

# PORTFOLIO

MONCHANOK JIRAPORN



## MONCHANOK JIRAPORN (KWUN)

### EDUCATION

#### 2018 - 2020 :

- Master of Architecture  
(Building and technology program: Architecture),  
Thammasat University. (GPA : 3.75),

#### 2014 - 2018 :

- Bachelor of Science (Architecture),  
Thammasat University. (GPA : 2.89),

#### 2008 - 2014 :

- Suankularb Wittayalai Rangsit School,

### WORK EXPERIENCE

#### ARCHITECT (2020 - Present) :

- FMCS Co.,Ltd,

#### INTERNSHIP (2019) :

- Eco-id (Thailand) LTD.,

#### INTERNSHIP (2017) :

- Physicalist Co.,Led

**Tel.** 094-552-8727

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### ACTIVITY

#### 2019 :

- Join the contest in Seoul International Invention Fair 2019 (SIIF '19 ) at Seoul ,Korea with the team.  
Get a Gold Prize from "Pallet Recycling Station"
- Join the contest in International Invention , Innovation & Technology Exhibition 2019 (ITEX '19 ) at Kuala Lumpur ,Malaysia with the team.  
Get a Gold Prize and Special Prize (International Best Invention award from HKSIIC ,Hong Kong) from "Adaptive Wooden Pallet : the design of movable shared Learning space"

#### 2018 - 2019 :

- Teacher Assistant  
DBT233 : Environmental Technology.  
AR205 : Design Communication.  
TU103 : Life and Sustainability in Architecture Module.

#### 2018 :

- Join a team in OTOP Inno-Life Tourism-Based Communities Project in Phrae.  
Activity 2.2.1 : Find and Developed Landscape , Photo Shot and Landmark in community.

### SKILLS

#### Language Skills :

- Thai (Native)
- English (Fair)

#### Personal Skills :

- Teamworking
- Enthusiastic
- Patient
- Responsible
- Self-Motivated
- Researching

#### Computer Skills :

- AutoCAD
- SketchUp
- Rendering
- Phoenics (CFD)
- Adobe Photoshop
- Adobe Illustrator
- Ms Word
- Ms Powerpoint
- Ms Excel

**EXTERIOR & INTERIOR**  
DESIGN



01

## Ripples Pavilion

Bang Kra Chao, Samut Prakarn.

**Building Type:** Pavilion.

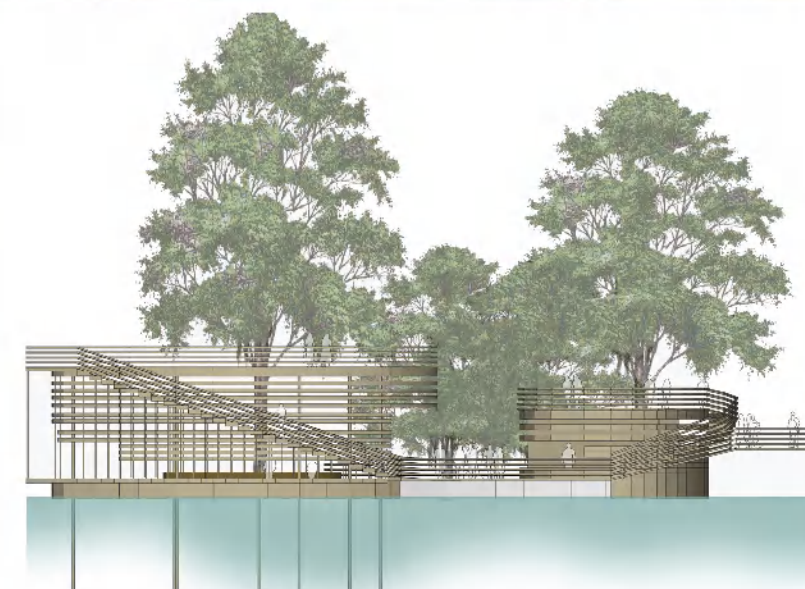
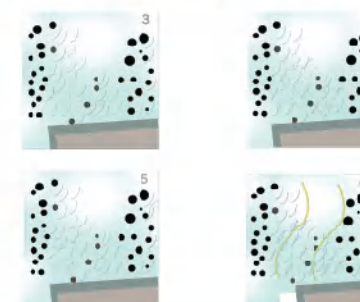
**Years:** 2015.

### Concept

*Water Ripple was born from the wind blows the water and made a wave with the existing trees. It's made me feel peaceful and oneness with nature.*

*The orientation of this pavilion from observing the water ripples that overlaying.*

*For material and mood tone will made natural material such as wood etc. and brown color to harmony with environment and made one like a tree.*





## 02

## ADAPTIVE WOODEN PALLET

Khlong Toei, Bangkok.

**Building Type:** Small Architecture.

**Years:** 2019.

### Concept

The Khlong Toei community has many foundations for children and older, but still lacks efficiency in using the area.

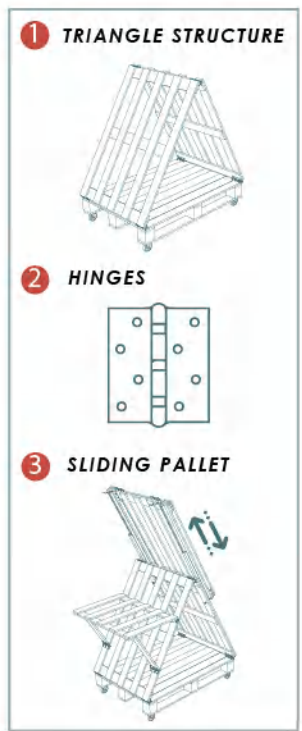
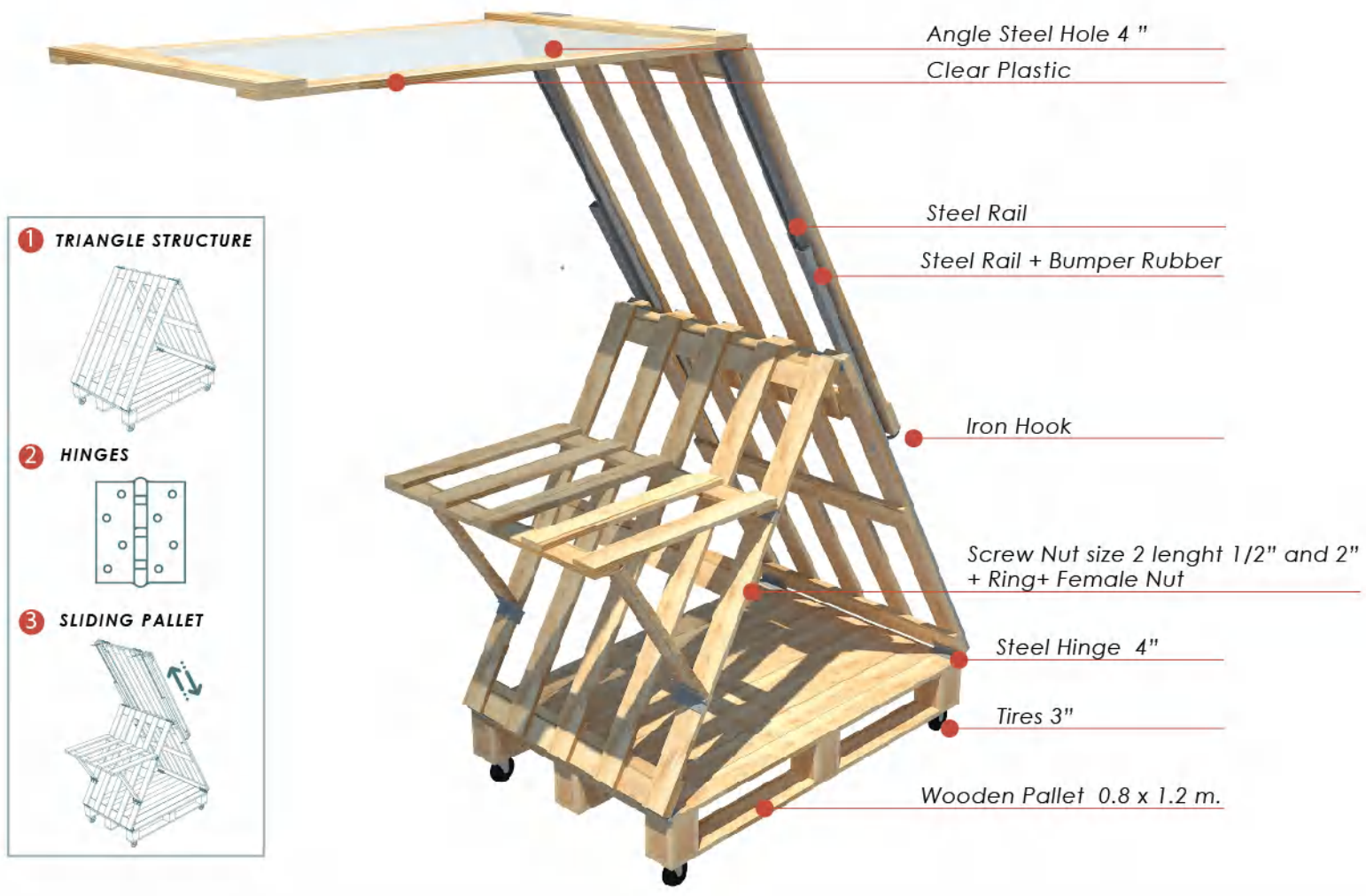
Therefore, it is interesting to bring the remaining pallets to create and adjust the model to suit the activities of the people in the foundation as well as reduce the amount of waste and adds value to the remaining pallets in the Khlong Toei community.

### Site

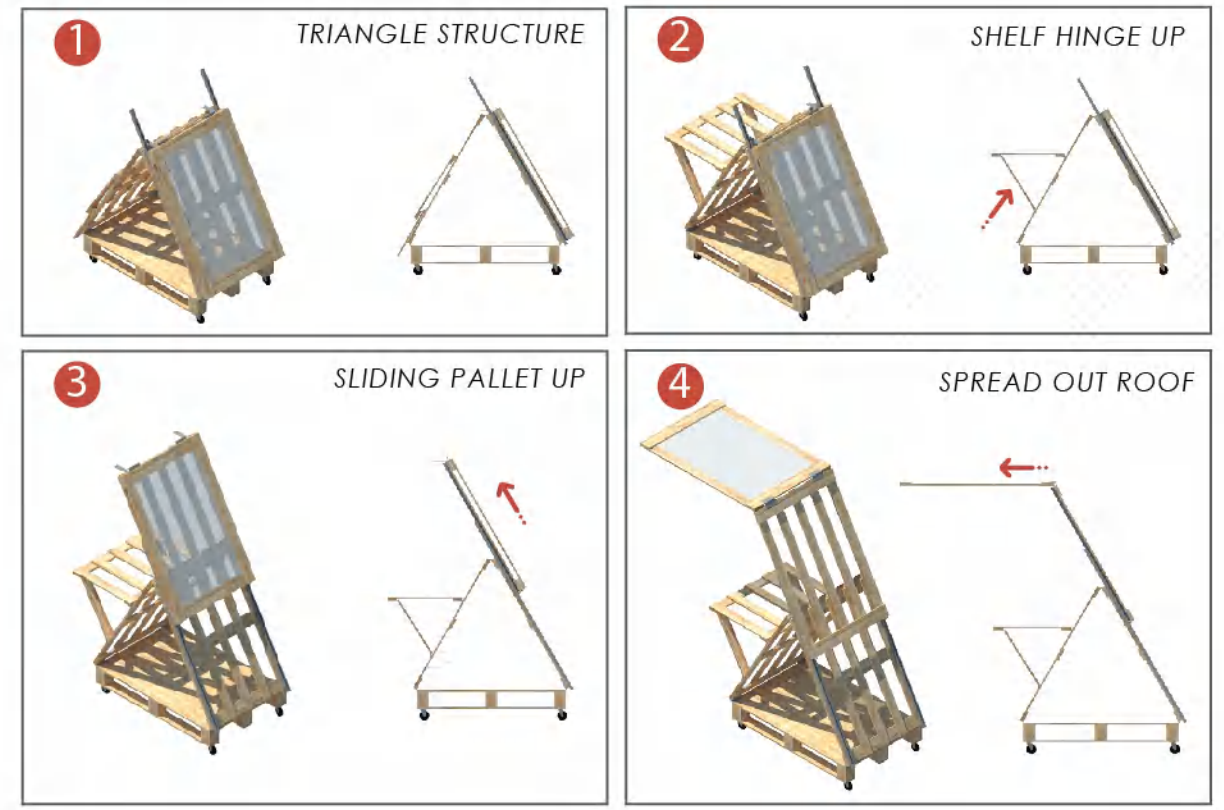
Map showing the foundation position in slum community and low income on Thailand.



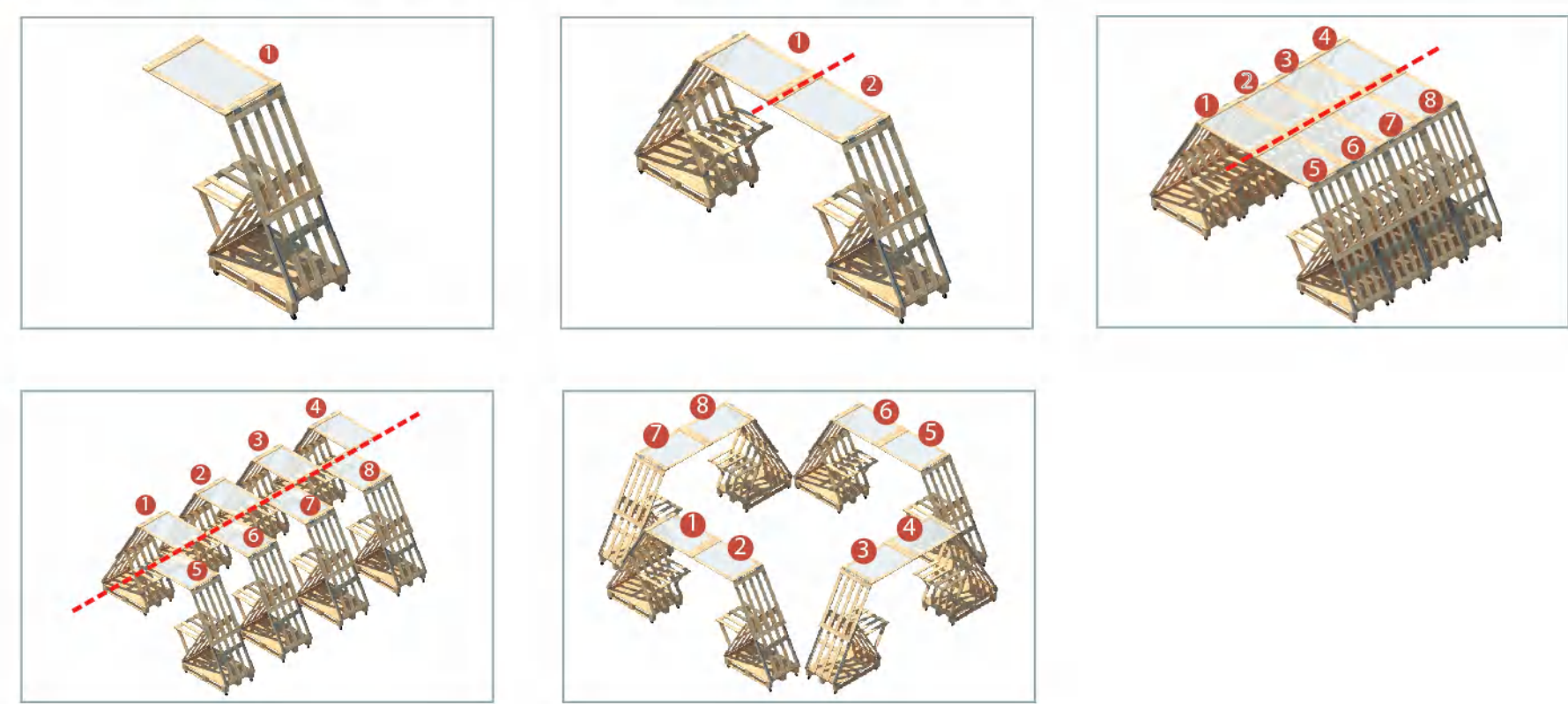
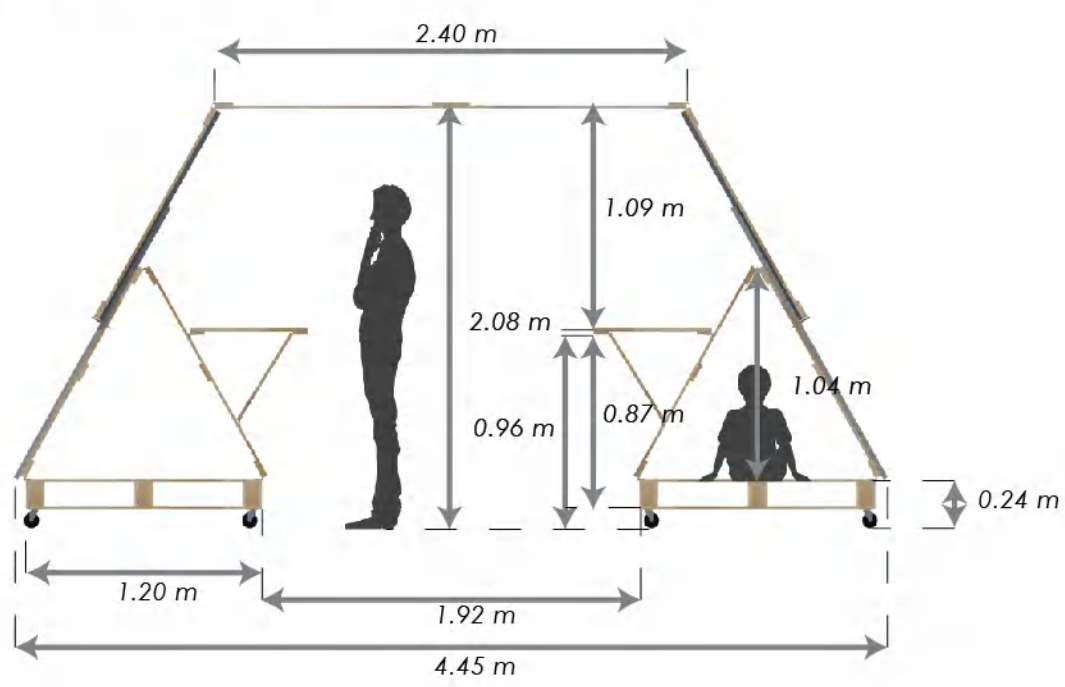
Foundation selection criteria : Open courtyard within Foundation Pallet shop



The techniques used in the design are 3 types:  
 1. The use of triangular structures that have the strength to support weight and as a fix structure  
 2. Using hinges and 3. use of slide rails.



The section shows the proportion of pallets that are related to the human scale. When used as a small architecture in community.





03

## PALLET RECYCLING STATION

Thailand.

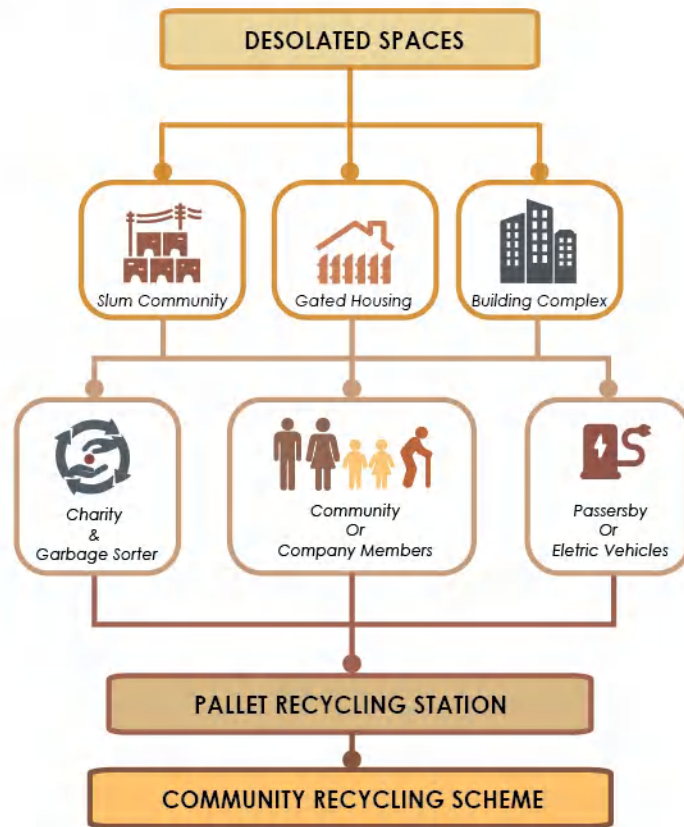
**Building Type:** Station.

**Years:** 2019.

“Pallet Recycling Station” is an equipment to solve recycling problem at the neighborhood scale. Leftover wooden pallets from the port and vinyl billboards in Bangkok are reassembled as a movable structural unit. It supports recycle processes in small urban areas such as slum, gated community or building complex which often found lacking of efficient recycling system and having desolated spaces. This invention is not only an upcycling product but also a process to set up community recycling scheme and to develop the city.



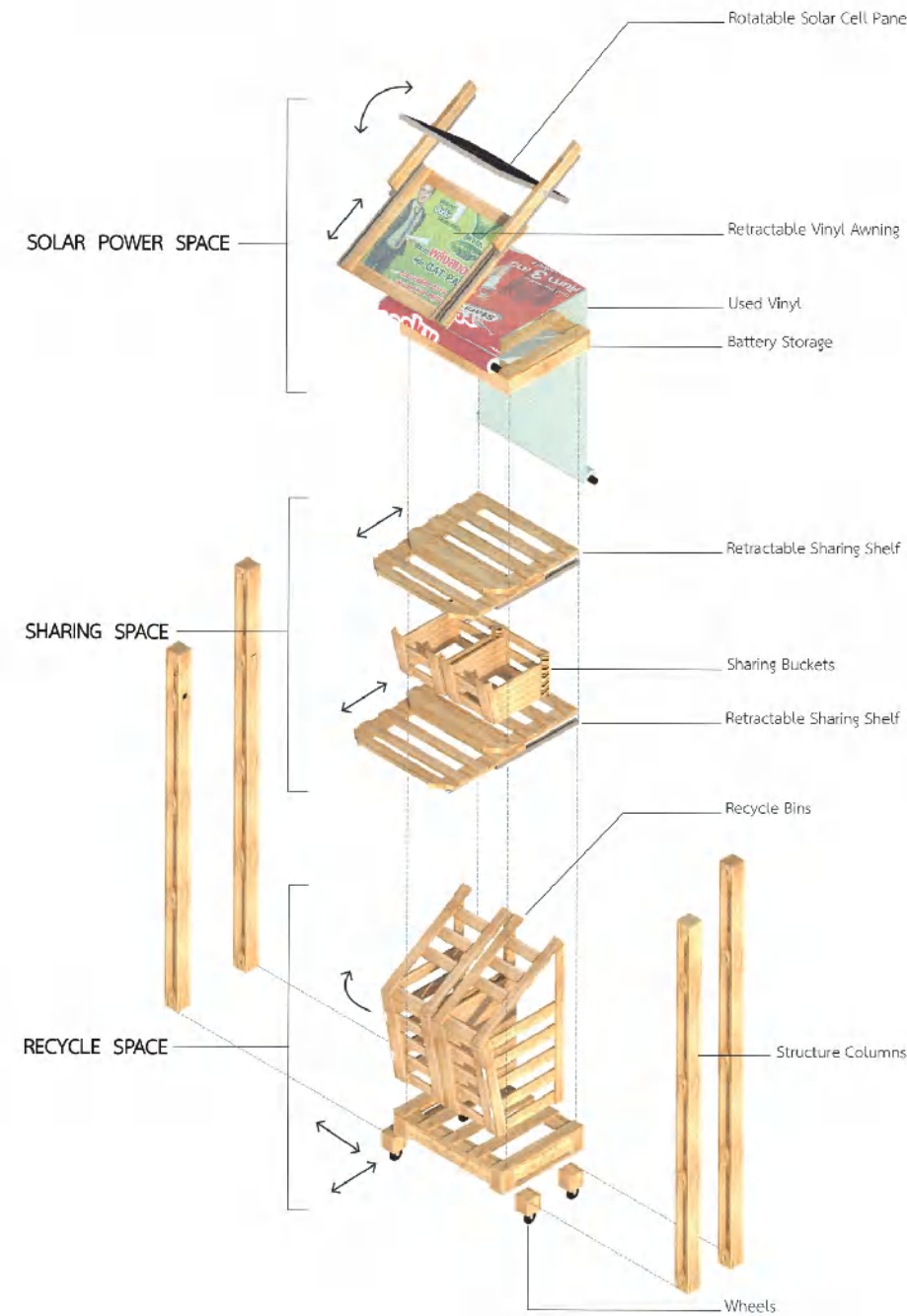
## Program & User



## Dimensions

One unit of Pallet Recycling Station :  
 = 0.60 x 1.00 x 2.20 m.  
 = 135 kg.  
 (Not include battery)

## Standard Unit



## Standard Unit



◀ Rotatable solar cell panel to suit sun path and orientation at the site / Retractable awning with aluminum track and used vinyl.

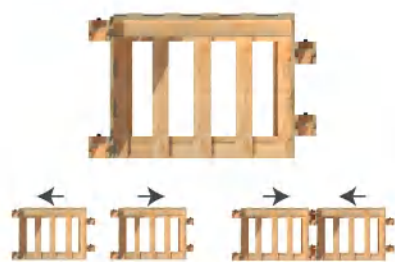
◀ Roll of used vinyl as cover sheet protecting inner spaces from weather elements, front and back.

◀ Retractable shelf as expandable sharing space on spacious sites.

◀ Structures are invented through wooden joints based on disassembled pallet elements.

◀ Wheels for mobility and flexibility in arrangement of units.

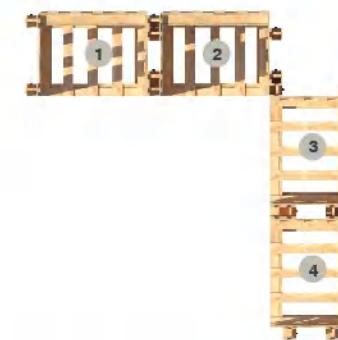
## Various Units and Combinations



Units are connected by inserting Plug Side into Receptacle Side and interlocked by dowels



Units can be connected back to back allowing accesses on two sides



Units can be perpendicularly connected forming a corner spot



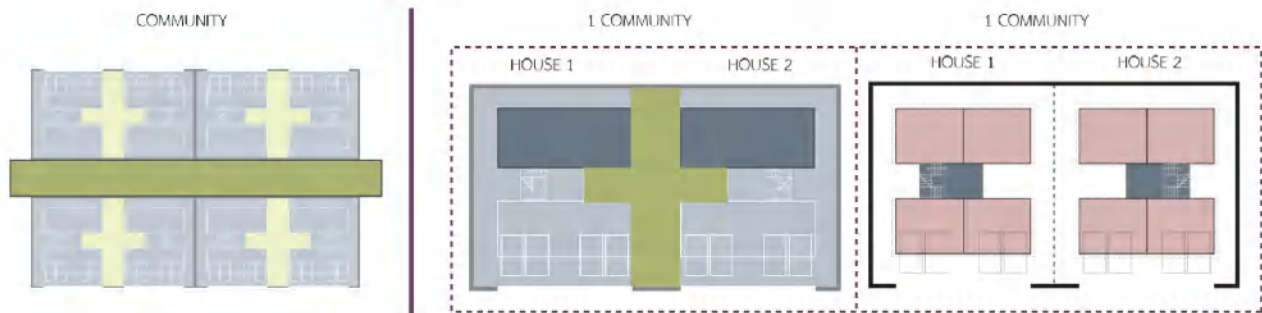
Units can be connected into a larger recycling station or a communal utility wall



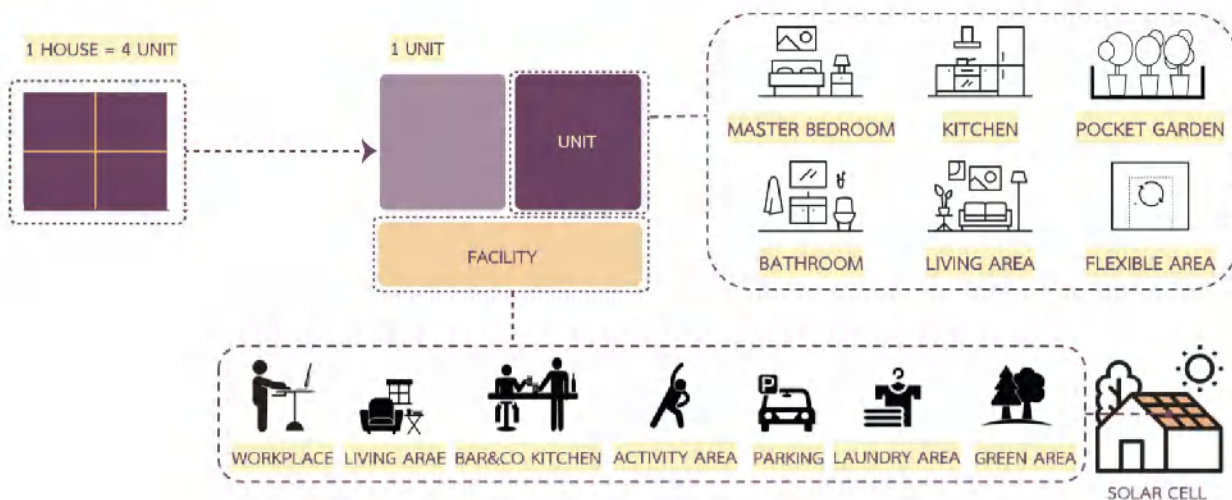
**04****SHARING HOUSE**  
*Ramkhamhaeng, Bangkok.***Building Type:** Residence (Housing).**Years:** 2019.

## Concept

In the future, We will have to be single or small families ( 2-3 persons ) than in the past. So sharing something with others is one choice to select because saving money, saving energy, and having more area.



## Programing



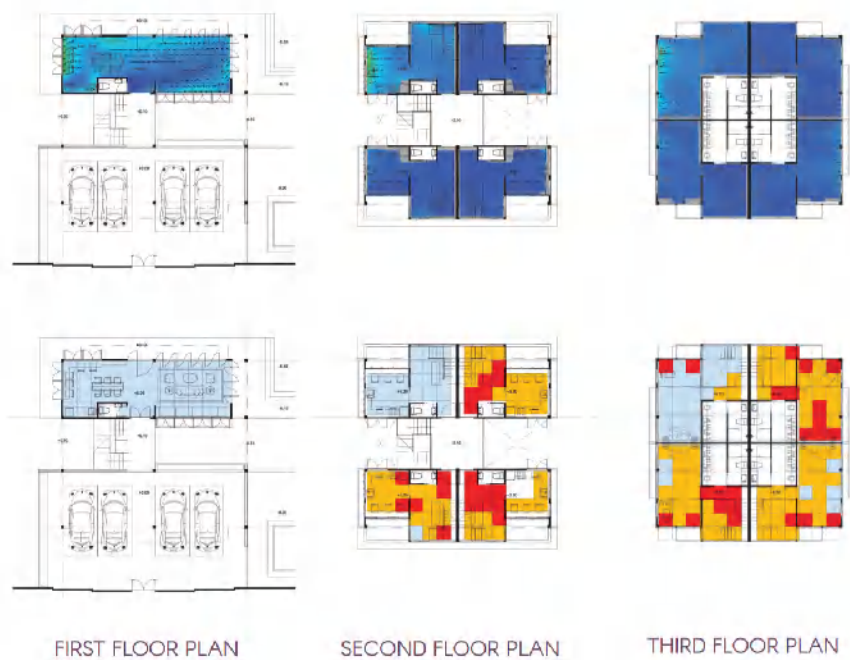
## Plan & Area

AREA	Sq.m.	Percent (%)
SHARING (Semi-Public)	272.8	48.7
4 UNIT AREA (Private)	286.9 (1 Unit = 71.7)	51.3
Total	559.7	100.0



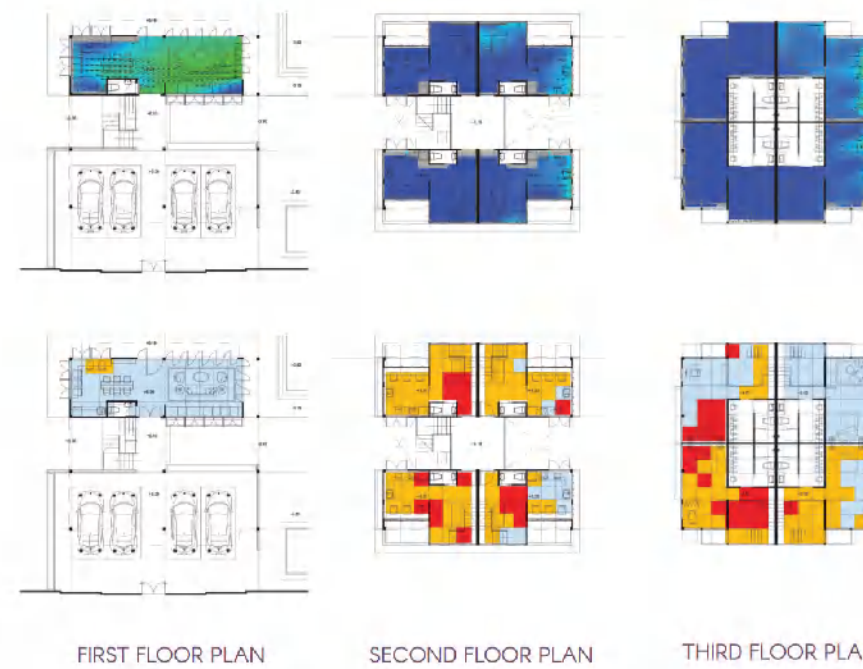
## Thermal Comfort

Winter Wind Direction E/N



Uncomfortable	18.8 %
Borderline	40.4 %
Comfortable	40.8 %

Rainy Wind Direction W/S



Uncomfortable	9.8 %
Borderline	50.6 %
Comfortable	52.5 %



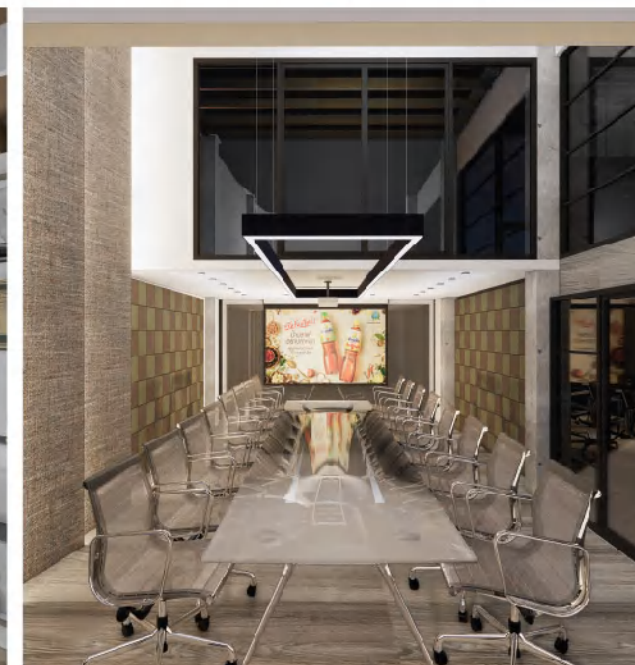
# 05

## THAI FISH SAUCE'S OFFICE

*Charoen Krung, Bangkok.*

**Building Type:** Office Building.

**Years:** 2020.





# 06

## SENIORSOFT'S OFFICE

*Lat Phrao, Bangkok.*

**Building Type:** Office Building.

**Years:** 2021.





# 07

## LAW FIRM OFFICE

Charoen Krung, Bangkok.

**Building Type:** Office Building.

**Years:** 2021.





# 08

## RENOVATE HOUSING

Bangkok.

**Building Type:** Housing.

**Years:** 2021.





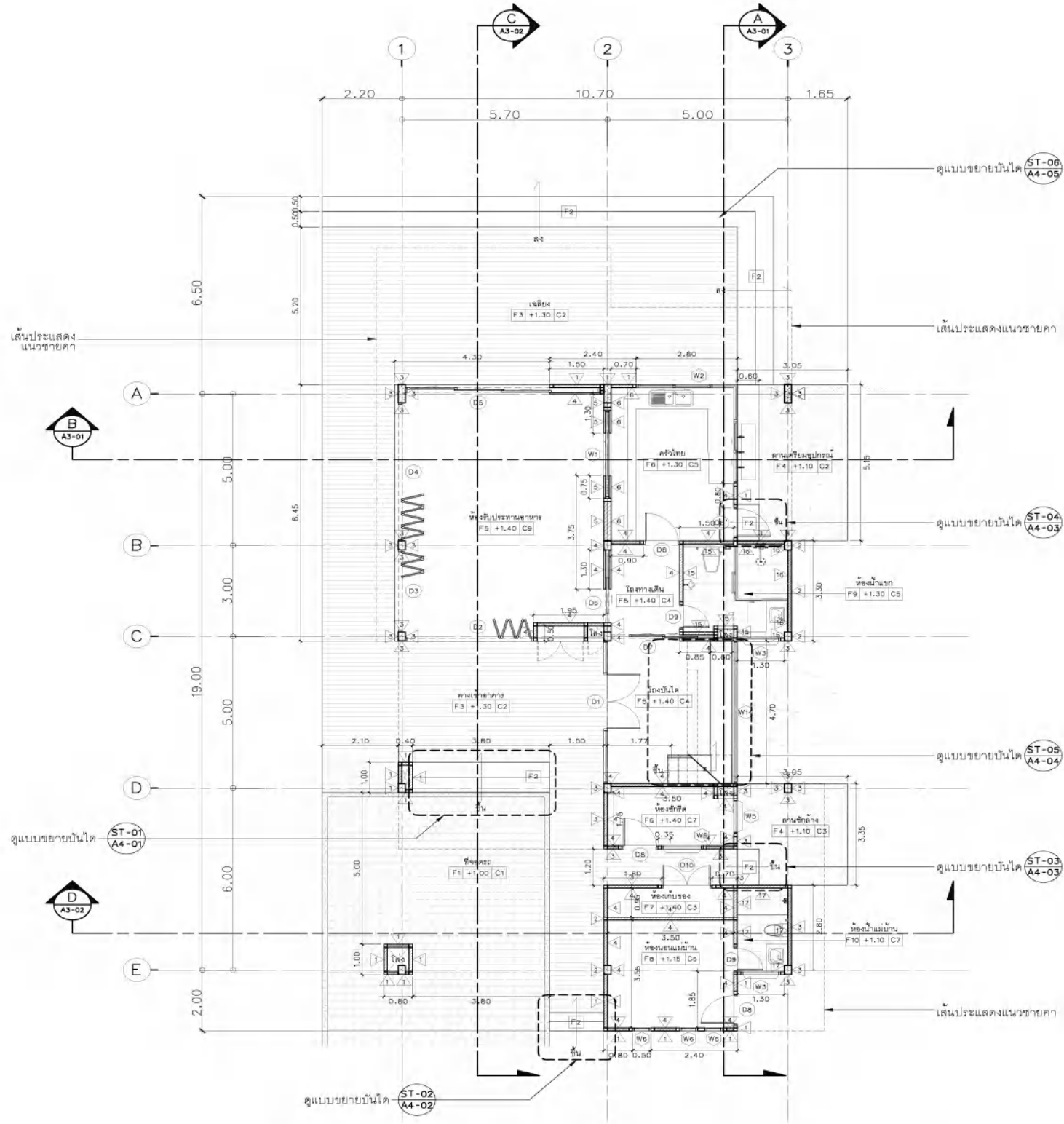
09

**RVK HOUSE**  
*Bang Krasan, Ayutthaya.*

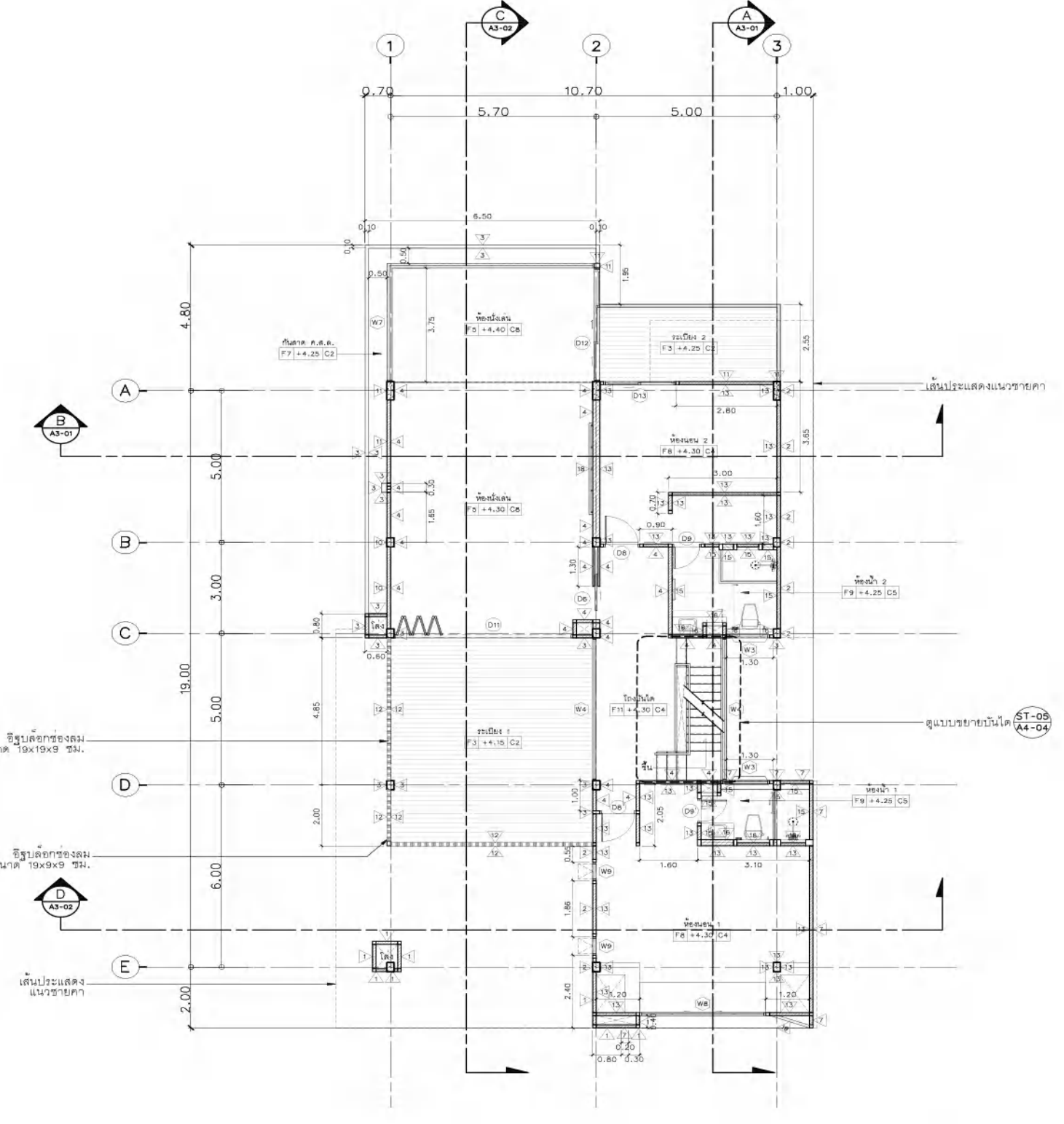
**Building Type:** Residence (Housing).

**Years:** 2021.



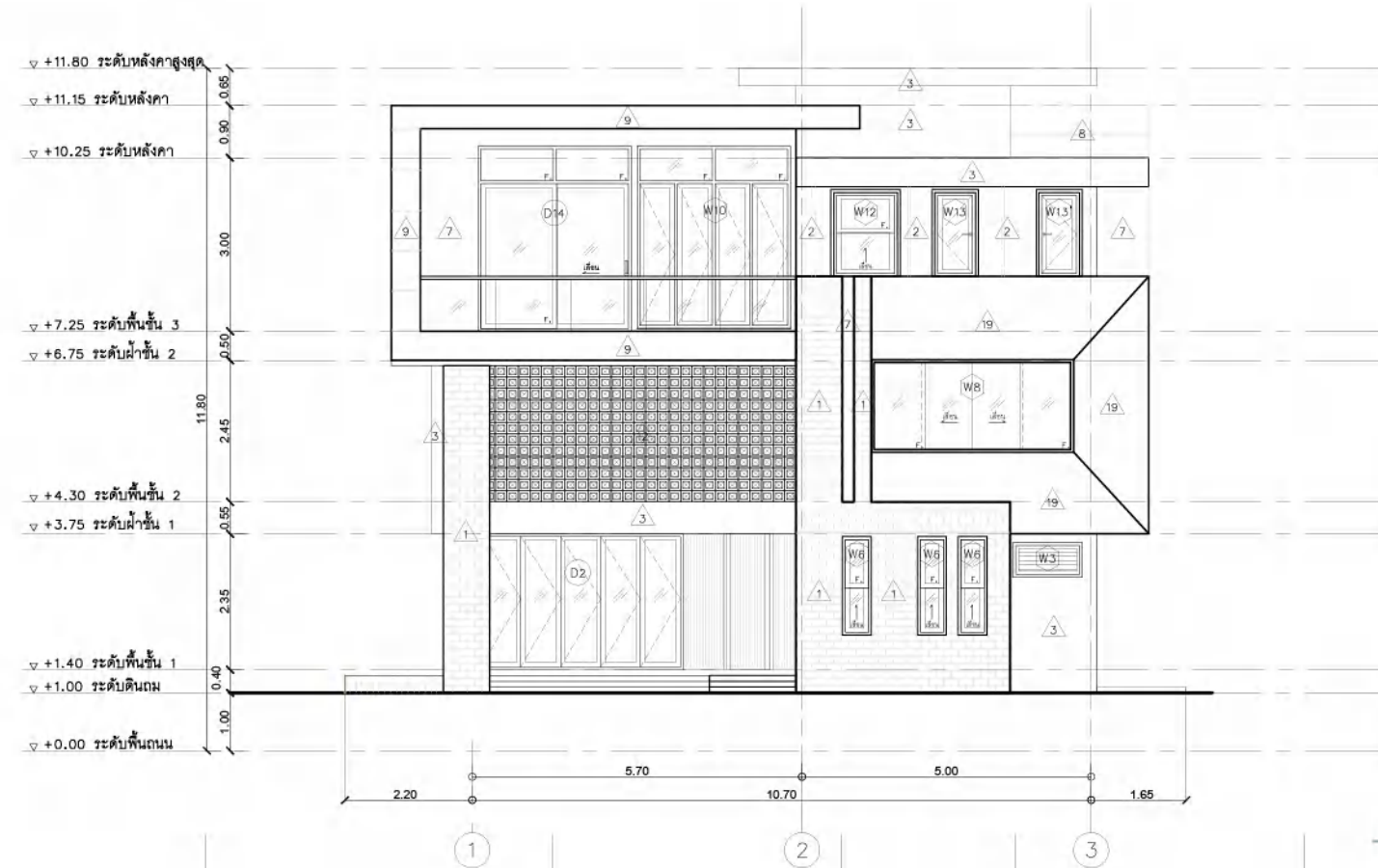


First Floor Plan

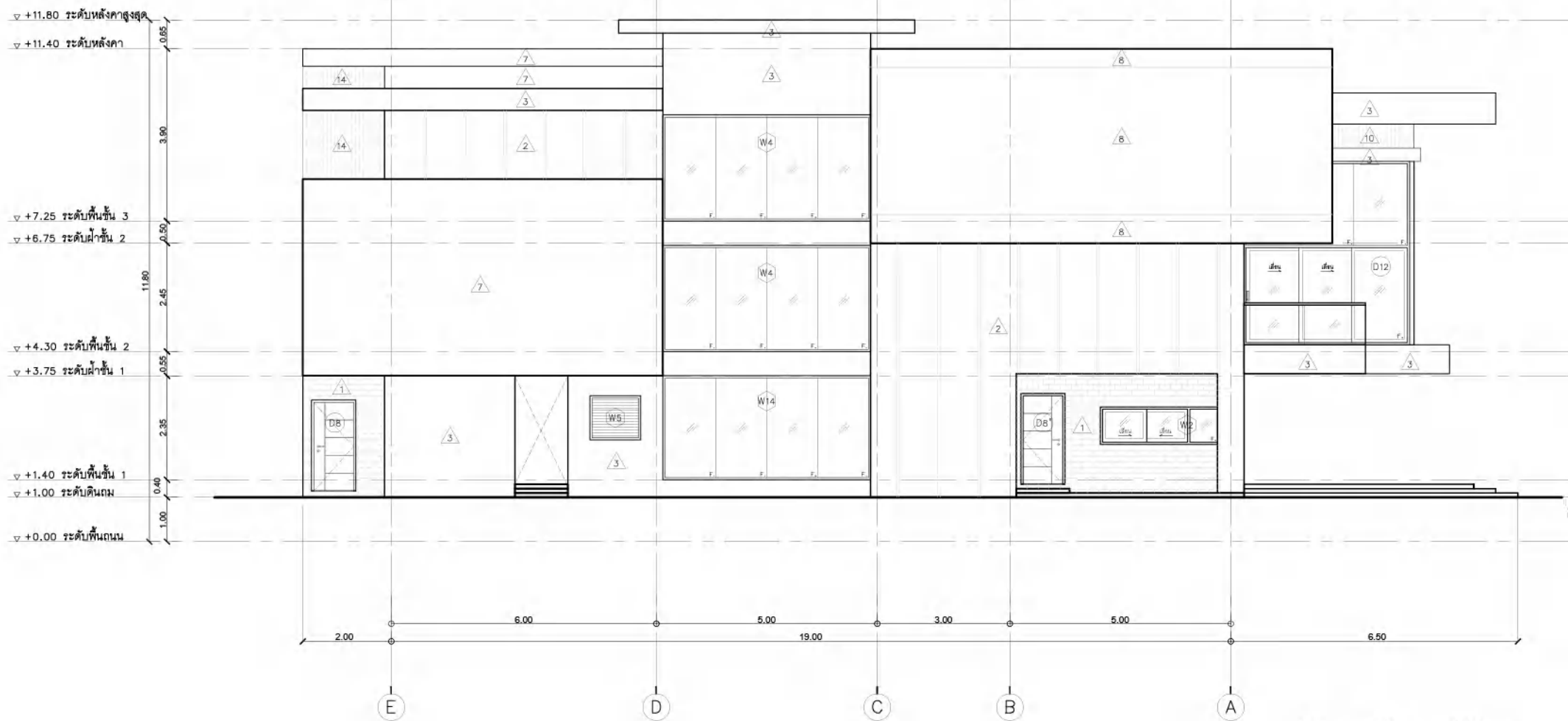


Second Floor Plan





Elevation : Front



Elevation : Side