



American Concrete Institute®
Advancing concrete knowledge

American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094, USA
PHONE: 248-848-3700 • FAX: 248-848-3701
WEB: www.concrete.org

Agenda
TAC Repair and Rehabilitation Committee
Meeting
Tuesday, March 28, 2006, 9:00 AM - 12:00 PM
Room W-CALDWELL
Charlotte, NC

Members

James McDonald (Chair)
Miroslav Vejvoda (Secretary, Non-voting)
Paul Carter
Peter Emmons
Paul Gaudette
Fred Goodwin

Lawrence Kahn
Antonio Nanni
Kelly Page
Jay Paul
Randall Poston
Michael Sprinkel

- 1.0 Welcome
- 2.0 Introduction (McDonald)
- 3.0 Approval of the Minutes from the Meeting in Kansas City, November 8, 2005
- 4.0 Approval of Agenda
- 5.0 Repair Code (Poston)

In Kansas City, TAC approved a creation of ACI committee 562 with the mission to “develop and maintain code requirements for evaluation, repair, and rehabilitation of existing concrete buildings.” ACI committee 562 Chair Poston is asked to update the committee.



American Concrete Institute®
Advancing concrete knowledge

American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094, USA
PHONE: 248-848-3700 • FAX: 248-848-3701
WEB: www.concrete.org

6.0 Implementation of the TRRC Action Plan (McDonald)

In Kansas City, TRRC members were asked to review their designated committees' documents in detail and determine what repair-related areas of those documents need to be addressed according to the TRRC action plan (Exhibit 6.0 A).

McDonald	201, 207, 210, 221, 346, 423, 446
Carter	506, 342, 365, 304, 357, 439, 524
Emmons	229, 230, 330, 332, 371, 533
Gaudette	303, 336, 363, 362, 372, 546
Goodwin	216, 225, 311, 351, 355, 364, 543
Kahn	301, 313, 341, 350, 363, 530
Nanni	360, 373, 437, 440, 544, 549
Page	116, 212, 232, 234, 303, 309, 547
Paul	222, 302, 315, 343, 349, 515
Poston	224, 228, 318, 352, 408, 550
Sprinkel	325, 345, 503, 504, 548, 551

Chair McDonald encourages members to review the compiled table (Exhibit 6.0 B – separate document) of repair and rehabilitation in ACI documents. Strategies need be developed for each committee to enhance evaluation, repair, rehabilitation, strengthening and protection within ACI.

This item is the main subject for discussion for this meeting. TRRC should communicate the resulting strategy regarding repair issues to TAC and the technical committees.

7.0 Council of Repair and Protection (Emmons)

Peter Emmons is asked to report on implementation of the Repair and Protection Council

8.0 Next TRRC Meeting

9.0 Adjourn



American Concrete Institute®
Advancing concrete knowledge

American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094, USA
PHONE: 248-848-3700 • FAX: 248-848-3701
WEB: www.concrete.org

Exhibit 6.0 A

TRRC ACTION PLAN AND COORDINATION ROLE June 30, 2004

Background

A specific and ongoing TRRC task has been providing oversight to Committees 364, Rehabilitation, and 546, Repair of Concrete. One of the other goals that was set for TRRC last year was to develop an action plan for guiding and coordinating technical activities related to repair and rehabilitation within all ACI committees, and to establish relationships with other organizations involved in concrete repair worldwide. Consequently, a 5-yr plan was developed by TRRC and reviewed by TAC (Fall 2003). The action plan, revised based on TAC review comments, is described in the following.

Thematic Role

One of the major themes that emerged during development of the action plan was that TRRC activities should not be restricted to “repair” and the coordination of those specific committees and their documents specifically related to repair. Instead, TRRC should assist TAC in providing leadership and coordination for all committee efforts related to evaluation, repair, rehabilitation, strengthening, protection, etc., of existing structures. If the work product of ACI technical committees is divided into “new” and “existing” concrete, most technical committees deal with design, materials, mixtures, and construction related to new structures with significantly less attention to those activities primarily related to existing structures (Fig. 1).

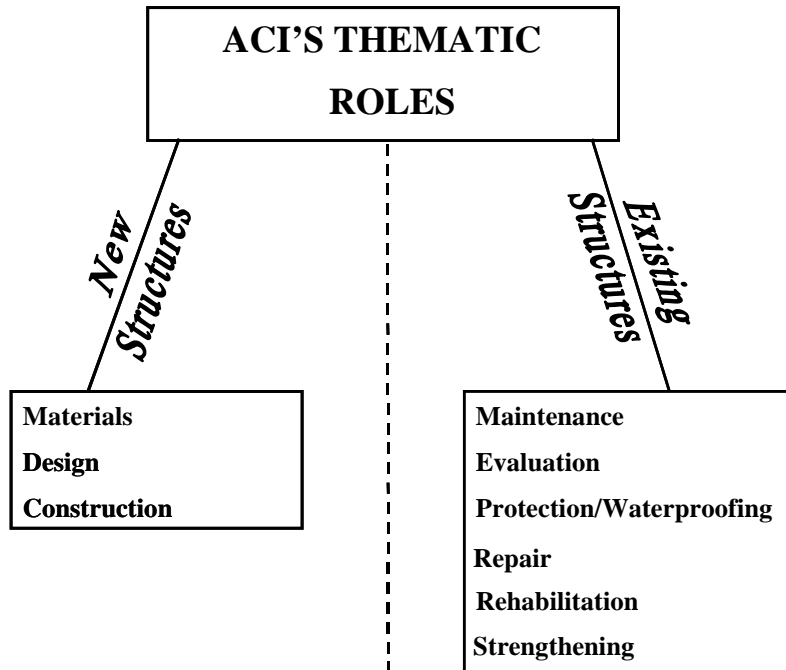


Figure 1. Arbitrary Division of Activities Related to New and Existing Structures

To expand this concept further and the proposed role of TRRC, ACI technical committees' work product could be separated into those documents related to new construction and those related to existing construction. TRRC will coordinate technical activities related to existing construction. As examples, the ACI 318 Building Code is primarily related to new construction; ACI 224R, Control of Cracking in Concrete, deals primarily with new construction; and, ACI 224.1R, Causes, Evaluation and Repair of Cracks, deals primarily with existing construction. In this context, the role of TRRC is less one of oversight of specific committees and more of coordination of a specific topic – namely, technical activities related to existing concrete construction.

Another reason this division by “new” and “existing” has merit is that many public agencies and private entities think and plan strategically and financially in term of “new” and “existing”. “New” implies capital expenditures, whereas, “existing” implies maintenance expenditures.

Specific Role & Plan

The following are specific roles and responsibilities proposed for TRRC:

- TRRC will be responsible for identifying and resolving inconsistencies in ACI technical documents related to repair and rehabilitation of existing structures.



American Concrete Institute®
Advancing concrete knowledge

American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094, USA
PHONE: 248-848-3700 • FAX: 248-848-3701
WEB: www.concrete.org

- TRRC will assist ACI technical committees in the development of appropriate core documents related to evaluation, repair, and rehabilitation of existing structures.
- The mission of 364 should be revised to: develop and report information on the analysis and design of repair, rehabilitation, and strengthening of existing concrete and masonry structures.
- The mission of 546 should be changed to: develop and report information on means and methods of repair, rehabilitation, and strengthening of existing concrete and masonry structures.
- Three committees (364, 546 & 437) will be responsible for development and maintenance of several core documents related to existing structures. TRRC will meet regularly with these committees and any other ACI committees that are interested in developing a document related to evaluation, repair, or rehabilitation of existing structures.
- All ACI committees need to distinguish between their documents that deal with existing structure topics and those that deal with other topics. In those cases where a given document addresses both new and existing concrete, committee goals should include dividing the information into two separate documents. If necessary, one document should reference the other for applicable information. All ACI committees will be encouraged to report information about existing structures within their field of expertise.
- TRRC will assist in identifying general topics for committees to consider when they write an existing structures document, such as maintenance, life-cycle analysis, analysis and design approaches, means and methods, strengthening, and demolition.
- Certain committees, such as Cracking (224) and NDE (228), should maintain core documents that will be referenced by most other documents related to existing structures.
- TRRC will maintain a strong coordination position, both within ACI and between ACI committees and other groups such as ICRI.
- TRRC as a group or selected TRRC members should act as outside reviewers during TAC review for all technical committee reports and standards that cover repair, rehabilitation and strengthening.

Timetable

TAC approved the existing strategic plan and TRRC mission at the summer meeting in Traverse City in 1999. The current mission and responsibilities of TRRC, as reviewed and approved annually by TAC, will not change. The proposed Action Plan augments and defines more specific roles for TRRC. The timetable for the activities in the new role, when approved by TAC, is shown in Figure 2.



American Concrete Institute®
Advancing concrete knowledge

American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094, USA
PHONE: 248-848-3700 · FAX: 248-848-3701
WEB: www.concrete.org

TAC approves action plan					←→																		
TRRC reviews current status of 364, 437, and 546 documents.					←→																		
TRRC meets with 364, 437, and 546 to discuss their respective involvement in the approved action plan.							X																
TRRC reviews current status of committee docs and sends correspondence to committees that have published info related to existing structures.						←→																	
TRRC holds a meeting with the affected committees to discuss the approved action plan.								X															
364, 437, and 546 revise related documents per approved action plan.									←→														
364, 437, and 546 chairs meet with TRRC for periodic updates.								X		X		X		X									
Related committees revise repair related documents according to approved action plan and revised 364, 437, and 546 documents.																	←→						
Related committee chairs meet with TRRC for periodic updates																		X		X		X	
	WIN	SPR	SUM	FALL	WIN	SPR	SUM	FALL	WIN	SPR	SUM	FALL	WIN	SPR	SUM	FALL	WIN	SPR	SUM	FALL	WIN		
	2003				2004				2005				2006				2007						

Figure 2. Action Plan Schematic - TRRC Coordination Role

Clean-Up Issues

In the past, TAC has not provided specific rules concerning operation of its subcommittees. However, TRRC believes it is important to have basic ground rules to ensure smooth operation and balanced representation.

TAC appoints the Chair of TRRC, with terms similar to other technical committee chairs. TRRC membership is by invitation only, and the TRRC Chair is responsible for appointing the number of members appropriate for committee activities.