



CONDITION ASSESSMENT OF BUILDING CONCRETE STRUCTURES USING NDTs – CASE STUDY

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Abstract – The quality of concrete and serviceability for three old buildings utilizing non-destructive testing (NDT) method of rebound hammer (RH) and ultrasonic pulse velocity (UPV) was assessed in the present study. Identification, classification and evaluation of in-situ concrete have helped us to decide whether these three buildings need to be repaired and in result extent their service life or it is not acceptable for its intended usage and they need to be demolished. To evaluate the level of deterioration in historical and fire-damaged buildings or infrastructures, non-destructive testing (NDT) methods can be used. In fact, NDT method employs inspection techniques to evaluate engineering properties to see if it is acceptable for its intended usage that does not need specimens to be crushed like the destructive testing method. The NDT method of rebound hammer (RH) and ultrasonic pulse velocity (UPV) in combination with conventional methods such as internal and external visual inspection and concrete color change to locate deterioration was used to evaluate the quality of concrete structures for three old buildings. According to the results obtained the RH and UPV can be used as reliable tools to predict the mechanical properties of concrete structures subjected to fire and/or weathering deterioration. In addition, combining the two NDTs decreased inaccuracies caused by utilizing one method alone to evaluate concrete quality.

Keywords – Concrete; Deterioration; Non-Destructive Testing; Rebound Hammer; Strength; Structure; UPV.

1. INTRODUCTION

Regular inspection and assessment of concrete structures' quality is very important at various stages of a structures' existence, especially for infrastructures and historical buildings deteriorating for which advanced inspection procedures are required. For such concrete structures, it is necessary to determine whether the structure is suitable for its designed usage or not, which examining should be done without damaging the structure. Weather and fire resistance are the main advantages of reinforced concrete over other construction materials. However, when exposed to very high temperatures, the overall concrete expansion and decrease in tensile strength of steel result in the deterioration and structural collapse of

reinforced concrete [1, 2]. Concrete deterioration can also result from inadequate design or construction, operational accidents, chemical attack, corrosion, loading, aging processes, or any combination of these [3]. Therefore, there is a need for better and advanced inspection techniques instead of human visual inspection to locate hidden damages for monitoring and identify the exact portion of the deterioration of infrastructures such as bridges, dams and even pipelines. From engineering point of view assessing the condition of a structure is necessary for its safety and maintenance process to support economics and to meet sustainable development's goals [4-6]. To evaluate the level of deterioration and to ensure the quality of concrete in historical and fire-damaged

Concrete Structures Condition Assessment Guidelines

Alireza Ghorbanpoor, Neal Benish



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Life-Cycle Civil Engineering: Innovation, Theory and Practice Airong Chen, Xin Ruan, Dan M. Frangopol, 2021-02-26
Life Cycle Civil Engineering Innovation Theory and Practice contains the lectures and papers presented at IALCCE2020 the Seventh International Symposium on Life Cycle Civil Engineering held in Shanghai China October 27 30 2020 It consists of a book of extended abstracts and a multimedia device containing the full papers of 230 contributions including the Fazlur R Khan lecture eight keynote lectures and 221 technical papers from all over the world All major aspects of life cycle engineering are addressed with special emphasis on life cycle design assessment maintenance and management of structures and infrastructure systems under various deterioration mechanisms due to various environmental hazards It is expected that the proceedings of IALCCE2020 will serve as a valuable reference to anyone interested in life cycle of civil infrastructure systems including students researchers engineers and practitioners from all areas of engineering and industry [Overview of Industry Guidance on Concrete Condition Assessment and Concrete Repair for Use Prior to Coating](#) ,2000 This Special Publication SP introduces a brief overview of concrete repair guidance offered by the American Concrete Institute ACI International the International Concrete Repair Institute ICRI the American Concrete Pavement Association ACPA the Aberdeen Group the Portland Cement Association PCA and work by authors considered experts in the field of concrete repair The publication is divided into two parts Part I **NEHRP Commentary on the Guidelines for the Seismic Rehabilitation of Buildings** Eugene Zeller, 2000-06 This document from the National Earthquake Hazards Reduction Program NEHRP was prepared for the Building Seismic Safety Council BSSC with funding from the Federal Emergency Management Agency FEMA It provides commentary on the NEHRP Guidelines for the Seismic Rehabilitation of Buildings It contains systematic guidance enabling design professionals to formulate effective reliable rehabilitation approaches that will limit the expected earthquake damage to a specified range for a specified level of ground shaking This kind of guidance applicable to all types of existing buildings in all parts of the country has never existed before Illustrated **Selected Proceedings of the 2nd International Engineering Research Symposium; IERS 2024; 14 Aug; Colombo, Sri Lanka** T. Nilanthi Fernando, Manjula Siriwardhana, Ranjith Dissanayake, Meththika Vithanage, Jayathu G. Samarawickrama, Pradeep Gajanayake, 2025-03-03 This book presents selected peer reviewed articles from the 2nd International Engineering Research Symposium IERS 2024 held at Colombo in Sri Lanka under the theme of Engineering Innovations for Economic Transformation It highlights the latest advancements in engineering research innovations and technological principles aimed at driving economic changes and improvements within society and the industry IERS2024 covers the areas of Agricultural Engineering Chemical Engineering Civil Engineering Computer Science Engineering Electrical Engineering Electronics Telecommunication Engineering Mechanical Mechatronics Engineering Materials Science Engineering Manufacturing Process Engineering and other Engineering discipline relevant to the theme of IERS 2024 **Ninth International**

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Case Studies of Rehabilitation, Repair, Retrofitting, and Strengthening of Structures Mourad M. Bakhoun, 2010

ACI Manual of Concrete Practice American Concrete Institute, 2002

Guideline for Structural Condition Assessment of Existing Buildings American Society of Civil Engineers, Structural Engineering Institute, 2000-01 Changing economic conditions concern for historic preservation emphasis on fully utilizing conveniently located structures space shortages and increasing cost of materials and products used in the construction of new buildings have resulted in a need to evaluate and more fully utilize the existing building inventory To this end this revision of the ASCE Standard Guideline for Structural Condition Assessment of Existing Buildings a replacement of ASCE 11 90 provides the design community with guidelines for assessing the structural conditions of existing buildings constructed of combinations of material including concrete masonry metals and wood It consists of an overview of preliminary and detailed assessment procedures of materials properties and test methods and of evaluation procedures for various physical conditions of the structure This information has been compiled and subjected to a consensus review and approved by the ASCE Standards Committee on Structural Condition to provide a much needed resource standards on building condition assessment for selected materials and for other areas related to the structural performance of buildings Professional engineers building owners and regulatory officials will find this Standard Guideline invaluable

Failure, Distress and Repair of Concrete Structures N. Delatte, 2009-11-24 Many concrete structures around the world have reached or exceeded their design life and are showing signs of deteriorating Any concrete structure which has deteriorated or has sustained damage is a potential hazard

Non-destructive Testing of Wisconsin Highway Bridges Alireza Ghorbanpoor, Neal Benish, 2005

Guide for Evaluation of Concrete Structures Prior to Rehabilitation ACI Committee 364, 1993

[Guide for Nondestructive Evaluation Methods for Condition Assessment, Repair, and Performance Monitoring of Concrete Structures](#) International Concrete Repair Institute, 2009

Report on Aging of Nuclear Power Plant Reinforced Concrete Structures D. J. Naus, 1996 The Structural Aging Program provides the US Nuclear Regulatory Commission with potential structural safety issues and acceptance criteria for use in continued service assessments of nuclear power plant safety related concrete structures The program was organized under four task areas Program Management Materials Property Data Base Structural

Component Assessment Repair Technology and Quantitative Methodology for Continued Service Determinations Under these tasks over 90 papers and reports were prepared addressing pertinent aspects associated with aging management of nuclear power plant reinforced concrete structures Contained in this report is a summary of program results in the form of information related to longevity of nuclear power plant reinforced concrete structures a Structural Materials Information Center presenting data and information on the time variation of concrete materials under the influence of environmental stressors and aging factors in service inspection and condition assessments techniques repair materials and methods evaluation of nuclear power plant reinforced concrete structures and a reliability based methodology for current and future condition assessments Recommendations for future activities are also provided 308 refs 61 figs 50 tabs **NEHRP**

Guidelines for the Seismic Rehabilitation of Buildings, 1997 Codes and Standards and Applications for Design and Analysis of Pressure Vessel and Piping Components, 1991 Robert F. Sannataro, 1991 **Repair and Renovation of Concrete Structures** Ravindra K. Dhir, M. Roderick Jones, Li Zheng, 2005 Preface Introduction Organising Committee Scientific and Technical Committee Collaborating Institutions Sponsoring Organisations with Exhibition Exhibiting Organisations Supporting Institutions Opening Paper Getting it Right From Testing Through Diagnosis to Lasting Repair

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Condition Assessment of RC Structures by Electro Chemical Method Linear Polarization and Accelerated Carbonation Experiments THEME 3 REPAIR MATERIALS AND METHODS Keynote Paper New Materials Concepts and Quality Control Systems for Strengthening Concrete Construction Repair of Foundation for Large Compressor On the Use of Non Adequate Primers to the Reinforcing Steel in Concrete Localised Repairs Evaluating External CFRP Strips and Internal MFX Steel Shear Bars for Shear Strengthening of Precast Concrete Channel Beams Evaluation of Corrosion Inhibitors for Remediation of St Mary s Multi Storey Car Park Colchester Improving Efficiency in the Galvanic Cathodic Protection of Concrete Structures Re alkalisiation of Carbonated Concrete by Alkalline Solutions Absorption and Diffusion Mechanisms External CFRP Tendons for Bridge Strengthening in Austria Anchorage of Additional External Prestressing Tendons Determination of Ductility and Deformability Undeces for FRP Strengthened RC Slabs Use of FRP Materials for Strengthening Concrete Structures Effect of Temperature on the Durability of Systems of Strengthening of Concrete Structures Axial Compressive Strength of Reinforced Concrete Columns Wrapped with Fibre Reinforced Polymers FRP Efficiency of Hybrid FRP Sheets in Strengthening Concrete Beams Embedded Fibre Bragg Grating Sensors for Monitoring the Health of Concrete Structures Performances of Bonded An Concrete International ,2004 *Assessment and Renovation of Concrete Structures* Ted Kay,1992 Part of the Concrete Design and Construction series this text considers the assessment and renovation of concrete structures It covers such areas as deterioration process testing techniques interpretation of results repair and renovation techniques and contract documents **Structural Condition Assessment** Robert T. Ratay,2005-01-17 In Structural Condition Assessment editor in chief Robert T Ratay gathers together the leading people in the field to produce the first unified resource on all aspects of structural condition assessment for strength serviceability restoration adaptive reuse code compliance and vulnerability Organized by the four main stages of a structural evaluation this book provides an introduction to structural deterioration and its consequences the business and legal aspects of conducting an evaluation initial survey and evaluation techniques for various structures and specific tests for five of the most common structural materials concrete steel masonry timber and fabric **Handbook of Corrosion Engineering 2/E** Pierre R. Roberge,2012-01-26 THE MOST COMPLETE UP TO DATE CORROSION CONTROL REFERENCE Fully revised throughout Handbook of Corrosion Engineering Second Edition discusses the latest advances in corrosion resistant materials methods and protective coatings This comprehensive resource covers all aspects of corrosion damage including detection monitoring prevention and control Written by a world renowned expert on the subject the book helps you to select materials and resolve design issues where corrosion is considered a factor Understand predict evaluate mitigate and correct corrosion problems with help from this authoritative guide Coverage includes Aqueous corrosion High temperature corrosion Atmospheric water seawater soil concrete and microbial environments Modeling life prediction and computer applications Identifying and inspecting corrosion failures Corrosion maintenance through inspection and monitoring Corrosion testing Selection and design of engineering

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Table of Contents Concrete Structures Condition Assessment Guidelines

1. Understanding the eBook Concrete Structures Condition Assessment Guidelines
 - The Rise of Digital Reading Concrete Structures Condition Assessment Guidelines
 - Advantages of eBooks Over Traditional Books
2. Identifying Concrete Structures Condition Assessment Guidelines
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Concrete Structures Condition Assessment Guidelines
 - User-Friendly Interface
4. Exploring eBook Recommendations from Concrete Structures Condition Assessment Guidelines

- Personalized Recommendations
 - Concrete Structures Condition Assessment Guidelines User Reviews and Ratings
 - Concrete Structures Condition Assessment Guidelines and Bestseller Lists
5. Accessing Concrete Structures Condition Assessment Guidelines Free and Paid eBooks
 - Concrete Structures Condition Assessment Guidelines Public Domain eBooks
 - Concrete Structures Condition Assessment Guidelines eBook Subscription Services
 - Concrete Structures Condition Assessment Guidelines Budget-Friendly Options
 6. Navigating Concrete Structures Condition Assessment Guidelines eBook Formats
 - ePub, PDF, MOBI, and More
 - Concrete Structures Condition Assessment Guidelines Compatibility with Devices
 - Concrete Structures Condition Assessment Guidelines Enhanced eBook Features
 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Concrete Structures Condition Assessment Guidelines
 - Highlighting and Note-Taking Concrete Structures Condition Assessment Guidelines
 - Interactive Elements Concrete Structures Condition Assessment Guidelines
 8. Staying Engaged with Concrete Structures Condition Assessment Guidelines
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Concrete Structures Condition Assessment Guidelines
 9. Balancing eBooks and Physical Books Concrete Structures Condition Assessment Guidelines
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Concrete Structures Condition Assessment Guidelines
 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
 11. Cultivating a Reading Routine Concrete Structures Condition Assessment Guidelines
 - Setting Reading Goals Concrete Structures Condition Assessment Guidelines
 - Carving Out Dedicated Reading Time
 12. Sourcing Reliable Information of Concrete Structures Condition Assessment Guidelines

- Fact-Checking eBook Content of Concrete Structures Condition Assessment Guidelines
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

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