

Accessibility for the Hearing Impaired



Certification Criteria

Park and Recreation Areas



Erasmus+

KA205 - Strategic Partnerships for Youth
Building United Society (2019-1-TR01-KA205-073434)





v1.0



Accessibility for the Hearing Impaired Certification Criteria, Parks & Rec.

Individuals who cannot fully meet the requirements of daily life due to the loss of their physical, psychological, sensory, and social skills because of the congenital or subsequent accidents and diseases are defined as disabled. The difficulties experienced by disabled people in adapting to the necessities of daily life, the difficulties they experience due to their deficiencies in their physical and mental conditions, and the inadequacies they experience in benefiting from public services make their adaptation to society difficult.

Daily life routines, such as eating and drinking, personal care, cleaning, and sports activities are partly met by the individuals themselves. However, they need outside help to overcome the deficiencies in their physical and mental states. This situation differs according to the type of disability experienced. The feeling of being dependent on someone is a situation that affects the self-confidence of disabled individuals and causes the individual to move away from social life over time. In addition, it is a relatively difficult process for disabled individuals to access public services such as health, education, employment, transportation, and information, which healthy individuals can easily access. Therefore, it seems normal for them to feel excluded.

On the other hand, the judgment that socially disabled individuals are in need of care and far from production; causes social exclusion of people with disabilities. This situation leads to a loss of self-confidence for people with disabilities. It has been observed that social attitudes and awareness are very important in revealing the potential of disabled people, and in societies where the necessary attitude and awareness are established, the social relations of disabled people are strengthened, and their quality-of-life increases. Sport is a leading activity to activate disabled individuals and ensure their adaptation to society.

Sport is an integral part of all people, regardless of ethnicity, age, gender, and physical condition. It has been an effective tool in ensuring social cohesion and cultural rapprochement, as well as improving the physical and mental health of individuals. Sports activities affect individuals positively in terms of mental, physical,

and social aspects, but they are more important for disabled individuals. The benefits of sports for people with disabilities can be counted as meeting the need for physical activity, providing a healthy lifestyle habit, enabling socialization, providing a sense of self-actualization, and relieving the feeling of exclusion. Considering these benefits, the only reason why sports have a rehabilitation aspect in the lives of disabled people is not only the positive physical effect, but also the fact that it gives the individual a social environment and helps them to feel good emotionally. Therefore, sports support the physical and emotional development of individuals with disabilities and enable them to establish good relations in society.

It is an undeniable fact that doing sports is of vital importance. However, there are factors that limit the participation of individuals in sports or reduce their level of satisfaction. It is possible to examine these factors in two main groups:

- Personal Barriers: Motivation, nervous-stress state, anxiety, limitation of movement, health problems, mood, etc. factors affecting the physical or mental state of the person,
- Environmental Barriers: Access, adequacy, and suitability of the facility, trainer status, sports equipment costs, time and season, etc. elements that do not originate from the person himself.

There are psychological support, motivational speeches, and personal development studies for the personal obstacles that prevent people with disabilities from doing sports. Regarding environmental barriers, there are building inspection accessibility guides developed. These guidelines aim to facilitate access to public services in both the United States and the European Union and to ensure that individuals can benefit equally from opportunities.

Studies on the accessibility of disabled people to sports have revealed that disabled people have more negative experiences than non-disabled individuals in terms of the place (building - equipment) and trainer. Trainers who graduated from the School of Physical Education and Sports (SPES) receive training in the field of working with disabled individuals. It is a fact that not all the trainers working in the halls are SPES graduates. The lack of a platform for SPES graduates to show their experience of working with disabled individuals leads to families of disabled individuals not being aware of this situation, which limits participation in sports activities. These mentioned points reveal the need for a well-planned, accessibility certification and communication platform for people with disabilities. One of the aims of our project is

to develop a certification system for different types of disabilities in terms of accessibility to sports fields. Accessibility is defined as the ability of everyone to reach and use any place and service they want without being dependent on anyone and safely. The purpose of the accessibility certificate system we have prepared is to enable disabled individuals to do sports with equal opportunities with everyone without any restrictions, to increase the quality of sports and physical activities offered/to be offered by existing and newly opened sports facilities to disabled individuals, thus, to create an environment that appeals to everyone without discrimination. The realization of these conditions is possible with the provision of accessibility.

In this regard, various main groups were determined, the main groups were divided into subgroups and criteria were determined for each group. In the Strategy document of the European Commission on the Rights of Persons with Disabilities 2021-2030, it is stated that the European Union will carry out further work on action, standardization, and technical specifications for people with disabilities. The accessibility certification system, prepared within the scope of the project, has been prepared in such a way that it will be accepted by international organizations and can be considered as a valid standardization document.

The prepared document has been created by taking into account the following principles adopted by international standardization organizations.

1. Transparency: The parties involved in standardization could easily access to information such as the workflow and the guidelines of the standardization institution, recommendations for standards and drafts of standards.
2. Clarity: The process of developing standards or policies in international standardization institutions should be available to all relevant and member organizations. Any member interested in the standardization activity – especially from developing countries- should be provided with the opportunity to participate in the development stage of the standards.
3. Impartiality and Consensus: All relevant institutions should be provided with the opportunity to contribute to the preparation of international standards so that the standardization process would not be biased for the benefit of a particular party or stakeholder. Impartiality must be maintained throughout the entire process. There should be reconciliation procedures that offers solutions to all interested parties and for possible conflicts.

4. Efficiency and Relevance: International standards should protect competition and industry progress. In order to maintain development and impartiality, standardization should be based on performance rather than factors that affect competitive balances such as design and product features.

5. Compatibility: There should be coordination and cooperation between international standardization bodies in order to avoid conflicts or duplications.

6. Development Dimension: Solutions should be offered to the conditions that restrict the participation of developing countries in international standardization studies and their participation should be facilitated.

Defining a person's disability is an extremely difficult and complex situation. ICF (International Classification of Functioning, Disability and Health) carries out the study of classification of disability types in the international arena. Today, many countries, including Turkey, benefit from ICF. The overall aim of the ICF classification is to establish a common, standard language and framework for describing health and health-related conditions. It defines the components of health and the health-related components of well-being (such as education and labor).

ICF was developed by the World Health Organization (WHO) to be used in a different field of health and is part of an international classification system. (WHO's international classification system provides a framework for digitizing a wide range of health-related information)

The objectives of the ICF can be summarized as follows::

- To provide a scientific basis for understanding and researching health and health-related conditions, their consequences and determinants,
- To create a common language in order to increase communication about health and health-related situations among different users in the society, including healthcare professionals, researchers, politicians and those with disabilities,
- To allow comparison of data in terms of countries, health-related disciplines, services and time,-

In this project, the "Measuring Health and Disability" handbook published by ICF (unit of the World Health Organization), was used to classify the individuals who has physical, visual and hearing impairment and to determine their needs. Hence, the disabilities were classified and the issue of accessibility was discussed in detail and regularly.

Direct accessibility to a place varies according to the type of disability of individuals. Therefore, we have differentiated the accessibility criteria according to the types of disabilities. We have detailed the accessibility criteria that we have separated according to the types of disabilities and divided them into sub-criteria. In this way, we made it possible to view interrelated data at once.

In this context, customized criteria have been prepared for different types of disabilities. All criteria and their subcategories were evaluated using color codes. The red color indicates mandatory conditions for each type of disability; if it is not provided being incompatible, the color orange indicates neutrality, and the green color indicates compatibility. As a result of our coloring system, whether a criterion is met or not is determined according to the disability type of the individual.

Certification and standardization provide the opportunity to produce a product or service under defined rules and protocols that are universally followed and adopted by everyone. In this sense, it is very important to increase the quality of the services provided for people with disabilities. With the certification process we created in this project, we ensure that sports fields reach universal standards.

Parking Lot

Hearing impaired people do not need detailed features to use accessible parking spaces. It is sufficient to meet the basic requirements such as the accessible car parks in the parks being close to the entrance-exit and not far from the elevator.

Question

Coloring Criteria

1

Is there a parking lot in the park?

If there is, it will be **green** and go to the sub-question, otherwise the coloring will not be done.

1.1

Is there a handicapped parking lot in the park?

If there is a parking lot in the park, it will be **green** and go to the sub-questions, otherwise, the coloring is not done and the sub-questions of this question cannot be accessed.

1.1.1

Is the number of disabled parking spaces in the park equal to 5% of the total number of parking spaces?

If the number of disabled parking spaces in the park is 5% of the total number of parking spaces, it is **green**; otherwise, no coloring is done.

1.1.2

Is the distance of the disabled parking place to the parking entrance-exit or the elevator (if available) less than 30 meters?

If the distance of the disabled parking place to the parking entrance-exit or the elevator (if available) is less than 30 meters, **green**, otherwise, no coloring is done.

1.1.3

Is the disabled parking lot clearly marked?

If the disabled parking lot clearly marked **green**, otherwise no coloring is done.

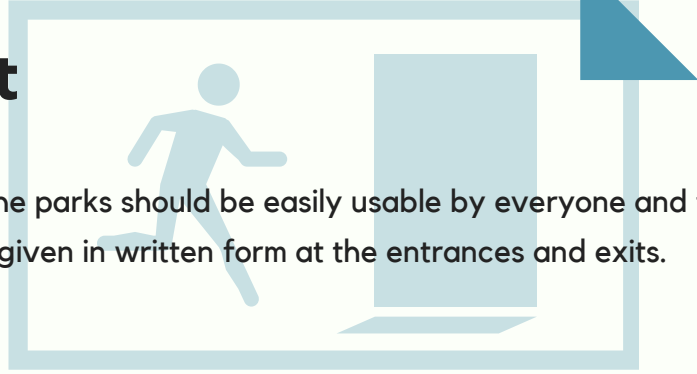
1.1.4

Is there a sign for the purpose of guiding and informing the disabled parking lot from places such as parking lot entrance, park entrance?

Green if there is a sign for guidance and information purposes from places such as parking lot entrance, park entrance to the disabled parking lot, if not, coloring is not done.

Park Entry/Exit

The entrance and exit points of the parks should be easily usable by everyone and the necessary information should be given in written form at the entrances and exits.



Question

Coloring Criteria

1

Are the park entrances and exits suitable for everyone's use?

Green if the park entrances/exits are suitable for everyone's use, otherwise **red**

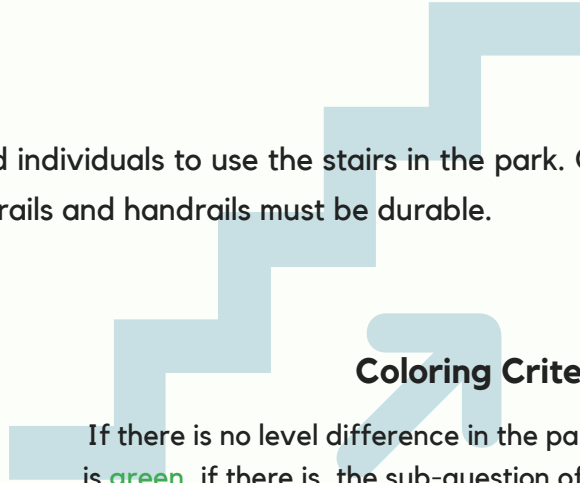
2

Is the park entrance/exit flat?

Green if parking entrance/exit is flat, **red** if not

Park Merdivenleri

There is no problem for hearing impaired individuals to use the stairs in the park. Only the equipment in the stairs such as handrails and handrails must be durable.



Question

Coloring Criteria

1

Is there a difference in elevation in the park?

If there is no level difference in the park, it is **green**, if there is, the sub-question of this question is answered without color evaluation.

1.1

Are there stairs in the park?

If there are stairs in parks with elevation difference, it will be **green** and go to the sub-questions, otherwise it will be **red** and the sub-questions of the question will not be passed.

1.1.1

Are there handrails or walls/parapets on both sides of the stairs?

Green if there is a handrail wall/parapet on both sides of the staircase, **red** if not

Question

1.1.2

Are there handrails on the stairs?

1.1.2.1

Are the handrails on both sides of the stair, the 1st level 90 cm above the floor and the 2nd level 70 cm above the ground?

1.1.2.2

Are the handrails durable?

1.1.2.3

Did the handrail start 30 cm before the start of the stair and continue 30 cm after the end of the stair? (If the 30 cm extension of the handrail remains in the circulation area, 30 cm extension should not be applied.)

1.1.2.4

Are the ends of the handrail fixed to the wall or rounded in a crescent shape?

1.1.2.5

Is there a distance of at least 4 cm between the handrail and the wall or handrail it is located on?

1.1.2.6

Is the diameter of the handrail between 32 mm and 45 mm?

Coloring Criteria

If there is a handrail on the stairs, go to the sub-questions of this question and it will be **green**, if not, it will be **orange**.

If the handrails on the sides of the stairs comply with the standards written in the question **green**, if they do not, **orange**

Green if the handrails are solid, **red** if not

Green if the starting and ending places and lengths of the handrails comply with the standards in the question, **orange** if they do not.

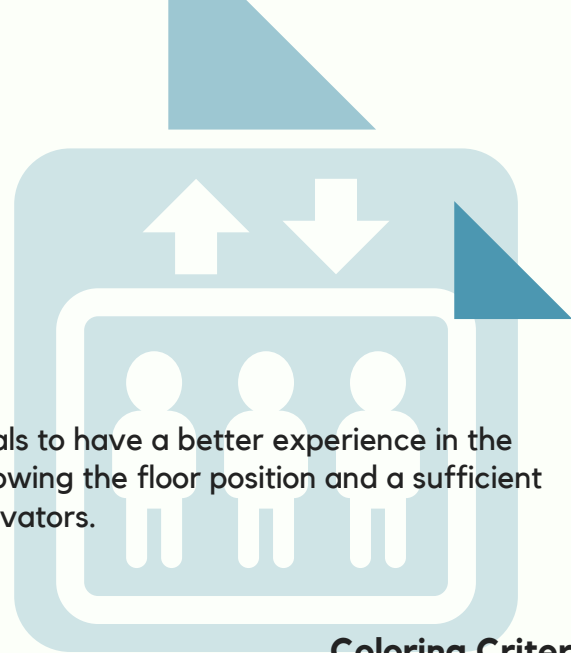
Green if the ends of the handrail are fixed to the wall or rounded in a crescent shape, otherwise **orange**

If there is a gap of at least 4 cm between the handrail and the wall it is on, **green**, or **orange**

Green if the diameter of the handrail fits the measurements in the question, **orange** if it does not.

Park Lifts

In order for the hearing impaired individuals to have a better experience in the elevators, there should be an indicator showing the floor position and a sufficient number of explanatory markings in the elevators.



Question

Coloring Criteria

1

Is there an elevator in the park?

If there is an elevator in the park, go to the sub-questions of this question and it will be **green**, if not, no coloring is done.

1.1

Is access to the elevator level and accessible?

Green if elevator access is level and accessible route, **red** if not.

1.2

Has the necessary guidance and marking been made for the elevator?

Green if necessary guidance and marking for the elevator has been made, **red** if not.

1.3

Are the necessary guidance and information signs used inside and outside the elevator cabin?

If the necessary guidance and information signs are used inside and outside the elevator cabin, they turn **green** and go to the sub-questions of this question, if not, **red**

1.3.1

Are the direction and information signs used in the elevator understandable and legible?

Green, if the direction and information signs used in the elevator are understandable and legible, and **red** if they are not.

1.4

Are the dimensions of the buttons inside and outside the cabinet at least 20 mm?

Green if 20 mm, **orange** if not

Question**1.5**

Is there an indicator showing the floor position in the elevator?

1.5.1

Are the heights of the numbers on the display in the cabin between 30 mm and 60 mm?

Coloring Criteria

Green, if there is an indicator showing the floor position in the elevator and go to the sub-question of this question, if not, it will turn **orange**.

Green if the height of the numbers on the indicator in the cabin is between 30 mm and 60 mm, otherwise **orange**

Park Lifting and Transmission Platforms

Lifting and conveying platforms are another system used to solve the problems created by level differences in parks and to ensure accessibility in vertical circulation. Site selection is very important in the design of lifting and conveying platforms. When the lifting and conveying platforms in the park go up, measures should be taken to prevent the formation of spaces under them. If not taken, they can cause serious injuries and accidents.

Question**1**

Does the park have lifting and conveying platform(s)?

1.1

Have measures been taken to prevent the formation of gaps under the platform when it goes up?

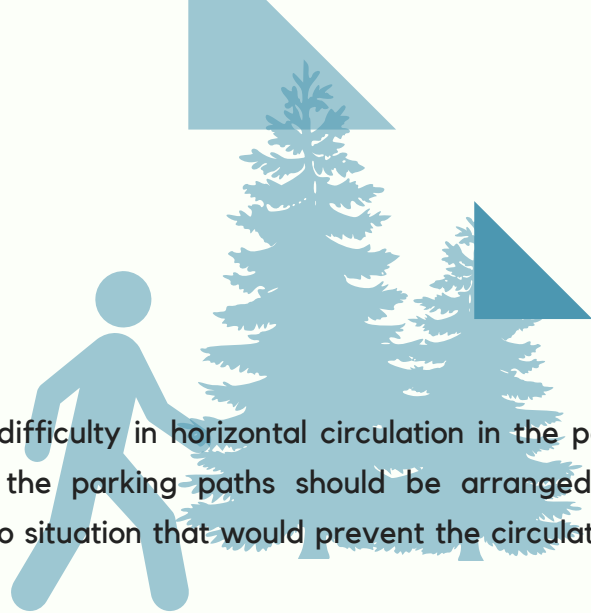
Coloring Criteria

Lifting and forwarding in the park platform(s), go to the sub-question of this question and turns **green**, if not, color evaluation is not performed.

If yes, **green**, if not, **red**

Roaming the Park

Hearing impaired individuals have less difficulty in horizontal circulation in the park than other disabled individuals. Only the parking paths should be arranged in appropriate sizes and there should be no situation that would prevent the circulation of individuals on the parking path.



Question

Coloring Criteria

1

Are the parkways accessible?

Green if parking paths are accessible, red if not.

2

Are the surface of the roads made of a smooth, stable, non-slip material?

Green if the surface of the roads is made of a smooth, stable, non-slip material, red if not

3

Is the parking path width at least 200 cm?

Green if parkway width at least green 200 cm, if not orange

4

Is 220 cm of head clearance provided along the park path?

Green if 220 cm head clearance is provided along the park path, red if not

5

Are there any wall-mounted objects in the parking lot?

No color if there is a wall-mounted object on the park road and resume with sub questions. If not, it will be green.

5.1

Do objects protrude more than 10 cm from the wall?

If the objects do not protrude more than 10 cm from the wall Green, if they do, no coloring is done and go to the sub-question of this question.

5.1.1

If the object protrudes more than 10 cm, is it positioned with a maximum clearance of 30 cm from the ground?

Green if the object protrudes more than 10 cm, placed with a maximum 30 cm clearance from the ground, red if not

Question**6**

Park yollarının eğimi en fazla %5 mi?

7

Yaya yolu kenarında aşağıya doğru dik eğim var mı?

7.1

Dik eğim olan bölgelerde en az 110 cm yüksekliğinde korkuluk bulunuyor mu?

8

Parkta dinlenme alanları bulunuyor mu?

8.1

Dinlenme alanları her 30 m'de yapılmış mı?

8.2

Parkta bulunan oturma ekipmanlarında (banklar) kolay oturup kalkmayı sağlayan kol ve sırt dayama kısımları bulunuyor mu?

8.3

Bankın zeminden yüksekliği en fazla 45 cm mi?

8.4

Parkta bulunan dinlenme alanlarındaki masaların yüksekliği 75 cm ile 90 cm arasında mı?

Renklendirme Kriterleri

Park yollarının eğimi en fazla %5 ise **yeşil**, değilse **turuncu**

Yaya yolu kenarında aşağıya doğru dik eğim varsa renklendirme yapılmaz ve bu sorunun alt sorusuna gidilir, yoksa **yeşil** olur

Dik eğim olan bölgelerde en az 110 cm yüksekliğinde korkuluk bulunuyorsa **yeşil**, bulunmuyorsa **kırmızı**

Parkta dinlenme alanları bulunuyorsa **yeşil** olur ve bu sorunun alt sorularına gidilir, bulunmuyorsa **turuncu** olur

Dinlenme alanları her 30 m'de yapılmışsa **yeşil**, yapılmamışsa **turuncu**

Parkta bulunan oturma ekipmanlarında (banklar) kolay oturup kalkmayı sağlayan kol ve sırt dayama kısımları bulunuyorsa **yeşil**, bulunmuyorsa **turuncu**

Bankın zeminden yüksekliği en fazla 45 cm ise **yeşil**, değilse **turuncu**

Parkta bulunan dinlenme alanlarındaki masaların yüksekliği 75 cm ile 90 cm arasındaysa **yeşil**, değilse **turuncu**

Question

Coloring Criteria

- 9** Are there gutters on the pedestrian path? (There should be no gutters on the pedestrian path.)
 - 9.1** Is there a grid on the pedestrian path?
 - 9.1.1** Is it perpendicular to the direction of crossing?
 - 9.1.2** Grid intervals max. 13mm?

If there is a gutter on the pedestrian path, it will be **red**, if not, it will be **green** and go to the sub-question of this question.

If there is a grid on the pedestrian path, no coloring and go to the sub-question of the question, if it is not found, it will be **green**

Green if perpendicular to the direction of the transition, if not **orange**

Green if grid spacing is up to 13 mm, otherwise **orange**

- 10** Is there a pedestrian sidewalk in the park?
 - 10.1** Is the sidewalk designed to be at least 150 cm clear so that all pedestrians can move freely?

Green if there is a pedestrian sidewalk in the park, and resume with sub-question, if not, no coloring

Green if the sidewalk is designed to be at least 150 cm clear so that all pedestrians can move freely, otherwise no coloring is done.

- 11** Is lighting provided along the pedestrian path?

Green if illuminated along the pedestrian path, **red** if not

- 12** Are plants used in park design?

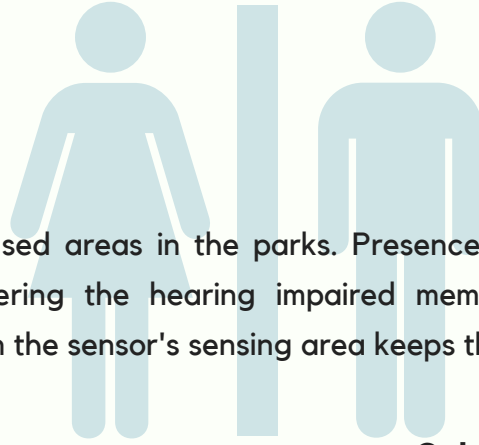
Green if plants are used in park design and resume with sub question. If not no color

- 12.1** Do the plants used in the park design create a problem for people with disabilities?

Orange if the plants used in the park design create a problem for people with disabilities, If not **green**

Park Restroom

Toilets are among the frequently used areas in the parks. Presence sensor can be added to the park toilets considering the hearing impaired members. With the presence sensor, every movement in the sensor's sensing area keeps the lighting on.



Question

Coloring Criteria

1

Are there toilets in the park?

If there is a toilet in the park, it will be green and go to the sub-question, if not, no coloring is done.

1.1

Parkta erişilebilir tuvalet bulunuyor mu?

If there is an accessible toilet in the park, go to the sub-questions and it will be green, if not, orange.

1.1.1

Are there accessible toilets in the park?

Green if there is a direction from the main entrance to the accessible toilets, orange if not

1.1.2

Are accessible toilets indicated by marking?

Green if marked accessible toilets are indicated, orange if not

1.1.3

Accessible toilet for both men and women does it exist?

Green if there is accessible toilet for both men and women, orange if not

1.1.4

Is the accessible toilet freestanding?

Green if accessible toilet is self-contained, orange if not

1.1.5

Does the accessible toilet have a presence sensor?

Green if there is a presence sensor in an accessible toilet, red if not

1.1.6

Is accessible toilet lighting provided using sensor light?

Green if accessible toilet lighting is made using sensor light, red if not

	Question	Coloring Criteria
1.1.7	Are there emergency call devices in accessible toilets?	Green if there is an emergency call apparatus in accessible toilets and go to sub-questions of this question if not red
1.1.7.1	Is the emergency call device hanging from the ceiling on all walls and on both sides of the toilet?	Green if the emergency call apparatus hangs from the ceiling on all walls and on both sides of the toilet bowl, otherwise orange
1.1.7.2	Is the ground clearance of the emergency call apparatus between 30 cm and 50 cm from the ground?	Green if the height of the emergency call apparatus is between 30 cm and 50 cm from the ground, otherwise, no coloring.

Markings Used in the Park

Hearing-impaired individuals do not have difficulty in understanding the markings throughout the park, but there should still be a sufficient number of guiding and informative markings and these markings should be supported by symbols.

	Question	Coloring Criteria
1	Are there guiding and informative signs in the park?	If there are guiding and informative signs in the park, go to the sub-questions of this question and it will be green , if not, red .
1.1	Are the guiding and informative signs used in the park in sufficient numbers and features?	Green if there are sufficient number of guiding and informative signs in the park, orange if not.
1.2	Are the written information in the park supported by symbols?	Green written information in the park is supported by symbols , if not orange

	Question	Coloring Criteria
1.3	Is the font size of the text easy and readable for everyone?	Green if the font size of the texts is easy and readable for everyone, if not red
1.4	Are the texts and signs appropriately sized for viewing distance? (Letter heights should be at least 15 mm and font sizes should be increased between 20 mm and 30 mm for every 1 meter viewing distance.)	If the text and signs are of suitable size according to the viewing distance, green, otherwise red
1.5	For easy understanding of the signs, the logo, symbol, etc. on the sign. matte or low gloss?	Green if for easy understanding of the signs, the logo, symbol, etc. on the sign matte or low gloss, otherwise red
1.6	Are symbols used in their entirety with parking marking systems?	Green if symbols used in conjunction with parking marking systems, orange if not used

Sports Fields and Children's Playgrounds

Sports and playgrounds that contribute to the physical and social development, socialization and acquisition of new skills of adults and children should be used comfortably and easily by everyone, security measures should be increased and the equipment placed in these areas should have the necessary features.

	Question	Coloring Criteria
1	Is at least one-third of the children's play equipment accessible?	Green if at least one-third of the children's play equipment is accessible, otherwise red

Question

2

Are the playgrounds in the park arranged in such a way that disabled and non-disabled children can play together?

3

Is there a minimum distance of 180 cm between the playground equipment in the park?

4

Are children's playgrounds separated by age groups? (Generally, a distinction should be made as pre-school (0-5 age group), school age (5-12 age group) and young groups over 12 years old.)

5

Is the playground equipment in the park made of a material that will prevent injuries in case of falling or hitting?

6

Is the equipment in the park made of a material that will not create static electricity?

7

Is there sports field at park?

7.1

Is there a minimum distance of 180 cm between the sports equipment in the park?

Coloring Criteria

Green if arranged, orange if not arranged

Green if there is a minimum distance of 180 cm between the playground equipment in the park, otherwise it is orange.

Green if children's playgrounds are separated by age groups, if not, no coloring.

Green if the playground equipment in the park is made with a material that will prevent injuries in case of falling, hitting, red if it is not made.

If the equipment in the park is made of a material that will not cause static electricity, red

If there is a sports field in the park, it will be green. Sub-questions of this question are answered, if not, no coloring is done.

Green if there is a minimum distance of 180 cm between the sports equipment in the park, otherwise orange

Question**Coloring Criteria****7.2**

Are the fittings of the sports equipment designed to suit different hand sizes?

Green if the equipment of the sports equipment is designed to suit different hand sizes, **orange** if it is not designed

7.3

Is the sports equipment free of sharp and protruding edges?

Green if sports equipment is free from sharp and protruding edges, **red** if not

Areas Using Water Element



Water elements not only add aesthetics to the park, but also create a focal point by increasing the memorability of the space and helping to define it. In addition, the use of water elements in parks provides a great convenience for people with disabilities in finding directions.

Question**Coloring Criteria****1**

Is the focal point created by using the water element in the park? (The use of water in the landscape creates a focal point, defines the space, makes it a reminder and catches the eye. Also, the use of the water element makes it easy for people with disabilities to find their way.)

If the focal point is created using the water element in the park, it will be **green** and go to the sub-question of this question, if not, no coloring is done.

1.1

Have the necessary security measures been taken for the water element used in the park?

Green if for the water element used in the park, the necessary security measures are taken. If not, **red**



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