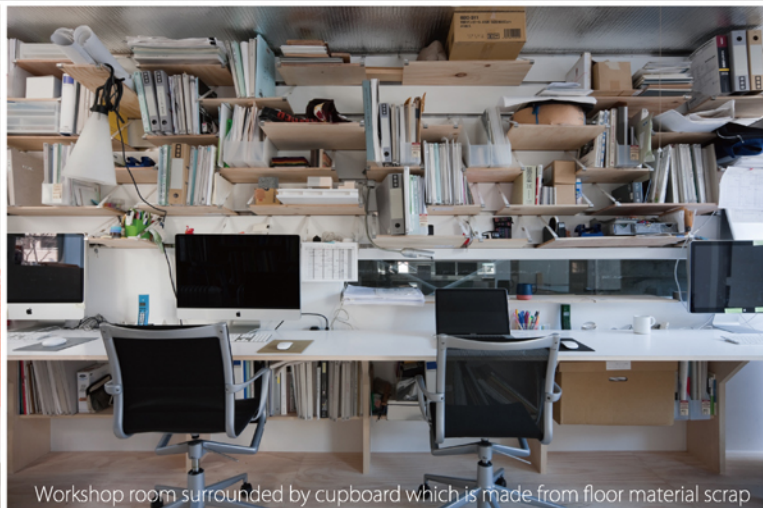


Sugoroku-office

- Building Data
- three-storeys 110m2
 - Structure: steel-frame
 - Finish of the exterior
 - Exterior wall:shipping container
 - Exterior roof:shipping container
 - Finish of the Interior
 - floor: plywood
 - wall:plasterboard with Acrylic emulsion paint on it
 - ceiling: thermal sheet



North Elevation



Workshop room surrounded by cupboard which is made from floor material scrap



The Containers are connected by FRP Panel



Looking at the inside from balcony at 3rd floor



International Prize for Sustainable Architecture
2013 Competition - Built Projects Division



Project name: SUGOROKU office
Project location: Gifu, Japan
Designer/s: met architects
City - Country: Gifu, Japan



Presently, many suburban cities are fragmented by small vacant lots, as a result of the demolition of unused buildings which has occurred due to population decline in city centres.

Some young people are attracted by subcultures attached to these vacant lots in local city centres and wish to occupy them. However, the majority of landowners are older people who have no economic reason to sell the land, as they are already in a steady financial position. They also find no advantage in leasing their land for a long period of time because this often leads to problems concerning rights. As long as this continues, the vacant lots in Gifu will be unavailable to new residents.

Sustainability of the 'Floating Foundation'.

We aim to put into practice new architectural methods in these suburban city centres; one of which is the 'floating foundation method', which consists of using low-cost buildings with no underground foundation. This enables mobility, so this architectural style is ideal for short-term land leases. Thus the owner of the building can take out a lease on an empty lot and use the components of the building for a short time without having to demolish the building when they leave. If these vacant lots can be used to house people, then this may be able to stop the fragmentation of the city and regenerate the community.

Our own Sugoroku Office provides a good example of sustainability. The office is a three story building which can be dismantled, removed and rebuilt within a day or two. We designed the removable tube joint on a square steel pipe, and then used a shipping container as a mobile frame structure, so the building requires no underground foundation. This method ensures durability, allowing for repetitive relocation, as well as resistance against earthquakes. Even fitting the container with a large opening, such as a window or door, does not cause structural damage. This structure has passed Japanese laws and regulation which do not typically allow shipping containers to be used as structural building material.

Sustainability of Waste Management

The Sugoroku office was designed to use 'waste', such as discarded shipping containers and other recycled materials. For example, scraps of plywood floors from a construction site have been used as material for shelves, the size of which can be altered, having been suspended by a PP band and packing materials. This has ensued in a flexible storage system which can hold anything from books to large storage boxes. In addition, a thermal sheet from a factory has been placed on the ceiling in order to increase the efficiency of LED lighting; a leftover net from a construction site has been used as a handrail; pieces of cutting board have been made into a table, and the vertical gutters are made from a drainpipe. These materials are widely available and frequently used, thus ensuring a low cost. We work around a common theme – the use of fragmented parts found in the city, in order to help regeneration.



By using mobile architecture with no underground foundation, these small empty lots can be employed for residential use'.

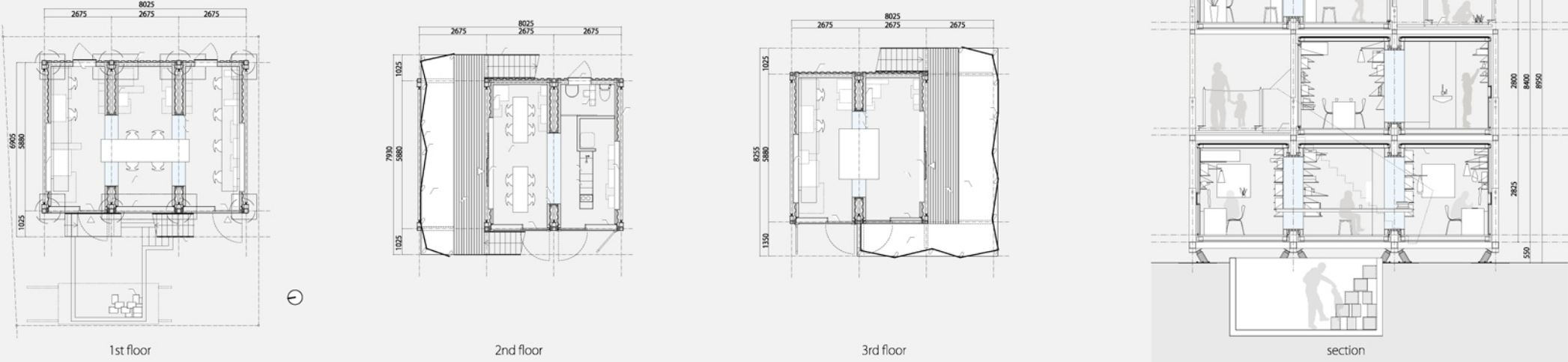
Floating Foundation



Waste Management



FRP PANEL AS A JOINT PART . FRP PANEL IS USUALLY USE IN THE FEELD OF CIVIL ENGINEERING FOR PUBLIC WORK.



met architects



We are based in the regional city 'Gifu', which is experiencing problems common to many regional cities in Japan, such as population decline and ageing.

We have designed 'Sugoroku House' for a sociologist whose area of study focuses on 'Spatial Reduction and Functional Regeneration of Ageing and Declining Regional Communities'. Thus we proposed that she use a small residential unit as her research laboratory, which allows her to live and move around amidst the vacant lots in the city centre. As the region in which she lives also acts as her location for field research, she can engage first-hand in the practice of regenerating the local community.

We have also had many opportunities to design facilities for the elderly in the past ten years. One of these is 'Chabobo', which is a facility for elderly people suffering from dementia. Our method is derived from scenes from the individual's own life, based on the results of workshops with caregivers. The residents, who formerly had trouble returning to their room as they struggled to recall their surroundings, were able to do so in this facility, as they recognised it as a home.

The sociological needs for caring for the elderly are constantly changing. We will continue to debate new issues as they arise, and create architecture as a solution to these problems. This is our way of exploring the possibilities of sustainable architecture in an ever-changing society.

