

ENGLISH

1962

**SAHM**  
ENGINEERS INC.  
**SHIN**



**Technology for  
Humans and the Environment**



SAHM-SHIN ENGINEERS, INC.



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SAHM-SHIN ENGINEERING

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# Introduction

SAHM-SHIN ENGINEERS, INC.

## CEO Greeting

Established in 1962 to provide mechanical engineering services during South Korea's period of rapid urbanization, today Sahmshin retains a team of dedicated design and engineering professionals. Having withstood the test of time and market volatility, Sahmshin is proud to be the frontrunner in the industry. As South Korea's leading mechanical engineering consulting firm, Sahmshin boasts extensive project experience and a stellar track record that can ensure the satisfaction of any client.

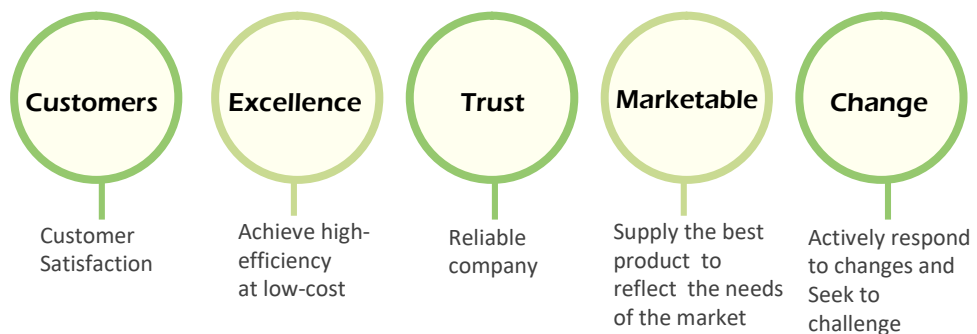
At Sahmshin, engineers always bear in mind the challenges that Sahmshin's founders faced, including a distinct lack of resources, and over which their passion prevailed. Indeed, that same passion has guided our firm for more than five decades. Sahmshin's core mission is "To create value for clients and constantly renew ourselves to adapt to rapidly changing social and business environments."

By combining technology and innovation, Sahmshin embraces next-generation technologies that allow buildings to perform better and smarter. We actively pioneer knowledge of and practice in green technologies by offering unique knowledge-based simulations and creative solutions on different projects. Sahmshin's unparalleled combination of engineering expertise and innovation has won the trust of architects and owners of many of South Korea's award-winning buildings. Our portfolio includes nearly every type of project, from high-rise office buildings, hotels, retail and exhibition centers, health care facilities, and sports and leisure venues to education institutes, residential buildings, laboratories, and data centers.

Sahmshin's recent active expansion into international markets has included projects in Qatar and Cambodia, and we are proud to support and cooperate with clients anywhere in the world. Our team of experts is confident that it can provide solutions for the harshest climate and respond to project challenges in the most difficult of locations.

Jung, Jong-Rim, PE, Ph.D

## Our Values



# About Us

*The use of sustainable energy solutions,  
providing a healthy earth and happiness of the human race.*

## Work Experience

- 55 years of experience
- HVAC system design
- Plumbing design
- Fire Protection System design
- Building information modeling (BIM)
- Certification (e.g., LEED, G-SEED)
- Consulting (e.g., building services, energy, and CFD)

## Projects

- Projects in HVAC & plumbing (1,100+)
- Projects in energy consulting (300+)
- Certified projects (50+)
- Overseas projects completed in 6 continents & 8 countries
- Building service engineering (40+ million m2)
- Building service engineering (1.7+ million m2/yr)

## Awards

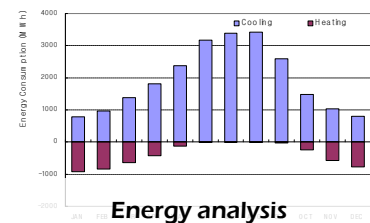
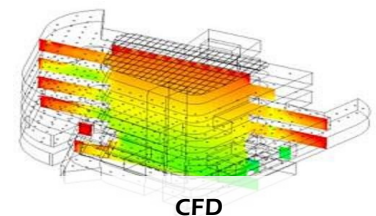
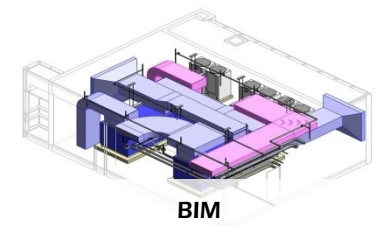
- Presidential Award (3 times)
- Prime Minister Award (1 time)
- Minister of Construction and Transportation Award (1 time)
- Appreciation Plaque received for various projects

## Clients

- 10+ Government agencies
- 40+ R & D institutes
- 15+ Construction companies
- 30+ Architectural firms
- 100+ Partners

## Industry Organizations

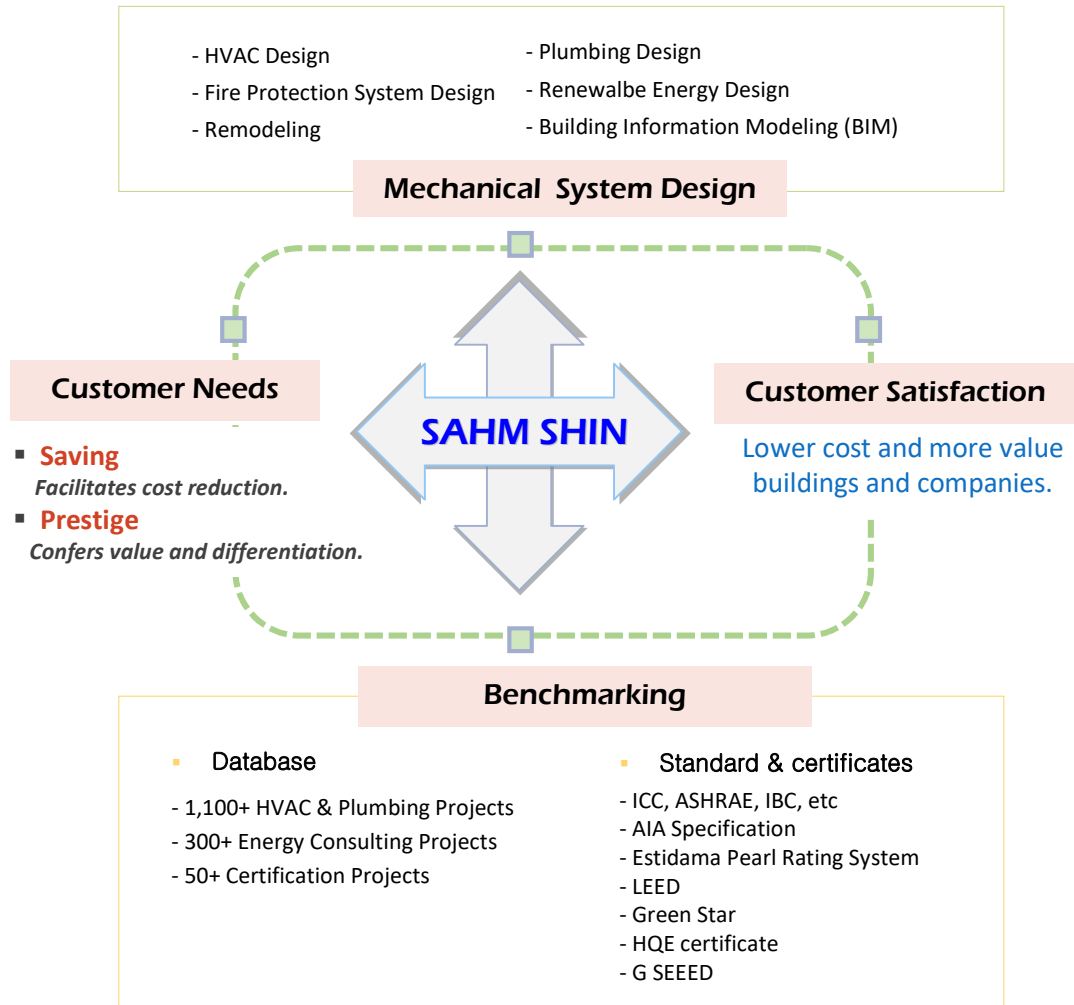
- KENCA (member states of FIDIC)
- SAREK
- KARME
- KPEA
- ASHREA/CIBSE



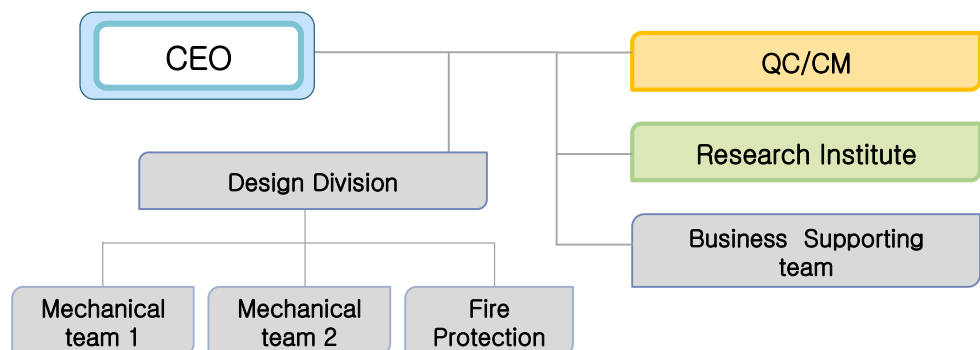


# Firm Profile

SAHM-SHIN ENGINEERS, INC.



## Corporate organization

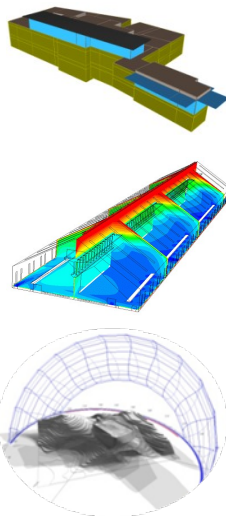


## Mechanical System Design, Fire Protection System Design



Sahmshin has designed a range of buildings—government buildings, hospitals, schools, exhibition venues, sports centers, high-rise buildings, and data centers—all by paying close attention to building's classification by heat source, HVAC, and plumbing. To design a heat source, we take into account the building's heat load and energy demands and perform LCC analysis to select an economical and reasonable heat source plant. We plan HVAC design based on HVAC zoning, air flow rate balance, and the comfort of occupancy in the offices, open spaces, hospital rooms, or data centers, whatever the case may be. Our plumbing designs consider the stable supply of water and reduce the use of water resources by reusing rainwater and grey water. Sahmshin provides reasonable solutions to address various challenges, including user-centered indoor environment optimization technology for health and quality of life, the optimal use of renewable energy and alternative energy, zero energy buildings, smart buildings, high-rise building technology, energy-saving through remodeling, and 3-D design to assess process interference in order to save time.

## Energy Consulting



To save on energy consumption, it is necessary to provide comprehensive consulting services in the planning stage based on expertise in various fields. Our services include the selection of an optimal orientation of buildings via climatic building mechanical data analysis, the optimization of exterior insulation, the choice of facility systems considering the use and operation of the building, the application of high-efficiency equipment and lighting fixtures, and the implementation of renewable energy system designs.

Currently, Sahmshin has provided consulting services on more than 300 projects and works with numerous experts who can apply various effective interpretation programs for reliability (e.g., Trace700, E-Quest, Trnsys16, EnergyPlus, Fluent, and Ecotect).

We also provide various services for LCC analysis regarding the economic value of systems, CFD analysis for the feasibility review of HVAC systems, sunlight analysis, and fire and evacuation analysis for fire safety.

## Overseas activities



Since its establishment in 1962, Samshin has led the design of South Korean machinery facilities and completed several distinguished projects overseas. Since 1978, Samshin has completed more than 15 overseas projects, ranging from the reconstruction of an opera house in New York, NY, USA, to the recent national museum in Kinshasa, D. R. Congo. Recently, given the decline of South Korean construction and the global economy, Samshin has prepared to undertake overseas projects and successfully completed projects, including the abovementioned.



# Project Experience



2001  
–2017

- Hyundai Global Business Center(GBC)
- Rare Isotope Accelerator Complex
- Songdo I Tower
- Korea Railroad Corporation



2001  
– 2005

- SK Telecom Euljiro Building,
- Kangwon Land (Casino, Hotel)



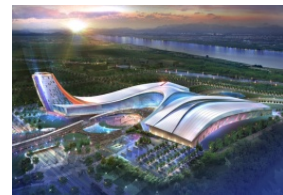
1991  
– 1995

- Korea advanced institute for science and technology (KAIST)
- National Police Hospital, War Memorial of Korea



1980  
– 1985

- The National Assembly
- The Bank Of Korea, Annex
- Korea Minting and Security Printing Corporation



- Korea International Exhibition Convention Center, Stage 2



1996  
– 2000



1986  
– 1990

- Jamsil Lotte World and Hotel



- Gwacheon Government Complex



1970  
– 1980

1962

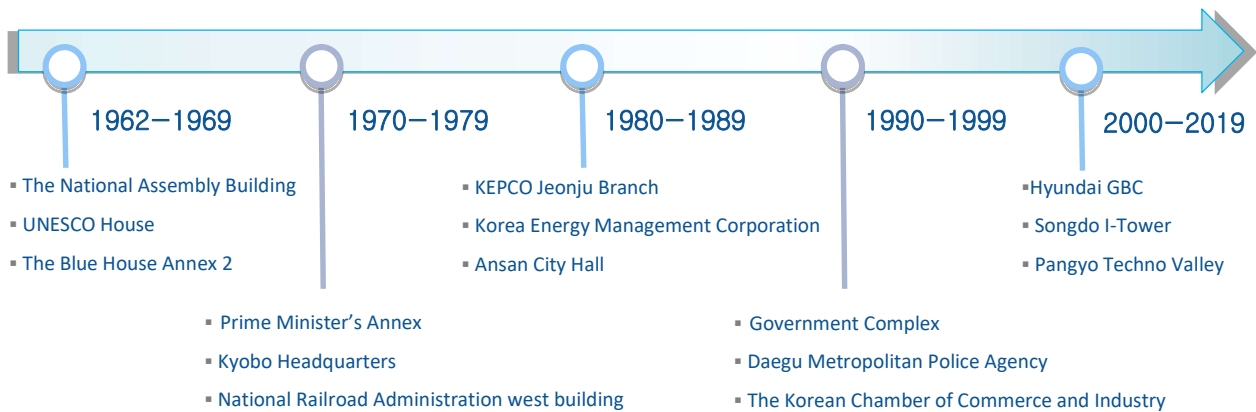
- SAHM-SHIN Engineering, Inc.

# Office

Office building is the type of building that SAHM-SHIN designed most and we designed about 350 national public institutions, offices, and high-rise buildings. Based on our accumulated know-how and experience, we considered the characteristics of workplaces and local conditions and reflected them on the design and applied various active technologies for greenhouse gas emission reduction and energy-efficient.

Projects

+380



## ▪ Song-do I-Tower

Location: In-cheon, Korea | G.F.A: 85,660.22㎡ | Floors: 33F\_B2F | Design: 2010 | Architects: Haeahn

The VAV system was selected as a primary air distribution system to increase the use of workspaces and correspond to heating-cooling loads at specific bearings via a modular plan that considered variability. We reduced power for transportation by applying a large temperature difference and a primary-secondary pumping system, as well as reduced heating, cooling, and hot water energy through geothermal and solar heating.



Office

Hotel and Resorts

Retail

Museum Exhibition

Education

Healthcare

Sports Leisure

Residential

Industrial Laboratory

Datacenter

BIM/ Overseas

Energy Consulting

Certification Consulting

TAB, Commissioning





We Build  
Next Generation

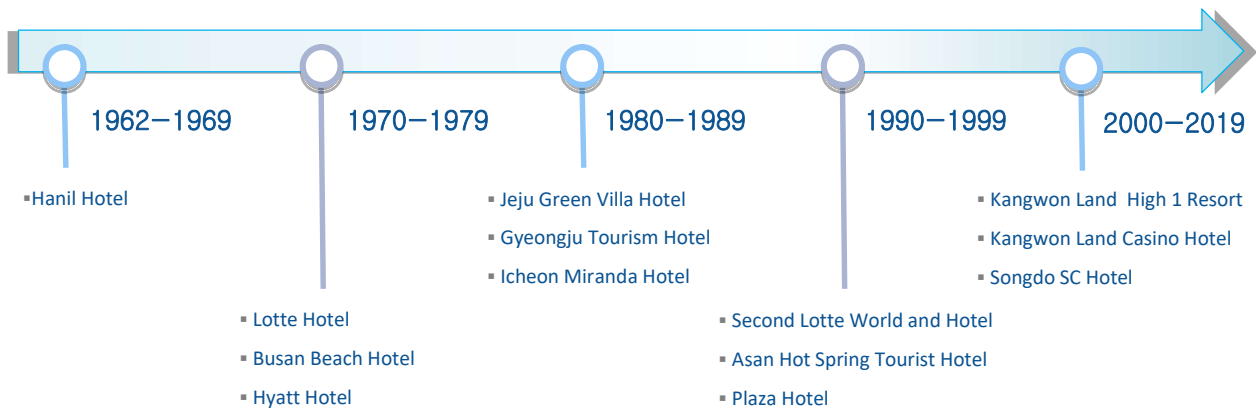
SAHM-SHIN ENGINEERS, INC.

# Hotel and Resorts

We need building service system to respond to the changing urban culture; to reflect the needs of users and to increase efficiency and profitability. SAHM-SHIN reflected following plans as to respond to hotel's demand of service system. To save operating and maintenance costs of hotel, we suggested active utilization of renewable energy and optimal heat source through LCC analysis. Fire & Evacuation plan is performed for safety of guests and HVAC plan according to using time and purpose is performed for comfortable of occupants.

Projects

+50



## ▪ Harbor park hotel

Location: In-cheon, Korea | G.F.A: 14,015.9㎡ | Floors: 15F\_B2F | Design: 2006 | Architects: Mooyoung

We provided appropriate plan for hotel business that has complex accommodation characteristics. By considering the load of accommodation and complex building, we divided the number of equipment. We reduced heating and cooling energy consumption through renewable energy and efficient equipment. To improve the comfort of the room, we applied ceiling FCU which is easy to control and through CFD, we verified actual comfort.

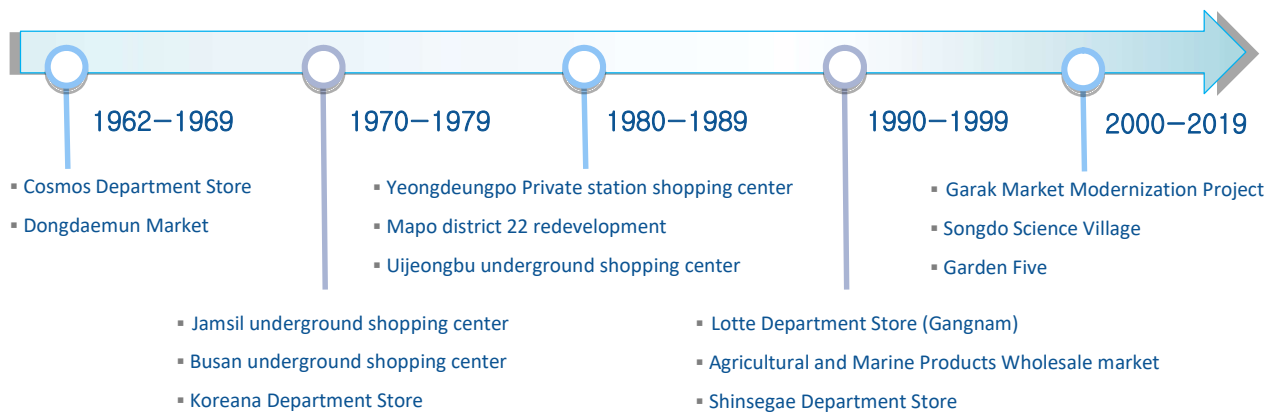


# Retail

Commercial buildings have large spaces and it is important to respond to the actual variability that happens around the building. Also, it needs to respond to the load change due to the inconsistent number of entering and exiting sellers and buyers. SAHM-SHIN accumulated know-how from designing more than 60 commercial buildings and we reflected following on our designs. We increased the convenience through HVAC plan for each operation time period and came up with a primary system plan to respond to the load changing and considered outdoor air flow rate control to improve the indoor air quality.

Projects

+60

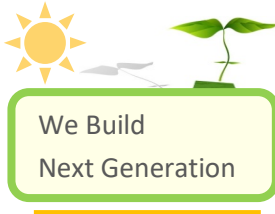


## ▪Garden Five - LIFE

Location: Seoul, Korea | G.F.A : 426,703㎡ | Floors: 11F\_B5F | Design: 2006 | Architects: Wonyang

Existing multiplexes have excessive load of lightning and latent heat and large spaces had imbalanced vertical direction temperature and low thermal comfort. Therefore, to solve such problem, this design selected HVAC methods that are easy to process excessive latent heat and fresh outside air. By applying district heat source and geothermal system, we improve energy saving chances and make easy maintenance.

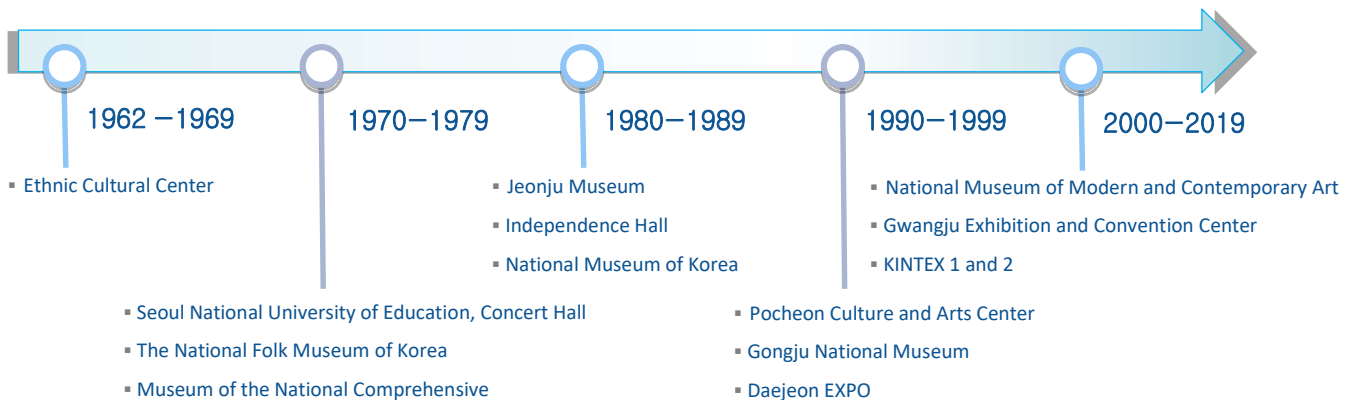




# Museum, Exhibition

We designed the largest exhibition facility and museum in Korea and have experiences from more than 80 places; we've had technology and know-how. Unlike normal buildings, exhibition buildings are spacious so HVAC and safety is important. Therefore, we've designed the facilities as following. Through optimized HVAC planning, we've solved temperature stratification and imbalances and through performance-based safety design, we've prioritized on life safety. In addition, we've planned the heat source plant considering the operating cost.

Projects  
**+80**



## ▪ KINTEX – 2(Korea International Exhibition Center – 2)

Location: Goyang, Korea | G.F.A : 219,079.52㎡ | Floors: 15F\_B1F | Design: 2009 | Architects: Mooyoung

The fourth Asian Exhibition center that has over 100,000 square meter exhibition area. Realization of advanced green exhibition center through applying renewalb energy and water saving method like geothermal system, solar energy system, and rainwater reuse system. Control of outdoor air volume by automatic sensing of number of people in large space, EMS, FMS, and high-end automatic control system made maintenance easy and efficient.



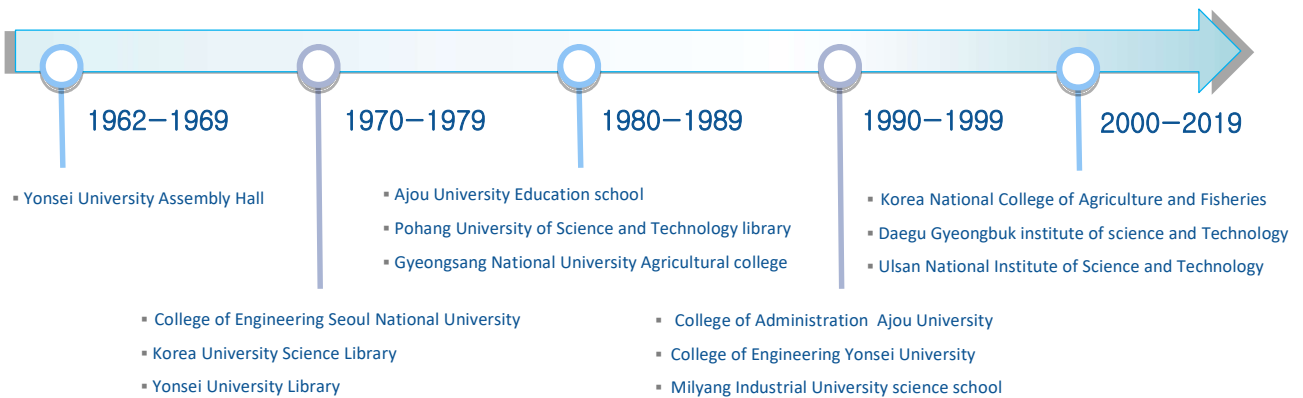


# Education

In designing 180 educational facilities, Sahmshin has developed robust technology and knowhow for ensuring ecofriendly green campuses. In those facilities, we actively save air-conditioning energy through a heat recovery system, save water resources by recycling storm water and grey water, and actively use renewable solar, photovoltaic, and geothermal energy.

Projects

+180



## ▪ UNIST (Ulsan National Institute of Science and Technology)

Location: Ulsan, Korea | G.F.A : 101,293㎡ | Floors: 15F\_B3F | Design: 2013 | Architects: Samoo

UNIST considered the characteristics of the educational as well as research and laboratory facility to design a building service system. To reduce the operating cost of the school, we implemented renewable geothermal energy and recycled gray water for cleansing water. The research and laboratory facilities installed equipment for emergencies, and for seamless utility supply, we designed a central system.

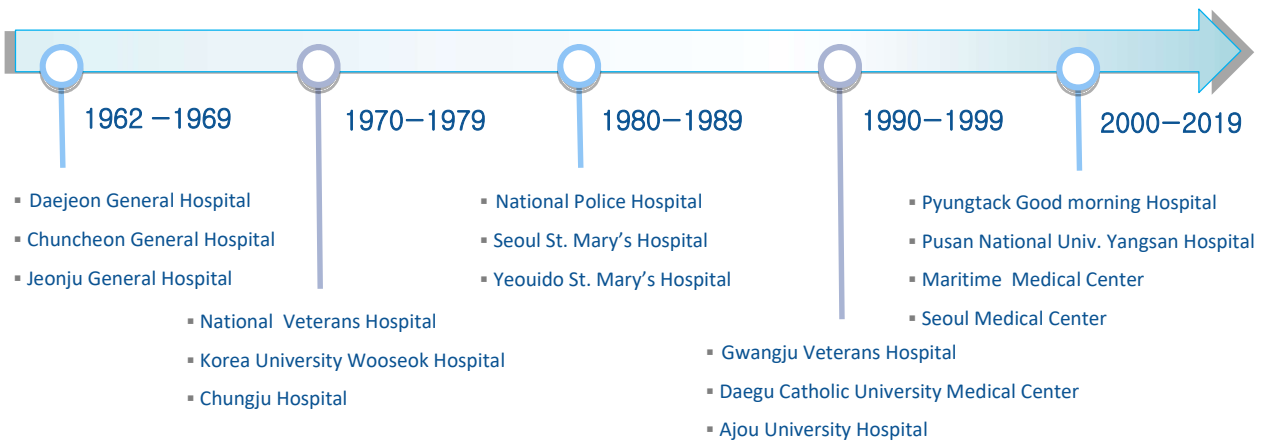


# Healthcare

Unlike other buildings, the energy consumption of hospitals can exceed 600 kWh/m<sup>2</sup>·y. At the same time, plans for heat sources and pollution-prevention systems are critical for spaces such as operating rooms. Sahmsin considered all of those needs, as reflected in the building's design. We actively applied methods that reserve nighttime electricity and renewable energy and supplied continuous heat through emergency and additional heat sources. To prevent secondary pollution, we also applied HVAC zoning with different pressure and high-performance filters.

Projects

+75



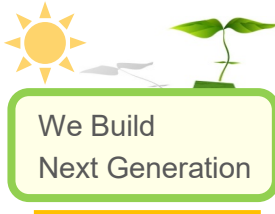
## ▪ Yang-pyeong Rehabilitation Hospital

Location: Yang-pyeong, Korea | G.F.A : 42,506.61 m<sup>2</sup> | Floors: 6F\_B1F | Design: 2011 | Architects: Baum

For the nation's first subacute rehabilitation hospital, we considered the type of patients and methods in identifying ways to save energy. We strengthened all of the sanitary fixtures and accommodated high noise standards, increased the amount of fresh air from outside, and actively applied solar and geothermal heating and exploited unused and natural energy.



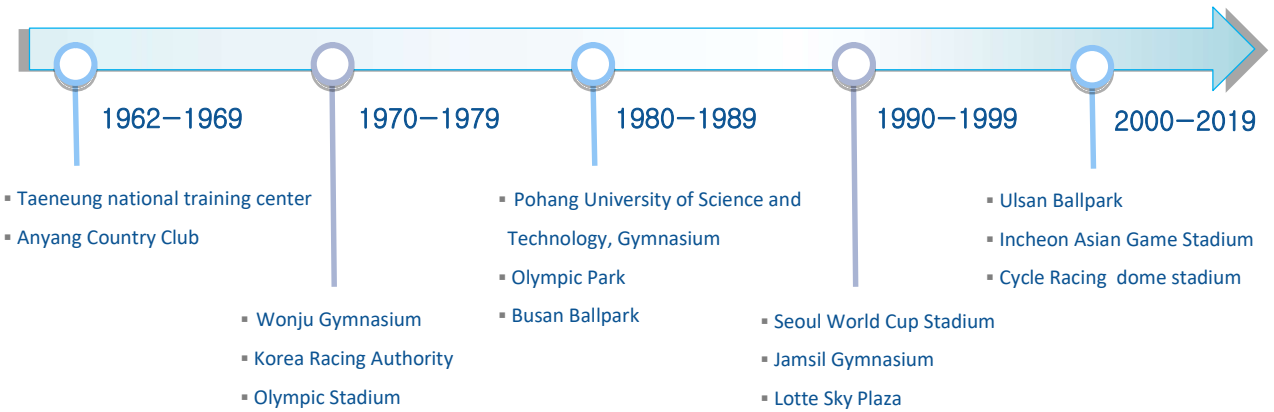




# Sports and Leisure

As large facilities, stadiums require not only detailed safety plans, but also optimal air control methods for the comfort of athletes and fans. In Sahmshin's experience with designing 80 sports-related buildings, we have accumulated extensive knowhow and technology. Based on building analyses, we have selected the best heat source systems and improved indoor air quality via innovative ventilation. We also established optimal emergency plans after fire and evacuation stimulations and even built fire extinguishing facilities.

Projects  
**+80**



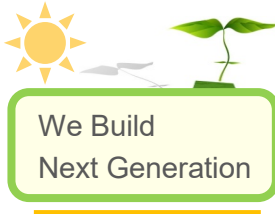
## Go-yang gym

Location: Go-yang, Korea | G.F.A : 39,370.75㎡ | Floors: 3F\_B1F | Design: 2009 | Architects: Mooyoung

Multipurpose indoor stadiums such as indoor sports centers and swimming pools are designed to enhance performance and ensure people's safety. To improve air circulation and thermal stratification, we applied a macro HVAC method and secured reliability by complying with fire extinguishing codes specific to the facilities' spatial characteristics.



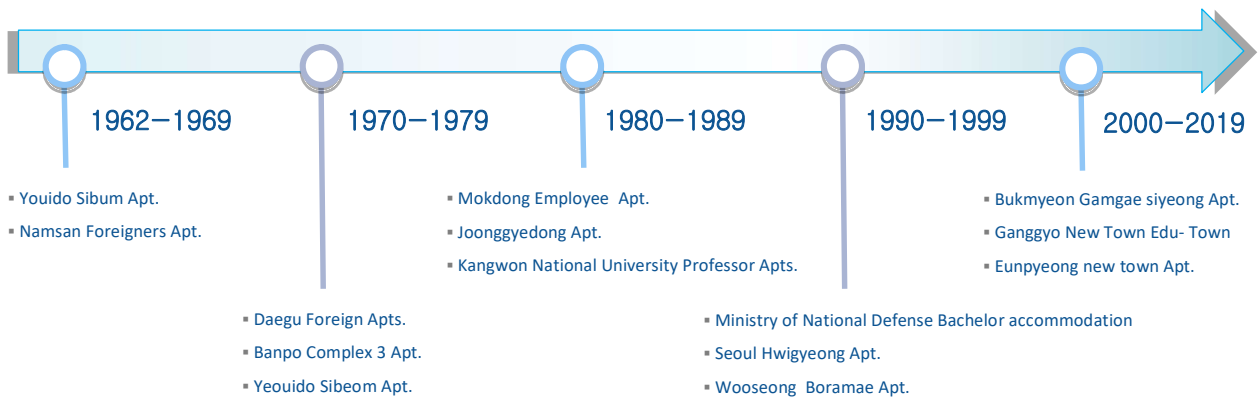
- Office
- Hotel and Resorts
- Retail
- Museum Exhibition
- Education
- Healthcare
- Sports Leisure**
- Residential
- Industrial Laboratory
- Datacenter
- BIM/ Overseas
- Energy Consulting
- Certification Consulting
- TAB, Commissioning



# Residential

Sahmshin has designed more than 130 apartment buildings and applied innovative ideas to improve the quality of life. We installed hood exhaust systems to solve the problem of discomfort caused by air intoxication from the kitchen, and with hybrid ventilation, we reduced pollution in the parking area. To create a comfortable thermal environment, we also installed temperature control for individual rooms and radiant floor heating for bathrooms.

Projects  
**+130**



## ▪ Gwang-gyo New City A-12B/L

Location: Gyeong-gi, Korea | G.F.A : 278,295.81㎡ | Floors: 35F\_B2F | Design: 2009 | Architects: Mooyoung

To create ecofriendly apartments that unite nature and education, we used renewable energy to reduce air-conditioning and heated water system energy, and to save water resources, we applied a state-of-the-art storm water recycling system. For residents, we installed bidets and aluminum thermal pads for heating efficiency and improved maintenance and convenience through automatic telemetering.

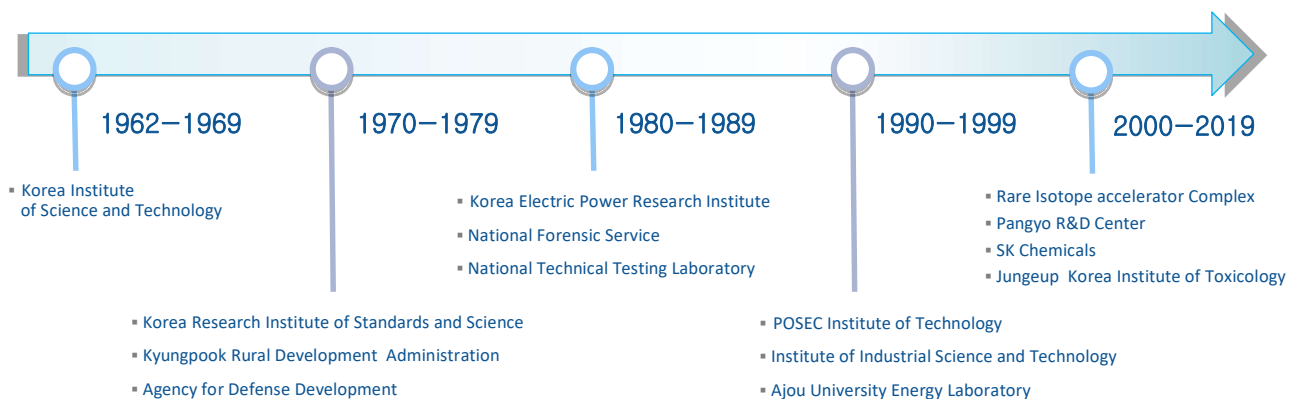


# Industrial, Laboratory

Sahmshin has designed approximately 90 research facilities, the key points for the design of which were as follows. To prevent cross-contamination, we applied pressure zoning according to clean class, separated air intake and exhaust, and used durable, corrosion-resistant equipment and material that can be used year-round. To provide the best research environment, we followed international guidelines such as AAALAG and GLP facility standards.

Projects

+90



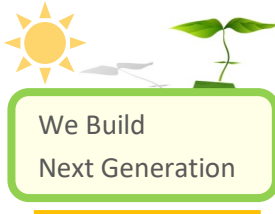
## ▪ Rare Isotope Accelerator Complex

Location : Daejeon, Korea | G.F.A : 130,144㎡ | Floors: 1F | Design : 2016 | Architects : Baum, Haeahn, Posco A&C, MAP

The heavy-ion accelerator is aiming to produce new rare isotopes by greatly accelerating and then colliding hydrogen ions (protons) or heavier ions into targets. This production also provides an opportunity to study and identify the characteristics of new rare isotopes. This facility intend to make RAON the first facility that combines two rare isotope production methods; Isotope Separation On-Line (ISOL) and In-flight Fragmentation (IF). For these purpose we design systematic and scientific hvac, plumbing, utility, and process system.





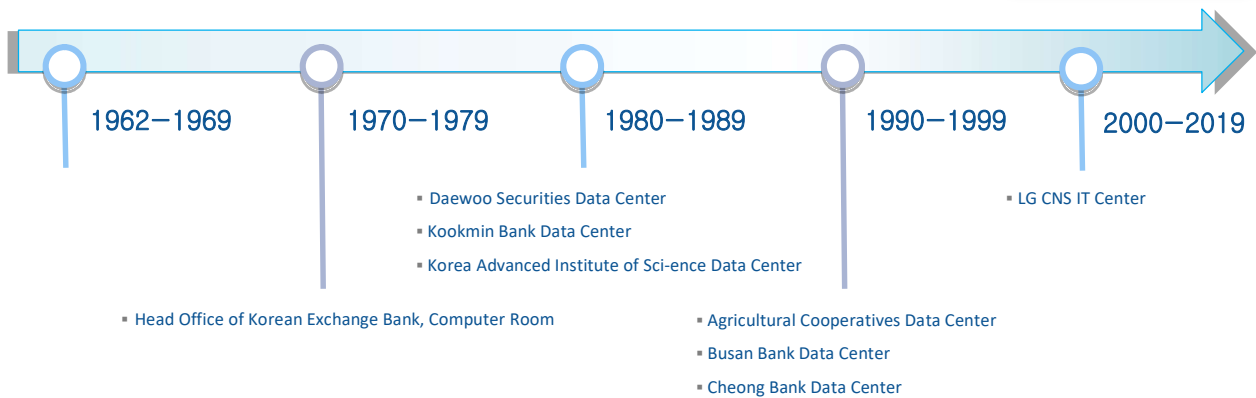


# Datacenter

Given the increased use of information technology, the energy consumption of datacenters has recently steadily risen. To meet demands for energy savings and sustainable technology in data centers, green technology is necessary. Sahmshin has designed more than 12 data centers with diverse energy-saving technologies such as economizers, variable flow control, and free cooling systems. We have also established an optimal environment of data centers via energy and CFD simulation.

Projects

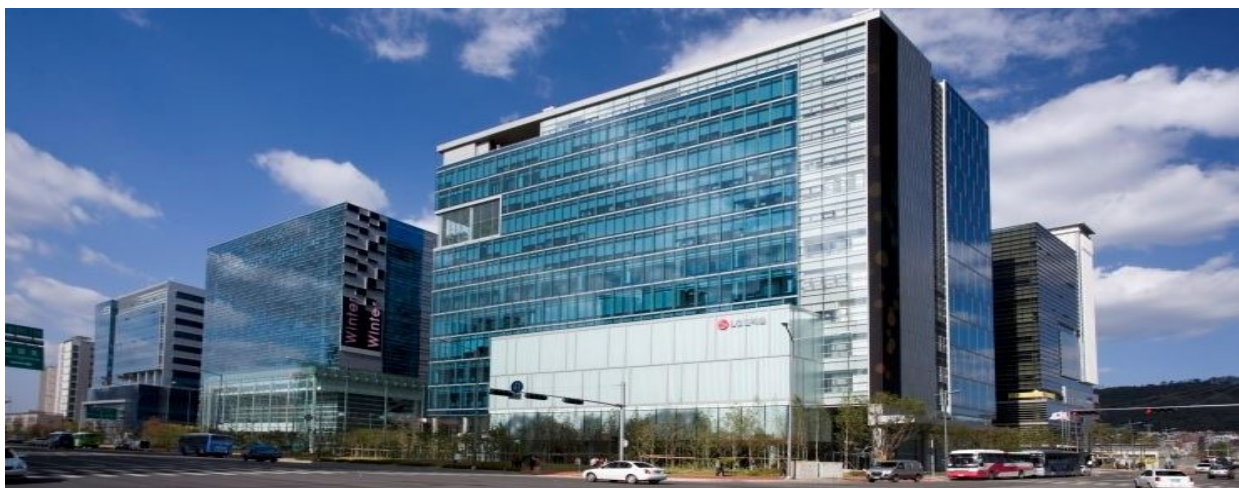
+10



## ▪ LG CNS IT Center

Location: Seoul, Korea | G.F.A: 44,200㎡ | Floors: 12F\_B4F | Design: 2004 | Architects: Changjo

By considering patterns of energy consumption at data centers, we have planned economizer cycles and free cooling systems and verified energy-saving consumption via energy simulation. To evaluate the aisle partition system's thermal performance in data centers for superior cooling efficiency, we have additionally performed modeling and simulated CFD.





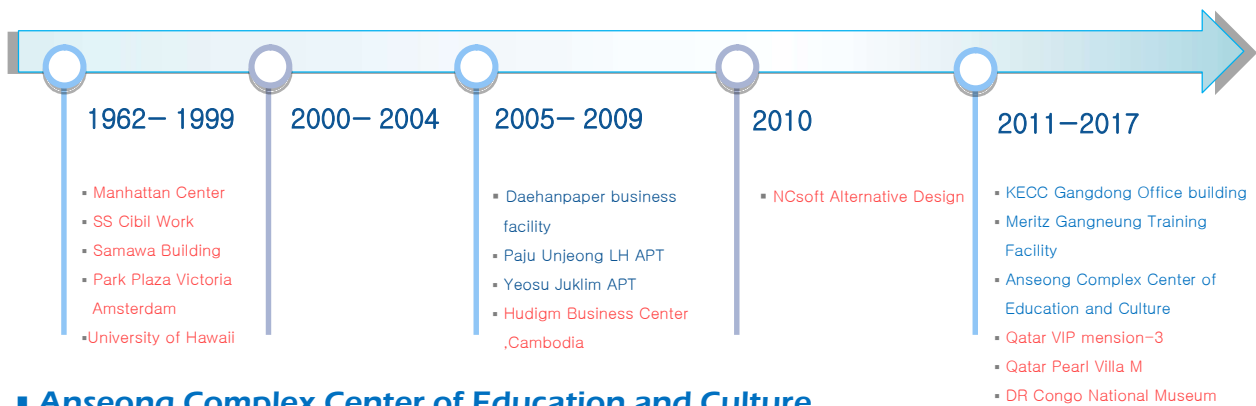
# BIM/Overseas

Building information modeling (BIM) is a technology that produces and manages all the information that occurs in various fields throughout the life cycle of the building from the initial conceptual design to the maintenance stage. BIM has emerged as an indispensable technology as the social trend increasingly prefers non-standard, large, and complex buildings. Samshin has been steadfast in its efforts to achieve the best performances of 13 designers since 2008. In line with this trend, Samshin has been steadfast in its efforts to achieve the best performance with its 13 design leaders since 2008.

Since its establishment in 1962, Samshin has led the design of South Korean machinery facilities and completed several distinguished projects overseas. Recently, given the decline of South Korean construction and the global economy, Samshin has prepared to undertake overseas projects and successfully completed projects, including the abovementioned.

## Projects

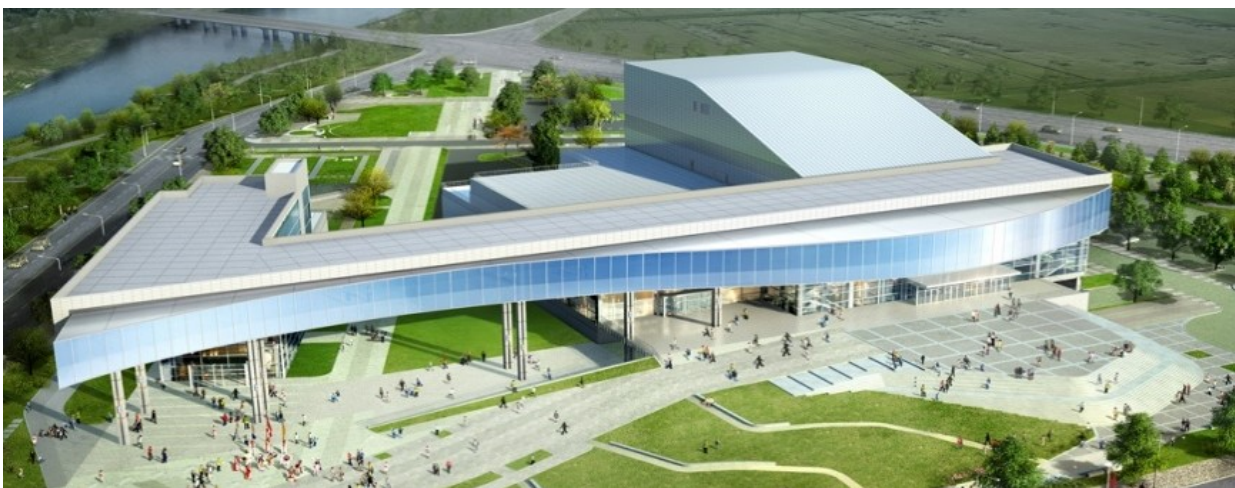
+ 10  
+ 15



## ■ Anseong Complex Center of Education and Culture

Location: Anseong, Korea | G.F.A: 6,053.33㎡ | Floors: 4F\_B1F | Design: 2014 | Architects : Samoo

The work was performed in four phases. In Phase 1, the model was completed with the collaboration of architecture and electricity units. In Phase 2, problems among each type of work were visually confirmed, and in Phase 3, as part of an interference check, facility spaces were completed via duct rerouting and level adjustments of piping. In the final phase, construction drawings for construction work were created, and BIM works were optimized and supplemented.







# BIM/Overseas

## 2014

- Anseong Educational & Cultural Complex

## 2013

- Meritz Gangneung Training Facility ->

## 2012

- Korea Engineering Consultants Company Building

## 2010

- NCsoft Alternative Design

## 2009

- Overall realization of BIM of West Incheon Post Office Building
- Paju Unjeong Apt Field Design
- Materialize BIM on Yeosu Juklim Apt

## 2008

- Materialize BIM on Daehanpaper Business Facility



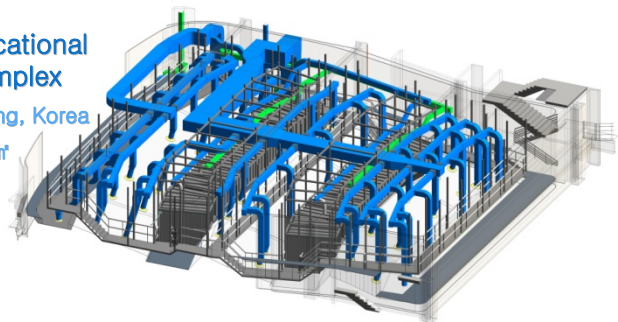
### Anseong Educational & Cultural Complex

Location : Anseong, Korea

G.F.A : 6,053.33㎡

Floors : 4F~B1F

Design : 2014



### KECC Gangdong

#### Office Building

Location : Seoul, Korea

G.F.A : 2,587.00㎡

Floors : 15F~B5F

Design : 2012



## 1979

- Manhattan opera house(USA)
- SSS civil works(SAUDIARABIA)

## 1984

- New international airport(SAUDIARABIA)
- Passport office building(SAUDIARABIA)
- Samawa building(IRAQ)
- Board guard housing(SAUDIARABIA)
- Victoria plaza complex building(URGUWAI)
- Riyadh general hospital(SAUDIARABIA)

## 1995

- 868 project(CHINA)
- 2020 plaza(CHINA)
- University of hawaii(USA)

## 2008

- hudigm business center(CAMBODIA)

## 2014

- 000 mansion(Qatar)
- 00 villa(Qatar)

## 2015

- Two project on Solomon Islands
- DR CONGO National Museum



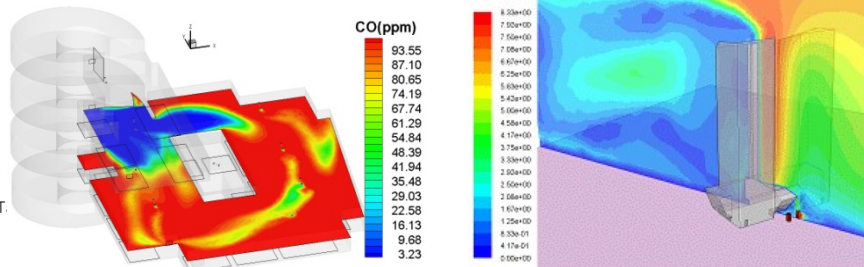


# Energy Consulting

## CFD Investigation and Analysis

+ 135

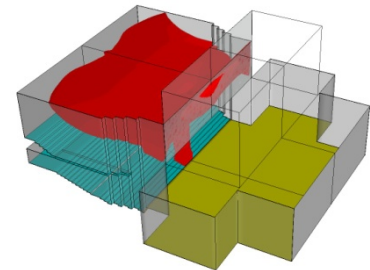
- Seogwipo Cruise Passenger Ship Terminal Technical Proposal
- Amorepacific Corporation Technical Proposal
- Gjseng Jet Air Turnover System
- Government Complex-Seoul, Gwacheon Reinforcement work
- Government Facilitese Building for the National T. Service to Relocate.
- LH New Head Office Design
- Simulation of Natural Ventilation of Coal Storage at
- ShinBoryeong Thermal Power Plant



## Fire Evacuation Investigation and Analysis

+ 60

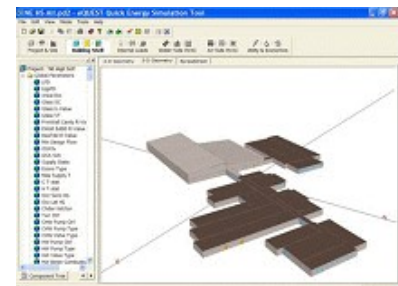
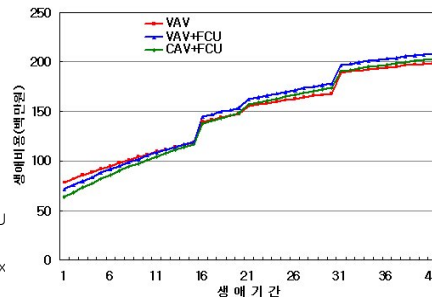
- Gwanggyo Edu-town 2nd Apartment
- Incheon Subway 201, 215 Complex
- Yeosu Expo Town 1, 2 block Apartment
- Paju Gyoha Disabled Facilities
- Cheongra Free Economic Zone, Incheon Metropolitan City 8 block
- Paju Munsan General welfare center
- Goyang - Stadium, Arena & Sports Venue



## LCC and Energy Analysis

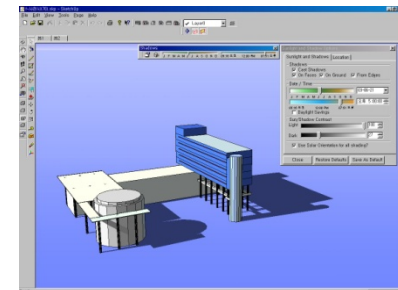
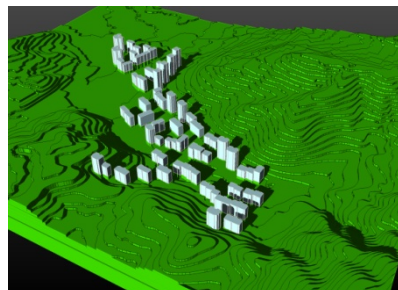
+ 120

- Amorepacific Corporation Technical Proposal
- Korea National Defense University 이전 TK
- Government Complex-Seoul, Gwacheon Reinforcement work TK
- War Game TK
- Ulsan National Institute of Science and Technology(U T) BTL
- Government Facilitese Building for the National Tax Service to Relocate.
- Changwon Gyeongsang National University Hospital TK



## Sun light and Sun Shadow Analysis. + 15

- Segok District Apt Construction Work
- Ulsan National Institute of Science and Technology(UNIST) New Construction BTL
- Osan Segyo District Two complex Apt
- Korea Electrical Safety Corporation(Gwangju Jeonnam Regional Headquarters)
- Eunpyeong Newtown One District



## Other Performance

- Green Remodeling Project Consulting / National Research Assignment(Development of Chilled Beam.) / External Research Service(Development of Cooling Tower.)

Office	Hotel and Resorts	Retail	Museum Exhibition	Education	Healthcare	Sports Leisure	Residential	Industrial Laboratory	Datacenter	BIM/ Overseas	Energy Consulting	Certification Consulting	TAB, Commissioning
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# Certification Consulting

## G-SEED

(Apartment Housing Performance Grading)

**+ 15**

- Segok District Housing 1~5 Complex
- Gyeonggi Educational Training Institute
- Gumi Girls' Middle School
- Sungui Arena Park
- Seoul Children's Museum
- Cheonho New town 2 District Urban Development
- Dobongsan Regional Intermodal Transit Center Construction Work
- Indong-dong Community Service Center



Gumi Indong-dong

Community Service Center

New construction

Location: Gumi Korea

G.F.A: 2,494.41 m<sup>2</sup>

Floors: 2F\_B1F

Design: 2013

Architects: Dusung

## The Building Energy Efficiency Rating

**+ 10**

- Segok District Housing 1~5 Complex
- Gyeonggi Educational Training Institute
- Gumi Girls' Middle School
- Sungui Arena Park
- Osan Segyo1 Complex Apartment Construction Work
- Korea Electrical Safety Corporation Gwangju Jeonnam
- Uijeongbu Millak 3 Complex B-5BL, B-6BL

## Construction standards for health-friendly housing

**+ 5**

- Cheonan-si Chaam-dong Number3 General Industrial Complex (E1-1BL, E1-2BL, E-1BL, E-2BL)
- Gumi-si Gongdan-dong Janghan Apartment New Construction
- Ulsan-si Ulju-gun Mangyang-ri Apartment Houses Building Program

## Crime Prevention Through Environmental Design

**(CPTED) + 1**

- Cheonho New town 2 District Urban Development Maintenance Business

## The Construction Criteria and Performance Appraisal of Green Homes.

**+ 10**

- Cheonan-si Chaam-dong Number3 General Industrial Complex
- Cheonho New town 2 District Urban Development Maintenance Business
- Sungui Arena Park
- Gumi-si Gongdan-dong Janghan New Construction
- Cheonan-si Seobuk-gu Dujong-dong Apartment New Construction
- Yongin-si Sanghyeon-dong Apartment New Construction
- Ulsan-si Ulju-gun Mangyang-ri Apartment Houses Building Program

## The Condensation Prevention Standards in Residential Buildings

**+ 2**

- Gumi-si Gongdan-dong Janghan Apartment New Construction
- Ulsan-si Ulju-gun Mangyang-ri Apartment Houses Building Program

## Green Building Guidelines

**+ 1**

- Cheonho New town 3 District Urban Development Maintenance Business

## Building Energy Simulation for Seoul (BESS)

**+ 1**

- Cheonho New town 2 District Urban Development Maintenance Business

## Barrier Free

**(BF) + 1**

- Cheonho New town 3 District Urban Development Maintenance Business



Dobongsan Regional Intermodal Transit

Location: Seoul, Korea

G.F.A: 16,597.22 m<sup>2</sup>

Floors: 4F\_B2F

Design: 2013

Architects: Namoa





# T.A.B / Commissioning

## ■ TAB + 88 / Commissioning + 2

Testing, adjusting, and balancing (TAB) assesses whether all environmental systems in the building perform as intended in the design, makes appropriate adjustments, balances the air and water distribution, adjusts the entire system to uphold design values, gauges the performance of each piece of equipment and automatic control, and measures noise and vibration.

The effects of TAB are:

- prevention of energy loss;
- highly efficient operation of equipment;
- efficient and systematic management of mechanical systems installed in buildings;
- extended life of equipment;
- prevention of problems during construction and installation
- possibility of evaluating the suitability of equipment selection.



**Yonsei University Health System ,Sinchon**

Seoul, Korea  
Medical Facilities  
11,191 m<sup>2</sup>



**Namseoul University Seongnam Culture & Sports Center**

Cheonan, Korea  
Physical Training Facilities  
20,034 m<sup>2</sup>

### 2016

- Osan Hospital
- S360 FED

### 2008

- Ospe ,Dongseon-dong
- Grand Department Store , Yeongtong
- Yonsei University Hospital ,Sinchon

### 2007

- KTF Daejeon Company Building
- Yeongdong Branch of Cheongju
- District Prosecutor's Office
- Yongin Sungbok Apartment

### 2006

- The Bank of Korea Chungbuk Branch

### 2005

- Hwasung Dongtan 3-6 Block
- Apartment
- Introducing Incheon Metropolitan City Museum
- Dong-A Pharmaceutical
- Sports Science Town of Konkuk University
- Korea Meditech Industry

### 2004

- Ewha Shinsegae Building Room
- Yonsei Advanced Science & Technology Center

### 2003

- Kookmin Bank : Call Center in Daejeon
- Bucheon-si Sang-dong Summit Ville APT Heating
- System Diagnosis and TAB
- Heyri Movie Studio TAB Services

### 2002

- Namseoul University Seongnam Culture & Sports Center
- Taeyoung Yongin Suji Desian APT
- Taeyoung Yongin Mabuk-ri Desian APT
- Daegu City Subway Line No. 2, Section 2
- Ohu replacement construction in new Building of The Bank of Korea
- Daegu Underground Shopping Center Remodeling Diagnosis

### 2001

- Severance New Hospitals , Sinchon
- Ssangyong Global Building
- Seoul High Court
- New Core Department Store , Bundang
- Hyundai Apartments in Daesang Town ,Banghak-dong
- The Bank of Korea Incheon Branch
- Samsung Life Company Building, Nampo Port
- KAL Training Institute
- Print Combination Building
- SKC Building
- Taihan Textile Yeouido Company Building

### 2000

- Hanwha General Insurance Company Building
- MBC Yeouido Company Building
- Busan National University Hospital
- The Bank of Korea Jeonju Branch
- Dongseo Securities Yeouido Company Building – Prime Minister's Secretariat Conservation Diagnosis
- Gwanjeo-dong Korea National Housing , Daejeon

### 1999

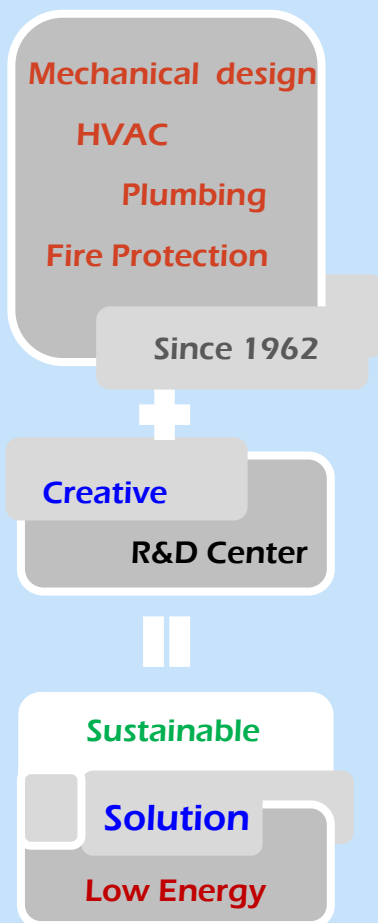
- Korea Stock Exchange
- Nonghyup Company Building
- Lotte Shoppin, Gangnam Branch
- Sejong Center for the Performing Arts
- Korea Electric Power Corporation Company Building
- local administration hall
- Yeungnam University Cesntal Library

### 1998

- The Maeil Shinmun Company Building

### 1986

- Daewoo Corporation



Company

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