# Competition Open air theatre "Gärten der Welt", Berlin (GER)

project New construction of a open air theatre on the grounds of the IGA Berlin 2017 awarding authority Grün Berlin GmbH team WW+, Esch-sur-Alzette/Trier (LUX/GER) civil engineering Schlaich Bergermann und Partner, Berlin (GER) rendering Stube 13, Zurich (CH) gfa 740 m² gv 4.120 m³ competition phase 06/2013 - 08/2013 restricted competition 2nd price

"Nature is always the same, but nothing remains unaffected at her visible appearance. Our design must give her the sublime of continuity, with the elements and the appearance of all variations. In our imagination design must grant her eternity."

Architecture is no longer realised as a single art form but as an everyday culture in a landscaped and social context. The design of a plastic structure gears optically and functionally with the surroundings by enabling a multiplicity of views and by connecting the terrain and natural stage through an auditorium, which follows the natural terrain. The concept for the architecture and scenography of the single functional units is logically derived from the existing landscape.

#### Genius Loci

Paul Cézanne

The architectural concept allows for a compact building form in order to reduce the built-up area in favour of a green environment, with a particular emphasis on the harmonious integration with the surrounding landscape. With its independent form, the building forms a clear and acoustically necessary spatial conclusion to the adjacent district, but opens up through its characteristic, expanded volume, which rises with the landscape, towards the 'Gärten der Welt' recreational park.

### Exploitation

The open-air stage can be reached via the existing path network in the park area or via a separate direct access for artists and deliveries from the Blumberger Damm. The multifunctional event area can also be accessed via both entrances outside of regular daytime hours and is an important cross-border point of reference for visitors and future organisers as well as for adjacent districts.

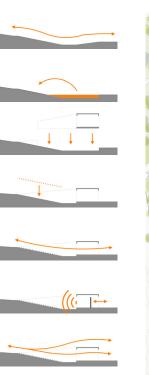
#### Functional solution

Geometry and choice of material for the central bell-mouthed stage hall comply with the acoustic requirements. The buckled structure and the low-mounted, thus walkable roof area, offer a view over the impressive nature panorama of the 'Gärten der Welt'. The roofs are planted whereby they are naturally embedded in the surrounding green landscape.

From the big tone shell in the middle of the building complex, you can reach the restrooms of the artists (with inside auxiliary functions) as well as the stage storage area, equipment rooms and the sanitary facilities for visitors (accessible from outside).

The equipment rooms are on the upper floor and can be reached from the ground floor via a staircase. The central stage area is assumed as an integral part of the landscape. Large sliding walls generate a variability and flexibility of the scenery. In an open state the view onto the garden and nature from the audience area forms a framed picture, thus creating openness and vastness. Based on the acoustic rules of an open-air theatre, the visitor seats are arranged shell-shaped around the pavilion. On the concrete steps there is enough room for 3000 visitors. There is the additional option to enlarge the auditorium by another 2000 temporary seats. The tribune fits into the natural, slightly deepened hollow, thus creating a fluent connection between the open-air theatre and the existing natural and green space.

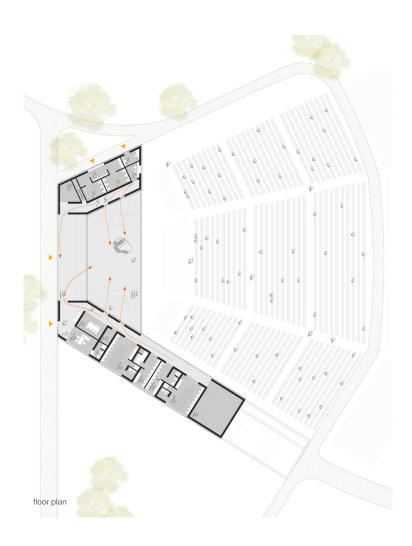






### Construction

The design of the open-air theatre has the same characteristic as the freely stretched framework system of the visitor centre. The freely stretched stage roof looks like a frame. The bolt of the frame is a box girder profile made of laminated veneer lumber (Kerto-Q for upper and lower belt; Kerto-S for rack). The hollow box with a wingspan of 22m needs a construction height of approximately 60cm. The hollow box elements can be delivered as entirely machined parts to the building site. In order to minimise the bending moments and consequently the distortion, the latch is laterally mounted on the vertical building elements, thus achieving a fixation through the effect of continuity. The vertical building elements of the remaining construction are made of reinforced concrete prefabricated parts, to minimise the number of joins. These reinforced concrete walls are the support of the frame transom. The other ceilings with normal wingspan can also be produced with reinforced concrete. As an alternative, wooden ceilings made of stacked planks can be used. The foundation of the building is realised via a bedded floor plate with integrated strip foundations, which also act as an ice wall.









## Material

The massive concrete cubage is covered with natural finished larch wood as curtain-wall wooden strip facing. Wood was chosen because of its adaptation to the environment and the reflection as an acoustically effective space. Inside the stage area large wooden sliding walls allow for the convertibility and flexibility of building and ambience: in an open state there are wide visual relations. A simple space strongly oriented towards the outdoor area with its generous, roofed open spaces and designed as a flowing floor plan. By closing the elements, an introverted stage area for different scenographies is created. Light and sound equipment is installed at the lower surface of the roof. The public auxiliary functions as well as the artist entrance in the back stage area are accessible from the outside and preserve the idea of a monolithic wood construction through the door elements being flush with the façades. In accordance with an holistic approach wood is chosen as a robust, durable and sustainable material, which is easy to care for and remains attractive over a long period of time.

The open-air theatre is planned as a multi-faceted structure in the middle of the existing recreation area. Apart from concert events, the natural theatre hosts a multitude and variety of other events, thus extending the usage potential of the whole area. A cultural area is developed, an invitation to explore new ways of playing with the impulses of its unique architecture, while opening up a new view to the world and expanding outlooks on life.