### Everett Grand, UK

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### **Existing Baseline Design**

2-floor, 5-bedroom, detached house
Offsite manufactured 2D open wall panels
Offsite manufactured floor cassettes with I-joists
Pre-assembled trussed rafter roof

### Design Modified to DfD/A and DfD/R

The building is disassembled and moved within the same municipality after 50 years of service life. It is explored how the building elements could be reused in the same configuration or in different building types, and how the house might be adapted for a different occupation scenario.



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# Advantages to DfD/R Identified

- Large modules extractable
- Knowledge and infrastructure already in place
- Few common tools needed

# Obstacles to DfD/R Identified

Nailed connections between elements

# CARDER ROOM CARDER ROOM LAUNDERY WC LOUNGE HALL LOUNGE LOUNGE

# Improvements to DfD/R

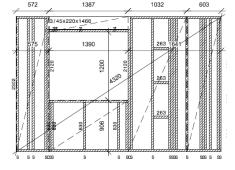
Screwed connections between elements

# Improvements to DfD/A

- Improved room layouts adapted for change in uses and users
- More uniformity in dimensions and element configurations for more versatile reuse
- Easily accessible services





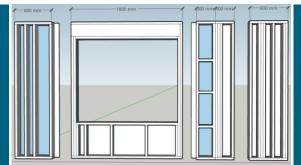


# Obstacles to DfD/A Identified

- Inflexible room layout
- Many different, highly specific wall panel and floor cassette configurations

Up to 95% of Wood Recoverable for reuse in the same building

Rating (RISE tool)



95% of Wood Recoverable for versatile reuse options

Rating (RISE tool)



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