

Mora River Aquarium

Given the blazing Alentejo sun and the need to create shade, the building was devised as a compact and monolithic volume with a pitched shelter of thin white pre-cast concrete porticos with single spans of thirty-three metres, evoking the profile of the canonical Alentejo whitewash barns known as "montes". The shading and cross ventilation systems along with the water circuits foster the reduction of cooling energy, the sustainable increase of humidity and the wellbeing of animal and plant life.

Standing on a massive concrete plinth with a built—in stairway—cum—ramp entrance, the pitched shed veils a set of mute boxes that contain the programme, namely reception, ticketing and shop, cafeteria, changing exhibits hall, documentation centre, research and education, live exhibits, multimedia and a small auditorium. Inside, the exhibition spaces tend to be dark, in order to minimise UV impact on the live exhibits and allow visitors an in—depth viewing of the aquariums. The outdoor void between these programme boxes and the pitched shed generates not only accelerated viewpoints onto the outside but also a promenade that culminates in the passage through a bridge over the lake which, in itself, is also a live exhibit of animals and plants collected and nurtured in the region. The live exhibits, the main feature of an aquarium, reproduce, through complex life support systems, the habitat conditions of different regions allowing to exhibit side—by—side the various animals and plants. On the basement, these support systems guaranty stability of water temperature, pH, quality control and filtering for each habitat parameter, including a duct gallery below each exhibit to supply and monitor the water.



莫拉河水族馆

由于阿伦德如地区的日光十分强烈,建筑采用了紧凑的单体结构。由斜屋顶上延伸下来的白色预制混凝土柱廊长33米,与阿伦德如地区被粉刷为白色的谷仓十分相似。遮阳和对流通风系统与水流回路一起,减少了制冷所需的能源,也为水族馆内的动植物提供了适宜的湿度和温度。

水族馆的混凝土基座上设有嵌入式楼梯和坡道,倾斜的棚架结构内部是水族馆的各个功能区:接待处、售票处、商店、餐厅、展览厅、档案中心、研究和教学区、生物展区、多媒体区和小礼堂。室内展览区十分昏暗,以最小化生物展区的太阳辐射,让游客得以对水族馆进行深度观察。水族馆的室外区域不仅优化了室外景观,而且在湖上形成了一个室外步行桥,而湖本身也展示

了当地的动植物。水族馆里的生物展览复制了不同区域 的生态环境,让游客可以与各种动植物进行面对面的接 触。地下室的支持系统保证了稳定的水温、pH值、水质 量和过滤系统,每个展览区下方都有一个监控、供水的 管道。

Photo: Sérgio Guerra and Fernando Guerra





