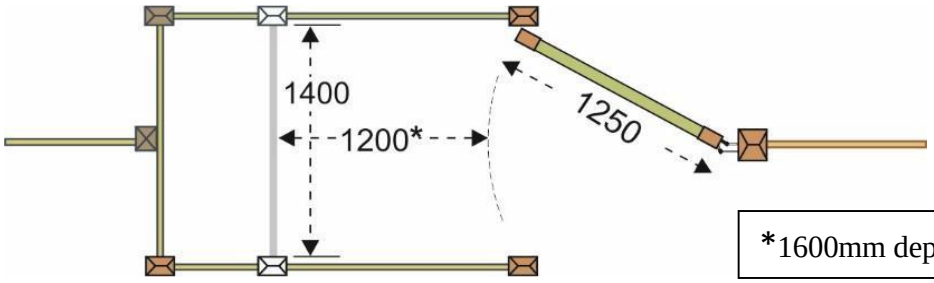


3a Example with high ring-type latch operating handle.

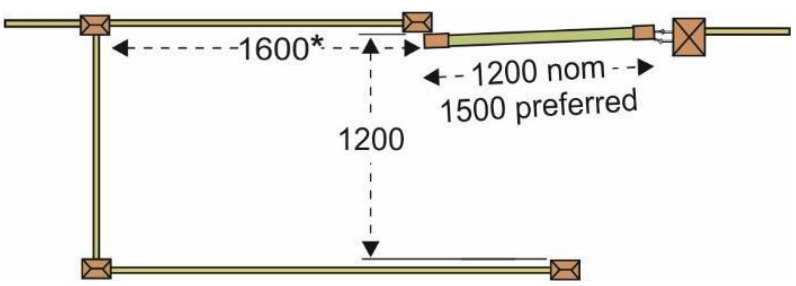
3b Example of latched metal bridlegate.

Selection and checks, see notes 1, 2, 3, and 4 above.

Example 4: Kissing gates
Installation of structure:
(5.2) barbed wire 1 metre injurious plants 500mm. (5.3) no projections on structure. (5.5) firm dry surface in and around. (5.6) set back from roads. (6.3.8) all users' manoeuvring space. (6.3.10) gateposts not used for fence straining. (6.3.11) clearance between gate and closing post. Etc. **Selection and checks, see notes 1. 2, 3, and 4 above.**



*1600mm depth allows larger mobility vehicles

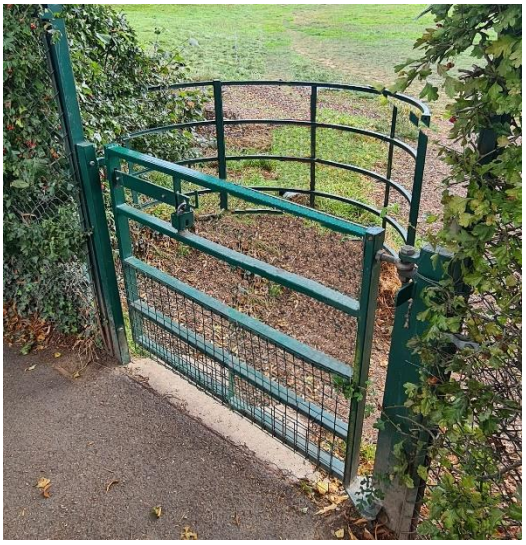


On the left is a design that fits all on one side of a boundary, useful at land ownership boundaries, also on the straight side it may be better for horses, not sticking out .

Another kissing gate overleaf

ALL KISSING GATES
A one metre diameter barrel, flat end on ground, must be able to pass through (6.4.a). Where mobility vehicles are in use there needs to be more space.
Latches, *only fitted if needed*, must be coloured yellow and easily accessible from both sides by all users (6.4.b) (6.3.5). Where mobility vehicle use is practicable the ground inside the structure and the outside manoeuvring space must be level or all in one plane (6.4.g).

When a RADAR lock is fitted, a notice (black on yellow) must be attached saying that the gate is not locked (6.4.j).



And a non-BS-compliant example: a metal kissing gate with RADAR accessibility
Notice saying 'not locked' is missing and hedge is encroaching.

Example 5: STILE (no diagram)

Two pedestrian types of stile are in the 2018 BS: Step-through and platform. The wider, single post, stile in the 2006 version is dropped. The platform stile may be useful on dry stone walls, the hand posts on these are on each side of the wall.
The step through stile may now be built to the 350 350 350 max stepping heights of the single-post in the 2006 version, but the 300 max proved best in the Countryside Commission trials, many years ago and is preferred. For new stiles the dog gate here is mandatory.
Typical main dimensions: steps 310, 310, 310 (to crossbar) [max 350]; between posts 600 to 700; Top step to top of posts 900 [spec is 900 +/- 100]; step surfaces 200x1000 min. Further detail in the BS (7.2) (7.3) (7.4).

See notes 1,2,3,4 above

Installation of structure:
(5.2) barbed wire 1 metre, injurious plants 500mm. (5.3) no projections on structure. (5.5) firm dry surface in and around. (5.6) set back from roads. (6.3.8) all users' maneuvering space. (6.3.10) posts not used for fence straining.

Other structures in the standard are Kent Carriage Gaps, Horse stiles & Step-through gates.