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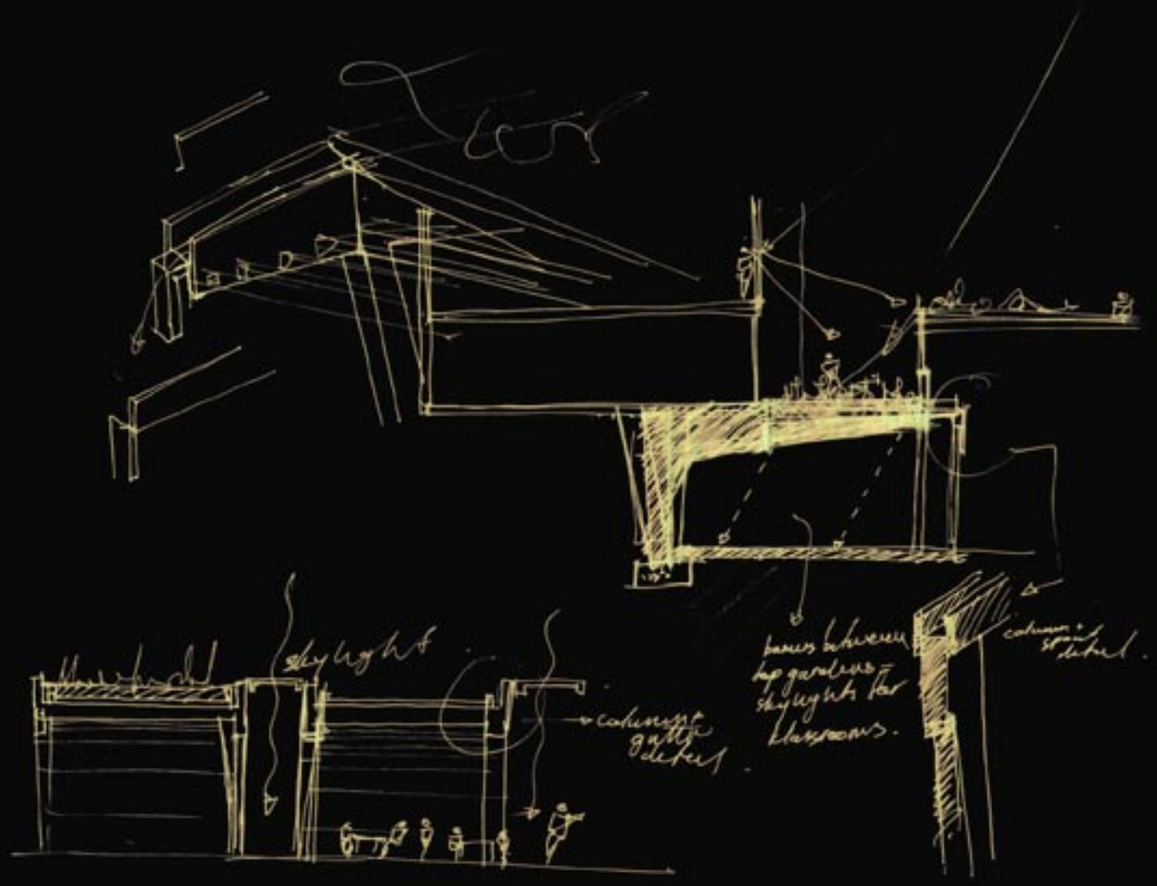
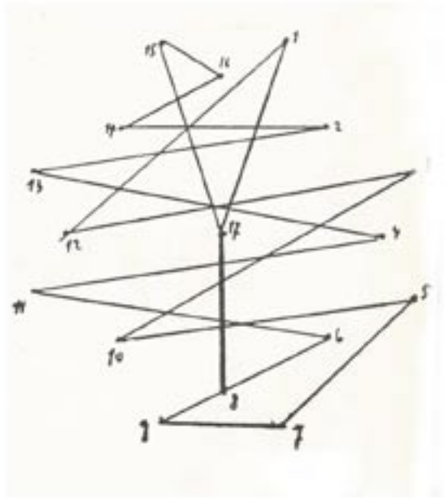
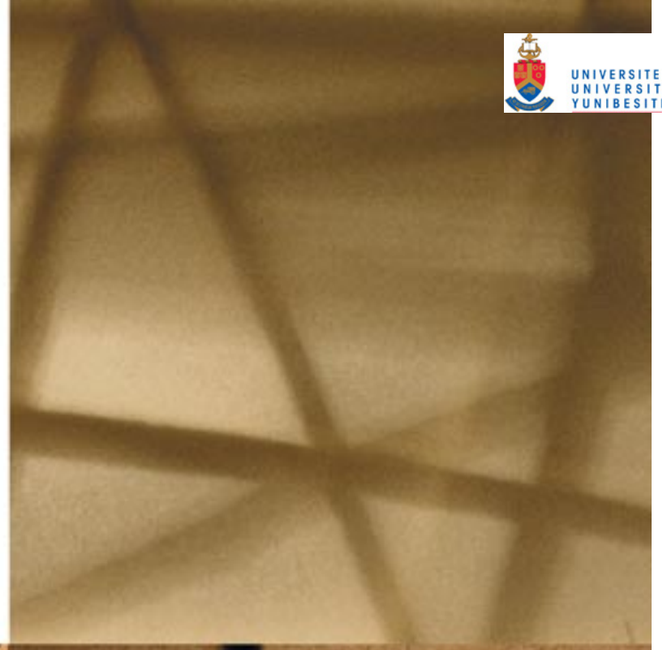
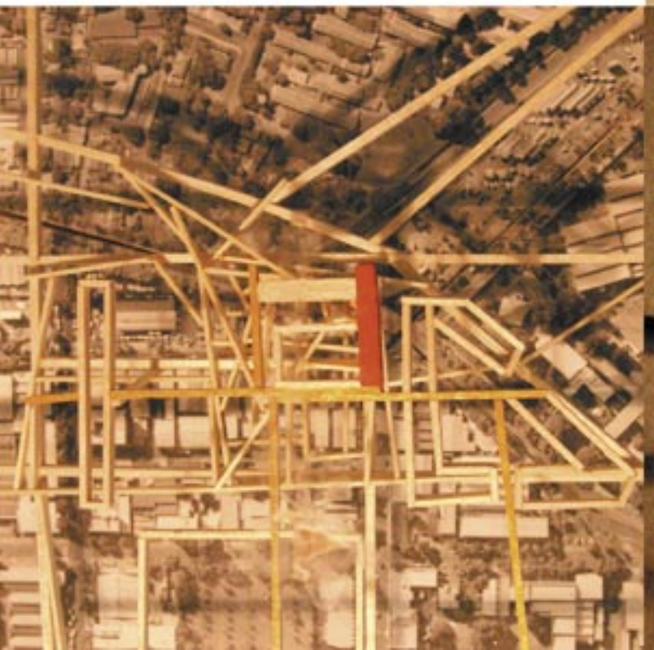


Technical investigation







Skin

Since the building consists of a basic concrete column and slab structure with brick and concrete infill, the technical investigation looks at the possibilities regarding the building skin. Large parts of the building is covered with screens which, as explained earlier, either forms part of the façade or is place in front of it. The nature of every screen is determined by the interior or exterior space it defines. This investigation explores possible materials and relating connection details.

Page 96: Figure 127: Design sketches (author)

Page 98: Figure 128 (top left): Diagram from *The Thinking Eye* by Paul Klee

Figure 129 (top right): Concept study of screen surface no. 1

Figure 130 (bottom left): Movement model over site

Figure 131 (bottom right): Concept study of screen surface no. 2

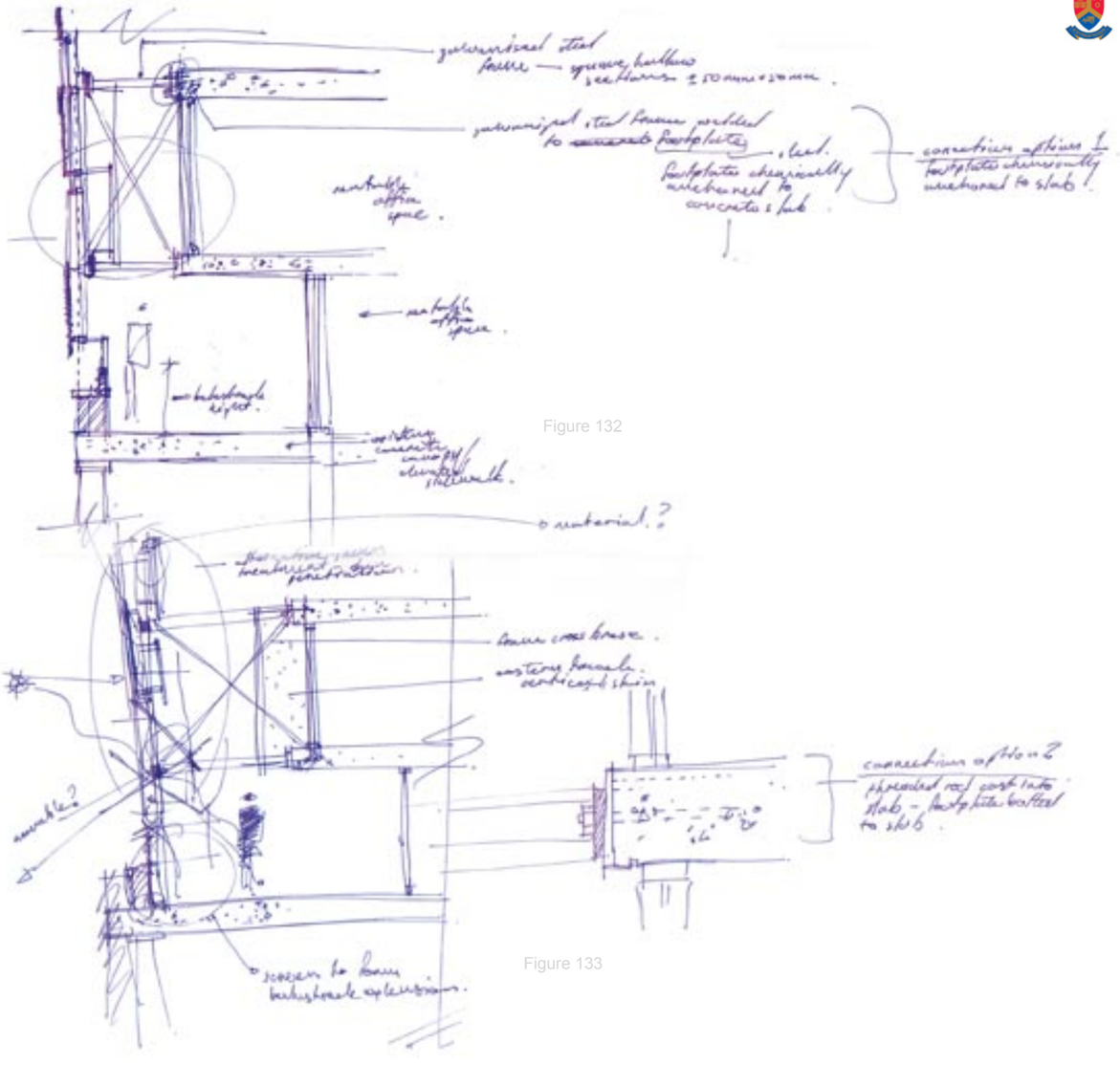


Figure 132

Figure 133

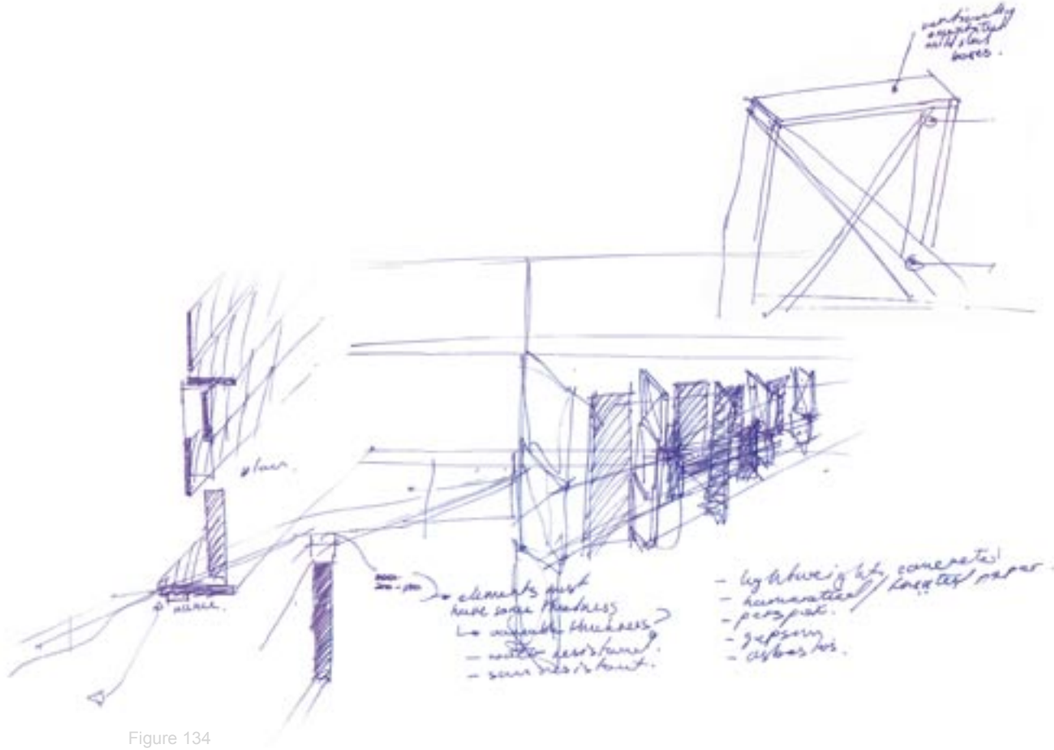
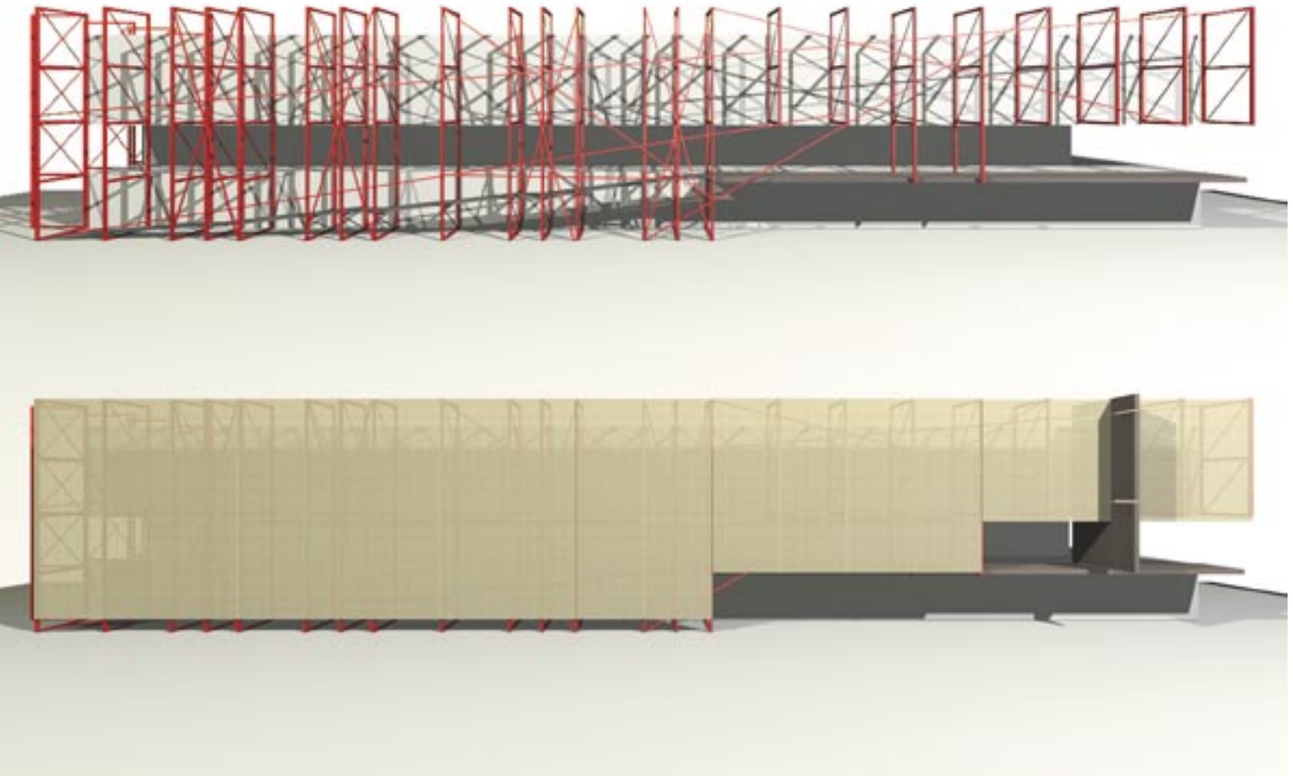
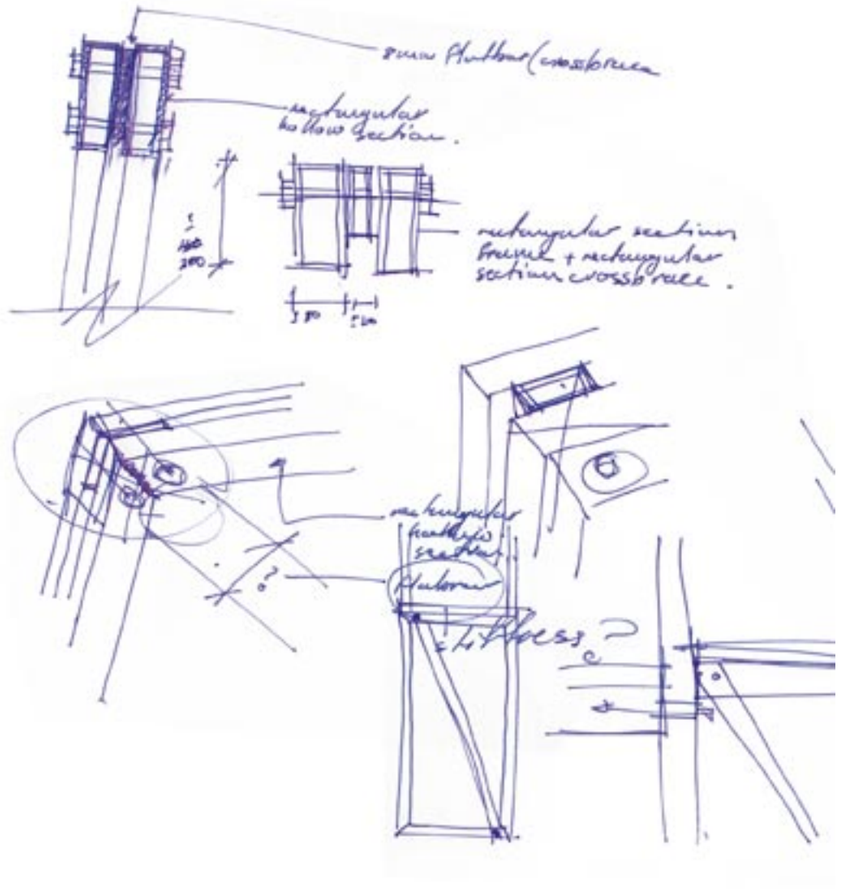


Figure 134

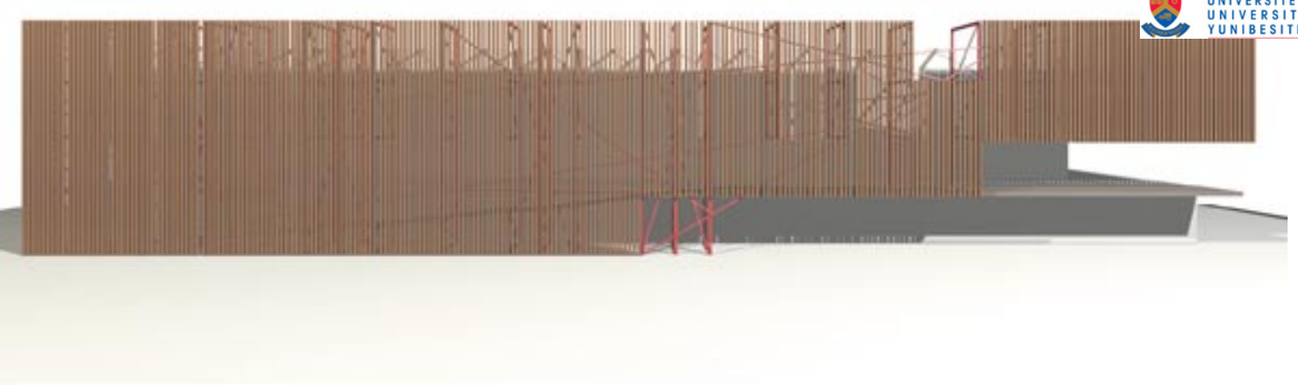


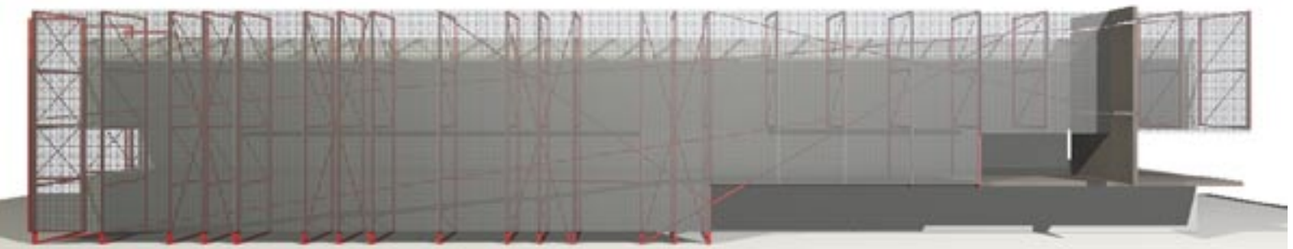


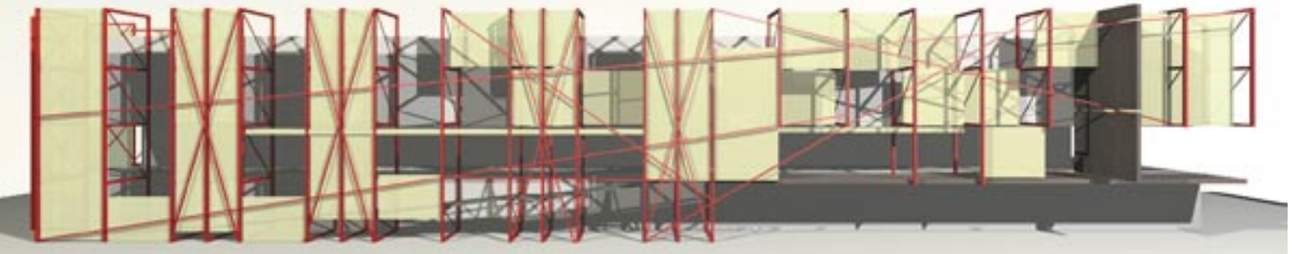
Page 102: Figure 135 (top): concept model of Eastern façade screen structure

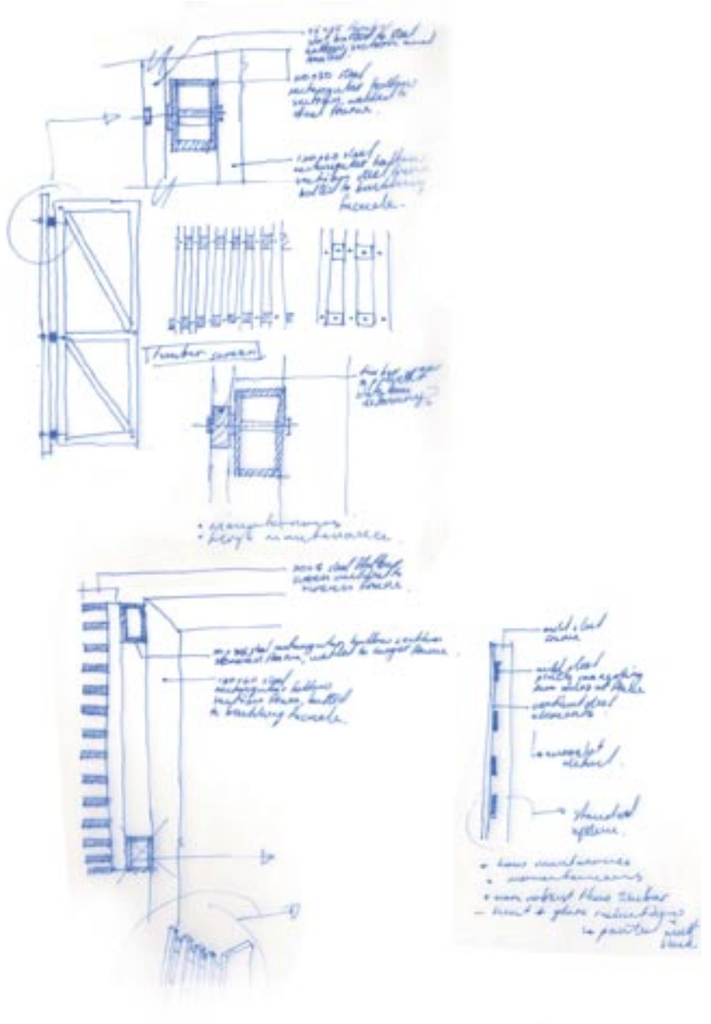
Figure 136 (bottom): Skin investigation no.1

Page 103:Figure 137: Detail design sketches of building skin









Page 104: Figure 138 (top): Skin investigation no. 2.

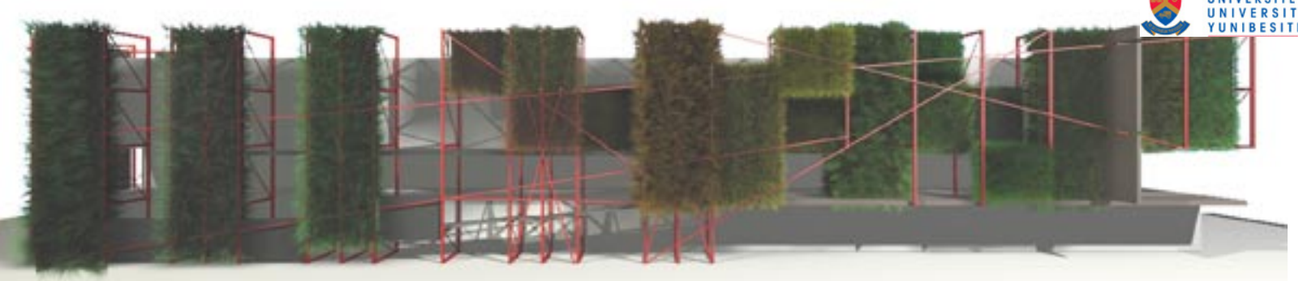
Figure 139 (middle): Skin investigation no. 3

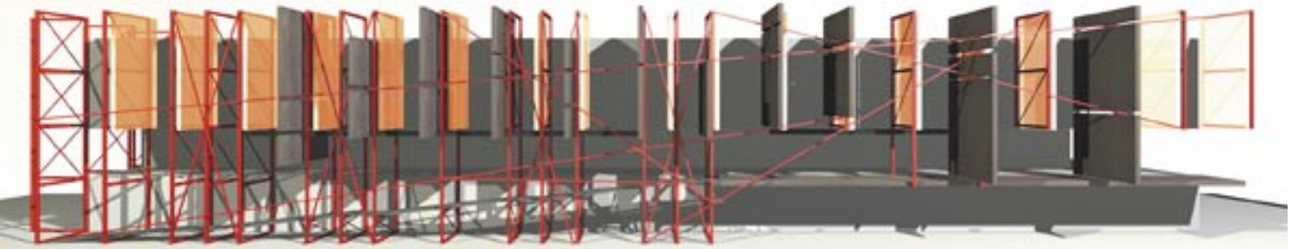
Figure 140 (bottom): Skin investigation no.4

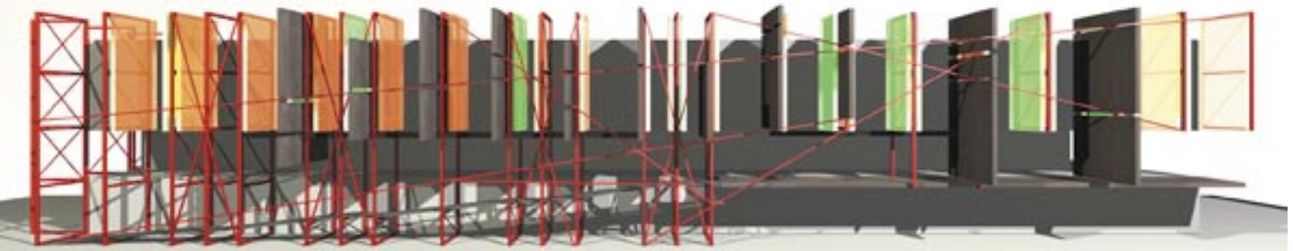
Page 105: Figure 141: Design investigation sketches of posible skin materials and structure

Figure 142: Euroslot stainless steel screen

Figure 143: Movable screen façade







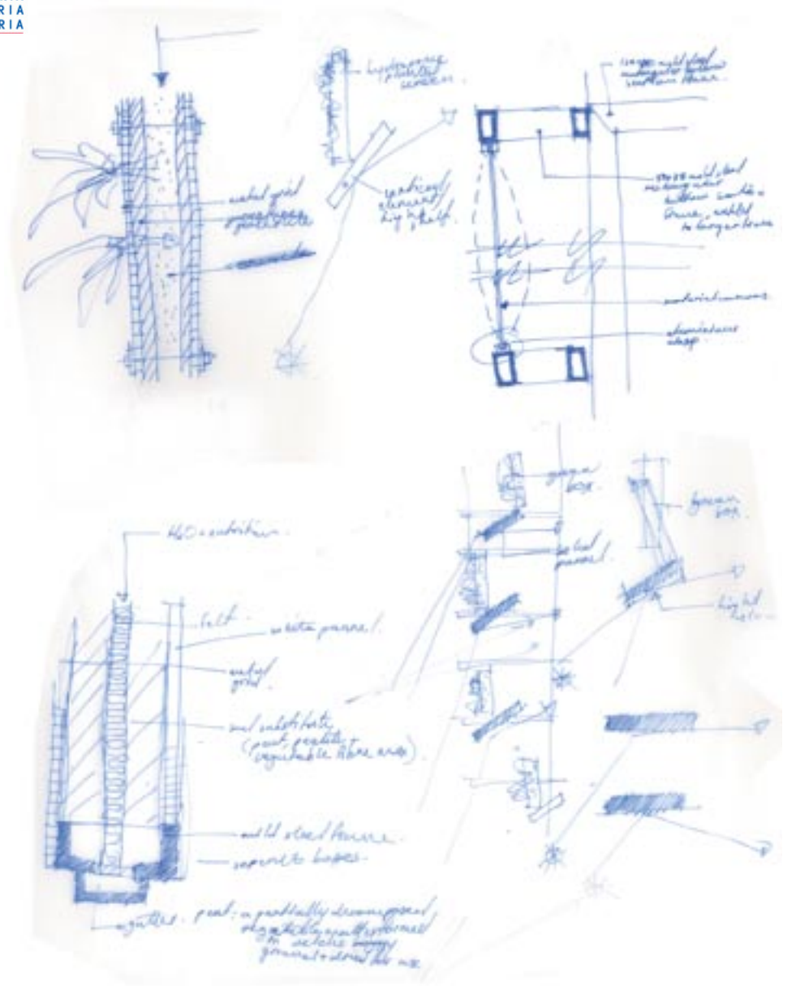


Figure 148: Patrick Blanc's living wall at Quai Branly, London

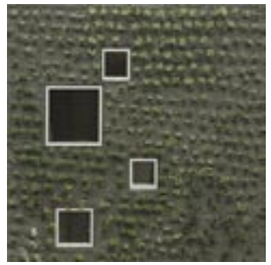


Figure 149: Paviljoen Blackbox

Page 107: Figure 147:Design investigation sketches of posible skin materials and structure

Page 108: Figure 144 (top): Skin investigation no. 5

Figure 145 (middle): Skin investigation no. 6

Figure 146 (bottom): Skin investigation no. 7

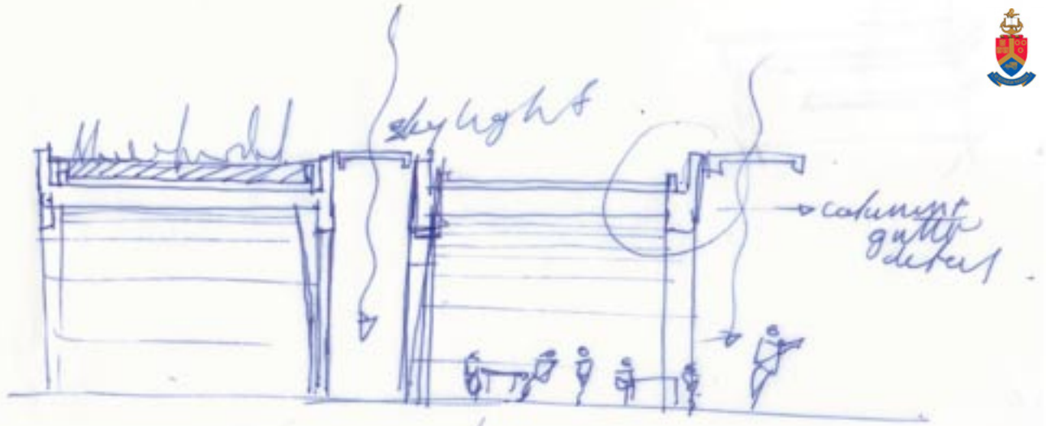


Figure 150

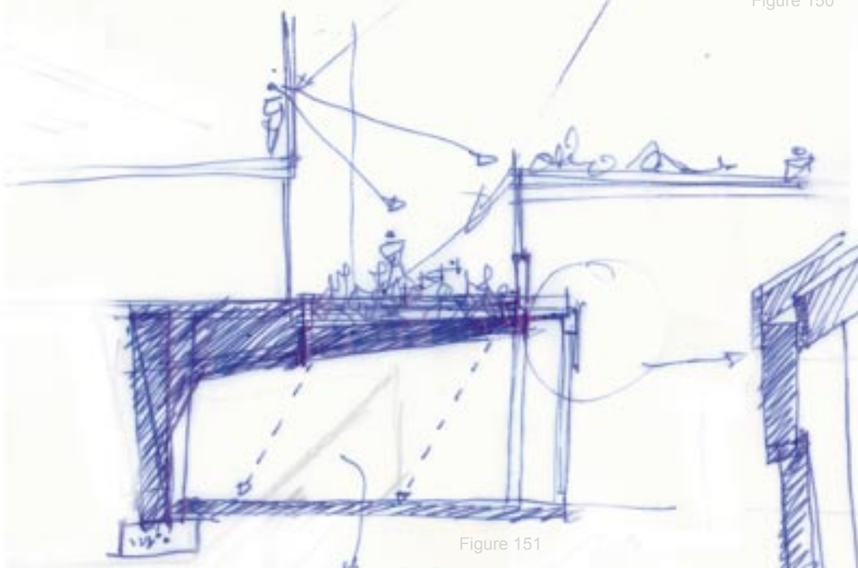


Figure 151

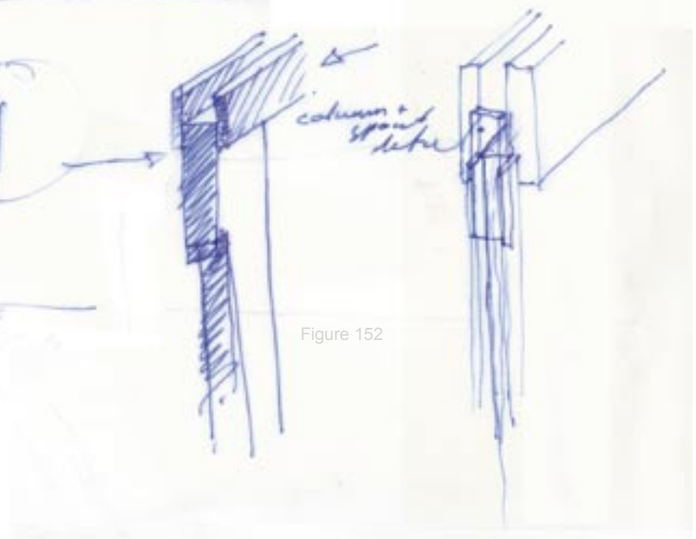
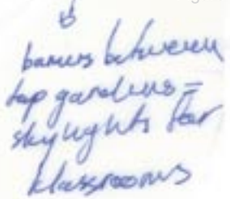


Figure 152



Flora/Daylight

In order to create a livable urban neighbourhood each residential unit has its own garden. These are located either on top of the day care centre classrooms for the lower units or on top of the residential block for the top units. The day care centre playground consists of a multitude of surfaces which includes grass and trees. Furthermore, the roof of the day care centre admin building consists of a vegetable garden which is maintained by the day care centre and used for education on nutrition and small scale agriculture. The following investigation looks at possibilities regarding the detail design of these gardens.

In both the residential units and the day care centre classrooms, the infiltration of natural light plays a vital role in the quality of space. Although each classroom faces north, considering that these rooms are seven meters deep, a skylight is used to allow for the maximum amount of sunlight to enter the space.

The residential block is covered with screens which defuses the light which enters each unit. The investigation explores the quality of some of these spaces regarding light entry.

Figure 153: Isometric view of section model for residential block and day care centre

Figure 154: Section showing structural considerations for day care centre and residential block connection

Figure 155: Model of vendor stalls in Bradbury St. London.

Figure 156: Instalation of Bradbury St. vendor stalls.

Figure 157: Operational vendor stalls.

Page 111: Fgure 158; Design sketches for vendor stalls

Vendor stalls

In order to activate the main public square and establish it as the vibrant heart of the community, vendor stalls are introduced next to the community hall. These stalls are mainly used for the preparation of food. The following investigation looks at a precedent and possible design options.

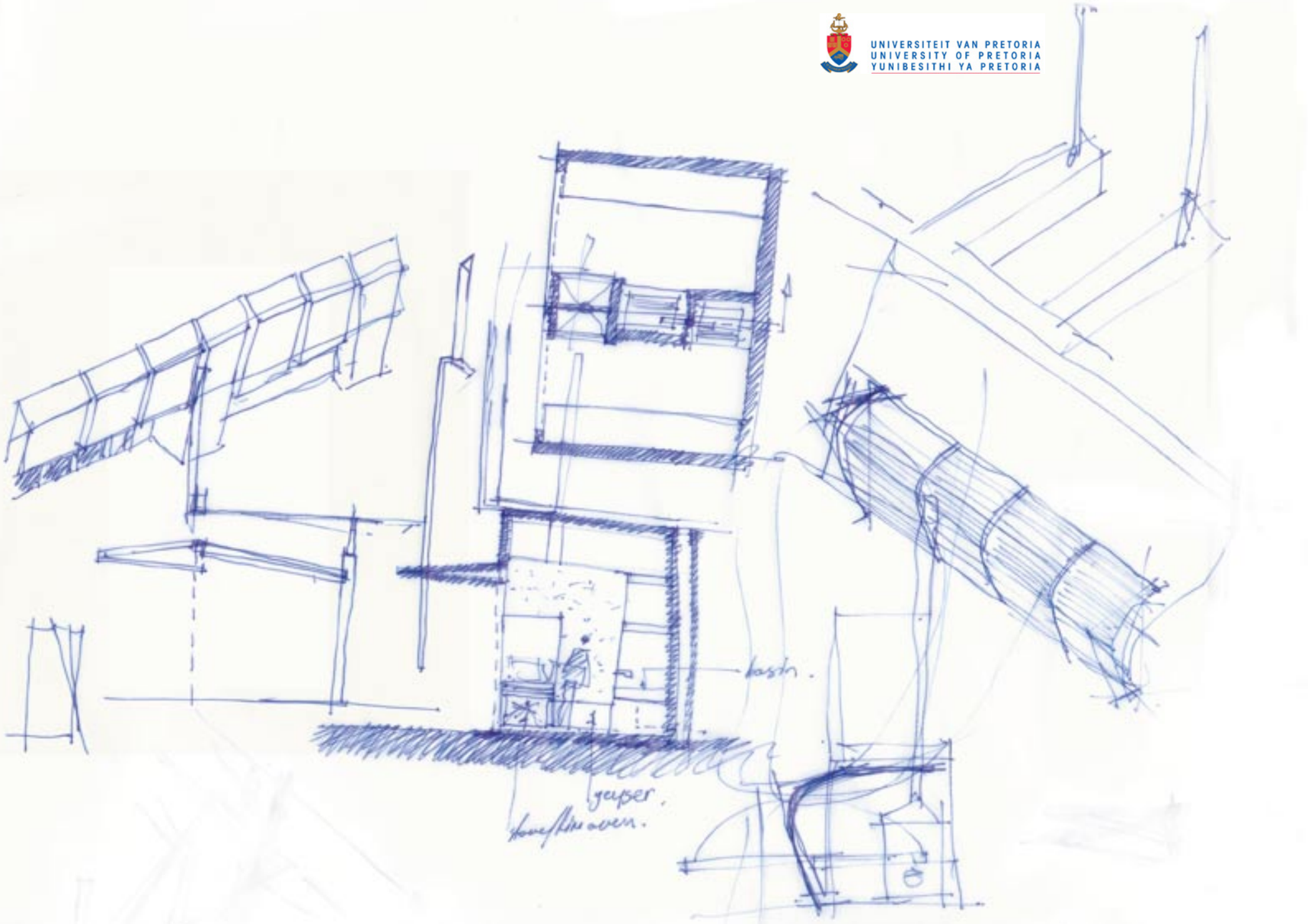


Figure 159: Design sketches for vendor stall in Public Square