ACI 562-16:
Assessment, Repair, and Rehabilitation of Existing Concrete Structures

ACI is:
• A technical and educational society dedicated to improving:
  • design
  • construction
  • maintenance
  • repair
• One of the world’s largest sources of concrete knowledge
• 501.C.3 corporation

ACI is NOT:
• A Trade or Promotional Association
• A Government Agency
• An Educational Institution
ACI members are:
- Architects
- Consultants
- Contractors
- Educators
- Engineers
- Materials Suppliers
- Lawyers
- Researchers
- Students
- Laboratory Technicians
- Insurance Agents

More than 400 technical documents, including:
- Codes
- Specifications
- Reports and Guides
- References
- Annual *Manual of Concrete Practice*

Certification Programs
- Field Testing Technician
- Flatwork Finisher
- Strength Technician
- Laboratory Technician
- Aggregate Technician
- Concrete Construction Inspector
- Tilt-Up Supervisor and Technician
- Shotcrete Nozzleman
- Adhesive Anchor Installer
Educational offerings:
More than 100 online learning modules supporting:
• Technical committee documents
• Certification
• General education

Part I
I-A: Why do we need a uniform concrete repair code?
I-B: Relative success with current repair methods
I-C: Reasons for repair failures
I-D: Goals of ACI 562 – “Repair Code”

Part II
II-A: Model Building Code
II-B: Understanding the Code Development Process
II-C: State and Local Codes
II-D: Action Plan

I-A: Why a Repair Code?

Create a uniform set of requirements
• Consistent methods to decide governing code for repair work
• Consistent methods to assess damage

Identify flexibility in repair solutions
• Performance base and prescriptive approach
I-A Why?: $18 to 21 billion/year
Source: American Concrete Institute (ACI) Foundation’s Strategic Development Council

I-B Successes: Factors affecting concrete (case study)

I-B Successes: Repair methods: Conventional approaches
I-B Successes:

![Graph showing repair performance over time.]

I-C Failures: Common Causes of Failed Repairs

**Engineering issues:**
- Incorrect diagnosis of the cause of deterioration
- Incorrect design of the repair
- Selection of inappropriate repair material

**Construction issues:**
- Incorrect method of applying repairs
- Workmanship issues

Part I-D Goals: ACI 562 a New Repair Code

- Standardizes industry practice
- Licensed design professional
- Building inspectors
- Owners
- Supplements IEBC or as a stand-alone code
Part 1-D: What type of code is it?
- Performance and prescriptive
- Minimum material and design
- Minimum life safety and repair performance

Part 1-D: Where is ACI 562 applicable?
- Buildings that hold a legal certificate of occupancy

Part II-A: Code
Part II-A: Code
International Code Council family of codes

Part II-B Process: ICC Committee Action Hearings

Part II-B: ICC Public Comment Hearings

Code Officials at PCH
Subsequent On-line Voting

Part II-C: States
Part II-C States:

Local officials voting
Legislative influence
State codes

Part II-D Plan: Network of Advocates

Network of grass roots initiatives
Need committed volunteers
Orchestration by ACI and allied interests
Need committed organizations
Need testimonials for I-code proposals
Need code change proposals
Need code official testimonies at hearings

Part II-D Plan: State adoptions - Hawaii State Building Code

(3) Existing Concrete Structures.
Section 3401.6 Alternative compliance is amended to read as follows:

3401.6 Alternative compliance.
1) Work performed in accordance with the International Existing Building Code shall be deemed to comply with the provisions of this chapter.
2) Work performed in accordance with the 2016 version of the American Concrete Institute Committee 562, “Code Requirements for Assessment, Repair, and Rehabilitation of Existing Concrete Structures” shall be deemed to comply with the appropriate provisions of this chapter or the International Existing Building Code. Wherever the term International Existing Building Code (IEBC) is used in ACI 562-16, it shall mean International Existing Building

Gaur Johnson, Moffatt and Nichol
Part II Plan: Representation:

- Yourself
- Your firm
- Your organizations

Established as a resource
Advise ACI is a professional society
Encourage adoption for public benefit

Thank you!