Precast Concrete Structures

The construction of a multifamily building often requires the use of precast concrete elements, which are made in a controlled environment to ensure quality and consistency. This process involves the use of molds to shape the concrete, and the elements are then cured before being transported to the building site. The use of precast concrete offers several advantages, including reduced construction time, increased durability, and reduced environmental impact.

An Economic Comparison Between a Precast Concrete and Two Steel Framed Multi-storey Buildings

This report presents an analysis of the economic benefits of using precast concrete for the construction of multifamily buildings. The study compares the costs of a precast concrete building with those of two steel-framed buildings of similar size and function. The results indicate that precast concrete offers significant cost savings, particularly in terms of labor and time.

Precast Concrete Technology

As a building material, precast concrete allows a wide range of sculptural forms and design options. By treating the concrete at the level of formwork, it is possible to create unique and striking architectural features. This technology is particularly useful in the construction of large and complex structures, where traditional methods may be insufficient.

Failures in Concrete Structures

Concrete is a popular construction material due to its durability and cost-effectiveness. However, concrete structures can fail in a variety of ways, ranging from minor cracks to catastrophic collapses. Understanding the causes of these failures is crucial for ensuring the safety and longevity of concrete buildings.

The Art of Precast Concrete

Precast concrete is a versatile material that can be used in a wide range of applications. This book provides an overview of the design and installation process, including the selection of materials, formwork design, and quality control. The book also includes numerous case studies and examples to illustrate the practical application of precast concrete in real-world projects.

Quantification of Building Seismic Performance Factors

This book contains the proceedings of the fib Symposium "High Tech Concrete: Where Technology and Engineering Meet", that took place in 2010. The symposium brought together experts from around the world to discuss the latest developments in concrete technology, focusing on the integration of technology and engineering in the design and construction of concrete structures.

Concise but comprehensive, Jonathan Ochshorn’s Structural Elements for Architects and Builders explains how to design and analyze columns, beams, tension members and their connections. The material is organized into single, self-contained volumes, including an overview of the design and analysis of columns, beams, and statically determinate structures. Each chapter contains a large number of problems for practice, which are solved in the text and included on the enclosed CD-ROM. The problems are designed to reinforce the concepts presented in the text and to provide the reader with a comprehensive understanding of the subject matter.