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Ejemplo de Balota – Sustentos

Item 15

To:	C09 and C09.40 (concurrent)
From:	Michelle Wilson, Chairman, Sections 1-8, C09.40
Subject:	Revision to C94/ C94M – 13a To specify target total air content in air-entrained concretes specifically for freeze thaw resistance. Delete the "Mild" exposure condition for air-entrained concrete in Table 1.
Work Item:	WK21753

Only those sections shown as being revised are subject to ballot. Non-altered text is presented for context only and is not subject to ballot. Negative votes related to non-altered text will be treated as "Not Related" and taken up as New Business. The new text is underlined and the old text is ~~stricken~~.

RATIONALE

The primary intent of this ballot is to delete the Mild exposure condition in Table 1. Other modifications to the language have resulted from the various comments received in previous ballots, including the most recent subcommittee ballot C09.40 14-01.

Table 1 provides total air contents for moderate and severe exposure conditions when concrete is exposed to freezing and thawing. The mild exposure condition in Table 1 is from ACI 211.1-91 and is proposed for deletion because it does not provide resistance to freezing and thawing. The following is the description in

Ejemplo de Balotas – Propuesta de Revisión

Item 15

6.1.4 Total air content at the point of delivery for concrete that will be exposed to cycles of freezing and thawing or anticipated exposure of the concrete. ~~When air-entrained concrete is specified, the air content of the samples taken at the point of discharge from the transportation unit~~ (see Section 8 ~~and Table 1 for the total air content and~~ for sampling for air content tests and tolerances) (Note 5),

NOTE 5—~~In selecting the specified air content, the purchaser should consider the exposure conditions to which the concrete will be subjected.~~ Table 1 provides total air contents in concrete that vary by exposure condition and aggregate size. Total air contents less than shown in Table 1 may be specified or used for concrete that is not subject to freezing and thawing. ~~not give provide the required resistance to freezing and thawing, which is the primary purpose of air-entrained air entrainment in concrete.~~ This may be done to improve workability and cohesiveness, reduce the rate of bleeding, reduce the water content for a given consistency, or achieve required lightweight concrete density. Specified total air contents higher than that ~~the levels~~ shown in Table 1 may reduce strength without ~~contributing~~ any further improvement of durability

Exposure conditions for freeze-thaw environments in Table 1 correspond to:

Moderate exposure – Concrete exposed to freeze-thaw cycles but not in contact with the ground or with limited exposure to water, limiting the ability to cause saturation of a portion of the concrete prior to freezing. The concrete will not receive deicing salts or other aggressive chemicals. Examples include: exterior beams, columns, walls, girders, footings below the frost line, or elevated slabs where application of deicing salt is not anticipated. The air content requirements for this exposure are consistent with those for Exposure Class F1 of ACI 318.

Severe exposure -- Concrete exposed to freeze-thaw cycles while in contact with the ground or with frequent exposure to water, potentially causing saturation of a portion of the concrete prior to freezing. The concrete may receive deicing chemicals or other aggressive chemicals. Examples include: pavements, bridge decks, curbs, gutters, sidewalks, canal linings, or exterior water tanks or sumps. The air content requirements for this exposure are consistent with those for Exposure Classes F2 and F3 of ACI 318.

8. Air-Entrained Concrete

8.1 Unless otherwise specified, for air-entrained concrete total air contents in Table 1 shall apply based on the exposure condition stated in the purchase order (Note 2). It is permitted to reduce the total air content values in

Ejemplo de Balota – Cambios Editoriales

NOTE 5—~~In selecting the specified air content, the purchaser should consider the exposure conditions to which the concrete will be subjected.~~ Table 1 provides total air contents ~~in~~ for concrete that vary by exposure condition and aggregate size. Total air contents less than shown in Table 1 may be specified or used for concrete that is not subject to freezing and thawing. ~~not give provide the required resistance to freezing and thawing, which is the primary purpose of air-entrained air entrainment in concrete.~~ This may be done to improve workability and cohesiveness, reduce the rate of bleeding, reduce the water content for a given consistency, or achieve required lightweight concrete density. Specified total air contents higher than that ~~the levels~~ shown in Table 1 may reduce strength without ~~contributing~~ any further improvement of durability

Exposure conditions for ~~freeze-thaw~~ freezing and thawing environments in Table 1 correspond to:

Moderate exposure – Concrete exposed to freeze-thaw cycles but not in contact with the ground or with limited exposure to water, limiting the ability to cause saturation of a portion of the concrete prior to freezing. The concrete will not receive deicing salts or other aggressive chemicals. Examples include: exterior beams, columns, walls, girders, footings below the frost line, or elevated slabs where application of deicing salt is not anticipated. The air content requirements for this exposure are consistent with those for Exposure Class F1 of ACI 318.

Severe exposure -- Concrete exposed to freeze-thaw cycles while in contact with the ground or with frequent exposure to water, potentially causing saturation of a portion of the concrete prior to freezing. The concrete may receive deicing chemicals or other aggressive chemicals. Examples include: pavements, bridge decks, curbs, gutters, sidewalks, canal linings, or exterior water tanks or sumps. The air content requirements for this exposure are consistent with those for Exposure Classes F2 and F3 of ACI 318.

8. Air-Entrained Concrete

8.1 Unless otherwise specified, for air-entrained concrete total air contents in Table 1 shall apply based on the exposure condition stated in the purchase order ~~(Note 2)~~. It is permitted to reduce the total air content values in Table 1 by one percentage point for concretes with a specified compressive strength greater than or equal to 35 MPa [5000 psi]. Total air content that differs from the values in Table 1 is permitted for concrete not exposed to

Ejemplo de Balota– Resolución Negativa

015	40	REVISION OF C0094/C0094M-2014B
		*** Pass to Next Ballot Level ***

TECHNICAL CONTACT:
Michelle L Wilson

WORK ITEM: WK21753

Click here - to view statements in Excel

	Main	Sub
Affirmative	314	80
Negative	1	1
Abstain	157	23
%Affirmative	99.68	98.76

NEGATIVE VOTERS: (all ASTM member negatives must be considered)

	Anthony E Fiorato	Withdrawn 12/12/2014
	Gerald D Lankes	Withdrawn 12/12/2014
	Karl A Dahm	Not Persuasive 12/12/2014
* #	Karthik H Obla	Withdrawn 12/12/2014
	Leslie J Struble	Withdrawn 12/12/2014
	Terence C Holland	Withdrawn 12/12/2014
	Thomas R Clapp	Editorial Withdraw 12/12/2014
	W K Johnson	Withdrawn 12/12/2014

NON-OFFICIAL VOTING MEMBER: # INDICATES SUB; * INDICATES MAIN

COMMENTS:

Ali C Gurhan
Barry Descheneaux
Curtis B Spring
Gregory K Wong
Jim Pierce
Nicholas J Carino
Walter Flood

Ejemplo de Balota– Voto Negativo

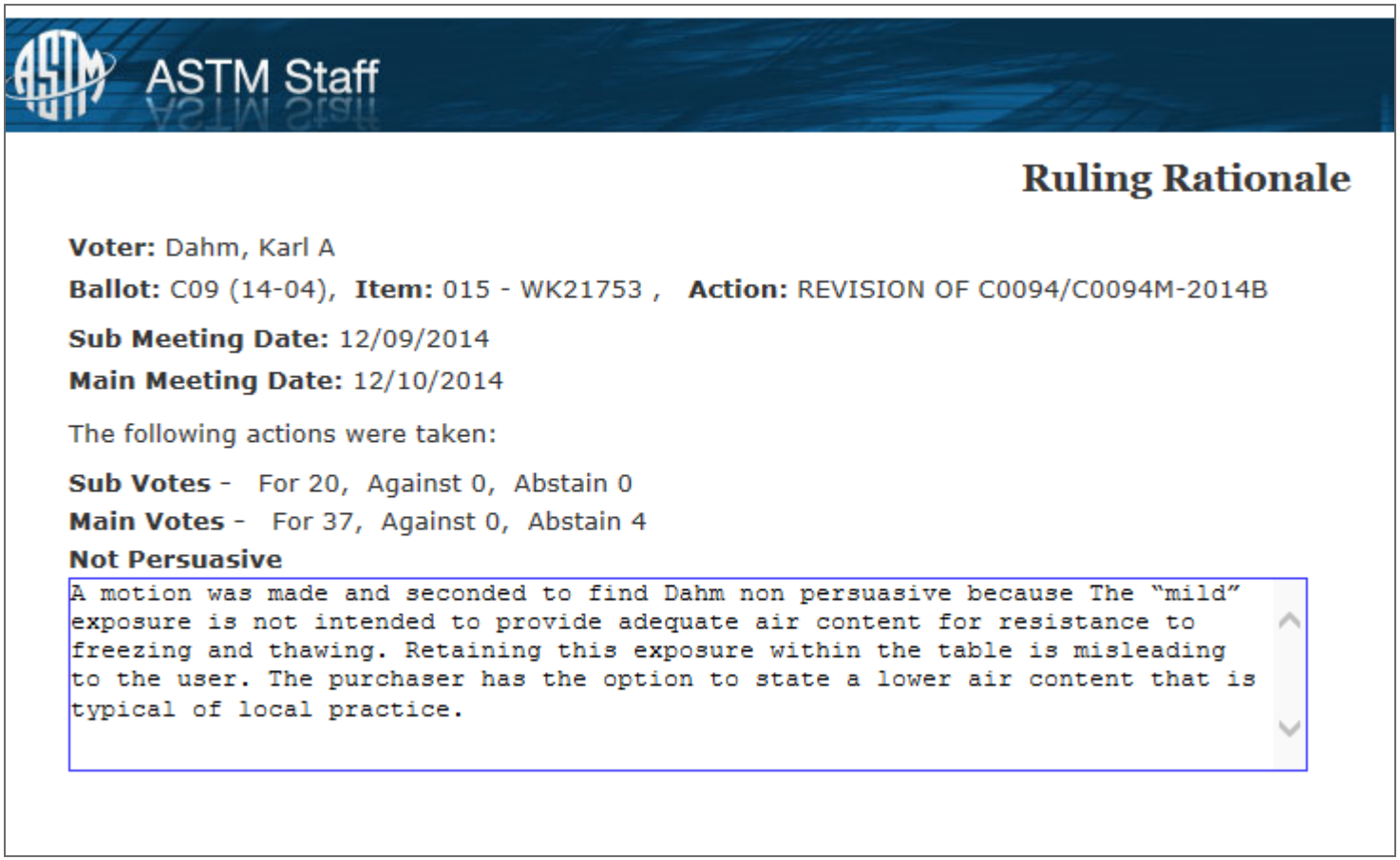
Negative

Ballot Number:	C09 (14-04)	Close Date: SEPTEMBER 10, 2014
Item Number:	015 Revision Of C0094/C0094M-2014B Specification for Ready-Mixed Concrete WK21753 secs. 6.1.4, Note 5, Table 1(SEE VOLUME 4 .2)(CONCURRENT WITH .4000) TECHNICAL CONTACT: Michelle L Wilson mwilson@cement.org (847) 966-6200	
Member's Name:	Karl A Dahm	
Address:	Qc Laboratories, Inc 10810 NW Freeway Houston TX 77092	
Phone Nr:	7136951133	Fax Nr:
Email Address:	kdahm@qclabs.com	
File Attachment:		

Statement:

This change will essentially mandate concrete produced in mild exposure areas to be specified with air contents of at least 4.5%, since engineers, architects, and other specifiers tend to default to the applicable standards.
In areas such as South Florida, the southern portions of Texas, and other areas with negligible freeze-thaw cycles, air entrainment for exposure is generally not needed and the common specified target for these areas is 3.0%.

Ejemplo de Balota – Fallo sobre Voto Negativo



ASTM Staff

Ruling Rationale

Voter: Dahm, Karl A

Ballot: C09 (14-04), **Item:** 015 - WK21753 , **Action:** REVISION OF C0094/C0094M-2014B

Sub Meeting Date: 12/09/2014

Main Meeting Date: 12/10/2014

The following actions were taken:

Sub Votes - For 20, Against 0, Abstain 0

Main Votes - For 37, Against 0, Abstain 4

Not Persuasive

A motion was made and seconded to find Dahm non persuasive because The "mild" exposure is not intended to provide adequate air content for resistance to freezing and thawing. Retaining this exposure within the table is misleading to the user. The purchaser has the option to state a lower air content that is typical of local practice.

Un Ejemplo – POSCO Steel Company (Corea)

La Historia de POSCO

Doosan Heavy Industries (Emiratos Árabes)

- Requiere componentes para la planta desalinizadora
- Necesitan conformidad con la norma ASTM A240

POSCO

- Requiere modificación de la norma ASTM para el nuevo grado de acero inoxidable resistente a la corrosión
- Participa en el Comité ASTM A01 en Acero, Acero Inoxidable y Aleaciones Relacionadas

Un año después:

- Norma revisada permitió especificar los aceros especiales de POSCO
- POSCO cumple con el contrato anticipado con Doosan
- El resultado ~ $15 millones de dólares en nuevos negocios para POSCO

$15 Millones en nuevos negocios para POSCO

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Gracias

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