BORGO DI ROCCA CASELLA
Molazzana, Lucca, Tuscany

Descriptive Specifications For Materials And Technical Characteristics
1. FOUNDATIONS
The foundations have anti-seismic criteria, and are in concrete reinforced with steel for improved strength.
2. **VENTILATION SPACE**

There will be a ventilation space under the floor, for anti-damp proofing, consisting of PVC domes (recyclable) and overlay of reinforced concrete.
3. **WATERPROOFING UNDER THE WALLS**
Waterproofing beneath the walls, to avoid any damp rising from the foundations.

4. **EXTERNAL WALLS**
Externally, highly biocompatible building using antiseismic supporting ECOPOR® WALL blocks from Fornace Toppetti, 41 cm thick (with plaster of 44-45 cm thick approx). These blocks have vertical holes, and are perforated with wood flour, ideal for the creation of supporting walls in any seismic area. They are characterised by a gross volume mass above 800 kg/m3 and a perforation percentage \( \phi \leq 45\% \). Thanks to the light mix and the numerous area chambers, ECOPOR® WALL guarantees very high thermal performance.
5. **INTERNAL WALLS**

Internally, the walls will be made of antiseismic supporting bricks, 30km thick.
6. **ANTISEISMIC RING BEAMS**
Where the ceilings/floors are, there will be antiseismic ring beams of reinforced concrete.

7. **CEILING**
The ceiling on the ground floor will be a supporting structure with large and small chestnut wood beams, partly or all salvaged/recycled, with a rustic finish (whitewashed if preferred) and with handmade cotto tiles in between. There will be soundproofing between floors.
8. **TOP FLOOR CEILING**
Exposed ceiling with supporting structure in chestnut wood large and small beams, partly or all salvaged/recycled, with a rustic finish (whitewashed if preferred) and with handmade cotto tiles in between.

9. **ROOF**
The roof will be in old cotto tiles, using flat and curved tiles in keeping with Tuscan tradition.
10. **MOISTURE BARRIER**
   A moisture barrier – a breathable layer of material – to prevent moisture from passing through the insulation and the structure, thus preventing condensation +

11. **ROOF INSULATION**
    Thermal roof insulation with ecological material 8cm thick

12. **WATERPROOF MEMBRANE (ROOF FELT) UNDER THE ROOF TILES**
    Above the layer of insulation, there will be a waterproof bitumen membrane with a rough surface to prevent water ingress from the roof
13. **EAVES**

The eaves will be constructed with handmade or recycled cotto
14. **LIFELINE**

A ‘lifeline’ will be installed on the roof (as required by law), of hook type, under the tiles, of minimum visual impact.
15. **GUTTERS AND DRAINPIPES**

Gutters and drainpipes are to be made of copper sheeting
16. **INTERNAL AND EXTERNAL PLASTER**

The internal and external plaster will be coloured lime plaster with antique finish.
17. **FLOORING**

The flooring will be handmade or salvaged cotto, or chestnut (or other local wood) floorboards.
18. BATHROOM FLOORING AND TILING

The bathroom flooring and tiling will be in handmade and/or salvaged ceramic tiles.
The sanitaryware will be of in keeping with the style created by the type of tiles chosen, and in particular the sink will be handmade or salvaged stone or cotto.
19. **WINDOWS**
The windows will be of painted wood, painted with suitable light colours. They will be double-glazed for the purposes of thermal insulation, and will have external shutters.

![Window Image]

20. **DOORS**
The internal doors will be in painted wood of a light colour. The external doors will be made of hardwood, and natural or painted.

![Door Image]
21. SYSTEMS

Electrics: connection to the photovoltaic plant (situated behind the hill and not visible), and also to the national grid.
Heating system: LPG

Water: connection to mains water

### 22. GENERAL DESIGN ELEMENTS

There will be old and salvaged elements used as much as possible, in order to add to the character of the apartments and create unique properties which although new, are unlike any other apartments available in Tuscany.

![Image of a room with old and salvaged elements](image)

### 23. SWIMMING POOL

Infinity pool, heated with solar panels.

![Image of an infinity pool](image)