

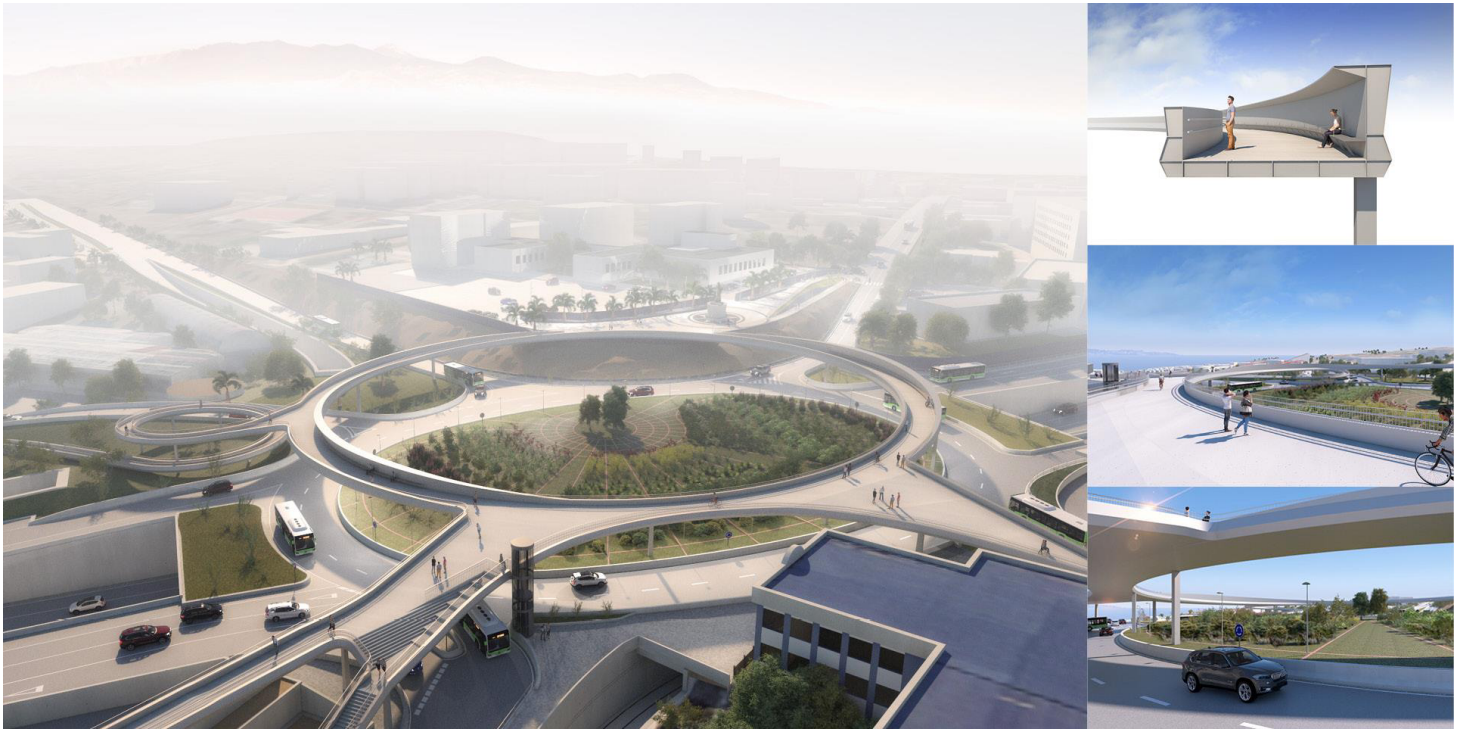


# Padre Anchieta Footbridge

San Cristóbal de la Laguna, Tenerife / 2018

Structural type  
Characteristics  
Client  
Scope

structural steel footbridge  
circular elevated structure  
Cabildo Insular de Tenerife  
tender design and detailed design



This work stems from the idea of solving a serious pedestrian interconnection issue between various spaces and buildings at the University of La Laguna. The solution, winner of a design competition, was envisioned as a system of connections that simultaneously created a new, high-quality urban space. With its circular configuration, the design effectively manages all pedestrian flows with functional efficiency and without additional cost. The structure features a "U"-shaped cross-section, with lateral elements of greater dimension in areas where supports are more distant, adapting to both functional and structural demands. The outer surfaces of the deck are folded to improve structural behavior and to break up the visual impact of the outer faces of the section. The result is a robust combination of the circular walkway's body with various access elements, creating a unique urban space: the new plaza at the University of La Laguna.

## GENERAL CONCEPT

Given the complexity of the existing problem, FHECOR recognized that the ideal, optimal solution would be somewhat utopian—this does not imply a resigned attitude, but quite the opposite. It was proposed from the outset that the objective was to find the best compromise solution among all viable options.

From a structural perspective, the proposed solution is essentially a continuous curved beam in the shape of a ring with an outer diameter of 100 meters, supported by a system of point supports located in positions minimally affecting roads and, presumably, services. This arrangement resolves all possible pedestrian movements between the various access points. The circular design connects with several ramps, staircases, and even an elevator to accommodate the unique characteristics of each access.

## DESIGN

The walkway deck has a usable width of 3.70 meters and is constructed in steel. The section consists of a variable-depth box beam with a shape that adapts to existing functional and structural constraints. Thus, the greatest depth is always found at the section's ends, reaching a maximum value of 2.50 meters, which then tapers off to disappear in areas where the walkway opens outward to connect with the access points.



C/ Barquillo 23, 2º | 28004 Madrid | España  
T. (+34) 917 014 460 | F. (+34) 915 327 864  
[www.fhecor.com](http://www.fhecor.com) | [fhecor@fhecor.es](mailto:fhecor@fhecor.es)