

The project consists of several sets of strategic flexible interwoven carbon fiber poles raising a mesh of catenary crossed over supports all over the site, according to the principal stress directions.

The intention is to generate a symbol for the city, capable of being remembered for the essential simplicity of its own shape traits. Like a playground for all ages, the structure of the folding flower poles allows the project to be always dynamically alive and to interact with visitors. These structures can have vertical cores and serve as a viewpoint to the whole environment through the rainbow-like mesh. This dynamism is accompanied by a tensioned membrane that allows the entire site to be covered with a light and everchanging shelter structure. The surface of the membrane shall be covered by a translucent reflective material capable of generating a field of light during the night and shadow spaces during the day.

Catenaries allow us to save as much light as possible with as little material as possible. A porous and transparent structure is placed, so that flora and fauna can use it as a support (ivy, moss, birds) and cross it. In addition, this structure supports technology for watering and spotlighting that respects the environment. An elevated structure allows full accessibility all around. The mutability of the flowers allows them to open and close so that adaptive activities can flourish throughout the seasons and 24 hours a day.

The development of the minimum surface area of the pre-stressed steel membrane aims at greater lightness, improved energy efficiency, and greater mobility and adaptability. In addition, it allows to absorb efforts produced by the wind, and also to serve as a support for the placement of light LEDs. The textile covers only the permitted parts with a dichroic and translucent material, capable of varying its color across the entire visible spectrum of the rainbow depending on the radiation, lighting and perspective of the visitor. Symbolizing the melting pot of cultures that embody the reflections and caustics of the material with full color variation.

The structures of the flowers also seek the greatest slenderness and the least impact on the environment in which they are located, for which they respond to the geometry of a hyperboloid, as it is a doubly regulated surface can be made with a network of straight bars, which gives the system greater ease of construction and greater efficiency.