

# International Horticultural Expo 2027, Yokohama, Japan

**Accessibility Guidelines** 

(Summary)



# **About Accessibility Guidelines**



# GREEN X EXPO 2027 YOKOHAMA JAPAN

With the theme "Scenery of the Future for Happiness", the International Horticultural Expo 2027, Yokohama, Japan (GREEN  $\times$  EXPO 2027) (hereinafter referred to as the "EXPO") aspires to contribute to the realization of a sustainable future for nature, people and society and the creation of an inclusive society where no one is left behind, leading to a future landscape of happiness for each and every person.

In order to achieve this, care has been taken to formulate guidelines for the development and operation of the Expo so that all visitors to the Expo can spend their time there safely and comfortably regardless of their background such as nationality, culture, race, gender, generation, and physical or other disability.

The Accessibility Guidelines for International Horticultural Expo 2027, Yokohama, Japan (hereinafter referred to as the "Guidelines") have been <u>formulated with the aim of achieving</u> <u>an accessible environment that meets the international standards</u> while taking into consideration the Accessibility Guidelines adopted for the Tokyo 2020 Olympic and Paralympic Games and the 2025 World Exposition, and the standards for smooth transportation, etc. based on laws and regulations such as the Act on Promotion of Smooth Transportation, etc. of Elderly People, Persons with disability, etc.

Furthermore, in formulating the Guidelines, the "International Horticultural Expo 2027 Accessibility Guidelines Study Group" was established, and a <u>variety of opinions from the participants, including persons with disabilities and persons of learning and experience, have been reflected in the Guidelines.</u>

We hope that the organisers and participants of the Expo will implement and operate it in accordance with the Guidelines, and that the Expo will be an opportunity for everyone to understand the purpose of the Guidelines and make broad efforts to improve the environment and to create opportunities for participation by the persons with disabilities, which will <u>lead to the realization of an inclusive society where no one is left behind as a legacy of the Expo.</u>

# **About Accessibility Guidelines**



# Purpose of this document

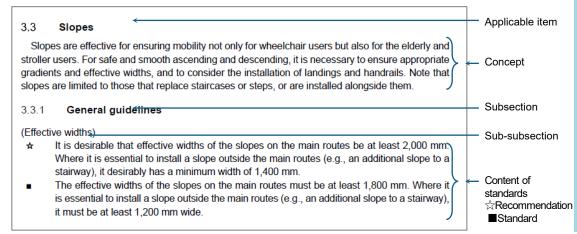
In preparation for the International Horticultural Expo 2027, Yokohama, Japan (GREEN x EXPO 2027), Accessibility Guidelines have been formulated for the development and operation of the Expo with consideration so that all visitors to the Expo can spend their time there safely and comfortably regardless of background such as nationality, culture, race, gender, generation, and disability.

This document explains the concepts and key points for the development and operation of the Expo provided in the Accessibility Guidelines, with the corresponding page numbers in the Guidelines.

When implementing the Guidelines in practice, please refer to this document and, for specific details, confirm the contents of the Accessibility Guidelines.

# How to read the Guidelines

The contents and main structure of the Guidelines are as follows. The concepts and standards are described for each item applicable to the Guidelines.





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Legends for page numbers

P.0-00 Items to be particularly checked by exhibitors, etc.

P.0-00

Items to be mainly implemented by the Association, etc.

Items to be checked by exhibitors, etc. as necessary



1

Introduction

# Introduction



# **Purpose of the Guidelines**

This section states that the aim of the Expo is to contribute to the creation of an inclusive society where no one is left behind, and that the purpose of the Guidelines is to set accessibility standards for facility implementation, services and transport access in order to achieve the aim of the Expo.

# 1.2 Basic principles behind the Guidelines

P.1-1

This section states that the three basic principles of "equity," "dignity" and "ensuring functionality," which are presented as the "basic principles of accessibility and inclusion" based on IPC Guide\*, are also carried over to this Expo.

In addition to the above basic principles, this section also states that "reflection of opinions" from stakeholders and "education and training" for staff, etc. are necessary for realisation of accessibility and inclusion.

# Basic approach to Expo operation

P.1-2

This section states that it is important for all people to understand the "social model of disability," and lists three points as the key points for embodying "barrier-free mind" to show the idea of promoting understanding of disabilities.

# 1.4 Visitor needs that require special attention

P.1-3

This section outlines the attributes of visitors that require special attention and points of attention in order to accurately understand the attributes of visitors and identify diverse needs.

# Opinions of people with accessibility needs

"Given that disabilities are diverse and the support required by each individual varies, I would like you to start by confirming what kind of support persons with disabilities want to receive."

#### \*Created by the International Paralympic Committee (IPC) in order to meet the needs of Olympic and Paralympic Games host cities which require comprehensive standards for designing venues and services and to create a benchmark for accessibility for audiences around the world

# Basic principles of accessibility and inclusion

**Equity** 

We will ensure that all people can receive the same experience and level of service, regardless of their individual physical and functional capacity.

**Dignity** 

We will ensure that the way in which a facility is operated, or a service is provided, respects the diverse people who use it and does not compromise their dignity as individuals.

**Ensuring** functionality

We will ensure that the functions of services and facilities are appropriate for the purpose, meeting the specific needs of every relevant group including persons with disabilities.



Toward realisation

Taking measures necessary to reflect **Reflection** opinions of the stakeholders including persons with disabilities at the various opinions planning stages related to design and operation.

and

Education Providing necessary education and training to staff and volunteers at the training implementation stage of operation.



2

**Use of the Guidelines** 

# 2 Use of the Guidelines



# 2.1 Scope of applicability of the Guidelines

P.2-1

These Guidelines shall be applicable to all visitors' circulation and activity areas within the venue of the Expo. It is desirable to give consideration to the accessibility for the areas used for the management purposes (backyards) using the Guidelines as reference.

Furthermore, in "5 Transport Access," the Guidelines shall be applicable to relevant facilities (stations, station squares, terminals, car parks, etc.) of major public transport systems that access the venue, transport means (vehicles, etc.), pavements, etc.

# 2.2 Basis for setting standards

P.2-1

As a standard that is particularly recommended for this Expo, a category of "Recommendation" has been established. In addition, as a standard that should be at least complied with, a category of "Standard" has been established.

Standards in the "Recommendation" and "Standard" categories are indicated by " $\stackrel{\checkmark}{\bowtie}$ " and " $\blacksquare$ ," respectively.

Facility nplementation Even if it is not possible to partly meet the Standard category standards for unavoidable reasons, it is required to provide visitors with <u>services equivalent to those provided when facility implementation is ensured in accordance with the Standard category standards by meeting the main equivalent laws and regulations, etc. and by providing alternative measures such as human support and other intangible measures.</u>

Services

In order to ensure that visitors with various circumstances can enjoy the Expo as other visitors do, these Guidelines provide the standards for services and measures (examples) to be taken in various situations. The measures (examples) are intended to provide a direction. Rather, each entity is required to exert its originality and ingenuity, aiming at providing better services than the measures (examples).

# 2.3 Basic dimensions, etc.

P.2-3

This section provides basic dimensions based on mobility characteristics of wheelchair users, cane users, etc.

# 2.4 Compliance with laws and regulations

P.2-10

This section lists the Japanese laws and regulations and municipal ordinances of Yokohama City that must be complied with in the operation of the Expo, as well as planning, designing, construction and maintenance of the facilities of the Expo.

# **Basis for setting standards**

Indicates a "desirable" item and is defined as a standard that is particularly recommended for this Expo

Recommendation in order to realise safe and smooth mobility for visitors as well as enhance convenience and provide comfort in the use of facility.

Standard

Indicates an item that must or should be ensured and is defined as a standard that should be at least complied with regardless of legal obligations.



3

# **Facility Implementation**

# 3 Facility Implementation



# Overall structure of "3 Facility Implementation"

The chapter, Facility Implementation, sets standards for "Common Spaces," "Gardens" and "Buildings" separately, and summarises common items for the entire facilities under "Common Guidelines."

# **Common Spaces**

- 3.1 Garden paths within the expo site
- 3.2 Staircases
- 3.3 Ramps
- 3.4 Venue entrance space
- 3.5 Information points

# **Gardens**

- 3.6 Garden paths
- 3.7 Staircases
- 3.8 Ramps

# 3 Facility Implementation

# **Buildings**

- 3.9 Pathway on plot (outdoor) 3.10 Doorways **Corridors etc. (indoor)** 3.11 3.12 **Staircases** 3.13 Ramps 3.14 Passenger lifts 3.15 **Escalators** 3.16 **Platform lifts** 3.17 **Toilet Stalls**
- 3.18 Auditorium
  3.19 Food service/retail vendor areas
  (cafeterias, restaurants, retail vendors, etc.)
  3.20 Baby care rooms
  3.21 Prayer rooms
  3.22 Fixtures and equipment
  (handrails, counters, vending machines, etc.)
  3.23 Interior design (interior decorations, equipment, and other arrangements)
  3.24 Evacuation equipment, etc.

# **Common Guidelines**

- 3.25 Display signs
- 3.26 Tactile floor tiles
- 3.27 Calm down/cool down spaces/sensory spaces, etc.
- 3.28 Areas for waiting/queueing
- 3.29 Assistance dog toilets



# 3.1 Garden paths within the expo site

P.3-2

This section states that the circulation plan must be prepared so that all users, including wheelchair users and stroller users, can move along the same circulation path.

#### **Examples of standards**

- The garden paths must ensure appropriate effective widths based on the anticipated visitor volumes.
- ☆ It is desirable that the effective widths of garden paths be at least 2,000 mm so that two wheelchair users can pass by one another.
- The path surface must be slip-resistant in both dry and wet conditions and must have a finish without unevenness that could hinder passage.
- Gravel or cobbled garden paths, which make it difficult for wheelchair users to move around, must be avoided. When using flat plates, interlocking pavers, ceramic tiles, etc., ensure that no step is created in the joints.

# Opinions of people with accessibility needs

"I would like routes for wheelchair users and non-disabled people to not be provided separately. I think that it should be a fundamental principle that no place inaccessible to wheelchair users is made."

"I would like pathways to be made wide enough to allow families using wheelchairs or strollers to enjoy themselves comfortably."

"Path surfaces such as cobbled pavements, which cause strong vibration, place a heavy burden on wheelchair users and people with cervical spine injuries, so I would like slip-resistant, flat and smooth pavements to be adopted."

"For wheelchair users, it is desirable that steps be eliminated as much as possible, even if they are 20 mm or less."

"Elderly people are prone to tripping and falling over even a small step. If steps are unavoidable, I would like them to be coloured so that they are easily distinguished."

# 3.2 Staircases

P.3-5

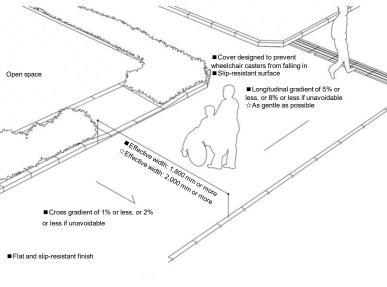
This section outlines safety measures, such as ensuring appropriate risers, tread structures and effective width, and installing non-slip devices.

# **Examples of standards**

☆It is desirable that the riser is no more than 150 mm.

The tread must be at least 300 mm.

# **Example of garden path implementation**



# 3 Facility Implementation

**Common Spaces 1/2** 



# 3.3 Ramps

P.3-8

This section explains ensuring appropriate gradients and effective widths, installing landings and handrails, etc.

# **Examples of standards**

- tis desirable that effective widths of the ramps on the main routes be at least 2,000 mm. Where it is essential to install a ramp outside the main routes (e.g., an additional ramps to a staircase), it desirably has a minimum width of 1,400 mm.
- ☆ It is desirable that longitudinal gradient be 5% or less.
- Longitudinal gradient must be no more than 8%.

# 3.4 Venue entrance space

P.3-11

This section outlines considerations for the venue entrance, such as ensuring places where wheelchair users and others can rest together.

# **Examples of standards**

☆ It is desirable to ensure a horizontal space of 1,500 mm x 1,500 mm or larger around
a bench or other equipment for resting so that a wheelchair can approach and stay
adjacent to it.

# 3.5 Information points

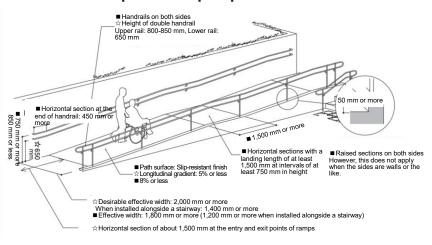
P.3-12

This section outlines the height, etc. for a counter, as it is a place for everyone to obtain information about services within the venue.

# **Examples of standards**

- The counter of the information point must be 700-750 mm in height, 750 mm in width and 450 mm in depth, with knee-high clearance of 650-700 mm below the counter, as standard.
- In order for wheelchair users to approach, sufficient space (1,500 mm x 1,500 mm or larger) must be ensured in front of the counter, etc. to allow wheelchair users to turn around.

# **Example of ramp implementation**



(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Parks]

# Opinions of people with accessibility needs

"It would be better to have a place where a wheelchair or stroller can be positioned with is user seated and there is a space for their caregiver or family member to be seated together."

# 3 Facility Implementation

**Common Spaces 1/2** 



# 3.6 Garden paths

P.3-13

This section states that the circulation plan must be prepared so that all users, including wheelchair users and stroller users, can move along the same circulation path.

# **Examples of standards**

- The garden paths must ensure appropriate effective widths based on the anticipated visitor volumes.
- ☆ It is desirable that the effective widths of garden paths be at least 2,000 mm so that two wheelchair users can pass by one another.
- The path surface must be slip-resistant in both dry and wet conditions and must have a finish without unevenness that could hinder passage.
- Gravel or cobbled garden paths, which make it difficult for wheelchair users to move around, must be avoided. When using flat plates, interlocking pavers, ceramic tiles, etc., ensure that no step is created in the joints.

3.7 Staircases P.3-16

This section states that staircases must not be basically installed in the gardens, but if it is unavoidable, 3.2 Staircases must be referred to.

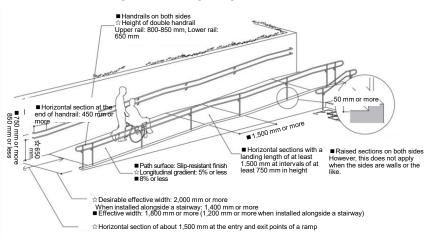
3.8 Ramp P.3-17

This section explains ensuring appropriate gradients and effective widths, installing landings and handrails, etc.

# **Examples of standards**

- ☆ It is desirable that the effective widths of the ramps on the main routes be at least 2,000 mm and no narrower than the pathways on plot, corridors, etc. Where it is essential to install a ramps outside the main routes (e.g., an additional ramp to a staircase), it desirably has a minimum width of 1,400 mm.
- ☆ It is desirable that longitudinal gradients be 5% or less.
- Longitudinal gradients must be at no more than 8%.

# **Example of ramp implementation**





# 3.9 Pathways on plot (outdoor)

P.3-20

This section states that the circulation plan must be prepared so that all users, including wheelchair users and stroller users, can move along the same circulation path.

# **Examples of standards**

- The pathways must ensure appropriate effective widths based on the anticipated visitor volumes.
- ☆ It is desirable that the effective widths of pathways be at least 2,000 mm so that two wheelchair users can pass by one another.

# 3.10 Doorways

P.3-23

This section outlines the width of doorways, the ease of opening and closing doors, and the approach to the surrounding spaces to ensure that doorways can be used smoothly.

# **Examples of standards**

- ☆ It is desirable to have at least 950 mm of effective width for doorways.
- The doorways must have at least 850 mm of effective width. Considerations are required to account for the door panel thickness, the door width that does not clear the doorway opening, etc. in order to ensure an appropriate effective width.
- ☆ It is desirable that the effective width of main doorways be at least 2,000 mm so that two wheelchair users can pass by one another. If an entrance and an exit for a main doorway are separated, it is desirable that each of them has an effective width of at least 1,000 mm.

# 3.11 Corridors etc. (indoor)

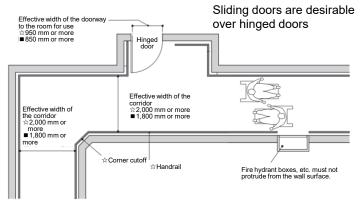
P.3-28

This section outlines how to ensure sufficient space for wheelchair users to pass by each other, how to ensure circulation with consideration for viewing spaces at exhibition sites, and the approach to effective widths.

# **Examples of standards**

- The corridors, etc. must ensure appropriate effective widths based on the anticipated visitor volumes.
- If the corridors, etc. are also used for viewing exhibitions and events, their effective widths must account for uses other than passage apart from the widths required for passage. In addition, attention must be paid to setting passage positions and securing appropriate effective widths so that exhibitions can be viewed from the eye level of wheelchair users and children without difficulty even during busy times.

# **Example of implementation of corridors, etc.**



(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Buildings]

# Opinions of people with accessibility needs

"To ensure that exhibits are visible even when it is crowded, please consider the eye level of wheelchair users and keep their view clear."

P.3-36



3.12 Staircases P.3-31

This section outlines safety measures, such as ensuring appropriate riser, tread structure and effective width, and installing non-slip devices.

# **Examples of standards**

- ☆ It is desirable that the riser is no more than 150 mm.
- The tread must be at least 300 mm.

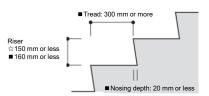
# 3.13 Ramps

This section explains ensuring appropriate gradients and effective widths, installing landings and handrails, etc.

# **Examples of standards**

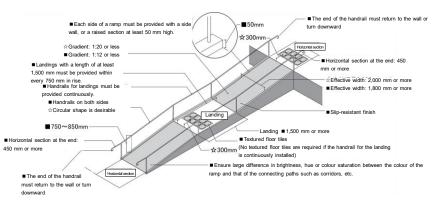
- ☆ It is desirable that effective widths of the ramps on the main routes, whether outdoor or indoor, be at least 2,000 mm, and not be narrower than the pathways on plot, corridors, etc. Where it is essential to install a ramp outside the main routes (e.g., an additional ramp to a staircase), it desirably has a minimum width of 1,400 mm.
- ☆ It is desirable that the gradient be 1:20 maximum.
- The gradient must not exceed 1:12.

# **Structure of steps**



(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Buildings]

# Basic structure of a ramp





# 3.14 Passenger lifts

This section outlines the design approach to the layout and size of elevators, the size of lift lobbies, etc.

# **Examples of standards**

☆ It is desirable that, taking into account the traffic volumes and exhibition facility sizes, the lift cars be at least 2,100 mm wide and 1,500 mm long or of an equivalent standard size (JIS A4301: 2,150 mm wide x 1,600 mm long; or 2,000 mm wide x 1,750 mm long (with a capacity of 24 passengers)), and that several lifts be provided.

# 3.15 Escalators

While lifts are the basic method for vertical mobility, this section outlines design methods for escalators that take into consideration the elderly people and persons with disabilities.

# **Examples of standards**

☆ If escalators are provided, it is desirable that the width is in alignment with the type-1000 (the effective width of step: approx. 1,000 mm).

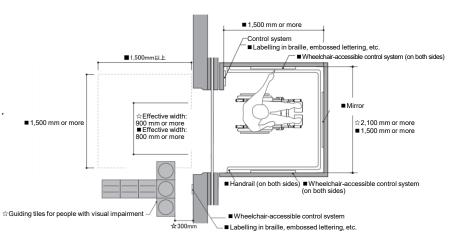
# 3.16 Platform lifts

While elevators are the basic method for vertical mobility, platform lifts that are installed next to staircases are also an effective means of vertical mobility. This section outlines the approach to their installation.

# **Examples of standards**

- The platform must be at least 900 mm wide and 1,500 mm long.
- In the case of platform lifts installed next to staircases, multiple platform lifts must not be installed consecutively in the same room.

# **Example of implementation around the lift**





# 3.17 Toilet stalls

P.3-48

This section outlines how to distribute various facilities and functions throughout the Exposite to avoid users concentrating at a specific toilet stall.

#### **Examples of standards**

- At least one individual washroom must be provided that is easily accessible to wheelchair users when installing toilet stalls.
- At least one individual washroom must provide facilities for emptying ostomy bags when installing toilet stalls.

For wheelchair-accessible toilet stalls, standards are provided for ensuring a sufficient space, door structures, etc. with consideration for the use by wheelchair users.

# **Examples of standards**

☆ It is desirable that dimensions inside a washroom for wheelchair users be at least 2,200 mm x 2,200 mm with a turning space of at least 1,800 mm in diameter, so that users of large electric wheelchairs can turn inside.

For equipment for ostomate, etc., standards are provided for necessary equipment, fixtures, etc.

# **Examples of standards**

■ If a toilet stall with equipment for ostomate is installed, a dedicated flushing basin, water tap, flush button, toilet paper holder, sanitary bin, shelf and hooks must be appropriately provided.

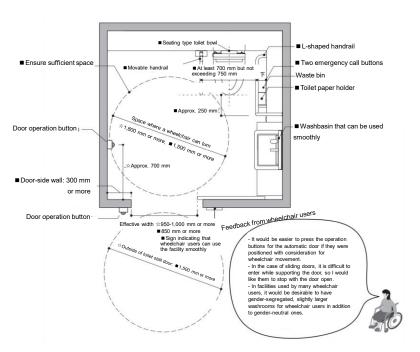
For equipment for infants, etc., this section outlines the approach to installation of diaper change tables for infants and infant chairs, and provides standards for necessary equipment, fixtures, etc.

# **Examples of standards**

■ If toilet stalls other than those for wheelchair users are installed, at least one of them (if they are separated for men and women, at least one for each) must, as a general rule, have a diaper changing table for infants and an infant chair.

Additionally, this section provides the approach to implementation and numerical standards for flooring materials, toilet bowls, washing basins and display signs.

# **Example of washroom for wheelchair users**





# 3.18 Auditorium

P.3-62

This section outlines matters related to ensuring auditoriums that are easy for elderly people, persons with disabilities, etc. and sightlines for various users including wheelchair users.

#### **Examples of standards**

- When the total number of seats is over 100 but does not exceed 200, it is desirable to provide wheelchair-accessible seats equal to at least 2% of the total number of seats.
- ☆ It is desirable to provide wheelchair-accessible seats in multiple areas so that
  wheelchair users can choose freely. When providing wheelchair-accessible seats in
  multiple areas, it is desirable to distribute them at different levels and different
  horizontal locations.

# 3.19 Food service/retail vendor areas (cafeterias, restaurants, retail vendors, etc.)

P.3-67

In order to ensure smooth mobility, communication, etc. within food service/retail vendor areas, this section outlines matters to be considered for doorways, pathways, counters, and seats.

#### **Examples of standards**

- t is desirable to have at least 950 mm of effective width for doorways.
- Main pathways must have a minimum effective width of 1,500 mm, and pathways between tables must have an effective width of at least 1,000 mm. Tables and chairs must be movable wherever possible to allow people to move between the tables.

# Opinions of people with accessibility needs

"For places for families and groups to enjoy together, I would like tables, spaces, etc. that can be used by wheelchair users to be provided so that wheelchair users can also enjoy together."

"Sofas would be appreciated for pregnant women or for cases where children fall asleep."

# 3.20 Baby care rooms

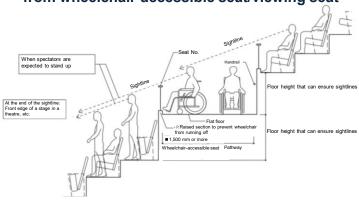
P.3-72

This section states that it is required to provide places for the care of infants (baby care rooms) that can be used for infant feeding, baby food feeding, diaper change, etc.

# **Examples of standards**

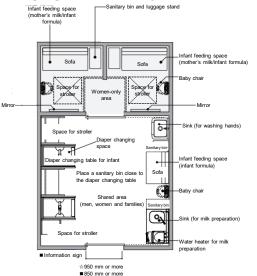
- Space must be closed off in consideration of privacy for breastfeeding. Privacy must be ensured with curtains, partitions, doors that locks from the inside (with status indicator), etc.
- It is desirable to provide spaces where both men and women can use (e.g., spaces for feeding milk or baby food, and diaper changing tables for infants).

# Example of implementation to ensure sightlines from wheelchair-accessible seat/viewing seat



(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Buildings]

# Examples of infant feeding rooms/diaper changing spaces (baby care rooms)





# 3.21 Prayer rooms

P.3-75

Since the Expo site will be visited by people of diverse religious and cultural backgrounds, this section outlines matters concerning prayer rooms that serve as facilities to accommodate such people.

# **Examples of standards**

■ If providing a room of worship, doorways must have an area free from obstructions, with space secured for removing shoes, and ensuring removed shoes do not block pathways.

# 3.22 Fixtures and equipment (handrails, counters, vending machines, etc.)

This section outlines the approach to implementation of internal and external fixtures and equipment, such as handrails, counters, vending machines and entrance/exit gates, as those that are easy for everyone to use.

### **Examples of standards**

- The dimensions of counters, writing desks, public telephone stations, etc. must be approx. 650-700 mm high at the lower end, approx. 700-750 mm high at the upper end, and approx. 450 mm deep so that wheelchair foot supports and knees can fit in the space underneath them.
- Operation buttons of vending machines and ticketing machines, and operation buttons, cash slots and cash outlets of automatic teller machines must be located at a height of approximately 400-1,100 mm from the floor.

# 3.23 Interior design (interior decorations, equipment, and other arrangements)

This section specifies the requirements for rooms, lockers, balconies, and stroller parking areas.

# **Examples of standards**

☆ It is desirable that the stroller parking area be large enough (with a depth of at least 1,000 mm) to accommodate strollers without folding them.

# 3.24 Evacuation equipment, etc.

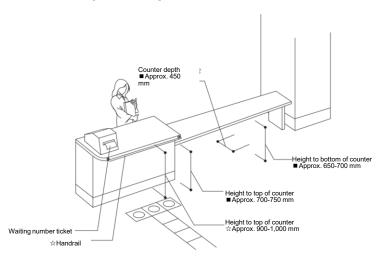
P.3-85

To ensure smooth evacuation for all people in the event of a disaster, this section outlines how to establish evacuation routes to enable all people to evacuate safely and quickly and the approach concerning necessary information guidance.

# **Examples of standards**

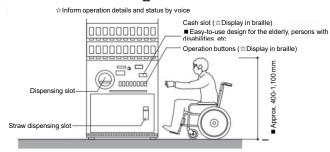
It is desirable that safe, temporary refuge areas are provided on staircase landings, on balconies connected to stairs, stair vestibules, and corridors, etc. in areas that do not block evacuation routes to be used while waiting for rescue in emergencies.

# **Example of implementation of a counter**



(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Buildings]

# Basic dimensions and implementation example of vending machine





#### 3.25 Display signs

P.3-88

This section states that signs should be easy for everyone to understand, and that pictograms, which are designed to be easy for all people including children and foreign nationals to understand, should be used.

#### **Examples of standards**

A combination of hiragana (furigana), pictograms, English, etc. should be used, and pictograms should basically be compliant with information symbols specified in JIS Z 8210.

# 3.26 Tactile floor tiles

P.3-92

This section outlines matters to be considered for the placement and structure of tactile floor tiles to ensure safe, secure and smooth use by persons with visual impairment.

#### Examples of standards

■ Guiding tiles for persons with visual impairment (e.g., striped tactile direction guiding tiles and dotted tactile warning tiles) must be installed on the route leading from outside the venue to the doorways to the venue and the main garden path in the common spaces.

# 3.27 Calm down/cool down spaces, sensory spaces, etc.

This section outlines the planning and design approach with consideration to ensure that people who may feel uneasy depending on the circumstances of the environment, such as crowds, sounds and lights, can enjoy the Expo with peace of mind.

# **Examples of standards**

As for the interior of calm down/cool down spaces and sensory spaces, the walls should be made of soft materials and cool colours, warm colours, etc. should be used so that users can spend their time with peace of mind.

# 3.28 Areas for waiting/queueing

P.3-97

This section outlines matters to be considered for environmental arrangements for the queueing and waiting spaces to ensure everyone, including elderly people and persons with disabilities, are able to gueue safely and move along smoothly.

# **Example of standards**

☆ It is desirable that priority entrances be provided for persons with disabilities, etc.

#### 3.29 Assistance dog toilets

P.3-98

# **Examples of pictograms**























Bathroom

Information point Baby care room\* Facility for ostomy bag



(for women)∆



(for both men and



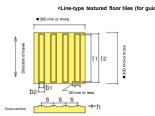
▲: Changed in accordance with the revised JIS standards, with

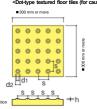
A: Symbols added in accordance with the revised JIS standards

When using this information symbol facilities for feeding infants and changing diapers must at least be

(Reference) Created based on Yokohama City Ordinance on Welfare Communities: Facility Implementation Manual [Buildings]

# Structure of striped tactile direction guiding tiles / dotted tactile warning tiles





Symbol	Measurement	Tolerance	
b1	17mm		
b2	b1+10mm	+1.5mm	
s	75mm	U	
h	5mm	+1mm	
l1	270 mm or more		
12	I1+10mm		



Symbol	Measurement	Tolerance	
d1	12mm		
d2	d1+10mm	+1.5mm 0	
s	55~60mm	U	
h	5mm	+1mm	





4

**Services** 



# Overall structure of "4 Services"

# 4 Services

# 4.1 Staff support

- 4.1.1 General guidance
- 4.1.2 Staff training

# 4.2 Information communication tools

- 4.2.1 Web content
- 4.2.2 Display signs
- 4.2.3 Digital signage
- 4.2.4 Voice guidance and broadcast
- 4.2.5 Distributive items such as maps

# 4.3 Multilingual support

# 4.4 Services at each facility

- 4.4.1 Admission ticket sales and entrance/exit gates
- 4.4.2 Information centres, etc.
- 4.4.3 Washrooms
- 4.4.4 Exhibits
- 4.4.5 Events
- 4.4.6 Shop operation, food, beverage, and product sales
- 4.4.7 Garden paths and circulation

# 4.5 Emergency response



# 4.1 Staff support

P.4-2

This section provides standards for general guidance and staff training to ensure that the staff members dealing with visitors can respond flexibly in every situation.

# **Examples of standards**

# 4.1.1 General guidance

- In order to deal with various circumstances of visitors, consideration should be given to ensure that staff members who can respond to visitors are assigned at the venue entrance spaces with entrance and exit gates, pickup and drop-off areas, information centres, care centres, etc.
- If a person who need support wishes to be assisted by a staff member and the person himself/herself or his/her companion, etc. makes a request or shows a help card, etc., consideration should be given to ensure that support is provided in accordance with their wish (It is only at the person's own request, and if there is no request, the same treatment will be given without distinction to other visitors. Also, when speaking to give support, do so to the person in question, not to the companion).
- In order to ensure that all visitors can move around the Expo site safely and comfortably, provide appropriate guidance and instructions, taking into consideration the nature of disabilities, the use of strollers, etc.

# 4.1.2 Staff training

- In order to prevent inadequate treatment of persons with disabilities and communication barriers due to misunderstandings and stereotypes, training should be provided to all staff members, including volunteers, to raise their awareness. Through the training, ensure that training attendees have correct understanding and knowledge and can provide appropriate services.
- Staff and volunteers should share the actual events that occur in operation after the opening of the Expo to improve services, and training opportunities should be ensured throughout the Expo period by updating training content.

# Opinions of people with accessibility needs

"I would like to ask that staff and volunteers be given thorough training to learn reasonable consideration and how to respond according the characteristics of disabilities so that they can provide support tailored to each individual."

"I would like staff training to be extended to as many people concerned as possible."

"I would like to ask that staff and volunteer training be conducted assuming that visitors with intellectual or developmental disabilities will also be present."

"I would like staff to be educated to speak directly to the person in a wheelchair, not to the wheelchair or their helpers."

"I would like staff to use privacy-conscious language when they guide a wheelchair user, and avoid guiding with loud announcements such as 'Wheelchair coming through!'"



# 4.2 Information communication tools

P.4-9

This section provides standards for information communication tools to disseminate information with consideration to its ease of understanding, usability and visibility so that all visitors can obtain the information they need.

# **Examples of standards**

#### 4.2.1 Web content

■ When providing information using websites, etc., consideration should be given to their convenience so that anyone can obtain information they need.

# 4.2.2 Display signs

- Consideration should be given to ensure that visitors who have difficulty obtaining information by visual can obtain the same level of information by using senses other than vision, such as touch and hearing.
- Provide announcements using display signs in front of spaces where strong light or smell, loud noise, etc. are generated.

# 4.2.3 Digital signage

☆ In emergencies, it is desirable to consider information communication to people with hearing difficulties, and to inform them of the situation in writing.

# 4.2.4 Voice guidance and broadcast

It is desirable that information displays and explanations (such as captions for exhibits) should be provided with voice guidance to ensure that they are easy for all visitors to understand.

# 4.2.5 Distributive items such as maps

■ Consideration should be given to provision of information to persons with visual impairment who have difficulty obtaining information with their eyes, those who are sensitive to light, smell and sound, people who need care in communicating and understanding, etc.

# Opinions of people with accessibility needs

"For information displays, I would like to ask that attention be paid to the use of large letters and clear colours so that the displays are easy for elderly people and persons with low vision to understand."

"In preparation for unforeseen situations such as disasters, I would like to ask that visual guidance and signs be used as a consideration for persons with hearing difficulties, so that we can avoid confusion."

"I would like to ask that pamphlets and other materials be made easy for all visitors to understand by using braille, large letters, and visual icons."



# 4.3 Multilingual support

P.4-14

This section states that, as a basic rule, multilingual support must be provided in Japanese and English.

# **Examples of standards**

- ☆ When multilingual support is required, it is desirable to use translation apps, etc. as necessary.
- Interpretation should be provided in Japanese and English. However, this shall not apply when the participants are limited to official participants or related parties who use a specific language, and interpretation in Japanese and the specific language may also be provided.

Multilingual items and applicable languages

Multilingual items	Examples	Applicable language principle
Staff support	Staff members dealing with visitors	Do not specify a specific language Use a translation app as needed
Ciam capport	Interpreters	
Web content	Websites, etc.	
Displays and signs	Japanese and English	
Digital signage		
Still and moving image content		
Guidance broadcast		
Printed matters for visitors	- Menus - Product descriptions - Brochures, etc.	
Explanation on exhibits, etc.		
Events	- Announcements - Screens, etc.	Generally, Japanese and English are to be used, but flexible arrangements are to be made according to the attendees.
Others	Name badges for staff	Japanese and Roman alphabet



# 4.4 Services at each facility

P.4-16

This section outlines matters to be concerned for services provided at each facility within the Expo site.

# **Examples of standards**

# 4.4.1 Admission ticket sales and entrance/exit gates

■ Consideration should be given to providing guidance/guide at and around the venue entrance by using textual information in addition to voice guidance.

# 4.4.2Information centres, etc.

■ Support tools, etc. should be introduced so that visitors can move around the Expo site comfortably.

#### 4.4.3 Washrooms

■ In order to meet the needs of diverse users, and make washrooms more user friendly, washrooms, such as washrooms for wheelchair users, individual toilet spaces with equipment for ostomates, and individual toilet stalls with equipment for babies/infants should be appropriately operated.

#### 4.4.4 Exhibits

- If explanations on exhibits are prepared, they should be placed in a position that is easy to read.
- Measures should be taken to allow people who have difficulty getting visual information to share their experiences by getting information with non-visual senses such as touch and hearing.
- Measures should be taken to install exhibits in a way that helps various people look at them, including wheelchair users and children.

#### 4.4.5 Events

■ Information and precautions should be provided in advance.

# 4.4.6 Shop operation, food, beverage, and product sales

■ It is necessary to provide facility information that can be used by all visitors, and when disseminating information, it should be devised in a way easy for visitors to see and understand that so that it would not be complicated. In addition, necessary information should be provided by utilising the website produced by the organiser or other means so that the information can be confirmed in advance.

# 4.4.7 Garden paths and circulation

■ In order to ensure that all visitors can move around the Expo site safely and comfortably, provide appropriate guidance and instructions, taking into consideration the nature of disabilities, the use of strollers, etc.

# Opinions of people with accessibility needs

"For persons with visual impairment, I would like to ask that written explanations of exhibits and hands-on exhibits be provided to increase the number of interactive exhibits. I would like areas with fragrant plants and exhibits of plants that can be touched and enjoyed."

"For persons with hearing difficulties, it would be helpful to have explanations in sign language. For example, a system in which scanning a QR code provides explanations in sign language. Explanations in both written text and sign language would be preferable."

"I would like to ask that attention be paid to the height of exhibits so that wheelchair users can approach and easily view them."



# 4.5 Emergency response

P.4-25

This section outlines response policies and measures for evacuation guidance to ensure that all visitors, including elderly people and persons with disabilities, can evacuate safely in the event of an emergency.

In addition, this section states that information on emergency response should be posted on the website, etc. produced by the organiser so that visitors can check it in advance.

# **Examples of standards**

■ Setting up display signs, broadcasting, providing information in advance, providing human guidance, and providing guidance in multiple languages should be done for the safe evacuation of all visitors, including the elderly people, people with disabilities and foreign nationals, in the event of an emergency.

# Opinions of people with accessibility needs

"In preparation for unforeseen situations such as disasters, I would like to ask that visual guidance and signs be used as a consideration for persons with hearing difficulties, so that we can avoid confusion."



# 5

# **Transport Access**



# **Overall structure of "5 Transport Access"**

# 5 Transport Access

- 5.1 Approach of this chapter
- 5.2 Road transport modes (related facilities, etc.)
  - 5.2.1 Car parks
  - 5.2.2 Bus and taxi pickup/drop-off facilities
- 5.3 Road transport modes (vehicles, etc.)
  - 5.3.1 Bus vehicles
  - 5.3.2 Taxi vehicles
- 5.4 Rail transport modes (related facilities, etc.)
  - 5.4.1 Rail transport modes (related facilities, etc.)
  - 5.4.2 Guidance and information equipment
  - 5.4.3 Facilities and equipment
- 5.5 Rail transport modes (vehicles, etc.)

- 5.6 Air transport modes
  - 5.6.1 Air passenger terminal facilities
  - 5.6.2 Aircrafts
- 5.7 Marine transport modes
  - 5.7.1 Passenger ship terminals
  - 5.7.2 Taxi vehicles
- 5.8 Walking, etc. (pavements, cycle and pedestrian paths, etc.)
  - 5.8.1 Pavements, cycle and pedestrian paths, etc.
  - 5.8.2 Grade separated crossing facilities
  - 5.8.3 Other facilities, etc.
- 5.9 Ensuring accessibility of information, and smooth communication



# 5.1 Approach of this chapter

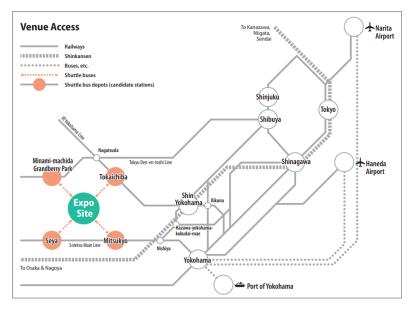
P.5-1

This chapter is based on the Universal Design Guidelines for Transport Accessibility for the 2025 World Exposition (Expo 2025, Osaka, Kansai), and guidelines for walking, etc. (pavements, cycle and pedestrian paths, etc.) are based on the principles and standards of the Guidelines for Smooth Transportation, etc. on Roads.

Furthermore, this chapter has been prepared with reference to the opinions of persons with disabilities and academic experts expressed in the "International Horticultural Expo 2027 Accessibility Guidelines Study Group."

When using these guidelines, facilities such as car parks and pickup and drop-off areas for shuttle buses, etc. that are to be developed or improved for the Expo must be planned and developed in accordance with the standards of these guidelines.

With regard to existing transport facilities such as railways and roads, if new facilities are constructed or existing facilities are improved, efforts shall be made to improve the level of implementation using these guidelines as reference.



# Approach to guideline development in this chapter

<Various modes of transport
such as roads and railways>

Universal Design Guidelines for Transport Accessibility for the 2025 World Exposition <Walking, etc.>

Guidelines for Smooth Transportation, etc. on Roads

"International Horticultural Expo 2027
Accessibility Guidelines Study Group and
thematic working groups
Opinions

International Horticultural Expo 2027, Yokohama, Japan Accessibility Guidelines "5 Transport Access"



# 5.2 Road transport modes (related facilities, etc.)

P.5-4

This section outlines car parks and bus and taxi pickup/drop-off facilities that serve as access points for transport to the Expo site.

# 5.2.1 Car parks

This section specifies the location, structure, size, information sign, etc. for accessible parking facilities and accessible stopping facilities.

# 5.2.2 Bus and taxi pickup/drop-off facilities

This section specifies the kerb height, shelter installation, operational information, structure, etc. for pickup/drop-off areas.

# 5.3 Road transport modes (vehicles, etc.)

P.5-16

This section outlines bus and taxi vehicles that serve as modes of transport access to the Expo site.

# 5.3.1 Bus vehicles

This section specifies standards for urban route buses, etc., including boarding/alighting doors, wheelchair ramps, wheelchair-accessible spaces and pathways, rear steps, handrails, interior colours, seats and priority seats, stop buttons, interior and exterior signage, interior and exterior announcements, and communication equipment.

#### 5.3.2 Taxi vehicles

This section specifies standards for universal design taxis, etc., including boarding/alighting doors, wheelchair ramps, handrails, wheelchair-accessible spaces, securing methods, display of universal design taxi mark, and support for persons with visual impairment or hearing difficulties.

# 5.4 Rail transport modes (related facilities, etc.)

P.5-59

This section outlines passenger facilities of railway transport services to the Expo site.

#### 5.4.1 Accessible route

This section specifies standards for routes for smooth transport within passenger facilities, doorways to public pathways, doorways to ticket sales offices, waiting areas and information desks, pathways, vertical circulation facilities, ticket gates, and platforms.

# 5.4.2 Guidance and information equipment

This section specifies standards for visual display equipment, guidance and information equipment for persons with visual impairment, and equipment for emergency guidance.

# 5.4.3 Facilities and equipment

This section specifies standards for washrooms, ticket sales offices, waiting areas, information desks, ticketing machines, facilities for rest, etc.

P.5-120

# 5.5 Rail transport modes (vehicles, etc.)

This section outlines railway vehicles of railway transport services to the Expo site.

# 5.5.1 Railway vehicles

This section specifies standards for railway vehicles, including boarding/alighting areas (inside and outside the vehicle), priority seats and other seats, handrails, wheelchair-accessible spaces, pathways, information signage and announcements (inside the vehicle), and equipment for preventing falling between vehicles.



# Air transport modes

This section outlines air passenger terminal facilities and aircrafts as air transport modes.

# 5.6.1 Air passenger terminal facilities

This section specifies standards for pathways of air passenger security checkpoints, air passenger boarding bridges, air passenger boarding gates, and boarding/disembarking within air passenger terminal facilities.

#### 5.6.2 Aircrafts

This section specifies standards for movable armrests, onboard wheelchairs, equipment for providing flight information, and washrooms.

# Marine transport modes

This section outlines passenger ship terminals and vessels as marine transport modes.

# 5.7.1 Passenger ship terminals

This section specifies standards for boarding gates, connecting bridges to piers/quays, gangways, and other equipment for boarding and disembarking.

#### 5.7.2 Vessels

This section specifies standards for equipment for boarding and disembarking, entrances/exits, pathways, washrooms, and equipment for providing operational information.

# 5.8 Walking, etc. (pavements, cycle and pedestrian paths, etc.) P.5-152

This section outlines pavements, etc. and grade separated crossing facilities for access to the Expo site on foot and by similar means.

#### 5.8.1 Pavements, cycle and pedestrian paths, etc.

This section specifies standards for installation and effective width of pavements, paving, gradients, separation between pavements and roadways, height, sections of pavements connected to pedestrian crossings, vehicle access points, etc.

# 5.8.2 Grade separated crossing facilities

This section specifies standards for, installation of grade separated crossing facilities, lifts, ramps, escalators, pathways, staircases, etc.

# 5.8.3 Other facilities, etc.

This section specifies standards for guide signs, tactile floor tiles, rest facilities, lighting facilities, etc.

# Ensuring accessibility of information, and smooth communication

This section outlines the approach to ensuring accessibility in the provision of information through websites and other similar means.

# 5.9.1 Provision of information through websites and other similar means

- Web accessibility
- Provision of information on transport access through websites
- Provision of information in the event of disasters and other emergencies

