1. Record Nr. UNINA990009299630403321

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| Titolo | A Europe of rights : the impact of the ECHR on national legal systems / edited by Helen Keller and Alec Stone Sweet |
| Pubbl/distr/stampa | Oxford, : Oxford University Press, 2008 |
| ISBN | 9780199535262 |
| Descrizione fisica | XL, 852 p. ; 25 cm |
| Disciplina | 341.4 |
| Locazione | DSI |
| Collocazione | H 376 |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |

2. Record Nr. UNINA9910811362903321

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| Titolo | Corrosion of steel in concrete : prevention, diagnosis, repair / / Luca Bertolini ... [et al.] |
| Pubbl/distr/stampa | Weinheim, Germany, : Wiley-VCH, 2013 |
| ISBN | 9781523115495<br>1523115491<br>9783527651696<br>3527651691<br>9783527651719<br>3527651713<br>9781299277113<br>129927711X<br>9783527651726<br>3527651721 |
| Edizione | [2nd. completely rev. & enl. ed.] |
| Descrizione fisica | 1 online resource (436 p.) |
| Altri autori (Persone) | BertoliniLuca |
| Disciplina | 620.1<br>620.1723 |
| Soggetti | Reinforcing bars - Corrosion<br>Reinforced concrete - Corrosion<br>Steel, Structural - Corrosion |

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| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Cover; Title page; Copyright page; Contents; Preface to the Second Edition; Preface to the First Edition; 1: Cements and Cement Paste; 1.1 Portland Cement and Hydration Reactions; 1.2 Porosity and Transport Processes; 1.2.1 Water/Cement Ratio and Curing; 1.2.2 Porosity, Permeability and Percolation; 1.3 Blended Cements; 1.3.1 Pozzolanic Materials; 1.3.2 Ground Granulated Blast Furnace Slag; 1.3.3 Ground Limestone; 1.3.4 Other Additions; 1.3.5 Properties of Blended Cements; 1.4 Common Cements; 1.5 Other Types of Cement; References; 2: Transport Processes in Concrete<br>2.1 Composition of Pore Solution and Water Content2.1.1 Composition of Pore Solution; 2.1.2 Water in Concrete; 2.1.3 Water Content and Transport Processes; 2.2 Diffusion; 2.2.1 Stationary Diffusion; 2.2.2 Nonstationary Diffusion; 2.2.3 Diffusion and Binding; 2.3 Capillary Suction; 2.4 Permeation; 2.4.1 Water Permeability Coefficient; 2.4.2 Gas Permeability Coefficient; 2.5 Migration; 2.5.1 Ion Transport in Solution; 2.5.2 Ion Transport in Concrete; 2.5.3 Resistivity of Concrete; 2.6 Mechanisms and Significant Parameters; References; 3: Degradation of Concrete; 3.1 Freeze-Thaw Attack<br>3.1.1 Mechanism3.1.2 Factors Influencing Frost Resistance; 3.1.3 Air-Entrained Concrete; 3.2 Attack by Acids and Pure Water; 3.2.1 Acid Attack; 3.2.2 Biogenic Sulfuric Acid Attack; 3.2.3 Attack by Pure Water; 3.2.4 Ammonium Attack; 3.3 Sulfate Attack; 3.3.1 External Sulfate Attack; 3.3.2 Internal Sulfate Attack; 3.4 Alkali Silica Reaction; 3.4.1 Alkali Content in Cement and Pore Solution; 3.4.2 Alkali Silica Reaction (ASR); 3.5 Attack by Seawater; References; 4: General Aspects; 4.1 Initiation and Propagation of Corrosion; 4.1.1 Initiation Phase; 4.1.2 Propagation Phase; 4.2 Corrosion Rate<br>4.3 Consequences4.4 Behavior of Other Metals; References; 5: Carbonation-Induced Corrosion; 5.1 Carbonation of Concrete; 5.1.1 Penetration of Carbonation; 5.1.2 Factors That Influence the Carbonation Rate; 5.2 Initiation Time; 5.2.1 Parabolic Formula; 5.2.2 Other Formulas; 5.3 Corrosion Rate; 5.3.1 Carbonated Concrete without Chlorides; 5.3.2 Carbonated and Chloride-Contaminated Concrete; References; 6: Chloride-Induced Corrosion; 6.1 Pitting Corrosion; 6.2 Corrosion Initiation; 6.2.1 Chloride Threshold; 6.2.2 Chloride Penetration; 6.2.3 Surface Content (Cs)<br>6.2.4 Apparent Diffusion Coefficient6.3 Corrosion Rate; References; 7: Electrochemical Aspects; 7.1 Electrochemical Mechanism of Corrosion; 7.2 Noncarbonated Concrete without Chlorides; 7.2.1 Anodic Polarization Curve; 7.2.2 Cathodic Polarization Curve; 7.2.3 Corrosion Conditions; 7.3 Carbonated Concrete; 7.4 Concrete Containing Chlorides; 7.4.1 Corrosion Initiation and Pitting Potential; 7.4.2 Propagation; 7.4.3 Repassivation; 7.5 Structures under Cathodic or Anodic Polarization; References; 8: Macrocells; 8.1 Structures Exposed to the Atmosphere<br>8.2 Buried Structures and Immersed Structures |
| Sommario/riassunto | This second edition retains the proven concept of its predecessor, while all sections have been thoroughly revised and updated to reflect recent developments, as well as expanded with around fifteen percent of the content completely new.The book examines the different aspects of steel corrosion in concrete, starting with basic and essential |

mechanisms of the phenomenon, before moving on to practical consequences for designers, contractors and owners for both new and existing reinforced and pre-stressed concrete structures.