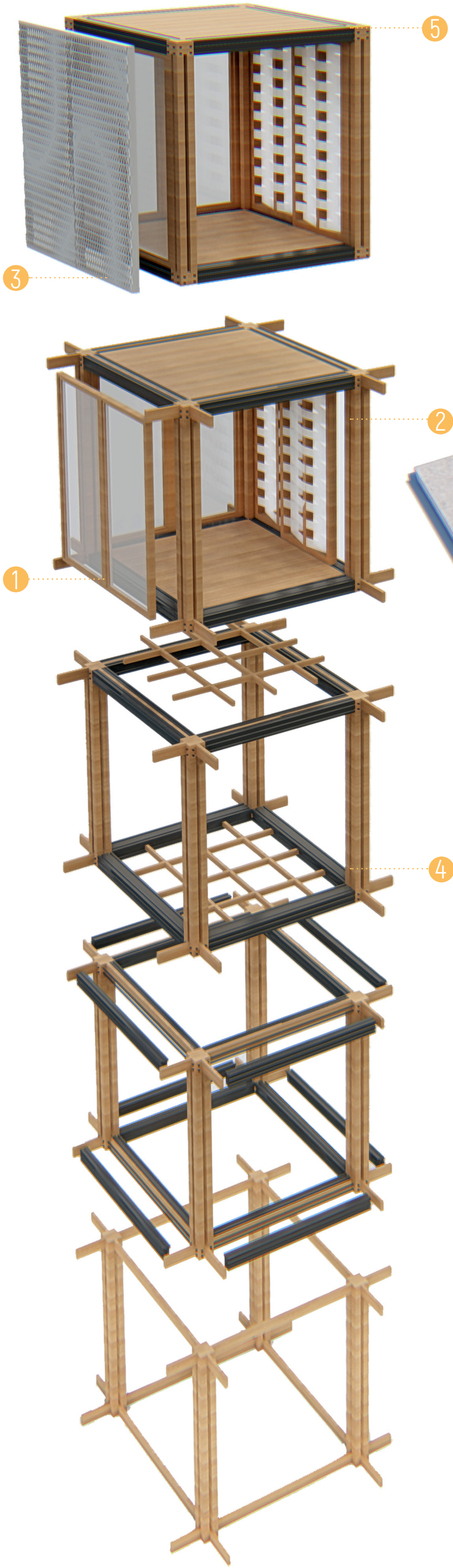
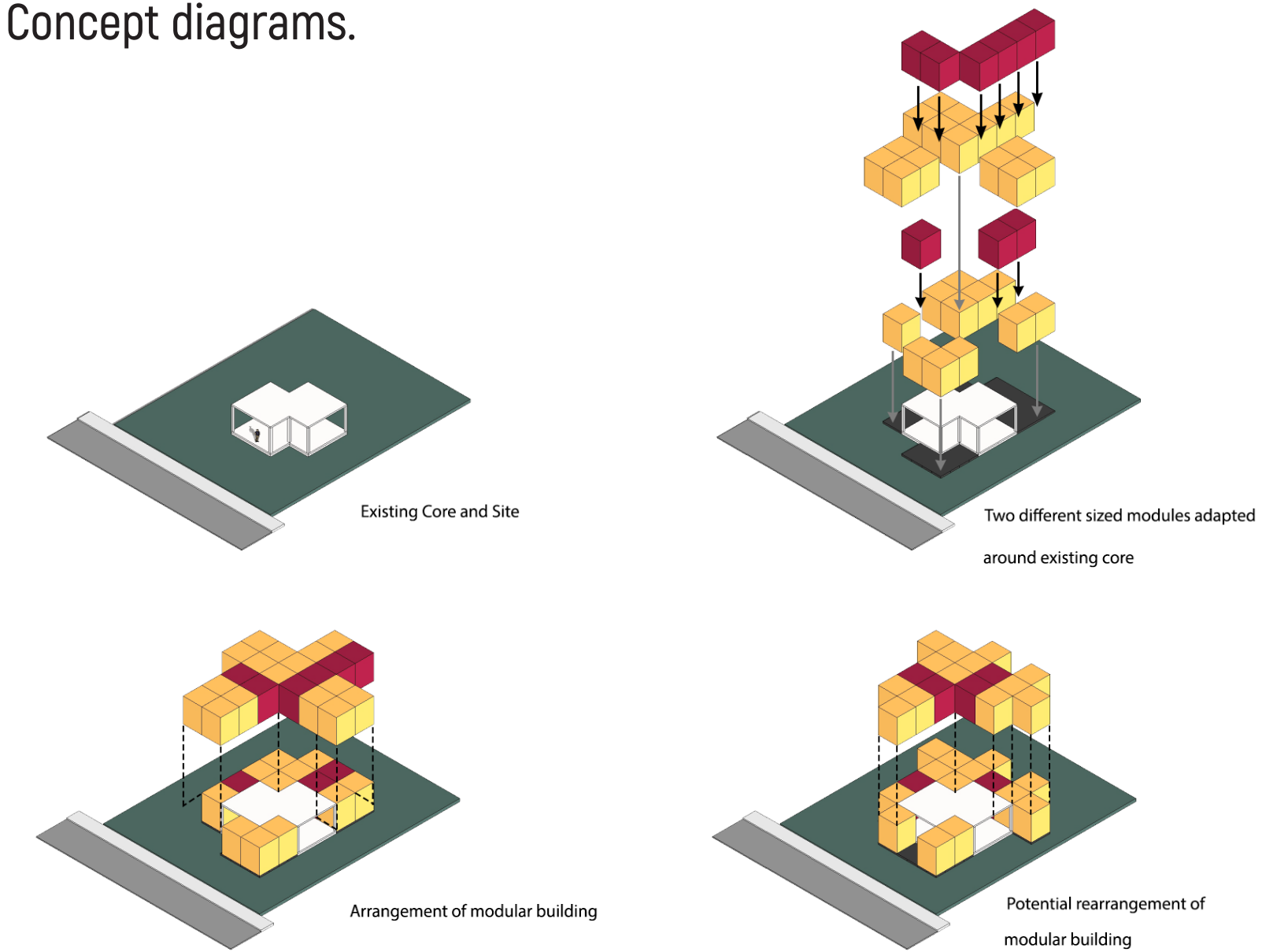


A modular building system designed with the capability to suite three different functions. Our concept for the design of a reversible building has the flexibility and transformation capacity to change its function by time according to the changeable needs from a textile factory (service), workers living accommodation (residential) and a textile shop and exhibition space (commercial). Societal needs and user preferences can change; therefore, we designed a circular industry model to create a sustainable future. The continuous loop extends the lifecycles of building components, systems and materials reducing the waste of them.

One of our key building design capabilities is being adaptable to changing user requirements. The façade material is constructed of lightweight fabric that is resilient in terms of visibility and daylight. The façade is modifiable to suit user requirements and experience. Another key building design capability is that it is upgradable and reconfigurable at building and component level. There are flexible interior partitions on a rail-sliding system that can be adapted and relocated where suitable depending on the use of the building. This allows for a smooth transition from one functional scenario to another represented in its capacity to transform in function, size and shape and minimising construction and deconstruction waste. In addition, the design is reversible and made by reused/remanufactured materials and components. The standard modular dimensioning ensures it always allows fit for purpose and is built as closed metabolisms which reprocesses its resources. This adjusts the changing functional requirements of the buildings and creates new building structures utilizing its components and materials. Each of the three different building functions can be easily deconstructed where the two different standard sized modules can be removed and added easily without damaging the building's integrity. This creates dynamic and flexible designed buildings that can be incorporated into a circular economy concept within the building sector and will function as banks of valuable materials.



Concept diagrams.



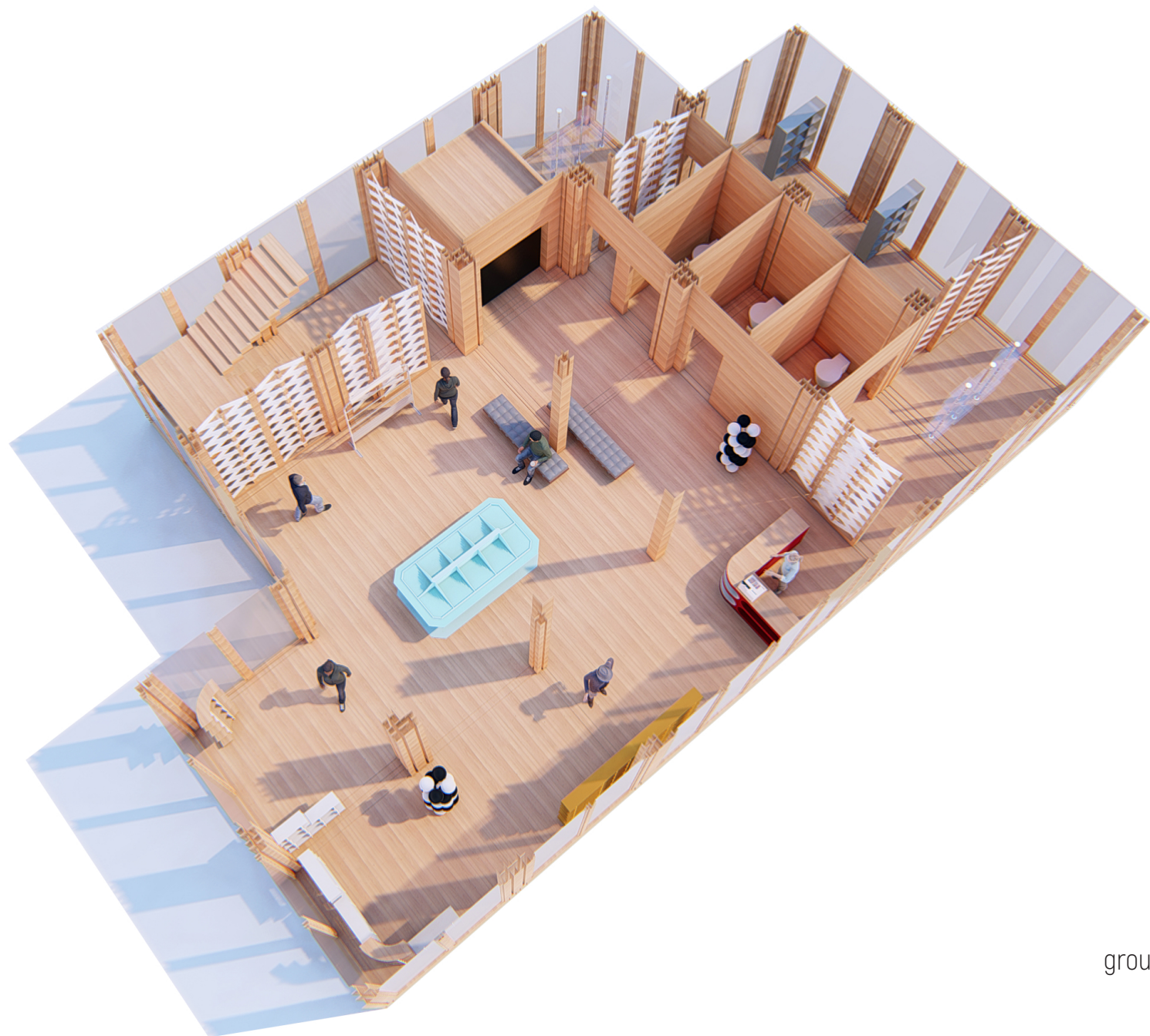
	Product	Product Trade Name	Manufacturer Name	Manufacturer Link	Quantity	Efficient use of resources	Potential next use	Description / Qualitative aspects
1	External Walls	Glazed Panels 2500 x 3450 x 125mm	Not Defined	Not Defined	Various	Reusable within building modular framing system	Only reuseable on other building modules using the same system	Glass panes fitted to external framing system and attached to structure.
2	Internal Walls	Accoya Framed Textile Partition 2500 x 3450 x 125mm	Accoya	<a href="http://www.accoya.com">www.accoya.com</a>	Various	Reusable within the building's structural grid	The product can be removed, relocation andreused on the same building or the component can be decostructed and materials reused or recule.	Textile weaved into timber frame
3	External Openings	Parametric Sliding Façade Panels	Kedel	<a href="http://www.kedel.co.uk/recycled-mixed-plastic-lumber/recycled-mixed-plastic-sheet-1050-x-25.html">www.kedel.co.uk/recycled-mixed-plastic-lumber/recycled-mixed-plastic-sheet-1050-x-25.html</a>	Various	Recycled waste plastic panels with multiple potential use.	Only reusable on other buldings modules using the same system. Alternatively the product can be repurposedor recycled.	Sliding façade panels allow for adaptation of solar shading to suit user needs.
4	Internal Coatings & finishes	Accoya Floor Panel 2500 x 2500 x 125mm	Accoya	<a href="http://www.accoya.com">www.accoya.com</a>	Various	Accoya is a modified timber that is resistant to rot and as a result has a long life. Being timber It is easily work with, adapt and resuse for multiple purose.	Simple Accoya timber panel can have multiple future uses	Timber panels fitted to internal framing system and attached to structure.
5	Roof Coatings & Finishes	Accoya Roof Panel 2500 x 2500 x 125mm	Accoya	<a href="http://www.accoya.com">www.accoya.com</a>	Various	Accoya is a modified timber that is resistant to rot and as a result has a long life. Being timber It is easily work with, adapt and resuse for multiple purose.	Simple Accoya timber panel can have multiple future uses	Timber panels fitted to external framing system and attached to structure.



COMMERCIAL SCENARIO  
textile Shop & exhibition space

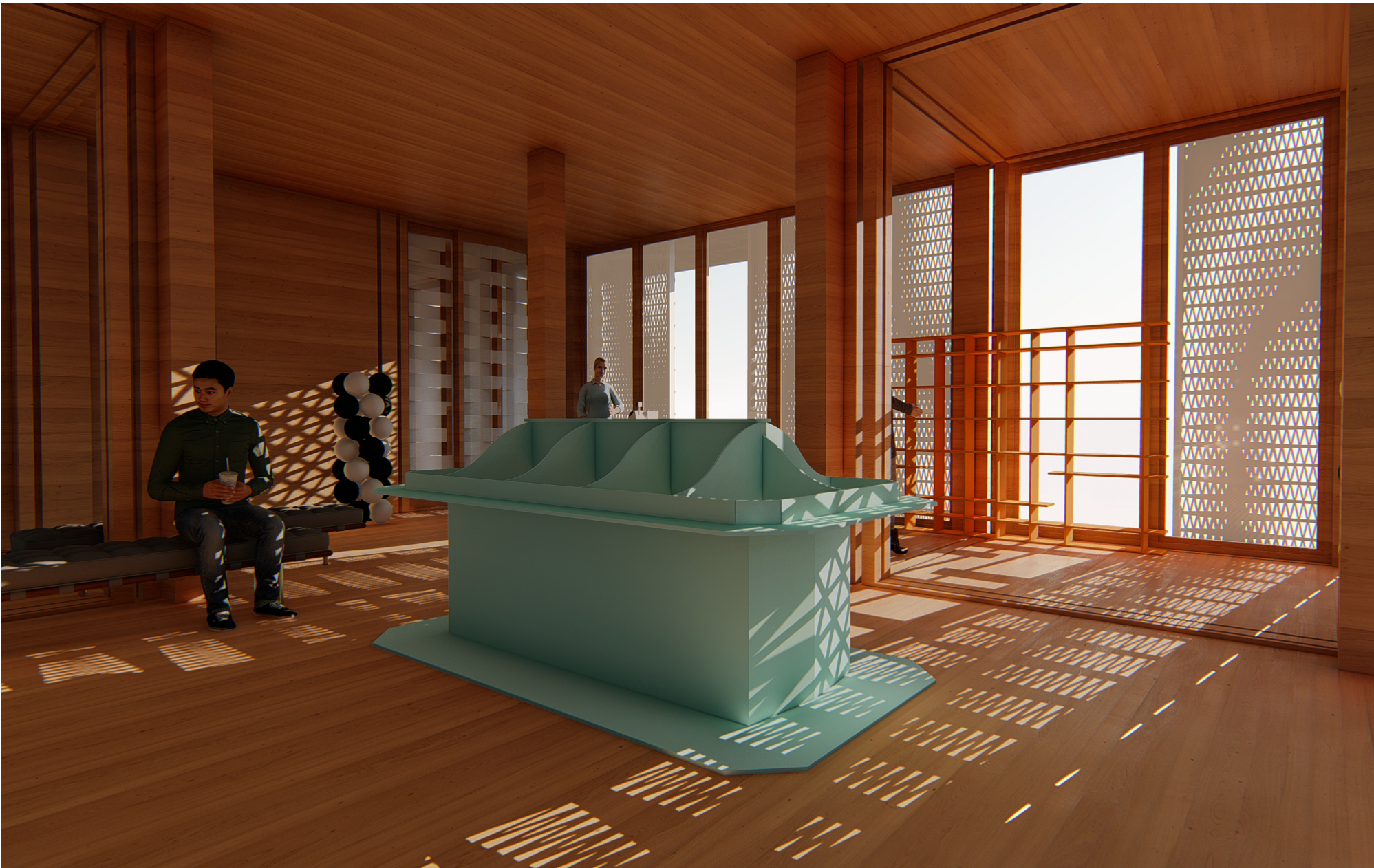


first floor plan

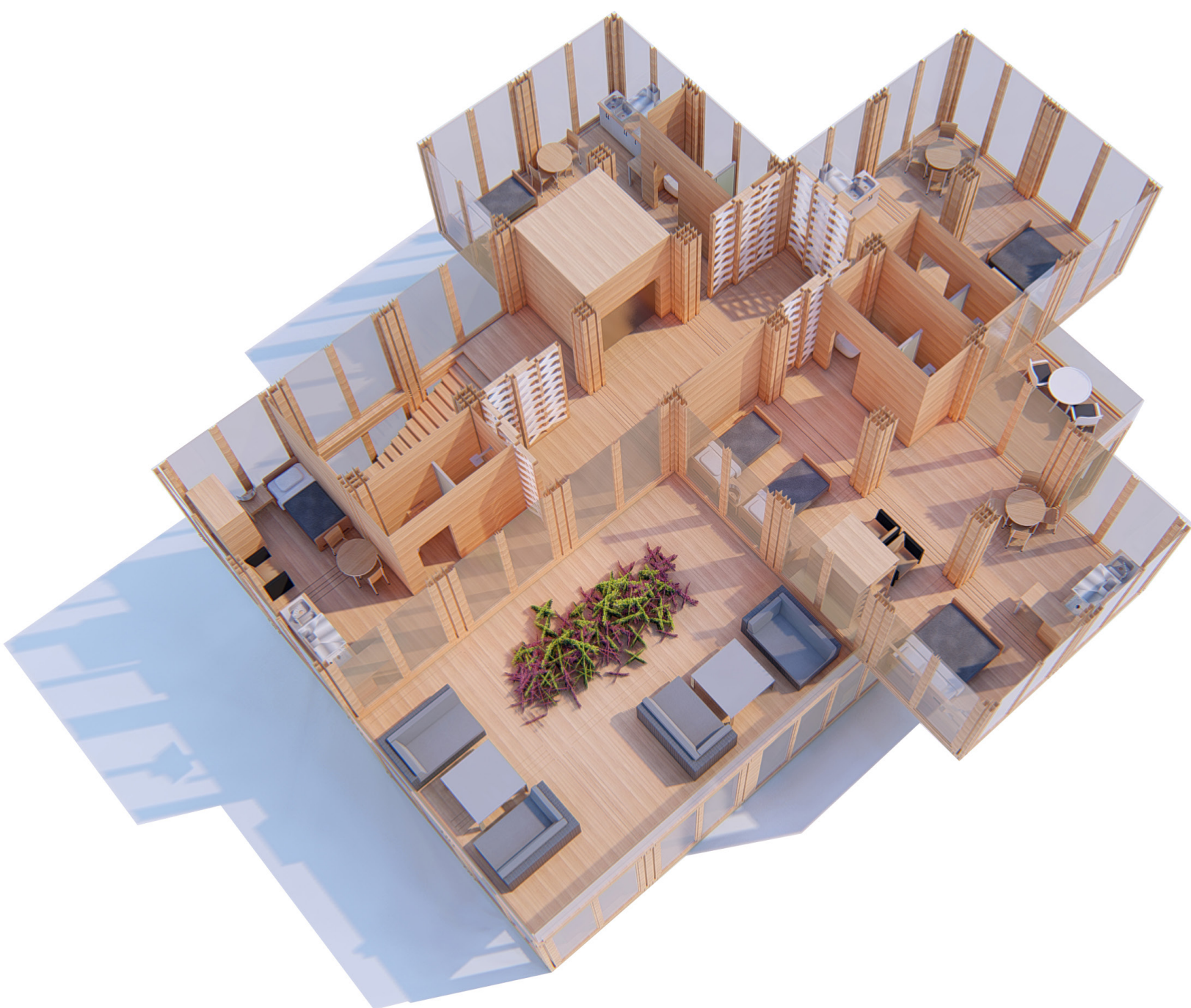


ground floor plan

interior space visual/exhibition



RESIDENTIAL SCENARIO  
workers living accommodation



first floor plan



ground floor plan

interior space visual/living accommodation



SERVICE SCENARIO  
textile factory



first floor plan



ground floor plan

interior space visual/factory space

