

SECTIONS AND ELEVATIONS

PCM Material

In rooms with natural ventilation heating requirement of the building is reduced by using PCM heat storage material. PCM heat storage material takes up cooling heat charges in operation time without energy investment. The heat accumulated in the heat storage material shall be removed by ventilation at night, in order to ensure that the heat storage material be able to reduce cooling requirement. Cross-ventilation is provided within the building structure. Natural removal of the heat accumulated in the PCM material is achieved by the ventilation at night of the space between the external insulated layer of the spatial lattice girder and the internal space limiting structure containing PCM material.

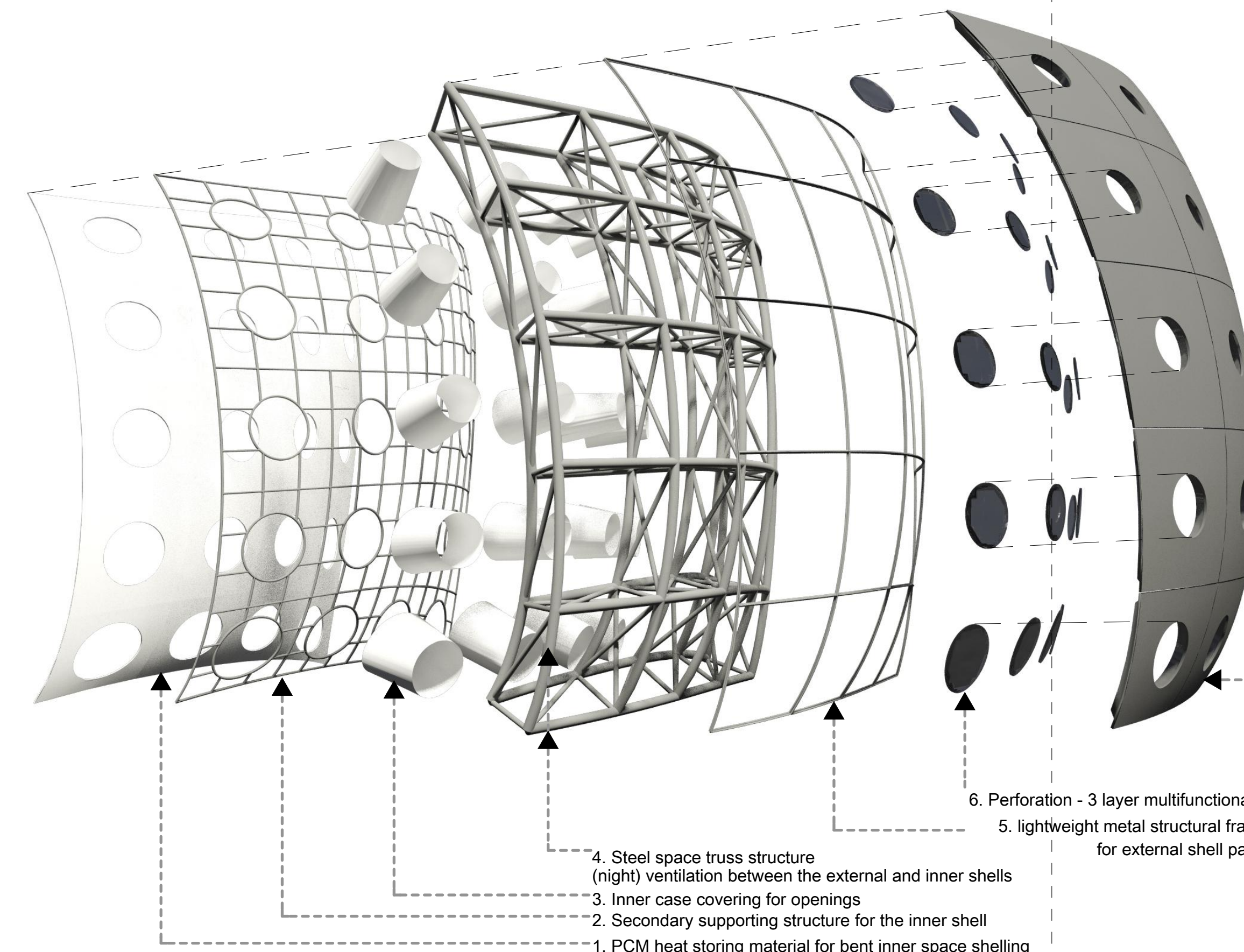
Used Materials

Regarding the used materials, environmental awareness and sustainability considerations increase healthy and comfortable sensation and improve the working conditions of the users of the building. Low emission of harmful substances in the materials is the basis of the healthy inner ambience. Furthermore, concerning the used materials we do our best to give preference to recycled materials (recycled aluminium cladding, recycled concrete foundations, insulation and interior finishing materials from renewable or quickly regenerating resources). Wood used in the building are from a fully sustainable forestry, this way also minimising the CO₂ footprint caused by the construction and the building.

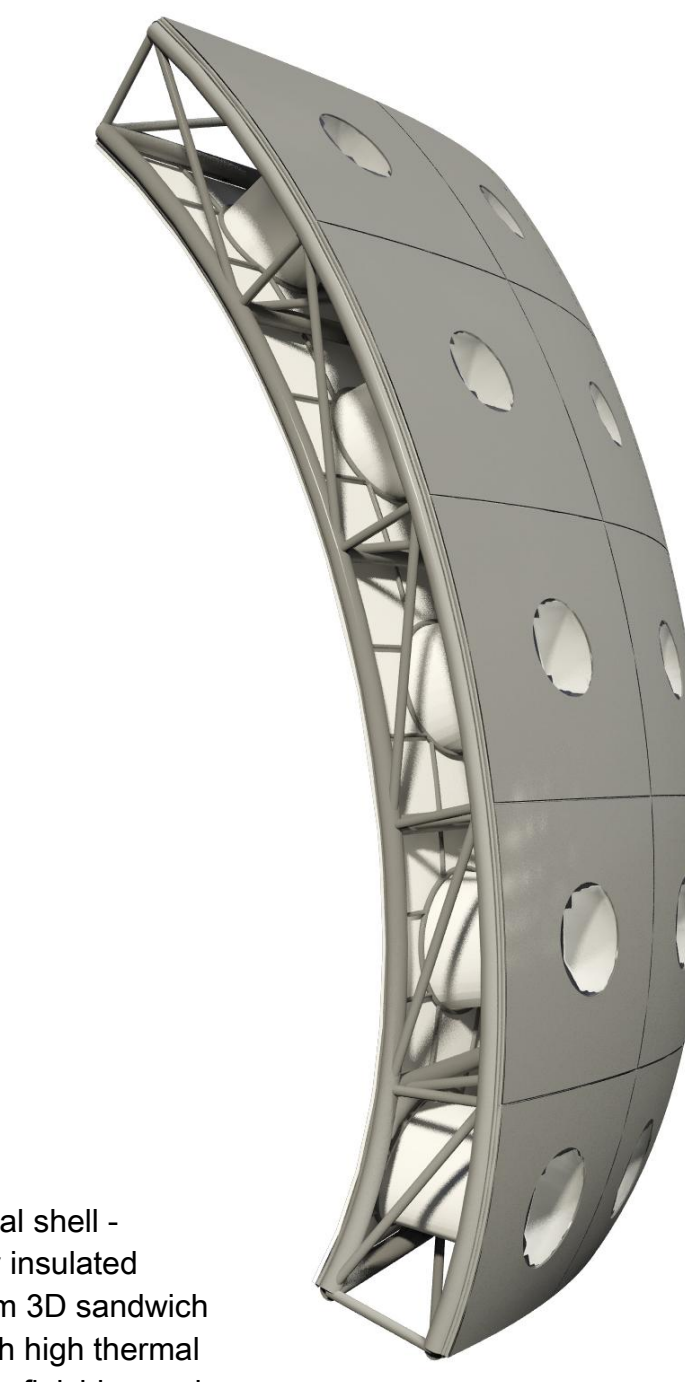
An experience of internal play of light

The perforation along the outer shell will result in vivid and expressive effects of light in the internal spaces and their interaction with the internal masses filling such spaces. The sharpness of prisms of light may be controlled by darkening the apertures. While these lights LIGET BUDAPEST COMPETITION APRIL 2016. MUSEUM OF ETHNOGRAPHY TECHNICAL DESCRIPTION 10/27 may not reach the exhibition spaces or may only reach them in a substantially subdued form, their presence will still permeate the entire building.

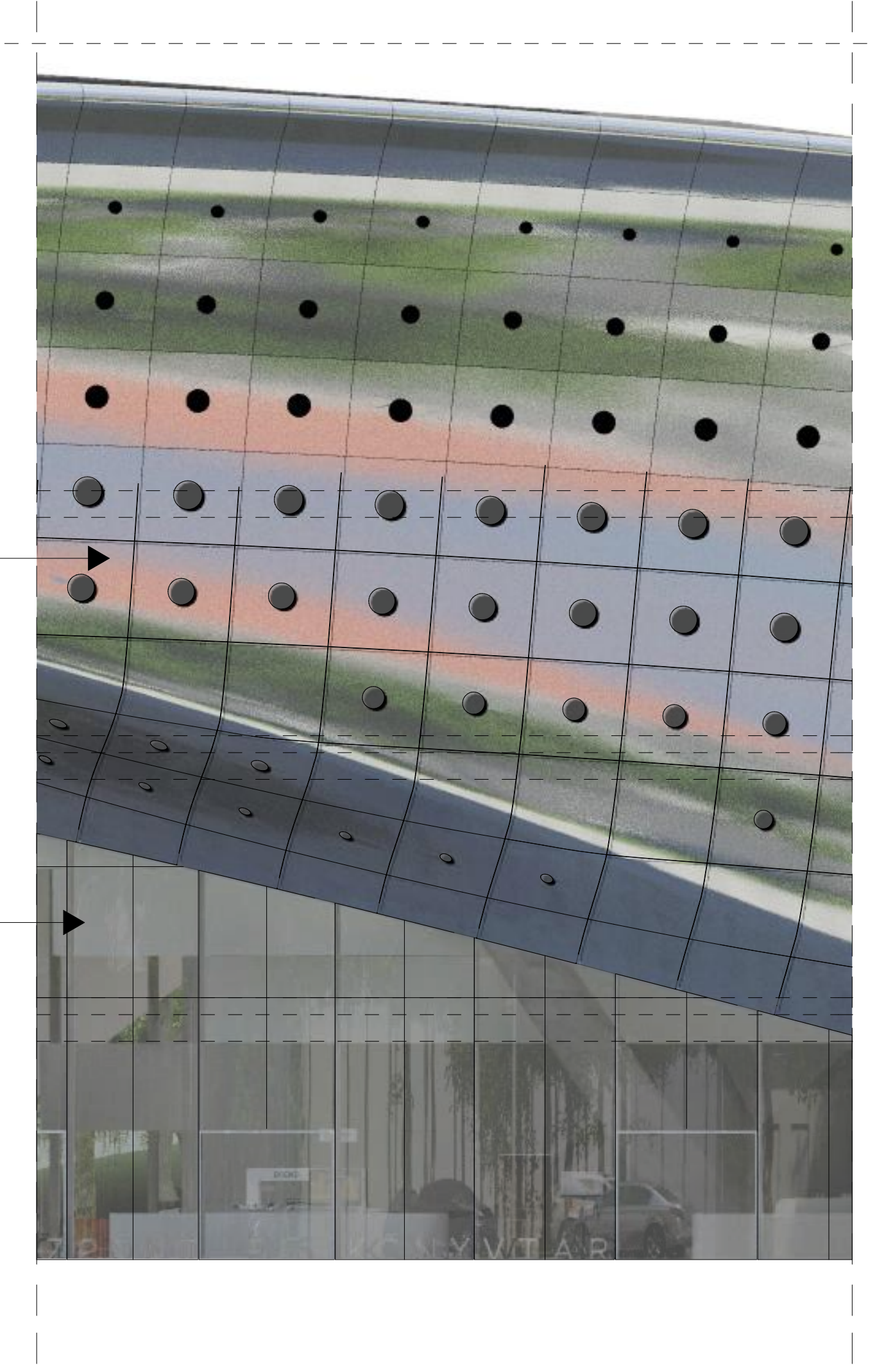
FACADE STRUCTURE



FACADE MODEL



FACADE DETAIL 1/100



Shell surface - perforated thermally insulated aluminium 3D sandwich panel with high thermal reflectivity finishing and non-visible fixing

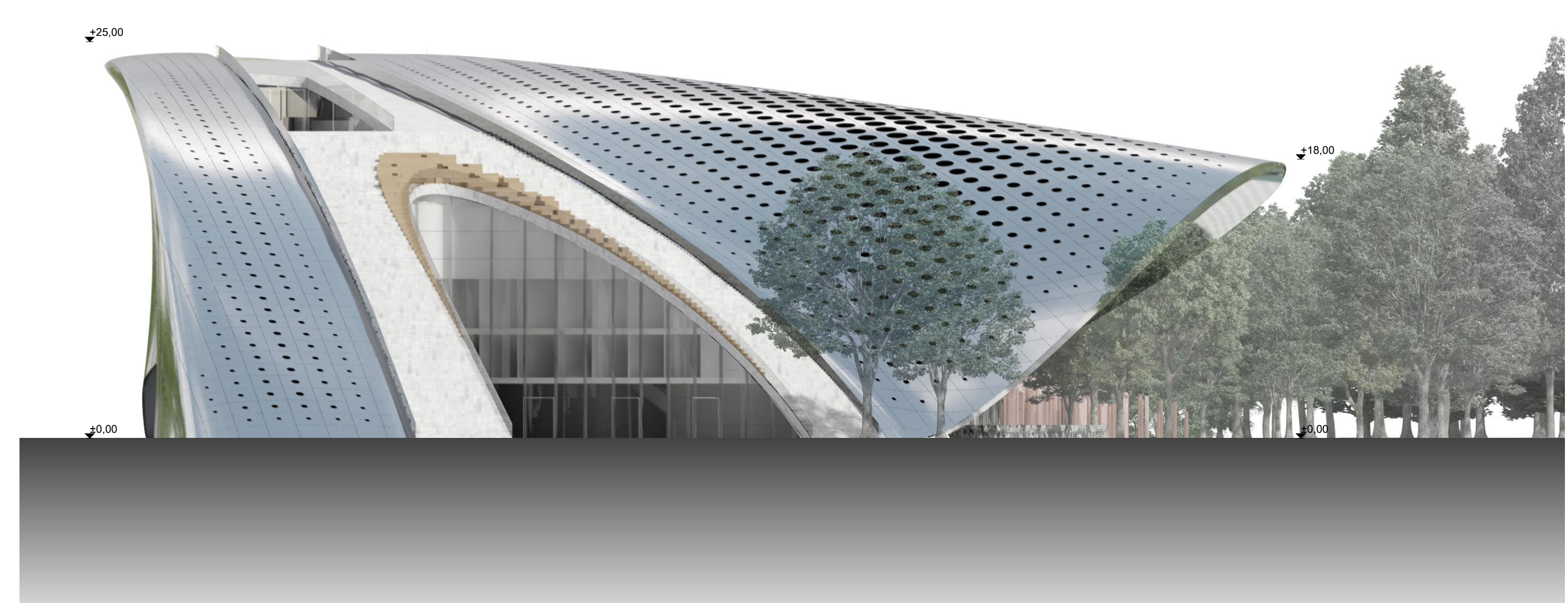
curtain wall - with 5-layer thermally insulated glazing

7. External shell - thermally insulated aluminium 3D sandwich panel with high thermal reflectivity finishing and non-visible fixing

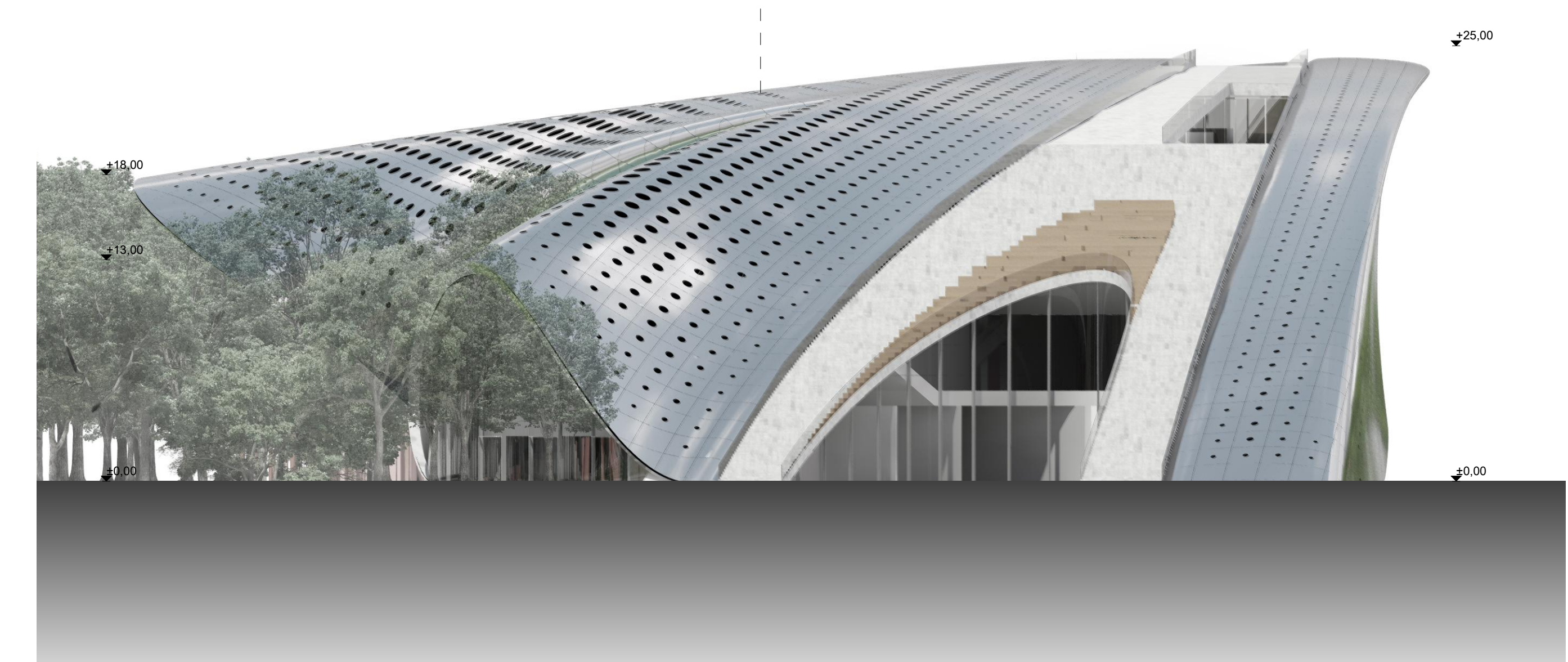
6. Perforation - 3 layer multifunctional glazing
5. lightweight metal structural frame for external shell panel

4. Steel space truss structure (night) ventilation between the external and inner shells
3. Inner case covering for openings
2. Secondary supporting structure for the inner shell
1. PCM heat storing material for bent inner space shelling

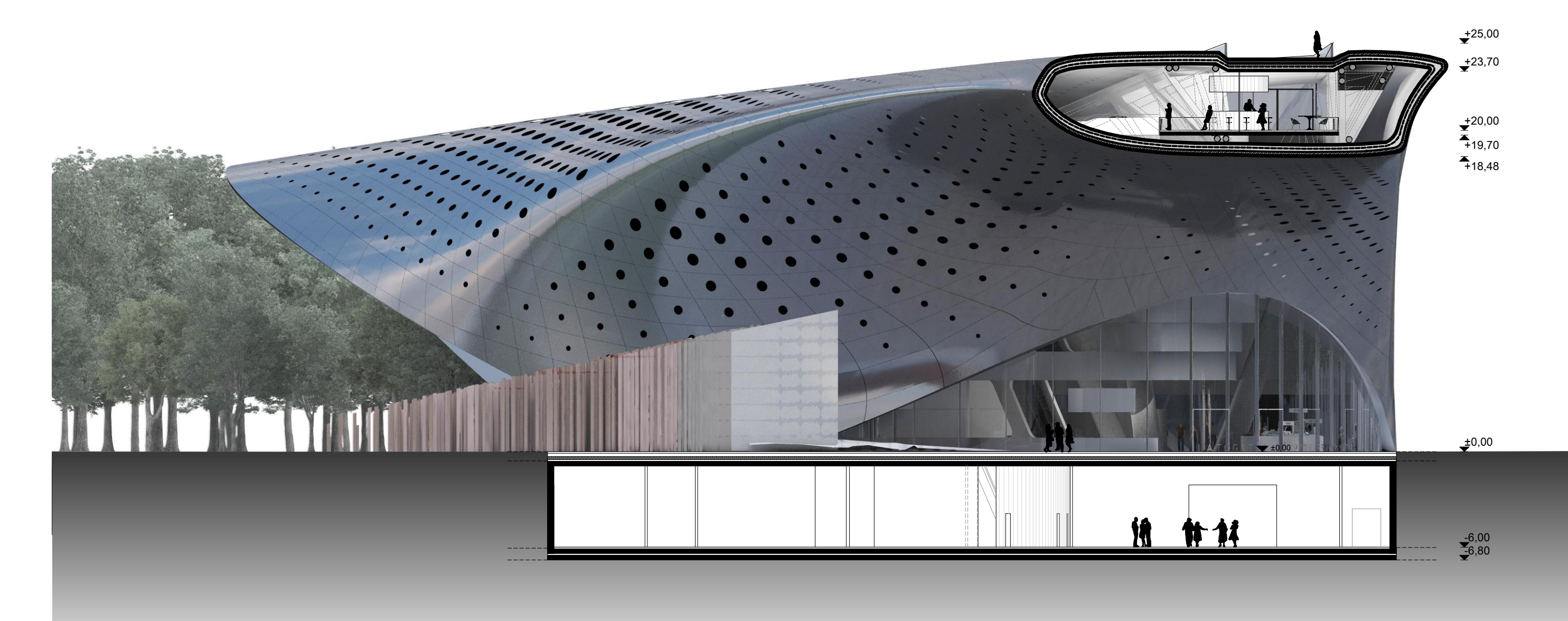
SOUTHEAST ELEVATION 1/250



NORTHWEST ELEVATION 1/250



CROSS SECTION 1/250



SOUTHWEST ELEVATION 1/250

