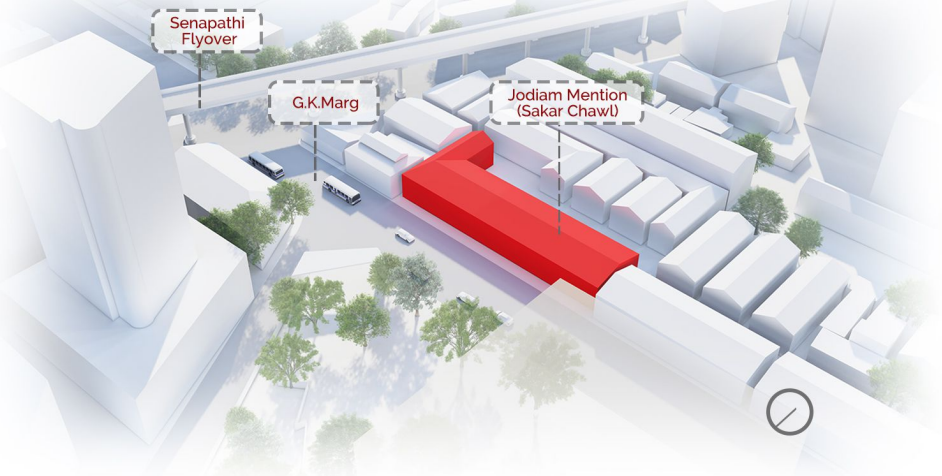


# Revitalizing Mumbai



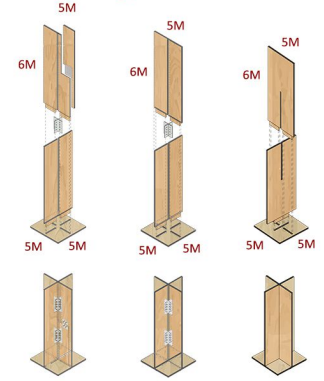
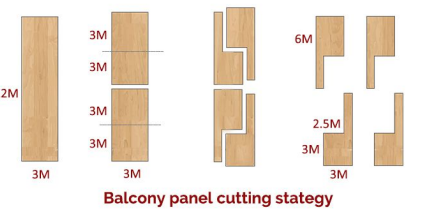
**Site Location:** Lower paret ,Mumbai ,Maharashtra ,India  
**Site area:** 1200 SQ.m  
**No.of units:** 70 (approx.)

Mumbai, one of the most densely populated city is a collage of urban fabric, cultures, and infrastructure. Mumbai has always been blemished by: Rapid unplanned urbanization, ever increasing housing needs, Lack of proper infrastructure, poor amenities. In such a high paced city, through the use of CLT we are providing a new alternative which is both faster & better than contemporary construction techniques.

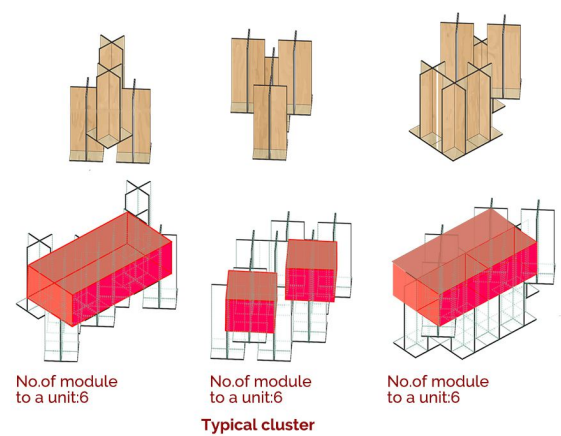
**Chawls:** Typically, a chawl is a set of rooms strung along a corridor. Chawls can be single storied or multi-storied households. The entire building may also have a courtyard inside with corridors running all around the courtyard with rooms strung along them. It is speculated that origin of chawls lie in an agrarian house-type, the wada, (typical in Maharashtra, India) with a courtyard inside and a set of rooms strung along the courtyard.



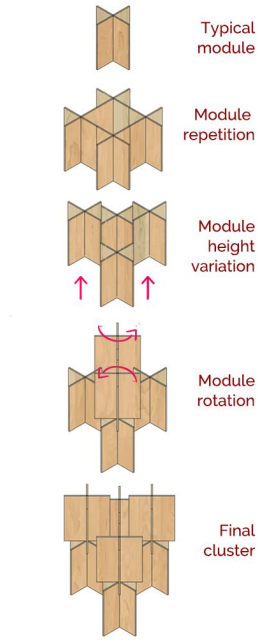
The design incorporates CLT module of 2.5 M width and 6 m in height that is divided from a CLT standard panel of 12m height. These panels are connected in a **cross formation** with a metal plate insertion. The module is then multiplied horizontally and vertically. These modules are stacked vertically one above the other in such a manner that every alternating module is rotated by 45 degrees along the center axis. The floor of a module is interconnected with walls of adjacent modules with the help of slots. This provides a solid bonding and provides proper rigidity to the entire building. Vertically modules are placed along center axis. Cumulatively the structure is held together by this alternate connections fostered by these shifting and rotating planes.



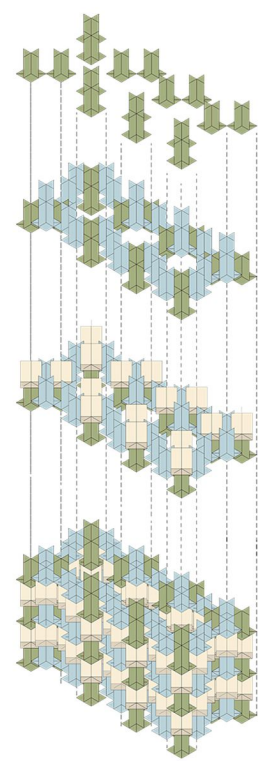
CLT sheet size: 2.5M X 6M  
 No.of sheets in a module: 4  
**Typical module**



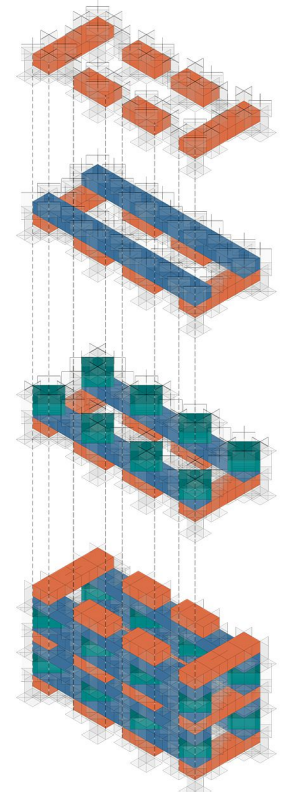
No.of module to a unit:6  
 No.of module to a unit:6  
 No.of module to a unit:6  
**Typical cluster**



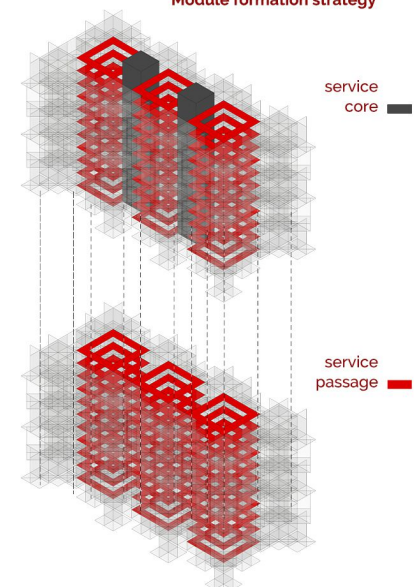
**Module formation strategy**



**Module setup**



**Mass interuion setup**



**Core and passage**

# Revitalizing Mumbai

**Design description:**

Design celebrates the vitality and multidimensional community by referencing historical building tradition and urban context, integrating with transportation infrastructure, and CLT construction.

By stacking housing similar to the lumber drying process, voids are created to allow for daylight, ventilation, and private and semiprivate amenity spaces. Neighborhood residents and visitors from other boroughs are encouraged to engage with the site.

Areas of double- and triple- height spaces contain the public program Housing levels above are organized in three typical floor plans depending on unit type.

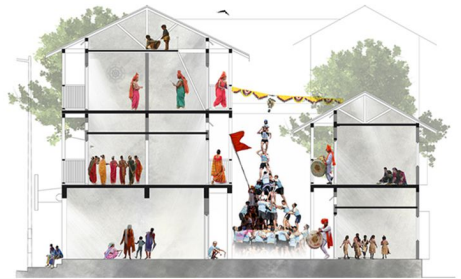
Keeping in mind the ever increasing demands, the units are designed with the possibility of incrementality over a period of years. The incrementality allows to create a unique character.

The courtyard is designed such that it remains shaded most of the time during the day and acts a focal point for the varied interactions between the users.

**Climatic response:**

Large overhang are provided that act as a protection from sun and rain. The balcony acts like a buffer and natural elements.

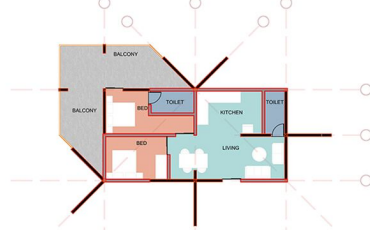
Taking inferences from spatial planning of chawls, the building is arranged in a linear fashion around beautiful linear courts. The courts act as node for all the festivities and gatherings and also creates interactive spaces for the residents.



Comparative comparison section between existing and proposed structure



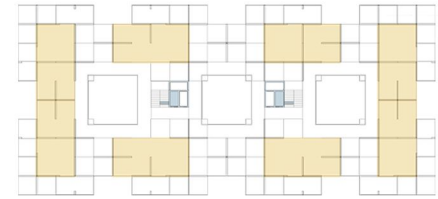
Unit type 1- Typical floor plan 1



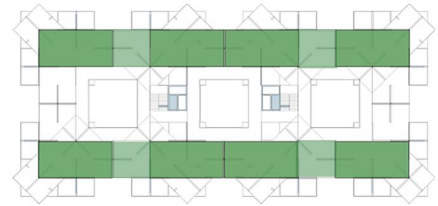
Unit type 2- Typical floor plan 2



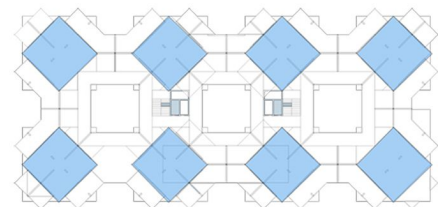
Unit type 3- Typical floor plan 3



Floor 1, 5, 9

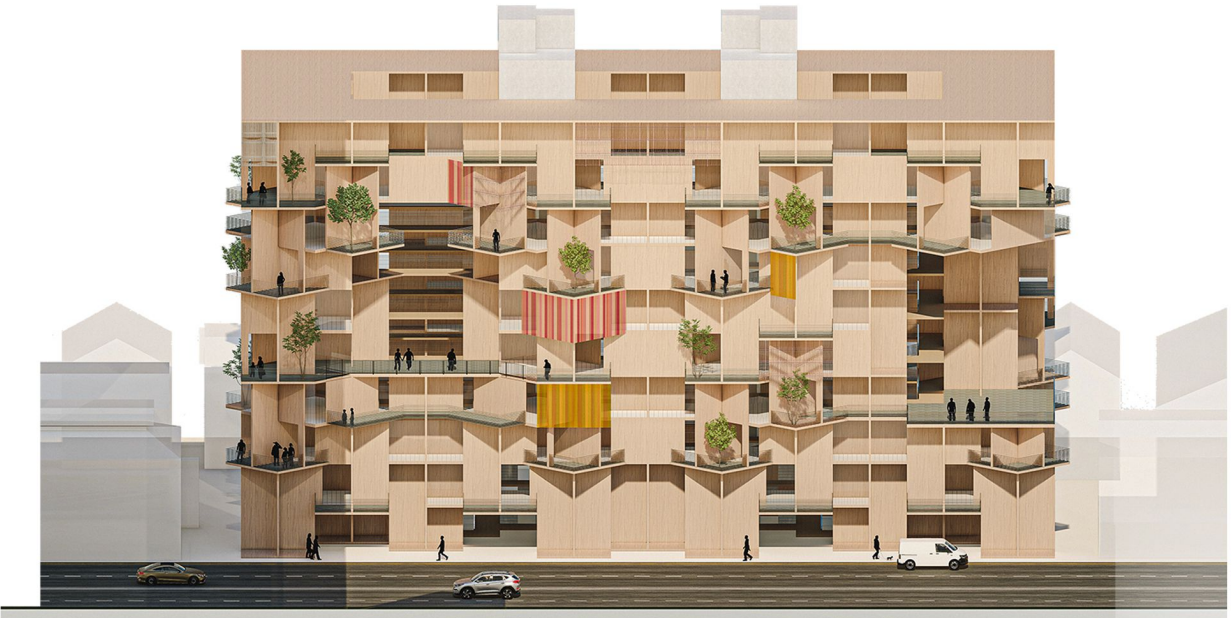
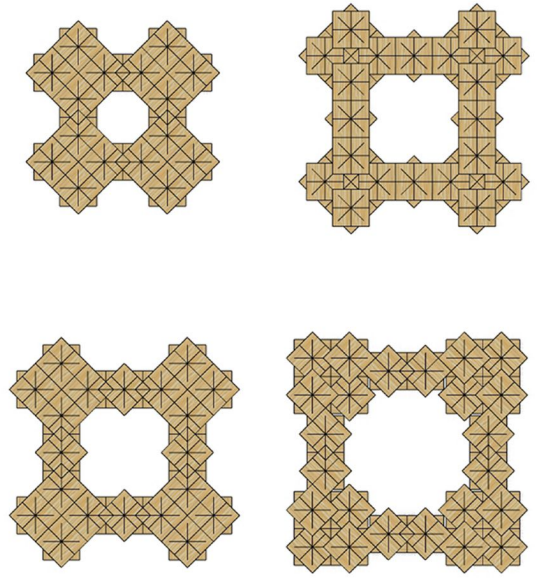


Floor 2, 4, 6, 8



Floor 3, 7

**Design explorations:**  
Using the same synergy exploring different iterations that can be utilized based on the different site conditions.



**Internal social spaces-Views**

