

# Corrosion of Steel in Concrete: Prevention, Diagnosis, and Repair

Corrosion of steel reinforcement is a major threat to the durability and structural integrity of concrete structures. It can lead to significant structural damage, costly repairs, and even catastrophic failures. This book provides a comprehensive overview of corrosion in steel-reinforced concrete structures, including causes, prevention, diagnosis, and repair techniques.



## Corrosion of Steel in Concrete: Prevention, Diagnosis, and Repair by Luca Bertolini

★★★★☆ 4 out of 5

Language : English  
File size : 13986 KB  
Text-to-Speech : Enabled  
Screen Reader : Supported  
Enhanced typesetting : Enabled  
Print length : 649 pages



The book is divided into three parts.

- **Part 1: Corrosion of Steel in Concrete**
- **Part 2: Prevention of Corrosion in Steel-Reinforced Concrete**
- **Part 3: Diagnosis and Repair of Corrosion in Concrete Structures**

## Part 1: Corrosion of Steel in Concrete

This part of the book provides a detailed overview of the corrosion process in steel-reinforced concrete structures. It covers the following topics:

- The basics of corrosion
- The electrochemical mechanism of corrosion in concrete
- The role of concrete properties in corrosion
- The influence of environmental factors on corrosion
- The different types of corrosion in steel-reinforced concrete

## **Part 2: Prevention of Corrosion in Steel-Reinforced Concrete**

This part of the book discusses the various methods that can be used to prevent corrosion in steel-reinforced concrete structures. It covers the following topics:

- The use of corrosion-resistant materials
- The use of protective coatings
- The use of cathodic protection
- The use of inhibitors
- Design and construction practices to minimize corrosion

## **Part 3: Diagnosis and Repair of Corrosion in Concrete Structures**

This part of the book provides guidance on how to diagnose and repair corrosion in steel-reinforced concrete structures. It covers the following topics:

- The visual inspection of concrete structures for signs of corrosion

- The electrochemical testing of concrete structures for corrosion
- The use of nondestructive testing techniques to detect corrosion
- The repair of corroded concrete structures
- The evaluation of the effectiveness of corrosion repairs

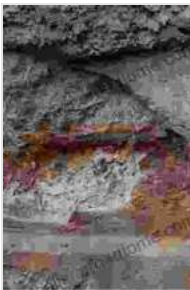
## Who Should Read This Book?

This book is essential reading for anyone who is involved in the design, construction, or maintenance of concrete structures. It is also a valuable resource for students of civil engineering and materials science.

## Free Download Your Copy Today!

To Free Download your copy of **Corrosion of Steel in Concrete: Prevention, Diagnosis, and Repair**, please click on the following link:

Free Download Now



## Corrosion of Steel in Concrete: Prevention, Diagnosis, and Repair

by Luca Bertolini

★★★★☆ 4 out of 5

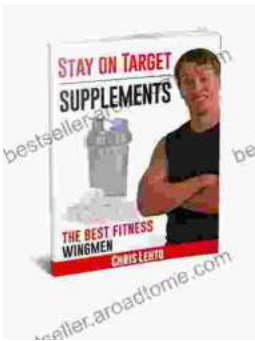
Language : English  
File size : 13986 KB  
Text-to-Speech : Enabled  
Screen Reader : Supported  
Enhanced typesetting : Enabled  
Print length : 649 pages





## Drawing and Illustrations of the 18th Century: A Journey into Artistic Brilliance

Step into the captivating realm of art and history with "Drawing and Illustrations of the 18th Century." This comprehensive volume offers an...



## Stay On Target Supplements: The Best Wingmen

In the high-stakes game of achieving your fitness goals, you need the best possible support. That's where Stay On Target Supplements comes in. Our...