



Perez Art Museum Miami; Synthesis of Engineering and Architecture

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Abstract

This paper discusses the architectural and structural engineering concepts for the recently completed Perez Art Museum Miami (PAMM) with Herzog & de Meuron (HdM). The outcome is a building that responds to the environment and works well in terms of efficiency of materials, energy and water.

The design is discussed in detail to highlight the expressive use of structural concrete both for the architecture and as a means of moderating the climate. The various concrete finishes and ideas behind the building structure and their interaction with the architecture are explored to reveal the depth of thinking, the coordination with other disciplines and the interaction with the contractor required to achieve such a building.

Keywords: Concrete, architecture, design, buildings.

1 Introduction

Perez Art Museum Miami is the new home of the Miami Art Museum (MAM) (Figure 1. PAMM site). The building opened for the Art Basel Miami art fair in December 2013 and subsequently attracted 300,000 visitors against an anticipated 200,000 in the first year. The design of the building uses

concrete extensively both visually, as part of the architecture, and to help moderate the climate.

This paper describes the design components and explores the collaboration between the engineer and architect to describe how the design developed from concept stage through to completion.



Figure 1. The new PAMM site looking easterly over the bay.

The site is shown in red in the foreground