The roof of the fish market is a continuous roof made of repetitive triangular members of steel and fabric that cover all the market’s area. The contour of the roof's elevation is an interpretation of the town’s skyline portrayed by the small wooden houses’ roofs contrasting with the sky. The combination of steel and fabric compares with the light structure of a sailing boat’s sail arrangement. The whiteness of the roof’s fabric change the project’s appearance during day and night reflecting the different colors nature provides such as the blue of the sky and the pink and orange of a typical sunset in Puerto Rico’s west coast.
The design of the market considered many environmental aspects that affect the site throughout the year. The possibility of a hurricane, the fluctuation of several natural factors such as tide, rainfall, intensity and direction of the Caribbean sun, and the beautiful views and sunsets are some of the environmental conditions that will affect this building.

The structure of the building is composed of concrete columns and beams to deal with the wind and tides during a hurricane. The design of the fabric roof makes possible the removal of the fabric in case a piece of it breaks or loses tension during a hurricane avoiding the tensile strength between the wind and the roof. The open structure permits the wind to pass freely through the building space avoiding resistance from structural elements.

**Diagram of Wind Direction**

*Drawing from book: Enfoque biotropical para la arquitectura en Puerto Rico*

**ENVIRONMENTAL CONSIDERATIONS**
The building is oriented taking into account the shape of the existing site; and the direction and strength of the water flow. In this way the typical water currents have a lesser effect on the integrity of the structural elements of the building and facilitate the arrival of the boats to the docks. At the same time the finished floor elevation of the building floor responds to the highest and lowest mean water levels in Puerto Rico in 1998.

The form of the roof is asymmetric: the south elevation of the roof is wider than the north elevation thus covering to the kiosks' side from the intensity of the sun with an extensive shade. The fishermen's service and working areas are located in the north side of the market in order to receive shade most of the day. Complementing the shade provided by the roof are the copper bris-soleils at the top of the kiosks that give more shade to areas that are not covered by the roof while at the same time work as drainages to the roof.

The kiosks and the tower are enclosed by wooden louver walls that function as bris-soleil while maintaining a constant cross ventilation and natural light in the working areas. The tropical weather and environment of the region allows the use of open spaces and the diversity of materials in the design and construction of this project.

ENVIRONMENTAL CONSIDERATIONS

The environmental conditions of this Caribbean island complemented positively to the evolution of this design. All environmental factors were taken in consideration enhancing and improving the building’s design while responding in a responsible way to all possible environmental factors that can affect the project.