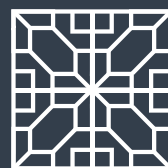


Hanok

Korean Traditional Architecture

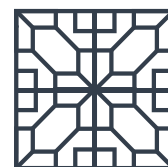
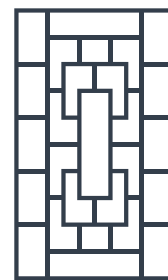
2011-2016
National Hanok Competition



Ministry of Land,
Infrastructure and Transport



Architecture &
Urban Research Institute



Hanok, Korean Traditional Architecture

2011-2016

National Hanok Competition



Introduction



As people's interests in Hanok(Korean traditional architecture) grew in the mid-2000s, the Korean government began implementing Hanok activation policies, such as projects supporting public construction of Hanoks, Hanok R&D, various cultural events for Hanok, etc., while preparing a legal basis for promotion of Hanok and securing of identity.

Hanok is a building with a structure in perfect harmony with Korean hearts and the environment. It is eco-friendly, naturally accepting nature and has outstanding aesthetics due to a unique architectural style. It also has scientific aspects, such as the timber framing structure which is rarely observed in other countries.

However, it is the fact that traditional Hanok also have an inconvenience not suited for contemporary life, along with the beauty and excellence mentioned above. Accordingly, newly-built Hanoks are being born again as wonderful architecture where tradition and convenience are harmonized by combining contemporary practicality while maintaining the unique taste, comfort and health.

National Hanok Competition is a meaningful event where the best practices of Hanok are excavated in three categories: completion, design, and photograph to share values of Hanok with many people. Eighteen projects awarded in completion category since 2011 are providing us with the same impression by adding a flow of time to the wonderfulness at the time of construction. Thus, this collection of awarded projects were published in English to spread the value of Hanok across the world.

We hope that many of you feel the essence of Hanok as the basis of our life as well as a cultural heritage. To spread the value of Hanok worldwide, the Korean government will do its best so that Korean people and many of you in the world can easily access such elegant Hanoks.

Thank you.

Ahn Choong Hwan
Construction Policy Director of Ministry of land, Infrastructure and Transport(MoLIT)



Hanok is being reevaluated and disseminated nationwide as a sustainable architecture with a social movement trying to maintain the traditionality intrinsic to Korea, and a global movement emphasizing eco-friendliness. However, due to structural distinctiveness of Hanok, a language barrier and a lack of publicity channel, most of the efforts are limited domestically.

National Hanok Center in Architecture & Urban Research Institute(AURI) has continued various activities as a think tank for promotion of Hanok culture. We are supporting related policies, institutions and projects to disseminate knowledge of Hanok, managing systems for Hanok education and publicity, and striving for globalization of Hanok culture.

In 2017, international events such as UIA 2017 Seoul World Architects Congress and 10th anniversary of AURI are being held. To inform domestic and foreign people about the excellence of Hanok in these events, we have made collections of awarded projects in the completion category of National Hanok Competition from 2011 to 2016.

The eighteen awarded projects reflect various attempts to accommodate lifestyles of contemporary people, as well as cultural values of traditional Hanok. Through these projects, we can see the possibility of Hanok as our inherent cultural asset in our routine.

Because Hanok is in harmony with the environment while retaining beauty inherent to its timber structure, it shows possibilities of sustainable architecture to people around the world. We expect that this collection can serve as the first step for the globalization of the Hanok.

Kim Dae Ik
President of Architecture & Urban Research Institute(AURI)

Hanok, meeting with individual

Hanok, meeting with public

Hanok, meeting with religion

National Hanok Competition in Korea

National Hanok Competition in Korea has been held by Ministry of Land, Infrastructure and Transport(MoLIT) and Architecture & Urban Research Institute(AURI) since 2011. This competition is aimed to search the potential of Hanok, which involves preservation of traditional values and possibilities as a contemporary architecture.



2011 National Hanok Competition - Evolving Hanok



2012 National Hanok Competition - Hanok as a living space



2013 National Hanok Competition - Possibilities of Hanok



2014 National Hanok Competition - Hanok enjoyed by everyone



2015 National Hanok Competition - Hanok beyond imagination



2016 National Hanok Competition - Hanok in the city

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Hanok, Korean Traditional Architecture 2011-2016 National Hanok Competition





Chapter. 1

Hanok, meeting with individuals

- 01 **Gahoe-dong L Residence**
(2011 National Hanok Competition 1st Prize)
- 02 **Mokgyeongheon**
(2016 National Hanok Competition 1st Prize)
- 03 **Yangyudang**
(2012 National Hanok Competition 2nd Prize)
- 04 **#200**
(2013 National Hanok Competition 2nd Prize)
- 05 **Sihaejang**
(2013 National Hanok Competition 2nd Prize)
- 06 **Jaseondang**
(2014 National Hanok Competition 2nd Prize)
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(2015 National Hanok Competition 2nd Prize)
- 08 **Hwaseomun-ro 41st Road 20th Residence**
(2016 National Hanok Competition 2nd Prize)

01

Gahoe-dong L Residence

(2011 National Hanok Competition 1st Prize)

10

Architect Hwang Doo Jin (Doojin Hwang Architects)

Construction Buckchon HRC

Client Oh Mo Yeon

Location Gahoe-dong, Jongno-gu, Seoul

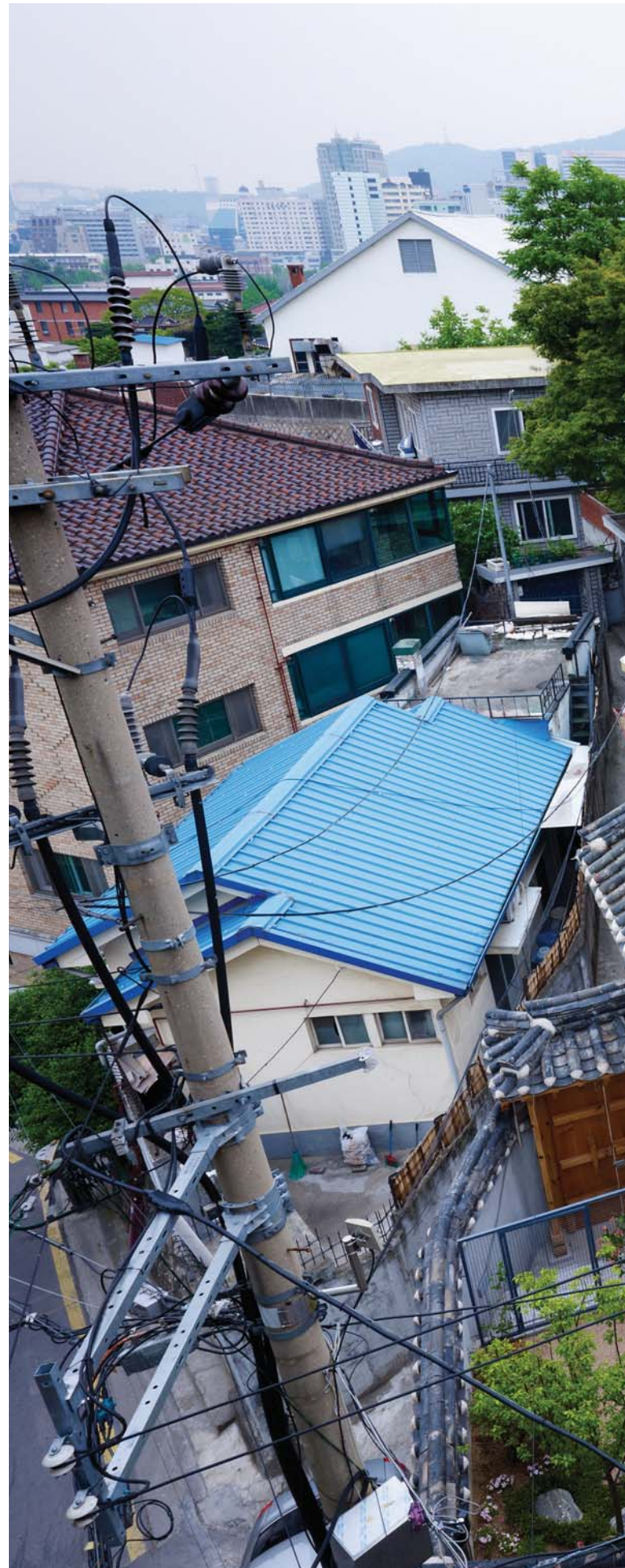
Site area 152.64m²

Building area 64.76m²

Gross floor area 133.56m²

Program Housing

Photographs Park Young Chae

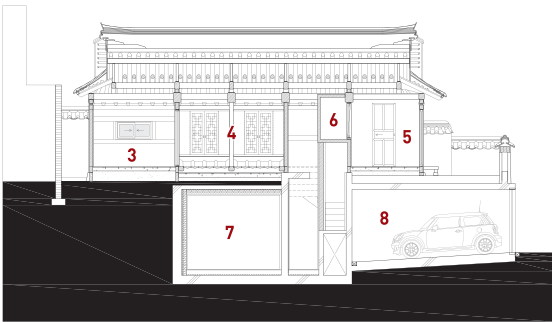




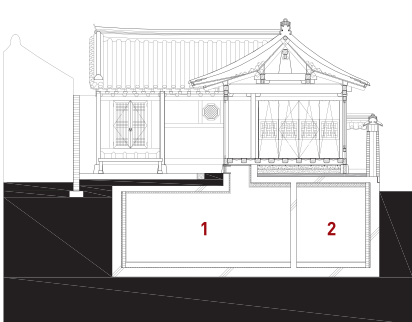
In Bukchon Hanok Village of Seoul, areas of housing numbers starting with 31 and 11 show the densest population of Hanok. Particularly, a house at the entrance of 31 area is interesting because it implies the consideration of the contemporary discourse, 'What should the contemporary Hanok be like?' An answer to this question would be 'A house with inherent values of the traditional Hanok as well as proper qualities of contemporary lifestyle.'

The distinctive feature of this house is the harmony of reinforced concrete structure underground and traditional timber structure on the ground. A study, a parking space and storage areas are located in the basement, and main living areas such as bedrooms, a living room and a kitchen are on the ground. By experiencing two different orders at the same time, residents can enjoy the essence of the traditional Hanok and the contemporary lifestyle together.

Horizontal section

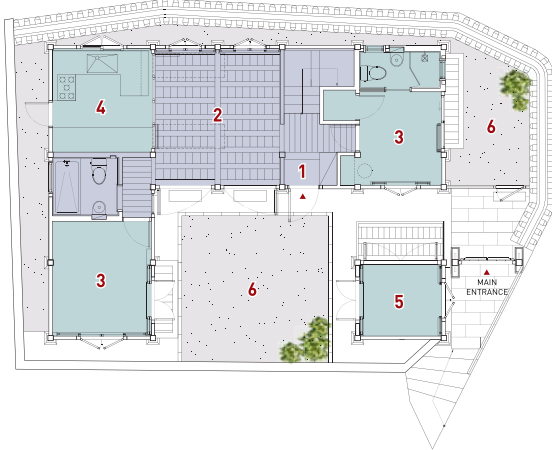


Vertical section

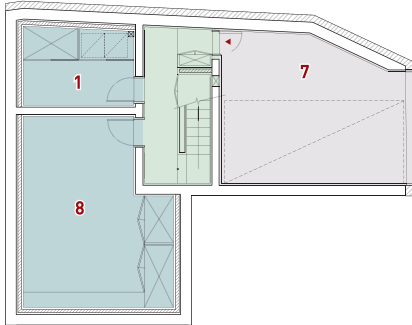


- 1 Multi-purpose room
- 2 Utility room
- 3 Kitchen
- 4 Living room
- 5 Bedroom
- 6 Closet
- 7 Utility room
- 8 Garage

First floor

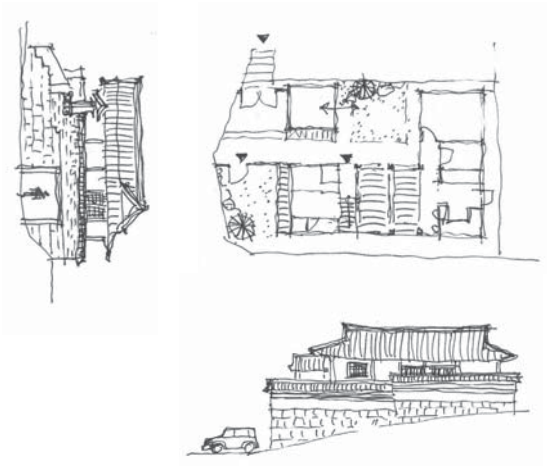


Basement



- 1 Utility room
- 2 Living room
- 3 Bedroom
- 4 Kitchen
- 5 Study
- 6 Garden
- 7 Multi-purpose room
- 8 Garage

Sketch

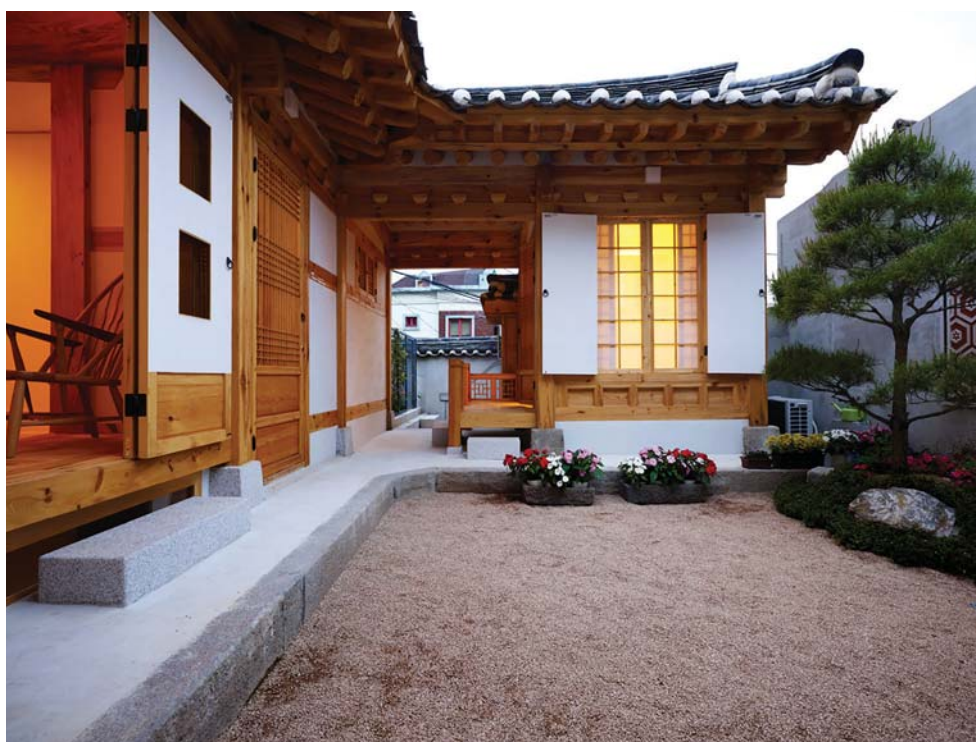


Main entrance



Modern kitchen with traditional timber structure





While the plan of house follows the 'ㄱ'-shaped typical urban Hanok style, it was partly modified according to the site condition. In this process, a yard for the main room was created separately from the courtyard in the center of the house. Although this was not an easy decision for the scale of this house, it was carried out for 'High-End Concept.' The 'Green Wall' between the gate and the yard for the main room inspired by a traditional quickset door.

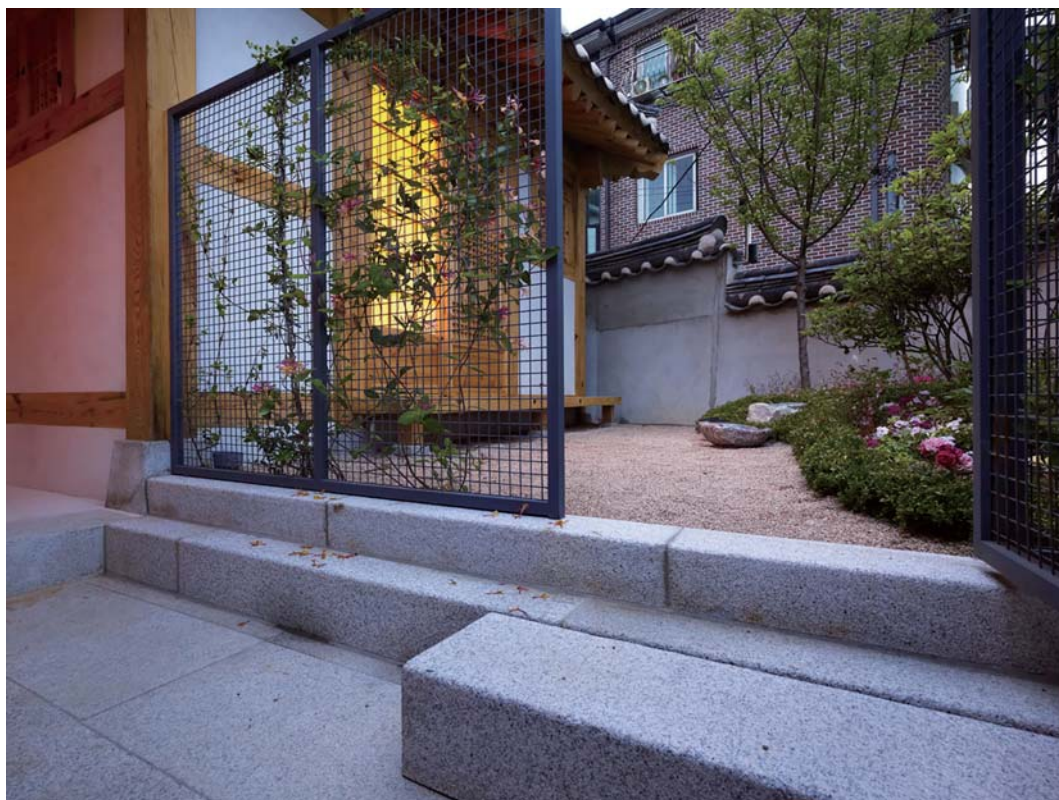




Traditional doors with glass windows



While using traditional windows, astragals and triple-layered windows were newly applied for airtightness and heat insulation. Especially for the front windows of the living room, insulation glasses were applied to let residents enjoy the exterior view from inside during the winter.

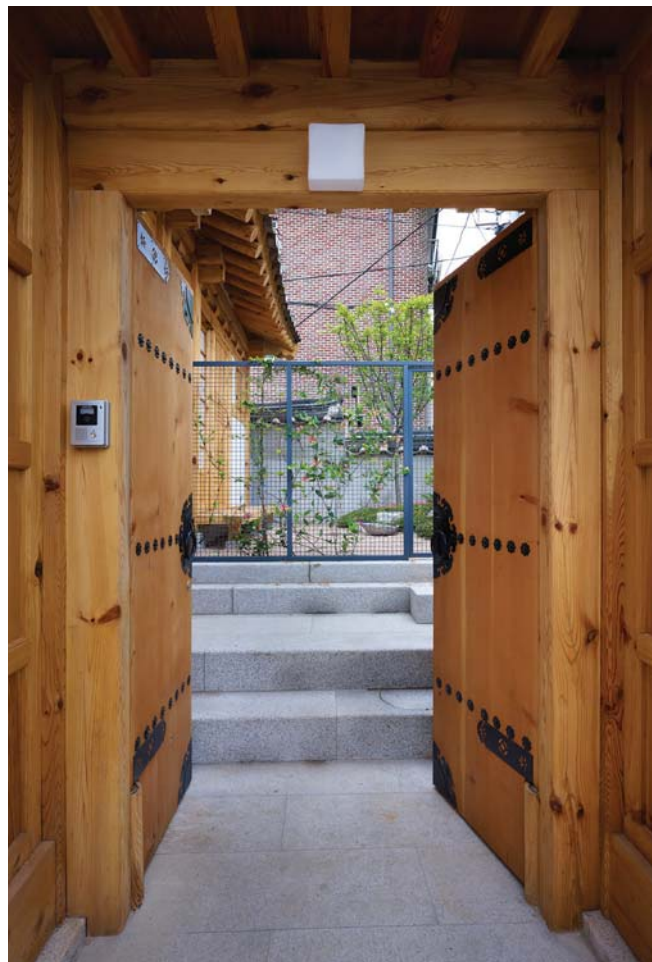


Green Wall inspired by
a traditional quickset door

Green Wall next to Hanok



Green Wall between entrance and inner courtyard





Modern basement

Mechanical systems were efficiently installed by considering authentic features of Hanok. For example, a dry construction method for the roof allowed pipes and ducts to be placed within the roof space; a discharge port for heating and cooling was arranged on the side wall of *Daecheong*(Wooden-floored hall) by using floor level difference in section.

Also, new spatial attempts concerning the sectional characteristics of Hanok were applied. By providing an attic on the upper part of the main room, the space could be divided vertically, and a skylight for the basement was installed on the bottom of *Daecheong*.

02

Mokgyeongheon

(2016 National Hanok Competition 1st Prize)

20

Architect Hwang Doo Jin (Doojin Hwang Architects)

Construction Gojin TNC

Client Bae Yun Mok

Location Jingwan-dong, Eunpyeong-gu, Seoul

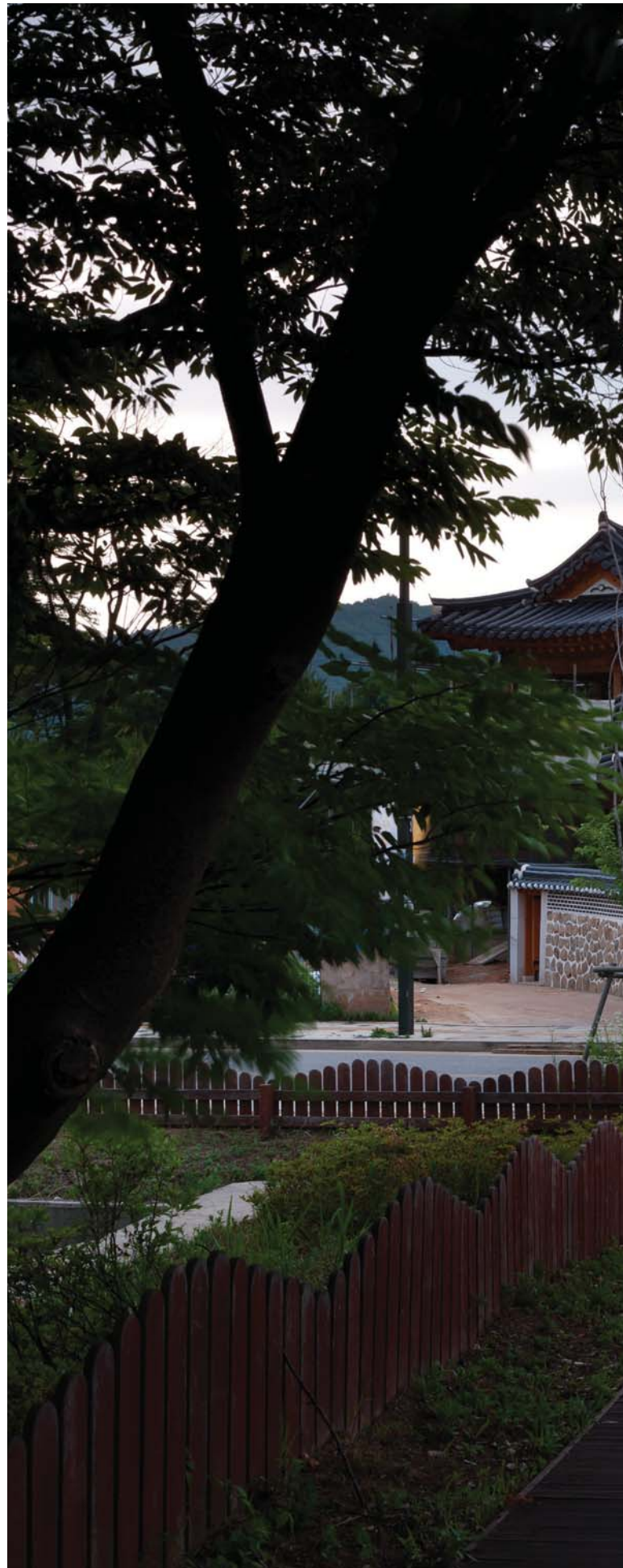
Site area 280.30m²

Building area 89.10m²

Gross floor area 178.98m²

Program Housing

Photographs Park Young Chae

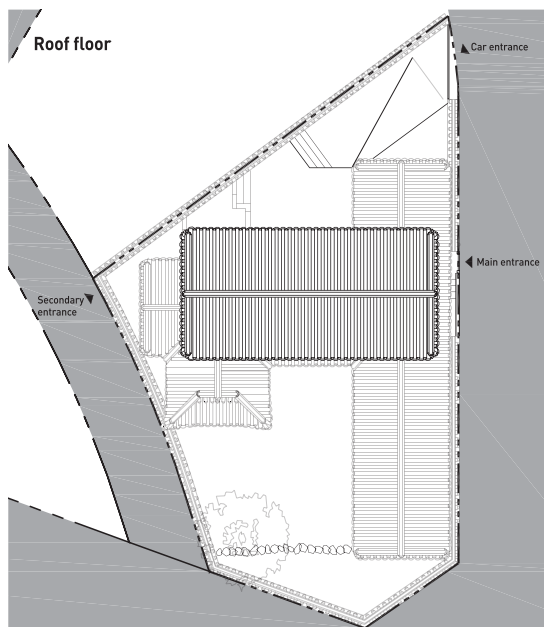




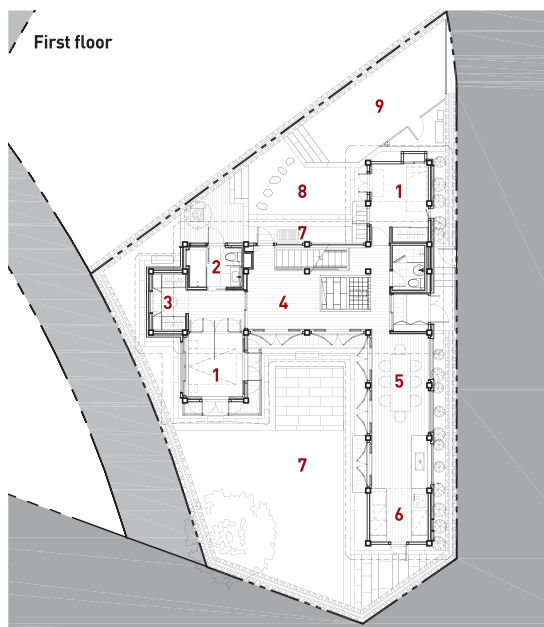
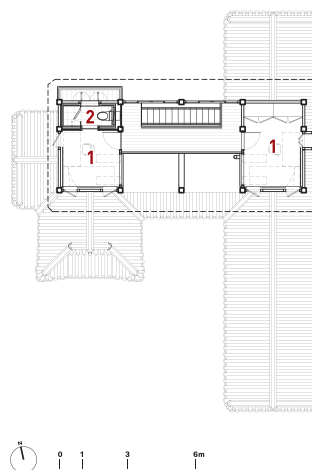
Courtyard



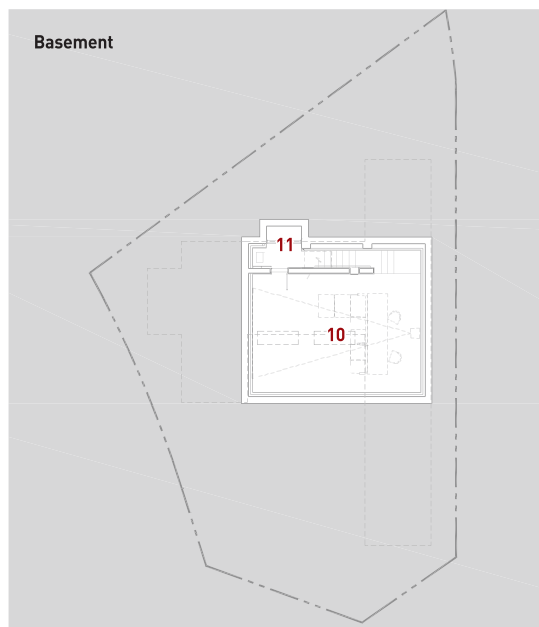
Mokgyeongheon is a two-story private Hanok with a basement in Eunpyeong Hanok village, Seoul. This house is located on the site of atypical shape at the corner of an intersection. It has an adequate size of a front yard and a backyard on the north-south axis.



Second floor



Basement



- | | | | | | |
|--------------|------------|-----------------|-----------------------|------------|---------------|
| 1 Room | 2 Restroom | 3 Dress room | 4 Living room | 5 Kitchen | 6 Dining room |
| 7 Front yard | 8 Backyard | 9 Parking space | 10 Multi-purpose room | 11 Storage | |



Firewall on both sides of the house were built with brick panels. A western firewall shows a unique ambience through perforated patterns made by brick piling. An eastern firewall where the main entrance is located has an irregular-shaped opening, generating modern spatial qualities at inside and a unique street scenery at outside.

The major common use spaces, living room and dining room, have different senses of space around the front yard. The living room has no ceiling so that a connecting path on a second floor and rafters are visible on the upper side. This spatial quality can be maximized only in two-story Hanok. In the dining room, people can feel the mood as if they were in a narrow and long servants' quarter.



Top Kitchen and dining room
Bottom Outside of the dining room with lifting
doors and horizontal sliding doors





Top Connecting path in the second floor and children's room
Bottom Modern basement with a skylight

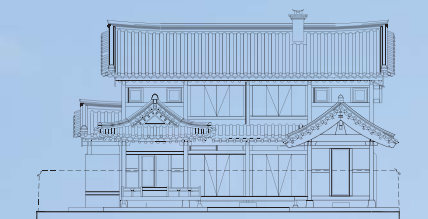


Children's rooms are located on either sides of connecting path on the second floor. When a lifting window is opened in each of these rooms, they are all connected to the living room. From the second floor, a roof of the first floor can be seen together with the outside landscape as a beautiful scenery, which is only available at two-story Hanok.

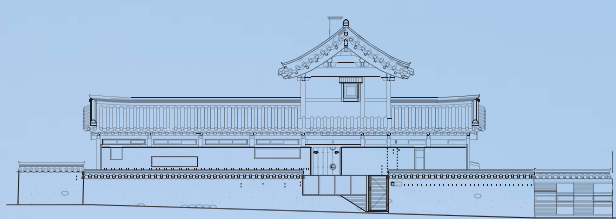
The basement, a multi-purpose space, shows modern ambience. Through skylight and transparent *Jjokmaru* (Additional wooden floor) above, a natural light comes into the basement. Therefore, people can enjoy the view of Hanok even from the basement.

Mokgyeongheon shows the modernization process of a two-story Hanok which were originally built for commercial purposes. This is a transitional case of contemporary multi-story residential Hanok influenced by urbanization and relevant technological developments.

Front elevation



Right elevation





03

Yangyudang

(2012 National Hanok Competition 2nd Prize)

30

Architect Cho Jung Goo (guga Urban Architecture)

Construction Buckchon HRC

Client Kim Mi Kyeong

Location Gahoe-dong, Jongno-gu, Seoul

Site area 129.10m²

Building area 75.70m²

Gross floor area 79.34m²

Program Housing

Photographs Lee Han Koo (unless otherwise indicated)





Yangyudang is the house on the hill at 11 Gahoe-dong. When going up the inclined road, downtown in Seoul and Namsan(Name of the mountain) can be seen below. When following the long alley, a persimmon tree can be found in front of the servants' quarter. When entering the yard past the gate, the kitchen comes into sight beyond a transparent glass window. And when standing on the *Daecheong*(Wooden-floored hall), the cool scenery of Bukaksan(Name of the mountain) is visible on the rear side.

Construction of this house was completed in the fall of 2011 by remodeling existing Hanok. The family members, parents and a child, were unsure of a harmonious life in a Hanok because they used to live in apartments. The child, who did not have his own space other than a room, was given an independent domain called an outer house that contains a room, a small *Daecheong*, an attic and a restroom. The child is expected to communicate confidently with their parents as he has an independent domain now.

Parents and a child can meet in the kitchen. By lowering the kitchen floor, communication from the courtyard becomes comfortable, and conversations can be carried out even from the attic of the outer house. Also, a family room as an 'Open and Intimate Space' placed in the location of the main room of existing Hanok. Family members gather there to use computer, read books or rest. Moreover, restful bathing can be enjoyed in the bathroom with a small forerom and a skylight. Although each space is separated, the overall circulation of family members is connected as one.



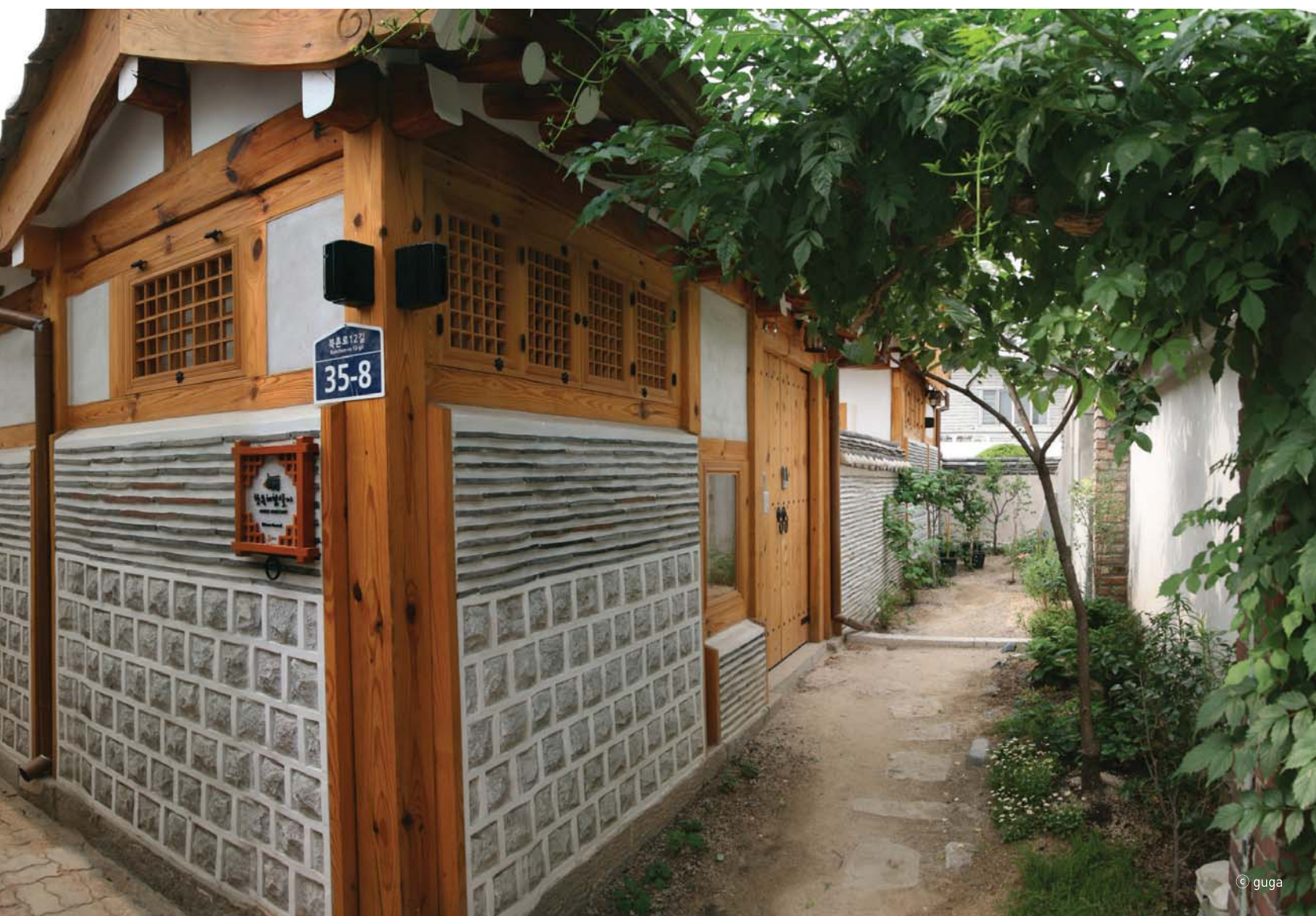
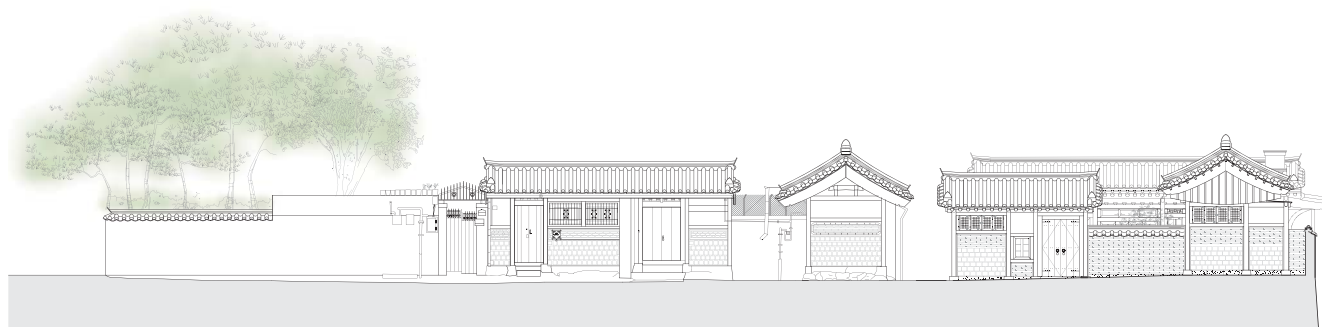
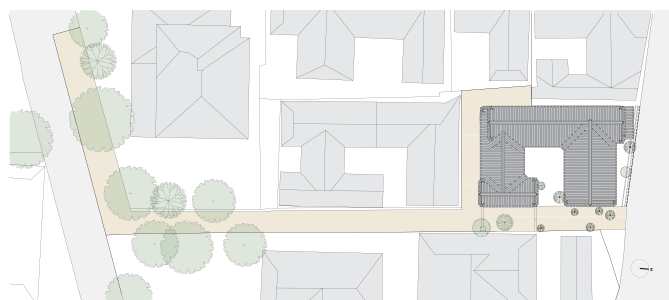
Left Exterior of the existing house

Right Exterior of Yangyudang after completion



Old alley scenery continued

When walking along the uphill road of 11 Gahoe-dong, you can encounter a bantering alley where surrounding walls are stained with traces of time and overgrown trees are clustered together. Yangyudang, located at the end of the road, was planned to combine the house with the ambience of the alley and to aid the scenery of the alley as well. A flower garden was prepared by dismantling the existing iron gate, and surrounding walls were arranged by using granite and broken tile pieces in order to be harmonized with surrounding landscape. The appearance of Hanok facing the alley was planned to have a natural elevation with windows carefully calculated to keep privacy but not to be stuffy.



Transparent inner space, looking at each other

The interior was planned to have a transparent elevation by using glass so that family members can see each other, unlike the elevation of the outside which was harmonized with the surroundings by having an appropriate opening. When opening the gate and enter the yard, you can see the warm kitchen and the small *Daecheong* as the son's domain comes into view. Also, the backyard and Inwangsan(Name of the mountain) can be seen from the yard through a glass window in the *Daecheong* of main house, while view from the next door is blocked by double-sided doors and lifting doors.

Top Opened Daecheong

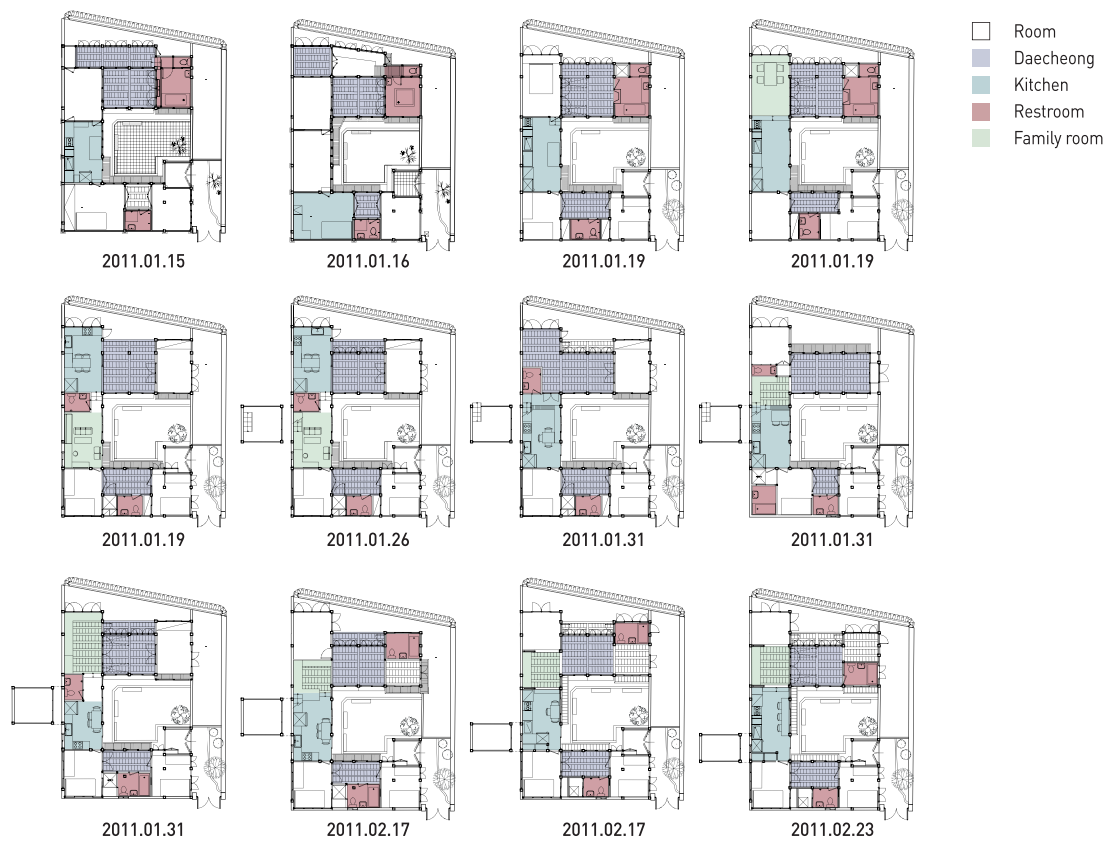
Bottom Scenery of the backyard with Bukaksan viewed through the window



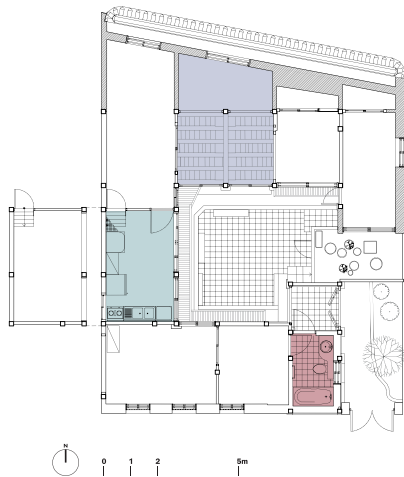
Family room, communicating with respect for each other's domain

The existing Hanok consists of a main house with a main room, a central *Daecheong*, and *Geonneonbang*(Room across from the main room), a servants' quarter with a room and a restroom, and a small and tight kitchen. There is a strong hierarchy among each area. A client wanted to have a space which could contain harmonious family life and contemporary living style in this Hanok. For this purpose, a concise and wide-open main house with a new family room and a bathroom was placed in the location of existing main room. An open kitchen towards the courtyard was planned as well. An 'Independent Area' with a room, a small *Daecheong*, and a bathroom was given to the son to carry out independent lifestyle responsibly. Therefore, a public living space spans from the *Daecheong* to the family room and the kitchen, and each of family members can have independent life and easily communicate with each other at once. Also, the family room can be closed as a normal room if needed.

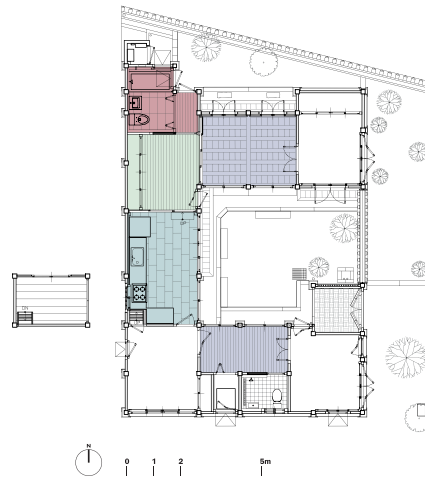
Changes in floor plan



Floor plan : Existing Hanok



Floor plan : After completion







Family room and kitchen

**Concept diagram of interconnected ventilation
as well as communication**

- a. Restroom with a foreroom enables an available space
- b. Horizontal sliding doors were used in two sides of *Daecheong*
to enable three separate spaces to be utilized as one entire space if needed
- c. Communicating space considering height of an eye
- d. External facade in harmony with ambience of an alley
- e. Skylight
- f. Side glass windows were designed for the extension of glances



Top Daecheong serves as parent's area
Bottom Small Daecheong serves as child's area



Top Guest's room
Bottom Son's room

Hanok, keeping fundamentals of housing

Room as a room should be, and Daecheong as Daecheong should be

The dark and stuffy expansion part of the existing house is reformed to a bright and cozy room. Windows of appropriate height and size were planned variously to consider both elements of privacy protection and natural lighting for the outside where adjoins the alley. On the north side, *Daecheong* where a backyard and the scenery are alive so to be cool has been prepared. The family room has sliding doors in two sides so that it can be a flexible space if needed.

Kitchen viewed from family room



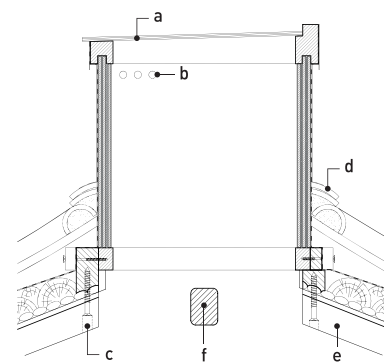
Restroom



Kitchen and restroom should be bright and pleasant

By placing the porch in the kitchen below the attic, the main entrance was made to be cozy and amiable, while the elevation was treated to be transparent to allow easy communication within the courtyard. By having level differences of floors around 380mm between the kitchen and the family room, the stand-up kitchen and the sedentary family room were planned to be harmonious. The kitchen floor is tiled considering the water usage, and kitchen walls are painted with light green for calm ambience. The restroom on the north side was given an available space by placing a foreroom, and a natural lighting by having a skylight above the ridge of a roof. A window is arranged around the bathtub to allow enjoyable bathing while looking at the backyard. A floor and walls of the bathroom are all tiled to be not only modern but also antique at the same time.

Detail plan : Skylight in the restroom



- a. Pair glass
- b. Ventilation hole
- c. Screw bolt fixation
- d. Roof tile
- e. Rafter
- f. Purlin on column row

Courtyard



Epilogue, anguishing over the shape of life suited to the scenery of family

One day, the owner conveyed the happy news that his blunt son who is a second year student of high school greeted him for the first time by saying "Dad, I am going to school!" on the day of moving to this house. Designing a house could be a touching work and connects people's hearts, rather than simply building a beautiful and proudful house. By picturing various appearances of Hanok through the family story of Yangyudang, it can be realized that slowly evolving Hanok is effective in expressing the potential of our lives. Furthermore, Hanok could suggest the scenery of a new life which is unprecedented before. Currently, Yangyudang adds vitality to itself while it cherishes a harmonious family life.

04

#200

(2013 National Hanok Competition 2nd Prize)

42

Architect Kim Jang Kwon (Buckchon HRC)

Construction Buckchon HRC

Client Lee Yu Kyeong

Location Gahoe-dong, Jongno-gu, Seoul

Site area 152.10m²

Building area 84.15m²

Gross floor area 108.51m²

Program Housing

Photographs Buckchon HRC Co.,Ltd. (unless otherwise indicated)





Borrowing the fragrance and scenery of nature - Allowing architecture to remain in the nature

The existing Hanok had an exclusive orientation where good views of the east and the south were blocked. The orientation was changed to protect privacy and not to block the landscape of the east. This change allowed to secure open sight and to communicate with the surroundings for the existing form which had been isolated from the outside.

Contemporary characteristics - Return of the head of household due to the prolonged life expectancies

The domain of the head of household is composed of a study, a room and a bathroom. This house was made to contain our historical characteristics by presenting a space enabling independent life while the head of household stays in the house after retirement. It also intended to play the role of *Sarangchae*(Detached house for guest reception) by separating the entrance from the main house.

Outside scenery viewed through the window

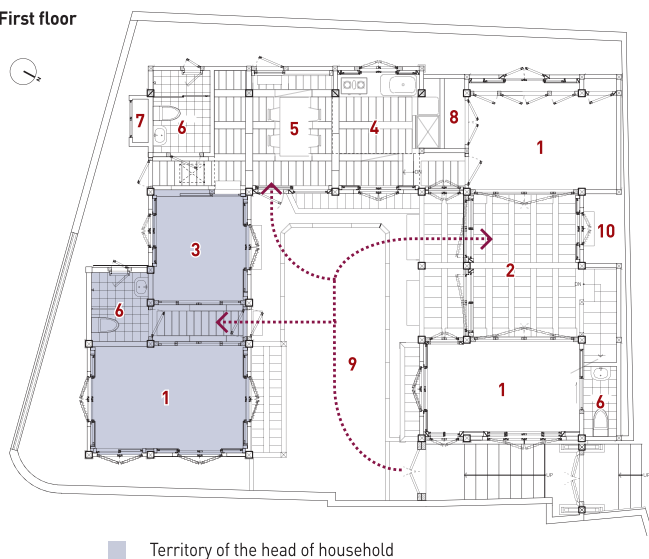




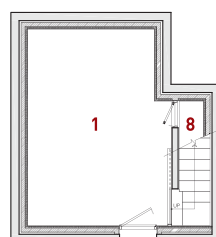
45

Courtyard

First floor



Basement



- 1 Room
- 2 Daechong
- 3 Study
- 4 Kitchen
- 5 Dining room
- 6 Restroom
- 7 Boiler room
- 8 Storage
- 9 Front yard
- 10 Backyard

Desirable house to live in

While maintaining the shape of Hanok, well-known problems such as lack of heat insulation and spatial limitation were resolved. If Hanok can change shape and function according to contemporary needs, it can become a desirable house for anyone.

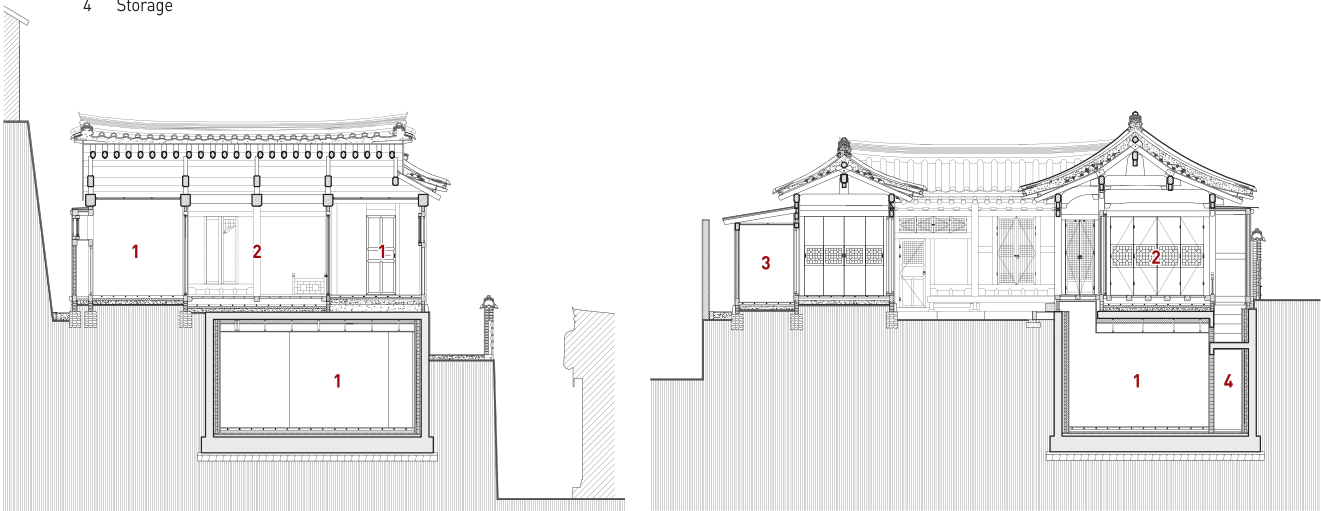
Maximizing heat insulation

In order for Hanok to be the architecture of the future, the problem of heat insulation should be solved. Through advanced methods of heat insulation, the outer walls of this house are protected from wind and rain while maintaining proper levels of humidity and air circulation. Also, by placing heat insulating materials on the joints of wooden members, the issue of heat insulation was further improved.

Vertical expansion - An attic as a living space

Underground space with contemporary functions was formed to supplement spatial limits of the Hanok, and attics were installed to solve the insufficient storage space. Although an attic above the kitchen was planned as a storage according to the traditional sense, another attic above the restroom was planned as a living space for teatime or resting place to enjoy outside sceneries.

- Section
- 1 Room
 - 2 Daechyeong
 - 3 Restroom
 - 4 Storage





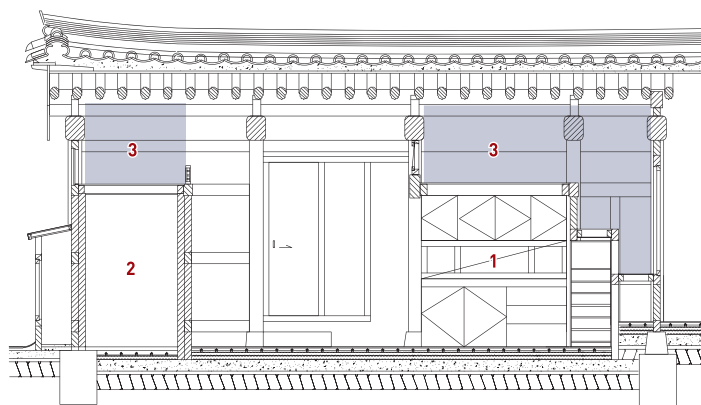
Expansion of the kitchen by placing upper attic



Attic above the restroom

Section : Kitchen

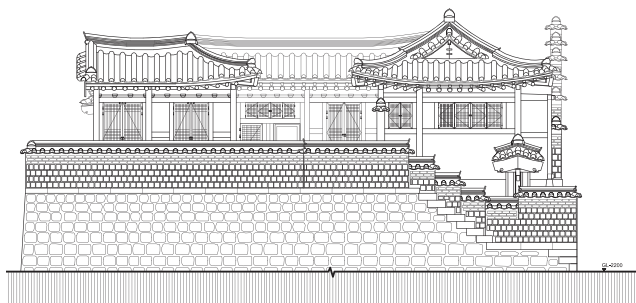
- 1 Kitchen
- 2 Restroom
- 3 Attic



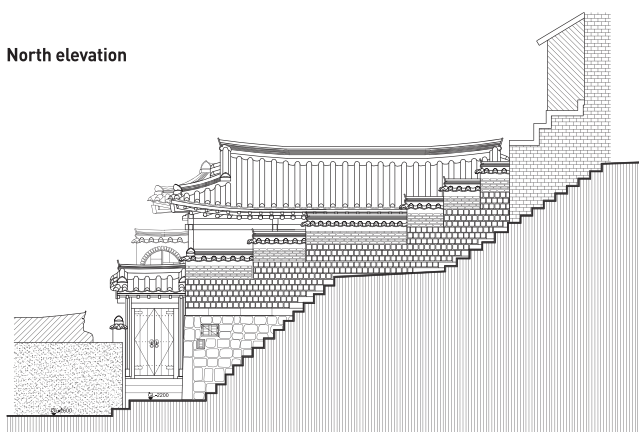
Storage and lighting - Overcoming the limitations of small site

Within the scope of legal permission, the lack of storage space was solved by installing a small closet inside eaves line. By installing a window beneath *Toetmaru*(Narrow wooden porch), light flows into the basement from the courtyard. Also, glass windows were put on wooden awnings along the eaves for sufficient sunlight in the courtyard. However, eaves in the central *Daecheong*(Wooden-floored hall) do not have awnings so that the residents can enjoy the nature such as rain, wind, and sunlight fully in this small front yard.

East elevation



North elevation



Daecheong





Courtyard

05

Sihajang

(2013 National Hanok Competition 2nd Prize)

50

Architect Song Dong Chul (Sodo Architects & Engineers)

Construction Kunwon Traditional Architecture,
Doohae Traditional Architecture

Client Cho Young Ja

Location Seongbuk-dong, Seongbuk-gu, Seoul

Site area 327.00m²

Building area 92.38m²

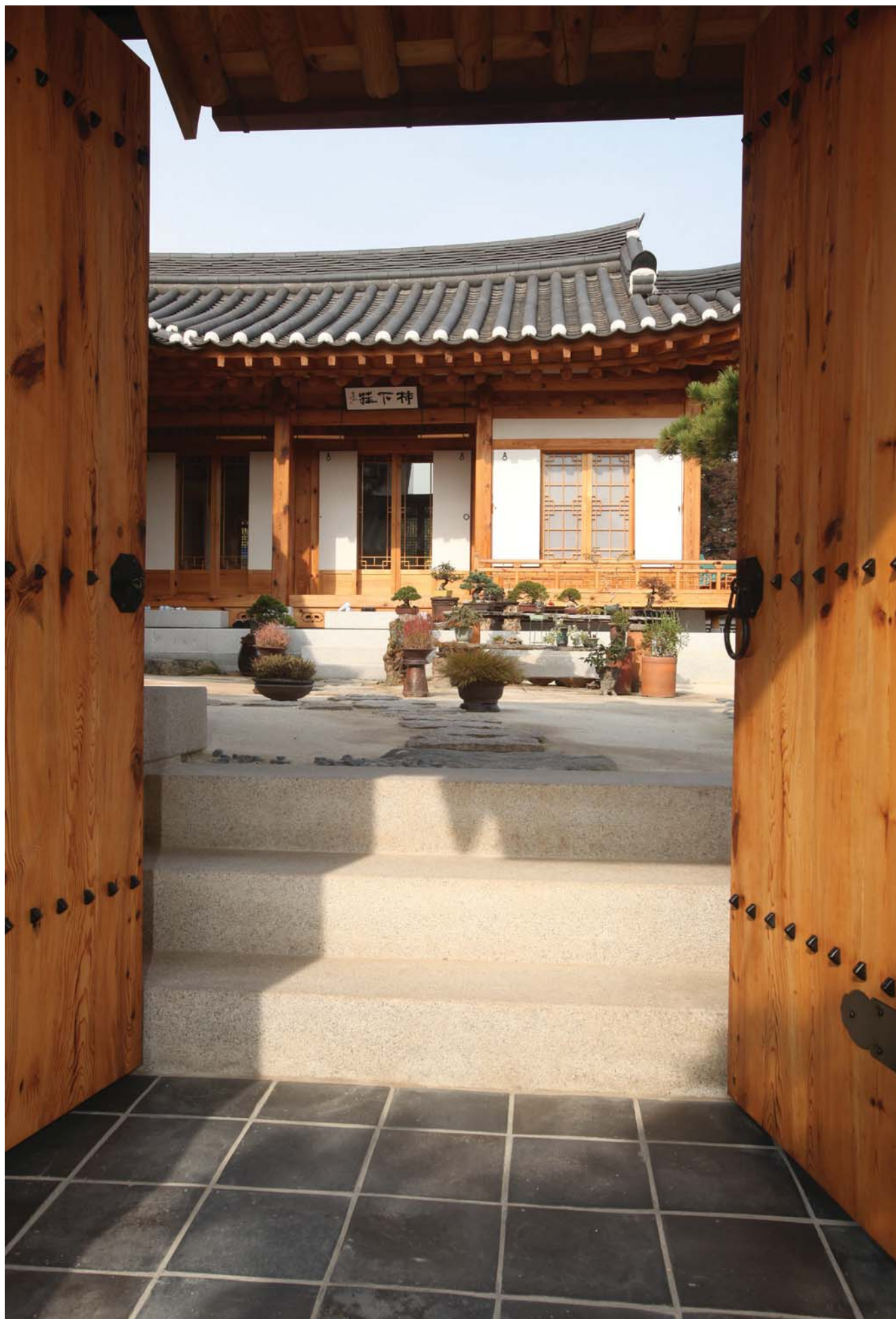
Gross floor area 194.13m²

Program Housing

Photographs Yeom Gi Dong







Sihajang was the name of Hanok where the owner once lived. It was named Sihajang because there was a large persimmon tree in front of the house.

The old house, where the owner had lived for more than 50 years since childhood, was filled with the owner's memories of his deceased father in every corner.

Due to the influence of the deceased father who used to be an architect as well as a master carpenter, the owner had an exceptional love for Hanok.

As time passed and the owner, over seventy years, found it difficult to manage the house alone, so he built a new house, named after the old house in commemoration of the deceased father.

The site for the newly built Hanok is located between Seongbuk Elementary School, which is not far from the old house, and Seonjamdanji(Altar site of the silkworm god), in the direction of Gilsangsa(Name of the temple).

The neat square site facing southeast was harboring a bright and cool ambience due to abundant sunshine and ventilation.

Focus of the design

Design of Sihajang was focused on two viewpoints. One was the reproduction of traditional housing type in Seoul, and the other was to figure out the relationship between the basement and Hanok.

A private house in Seoul

Private houses in the Seoul region basically have a 'ㄱ'-shaped plan. In the '—'-shaped sector of the house, there is *Daechyeong*(Wooden-floored hall) at the center, and the main room and *Geonneonbang*(Room across from the main room) are positioned on the left and right sides. Then, the kitchen is attached to this '—'-shaped sector. This house, moreover, can be expanded by adding annexes, such as *Sarangchae*(Detached house for guest reception), a servants' quarter and a storage. Considering the shape and orientation of the site, Sihajang followed the typical private house in Seoul, additionally placing a servants' quarter.

Lower yard and sunken garden

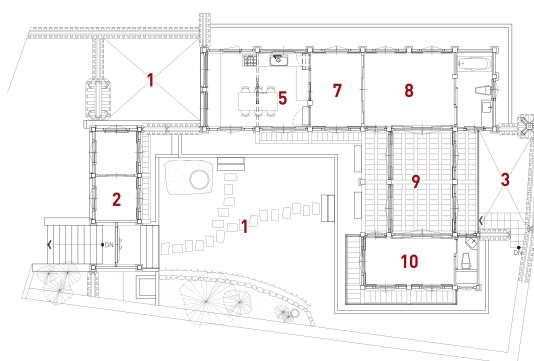
To pursue convenience, the basement is actively utilized in the recent Hanok. However, the basement has many problems to be solved, and joining with the wood structure of Hanok is not easy either. Sihajang has a sunken garden formed underground, taking advantage of an inclination, and an apparatus that blocks humidity while allowing in light and wind was installed. Through this, the front yard on the first floor and the lower yard on the basement were made to function as a part of the architecture, maximizing a sense of Hanok.



Basement



First floor



- 1 Garden
- 2 Guest room
- 3 Sunken garden
- 4 Living room/Kitchen
- 5 Kitchen/Attic
- 6 Garage
- 7 Room
- 8 Main room
- 9 Main Daechyeong
- 10 Geonneonbang



'ㄱ'-shaped main house

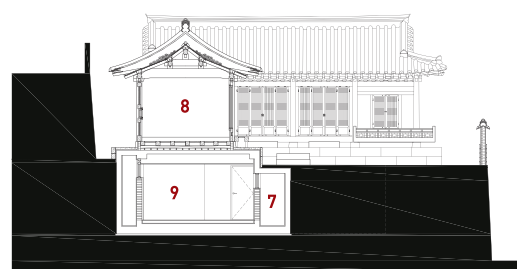
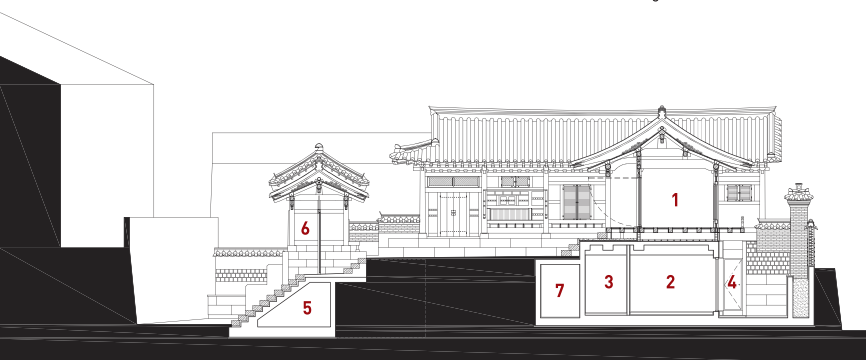
Outside and inside of the servants' quarter





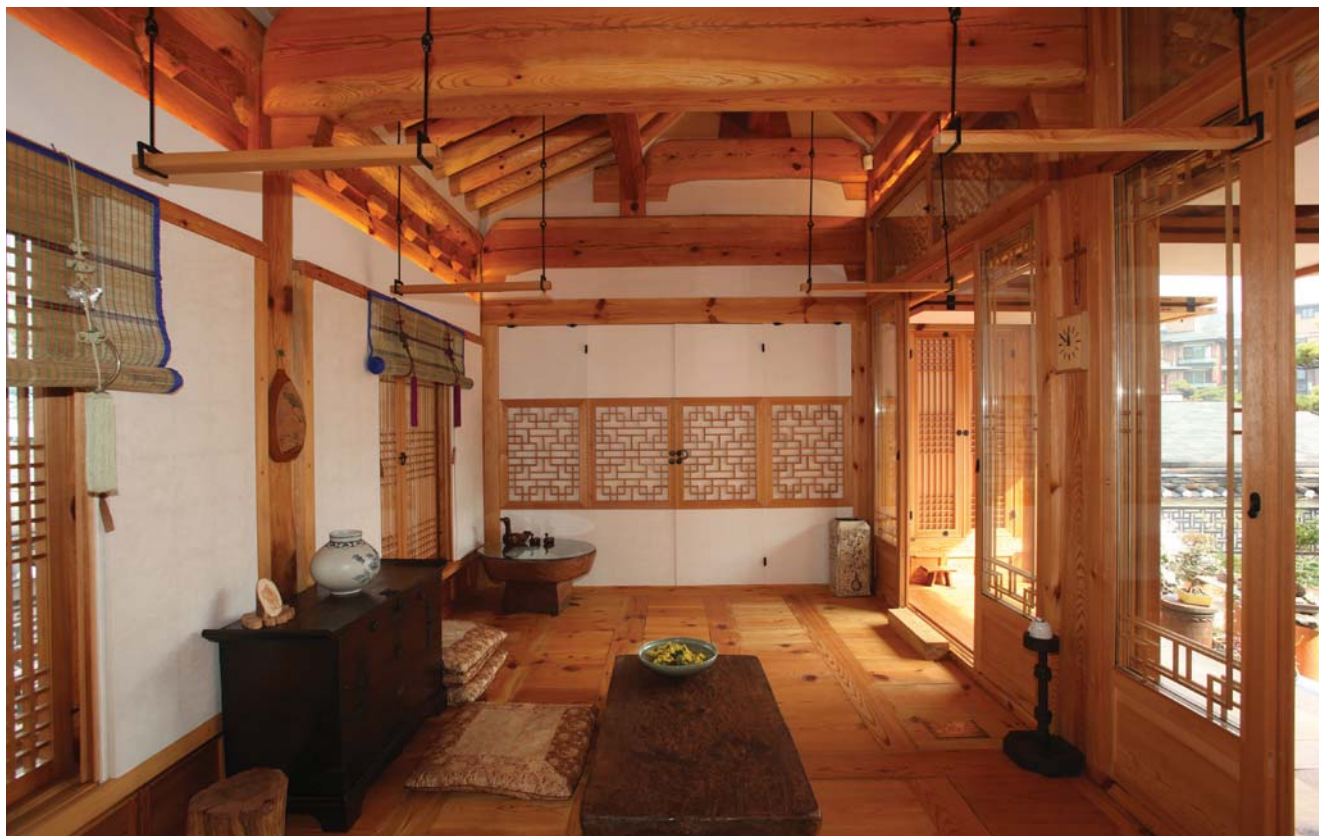
Lower yard and sunken garden

Section	1	Daechong	4	Sunken garden	7	Dry pit
	2	Room	5	Storage	8	Kitchen
	3	Restroom	6	Main Entrance	9	Living room



Instruction of using Hanok

Hanok reflects owner's lifestyle. Sihajang was completed according to the simple lifestyle of the owner. Simple furniture in harmony with the scale of the space calmly fill up the indoor space. Soiled traditional props and stone objects in the yard, and flowers carry the memories of the old house.



Opposite top Living room reflects the house owner's lifestyle
 Opposite bottom Kitchen designed to be suitable for the ambience of Hanok
 Top Simple furniture adequate for the size of space
 Bottom Traditional props arranged in the room



57



2011 - 2016

06

Jaseondang

(2014 National Hanok Competition 2nd Prize)

58

Architect Kim Seok Soon (Areumter Architects & Associates)

Construction Yang Baek Co., Ltd.

Client The families of Gwangju Ahn clan

Location Jungdae-dong, Gwangju-si, Gyeonggi-do

Site area 1,213.00m²

Building area 223.15m²

Gross floor area 223.15m²

Program Housing

Photographs Areumter Architects & Associates





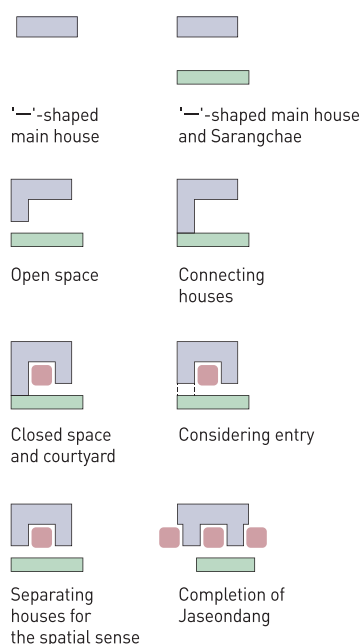
The Head family house, Hanok

A Clan village has faded in 21st-century contemporary society, and box-type houses are jumbled up close together in our surroundings. 'The head family house' overwhelms the surroundings quietly and rules confidently, while mingling successfully with ancestors' tombs and shrines.

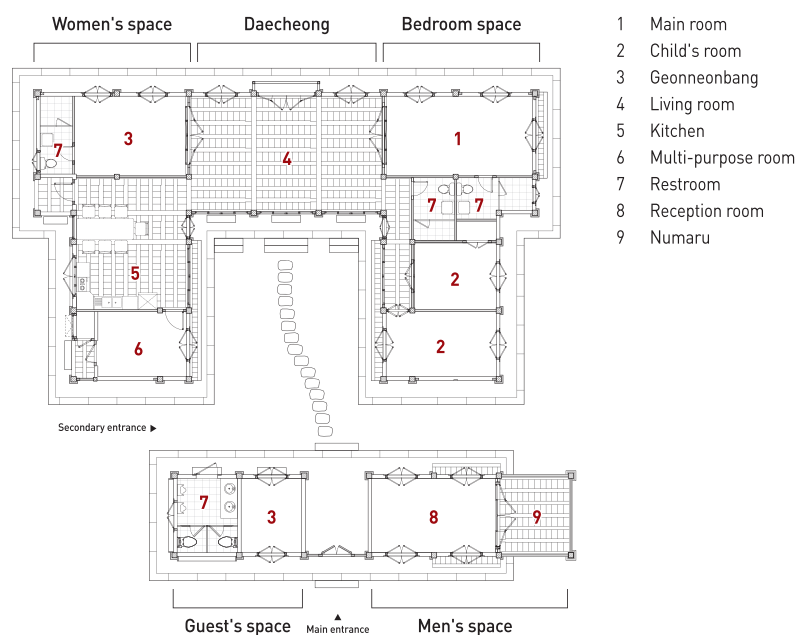
Separation and connection of houses

To surely distinguish each domain and function of the head family house, the main house and *Sarangchae* (Detached house for guest reception) are separated. The '—'-shaped *Sarangchae* is connected to the front face of the '□'-shaped inner house through the courtyard. This open '□'-shaped arrangement was planned for the spatial flow and harmony.

Concept diagram

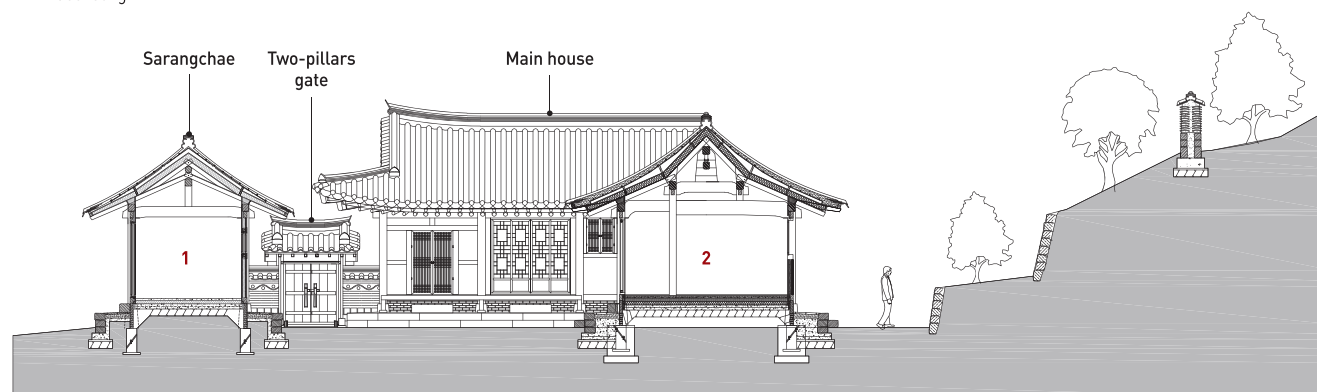


Floor plan



Section

- 1 Room
- 2 Daecheong





Main house viewed from Sarangchae

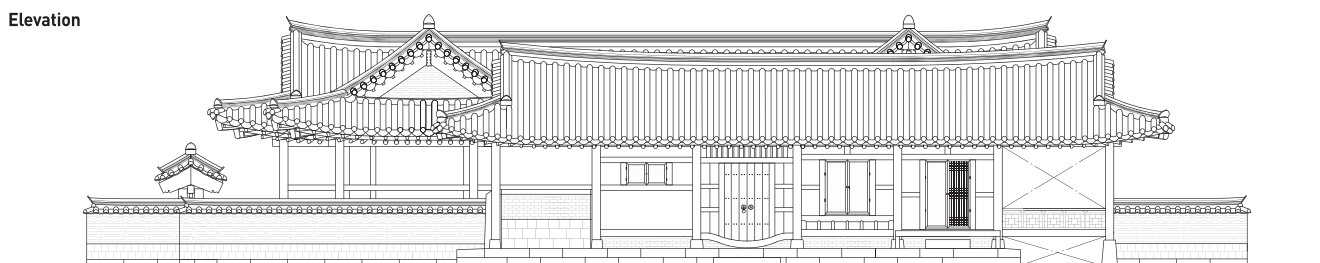
Sarangchae viewed from the main house



Daecheong of the head family house

Daecheong (Wooden-floored hall) in the head family house is very important because there is a tabernacle serving the ancestral tablet on the rear wall in the middle of it. Hence, it was planned to be wide enough to allow many people to gather upon conducting a memorial service. Also, lifting doors are installed in the main room and *Geonneonbang* (Room across from the main room) so that when the doors are open, they are all connected to the central *Daecheong*.

Elevation





Raised wooden floor

The reception room and Numaru as a whole

In *Sarangchae*, there are the reception room and *Numaru*(Raised wooden floor) usually occupied by the head family senior and guests. Ceiling of *Numaru* exposes the beauty of fan rafters. The handrails are not glamorous, but simple and plain. Also, the floor levels of the reception room and *Numaru* are on the same level so that when the windows are open, they become one big space.



Harmony between the two-pillars gate and the surrounding walls

For the access to the shrine and the tomb on the backhill, a two-pillars gate was installed on the left side of the house. The two-pillars gate and the surrounding walls were installed with one bend, making the space in front of the two-pillars gate to have much more room.

Surrounding walls made of broken roof tiles

Surrounding walls made of broken roof tiles gives quite different feelings from typical intimidating walls. Design motifs of surrounding walls from traditional patterns and installed lightings generate friendly feelings, and also make nightscape beautiful.





Two-pillars gate and front space



Surrounding walls made of broken roof tiles



07

Gimcheon Hakijae

(2015 National Hanok Competition 2nd Prize)

66

Architect Main house - Lee Jae Ho (Songjeong Hanok), Boseung Architects
Sarangchae - Cho Jung Goo (guga Urban Architecture)

Construction Songjeong Hanok, Namgok Construction

Client Baek Lak Kwang

Location Nam-myeon, Gimcheon-si, Gyeongsangbuk-do

Site area 3,065.00m²

Building area 313.54m²

Gross floor area 313.54m²

Program Housing

Photographs Yoon Joon Hwan (unless otherwise indicated)







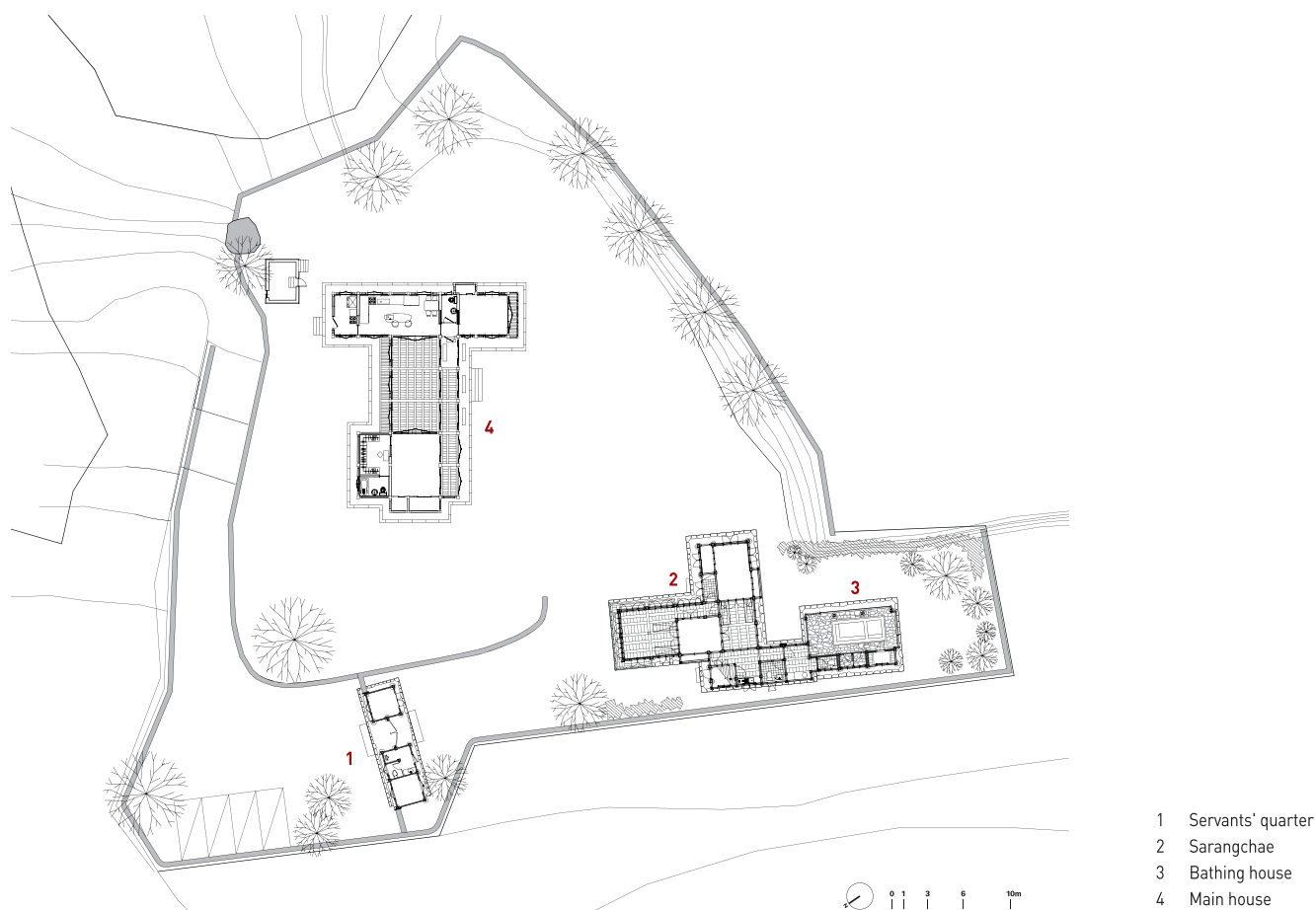
Top Servants' quarter including tall gate
Bottom Numaru of Sarangchae past the entrance



Hakijae is a house located on the protruding site in the village. A chinese hackberry under which village residents had performed memorial services every year has spread wide branches on a hard rock, guarding the entrance of the house. While the main house for the family was already built in 2010, the owner asked for the building of a simple *Sarangchae*(Detached house for guest reception) and particularly asked for a 'Space where people can bath together.'

An original plan was to place the courtyard between the *Sarangchae* and the bathing house with connection by a corridor. However, bringing the landscape of the surroundings and the scenery of Geumosan(Name of the mountain) into the house was considered a 'Natural attitude.' Thus, a new design was carried out, imagining people gently immersing their bodies in the bathtub and enjoying the view of Baebawi(Name of the rock) in Geumosan.

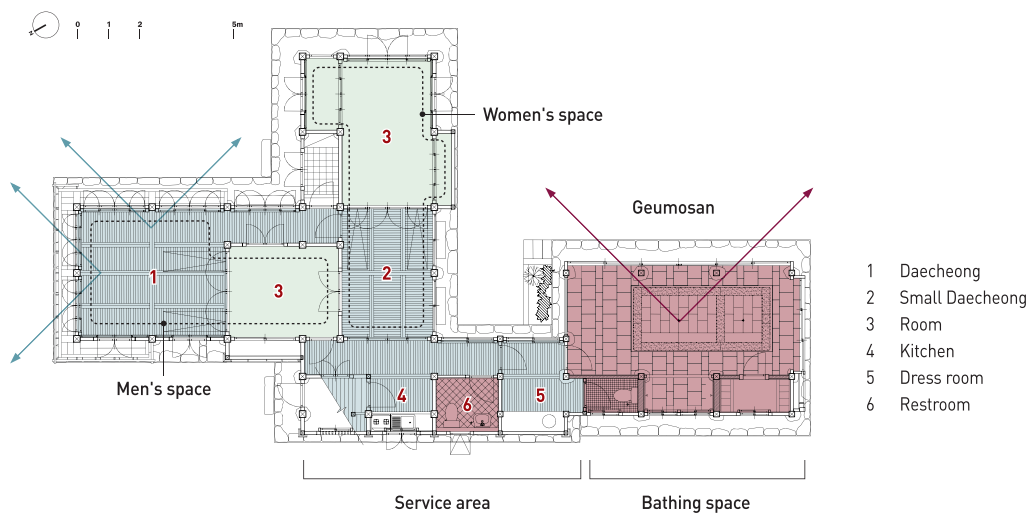
A servants' quarter was also planned together with *Sarangchae*. It was planned around a broadish courtyard to be followed after the inclination of the entrance road. After passing through a lofty gate, *Numaru*(Raised wooden floor) of *Sarangchae* can be seen at the end of the long yard. And when you turn your footsteps at the front to go up a few stairs, a wide courtyard appears and you can encounter an eye-catching view of Geumosan spreading out like a folding screen. *Sarangchae* diagonally faces the main house by having the bathing house inside and holding out the body to the large courtyard in 'ㄱ'-shape. The modified plan for 'Wide-open Courtyard' which allows various works or events was selected rather than the previous plan which designed the courtyard intimately around the main house and *Sarangchae*.





Sarangchae

Although *Sarangchae* was traditionally a men's social space, a wooden floor and a room were assigned one each for both men's space and women's space in 'Ilsindang', *Sarangchae* of Hakjiae. According to the characteristics, however, the men's space had *Daecheong* (Wooden-floored hall) in the front side with the room arranged inside, while the women's space had the room placed outside so to have the bright inside with the *Daecheong* placed inside in for intimate formation. Also, a small kitchen and a restroom were connected as the public space. When you go in further you can find the bathing house that has an attached fitting room and a restroom. A small attic allowing going up by the sink was placed above the boiler room, and it was planned to become a small yet cozy and comfortable space by placing the top open small windows inside and outside. In particular, two pairs of sliding doors opening outward were made to appear as if they were one window by reducing the frame thickness of the connecting part.



Top Man's space and Daecheong
Bottom Woman's space and inner Daecheong



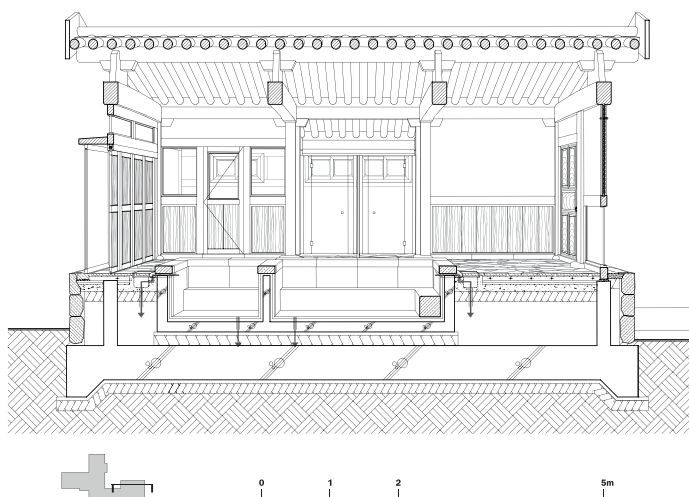


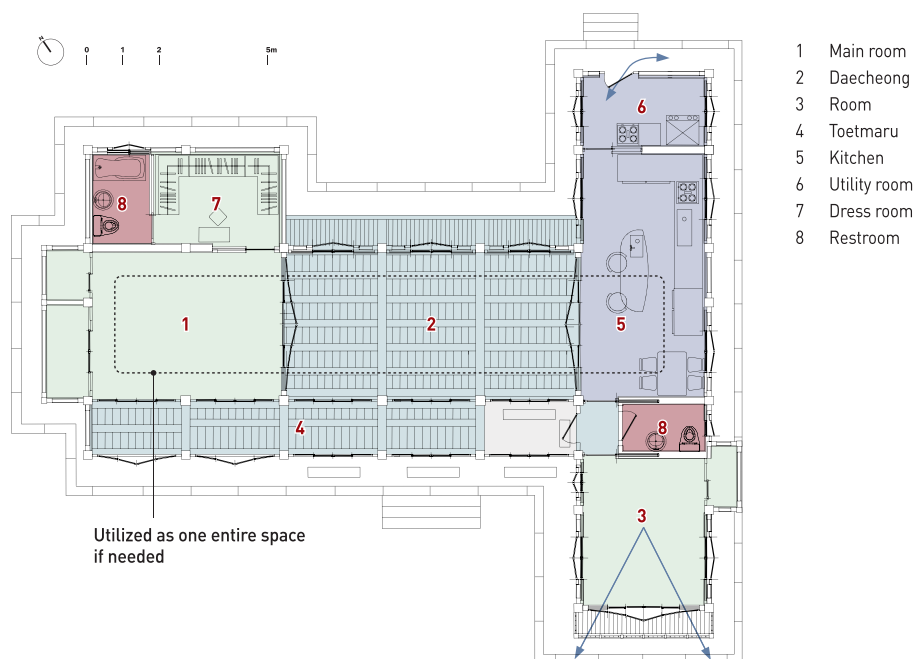
Bathing house

Sarangchae and the bathing house were placed in the center of the courtyard surrounded by the topography around and the surrounding walls for privacy. Also, on the front face and the side face, not only does it have a view of Geumosan, but also the surrounding mountains and the scenery can be seen through whole glass windows. And inside all the windows, wooden folding doors were installed to allow bathing with the door open while feeling the seasonal ambience.



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Main house

The main house was designed by the owner and the master carpenter and constructed according to traditional building principles to realize a traditional Hanok. They intended to build the Hanok sturdy enough for future generations to register it as a cultural heritage building so to enable long-term conservation. The southward wide *Daecheong* was placed in the middle of the main house with a plan for having the main room accompanied by a dressing room and a bathroom on one side, and a wide kitchen and a multi-purpose room on the opposite side. The gate of the Hakijae is always open. The main room and the kitchen have lifting doors, and it was intended to allow using as one space together with the *Daecheong* when a wide space was required for guest reception.





© guga

Top Daechong
Bottom Main room

75



© guga

08

Hwaseomun-ro 41st Road 20th Residence (2016 National Hanok Competition 2nd Prize)

76

Architect Kim Sae Won (Architects HAO),
Ahn Kug Jin (Suwon Research Institute)
Construction Seoul Hanok
Client Hwang Gun Ja
Location Jangan-dong, Suwon-si, Gyeonggi-do
Site area 261.00m²
Building area 130.23m²
Gross floor area 130.23m²
Program Housing
Photographs Architects Hao





Compliance

'All things have an intrinsic order'

There are the spirit of earth and heaven. The place where these spirits are strongly consolidated in a residence is the courtyard. It is not right, therefore, for the courtyard to be placed on the leftover space after all residential spaces are already arranged. Rather, the position of the courtyard should be set up first at where those spirits are full, and then, buildings should be planned.

The first thing considered upon design of a house is appearance of the site. Since this site has a slender form, the space was compartmentalized with two courtyards rather than one, naturally generating a hierarchy between the two spaces. Considering the natural orders for the space, the main house should be larger than *Sarangchae*(Detached house for guest reception) which should be subordinate part of the house.

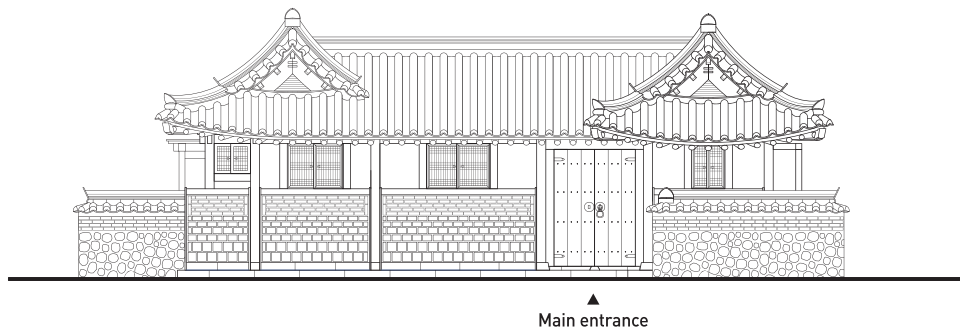


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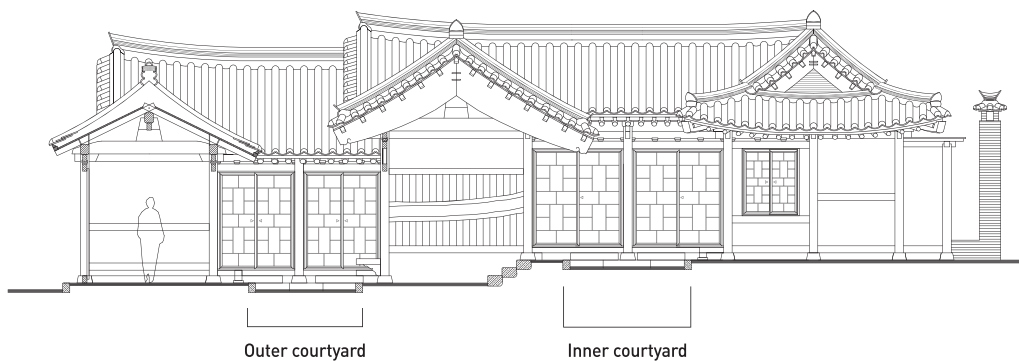
The site had some level differences; the street side is lower than the inner side. Usage and role of two courtyards were determined by such difference in levels. As the hierarchy of courtyards was determined and the position of the main house and *Sarangchae* as well, design was implemented smoothly. Everything from sizes of the courtyards, height and size of the house, the form of the roof, to the decoration of the gable, as well as the windows and doors, was determined within the hierarchical order. A separated house was placed on the opposite side of *Sarangchae* as a special space where guests can primarily stay.

West elevation



Outer courtyard

South elevation



Inner courtyard

In this house, the spirit of earth and heaven, i.e., the spirit of the universe, is transferred from the courtyard to the main *Daecheong*(Wooden-floored hall) and that of *Sarangchae*. The space was formed so that the spirit of the universe could flow indoors. As *Daecheong* serves as a center for indoor space of the main house and *Sarangchae*, everything within the site was designed to be seen at a glance, not being blocked when you are in the main *Daecheong* or that of *Sarangchae*. A side window was installed at a place closest to the earth on the rear edge of the room to allow the spirit of earth to come in. This house was designed according to the intrinsic order determined with compliance to the nature rather than artificial intentions.

Middle gate viewed from the south of main room





Top Numaru of the annex
Bottom Annex viewed from the outer courtyard





Left Main house viewed from the outer Daecheong
Right View of the room from the inner Daecheong
Opposite Outer Daecheong



Hanok, Korean Traditional Architecture 2011-2016 National Hanok Competition





Chapter. 2

Hanok, meeting with public

- 01 Dugaheon, Hanok Pension at Seomjingang**
(2012 National Hanok Competition 1st Prize)
- 02 Sancheong Yulsuwon**
(2013 National Hanok Competition 1st Prize)
- 03 Gahoe Hangyeongheon**
(2014 National Hanok Competition 1st Prize)
- 04 Cheongun Literature Library**
(2015 National Hanok Competition 1st Prize)
- 05 Geulmaru Hanok Library for Children**
(2011 National Hanok Competition 2nd Prize)
- 06 Gwanhunjae**
(2013 National Hanok Competition 2nd Prize)
- 07 Heungcheon Daycare Center**
(2015 National Hanok Competition 2nd Prize)
- 08 SIDE, Hanok Residence Hotel**
(2016 National Hanok Competition 2nd Prize)

01

Dugaheon, Hanok Pension at Seomjingang (2012 National Hanok Competition 1st Prize)

88

Architect Jeon Woo Seok (Wooseok Architects),
Lee Byung Ha (Jeonnam Provincial College)
Construction Kim Young Sung
Client Shin In Su
Location Godal-myeon, Gokseong-gun, Jeollanam-do
Site area 1,610m²
Building area 210.42m²
Gross floor area 210.42m²
Program Accommodation
Photographs Yoon Joon Hwan





Swept away by water or by cloud, one nest at the foot of a mountain.

Dugaheon is located on the riverside of Seomjingang(Name of the river) in Gokseong-gun, Jeollanam-do. This building provides relaxing atmosphere of the countryside and becomes a perfect resting place surrounded by natural environments.

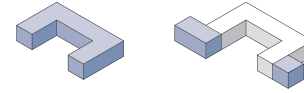
The design of Dugaheon was approached from the viewpoints of harmony and diversity. To comply with the nature and reach the harmony, landscape was brought to indoors through installing *Numaru*(Raised wooden floor), and flow of the time was reflected in the roof of the restroom by installing old traditional roof tiles.

Realization of functional harmony was intended by accommodating contemporary functions of a pension to a traditional Hanok. Technologic harmony was developed for the building to configure a cool wooden floor and a warm Ondol room. The building was planned to tastefully mingle with the surroundings by appropriate landscape lighting.

Diversity in forms, as well as diversity in space and decoration, was pursued in design. First, to allow guests to feel various spaces, unique floor plans of 'ㄱ', 'ㄴ', and 'O' shapes were applied. Also, by connecting individual rooms through *Numaru* and *Toetmaru*(Narrow wooden porch), the unique sense of space in Hanok, where boundaries between inside and outside are ambiguous, was maximized. Also, by application of various forms to windows and doors as well as railings, considerations were given to allow detailed aesthetics of Hanok to be felt in Dugaheon.

Concept diagram

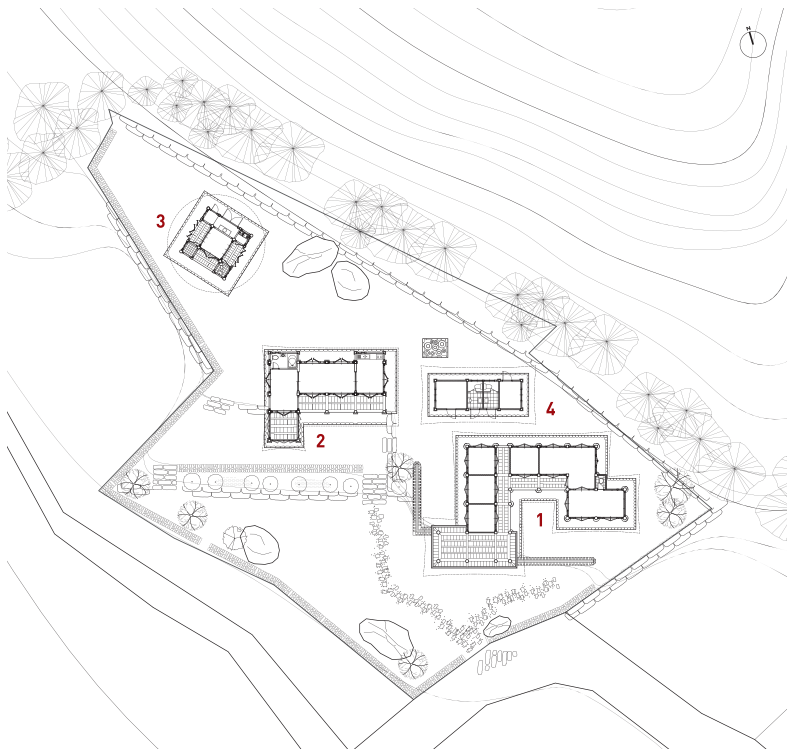
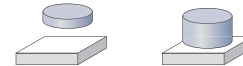
1. Hyeonjudang
Hyeonjudang is a variation of the typical 'ㄱ'-shaped building



2. Changmangjae
Changmangjae is a 'ㄴ'-shaped building by adding Numaru in the corner



3. Neungsogak
Neungsogak has a form inspired by the idea that 'The sky is round and the earth is square'
Variation of the cross section of pillars formed by the idea that 'The sky is round and the earth is square'



- 1 Hyeonjudang
- 2 Changmangjae
- 3 Neungsogak
- 4 Restroom



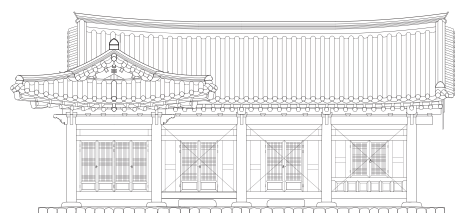
Top Changmangjae
Bottom Inside of Changmangjae





Numaru of Changmangjae

Front elevation



Left elevation



Right elevation



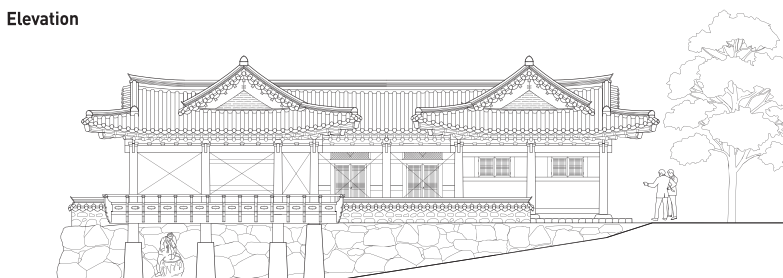




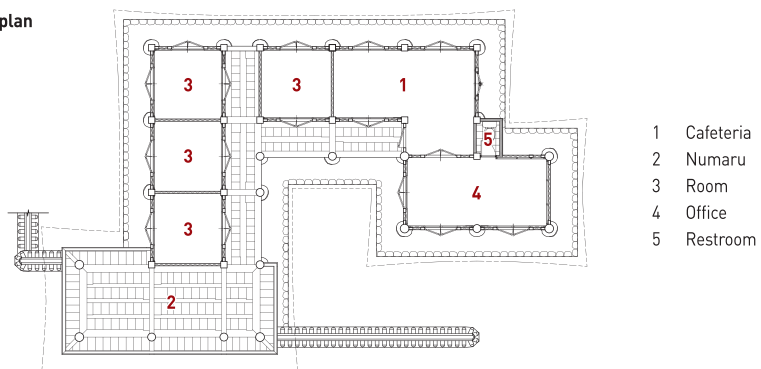
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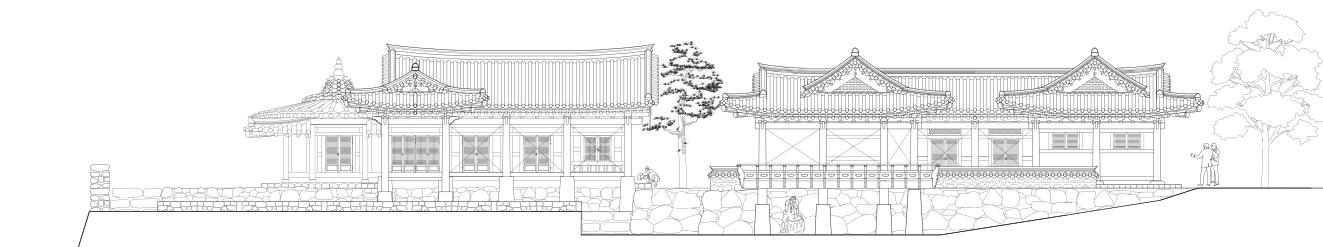
Top Hyeonjudang and Changmangjae
Opposite top Hyeonjudang
Opposite bottom Inside of Hyeonjudang

Elevation



Floor plan







Neungsogak



02

Sancheong Yulsuwon

(2013 National Hanok Competition 1st Prize)

98

Architect Kwon Hyun Ho (Samganilmok Architects)
Construction Gaeun & Partners
Client JEI Corporation
Location Sindeung-myeon, Sancheong-gun, Gyeongsangnam-do
Site area 2,519.00m²
Building area 465.21m²
Gross floor area 599.30m²
Program Culture and Assembly Facility
Photographs Samganilmok Architects



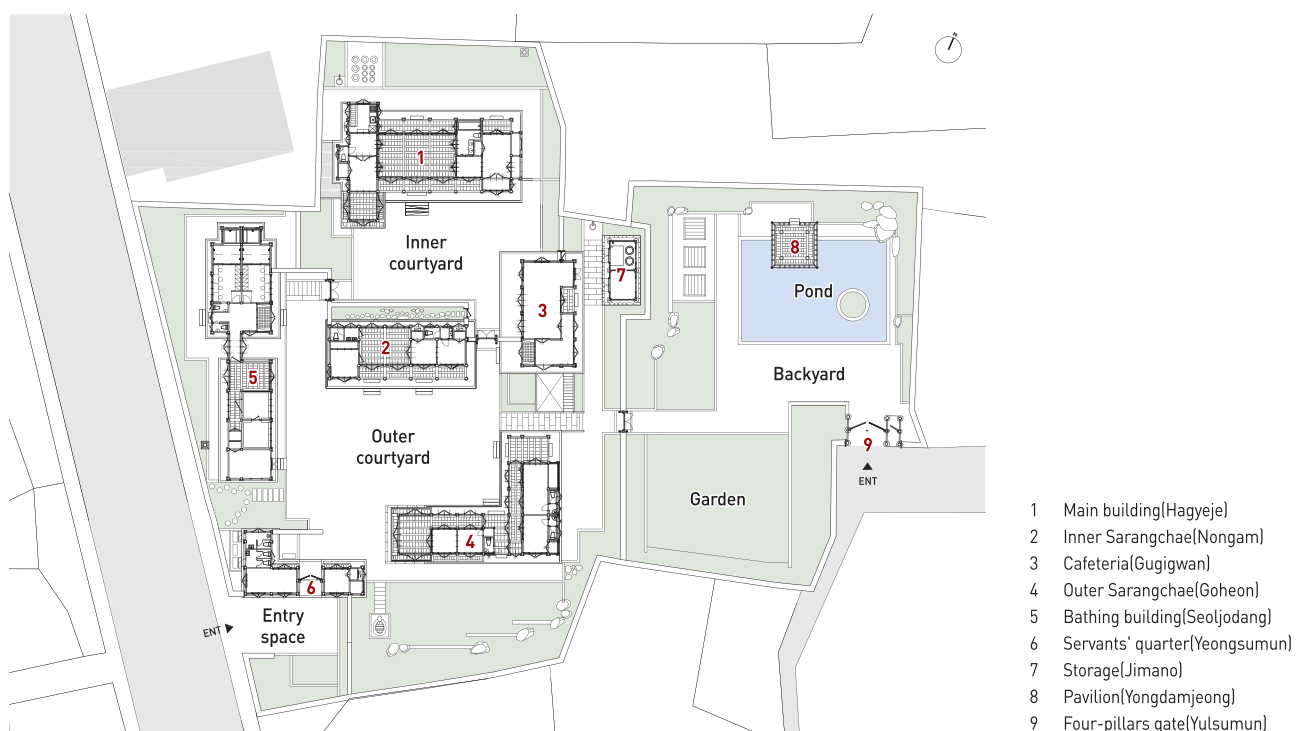


Dangye Hanok village is located in Dumulmeori where Dangyecheon(Name of the stream) and Sindeungcheon(Name of the stream) merge as well as the basin coming down from the stem of Hwangmaesan(Name of the mountain) in Sancheong-gun, Gyeongsangnam-do. Moreover, there is Yulsuwon in this village which has kept the tradition of prestigious old houses and authentic atmosphere of old surrounding walls.

Yulsuwon, 'A house cultivating virtues for itself', was the old house named Goheon, 'An old house', for Park's family in Suncheon area, and is planned and expanded to Hanok stay facility. There are nine buildings reflecting regionality, courtyards for *Sarangchae*(Detached building for guest reception) and the main building, and a backyard. The overall space was formed to let visitors feel and experience the excellence of our tradition.

Since the area of this site exceeds more than 3,000m², *Feng Shui*(The theory of divination based on topography) was considered important during site planning process. While the architectural form keeps to the tradition of the region, the aesthetics pursue the traditional value of Hanok in addition to the contemporary practicality.

This place is largely divided into the domain of a courtyard for *Sarangchae*, an inner courtyard, and a backyard. The domain of the courtyard for *Sarangchae* includes a servants' quarter, an outside *Sarangchae*, a bathing building and an inner *Sarangchae*. The inner courtyard domain is composed of the inner courtyard and the main building formed in the rear side of the inner *Sarangchae*, belonging to the higher hierarchy than the outer courtyard for *Sarangchae*. Also, the backyard domain includes a square pavilion(Yongdamjeong), a pond, and a four-pillars gate. Each courtyard can communicate through the space between buildings and through the open space between the surrounding walls and the roof, being expanded visually and spatially.





Top Servants' quarter

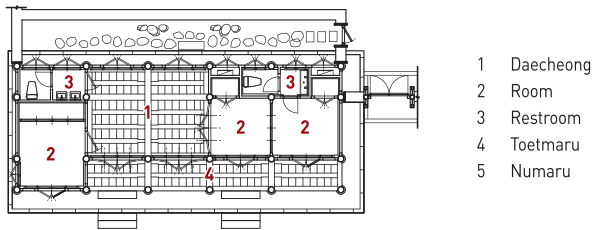
Bottom Outer courtyard viewed from Servants' quarter



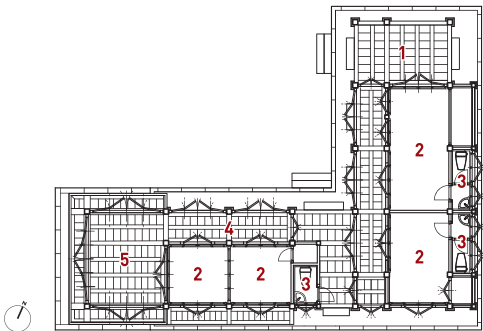


Outer courtyard, inner Sarangchae(Left building) and outer Sarangchae(Right building)

Floor plan : Outer Sarangchae



Floor plan : Inner Sarangchae

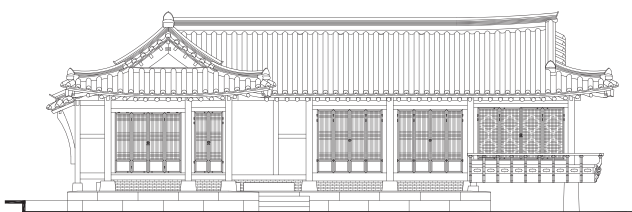




Top Room in front of Daechyeong
Bottom Room in front of Numaru

When passing the 'ㄱ'-shaped servants' quarter(Yeongsumun) in the entry space, you enter the domain of *Sarangchae* after going around the low wall. In the domain, the outer *Sarangchae*(Goheon), the inner *Sarangchae*(Nongam), the bathing building(Seoljodang) and the dining building(Gugeogwan) shares the courtyard. The circulation expands toward the backyard domain and the inner courtyard domain from this *Sarangchae* domain.

Front elevation : Outer Sarangchae



Front elevation : Inner Sarangchae





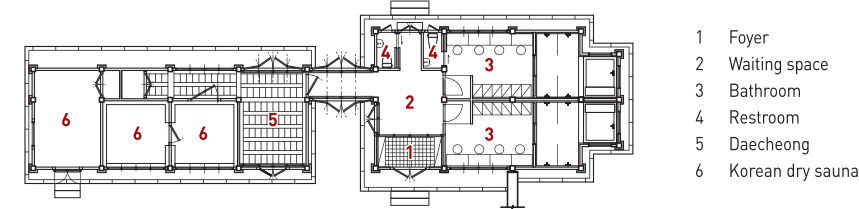
Top Front of inner Sarangchae
Middle Daecheong
Bottom Room



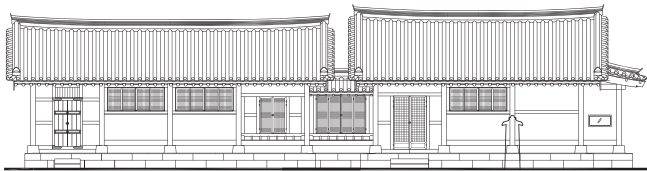
Top Cafeteria(Left building) and inner
Sarangchae(Right building) viewed
from the main building
Bottom Front of the cafeteria



Floor plan



Front elevation

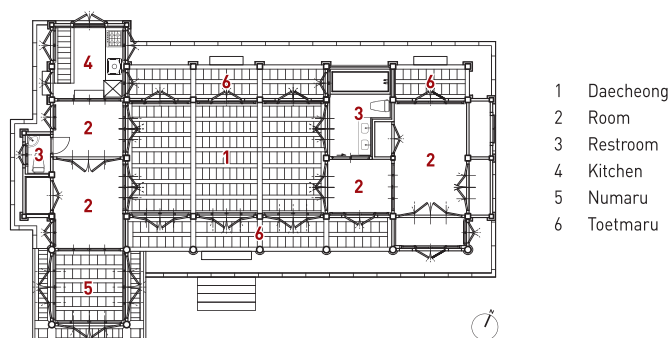




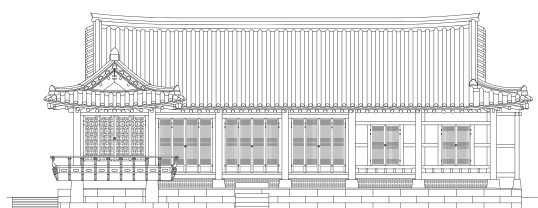
Top Daecheong of the main building
Middle Numaru of the main building
Bottom Room of the main building



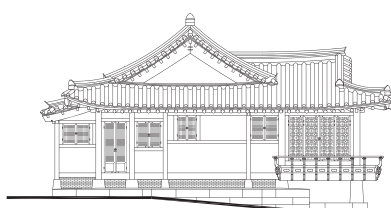
Floor plan



Front elevation



Left elevation



You can enter the main building domain through the side door on both sides of the inner *Sarangchae*. Upon entering the courtyard, the 'F'-shaped main building with *Numaru*(Raised wooden floor) and a large *Daecheong*(Wooden-floored hall) is visible in the front, while a part of the dining building and the connecting wall surround the inner courtyard, making the main building domain into a static space. And behind the main building, there is a backyard with a jar stand and a chimney.

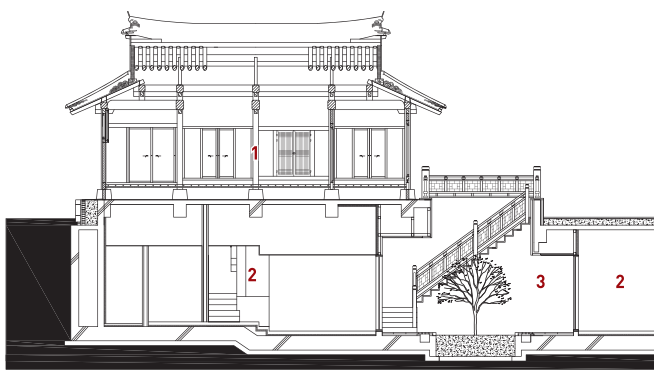




Top Cafeteria and the stairs to basement
Bottom Inside of the basement

Top Inside of the cafeteria
Bottom Inside of the multi-purpose room

Section



- 1 Cafeteria
- 2 Multi-purpose room
- 3 Sunken garden



When entering the side door between the dining building and the outer *Sarangchae*, you find the backyard domain. The backyard domain is the garden with a pond and a square pavilion, securing an open feeling of inside compared with the outside view, as well as securing the circulation connected to the dining building by installing a four-pillars gate.

Pavilion



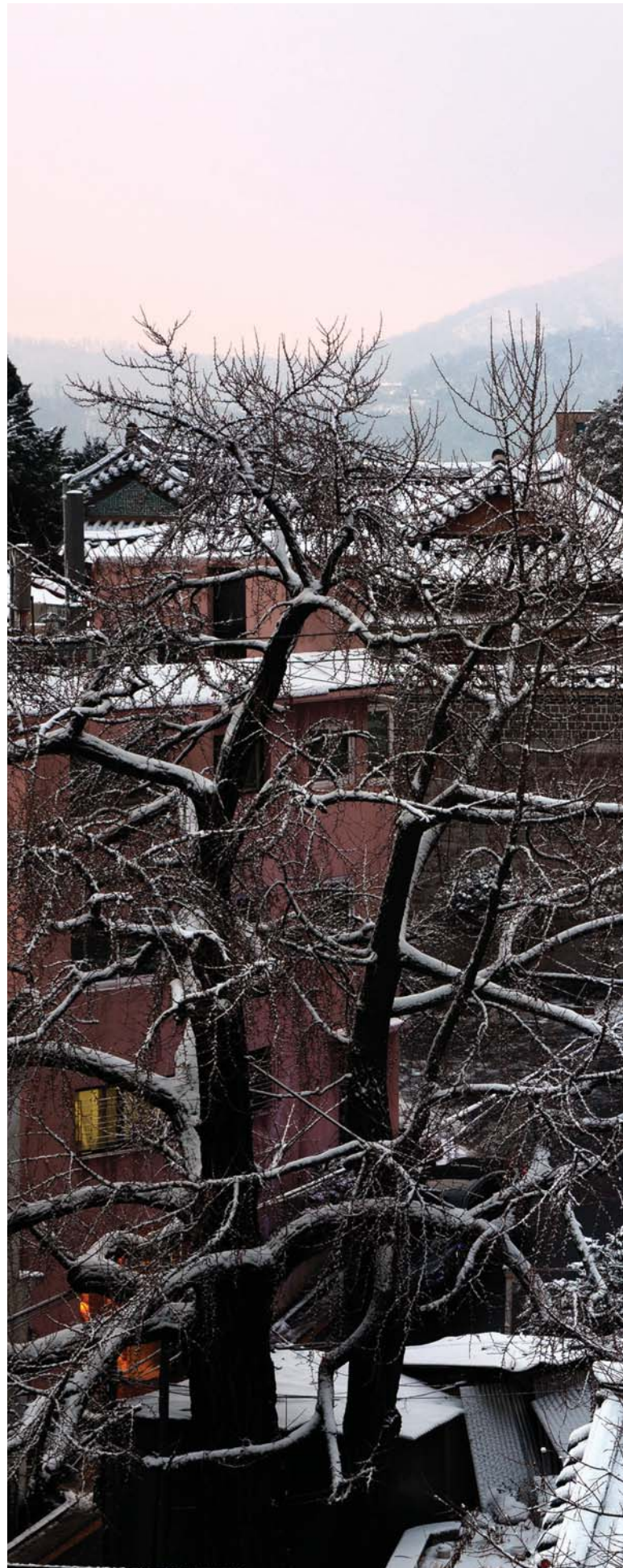
03

Gahoe Hangeongheon

(2014 National Hanok Competition 1st Prize)

110

Architect Kim Hyung Woo (Hongik University),
Choi Hong Jong (Archinous Architects)
Construction Samhyub Engineering & Construction,
Kumjin Timber E&C
Client Shin In Su
Location Gahoe-dong, Jongno-gu, Seoul
Site area 77.30m²
Building area 46.36m²
Gross floor area 125.44m²
Program Culture and Assembly Facility
Photographs Archinous Architects









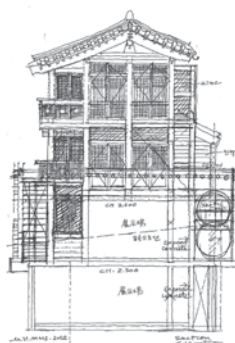
Hangyeongheon, which means 'A house for learning and practicing the writing', consists of an art gallery for exhibition of textile art works of the building owner, who spent his childhood in Bukchon of Seoul, and of the resting place to support the exhibition space.

This art gallery was built by boldly changing the building principles and the materials for the traditional Hanok. A new advancement of the contemporary Hanok was brought particularly through the mixed use of a wooden structure and a reinforced concrete structure revealing the body, and heterogeneous convergence of traditional materials and contemporary material properties.

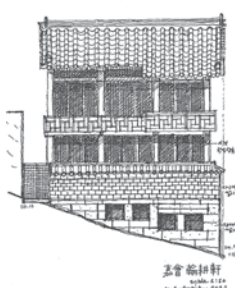
To accommodate all exhibition space and resting space in the atypical site, which was obliquely cut off in the frontal road, *Toekan*(Half-sized side bay) underneath eaves was utilized. For the surroundings of reinforcing stone wall of the stylobate to the frontal road, advantages of the inclined site were fully considered through proper landscape design.

Although the basement was originally designed as two stories, difficulties in civil-engineering works were encountered during construction. Eventually, the second floor of the basement was eliminated, and the design was changed to have the height of the first level of the basement by more than three meters.

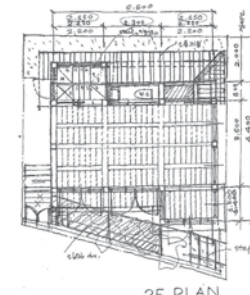
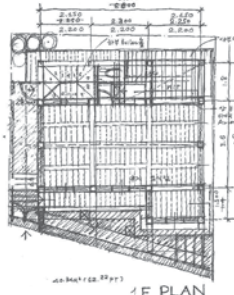
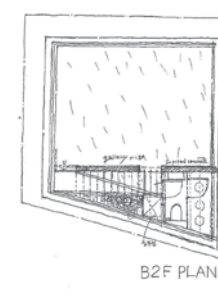
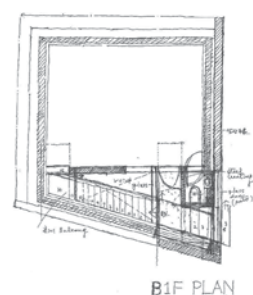
Section : Early sketch



Elevation : Early sketch



Floor plan : Early sketch





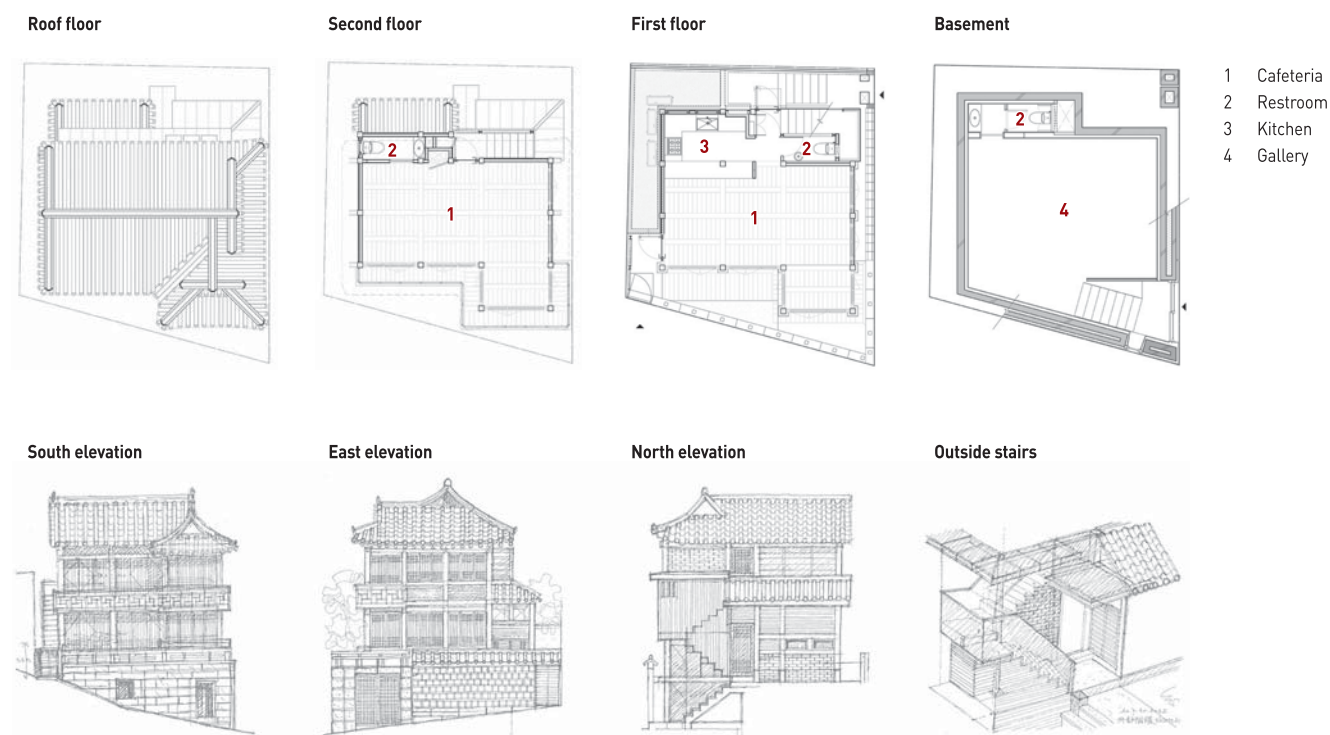
Cafeteria in the first floor



Toekan in the first floor

For the second floor of Hanok, there is a resting space consisted of three rooms in the front, two rooms in the side, and *Toekan*. The secondary space such as a staircase, a restroom, a boiler room and a storage was concentrated on *Toekan* in the rear while the center was left vacant, a spatial layout that follows the traditional timber structure of Hanok.

Since half of the art gallery in the basement is exposed to the frontal road and the alley on the east side due to the inclination, a sufficient height of the access door for the art gallery entering from the alley was not secured. Therefore, the floor level of the first floor had to be raised up for the efficient use of space.



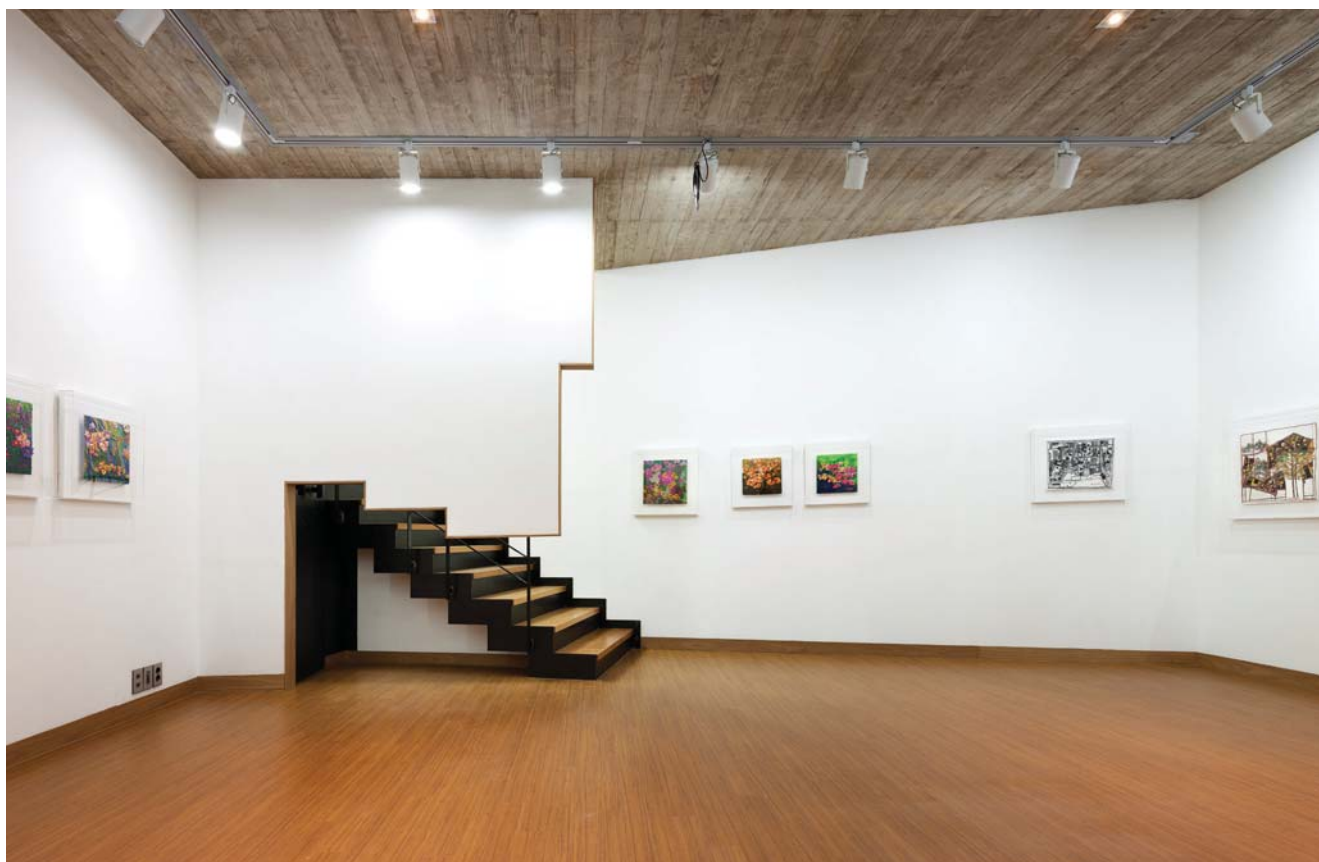
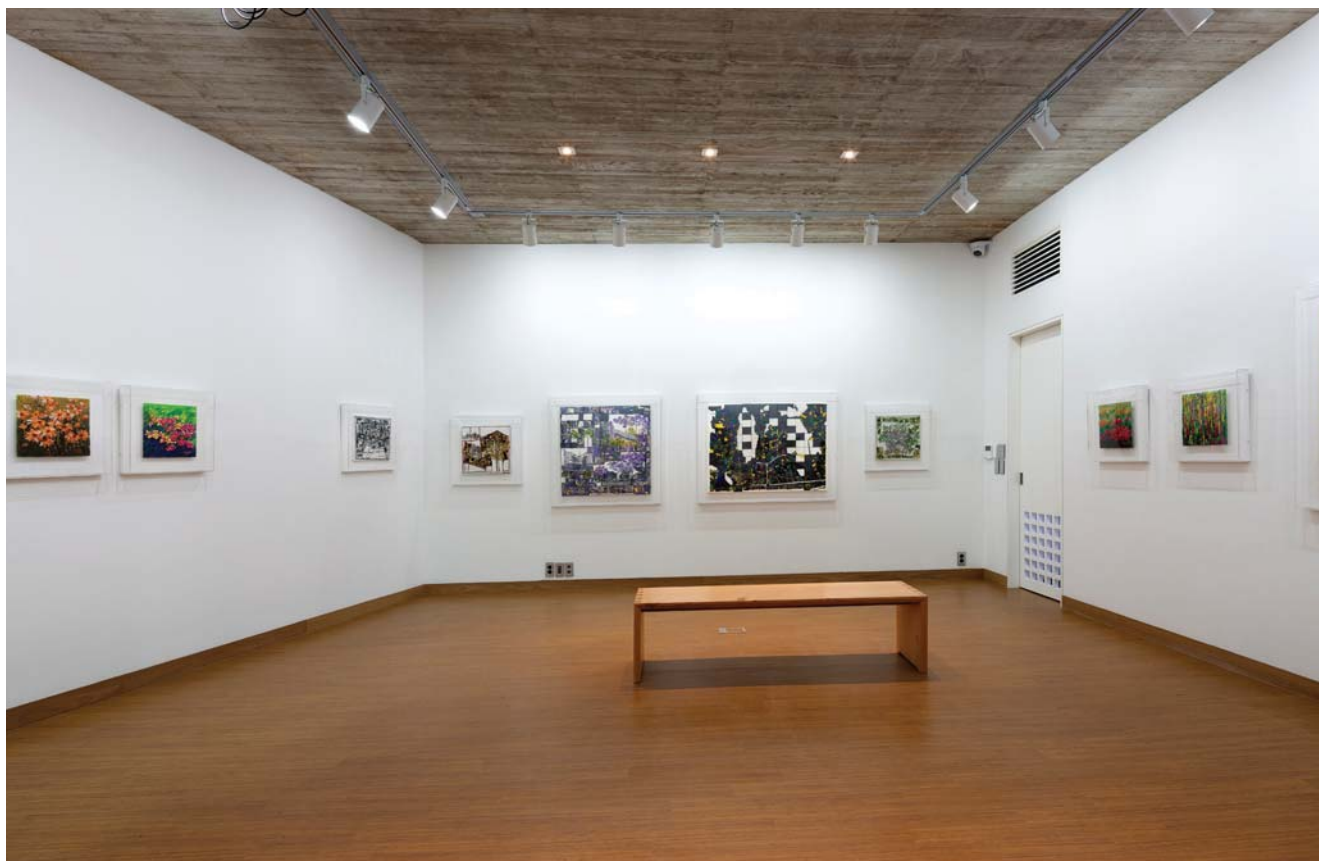


Top Waiting room in the second floor
Bottom Toekan in the second floor



Top Path connecting the first floor and the second floor
Bottom Traditional windows of the path





The basement gives a taste of wood with exposed concrete of pine plate patterns. Also, wooden stairs and black iron plates, along with dynamic feelings of cladding walls, enhanced the lively atmosphere in a monotonous exhibition space.

The recent emergence of multiplex and multi-housing buildings in Gahoe-dong Hanok concentration and the expansion of streets brought a huge change in this area. It not only damaged the long-cherished landscape of the street, but also triggered a new change that contemporary buildings can be integrated.

This building shows an efficient application of new design ideas through integration of contemporary functions and traditional values. Therefore, previous issues regarding multi-purpose Hanok were resolved to the certain extent, thus contributing to contemporary applications of Hanok.



04

Cheongun Literature Library

(2015 National Hanok Competition 1st Prize)

120

Architect Yang Seok Man (Ophir Design Group)
Construction Seotaek Construction
Client Jongno-gu Office
Location Cheongun-dong, Jongno-gu, Seoul
Site area 1,238.50m²
Building area 157.87m²
Gross floor area 744.82m²
Program Education and Research Facility(Library)
Photographs Park Young Chae









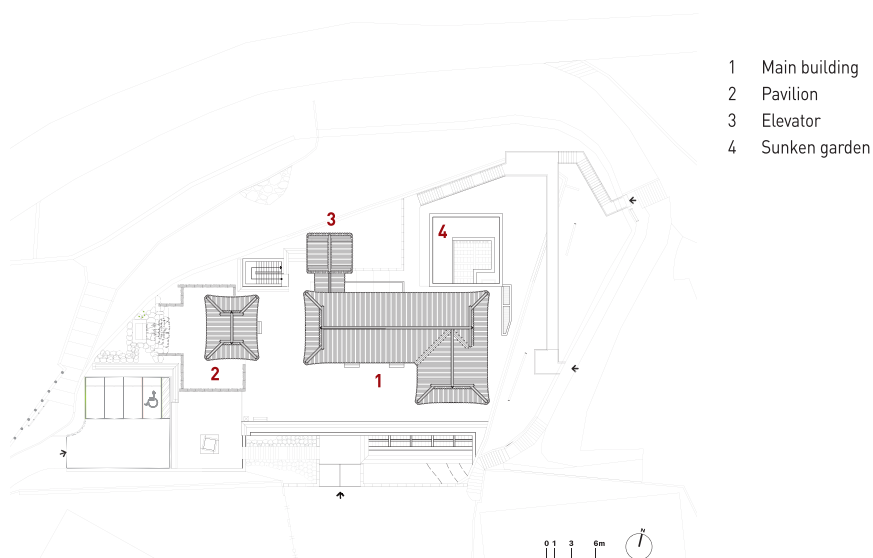
Background for establishment

The Inwangsan Park is a place with beautiful scenery and is good to walk around. Also, time-honored remains dwelt by troubadours' literature such as Seokpa pavilion, Hwanghak pavilion, etc. are distributed in the surroundings, and there is the Dongju Yoon literature exhibition hall and the hill of poets. Cheongun Literature Library was established by Jongno-gu to provide downtown citizens with opportunities for various experiences within the scope of literature as a space for enjoying poetry and literature.

Site plan

Since the site was isolated from access to the surroundings and had a distorted topography, various access routes were considered by placing the main Hanok building in an open direction. To be mingled with the surrounding environments, a traditional Hanok was designed on the ground, and a library was planned in the basement by using level differences.

Having the main Hanok building and the courtyard at the center, Nujeong(Pavilion), a pond, a frontyard and a backyard were placed in the surroundings. A circulation is elongated as long as possible between each space. Traditional scenery was created by arranging the green and the traditional surrounding walls between individual spaces.





Main building in harmony with traditional floral wall

Elevation plan

The main Hanok building has a relatively large scale hardly observed for old houses or private residences. However, not to damage the elegance of an economic yet graceful Hanok, despite being a building of large scale, Cho-ikgong(One-ikgong type) structure was used for the main Hanok building, with planning to represent the symbolism of public architecture.

A connecting path between the main Hanok building and the elevator tower installed for the disabled combines two areas in one harmonious space. Also, Nujeong is emphasized to establish the identity of this place as a literature library.

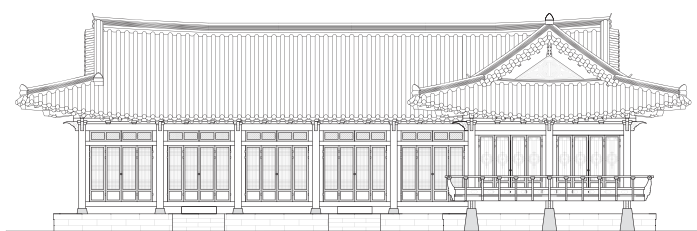
The traditional roof tile and the floral wall

For the library, natural and classical aesthetics was reproduced by using traditional hand-made roof tiles. A simple traditional floral wall was formed by combining rinceau and roofend tile pattern.

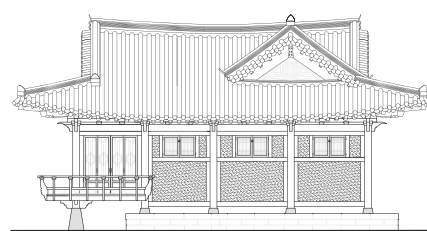


Pavilion

Front elevation



Right elevation



Floor plan

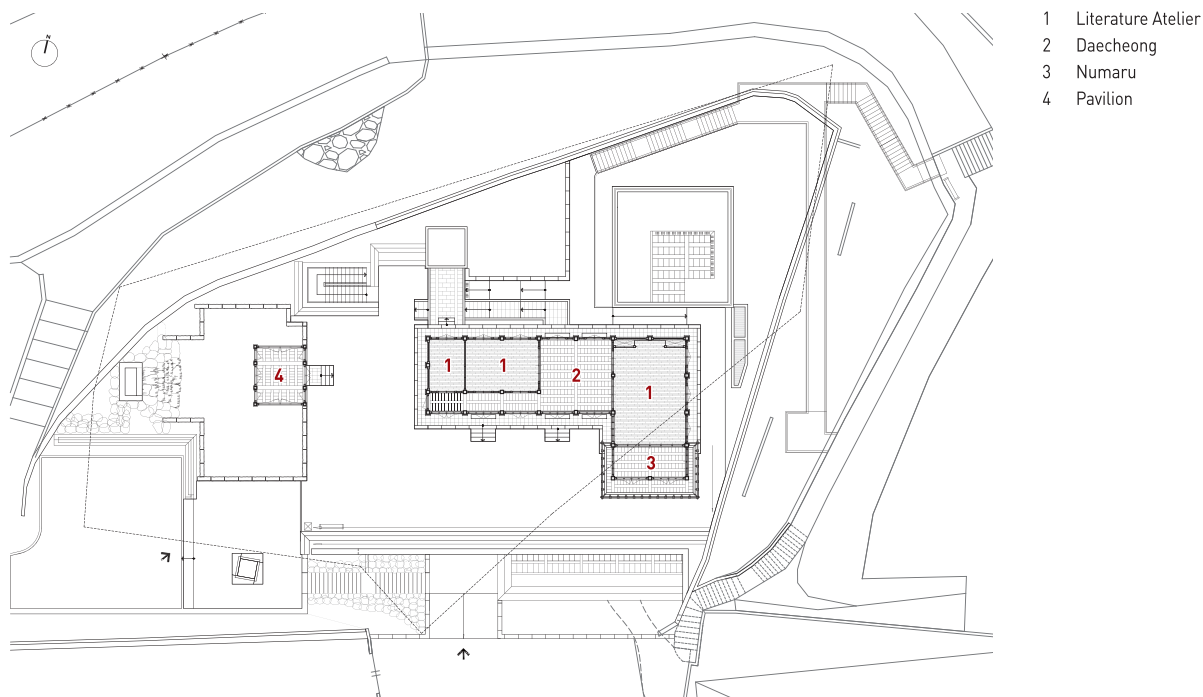
For the main Hanok building, *Daechyeong* (Wooden-floored hall), one of the key features in traditional Hanok, was actively utilized. The second Literature Atelier, the third Literature Atelier, and the first Literature Atelier for small meetings and poem recitation were planned to have slight differences in the heights for *Numaru* (Raised wooden floor), allowing various uses. By planning Nujeong separately, creation of literature was further encouraged.

Section plan

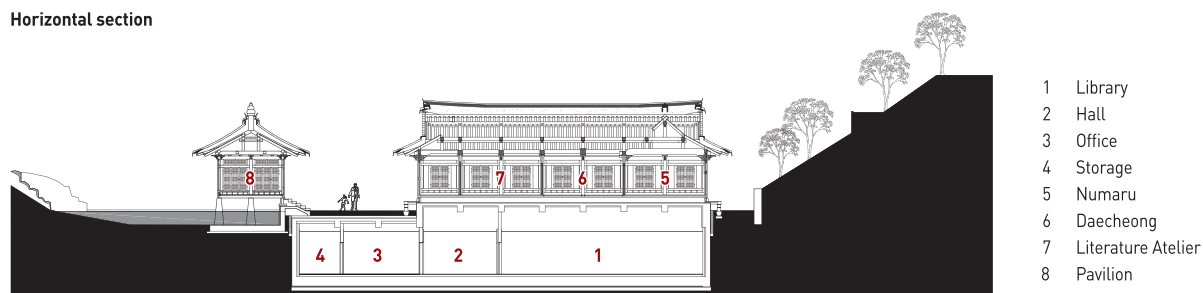
An access to the underground library incorporates the difference in levels. Although stepped flower beds were initially planned in the back side, space was too tight as a new facilities room was required. Thus, the plan was reduced to a sunken garden for natural lighting and ventilation of each room.

At the main entrance to the basement, the forerom hall, as a multi-purpose hall as well as a pathway, takes as much space as possible, and outdoor stairs were installed to enable a natural connection with the courtyard on the ground. Also, to minimize level differences in front of the underground library, a green area was placed between the vertical wall and surrounding walls.

First floor



Horizontal section



Top Daecheong
Middle Children taking classes at 'Literature Atelier' in main Hanok building
Bottom Modern library in the basement



Toetmaru

05

Geulmaru Hanok Library for Children (2011 National Hanok Competition 2nd Prize)

128

Architect Cho Jung Goo (guga Urban Architecture)
Construction HD Engineering & Construction
Client Guro-gu Office
Location Gaebong-dong, Guro-gu, Seoul
Site area 880.00m²
Building area 341.46m²
Gross area 441.09m²
Program Education and Research Facility(Library)
Photographs Park Young Chae

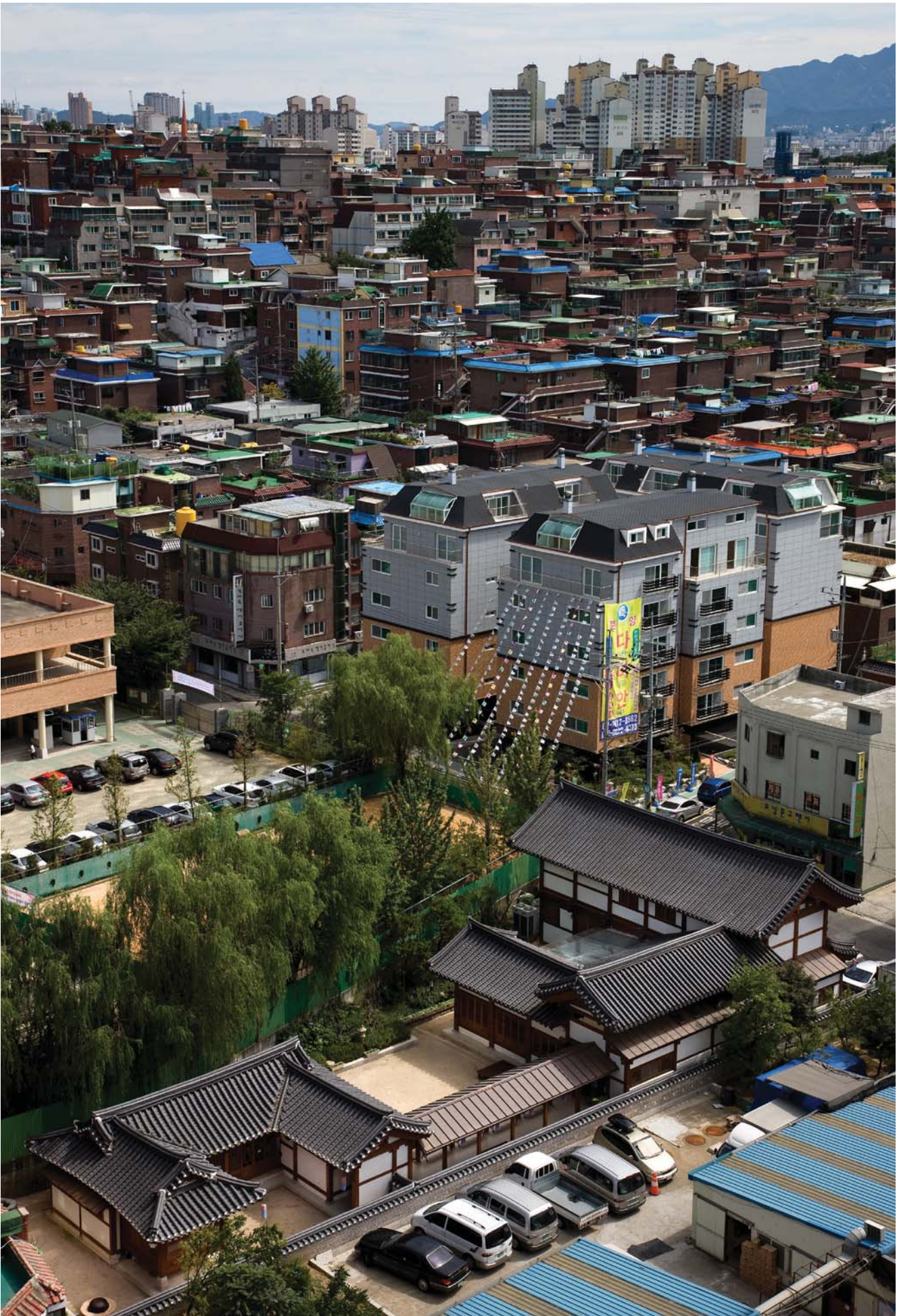




At the foot of Maebongsan(Name of the mountain) in Guro-gu, Seoul, the low income people's residential area was formed as a multiplex and multi-household housings built from the end of 70's. Although this place required many cultural facilities for the family and children due to many relatively young households residing in the neighborhood, those facilities were insufficient. This library was built is adjacent to the southwest corner of Oryu middle school. Originally, there was a reading room at this site for students preparing for the exams. Design of this library had to take care of issues such as a rectangular site that becomes narrower inward in a north-south direction, and the noise and odor from the adjacent kimchi factory. Guro-gu office, the client, requested an experience facility to operate Hanok experience program along with the role of the library for children.

Library and Oryu middle school







Basic concept

The library must had to be a place which has a program responding to the regional needs as a cultural facility. In this situation, the feature was taken into account where the site was adjacent to Oryu middle school and had a slender shape in north-south direction.

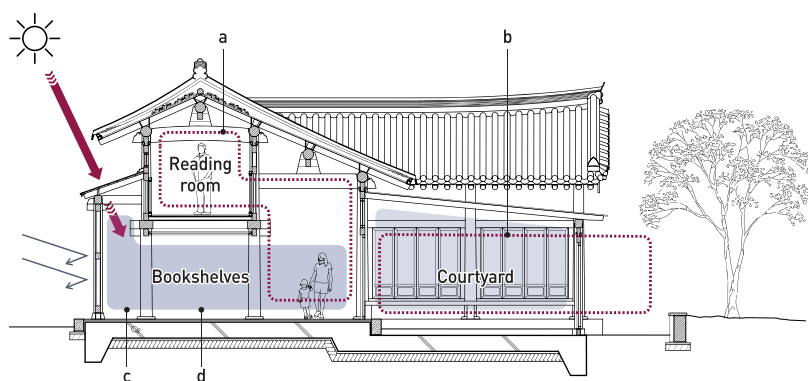
First of all, the library could be expected to have an anchoring effect as an educational and cultural facility, if the library is planned to merge with the middle school in a long-term view. Such a plan had a possibility for further materialization as Guro-gu office prepared a long-term plan of purchasing the kimchi factory to use it as a supportive space for the library once the construction of library is completed.

Also, although the slender parcel could have more disadvantages than advantages, efforts were made to find new possibilities through maximum utilization of the site shape. Alongside, by planning a sequential space through appropriate arrangements of the two given programs as a library and an experience facility, an in-depth delivery of a spatial feeling of Hanok was attempted.



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Atrium of the reading room



Concept diagram : Atrium(Reading room)

- a. Sedentary reading room was installed at the raised attic in order to encourage people to read books in a comfortable position
- b. Courtyard was planned to be a stand-up reading room by having an atrium decorated with traditional angled rafters
- c. Skylight was installed instead of a window for realizing deep spatial sense as well as to block the noise and the sunshine during sunset
- d. Bookshelves were placed below the raised attic



Classification of formality according to program

The library, with an emphasized publicity, was arranged adjacent to the road, and the experience facility as an independent Hanok was placed in the back, two buildings connected through the corridor and the yard. Also, two 'ㄷ'-shaped Hanok buildings formed a yard of various characters, and were planned to respond to the required program. The library and the experience facility were intended to allow visitors to have abundant and colorful experiences of space by varying the methods of organizing the program.

Because the library is normally visited by children together with parents, requiring functions as a public facility. The entrance emphasized frontality by placing second-storied tiled roofs and the front piloti. By configuring a three-dimensional, yet simple traditional timber structure of Hanok, the library was planned to accommodate contemporary programs without problems.

With the floor plan of a 'ㄷ'-shaped private house, Hanok experience facility was designed to allow children to naturally walk around the hall, rooms, upper floors and yards, etc., feeling and learning spatial configuration of Hanok while participating in the experience program prepared by the library.

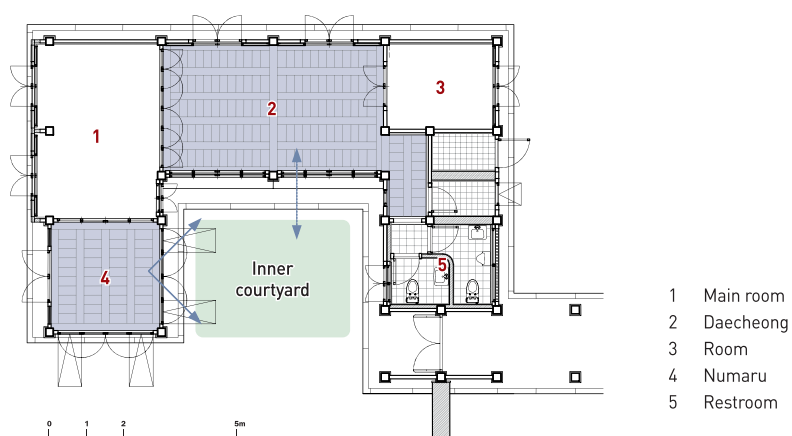


Reading room and courtyard



Bookshelves

Floor plan : Hanok experience facility





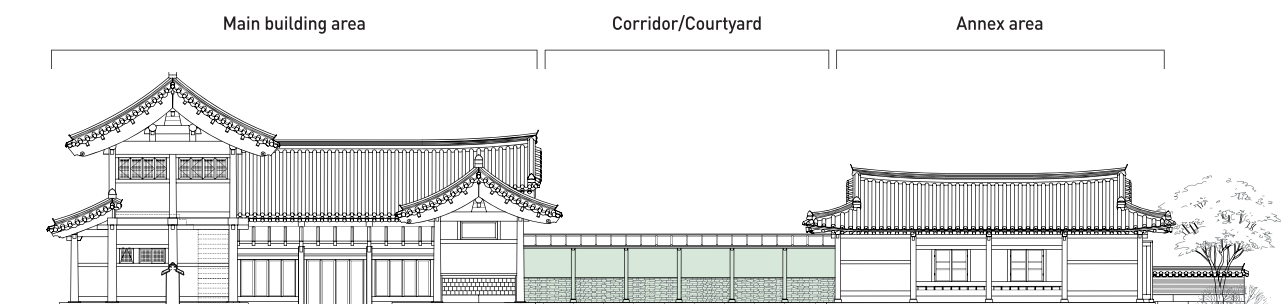
Traditional corridor connects main building and annex

Contemporary and three - dimensional spatial layout according to the traditional timber structure

Space elements of Hanok such as the attic, wooden floor, space beneath upper floor, etc. were reconfigured in a contemporary and three-dimensional manner. Also, the scale of the space along with size of the building members was carefully considered to allow visitors to naturally experience the atmosphere of Hanok while moving around. And the courtyard was planned as an atrium of the traditional timber structure of Hanok, newly suggested for the compliance with library functions while feeling the mood of Hanok.

Yard and corridor as the axis for integration

Event yard positioned in the center of the site was considered as a quiet resting place which allowed for comfortable rest of not only visitors using the library, but also regional residents. The yard was also intended to carry out various events. Also, the library and the experience facility were linked together with the central axis for integration of the long site which was easily susceptible to be isolated. And by placing the corridor made of copper plate roof, the boundary of the yard was set so that physical linkage of the two facilities and solidarity of the space were reinforced.





Top Raised attic above the reading room
Middle Main room and Numaru of the annex
Bottom Seminar room in the second floor



06

Gwanhunjae

(2012 National Hanok Competition 2nd Prize)

138

Architect Kim Jang Kwon (Buckchon HRC)
Construction Buckchon HRC
Client Lim Seok Suk
Location Gwanhun-dong, Jongno-gu, Seoul
Site area 109.00m²
Building area 63.21m²
Gross floor area 187.91m²
Program Commercial Facility
Photographs Yoon Joon Hwan





Vertical expansion - Preservation and Development

Since the land use rate of Hanok lags behind that of contemporary buildings, accessibility and publicness as a commercial space for Hanok are lacking. Vertical expansion to supplement this disadvantage grants various functionalities to Hanok while still using the traditional techniques as is, and will be a method that Hanok can become a developing building while communicating with the city rather than a stagnant vestige of the past. Gwanhunjae was designed with emphasis on prevention of the noise between floors, one of the major issues for vertical expansion of Hanok. Gwanhunjae went through the timber framing capable of expansion to multiple stories.

Hanok connects nature with people while humbly revealing its existence in this overcrowded city. This shows the concept, 'Emptying.' Hence, as the courtyard was planned for Gwanhunjae to comply and coexist with the nature, its form was trimmed by 'Emptying' rather than 'Filling.' Space differentiated through vertical expansion could be harmonized in the city without being alienated from the surrounding contemporary buildings.

Site Analysis

The site is within the area densely populated with Hanoks and high-rise contemporary buildings altogether, playing the connecting role of the two isolated spaces. A contemporary building could also be built in the site, since commercial facilities were lined up and there was a much floating population. However, Hanok was selected instead of contemporary buildings for this site to prevent the existing Hanoks from being covered by contemporary buildings and forgotten and deteriorated to buildings of the past.



Gwanhunjae in the crowded city





Gwanhunjae viewed from the courtyard

Concept: Lift up

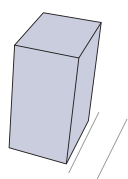
Gwanhunjae as a two-story Hanok is characterized most by the courtyard lifted up that enables free movement on the first and the second floors through the yard, and that attempts to overcome the isolation of the site from the second floor. Despite being a commercial facility, Gwanhunjae did not fill the yard which should be an emptied space in Hanok, allowing natural lighting and ventilation of the basement through a lifted-up courtyard.

Design Process

According to the guidelines of district unit plan, a 'ㄱ'-shaped mass adjacent to a road was planned at first. Then a 'ㄴ'-shaped mass was placed to the side of mass to secure the yard as well as to increase the land use rate. Finally, a 'ㄷ'-shaped mass was completed by joining two masses and the courtyard was raised up in between two masses.

Step 1.

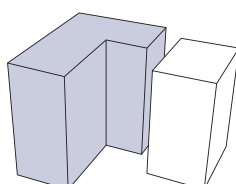
Placing the building to give on to the street



Planned to reduce pressure and provide stability by lowering the height of the mass, while meeting legal requirements (District unit guidelines) at the same time

Step 2.

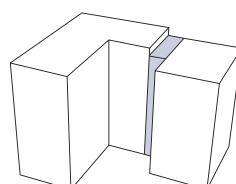
Organizing 'ㄴ'-shaped plan by ranging two masses



'ㄴ'-shaped mass was placed differently in levels with 'ㄱ'-shaped mass to fulfill the sense of height for commercial facilities

Step 3.

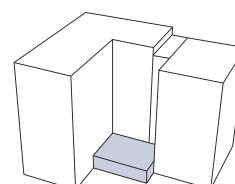
Completing 'ㄷ'-shaped plan by connecting two masses



'ㄱ'-shaped mass and 'ㄴ'-shaped mass were connected to enable communication between two masses

Step 4.

Planning the courtyard



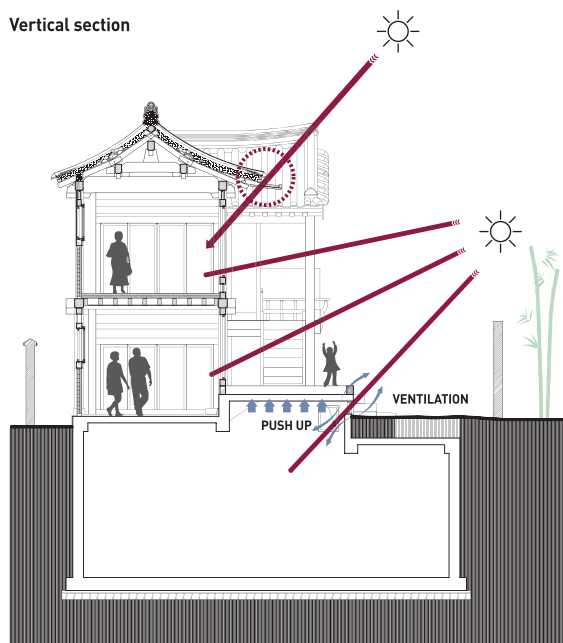
Courtyard was planned between first and second floor to keep dignity of the traditional Hanok, while providing accessibility and availability of the building at once

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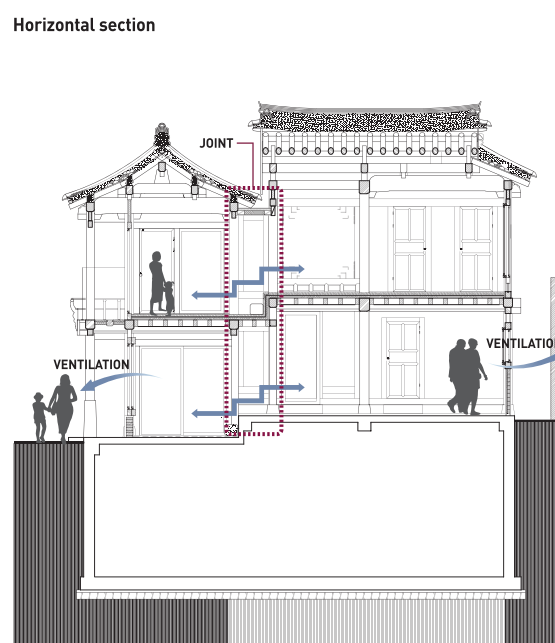
Section Plan

In Gwanhunjae, level differences in the existing site was applied to create the elevation difference between 'ㄴ'-shaped and 'ㄷ'-shaped masses, placing the raised up courtyard between two masses. Therefore, various elevation differences in a narrow space create diversity in spatial configuration and allow natural lighting and ventilation.

Vertical section



Horizontal section



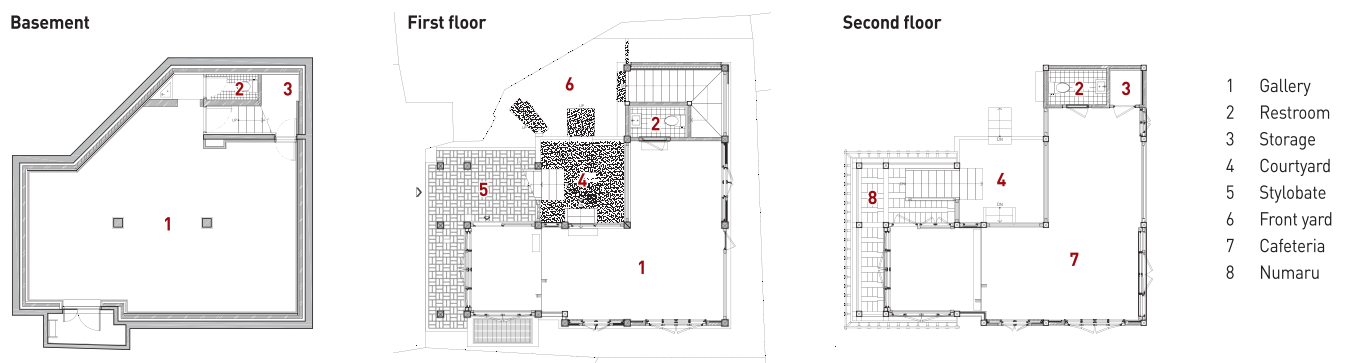
Floor Plan

To secure accessibility from Insa-dong gil, the arrangement of rooms on the first floor aimed for easy recognition from the main road. Entrance is a piloti, allowing easy entry to the courtyard and basement, the first floor and the second floor; entrance circulation starts from the courtyard and is connected to the interior from that point. Also, the roof structure was exposed without finishing the ceiling of the first floor to reduce stuffy impression, and the irregular arrangement of lighting between rafters generates lively atmosphere.

A boredom of vertical movement was lessened by having the second floor entered through the courtyard. The main entrance was planned in the form of *Numaru*(Raised wooden floor), securing a view and giving an open feeling. Also, the ceiling of the second floor exposed rafters and fan rafters as did so in the first floor to emphasize the beauty of Hanok to be felt even in a commercial space while securing spatial sense.

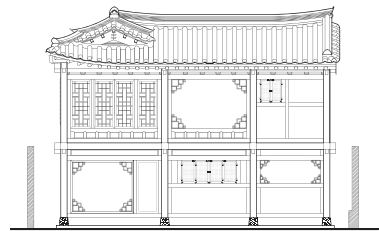
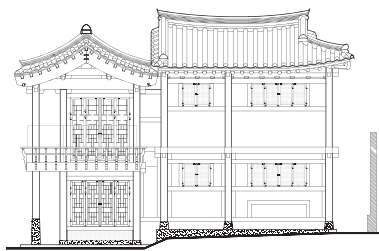
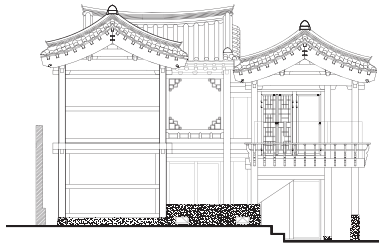
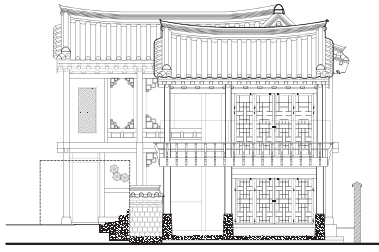
The basement is made of reinforced concrete. The wall of the staircase was finished by wood and roof tile pieces, and the ceiling exposed the timber structure to maximize the spatial qualities of Hanok.

Since this building is a two-story commercial facility planned on a narrow site, an effort was made to bring maximum natural light into the yard and the first floor. For this purpose, glass was partially added to a wooden shade to secure natural lighting and view.





Top Gallery in the first floor
Bottom Cafe in the second floor
Opposite Basement



Elevation Plan

The columns of entry space in the first floor could appear uneasy and too simple due to vertical expansion, a sense of natural proportion for the column and the foundation stone was magnified by using a tall column base stone. Also, to satisfy legal specifications regarding height of the railing while maintaining elevation of the protruding railing, a reinforced glass railing was installed inside the protruding railing, preventing rain. In the case of the window, a large whole glass window was installed to secure view and space, while a small window was installed on the right side for privacy protection from the adjacent commercial building and was supplemented by using window paper.

Detailed Plan

An iron gate with wood patterns aims for both security and aesthetics. Also, to reflect congenial yet natural elements of Hanok as a commercial facility crammed in a small site, roof tile pieces were used on a small flower garden and a fence in natural patterns.



Tall column base stones and protruding railings of Gwanhunjae

07

Heungcheon Daycare Center

(2015 National Hanok Competition 2nd Prize)

148

Architect Kim Yong Mi (G.S Architects & Associates)
Construction Taewon Construction
Client Seongbuk-gu Office
Location Donam-dong, Seongbuk-gu, Seoul
Site area 2,734.00m²
Building area 320.94m²
Gross floor area 591.86m²
Program Education and Research Facility(Kindergarten)
Photographs Park Young Chae





Site plan

At the place where a high apartment complex stopped gnawing away the mountain at Donam-dong in Seongbuk-gu, Seoul, there is Heungcheonsa(Name of the temple). And Heungcheon Daycare Center is located at the foot of the Heungcheonsa. Although the trace of original topography disappeared due to urbanization, it can be presumed to have been a valley with beautiful old scenery of the outstanding rock together with the woods on the opposite side.

As the site was a narrow and long inclined place facing the forest, the requirement of Seongbuk-gu office, the client, was to build daycare center which can accommodate 90 children.

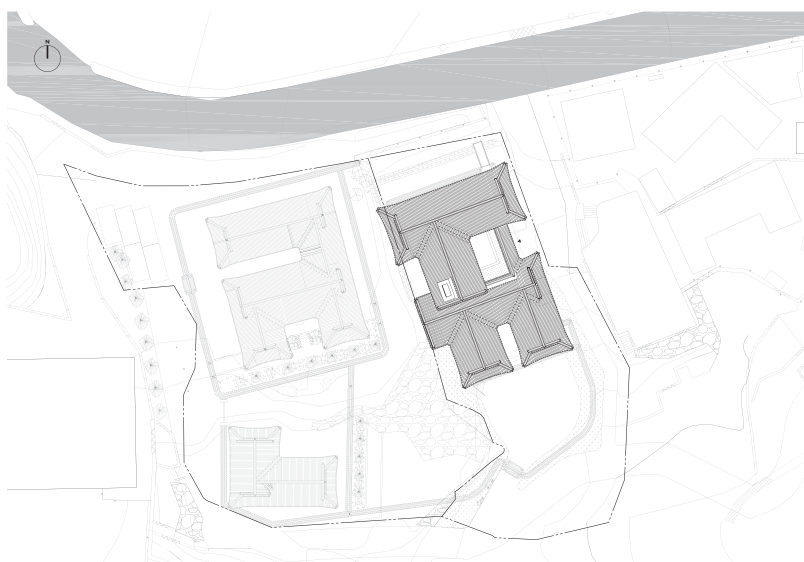
Main entrance





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Heungcheon Daycare Center on the inclined site

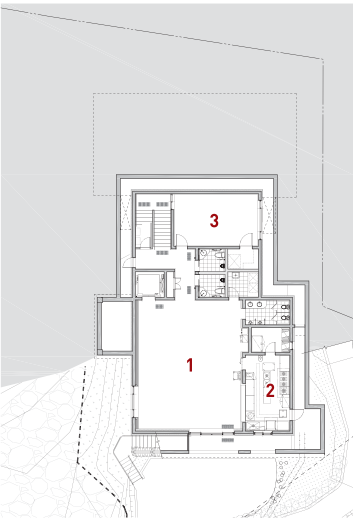


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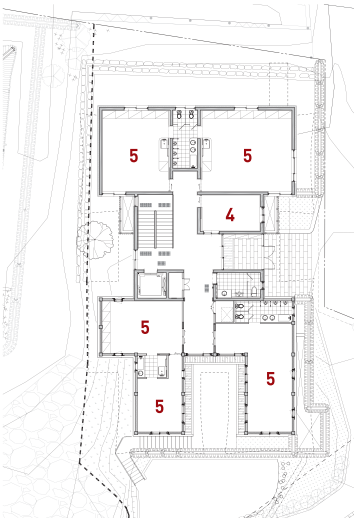
Floor plan

When two-story Hanok are laid on the top after preparing a wide terrace of two floors of concrete mass along the inclined site with 6 meters in level differences, an indoor space of three floors is produced. The first floor of the concrete mass is legally the basement, but it seems like the first floor from the street; a large play room and a kitchen were arranged. Also, the second floor was the first floor according to the legal definition, and it constitutes of the classroom for one and two-year-olds(Hanok portion) and the classroom for three and four-year-olds(Concrete portion). The classroom for five-year-olds is on the third floor being formed as Hanok. Outside yards were also planned for different features at each of the three floors. The front yard of a play room on the first floor is a playground for all children. A small yard surrounded by Hanok on the ground has two different floors; the second floor was planned as a play space for the one and two-year-olds, and the third floor is a garden for the five-year-olds. The daycare center has consistent appearance as Hanok by covering concrete mass with Hanok and surrounding walls.

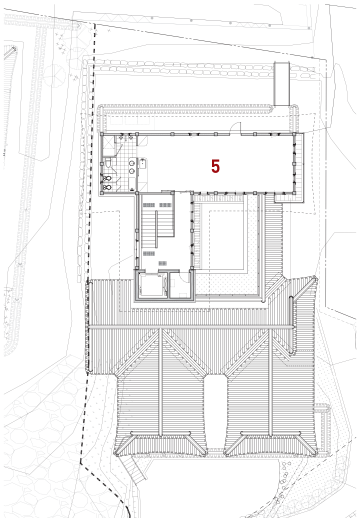
Basement



First floor



Second floor



- 1 Play room
- 2 Kitchen
- 3 Teacher's room
- 4 Director's room
- 5 Childcare room

Panoramic view of Heungcheon Daycare Center



Top Childcare room in the first floor viewed from the courtyard
Bottom Inside of the childcare room in the second floor



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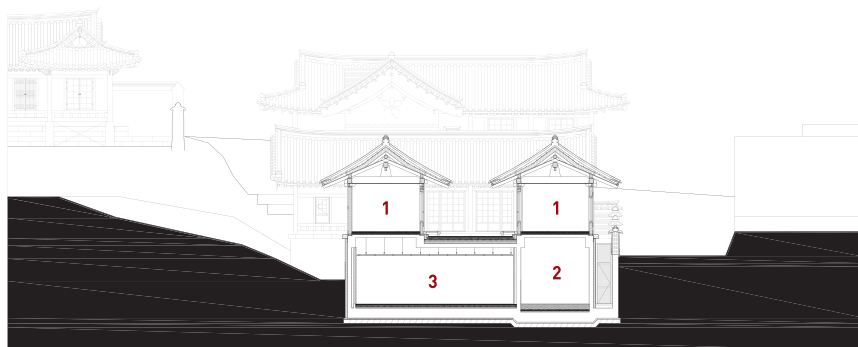
Elevation and section plan

Since this Hanok was planned for the daycare center, the greatest concerns were decisions on the suitable size and proportion of Hanok, and the measures for reducing construction costs to match the budget. While harmony with the adjacent existing Hanok was a problem in the attempt of containing a large classroom of the daycare center in Hanok, it was basically too large and lacked quaint beauty to designate as Hanok. Several Hanoks formed a cluster on the inclined site with the space between buildings becoming a yard, and the space where the inside and outside were connected as one was considered. The starting point of this design was to imitate the imagery of a small Hanok village with overlapping roofs and let the interiors be connected.

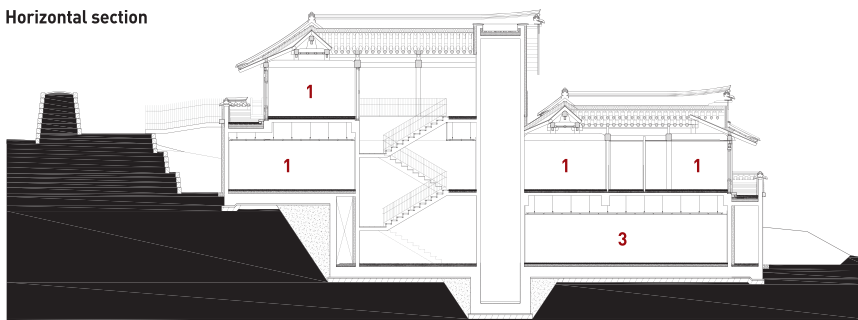
Experiment of Hanok

The issue of construction cost has been troublesome until the last minute. Although the portion of concrete was increased and that of Hanok was reduced to 33%, the construction cost still exceeded the original plan. The unit cost was reduced considerably with building Hanok through contemporary construction methods, however, an overall cost was more than a traditional Hanok since heat insulation and air tightness performance were enhanced and an earthquake-proof structure was applied. To further reduce the construction cost, decorating elements which were not necessary for functional purposes but had traditional values had to be removed. For instance, the stylobate and the column base stone which are traditional elements of Hanok were removed.

Vertical section



Horizontal section



- 1 Childcare room
- 2 Teacher's room
- 3 Play room



Courtyard viewed from the path in the first floor



08

SIDE, Hanok Residence Hotel
(2016 National Hanok Competition 2nd Prize)

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Architect Lee Yong Jae (Leeyongjae Architects)
Construction Leeyongjae Architects
Client Park Yong Su
Location Nuha-dong, Jongno-gu, Seoul
Site area 413.20m²
Building area 115.50m²
Gross floor area 115.50m²
Program Accommodation
Photographs Leeyongjae Architects





SIDE is a renovation of an old Hanok in Seochon where the artist Bonwoong Gu, the close friend of Sang Lee, a poet and a writer, is presumed to have resided.

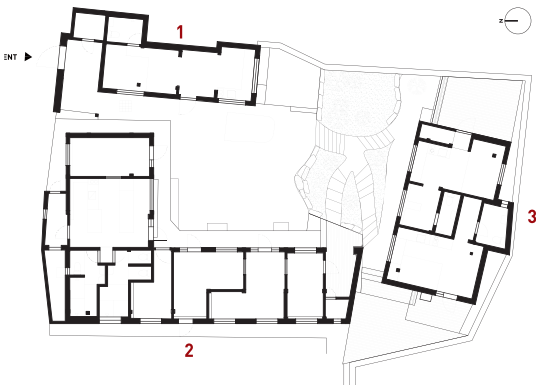
Hanok had traces of time, more than 100 years, everywhere. While renovating the old Hanok containing such precious traces, it was important to ensure harmonious mingling of tradition and contemporary time by using contemporary materials such as metal or glass within the framework of tradition.



Kitchen viewed from the courtyard



Panoramic view of the main room



- 1 Servants' quarter
- 2 Main building
- 3 Sarangchae

Ancestors did not consider the window simply as an opening for communication between inside and outside, but looked at it as a frame containing scenery. In SIDE, such sensitivity of ancestors was reinterpreted with contemporary sense, emphasizing beauty of the scenery viewed from inside through a window which might be the greatest feature of Hanok.



Outside scenery viewed through the window



Top Room
Bottom Room next to the kitchen

Top Kitchen
Bottom Restroom



Top Courtyard in the daytime
Middle Kitchen
Bottom Outside scenery viewed
through the window of the
kitchen





Path to Sarangchae viewed from the main building

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Outside scenery viewed through the window of the kitchen



Light coming through the window of the kitchen



Hanok, Korean Traditional Architecture 2011-2016 National Hanok Competition





Chapter. 3

Hanok, meeting with religion

01 Cheongansa, Buddhist Temple
(2011 National Hanok Competition 2nd Prize)

02 Gahoe-dong Catholic Church Sarangchae
(2014 National Hanok Competition 2nd Prize)

01

Cheongansa, Buddhist Temple

(2011 National Hanok Competition 2nd Prize)

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Architect Cho In Souk (DaaRee Architects & Associates)
Construction Sungik Construction, Samgong Construction
Client Ilbung Zen Order of Korean Buddhism,
Redevelopment Combination of Bulgwang 3 area
Location Bulgwang-dong, Eunpyeong-gu, Seoul
Site area 1335.50m² / 762.50m²
Building area 372.50m² / 212.67m²
Gross floor area 743.88m² / 338.49m²
Program Religious Facility(Temple)
Photographs Yoon Joon Hwan





Cheongansa(Name of the buddhist temple) has been in a residential area of 17 Bulgwang-dong at the foot of Bukhansan(Name of the mountain) since 1965. As demolition was accommodated by the apartment redevelopment fever in 2009, however, it moved to a religious facility site within the new apartment complex in the neighborhood.

Focus of the design

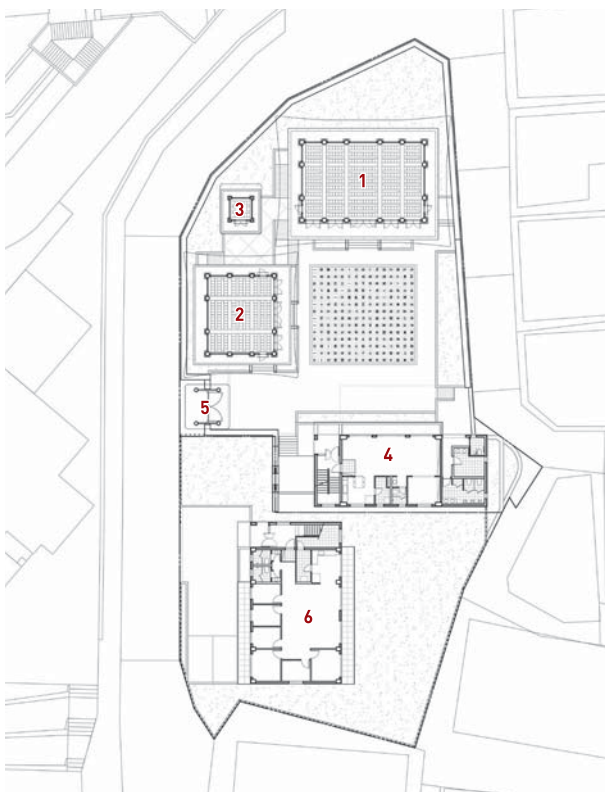
Design was already completed by arranging *Jeongak*(Building of a temple), which is determined by an expert of *Feng Shui*(The theory of divination based on topography), and a permit was already issued when supervision was requested for removing and reconstruction of *Cheongansa* in 2009. However, buddhist service could not be offered with *Daeungjeon*(Main building of a temple) being placed in front of a 25-story apartment. Eventually, the current Cheongansa was born again with design changes.

The site had level differences, and it was divided into two parts. Hanok buildings of *Daeungjeon*, *Geungnakjeon*(Building of a temple representing paradise), and *Josajeon*(Building of a temple honoring famous mentors) and non-Hanok buildings, *Yosachae*(Building of a temple accommodating monks and nuns) and international Zen institute, had to be added without scale changes from the existing design. In this situation, the focus of design for *Cheongansa* was the efficient arrangement of each *Jeongak* and the land use. Emphasis was also placed on the relationship with surrounding environments and hierarchy for buildings and outdoor space, since the optimum point recommended by *Feng Shui* was different when the surrounding was empty and when it was surrounded by high-rise apartments.

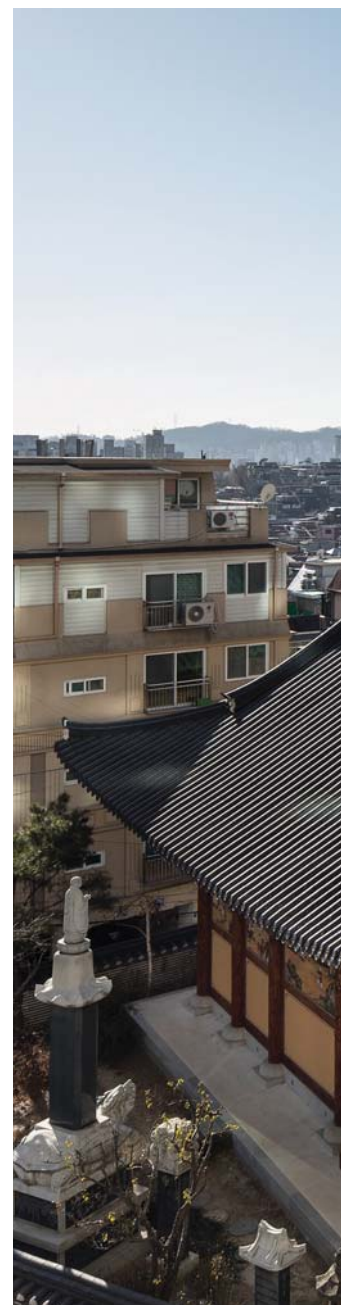
Site plan : Before design changes



Site plan : After completion



- 1 Daeungjeon
- 2 Geungnakjeon
- 3 Josajeon
- 4 Yosachae
- 5 Four-pillars gate
- 6 Main entrance





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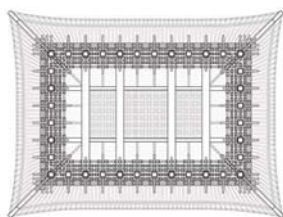


Although *Daeungjeon* had to be scaled down due to the limitation of the site, the scaled-down version of the building was unpopular among participants. Also, the failure to clearly reveal the hierarchy for *Daeungjeon* and *Geungnakjeon* remained as a regret since the stylobate of *Daeungjeon* could not be raised due to the inclined road for the disabled.

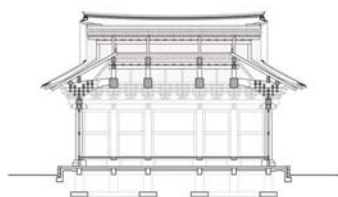
Daeungjeon shows the highest hierarchy in the site by having a mountain in the back. Also, relationships among buildings, yards and fences were set up by planning so that *Daeungjeon* was visible from each floor of *Yosachae*. And *Josajeon* for the monk Changgeon was arranged according to the *Feng Shui*.

Since it was a religious building with longer eaves than a general Hanok, the hip rafter of the roof or the tip of the end angle rafter should be arranged not to go beyond the site boundary, and the hierarchy of the roof ridge for each *Jeongak* also needed to be considered. Also, while the international Zen institute had a separate gate, a side door was installed to allow organic communication with other *Jeongaks*. Moreover, *Yosachae* and the international Zen institute were designed to be simple with the intention to have *Daeungjeon* to become the main building.

Roof framing plan



Horizontal section



Daewoongjeon and a pagoda in the courtyard





Top Inside of Daewoongjeon

Bottom Long eaves of Daewoongjeon and Geuknakjeon





Inside of Geuknakjeon



Geuknakjeon in contrast with high-rise apartments

02

Gahoe-dong Catholic Church Sarangchae (2014 National Hanok Competition 2nd Prize)

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Architect Woo Dae Seung, Cho Seong Ki,
Kim Hyung Jong (Architects OP'US)
Construction LOHAS Hanok
Client Maintenance Foundation of Archdiocese of Seoul
Location Gahoe-dong, Jongno-gu, Seoul
Site area 1,150.30m²
Building area 672.59m²
Gross floor area 3,738.34m²
Program Religious Facility(Cathedral)
Photographs Yoon Joon Hwan





GAHOEDONG
CATHOLIC CHURCH
OF THE ARCHDIOCESE
SEOUL

가회동성당
천주교서울대교구

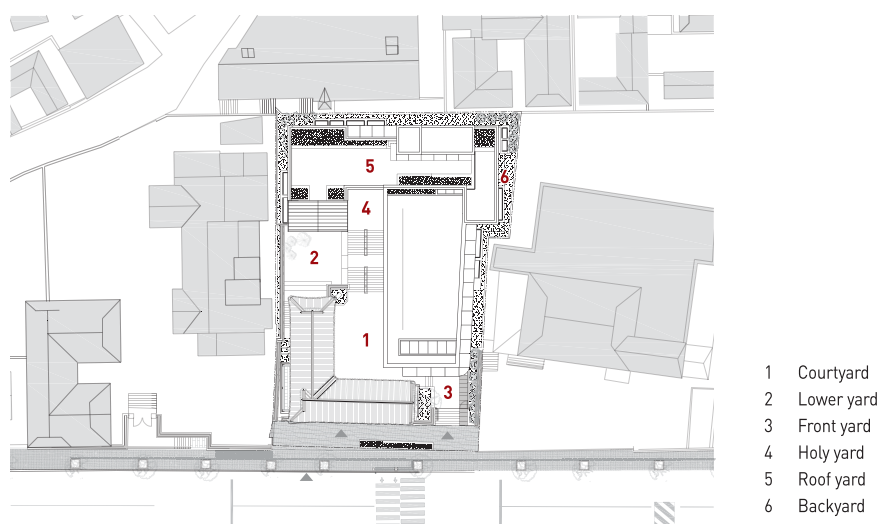




Center of open space

Gahoe-dong Catholic Church was planned to be opened to public from the conceptual planning phase, with the plan to build a new Hanok *Sarangchae*(Detached building for guest reception) at the main entrance. Although there was no reason for Hanok to be here, it was considered that Hanok could lessen the psychological burden of being a religious building by creating the streetscape of Hanok mingled with Bukchon village, and can be expected to be a space enjoyed by many people.

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Top Free spatial structure of the inside

Bottom Outside scenery viewed from Daecheong between two rooms

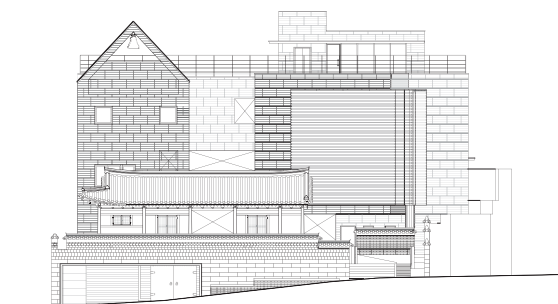


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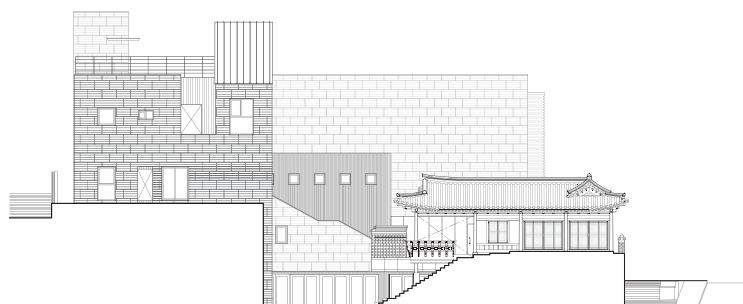
Architectural change as a public space

Hanok consists of a free spatial structure. As doors and windows change, the scenery changes and distinction between the inside and outside also disappears. People can have small chats in Hanok, and it may also become a place of festival. We can fully appreciate abundant joy in an open Hanok, and it carries more meaning since it is a public place.

Front elevation

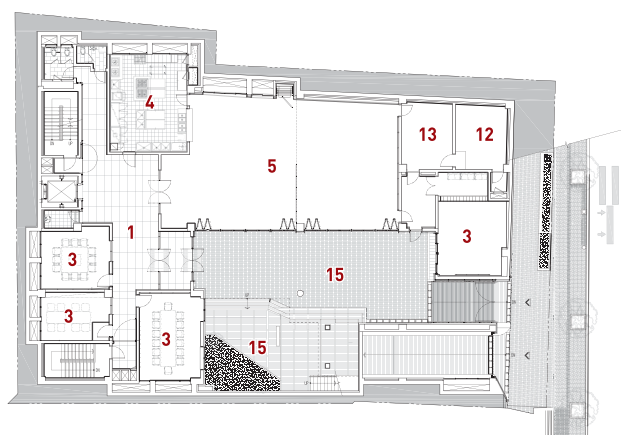


Left elevation

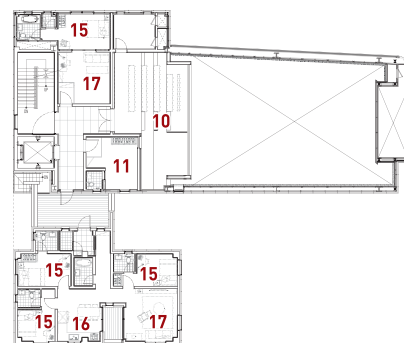




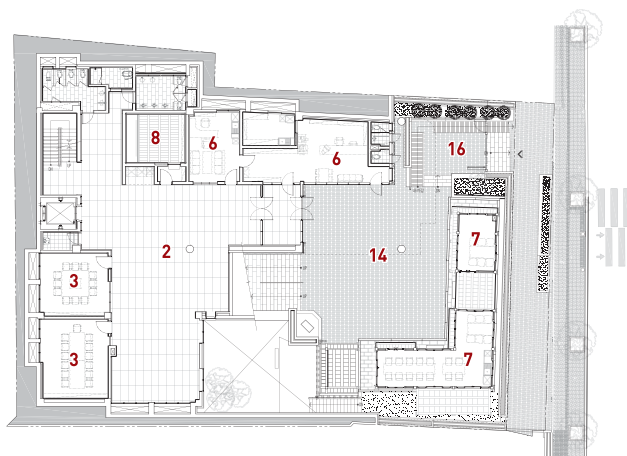
Sarangchae in harmony with contemporary church



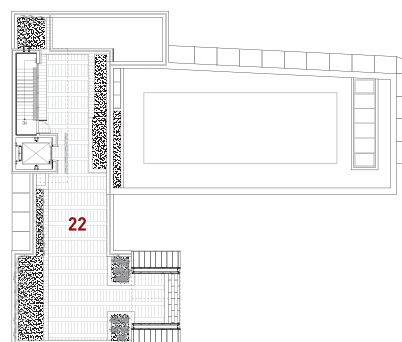
Basement



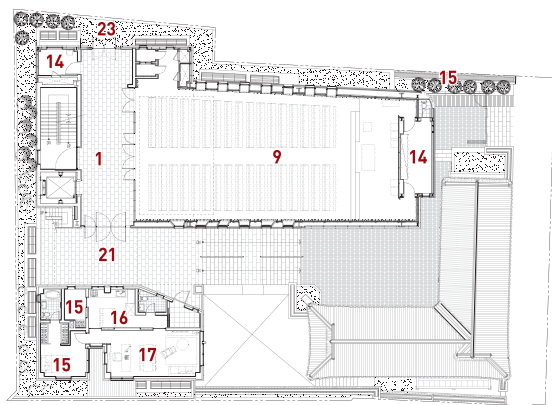
Third floor



First floor



Roof floor



Second floor

- | | | |
|-------------------|------------------------|----------------|
| 1 Hall | 9 Chapel | 17 Living room |
| 2 Exhibition hall | 10 Choir stalls | 18 Courtyard |
| 3 Class room | 11 Baby room | 19 Lower yard |
| 4 Kitchen | 12 Electrical room | 20 Front yard |
| 5 Auditorium | 13 Storage | 21 Holy yard |
| 6 Office | 14 Preparation room | 22 Roof yard |
| 7 Sarangbang | 15 Room | 23 Backyard |
| 8 Prayer room | 16 Kitchen/Dining room | |



Top Sarangchae viewed from under the church

Bottom Numaru of Sarangchae viewed from under the church

Building Hanok as a contemporary building

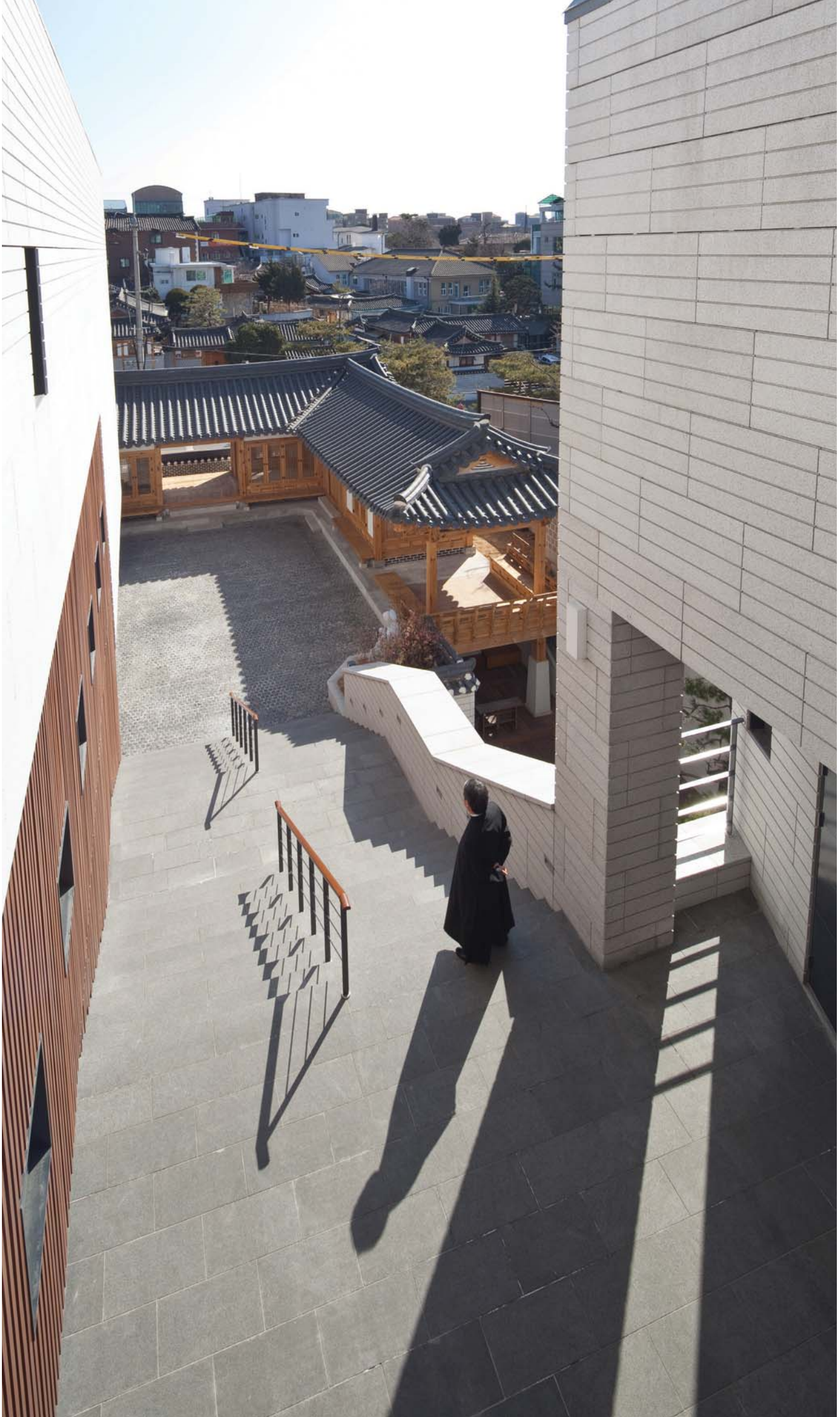
In Korea, building Hanok as a composite building rather than as a stand-alone building is difficult. It is because Hanok should be built according to architecture regulations oriented for contemporary buildings. Although various legal benefits has been applied to Hanok for preservation and dissemination of traditional culture, constructing Hanok as a contemporary building grafted with new functions and programs has never been an easy task.

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Gahoe-dong Catholic Church was segmented to be small according to the characteristics of Bukcheon area, densely populated with Hanoks in Seoul, and a contemporary building and Hanok were arranged to face each other across the yard. It was necessary to apply new architectural approaches for the composite Hanok building.

Although Gahoe-dong Catholic Church Sarangchae is not different from an ordinary Hanok in appearance, it is fully equipped with the contemporary functions to serve as a central space for the communication of neighborhood.





Hanok, Korean Traditional Architecture

2011-2016
National Hanok Competition

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