

Types of SHARED SPACES

Conditions for accessibility



GENERAL MAGNAGEMENT
Department of Personal Autonomy,
Technology and Accessibility

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INTRODUCTION


The publication of the document entitled “PLATAFORMAS ÚNICAS. Criterios ONCE”¹ (Shared Spaces: ONCE Criteria) in 2017 was the culmination of a study carried out by ONCE employees on the designs of the spaces that were being implemented at that time. It outlined the problems stemming from the unwarranted implementation of shared spaces and made a clear proposal on agreed solutions for such designs. This served to unify criteria and to provide a consistent response to the specialists from the various government bodies, especially local councils, as well as to other professionals involved in the field of accessibility.

This document provided material detailing the movement of visually impaired people and described the conditions for implementing shared spaces, in addition to alternative solutions to the various problems in order to guarantee the safety and usability of these spaces for all people and, in particular, for those with severe visual impairment.

Over time, the proliferation of shared spaces has resulted in numerous different designs, which are even becoming prevalent in new urban environments and in solutions applied to various uses of public spaces, such as ‘superblocks’. The traffic zones for pedestrians and vehicles and the intersections established between them are increasingly unclear and poorly defined, which in practice leads to ongoing or growing problems with safety and orientation for visually impaired pedestrians.

1 PLATAFORMAS ÚNICAS. Criterios ONCE. https://portal.once.es/bibliotecas/fondo-bibliografico-discapacidad-visual/plataformas-unicas-criterios-once/Plataformas%20Unicas%20%20Criterios%20ONCE.pdf/at_download/file





Furthermore, with regard to current legislation, the approval of Order TMA/851/2021² repealing Order VIV/561/2010, provides a broader overview of the designs of these shared spaces. The “Accessibility Guide”³, a document that describes and expands on specific aspects of the new regulation, includes a new classification of these spaces, identifying them as “shared traffic spaces” and spaces with “segregated pedestrian and vehicular traffic”. In this respect, it should be noted that the practical differences between “shared spaces with shared traffic” and areas that are clearly pedestrianised are difficult to discern and it may only be possible to distinguish between them based on the conditions under which they are implemented, according to the width of the road, the differing uses assigned to them or the types of vehicles allowed to circulate on them.

It is therefore expedient to review the “PLATAFORMAS ÚNICAS. Criterios ONCE” document, with the aim of providing guidelines that are adapted to present circumstances and the new regulations, as well as specific recommendations for the safe movement of visually impaired people.

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- 2 Order TMA/851/2021. <https://www.boe.es/boe/dias/2021/02/06/pdfs/BOE-A-2021-1751.pdf>
 - 3 Accessibility Guide (Page 31 to 34) https://cdn.mitma.gob.es/portal-web-drupal/estudios_y_publicaciones/guia_accesibilidad.pdf



SHARED SPACES

2.1. Definition

Urban areas shared by pedestrians and vehicles without any differences in ground levels.

2.2. Types of shared spaces

Shared spaces with shared traffic

Spaces shared and occupied by vehicles and pedestrians with pedestrian priority.

Shared spaces with segregated traffic

Spaces in which pedestrians and vehicles occupy different areas, with features that mark the boundary between the pavement and the road, even if there is no kerb. Generally, the vehicular traffic zone is located in the central part of the space.



PREREQUISITES FOR IMPLEMENTATION

They must have a mobility study that shows that they are advisable and technically guarantees compliance with the conditions outlined in this document in order to ensure both accessibility and safety for all persons.

A shared space will be a suitable solution for a road whose width or layout does not ensure an accessible pedestrian route and makes it impossible to segregate vehicular and pedestrian routes at different levels. **Otherwise**, the separation between the road and the pavement will be maintained by means of a kerb.



Image 1. Street where the implementation of an shared space is warranted due to narrow pavements that are impassable for pedestrians.





Image 2. Suitable shared space solution on a narrow street.



OUTLINE OF THE EXISTING PROBLEM

The distinction between shared spaces in which pedestrian and vehicular traffic is shared or segregated, as set out in the current regulations, is not actually supported by clear design elements that allow both pedestrians and drivers to unequivocally recognise each type of space and, therefore, distinguish between them.

This creates confusion, disorientation and hazards in traffic for all people, especially for the visually impaired.

Moreover, the indiscriminate and unwarranted implementation of shared spaces, regardless of road width, traffic and the types of vehicles that circulate on them, where a conventional road would be advisable, leads to dangerous situations and inefficient use of them by pedestrians.

The following images (3, 4 and 5) show examples where the implementation of a shared space is not justified and it is impossible to tell whether it is shared-use or segregated.



Image 3.





Image 4.



Image 5.



SHARED SPACES WITH SHARED TRAFFIC. DESIGN AND USAGE CRITERIA

5.1. Pedestrian priority

Pedestrian traffic will have priority throughout the space.

5.2. Layout of the area

The existing areas must be arranged in such a way that the different uses are clearly identified, the street furniture is laid out in a consistent manner and there are specific areas for stopping vehicles (loading and unloading, authorised vehicles, etc.).



Image 6. Uniform pavement design and well-arranged street furniture.



5.3. Restricted public transport

There must not be any form of public transport traffic.



Image 7. Public transport and pedestrians in the same space create extremely hazardous situations.



5.4. Permitted vehicles

Only authorised vehicles may have access, subject to the restrictions established in the current regulations. Bicycles, personal mobility vehicles or similar will be subject to these restrictions.



Image 8. Bicycles and personal mobility vehicles are subject to the same restrictions as all other vehicles.





Image 9. Unauthorised personal mobility vehicle on this road.

5.5. Paving

The same paving and paving layout should be used throughout the shared space; it should not be laid out or arranged in a way that could create the impression that vehicles have priority in any particular area.



Image 10. Paving markings that suggest that vehicles have priority.





Image 11. Design that gives the impression that vehicles have priority.



5.6. Design of the safe zone

The following criteria must be met to provide such areas:

- It must be located on both sides of the road, with a width of no less than 1.80 m from the building line, landscaped area or horizontal element that demarcates it. Where there is insufficient space, it must be provided on one side.



Image 12. Safe zone on one side of the road.



- One of the following options should be implemented to allow visually impaired persons to identify it:
 - a. Installation of a strip of visual tactile warning paving that is between 40 and 60 cm wide on its outer edge, with no difference in colour from the adjacent paving.

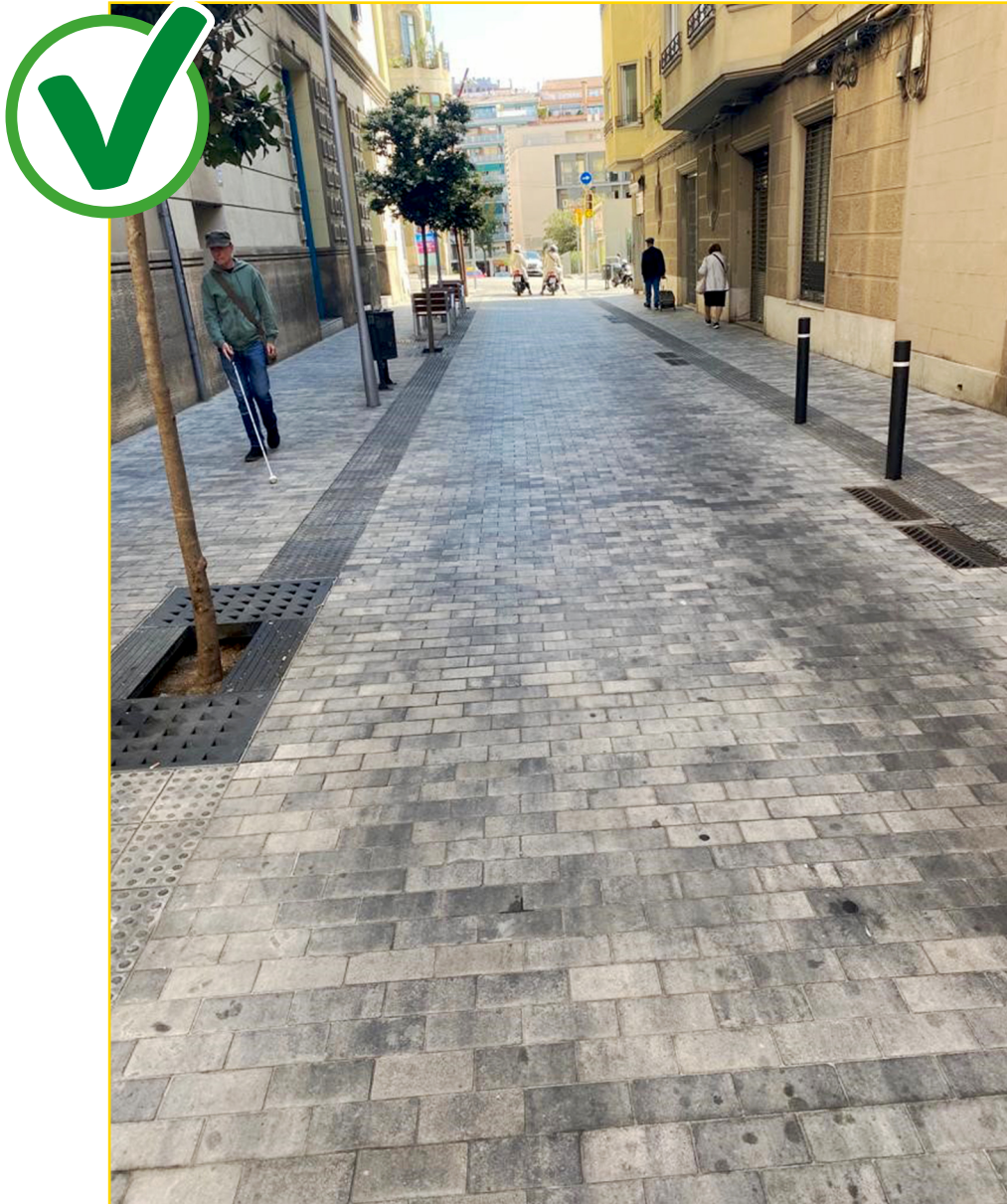


Image 13. Strips of visual tactile warning paving on both sides of the road.



- b. Installation of a delineator strip (groove) that is between 40 and 60 cm wide, no difference in colour, allowing the user to move around in open spaces and/or in areas where it is not possible to provide a safe zone adjacent to the wall.

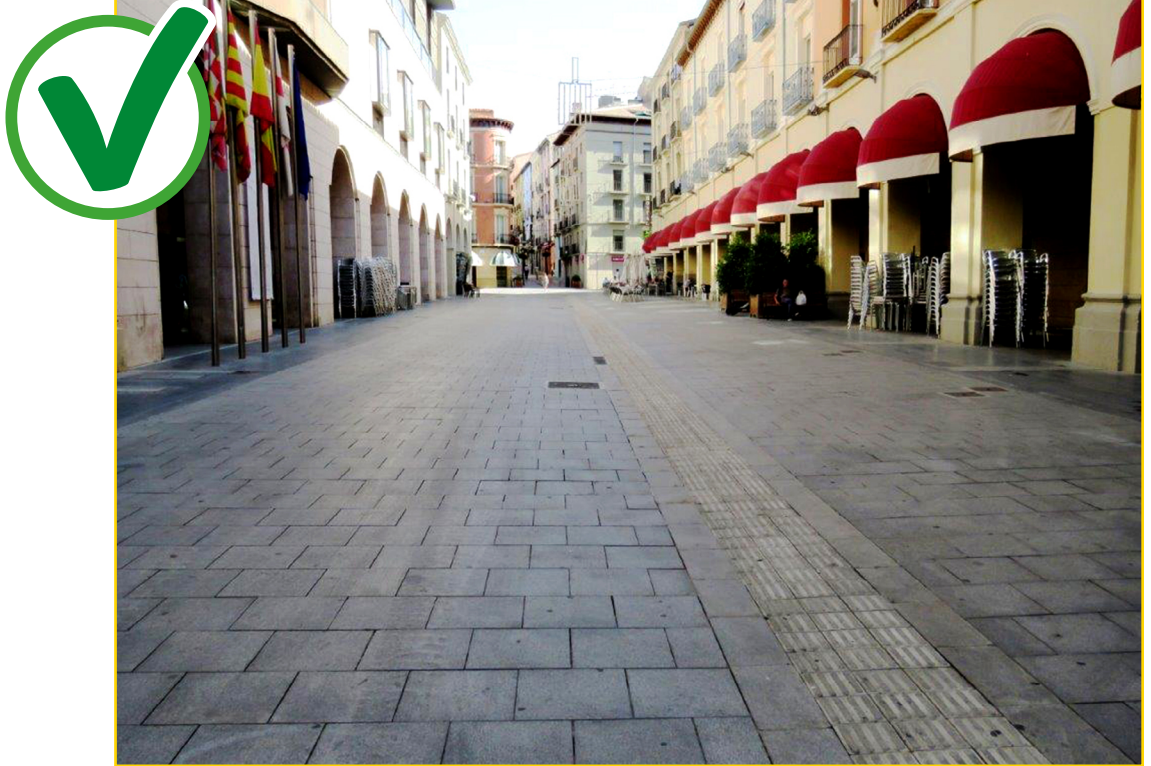


Image 14. Presence of grooved paving due to the impossibility of marking the safe zone next to the façade.



- The paving adjacent to the visual tactile warning or delineator must have a contrasting texture so that they can be clearly distinguished from each other with a foot and cane.



Image 15. Proper contrast in textures between the warning paving and the adjacent paving.



Image 16. Proper contrast in textures between the delineator and the adjacent paving.



- Visual tactile paving must not be encroached upon by elements that make it difficult to detect and/or follow (street furniture, terraces, vehicles, etc.).



Image 17. Street furniture on visual tactile paving.



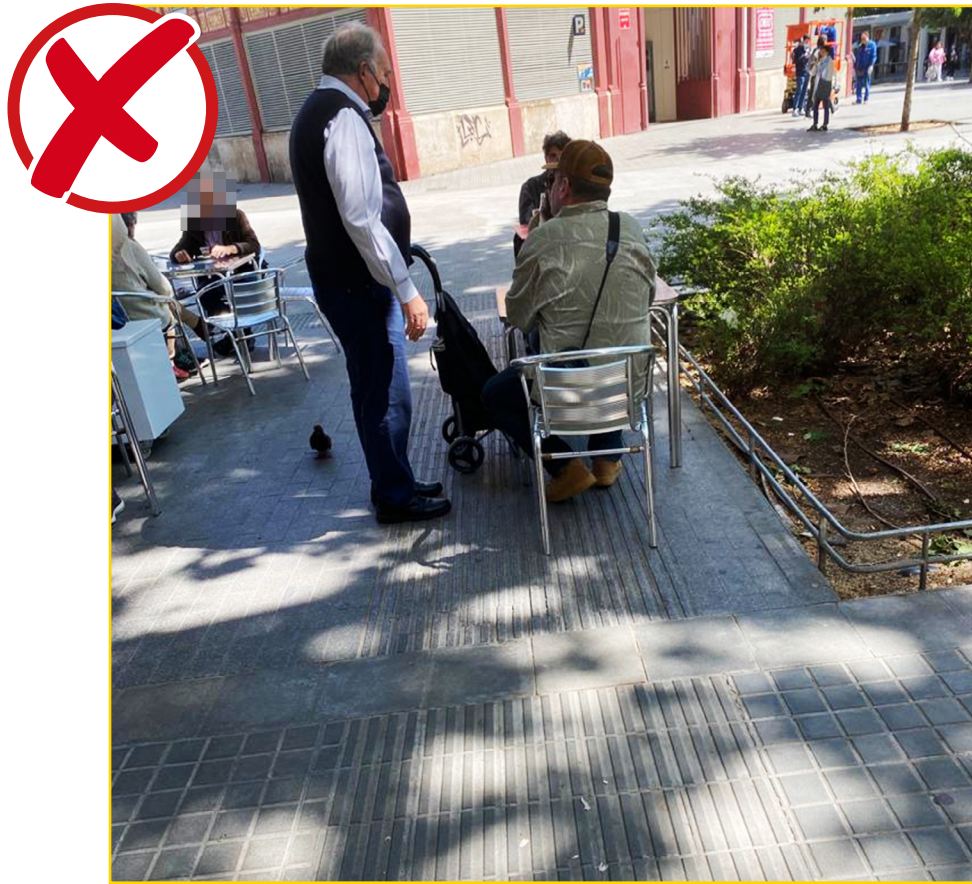


Image 18. Outdoor terrace on visual tactile paving.



Image 19. Vehicles on visual tactile paving.



- To facilitate movement between the safe zones in shared spaces, guidance paving may be placed alongside the building lines. These strips of paving must be straight, avoiding layouts that lead to disorientation and avoiding areas with street furniture or that are easily occupied for other uses and services. The warning paving must be maintained at the point of intersection between the safe zone warning strips and the guidance strips.



Image 20. Guidance paving connecting both safe zones.



- In streets whose width prevents the delimitation of a safe zone, no visual tactile paving will be installed.



Image 21. Street where it is impossible to delimit a safe zone.



5.7. Intersections with other types of roads

To ensure that drivers understand the requirements for using these areas, at intersections between shared spaces with shared traffic and other types of roads, the following must be in place:

- Warning markings on the paving to help reduce the speed of vehicles.
- Visual contrast between the road's paving and the shared space to ensure that all drivers recognise that they are entering and present in the shared space.
- Vertical and/or horizontal signage, subject to the appropriate restrictions.



Image 22. Intersection between a shared space with shared traffic and another type of road.



The intersection between a road and a shared space should be marked by a strip of visual tactile warning paving between 60 and 120 cm wide, and a strip of visual tactile guidance paving between 80 and 120 cm wide should be installed to make it easier to find.

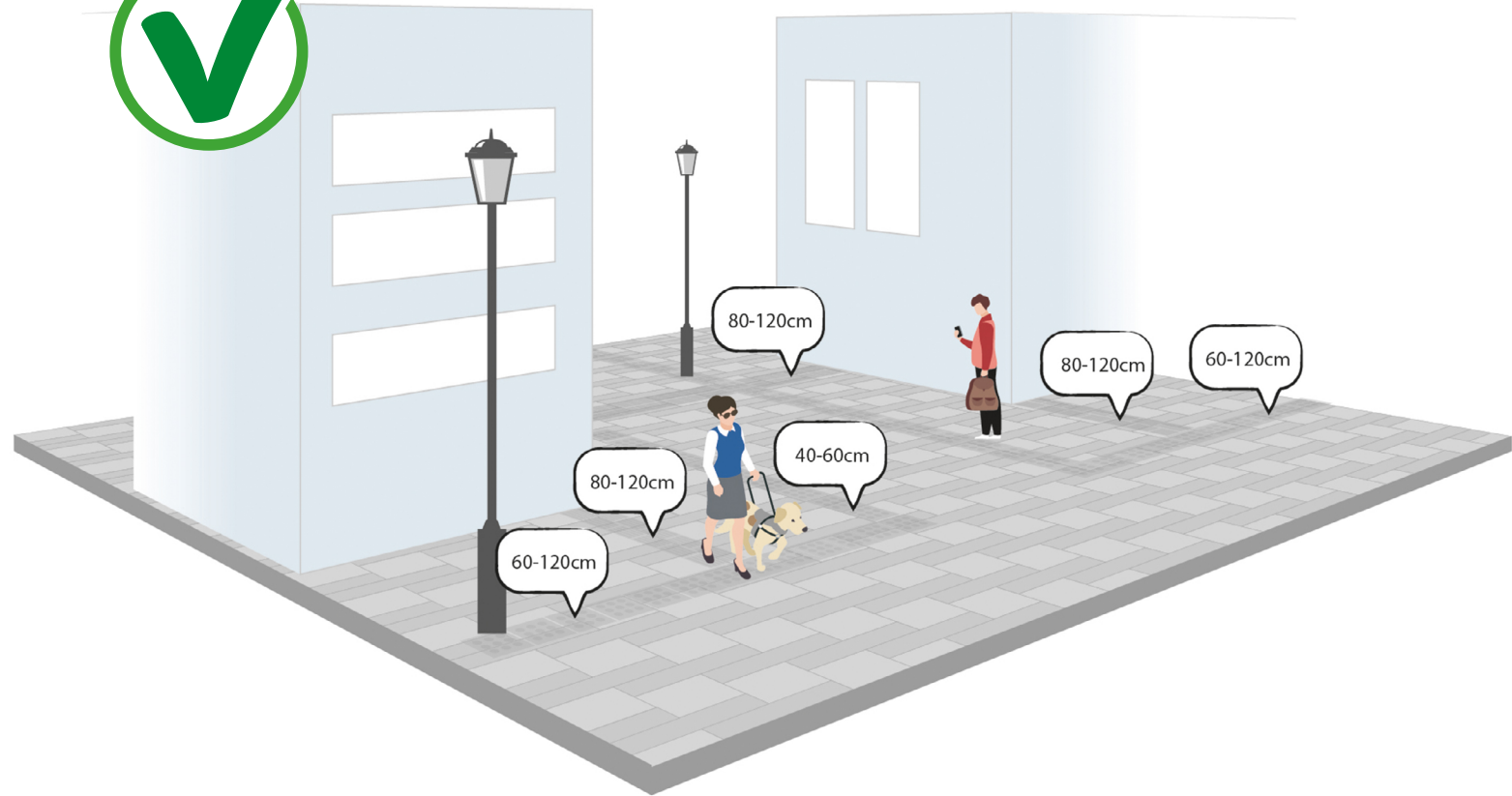


Image 23. Width of visual tactile warning and guidance paving.





Image 24. Signage to identify the uses and restrictions of the road.

The above criteria and conditions for implementation must be met in areas where the design includes streets with shared spaces for shared traffic, forming what are known as superblocks.

However, the size of these areas, the combination of several streets with shared spaces and the lack of clarity in their design increase disorientation and reduce safety, resulting in places that are inaccessible as a whole.



5.8. Examples of poor practice in shared spaces with shared traffic

Images 25, 26, 27, 28 and 29 show poorly laid out spaces, a road that is wider than permitted to implement a shared space, a lack of signage and guidance elements, traffic of all types of vehicles (including public transport), etc.



Image 25. Poorly arranged space with nothing to facilitate orientation or identify safe zones.



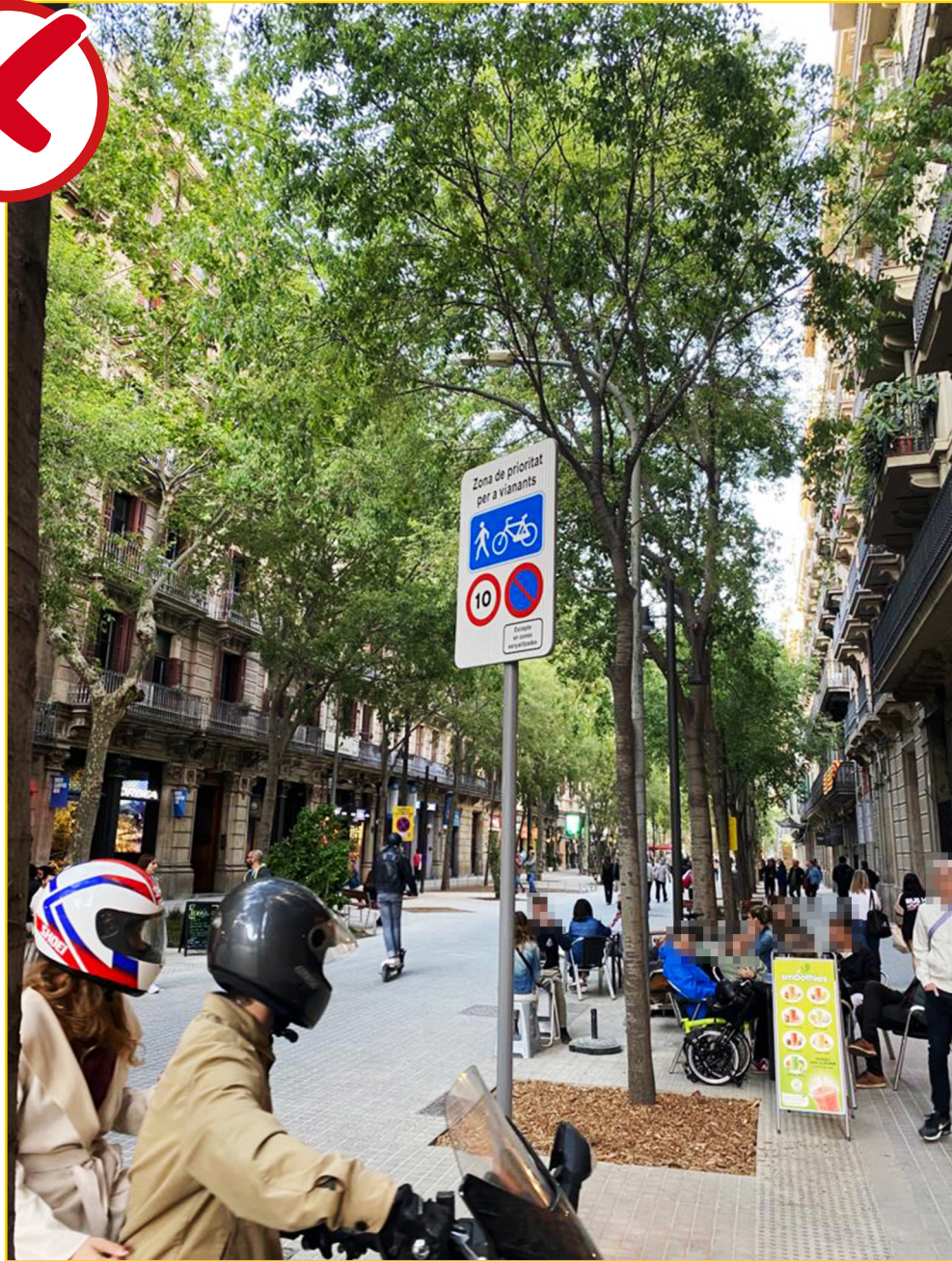


Image 26. Wide enough for a conventional road where any vehicle can circulate, despite the signage.





Image 27. Public transport traffic.



Image 28. Poorly organised vehicle traffic.





Image 29. Incorrect placement of warning strips.



SHARED SPACES WITH SEGREGATED TRAFFIC. DESIGN AND USAGE CRITERIA

Designing them will not be warranted if it is possible to provide an accessible pedestrian route. When this is possible, kerbing should be installed, this being the safest delimiting element.

In the event that a shared space with segregated traffic is planned on a road whose width and layout make it impossible to install kerbs, it must have the following elements at a minimum⁴:

6.1. Identification of pedestrian and vehicular zones

The texture and colour of the vehicular traffic area must be distinguishable from those of the pedestrian area, and it must be identified as a road.



Image 30. Vehicular and pedestrian areas are clearly distinguishable.

⁴ For a better understanding of these spaces, the terms pavement and road are still used, despite the lack of a kerb as a delimiting element.



Each area (for pedestrian and vehicular traffic) must have a uniform design along the entire route, both in terms of paving and street furniture, avoiding anything that could lead to confusion when distinguishing between the two.



Image 31. Suitable design, clearly identifying the different areas.



Image 32. Poor design that causes confusion between vehicular and pedestrian areas.



6.2. Demarcation of both areas

Demarcation between pavement and road is ensured by a continuous strip of visual tactile warning paving, between 40 and 60 cm wide, combined with street furniture to prevent vehicles from encroaching on the pedestrian safety zone. The gap between these items of street furniture should not exceed 120 cm.



Image 33. Proper demarcation of pavement and road.



Image 34. Lack of demarcation through warning paving.





Image 35. There is no difference between the paving on the road and on the pavement.

6.3. Intersections / crossings

Crossings should be marked by the installation of grooved guidance paving to direct users to the kerbside boundary.

These markings should be facing each other in a straight line, between the two pavements, avoiding diagonal lines that could lead to disorientation.

The boundary between the pavement and the road should be marked with contrasting visual tactile warning paving.





Image 36. Lack of markings.

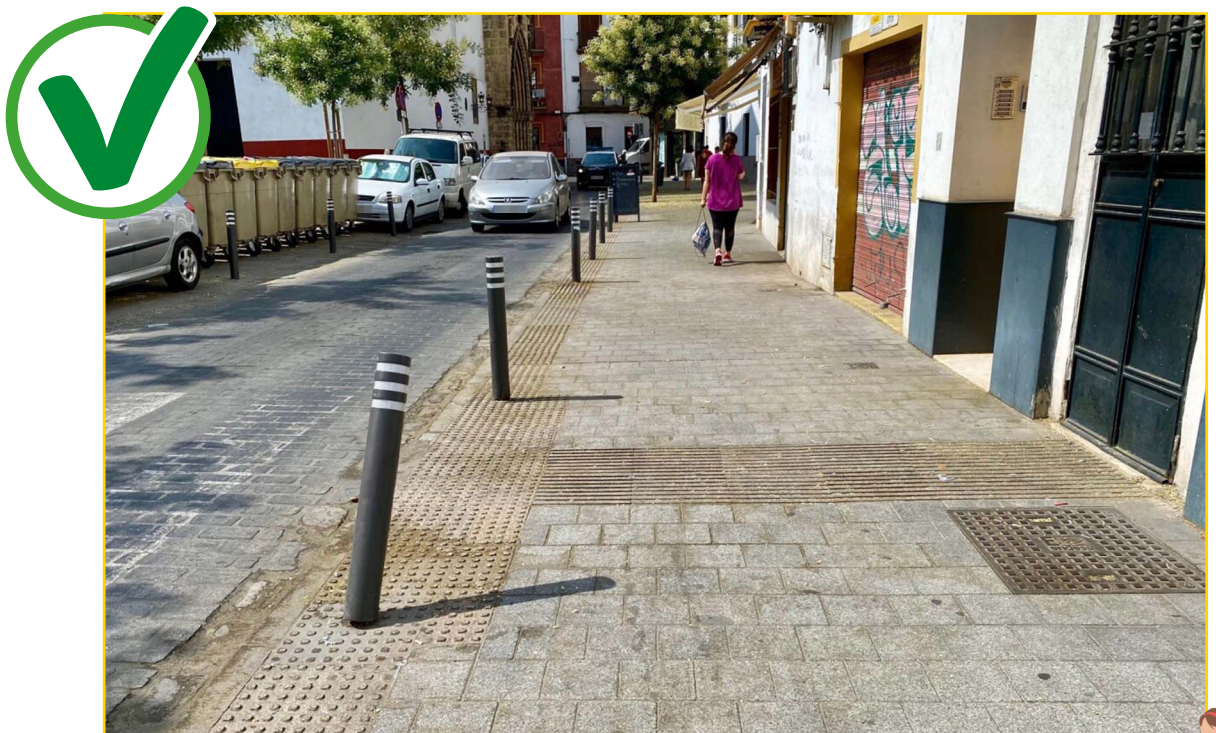


Image 37. Proper marking of the crossing.





Image 38. Properly aligned guidance paving.

6.4. Approved signage system

Placement of a signage system (horizontal/vertical), that is understandable and visible from several locations, warning drivers and pedestrians of the following circumstances:

- The maximum permitted speed.
- The location and conditions for authorised temporary parking for loading/unloading.
- The presence of intersections between pedestrian and vehicular traffic.





Image 39. Poor signage in a space with segregated traffic, suggesting that this space is for shared use.



Image 40. Suitable signage providing information on traffic restrictions. However, there is not enough delimiting furniture alongside the visual tactile paving.





Image 41. Signage with adequate information about the parking area and conditions. However, there is not enough delimiting furniture alongside the visual tactile paving.

As previously stated, the purpose of this document is to offer a range of criteria that avoid the problems faced by visually impaired persons as they navigate increasingly common areas in urban set.

Generally speaking, the fact that there must not be any differences in ground level seems to be the only condition for these spaces to be considered accessible, when there are some groups that find it very difficult to move around them. It is therefore essential that all professionals involved in the design and construction of these types of urban spaces are familiar with this document, and it is for this purpose that it has been prepared.

We believe it is necessary for the various government bodies that implement and regulate them to regard these criteria as prerequisites for the accessibility of shared spaces.



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