

## PRESENCE

HEDONISTIC PALACE



APA-Tower



concept model  
heavy and light



concept model  
compress and release

The APA-Tower, which has been vacant for years, was once riddled with asbestos and is now threatened with demolition, is one of the most distinctive buildings in Vienna's 19th district. Its strong form, the rhythmic concrete parapets made of structural concrete and the façade clad with formwork panels give it a unique presence in the urban space that must be preserved at all costs.

Our project attempts to complement the existing structure in an experimental way with the versatile use and design possibilities that concrete offers us and to explore the limits of the material.

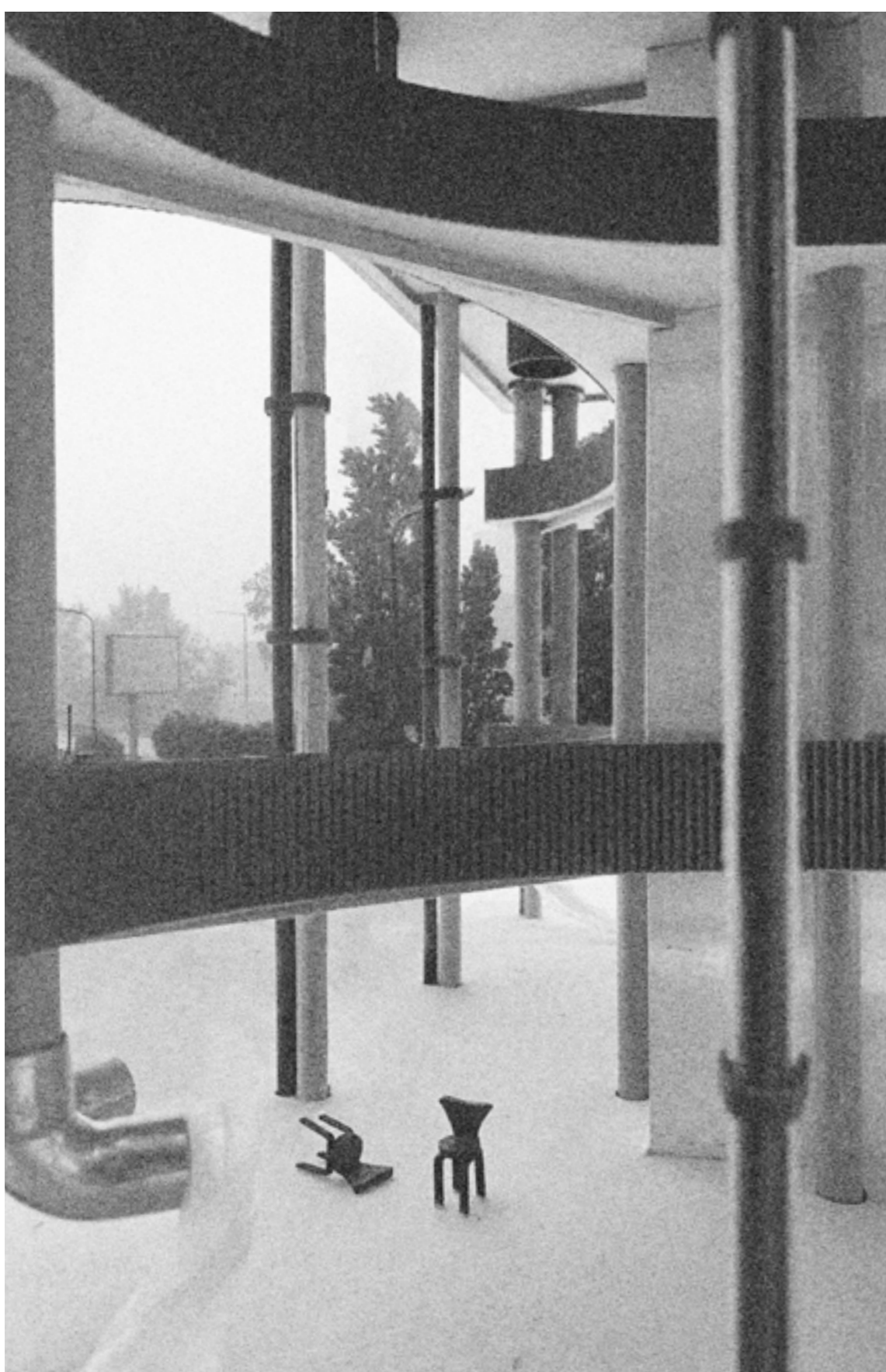
In contrast to the regularity of the storeys, new airy spaces are created which are partly filled with a thin pneumatic structure into which the concrete presses and forms the space.

The almost limitless malleability of concrete makes it possible to play with material and space, with heaviness and lightness.

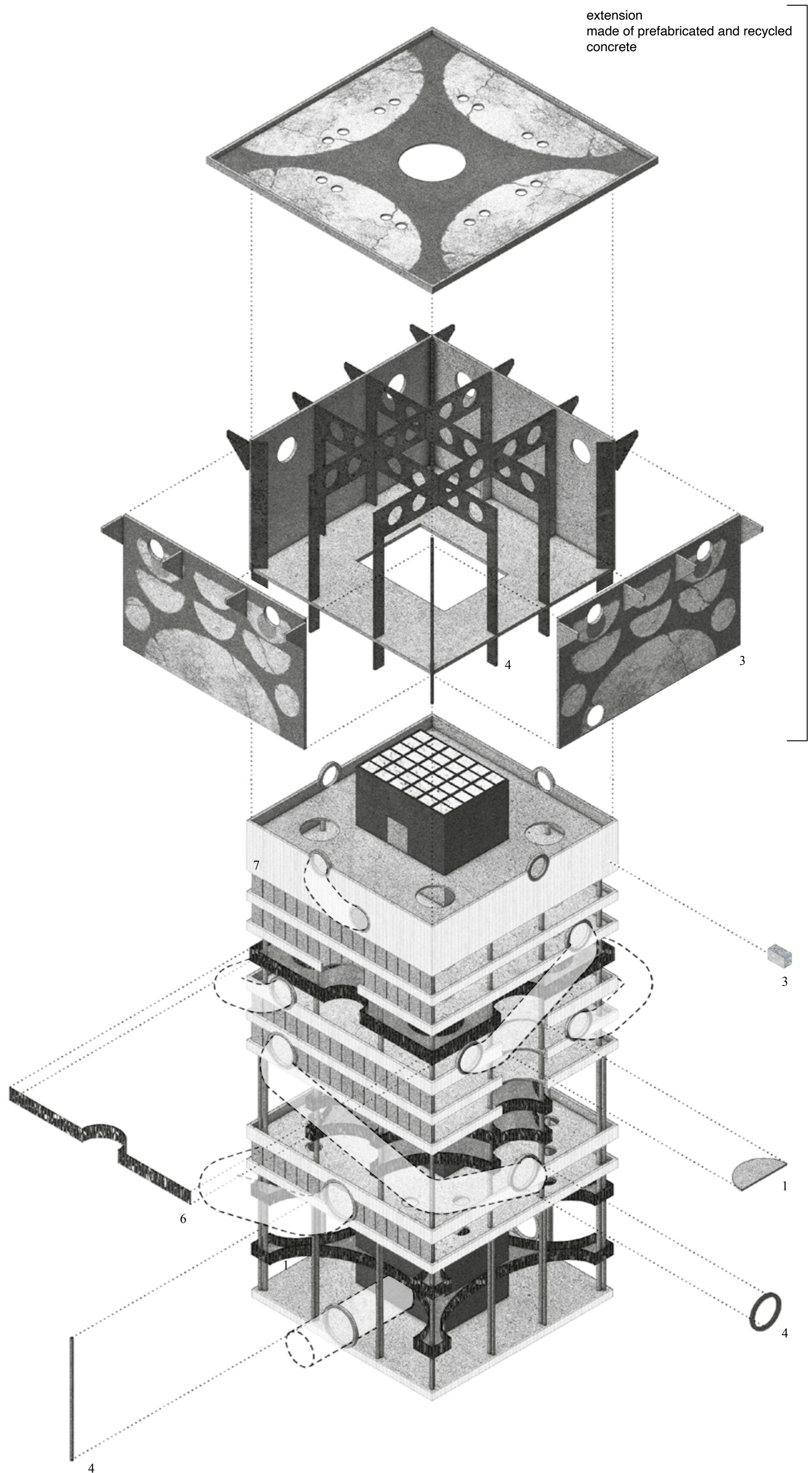
Furthermore, the differentiated handling of the surface design of the concrete further reinforces the reorganization of the existing structure.



By reshaping the existing concrete, the Apa Tower gains a new rhythm and appearance. The strong rhythm is broken by the external circulation, which is attached to prefabricated high-performance concrete rings.



The new loads resulting from a removed ceiling will be borne by added prefabricated high-performance concrete columns. This not only facilitates new visual perspectives it also creates a dramatic spacial atmosphere with significant ceiling heights.



- |                            |                          |                             |                          |                           |  |
|----------------------------|--------------------------|-----------------------------|--------------------------|---------------------------|--|
| 1                          | 2                        | 3                           | 4                        | 5                         | 6  |
|                            |                          |                             |                          |                           |  |
| existing polished concrete | existing facade concrete | recycled aggregate concrete | highly polished concrete | high-performance-concrete | pigmented concrete with recycled aggregate |

### Reshaping

Although the ceilings were poured a long time ago, they can still be reshaped. By cutting out existing concrete ceilings using a diamond wire saw, the building is spatially restructured and thus becomes a tangible sculpture in itself. Some of the removed elements are poured back in as whole pieces, reused as furniture or mixed into recycled concrete as aggregate. Therefore you can speak of a pure material rearrangement within the tower.

### Support

We counteract the structural weakening caused by the cut-outs in the ceilings with high-performance support elements. These are made of ultra-high-strength prefabricated concrete. These include the support columns in the open storeys and the fastening rings for the external circulation. The beams in the newly constructed upper storey are also made of pre-stressed high-performance concrete

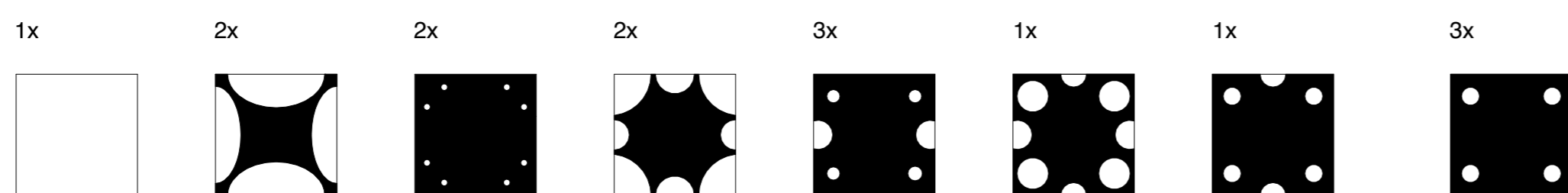
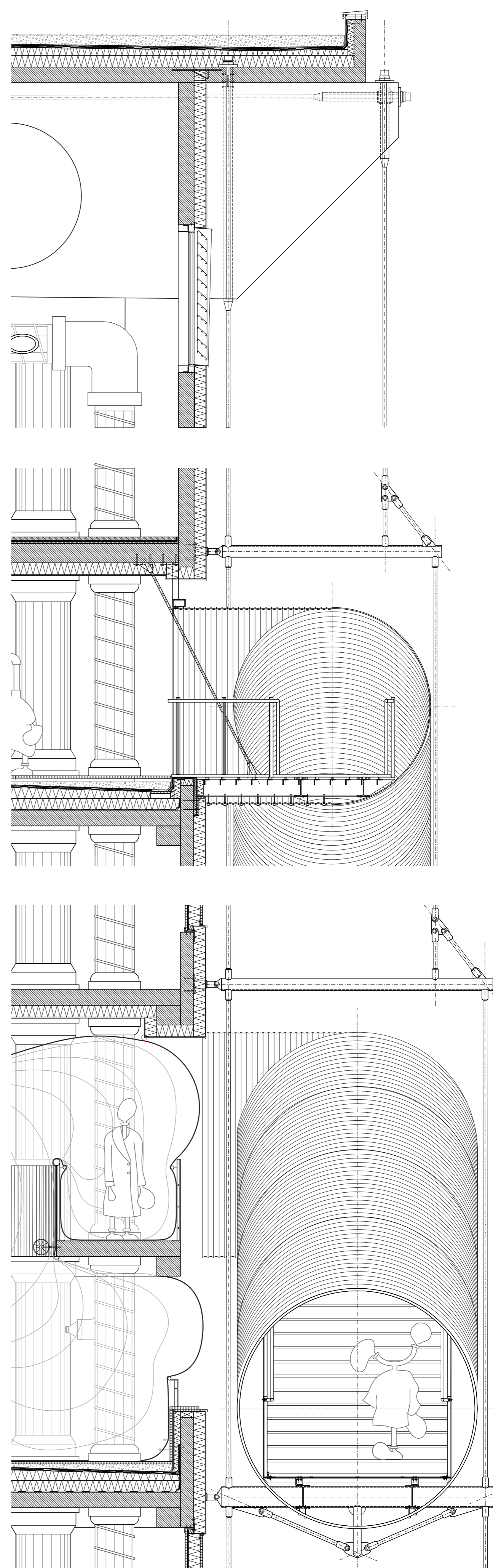
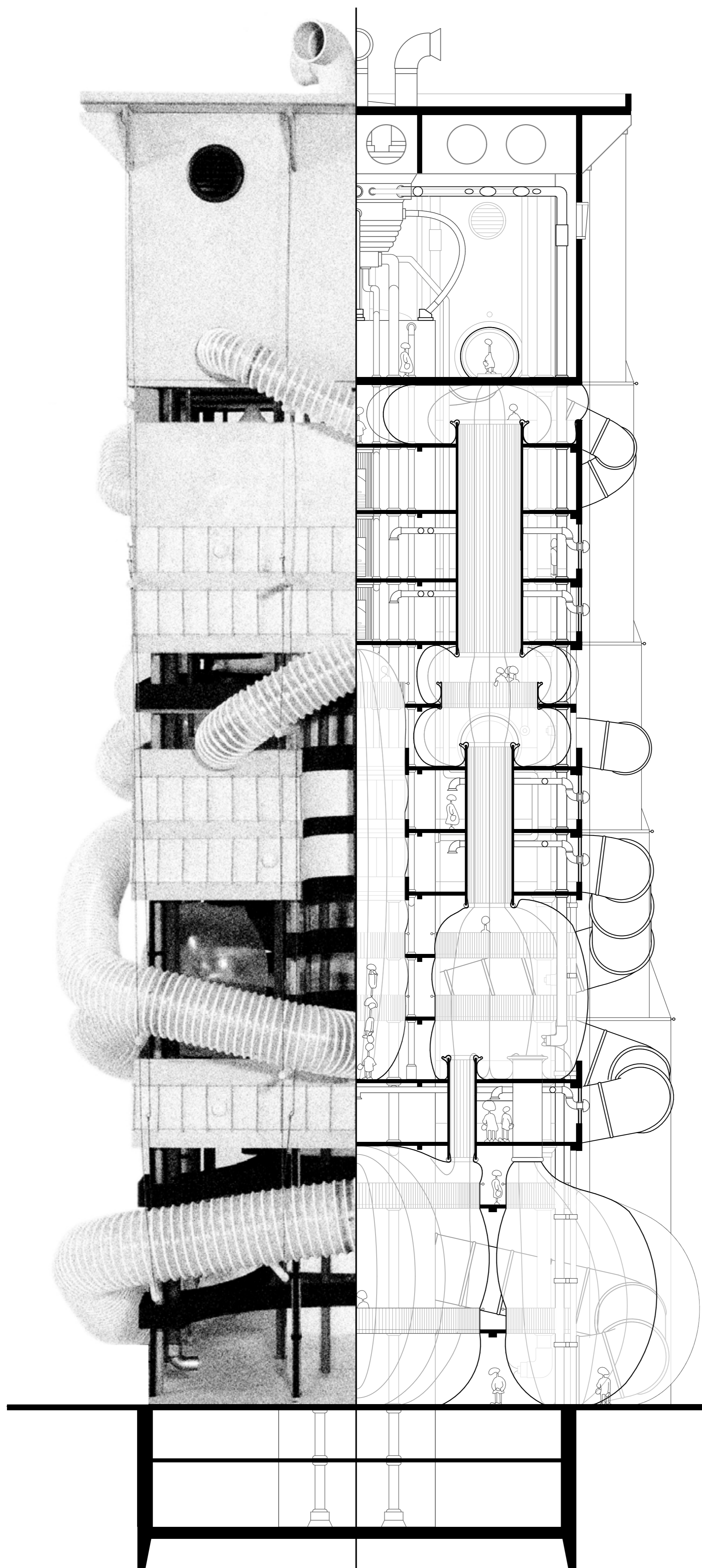
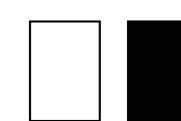
### Mixing

The facade of the new top floor is constructed from composite concrete with the fragments taken out. These are placed as a whole in the formwork and assembled with pigmented recycled concrete to form a new whole.

### Structuring

The fall protection in the open storeys is structured vertically by inserting formliners into the formwork in the same way as the existing façade parapet. In addition, an aggregate of recycled fragments and dark pigments is added to the concrete.



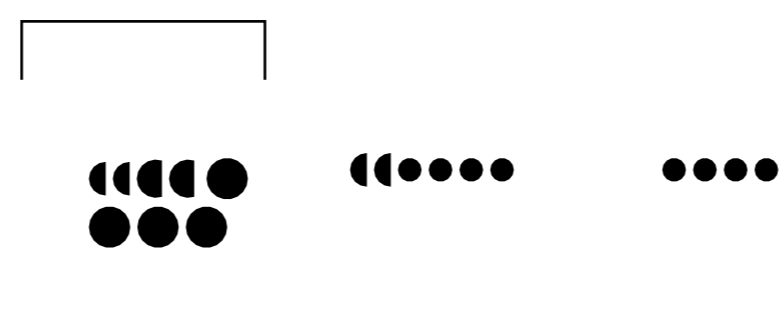


From the existing concrete slabs, openings are cut around the core using a diamond saw, leaving the beams intact. The cut material is recycled.

recycled for the extension



recycled for the extension



recycled aggregate concrete

recycled aggregate concrete

**accessible roof:**

- 27 mm three-layer slab, roughened with drainage joints
- 50-120 mm gravel pack
- fleece
- bitumen waterproofing, doubled
- 30-100 mm tapered insulation
- insulation
- vapor barrier
- 180 mm recycled reinforced concrete

**bubbles:**

- 200 g/m<sup>2</sup> PE-film, translucent with fiber grid selective fixation to reinforced concrete
- barometric pressure nozzle
- inlet opening closed through overpressure

**wall:**

- finishing coat
- reinforced mortar with mesh
- 180 mm insulation
- subframe
- double heat-absorbing glazing with shading
- 180 mm recycled reinforced concrete

**pipes:**

- corrugated iron
- insulation, mineral wool with substructure, thermally separated
- corrugated iron with L-profile ring, mounted to ceiling made out of reinforced concrete