

Japan National Stadium

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A Blending in with the surrounding environment

Stadium open to everyone, blending in with the forest of Jingu

The forest of Jingu inherits the historic greenery spreading from the Inner Garden of Meiji Jingu Shrine to the Imperial Palace. To preserve the precious greenery of the area, Stadium in Forest, a stadium open to everyone and blending in with the surrounding nature, has been born as a great living tree rooted in the earth, looking at 100 years from now.



Stadium in Forest forming a green network

Green network spreading from the Inner Garden of Meiji Jingu Shrine to the Imperial Palace

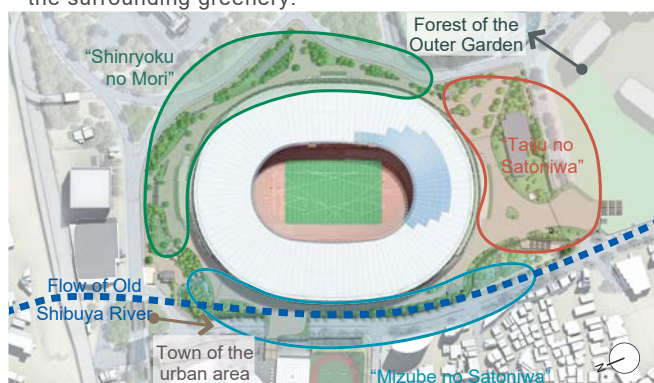
- The stadium, surrounded by the abundant greenery of the Outer Garden of Meiji Jingu Shrine, forms a green network spreading from the Inner Garden of Meiji Jingu Shrine to the Imperial Palace through the Shinjuku Imperial Gardens and the Akasaka Detached Palace.



"Daichi no Mori" creating a landscape of abundant forest and town

Three zones utilizing features of the surrounding area

- By utilizing features of the location where the Forest of the Outer Garden of Meiji Jingu Shrine and the Town of the urban area are in contact with each other, "Daichi no Mori", garden on the ground has been developed in harmony with the surrounding greenery.



"Daichi no Mori" composed of "Shinryoku no Mori", lush green garden, "Tate no Satoniwa", garden of the great tree, and "Mizube no Satoniwa", waterside garden

Flat roof structure minimizing the height of the building

The height of the building will be 50 meters or less to ease a feeling of pressure.

- To blend in with the landscape of the Outer Garden of Meiji Jingu Shrine, the height of the building is 50 meters or less. The spectators' seats have been placed as compactly as possible and the top of the stand has a flat roof structure.



Image of the three-dimensional surface from the west

Center of sports cluster open to everyone

"Daichi no Mori" and "Sora no Mori" leading to citizens' activities

- The stadium features spaces for everyone: the "Daichi no Mori" connected to the surrounding parks and the "Sora no Mori" on the top floor with a circumference of approximately 850 meters. This unique stadium will become a "New center of sports cluster" where everyone can enjoy taking walks and doing various types of sports.



View of "Sora no Mori", rooftop garden

B Japanese features

Wood and green stadium featuring Japanese climate, culture, and tradition

The eaves around the outer perimeter of the stadium keep out the sunlight and rain and also provide faint shadow and mild texture. Eaves are one of the features of traditional Japanese construction suitable for Japanese climate and culture. They create a very Japanese stadium, gently blending the architecture in with the green environment.



Exterior view of the south gate

Eaves providing gentle shade

Eaves covered with vertical cedar lattice blending in with surrounding trees

- The eaves, located around the outer perimeter of the stadium and covered with vertical cedar lattice, give the stadium faint shadow and mild texture and blend in with surrounding trees. The mild cedar texture warmly welcomes all visitors.
- Lumber obtaining forest certification from 47 prefectures nationwide has been used for the eaves, cedar from 46 prefectures and Ryukyu-pine from Okinawa.
- The greenery on the eaves blends with the forest of the Outer Garden of Meiji Jingu Shrine in with the stadium.

Traditional Japanese lights fitting in with the surrounding environment

- Traditional Japanese lights (stone and paper lanterns like Bonbori, Tōrō, Chōchin) provide the entire stadium with soft light.



Exterior view of the south gate (night)

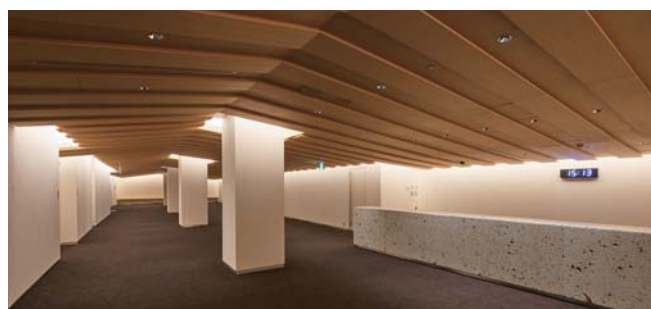


Exterior view from south

Space with the spirit of hospitality, using traditional design

Japanese design

- Interior design applying traditional Japanese designs such as Yamato-bari (a method of laying boards) and warm wooden texture creates a very Japanese space.



Interior space filled with Japaneseness

World-class stadium using domestic lumber

Spectators will feel the warmth of wood through the combination of lumber and steel for the truss of the Large Roof. Lumber also has been prominently used inside the stadium and for the eaves of the outer perimeter to achieve a very Japanese and world-class stadium. Domestic lumber obtaining forest certification has been used for the Large Roof and eaves.



Inside of stadium filled with warmth of wood.

Large Roof and eaves using lumber will embrace all spectators.

Using wooden material for the truss of the Large Roof

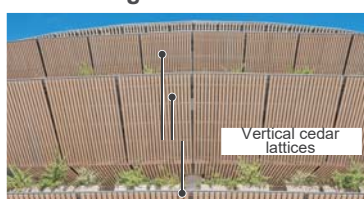
- Materials used for the truss of the Large Roof are mainly steel, which has sufficient strength, and lumber, to suppress deformation in case of an earthquake or strong wind.
- Laminated lumber made of larch and cedar has been used for the truss.



Image of using lumber for the truss of the Large Roof

Using vertical lumber lattice for the eaves around the outer perimeter of the building

- Vertical cedar lattice has been used for the eaves around the outer perimeter of the stadium. The warm cedar texture creates the appearance of a very Japanese stadium.



View of using lumber for the backs of the eaves around the outer perimeter

Proactively using lumber inside and outside the building^{*1}

Utilization method suitable for lumber used on exterior surfaces

- Lumber has been used for the inner side of the Large Roof and the eaves where it is not likely to be exposed to the rain, which is the main cause for degradation.
- Lumber has been treated with pressure injection processes for antiseptic and anti-termite measures to increase durability.

Interior space surrounded by wood

- Wooden texture in the interior space embraces spectators with a warm atmosphere.
- Domestic CLT^{*2} having high strength will be used for lockers in the athletes' dressing rooms, benches in recreation spaces, exterior wall of outdoor elevator, etc.



Interior space where everyone can feel the texture of wood



Lockers with CLT materials

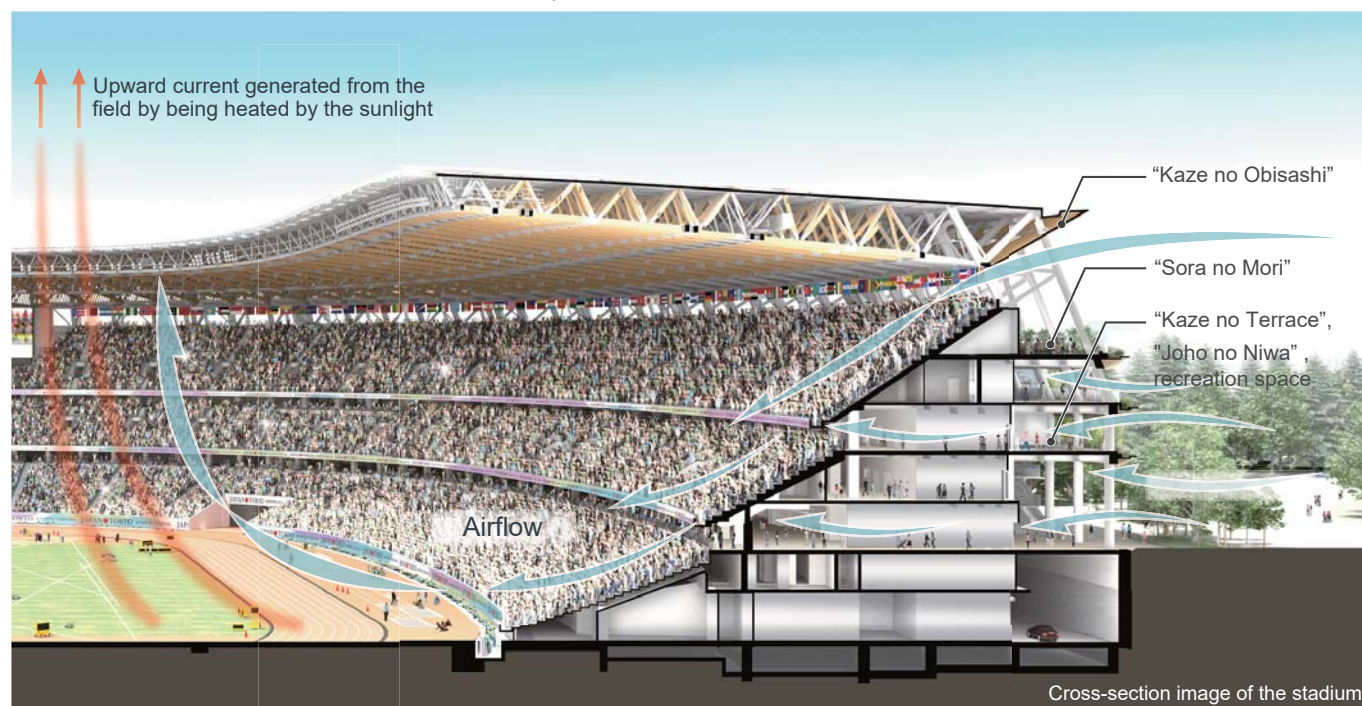
^{*1} Used only where it's not necessary to fireproof lumber

^{*2} Cross Laminated Timber: Wood materials laminated and adhered after they are orthogonally placed

D Improving the thermal environment of spectators' seats (Heat measures)

Improving the spectator environment by using the natural energy

Natural winds channeled into the stadium from “Kaze no Obisashi”, eaves to guide the wind and “Kaze no Terrace”, recreation space circulate airflow and discharge heat and moisture generated from the field and spectators, which improves the thermal environment of the spectators' seats and field. In addition to the natural energy, an airflow-creating fan and a mist-cooling system has been installed to achieve further improvement of the thermal environment.



Improving the thermal environment of the spectators' seats by using winds

“Kaze no Obisashi” and “Kaze no Terrace” channeling winds into the stadium

- “Kaze no Obisashi” efficiently channel seasonal winds into the upper tier of the stadium. Channeling winds into upper tier of the stadium and utilizing the upward current effectively generated from the field by being heated by the sunlight, heat and moisture generated in the stadium are discharged.
- The “Kaze no Terrace” channels winds into the concourses and the lower tier of the stadium and improves the thermal environment of the spectators' seats.



View of “Kaze no Obisashi”

Heat measures through auxiliary facilities and equipment

Airflow-creating fan for reducing the perceived temperature

- Airflow-creating fans will be used in cases where winds are gentle, airflow feeling is not expected, or spectators' seats are exposed to the sun.
- Airflow-creating fans reduce spectators' perceived temperature and improve the spectator environment.

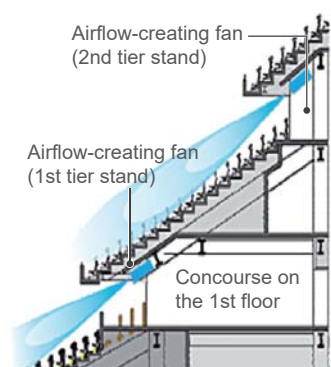


Image of assumed positions where airflow-creating fans are installed

Mist-cooling system for reducing the external temperature

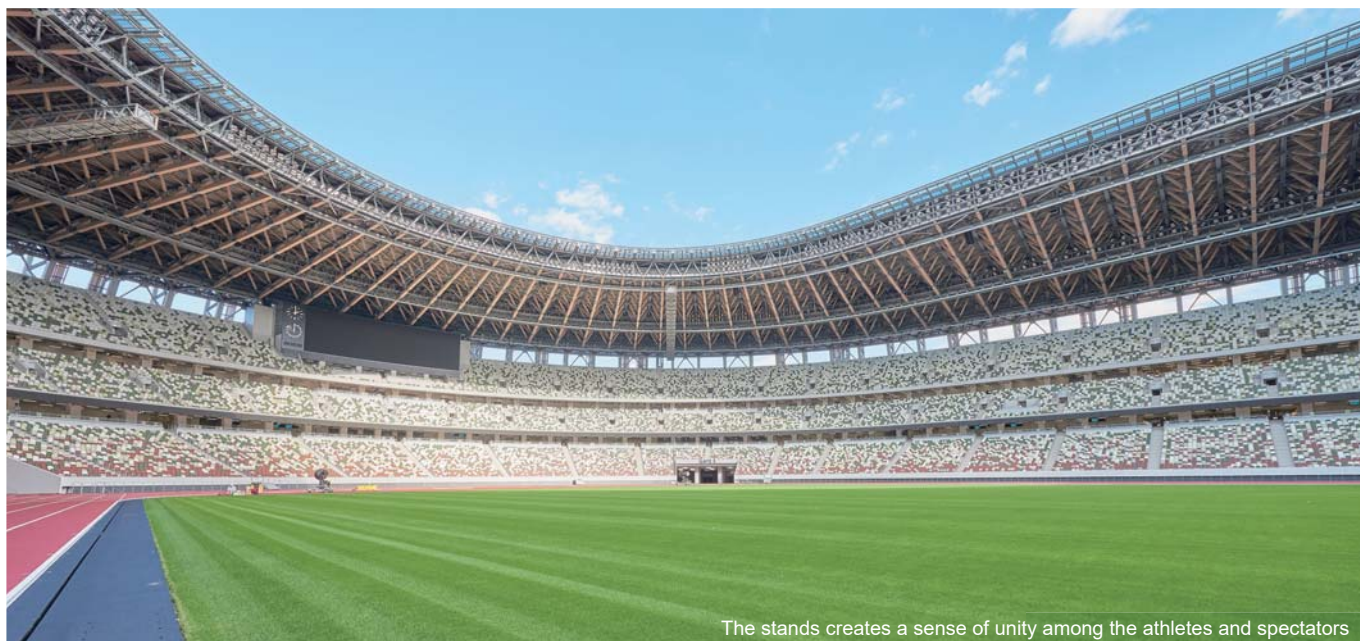
- A mist-cooling system, using water vaporization heat, has been installed near the entrance gates where many people gather and in some areas inside the stadium.
- It is expected to reduce the surrounding air temperature by spraying fine water particles.



View of mist cooling system

Creating an environment allowing athletes to give their best performance

The circulation route and room placement designed for athletes create an environment where they can smoothly travel, comfortably use the stadium, and maintain their concentration. The stands have been developed to create a sense of unity among the athletes and spectators. In addition, the high-performance field maintenance system makes it possible to keep the best condition regardless of the season or weather.



The stands create a sense of unity among the athletes and spectators

Circulation route enabling athletes' smooth traveling

Athletes' traffic lane during track and field events

- Athletes can enter the track via the special passageway.
- The interview zone and doping-control rooms placed near the finish line allow athletes smooth access.

Athletes' circulation route during football matches

- Athletes can quickly enter the dressing room via the bus parking and entrance for the athletes. They can also smoothly enter the pitch via the special passageway.
- Event management personnel access from the special entrance so that their circulation routes do not meet with the circulation routes of the athletes and their related persons.

Stands creating a sense of unity among the athletes and spectators

Three-layer stands

- Bowl-shaped three-layer stands, whose inclination gradually becomes steeper, continue 360° around the field. By surrounding the field with the spectators' seats, a sense of unity among the athletes and spectators will be created.

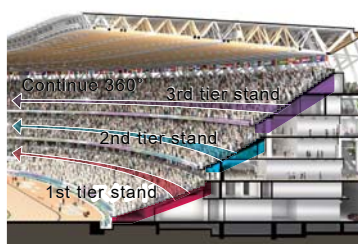


Image of stand composition

Skylight for growing natural lawn

The most appropriate form based on the sunshine distribution simulation

- The skylight installed in the southern portion of the Large Roof efficiently takes natural light onto the natural lawn.
- The form of the skylight is based on the simulation of sunshine distribution to the pitch surface. It is the most appropriate form for growing natural lawn in winter.

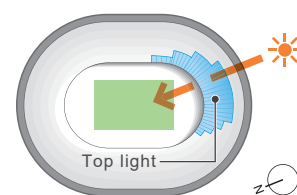


Image of Large Roof skylight

High-performance field maintenance system

Lawn sprinkler system

- A pop-up sprinkler will uniformly sprinkle the surface of the field with its natural lawn.
- The system will be operated and managed through system control, timer control, and rainfall sensor control.

Field drainage facilities

- Facilities installed below the field, including a buried pipe designed to uniformly and quickly drain water, will smoothly discharge water in case of concentrated downpour.

Underground temperature control system

- A pipe with a total length of approximately 25 kilometers has been buried beneath the lawn to circulate cool water in summer and heated water in winter, respectively, to maintain the optimum environment for growing natural lawn throughout the year.

F Universal design 1

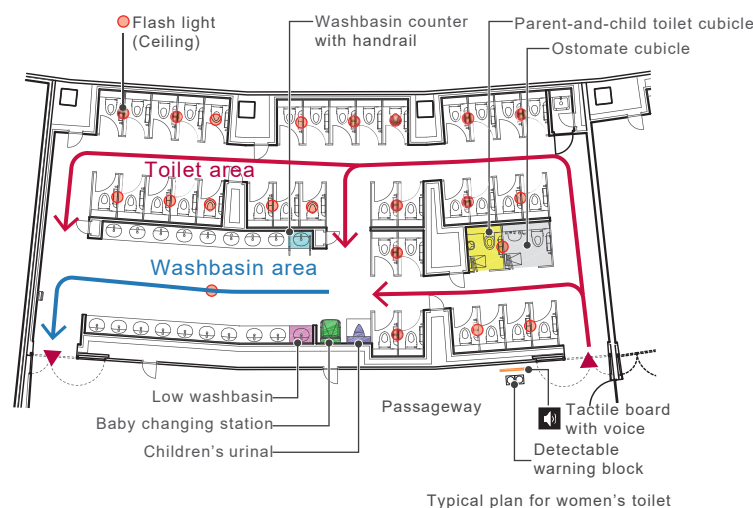
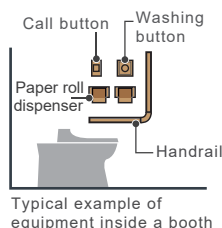
Stadium allowing everyone to feel comfortable while watching events

Based on the opinions through the workshop with 14 organizations for persons with disabilities etc., an environment where everyone can comfortably use the stadium has been developed with due considerations to various users regardless of age, sex, nationality, and presence or absence of disabilities.

Toilet plan enabling comfortable use by all users

Due consideration to various users

- For the elderly, handrails has been installed for urinals, washbasin counters, and all the toilet booths.
- For persons with visual impairment, arrangement according to JIS S 0026 has been applied to all the general toilet booths.
- The parent-and-child toilet cubicle and ostomate cubicle have been placed in an area visible from the entrance of the general toilets, and the baby changing station has been placed near the washbasin counter area.
- For children, all the urinals are low-lip urinals and some low washbasin counters have been installed in each general toilet. In addition, a children's urinal has been placed in the women's toilet area.
- Toilets for assistance dogs have been placed, one inside and one outside the stadium.



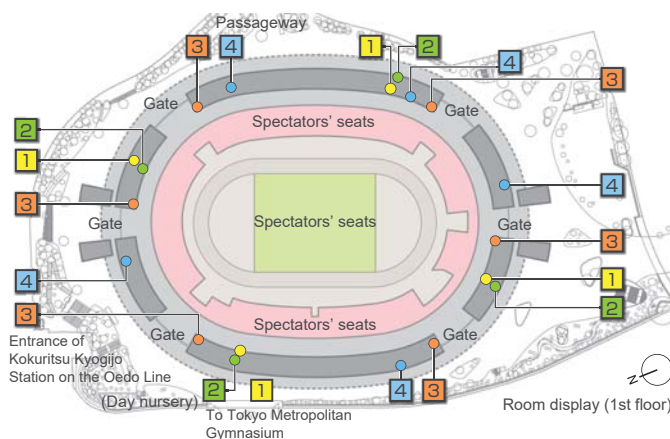
Rooms enabling comfortable use by all users

Rooms for infants

- Nursing rooms have been placed on each floor in a balanced manner, considering wheelchair users. Stroller spaces have been placed near the entrances of the rooms.
- The day nursery and children's room have been placed on the 1st floor where users can smoothly evacuate in case of a disaster.
- The stroller spaces have been placed around the information counters near the gates. Strollers can be placed promptly after entering a gate.

Resting rooms considering persons with intellectual, mental, and developmental disabilities

- Resting rooms have been placed each floor in a balanced manner as rooms for calming down.



Sign plan that everyone can understand

- A sign plan that everyone can understand regardless of the age, nationality, and presence / absence of disabilities achieves Universal Design (UD) environment.

Users requiring UD and examples of considerations in providing signs

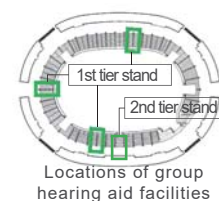
- | | |
|--|---|
| • Totally blind persons | ----- Provide information other than visual information such as tactile boards, voice guide, and braille guide blocks, etc. |
| • Persons with weak sight | ----- Provide a large display surface with large characters and a strong contrast |
| • Persons with hearing disability | ----- Provide visual information |
| • Wheelchair users | ----- Secure spaces where they can comfortably watch signs |
| • The elderly and children | ----- Secure a low viewpoint |
| • Foreigners | ----- Provide pictograms (partly with multiple languages) |
| • Persons with intellectual disability | ----- Provide simple information |
| • Others | ----- Install an intercom at the information counters |

Basic policy for Universal Design (UD) in the sign plan

Considerations to persons with hearing disability

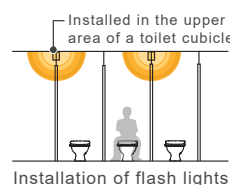
Distributed arrangement of group hearing aid facilities

- Group hearing aid facilities installed in multiple areas of the stands allow persons with hearing disability to watch events from various seats.



Emergency facilities

- Flash lights installed in major toilets, resting rooms, and nursing rooms inform persons with hearing disabilities about emergency events.
- For safety evacuation guidance, textual information will be provided on the large display panel in the south and north stands.



Environment allowing wheelchair users to comfortably watch events from any area

Accessible seats have been distributed on all tiers and floors of the stands. In particular, the 1st tier stand, having high frequency of use, has many seats accessible from outside without level differences. This creates an environment which ensure visibility and comfort of wheelchair users to share excitement while watching events. In addition, toilets friendly to various user types have been prepared in order to allow everyone to comfortably use the stadium.

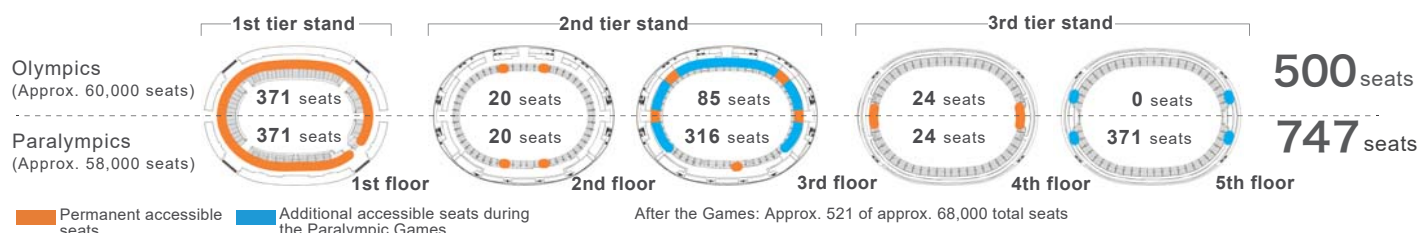


View of the stadium from 2nd tier stand (3rd floor)

Stadium allowing wheelchair users to watch events from any area

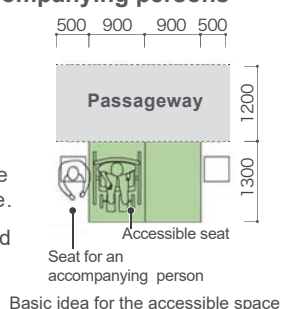
Accessible seats have been arranged on all tiers in a balanced manner

(For the 5th floor, the seats are prepared only during the Paralympic Games. Numbers of seats are at the time of design phase.)



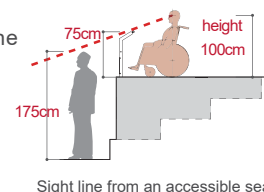
Accessible seats considering accompanying persons

- Accessible seats and seats for an accompanying person have been placed next to each other without being separated.
- Accessible seats and seats for accompanying persons have been placed in areas accessible from the concourses without level difference.
- Electric outlets have been prepared so that electric wheelchairs can be recharged during events.



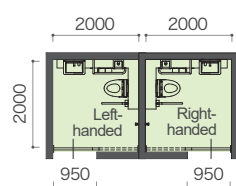
Sight line for the accessible seats

- In order to secure the sight line of wheelchair users having a low eye height, 100 centimeters are the standard eye height.
- The anticipated height of persons in the row in front of accessible seats is 175 centimeters. Even if the person stands up, the sight of a person in an accessible seat will not be hindered. This realizes an environment allowing wheelchair users to share excitement with spectators in general seats.



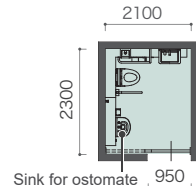
Five types of accessible toilets for various users Major examples of each type are shown below

1 Toilet for wheelchair users considering dominant hands



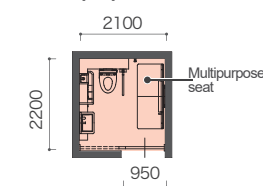
If two or more toilets are installed, a toilet which has a symmetrical design to be used by both right- and left-handed persons has been placed next to the toilets.

2 Toilet for wheelchair users having a sink for ostomate facilities



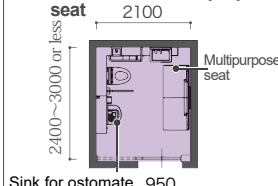
A toilet for wheelchair users having a sink for ostomate facilities have been installed.

3 Toilet for wheelchair users having a multipurpose seat



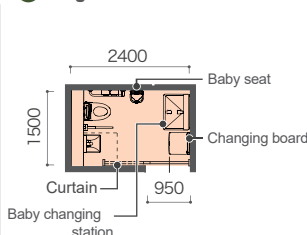
A toilet for wheelchair users having a multipurpose seat has been installed.

4 Toilet for wheelchair users having a sink for ostomate facilities and multipurpose seat



A toilet for wheelchair and stretcher users having a sink for ostomate facilities and multipurpose seat has been installed.

5 All gender toilet



A toilet for those who have difficulty in use of gender separate toilet, including LGBT* or developmental disability with accompanying person of the opposite sex, has been installed.

*LGBT: LGBT stands for Lesbian, Gay, Bisexual, and Transgender, which means sexual minorities.

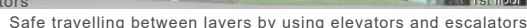
The stadium has an environment where all visitors can safely travel with less physical burden regardless of their age or presence/absence of disabilities. Everyone can approach with the gentle slope, which allows wheelchair users and speech guidance having difficulty in moving about to safely and comfortably access the stadium. Guide blocks and voice information boards has been prepared on major routes for the safe access of persons with visual impairment.



- Three-layer stands reduce vertical travel distance on foot
- Elevators will land on all floors. For reducing burdens in traveling, dedicated escalators have been installed for entry to the 2nd and 3rd stands. Voice guide and other facilities will allow all visitors to travel safely.

- Car operation panel (with braille dots)
- Button (with raised characters)
- Intercom button with a video monitor
- Car operation panel (for wheelchair users)
- Handrail
- Capacity of 30 people complying with the IPC accessibility guidelines
- Security camera

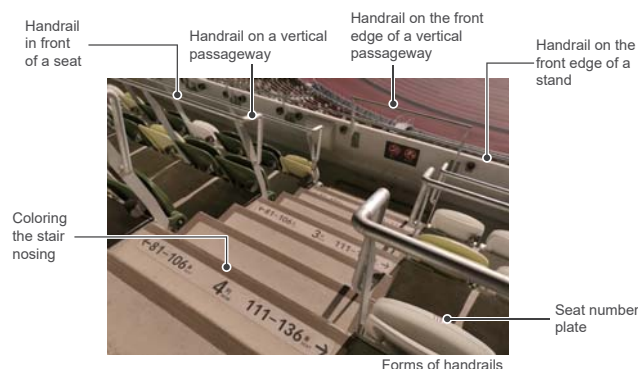
- Compartment line on all sides of a step
- Mildly sloped comb rubber (yellow)
- Attention-attracting blocks for entry and exit
- Three flat steps



- Handrails have been installed in the vertical passageways in all the tiers for the safe travelling of persons having difficulty in moving about.

- Vertical passageways in the stands have been colored to improve their visibility. Stair nosing has been painted a different color to prevent spectators from losing their footing or tripping on the stairs.

- A plate providing the seat number has been placed on the upper and visible part of each folding seat. (Numbers have been printed with ink and in braille.)



I Reducing environmental load

Earth-friendly stadium with low environmental load

The stadium will take full advantage of the natural energy to be an environment-symbiotic stadium. It will proactively and effectively use natural energy, such as photovoltaic power, rainwater, and well water. The Building Energy Management System (BEMS) for effective operation of high-efficiency equipment and a system to reduce energy consumption waste will realize effective and energy-saving operation.

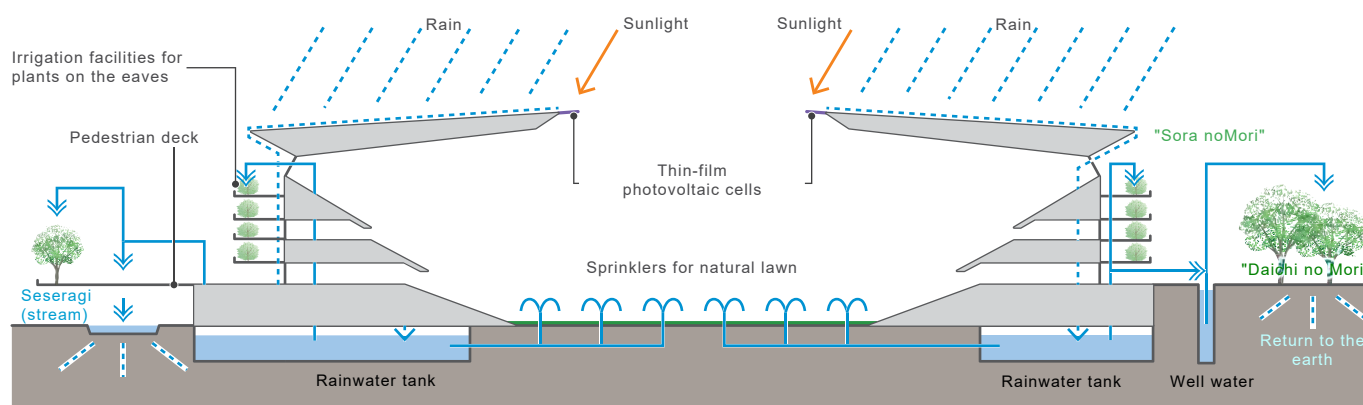


Image of utilization of natural energy

Reducing environmental load by proactively using natural energy

Crystalline Si see-through photovoltaic modules on the glass part of the edge of the Large Roof

- Building-integrated high conversion efficiency crystalline Si see-through photovoltaic modules have been installed on the glass part of the edge of the Large Roof to be viewed from all the spectators' seats.



Image of photovoltaic facilities on the edge of the Large Roof

Effectively using rainwater and well water on the entire premises

- Rainwater falling on the roof and pavement will be collected in the rainwater tank and used for the irrigation facilities for plants on "Sora no Mori", rooftop garden and the eaves.
- Irrigation facilities for green spaces of "Daichi no Mori", garden on the ground will use well water and rainwater. The facilities will circulate water resources by returning water to the earth.
- Well water can be used as an emergency water resource in case of water failure due to a disaster.

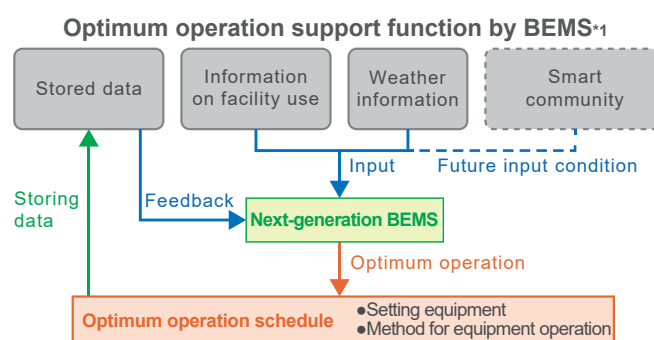
Energy-saving system considering the characteristics of facility operation

Introducing a next-generation BEMS*1 to support operation management

- In addition to the introduction of high-efficiency equipment, effective facility operation is important for reducing environmental load. Based on the characteristics of the building, operating rate, weather condition, and past performance data, a next-generation BEMS*1 has been introduced to support the optimum operation management.

Reducing load loss caused by standby power consumption and transformers

- The operating rate of the facilities is lower when events are not held than when events are held. By separating electrical systems which will not be used, transformers can be shut off when events are not held. This will reduce load loss caused by standby power consumption and transformers and waste of energy consumption.



*1 BEMS (Building Energy Management System)

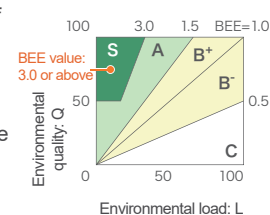
Achieving the highest ranking in CASBEE

- By adopting environmental technology, the environmental performance of the building achieves the S rank (BEE value: 3.0 or above), the highest ranking in the Comprehensive Assessment System for Built Environment Efficiency (CASBEE*2).

*2 CASBEE (Comprehensive Assessment System for Built Environment Efficiency):

A method by Institute for Building Environment and Energy Conservation for rating the environmental performance of buildings and a system for comprehensively evaluating the quality of buildings including degree of internal comfort and consideration to surrounding landscape

- The stadium achieves Reduction of the Perimeter Annual Load (PAL*) of a building by 20% or above and reduction of the Energy Reduction Ratio (ERR) of the entire facility system by 11% or above. These are energy-saving performance standards based on Tokyo metropolitan environment plan system.



Disaster-resilient stadium for increasing local disaster risk reduction capacity

Being located in a local evacuation area in Tokyo, the stadium gives first priority to securing human life in case of emergency and secures the seismic capacity enabling the stadium to be used safely without being extensively repaired even after a huge earthquake. The stadium also takes into account the BCP* measures for early restoration of necessary functions after the restoration of lifelines.

Development standards

Seismic capacity

The aims of the capacity are to allow the building to be used after a huge earthquake without extensive repair of the building structure and to secure human life and prevent a secondary disaster in case of damage or movement of non-structural components of the building.

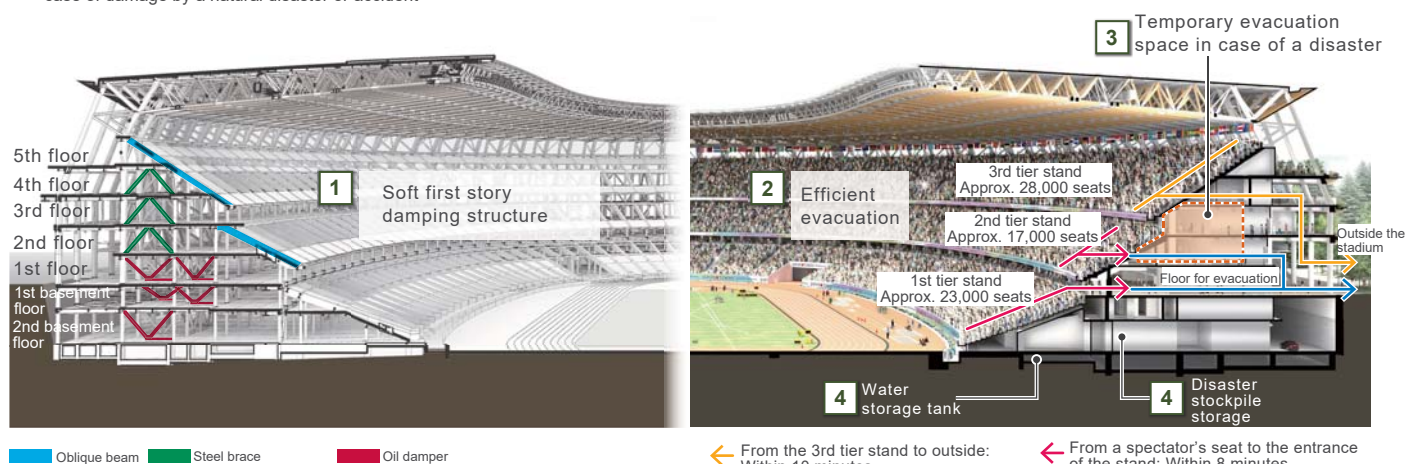
BCP measures

Necessary functions may be temporarily limited in case of disruption of lifelines. However, the measures enable the performance of minimum operation by maintaining a part of the functions, and secure standards to promptly restore the necessary functions after the restoration of lifelines.

Measures for people who are unable to return home

In accordance with Tokyo metropolitan ordinance on measures for people who are unable to return home, the stadium will, as a facility to attract visitors, take necessary measures for protecting the visitors if there are many visitors inside the stadium who are unable to return home. The stadium will have a disaster stockpile storage for drinking water, food, and other necessary goods for the visitors.

*BCP (Business Continuity Plan): A plan to strategically prepare for business continuity in the absence of disaster for continuation or early restoration of core business in case of damage by a natural disaster or accident



Disaster-resilient stadium

1 Adopting a damping structure excellent for earthquake resistance

- Oblique beams and steel braces installed in the upper floors of the stands prevent deformation in case of an earthquake. Oil dampers installed throughout the lower floors of the stands (from 2nd basement floor to 1st floor) composed of relatively soft frames achieve a **Soft first story damping structure** which reduces a quake by efficiently absorbing earthquake energy. These ensure a high seismic safety for the entire stadium.

Achieving efficient evacuation in case of a disaster

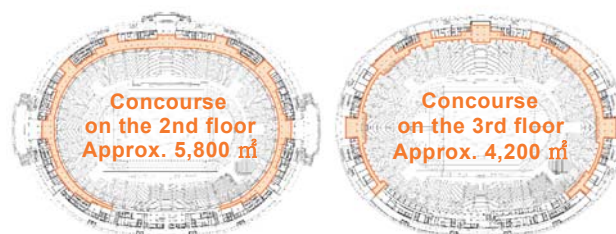
2 Spectators' seats allowing prompt evacuation

- The facility plan giving first priority to spectators' safety evacuation realizes smooth evacuation. The plan allows spectators to safely evacuate outside the stadium **within 15 minutes** from any seat (for 3rd tier stand, within 10 minutes).
- Evacuation guidance elevators and temporary evacuation areas have been distributed for safe evacuation of wheelchair users.

Protecting facility users and maintaining facility function in case of a disaster

3 Temporary evacuation space in case of a disaster

- Concourses on the 2nd and 3rd floors (approx. 10,000 m²) can be used as a temporary evacuation space. In addition to illumination, electric outlets have been prepared in the spaces for recharging mobile phones and using electric stoves in case of a disaster.



4 Measures for maintaining facility function in case of a disaster

Countermeasures for power failure

- Emergency power generator
- Security power generator
- Hybrid solar outdoor light
- 15 manhole toilets

Water tanks in case of failure of water and sewer systems

- Head tank/Intermediate tank/ Sewage tank

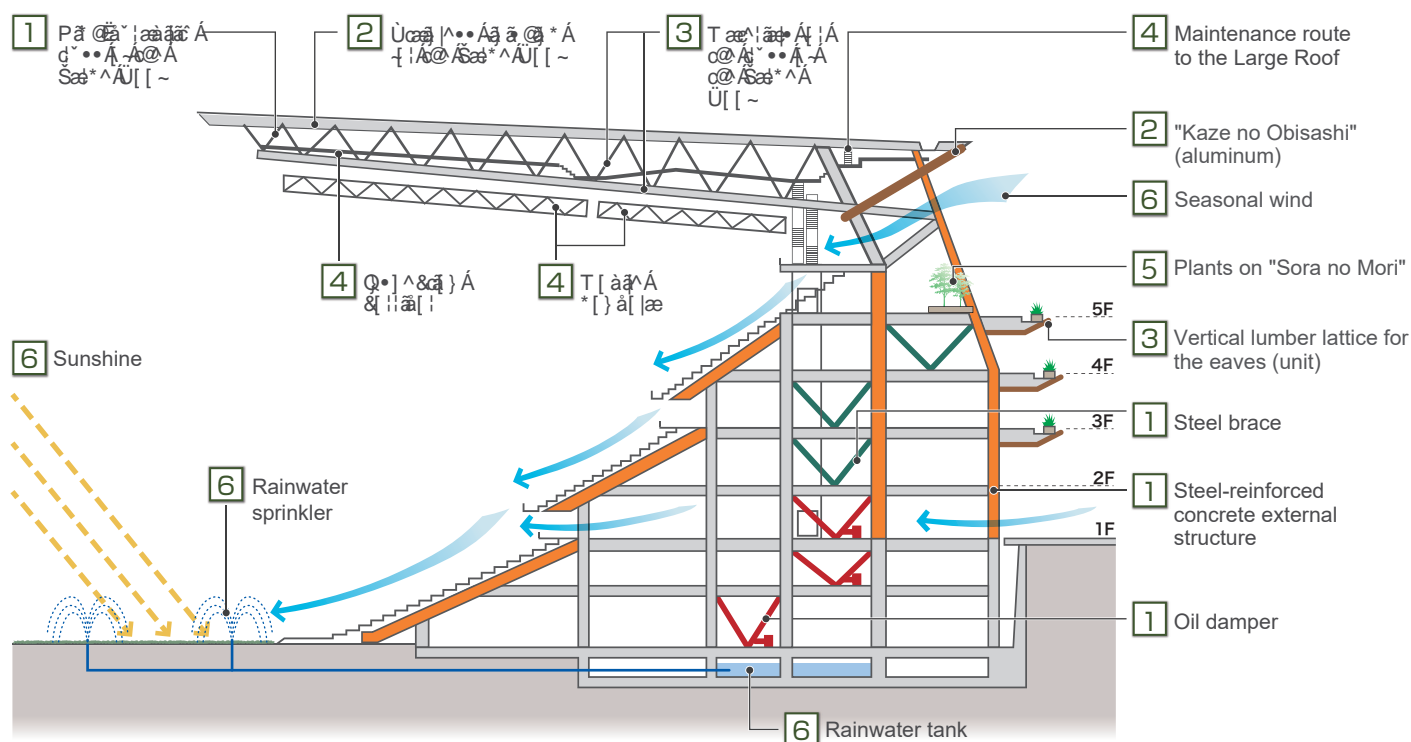
Disaster stockpile storage

- Approx. 480 m² (for approx. 80,000 people)

K Reducing maintenance and management costs

Maximizing life-span for reducing maintenance and management costs

To extend its life-span, the stadium has adopted high-durability specifications and finishing materials and the main structure will require no major repair for 100 years. Consideration has been given in terms of maintenance and renewal of the parts of the stadium towards the reduction of maintenance and management costs of the entire facility.



High-quality and high-durability facilities

1 Structure requiring no major repair

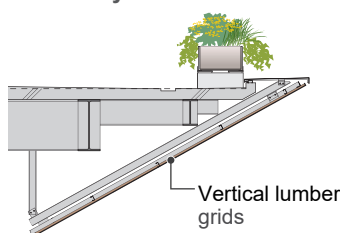
- Steel braces installed in the upper floors, relatively soft frames composing the lower floors, and the damping structure with oil dampers ensure a high seismic capacity.
- High-durability materials have been used for the external structure and the truss of the Large Roof for extending the life-span of the main structures.

2 Extending the life-span of finishing materials

- Long-life materials, suitable for parts exposed to the rain have been selected, such as stainless finishing for the Large Roof and wood-like aluminum louver for "Kaze no Obisashi", eaves to guide the wind, etc.

3 Pressure injection processing has been added throughout to increase the durability of exterior lumber

- As antiseptic and anti-termite measures, pressure injection processing have been added to increase the durability of laminated lumber for the truss of the Large Roof and vertical lumber grids for the eaves.
- Vertical cedar lattice have been used for the downside of the eaves which are not greatly exposed to the rain.



Cross-section image of the eaves

Easy-to-use facilities giving consideration to daily maintenance

4 Securing smooth inspection of the facilities and improvement of the renewing property

- The mobile gondola below the truss of the Large Roof and the inspection corridor in the truss enable safe and smooth inspection of lighting and audio equipment and truss materials.
- The route to access to the top of the Large Roof makes it easy to perform maintenance of the roof top.

5 Planting design considering the selection of tree species and the placement of plants

- Tree species for "Sora no Mori", rooftop garden on the 5th floor have been selected based on sunshine conditions and wind environment, and planted around the portion of the outer perimeter expected to be exposed to the rain.
- Native species have been mainly selected as large trees for "Daichi no Mori", garden on the ground and planted in the ground for sound growth and preventing dying and insect pests.

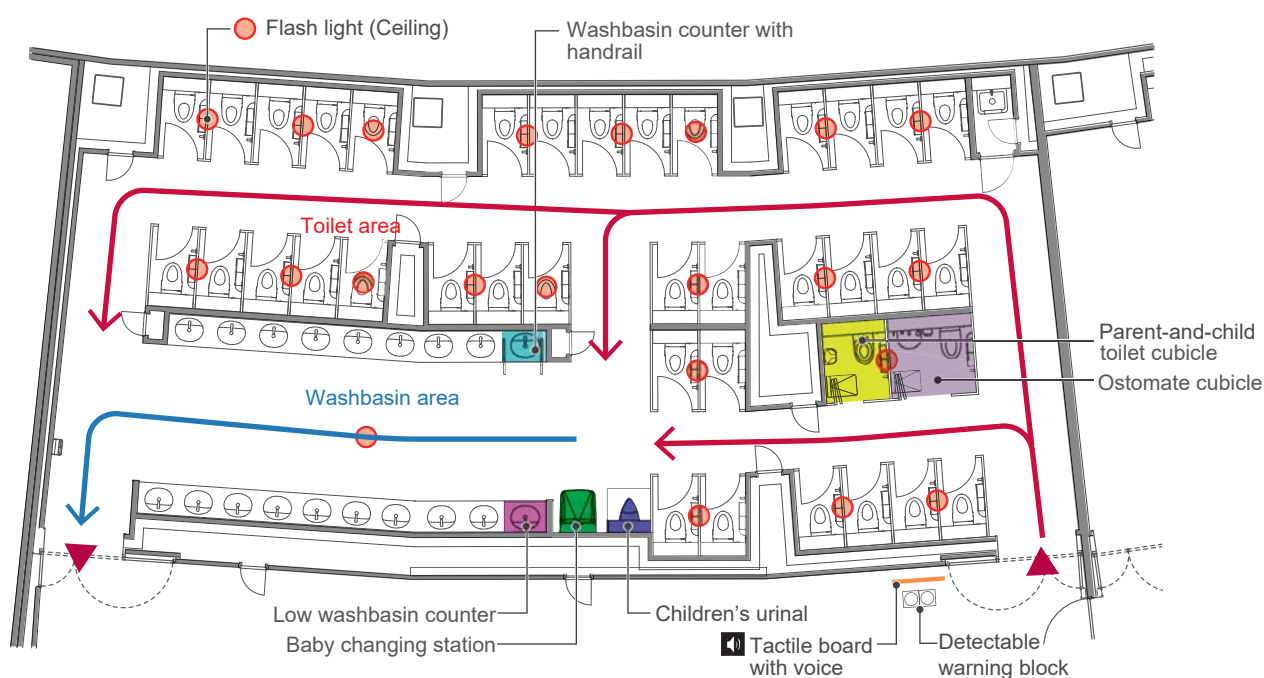
6 Maintaining and managing natural lawn by effectively using natural energy

- Summer lawn, which is easily maintained and managed throughout the year, has been selected. By sowing winter turf seeds on summer turf, the pitch can keep evergreen through the year.
- To reduce maintenance and management costs, natural energy has been proactively introduced such as appropriate sunshine and ventilation and the securing of rainwater, etc.

Enhanced toilet plan for realizing a Stadium for Everyone

Toilets have various functions to sufficiently respond to diverse needs according to age, sex, and presence / absence of disabilities. To create a stadium where everyone can feel safe and comfortable, the toilets have an environment considering safety in case of emergency.

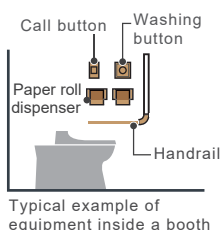
Toilet plan enabling comfortable use by all users



Typical plan for women's toilet

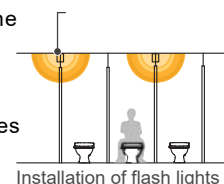
Due consideration to various users

- For the elderly, handrails have been installed for urinals, washbasin counters, and all the toilet booths.
- For persons with visual impairment, arrangement according to JIS S 0026 has been applied to all the general toilet booths.
- The parent-and-child toilet cubicle and ostomate cubicle have been placed in an area visible from the entrance of the general toilets, and the baby changing station has been placed near the washbasin counter area.



Typical example of equipment inside a booth

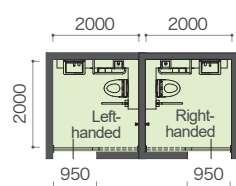
- For children, all the urinals are low-lip urinals and some low washbasin counters have been installed in each general toilets. In addition, a children's urinal has been placed in the women's toilet area.
- Toilets for assistance dogs will be placed, one inside and one outside the stadium.
- Flash lights installed in major toilets, resting rooms, and nursing rooms inform persons with hearing disabilities about emergency events.



Installation of flash lights

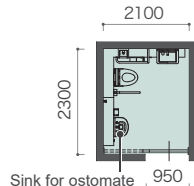
Five types of accessible toilets for various users Major examples of each type are shown below

1 Toilet for wheelchair users considering dominant hands



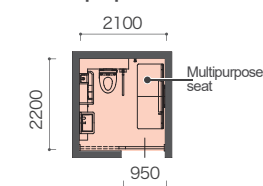
If two or more toilets are installed, a toilet which has a symmetrical design to be used by both right- and left-handed persons has been placed next to the toilets.

2 Toilet for wheelchair users having a sink for ostomate facilities



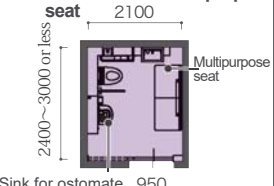
A toilet for wheelchair users having a sink for ostomate facilities have been installed.

3 Toilet for wheelchair users having a multipurpose seat



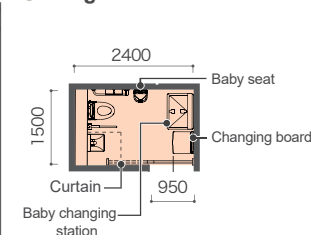
A toilet for wheelchair users having a multipurpose seat has been installed.

4 Toilet for wheelchair users having a sink for ostomate facilities and multipurpose seat



A toilet for wheelchair and stretcher users having a sink for ostomate facilities and multipurpose seat has been installed.

5 All gender toilet



A toilet for those who have difficulty in use of gender separate toilet, including LGBT* or developmental disability with accompanying person of the opposite sex, has been installed.

*LGBT: LGBT stands for Lesbian, Gay, Bisexual, and Transgender, which means sexual minorities.

Eaves of lumber from 47 prefectures

Eaves, that have been placed around the outer perimeter of the stadium, are composed of a series of wire rods with the vertical lattice of wood, and has characterized the exterior design of the stadium. Each lumber of eaves has been procured from every 47 prefectures nationwide to realize a very Japanese national stadium.



Eaves made from nationwide lumber

- Lumber from 47 prefectures nationwide has been used for the eaves, being placed all around the outer perimeter depending on a direction of each prefecture from stadium.
- Lumber has been placed by order from north to south - Hokkaido, Tohoku, Kanto, Chubu, Kinki, Chugoku, Shikoku, Kyushu, Okinawa region.

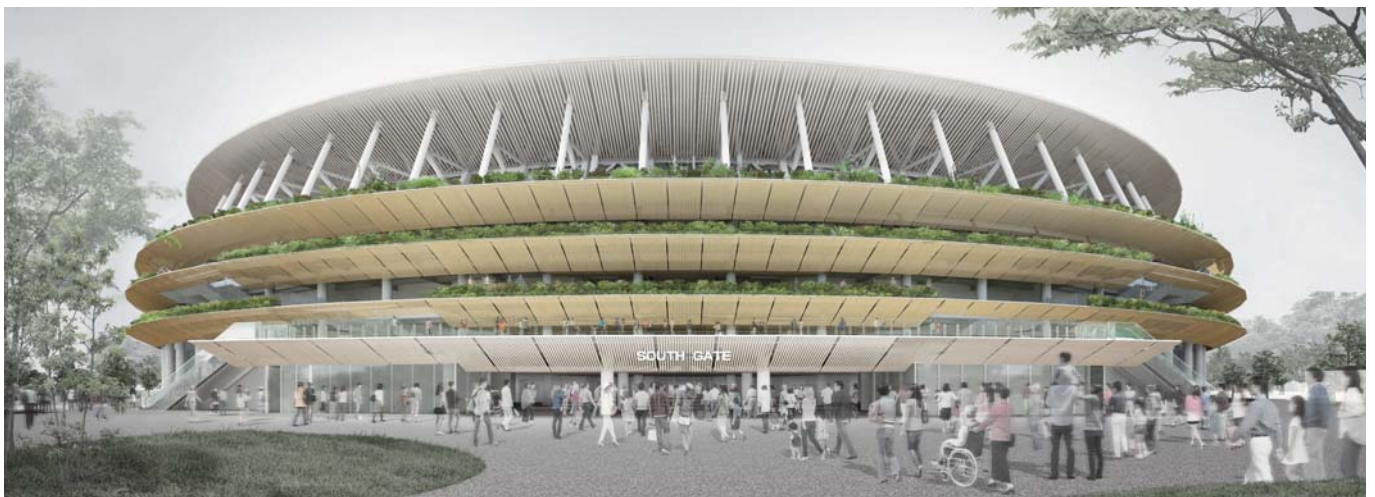
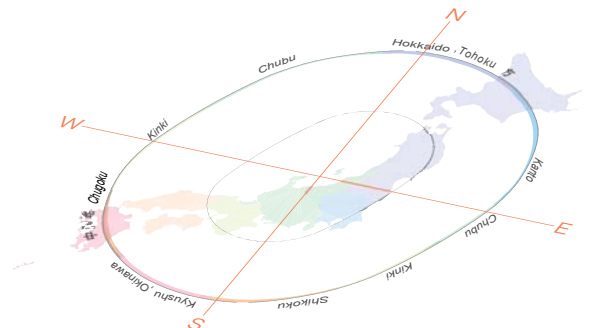


Image of Eaves

Sunshine filtering through foliage by a mosaic! patterned earth colors

Spectators' seats with mosaic-patterned earth color, gradually changed from lower tier to upper tier, creates a stadium space in harmony with the abundant greenery of the Outer Garden of Meiji Jingu Shrine



Spectators seats colored by earth colors

- Earth colors such as white, yellow-green, gray, dark-green and dark-brown have been selected for spectators' seats.



white



yellow-green



gray



dark-green



dark-brown

- The area near the field has more dark colors, and the area near the roof has more light colors



New National Stadium Development Project

Site address	10-1, Kasumigaoka-machi, Shinjuku-ku, Tokyo
Site area	Approx. 109,800 m ²
Building coverage area	Approx. 69,600 m ²
Total floor area	Approx. 192,000 m ²
Number of floors	Two underground floors, five floors above ground
Height	Approx. 47 m
Construction	Steel construction, partly steel-reinforced concrete and reinforced concrete construction.
Seating capacity	Approx. 60,000 (plan to enable increasing capacity to approx. 80,000 in the future)
Project period	<u>Phase 1 (Design)</u> From January 2016 to January 2017 <u>Phase 2 (Construction)</u> From October 2016 to November 2019
Contractor	New National Stadium Development Project Taisei Corporation, Azusa Sekkei Co., Ltd., and Kengo Kuma and Associates Joint Venture