



**Dwelling Shift**  
Serving the City

348

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## 44 Social Housing Units

LEM+ Architectes

Located on the edge of the Saint-Cloud national park, the project by architects Pierre Lépinay and Bertrand Meurice for the I3F social housing development group is set in a particularly green area enclosed by the Garches-Marnes railway station and the A13 motorway.

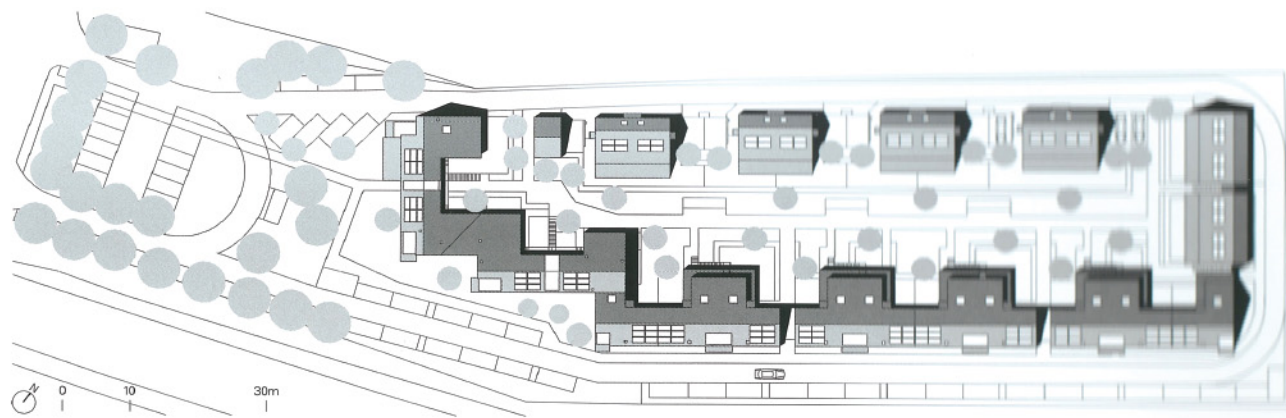
Comprising single-family homes with private gardens on the railway station side and by a group of apartments provided with balconies and ranging from studio flats to four and five room duplex units, the operation (3,338m<sup>2</sup> net plan area) takes the form of a drawn-out U-shape that protects the center of the block from the noise nuisances resulting from the presence of the motorway to the south. These housing units with their large number of windows and dual aspects are particularly bright. The private gardens are bathed in sunlight throughout most of the day thanks to roof profiles specifically designed to limit shadow impact.

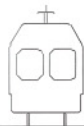
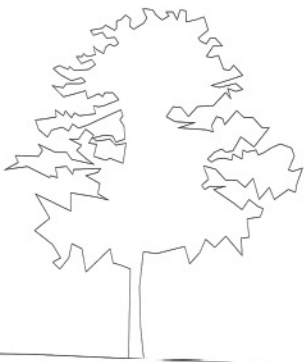
The architects provided a number of innovative solutions to overcome the noise constraints. In addition to the protective U-shaped layout, they incorporated a wooden fence running alongside the motorway, built two-story buildings with reinforced insulation in the attic spaces, installed sloped roofs with a continuous nine meter high ridge line, and equipped the housing units on the motorway side with acoustic loggias.

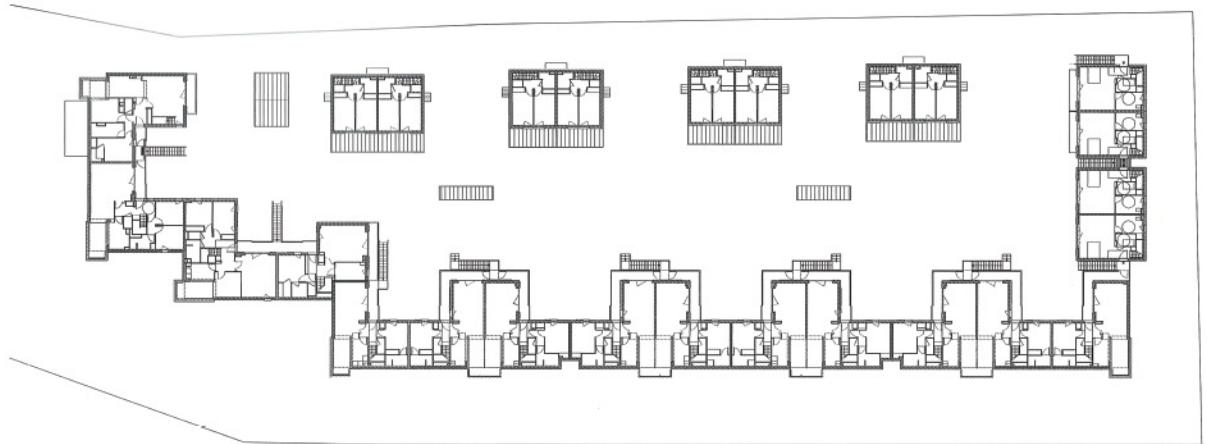
Acting as a green extension to the housing units, the acoustic loggias open the apartments onto the south, providing large glazed spaces giving onto the Saint Cloud park while also protecting residents from noise. This planted space, opening onto the sky and closed off to the sides by glass screens, forms a particularly efficient acoustic barrier that is further reinforced by the specific layout of the apartments. The utility rooms give onto the motorway side while the main rooms open onto balconies, loggias and private gardens on the protected side. The noise nuisances are also reduced by the use of a double flow system that avoids the creation of acoustic bridges, improves air quality and contributes to heating the housing units.

Wishing to adopt energy-saving solutions, the architects chose to use interior insulation with thermal breaks on slab nosings, install solar panels on the roof and equip each housing unit with solar collector tanks. They also paid particular attention to the landscaping project. Climbing plants have been placed around the site to colonise the fence on the railway line side and the 150 meter long support wall on the motorway side. Lying in the heart of the block outlined by the U-shaped layout, the private gardens are reduced in size as much as possible to offer larger spaces to the common areas that are planted with a variety of species and looked after by the landlord.

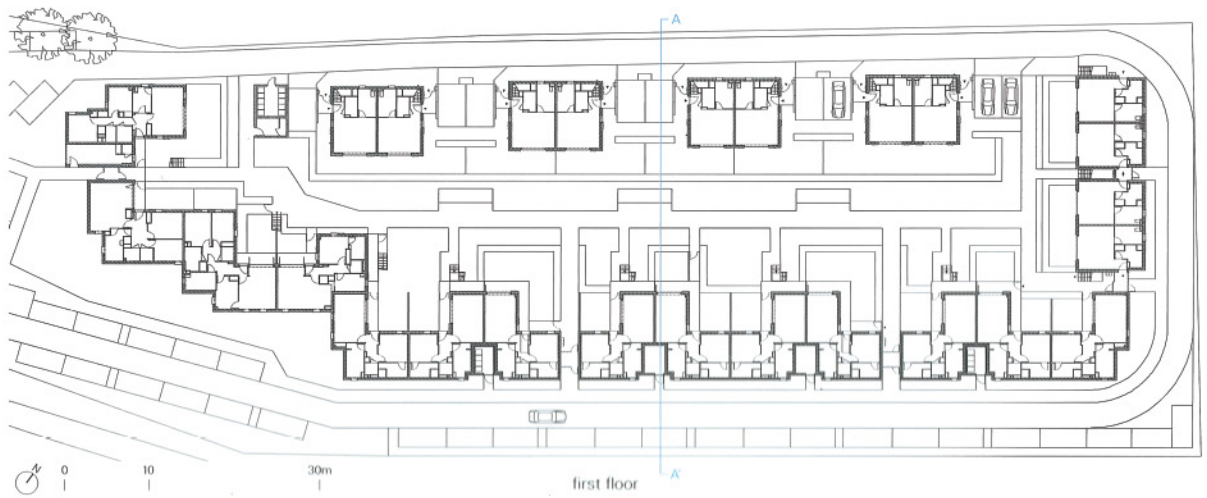




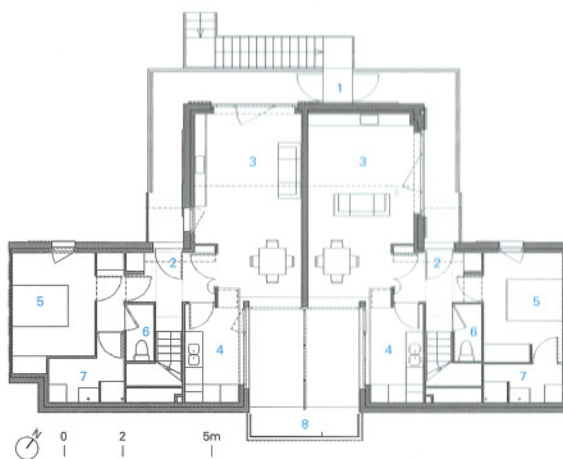




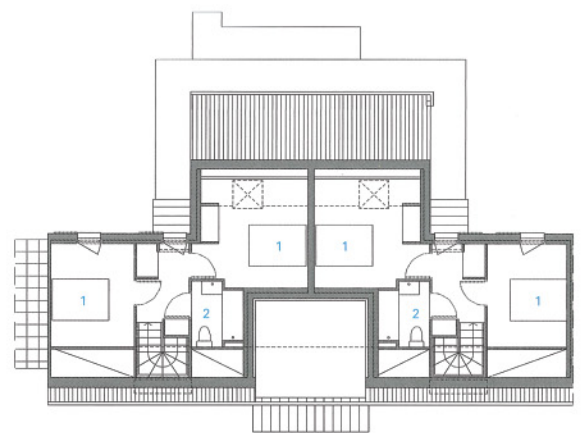
second floor



first floor



1. terrace 2. entrance 3. living room 4. kitchen 5. bed room 6. toilet 7. bath room 8. loggia  
duplex unit\_first floor



1. bed room 2. bath room  
duplex unit\_second floor