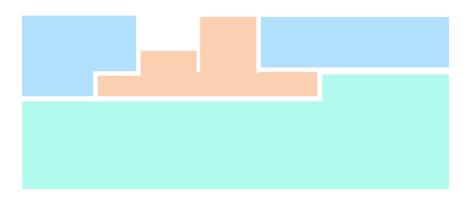
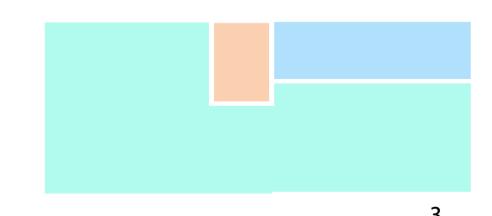


LVL series home with basement option comparable to OUTin house

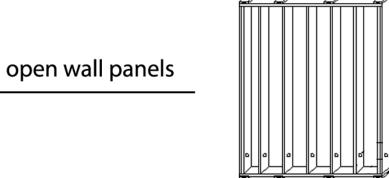
2



**Ground Level Unit** 



Optional Basement



Section

2

# Plan

Both prototype examples aim for efficiency in plan, but do so in different ways. Plans shown are for three bedroom units with almost the same square feet of living space, LVL series top floor 1,453 and top two floors of the OUTin House 1,470. However the amount of circulation area is much less in the LVL series, 10% compared to 23%. This increased efficiency is due in part to the simple rectangular shape and clear diagram of spaces in LVL house. Circulation is central and service spaces are pushed to one side. The OUTin house has a less clear organization. Entry points are also central but 'leftover' space and extra circulation to back doors decrease efficiency of space. Shifted modules define outdoor areas and create more visual interest, but also increase the amount of exterior wall and corner conditions.

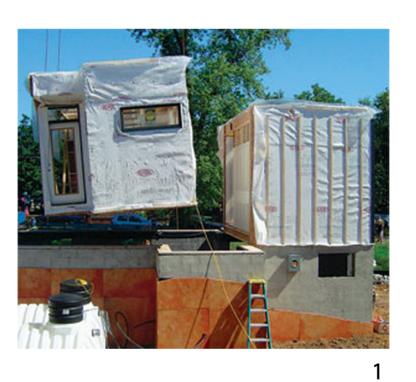
## **IMAGES:**

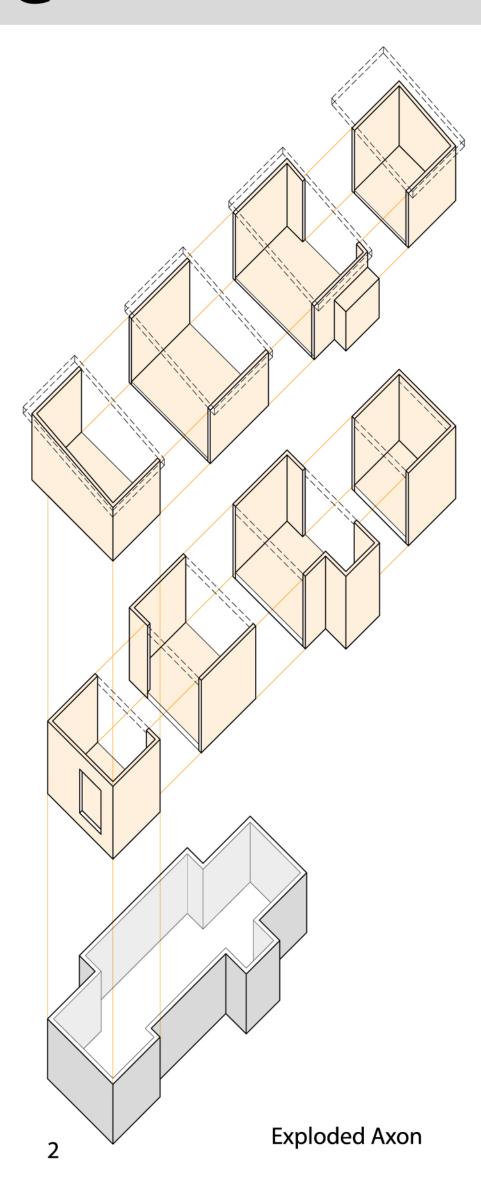
- 1 construction images courtesy http://www.rocioromero.com/
- 2 plans, sections coutesy http://www.rocioromero.com/
- 3 program diagrams courtesy Jeff Wilkins

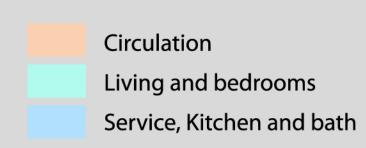
# LV Series Homes OUTin House







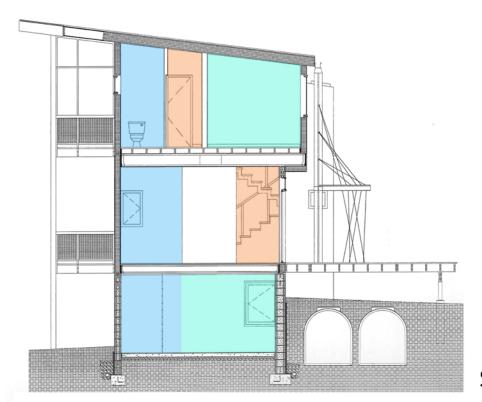




# Comparative Analysis

# **Prefab Construction**

Assembling components of a structure in a factory or other manufacturing facility is becoming more of a feasible option for homeowners looking to build. Transporting complete assemblies or sub-assemblies to the site where the structure is to be located presents many advantages compared to conventional construction. The LV series homes and OUTin House are examples of prefab, yet they have two different approaches. While the LVs are designed to have only stud and OSB wall panels assembled in the factory, the OUTin house has utilized the ability to construct individual modules with more components prior to delivery, including windows and insulation. This approach reduces and streamlines the construction process even more, but poses more challenges in transportation to the site. The LV wall panels are flat packed for transportation efficiency and still require more on-site general contracting, although the simplicity of the designs allow for precision and speed on the job site. With sustainability rising in importance, the processes of different prefab solutions can be utilized to continue increasing environmental awareness while reducing overall costs.



Section

Basement - Unit 1

First Floor - Unit 1

Second Floor- Unit 1

### **IMAGES:**

3

- 1 Moe, Kiel. Integrated Design in Contemporary Architecture. Princeton Arch Press: NY. 2008. pg. 69.
- 2 exploded axon drawing courtesy Jennifer Gailey
- 3 program diagrams courtesy Jennifer Gailey
- 4 Moe, Kiel. <u>Integrated De sign in Contemporary Architecture.</u> Princeton Arch Press: NY. 2008. pg. 66. with program diagram overlay courtesy Jennifer Gailey