



COMPLETED PROJECT



UNDER CONSTRUCTION PROJECT



NEW PROJECT



ECT. ACTIVITIES & ARTICLE





**LAKE LEGEND**  
BANGNA - SUVARNABHUMI



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**BANGNA - SUVARNABHUMI**

NEW PROJECT



## NEW PROJECT

### LAKE LEGEND BANGNA - SUVARNABHUMI

**Location:** @King Kaew Road, Bangkok, Thailand  
**Owner:** Property Perfect Public Co., Ltd. & Hongkong Land  
**Project Summary:**  
 4 Types, 3-Storey super luxury house.  
 Total 127 units. Land area 83-0-60.2 rai.

#### WAG Responsibilities:

- Mechanical, Electrical and Plumbing System Design.
- Civil and Structural Design
- Project / Construction Management

Architect : DB Studio Co., Ltd.  
 Photo credit : <https://www.pf.co.th/th/project/single-house/lake-legend/bangna-suvarnabhumi>

#### PROJECT INFORMATION

A Super Luxury Residence Like No Other

Inspired by the modern lakeside villas of Italy, Lake Legend Bangna-Suvarnabhumi offers a series of private homes, ranging from two-storied to three-storied residences. Putting simplicity, comfort, and elegance at the forefront, each of these exclusive, spacious homes are nestled amidst serene surrounds, while natural elements and a refreshingly sleek aesthetic gives each residence an irresistible sense of la dolce vita.





SOONTHAREEYA

RATCHADAMRI



# SOONTHAREEYA RATCHADAMRI

NEW PROJECT



## NEW PROJECT

### SOONTHAREEYA RATCHADAMRI

**Location:** @Ratchadamri Road, Bangkok, Thailand

**Owner:** Areeya Property Public Co., Ltd.

**Project Summary:**

A 57-Storey High-rise condominium building with underground carpark. Total 542 units. Construction area of 73,285 sq.m.

**WAG Responsibilities:**

- Project/Construction Management

Architect : Palmer & Turner (Thailand) Ltd.

Photo credit : [www.areeya.co.th/landing-soonthareeya/](http://www.areeya.co.th/landing-soonthareeya/)

**PROJECT INFORMATION**

Life's refined/Aesthetic arises/Through the eye of the beholder.

Soonthareeya Ratchadamri the utmost of aesthetic living

You have come home at last.

Soonthareeya Ratchadamri is where it feels like the end finally meets the beginning. the future is rising on the last prestigious piece of land in ratchadamri, where life's indulgent experiences are truly appreciated.



*Reference*  
SATHORN - WONGWIANYAI



**REFERENCE  
SATHORN – WONGWIANYAI**

**NEW PROJECT**



## NEW PROJECT

### REFERENCE SATHORN - WONGWIANYAI

**Location:** @Krunghthonburi Road, Bangkok, Thailand  
**Owner:** SC Asset Corporation Public Co., Ltd.

**Project Summary:**  
 2 High-rise condominium with 815 units in total.  
 Building A: 32 storeys  
 Building B: 51 storeys  
 Construction area is estimated at 55,000 sq.m.

**WAG Responsibilities:**  
 - Mechanical, Electrical and Plumbing System Design.

Architect : I'll Design Studio Co., Ltd.  
 Photo credit : [www.scasset.com/th/condominium/reference-sathorn-wongwianyai](http://www.scasset.com/th/condominium/reference-sathorn-wongwianyai)

#### PROJECT INFORMATION

Reference Sathorn Wongwianyai as inspiration References are the foundational support that sparks imagination to life.

With its distinctive design concept and user-friendly experience customised for the lifestyle of the modern generation

Reference Sathorn Wongwianyai is your reference to unblock inspiration.





INTERCONTINENTAL®  
CHIANG MAI MAE PING



**INTERCONTINENTAL  
CHIANG MAI MAE PING**

NEW PROJECT





## UNDER CONSTRUCTION PROJECT

### INTERCONTINENTAL CHIANG MAI MAE PING

**Location:** @Chiang Mai, Thailand

**Owner:** Asset World Corp Public Co., Ltd.

**Project Summary:**

The Renovation 15-Storeys, 1 building and 4 storeys, 1 building. Total 305 units.

**WAG Responsibilities:**

- Mechanical, Electrical and Plumbing System Design.
- Civil and Structural Design

Architect : Architects 49 Ltd.  
Photo credit : Asset World Corp Public Co., Ltd.

**PROJECT INFORMATION**

The first sneak peak to the sense of arrival to our hotel inspired by “Kampang Vieng” or “The wall of Chiang Mai”

InterContinental Chiang Mai Mae Ping Hotel, concept of “Living Museum” is weaving around the rich culture and the proud heritage of Chiang Mai with the meticulous thought on vernacular design allowing our guests to immerse into Chiang Mai’s culture in the true luxury style.



**ONE BANGKOK**  
Evolving Bangkok



**ONE BANGKOK**  
UNDER CONSTRUCTION PROJECT



# UNDER CONSTRUCTION PROJECT

## ONE BANGKOK

**Location:** @Rama IV Road, Bangkok, Thailand  
**Owner:** Kasemsubvadhana Co., Ltd.

**Project Summary:** Land area of 104 rai. (166,400 sq.m.)  
 Gross floor area (GFA): 1.83 Million sq.m. will consist of:

- 5 Premium Grade A office towers
- 4 Distinct yet interconnected retail precincts
- 3 Luxury high-rise residential towers
- 5 Luxury and lifestyle hotels

### WAG Responsibilities:

- Mechanical, Electrical and Plumbing System Design.

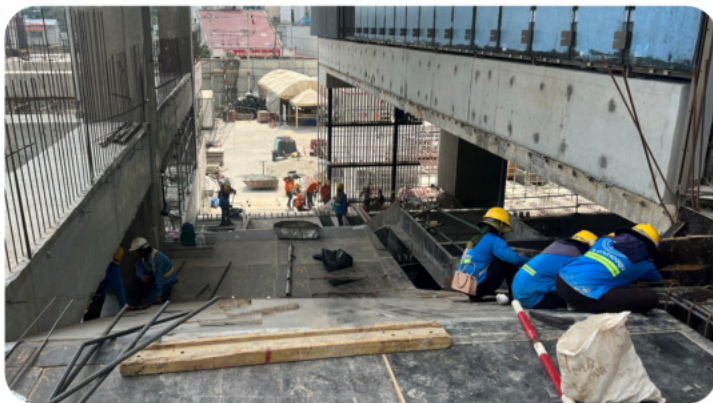
Architect : Skidmore, Owings & Merrill (SOM) / A49 / Plan Associates  
 Photo credit : Italian-Thai Development Public Co., Ltd.

### PROJECT INFORMATION

The value of the past is a blessing to be amplified, and One Bangkok takes inspiration from the design of the Rattanakosin city plan - a vital residential and commercial region equipped with all the necessary elements for urban living.

By incorporating the cumulative value of Bangkok's architecture and interior design, One Bangkok pays homage to the city's unique and authentic identity, creating a space that is both exclusive and genuine.

All buildings and landscape within the district is targeting LEED Neighbourhood Development Platinum certification - the first in Thailand - with several buildings also targeting WELL Platinum certification.



# CENTRAL CHANTHABURI



## CENTRAL CHANTHABURI

COMPLETED PROJECT



## COMPLETED PROJECT CENTRAL CHANTHABURI

**Location:** @Chanthaburi, Thailand

**Owner:** Central Pattana Public Co., Ltd.

**Project Summary:**

Shopping complexes comprise of retail spaces, anchors, cinemas, F&B and etc. Total project area is 75,953 sq.m.

**WAG Responsibilities:**

- Civil and Structural Design

Architect : M.A.A.R. Co., Ltd.

Photo credit : <https://www.thaipolycons.co.th/portfolio/เช็คน้้า-น้ำนุ้ส/>  
<https://art4d.com/2022/07/central-chanthaburi>  
<http://www.ma-ar.com/>

**PROJECT INFORMATION**

Design concept is realized from the study of chanthaburi’s surrounding context, expressing natural diversity and different local ways of life through contemporary thai architecture which held under the concept “ Charming Chanthaburi ”

The design opens the functional space to welcome natural wind and light, intertwining parts of the architecture to the surrounding nature with tales and stories of the local ways of life reflected in the lines, curvatures and patterns of the interior spaces and architectural structure.



**THE  
RESERVE**  
61 HIDEAWAY



**THE RESERVE 61 HIDEAWAY**

COMPLETED PROJECT



## COMPLETED PROJECT

### THE RESERVE SUKHUMVIT 61 HIDEAWAY

**Location:** @Sukhumvit 61, Bangkok, Thailand

**Owner:** Pruksa Real Estate Public Co., Ltd.

**Project Summary:**

Two, 7-Storey Low-rise condominium buildings with 155 units.

Building A: 78 units, Building B: 77 units

Site area of 3-2-60 rais.

**WAG Responsibilities:**

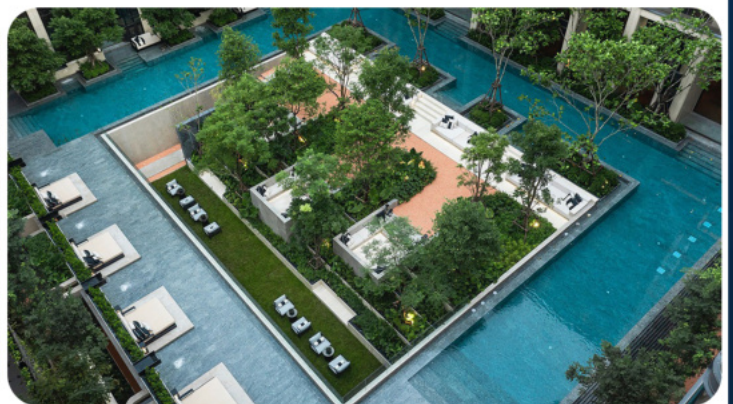
- Quantity Surveying Service

Architect : I'll Design Studio Co., Ltd.

Photo credit : [www.pruksa.com/thereserve/61-hideaway](http://www.pruksa.com/thereserve/61-hideaway)

#### PROJECT INFORMATION

Designed with 'Your own private residential sanctuary' concept, The Reserve 61 Hideaway outperforms all others in its class. The 'Nestling in nature' architecture concept, awe-inspiring interior décor, grand relaxing mood and tone, top-notch facilities, glittering infinity pool, and magnificent urban landscape all co-exist flawlessly in an unexpected.



# ACTIVITIES

Happy New Year 2023 | 06-01-2023





# ACTIVITIES

Getting good things to increase love and unity and Happiness in life with company Merit-making Ceremony 2023



On Thursday, February 27, 2023 'W. AND ASSOCIATES group' organized the annual company Merit-making ceremony at W. AND ASSOCIATES office with good activities that all Buddhists employees pay homage to the sacred, including bringing dehydrated food and the 4 necessities of a Buddhist come to offer food to 9 monks. This activity has monks praising the Buddha's mantra and sprinkling holy water, embracing the auspiciousness into life, as well as increasing love and unity and feeling satisfied when sharing precious moments.

# DOMES STRUCTURE



## INTRODUCTION

Domes have been called "The kings of all roofs," due to their ability to provide a vast amount of space without the use of a single column. They have been an integral part of construction since ancient times. Despite their thinness, domes are among the strongest and stiffest structures in existence today.

At the beginning almost all ancient buildings had roofs supported by forests of columns to prevent the heavy roofs from collapsing, but it left very little open interior space.



*Columns and roof: Parthenon, Athens, Greece*

Forest columns reached their limitation when the required spacing was increased. Soon thereafter, around 100 A.D., Roman engineers began experimenting with arches and discovered that rotating an arch in a circle produced a strong three-dimensional shape known as dome. The dome offers unprecedented structures for covering areas with minimal internal support interference. Their geometrical form, self-supporting nature, and rigidity have allowed domes to be used in both ancient and modern architectural and structural works.

## THE EARLY HISTORY OF DOMES

The earliest domes were construction from stone or brick. Therefore, they were so heavy. To reduce the weight, engineers carved intricate shapes, called coffers, along the walls as can be found in the Pantheon dome. In addition, they drilled a hole, known as an oculus, at the top of the structure to enable sunlight to enter the interior space.



*The dome of Pantheon, Rome, Italy*

By 532 A.D., ancient engineers realized that they could lighten their domes by scooping out the spaces between the arches. This design allowed sunlight to pour into the dome without weakening the structure. The Mihrimah Mosque, built in 1555 by the great architect, Sinan, is pierced with 161 windows.

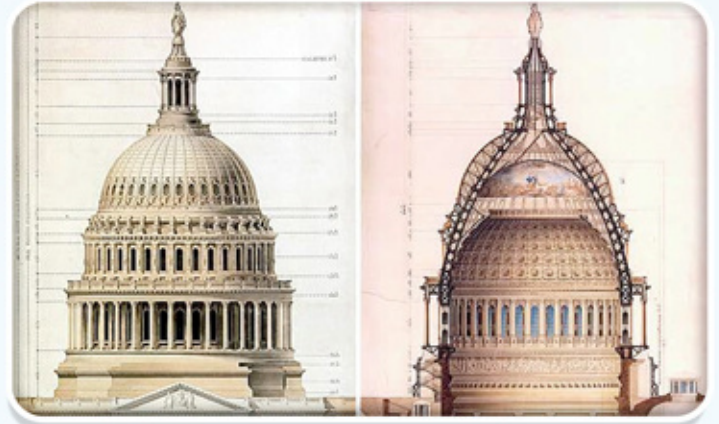


*The dome of Mihrimah mosque, Istanbul, Turkey*

In order to prevent the dome of St. Peter's Basilica from collapsing at the beginning of the 18th century, Vatican engineers secured a number of iron rings, known as tension rings, to its perimeter. Fortunately, their quick fix has endured the test of time.

By the early 1400s, Roman engineers began building two domes in one to create the illusion of even greater height. The U.S. Capitol dome, built in 1793, gets its height from this engineering sleight of hand. The large outer dome is a thin shell, held up by a ring of curved iron ribs. Underneath it all is a smaller, self-supporting dome, visible only from the inside.

The U.S. Capitol dome is also one of the earliest domes made of pre-fabricated cast-iron ribs. The switch from heavy masonry to lightweight metal ribs in the late 18th century greatly reduced the weight of domes being built around the world.

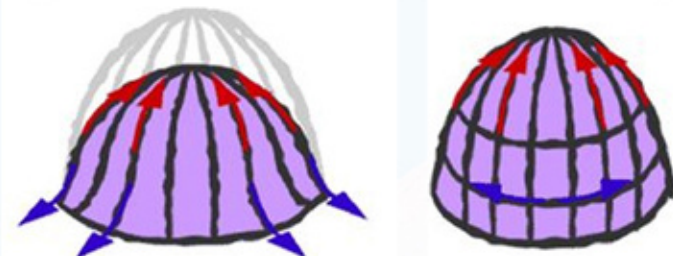


*Cross-section drawing of the dome of U.S. Capitol, Washington D.C., USA*



## MODERN DOMES

In the 1950s, the geodesic dome was invented by American engineer and architect Buckminster Fuller. This invention changed the way engineers looked at domes for the first time in 2,000 years. The geodesic dome is a space type of structure that looks like a section of a ball or sphere. This instrument is made of a grid of triangles, rather than a series of arches, that eventually form a spherical surface. Today, geodesic domes come in an almost endless variety of shapes and styles.



*Iron rings tied around the dome of St. Peter's Basilica, Vatican City*



*Geodesic dome, EPCOT Center in Orlando, Florida, USA*

A new generation of domes equipped with retractable roofs which is designed to roll back the roof of a structure so that the interior of the facility is open to the outdoor. Retractable roofs, like the Toronto SkyDome, has become a popular choice for sports stadiums around the world.



***Retractable domed roof of Toronto Skydome, Toronto, Canada***

***Source:*** BUILDING BIG: Dome Challenge Basics (pbs.org)

T H A N K   Y O U



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