

# MAN-MADE BARRIERS & LEAST RESTRICTIVE ACCESS

## Principle of Least Restrictive Access

*"A gap is less restrictive than a chicane or bollard, which is less restrictive than a self-closing gate, which is less restrictive than a stile. So, when a stile is removed, the first option is to seek to replace it with a gap. If this is not an option, it is replaced by a chicane or bollard, and then a gate that is as accessible to as wide a range of people as possible.*

*All options must be compliant with the  
British Standard for Gaps, gates and stiles (BS 5709:2018)."*

[outdoor-accessibility-guidance-18April2023.pdf \(sensorytrust.org.uk\)](#)

## INTRODUCTION

Disabled Ramblers has its origins in the 1990s [History \(disabledramblers.co.uk\)](#). Access to the countryside was a huge challenge then and, sadly, remains a huge challenge now. Although this document concerns barriers in the sense of physical structures, it should be recognised that barriers to access can also be people's attitudes, availability of relevant information, lack of relevant signage, poorly designed or maintained paths, etc.

Today Disabled Ramblers continues to inform and to campaign for a countryside where people with limited mobility can have an equality of experience that is worthwhile and enjoyable.

*"An inclusive approach is underpinned by the Equality Act 2010 and related legislation. It is required by planning systems, expected by funders and increasingly supported by design guidance. Perhaps most importantly, making places, paths and routes and services accessible to people of all ages, abilities and characteristics has increasingly become recognised as simply the right thing to do."* [outdoor-accessibility-guidance-18April2023.pdf \(sensorytrust.org.uk\)](#)

There are a significant and steadily increasing number of people with limited mobility who like to get off tarmac onto natural surfaces and out to wilder areas to enjoy great views, getting in touch with nature whenever they are able to. There are many ways they achieve this, depending on the individual and how rough and steep the terrain is. A determined pusher of a manual wheelchair can enable access to a disabled person across grass and up steep hills. An all-terrain mobility scooter rider can manage rough terrain, significant slopes, cross water up to 8" deep, and depending on their battery type and the terrain they are on,

they can easily run eight miles or more on one charge. Some people upgrade to lithium batteries that, in favourable circumstances, allow a range of about 60 miles on one charge.

Many more people are now using mobility vehicles in urban areas, both manual and electric. 'Pavement' scooters and powered wheelchairs often have very low ground clearance, and some disabilities mean that riders are unable to withstand jolts, so well-placed dropped kerbs and safe places are needed to get across roads.

Users of mobility vehicles have the same rights of access as walkers. Many existing man-made structures, (gates, footbridges, stiles etc) are a barrier to the legitimate access of riders of mobility vehicles. Access should be available to everyone, including riders of large powered chairs, 'all-terrain' scooters and 'pavement' scooters. [Rights of way and accessing land: Use public rights of way - GOV.UK \(www.gov.uk\)](#).

As much as is possible, barriers should be removed and land and rights of way kept free of barriers.

### Disabled Ramblers campaign for

- installation of new structures that provide the least restrictive access possible for those who use large mobility vehicles, and that complies **with British Standard BS5709: 2018 Gaps Gates and Stiles**.
- landowners and responsible bodies to conduct **audits** of existing man-made structures, **reviews** of those structures that are a barrier to people who use mobility vehicles, and, where possible, removal of unsuitable structures and replacement with the most accessible solution to provide the least restrictive access possible (see Section A.2 Path and route standards, grades and audits [outdoor-accessibility-guidance-18April2023.pdf \(sensorytrust.org.uk\)](#) )
- compliance with the **Equality Act 2010**
- compliance with the **Countryside Rights of Way Act 2000** (see [Countryside and Rights of Way Act 2000 - Explanatory Notes \(legislation.gov.uk\)](#) and particularly paragraphs 71, 77 and 157)
- adherence to **Outdoor Accessibility Guidance: Supporting inclusive outdoor access in the UK** [outdoor-accessibility-guidance-18April2023.pdf \(sensorytrust.org.uk\)](#) (This guide updates and expands on Countryside for All which was published by The Fieldfare Trust)
- adherence to the advice from **Disabled Ramblers** as set out below

The suitability of a structure should always be determined with the assumption that a person with limited mobility will not be accompanied by more-mobile helpers, so will need to negotiate the structure on their own, while seated on their mobility vehicle.

Care should be taken to study the information in this document and to find the most accessible solution for each situation. It should be noted that some structures which are

marketed as being accessible are actually not accessible to many people with limited mobility.

New structures should allow convenient access to mobility vehicle riders as standard and should comply with British Standard BS5709: 2018 Gaps Gates and Stiles which places the emphasis on Least Restrictive Access.

Whilst BS5709:2018 does not automatically apply retrospectively to most existing structures, Disabled Ramblers would like to see existing structures removed, replaced, or adapted as soon as possible if they are not already the least restrictive and the most accessible solution for each situation.

Where this is not possible, the least restrictive and the most accessible alternative should be provided nearby wherever feasible. For example, a slope adjacent to steps, a gap beside a historic gate, or a signed short diversion. Some structures can have a 'life' of 25 years – it would be a crying shame if those with limited mobility have to wait this long before they can be afforded the same access that walkers have to those areas where the terrain is suitable for mobility vehicles.

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## **1. NOTES ON MOBILITY VEHICLE MEASUREMENTS**

- Legal maximum width of a Class 3 Mobility Vehicles is 85cm.
- Length of mobility vehicles is not restricted; 1.8m is a fairly normal length for a mobility vehicle. However, there may be rear mounted storage boxes or crutch holders adding to its length. Sometimes mobility aids such as wheelchairs and rollators are carried at the rear.
- Manoeuvring space required for a large mobility vehicle depends very much on the structure being negotiated. To open a field gate this can be 4m x 4m.
- Space required to turn a large mobility vehicle through 90° is 2.5m.
- The ground before, through and after any gap or barrier must be firm and compact. It should be flat otherwise the resulting tilt of the mobility vehicle effectively reduces the clear width available.
- Attention must be paid to clearance above head height – some mobility vehicles are equipped with overhead canopies and crutch holders.

## **2. ACCESSIBILITY OF GAPS AND BARRIERS IN LEAST RESTRICTIVE ORDER**

### **2.1. Gaps**

A gap is always the preferred solution for access, and is the least restrictive option.

A cost-effective way of improving access to riders of large mobility vehicles is to create a gap alongside an existing gate or stile.

- Gaps should have a clear width of 1.5m to allow easier access for those less able to steer a precise line, those accompanied by other people, or by assistance or pet dogs, and to allow riders to adjust their line a little if there are bumps in the path. BS 5709:2018 stipulates minimum clear width for gaps as 1.1m on footpaths (but we think this is too narrow) and 1.525m (5') on bridleways.

- The clear width of the gap should be maintained vertically to at least 2.4m to allow for bodywork, canopies, walking sticks in holders etc. (3.7m is required on bridleways). Attention should be paid to the height of overhanging vegetation and signs so they do not impinge on the available clear height

## **2.2. Bollards**

Bollards can be used to reduce the width of a gap where there is a particular need, such as restricting access to cars and larger vehicles without restricting access to mobility vehicle riders.

Removeable bollards can be used to allow access to permitted vehicles or machinery such as grass cutters.

- The specification for gaps (above) should apply to at least one of the gaps beside a bollard

## **2.3. Chicanes and staggered barriers**

Many chicanes, particularly older ones, are impassable by mobility vehicles. Other forms of staggered barriers, such as single hurdles used to slow people down before a road, are very often equally impassable. In such cases they should be removed and replaced with a gap, or a bollard as the least restrictive option. But where necessary, they could be replaced with an accessible chicane or pair of staggered barriers.

- The path through the chicane or barriers must be wide enough at all points for a large mobility vehicle to manoeuvre through - a large mobility vehicle needs a 2.5m space to turn through 90°
- The clear width of the path through the chicane or barriers should be maintained vertically to at least 2.4m to allow for bodywork, canopies, walking sticks in holders etc. Attention should be paid to the height of overhanging vegetation and signs, so they do not impinge on the available clear height

A well-designed chicane is preferable to a gate. If the leaves of the chicane are hinged to a post or wall, they can be moved out of the way of the path altogether when needed to allow access for maintenance machinery and permitted vehicles.

For further information on manoeuvring and turning space required for a large mobility scooter, see page 54 of [outdoor-accessibility-guidance-18April2023.pdf](https://sensorytrust.org.uk/outdoor-accessibility-guidance-18April2023.pdf) ([sensorytrust.org.uk](https://sensorytrust.org.uk))

## **2.4. Accessible gates**

Gates are more restrictive than accessible gaps, bollards and chicanes so new, accessible, gates should only be installed where there is a justifiable reason to do so. If existing gates need to be retained, and a gap cannot be created beside or near them, they should be altered to be as accessible as possible.

Accessible gates should

- be fastened open whenever possible unless there is a justifiable reason to be shut e.g. livestock in a field. Well-meaning people often close an open gate, so it should be chained back and secured with a shackle or lock and accompanied with a sign explaining why it is open, or advising to leave the gate as it was found
- have a clear width of 1.5m to allow easier access to those less able to steer a precise line, those accompanied by other people, by assistance or pet dogs, and to allow riders to adjust their line a little if there are bumps in the path. BS 5709:2018 stipulates minimum clear width for gates as 1.1m on footpaths (but we think this is too narrow) and 1.525m (5') on bridleways
- have the clear width of the gap through the gate maintained vertically to at least 2.4m to allow for bodywork, canopies, walking sticks in holders etc. (3.7m is required on bridleways). Attention should be paid to the height of overhanging vegetation and signs so they do not impinge on the available clear height
- be well maintained
- be two-way
- be operable by unaccompanied people, seated on their mobility vehicle
- have sufficient manoeuvring space for a large mobility vehicle rider to reach the latch while seated on their mobility vehicle
- be fitted with an Easy Latch [Easy Latch for Two-Way Gate - Centrewire](#) with an adjacent instruction notice
- have trombone handles
- have the handles and latches painted yellow to be easier to spot at a distance, and to see where to open them.
- ideally, have barge boards to allow a mobility vehicle rider to push through a gate when it is unlatched
- have a controlled self-closing mechanism (fast closing gates, e.g. by a spring closure or gravity mechanism, are not accessible)

### **Notes:**

#### ***One-way, non-self-closing gates - not advised***

*One-way opening gates and those that do not self-close are less accessible than two-way self-closing gates. They need much more manoeuvring space to operate from a mobility vehicle than two-way self-closing gates. Large mobility vehicles may need a 4 x 4m space to manoeuvre to open or close these gates.*

## ***Field gates and similar large barriers - not accessible***

*Field gates (sometimes used across access roads) are too large and heavy for those with limited mobility to use.*

- *If such a gate is needed, it should be paired with an alternative such as an accessible gap or an accessible gate (see above). If this is not possible, a 2-in-1 gate arrangement, eg York 2-in-1 where one of the gates is accessible is an acceptable alternative (see below).*

## **2.5. York 2-in-1 gate**

A York 2-in-1 gate [York 2-in-1 - Centrewire](#), or a similar gate arrangement, should have one part which is accessible to large mobility vehicles.

- The accessible part of the gate should ideally have a clear width of 1.5m
- the specifications stated above for an accessible gate are also applicable to a York 2-in-1 gate.
- Where the York gate needs to span a small width, the accessible part of the gate should ideally have a clear width of 1.5m (minimum 1.1m) and the non-accessible part can be custom made to fit across the remaining gap.

## **2.6. 'Airlock' gates system**

Where a single gate has proved to be insufficient, the 'airlock' gates system is an alternative way to prevent livestock escaping while still allowing access to large mobility vehicles. This comprises a two-way accessible gate (see above for specification for an accessible gate) which leads into a fenced box area with another two-way accessible gate at the other end.

For the 'airlock' gates system to be accessible

- the specifications stated above for an accessible gate are also applicable to both gates of an 'airlock' gates system
- the box between the two gates should have a length of at least 2m plus the width of the gate (ie 3.5m if the gate has a clear width of 1.5m)
- the box between the two gates should be wider than the width of the gate to allow sufficient manoeuvrability space for opening and closing

## **2.7. Kissing gates - should be avoided**

The installation of new kissing gates of any description should be avoided as they are among the least accessible structures for those who use mobility vehicles and are completely inaccessible to many. Unfortunately, some kissing gates are still marketed as being accessible.

Existing kissing gates should be replaced with the least restrictive option as soon as possible.



Note about RADAR locks on kissing gates and other gates:

It was hoped that RADAR locks on kissing gates and other gates would make them more accessible, but this has not proved to be the case. Mobility vehicle riders find RADAR locks difficult or impossible to use. Here are some of the reasons why they are not accessible to many people:

- rider has insufficient dexterity to operate the lock
- rider cannot get off mobility vehicle to reach the lock, or can't reach lock from mobility vehicle (poor balance, lack of core strength etc.)
- position of lock is in a position where mobility vehicle cannot come alongside lock to reach it, even at an angle
- RADAR lock has not been well maintained and no longer works properly
- not all disabled people realise that a RADAR key will open the lock, and don't know how these kissing gates work. There must be an appropriate, informative, label beside the lock.

## **2.8. Motorcycle barriers, A frames, K barriers and similar - should be avoided**

Motorcycle barriers seldom meet the BS 5709 standard's minimum clear width for a gap and gate of 1.1m at ground level, and as these structure extend vertically from the ground to a point where the gap reduces significantly, they form an intimidating, and very often inaccessible narrow gap. They are to be avoided.

They have often been put in place to restrict the illegal access of motorcycle riders however in doing so they are a barrier to the legal access of those who ride mobility vehicles.

Existing motorcycle barriers should be removed - they are often no longer needed. The case for avoidance of and removal of these barriers is made very well by Sustrans. [Sustrans traffic-free routes and greenways design guide: 9. Access to routes](#)

Motorcycle barriers should only ever be installed as last resort and as a temporary measure where law enforcement methods are failing to curtail antisocial behaviour and there is a proven, significant, recent and ongoing problem of illegal motorcycle use.

- The problem should continue to be monitored, and the barriers removed as soon as possible

## **3. OTHER MAN-MADE STRUCTURES**

### **3.1. Steps**

Riders of mobility vehicles need step-free routes.

- Existing steps could be replaced, or supplemented at the side by a slope or ramp



- Where this is not feasible an alternative route should be provided, if at all possible. Sometimes this might necessitate a short diversion, regaining the main route a little further on, and this diversion should be signed

### 3.2. Footbridges

Footbridges should be designed to be accessible to riders of large mobility vehicles. To be accessible and safe a footbridge should

- be sufficiently strong and wide; ideally with a clear width of 1.5m (but a minimum of 1.1m) between the edge boards.
- have edge boards at least 7.5cm high which run along the base of the bridge at either side to reduce the risk of slipping off the edge.
- have a well-maintained and non-slippery surface with boards at right angles to the direction of travel (chicken wire must not be used as it punctures tyres and injures dogs' paws)
- have parapets and handrails
- not have a gap or step between the bridge and the adjacent ground at the points of access to the footbridge. Where necessary there should be a ramp at either end suitable for mobility vehicle riders.
- If the footbridge is long, it should have passing places of at least 2.2m clear width

For further detail please refer to [outdoor-accessibility-guidance-18April2023.pdf](https://sensorytrust.org.uk/outdoor-accessibility-guidance-18April2023.pdf) ([sensorytrust.org.uk](https://sensorytrust.org.uk)) section A11 Boardwalks and Bridges

#### **Note:**

#### ***Sleeper bridges***

*Small informal bridges over a ditch are very often sleeper bridges. They are usually constructed of 3 railway sleepers, but they need to be at least 4 sleepers wide to allow for use by mobility vehicles. Installation of new sleeper bridges is not advised as there are no safety features.*

- *Existing sleeper bridges should be upgraded to proper footbridges as soon as possible*

### 3.3. Boardwalks

Boardwalks can be very advantageous to riders of mobility scooters, especially over ground that is soft, wet or sandy, and are often the only way of allowing access across these areas. To be accessible and safe a boardwalk should

- be of an appropriate width for the expected level of use. It should have a minimum clear width between edge boards of at 1.5m

- have deck level edge boards at least 7.5cm high at either side to reduce the risk of slipping off the edge
- have a well-maintained and non-slippery surface with boards at right angles to the direction of travel (chicken wire must not be used as it punctures tyres and injures dogs' paws)
- have no gaps or steps between the boardwalk and the adjacent ground at access points to the boardwalk. Where necessary there should be a ramp at access points suitable for a large mobility vehicle
- have a turning platform to allow sufficient room for a large mobility vehicle to turn (a large mobility vehicle needs 2.5m to turn 90°) wherever the boardwalk changes direction, or there is a dead end
- have passing places on longer boardwalks every 100m, or more frequently if visibility is restricted, to allow two large mobility vehicle riders to pass each other. The passing place should have a clear width of at least 2.2m

For further detail please refer to [outdoor-accessibility-guidance-18April2023.pdf](https://sensorytrust.org.uk/outdoor-accessibility-guidance-18April2023.pdf) ([sensorytrust.org.uk](https://sensorytrust.org.uk)) section A11 *Boardwalks and Bridges*

### 3.4. Stepping stones

There may be good reasons to retain stepping stones, such as being listed by Historic England, or simply just because they are fun. However, they are obviously not accessible to mobility vehicles and many walkers are also unable to use them.

- A suitable and accessible bridge or boardwalk (see above) should be provided nearby

### 3.5. Stiles

Stiles are a barrier to mobility vehicles, less agile walkers, and families with pushchairs. They should be replaced with a gap or the least restrictive alternative.

- If there is a justifiable reason to retain the stile, such as it being listed by Historic England, then an accessible alternative to the stile should be provided nearby

## 4. Urban areas, obstructions and kerbs

In urban areas people with limited mobility may well be using 'pavement' or 'shopping' scooters which have low ground clearance and often are large.

- Where the path follows a footway (e.g. pavement) it should be sufficiently wide for large mobility vehicles, and free from obstructions of any kind
- The provision and correct positioning of dropped kerbs at suitable places along the footway is essential. Every time the path passes over a kerb, a dropped kerb should be provided

## 5. FURTHER INFORMATION

**5.1. By All Reasonable Means – Least restrictive access to the outdoors (Sensory Trust 2020)** [ByAllReasonableMeansEnglandAug2020.pdf \(sensorytrust.org.uk\)](#)

A guide for those responsible for providing public outdoor access and recreation, thinking about equality of access to the countryside and open spaces.

(In 2024 this is being updated to align more closely with Outdoor Accessibility Guidance – Supporting inclusive outdoor access in the UK 2023.)

**5.2. Outdoor Accessibility Guidance – Supporting inclusive outdoor access in the UK (Paths for All / Sensory Trust 2023)** [outdoor-accessibility-guidance-18April2023.pdf \(sensorytrust.org.uk\)](#)

‘Countryside for All’ (Fieldfare Trust) has widely been respected as the benchmark reference for improving access to the countryside since 1997. This guide updates and expands on ‘Countryside for All’ to reflect a wider diversity of people and landscape, and to bring it in line with the Equality Act 2010 and other relevant legislation and is now the go-to reference.

**5.3. BS 5709:2018 Gaps Gates and Stiles - Specification (British Standards Institution 2018)** [Explanation of BS5709:2018](#)

The 2018 British Standard notes the requirements of the Equality Act 2010 and the safety of path users, taking account of the needs of land management whilst placing the emphasis on Least Restrictive Access.

**5.4. Statutory guidance The Countryside Code: advice for land managers (2023)** [The Countryside Code: advice for land managers - GOV.UK \(www.gov.uk\)](#)

Sections relevant to the Disabled Ramblers advice include ‘Public rights of way: landowner responsibilities’ – structures for access, ‘Understand visitors’ access rights on your land and ‘Keep rights of way useable’.

**5.5. Explanatory Notes to the Countryside and Rights of Way Act 2000 (DETR)** [Countryside and Rights of Way Act 2000 - Explanatory Notes \(legislation.gov.uk\)](#)

Of particular relevance to the Disabled Ramblers advice are paragraphs 71, 77 and 157 in Part 2: Public rights of way and road traffic.

**5.6. Sustrans Traffic-free Routes and Greenways Design Guide 9. Access to routes (Sustrans 2022)** [Sustrans greenways design guide: 9. Accessibility to routes - Sustrans.org.uk](#)

An overview of the design of access points, access controls and the removal of restrictive access associated with traffic-free routes and greenways. Particularly useful are the sections on Preventing unauthorised access and Access points at roads.