



6 CLIMAX & RESOLUTION

The amphitheatre space is open to the public at all all times. It is a public space for the city to use.

Access flooring was chosen to build the seating. It is a strong yet flexible method. A 900x900mm grid is used for the supports with treads of panels of the same dimensions being fitted in-between. The panels can be custom designed to achieve the required aesthetic. In this case the regular geometry is used to generate a pattern based on African motifs which is then carried through onto the flooring at ground and first level. The treads are fitted with robust steel mesh. This allows light in to the gallery underneath the seating as well as creating a visual connection from within the gallery to the outside. At night the lights inside the gallery will shine through lighting up the seating area.. On the Paul Kruger St side of the building the access flooring is adapted to contain small lockable storage for informal traders to make use of, and the steps here are designed with the intention that they may be used for shelving to display goods for sale.

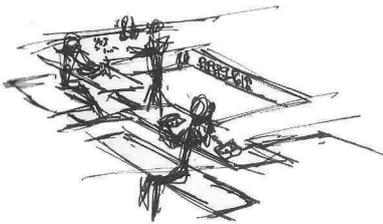
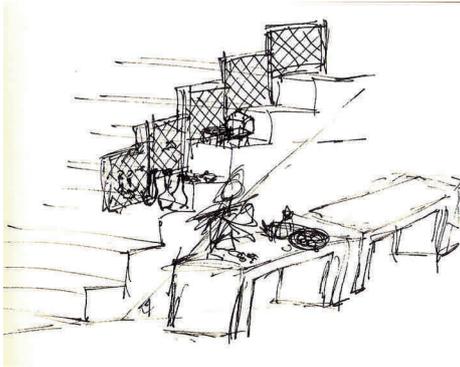


Fig. 60 Concept sketches of informal traders

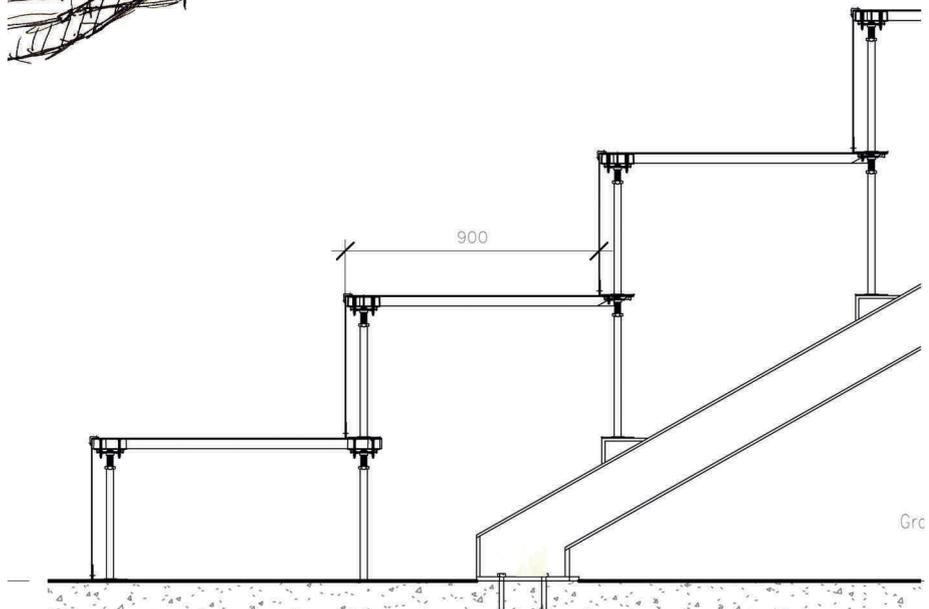
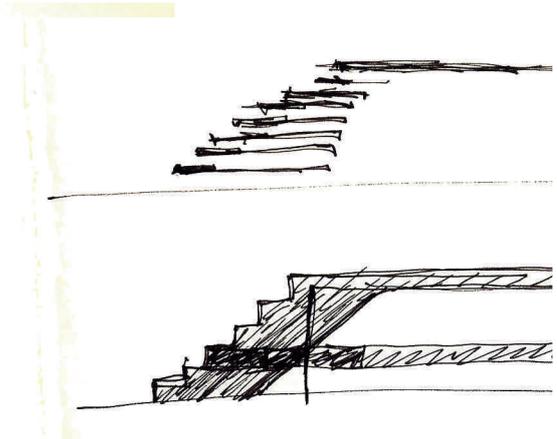
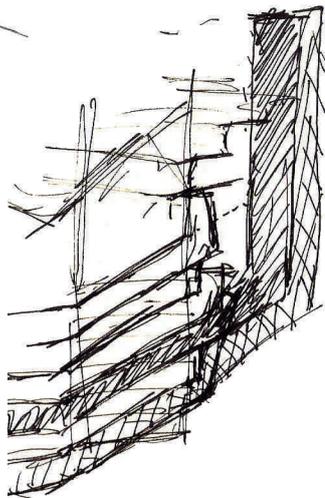


Fig. 61 Sketches and details of seating

Fig. 62 View of public space from Paul Kruger St

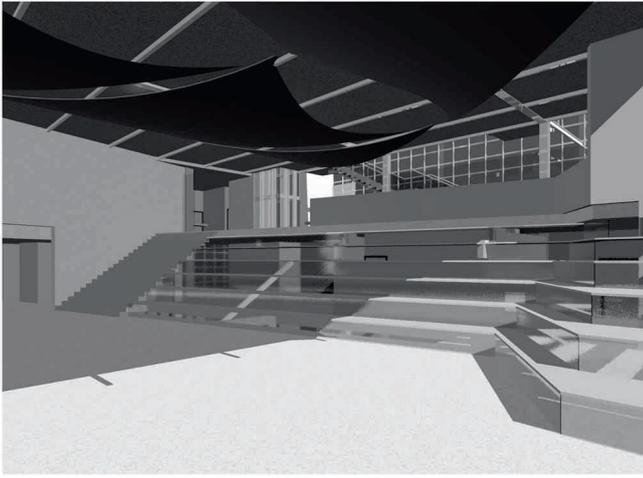


Fig. 63 Elevated view of public space



Fig. 64 View of public space at night

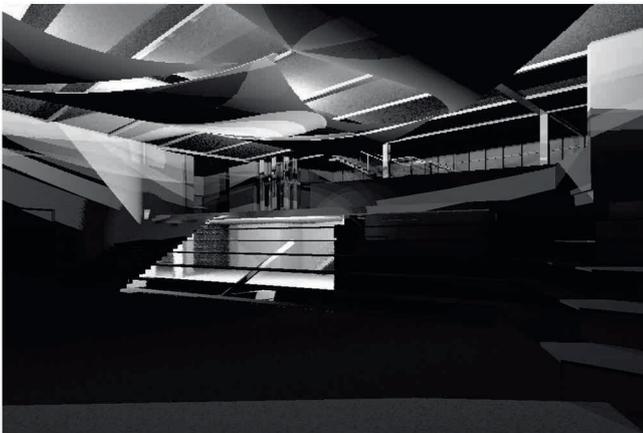


Fig. 65 Internal view of auditorium with stage in the middle



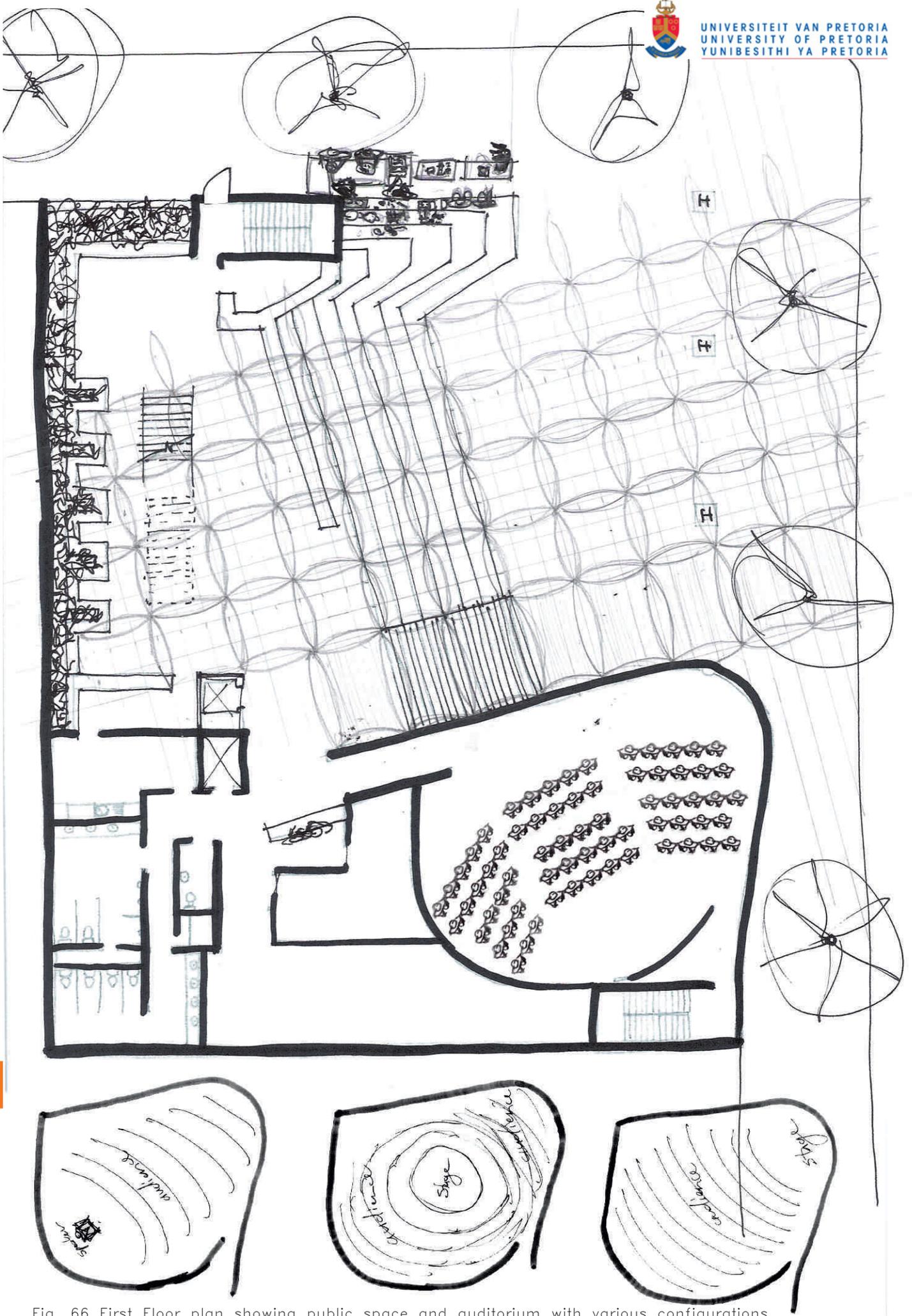


Fig. 66 First Floor plan showing public space and auditorium with various configurations

AUDITORIUM

An auditorium is typically a very prescriptive space but due to the nature of events that would occur in this space (as described previously), it could be designed more flexibly. To make the space less prescriptive, it was decided that the auditorium would not contain fixed seating. This gives the user creative input into how the space will be used. The form of the auditorium came from investigating possible configurations of how a story could be told and was influenced by a hypothetical disposition of a Zulu theatre from Credo Mutwa. Although in reality traditional African storytelling was not limited to certain places and therefore did not find architectural expression [Frescura, 2001:122].

How are stories told?

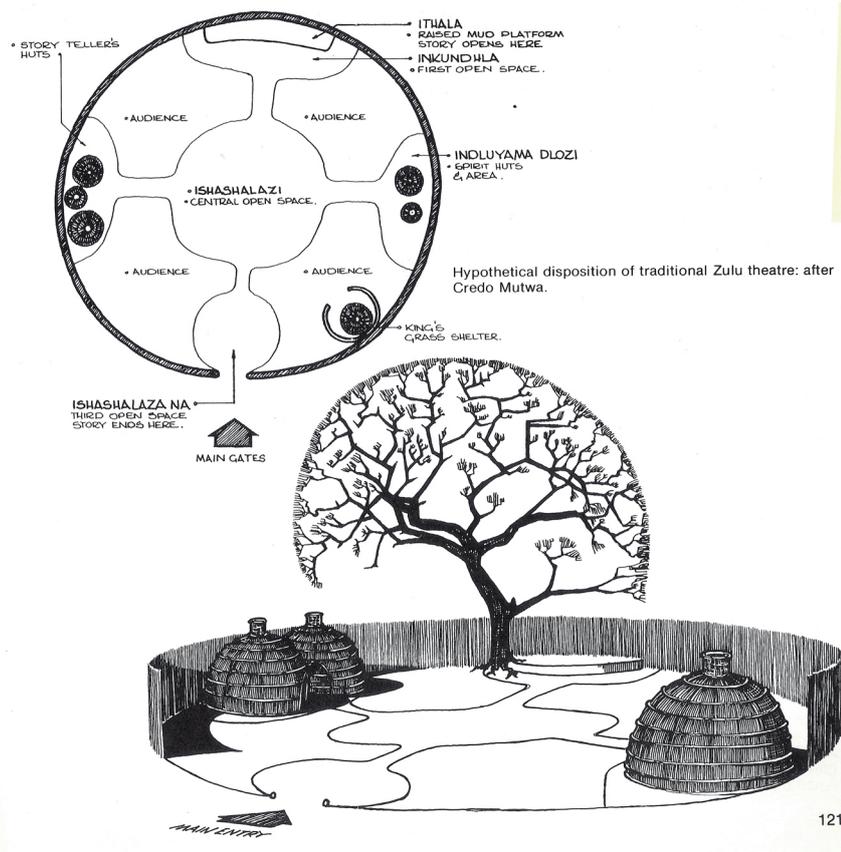
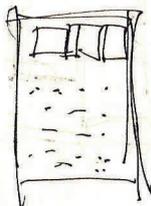
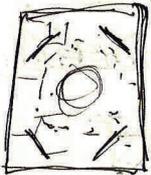
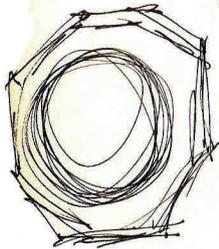


Fig. 67 Investigation of storytelling space configurations

Fig. 68 Hypothetical Zulu Theatre

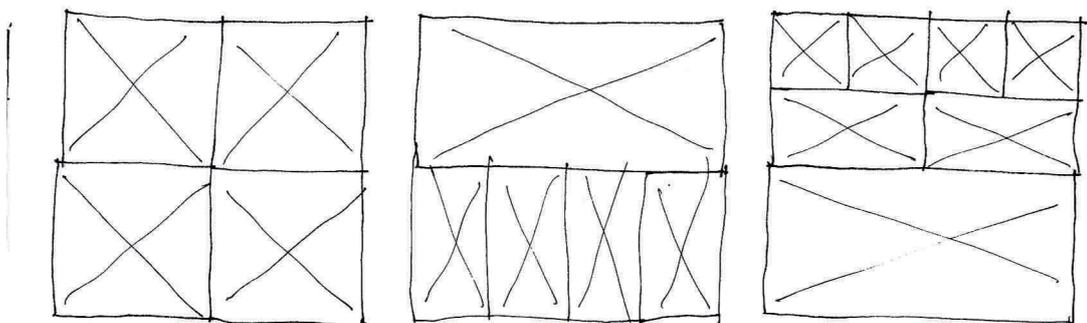
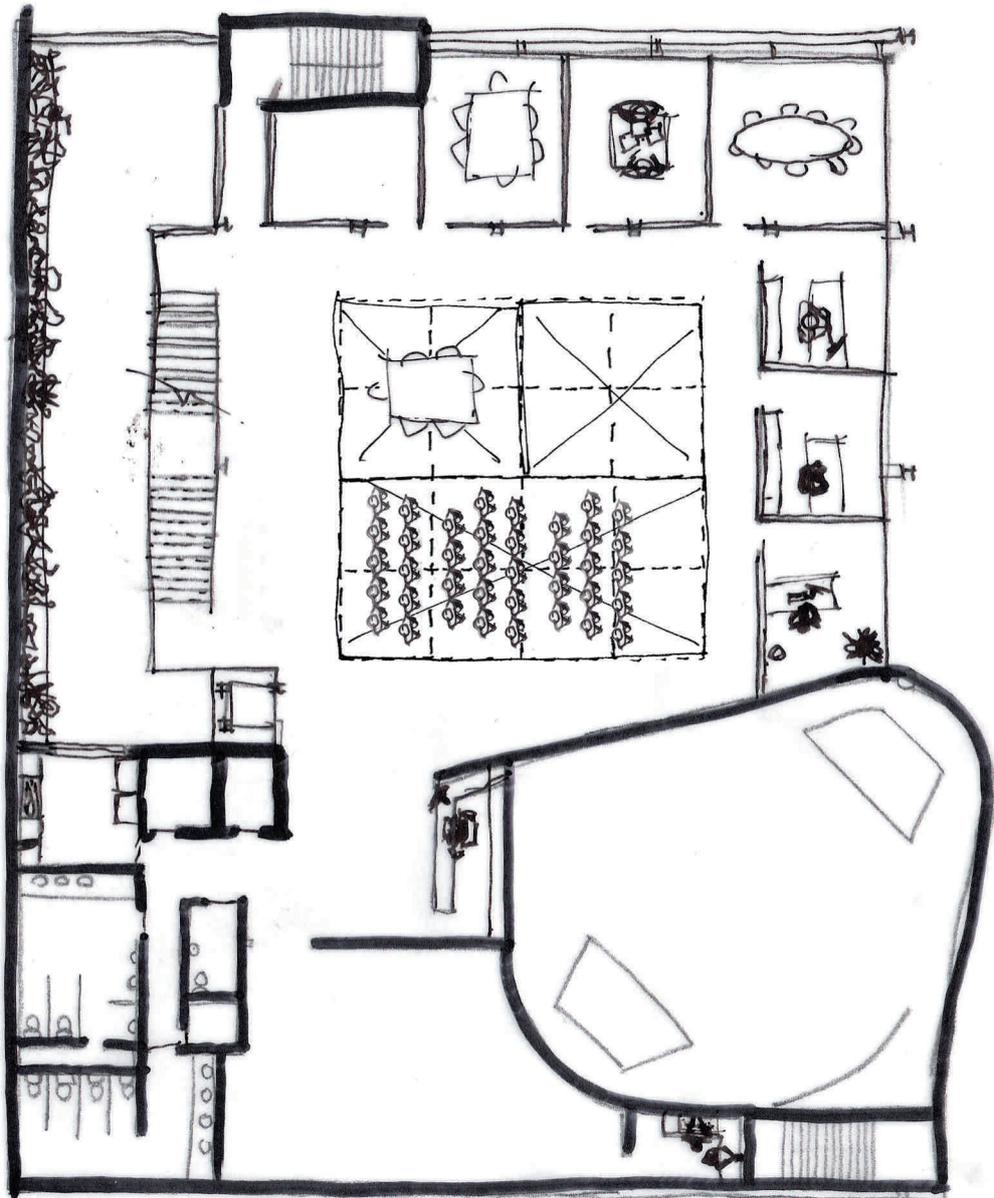


Fig. 69 Second floor plan with various flexible conference room space configurations

The movable partitions used on the second floor will be acoustic panels 3m wide. They will run on overhead tracks laid out in a grid pattern of 3m x 3m. The space can be divided up into rooms with dimensions in modules of 3m as illustrated. An area is demarcated to store panels that are not in use.

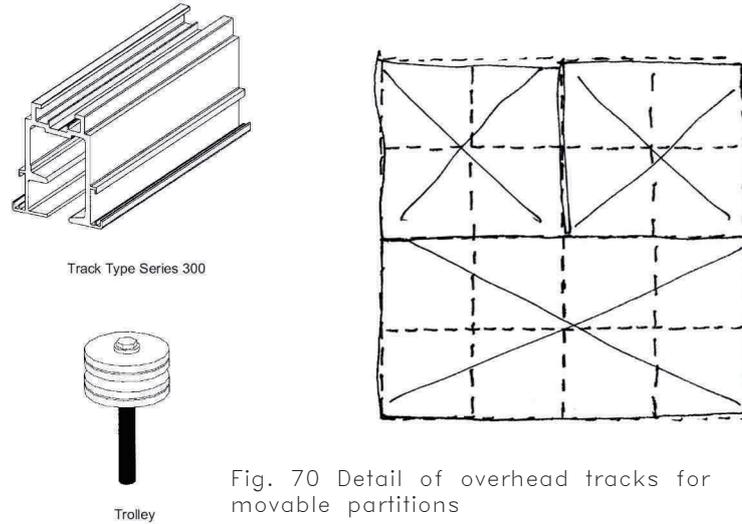


Fig. 70 Detail of overhead tracks for movable partitions

ATRIUM

The atrium's function is mainly to provide light to the back part of the building and encourage some cross ventilation.

Kapilux Glazing panels are used to glaze the atrium. Kapilux offers forward-directed light diffusion which improves in-depth illumination of a room.

It provides thermal solar protection and glare protection (Arroyo:2007). The vertical section of the atrium skin contains both clear glass and the translucent kapilux panels so that the city outside is always visible to people in the building.

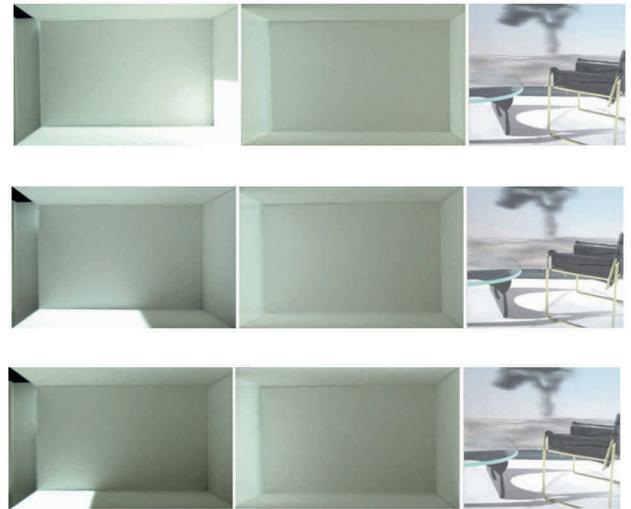
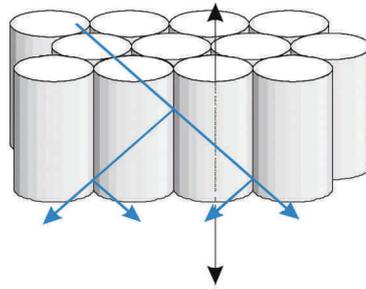


Fig. 71 The illumination difference between normal glazing and kapilux glazing

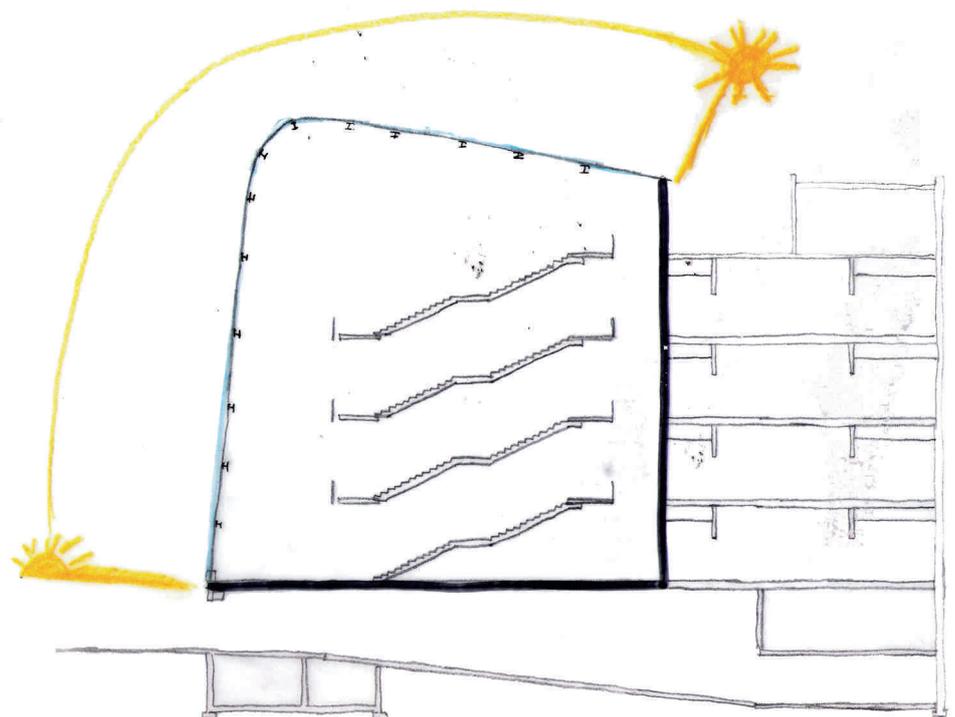
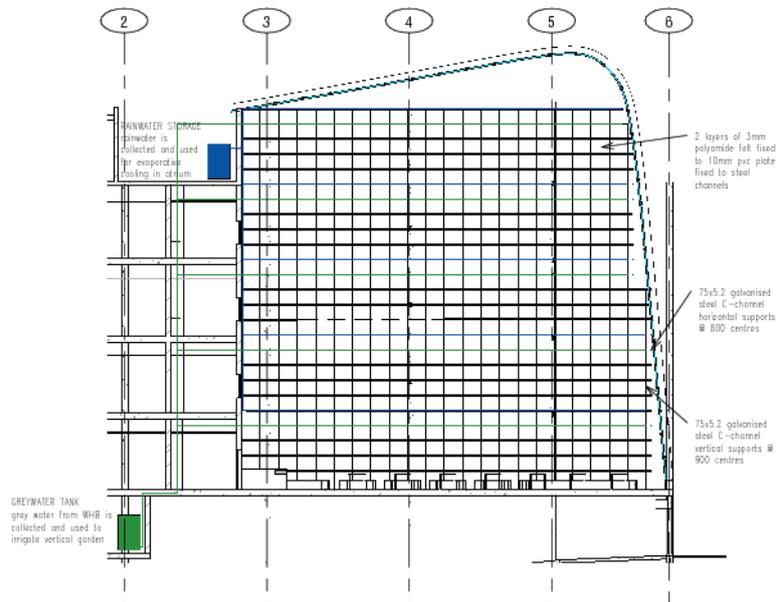


Fig. 72 Section through atrium showing cycle of sunlight

THE VERTICAL GARDEN

The vertical garden runs the full length of the atrium. PVC plates are supported by a framework of steel struts. Two layers of polyamide felt is riveted to the PVC. The felt is continuously supplied with a nutrient rich water solution and the plants embed their roots into the felt (Le Blanc, 2004). Two sources of water are used to irrigate the garden. Rain water is collected from the roof and the grey water from the wash hand basins in the ablutions is filtered and pumped through pipes along the atrium wall.

Fig. 73 Detail of irrigation system for vertical garden



Vertical Garden

Loadbearing wall

metal plate

10mm pvc plate

2 layers 3mm polyamide felt

network of pipes controlled by valves provides nutrient solution



10 bar pressure pump & tank in store on GROUND FLOOR

Fig. 74 Detail of vertical garden system

Fig. 75 3D of atrium



Fig. 76 3D of atrium showing vertical garden

