



Commerzbank Headquarters, Frankfurt

Sir Norman Foster

The new headquarters for Commerzbank in Frankfurt is the world's first ecological high-rise tower. The outcome of a limited international competition held in 1991, our design transforms the fundamental nature of a large office building by developing new ideas for the ecology and working patterns in an office environment. Working closely with the Bank and the City Planners, every office is designed to have natural ventilation with opening windows. Generous winter gardens spiral up the tower to become the visual and social focus for four-storey clusters of offices. These gardens are linked to a central atrium, running the full height of the building, which acts as a natural ventilation chimney for the inward looking offices.

The plan of the tower is triangular in form, each side gently curved to maximise space efficiency. Lifts, staircases and services are placed in the three corners, the lifting pattern designed to reinforce the village-like clusters of offices and gardens. Pairs of vertical masts, enclosing the corner cores, support eight storey vierendeel beams, which in turn support clear span office floors. Thus, not only are there no columns within the offices, but the vierendeels also enable the gardens to be totally free of structure.

The sixty-storey tower, just under three hundred meters high, rises from the centre of the city block alongside the existing Commerzbank building. This relationship with the surrounding neighbourhood is of great impor-



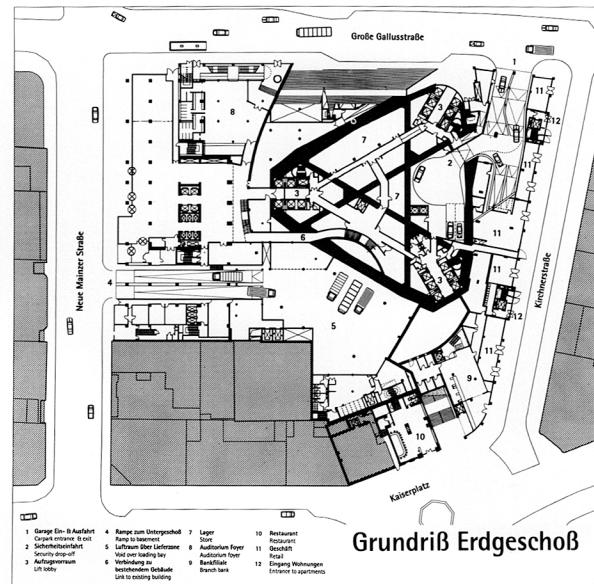
tance. By rebuilding and restoring, where appropriate, the perimeter edge buildings, the scale of the neighbourhood is preserved.

The principal entrance to the new tower is from the north, up a grand flight of stairs. The city block containing the tower is opened up with

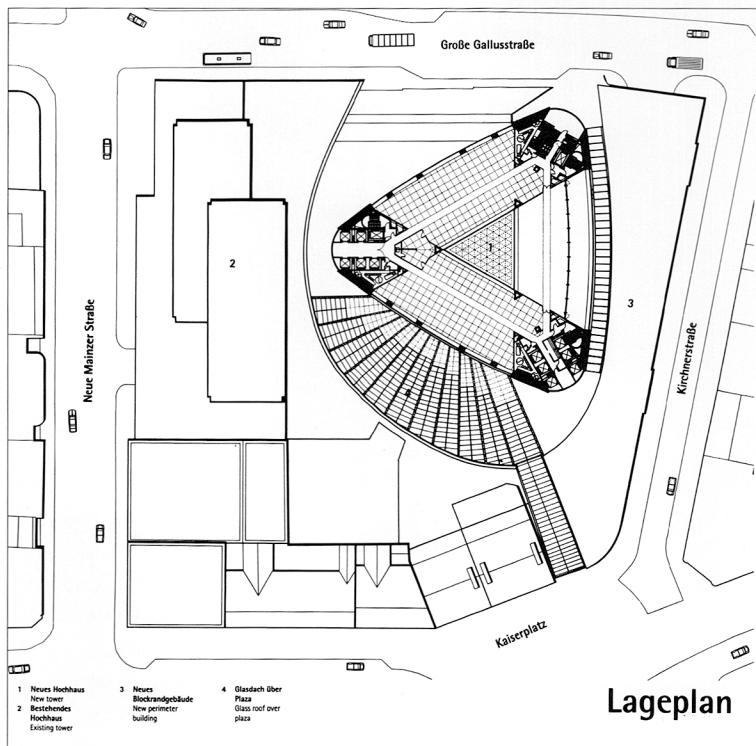
a diagonal route which contains a new public space—a venue for the people of Frankfurt. This is a winter garden housing restaurants, cafes and space for performances and exhibitions of works of art. The new route is entered through a gateway on the southern edge of the site, appropriate to the pedestrian scale of Kaiserplatz. Whilst

on Grosse Gallusstrasse to the north, with its larger scale traffic movement, the tower rises directly from wide terraces of steps which mark the main entrance. The perimeter buildings contain a rich mix of apartments, shops, branch bank and car parking as well as a new auditorium for the Bank.

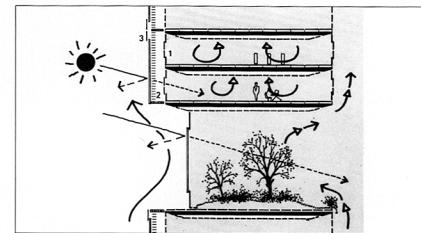
Opposite: photo courtesy Richard Davies.



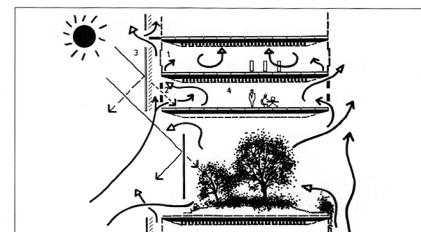
Ground Floor Plan



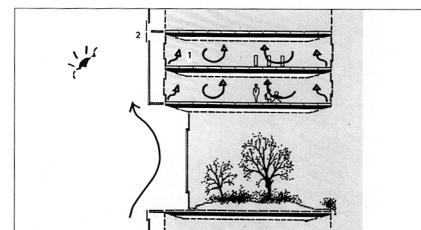
Site Plan



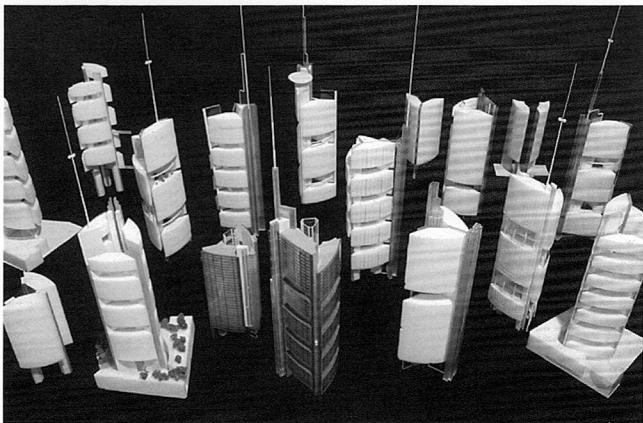
Energy Concept (Winter, Sunny)



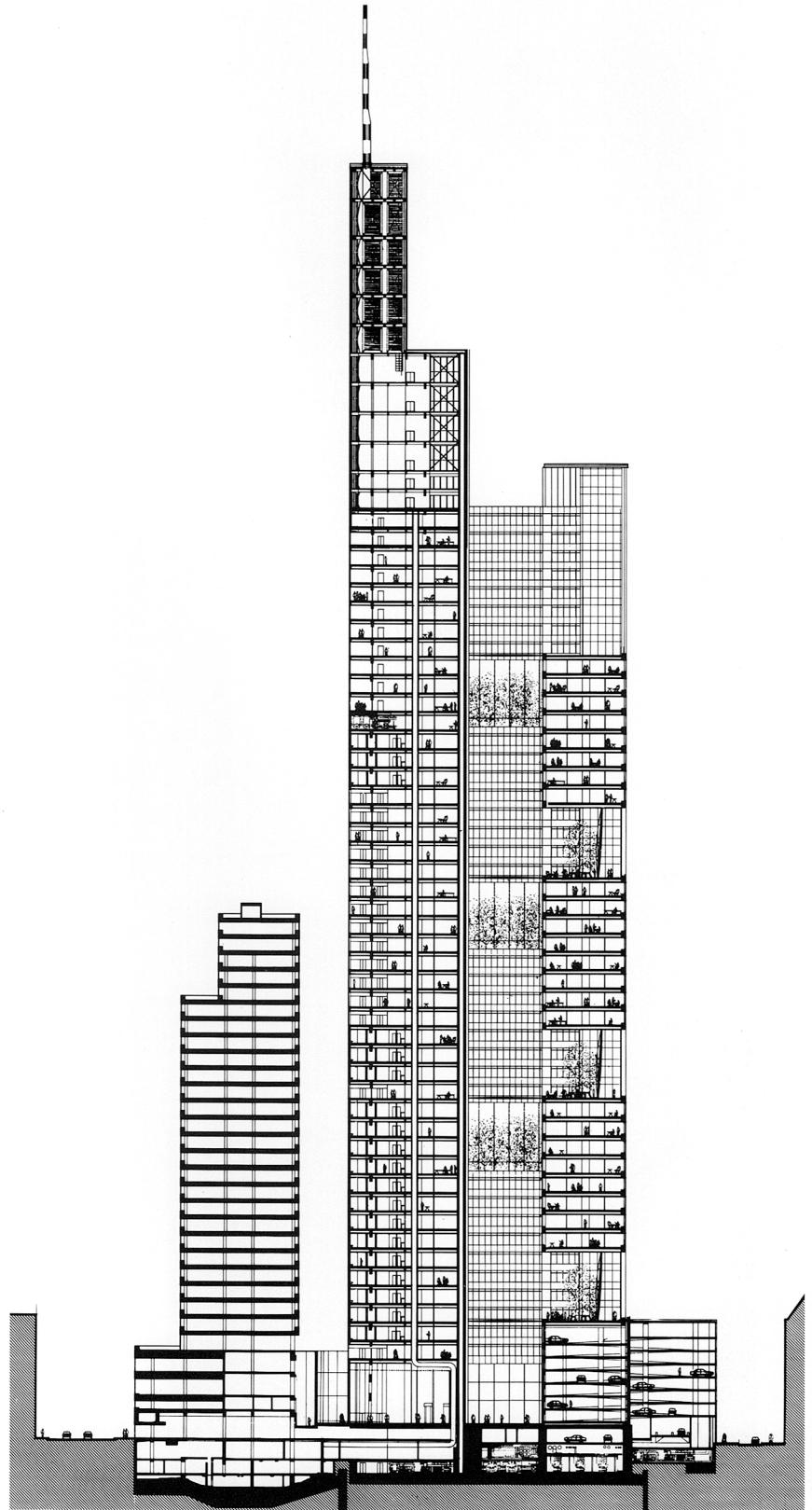
Energy Concept (Summer)



Energy Concept (Winter, Cloudy)



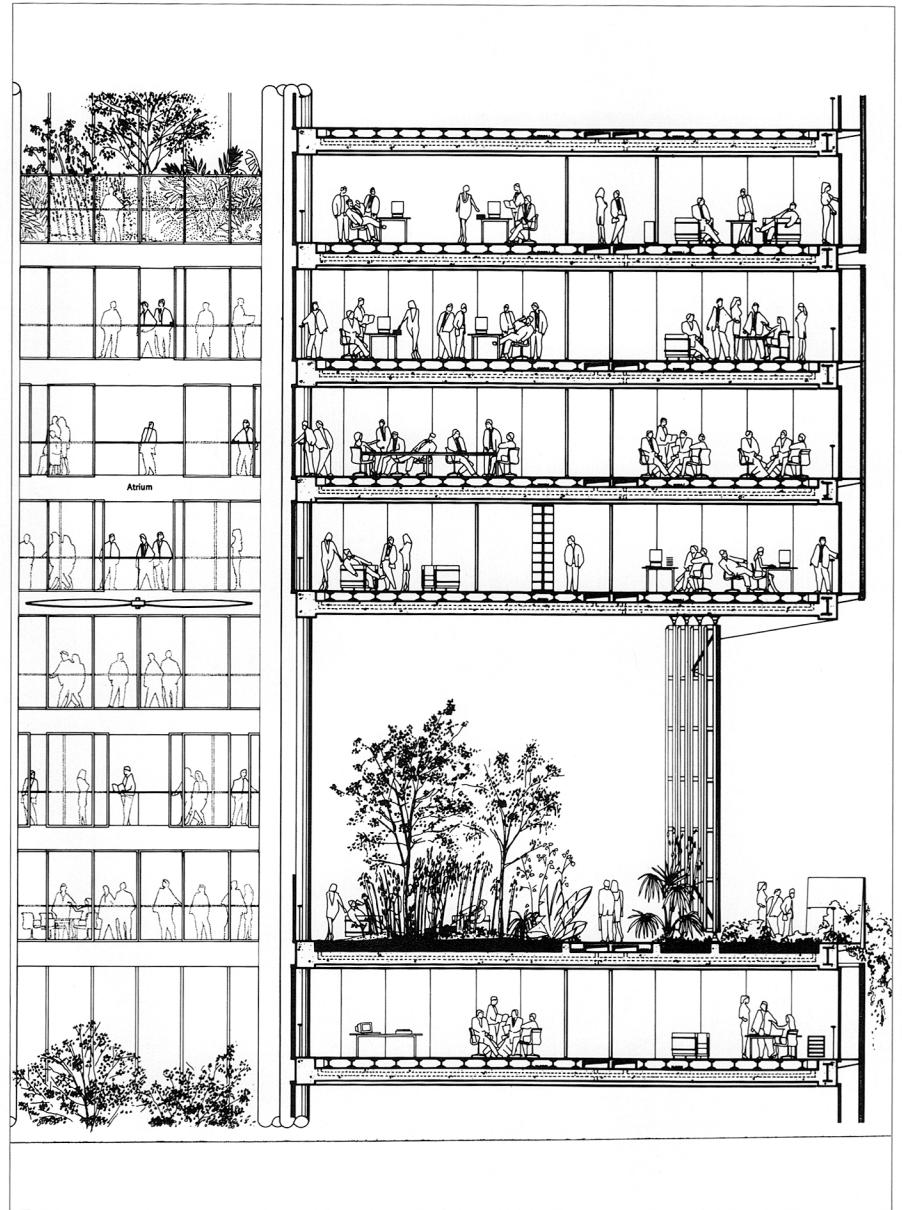
Development Models (Courtesy Richard Davies)



Section



View of Model (Courtesy Richard Davies)



Detail Section



View of Model (Courtesy Richard Davies)

