

## Residential and commercial building, Strassen (LUX)

project **New construction of a residential and commercial building with 6 commercial units and 20 residential units, including an underground car park with 100 parking spaces**  
client **private** architecture complete planning phase **WW+, Esch-sur-Alzette/Trier (LUX/GER)** civil engineering **TR Engineering, Luxembourg (LUX)** technical engineering **LUXauTEC, Luxembourg (LUX)** total gfa **3.992 m<sup>2</sup>** gfa-living **2.592 m<sup>2</sup>** gfa-commerce **1.400 m<sup>2</sup>** volume **30.780 m<sup>3</sup>** total area **3.673 m<sup>2</sup>** net construction costs **7.000.000 €** start of planning **10/2011**



### Concept

The residential and commercial building will be located as the lead structure on Route d'Arlon with the potential of becoming an entrance portal to the area known as "Wunnen am Duerf". The building houses 6 commercial units and 20 residential units, as well as 100 underground parking spaces and a children's playground.

### Construction principle and materials

The load-bearing structure features reinforced concrete walls and ceilings, while the partition walls within the storeys are made of drywall for reasons of increased flexibility. In both the load-bearing structure and the cladding, the staggered floors are designed as a wooden construction. The head of the building and the public ground floor are glazed, structured by black-coated metal sheets, and the area of the residential units features a plaster façade. The ground-floor cladding is a high-pressure decorative laminate.

### Energy concept

The building is clad with a thermal insulation system. Heating is achieved via gas condensing boilers and an additional solar thermal system is installed on the roof for the central hot water provision. Each residential and commercial unit will have a ventilation system with high heat recovery.