

Our Circular Economy Building Design Criteria

The following criteria should be used to evaluate the circular performance of each 'layer' or system adopted within a given design.

Lining	Insulation	Frame	Fixtures	Doors	Glazing	Services

Materials

- Recycled, reused, renewable and/or compostable feedstock
- Inert/non-toxic
- Non-composite/non-hybrid
- Without secondary finishes
- Low-carbon
- Durable
- Low embodied energy
- Established high-value material recovery schemes
- Limited quantities of different material types

Geometry

- Standardised module working through structural and finishing layers
- Component sizes that are easy to incorporate into new buildings
- Deconstruction possible in parts and/or as an entirety
- Manufactured using standardised material sizes
- Allows for flexible reuse through expansion/structural independence
- Sized to facilitate easy handling, transportation and storage
- Deconstruction sequencing apparent based on junction and module design
- Geometry such that it does not prohibit or limit deconstruction practices

Fixings

- Use of durable mechanical fixings that allow for multiple use cycles
- Fixings that do not damage the materials they join or themselves
- Standardised fixing positions across all reusable elements
- Fixings that can be quickly separated from intersecting materials
- Deployed fixings that can be removed progressively and safely
- Reduced numbers of connections in a unit area (lower is better)
- Fewer different types of connections in each layer (lower is better)

Documentation

- As-built documentation
- Standardised part auditing and reporting
- Lifecycle tracking of modified components
- A viable reverse logistics pathway
- Second-hand component validation/certification