



FOUNTAINBRIDGE COMMUNITY WIKIHOUSE

Over the course of one weekend in October 2015, more than 70 people gathered to assemble and erect a standalone community space in the heart of the Meanwhile site in Fountainbridge, Edinburgh. The Fountainbridge Community WikiHouse was created by Fountainbridge Canalside Initiative (FCI) and uses an open-source design that has been adapted to the particular conditions of the usage, site and budget. FCI members Jane Jones and Akiko Kobayashi led the project which included obtaining funding, designing and testing the structure, prefabricating the components, sourcing materials (some donated), promotion and co-ordination on site.

The location is a prominent brownfield plot, owned by the City of Edinburgh Council, adjacent to the canal to the west of the city centre. Before the last use as a brewery, the site had previously been home to the North British Rubber Company, Castle Silk Mills and various other artisan industries since the early 1800s. The WikiHouse approach represents the third industrial revolution as a progression of the rich history of manufacturing in this area.

Fountainbridge Canalside Initiative is a group of community activists and local groups who are working to ensure a viable and sustainable local community is created on the site being developed for mixed use by the EDI Group.

Other Meanwhile Uses alongside the WikiHouse are The Grove Community Garden allotments and The Forge woodworking and metalworking open access workshops. All these activities are temporary until development starts on site, but all hope to feed into the permanent features and character of the new neighbourhood.

During 2016, various activities will continue to be held in the WikiHouse, including discussion groups, craft workshops and events around such locally relevant issues as community empowerment, participatory urbanism, land rights & housing.

104 volunteers

70 sheets of plywood used

2318 screws used

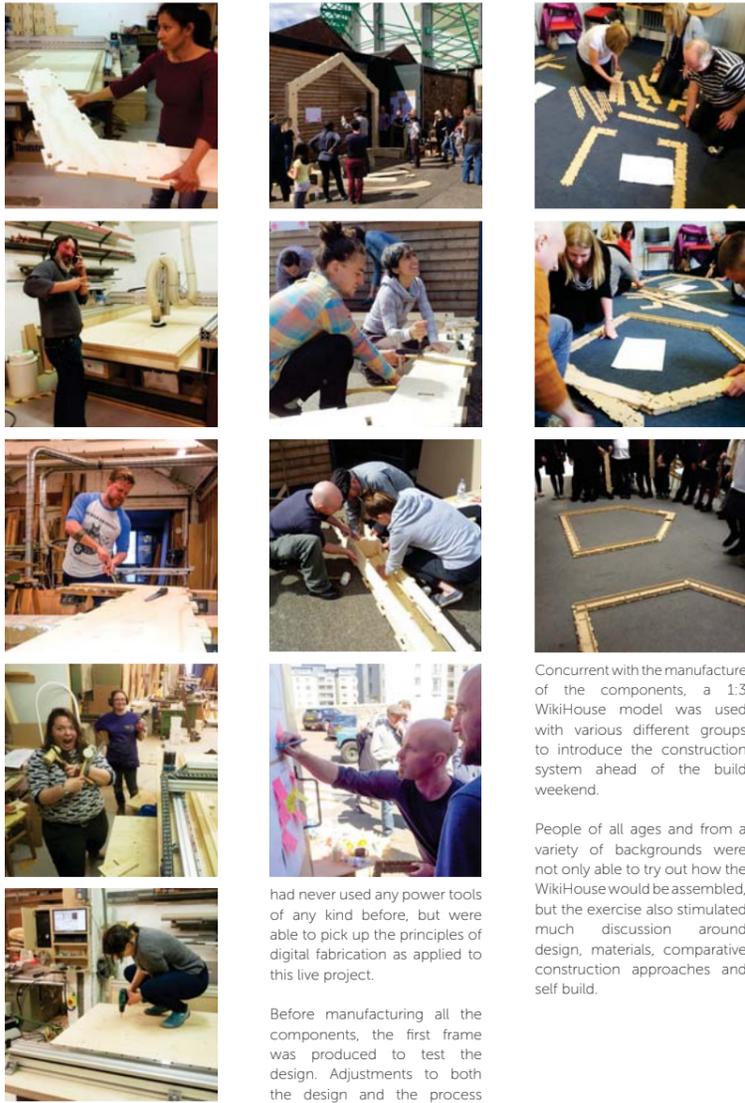
1976 kg of ballast

3500 £ funding

6330 £ approximate value of donations

VOLUNTEERS (PREFABRICATION & CONSTRUCTION)

- Abdullah Shahzad (Nari Kallyan Shangho)
- Adriana Koluszczo
- Akiko Kobayashi (Fountainbridge Canalside Initiative)
- Alan Stoddart (Dunedin Canmore HA)
- Alasdair Gall
- Alastair Campbell
- Alex Oliver
- Alistair Langmuir
- Ana Miret (Grove Community Garden)
- Andrew Miller
- Andy Devenport (Tolcross Community Council)
- Andy Summers
- Angela Doran (Assemble Collective Self Build)
- Anna Butler
- Ann Barton (Dunedin Canmore HA)
- Ann Chesow
- Arran Bone
- Ben Ingle
- Beth Dutton
- Bill Debenham
- Bushra
- Callum Bolger
- Charlie Craigie
- Charmaine Gilbert
- Chris Hellawell (Edinburgh Tool Library)
- Cicely Poulton
- Claire Rowland (Dunedin Canmore HA)
- Colin Paton
- Constantine Talaalaer
- Dan Harrison
- Daniel Colvin
- Denise Havard (EDI Group)
- Dominic McAndrew
- Duncan
- Duncan Shingleton
- Elaine Inglis (Dunedin Canmore HA)
- Elisabeth
- Fuad Alsliebi
- Gandolf
- Gavin Kennerley
- Gavin Kirk
- Gillian Fraser (Pregnancy & Parents Centre)
- Graeme Plews (Dunedin Canmore HA)
- Graham Shawcross
- Humaira Abdullah, (Nari Kallyan Shangho)
- Izzy Hancock
- Jacek Laskowski
- Jack Green
- Jacqui Gibson (Hartley Hill)
- James York
- Jane Jones (Fountainbridge Canalside Initiative)
- Jane Macdonald
- Jarek Gasiorok
- Jasper Hamlet
- Javier Vidal
- Jenn Hutchison (AED)
- John Colvin
- Julian St Clair
- Julian Verduysson
- Julietta Duran
- Kirsty Stenbridge (Boroughmuir HS)
- Lena
- Letitia Valle
- Lucy Stewart
- Maja Myltorska
- Maria Gonzalez
- Maria Linklater (Dunedin Canmore HA)
- M.Ali Naeem (Nari Kallyan Shangho)
- Marino Cardelli
- Mari Stella
- Maristelo F Silva Tete (Grove Community Garden)
- Matt Green (The Forge)
- Matt Wright (The Forge)
- Michelle Pinkerton (Dunedin Canmore HA)
- Mohamed Kiar
- Neil Hartley (Hartley Hill)
- Nicky Thomson
- Ollie Debenham (Bodan Workshops)
- Pablo Barru
- Peter Alexander
- Pierre Frossier
- Richard Allen (Fountainbridge Canalside Initiative)
- Robert St Clair
- Roger
- Ross Jenkins (Build To Grow)
- Rowan Mackinnon-Pryde
- Sabina (Grove Community Garden)
- Samantha Mein
- Savan Panchal
- Silvana Crolla
- Siraj Sabihuddin
- Stacey Hunter
- Steven Moffat
- Susanne Mueller (Grove Community Garden)
- Talha Shahid (Nari Kallyan Shangho)
- Tim Vincent-Smith
- Thomas and Louis Lynch (Dad's Rock)
- Tom Hetherington
- Tom Straker
- Umair Shahid (Nari Kallyan Shangho)
- Urooj Ashraf (Nari Kallyan Shangho)
- Uzayr Bashir (Nari Kallyan Shangho)
- Wendy Lord (Grove Community Garden)



All frame and sheathing components were prefabricated from 18mm thick spruce plywood on a CNC machine operated by volunteers. As with those who helped to build the structure on site, some people

had never used any power tools of any kind before, but were able to pick up the principles of digital fabrication as applied to this live project.

Before manufacturing all the components, the first frame was produced to test the design. Adjustments to both the design and the process were crowdsourced and then implemented for the fabrication of the remaining parts.

What was learned about the assembly method on this first frame was invaluable for the management of the main build.

Concurrent with the manufacture of the components, a 1:3 WikiHouse model was used with various different groups to introduce the construction system ahead of the build weekend.

People of all ages and from a variety of backgrounds were not only able to try out how the WikiHouse would be assembled, but the exercise also stimulated much discussion around design, materials, comparative construction approaches and self build.

Due to site contamination being discovered in the Summer, the original plot was no longer able to be used, but in conjunction with the Grove Community Garden and the Forge workshops, a new plot on the NW corner was covered with carpet and astroturf reclaimed from Fringe Festival venues to protect the ground from any further disturbance, and all existing meanwhile uses were able to relocate and resume activity.

Volunteers helped to prepare the site, learning how to use a whacker plate and laser level to ensure that the temporary footings for the WikiHouse were straight and level. Children particularly enjoyed this stage with the opportunity to play with stones and sand, and the idea that a special patch was being created for a soon to be erected building.



DAY 1 - FRAME ASSEMBLY

On the Friday, a group of volunteers from Dunedin Canmore Housing Association and others assembled all five portal frames. From the diagrams that the builders were given, the pieces were aligned and then connected into a box beam cross section with the use of only wooden mallets to close the friction joints.

Visitors came from Lochrin Nursery, Baby Rainbow Nursery and ESALA Architecture School to view the progress. Other interested passers-by asked if they could help with the build the next day, and signed up to return.



DAY 2 - FRAME ERECTION

With many more keen volunteers than the first day, Saturday was carefully organised into shifts and teams to not only ensure safety on site, but also that all those who wanted to build had a chance to take part. Once the frames were up and pegged together in the morning, there were a variety of tasks in the afternoon such as loading the ballast within the floor depth, completing the bracing of the structure with the sheathing and inserting more insulation.

The wooden mallets from the previous day were supplemented with nothing more than hand saws, screwdrivers for levering parts together and basic power drill drivers. Although it was many people's first experience of construction work, techniques were picked up quickly and people went on to help each other learn, handing over naturally between shifts.



DAY 3 - WRAPPING & INFILL

The weather held up for one more day to allow us to wrap the main structure in self-adhesive protective membrane. At the same time, timber studwork was inserted into the gable ends and donated/reclaimed doors and windows were fitted and sealed.

During the following weeks, reclaimed rainscreen cladding was added to the outside and recycled denim insulation fitted on the inside, with volunteers eagerly returning to continue to contribute where they could.

Although the WikiHouse is looked after by FCI, it is available to use for anyone who would like to propose an activity. The structure will be in place until September 2016.



SUPPORTED BY:

(donations, materials, equipment, advice)

- AED
- Andrew Pritchard
- A. Proctor Group
- Architecture 00
- Bodan Workshops
- David Knight
- Demetrios Cotsovos
- Dunedin Canmore Housing Association
- EDI Group
- Hartley Hill
- Innothem
- MAMB Developments
- Momentum Engineering
- O'Hare & McGovern
- Polyscot
- Remo Pedreschi
- Richard Campbell
- Scotmid
- South West Neighbourhood Partnership
- The Forge Fountainbridge
- WikiHouse Foundation