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# Vertical School

## Participant info

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**Institute:**

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## Project info

A High-rise Educational Building in Frankfurt

The quality of the European city is found in its public space. It shapes the structure of the city and its society. The public space forms points of reference from which the city is experienced. These points of reference must be designed sustainably. Near Frankfurt downtown, in Rothschildpark a prototype solution for an urban, vertical school is being sought. The aim is to rethink, rearrange and stack flat building concepts. Which solution or improvement can a vertical public building in Frankfurt's urban structure achieve and how can it position itself in its environment? The issues of a public urban space, a new prototypical learning architecture, a public multifunctional use and densification are combined in a single draft. It is about the design of a socially sustainable architecture.

The architectural design is primarily characterized by the creation of a main floor plan and its stacking. It is about answering the question of how the planar spatial sequences of a school can be thought vertically and linked with the aspiration of an open school concept that questions the standards of corridor schools. In addition to a variety of individual learning spaces, vertical networking between the learning platforms is guaranteed due to the decentral arrangement of cores.

The houses are reduced to the essential structural elements of architecture and thus provide an answer to the heterogeneity of the city and the question of a typology. The structural skeleton of columns and stacked ceilings reveals itself to the outside and inside in its pure tectonic. It is a flexible, but also resilient construction principle.

The interaction results in a sustainable, prefabricated prototype of a modern vertical learning studio - a vertical place of learning.



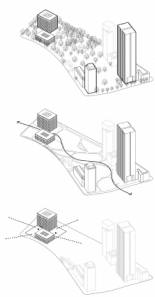
**Vertical School**  
A High-Rise  
Educational Building  
in Frankfurt



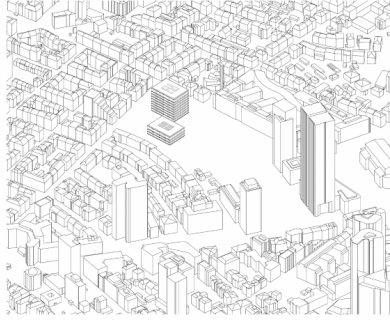
Figure Ground Plan - Frankfurt



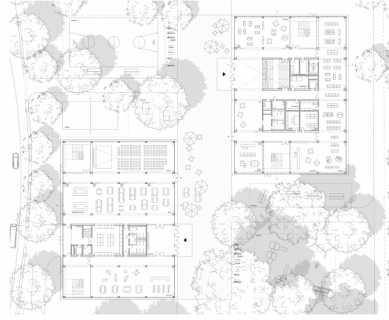
Site Plan - Frankfurt, Westend



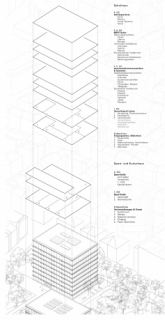
Urban Design Principles



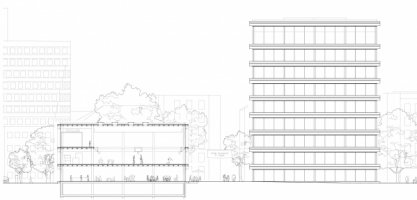
Urban Autonomy



Floorplan Ground Floor - Sports Building & School House



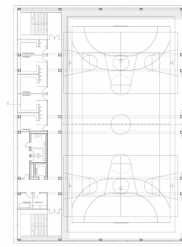
Autonomy Utilization



Section, Elevation - Sports Building & School House



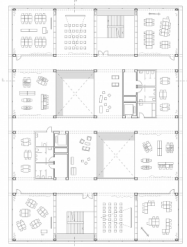
Section - School House



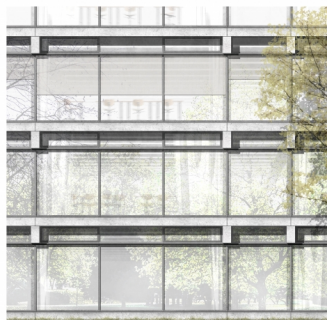
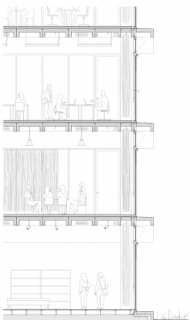
Sports Building - 1<sup>st</sup> Floor



School House - 1<sup>st</sup> Floor



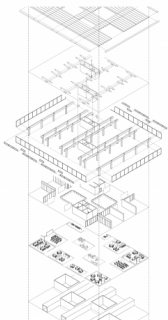
School House - 3<sup>rd</sup> Floor



Detailed Section - Construction of the Facade



Interior Perspective



Autonomy - Interdisciplinary