



TOWN AND TERRACED HOUSING

FOR AFFORDABILITY AND
SUSTAINABILITY

AVI FRIEDMAN

Bunker Houses

Location: Köln, Germany
Design: Luczak Architekten
Completion: 2004
Site Area: 18,426 sq. ft. (1,712m²)
No. of Units: 17
No. of Floors: 2.5 to 3.5

“Hochbunkers”, or German high-rise air-raid shelters, have become functionless spaces amidst Köln’s high-density urban centers. This project demonstrated how a dreary air-raid shelter and the adjacent wasteland can be converted into living spaces through innovative spatial conceptions and an economically reasonable approach (Figure 10.32).

The concept and pragmatic approach on which the project is based consist in amply opening the available interior space by cutting into the pre-existent structure, whose concrete walls and ceilings achieve thicknesses of up to 4.5ft. (1.4m). The existing bunker was intersected on its northern edge by a new three-and-a-half storey building with a semi-circular metal roof (Figures 10.33 and 10.34). The addition of a penthouse and a closing-off building on the street front completed the intervention (Figure 10.35). A total of 17 lofts and townhouses have been generated from this protected urban environment.

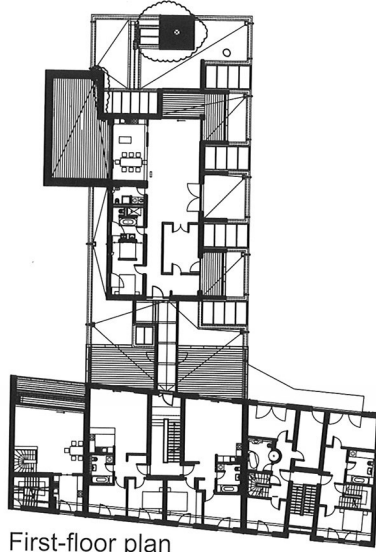
10.32

This former air-raid shelter, or “Hochbunker”, has been excavated and expanded to create 17 lofts and townhouses in Köln, Germany

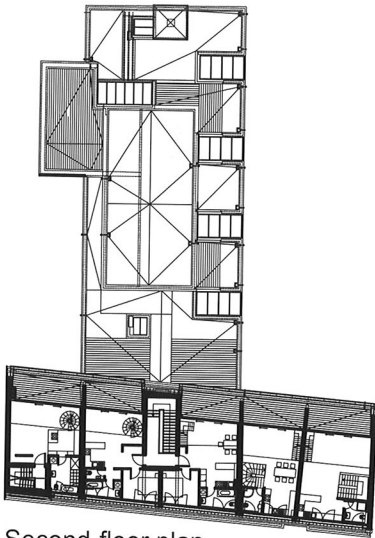




Ground-floor plan



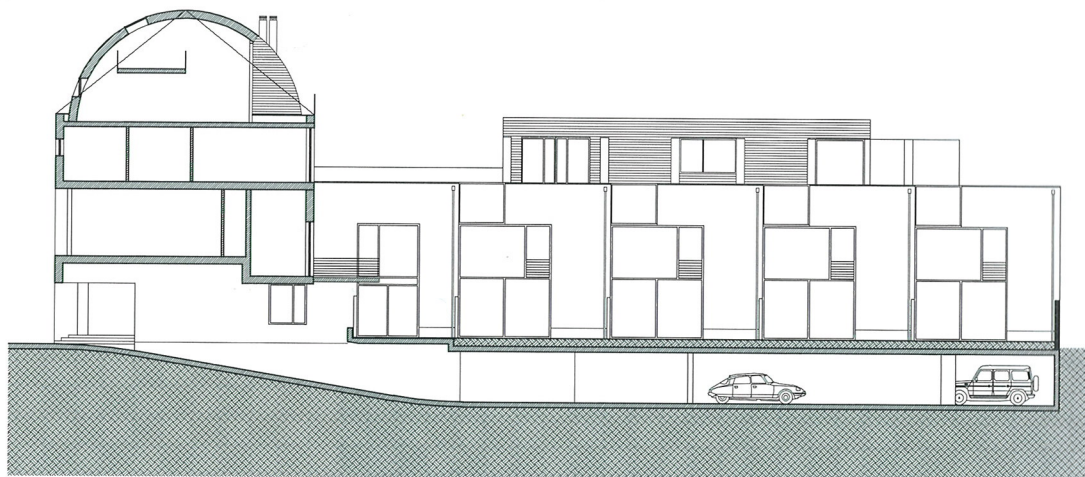
First-floor plan



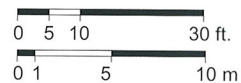
Second-floor plan



10.33
Floor plans for the new and existing
buildings intersect to create 17
"bunker" houses



10.34
 A three-and-a-half storey addition, seen here in section (left), and a penthouse were added to the dissected bunkers, seen here in elevation (right)



10.35
 The new building to the north, adorned with a curved metal roof, protects the bunker units behind and extends the complex to meet the street

Projects

By introducing indentations into the compact building, and reaping the benefit of terraced housing, all dwellings were equipped with a two-level glazed atrium, allowing light to penetrate deeply into the 46 ft. (14m) thick housing body (Figure 10.36). All units were designed on at least two levels with bridging air spaces and galleries. Living, working and flexible-use spaces flow smoothly one into another; gardens and terraces give wide open access to the interior. The design within each housing unit was planned according to the needs of future users. The use of rugged building material purposefully evokes the former character of the shelter.



10.36
Interior view of the main living space
within a two-level glazed atrium of a
typical unit