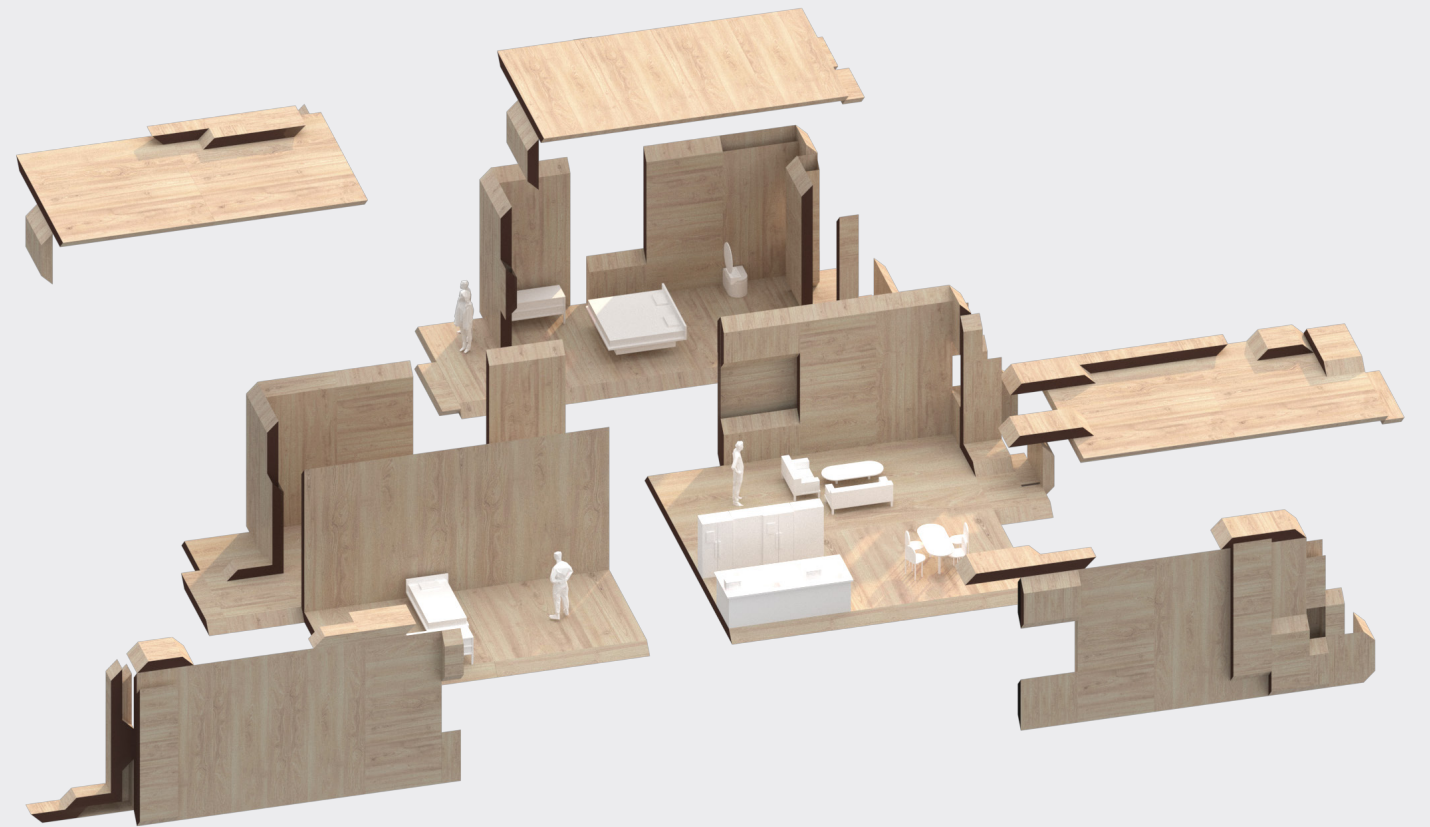
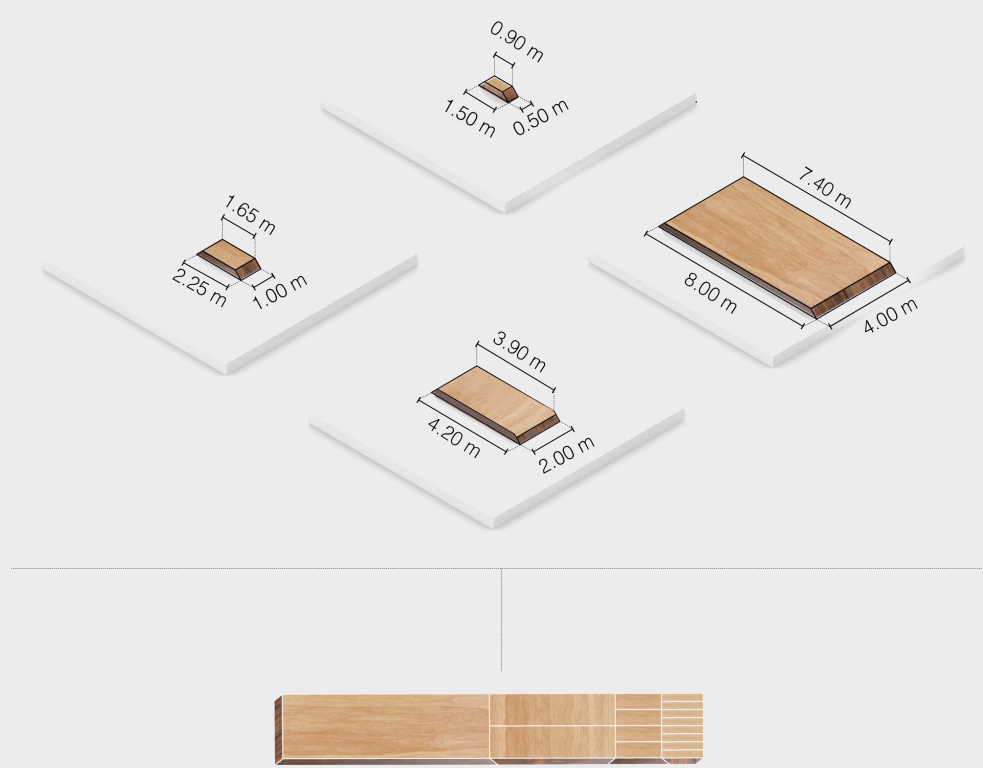


# 0001+1 Bits

A CLT CONSTRUCTION SYSTEM

001+1BITS is a CLT construction system evolved out of the inherent properties of CLT as a lightweight fast and dry construction methodology. Building on the work of metabolism, 001+1 Bits proposes a reconfigurable kit-of-parts which can be combined, disassembled and recombined to form a hyper-personalized housing solution.



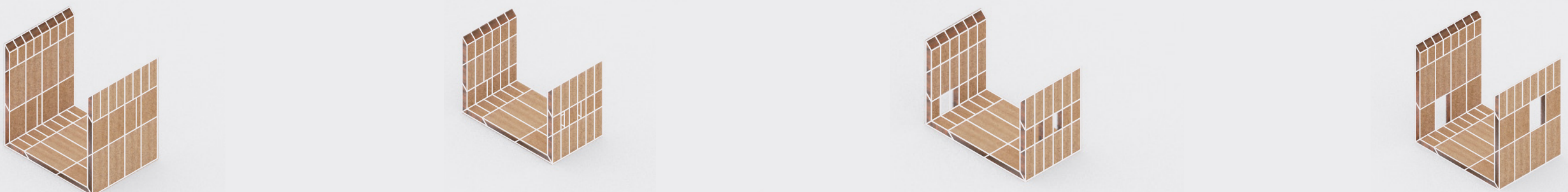
The system is formed of four panels. These panels have a 1 to 2 ratio to one another, for an ease in assembly. The trapezoidal geometry allows seamless configuration of these modules.

A single apartment unit. exploded to reveal the various functions that can be embedded within the apartment. more functional modules can be added according to the needs of the inhabitants.

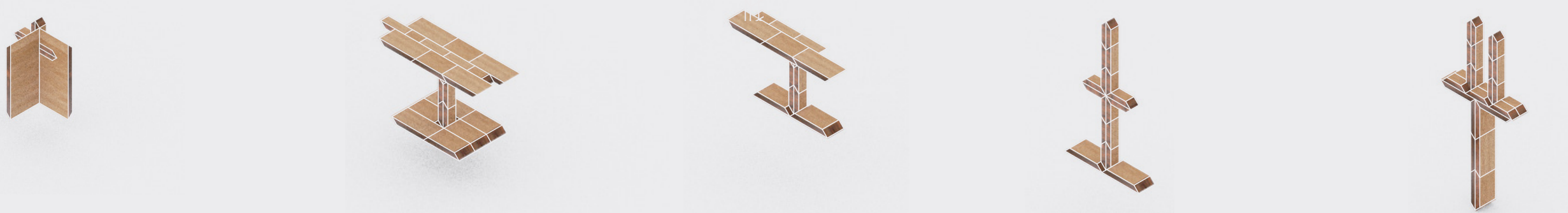
01



02



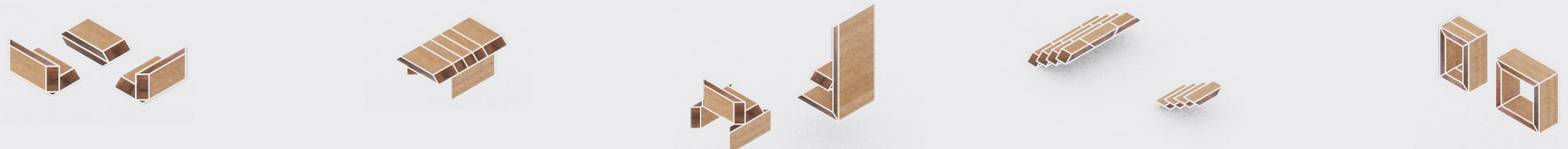
03



04



05

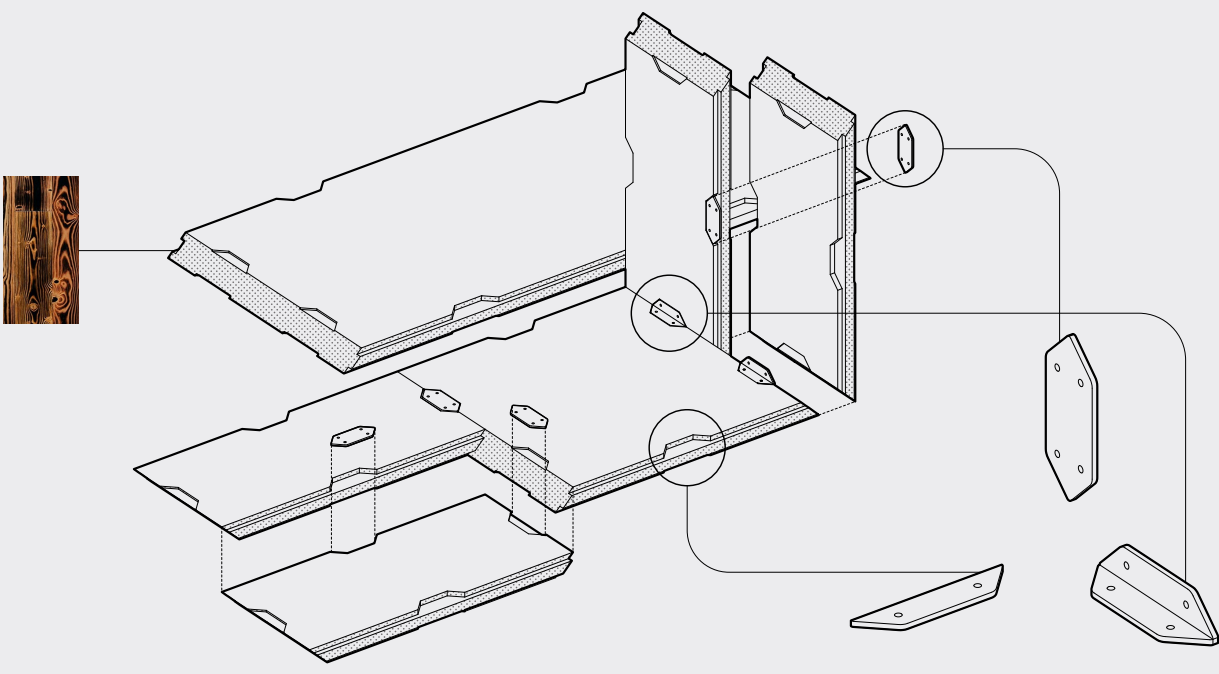


06

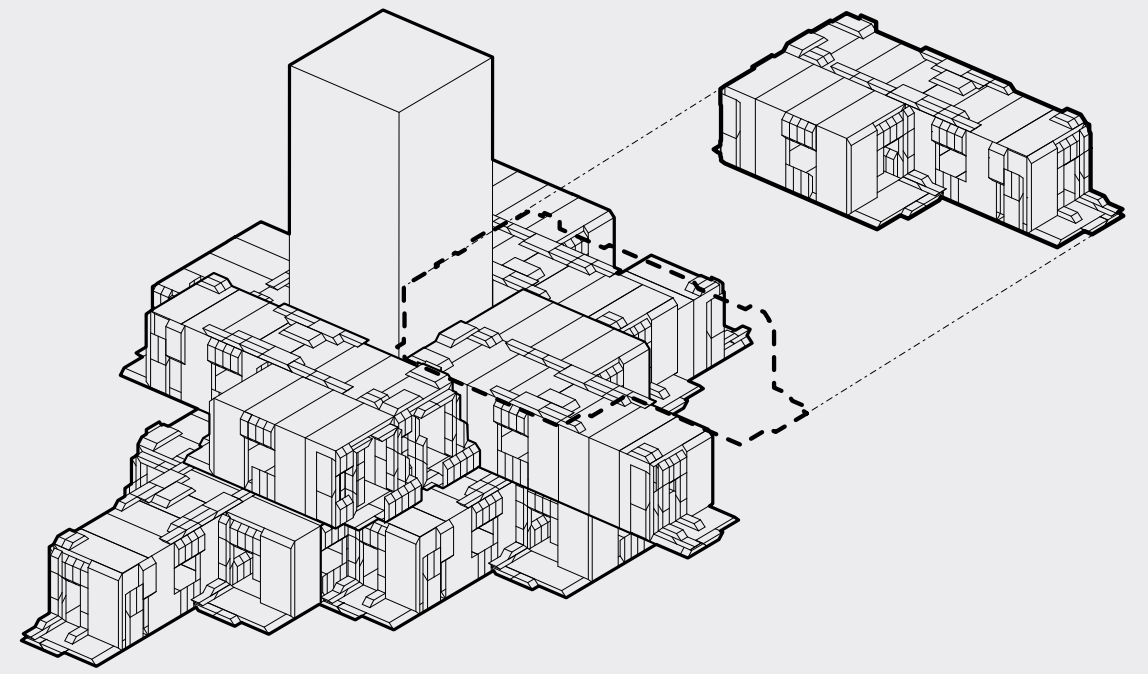


- from above :
- 1 - Ceiling and slab
  - 2- Floor and slab
  - 3- Column and connection detail
  - 4-Roof
  - 5-Furniture and staircase
  - 6-Assembly of one unit procedurally

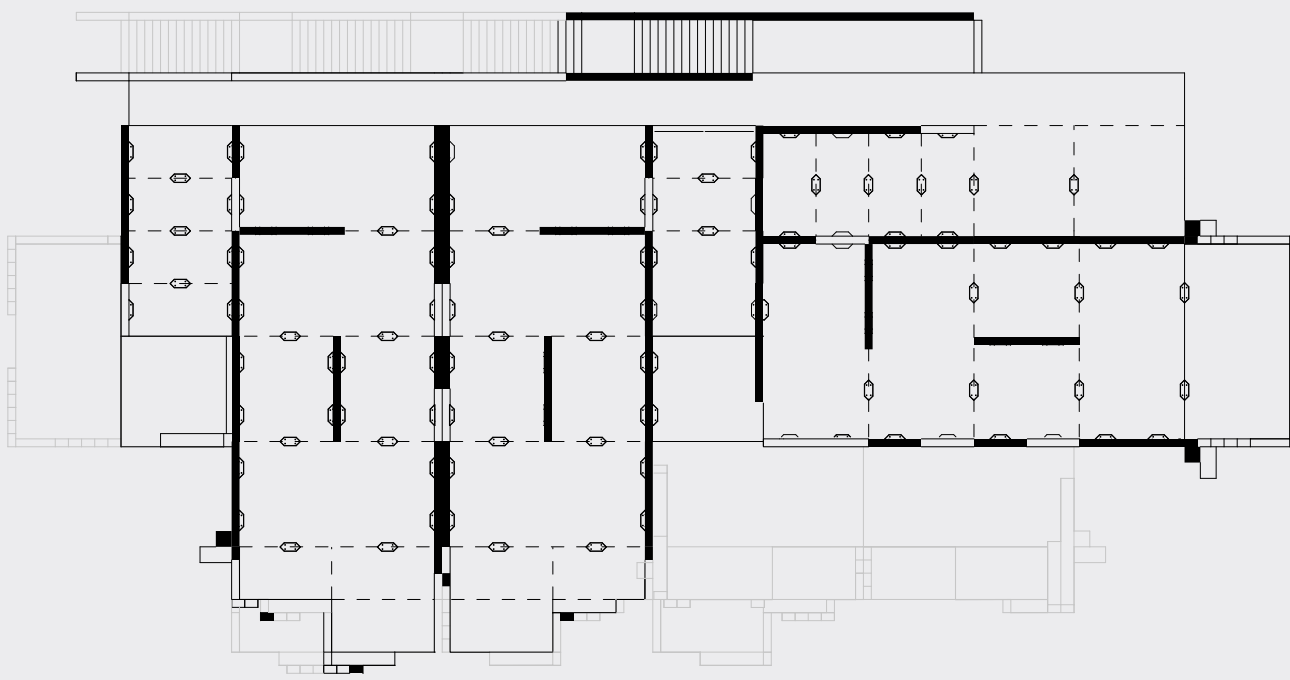




Various modules are embedded with CNC'd slots where steel joints can be bolted to enable the rapid reversible joints. We have designed three steel plates for various conditions. These steel joints are then covered with a timber panel to form a flush surface.



The housing units can be stacked and removed depending upon the requirements of the occupants. Here the structure is treated as an organism which can respond to its contextual requirements. The housing stack can grow vertically around a central CLT core, where newer housing units can be added as the need for space grows.



This plan showcases the Delhi apartments in a low-rise structure where housing units can grow horizontally provided there's space available in that direction. here three distinct units are formed with same bits and pieces, personalized according to the requirements of their inhabitants.



The interior can be left with the timber finish which provides a classy warm aesthetic. The exposed edges of the CLT are charred and treated with oil to seal it off. Similar treatment is provided for members on the exterior as well.



**Mumbai**



**Delhi**



**Shimla**



**Kochi**

Top Left: Mumbai requires high rise solution due to land being a scarce resource. here terraces have been provided to function as green spaces as well.

Top Right: Delhi house, is a spacious low-rise multi-family cohousing. Huge windows face the eastern direction while the western and south western faces are provided with scarce openings .

Bottom Left: The Shimla house is built upon a steep sight held over Glulam columns. This also provides insulation from the cold ground, where heat loss may take place.

Bottom Right: a house in Kochi. Building upon the vernacular context . replicating its style and properties that are embedded within that style. such as the courtyard and sloped roof.