



## 3) 인원구성

- ❖ 내진성능평가를 포함한 국,내외 다수의 프로젝트 경험을 가지고 있는 약 **20년차 경력의 대표이사**
- ❖ 내진성능평가를 포함한 다수의 프로젝트 경험을 가지고 있는 **10년차 이상의 특급 엔지니어** 보유
- ❖ 대규모 프로젝트 시 모설회사(주)CS구조엔지니어링)와 협업 진행가능, 다양한 엔지니어 Pool 구성
- ❖ 내진성능평가 및 일반구조설계 경험이 있는 초급 엔지니어 보유

## 4) 사용가능 프로그램 및 구조설계기준

- ❖ Design Software
  - MIDAS GEN, SDS, ADS, Design+ (탄성 및 비선형해석, 부재설계)
  - ETABS, SAFE (구조해석 및 부재설계)
  - Perform 3D (비선형해석)
  - BEST (부재설계)
  - AUTOCAD (Drawings)
- ❖ Design codes
  - 국내외 설계 기준으로 설계가능
  - International Building Code, 2020 (IBC 2020)
  - ASCE 7- 16 : American Society of Civil Engineers
  - ACI 318 : Building Code Requirements for Structural Concrete
  - Precast and Pre-stressed Concrete, PCI design handbook
  - EUROCODES

## 02. 대표 주요 이력



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구조설계 / 특수 구조설계/ 성능기반설계 전문



RYU, HYUN HEE

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### QUALIFICATION

1998 Certificate in Engineer Architect (Structural Engineering)

2013 Certificate in Professional Engineer (Professional Engineer Architectural Structures)

### EDUCATION

1999 Bachelor's degree in Architecture (Ewha Womens University, Seoul, S. Korea / Structural Engineering)

2001 Master's degree in Structural Engineering (Ewha Womens University, Seoul, S. Korea)

### PAPERS PUBLISHED IN PROFESSIONAL AND SCHOLARLY JOURNALS

Structural health monitoring during construction in Philippine Arena (IASS, Amsterdam, 2015. 08)

Structural Engineering of W-Project in Busan Yonghoman (CTBUH, Shanghai, 2014. 09)

Structural Design and construction of South-Western Dome Baseball Stadium (KSEA, 2015. 03)

Seismic Design for Spatial Structure in High Seismicity Regions Based on the Structural Design of Philippine Arena (KSSC, 2012.06)

Structural Design of Philippine Arena (IASS-APCS, Seoul, 2012. 05)

Structure Design of Spatial Structure Based on Philippine Arena (KASS, 2014.09)

Joint method considered shortening effects on Belt-wall (CTBUH, 2012.01)

Structural Behavior of RC Beams with increasing cross-sectional modified epoxy mortar (KCI, 1999.06)

### PROFESSIONAL SOCIETIES

Korean Structural Engineers Association (KSEA)

Korea Concrete Institute (KCI)

Korea Steel Society Construction (KSSC)

Architectural Institute of Korea (AIK)

Council on Tall Buildings and Urban Habitat, Korea (CTBUH Korea)



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구조설계 / 특수 구조설계/ 성능기반설계 전문



### Total Engineering

#### PROJECT INVOLVED



##### Paradise City, 2016

Work Scope : Structural Design  
Location : Jung-gu, Incheon, Korea  
Occupancy : Hotel, Casino, SPA, Commercial  
Size : 295,530㎡ Hotel(B2F~10F),  
Commercial(B1F~8F), SPA(B2F~3F) B3F~10F  
Structure System : RC + Steel Frame  
Client : Paradise Group



##### Bismayah New City Project, 2012

Location : Iraq  
The Iraq government invested to a new construction project which is containing more than 100,000 households, and, now this project is on going.



##### Structural Health Monitoring for Lotte Super Tower, 2012

Location : Seoul, Korea  
We have performed the schematic design of SHM for the highest building in Korea. We evaluate the structural behavior through the non-linear and pushover analysis.



##### Bismayah New-City Project – School, 2013

Work Scope : Structural Design, 3D Structural Drawing  
Location : Bismayah, Iraq  
Occupancy : School  
Size : 823,738㎡, 3F  
Structure System : PC Shear Wall System (Hollow Core Slab, PC Wall)  
Client : Haeahn Architecture + Hanwha Enc.



##### Jaan Exordium Apartment, 2005

Location : Ulsan, Korea  
50 story wall type apartment on the super frame with 3.0m depth transfer plate has designed in middle seismic zone.  
The design of transfer column is applied the over strength factor so that the mega column's condition should still remain on the elastic after the seismic event.



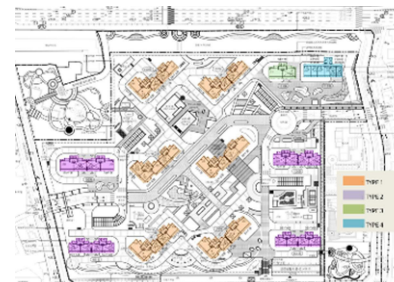
##### HP BUILDING RENOVATION – Seismic Performance Evaluation, 2019

Work Scope : Seismic Performance Evaluation  
Analysis Program : Midas Gen, Perform 3D  
Location : Seoul, Korea  
Size : 43,725m<sup>2</sup>, B7F / 23F (Height : 119.4m)  
Lateral Resistance System : Moment-Resisting Frame System + Brace  
Client : KEBHANA BANK Inc.



##### Madinah Haji Hotel, 2016

Work Scope : Review & Structural Design of VE Items based on “The Alternative Proposal”  
Location : Madinah, Saudi Arabia  
Occupancy : Hotel  
Size : 349,335m<sup>2</sup>, B2/20F (Total 5 Buildings)  
Structure System : RC Core Wall \_ RC Column + Perimeter Girder  
Client : PESCA (POSCO E&C Saudi Arabia).



##### Hyo-Seong Housing Redevelopment Projects, 2018

Work Scope : Performance Based Design  
Analysis Program : Perform 3D  
Location : Incheon, Korea  
Occupancy : Residential  
Size : 214,726m<sup>2</sup>, B2F/33F – 12 Buildings (Maximum Height : 93.15m)  
Lateral Resistance System : Bearing Wall System – Ordinary reinforced concrete shear walls



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**Total Engineering**

### PROJECT INVOLVED



#### Incheon International Airport Terminal 2, 2014

Location : Incheon, Korea

Technical proposal including value engineering and structural design have done for the terminal 2 in 2014.

That project prepares for the 2018 Pyeongchang Olympics opening under construction.



#### Millenium centum, 2013

Location : Busan, Korea

Reinforced concrete tubular system is designed for 42 stories office. It is very slender, so we apply the specific structural system in this building.



#### Philippine Arena, 2011

Location : Bocaue, Philippine

Philippine Arena is one of the biggest arena domes in the world. We proceed the whole structural design through the value engineering. After then, we also perform the Erection Engineering.

The construction have finished in 2014.



#### HMC global business center, 2010

Location : Seoul, Korea

The structural design had developed with Arup New-york office from 2010 to 2011. The gross area of this building is more than 358,000 m<sup>2</sup> of office high rises of up to 110 stories.



#### South-western Dome, 2010

Location : Seoul, Korea

The indoor baseball stadium with 218 m X 190m steel structure roof has designed through the value engineering in 2009~2012.

The architectural design is still revised according to the change of commercial revenue and construction situation.



#### Bucheon Kumho Richensia, 2008

Location : Bucheon, Korea

The structural design and supervision for column shortening are performed. We analyze the each story using the program. We estimate the differential shortening due to concrete material, and the slab rebar are strengthened by result.



#### Yonghoman Mixed use buildings (W-project), 2014

Location : Busan, Korea

All the four residential towers have 67 stories adopting reinforced concrete core wall, outrigger wall and belt wall system. They are designed as mixed use buildings of 490,000m<sup>2</sup> in 2011 and 2012.



#### Galleria Foret , 2007

Location : Seoul, Korea

Structural design and construction supervision were completed two tower of residential with 170,000m<sup>2</sup> and 45 stories apartment in 2008 and 2009.