

Dalseong Citizen's Gymnasium

2014 **uia** Approved International Architectural
Ideas Competition

Client

Daegu Metropolitan City Dalseong-gun Office

Competition Organizer

Daegu Architectural Culture Confederation(DACC)

www.dacc-compe.kr

Dear valuable creatives at home and abroad

Welcome.

The urban-rural combined county, Dalseong-gun is located in the Korea's third largest city, Daegu. Both culturally and geographically, Dalseong-gun has been an anchor of the region. Recently, it has established various cultural and artistic tourism infrastructures along the Nakdong-river such as Hwawon Mabijung Mural Village, restoration of Samunjin-ferry, expansion of Daegyeonsa-temple and UNESCO World Heritage candidate Do-dong Confucian Academy. Also, Dalseong-gun will be the center of Daegu together with 1,600m² of Daegu Techno-polis and Daegu National Industrial Park.

As more people and businesses are coming in, overall demand for descent life is also increasing. It is not different here in Dalseong-gun. Today, more and more people are interested in urban life. Subsequently, people feel the necessity of a symbolic structure that will embrace their lives.

As all of you may know, in the age of globalization, the brand-power and competitiveness of a city determine that of a country it belongs to. In this context, Dalseong-gun hosts an international architectural competition for the latest style of indoor gymnasium which is supposed to be a new land-mark, and eventually will enhance the value of the region.

We hope that many of you will participate in the competition. Your creativity and passion towards architecture will be definitely sublimated into a new land-mark of Nakdong-river area.

Thank you.

김문오

Kim Moon Oh
Governor
Dalseong-gun



This year, we are proudly hosting the 3rd International Architecture Competition for the Daegu Architecture Culture Biennale.

In the hope of refining architectural culture of Daegu, the competition aims to plant a sophisticated culture on the city by constructing architectural pieces which are demanded by Daegu-Metropolitan city government and its affiliated local administrations.

The competition will provide us an opportunity to invite a piece of architecture that will guide us to a new cultural direction of the city with a long history and a tradition. Furthermore, it will solidify the identity of the place which your architectural proposal is to get realized on.

I am grateful to everyone who devotes his/her efforts to our hope. I believe that the new architecture of your creativity will lead us to a new spectrum of cultural pride and power of the city of Daegu.

Thank you.

2014. 6. 9

이종국

Lee Jong Kuk

Head Commissioner

Organizing Committee of 2014 Daegu Architectural Culture Biennale

Daegu Architectural Culture Confederation (DACC)



contents

1.	Description	
1.1	Purpose	9
1.2	Host Organization	9
1.3	Background	10
1.4	Method	10
1.5	Eligibility	11
1.6	Registration	11
1.7	Jury and Committee	12
1.8	Judging Criteria	12
1.9	Scheduled Dates and Deadlines	14
1.10	Questions and Answers	14
1.11	Anonymity	14
1.12	Submissions	15
1.13	Drawing Sheet Layout	16
1.14	Prizes and Awards	17
1.15	Exhibition	17
1.16	Copyright and Return of the Work	18
2.	Assignment	
2.1	Assignment Outline	19
2.2	Mission	19
2.3	Urban Environment	20
2.4	Environmental Elements	23
2.5	Interior Space and Facilities	26
2.6	Space Programs	27
2.7	Design Considerations based on Space Programs	28
2.8	Exterior Space, Access and Parking	31
2.9	Codes and Regulations	32
2.10	Sustainability	35
3.	Additionally Materials	36

1. Description

1.1 Purpose

This competition aims to invite participants into an open ideas architectural design contest of the gymnasium for local residents in Hyeonpung-myeon located in Dalseong-gun (District), Daegu Metropolitan City, which is expected to begin construction in 2015.

In light of the 100th anniversary of its office in 2014, the continuously growing district of Dalseong-gun is trying hard to make a new leap forward. In this context, and in response to the rapid increase of the population influx, the district is encouraged to provide a diversity of cultural benefits to its local residents. It is in this line of action that the gymnasium for locals should be understood as an attempt to offer high quality sports related facilities to the residents. The objective is to contribute to the improvement of the quality of life of Dalseong-gun's citizens by procuring a space for health promotion and sports activities, offering the foundations by which to enjoy the benefits of sports, culture and welfare, and thus building a new gymnasium complex, replacing the small and outdated existing one. Moreover, it also intends to fill the local community of Dalseong-gun in its centenary with great pride regarding their splendid city, by building a gymnasium with outstanding design and functions.

1.2 Host Organization

Client

Dalseong-gun Office, Daegu Metropolitan City
33 Dalseong guncheong-ro, Nongong-eup,
Dalseong-gun, Daegu
711-790, Republic of Korea

Competition Organizer

Daegu Architectural Culture Confederation (DACC)
870 Gukchaebosang-ro
Suseong-gu, Daegu
706-816, Republic of Korea
Phone : +82 53 755 8980
E-mail : compe@dacc.or.kr

1.3 Background

With the shift of paradigm from a labor-based ethics centered era of industrial society to a leisure-based ethics value era of post-industrial society, many countries in the world are making sports promoting policies through everyday physical activities for the public, with the objective of improving their well-being. Specifically, and in order to increment the participation of the public into everyday sports activities, multiple policies related to physical activities are being carried out: planning promotion programs, expanding facilities, manufacturing slogans, public relations, developing programs, setting up and consolidating administrative structures and fomenting leisure sports clubs, etc.

Today's Korea is also implementing sports activities programs with the future in mind. Korea is working towards a long-term proposal for physical activity policies for the public. With the increase in interest about the importance of health issues, people are spending more leisure time exercising, thus changing the sports paradigm. Exercise has moved from an elitist centered one to one that is part of everyone's daily lives. It has shifted from a spectator role to a more participation based one. Moreover, the increased participation in physical activities by the elderly is leading to an increase in the demand for related facilities. It is in this context that the construction of Dalseong Citizen's Gymnasium should be understood: with the purpose of offering to its people the facilities for physical activities, culture and well-being. By providing a sport facility in response to the public's desire of sports activities both for us now and for future generations, and making it possible for these kinds of installations to function as cultural spaces as well.

1.4 Method

- This competition is officially registered in the UNESCO/UIA (Union International des Architectes/ International Union of Architects) and it is carried out in accordance with the UNESCO/UIA international regulations for international competitions. Also, the target is everyone who can make a proposal regarding the construction of a gymnasium.
- The competition is managed in a single stage and the award winning work will be chosen by jury members recommended and approved by the UNESCO/UIA, through an on site/offline evaluation process.
- Anonymity will be maintained throughout the entire process until the selection of the award winning entry.

1.5 Eligibility

- The competition is open to anybody who is willing to enter.
- All registered/un-registered architects and inter-disciplinary teams led by an architect.
- All current students and graduates of architecture (including city planning, environment and structure discipline).
- Although there is no limit to the number of members in a team, duplicate/ double registration is not allowed.
- If participating as a team, each team must appoint a representative.
- In order to ensure the fairness of the competition, neither member of nor anyone in direct association to the executive committee, the jury or the advisory committee of the competition is allowed to participate.

1.6 Registration

Registration period

From to June 9 to July 31, 2014

Registration procedure

1. After filling the application form, registration via e-mail
2. Payment of registration fee can be made via Pay-Pal, account wire transfer, mobile payment or ARS for domestic registrations. International payment can be made via Pay-Pal.
3. Confirmation of registration will be sent via email from the organizer

Registration fee

USD 100 (100,000 Korean Won)

1.7 Jury and Committee

-Jury

- Laurent Pereira /Belgium
- Takaharu Tezuka /Japan
- Yoshiharu Tsukamoto /Japan
- Hyunjoon Yoo /Korea
- Taeksoo Hyun /Korea

-Alternate juror : Marc Brossa (Spain)

-Executive Committee

- Cho, Kuk Rae (Head of committee; Professor, Daegu Catholic Univ. School of Architecture)
- Kim, Ki Seok (Principal, Gidan Architecture)
- Kim, Chan Ki (Principal, Khan Architecture)
- Seok, Kang Hee (Principal, ATF Architecture)
- So, Byung Sik (Principal, SO Arquitectos)
- Lee, Woo Jin (Principal, studio(in)flux)

1.8 Judging Criteria

Submissions that violate the following requirements or do not satisfy them will be reported to the jury by the executive committee.

- Works must be submitted in compliance with the formats clearly stated in the submission guidelines.
- The submitted works must be composed of items and contents in accordance with the submission requirements.
- Works must be submitted by the due date.
- The submitted works must not violate any term related to the anonymity condition of the entries.
- Submissions must follow the specific indications provided by the design guidelines.

[Main points of evaluation]

- Design concept and purpose
 - Whether the whole design concept has a realistic possibility and sustainability.
 - Whether there is a consistency in content from the original concept to the final product.

- Urban planning
 - Does the participant check legal matters on urban planning arrangement, mass planning, site planning, exterior space planning?

- Architectural planning
 - Architectural expression of the design concept
 - Consistency of the space composition
 - Material and detail composition
 - Planning that is suitable for the provided building cost
 - Consideration of building operation cost reduction

- Exterior space design
 - Consistency of the exterior space composition
 - Innovative exterior space planning
 - Material and detail composition

- Structural and technical concept
 - Proposition of a structure appropriate to the overall design concept
 - Flexibility
 - Actual construction possibility and material selection suitability
 - Energy saving design and environmental architectural planning

1.9 Schedule

- June 9, 2014 : Competition Launch
- June 22 : Closing date for inquiries
- June 30 : Answers to inquiries (competition website and e-mail)
- July 31 : Closing date for Registration
- Sept 5 : Closing date for Submission
(The submission should be postmarked no later than September 5 AND should arrive by September 19)
- Sept. 21~ 23 : Jury Deliberation (at Dalseong-gun Office)
- Sept. 30 : Announcement of results
- Oct. 30 : Award ceremony
- Oct. 30-Nov. 8 : Exhibition (2014 Daegu Architecture Culture Biennale)
- Separate exhibition at the Dalseong-gun Office will also be held.

1.10 Questions and Answers

- Inquiries related to the competition will only be possible via e-mail (compe@dacc.or.kr).
- Inquiries that have been received by June 22, 2014 will be processed by the hosting organization and be responded to by June 30. Matters that are answered through the inquiries will be acknowledged as amendments/reinforcements to the design guidelines and therefore will be considered above the given guidelines.

1.11 Anonymity (PIN)

- Each participant can create a PIN code that must consist of a mixture of 2 English alphabetical letters and 4 single digit numbers.
- The PIN number must be indicated on the upper right on each drawing sheet submitted in the size of 6cm (length) × 1cm (height).

1.12 Submissions

- List of submission
 - a. Submission list form (see the additional materials)
 - b. Participation application form : insert the application form into a non-transparent envelope with the PIN number on the outside of the envelope. (To be opened after the final judgment)
 - c. Exhibition drawing sheets : 3 sheets of A1 size paper (landscape orientation, see 1.13 for drawing sheet layout)
 - d. Project description : about 2 pages, A4 size (10 copies for jury)
 - e. Space program/ area calculation table (see the additional materials)
 - f. CD or DVD submission : should contain image files of the drawing sheets, perspective drawings, sketches, diagrams, project descriptions etc. (jpg format, CMYK 300dpi)

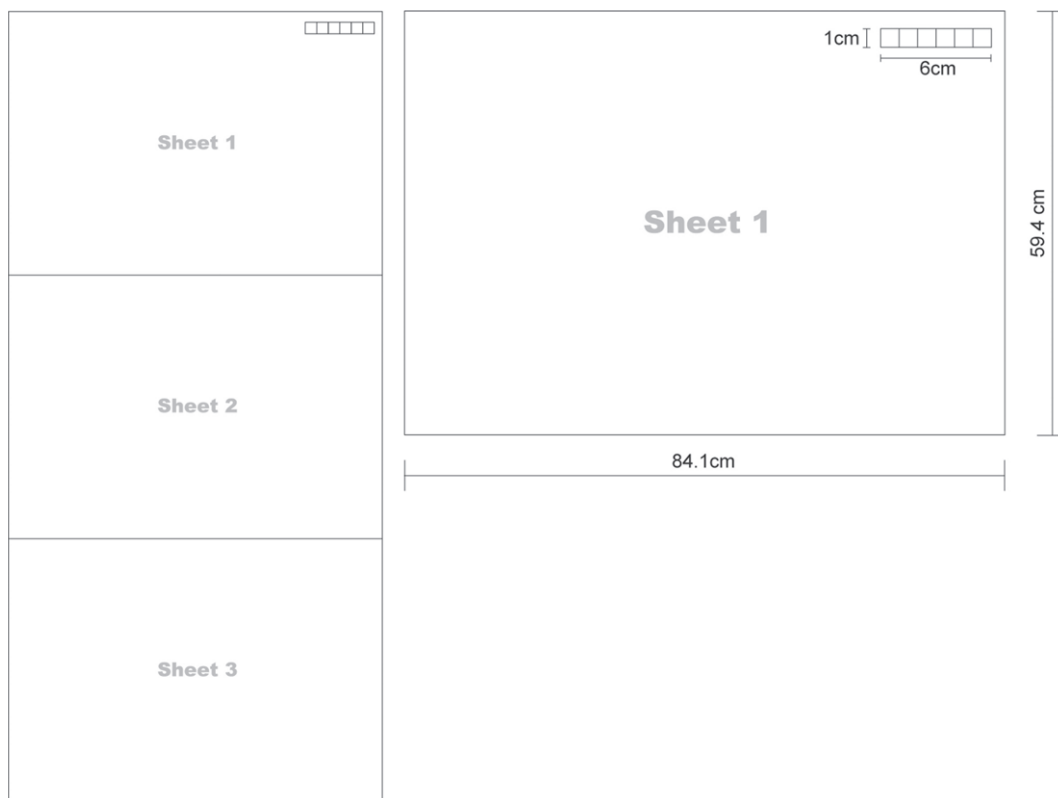
- * The official language of this competition is English.
- * All submissions should not be folded. The submission should be packaged/wrapped twice. The PIN on the drawing sheets should not be visible through the inner package/wrapping. The name of the participant/s should be marked on the outer package/wrapping.
- * Submission package tube/box should have a label that says “Dalseong Citizen’s Gymnasium International Architectural ideas Competition” and your “PIN number”.

- The submitted drawing sheets should have the followings.
 - a. Site plan, scale of 1:600
(Including urban context/ planning concept and exterior space plan)
 - b. Floor plans, scale of 1:300
(Express in the 1st floor/ground floor the connection to the exterior space, and necessary levels compared to the entrance level ($\pm 0.00\text{m}$))
 - c. Sections and Elevations, scale of 1:300
 - d. Facade wall sections (with partial elevations), scale of 1:50
(Expressing exterior material, colors, concept of environment-friendly space etc)
 - e. Perspectives (exterior and interior)

- Submission address
 Daegu Architectural Culture Confederation (DACC)
 870 Gukchaebosang-ro
 3rd Floor
 Suseong-gu, Daegu 706-816
 Republic of Korea
- Work submission deadline
 Submitted works must be postmarked by Sep. 5, 2014. Works arriving after Sep. 19, 2014 will not be accepted.

1.13 Drawing Sheet layout

Landscape orientation of each sheet and vertical arrangement of the whole



1.14 Prizes and Awards

- Prizes
 - 1st Place (1 person or team) : USD \$30,000 + plaque
 - 2nd Place (1 person or team) : USD \$10,000 + plaque
 - 3rd Place (1 person or team) : USD \$5,000 + plaque
 - Honorable mentions (10 person or teams) : plaque
 - * Prize money may be subject to tax in accordance with Korean tax laws.
 - * The winner can join the further design development of the gymnasium.

- Award Ceremony
 - Date : October 30, 2014
 - Venue : 2014 Daegu Architecture Culture Biennale main events hall
Daegu Art Factory
31-12 Dalseong-ro 22gil, Jung-gu, Daegu 700-850, Republic of Korea

1.15 Exhibition

The competition entries will be exhibited during the 2014 Daegu Architecture Culture Biennale and will be returned by notice after the event.

- Date : October 30 – November 8, 2014
- Location : 2014 Daegu Architecture Culture Biennale main events hall
Daegu Art Factory
31-12 Dalseong-ro 22gil, Jung-gu, Daegu 700-850, Republic of Korea

1.16 Copyright and Return of the Work

- The author of the submitted designs shall retain the copyright of his/her work. The DACC reserves the right to exhibit, publish and promote all designs submitted without additional compensation.
- The UIA will have the right to publish the winning entries on its website and in its newsletters.
- Non-prize winning entries will be returned after adjudication and public exhibition of all entries.
- Submitted works are to be picked up in person and works that remain after the returning period will be disposed at the discretion of the DACC
- The date of return is to be notified on the website or via email.
- Location of return : Office of Daegu Architectural Culture Confederation (DACC)
870 Gukchaebosang-ro
3rd Floor
Suseong-gu, Daegu 706-816
Republic of Korea

2. Assignment

2.1 Assignment Outline

- Location : 130 Hyeonpungjungang-ro, Hyeonpung-myeon, Dalseong-gun
Daegu Metropolitan City, Republic of Korea
 - Site Area : 11,806m²
 - Construction Size : Less than 3 floors, building height less than 25m.
Total floor area 4,500m²
 - Building Cost : USD 10,000,000
- * Total floor area may be increased or decreased by up to 5% according to the designer.

2.2 Mission

Gymnasium as basis for an integral sports-belt

The Construction of this gymnasium would allow a variety of daily sports activities programs in connection with the Dalseong Sports Complex Park located north of the site. In order to do so, (taking into account the environmental surroundings, exterior space arrangement and circulation settings) the installation and the placement of a bridge between the site and the Dalseong Sports Complex Park should be considered if not designed.

Gymnasium as a place for culture

For the gymnasium to function as a cultural area, local cultural background should be taken into account. The space should function as a cultural space that local people can actively participate in and make use of. It should respond to the demands of the local community. It should accommodate various types of performances, gatherings and exhibitions with the purpose of contributing to the regional cultural development.

Gymnasium as a place for leisure

Public facilities for physical activities should function as a place for leisure where members of the community can enjoy a relaxing lifestyle and feel revitalized. It should provide subsidiary facilities or exterior spaces for community meetings.

Gymnasium as a local design icon

Public facilities for physical activities should not only become an architectural structure that makes it possible for anyone to access easily and make use of it, but also should function as a unique building that transmits great pride and satisfaction to the local community.

2.3 Urban Environment

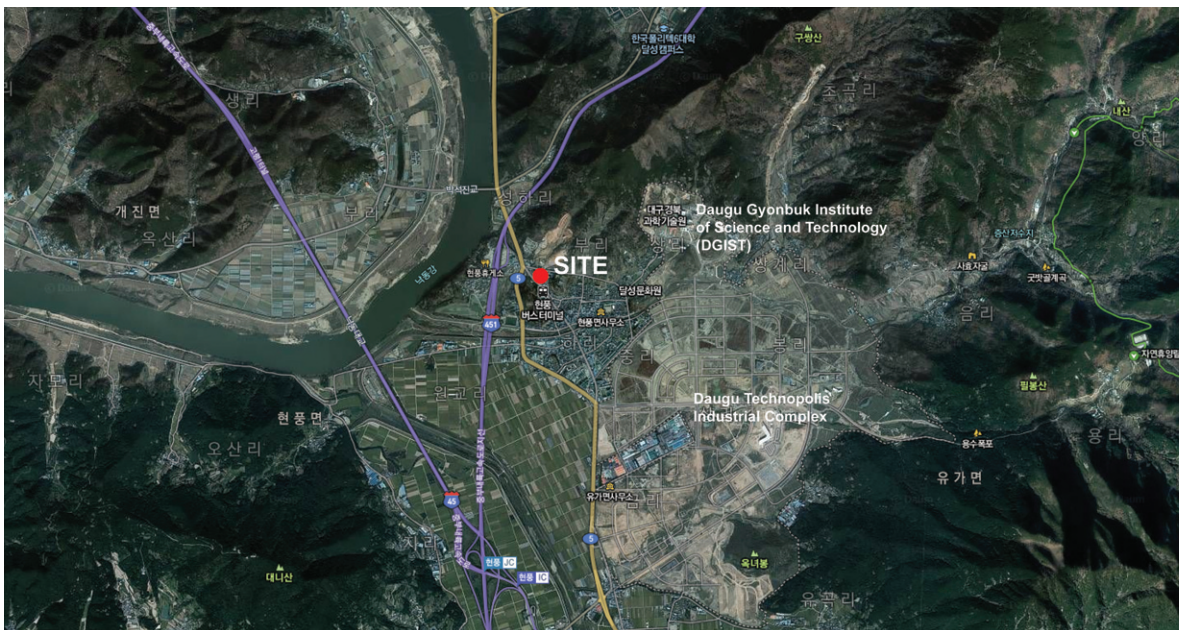
- Site (street view : <http://dmaps.kr/j8nw>)

The district of Dalseong-gun, where the site is located, is a gateway of Daegu Metropolitan City from the west. Additionally, it is a place of cultural tourism and industry where modernity, tradition and nature coexist in harmony. It has a very well preserved green belt around the Biseul mountain and Nakdong river. The recent creation of Daegu Technopolis Industrial Complex, Guji National Industrial Complex, Daegu Gyeongbuk Institute of Science & Technology (DGIST) and Daegu National Science Museum plays a key role in the development of Daegu Metropolitan City.

The site is located where Biseul-Ro(national route number 5), an extension of Nongong-eup, meets Hyeonpung-myeon; the Hyeonpung I.C is in less than 3km to the southwest, Hyeonpung junior high and high schools are in less than 400m to the southwest, the Dalseong Integral Sports Park is in 40m to the north as well.

It is also in proximity of Hyeonpungdong-ro(20m width road, four lane) and Hyeonpungjungang-ro to the southwest(12m width road, two lane). The difference of elevation between the site and the road is 3m(min) and 7.5m(max.).

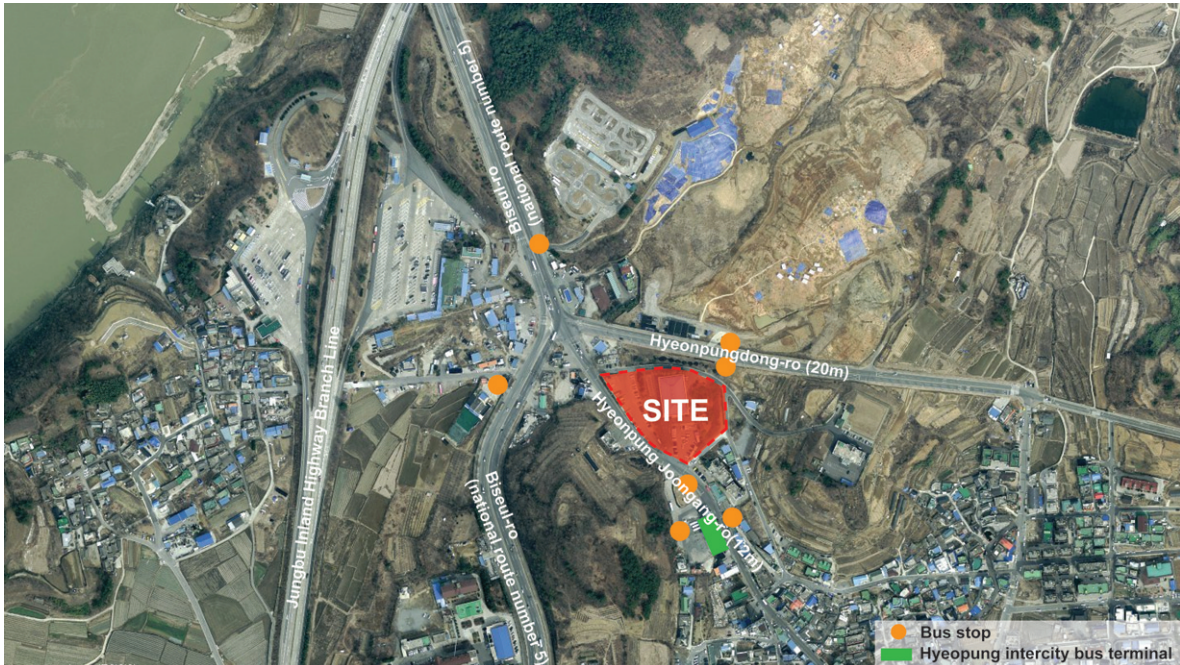
- Site location



- Panoramic site view



- Transportation facilities



bus stop Hyeonpung intercity bus terminal

The site is located in less than 3km to the southwest of the Hyeonpung I.C and in proximity of Biseul-Ro(national route number 5). Nearby, there is Hyeonpungdong-ro(20m width road, four lanes) to the north and Hyeonpungjungang-ro(12m width road, two lanes) to the southwest.

- Population (Feb. 2014 data)

Area	Total population	Male	Female	Households	Population per household
Daegu Metropolitan city	2,500,778	1,245,343	1,255,435	962,186	2.6
Dalseong-Gun	184,372	94,130	90,242	67,833	2.7

The total population of Daegu Metropolitan City is 2,500,778, and of those, 184,372 belong to Dalseong-gun where the site is located. The population density of Dalseong-gun is low in comparison to other districts of the city but its population is growing rapidly due to the formation of Daegu Technopolis Industrial Complex, the construction of national industrial complex of 2,500,000 PY (8,260,000m²) and residential complex near the site.

[Daegu Metropolitan City]

Daegu Metropolitan City is one of the three largest cities in Korea and has an important role in Gyeongsangbuk-do administration, economy and culture. Administratively, it is composed of seven districts of gu and one gun: Jung-gu, Dong-gu, Seo-gu, Nam-gu, Buk-gu, Suseong-gu,

Dalseo-gu and Dalseong-gun. 134 administrative donges and 195 legally fixed donges are under the jurisdiction of gu, and 3 eupes and 6 myeons are under that of gun. The city hall is located in Dongin-Dong of Jung-gu. The total area of the city is 884.09km² and it has a population of 2,500,788 according to 2014 census.

[Dalseong-gun]

The address of Dalseong-gun office is 33 Dalseongguncheong-ro, Nongong-eup, Dalseong-gun, Daegu (also, 1313 Geumpo-ri, Nongong-eup, Dalseong-gun, Daegu). The administrative zone covers Sangwon-ri of Gachang-myeon to the east end (128° 42' east longitude), Dodong-ri of Guji-myeon to the west end (128° 21' east longitude), Daeam-ri of Guji-myeon to the south end (35° 37' north latitude), and Daepyong-ri of Habin-myeon to the north end (35° 56' north latitude).

- Dalseong-gun's regional characteristics
 - Historical : it is a region with a very long history and with great influence of Confucianism and Buddhism.
 - Cultural : it is a recreational city for cultural tourism thanks to the harmony of modernity, tradition and nature.
 - Geographically : it is a gateway to Daegu Metropolitan city, where main routes such as Jungbu inland highway branch line, 88 Highway and National route 5 go through, making it a very heavily trafficked area. Also, it was the matrix of Daegu Metropolitan City.
 - Environmentally : there is a tourist belt of great magnitude around the Biseul Mountain and the Nakdong River, that connects the areas of Dasa, Habin and Hwawon, Okpo, Nongong, Hyeonpung, Yuga and Guji. It has a very well preserved green belt which forms the metropolitan green belt axis of the Daegu area.
 - It also plays a key role in the development of Daegu Metropolitan City by creating basis for an advanced science and cutting edge technology centered city, such as the Daegu Technopolis Industrial Complex, the National Industrial Complex and Daegu Gyeongbuk Institute of Science & Technology (DGIST).
- Administrative map of Daegu Metropolitan City



2.4 Environmental Elements

- Topography

The topography of Dalseong-gun is composed of a rugged mountain area of volcanic rocks to the east and a long plain to the west along the riverside of the Nakdong River with mountains and hills.

- Climate

The climate has characteristics of an inland basin. There is a big difference of temperature between summer and winter with light precipitation. The average temperature was 14.8°C in 2012, 0.8°C in January of 2012 and 25.8°C in August of 2012 and the annual precipitation was 1,224.4mm.

- Annual Climate Data (2012.12.31)

(unit : day / m²)

year	Clear weather	partly cloudy	mostly cloudy	cloudy	rain	frosty	foggy	snow	thunder stroke	storm	sandy dust
2007	107	104	60	94	96	29	6	7	23	-	9
2008	111	102	66	87	83	31	6	8	18	-	6
2009	112	103	61	89	87	25	2	5	16	-	9
2010	110	102	52	101	112	35	2	12	27	-	15
2011	118	87	58	102	103	23	4	7	18	-	12
2012	101	94	73	98	108	21	9	19	12	-	2
Jan.	13	7	4	7	8	5	1	5	-	-	-
Feb.	11	7	4	7	4	3	1	3	-	-	-
Mar.	9	7	6	9	10	-	-	1	-	-	-
Apr.	12	7	4	7	9	-	-	-	-	-	-
May	10	6	7	8	10	-	-	-	3	-	-
Jun.	-	5	13	12	11	-	-	-	2	-	-
Jul.	1	8	9	13	13	-	-	-	3	-	-
Aug.	1	7	9	14	13	-	-	-	3	-	-
Sept.	5	9	8	8	10	-	1	-	1	-	-
Oct.	15	11	3	2	3	-	-	-	-	-	-
Nov.	9	14	4	3	8	9	1	1	-	-	2
Dec.	15	6	2	8	9	4	5	9	-	-	-

data : Taegu meteorological observatory

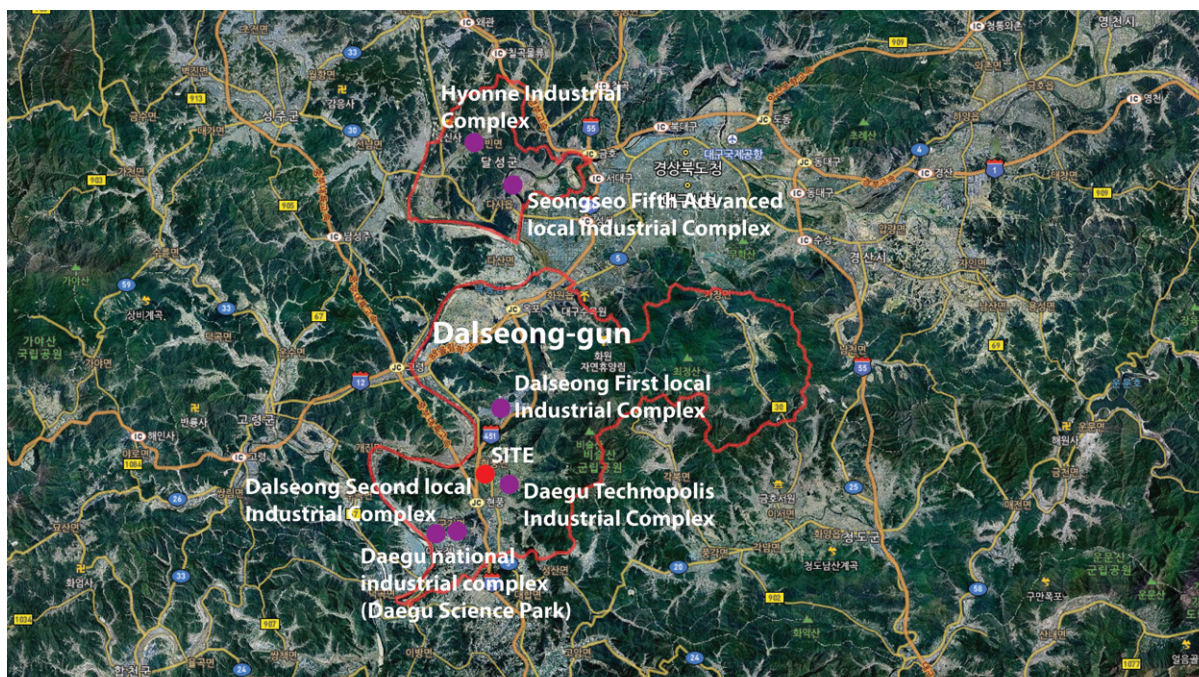
When the daily mean cloud amount is below 2.4 the weather is considered clear, and when it is over 7.5, it is considered cloudy. "Precipitation days" refer to the days precipitation is over 0.1mm, and "Days with storms" refers to the days when the maximum wind speed is over 13.9%.

- Distribution of the nearby sports facilities



(Dalseong Integral Sports Park, Gachang sports facility, Hwawon sports facility, Dasa sports facility)

- Distribution of Industrial facilities



(Daegu Technopolis Industrial Complex, Daegu national industrial complex (Daegu Science Park), Daegu Dalseong First local Industrial Complex, Dalseong Second local Industrial Complex, Seongseo Fifth Advanced local Industrial Complex, Hyonne Industrial Complex)

- Other facilities around the site



- ① Hyeonpung junior high and high school (0.4km southwest)
- ② Hyeonpung elementary school (0.7km southeast)
- ③ Dalseong public library (0.6km southeast)
- ④ Dalseong Cultural Center (1km east)
- ⑤ Daegu-Kyongbuk Institute of Science and Technology (1.3km northeast)
- ⑥ Daegu Technopolis Industrial Complex (1.9km southeast)

- Dalseong-gun website in English

<http://www.dalseong.daegu.kr/eng/html/main.html>

2.5 Interior Space and Facilities

- Multipurpose sports facility for the community

The gymnasium is to have a central role in physical fitness and community activities for the local community. It is required to make it possible for sports activities to have a substantial function. It should be able to respond to the various needs of the community such as gatherings and cultural activities.

Ex.) Multipurpose gymnasium, everyday physical activities facility, stage, preparation room, etc.

- Spectators sector

This part of the facility has to be suitable for the public to watch different activities and events, and it has to be planned so as to ensure a smooth circulation of the users and their safety.

Ex.) Stands and seats, bleachers, foldable and retractable seats

- Facilities for Athletes

Facilities for Athletes have to be located in the proximity of the indoor sports courts for convenient access. Their route should be separated from the general public route to avoid obstacles while they are moving between the courts and the facilities.

Ex.) waiting room, locker room, shower stalls, sports equipment storage etc.

- Facilities for users and local community's assistance

It is necessary to provide a space for relaxing and gathering for the local community to vitalize everyday physical activities.

Ex.) Lounge (Cafeteria), membership club rooms, etc.

- Facilities for administration and maintenance

It is to provide a work environment for efficient and smooth services to the users and for steady maintenances.

Ex.) office, conference room, public-address room, storage, machinery room, electrical room, etc.

- For general users and the disabled

The gymnasium must provide facilities and services comfortable for the users, and it also has to have installations for the disabled, senior citizens and pregnant women for ease of use regardless of age or physical condition.

Ex.) lobby, elevators, ramp, restrooms for disabled etc.

- Parking

The facility has to provide sufficient parking with easy access for users. Moreover, it should offer an organic connectivity to the gymnasium by analyzing topographical conditions and the users.

Ex.) Ground parking lot, underground parking lot, parking lot for athletes, etc.

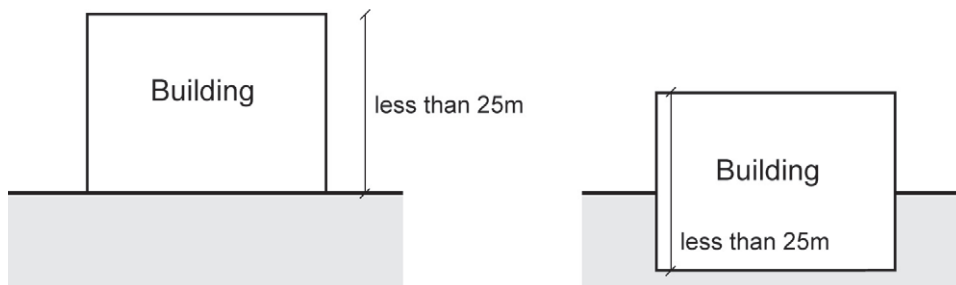
2.6 Space programs

Category	Area(m ²)	Usage classification	Area(m ²)	Remarks
Sports Facilities	2,035	Multipurpose gymnasium	1,425	· 10 Badminton courts installation · Includes stage and preparation room
		Daily sports facility(1),(2)	610	
Operational Support Facilities	335	Lounge (Cafeteria)	90	
		Membership club	30	
		Athletes waiting room	50	
		Dressing room, Shower room	100	· Female/male separation, each, 2
		Storage	65	
Offices/maintenance Facilities	340	Office	70	· Including conference room
		Public announcement booth	25	
		Machinery/Electrical room	245	
Stand seats /Common Space	1,790	Stand seats /Common Space	1,790	· Of over installation of 350 seats · Including toilets
Total	4,500m ²			

※ Total floor area may be increased or decreased by up to 5%

※ Underground parking space is possible if it does not exceeds the total floor area restriction.

– Limits on number of stories and height of the building

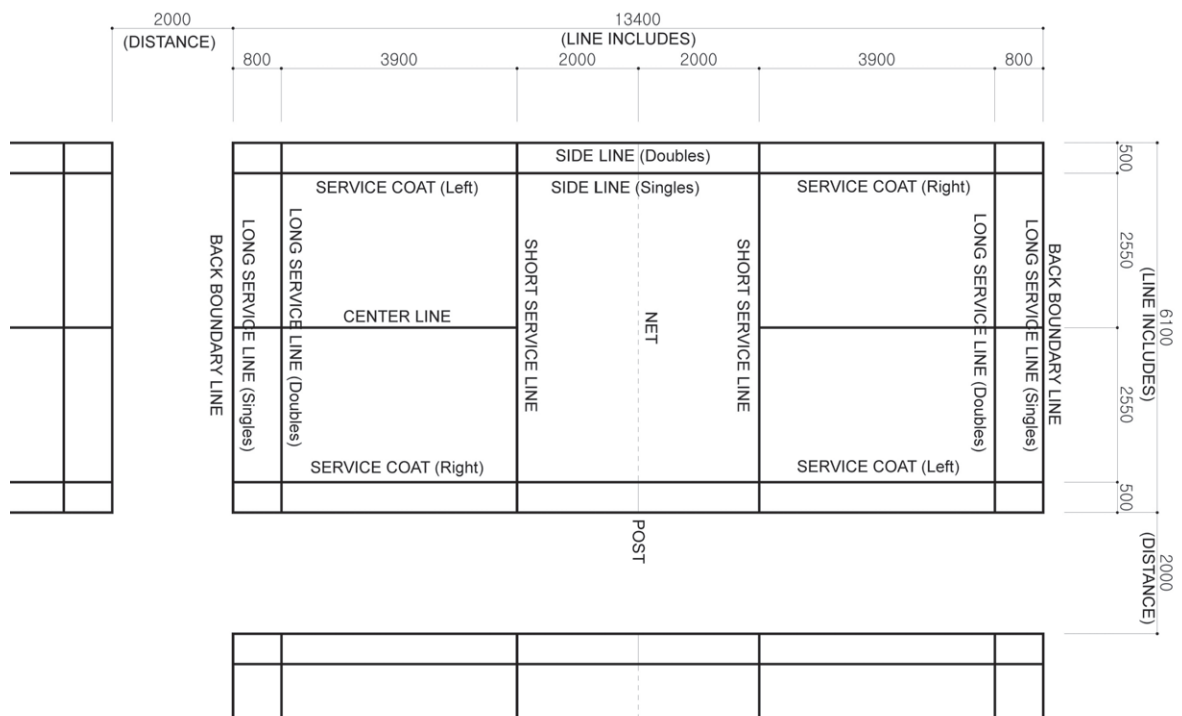


※ Should not be higher than 25m from the bottom of the underground floor to the highest point of the roof.

2.7 Design Considerations based on Space Programs

[Gymnasium sector space program]

- Multipurpose gymnasium space program
 - The multipurpose part of the gymnasium is a central large scale space that is composed of indoor sports courts, a stage, and a preparation room
 - Indoor sports courts must have a space enough for the arrangement of 10 badminton courts
 - Each badminton court should meet the standard of 6.1m (short side) × 13.4m (long side)
 - The gap between each court should be 2m min.
 - The height of the ceiling of the stadium should be about 12m or more (9m minimum)
 - The preparation room should be near the stage to make different cultural activities possible
- Badminton court standard measure



- Daily sports space program
 - A space for the local people to enjoy daily sports such as ping pong, billiards, and other fitness apparatus
 - It should have easy access from the parking lot due to a high daily usage
 - It is to be a space flexible enough for a variety of small and medium scale activities

[Spectator sector space program]

- Spectators seats space program
 - Exits, passage ways and stairs should be taken into account for a rapid and smooth circulation of the public
 - The spectators needs to have a front and left-right view free from obstacles while seated
 - Install enough seats for at least 350 people
 - The height of the seats from spectators' feet should be 45cm max. and the width needs to be 40~55cm.
 - Front-back distance between seats should be of 60~100cm
 - The sight line from the seats should be planned within 30° of both angles with the 125cm eye level while seated and 15cm head height differences of front-back rows.
 - General seats can be arranged throughout the 1st and 2nd level of the ground floor,

[Operational Support Facility space program]

- Lounge(Cafeteria) space program
 - A space destined for relaxing for the Gymnasium users
 - It should be placed with easy access for the users and needs to be manageable individually.
 - It should be a relaxing area designed with consideration of connectivity to the outdoor space and surrounding environments.
- Members club meeting room space program
 - An area for local people to actively participate in physical activities and to strengthen community bonds.
 - It should be designed as a relaxing area near the daily sports rooms to have a better use of space.
- Athletes waiting room
 - It should be placed near the indoor sports courts and make it free from obstacles for the athletes traveling between the facilities
 - Female and male waiting rooms should be installed separately with no interference between them.
 - An area for lockers should be arranged so that sports equipments can be stored.
- Locker rooms, shower rooms
 - Locker rooms and showers must be separated by differentiating indoor sports court users from daily life sports room users.
 - Entrance/exits for female and male users must be separated to avoid interference between them.

- Locker rooms should be installed in connection to shower rooms, and they should be close to the indoor sports courts and athletes' waiting room
- Locker rooms should be of 1.8~1.95m² per person and each locker should be 1.2~1.3m²
- Storage
 - The storage for management must be differentiated from that of sports equipments.
 - Sports equipment storage should be installed near the indoor sports courts for convenience and it should be designed so that the equipment can be taken in and out directly
 - The storage for management should be installed someplace where it can be of easy maintenance.

[Administrative and maintenance sector space program]

- Office
 - The office will be a place for the staff in charge of managing the facility; it should be planned as a pleasant area with good illumination and ventilation.
 - Circulation of the staff transit should not overlap with that of users' and athletes'
- Conference room
 - There should be a conference room exclusively for staff use
 - It should be in proximity of the office to improve the performance
- Public address booth
 - As an area that has a overall control of the stage and indoor sports courts, it should be installed in a place with direct view of the stage and indoor sports courts to manage activities.

[Parking and public use sector space program]

- Parking space program
 - Taking into account that the site is near a sloping road, there must be no inconvenience for the traffic flow when entering and exiting the site.
 - The roads and parking areas should be planned in accordance with the standards.
 - For the sake of the users' safety, pedestrian walkways should not coincide with the vehicle road and pedestrian crossing signs should also be indicated.
 - Separate space for the disabled, senior citizens and pregnant women should be secured and arranged near the exit zone
 - As the parking lot will mostly be empty outside the hours of gymnasium usage, it is recommended to connect it to outdoor space to be able to be used for different events
 - An underground parking lot can be designed considering the site's conditions.
 - The parking lot should accommodate at least 50 cars minimum.

- Exit, front hall, stairs, hallway
 - Commonly used spaces should be placed for an efficient usage and management of the gymnasium.
 - It is recommended to separate the users of indoor sports courts with the ones of daily sports rooms, and to create a divergence of circulation paths when entering and exiting the gymnasium
 - To offer the disabled, senior citizens and pregnant women easily access, it is necessary to install a ramp and a separate automatic door.
 - The front hall of the indoor sport courts should secure an extensive space for a smooth circulation of users, and should be connected to the stairs and hallways for easy access to other facilities of the gymnasium.
 - Each staircase should have sufficient space for a smooth circulation and emergency evacuation of the users according to the size of each facility, and should be dispersed to avoid sudden congestion.
 - Hallways should have good illumination and ventilation and be placed appropriately for an easy access to other facilities and emergency evacuation.

2.8 Exterior Space, Access and Parking

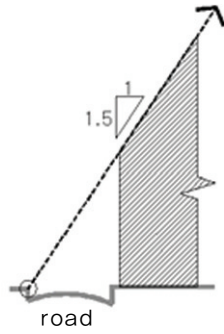
- Block planning should focus on creating a harmonious and pleasant environment by considering urban and humanistic characteristics of the local area and interpreting level differences of the site and its surroundings.
- Buildings should show optimization of orientation, topography, climate and form.
- Increase of construction cost should be taken into account when making use of the site's levels.
- The arrangement of the gymnasium should consider the degree of illumination inside the indoor sport courts so it is not too bright for athletes.
- When having large volume of spectators, public transportation and sufficient parking become a very important issue, and so it is necessary to have an exterior space that can accommodate a large number of people.
- Block planning should also consider the construction of an bridge between the site and Dalseong Sports Complex Park located to the north.

2.9 Codes and Regulations

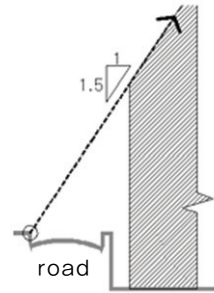
Regulations	Object	Legal Standard	Design standard
Daegu city planning ordinance no. 75	Building coverage rate	· Natural green area : less than 20% of the site area	
Daegu city planning ordinance no. 80	Floor area ratio	· Natural green area: less than 100% of the site area	
Daegu city Architectural ordinance no. 25	Open Space of the site	· Mandatory distance between the limit line of structure and the building : 3m	apply
Building act enforcement decree no. 25	Structural safety verification	· Building with total floor area of more than 1,000m ² · Building with more than 13m of height · Building with more than 10m of distance between columns	apply
Building act enforcement decree no. 34	Direct Stair installation	· Distance to direct stairs: less than 30m (main structural parts made of noncombustible material/ fire-resisting structure: less than 50m)	apply
Building act enforcement decree no. 46	Fire Partition	· Per each 1,000m ² , demarcation of floors, walls, first grade fire door made of fire-resting structure (should be per each 3,000m ² if fixed fire fighting system is installed) · Delimitation per floor for floors more than 3 levels above the ground, and for underground floor · Exception: unavoidably large rooms like the ones destined for cultural, gatherings or physical activities	apply
Building act enforcement decree no. 82	Building height limit	· Less than 1.5 times the frontal road width *see figure 1	apply
Evacuation. fireproof regulation no. 15	Stairs installation standard	· Stairs over 3m height: install stair landin of 1.2m min. every 3m · Stairs and stair landin width of more than 120cm	apply
Parking		· Accommodation of more than 50 cars	apply
Convenience promotion security for the disabled		* See figure no. 2	apply

<Figure1> Example of road width application cases

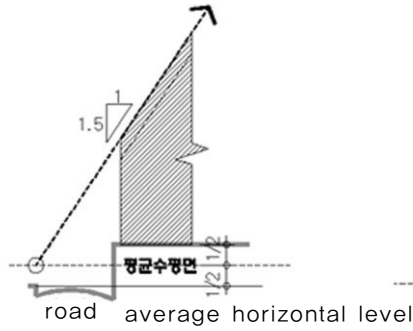
· In general



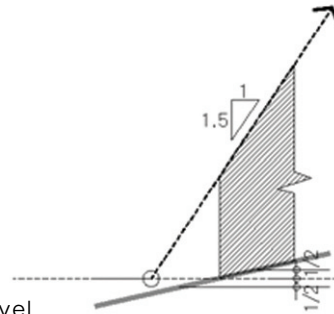
· When the site is located in low terrain



· When the site is located in high terrain

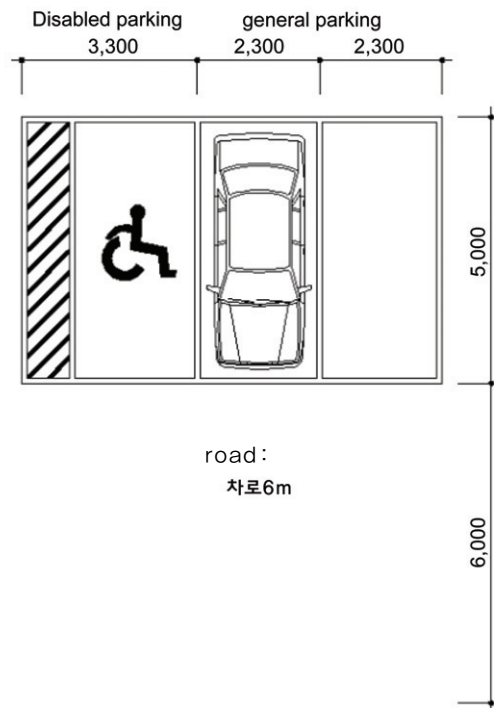


· When front road is inclined

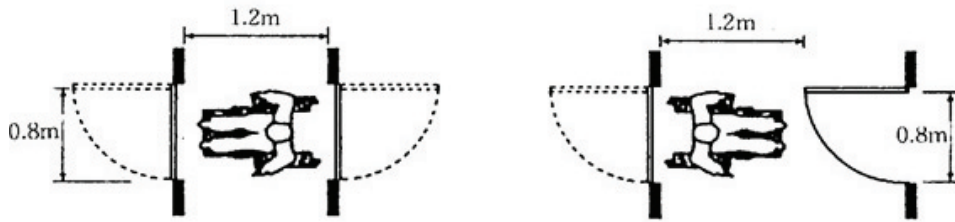


- Standard for Disabled parking

< When total number of cars exceeds 10, 3% of total parking space should be reserved for disabled parking >

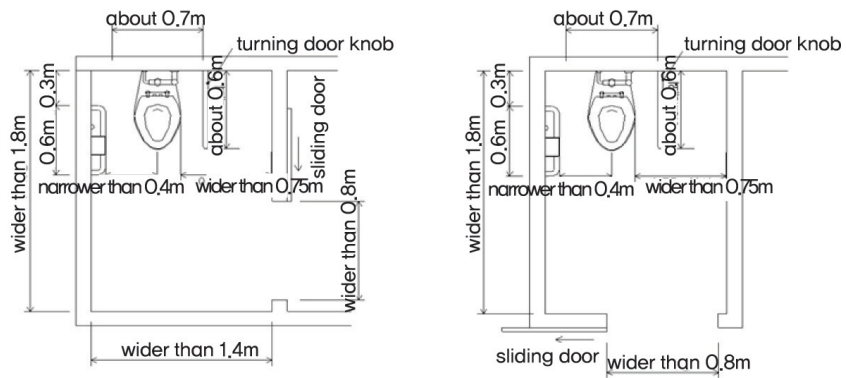


- Standard for corridors and exits in consideration of the disabled

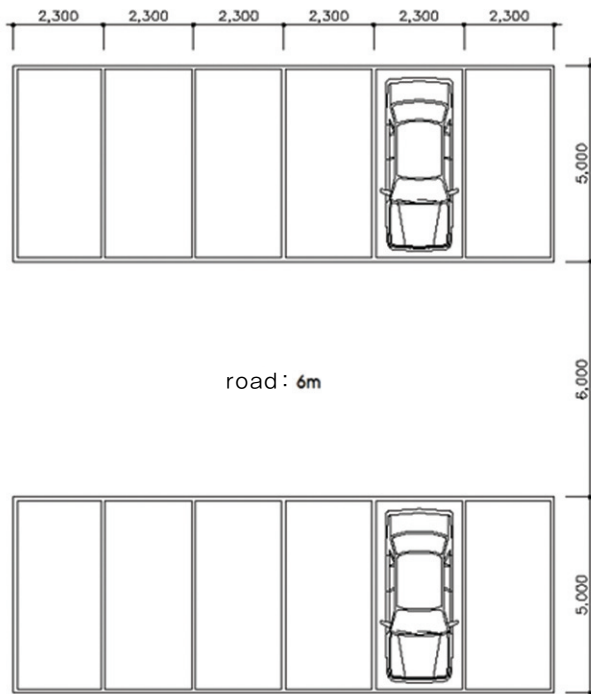


<Entrance (door) accessible for the disabled, valid width of corridor should be over 1.2 meters (for inevitable difference of height, install ramp)>

- Standard for Toilets for the disabled



- Parking for the disabled example



<see details in the attachment>

2.10 Sustainability

- The gymnasium design should be eco-friendly to reduce energy consumption.
- The gymnasium design should utilize appropriate forms and materials to make it sustainable considering local climate and environments.

3. Attachments

- # 01 - Competition brief
- # 02 - Checklist of submissions
- # 03 - Application form
- # 04 - Space program / area calculation table
- # 05 - Site drawings (dwg files)
- # 06 - Map of existing Dalseong Sports Complex Park's (dwg file)
- # 07 - Location map
- # 08 - Aerial maps
- # 09 - Site photos
- # 10 - Panoramic photos
- # 11 - Competition poster
- # 12 - Example drawings of codes and regulations

