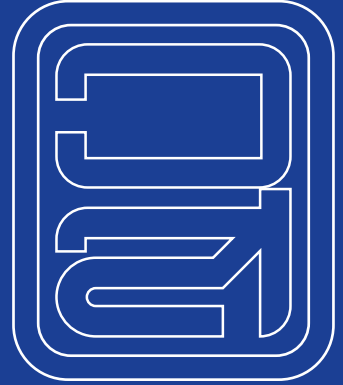


MECHANICAL ENGINEERING  
ELECTRICAL ENGINEERING  
ENERGY CONSERVATION  
STRUCTURAL ENGINEERING



## INTRODUCTION

W. AND ASSOCIATES's group activities started in early 1965. Group activities were focusing on M&E engineering design services. In 1973, W. AND ASSOCIATES ROP. was then established to be consulting firm specializing in Mechanical, Plumbing, Sanitary, Electrical and Telecommunication .

During Thailand's booming economy, W. AND ASSOCIATES Consultants Co., Ltd. and W. AND ASSOCIATES Designs Co., Ltd. were established to cope with the fast-expanding real estate business. W. AND ASSOCIATES engineers had under taken responsibility of numerous projects for various engineering services, both design and construction supervision. Engineering services include electrical power, lighting, fire alarm system, security system, sound system, telephone system, telecommunication system, building automation system, air-conditioning system, ventilation system, smoke control system, vertical transportation, plumbing system, sanitary system, waste treatment system, computer site support system and other related systems for several major buildings and factories in Thailand.

Moreover, in 1996, W. AND ASSOCIATES has been one of companies approved by Department of Energy Development and Promotion (D.E.D.P.) for being registered as a consultant company in energy conservation program initiated by D.E.D.P. W. AND ASSOCIATES, as a registered consultant company, will be auditing the designated buildings and factories, which cover thousands buildings nationwide, to improve building's energy

In 2012 the group has begun the service in Civil/Structural Engineering discipline with all engineering disciplines included in one umbrella, the group now is focusing on providing one-stop, all-in-one engineering service for the client.

## MESSAGE FROM PARTNERS

Our company is one of the earliest Thai owned consulting firms specializing in Building System (1965) / Civil and Structural Engineering Designs (2012). From the beginning, our company's philosophy has always been ethical practices with good and practical engineering designs. Our design principles for all of our projects are functionally advanced and economical designs meeting the present and future requirements of our clients, energy saving, ease of operation and maintenance. We will do our utmost to offer the designs which best serve our clients.

## BOARD OF DIRECTORS



**WICHAI LAKSANAKORN**  
Chairman / Co-Founder



**WITHU RUKSVANICHPONG**  
Co-Founder



**CHOKEWICHIT LAKSANAKORN**  
Managing Director

## ENGINEERING SERVICES

### CIVIL AND STRUCTURAL DESIGN

- 1.1 Structural work
- 1.2 Civil and Infrastructure work
- 1.3 Earthwork
- 1.4 Site Drainage
- 1.5 Investigation of Structural Integrity
- 1.6 Non-Destructive Structural Test

### MEP DESIGN

- 2.1 ELECTRICAL SYSTEMS
  - 2.1.1 Power
  - 2.1.2 Lighting
  - 2.1.3 Grounding
  - 2.1.4 Emergency Power
- 2.2 TELECOMMUNICATION SYSTEM
  - 2.2.1 Premise Distribution System
  - 2.2.2 PABX
  - 2.2.3 Telephone Wiring System
  - 2.2.4 High Speed Data Cabling System

### 2.3 FIRE ALARM SYSTEM

- 2.4 SECURITY SYSTEM
  - 2.4.1 Closed Circuit Television (CCTV )
  - 2.4.2 Access Control
  - 2.4.3 Burglar Alarm

### 2.5 AUDIO-VISUAL SYSTEM

- 2.5.1 Master Antenna Television system (MATV)

### 2.6 VERTICAL TRANSPORTATION SYSTEM

- 2.6.1 Elevators
- 2.6.2 Escalators

### 2.7 BUILDING AUTOMATION SYSTEM (BAS)

- 2.7.1 Energy Management
- 2.7.2 Comfort Control
- 2.7.3 Maintenance Management

### 2.8 SANITARY SYSTEM

- 2.8.1 Waste Water Treatment
- 2.8.2 Soil, Waste, Vent piping System
- 2.8.3 Site Drainage System

### 2.9 AIR CONDITIONING AND VENTILATING SYSTEMS

- 2.9.1 Exhaust and Ventilating System
- 2.9.2 Air-Conditioning System
- 2.9.3 Smoke Control System
- 2.9.4 Clean room System
- 2.9.5 Thermal Storage

### 2.10 PLUMBING SYSTEMS

- 2.10.1 Cold Water Distribution System
- 2.10.2 Hot Water Distribution System
- 2.10.3 Boiler Plant
- 2.10.4 Fire Extinguishing System
- 2.10.5 Sprinkler System
- 2.10.6 LPG Gas Piping System
- 2.10.7 Swimming Pool

### PROJECT / CONSTRUCTION MANAGEMENT

- 3.1 Project / Construction Management
- 3.2 Site Supervision

### OTHER SERVICES

- 4.1 ENERGY CONSERVATION
  - 4.1.1 Auditing Designated Buildings and Factories as a Registered Consultant to Department of Energy Development and Promotion
    - Registration Number (Building Category) : 12
    - Registration Number (Factory Category) : 45
  - 4.1.2 Energy Consumption Surveys in Building
- 4.2 VALUE APPRAISAL AND DUE DILIGENCE SERVICE



# PROFESSIONAL RECORDS

## HOTEL / RESORT

- 1.1 Banyan Tree Resort and Spa, Samui
- 1.2 W. Retreat and Residences, Samui
- 1.3 InterContinental Hua Hin
- 1.4 S31 Hotel
- 1.5 Mandarin Oriental Bangkok (the renovation)
- 1.6 Le Meridien Bangkok, Surawong
- 1.7 The Ambassador hotel (the renovation)
- 1.8 Holiday Inn Regent Beach Cha-Am
- 1.9 Holiday Inn Pattaya
- 1.10 Sheraton Grande Lagoon, Hua Hin
- 1.11 Hotel Plaza Athenes
- 1.12 Grand Hyatt Erawan Hotel
- 1.13 Westin Grande Sukhumvit (Renovation)
- 1.14 J.W. Marriott Hotel
- 1.15 Baiyoke 2 Sky Hotel
- 1.16 Swissotel (Le Concorde Complex)
- 1.17 Bangkok Peninsula Hotel (Now : Four Seasons Hotel)
- 1.18 The Fisherman's Village
- 1.19 Choengmorn Resort, Samui
- 1.20 Metropole Hotel, Phuket
- 1.21 Dusit Resort Hotel & Polo Club, Cha-Am
- 1.22 Chiangmai Holiday Inn (Green Hill) Hotel
- 1.23 Twin Lotus Hotel, Nakorn Srithamarat
- 1.24 Kempinski Hotel
- 1.25 Movenpic Hotel
- 1.26 Siam City Hotel
- 1.27 Swiss Garden Hotel
- 1.28 Bangkok Twin Tower Hotel
- 1.29 Bann Boran Chiangrai Hotel
- 1.30 Laguna Beach Club Resort
- 1.31 Siam Ballroom Phase 2 (Siam Intercontinental Hotel)
- 1.32 Royal Chiang Mai Hotel And Golf Club
- 1.33 Independence Hotel, Kampongsm, Cambodia (Renovation)
- 1.34 Little Duck Hotel, Chiangrai

## OFFICES

- 2.1 Thanaphoom Tower
- 2.2 The Elephant Building, Ratchayothin
- 2.3 United Center Tower
- 2.4 Siripinyo Building
- 2.5 S.S.P. Building 3
- 2.6 C.T.I. Tower
- 2.7 Maleenon Tower, Rama IV (including production house of channel 3 television)
- 2.8 Le Concorde Office Tower
- 2.9 Wall Street Tower
- 2.10 Srijuksup Tower
- 2.11 Beauty Gems Tower
- 2.12 Ural Building
- 2.13 Silpathai Building
- 2.14 The Nation Tower I, II
- 2.15 Thai Life Insurance Building, Rattanaibet
- 2.16 Muang Thong Thani Project (Villa Office)
- 2.17 The Malaysian Embassy
- 2.18 The Privy Council Office

## CORPORATE OFFICES

- 3.1 Stock Exchange of Thailand (New Headquarters)
- 3.2 Thai Airways International Building, Head Office
- 3.3 Bank of Asia Head Office, Robot Building
- 3.4 Siam Commercial Bank (S.C.B.), Chidlom Office
- 3.5 Siam Commercial Bank (S.C.B.), Phase III, Ratchayothin
- 3.6 Shell Building, Head Office
- 3.7 Lean Tower, Thai Airways International
- 3.8 Samaggi Insurance Tower
- 3.9 Krung Thai Bank, Head Office
- 3.10 I.F.C.T. Buildings
- 3.11 ESSO Building

## COMPLEXES

- 4.1 Jewelry Trade Center
- 4.2 Silom Complex
- 4.3 Royal Charoenkrung Tower
- 4.4 Central City Bangna ( East Tower )
- 4.5 Ploenchit Center
- 4.6 Siam Commercial Complex (S.C.B.) Phase III
- 4.7 Amarin Plaza
- 4.8 Gems Tower
- 4.9 Laksi Plaza
- 4.10 Le Concorde Complex
- 4.11 Jomthien Complex
- 4.12 Bang-Rak Plaza
- 4.13 Palm Square, Phuket

## GOVERNMENT

- 5.1 The Parliament Building, the office
- 5.2 Bank Note Printing Plant, Bank of Thailand
- 5.3 The Ministry Of Foreign Affairs Office, Jaengwattana
- 5.4 Metropolitan Electricity Authority office ( MEA ), Laksi
- 5.5 The United Nation Tower
- 5.6 Ministry of Finance Office, Rama VI
- 5.7 The United Nations, Economic and Social Commission for Asia and the Pacific (UN-ESCAP), the renovation
  - 5.7.1 Vertical Transportation
  - 5.7.2 HVAC upgrading system

## RESIDENTIAL

- 6.1 Villa Asoke
- 6.2 Intro by RASA
- 6.3 Villa Rachatewi
- 6.4 The FAH
- 6.5 The Regent Bangkok
- 6.6 The SAIL Residences, Pattaya
- 6.7 Royal Charoenkrung Tower
- 6.8 Sky Beach
- 6.9 Silom Palace
- 6.10 Silver Beach
- 6.11 Lumpini Park View
- 6.12 Park Beach
- 6.13 City Lake Condominium
- 6.14 La Cascade
- 6.15 The President Park
- 6.16 Sathorn Park Place
- 6.17 Dusit Resort, Hua Hin
- 6.18 Metro Jomthien Condotel
- 6.19 Tridhos City Marina
- 6.20 Bangkok River Park Condominium
- 6.21 Thana City
- 6.22 Apartment Sukhumvit 33
- 6.23 HuaHin Sea-View Paradise
- 6.24 Bann Monchale, Cha-Am
- 6.25 Sathorn Garden
- 6.26 The Elephant Building, Ratchayothin
- 6.27 Central City Bangna (East Tower)
- 6.28 Coconut Beach Condominium, Pattaya

## RETAILS

- 7.1 Central Plaza Chiang-Rai
- 7.2 Central Plaza Pinklao (the renovation)
- 7.3 The Vue, Charoen Nakorn
- 7.4 The Rain Hill sukhumvit 47
- 7.5 Nikorn Thani
- 7.6 Porto Chino Community mall
- 7.7 Digital Gateway, Siam Square (Independent Checker)
- 7.8 B/G C Super Center
  - 7.8.1 Thanyaburi Branch
  - 7.8.2 Mahachai Branch
  - 7.8.3 Loomsak Branch
  - 7.8.4 Ta-ma-ka, Kanjanaburi Branch
  - 7.8.5 Rajapruck Branch
  - 7.8.6 Thepkasastree
- 7.9 Central Town Center (Rattanaibet Phase II)
- 7.10 the Erawan Bangkok
- 7.11 Central Department Store, Hua-Mark
- 7.12 Robinson Department Store, Donmuang
- 7.13 Ploenchit Center
- 7.14 Laksi Plaza
- 7.15 Bangrak Plaza
- 7.16 Silom Complex
- 7.17 Amarin Plaza
- 7.18 Cathay Department Store, Bang Kae
- 7.19 Ratchadamri Arcade
- 7.20 Ploenchit Arcade

## EDUCATION

- 8.1 IT and Laboratory Studies for medical student, Siriraj Hospital
- 8.2 Laboratories Study and Bio Safety research facilities, Khon Kaen University
- 8.3 Thammasat Gymnasium, The 13th Asian Game Project
- 8.4 Thammasat Multipurpose Building II, Bangkok
- 8.5 Medical Study building for Dentist, Khon Kaen University
- 8.6 Bangkok University art gallery and multipurpose building
- 8.7 Mae-Fah Luang University, Chiang-Rai
- 8.8 Khon Kaen University, Exhibition And Conference Building
- 8.9 Thammasat Central Library, Bangkok
  - 8.9.1 Lecture Building I
  - 8.9.2 Lecture Building II
  - 8.9.3 Lecture Building III
  - 8.9.4 Lecture Building IV
  - 8.9.5 Faculty of Engineering Building (Int.)
  - 8.9.6 Library Building
  - 8.9.7 Laboratories
  - 8.9.8 Multi - Purpose Building
- 8.10 Na-Ray Suan University, Pichit

## INDUSTRIALS

- 9.1 Yuasa Battery Factory, Gateway Industrial Estate
- 9.2 Siam Nastech Factory ( Extension )
- 9.3 Fuji Serina Factory
- 9.4 Cornel Polymer Factory
- 9.5 Siamwala Warehouse
- 9.6 Super Gold Factory
- 9.7 Universal Toy Factory (Match Box)
- 9.8 Pranda Jewelry Factory
- 9.9 Artico Craft Toy Factory
- 9.10 Match Box Factory
- 9.11 American Standard Factory, 2nd Phase
- 9.12 Tai Ping Factory, 2nd Phase
- 9.13 Coca-Cola Bottling Plants (Hua Mak, Pathumthani, Khon Kaen, Lampang, Haad Yai)
- 9.14 Bangkok Domtex
- 9.15 NTS Steelmill
- 9.16 Bangkok Weaving Mill
- 9.17 Siam Tsuchiya Factory
- 9.18 Cheena Gasket Factory
- 9.19 Siam Tsuchiya Mfg. Factory, Bangplee

## COMPUTER CENTERS

- 10.1 North Park Computer Center, Stock Exchange of Thailand
- 10.2 United Nations Computer Center, Bangkok, 1972
- 10.3 Sita Switching Center, Rajdamri Arcade, 1979
- 10.4 Computer Center At Bank Note Printing Plant, Bank Of Thailand, 1977
- 10.5 Computer Center, Siam Commercial Bank, Chidlom Office
- 10.6 Computer Center, Krung Thai Bank Head Office
- 10.7 Computer Center 1st Expansion, Siam Commercial Bank, Chidlom Office
- 10.8 Northern Computer Center, Siam Commercial Bank, Chiang Mai
- 10.9 Computer Center 2nd Expansion, Siam Commercial Bank, Chidlom Office
- 10.10 Southern Computer Center, Siam Commercial Bank, Had Yai
- 10.11 Siamnet Computer Center
- 10.12 Government Saving Bank Computer Centers at Bangkok, Chiangmai, Nakornraisima
- 10.13 ESSO's Computer Center (new), Bangkok
- 10.14 Renovations of UPS for Siam Commercial Bank Computer Center
- 10.15 Data Center, Thai Airways International

## HEALTH CARES

- 11.1 Srinakarin Hospital (Srinakarin University)
- 11.2 Ratnin Eye Hospital
- 11.3 Khon Kaen Hospital
- 11.4 Buayai Hospital
- 11.5 Siriraj Hospital, Anantamahidhol Building
- 11.6 Bumrungraj Hospital, Main Power Distribution (Renovation)
- 11.7 Khlangnakorn Hospital, Lampang
- 11.8 Kalasin Hospital

## PORTS

- 12.1 Sriracha Harbour
- 12.2 Maptaphut Port
- 12.3 Phuket Deep Sea Port
- 12.4 Songkla Deep Sea Port
- 12.5 Donmuang Airport (Air-Bridge Terminals)

## MASTER PLAN, INFRASTRUCTURE PROJECT

- 13.1 Mass Rapid Transport Authority (MRTA) (CSC I)
- 13.2 Mae-Fah Luang University, Chiang-Rai
- 13.3 The Master Plan For National Housing Authority, Din-Daeng Site
- 13.4 Muang Thong Thani, Infrastructure
- 13.5 Telephone Organization Of Thailand, Ploenchit Office
- 13.6 State Railway Of Thailand
  - 13.6.1 Paholyothin Site
  - 13.6.2 Makkasan Site
- 13.7 The Government House

## LABORATORY

- 14.1 Siriraj Hospital, IT Studies and Laboratory for Medical studies
- 14.2 Khon Kaen University Laboratory for Medical studies

## OTHER PROJECTS

- 15.1 Community Market, Phnom Penh, Cambodia (Soraya Market)
- 15.2 New Office, Storage and Garage of ESSO Standard Thailand Limited, Bangkok
- 15.3 ESSO's Chongnonsri Terminal Security System And Command Center
- 15.4 Multi-Credit Corporation of Thailand Company Limited (Kanchanatat Building Branch)
- 15.5 Thanmasat Gymnasium, The 13th Asian Game
- 15.6 Mae-Ping Convention (Imperial Mae-Ping Hotel)

## ENERGY CONSERVATION PROJECT

- 16.1 Hawaii Tower, Bangkok
- 16.2 TOT services center, Maptapud, Rayong
- 16.3 Song Phunburi Hotel, Suphanburi
- 16.4 Petcharat Hospital, Petchburi
- 16.5 Saovaluk Thani Hotel, Surat Thani
- 16.6 Rajabhat Buriram, Buriram
- 16.7 Amarin Plaza, Bangkok
- 16.8 Sukhumvit Hospital
- 16.9 AP National, Samut Prakarn
- 16.10 Samaggi Insurance, Bangkok
- 16.11 Laksi Plaza, Bangkok
- 16.12 Riverside Hotel, Bangkok
- 16.13 Saint John University, Bangkok
- 16.14 Saint John Polytechnic, Bangkok
- 16.15 Saint John School, Bangkok
- 16.16 Saint John International School, Bangkok
- 16.17 BB Building, Bangkok
- 16.18 Pachorn Place, Bangkok
- 16.19 Pacific Price Hotel, Chonburi
- 16.20 Welcome Jomthien Hotel, Chonburi
- 16.21 Talay Thong Tower, Chonburi
- 16.22 Rom-Po Mansion, Bangkok
- 16.23 Jarun Tower, Bangkok
- 16.24 Bang Pa Kong Royal Country Club, Cha Choeng Sao
- 16.25 UN-ESCAP building, Bangkok



W. AND ASSOCIATES



PROJECT REFERENCES

RETIALS





## CURRENT PROJECT

- THE STREET
- CENTRAL PLASA KOKO
- EMPIRE TOWER (The renovation)
- JEDDAH HOUSING COMPLEXE
- METRO WEST COMMUNITY CENTER
- METRO EAST COMMUNITY CENTER
- UBON SQUARE
- MYAWADDY TOWN SQUARE

## PAST PROJECT

- CENTRAL PLAZA SALAYA
- CENTRAL PLAZA RAYONG
- EKAMAI GATEWAY
- PLEARNARY MALL
- CENTRAL PLAZA SURATTHANI
- ASIATIQUE The River Waterfront
- Big C SUPER CENTER
  - Thepkasastree, Phuket Branch
  - Lomsak Branch
  - Thanyaburi Branch
  - Mahachai Branch
  - Tharuea, Kanjanaburi Branch
  - Satun Branch
  - Roiet Branch
  - Aungthong Branch
  - Kalasin Branch
  - Samutrsongkram Branch
- PORTO CHINO
- RAIN HILL
- CENTRAL PLAZA CHIANG-RAI
- CENTRAL PLAZA PINKLAO (The Renovation)
- ERAWAN Bangkok
- AMARIN PLAZA
- PLOENCHIT CENTER
- LAKSI PLAZA
- BANGRAK PLAZA
- SILOM COMPLEX
- NIKORN THANI
- CATHAY DEPARTMENT STROE, Bang Kae
- CENTRAL TOWN (Rattathibet renovation)
- CENTRAL TOWN CENTER (Rattathibet Phase II)
- RATCHADAMRI ARCADE
- PLOENCHIT ARCADE
- CENTRAL DEPARTMENT STROE, Hua-Mark
- ROBINSON DEPARTMENT STROE, Donmuang



# PROJECT REFERENCE




- Project Title : **CENTRAL PLAZA NAKORN RACHASIMA (KORAT)**
- Location : Nakorn Rachasima, Thailand
- Owner : Central Pattana Plc.
- Commissioned : 2014-2015
- Project Summary : Construction area est. 233,800 sq.m., Shopping Complexes comprise of Retail Spaces, Anchors, Cinemas, F&B and etc.
- Construction Cost : est. 6,000 million baht
- Firm's Role : M&E System Design: Air-conditioning, Ventilating  
Electrical Power, Lighting, Telecommunication  
Fire Alarm, Public Address and Background Music  
Master Antenna Television, CCTV, Fire Fighting  
Waste Water Treatment, Recycle Water Irrigation  
Security System, Vertical Transportation and Escalators

Civil and Structural design








# PROJECT REFERENCE



**Retails**


Project Title	:	<b>CENTRAL PLAZA RAYONG</b>
Location	:	Rayong, Thailand
Owner	:	Central Pattana Plc.
Commissioned	:	2013-2015
Project Summary	:	Construction area est. 136,550 sq.m., Shopping Complexes
Construction Cost	:	est. 4,000 million baht
Firm's Role	:	M&E System Design: Air-conditioning, Ventilating Electrical Power, Lighting, Telecommunication Fire Alarm, Public Address and Background Music Master Antenna Television, CCTV, Fire Fighting Waste Water Treatment, Recycle Water Irrigation Security System, Vertical Transportation.






# PROJECT REFERENCE

  
**Retails**


Project Title	:	<b>CENTRAL PLAZA SALAYA</b>
Location	:	Nakhonpathom
Owner	:	Central Pattana Plc.
Commissioned	:	2012-2014
Project Summary	:	Construction area est. 89,500 sq.m., Shopping Complexes
Construction Cost	:	2,700 millions Baht
Firm's Role	:	M&E System Design: Air-conditioning, Ventilating Electrical Power, Lighting, Telecommunication Fire Alarm, Public Address and Background Music Master Antenna Television, CCTV, Fire Fighting Waste Water Treatment, Recycle Water Irrigation Security System, Escalator, Vertical Transportation.




# PROJECT REFERENCE

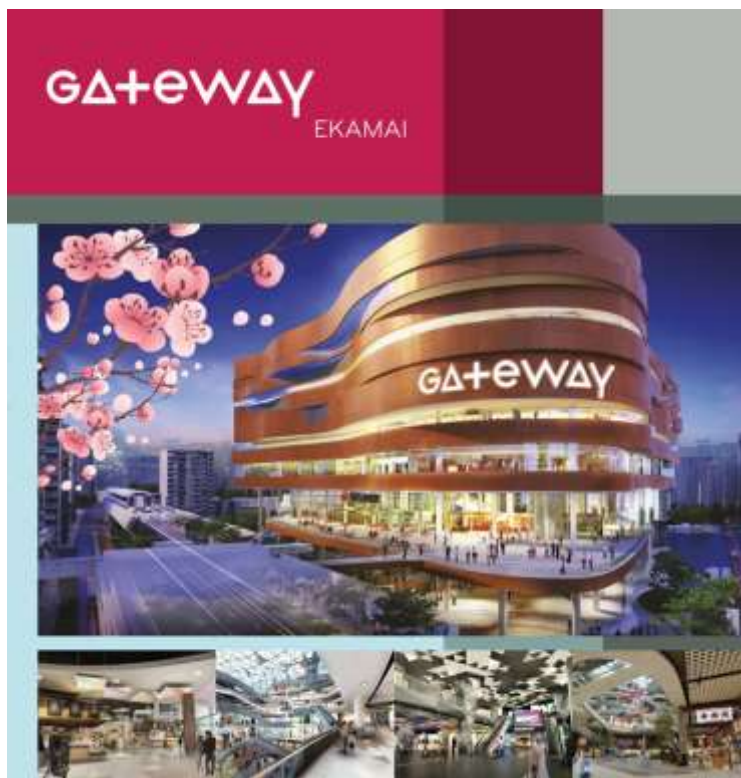

  

  
**Retails**


- Project Title : **THE STREET**
- Location : Rachada Phisek Road Thailand
- Owner : Variety 5 Co., Ltd.
- Commissioned : 2014-2015
- Project Summary : Construction area est. at 60,000sq.m.,  
the site will be developed into a new shopping destination targeting new generation of customer around the area.
- Construction Cost : est. 600 million baht
- Firm's Role : M&E System Design: Air-conditioning, Ventilating  
Electrical Power, Lighting, Telecommunication  
Fire Alarm, Public Address and Background Music  
Master Antenna Television, CCTV, Fire Fighting  
Waste Water Treatment, Security System, Vertical  
Transportation and Escalators.



# PROJECT REFERENCE


 Retails


- Project Title : **EKAMAI GATEWAY, the renovation**
- Location : Ekamai, Thailand
- Owner : TCC Group
- Commissioned : 2014
- Project Summary : Renovation of level 4 and 5 to suit changing shopping environment.
- Construction Cost : est. 200 million baht
- Firm's Role : M&E System Design: Air-conditioning, Ventilating  
Electrical Power, Lighting, Telecommunication  
Fire Alarm, Public Address and Background Music  
Master Antenna Television, CCTV, Fire Fighting  
Waste Water Treatment,  
Security System, Vertical Transportation.



# PROJECT REFERENCE

  
 Retails


Project Title	: <b>EMPIRE TOWER (The renovation)</b>
Location	: Sathorn Road, Bangkok
Owner	: TCC Group
Commissioned	: 2012-2014
Project Summary	: the renovation of front tower to be a Shopping Mall (36,000 sq.m.)
Construction Cost	: 1,000 millions Baht
Firm's Role	: M&E System Design: Air-conditioning, Ventilating, Electrical Power Lighting, Telecommunication, Fire Alarm, CCTV, Access Control Fire Fighting, Waste water treatment, Storm Drainage, BAS Security System and Vertical Transportation, LPG system.



# PROJECT REFERENCE

Retails



Project Title : **METRO EAST TOWN**

Location : Sukhumvit, Bangkok

Owner : Property Perfect Plc.

Commissioned : 2012

Project Summary : Construction area est. 23,000 Sq.m.

Construction Cost : 400 Million Baht

Firm's Role : M&E System Design: Air-conditioning, Ventilating  
Electrical Power., Lighting, Telecommunication  
Fire Alarm, Access Control, CCTV, Fire Fighting  
Waste Water Treatment, Recycle water, Irrigation,  
Security System, Vertical Transportation.

**PROPERTY PERFECT**



# PROJECT REFERENCE



Project Title : **CENTRAL PLAZA SURATTHANI**

Location : Suratthani

Owner : Central Pattana Plc.

Commissioned : Construction Completed

Project Summary : 119,000 sq.m. shopping complexes

Construction Cost : -

Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, CCTV, Access Control, Fire Fighting, Waste Water Treatment, Storm Drainage, Security System and Vertical Transportation.



Retails



# PROJECT REFERENCE

Retails



Project Title : **CENTRAL PLAZA CHIANG-RAI**

Location : Chiang Rai

Owner : Central Pattana Co., Ltd.

Commissioned : 2008

Project Summary : 90,000 sq.m. shopping complexes

Construction Cost : -

Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, CCTV, Access Control, Fire Fighting, Waste Water Treatment, Storm Drainage, Security System and Vertical Transportation.



# PROJECT REFERENCE

  
 Retails


Project Title	: <b>PLEARNARY MALL</b>
Location	: Bangkok, Thailand
Owner	: Prinsiri Group
Commissioned	: under design
Project Summary	: 24,000 sq.m.
Construction Cost	: 410 Million Baht
Firm's Role	: M&E System Design: Air-conditioning, Ventilating Electrical Power, Lighting, Telecommunication Fire Alarm, Access Control, CCTV, Fire Fighting Waste Water Treatment, Recycle water, Irrigation Security System, Vertical Transportation

Civil and Structural design





# PROJECT REFERENCE

**Retails**


- Project Title : **ASIASIQUE the river waterfront**
- Location : Charoen Krung Rd., Bangkok
- Owner : TCC Group
- Commissioned : -
- Project Summary : shopping arcade area est. 90,000 sq.m. for Retail shop, Restaurant Pub, Theater, Event Hall, Fresh Market, Amusement Park, Food and Beer, Outdoor event, Parking
- Construction Cost : -
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Access Control, CCTV, Fire Fighting, Waste Water Treatment, Recycle water, Irrigation, Security System, Vertical Transportation.



- Project Title : **PORTO CHINO**
- Location : Rama II Rd., Bangkok
- Owner : -
- Commissioned : 2012
- Project Summary : Community Mall, Land Area 25,297 sq.m. GBA 17,494 sq.m.
- Construction Cost : -
- Firm's Role : M&E System Design: Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Access Control, CCTV, Fire Fighting, Waste Water Treatment, Irrigation, Security System, Vertical Transportation.



# PROJECT REFERENCE

Retails



Project Title : **BIG C SUPER CENTER**

- Roiet Branch
- Aungthong Branch
- Kalasin Branch
- Samutrsongkram Branch
- Thepkasastree, Phuket Branch
- Lomsak Branch
- Thanyaburi Branch
- Mahachai Branch
- Tharuea, Kanjanaburi Branch
- Satun Branch

Owner : Big-C Supercenter Public Co., Ltd.  
 Project Summary : Superstore with retail outlets, Cinemas and etc.  
 Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, CCTV, Access Control, Fire Fighting, Waste Water Treatment, Storm Drainage, Security System and Vertical Transportation.



# PROJECT REFERENCE

Retails



- Project Title : **METRO WEST TOWN**
- Location : Kalaprapuek, Bangkok
- Owner : Property Perfect Public Company Limited
- Commissioned : 2013
- Project Summary : 22,000 Sq.m.
- Construction Cost : 500 Million Baht
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Access Control, CCTV, Fire Fighting, Waste Water Treatment, Recycle water, Irrigation, Security System, Vertical Transportation.



# PROJECT REFERENCE



**Retails**


- Project Title : **MYAWADDY TOWN SQUARE**
- Location : Myanmar
- Owner : Htoo Trading Co., Ltd.
- Commissioned :
- Project Summary : area est. 30,000 sq.m.  
of Shopping Mall, Cinema and etc.
- Construction Cost : -
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Building Management, CCTV, Gas piping, Hot water generation, Fire Fighting, Waste Water Treatment, Recycle water, Irrigation Pool Support and Security System.



- Project Title : **UBON SQUARE**
- Location : Ubonratchathani, Thailand
- Owner : บริษัท เจริญพัฒนาเขต จำกัด (โครงการนิกรธานี)
- Commissioned : 2012
- Project Summary : 18,551 sq.m. Open Mall
- Construction Cost :
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Plumbing & Fire Protection system, Waste Water Treatment and Drainage System .



# PROJECT REFERENCE

Retails



- Project Title : **JEDDAH HOUSING COMPLEX**
- Location : Jeddah, Saudi Arabia
- Owner : RIC (Rayadah Investment Company)
- Commissioned : 2013 - 2015
- Project Summary : Construction area est. 29,800 sq.m. Shopping Complexes
- Construction Cost : 810 Million Baht
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Public Address and Background Music (sound), Master Antenna Television, CCTV, Fire Fighting, Waste water treatment, Recycle water, Irrigation, Pool Support, Security System, Vertical Transportation.



# PROJECT REFERENCE

**Retails**


Project Title : **THE VUE**

Location : Charoen Nakorn Rd., Bangkok

Owner : Raimon Land Public Co., Ltd.

Commissioned : 2010

Project Summary : Community Mall GBA 7,000 sq.m.

Construction Cost : -

Firm's Role : M&E System Design: Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Access Control, CCTV, Fire Fighting, Waste Water Treatment, Irrigation, Security System, Vertical Transportation.



Project Title : **THE RAIN HILL**

Location : Sukhumvit 47, Bangkok

Owner : BOUTIQUE Asset Management Ltd.

Commissioned : -

Project Summary : Mix-used comprises of Service Apartment & Restaurant, Swimming Pool and Fitness GBA 10,000 sq.m.

Construction Cost : -

Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Access Control, CCTV, Fire Fighting, Waste Water Treatment, Irrigation, Security System, Vertical Transportation.



# PROJECT REFERENCE



central **plaza**

Retails

Project Title : **CENTRAL PLAZA PINKLAO**  
(The Renovation)

Location : Bangkok  
Owner : Central Pattana Co., Ltd.  
Commissioned : 2008  
Project Summary : 53,000 sq.m. shopping complexes  
Construction Cost : -  
Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, CCTV, Access Control, Fire Fighting, Waste Water Treatment, Storm Drainage, Security System and Vertical Transportation.



central **plaza**

Project Title : **CENTRAL TOWN CENTER**  
(Rattana Thibet Phase II)

Location : Rattana Thibet Road, Nonthaburi  
Owner : Central Pattana Plc. ( CPN )  
Commissioned : 2006  
Project Summary : a 50,000 sq.m. of Retailed spaces and Car park area.  
Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Building Management, CCTV, Fire Fighting, Waste Water Treatment, Security System and Vertical Transportation.



# PROJECT REFERENCE

Retails



Project Title : **ERAWAN BANGKOK**  
(The Renovation)

Location : Ratchaprasong Square  
Owner : ERAWAN Groups  
Commissioned : 2005  
Project Summary : Renovation of the residence meeting area  
and pool deck with urban resort style villas  
Firm's Role : Mechanical and Electrical engineering





# PROJECT REFERENCE

  
 Retails


Project Title : **PLOENCHIT CENTER**  
 Location : Ploenchit Road, Bangkok.  
 Owner : Amarin Plaza Group.  
 Commissioned : 1997  
 Project Summary : Site Area:140,000 Sq.m., Five  
 Star Hotel, Shopping Arcade, and Office Building.  
 Firm's Role : M&E System Design: Air-conditioning, and Ventilating System.



Project Title : **LAKSI PLAZA**  
 Location : Viphavadi Road, Bangkok.  
 Owner : Laksi Plaza Co., Ltd.  
 Commissioned : 1991  
 Project Summary : Office Building, Department Store and Shopping Center.  
 Firm's Role : M&E System Design: Air-conditioning, Ventilating,  
 Electrical Power, Lighting and Vertical Transportation System.



# PROJECT REFERENCE

  
 Retails


Project Title : **AMARIN TOWER**

Location : Ploenchit Road, Bangkok.

Owner : Amarin Plaza Group.

Commissioned : 1987

Project Summary : 20-Storeys Office Tower and Shopping Arcade.

Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm and Vertical Transportation System.



Project Title : **BANGRAK PLAZA**

Location : Charoen-Krung Road, Bangkok.

Owner : Rajapark Enterprise Co., Ltd. Centre Point Apartments.

Commissioned : 1991-1994

Project Summary : Site Area:80,130 Sq.m.28-Storey Service Apartment, Department Store and Market.

Firm's Role : M&E System Design: Air-conditioning and Ventilation System.



# PROJECT REFERENCE



 Retails


- Project Title : **SILOM COMPLEX**
- Location : Silom Road, Bangkok
- Owner : Silom Complex Co., Ltd.
- Commissioned : 1992
- Project Summary : Office Building, Department Store, and Shopping Center.
- Firm's Role : M&E System Design: Electrical Power, Lighting, Telecommunication and Fire Alarm.



- Project Title : **LE CONCORDE COMPLEX**
- Location : Ratchadapisek Road, Bangkok.
- Owner : Leconcorde Hotel, Toondamrong Co., Ltd.
- Commissioned : 1997
- Project Summary : Site Area: 120,000 sq.m., 400Rooms Five Star Hotel, 25-Storey Office Tower.
- Firm's Role : M&E System Design: Air-conditioning, Ventilating, Electrical Power, Lighting, Telecommunications, Fire Alarm, Security, CCTV, Vertical Transportation, Plumbing, and Sanitary System.



# PROJECT REFERENCE

**Retails**


Project Title : **SORAYA SHOPPING**  
 Location : Phnom Penh, Cambodia  
 Owner : Canadia Bank  
 Commissioned : 2002 (completed )  
 Firm's Role : M&E System Design: Ventilating, Electrical Power, Lighting, Telecommunication, Fire Alarm, Fire Fighting Plumbing, and Sanitary System.



Project Title : **GOLDEN CITY SHOPPING CENTER**  
 Location : Phnom Penh, Cambodia  
 Owner : Canadia Bank Ltd. Phnom Penh, Cambodia  
 Commissioned : -  
 Project Summary : Shopping Center  
 Firm's Role : M&E System Design, Electrical Power, Lighting, Telecommunication, Fire Alarm, Plumbing, Fire Protection and Sanitary System..





W. AND ASSOCIATES



PAST PROJECTS



# PAST EXPERIENCE

## Hotels



W. RETREAT, SAMUI  
- M.E.P. -



BANYAN TREE, SAMUI  
- M.E.P. -



INTERCONTINENTAL HUA HIN  
- M.E.P. -



SHERATON GRANDE LAGOON HUA HIN  
- M.E.P. -



LAGUNA BEACH RESORT  
(Part of LAGUNA Phuket)  
- M.E.P. -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Hotels



DOUBLE TREE by HILTON  
M,E,P



MODE SATHORN HOTEL  
M,E,P



HILTON SUKHUMVIT BANGKOK  
M,E,P



MARIOTT RAYONG  
M,E,P

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

## Hotels



**BAIYOKE SKY HOTEL**  
Currently the tallest building in Thailand  
- M.E.P. -



**GRAND HYATT ERAWAN HOTEL**  
- M.E. -



**TWIN LOTUS HOTEL**  
- M.E.P. -



**HOLIDAY INN CHIANG MAI**  
- M.E.P. -



**WESTIN GRANDE SUKHUMVIT**  
- M. -



**SIAM CITY HOTEL**  
- M.E. -



**INDEPENDENCE HOTEL CAMBODIA**  
- M.E.P. -



**FOUR SEASONS HOTEL**  
- M.E. -



**J.W. MARRIOTT HOTEL**  
(Ploenchit Center)  
- M. -



**SOL TWIN TOWERS**  
- M.E. -



**METROPOLE HOTEL, PHUKET**  
- M.E.P. -

M = Mechanical E = Electrical P = Plumbing





# PAST EXPERIENCE

## Hotels



MANDARIN ORIENTAL The Renovation  
Back of House, Main Lobby



HOLIDAY INN PATTAYA  
- M.E.P. -



S31 HOTEL  
- M.E.P. -



HOTEL PLAZA ATHENEES  
- M.E.P. -



LE MERIDIEN BANGKOK  
- M.E.P. -



MERCURE AMBASSADOR HOTEL  
(Renovation)  
- M.E.P. -



HOLIDAY INN REGENT BEACH CHA-AM (Renovation)  
- M.E.P. -



FISHERMAN'S VILLAGE  
- E. -



DUSIT AND RESORT HOTEL  
- M.E.P. -



SHERATON GRAND LAGOON  
(Rebranded to ANGSANA)



SALA-SAMUI RESORTS  
- M.E.P. -



BAAN BORAN CHIANG SAEN  
(ANANTARA GOLDEN TRIANGLE)

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Residential



SILVER BEACH CONDOMINIUM  
- E -



CITY LAKE CONDOMINIUM  
- M.E. -



LA CASCADE  
- E -



SATHORN GARDEN  
- M -



ROYAL CHAROENKRUNG  
- M.E. -



LUMPINI PARK VIEW  
- M.E.P. -



PARK BEACH CONDOMINIUM  
- E -



SKY BEACH CONDOMINIUM  
- E -



JOMTIEN COMPLEX  
- E -



CENTRAL BANGNA (East Tower)  
- M.E.P. -



COCONUT BEACH CONDOMINIUM  
- M.E.P. -



THE PRESIDENT PARK  
- M.E. -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Residential



SATHORN PARK PLACE  
- M.E.P -



TRIDHOS CITY MARINA  
- M.E.P -



INTRO BY RASA Condominium  
- M.E.P -



BANGKOK RIVER PARK  
- M.E.P -



VILLA RACHATEWI  
- M.E.P -



METRO JOMTIEN CONDOTEL  
- M.E.P -



PARKLAND PHASE II  
- M.E.P -



THANA CITY



BAAN MON-CHALE  
- M.E.P -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

## Residential



MODE SUKHUMVIT 61  
-M,E,P-



VILLA ASOKE  
-M,E,P-



VERTIQ CONDOMINIUM  
-M,E,P-



VIA BOTANI  
-M,E,P-



URBANO SATHORN  
-M,E,P-



THE AXIS CONDOMINIUM  
-M,E,P-



KHAO-YAI RESIDENCE  
-M,E,P-

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Offices



MALEENOND TOWER  
(Channel 3 TV Studio)  
- M,E,P -



ESSO BUILDING



GRAND AMARIN TOWER  
- M,E,P -



UNITED CENTER  
- M,E -



C.T.I TOWER  
- M,E -



JEWELRY TRADE CENTER  
- M,E,P -



S.S.P TOWER III  
- M,E,P -



SRIJULSUP TOWER  
- M,E -



THE NATION TOWER I, II  
- M -



SIRIPINYO BUILDING  
- M,E -



WALL STREET TOWER  
- M,E -



GEMS TOWER  
- M,E,P -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Offices



ELEPHANT BUILDING  
- M, E, P -



BEAUTY GEMS BUILDING  
- M, E -



VILLA OFFICE  
- M, E, P -



MALAYSIAN EMBASSY  
- M -



THAI LIFE INSURANCE



MINISTRY OF FINANCE  
- E -



MINISTRY OF FOREIGN AFFAIR  
- M -



UNITED NATIONS - ESCAP  
- M, E -



BANK NOTE PRINTING  
- M, E -



METROPOLITAN ELECTRICITY  
AUTHORITY, BANGKOK  
- M -



PRIVY COUNCIL OFFICE  
- M, E, P -



LECONCORDE COMPLEX  
- M, E, P -



PARLIAMENT BUILDING (OFFICE)  
- M, E, P -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

## Corporate Offices



SIAM COMMERCIAL COMPLEX (PHASE III)  
- M.E.P. -



SIAM COMMERCIAL BANK  
(Old Head Quarter)



THAI AIRWAY INTERNATIONAL (Head Quarter)  
- M.E. -



SHELL HEAD OFFICE  
- M -



SAMAGGI TOWER  
- M.E.P. -



BANK OF ASIA  
(Head Quarter)  
- M -



KRUNGTHAI BANK  
(Head Quarter)  
- M.E. -



IFCT BUILDING  
- M.E. -

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

## Retails



CENTRAL PLAZA CHIANG-RAI  
- M.E.P. -



ASIATIQUE the river front  
- M.E.P. -



RAIN HILL  
- M.E.P. -



THE VUE  
- M.E.P. -



PORTO CHINO  
- M.E.P. -



BIG C Super Center  
- M.E.P. -



CENTRAL TOWN CENTER RATTANATHIBET  
- M.E.P. -



CENTRAL PLAZA SURATTHANI  
- M.E.P. -



CENTRAL PLAZA PINKLAO (The Renovation)  
- M.E.P. -

M = Mechanical E = Electrical P = Plumbing





# PAST EXPERIENCE

Retails



AMARIN PLAZA  
-M,E-



BANGRAK PLAZA  
-M-



THE ERAWAN BANGKOK  
-M,E,P-



SILOM COMPLEX  
-E,P-



RAJADAMRI ARCADE  
-M,E-



SORAYA SHOPPING, PHNOM PENH  
-M,E,P-



GOLDEN CITY SHOPPING CENTER  
PHNOM PENH



LAKSI PLAZA  
-M,E-

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Health Cares



SRINAKARIN HOSPITAL  
-M,E,P-



KHONKAEN HOSPITAL  
-M,E,P-



BUA YAI HOSPITAL  
-M,E,P-



RATNIN EYE HOSPITAL  
-M,E,P-



KALASIN HOSPITAL  
-M,E,P-



BLOOD CENTER  
THAI RED CROSS SOCIETY  
-M,E,P-



SIRIRAJ HOSPITAL  
Laboratory and IT studies for medical student  
-M,E,P-

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Health Cares



PATANA MEDICAL CENTER  
-M,E,P-



SONGLANAKARIN HOSPITAL  
-M,E,P-

M = Mechanical E = Electrical P = Plumbing



# PAST EXPERIENCE

Educations / Gym / Master plan



- THAMMASAT UNIVERSITY**  
(Rangsit Campus)
- Main Admission Office Building
  - Lecture Building I
  - Lecture Building III
  - Lecture Building IV
  - Faculty of Engineering Building (Int.)
  - Library Building (Bangkok campus)
  - Laboratories
  - Multi-Purpose Building (Bangkok campus)



**MAEFAH-LUANG UNIVERSITY**  
Education Buildings  
- M.E.P -



**Phaholyothin Site**



**Makkasan Site**



**AUDITORIUM**  
Khon Khaen University  
- M.E -



**THAMMASAT UNIVERSITY LIBRARY**  
- M -



**BANGKOK UNIVERSITY ART GALLERY**  
- M.E.P -

**STATE RAILWAY OF THAILAND**  
The Master Plan for Land Use



**GYMNESIUM, 13<sup>th</sup> ASIAN GAME**  
- M -



**HUAMARK STADIUM**  
- E -

M = Mechanical E = Electrical P = Plumbing

