



## AGENDA

### TAC Specifications Committee

Kansas City, MO  
Room C-2213  
Wednesday November 9, 2005  
7:00 to 10:00 AM

#### 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

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.  
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 2005 spring meeting in New York City?

##### 1.3 Membership Report

**REPORT:** A moment of silence will be observed in memory of Leon Glassgold. 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](http://www.concrete.org/COMMITTEES/com_forms.htm)

**2.1 TAC Review of Revisions to 2002 version of ASpM**

The revisions were approved by TAC at the summer meeting pending response to review comments, which are shown in Exhibit 2.1. Chair Carino has developed recommended responses that will be discussed.

**2.2 Punchlist**

A new punchlist of changes to the 2005 version of the *Manual* has been created.

**ACTION:** Are there any other proposed changes to the *Manual* that should be added to the punchlist?

**2.3 Revise 3.3 “Reference Standards”**

Include Website addresses (URLs) for organizations issuing cited reference standards (see Exhibit 2.3).

**ACTION:** Make editorial revision “Provide full names, addresses, and URLs (if applicable) of organizations whose standards are referenced (see the ACI Style Manual).”

**2.4 Revise organization of reference specifications**

It has been proposed that the mandatory language portion of a reference specification be clearly delineated from the advisory portion (see Exhibit 2.4).

**ACTION:** Does TSC concur with the proposal?

**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 Kaufman. Associate Member Dan Dorfmueller.

Committee 305: liaison Aimee Pergalsky.

Committee 306: liaison Aimee Pergalsky.

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. ACI staff has been made aware of all specification-writing committees so that TSC reviews will be triggered when documents are being balloted.

**REPORT:** ACI 308 has issued a ballot for their revised specification.

#### 5. Requests for New Specifications

5.1 No requests have been received.

#### 6. Planning

##### 6.1 TSC Mission (For Information)

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 Goals for 2005 (For Information)

- Assist TAC in reorganization of ACI 301;
- Coordinate specifications with overlap with Codes;
- 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*;
- Submit for TAC review approved revisions of *2002 ACI Specifications Manual*.

#### 7.0 ACI Specification Policy

##### 7.1 Background

Refer to the minutes of the previous three TSC meeting for background. On February 8, 2004, Chair Carino submitted to TAC the TSC recommendation for the reorganization of ACI 301. At the fall 2004 meeting, TAC selected Cal McCall for a three-year term to implement this reorganization. Chair Carino has been working with TAC, ACI staff, and Cal McCall on details of the reorganization. At the New York City convention, a meeting

was be held with Chairs of the committees directly affected by the new format for ACI 301. McCall has selected new members for the committee.

**REPORT:** McCall will report on the subcommittee structure and the new membership.

**ACTION:** Does TSC concur with the new membership of ACI 301.

## 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. Action on this item is tabled until additional direction is provided by ACI.

**REPORT:** No action to report.

## 8. Training on Specification Writing

### 8.1 Workshop

At the San Francisco meeting, TSC approved an outline for a proposed TSC workshop on writing specifications. TSC members Pergalsky and Weiss forwarded the Chair information that they had accumulated on the subject. Carino will prepare outlines for the different modules for discussion.

**REPORT:** Carino will review the draft modules.

**ACTION:** Additional volunteers will be sought to expand the draft modules.

## 9. New Business

## 10. Next Meeting

Wednesday, March 29, 2006 7:00 to 10:00 am.

## 11. Adjournment

### EXHIBITS:

- Exhibit 1 — TSC Roster with Contact and Assignment Information
- Exhibit 2.1 — TAC Review Comments
- Exhibit 2.2 — *ASpM* Punch List
- Exhibit 3 — ACI Specifications Activity Database

### Copies:

James R. Cagley, President, ACI  
Thomas Verti, Vice President, ACI  
David Darwin, Vice President, ACI  
Anthony E. Fiorato, 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**

October 2005			
Name	Assignment	Telephone No.	E-Mail Address
<b>TSC Officers and TAC Contacts</b>			
Nicholas J. Carino	Chair	301/975-6063	<a href="mailto:ncarino@nist.gov">ncarino@nist.gov</a>
Todd R. Watson	Secretary TSC (NV)	248/848-3728	<a href="mailto:todd.watson@concrete.org">todd.watson@concrete.org</a>
Sharon Wood	Chair TAC	512/471-7298	<a href="mailto:swood@mail.utexas.edu">swood@mail.utexas.edu</a>
Daniel W. Falconer	Secretary TAC	248/848-3726	<a href="mailto:daniel.falconer@concrete.org">daniel.falconer@concrete.org</a>
M. A. (Tony) Murray	TAC Contact	303/688-8244	<a href="mailto:tmurray@restruction.com">tmurray@restruction.com</a>
<b>Voting Members</b>			
Jon B. Ardahl	301, 350, 506	785/887-9991	<a href="mailto:ard00097@netzero.net">ard00097@netzero.net</a>
William L. Barringer		505/293-8368	<a href="mailto:joy2Bill@aol.com">joy2Bill@aol.com</a>
William C. Bretnall		216/241-7078	<a href="mailto:bbretnall@gba-engineers.com">bbretnall@gba-engineers.com</a>
Jeffrey W. Coleman		952/841-0200	<a href="mailto:jwcoleman2@cs.com">jwcoleman2@cs.com</a>
D. Gene Daniel	305, 423	479/636-1856	<a href="mailto:dgenedinc@aol.com">dgenedinc@aol.com</a> *
Ronald L. Hollrah		KC 913-897-3651 CO 970-752-1990	<a href="mailto:hollrah@earthlink.net">hollrah@earthlink.net</a>
Alfred L. Kaufman, Jr.	303, 346, 551	925/866-2780	<a href="mailto:akaufman@rmcpmi.com">akaufman@rmcpmi.com</a>
W. Calvin McCall		704/392-1506	<a href="mailto:wcmccall@concretees.com">wcmccall@concretees.com</a>
M. A. (Tony) Murray	117, 503	303/688-8244	<a href="mailto:tmurray@restruction.com">tmurray@restruction.com</a>
Aimee Pergalsky	306, 308	216/491-9265	<a href="mailto:geoaimee@aol.com">geoaimee@aol.com</a>
Arthur T. Weiss, Jr.	330, 336, 533, 548	770/860-1942	<a href="mailto:aweiss7501@aol.com">aweiss7501@aol.com</a>
<b>Associate Members</b>			
Karl J. Bakke	117	303/674-2290	<a href="mailto:karl.bakke@kalmanfloor.com">karl.bakke@kalmanfloor.com</a>
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Daniel P. Dorfmueller	303	513/933-0489	<a href="mailto:dorf@go-concepts.com">dorf@go-concepts.com</a>
Sidney Freedman	533	312/786-0300	<a href="mailto:sfreedman@pci.org">sfreedman@pci.org</a>
Kenneth G. Kazanis	330	248/354-9050	<a href="mailto:ken.kazanis@lafarge-na.com">ken.kazanis@lafarge-na.com</a>
William H. Oliver, Jr.	336	713/207-4379	<a href="mailto:billy.oliver@centerpointenergy.com">billy.oliver@centerpointenergy.com</a>
Michael S. Stenko	548	914/636-1000	<a href="mailto:mstenko@transpo.com">mstenko@transpo.com</a>
*Text e-mail messages only; mail hard copies of any attached files			

**Exhibit 2.1  
TAC Review Comments**

TAC Review Location: Timber Line Lodge					TAC Review Date:	TAC Agenda #: 8.
Document Title: ACI Specification Manual						Committee:
No.	Pg #	Line	E/P/S	TAC Comment	Committee Response	
1.	9	4	P	Based on my experiences, this still doesn't explain enough. Add a sentence after 'reference': 'It must be interpreted, choices made, and written into the specifications'.	Accept comment.	
2.	9	9	P	Double check to be sure "hard" and "soft" definitions are not reversed., Lines 9-16	OK as is. No change needed.	
3.	25	1	P	In P5 include the verb 'must'	Line 1: Change "P4" to "P5". "Must" is not needed.	
4.	28	11	E	Add: 'future' before 'inclusion'	Accept comment.	
5.	31	23	P	Add: 'that require a decision and that are....' after 'items'. (Clarifies and further explains the action required).	Accept comment.	
6.	44	8	P	Provide reader with proper wording for the example.	Add sentence: "Refer to the <i>ACI Style Manual</i> for recommended terminology."	
7.	45	21	P	Doesn't this conflict with P5 on page 25, ln 1? Even, if there is no direct conflict some discussion on why to not use "will" would be helpful.	Revise as follows: "Do not use 'will' when referring to action to be taken by the Contractor. The word 'will' is used to provide information to the Contractor of actions that will be taken by the Owner or Architect/Engineer."	
8.	46	4	P	Not sure that "gerund" is used properly here.	Revise to read: "...when the subject <u>or</u> object <del>or gerund</del> is known..."	
9.	1	19	E	Fax number is wrong.	Fix phone number and fax number.	
10.	7	10	E	The liaison is part of TSC so change to "The TCS liaison and the remaining TCS committee..."	Revise to read: "The TSC liaison on other TSC members will assist..."	
11.	8	20	E	Add: 'is' after document.	Revise: "a standardized document <u>that is</u> intended..."	
12.	8	23	E	"Documens" should be "Documents"	OK	
13.	14	2	E	Change "submitted" to "submittal". The definition that follows calls for a noun.	Alternative 1: " <b>submitted</b> —provided to Architect /Engineer for review or acceptance." Alternative 2: " <b>submittal</b> —documents or materials provided to Architect /Engineer for review or acceptance"	
14.	14	5	E	Change "Work" to "The Work" to conform to common usage in documents and contracts.	Discuss at meeting.	
15.	15	11	E	Leave in the word <i>units</i> following SI.	OK	
16.	17	22	E	Two periods	OK	

TAC Review Location: Timber Line Lodge				TAC Review Date:		TAC Agenda #: 8.	
Document Title: ACI Specification Manual					Committee:		
No.	Pg #	Line	E/P/S	TAC Comment	Committee Response		
17.	28	9	E	Change “Define” to “Explanation of “	Leave as is. This is an instruction to the user on what should be included in the specification.		
18.	32	9	E	...F5 to F8.... If this is intended to include F8 then change ‘to’ to <b>‘through’</b> If not then If not then change to <b>‘F5 through F7’</b>	Revise to: “...F5 <u>through</u> <del>to</del> F8...”		
19.	37	8	E	“or’s” could be removed to make the sentence read better.	Discuss at meeting.		
20.	44	22	E	Include: ‘or “will”’ after ‘may’. Also in line 24 (to follow advice in ‘P5’ on page 25)	Leave as is. The use of word “will” is clarified in response to Comment 7.		
21.	45	1	E	Put ‘or “will”’ after ‘may’	Same response as for Comment 20.		
22.	12	19	S	“Bid Documents” has a particular “hard-dollar, due at 2 p.m.” connotation. I suggest substitution of “Proposal Documents”. Very many private jobs are negotiated over weeks or months and we don’t want to seem to exclude those. If adopted, this change would require minor editorial changes wherever “bid” and “bidder” occur.	Discuss at meeting. The word “bid” appears also under “Project Manual.” New business?		
23.	29	8	S	Suggest word “State” be changed to “Describe”. This would avoid any possible thought that it deals with requirements of the State of Oregon or whatever.	Change to “provide”.		
24.	30	21	S	Suggest change “State” to “Describe”.	Change to “provide”.		

**Exhibit 2.2**  
**2005 ACI Specification Manual Punch List of Future Changes**

<b>Section</b>	<i>Issue</i>	<i>Action</i>
<b>APPROVED REVISIONS</b>		
<b>PROPOSED REVISIONS</b>		
3.3	An ACI Committee may wish to write a “materials” specification when and ASTM specification is lacking. In this case the “execution” part is not appropriate, since that is directed to the Contractor.	April 2005: Explain that an ACI specification needs three parts if all of them are necessary.
	Update dates of specifications used in examples.	In 2.3.3.3, Revise to ACI 301-05 and ensure that blocked text agrees with the current version of ACI 301. In 6.2, Revise to ACI 301-05 and check whether parenthetical expression is still needed. Check excerpted text for agreement with 05 edition.



**Exhibit 2.3**

863 N. 1884 Road  
Lecompton, KS 66050

**Date:** October 25, 2005

**TO:** ACI TAC Specification Committee

**FROM:** Jon B. Ardahl

**RE:** Proposed Revision of ACI Specification Manual  
Add Website Addresses for All Organizations

The proposed change is to add website addresses in all ACI Specifications when an organization is listed, both in the specification and in the guidance part of the document. This change would agree with the 2005 ACI Style Manual. The following website addresses are the ones needed in ACI 301-05:

[www.wirereinforcementintitute.org](http://www.wirereinforcementintitute.org)

[www.cement.org](http://www.cement.org)

[www.astm.org](http://www.astm.org)

[www.aci-int.org](http://www.aci-int.org)

[www.usace.army.mil](http://www.usace.army.mil)

[www.crsi.org](http://www.crsi.org)

[www.aws.org](http://www.aws.org)

Please call me if there are any questions.

Jon B. Ardahl, PE, FACI

<mailto:ard00097@netzero.net>

Phone: (785) 887-9991

Cell phone: (785) 766-9041

Fax: (800) 852-6041

cc: Todd Watson

### Exhibit 2.4

863 N. 1884 Road  
Lecompton, KS 66050

**Date:** October 25, 2005

**TO:** ACI TAC Specification Committee

**FROM:** Jon B. Ardahl / Calvin McCall

**RE:** Proposed Revision of ACI Specification Manual  
Organization of ACI Reference Specifications

The organization of an ACI Reference Specification needs to be revised and organized into two parts, the construction specification that is written to the contractor and must be in mandatory language and the Notes to the Specifier that is written to the design professional and provides guidance and instructions in non-mandatory. Based on ACI requirements and policies in the ACI Specification Manual only the specification that is in mandatory language may be referenced in a project specification.

The proposed revision is to organize an ACI Reference Specification into two documents. The first document would be the Specification and second document would be the guidance provided to the design professional. When published the documents may be printed into a single publication but the two documents must be on separate pages so that, if needed, the second document could be removed when the specification is bound into a project specification.

The Preface and any mention of the Foreword and checklists should be in the second document. The table of contents for the specification should include only items that are in the specification and a separate table of contents should be developed for the second document that would include all non-mandatory information. The items in the Preface are not written to the contractor. The Preface is written to the design professional and in not in mandatory language.

#### JUSTIFICATION

ACI policy has always been that the ACI Reference Specification should be referenced in its entirety or bound into the project specification. ACI has always stated that Reference Specifications must be written as legal documents. See TAC Spec Manual Article 2.2.2.

In Article 2.3.1 of the Specification Manual is the sample outline for a single-item format and in that outline the Preface that is written in non-mandatory language yet it is indicated to be placed before the specification text. Refer to ACI 301-05 table of contents for a specific example.

When a document such as ACI 301-05 includes non-mandatory items within the specification there is a good chance the lawyers and courts will require that all parts of the document be

enforced equally, even the items that are written in non-mandatory language. Just stating they are not a part of the specification may not be acceptable to the courts when ACI does not publish the document in a manner that would permit the user to separate the two types of documents.

Please call me if there are any questions.

Jon B. Ardahl, PE, FACI

<mailto:ard00097@netzero.net>

Phone: (785) 887-9991

Cell phone: (785) 766-9041

Fax: (800) 852-6041

cc: Todd Watson  
Dan Falconer

**Exhibit 3  
ACI SPECIFICATIONS ACTIVITY DATABASE**

<b>Comm. No.</b>	<b>Title</b>	<b>Specification</b>	<b>Status</b>	<b>Comment/ Action</b>	<b>TSC Liaison</b>	<b>Nonvoting TSC Members</b>
117	Tolerances	Standard Specifications for Tolerances for Concrete Construction and Materials	117-90	Open for public discussion Nov. 1, 2004 – Jan. 31, 2005. Committee preparing closure.	Murray	Bakke
301	Specifications for Concrete	Specifications for Structural Concrete	301-99	To be published Spring 2005.	Ardahl (M)*	Not needed
303	Architectural CIP Concrete	Standard Specification for Cast-in-Place Architectural Concrete	303.1-97	Not currently revising the specification.	Kaufman	Dorfmueller
304	Measuring, Mixing, Transporting, and Placing Concrete	Guide Specification for Underwater Concrete	In preparation	Approved by TSC April 2005. Needs TAC approval.	Weiss	TBD – Holland or Yao
305	Hot Weather Concreting	Standard Specification for Hot Weather Concreting	In Preparation	To be opened for public discussion Spring 2005.	Daniel	Not needed
306	Cold Weather Concreting	Standard Specification for Cold Weather Concreting	306.1-90 (R-98)	No action on Spec. Working on report first.	Pergalsky	
308	Curing Concrete	Standard Specification for Curing Concrete	308.1-98	Ballot closes 11/04/05..	Pergalsky (M)*	Not needed
330	Concrete Parking Lots and Site Paving	Standard Specification for Plain Concrete Parking Lots	330.1-03	No action reported.	Weiss	Kazanis
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	No action reported.	Kaufman (M)*	Not needed

<b>Comm. No.</b>	<b>Title</b>	<b>Specification</b>	<b>Status</b>	<b>Comment/ Action</b>	<b>TSC Liaison</b>	<b>Nonvoting TSC Members</b>
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 plans to ballot draft summer '05.	Ardahl (M)*	Not needed
423	Prestressed Concrete	Specification for Unbonded Single Strand Tendons and Commentary	423.6-01/423.6R-01	TSC approved plan to prepare materials spec and separate installation spec 4/05.	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	Format revision overdue	Murray (M)*	Not needed
		Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive	503.2-92 R-97	Format revision overdue		
		Standard Specification for Producing a Skid Resistant Surface on Concrete by the Use of a Multi-Component Epoxy System	503.3-92 R97	Format revision overdue		
		Standard Specification for Repairing Concrete with Epoxy Mortars	503.4-92 R97	Format revision overdue		
		Standard Specification for Crack Repair by Epoxy Injection	In preparation	To be opened for public discussion Spring '05.		

<b>Comm. No.</b>	<b>Title</b>	<b>Specification</b>	<b>Status</b>	<b>Comment/ Action</b>	<b>TSC Liaison</b>	<b>Nonvoting TSC Members</b>
506	Shotcreting	Specifications for Shotcrete	506.2-95	Finalizing rewrite from ballot comments.	Ardahl (M)*	Not needed
		Guide Specification for Underground Shotcrete	In preparation	TSC did not approve 4/05. Should be a report.		
530	Masonry Standards Joint Committee	Specification for Masonry Structures	530.1-02	Carino informed TAC Chair Wood that the 530 specification should follow ACI format.	(pending)	(pending)
533	Precast Panels	Proposed Specification on Precast Panels	In preparation.	TAC approval needed.	Weiss	Freedman
548	Polymers in Concrete	Standard Specifications for Latex Modified Concrete (LMC) Overlays	548.4-93 R98	Format revision overdue	Weiss	Stenko
		Standard Specifications for Type EM Polymer Concrete Overlays	committee revising	Submitted to TAC for review July 2004 meeting. Not approved (3R)		
		Standard Specifications for Type ES Polymer Concrete Overlays	committee revising	Submitted to TAC for review July 2004 meeting. Not approved (3R)		
551	Tilt-Up Construction	Specification on Tilt-Up Construction	In preparation.	Committee ballot 12/02; Kaufman and Carino provided comments in March 2003.	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