



Concrete — A Century of Innovation

AGENDA

TAC Specifications Committee

Washington Hilton
Dupont Room
Wednesday March 17, 2004
7:00 to 10:00 AM
Washington, D.C.

Voting Members:

Nicholas J. Carino, Chair
Todd R. Watson, Secretary (Non-voting)
Jon B. Ardahl
William L. Barringer
William C. Bretnall
Jeffrey W. Coleman
D. Gene Daniel

I. Leon Glassgold
Ronald L. Hollrah
Alfred L. Kaufman, Jr.
W. Calvin McCall
Myles A. (Tony) Murray, TAC
Contact
Aimee Pergalsky
Arthur T. Weiss, Jr.

Associate Members

Karl J. Bakke
James R. Baty
Daniel P. Dorfmueller
Sidney Freedman

Kenneth G. Kazanis
William H. Oliver, Jr.
Robert J. Ryan
Michael S. Stenko

1. Call to Order and Introduction of Members and Visitors

1.1 Approval of Agenda

ACTION: Are any changes to the agenda required?

1.2 Approval of Minutes

ACTION: Does TSC approve the Minutes of the 2003 fall meeting in Boston?

1.3 Membership Report

REPORT: The current TSC roster is shown as Exhibit 1. Members are asked to review the roster and inform Secretary Watson of any corrections.

ACTION: Are there any ACI members that should be encouraged to join TSC?

2. ACI Specification Manual (*ASpM*)

The 2002 version of the *ACI Specifications Manual* is available on the ACI Web site at: http://www.concrete.org/COMMITTEES/com_forms.htm

2.1 Punchlist

As a result of the TAC review and comments received during the balloting of the last revision, new items to be considered in the next revision have been identified. A punch list of these items is shown as Exhibit 2.1. Volunteers were assigned at the Boston meeting to develop draft language to address these items. Some of the items were submitted for ballot in TSC Ballot 03-1 on December 22, 2003, with a canvassing date of January 22, 2004. Item 1 of TSC Ballot 03-1 is covered under section 7 of this agenda; items 2 - 5 are covered in sections 2.2 - 2.5 of this agenda, respectively.

ACTION: Members assigned items on the punch list are asked to report status.

2.2 TSC Ballot 03-1 Item 2

“Accepted” versus “specified” – At the Boston meeting Jon Ardahl stated that the term “accepted” is an action taken by the Architect/Engineer, rather than the Specifier. He suggested that the definition of “accepted” in the *ASpM* be changed to “determined satisfactory by Architect/Engineer Specifier”, and that the definition of “submitted” be changed to “documents or materials provided to Architect/Engineer Specifier.” The rationale provided was that the specifier for a project might not be the entity or individual issuing the contract documents or administering the work under the contract documents. In addition, Ardahl suggested moving the definition of “Specifier” in section **1.2.2 Terms used in specifications** to section **1.2.1 Terms used in this manual**.

TSC members present approved these changes and they were submitted for letter ballot.

ACTION: Ballot results were 8 Affirmative, 0 negative, 0 Abstain, 5 not returned (Bretnall, Coleman, Hollrah, Kaufman, and Weiss). The change will be submitted to TAC for approval.

2.3 TSC Ballot 03-1 Item 3

Forward F.4—During the spring TAC review of ACI 301, it was noted that there were discrepancies between the concrete sampling requirements in ACI 318 and ACI 301, with ACI 301 requiring more frequent sampling. ACI 301 justified having the more stringent requirement on the basis of statement F4 in the Forward to Checklists given in the *ASpM*: “*Building codes set minimum requirements necessary to protect the public. ACI Specification ____ may stipulate requirements more restrictive than the minimum. The Specifier shall make adjustments to the needs of a particular project by reviewing each of the items in the checklists and including those the Specifier selects as mandatory requirements in the Project Specification.*” This was discussed at the summer TAC meeting and TAC agreed that this section of the Forward should be revised to read: “*Building codes set minimum requirements necessary to protect the public. ACI*

Specification _____ may stipulate suggest requirements more restrictive than the minimum in the Optional Checklists. The Specifier shall make adjustments to the needs of a particular project by reviewing each of the items in the checklists and including those the Specifier selects as mandatory requirements in the Project Specification.”

The TSC members present at the Boston meeting discussed this section of the Foreword decided that paragraph F4 should be eliminated rather than revised. This deletion was submitted for letter ballot to TSC. The rationale for deletion is as follows:

“Current wording in F4 allows for conflicts on items that are common to a code and a specification. The purpose of the *Foreword to Checklists* is to provide guidance on the use of the checklists. The first sentence goes beyond the scope of explaining the checklists. The second sentence provides information that is covered in F3 and F5. Therefore, it is proposed that this paragraph be deleted.”

Ballot results were 7 Affirmative, 1 Negative (Daniel), 0 Abstain, 5 Not Returned (Brettnall, Coleman, Hollrah, Kaufman, and Weiss). Daniel voted negative for the following reason:

“The rationale states that the first sentence of F4 goes beyond the scope of explaining the checklists. I disagree with this. I read this sentence as a very specific reason for having some of the checklist items and this serves as a warning to the A/E that the 318 Code may have restrictions.”

ACTION: The negative vote will be discussed and resolved.

2.4 TSC Ballot 03-1 Item 4

New Paragraph to Preface: Calvin McCall suggested a new paragraph be added to the Preface (Section 3.2 of the *ASpM*). McCall pointed out that ACI 301 includes a paragraph explaining the use of nonmandatory language within the specification, such as “may,” and recommended the paragraph be adopted by TSC. There was considerable discussion over the use of “may” to indicate an option. Chair Carino consulted with other members of TSC and prepared a letter ballot for TSC on the addition of following Paragraph P5 to the Preface.

P5. The Specification is written to the Contractor. When a provision of this Specification requires action by Contractor, the verb “shall” is used. If Contractor is allowed to exercise an option when limited alternatives are available, the phrasing “either...or...” is used. Statements provided in the Specification as information to Contractor use the verbs “may” or “will.” Informational statements typically identify activities or options that “will be taken” or “may be taken” by Owner or Architect/Engineer.

Ballot results were 7 Affirmative, 1 Negative (Daniel), 0 Abstain, 5 Not Returned (Brettnall, Coleman, Hollrah, Kaufman, and Weiss). Daniel voted negative for the following reason:

“Concrete specifications form a part of the project specification just as the grading specification or plumbing specification do. As part of the overall picture and a part of the project contract, the concrete specification is binding on both the contractor and the owner.

The concrete specification is mostly specific in what the contractor must do, which also tells the owner the full extent of what he/she can expect as an owner.

For example, if a specification permits calcium chloride, the owner does not have the right to prohibit the use of calcium chloride without additional compensation to the contractor.

This proposed item fails to recognize that testing by the owner is included in 301 and that the specified test methods and the required technician certifications are essential elements to be imposed on the owner.”

ACTION: The negative vote will be discussed and resolved.

2.5 TSC Ballot 03-1 Item 5

Revision of 5.3.4: In the course of preparing ballot item 4, Chair Carino observed that wording in 5.3.4 conflicts with proposed P5. Therefore, he initiated a revision of 5.3.4. The rationale for the change was as:

The word “may” is not appropriate in a mandatory language document, because a statement with “may” is not enforceable. When the contractor is permitted to exercise an option under prescribed conditions, the wording “is permitted” is acceptable. It is, however, best to avoid this wording by rewriting the sentence.

The following revision to 5.3.4 was proposed:

5.3.4 Options—Use It is acceptable to use the verb “may” wording “is permitted” to indicate that Contractor can exercise an option of its own choice if prescribed conditions are satisfied. If possible, however, it is better to rewrite the sentence to avoid this wording. Use “shall-either ... or...” where Contractor has limited, specified alternatives.

Examples:

Use: When surface temperature of concrete is within 20 °F of ambient or surrounding temperature, protection measures are permitted to be removed.

Use(best): Protection measures are not required when surface temperature of concrete is within 20 °F of the ambient or surrounding temperature.

Do not use: When surface temperature of concrete is within 20 °F of ambient or surrounding temperature, protection measures may be removed.

Use: Consolidate concrete either by vibration or rodding.

Do not use: Concrete may be consolidated by vibration or rodding.

Ballot results were 6 Affirmative (Pergalsky comment), 2 Negatives (Ardhal and McCall), 0 Abstain, 5 Not Returned (Brettnall, Coleman, Hollrah, Kaufman, and Weiss). Arhal voted negative for the following reason:

“Everything in this item is unacceptable starting with the rationale. The use of the word ‘may’ in contract documents is acceptable when used correctly. The proposed alternatives are unacceptable because they are not clear concise language that must be used in contract documents and do not state what is acceptable. The obsession with not using ‘may’ in mandatory documents is not correct.

The word ‘may’ is defined as ‘to be allowed or permitted to’ and also ‘to be obliged to; must. Used in statutes, deeds, and other legal documents.’

If it can be used in the various legal documents then it can and should be permitted in the contract documents because they are also legal documents. Therefore it is acceptable to use ‘may’ in the specifications.

The current wording in the manual is correct and acceptable based on the definitions of ‘may’.”

McCall voted negative for the following reason:

“There is nothing wrong with the term ‘may.’ There is no advantage using the term ‘is permitted’ rather than ‘may’. If we were to this, the term would probably be ‘is permitted to.”

The term “is permitted” does work well when we are describing items that may happen to the contractor. It sounds confusing for the A/E to state that he is permitted to do something. It also sounds confusing when we state something that may happen to a material.

Suggest that we require that the use of ‘may’ be minimized in specifications. The term ‘can’ can replace ‘may’ in most applications.”

ACTION: The negative votes will be discussed and resolved.

3. Status of Specification Activities

Background: TSC members are assigned as liaisons to ACI committees known to be working on or planning to work on a specification. Committee members are appointed as associate members of TSC (unless the TSC liaison is also a member of the committee). Exhibit 3 summarizes ACI specification activities and current membership assignments.

REPORT: TSC Liaison and Associate Members are asked to report their respective committees’ activities, update Exhibit 3, and discuss any actions required of TSC.

Committee 117: Liaison Tony Murray. Associate Member Karl Bakke.
Committee 301: Liaison Jon Ardahl.
Committee 303: Liaison Alfred Kauman. Associate Member Dan Dorfmueller.
Committee 305: Liaison Aimee Pergalsky. Associate Member Robert Ryan.
Committee 306: Liaison Aimee Pergalsky. Associate Member Robert Ryan.
Committee 308: Liaison Aimee Pergalsky.
Committee 330: Liaison Art Weiss. Associate Member Ken Kazanis.
Committee 336: Liaison Art Weiss. Associate Member Billy Oliver.
Committee 346: Liaison Alfred Kaufman.
Committee 347: Request for a specification pending.
Committee 350: Liaison Jon Ardahl.
Committee 423: Liaison Gene Daniel.
Committee 503: Liaison Tony Murray.
Committee 506: Liaison Jon Ardahl.
Committee 530: Liaison pending committee decision on future of specification.
Committee 533: Liaison Art Weiss. Associate Member Sidney Freedman.

Committee 548: Liaison Art Weiss. Associate Member Mike Stenko.
Committee 551: Liaison Alfred Kaufman. Associate Member Jim Baty.

4. Specification Review

Background: Section 1.3.3 of the *ASpM* explains the TSC review process for ACI specifications. The intent is for TSC to review new and revised documents when they are being balloted by the committees. The process has yet to be implemented fully. ACI staff will be made aware of all specification-writing committees so that TSC reviews will be triggered when documents are being balloted.

4.1 ACI 548 Draft Specification for Type EM Polymer Concrete Overlays

This draft was submitted to TAC but it had not been reviewed by TSC. Watson asked Chair Carino to look over the draft and recommend whether it was ready for TAC review. Carino made detailed comments on the documents, which he had had reviewed two years ago. The draft does not follow the *ASpM* and he recommended that it be sent back to the committee. Art Weiss, TSC Liaison to ACI 548, was asked to discuss the issues with the 548 Chairman so that the committee understands fully what needs to be done.

REPORT: Carino, Weiss, and Stenko will report.

4.2 ACI 548 Draft Specification for Type ES Polymer Concrete Overlays

The same comments as in 4.2 apply. The ES specification is basically the same document as the EM specification. Carino believes these specifications need to have a clear explanation of what is the difference between these two techniques. The ES document apparently uses epoxy slurry but this slurry is not defined.

REPORT: Carino, Weiss, and Stenko will report.

5. Requests for New Specifications

Staff has received no new requests.

6. Planning

6.1 TSC Mission

The TSC mission is: “Assist the technical committees in preparing and maintaining specifications in the correct format and language, and manage specification development by the Institute.”

6.2 Proposed Goals for 2004

- Oversee reorganization of ACI 301 in accordance with TAC directives;
- Maintain database of ACI specification activities;
- Review draft specifications in a timely manner;
- Develop training program for writing ACI specifications;
- Maintain punch list for future revision to the *ACI Specifications Manual*;
- Develop proposal for ACI e-Specifications.

ACTION: Does TSC approve the proposed Goals for 2004?

7.0 ACI Specification Policy

7.1 Background

Refer to Item 7.0 of the minutes of the Boston TSC meeting. To summarize, at their summer 2003 meeting, TAC reaffirmed that ACI 301 should contain all information for construction of structures designed according ACI 318. A task group (A. Pergalsky (Chair), T. Murray, G. Daniel, and D. Dorfmueller) had been appointed at the March 2003 TSC meeting to develop a plan and timetable for reorganization of ACI 301. The TG's proposal was discussed at the Boston meeting and was balloted for approval by TSC as part of TSC Ballot 03-1 on December 22, 2003, with a canvassing date of January 22, 2004.

The results were 6 Affirmative, 2 Negatives (Ardahl and Daniel), 0 Abstain, 5 not returned (Brennall, Coleman, Hollrah, Kaufman, and Weiss).

Since this was an administrative ballot, the chair did not believe it was necessary for TSC to resolve the two negative votes. Therefore, On February 8, 2004, Chair Carino submitted to TAC the TSC recommendation for the reorganization of ACI 301. The submission included the ballot item and the comments by Ardahl and Daniel, and is shown as Exhibit 7.1. The two negative comments are also repeated here.

Ardahl voted negative for the following reason:

“Page 3, lines 40-44. Chair designates selection of committee members needs to be revised. The chair should not be required to check with the stated individuals or groups when deciding on committee membership. The guidelines for membership on the committee should be established so the chair can make a decision based on the guidelines and then get on with the real task of developing the specification. I have no problem with the various committees helping establish the guidelines and then monitoring the committee membership, but the chair needs to be able to control the committee with accountability to TSC and TAC. The guidelines that are stated will not permit the chair to run the committee and will hinder suitable progress in the development of the new specification. If TSC and the current chair have too much to say about how the chair designate organizes the new committee beyond general guidelines including the selection of subcommittee chairs this could hinder how the chair can manage the new committee. We do not want the committee chaired by a committee or multiple committees if we expect to make progress in the development of the new spec.”

Daniel voted negative for the following reason:

“ACI 301 is a nice specification, but it is seldom, if ever, used in a project specification. The non-use is probably due to the enormous number of checklist items it contains and the built-in difficulty in using the specification, but the latter is speculation on my part. In contrast, ACI 211, 305, 306, and 308 are often specified within project specifications.

I believe this proposed change to enlarge 301 and to do away with individual specifications that are being used is a disservice to A/Es who rely on the expert committee specifications, but reject the 301 specification. A better approach is to reduce 301 to the 5 basic chapters.”

REPORT: Carino will report.

7.2 e-Specifications

ACI Staff, TSC, and ACI 301 Chair McCall have been discussing the idea of preparing an “active” electronic specification that can be tailored to a specific project and included directly in the project specifications. At the Phoenix meeting, a task group composed of Art Weiss (Chair), Jon Ardahl, Al Kaufman, Jeff Coleman, and Jim Shilstone was asked to discuss alternative approaches and prepare a draft plan for discussion.

REPORT: Art Weiss is asked to report on the task group’s progress.

8. Workshop on Specification Writing

Art Weiss has been working on developing presentation materials for an upcoming training session on writing specifications. The focus will be on discussing how an ACI specification fits into the project specification and a review of the main features of the *ACI Specifications Manual*.

REPORT: Art Weiss is asked to report.

ACTION: Are we ready to request a session at a future convention?

9. New Business

10. Next Meeting

The next TSC meeting will be held on Wednesday morning at the 2004 Fall Convention in San Francisco.

11. Adjournment

EXHIBITS:

- Exhibit 1 — TSC Roster with Contact and Assignment Information
- Exhibit 2.1 — *ASpM* Punch List
- Exhibit 3 — ACI Specifications Activity Database
- Exhibit 7.1 — TSC Recommendation for reorganization of ACI 301

Copies:

- José M. Izquierdo, President, ACI
- Anthony E. Fiorato, Vice President, ACI
- James R. Cagley, Vice President, ACI
- Terence C. Holland, Past President, ACI
- William R. Tolley, Executive Vice President, ACI
- Sharon L. Wood, Chair, ACI TAC
- Daniel W. Falconer, Secretary, ACI-TAC

**Exhibit 1
 TSC Contact Information**

September 2003			
Name	Assignment	Telephone No.	E-Mail Address
TSC Officers and TAC Contacts			
Nicholas J. Carino	Chair	301/975-6063	ncarino@nist.gov
Todd R. Watson	Secretary TSC (NV)	248/848-3728	todd.watson@concrete.org
Sharon Wood	Chair TAC	512/471-7298	swood@mail.utexas.edu
Daniel W. Falconer	Secretary TAC	248/848-3726	daniel.falconer@concrete.org
Voting Members			
Jon B. Ardahl	301, 350, 506	785/887-9991	ard00097@netzero.net
William L. Barringer		505/293-8368	joy2Bill@aol.com
William C. Bretnall		216/241-7078	bbretnall@gba-engineers.com
Jeffrey W. Coleman		952/841-0200	jwcoleman2@cs.com
D. Gene Daniel	305, 423	479/636-1856	dgedinc@aol.com *
I. Leon Glassgold		410/3355-4390	102126.1102@compuserve.com
Ronald L. Hollrah		913/458-8300	hollrahrl@bvsg.com
Alfred L. Kaufman, Jr.	303, 346, 551	925/866-2780	akaufman@rmcpmi.com
W. Calvin McCall		704/392-1506	wcmccall@structuralservicesinc.com
M. A. (Tony) Murray	TAC Contact, 117, 503	303/688-8244	tmurray@restruaction.com
Aimee Pergalsky	306, 308	216/491-9265	geoaimee@aol.com
Arthur T. Weiss, Jr.	330, 336, 533, 548	770/860-1942	aweiss7501@aol.com
Associate Members			
Karl J. Bakke	117	303/674-2290	karl.bakke@kalmanfloor.com
James R. Baty	551	319/895-6911	jbaty@cfawalls.org
Daniel P. Dorfmueller	303	513/933-0489	dorf@go-concepts.com
Sidney Freedman	533	312/786-0300	sfreedman@pci.org
Kenneth G. Kazanis	330	248/354-9050	ken.kazanis@lafarge-na.com
William H. Oliver, Jr.	336	713/207-4379	billy.oliver@centerpointenergy.com
Robert J. Ryan	305, 306,	216/839-7500	robert.ryan@degussa.com
Michael S. Stenko	548	914/636-1000	mstenko@transpo.com
*Text e-mail messages only; mail hard copies of any attached files			

Exhibit 2.1

2002 ACI Specification Manual Punch List of Future Changes

Section	Issue	Action
2.3	TAC 7/02: Clarify if all topics in Section 2.3 are required. Current language is unclear.	Sept. 2003; Art Weiss appointed to develop proposed wording.
3.3 Definitions	TAC 7/02: Including definitions for all terms in a spec that are not in 116R could be overwhelming; however, a clear statement that significant, important, pertinent, or, etc, terms should be defined will be difficult. Also, I am not sure what is meant by terms used in unique ways.	Sept. 2003: Jon Ardahl appointed to develop proposed wording.
	Consider recommending a structured format for checklist items: <ul style="list-style-type: none"> • Statement of requirement • Guidance to specifier • References 	Sept. 2003: Al Kaufman appointed to develop proposed wording.
	Define specification formats <ul style="list-style-type: none"> • Product • Prescription • Performance 	Sept. 2003: Aimee Pergalsky appointed to develop proposed wording.
	Recommended format for specifying performance criteria.	Sept. 2003: Aimee Pergalsky appointed to develop proposed wording.
4.4	Should guide specifications include mandatory and optional checklists? A critical review of Chapter 4 is needed.	Sept. 2003: Calvin McCall and Art Weiss (chair) appointed to develop proposed wording.
3.4.1	Wording in F4 encourages conflict between codes and specifications.	Proposed: Revise second sentence to read: <i>ACI Specification _____ may stipulate suggest requirements more restrictive than the minimum in the Optional Requirements Checklist.</i> Sept. 2003 Minutes, Item 2.2.1: delete paragraph F4 from the foreword. On TSC Ballot 03-1, Negative by Daniel
1.2	“Architect/Engineer” is not in agreement with ACI 116R, which uses “architect-engineer.”	Sept. 2003 Minutes, Item 2.2.2: TSC voted to keep “Architect/Engineer” and to notify ACI Committee 116 of their action. Done
1.2.1/1.2.2	“Accepted” versus “specified” – “Accepted” is an action taken by the Architect/Engineer, rather than the	Sept. 2003 Minutes, Item 2.2.3: Move the definition of Specifier in section 1.2.2 to 1.2.1. Revise definitions. Approved in TSC

Section	Issue	Action
	Specifier.	ballot 03-1.
3.2	Add new P5 to Preface to explain non-mandatory language.	Sept. 03 Minutes, Item 2.2.4. TSC Ballot 03-1, Negative by Daniel.
5.3.4	Revise wording on options to avoid “may.”	TSC Ballot 03-1, Negatives by Ardahl and McCall.

Exhibit 3

ACI SPECIFICATIONS ACITIVITY DATABASE

Comm. No.	Title	Specification	Status	Comment/ Action	TSC Liaison	Nonvoting TSC Members
117	Tolerances	Standard Specifications for Tolerances for Concrete Construction and Materials	117-90	Revisions submitted to TAC 7/02. Approved. Committee responding to TAC comments.	Murray	Bakke
301	Specifications for Concrete	Specifications for Structural Concrete	301-99	Submitted to TAC review 3/03. Responding to TAC comments	Ardahl (M)*	Not needed
303	Architectural CIP Concrete	Standard Specification for Cast-in-Place Architectural Concrete	303.1-97	Agreement reached with 301. Revising spec.	Kaufman	Dorfmueller
305	Hot Weather Concreting	Standard Specification for Hot Weather Concreting	In Preparation	Approved by TAC 9/03.	Daniel	Ryan
306	Cold Weather Concreting	Standard Specification for Cold Weather Concreting	306.1-90 (R-98)	No action on Spec. Working on report first.	Pergalsky	Ryan
308	Curing Concrete	Standard Specification for Curing Concrete	308.1-98	Revision reviewed by TSC 9/03. not approved Planning new Specs. Need TAC approval of request	Pergalsky (M)*	Not needed
330	Concrete Parking Lots	Standard Specification for Plain Concrete	330.1-03	New version	Weiss	Kazanis

Comm. No.	Title	Specification	Status	Comment/ Action	TSC Liaison	Nonvoting TSC Members
	and Site Paving	Parking Lots		published.		
336	Footings, Mats, and Drilled Piers	Specification for the Construction of Drilled Piers	336.1-01	No action reported	Weiss	Oliver
346	CIP Pipe	Specification for Cast-in-Place Concrete Pipe	346-01	Review in progress.	Kaufman (M)*	Not needed
347	Formwork for Concrete	(Proposed specification on formwork)	Planning	TAC approval pending TSC recommendations on specification policy.		
350	Environmental Structures	Proposed Specification for Environmental Engineering Concrete Structures	In preparation	TSC/TAC approval to proceed given 4/02; Committee drafting it; committee ballot expected after Vancouver	Ardahl (M)*	Not needed
423	Prestressed Concrete	Specification for Unbonded Single Strand Tendons and Commentary	423.6-01/423.6R-01	No action reported	Daniel	423 Chair (Bruce Russell) to appoint TSC rep.
503	Adhesives in Concrete	Standard Specification for Bonding Concrete, Steel, Brick and Other Materials to Hardened Concrete with a Multi-Component Epoxy Adhesive	503.1-92 R97		Murray (M)*	Not needed
		Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive	503.2-92 R-97			

Comm. No.	Title	Specification	Status	Comment/ Action	TSC Liaison	Nonvoting TSC Members
		Standard Specification for Producing a Skid Resistant Surface on Concrete by the Use of a Multi-Component Epoxy System	503.3-92 R97	Need to check for conflicts with 548 Specs		
		Standard Specification for Repairing Concrete with Epoxy Mortars	503.4-92 R97			
		Standard Specification for Crack Repair by Epoxy Injection	In preparation	Submitted to TAC, Fall 2002. Approved by TAC. Committee responding.		
506	Shotcreting	Specifications for Shotcrete	506.2-95	Finalizing rewrite from ballot comments.	Ardahl (M)*	Not needed
		Guide Specification for Concrete for Underground Support	In preparation	TAC approval not requested; Ardahl review recommends against Guide Spec.; develop as Guide.		
530	Masonry Standards Joint Committee	Specification for Masonry Structures	530.1-99	Discussing idea to separate code and spec requirements.	(pending)	(pending)
533	Precast Panels	Proposed Specification on Precast Panels	In preparation. TAC approval needed.	Weiss to review current draft	Weiss	Freedman
548	Polymers in Concrete	Standard Specifications for Latex Modified Concrete (LMC) Overlays	548.4-93 R98		Weiss	Stenko

Comm. No.	Title	Specification	Status	Comment/ Action	TSC Liaison	Nonvoting TSC Members
		Standard Specifications for Type EM Polymer Concrete Overlays	In preparation	Need to check w/ 503.3 for conflict. Comments by Carino sent to Committee		
		Standard Specifications for Type ES Polymer Concrete Overlays	In preparation	Comments by Carino sent to Committee		
551	Tilt-Up Construction	Specification on Tilt-Up Construction	In preparation.	Committee ballot 12/02; Kaufman and Carino provided comments	Kaufman	Baty

*(M) indicates that the TSC liaison is also a member of the committee and an associate member from that committee is not necessary

Exhibit 7.1



Concrete — A Century of Innovation

TAC Specification Committee

February 8, 2004

TO: Sharon L. Wood, TAC Chair

FROM: Nicholas J. Carino, TSC Chair

SUBJECT: TSC Recommendation on Reorganization of ACI 301

TAC requested that TSC provide recommendations for the reorganization of Committee 301 and the enhanced scope of the new ACI 301 specification on structural concrete. A task group composed of A. Pergalsky (Chair), T. Murray, G. Daniel, and D. Dorfmueller developed a draft recommendation, which was discussed at the Boston meeting. Because only 6 TSC voting members (out of 13) were present in Boston, a letter ballot was issued, with a closing date of January 22, 2004, to approve the Task Group's recommendation. Attachment A is item #1 of the letter ballot that covered the recommendation.

The ballot results were 6 affirmative, 2 negatives, 5 not returned (Bretnall, Coleman, Hollrah, Kaufman, and Weiss). The negatives by Ardahl and Daniel are presented in Attachment B. Ardhal does not agree with the proposed procedure for selecting the membership of the reorganized Committee 301. Daniel objects to the expansion of the scope of the 301 specification.

Since this was an administrative ballot, we do not believe it is necessary for TSC to resolve the two negative votes. Therefore, we are submitting Attachment A as the TSC recommendation for the reorganization of ACI 301.

Copies:

José M. Izquierdo, President, ACI
Anthony E. Fiorato, Vice President, ACI
James R. Cagley, Vice President, ACI
Terence C. Holland, Past President, ACI
William R. Tolley, Executive Vice President, ACI
Sharon L. Wood, Chair, ACI TAC
Daniel W. Falconer, Secretary, ACI-TAC
TSC Members

ATTACHEMENT A

TSC Ballot 03-1

Ballot Item #1: Reorganization of ACI 301 and ACI Specification Policy

Rationale:

Refer to Item 7.0 of the minutes of the Boston TSC meeting. To summarize, at the summer 2003 meeting, TAC reaffirmed that ACI 301 should contain all information for construction of structures designed according ACI 318. A task group was appointed at the March 2003 TSC meeting to develop a plan and timetable for reorganization of ACI 301. The TG's proposal was discussed at the Boston meeting and is now being offered for approval by TSC. This recommendation provides:

- The objectives of the reorganization of ACI 301;
- The ACI expert committees that will be involved in the development of the expanded ACI 301 specification;
- A proposed outline of the contents of the expanded ACI 301 specification;
- A timeline for implementing the reorganization plan;
- Membership guidelines for ACI Committee 301; and
- The process for selecting members of ACI Committee 301.

We had numerous discussions about committees that have specifications covering subjects currently included in ACI 301. A compromise solution has been developed (last two bullets under "Timeline") that ensures conflicts are avoided between ACI 301 and other specifications that apply to structures designed in accordance with ACI 318, and at the same time fill the needs of users who may not require ACI 301 for their work.

Recommendations for Reorganizing ACI 301 and Expert Committee Participation

Objectives:

- Produce an ACI Specification on structural concrete that suits users' needs;
- Eliminate conflicting specification requirements by controlling scopes of ACI specifications.
- Develop an electronic companion product to ACI 301 that takes the user through a selection process for Mandatory and Optional Checklist items. The scope of this new electronic product and how it will be developed need to be defined

Expert committees for new ACI 301 Specification Committee:

116 – Terminology and Notation
117 – Tolerances
121 – Quality Assurance Systems
201 – Durability
207 – Mass Concrete
211 – Proportioning
213 – Lightweight Aggregates and Concrete
214 – Evaluation of Strength Test Results
223 – Shrinkage Compensating Concrete
228 – Nondestructive Testing
302 – Construction of Concrete Floors
303 – Architectural Cast-in-Place Concrete
304 – Measuring, Mixing, Transporting and Placing.
305 – Hot Weather
306 – Cold Weather
308 – Curing
309 – Consolidation
311 – Inspection
315 – Reinforcement Details
318A – General Concrete and Construction
318G – Precast and Prestressed Concrete
347 – Formwork
360 – Slabs on Grade
363 – High-Strength Concrete
423 – Prestressed Concrete
533 – Precast Concrete Panels
550 – Precast Concrete Structures
551 – Tilt-up Construction

Proposed Structure of ACI 301:

1. General Requirements
2. Formwork
3. Reinforcement
4. Concrete Mixtures
5. Handling, Placing, Finishing and Curing
6. Lightweight Concrete
7. Mass Concrete
8. Prestressed Concrete – Pre-tensioned
9. Prestressed Concrete- Post tensioned
10. Structural Slabs
11. Shrinkage Compensating Concrete
12. Precast Concrete
13. Tilt-up Concrete
14. Architectural Cast- in- Place Concrete
15. Architectural Precast Concrete

Note: Tolerances to be included in appropriate section. ACI 117 document will be limited to structures not designed according to ACI 318

Timeline:

- Discharge ACI 301 upon completion of ACI 301-04;
- Chair of 301 asked to continue for additional 2 years and new Chair designate selected,
 - Chair to facilitate training of Chair designate;
- New version of ACI 301 in 2007, to be on 3-year cycle to coincide with 318;
- ACI expert committees that work with ACI 301 will be permitted to submit new guide specifications or reference specifications that are outside the scope of ACI 318 after Spring 2004;
- Existing expert committee specification within the scope of ACI 301 (306, 308, and so forth) to be withdrawn, converted to Guide Specifications beginning in 2007, change the scope to exclude structures designed by ACI 318;
 - TSC to expand the Guide Specification section of *Specification Manual*.

ACI 301 Membership Guidelines:

- TSC identifies expert committees in cooperation with Committee 301;
- At least 50 % of the ACI 301 subcommittee membership shall be composed of members of the expert committees; and
- Each expert committee shall have at least one voting member on the ACI 301 main committee.

Committee Selection:

- Chair designate creates subcommittee structure in consultation with current Chair and TSC;
- Chair designate selects subcommittee chairs in consultation with current Chair and TSC;
- Chair designate, current Chair, and subcommittee chairs are the 301 steering committee;
- Chair designate selects committee members (voting and non-voting) in consultation with steering committee, expert committee Chairs, and TSC (balance of interest considered);
- TAC to revise the *Technical Committee Manual* so that Committee 301 can follow the code committee membership rules.

ATTACHEMNT B

Reasons for Negative Votes on Item #1 of TSC LB 03-1

J. Ardahl.

Page 3, lines 40-44. Chair designates selection of committee members needs to be revised. The chair should not be required to check with the stated individuals or groups when deciding on committee membership. The guidelines for membership on the committee should be established so the chair can make a decision based on the guidelines and then get on with the real task of developing the specification. I have no problem with the various committees helping establish the guidelines and then monitoring the committee membership, but the chair needs to be able to control the committee with accountability to TSC and TAC. The guidelines that are stated will not permit the chair to run the committee and will hinder suitable progress in the development of the new specification. If TSC and the current chair have too much to say about how the chair designate organizes the new committee beyond general guidelines including the selection of subcommittee chairs this could hinder how the chair can manage the new committee. We do not want the committee chaired by a committee or multiple committees if we expect to make progress in the development of the new spec.

G. Daniel

ACI 301 is a nice specification, but it is seldom, if ever, used in a project specification. The non-use is probably due to the enormous number of checklist items it contains and the built-in difficulty in using the specification, but the latter is speculation on my part. In contrast, ACI 211, 305, 306, and 308 are often specified within project specifications.

I believe this proposed change to enlarge 301 and to do away with individual specifications that are being used is a disservice to A/Es who rely on the expert committee specifications, but reject the 301 specification. A better approach is to reduce 301 to the 5 basic chapters.