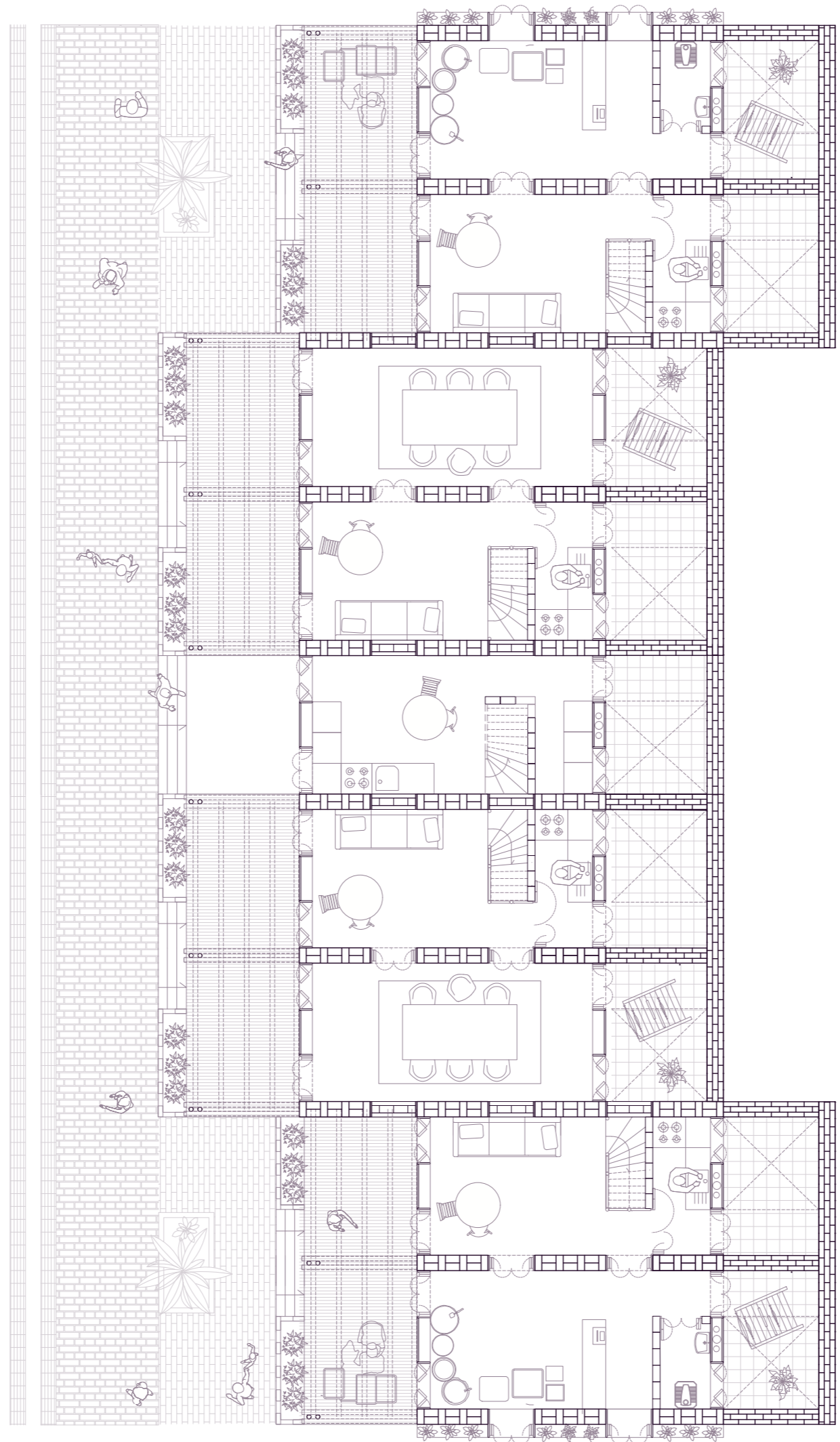
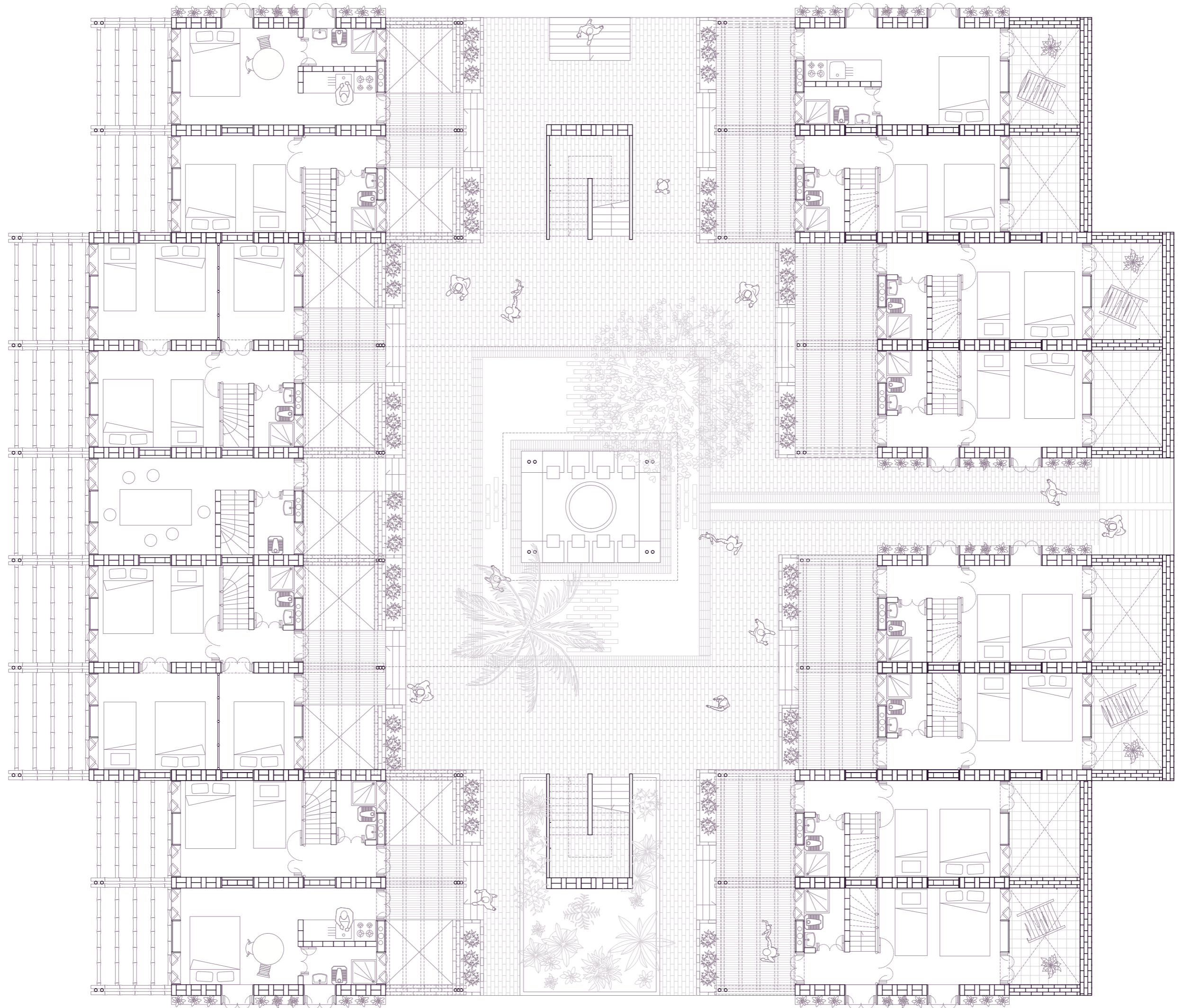


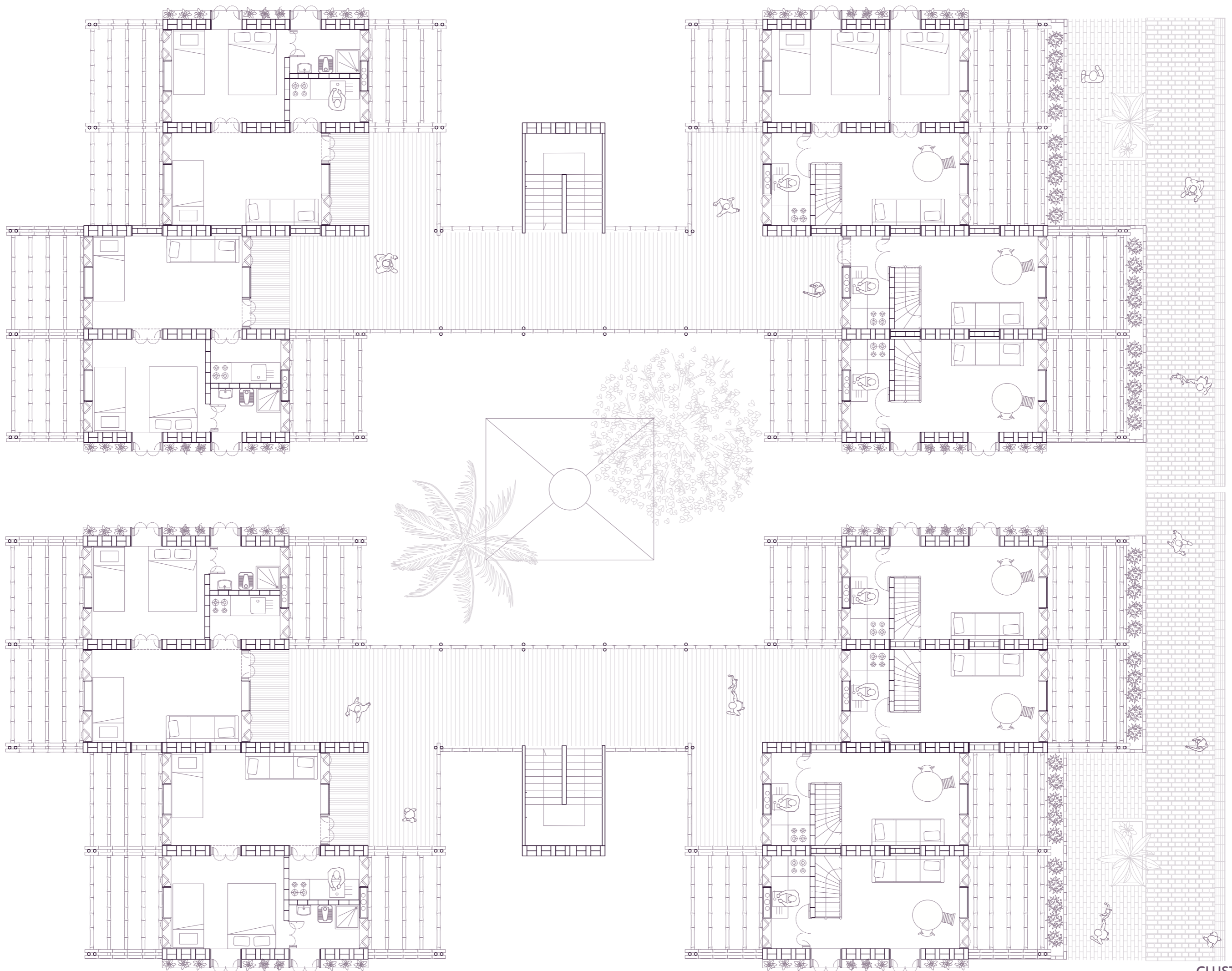
DESIGN DRAWINGS

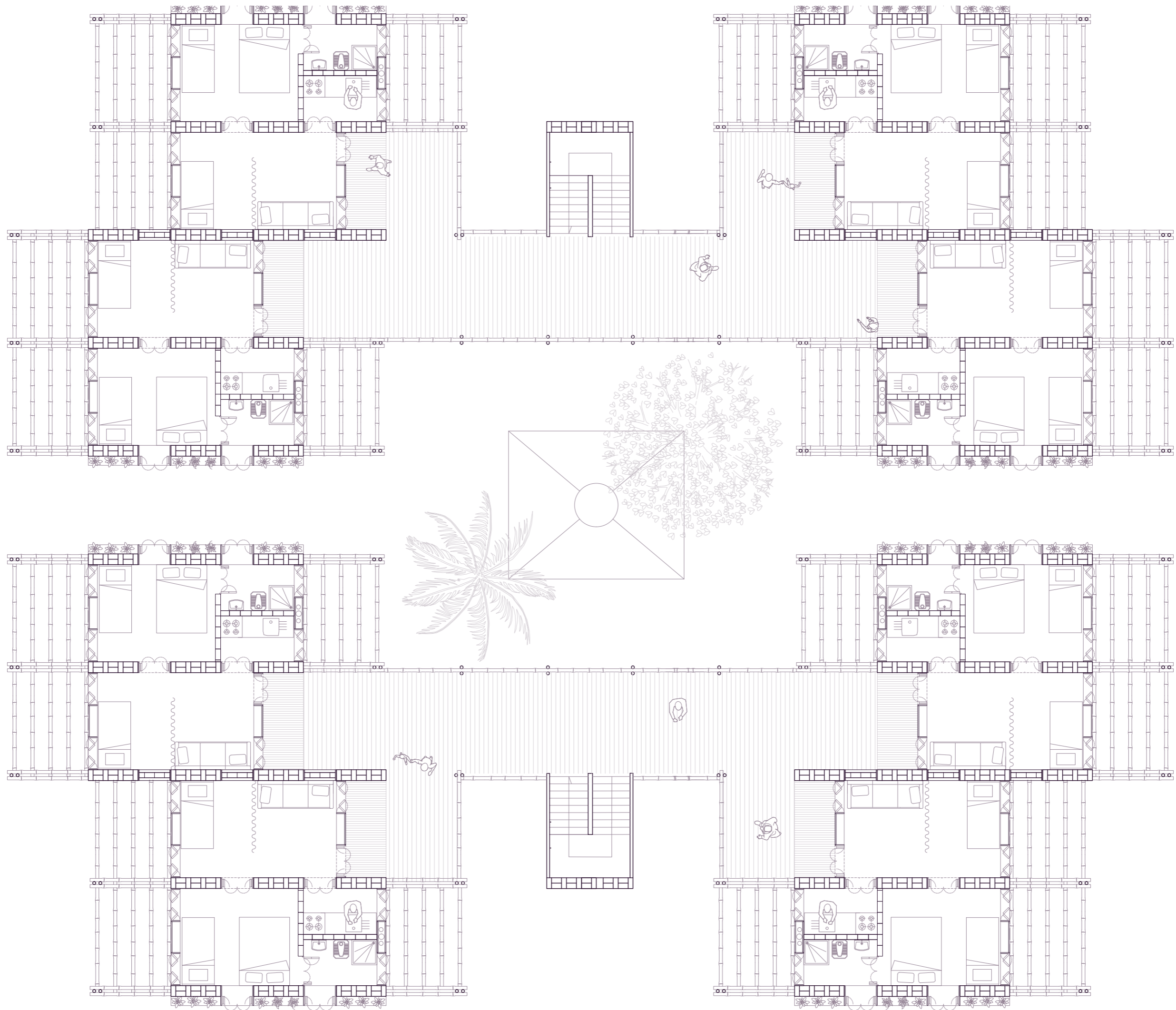
Marion Achach - TU Delft - Global Housing Graduation Studio
June 28th, 2024

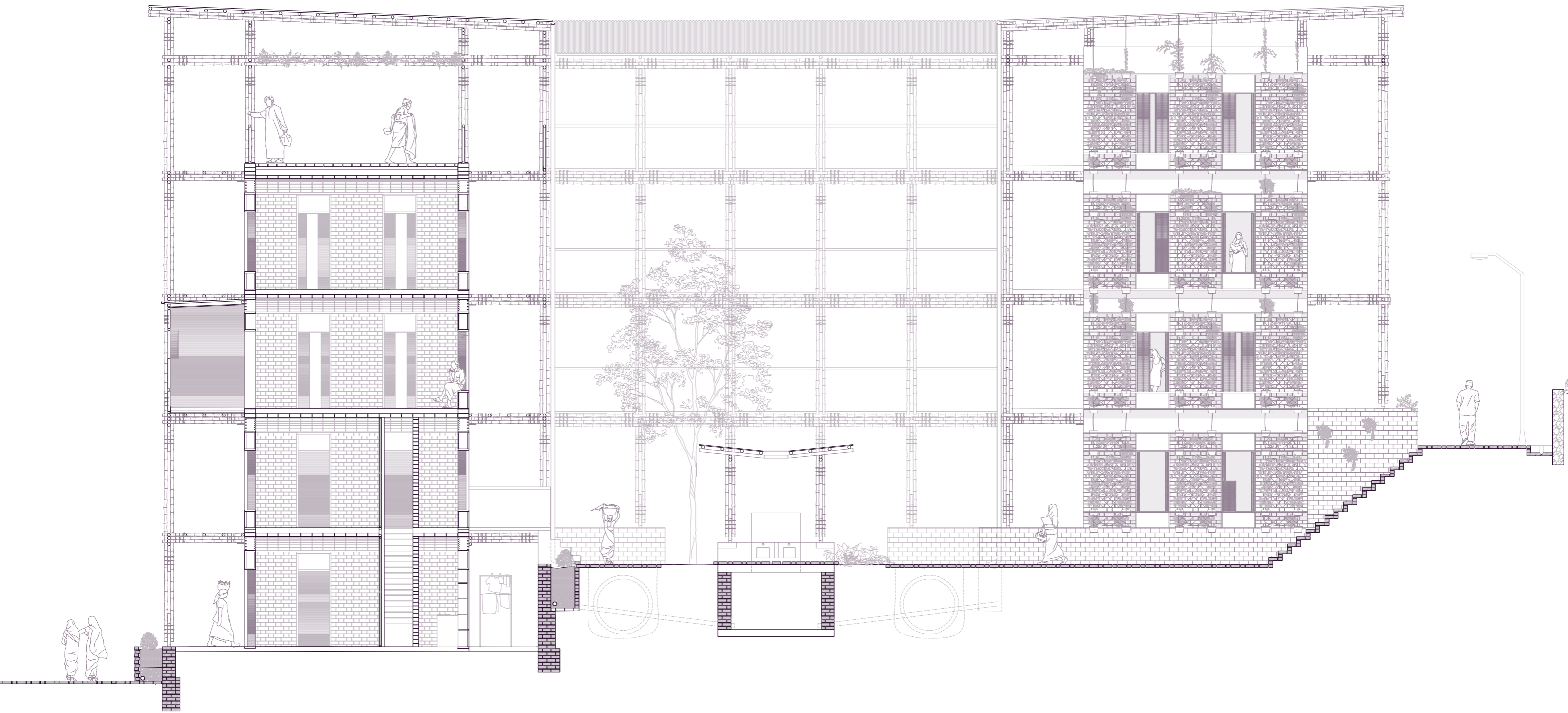


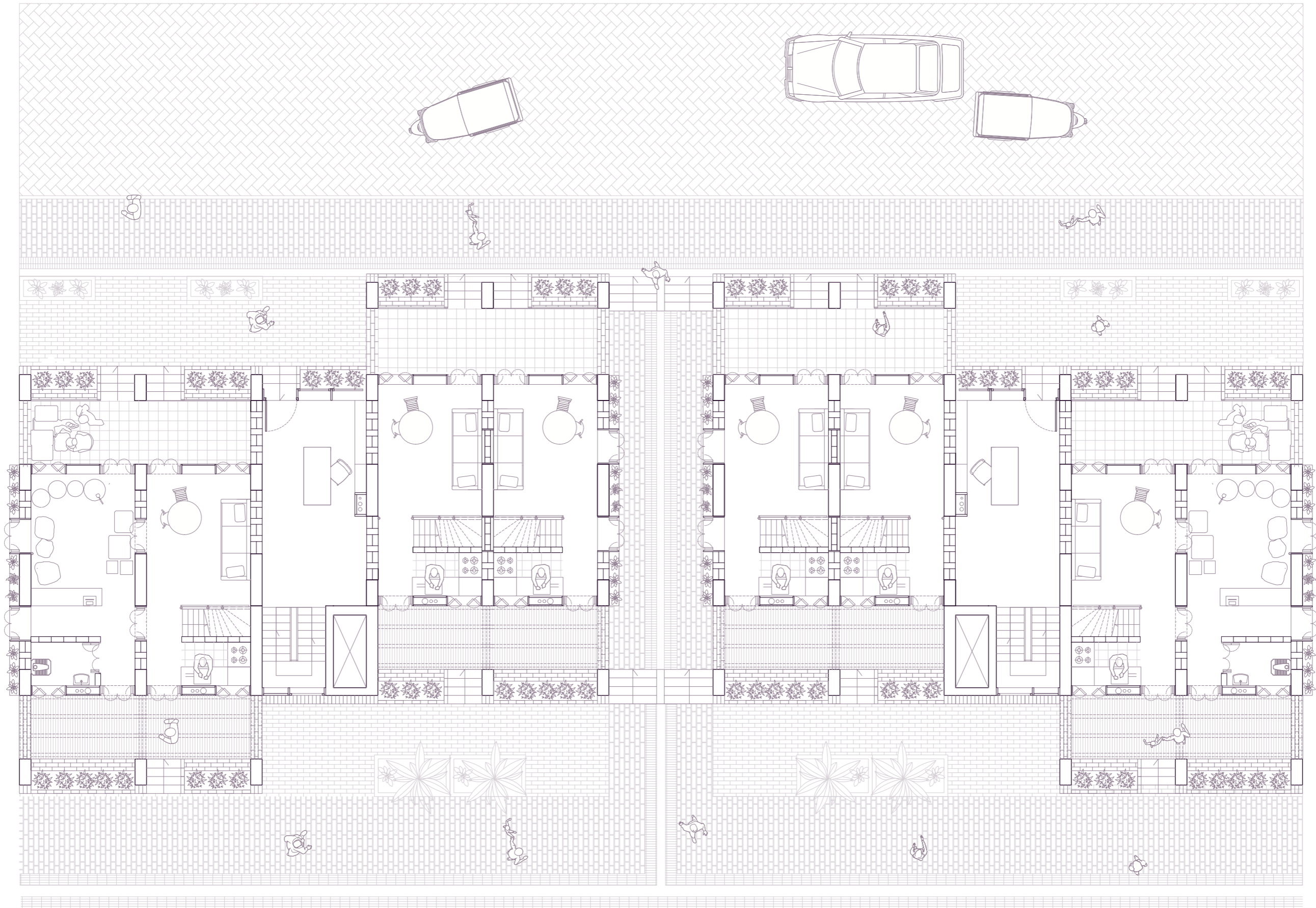
CLUSTER 1
scale 1:100 - ground floor





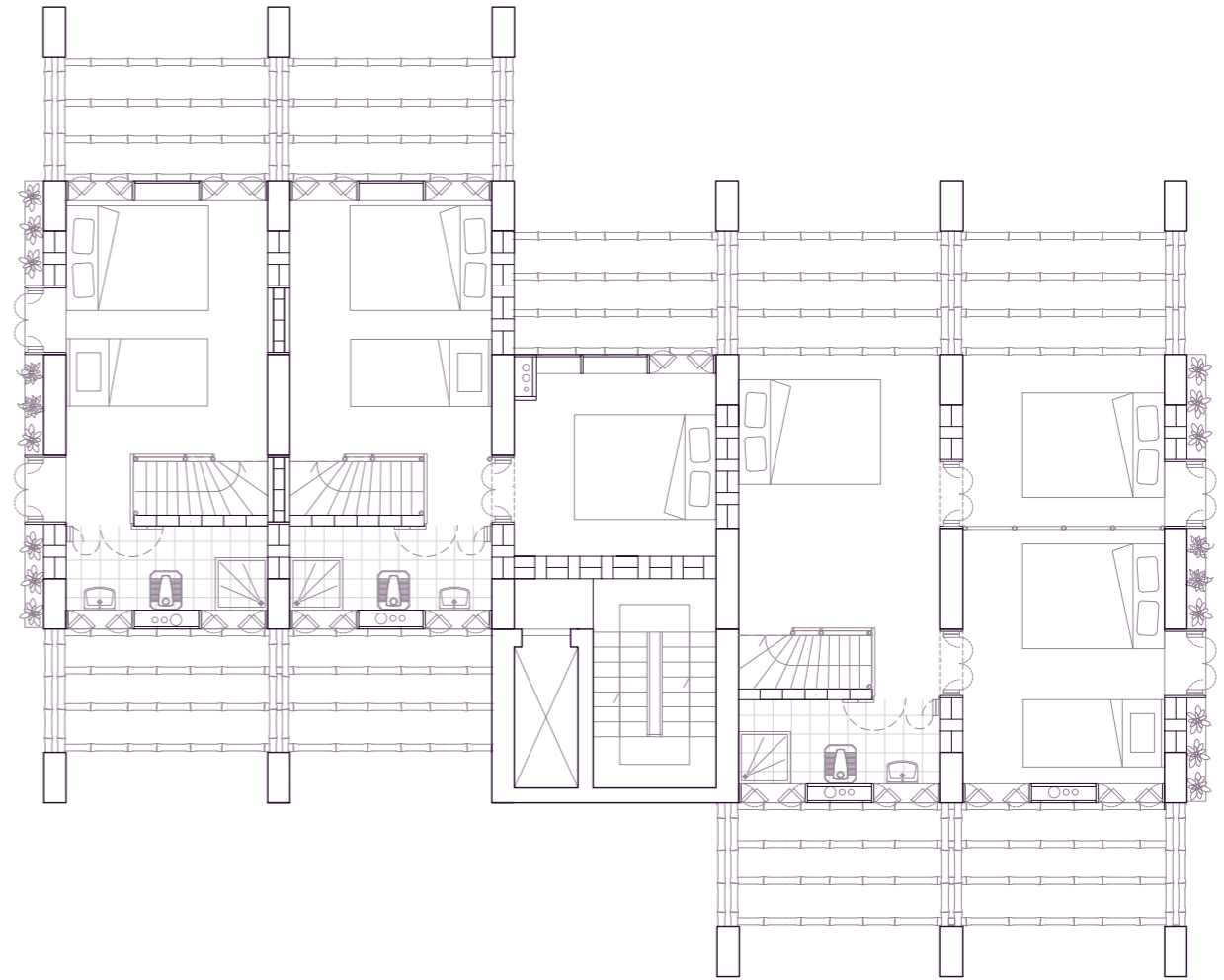
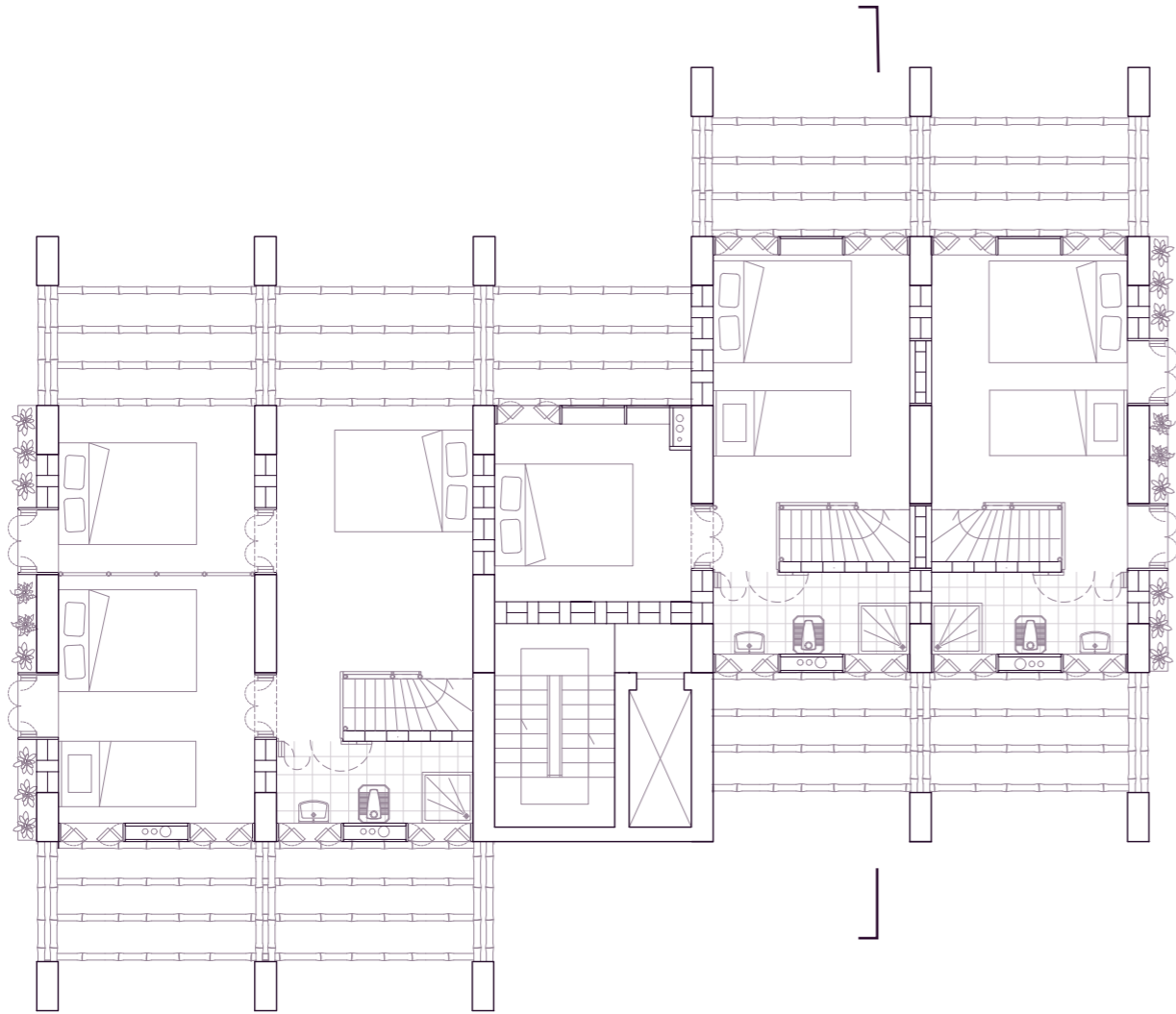


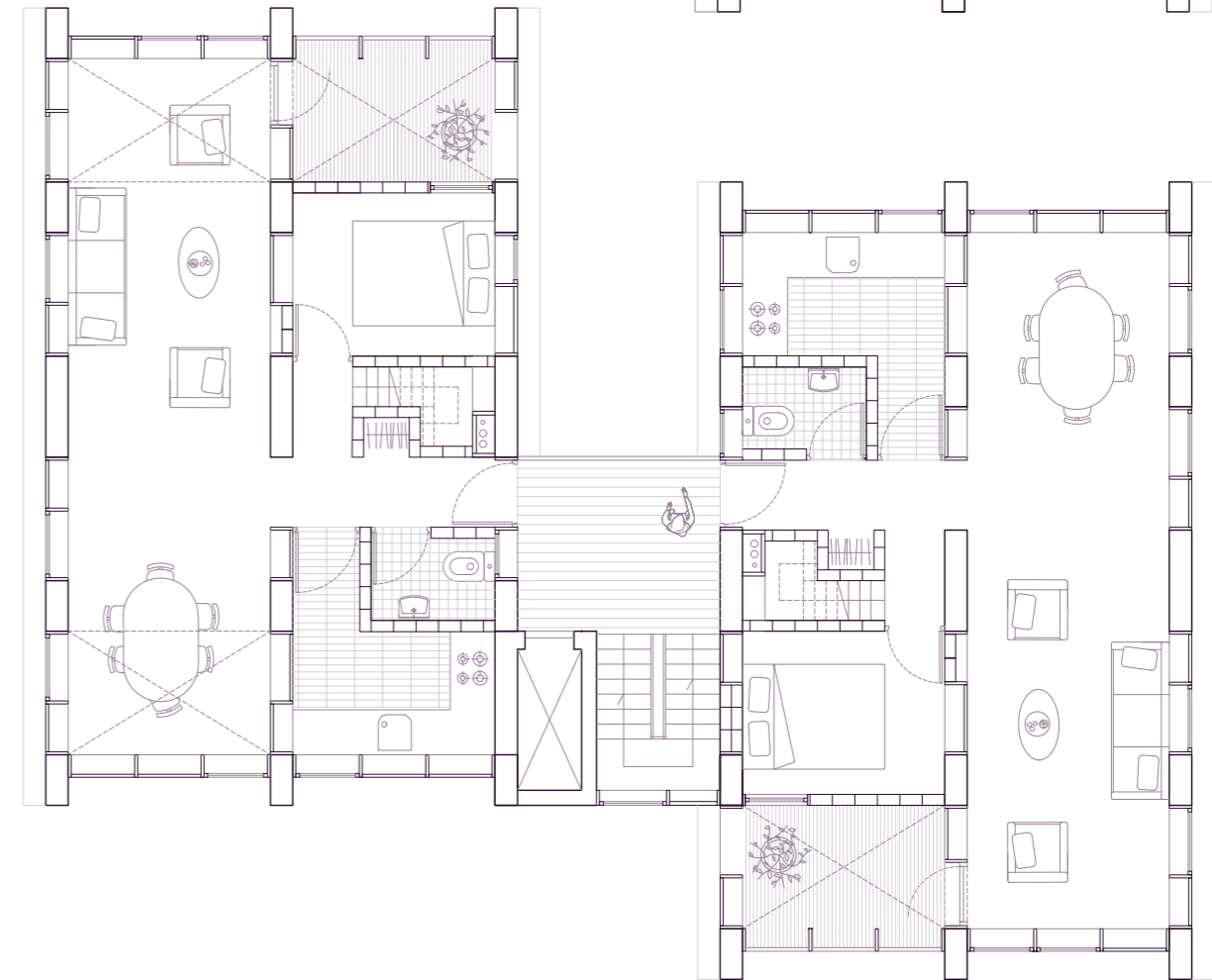
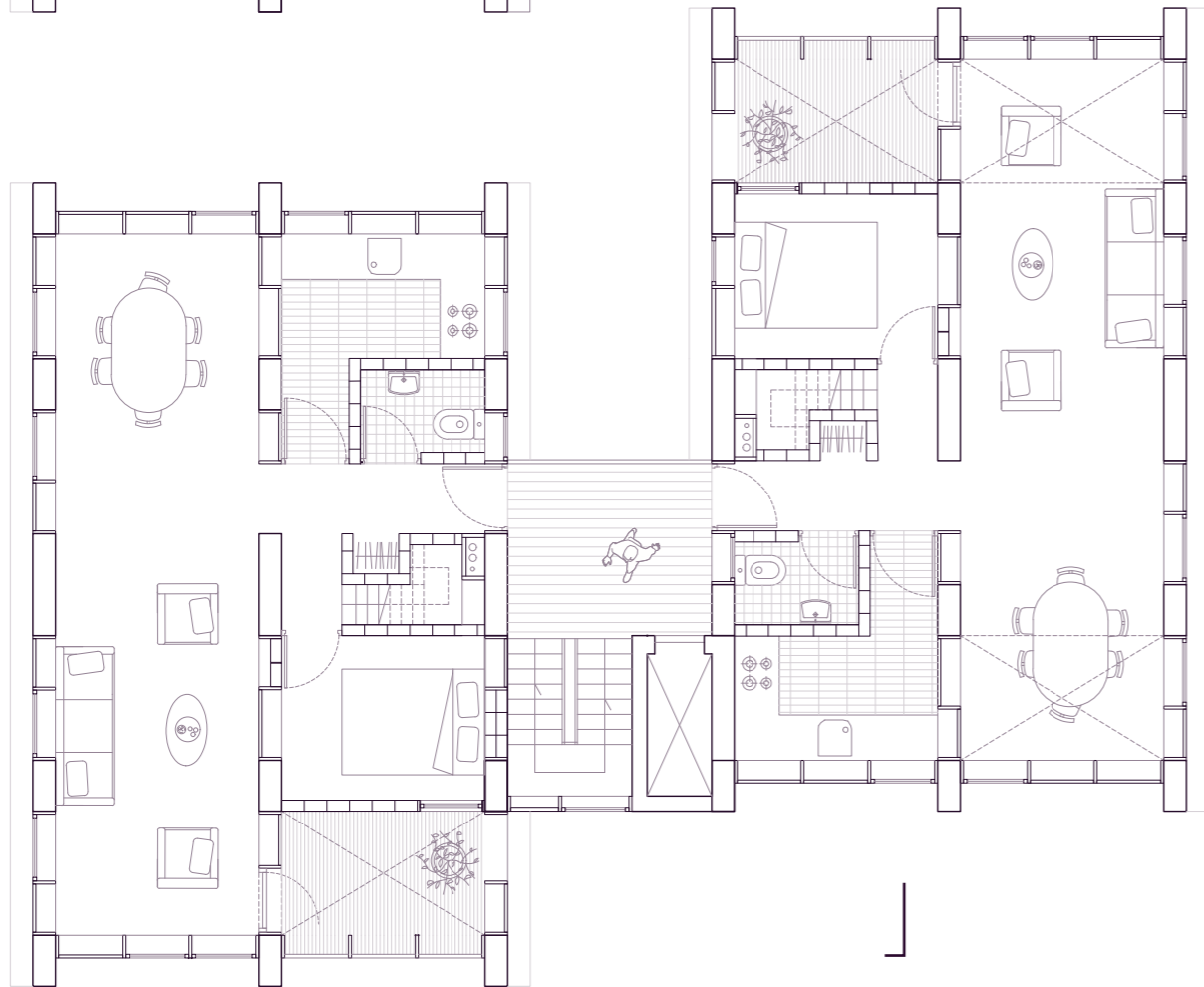
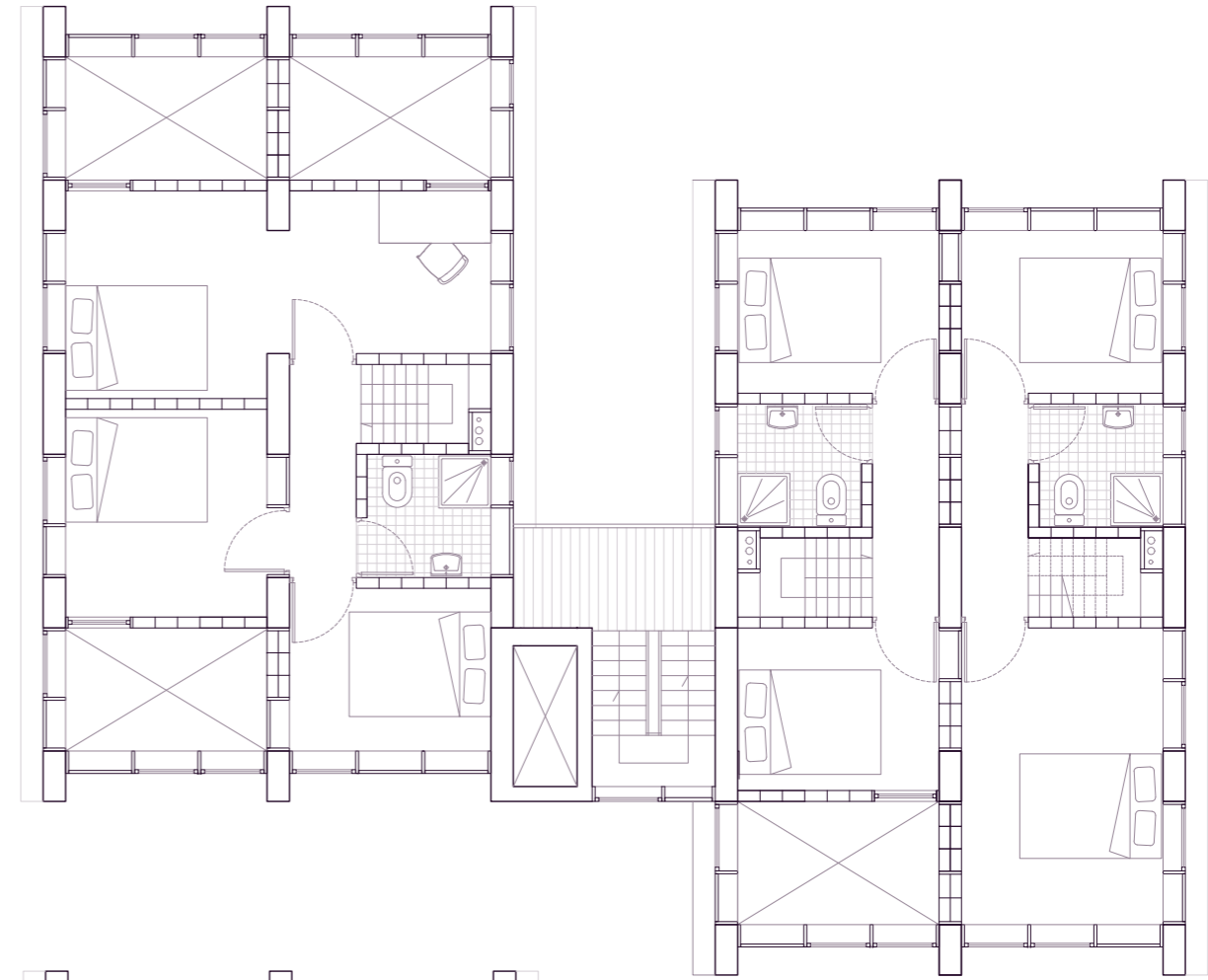
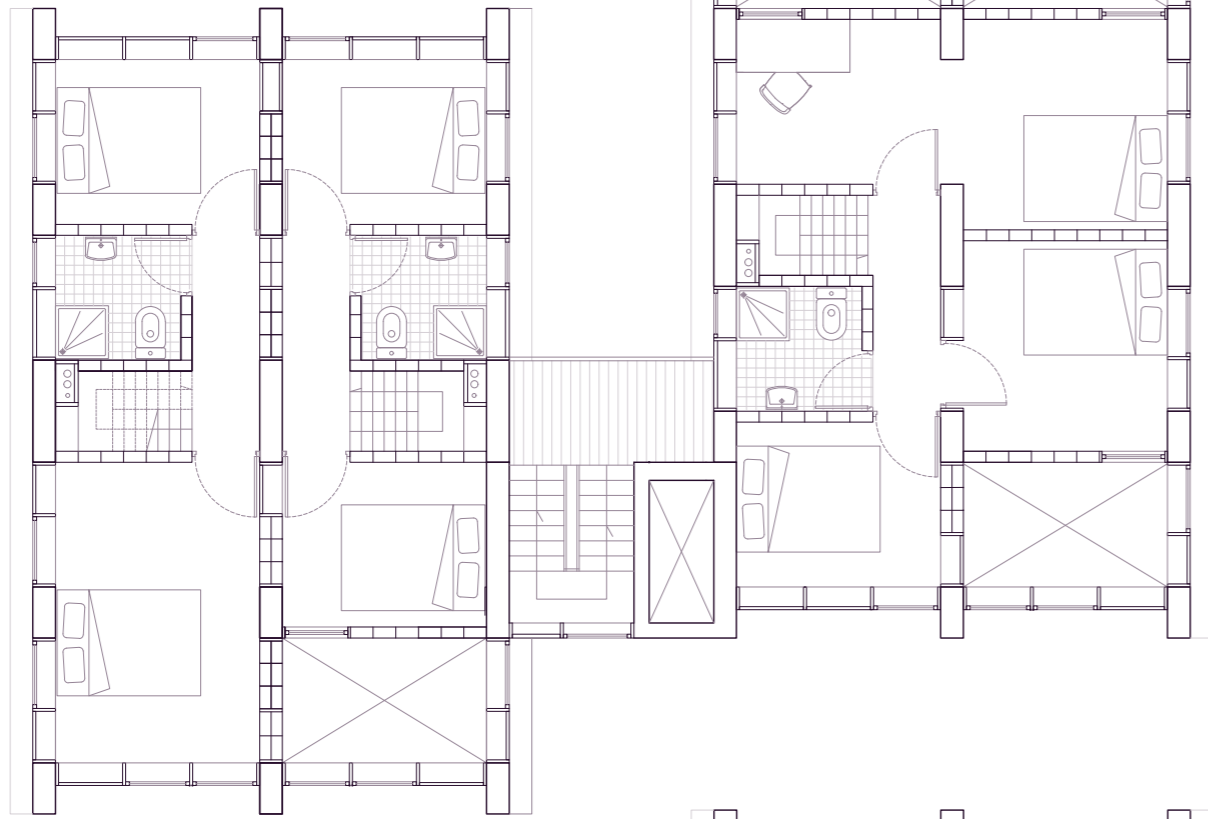




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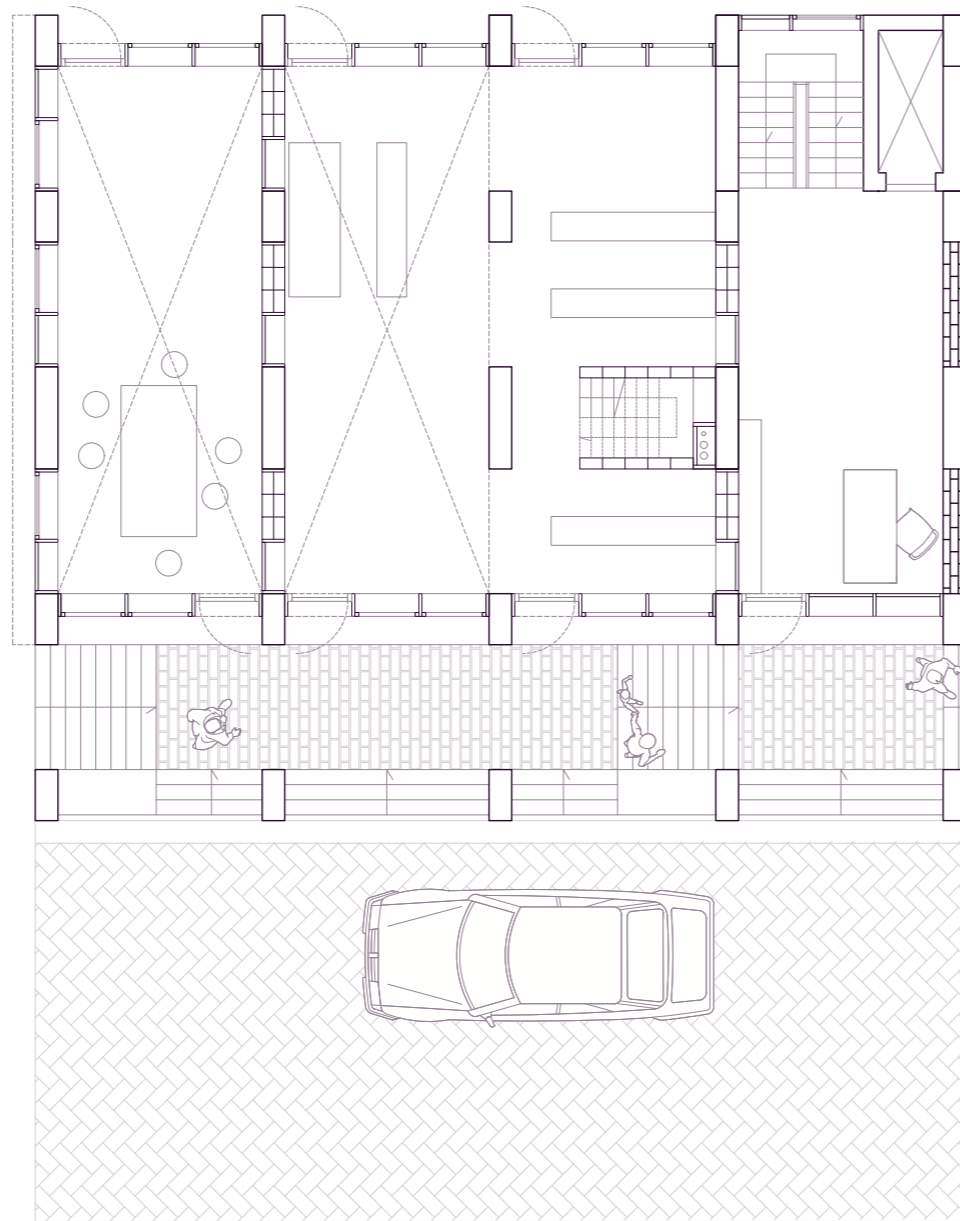
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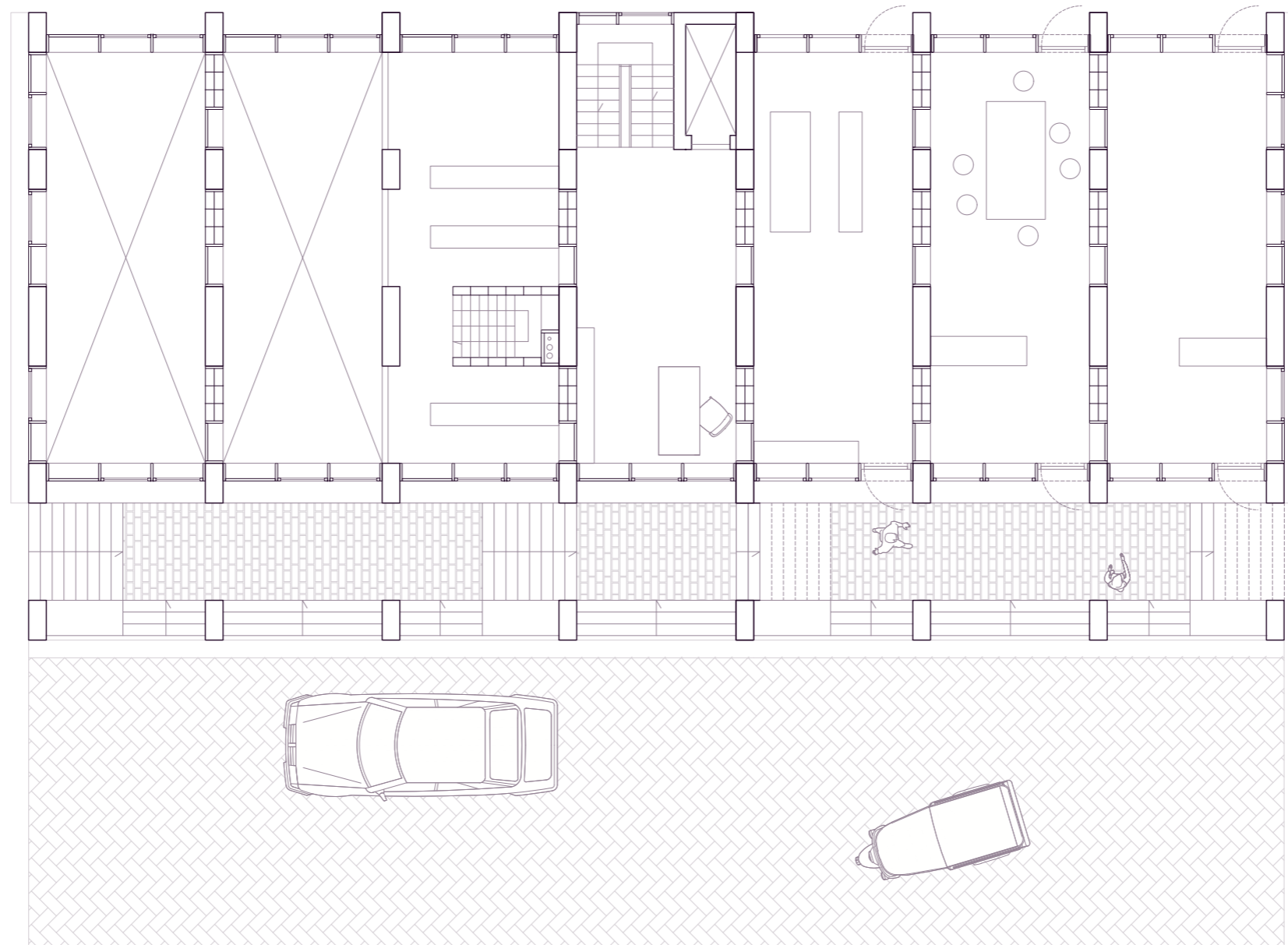




level 3



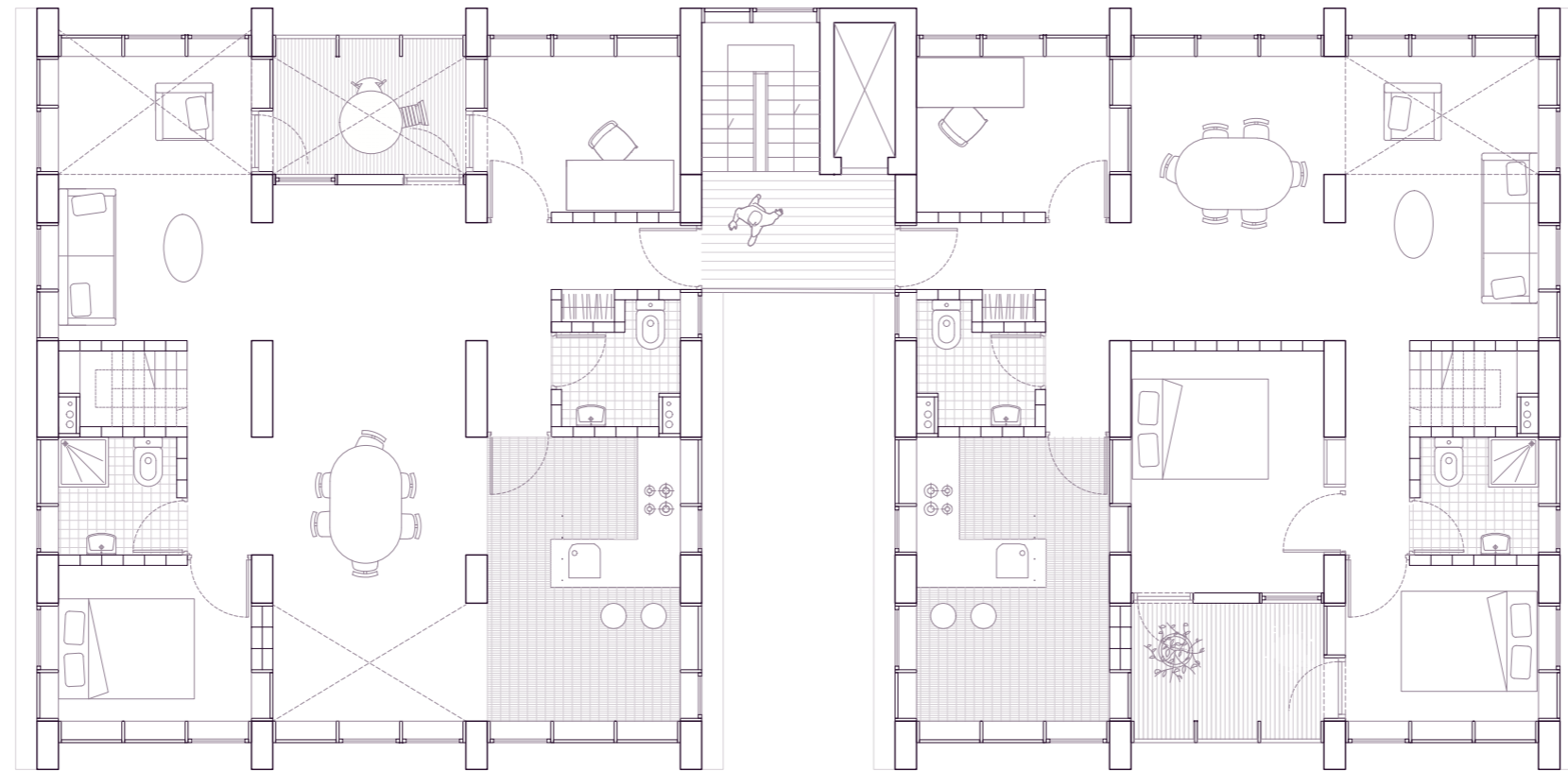




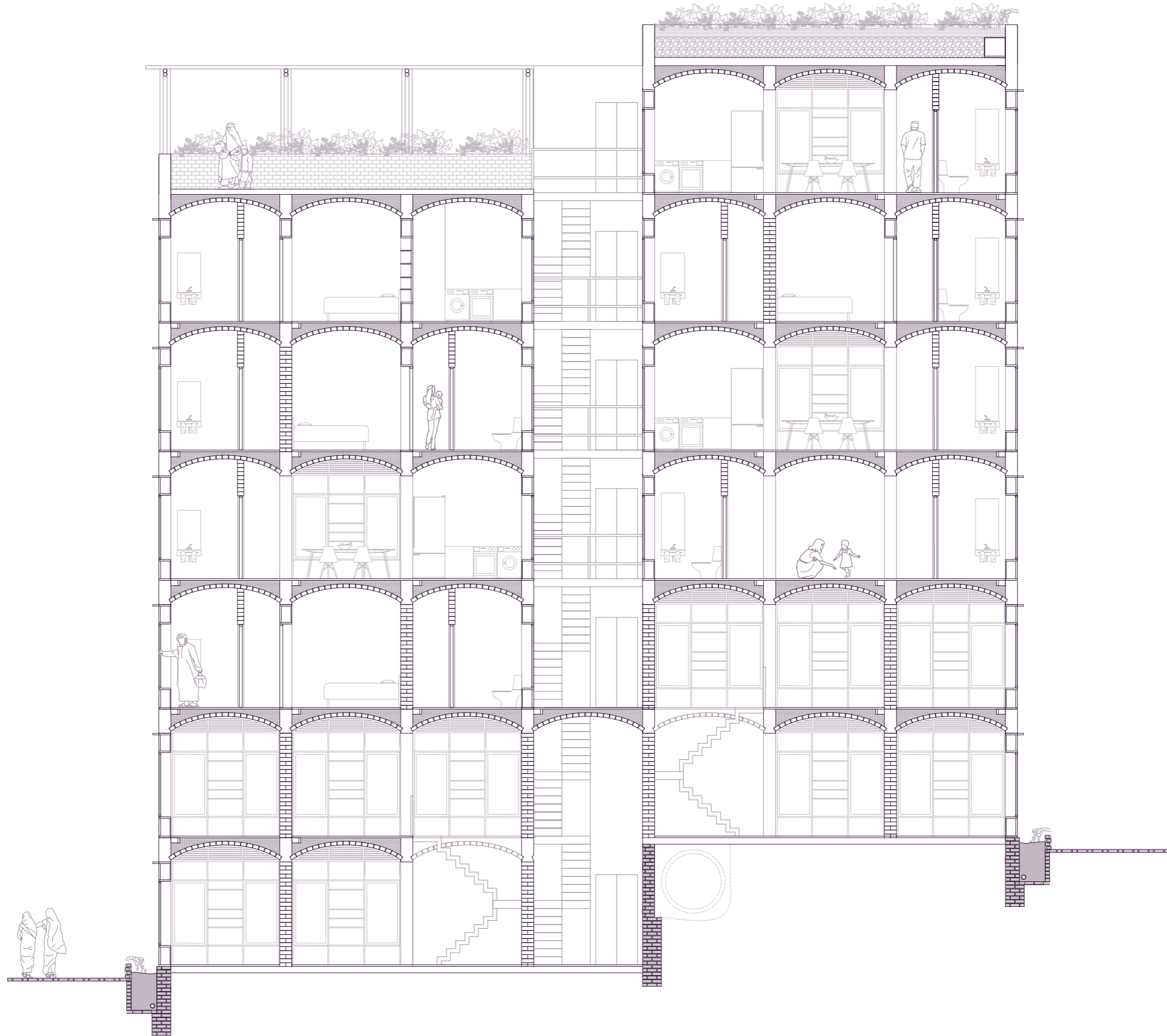
level 3

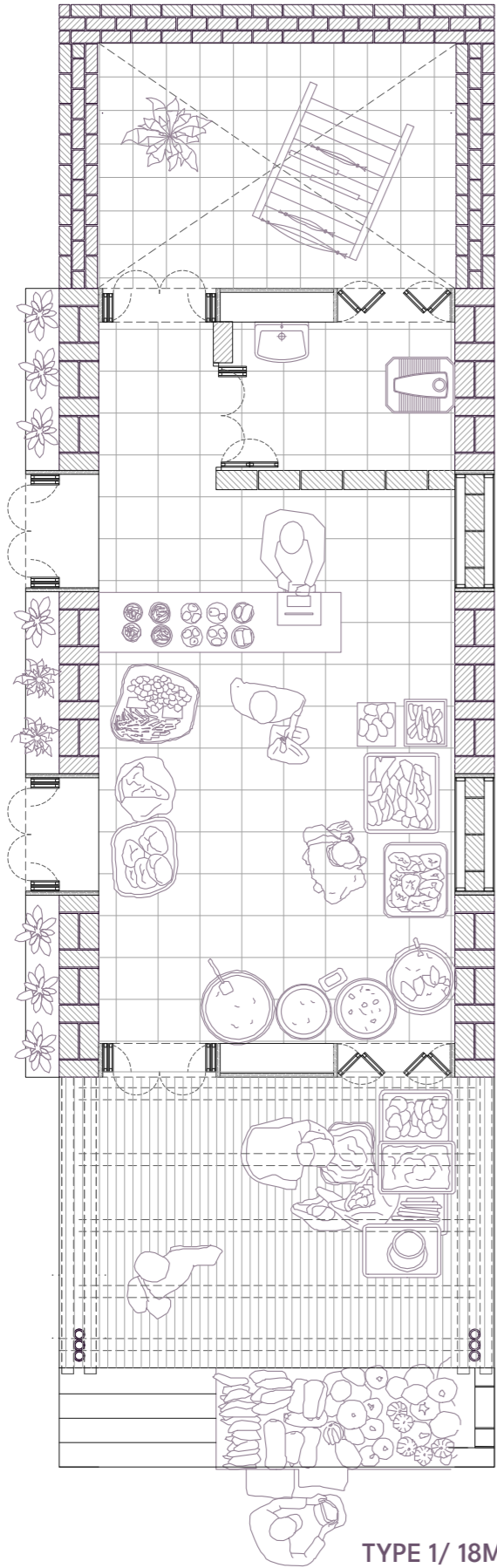
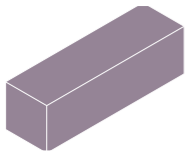


level 2

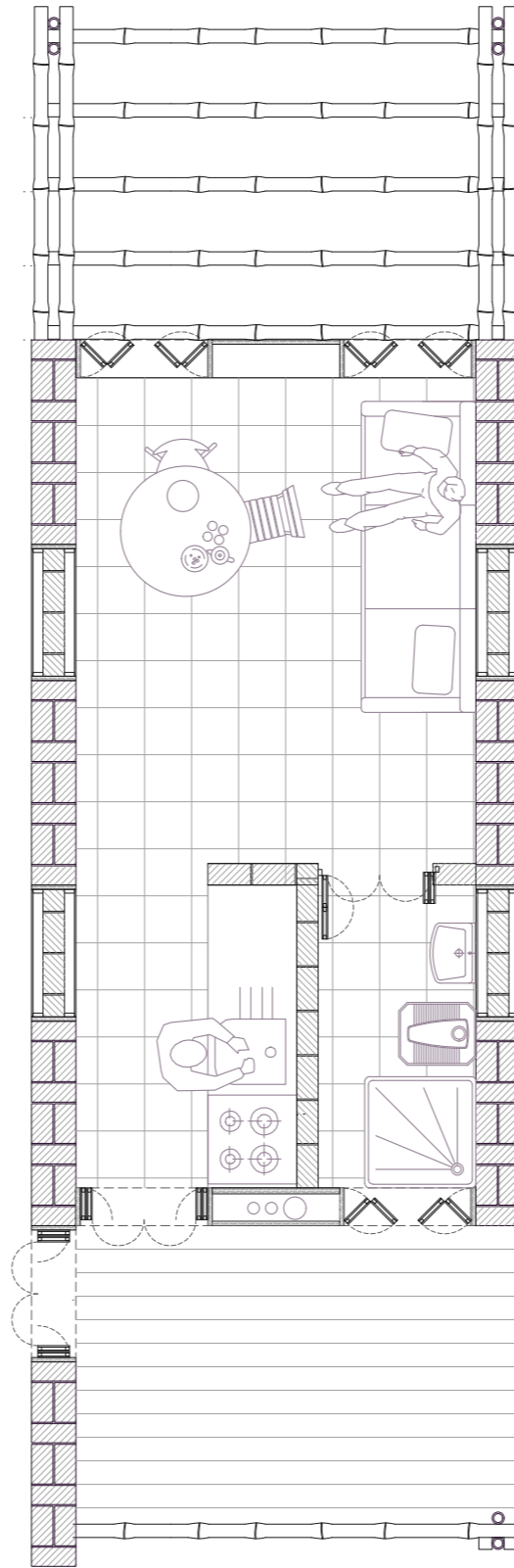
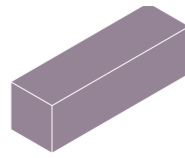


CLUSTER 3
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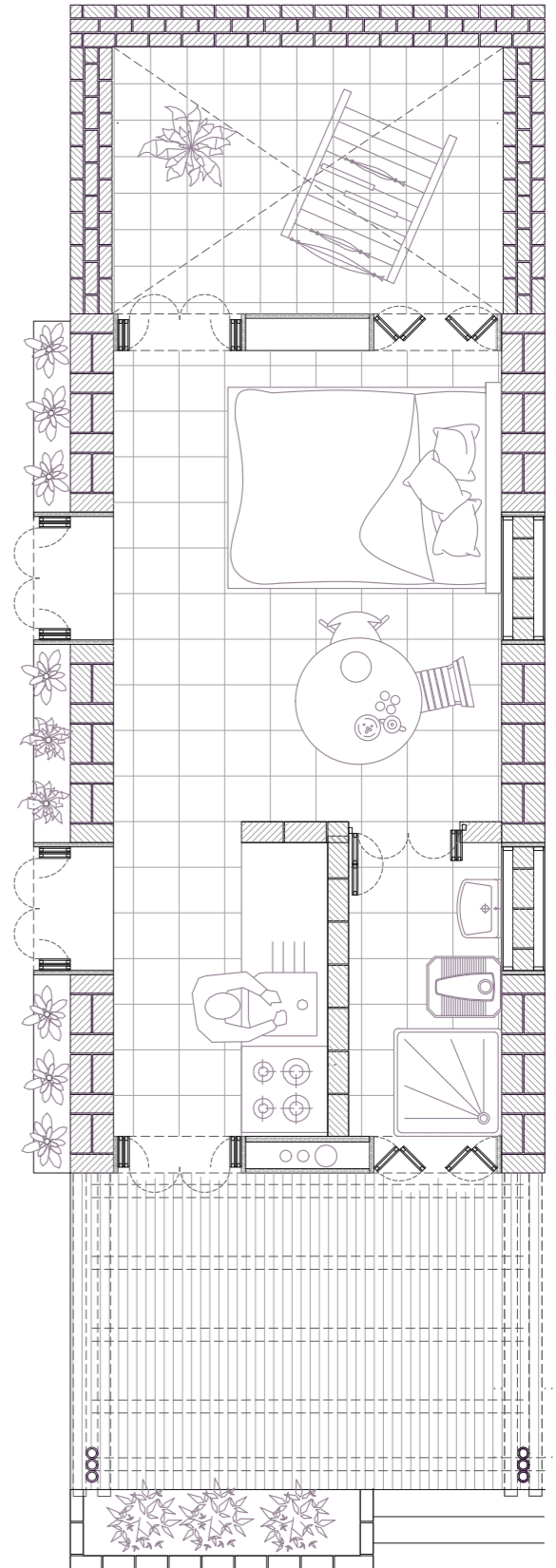
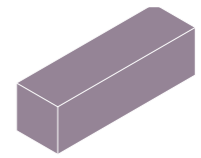




TYPE 1/ 18M²

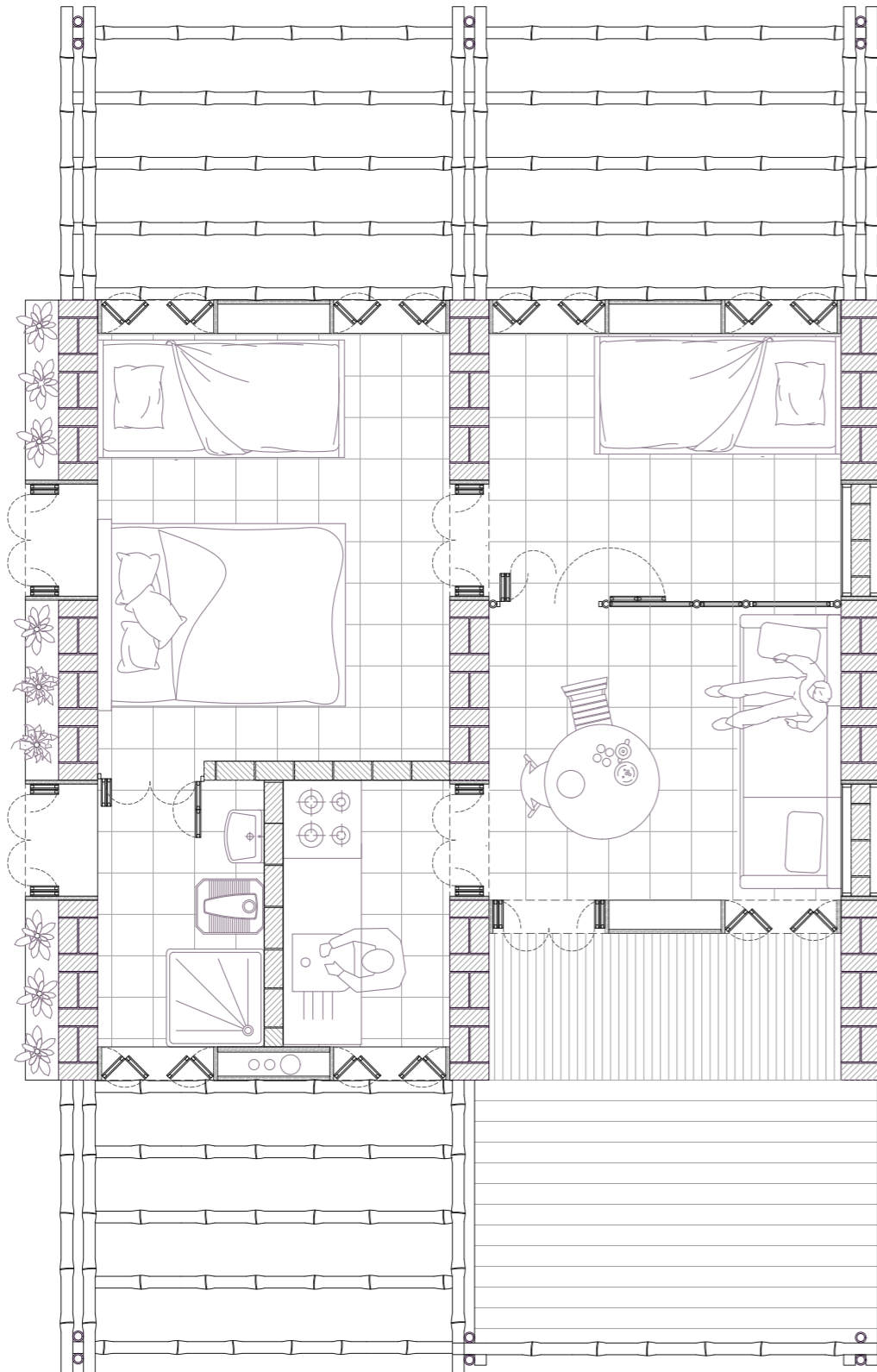
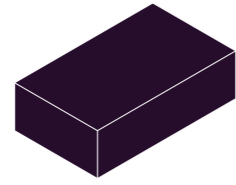


TYPE 1' / 18M²

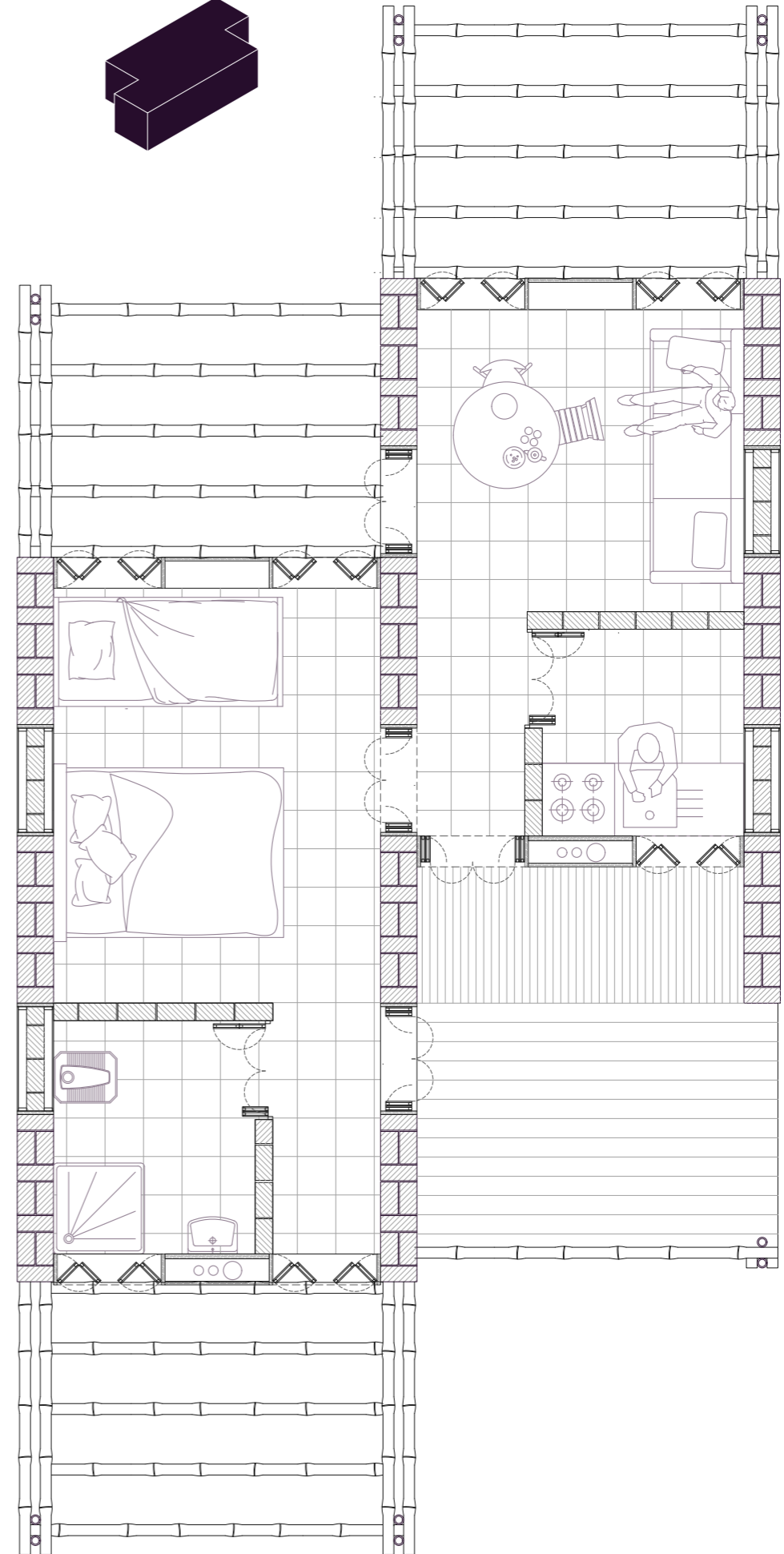
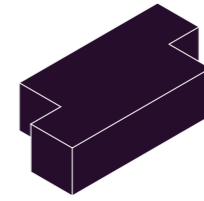


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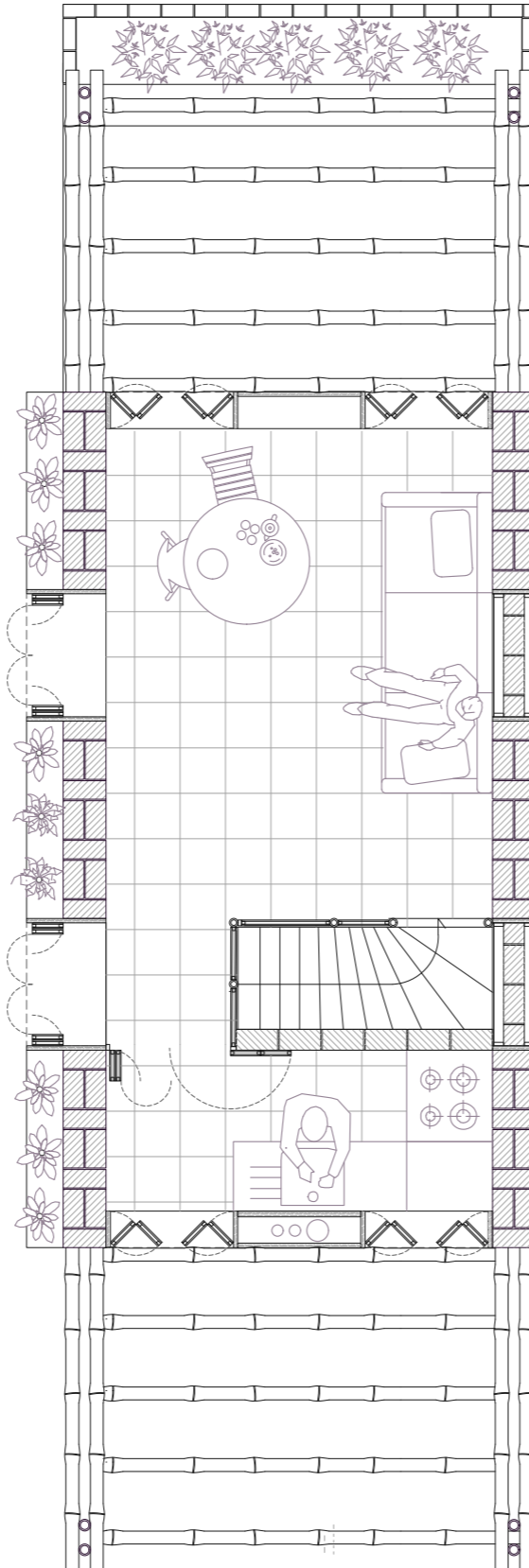
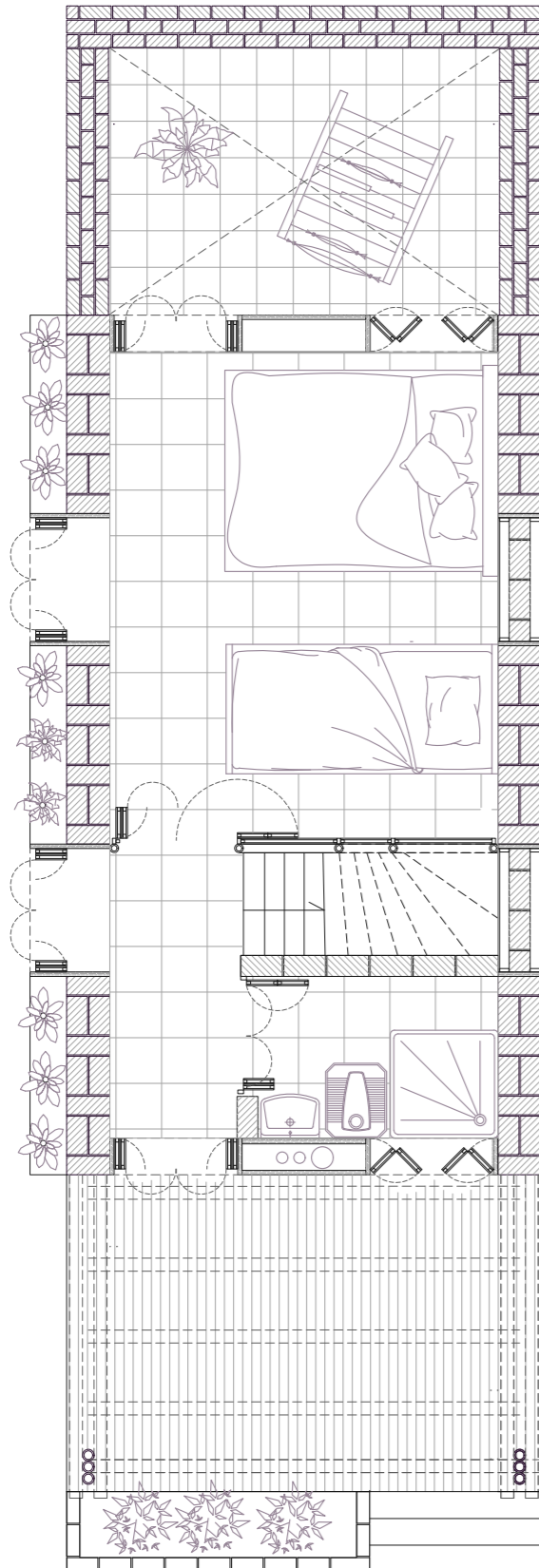
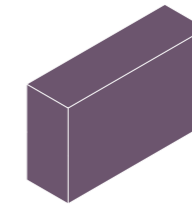
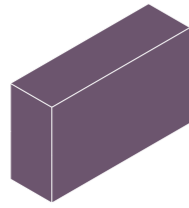
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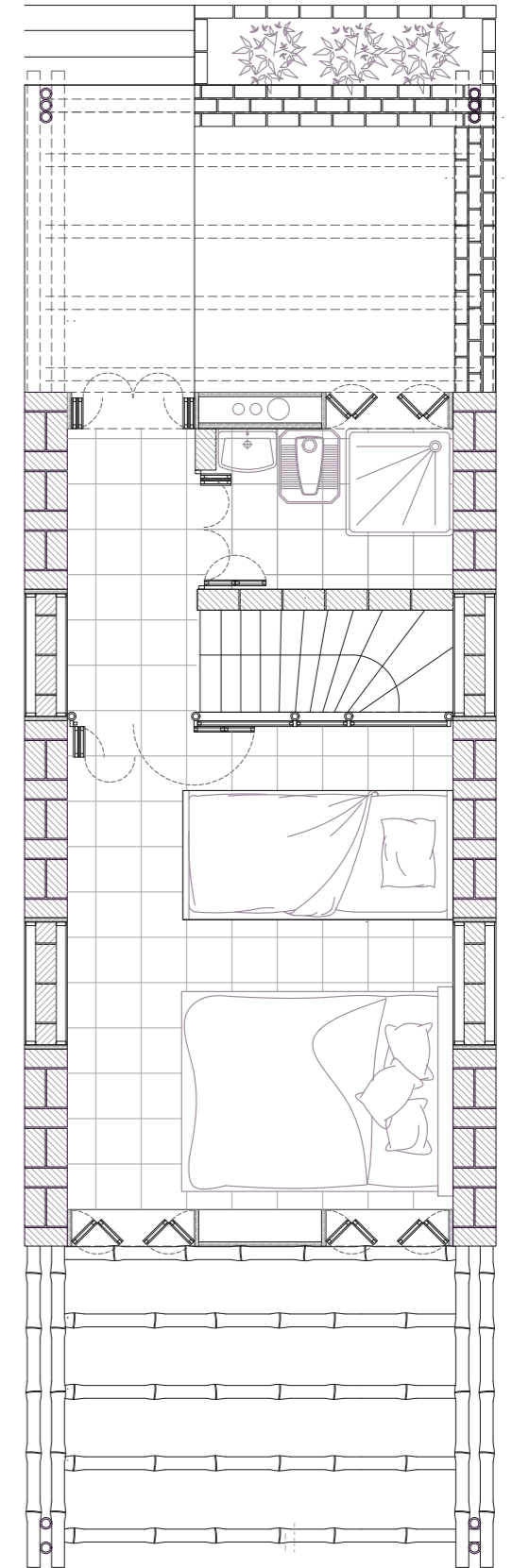
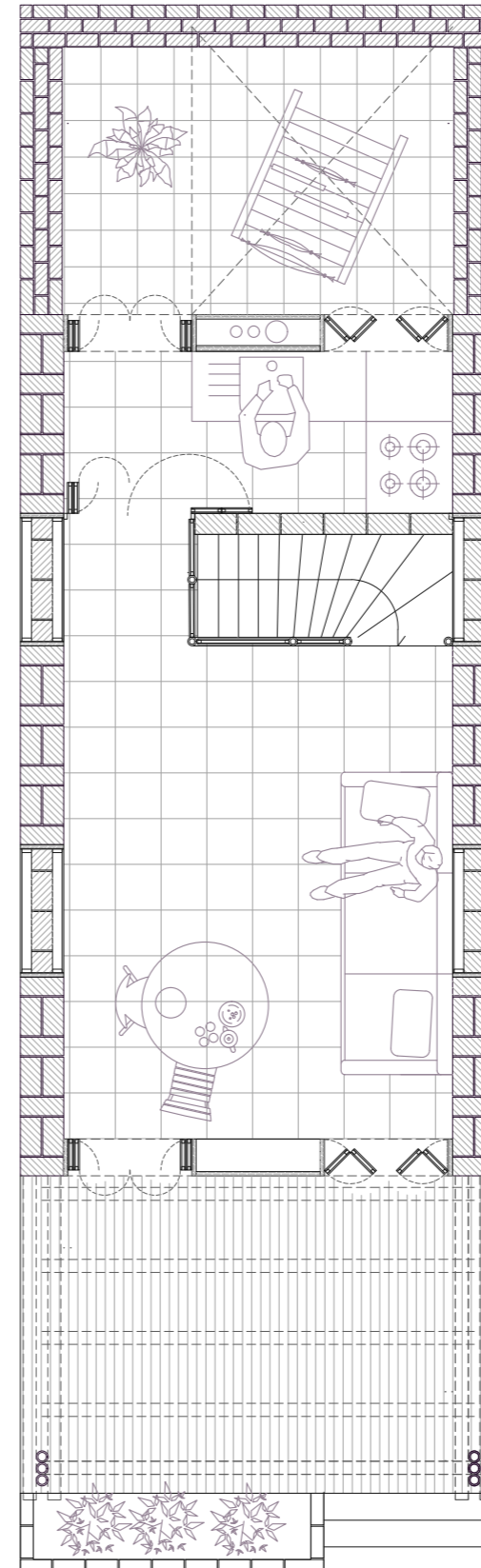
TYPE 2/ 36M²



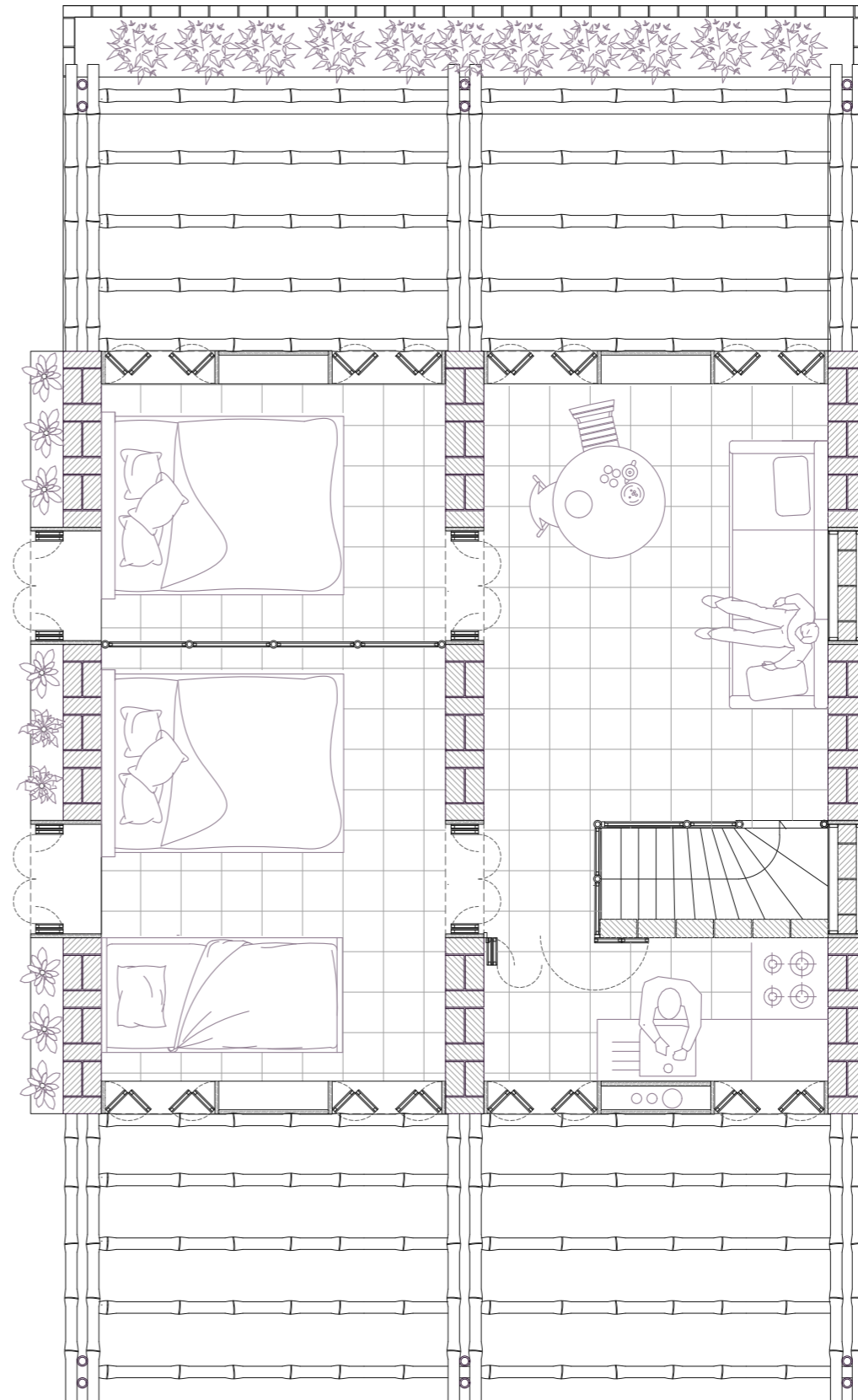
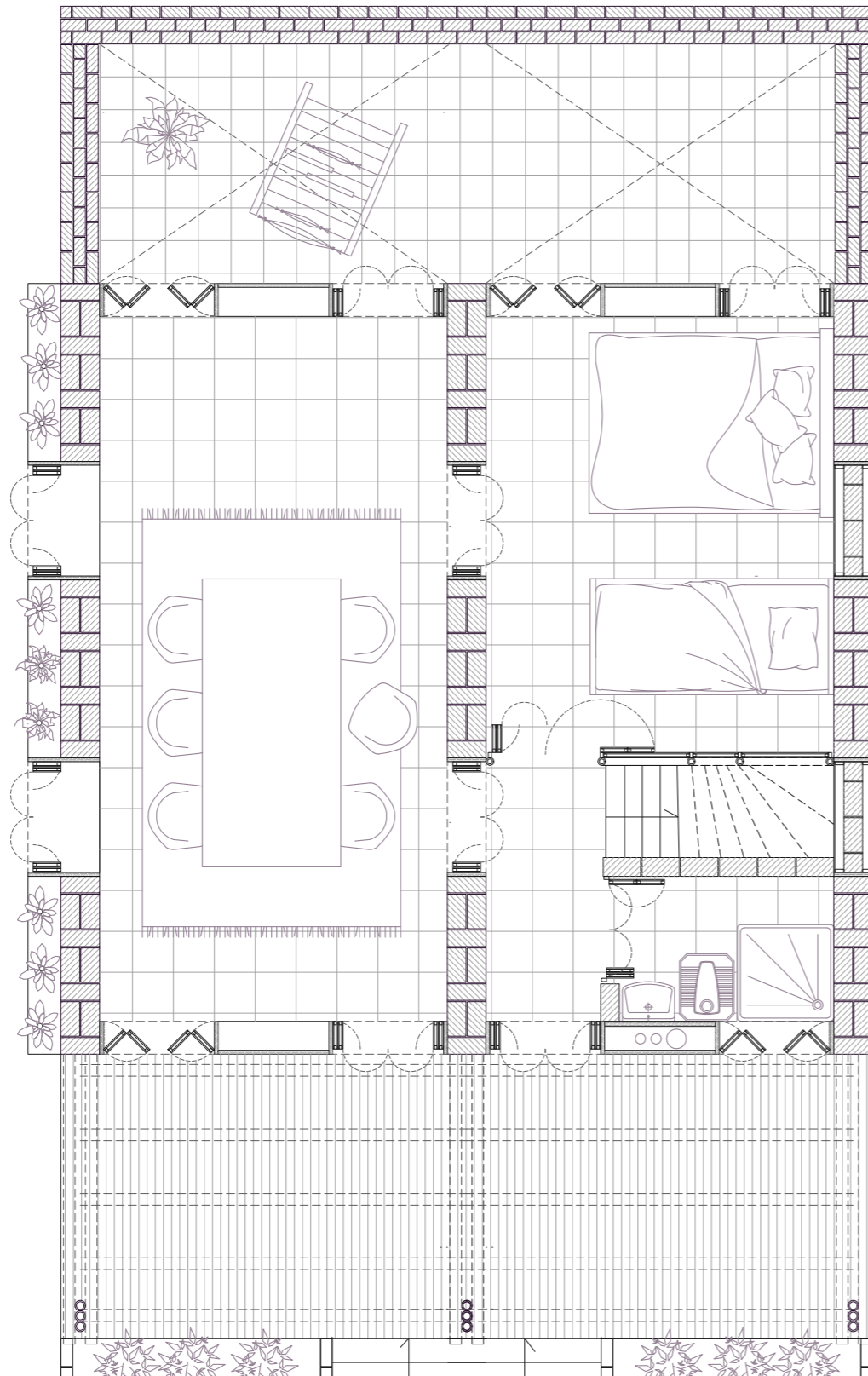
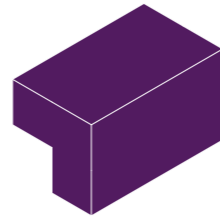
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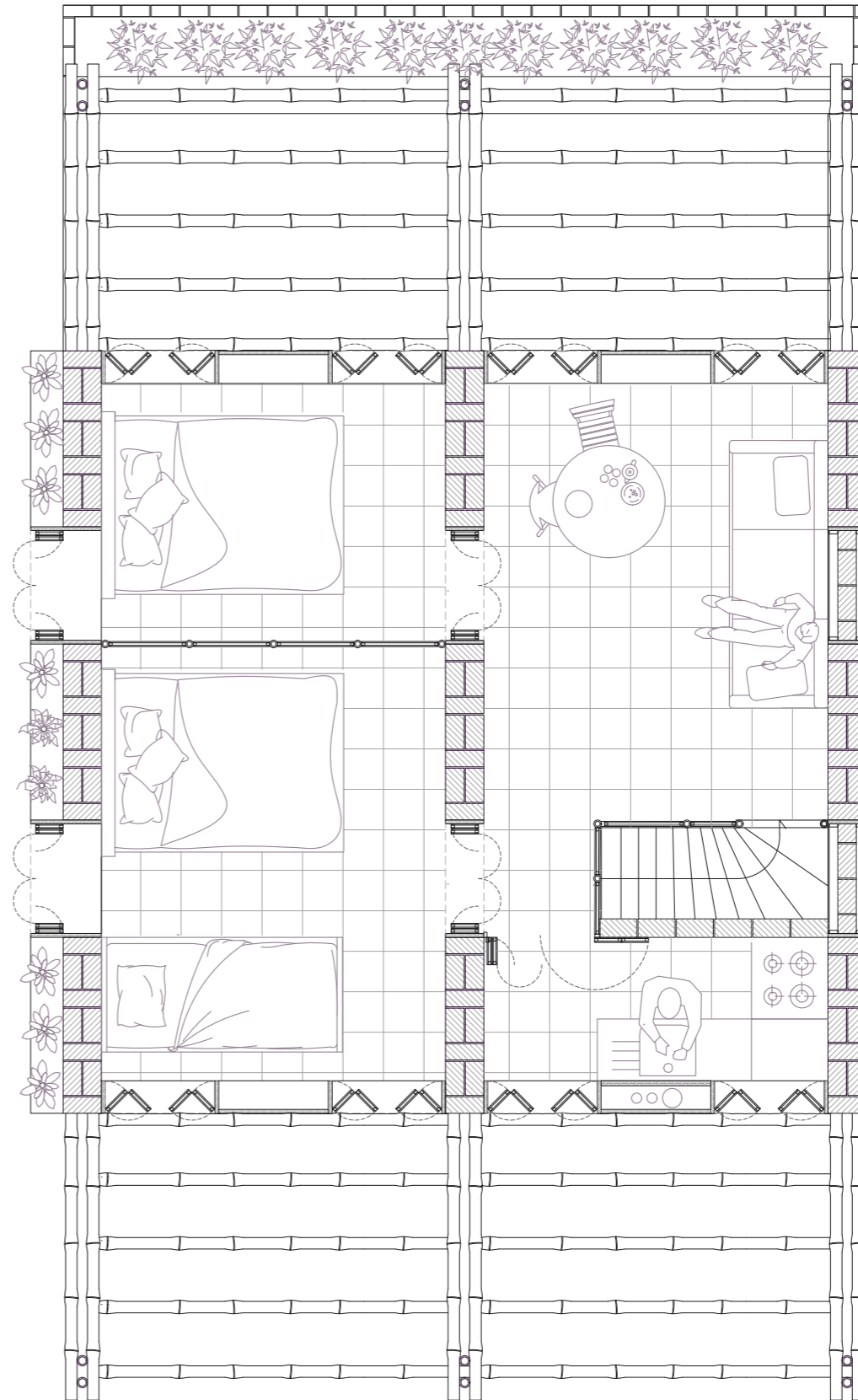
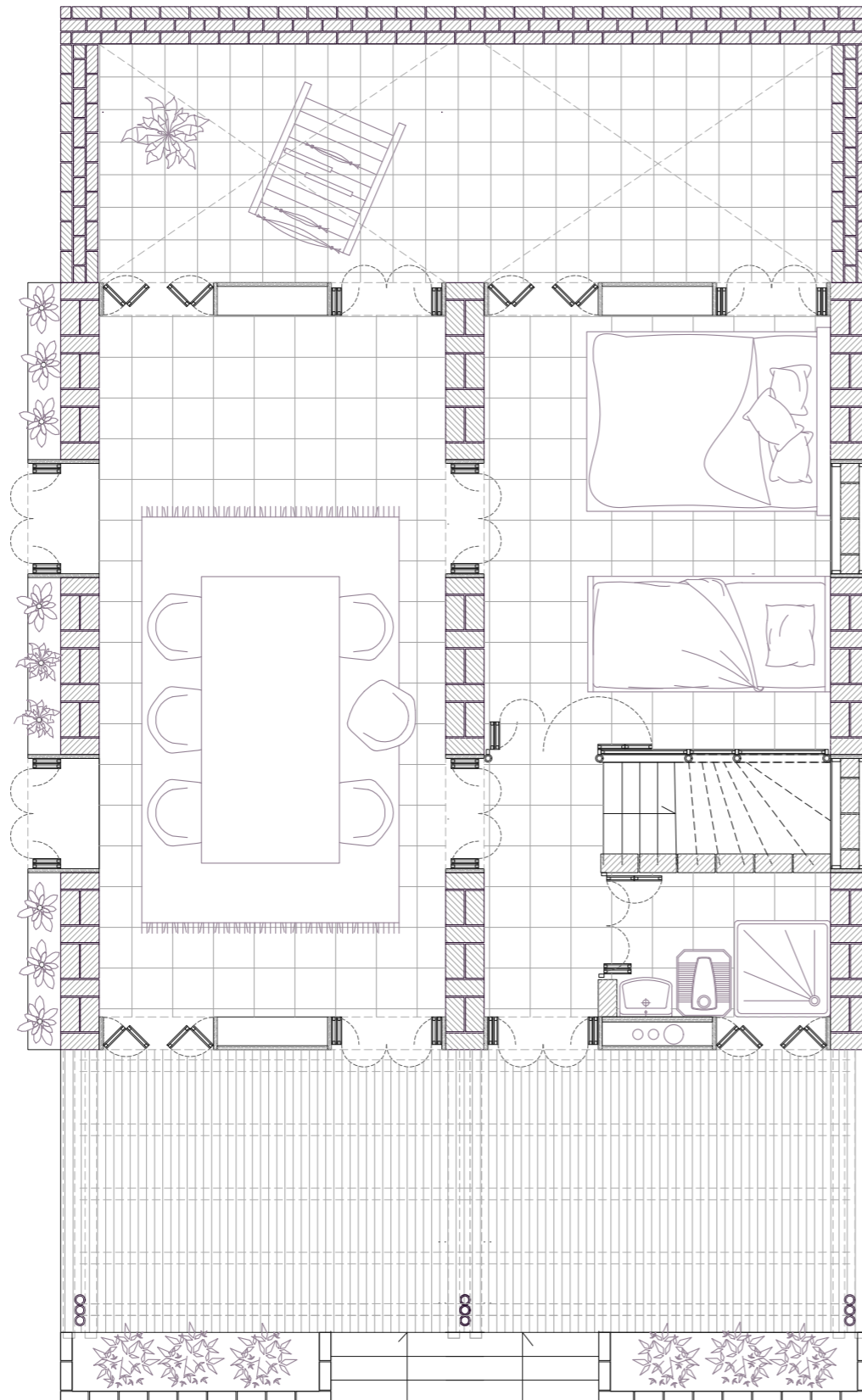
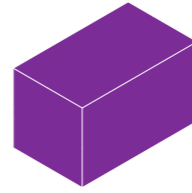


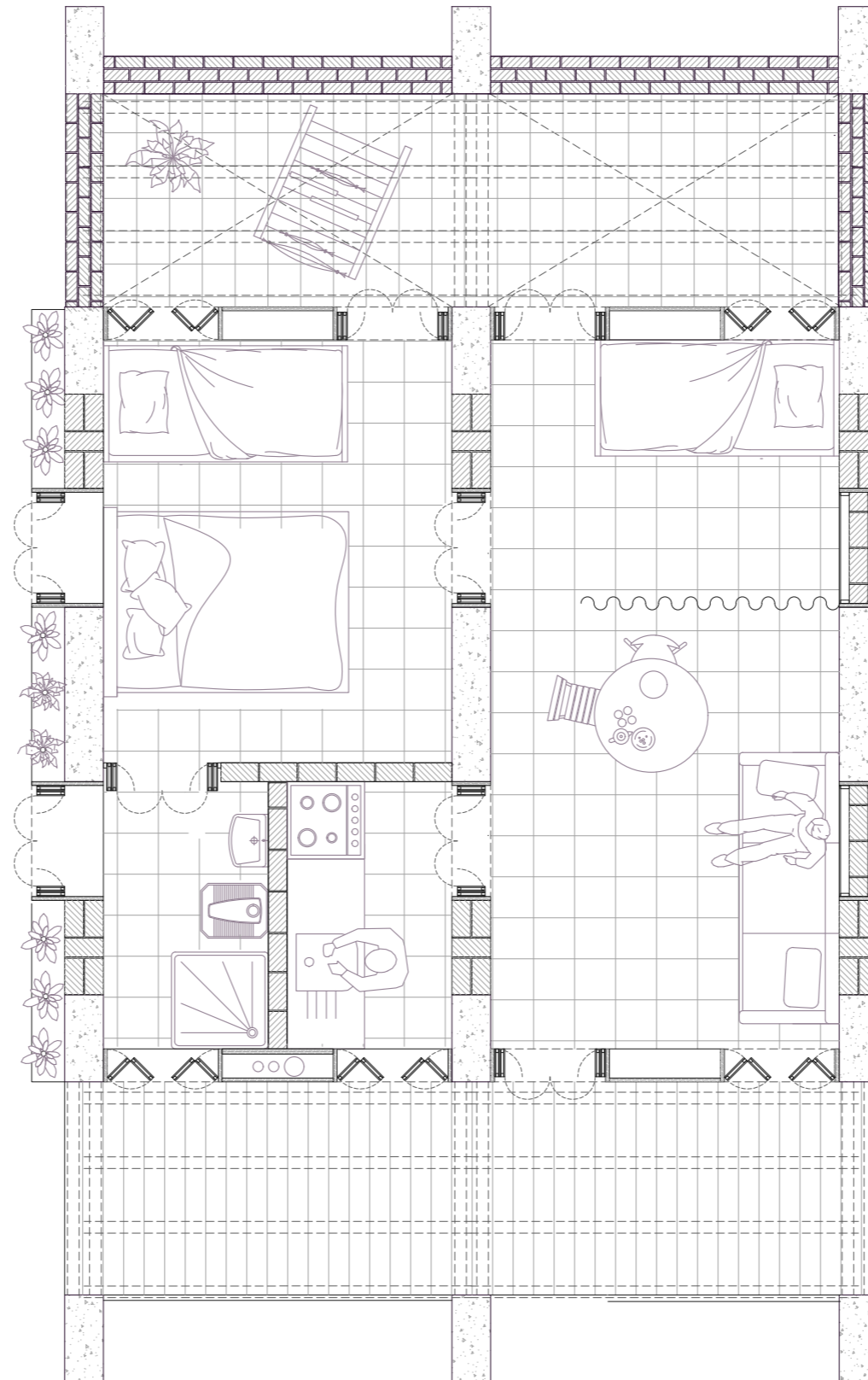
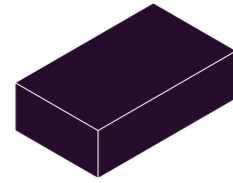
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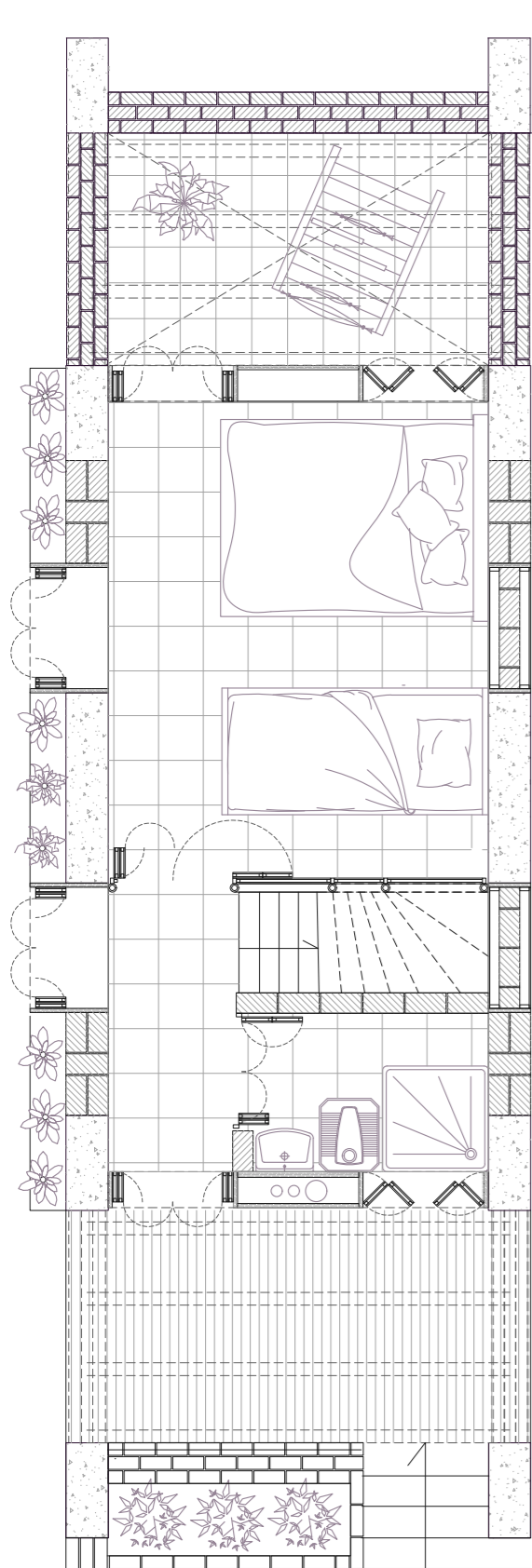
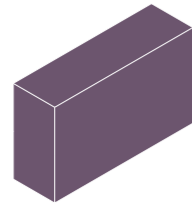


TYPE 3/ 36M²
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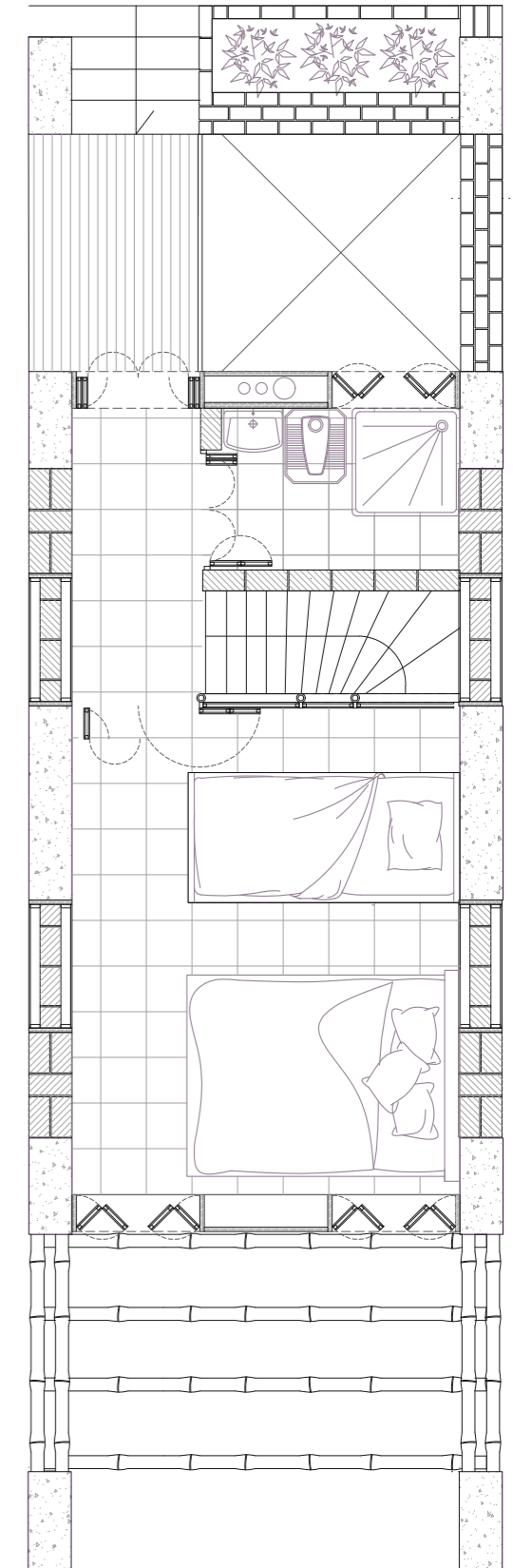
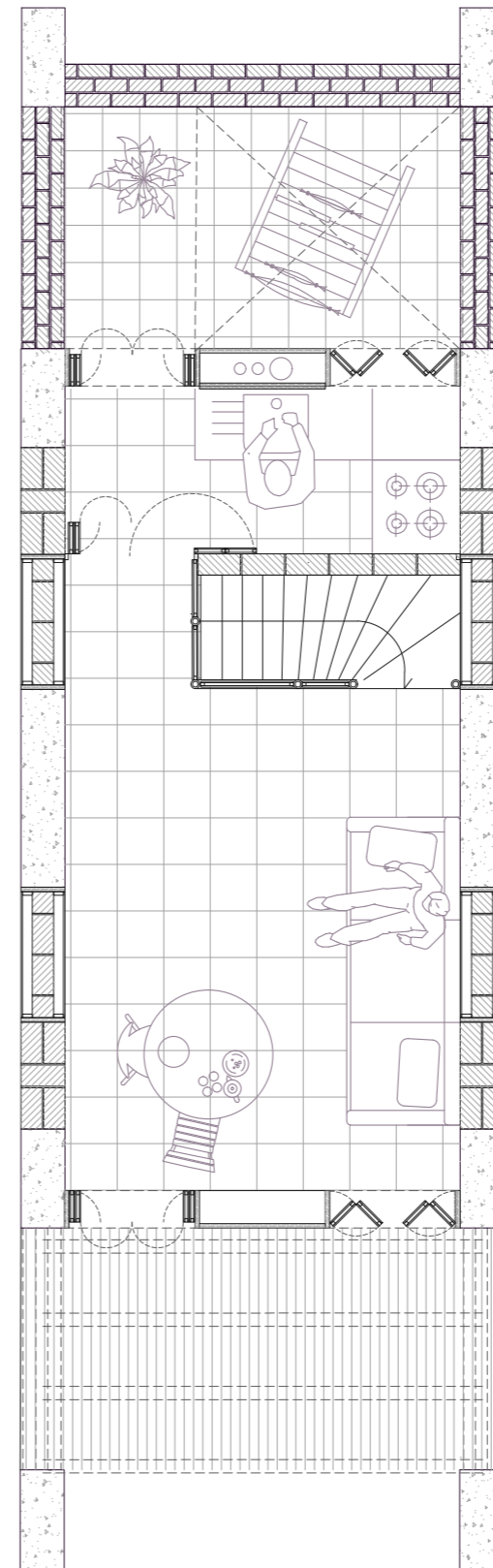
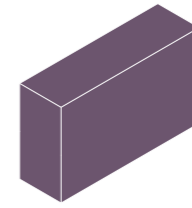
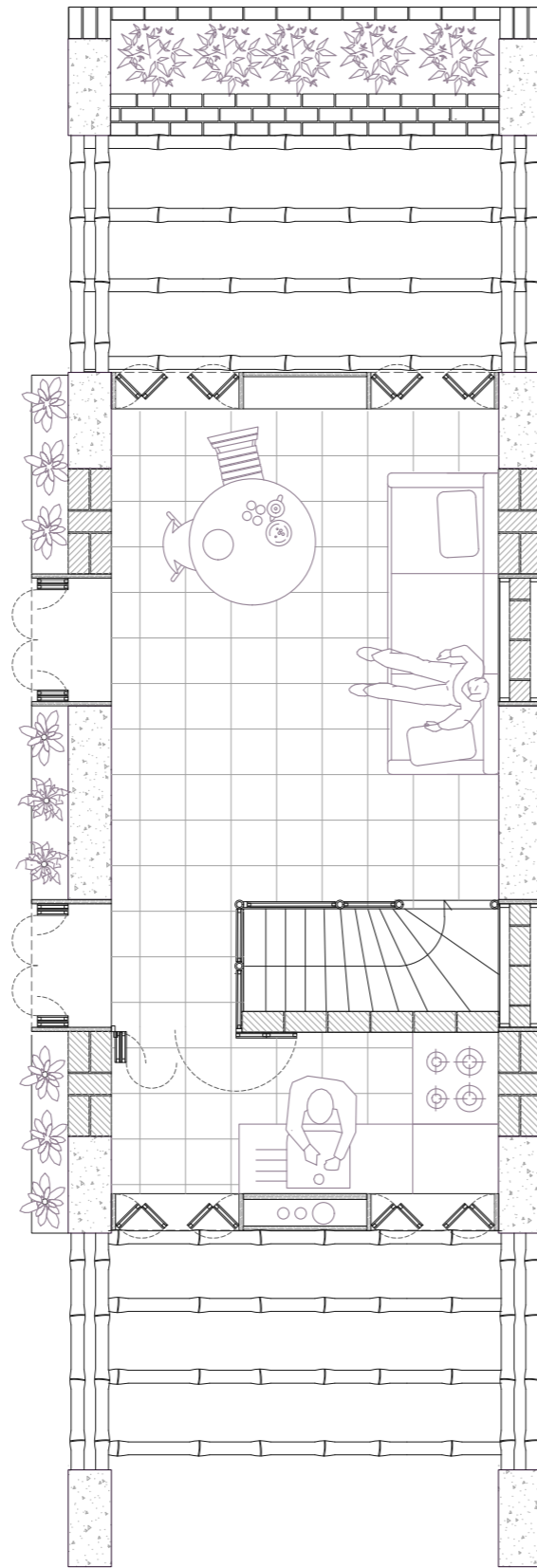




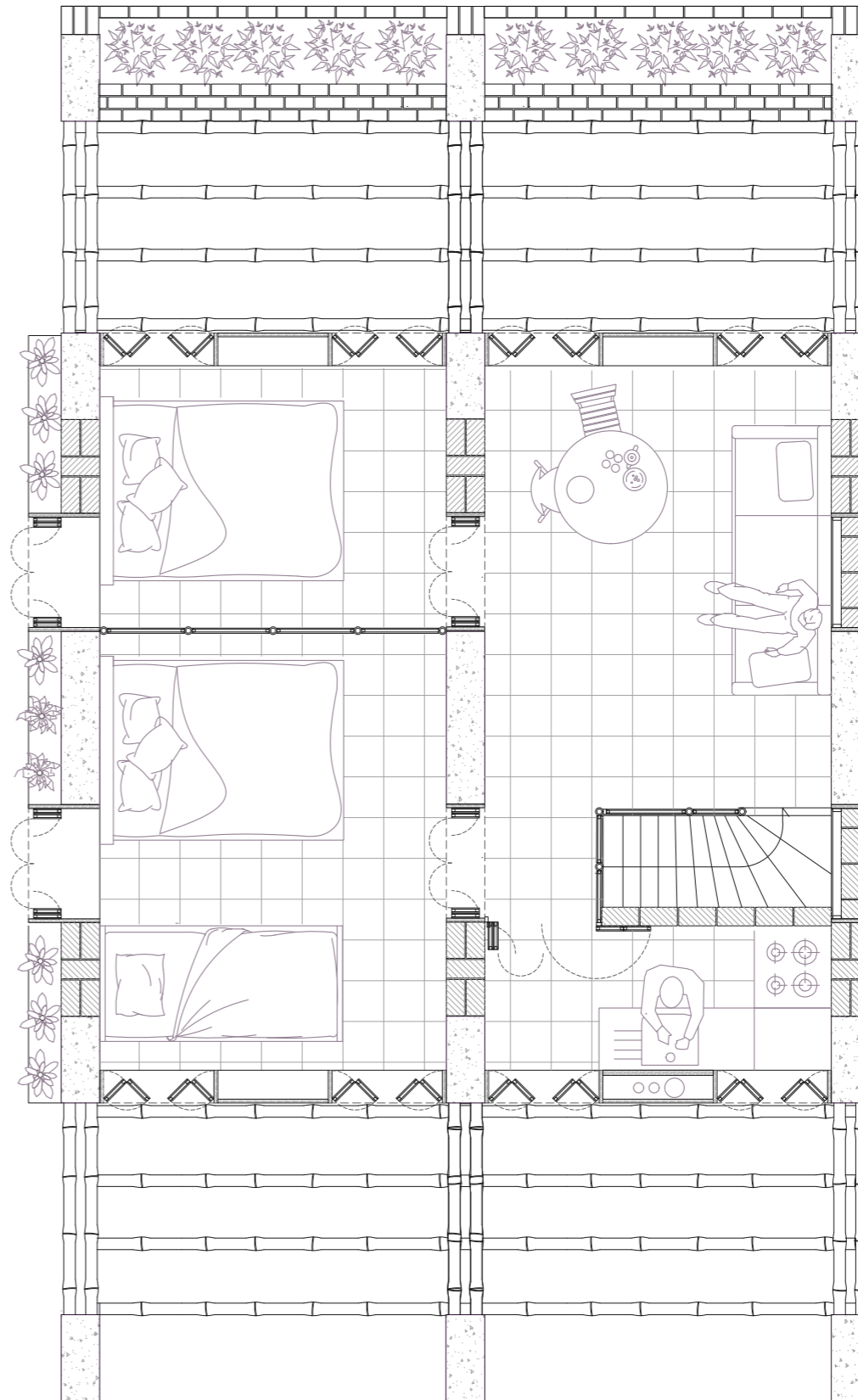
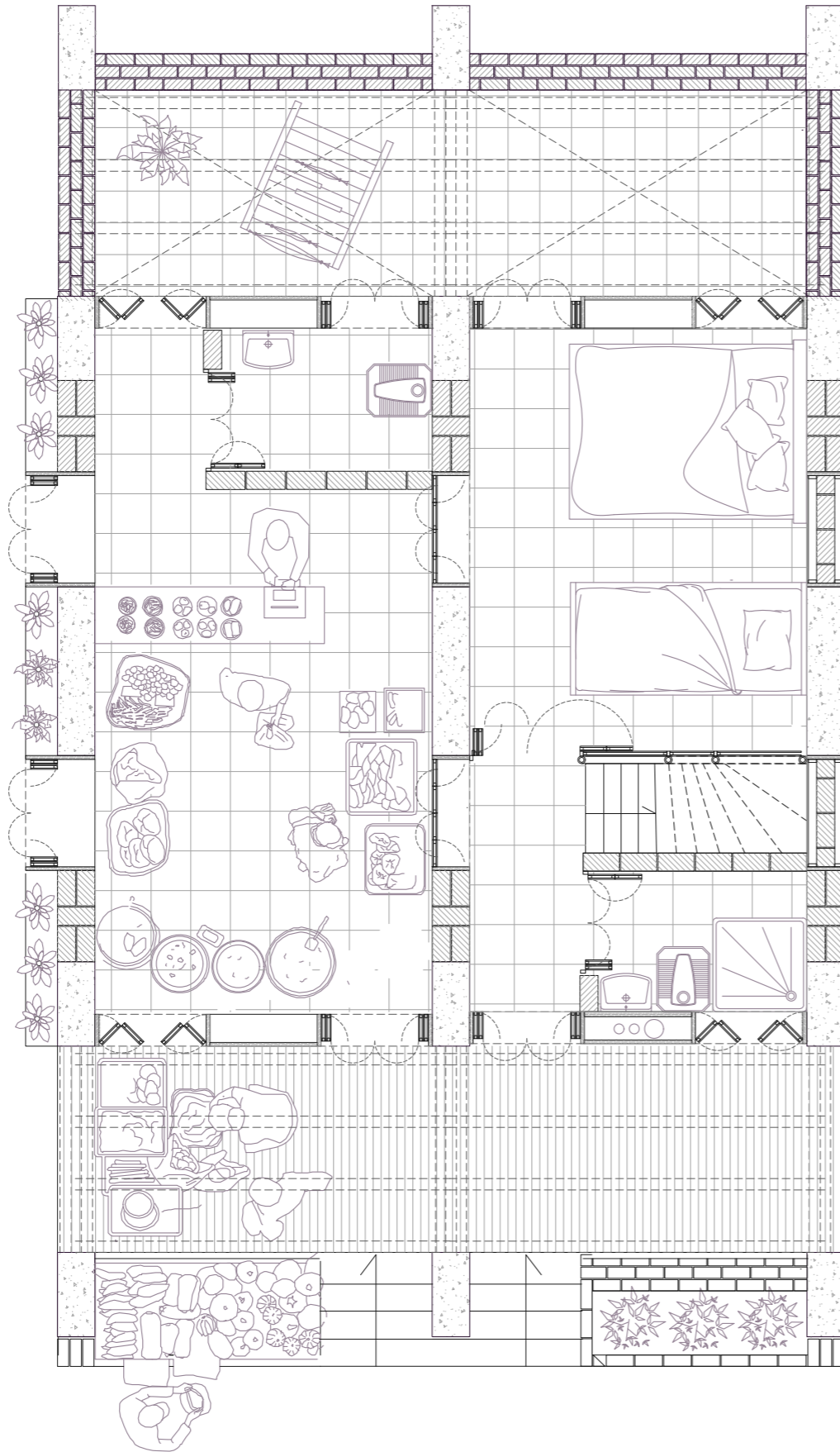
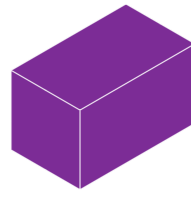


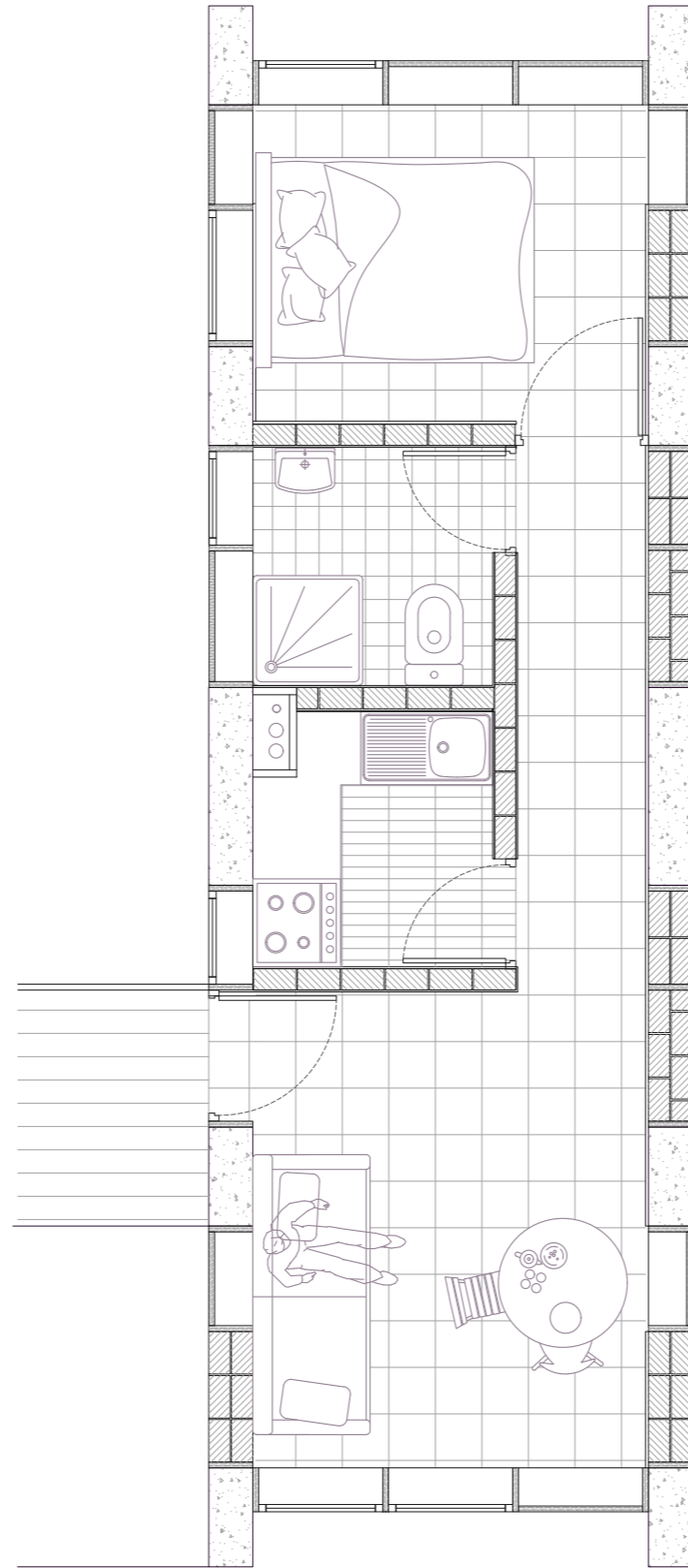
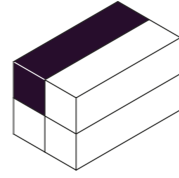


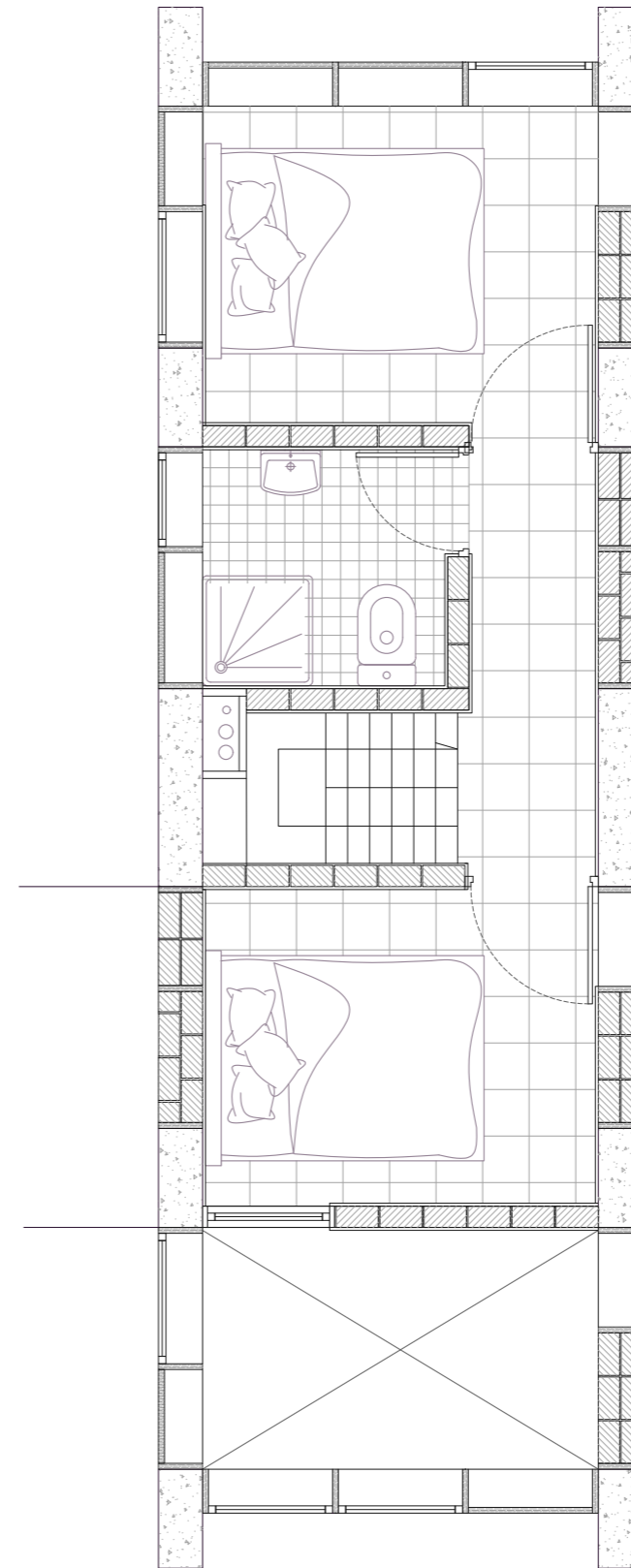
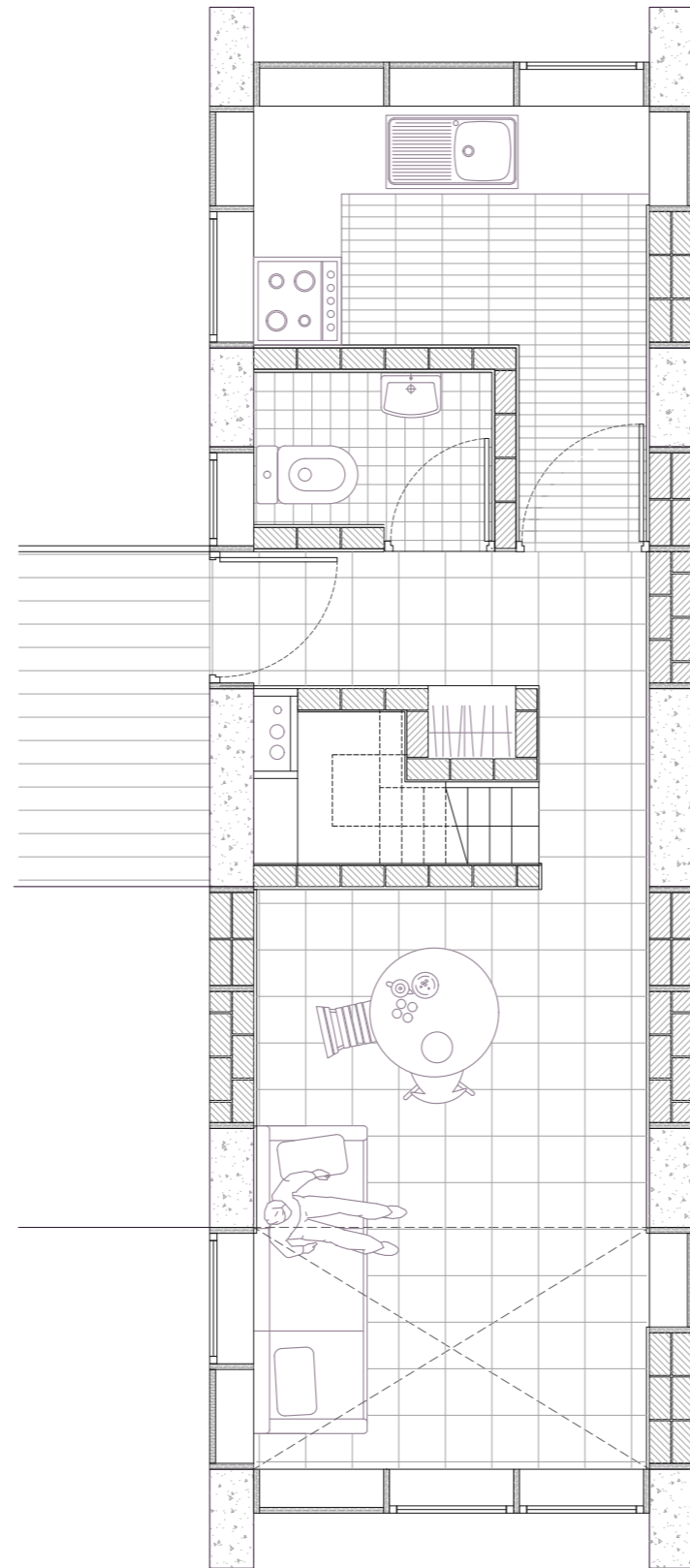
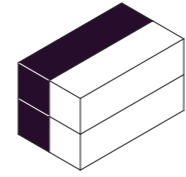
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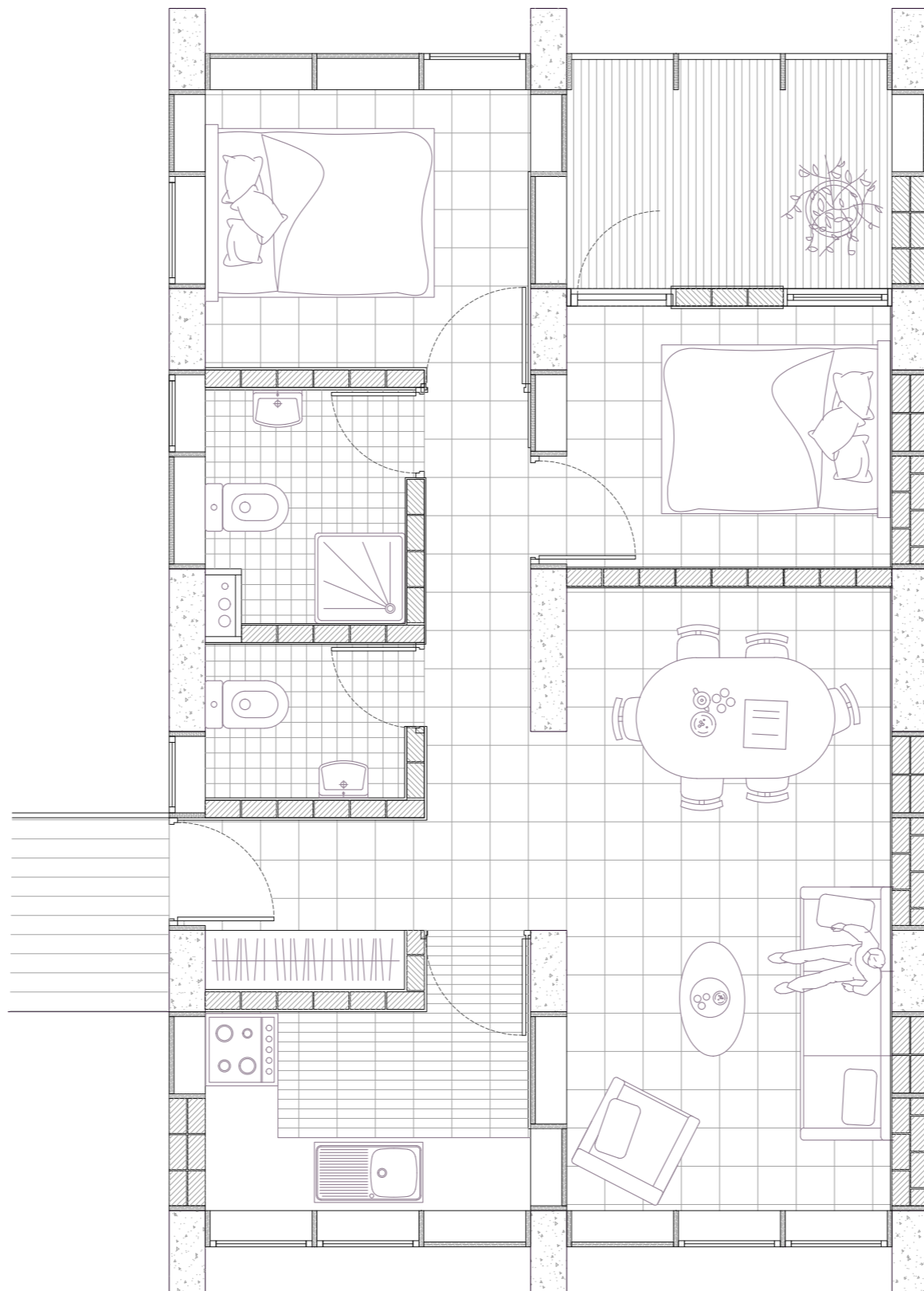
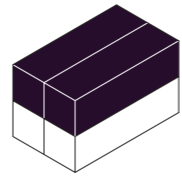


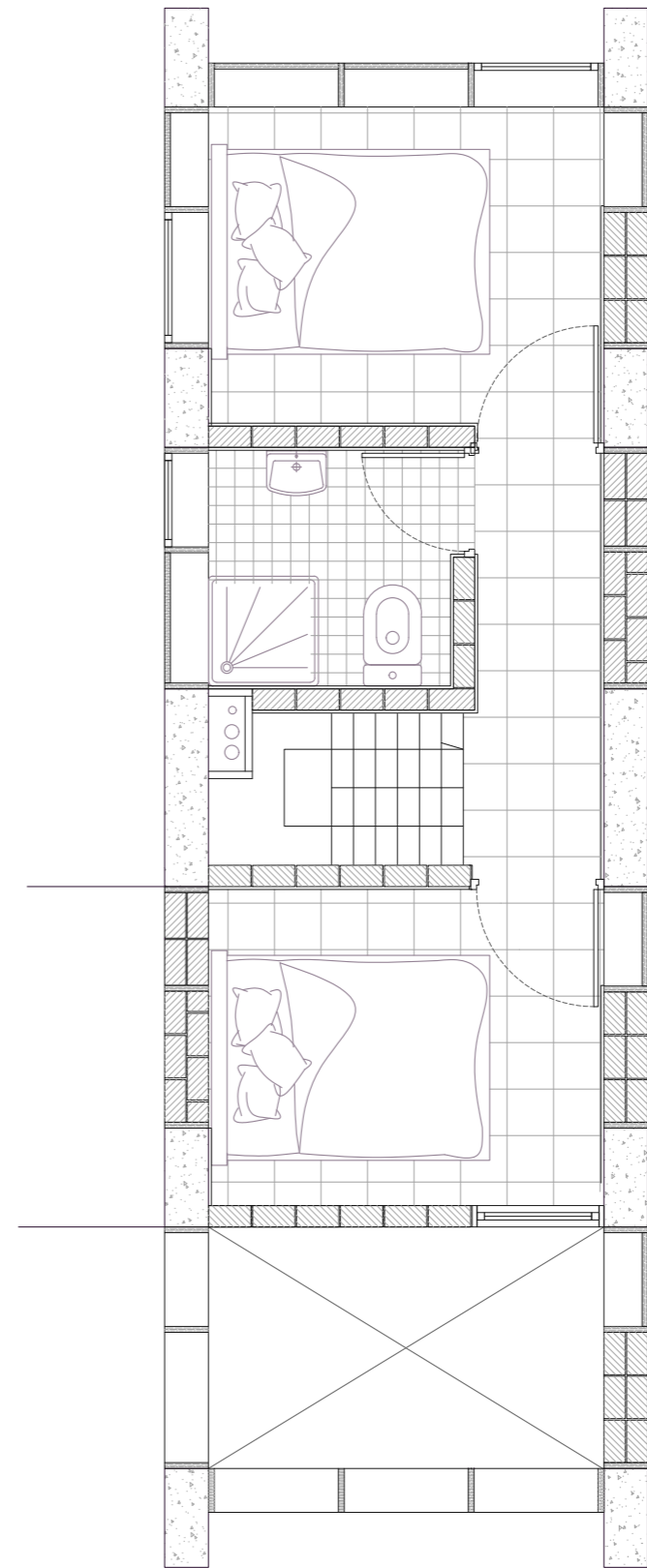
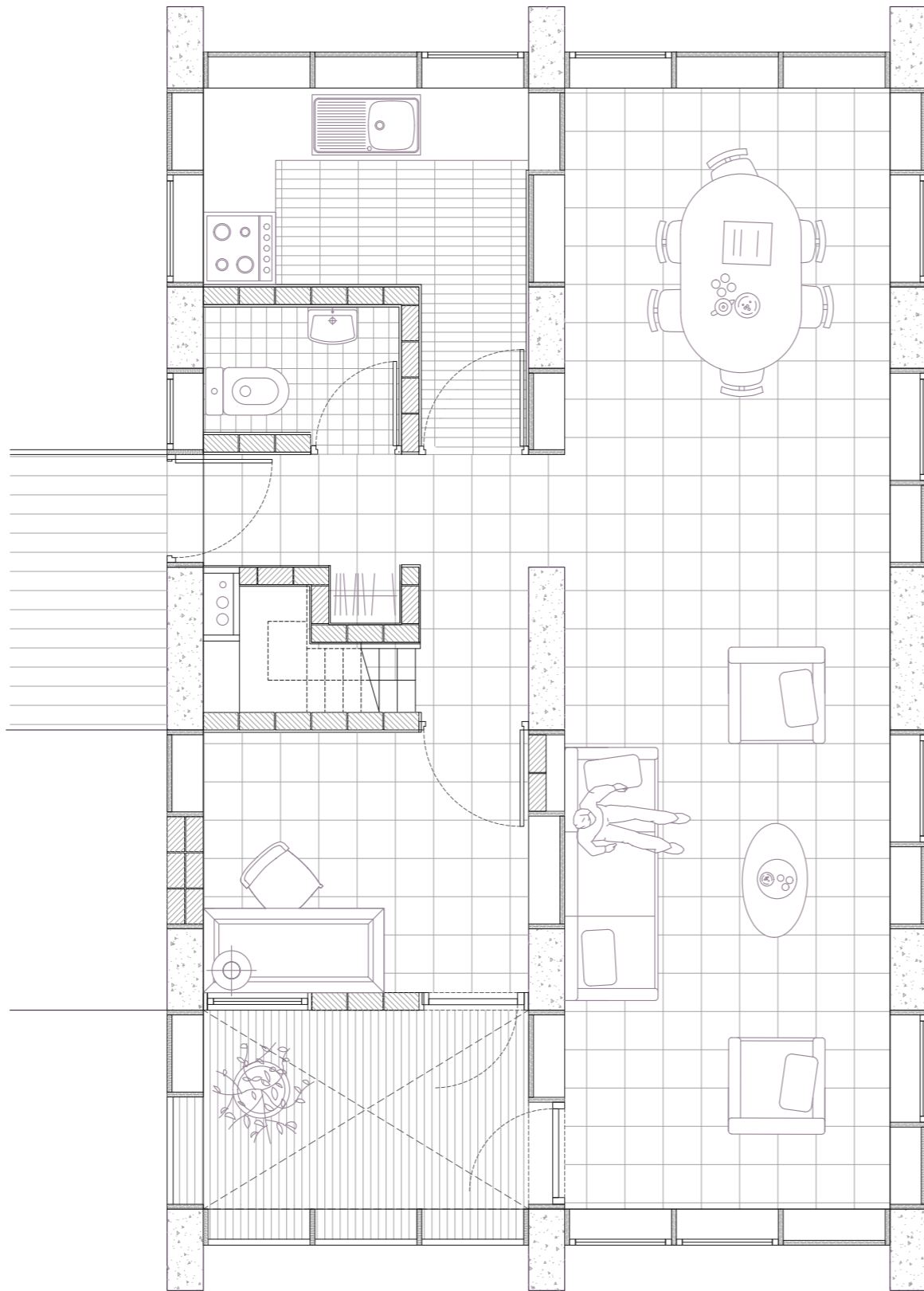
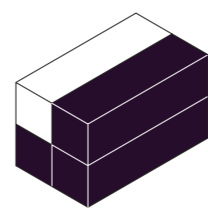
TYPE B / 36M²
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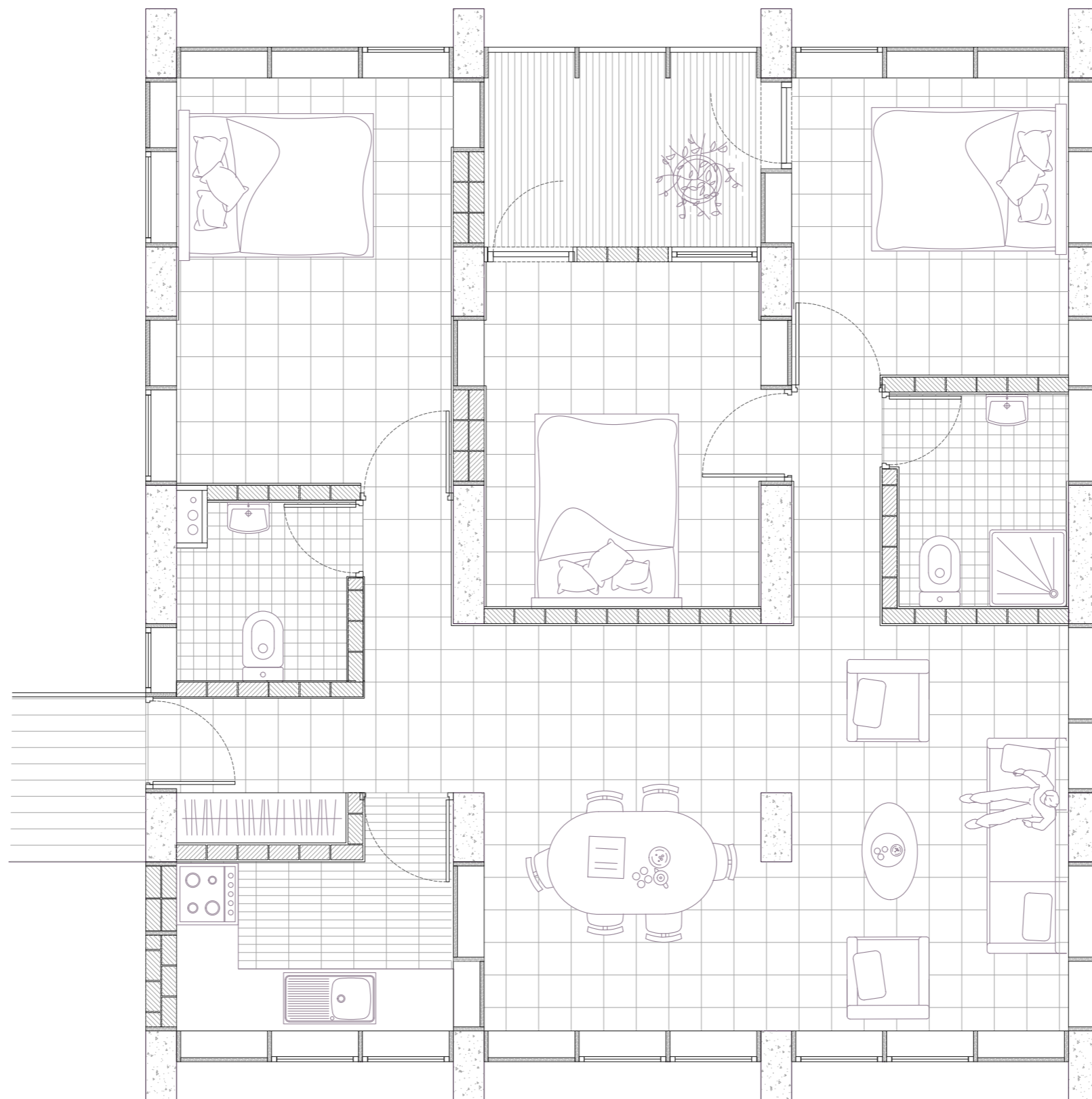
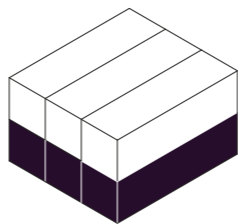


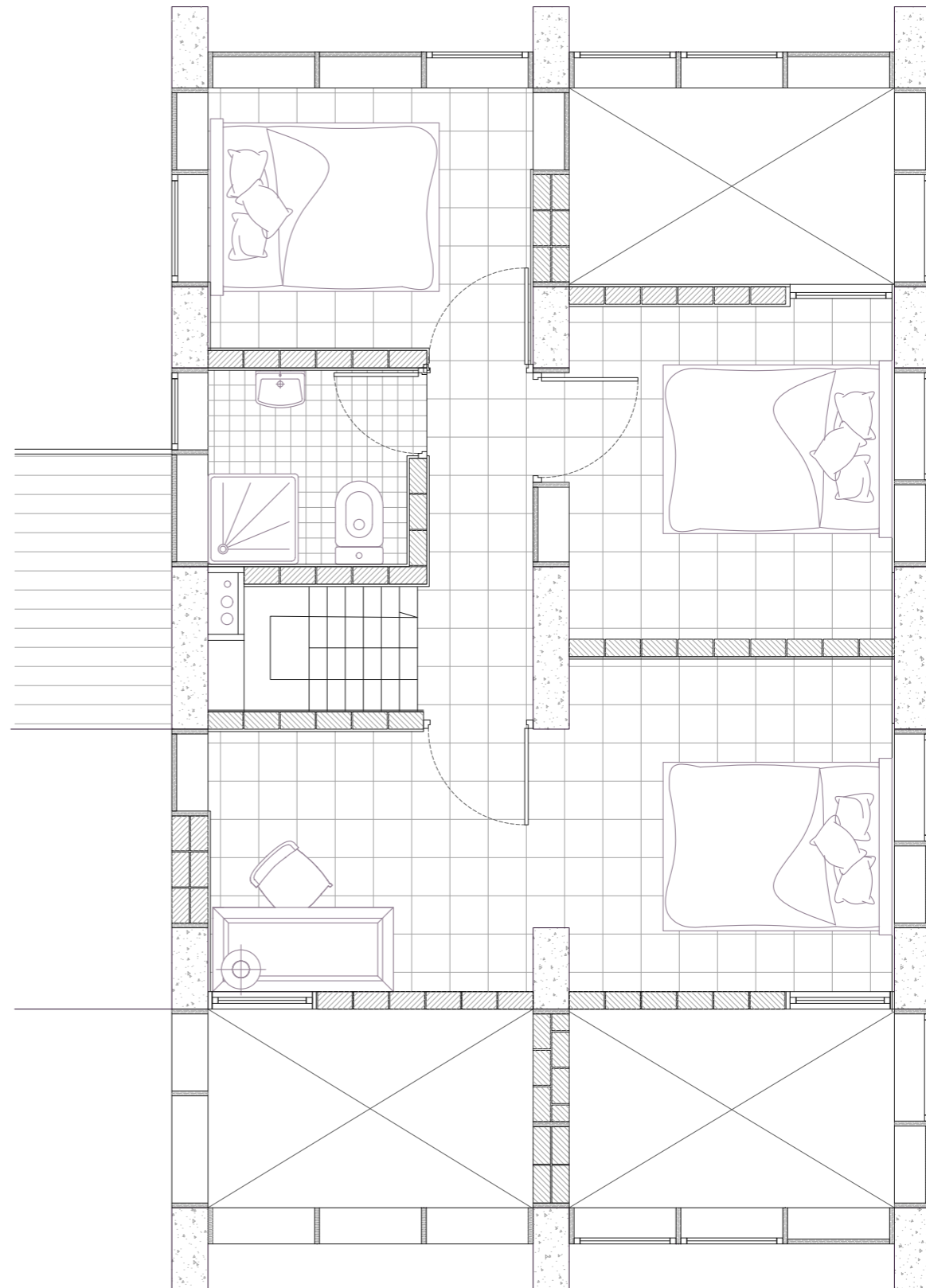
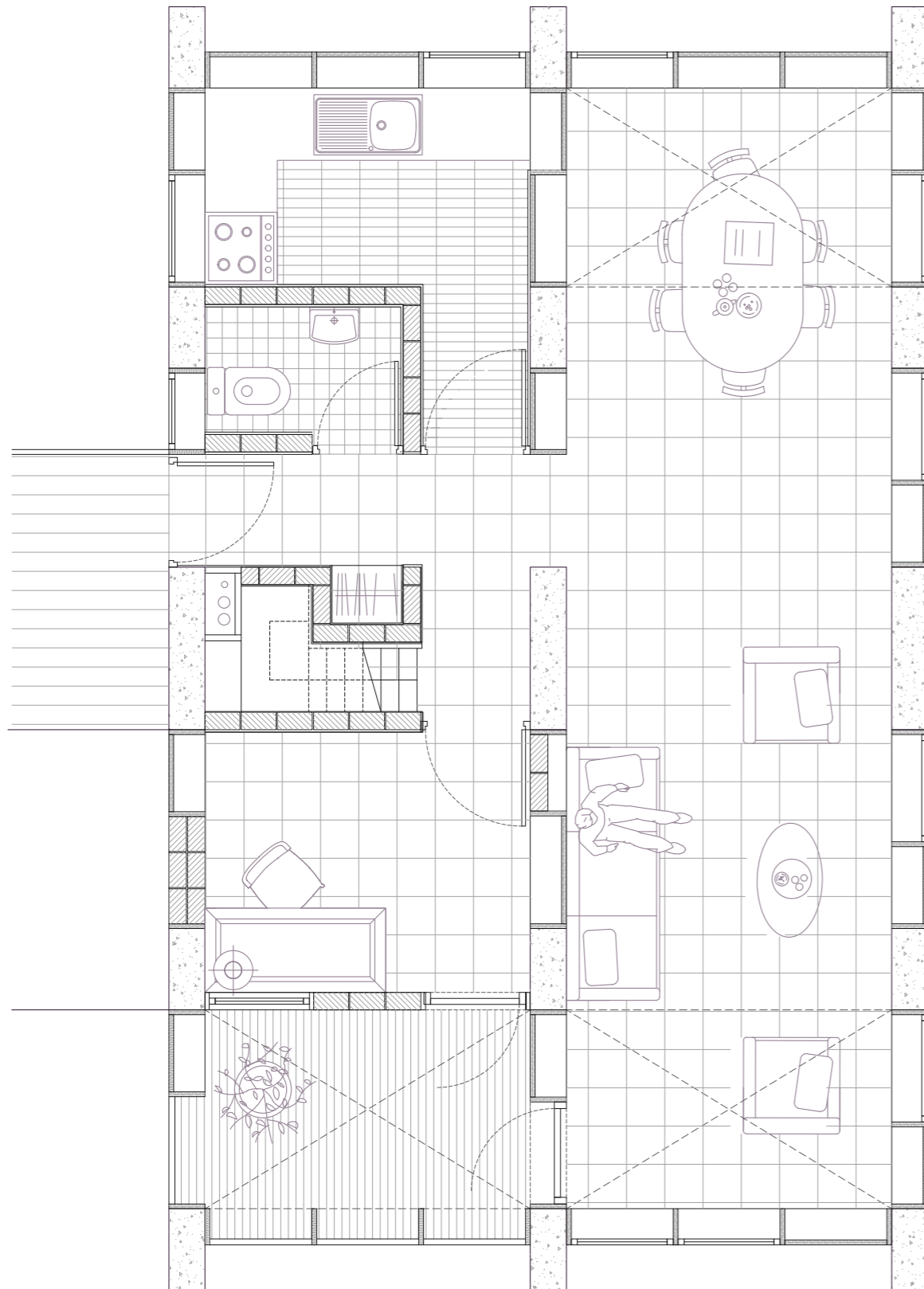
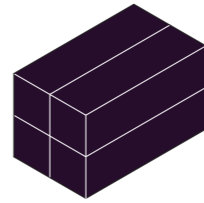


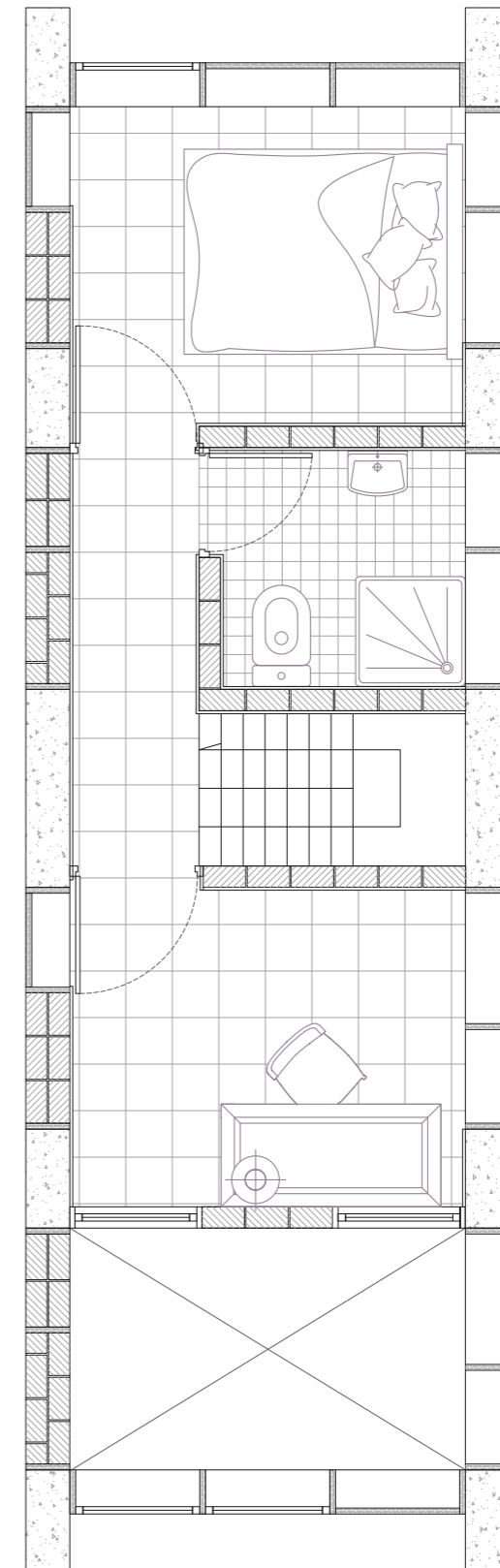
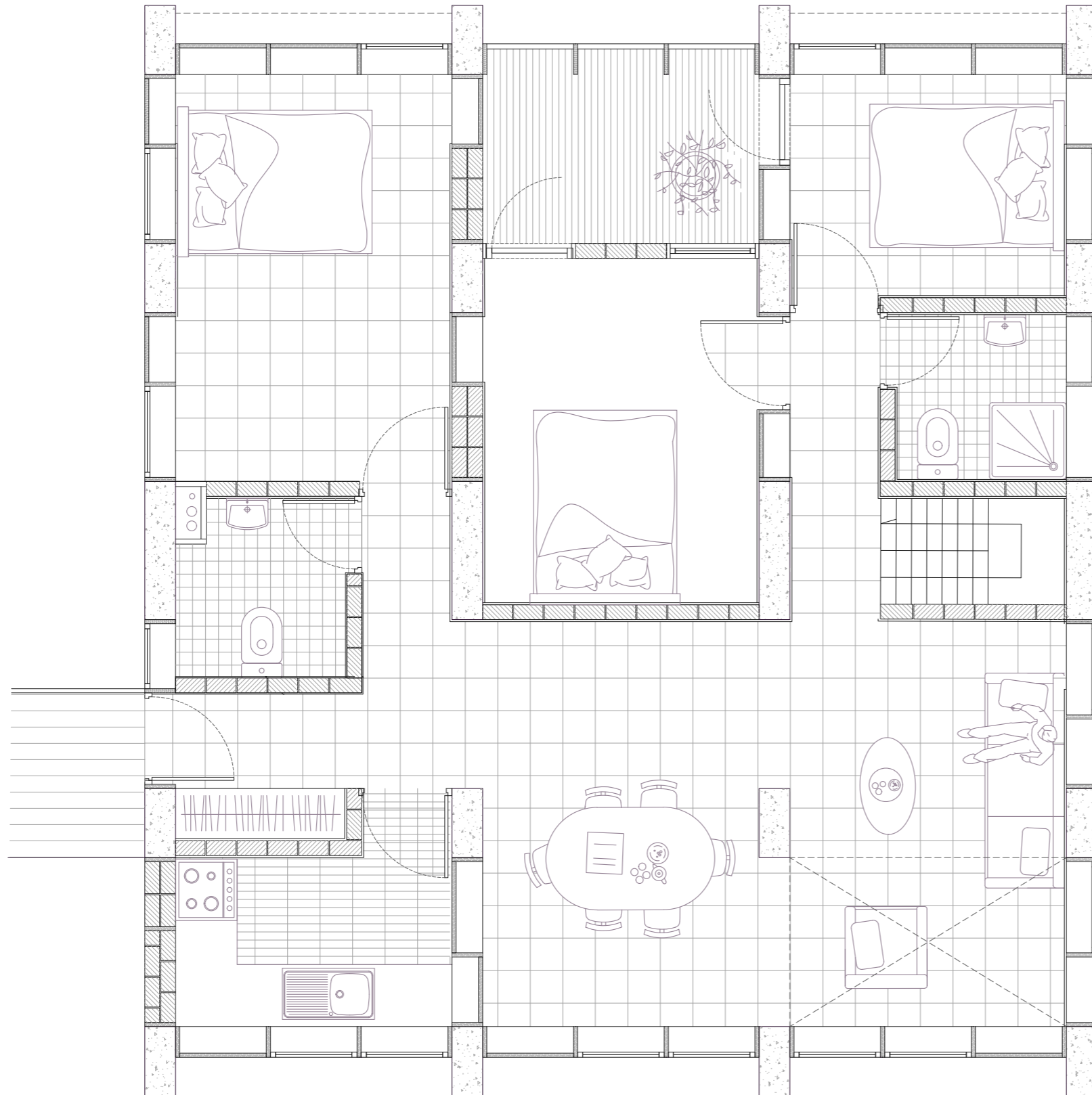
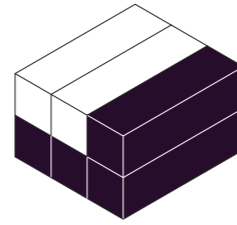


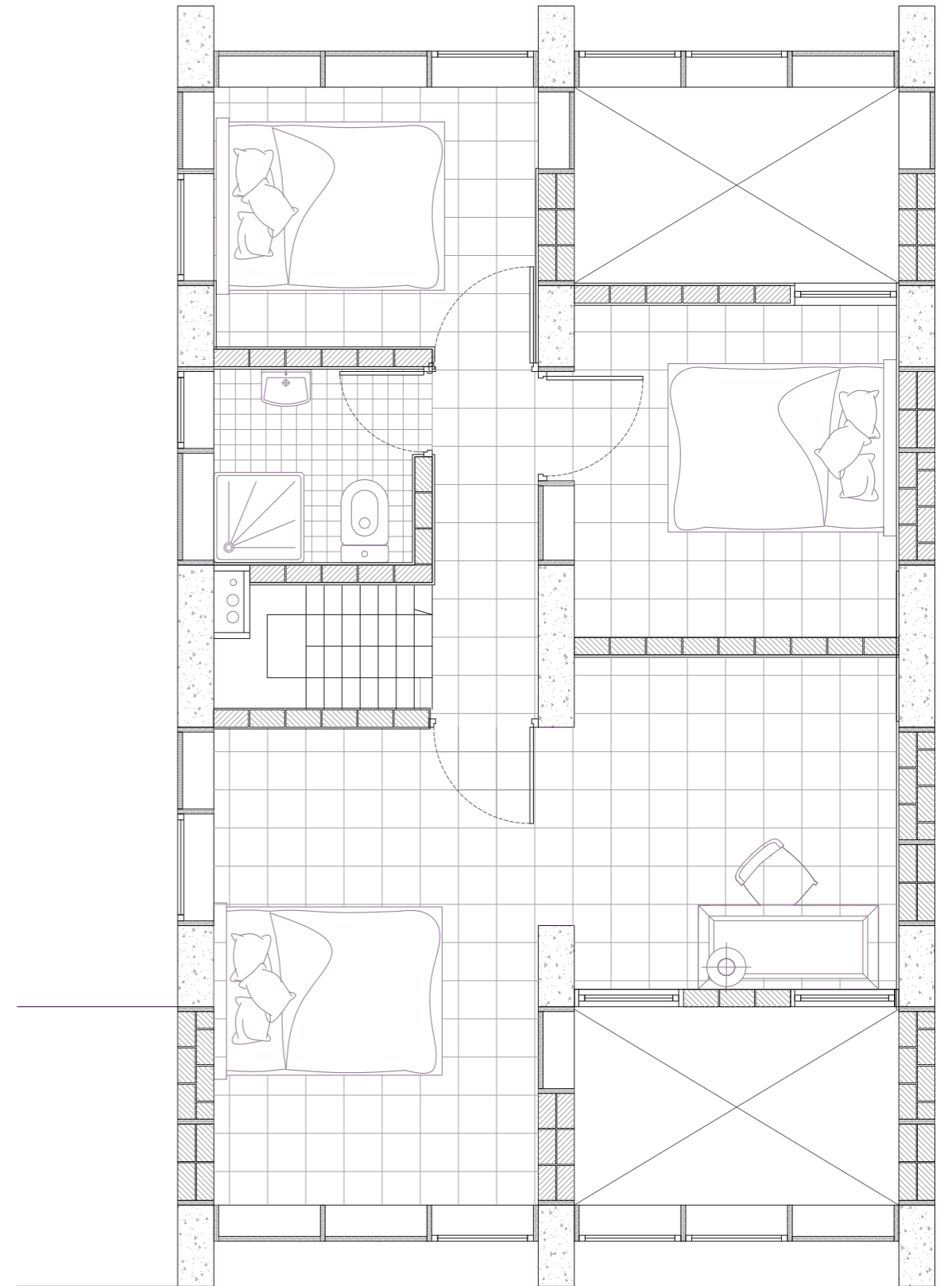
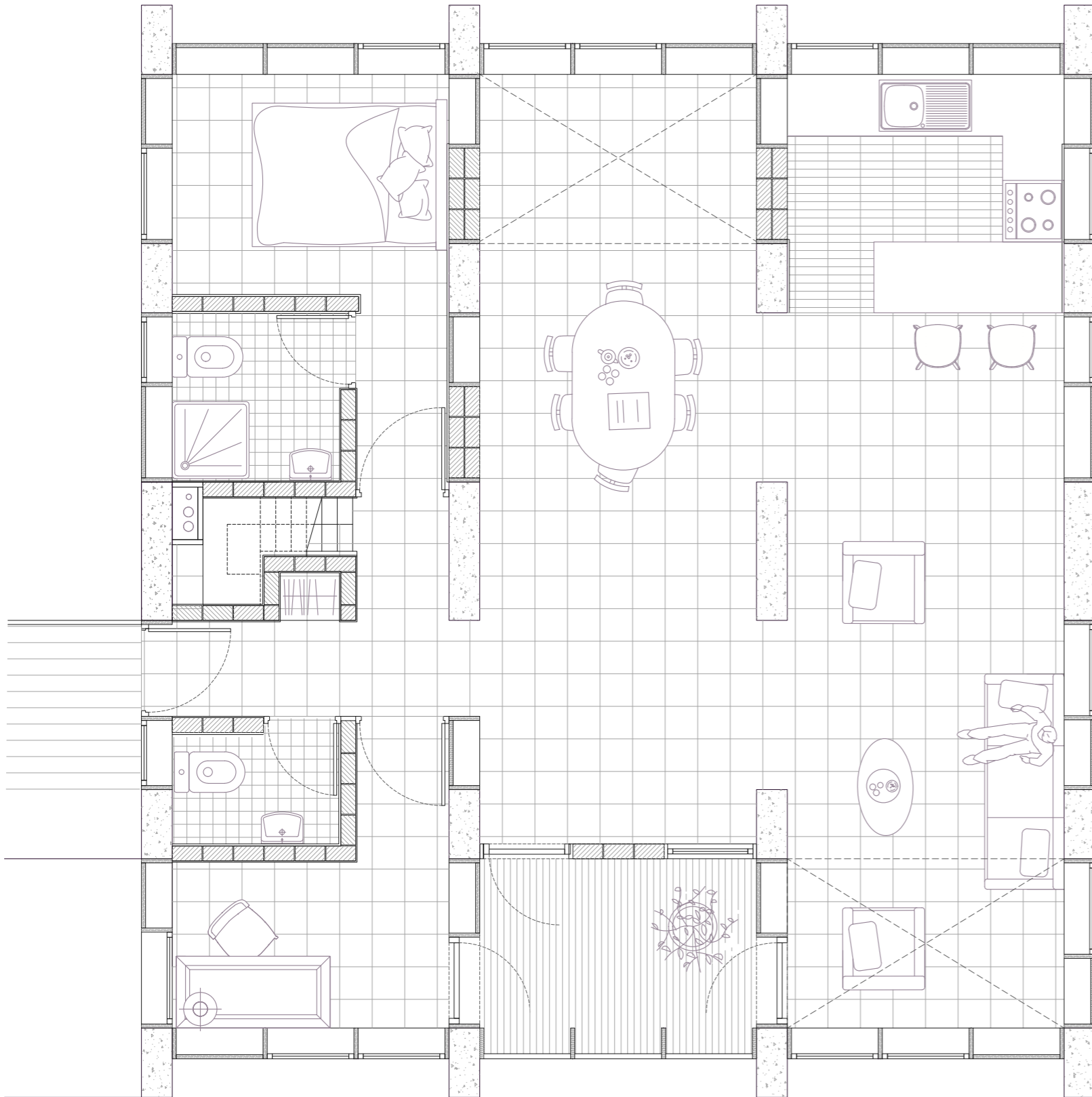
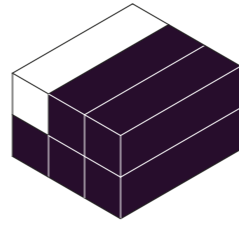


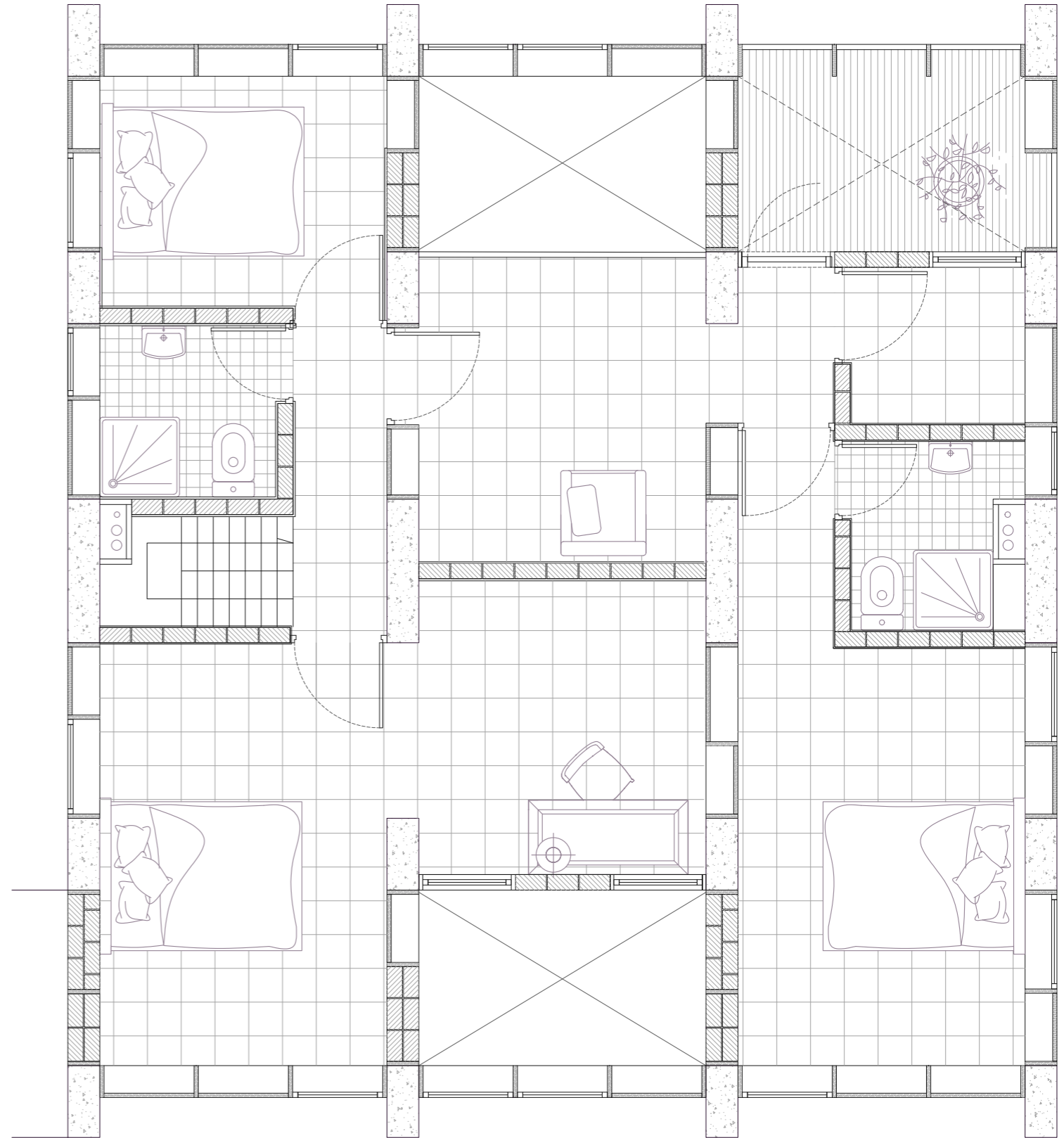
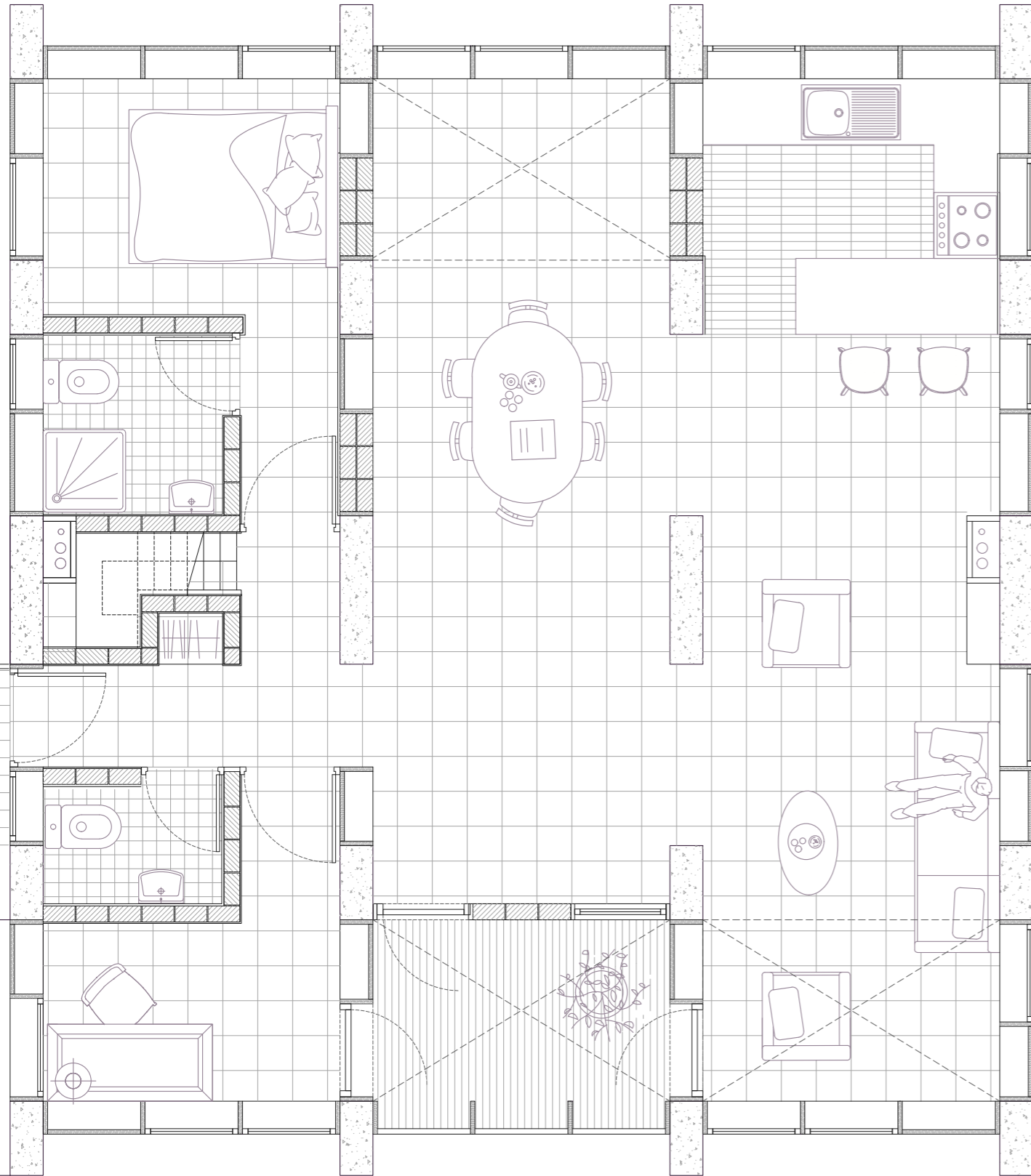
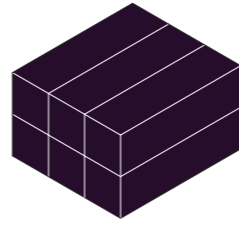


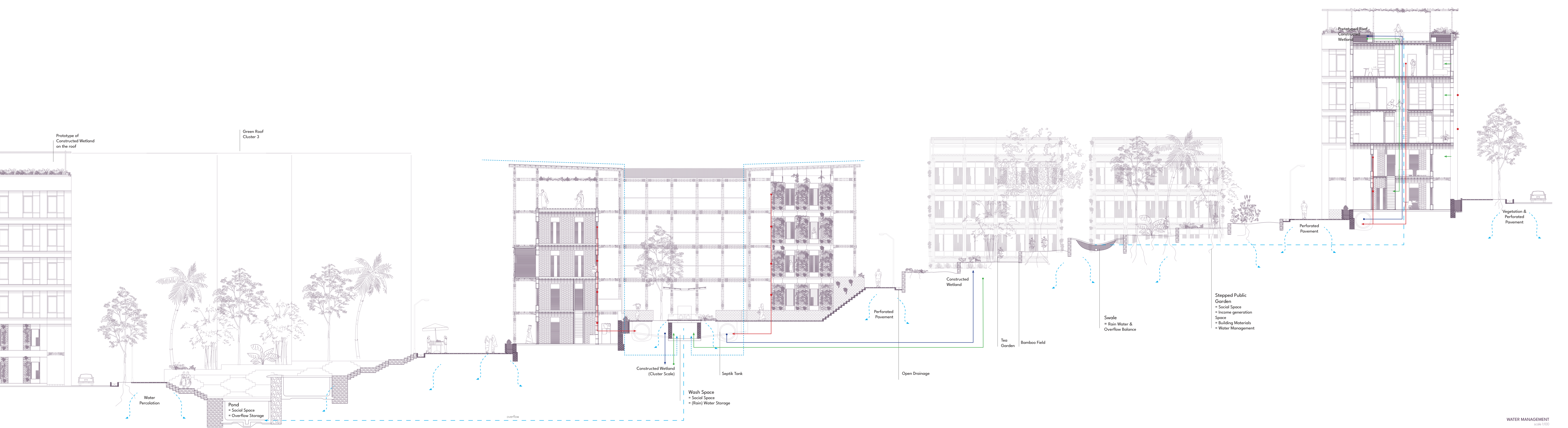






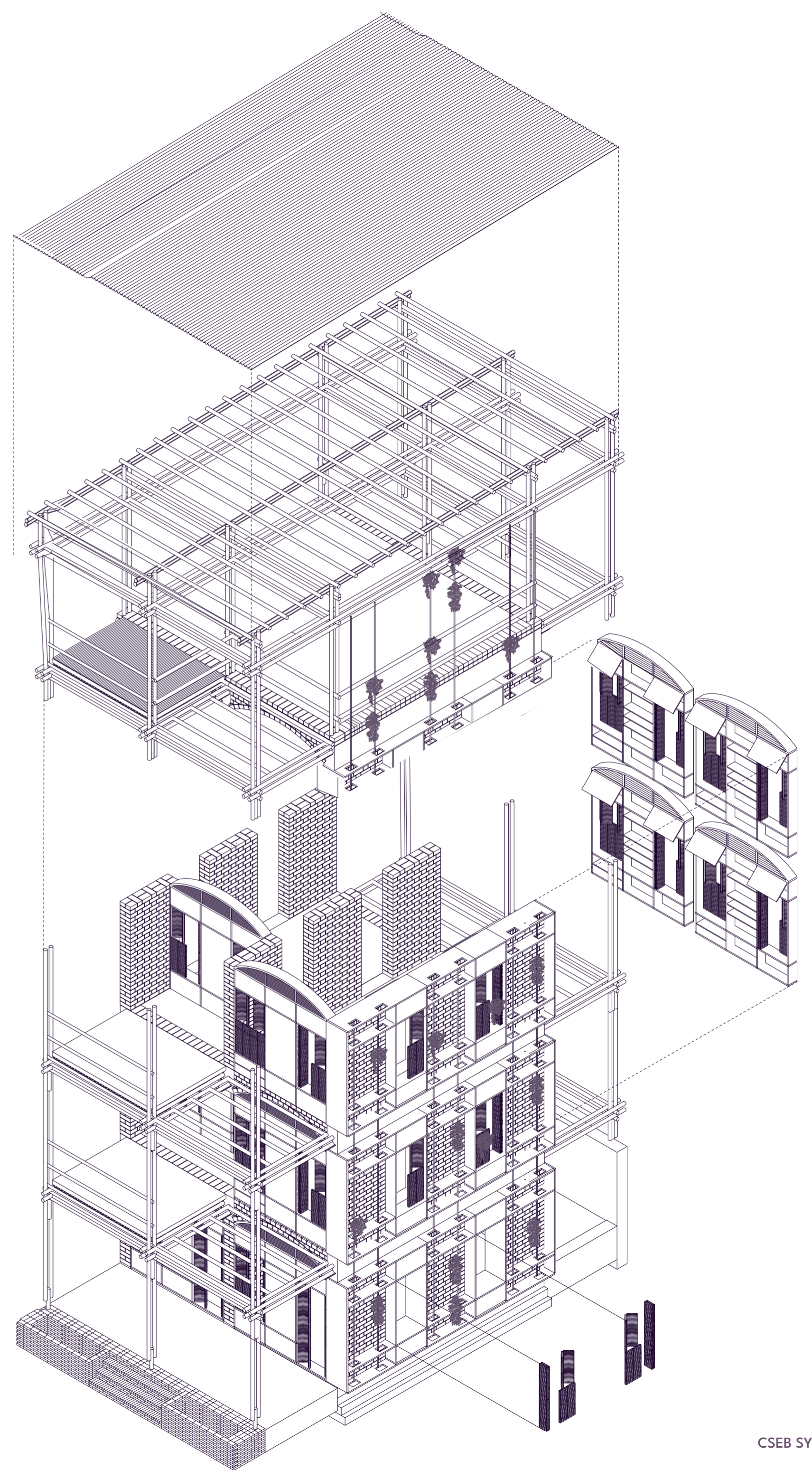
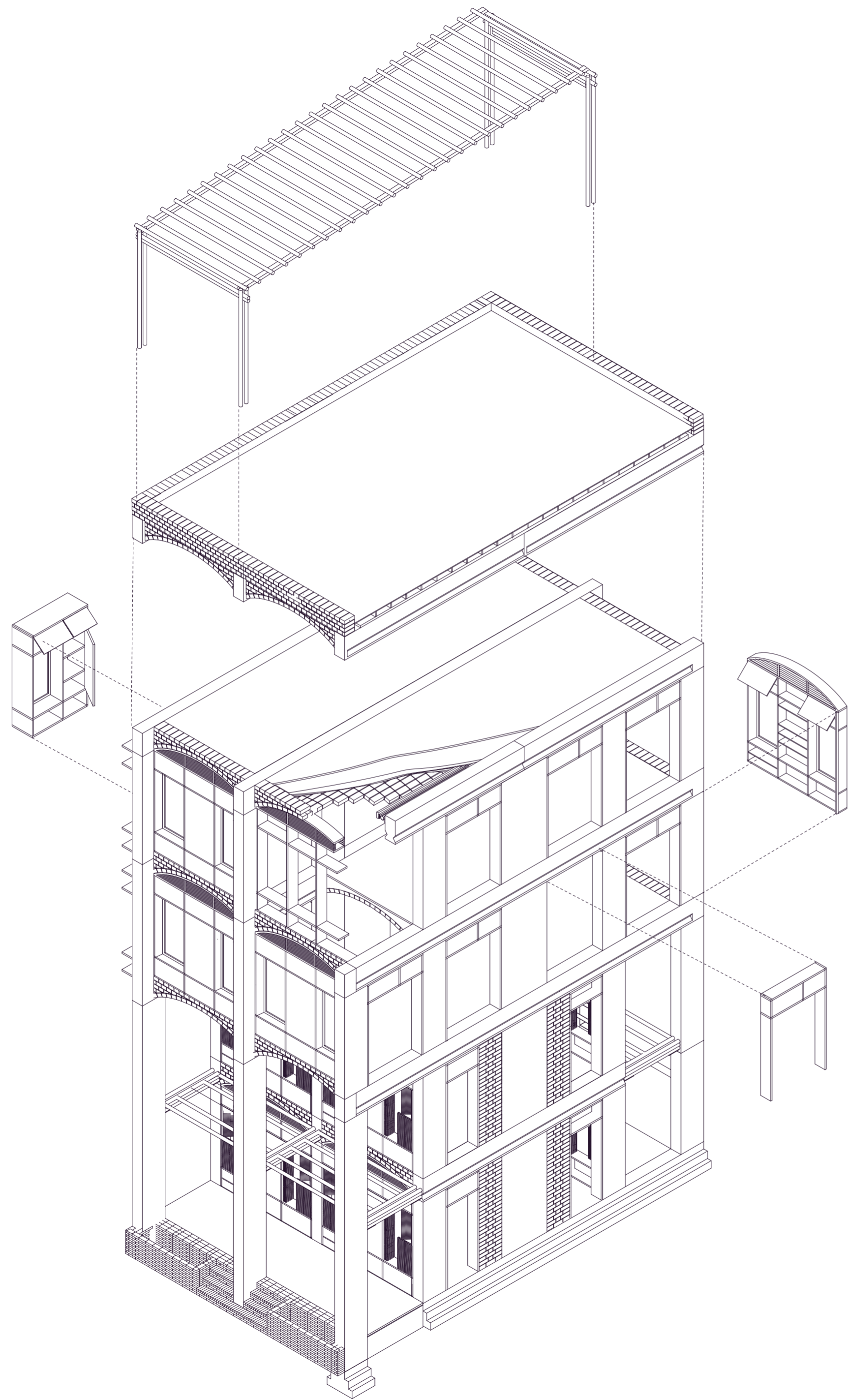


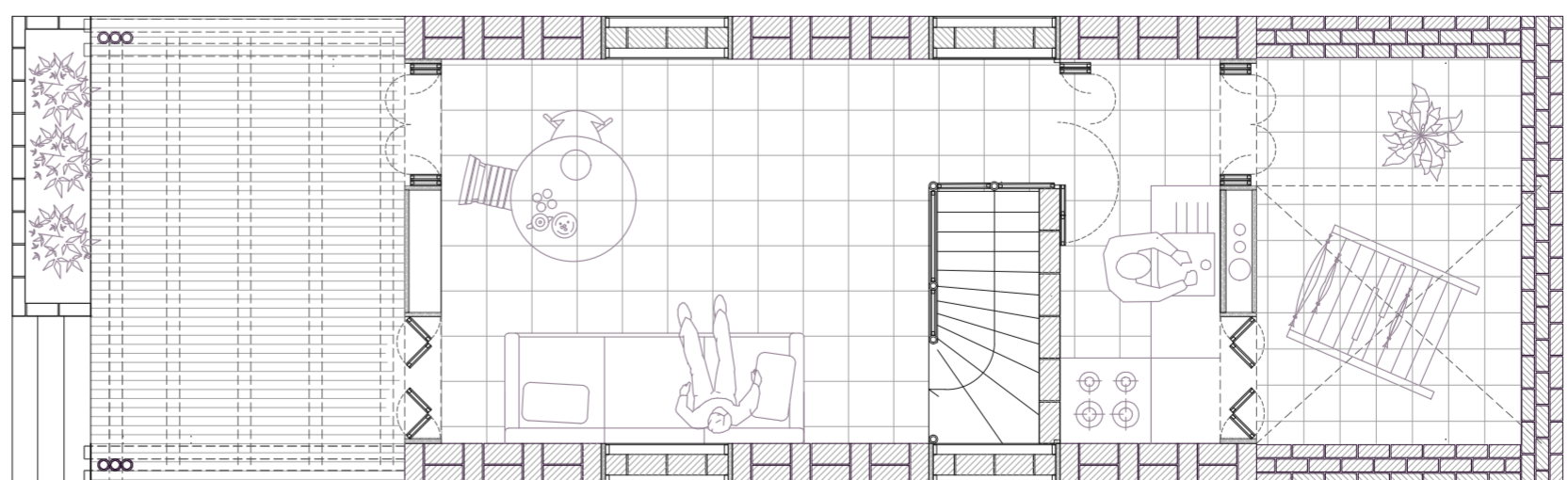
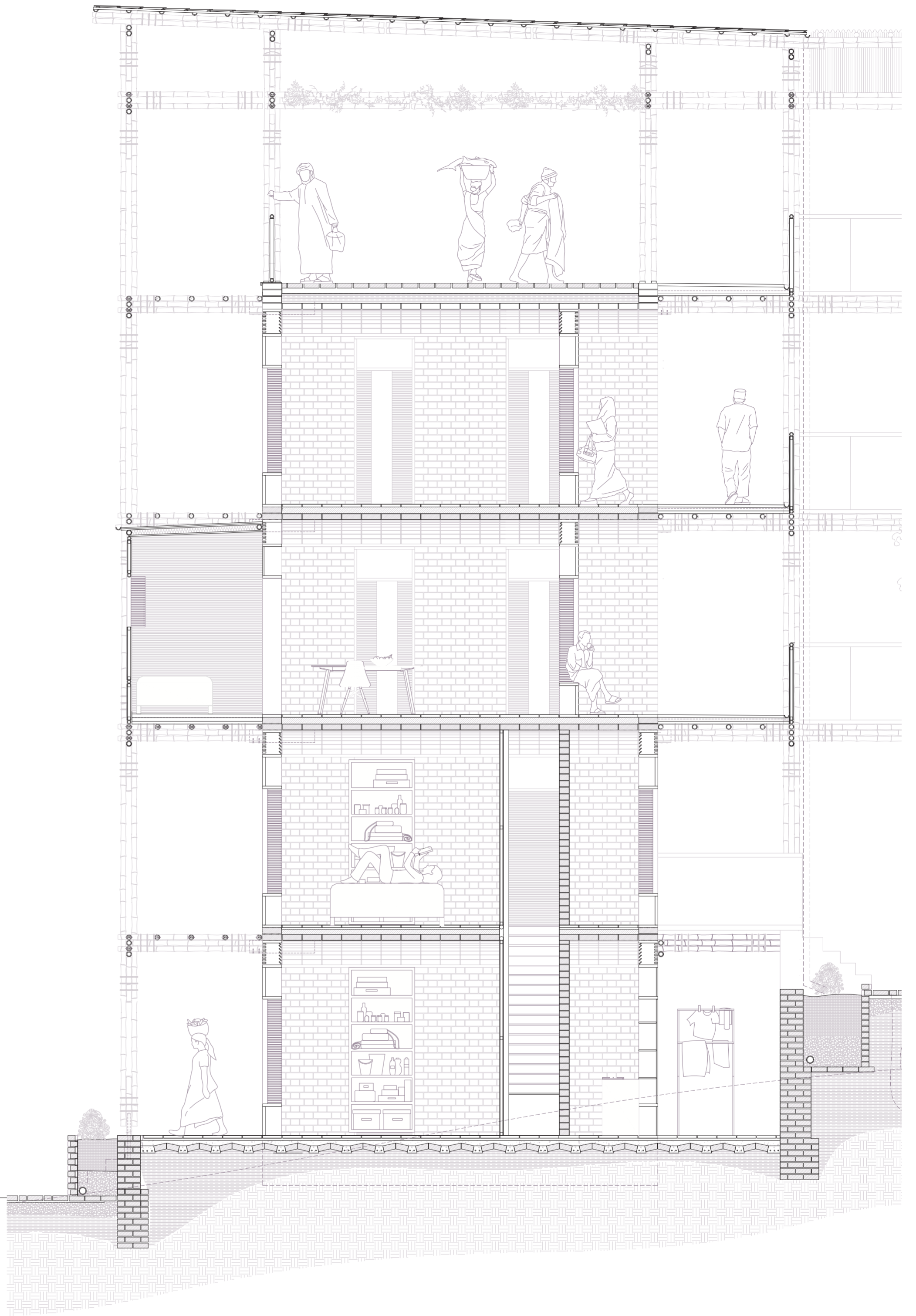
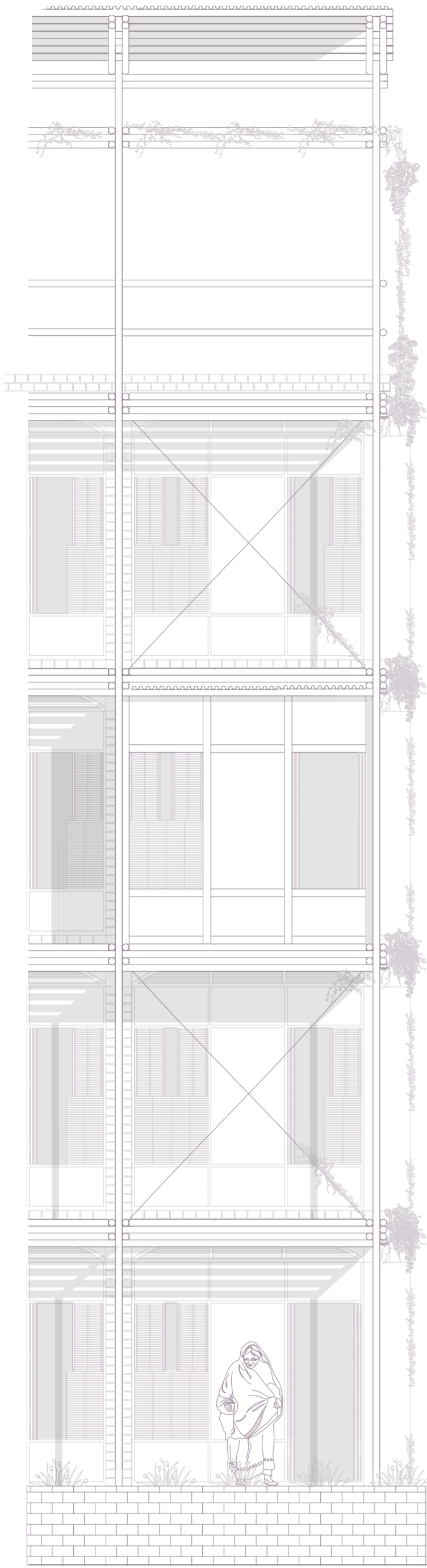


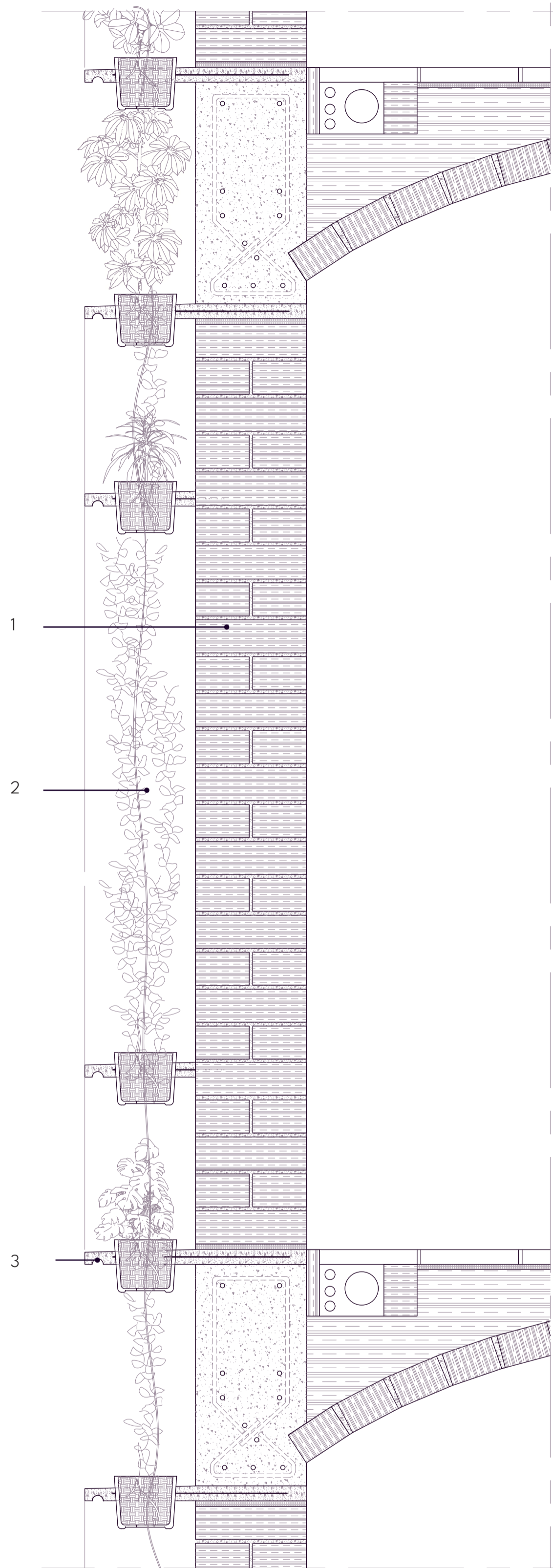


BUILDING TECHNOLOGY DRAWINGS

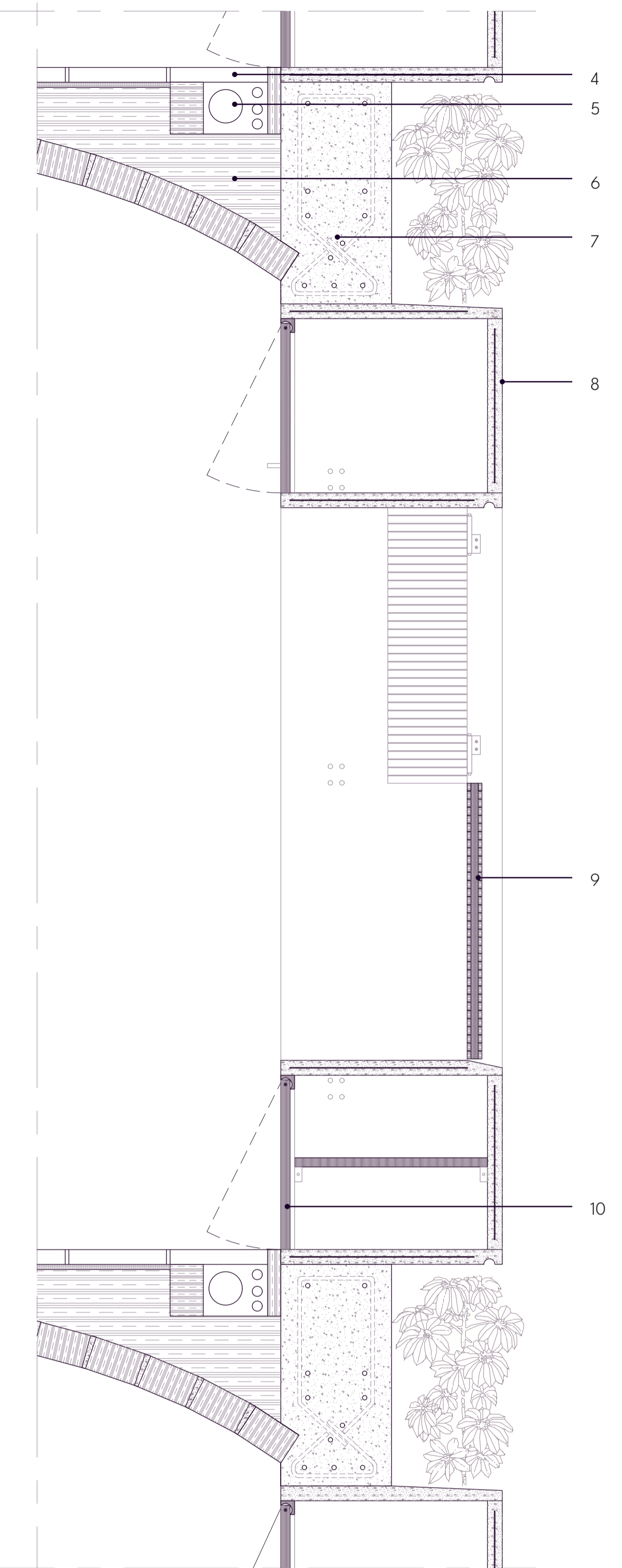
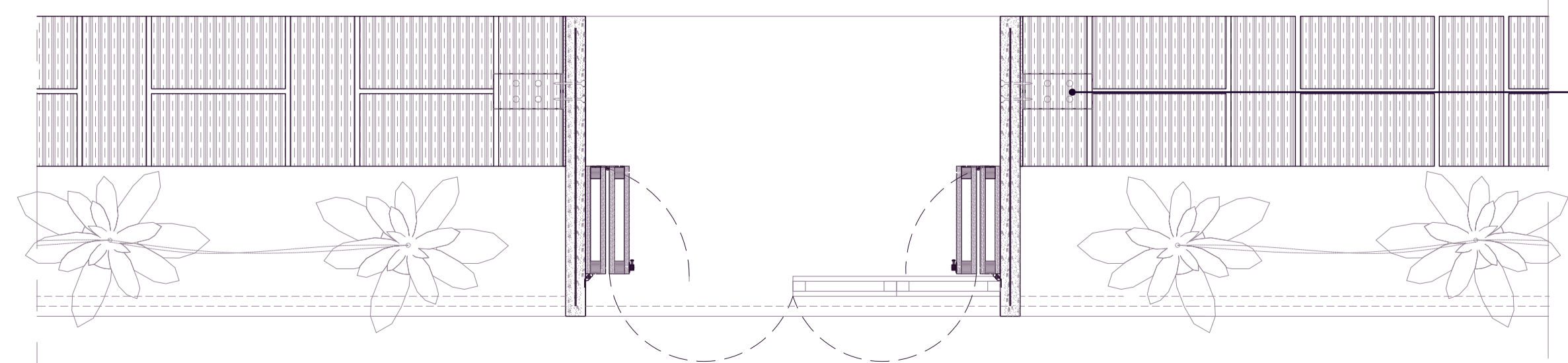
Marion Achach - TU Delft - Global Housing Graduation Studio
June 28th, 2024



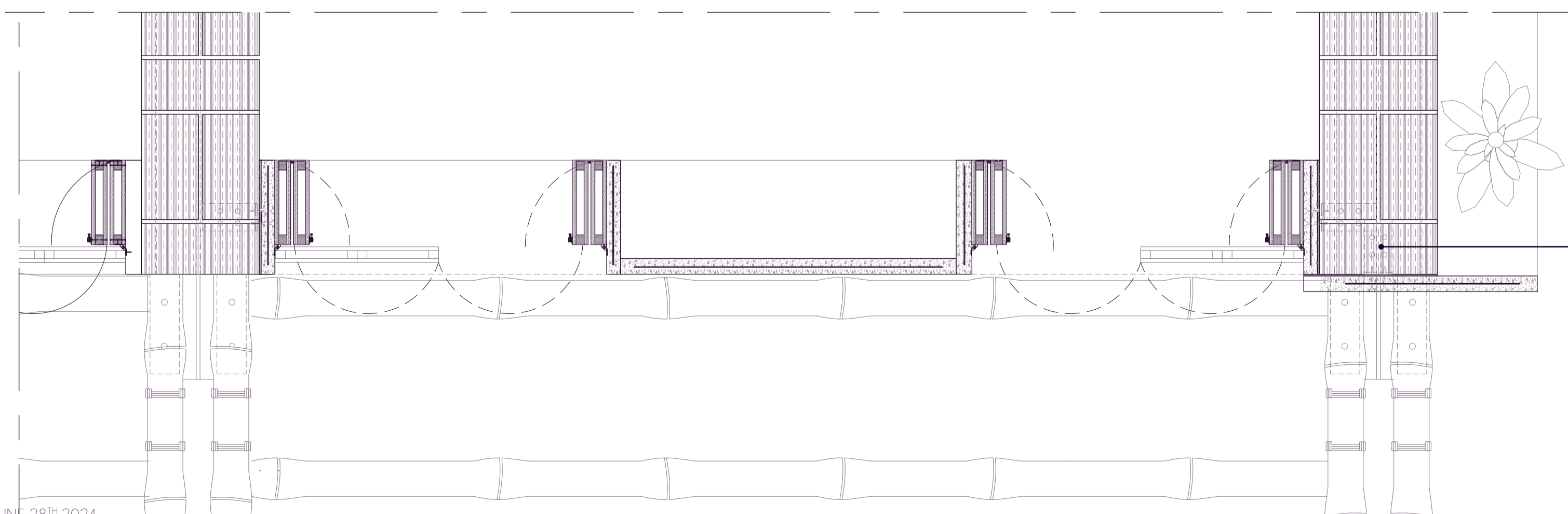
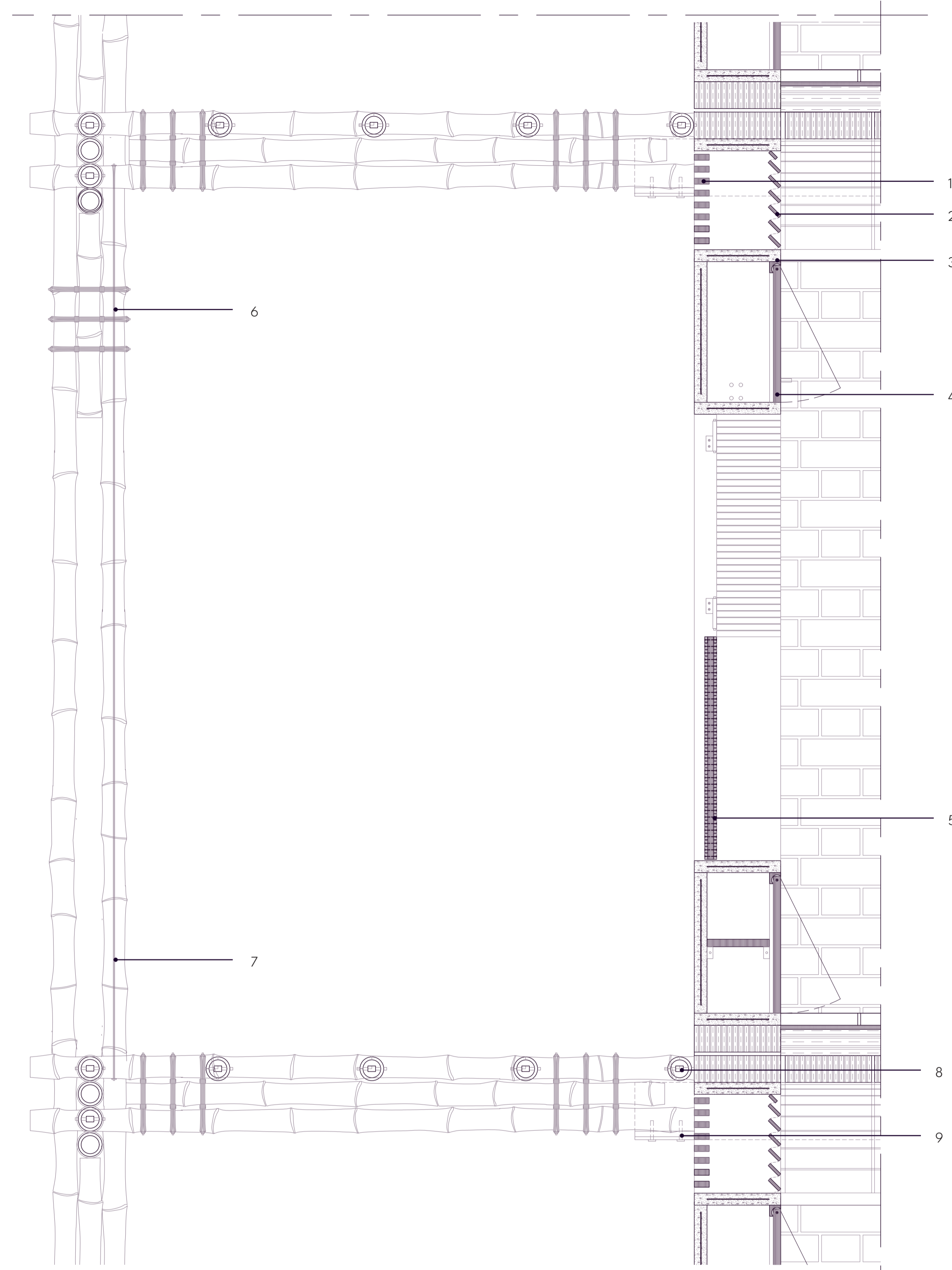
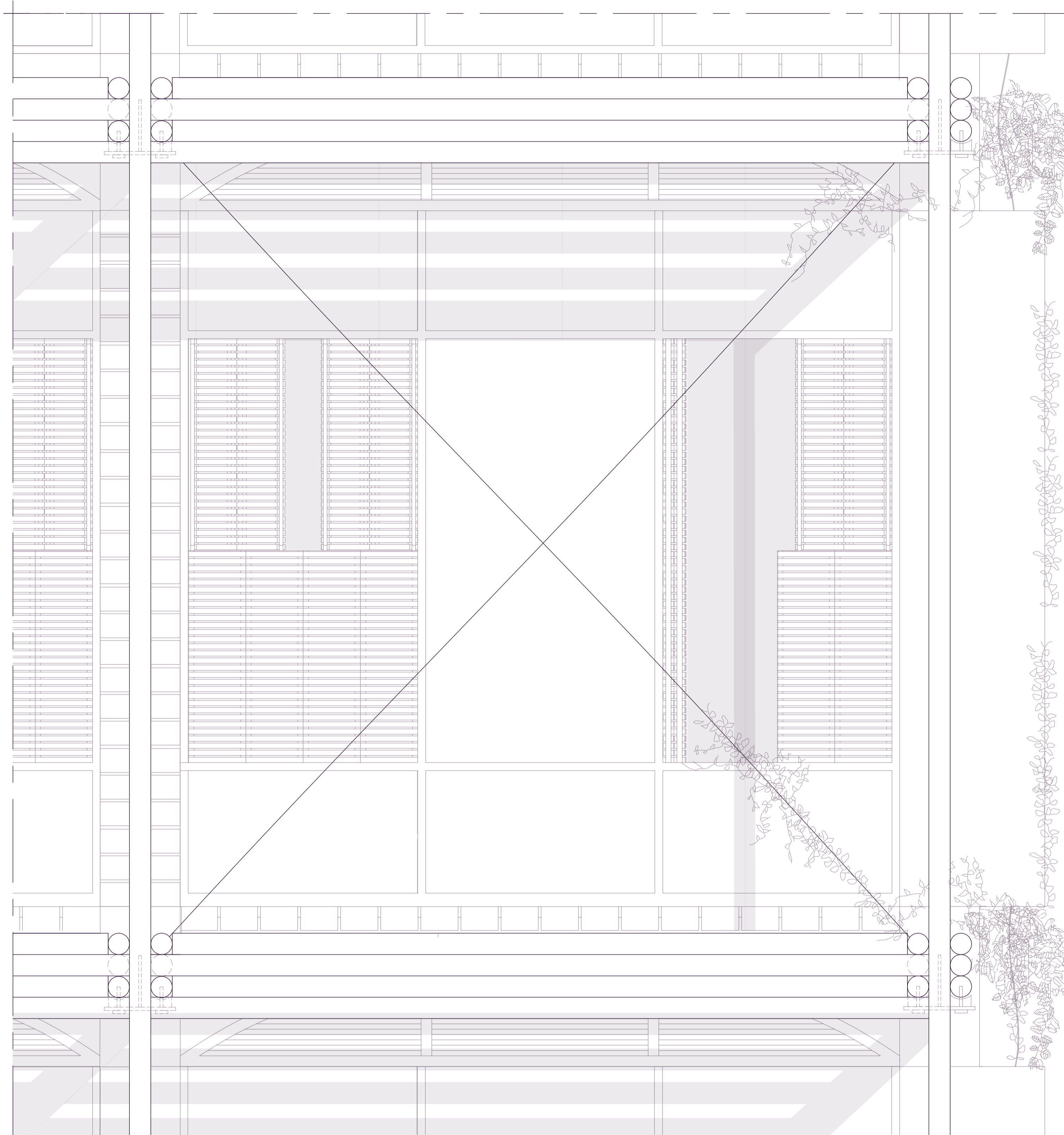




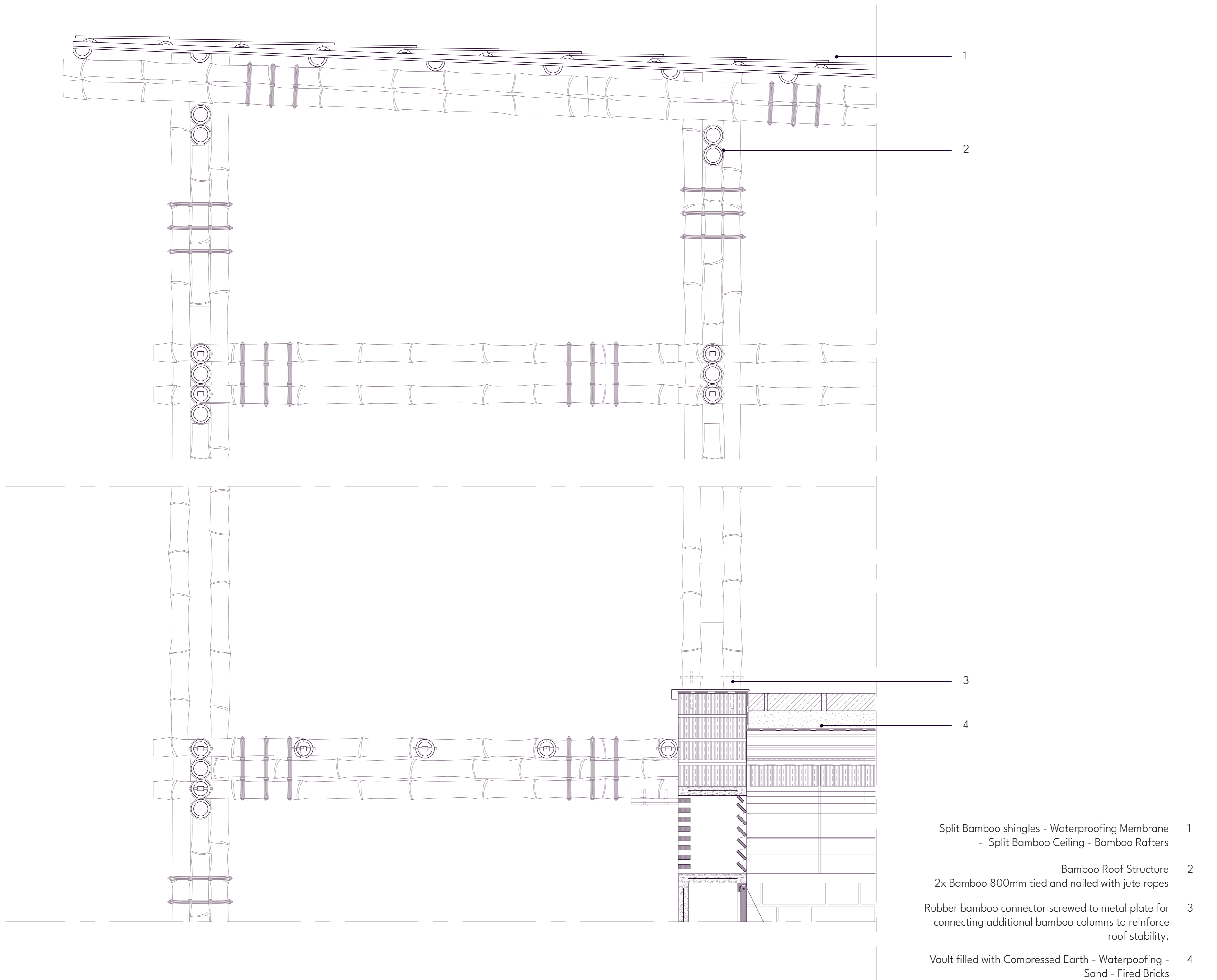
- 1 Compressed Stabilized Earth Block Bounded with the Flemish bonding
- 2 Ceramic pots with plants inserted in prefabricated ferrocement frame for rainwater protection at CSEB. Ropes and jute mesh are attached to the system to ensure adequate protection and vegetation growth.
- 3 Hood Mould designed in the prefabricated ferrocement frame



- Ceramic Tiles 300x300x40mm with 20mm Adhesive 4
- Plint 150mm with technical pipes 5
- Vault filled with compressed earth 6
- On site casted concrete beam 600mmx6000mm 7
- Prefabricated ferrocement façade frame (920x2700), bolted to L steel profile (every 60cm) inserted into the CSEB joint 8
- Bamboo Strip 20x200mm nailed to Timber Frame 20mm screwed to hinge 9
- Timber Shelft 470mmx830mm 10
- Metal L Profile inserted into CSEB Joint 11

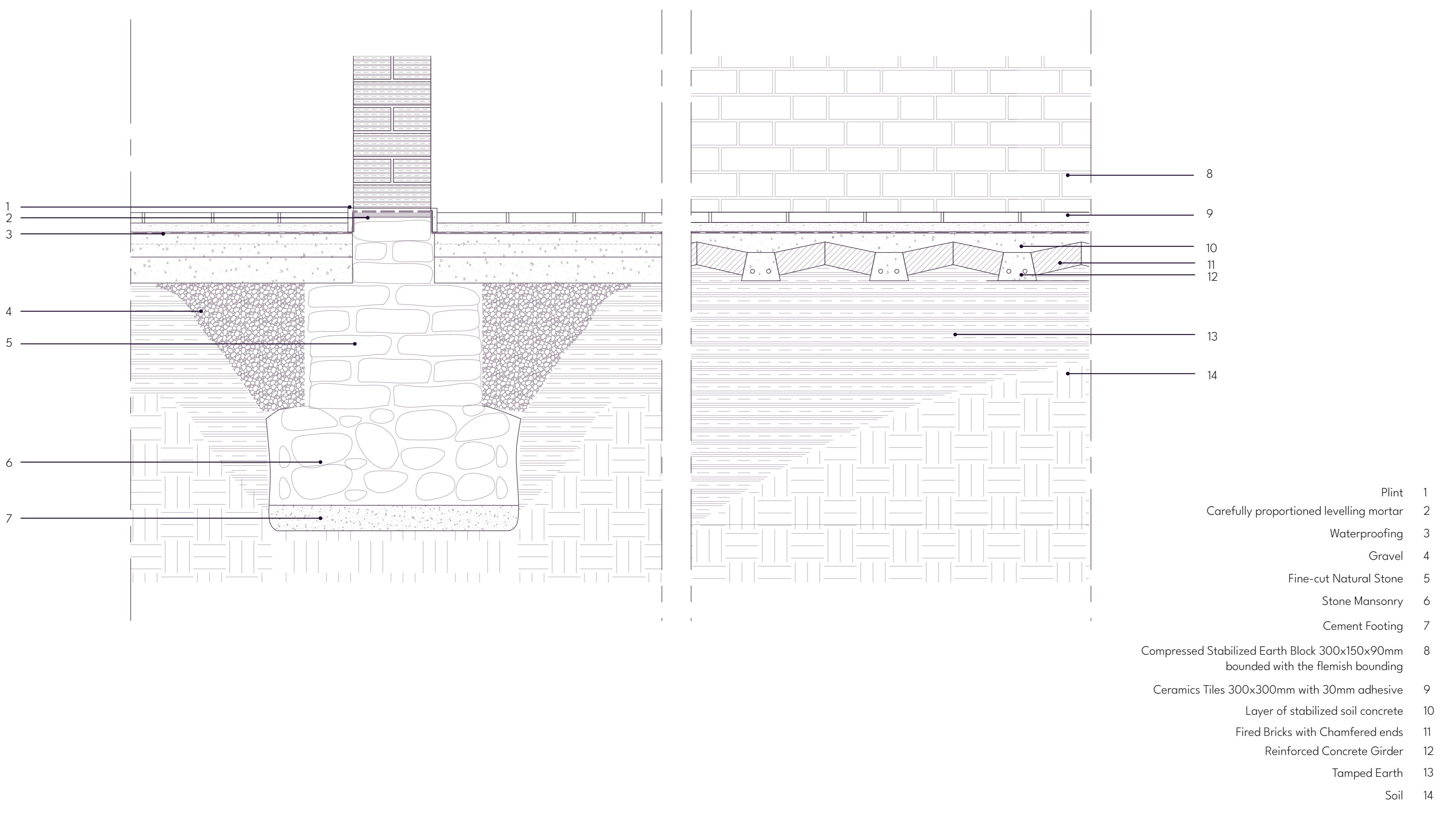


- 1 Timber 20mm claustra screwed to the ferrocement frame
- 2 Adaptable ventilation dampers
- 3 Prefabricated ferrocement façade frame (920x2700), bolted to L steel profile (every 60cm) inserted into the CSEB joint
- 4 Timber Shelft 470mmx830mm
- 5 Bamboo Strip 20x200mm nailed to Timber Frame 20mm screwed to hinge
- 6 3x Bamboo 80mm tied and nailed with jute ropes
- 7 Jute rope attached to bamboo beams for bracing
- 8 Bamboo 80mm nested in Bamboo Beams
- 9 3 x 80 mm Bamboo tied with jute ropes and screwed to the L-profile with a rubber connector
- 10 Metal L profile inserted in the casted concrete beam



- 1 Split Bamboo shingles - Waterproofing Membrane
- Split Bamboo Ceiling - Bamboo Rafters
- 2 Bamboo Roof Structure
2x Bamboo 800mm tied and nailed with jute ropes
- 3 Rubber bamboo connector screwed to metal plate for connecting additional bamboo columns to reinforce roof stability.
- 4 Vault filled with Compressed Earth - Waterproofing - Sand - Fired Bricks

DETAIL ROOF
scale 1:10



- 1 Plint
- 2 Carefully proportioned levelling mortar
- 3 Waterproofing
- 4 Gravel
- 5 Fine-cut Natural Stone
- 6 Stone Masonry
- 7 Cement Footing
- 8 Compressed Stabilized Earth Block 300x150x90mm bounded with the flemish bounding
- 9 Ceramics Tiles 300x300mm with 30mm adhesive
- 10 Layer of stabilized soil concrete
- 11 Fired Bricks with Chamfered ends
- 12 Reinforced Concrete Girder
- 13 Tamped Earth
- 14 Soil

DETAIL FOUNDATION
scale 1:10