

Show Closed Ballot Detail

Committee: TMS 402/602 Main

Ballot: 2022 TMS 402/602 Main Committee Ballot 20

Item Number	Sub-Item Number	Description	Pass/Fail	Affirmative	Affirmative With Comment	Negative	Abstain	Comments	Total Voting Members	Totals
20-CR-001 #049			Pass	43	0	1	0	2	46	1
20-CR-002 #108			Pass	42	2	0	0	3	46	1
20-CR-003 #134			Pass	44	0	0	0	1	46	1
20-CR-004 #138			Pass	43	0	1	0	2	46	1
20-CR-005 #152			Pass	41	2	1	0	4	46	1
20-CR-006 #005, 6, 7			Pass	44	0	0	0	1	46	1
20-CR-007 #005, 6, 7			Pass	43	1	0	0	2	46	1
20-CR-008 #109			Pass	44	0	0	0	1	46	1
20-CR-009 #031			Pass	42	2	0	0	3	46	1
20-CR-010 #182			Pass	33	4	5	2	10	46	1
20-CR-011 #159			Pass	43	1	0	0	2	46	1
20-CR-104 #032			Pass	37	1	6	0	6	46	1
20-CR-105 #033			Pass	36	1	7	0	6	46	1
20-DE-004 #004			Pass	41	3	0	0	4	46	1
20-DE-037 #037			Pass	42	1	0	1	2	46	1
20-DE-057 #057			Pass	44	0	0	0	1	46	1
20-DE-091 #091			Pass	44	0	0	0	1	46	1
20-DE-115 #115			Pass	44	0	0	0	1	46	1
20-DE-168 #168			Pass	38	0	4	2	5	46	1
20-EX-001 #002			Pass	43	1	0	0	2	46	1
20-EX-002 #002			Pass	42	2	0	0	3	46	1
20-GR-044 #044			Pass	36	2	5	0	7	46	1
20-GR-096 #096			Pass	42	0	1	0	1	46	1
20-GR-125 #125			Pass	41	0	2	0	2	46	1
20-GR-128 #128			Pass	43	0	0	0	0	46	1
20-GR-130 #130			Pass	40	1	2	0	4	46	1
20-GR-131 #131			Pass	41	0	2	0	2	46	1
20-GR-135 #135			Pass	37	4	2	0	6	46	1
20-GR-169 #169			Pass	40	1	2	0	3	46	1
20-GR-198 #198			Pass	43	0	0	0	0	46	1
20-GR-199 #199			Pass	43	0	0	0	0	46	1
20-GR-200 #200			Pass	38	2	2	1	5	46	1
20-GR-217 #217			Pass	40	3	0	0	3	46	1
20-GR-219 #219			Pass	41	2	0	0	3	46	1
20-PI-149 #149			Pass	35	5	3	0	9	46	1
20-RC-002 #045			Pass	36	6	1	0	8	46	1
20-RC-003 #037			Pass	40	2	0	1	3	46	1
20-RC-012 #095			Pass	40	3	0	0	4	46	1
20-RC-013 #063			Pass	40	3	0	0	4	46	1
20-RC-015 #086			Pass	41	2	0	0	3	46	1

Item Number	Sub-Item Number	Description	Pass/Fail	Affirmative	Affirmative With Comment	Negative	Abstain	Comments	Total Voting Members	Totals
20-RC-016 #127			Pass	43	0	0	0	1	46	1
20-RC-017 #211			Pass	40	3	0	0	4	46	1
20-SL-003 #087			Pass	39	1	1	3	1	46	1
20-SL-004 #090			Pass	43	0	0	1	0	46	1
20-SL-006 #094			Pass	43	1	0	0	1	46	1
20-SL-009 #114			Pass	37	4	0	3	4	46	1
20-SL-013 #120			Pass	44	0	0	0	0	46	1
20-SL-014 #163			Pass	43	1	0	0	1	46	1
20-SL-015 #166			Pass	44	0	0	0	0	46	1
20-SL-018 #116			Pass	40	1	2	0	3	46	1
20-SL-019 #037			Pass	43	0	0	0	1	46	1
20-SL-020 #104			Pass	41	2	0	0	2	46	1
20-SL-021 #139			Pass	42	1	1	0	2	46	1
20-SL-023 #147			Pass	40	1	2	0	3	46	1
20-SL-024 #137			Pass	36	2	3	2	5	46	1
20-SM-012 #012			Pass	41	2	0	0	3	46	1
20-SM-016 #016			Pass	41	2	0	0	3	46	1
20-SM-017 #017			Pass	41	1	1	0	4	46	1
20-SM-018-019 #018, 019			Pass	43	0	0	0	1	46	1
20-SM-020 #020			Pass	43	0	0	0	1	46	1
20-SM-021 #021			Pass	42	0	1	0	2	46	1
20-SM-022A #022			Pass	43	0	0	0	1	46	1
20-SM-022B #022			Pass	42	1	0	0	2	46	1
20-SM-022C #022			Pass	43	0	0	0	1	46	1
20-SM-028-029 #028, 029			Pass	42	1	0	0	2	46	1
20-SM-078 #078			Pass	42	0	1	0	2	46	1
20-SM-111 #111			Pass	41	1	1	0	3	46	1
20-SM-136 #136			Pass	43	0	0	0	1	46	1
20-SM-190 #190			Pass	42	1	0	0	2	46	1
20-SM-197 #197			Pass	42	1	0	0	2	46	1
20-VG-039, 201 #039 201			Pass	42	1	0	0	2	46	1
20-VG-040 #040			Pass	42	0	0	1	1	46	1
20-VG-056, 067 #056 067			Pass	40	2	0	1	3	46	1
20-VG-066 #066			Pass	43	0	0	0	1	46	1
20-VG-097A #097			Pass	43	0	0	0	1	46	1
20-VG-106, 143, 170 #106 143 170			Pass	42	0	0	1	1	46	1
20-VG-151A #151			Pass	42	1	0	0	2	46	1
20-VG-155 #155			Pass	43	0	0	0	1	46	1
20-VG-158, 165 #158 165			Pass	40	0	1	1	2	46	1
20-VG-174 #174			Pass	40	0	1	1	2	46	1
20-VG-209A #209			Pass	41	0	0	1	1	46	1
20-VG-210, 212A, #210, 212			Pass	40	1	0	1	2	46	1
20-VG-214A #214			Pass	41	0	0	1	1	46	1
									Totals	83

Closed Ballot Detail - Comment Resolution Table

Item Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals	
20-CR-001 #049	Negative	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1	
20-CR-002 #108	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Jason J. Thompson jthompson@ncma.org								1	
20-CR-004 #138	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1	
20-CR-005 #152	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Alan Robinson arobinson@trseinc.com								1	
	Negative	Mr. Todd A. Dailey todddailey@me.com								1	
20-CR-007 #005, 6, 7	Affirmative With Comment	Dr. Khaled Nahlawi khaled.nahlawi@concrete.org								1	
20-CR-009 #031	Affirmative With Comment	Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntontomasetti.com								1	
		Dr. Richard M. Bennett rmbennett@utk.edu								1	
20-CR-010 #182	Abstain	Mr. Darrell W. McMillian misdarrell@masonrystl.org								1	
		Mr. David B. Woodham dwoodham@ana-usa.com								1	
	Affirmative With Comment	Dr. William Mark McGinley m.mcginley@louisville.edu								1	
		Mr. Brian E. Trimble btrimble@imiweb.org								1	
		Mr. Paul G. Scott pscott@ctsaz.com								1	
	Negative	Mr. Thomas Michael Corcoran tmcocoran@comcast.net									1
		Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntontomasetti.com									1
		Mr. David T. Biggs biggsconsulting@att.net									1
		Mr. John M. Hochwalt johnh@kpff.com									1
		Mr. Scott W. Walkowicz scott@walkowiczce.com									1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com									1
	20-CR-011 #159	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-CR-104 #032	Affirmative With Comment	Mr. Paul G. Scott pscott@ctsaz.com								1	
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Darrell W. McMillian misdarrell@masonrystl.org								1	
		Mr. David T. Biggs biggsconsulting@att.net								1	
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1	

Item Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals
		Mr. Todd A. Dailey todddailey@me.com								1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1
20-CR-105 #033	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com								1
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1
		Mr. Brian E. Trimble btrimble@imiweb.org								1
		Mr. Darrell W. McMillian misdarrell@masonrystl.org								1
		Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John M. Hochwalt johnh@kpff.com								1
		Mr. Todd A. Dailey todddailey@me.com								1
Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1		
20-DE-004 #004	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu								1
		Mr. David T. Biggs biggsconsulting@att.net								1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1
20-DE-037 #037	Abstain	Mr. James A. Farny jfarny@cement.org								1
	Affirmative With Comment	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1
20-DE-168 #168	Abstain	Mr. David B. Woodham dwoodham@ana-usa.com								1
		Mr. James A. Farny jfarny@cement.org								1
	Negative	Mr. Alan Robinson arobinson@trseinc.com								1
		Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John M. Hochwalt johnh@kpff.com								1
Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1		
20-EX-001 #002	Affirmative With Comment	Mr. David T. Biggs biggsconsulting@att.net								1
20-EX-002 #002	Affirmative With Comment	Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John M. Hochwalt johnh@kpff.com								1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1
			Dr. Richard M. Bennett rmbennett@utk.edu							1

Item Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals
20-GR-044 #044	Negative	Mr. David L. Pierson davep@arwengineers.com								1
		Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John M. Hochwalt johnh@kpff.com								1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1
20-GR-096 #096	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-GR-125 #125	Negative	Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John G. Tawresey johntaw@aol.com								1
20-GR-130 #130	Affirmative	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1
	Affirmative With Comment	Mr. James A. Farny jfarny@cement.org								1
	Negative	Mr. John G. Tawresey johntaw@aol.com								1
		Mr. John M. Hochwalt johnh@kpff.com								1
20-GR-131 #131	Negative	Mr. John G. Tawresey johntaw@aol.com								1
		Mr. John M. Hochwalt johnh@kpff.com								1
20-GR-135 #135	Affirmative With Comment	Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntontomasetti.com								1
		Dr. Richard M. Bennett rmbennett@utk.edu								1
		Mr. Alan Robinson arobinson@trseinc.com								1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1
	Negative	Dr. Daniel P. Abrams d-abrams@illinois.edu								1
		Mr. John M. Hochwalt johnh@kpff.com								1
20-GR-169 #169	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
	Negative	Mr. David T. Biggs biggsconsulting@att.net								1
		Mr. John M. Hochwalt johnh@kpff.com								1
20-GR-200 #200	Abstain	Mr. David B. Woodham dwoodham@ana-usa.com								1
	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu								1
	Affirmative With Comment	Mr. James A. Farny jfarny@cement.org								1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com								1
		Mr. David L. Pierson davep@arwengineers.com								1

Item Number	Negative Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals	
		Mr. John M. Hochwalt johnh@kpff.com								1	
20-GR-217 #217	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1	
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1	
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1	
20-GR-219 #219	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu								1	
	Affirmative With Comment	Mr. David L. Pierson davep@arwengineers.com								1	
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1	
20-PI-149 #149	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Brian E. Trimble btrimble@imiweb.org								1	
		Mr. Charles B. Clark Jr. cclark@bia.org								1	
		Mr. David L. Pierson davep@arwengineers.com								1	
		Mr. John M. Hochwalt johnh@kpff.com								1	
	Negative	Dr. Daniel P. Abrams d-abrams@illinois.edu									1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net									1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com									1
	20-RC-002 #045	Affirmative With Comment	Dr. Daniel P. Abrams d-abrams@illinois.edu								1
Mr. Alan Robinson arobinson@trseinc.com										1	
Mr. David L. Pierson davep@arwengineers.com										1	
Mr. James A. Farny jfarny@cement.org										1	
Mr. John M. Hochwalt johnh@kpff.com										1	
Mr. Scott W. Walkowicz scott@walkowiczce.com										1	
Negative		Mr. David T. Biggs biggsconsulting@att.net								1	
20-RC-003 #037	Abstain	Mr. James A. Farny jfarny@cement.org								1	
	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. John M. Hochwalt johnh@kpff.com								1	
20-RC-012 #095	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Alan Robinson arobinson@trseinc.com								1	
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1	

Item Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals	
20-RC-013 #063	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1	
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1	
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1	
20-RC-015 #086	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. Alan Robinson arobinson@trseinc.com								1	
20-RC-017 #211	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1	
		Mr. David L. Pierson davep@arwengineers.com								1	
		Mr. John M. Hochwalt johnh@kpff.com								1	
20-SL-003 #087	Abstain	Mr. Charles B. Clark Jr. cclark@bia.org								1	
		Mr. David B. Woodham dwoodham@ana-usa.com								1	
		Mr. James A. Farny jfarny@cement.org								1	
	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com								1	
	Negative	Mr. Darrell W. McMillian misldarrell@masonrystl.org								1	
20-SL-004 #090	Abstain	Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1	
20-SL-006 #094	Affirmative With Comment	Mr. Brian E. Trimble btrimble@imiweb.org								1	
20-SL-009 #114	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1	
		Mr. James A. Farny jfarny@cement.org								1	
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1	
	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu									1
		Dr. Richard M. Bennett rmbennett@utk.edu									1
		Mr. Brian E. Trimble btrimble@imiweb.org									1
		Mr. David L. Pierson davep@arwengineers.com									1
	20-SL-014 #163	Affirmative With Comment	Mr. David L. Pierson davep@arwengineers.com								1
20-SL-018 #116	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1	
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1	
		Mr. David L. Pierson davep@arwengineers.com								1	
20-SL-019 #037	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu								1	

Item Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non-Persuasive	Action to Resolve Comment Negative	Vote Record	Totals
20-SL-020 #104	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
		Mr. Alan Robinson arobinson@trseinc.com								1
20-SL-021 #139	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu								1
	Negative	Mr. David T. Biggs biggsconsulting@att.net								1
20-SL-023 #147	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1
	Negative	Mr. David L. Pierson davep@arwengineers.com								1
		Mr. John G. Tawresey johntaw@aol.com								1
20-SL-024 #137	Abstain	Mr. David B. Woodham dwoodham@ana-usa.com								1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1
		Mr. Paul G. Scott pscott@ctsaz.com								1
	Negative	Dr. William Mark McGinley m.mcginley@louisville.edu								1
		Mr. David L. Pierson davep@arwengineers.com								1
		Mr. David T. Biggs biggsconsulting@att.net								1
20-SM-012 #012	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
		Mr. John M. Hochwalt johnh@kpff.com								1
20-SM-016 #016	Affirmative With Comment	Mr. John Chrysler jc@masonryinstitute.org								1
		Mr. Scott W. Walkowicz scott@walkowiczce.com								1
20-SM-017 #017	Affirmative	Mr. Thomas Michael Corcoran tmcocoran@comcast.net								1
	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
	Negative	Mr. John G. Tawresey johntaw@aol.com								1
20-SM-021 #021	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-SM-022B #022	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1
20-SM-028-029 #028, 029	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com								1
20-SM-078 #078	Negative	Mr. John M. Hochwalt johnh@kpff.com								1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com								1

20-SM- Item #111 Number	Comment Type	Commenter	Unrelated	Withdrawn	Pers Editorial	Pers Substantive	Non- Persuasive	Action to Resolve Comment Negative	Vote Record	Totals
	Negative	Mr. John M. Hochwalt johnh@kpff.com								1
20-SM- 190 #190	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com								1
20-SM- 197 #197	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-VG- 039, 201 #039 201	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com								1
20-VG-040 #040	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
20-VG- 056, 067 #056 067	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
	Affirmative With Comment	Dr. William Mark McGinley m.mcginley@louisville.edu Mr. Alan Robinson arobinson@trseinc.com								1
20-VG- 106, 143, 170 #106 143 170	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
20-VG- 151A #151	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-VG- 158, 165 #158 165	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
	Negative	Mr. John M. Hochwalt johnh@kpff.com								1
20-VG-174 #174	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu								1
20-VG- 209A #209	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
20-VG- 210, 212A, #210, 212	Abstain	Mr. David B. Woodham dwoodham@ana-usa.com								1
	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com								1
20-VG- 214A #214	Abstain	Mr. David T. Biggs biggsconsulting@att.net								1
Totals										180

Closed Ballot Detail - Comment Table

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-CR-001 #049	Negative	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	<p>The slump requirements of TMS 602 Article 2.6 B.2 are certainly helpful and should be referenced if this situation occurs, but what if the contractor argues that a piece of hardened grout is not "grout" but a "bar positioner"? There is no language currently in the code or specification that constrains the maximum size/thickness of a bar positioner nor on the maximum obstruction that it can pose within the grouted cell. TMS 602 Commentary figure SC-11 shows examples of typical bar positioning devices, but no where do we define or limit what can be called a "bar positioner". What prevents the use of a wood block as a bar positioner? I think there is room for improvement and clarification here. One suggested way would be to define a maximum size of obstruction that a bar positioner can introduce. Perhaps referencing back to the maximum reinforcement percentages in TMS 402 6.1.3 and the definition of gross grout space would be a good starting point.</p> <p>To aid the subcommittee, consider expanding TMS 602 article 3.4B as follows:</p> <p>1. Support reinforcement to prevent displacement caused by construction loads or by placement of grout or mortar, beyond the allowable tolerances. Reinforcement supports shall not exceed the percentages of the gross grout space defined by TMS 402 Table 6.1.3.2.5, Table 6.1.3.2.5.1, or Table 6.1.3.2.5.2, taking the area of vertical reinforcement and the area of horizontal reinforcement into account.</p>		1
20-CR-002 #108	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Editorially change 12" to 12 in. (305 mm)		1
		Mr. Jason J. Thompson jthompson@ncma.org	Instead of 12"...replace with <u>12 in. (305 mm)</u> .		1
	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-CR-003 #134	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-CR-004 #138	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu	If users are finding our provisions to be extremely unclear, then I do not think a proper response is to say that we believe the existing language is sufficiently clear. We need to put ourselves in the place of a user that does not have the time we spend to examine and discuss the requirements. I do agree there are flaws in what is being proposed, but when I read our existing language I agree that it is unclear, or at least not well written.		1
20-CR-005 #152	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	What are other ways to comply with rebar placement requirements? I think a better solution would be to modify the commentary to list several ways that rebar can be supported and then say Figure SC-11 illustrates several devices used to secure bar reinforcement.		1
		Mr. Alan Robinson arobinson@trseinc.com	Along with the note on the figure, it might also be good to change the title of the figure to "Examples of positioners for reinforcement" to clarify that this is not required or necessarily typical.		1
	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Mr. Todd A. Dailey toddailey@me.com	<p>1) The current code/commentary language leads many (such as building officials and design professionals) to believe rebar positioners are required. Especially with low lift grouting, accurate placement of rebar can be made without positioners or tying. The freshly placed grout is often used to essentially locate and stabilize the bar position. At the very least, code commentary should be modified.</p> <p>2) The "Typical reinforcing bar positioners" shown in Figure SC-11 are outdated and do not reflect today's styles.</p>		1
20-CR-006 #005, 6, 7	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-CR-007 #005, 6, 7	Affirmative With Comment	Dr. Khaled Nahlawi khaled.nahlawi@concrete.org	Add "ASTM" before "C1714" in Ballot 007		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-CR-008 #109	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-CR-009 #031	Affirmative With Comment	Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntontomasetti.com	it would be good to add the reason why heat loos should be considered. Suggest adding the following "Grout should be mixed to a temperature above the minimum mixing temperature to account for possible heat loss while transporting it between the mixing station and work area <u>to ensure that the minimum placement temperature requirements are satisfied.</u>		1
		Dr. Richard M. Bennett rmbennett@utk.edu	It would help to change to Maintain grout temperature <u>at or</u> above 70i, °F (21.1i, °C) at the time of grout placement. This would make placement at 70 degrees acceptable, which is currently not acceptable.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Affirmative With Comment	Dr. William Mark McGinley m.mcginley@louisville.edu	The figures in the Commentary stil mention Pour height. Please change to Maximum heigh of masonry to be grouted		1
		Mr. Brian E. Trimble btrimble@imiweb.org	Great idea to make this change, but there may need to be a couple of editorial corrections. Article 3.5 D a.iii and b, use the term "area", but it really should be "cell(s)". So the two instances would read: "No intermediate reinforced bond beams are located between the top and the bottom of the <u>area cell(s)</u> to be grouted" and " When the conditions of Articles 3.5 D.1.a.i and 3.5 D.1.a.ii are met but there are intermediate bond beams within the <u>area cell(s)</u> to be grouted, limit the grout..."		1
		Mr. Paul G. Scott pscott@ctsaz.com	Consider different wording : Use ' Height of masonry to be grouted ' instead of ' Height of masonry prior to grouting '. This language allows a different height of masonry to be built vs the height of the grout to be placed.		1
		Mr. Thomas Michael Corcoran tmcorcoran@comcast.net	Suggest deleting "to be built" from the changed title note of Table 7 and Figure SC-7.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
		Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntontomasetti.com	The term "maximum height of masonry to be built prior to grouting" is confusing. The heights in the table refer not to the masonry, but to the grout. Does the masonry built also incldue all previously grouted masonry? For example, if a wall is constructed in two 12.67' sections and grouted completely each time (with 5.33 grout lifts for exmple), the grout pour is 12.67' but the maximum height of masonry built is 24.33' A better term could be "Maximum height of grout placed prior to erection of additional masonry". Otherwise the definition of a grout pour and grout lift are fine as is.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-CR-010 #182	Negative	Mr. David T. Biggs biggsconsulting@att.net	<p>Grout pour has been an industry term for decades. I don't believe a change is needed.</p> <p>In addition, grout pour and grout lift are defined in TMS 602. The terminology is used in many locations. This ballot does not address all the changes to delete grout pour and grout lift.</p> <p>There are also many publications, including the MDG, that explain grout pour. Are we really wanting to eliminate the term and force a full rewrite? Will it really make a necessary improvement?</p> <p>As to the ballot, there are inconsistencies that create new problems.</p> <ol style="list-style-type: none"> 1. The 3.5C change refers to "Height of masonry prior to grouting...". The change to Table 7 lists "maximum height of masonry.." 2. Then Note 3 in the table lists "maximum grout height". 3. Grout pour is deleted in 3.5 but still remains in the definitions. 4. I also agree with the Subcommittee comment that this now limits building higher than could be grouted in a lift. The code intent has been to limit the grout pour height not the wall height before grouting. <p>I believe the proposed change creates more confusion through the inconsistencies noted, not less, and suggest making no change.</p>		1
		Mr. John M. Hochwalt johnh@kpf.com	<p>The committee has already done good work this cycle towards reducing the confusion of users about the pour and lift heights, making the issue raised by the commenter less urgent. As a result, I am voting negative because the potential unintended consequences of this ballot are greater than the potential for enhanced clarity.</p> <p>If, as the abstaining subcommittee member suggests, the area to be grouted stops short of the height of masonry permitted to be constructed by Table 7 that would mean that reinforced bond beams in the upper, ungrouted, portion of the masonry would not be considered when determining compliance with 3.5. D 1. In 3.5 D 1.a.iii we could close this loophole as follows ". . . between the top of the <u>as-built masonry</u> and the bottom of the area to be grouted." A similar revision could be made in 3.5 D 1.b.</p> <p>The use of the term "grouting height limits" in Section In 3.5 D 2 is inconsistent with the description in Table 7, which is proposed to be a masonry height limit. This could be corrected by describing this as "the masonry height limit of Table 7" at both locations in this section.</p> <p>In 3.5 F, I wonder if it will be obvious to all users that we are assuming that the last lift in a pour should be treated as the first lift for the next pour. I would suggest leaving the text of the first two sentences as-is.</p>		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	<p>While I agree that the term 'grout pour' can be confusing along with 'grout lift', they are industry terms that many users come to understand and that many presenters educate engineers and architects about. The term is defined and clear and the proposed alternative is to wordy. Other minor concerns with the proposal is the use of 'area to be grouted' that should maybe, in some places anyway, be 'height'. I also agree with the AWC SC voter and suggest that if the proposed changes were to move forward that the language be adjusted, or Commentary added, that makes it clear that the grout pour height can exceed the height to be grouted, and that the height to be grouted can be grouted in multiple lifts. All in all, I propose leaving the language as is and note the definition, industry terminology and user responsibility to understand the provisions being applied. Some of the other proposed changes like the simplification of the grout key in Figure SC-20 are good and should be considered for future changes.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals	
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	The abstention voter's comment regarding completed height vs pour height deserves additional consideration. I do not think the intent of the proposed revisions is to prevent laying up block as the commenter describes - this could place masonry at a construction speed disadvantage compared to other materials. Consider the following alternate phrasing throughout: In place of "Maximum height of masonry to be built prior to grouting," instead use "Maximum grout lift height." Alternatively, perhaps 3.5C and 3.5D could be merged into one section with the title of 3.5D governing.		1	
20-CR-011 #159	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Minor point, but in the Spec, it is Dimensions, specified (plural), while the proposed for the Commentary is Dimension, specified (singular). One or the other should be changed.		1	
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1	
20-CR-104 #032	Affirmative With Comment	Mr. Paul G. Scott pscott@ctsaz.com	I do not disagree with some wiggle room for these types of items if agreed to by the engineer, the inspector and the contractor. However, I think the location for these types of items is in the Alternate Means and Methods section.		1	
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1	
	Negative		Mr. David T. Biggs biggsconsulting@att.net	I believe the Negative voter's comments have merit. I am also concerned that there is a clear statement in the MDG that contradicts what is being stated in the rationale...ie sample panel can't override cleanouts. If this item passes, the MDG needs to be changed.		1
			Mr. Scott W. Walkowicz scott@walkowiczce.com	I believe that the CR SC's note about demonstration panels is valid, if the structure of the code permitted demonstration panels to modify cleanout requirements. I agree with McMillian's following comment that the demonstration panel does not affect cleanout requirements and I have spoken to that on several occasions. I know that some inspectors/officials allow the demonstration panel to modify the cleanout provisions but I believe that action to be in error. I propose that the demonstration panel provisions be moved or additional provisions be added to allow a demonstration panel to prove sufficient control to allow taller grout pours without cleanouts.		1
			Mr. Todd A. Dailey todddailey@me.com	I believe D. McMillian is correct on at least two counts: 1) The code does not permit a grout demonstration panel to be used to waive the 5'-4" cleanout limit (I think that should be fair game for a demonstration panel, but it is not the way the code is written). 2) I see his request and sample scenario as quite reasonable.		1
			Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	I find the negative voter's argument persuasive.		1
20-CR-105 #033	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com	I understand McMillian's concerns but would like to see things go in a different direction. I'd like the Sample Panel inspection to remain and the Commentary related to 1.6D expanded to address more structural content that can and should be shown in the Sample Panels. The Specification notes: 'materials and procedures for the accepted work' and that should include structural content including reinforcement, grouting, etc... even for simple wall construction. Too many times the SP's are simply aesthetic and the structural portion of the work isn't installed as would be expected in the actual construction - but it should be, and then SI makes sense. Add this for consideration in the next cycle and leave the language and table as-is.		1	
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1	
		Mr. Brian E. Trimble btrimble@imiweb.org	There is no reason that a special inspector needs to review a sample panel. The design and construction team should have this all figured out by the time the inspector arrives to review the actual construction. I doubt that anyone would hire an <u>inspector</u> to help review issues that are discovered during the building of a sample panel - a consulting engineer or constructability expert, but not likely an inspector.		1	

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
	Negative	Mr. David T. Biggs biggsconsulting@att.net	The commenter's suggestion to develop a new ballot concerning special inspection requirements for a sample panel seems reasonable. I too believe the special inspectors duties should be clarified between structural and aesthetic issues. My understanding is the special inspector's role was created to primarily address structural issues, but that role can be expanded to any inspecton if so specified by the designer.		1
		Mr. Todd A. Dailey todddailey@me.com	I fully agree with D. McMillian.		1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	I find the negative voter's argument persuasive.		1
20-DE-004 #004	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu	Consider removing "specified" from the titles of 4.3 and Table 4.3.1 (including titles in columns 2 and 3 of the table). Both "m" and "g" include "specified" in their definitions.		1
		Mr. David T. Biggs biggsconsulting@att.net	The last paragraph of the Commentary proposed for 4.3 regarding the hydrophilic nature of AAC has little to do with compressive strength and should be moved to the Commentary for TMS 602, Article 3.5H.		1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	I love the table formatting proposed here as well as shifting these provisions to chapter 4. It seems odd that we do not have a requirement that f'g for grout in clay masonry must exceed f'm, but the rationale for 20-DE-115 explains the reason for this distinction.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-DE-037 #037	Affirmative With Comment	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	Thank you for addressing the second half of this public comment.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-DE-057 #057	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-DE-091 #091	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-DE-115 #115	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-DE-168	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
		Mr. Alan Robinson arobinson@trseinc.com	I still think this change is not appropriate. As per my previous submitted example (maybe it was not clear), per the revised code, the member can have a reinforced nominal moment capacity that is less than the cracking moment capacity of the member. Therefore, under an unexpected event, the reinforcing could instantly go from compression to extreme tension as the member cracks. This could lead to fracture of the reinforcing and cause instantaneous collapse under the self weight of the member. With the current language, there is much more likelihood that the failure will be ductile and collapse less likely.		1
		Mr. David T. Biggs biggsconsulting@att.net	I agree with much of the subcommittee negative comments. I also disagree with the "small amout of uplift" comment as being vague. If the example beam has uplift at the top of a wall, the roof needs to be anchored down. It the beam is one course deep, there is very little masonry to resist uplift anchorage. If there are multiple courses to carry roof gravity loads, it is not unreasonable to expect bottom reinforcement for the gravity loads and a top bar as a diaphragm chord reinforcement thereby easily providing the 1.3 capacity. This may not be the best example, but I think the ballot needs more work.		1

105 #008 Number	Comment Negative Type	Commenter	Comment	Comment File	Totals
		Mr. John M. Hochwalt johnh@kpff.com	<p>The proposed revision is unnecessary and could result in reduced safety in circumstances where the predominant loads are not gravity loads.</p> <p>The proposal is unnecessary because Section 9.3.3.2.2 already provides an alternative to designing for 1.3 times the cracking moment provision - Section 9.3.3.2.2 allows for a capacity of less than 1.3 times the cracking moment if 1/3 more steel is provided than is required by analysis. This second provision is intended for exactly such applications as noted by the commenter, and results in an appropriately larger factor of safety for brittle flexural mechanisms. Regardless of the source of loading, if the potential failure mode is brittle, there should be a larger safety factor.</p> <p>A point of comparison would be to consider ACI 318-19 Section 9.6.1 which contains a parallel provision for reinforced concrete beams. Note that this provision offers the same out of providing 1/3 more steel and does not restrict the minimum reinforcement requirements to gravity load conditions.</p>		1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net	I think the statement the following statement is misleading "The reinforcement at the bottom of the beam can safely resist these transient loads. This provision would not apply to the uplift loading.". What if the beam reinforcement and the top of wall reinforcement are one of the same? If the net load on a beam is an uplift load then the bottom beam reinforcement is in compression. What is a "small amount" of uplift load? Shouldn't the design engineer check the beam for uplift loads and if there is a "large amount" of net uplift load then check the 1.3Mc _r requirement?		1
20-EX-001 #002	Affirmative With Comment	Mr. David T. Biggs biggsconsulting@att.net	Most users have not seen ASCE 7-22 yet. Who has verified there are not changes that affect TMS 402?		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-EX-002 #002	Affirmative With Comment	Mr. David T. Biggs biggsconsulting@att.net	Is the ballot presenting these updates and saying they have no changes in content that materially affect TMS 402?		1
	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com	Specifications, 1.3 - Reference Standards - for ACI 117-10, why do we repeat 117-10 in parentheses?		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	The words "where necessary" are redundant in the added language. If there are "locations where movement joints are not permitted", then showing where they are is necessary. Trying to describe where joints cannot be located in a clear note would probably not be possible or be too complex to be clear.		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	I agree that the proposed additional language is beneficial. I'd like to see a little more specific language in the Code/Spec that directly requires more clarity on where the joints should be placed and indication by the design professional - those locations should not be determined by the contractors - it is not their job or their liability.... If the joint placement truly doesn't matter, then they can note/detail standards for where joints cannot be located, and the added language helps although the checklist tables are not part of the mandatory language and the minimum requirement to show where joints should not be located should be in the Code or Spec.		1
		Dr. Richard M. Bennett rmbennett@utk.edu	<p>I agree with comment 2. Keep text as is.</p> <p>The checklist is not mandatory. The real requirement is in TMS 402 Section 1.2.1, where it says "Show or indicate all information required by TMS 402 on the project drawings or in the project specifications, including:" and item (h) is "Provision for dimensional changes resulting from elastic deformation, creep, shrinkage, temperature, and moisture." I believe giving a general note as to the spacing and showing locations where movement joints are prohibited meets the requirement of TMS 402.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-GR-044 #044	Negative	Mr. David L. Pierson davep@arwengineers.com	<p>I'm not one who wants to add a lot of words, but I think this is clearer if worded as follows:</p> <p>"...where movement joints are not permitted <u>in order</u> to maintain structural design intent...."</p> <p>Also, I think that this can be conveyed without graphics - so I would suggest deleting the phrase "graphically in plan or elevation"</p> <p>Therefore, the wording I would propose is:</p> <p>"and, where necessary, indicate where movement joints are not permitted in order to maintain structural design intent".</p> <p>This can be done, for instance, in a set of construction documents, with a note indicating "No movement joints are permitted over openings nor within 24" of the edge of any opening, unless specifically shown in the drawings".</p>		1
		Mr. David T. Biggs biggsconsulting@att.net	<p>I disagree with the premise that putting a note on the drawings without locating them in plan or elevation meets the intent of TMS 602. The use of notes improperly places the burden upon the contractor and often results in no review or oversight by the designer to confirm the locations.</p> <p>The ballot proposes the drawings show graphically on the plans or elevations where movement joints are not permitted. This is backwards to me.</p> <p>I recommend if any clarification is needed, that the checklist state:</p> <p>Indicate type and location of movement joints on the drawings and <u>specifically locate them graphically in plan or on elevations.</u></p>		1
		Mr. John M. Hochwalt johnh@kpf.com	<p>While I think this is a clever solution, I would be baffled if I saw this item in the checklist without the benefit of having seen this ballot. Perhaps this checklist item could be coupled with some commentary to TMS 402 Section 1.2.1 (h) that would introduce this idea of specifying maximum joint spacings and protected zones.</p> <p>Ultimately, though, I feel that this is straying beyond what the building code should address. Alternate approaches to defining joint locations is a topic better addressed outside the building code. For example, perhaps the Design Practices Committee of TMS could develop a document similar to the ACI Detailing Manual to illustrate best practices for the presentation of masonry structures on architectural and structural drawings.</p>		1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net	<p>Why go through all the work of showing where "not" to put movement joints when you can show them on the plans and elevations and be done with it? It's better to have the joints located on the structural and architectural drawings, reviewed and coordinated by both the architect and the engineer. You will eliminate problems in the field and save money. There may be times when the contractor will want to move a joint (ease of construction, a mechanical duct that was slipped in at the last moment, etc) but that's a lot easier to resolve than sitting out in the field with the contractor's crew and the architect trying to figure out where joints should be installed when a wall is half built.</p>		1
20-GR-096 #096	Negative	Dr. Richard M. Bennett rmbennett@utk.edu	<p>It seems strange to use the words Required Strength in allowable stress design, particularly since the term is not subsequently used in Chapter 8.</p> <p>In 9.1.3, 11.1.3, and 12.1.3 it states that the design strength shall exceed the required strength, so we are told what to do with the required strength. This does not happen in 10.4.3.2, and that should be changed.</p> <p>The current 8.1.2 states that Calculated stresses shall not exceed the allowable stress requirements of this Chapter. To follow the pattern of Chapter 9, 11, and 12, it seems that instead of the new 8.1.2 being Required Strength, it should be Calculated Stresses. The provision would be: Calculated stresses shall be determined in accordance with the allowable stress design load combinations as designated in Section 4.1.2, except as noted in this Chapter.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-GR-125 #125	Negative	Mr. David T. Biggs biggsconsulting@att.net	<p>I agree with the Public Comment.</p> <p>In 1.1.2, I propose that <u>unless modified by the building code</u> be added to the end of the first sentence.</p> <p>1.1.2 <i>Governing building code</i></p> <p>This Code supplements the legally adopted building code and shall govern in matters pertaining to structural design and construction of masonry, <u>unless modified by the building code</u>. In areas without a legally adopted building code, this Code defines the minimum acceptable standards of design and construction practice.</p> <p>unless modified by the building code</p>		1
		Mr. John G. Tawresey johntaw@aol.com	<p>20-GR-125</p> <p>As written:</p> <p>This Code supplements the legally adopted building code and shall govern in matters pertaining to structural design and construction of masonry.</p> <p>Possible interpreted:</p> <p>This Code (TMS 402) supplements the legally adopted building code (IBC) and (This Code TMS 402) shall govern in matters pertaining to structural design and construction of masonry.</p> <p>TMS 402 does not supersede the legally adopted building code.</p> <p>Suggested Language (From TMS 402-11):</p> <p>This Code supplements the legally adopted building code and shall govern in matters pertaining to structural design and construction of masonry elements, except where this Code is in conflict with the requirements in the legally adopted building code.</p>		1
20-GR-130 #130	Affirmative	Ms. Heather A. Sustersic hsustersic@colbycoengineering.com			1
	Affirmative With Comment	Mr. James A. Farny jfarny@cement.org	<p>I'm ok with the existing language but agree with the second subcommittee comment that the definitions of reinforced and unreinforced might be better aligned by restating the "used to resist forces" language to something like "masonry in which reinforcement and masonry act together and are both taken into consideration in resisting forces."</p>		1
	Negative	Mr. John G. Tawresey johntaw@aol.com	<p>20-GR-130</p> <p>As written:</p> <p><i>Masonry, reinforced</i> "Masonry in which reinforcement acting in conjunction with the masonry is used to resist forces.</p> <p>Comment: There are situations in unreinforced masonry where there is reinforcement and it is not used to resist forces. Does the word "used" imply used by the designer, or the physical system i.e. the masonry.</p> <p>Suggested language:</p> <p><i>Masonry, reinforced</i> "Masonry in which reinforcement acting in conjunction with the masonry is used <i>in design</i> to resist forces.</p>		1
		Mr. John M. Hochwalt johnh@kpff.com	<p>I agree with the non-voting subcommittee comment - better aligning the definitions of reinforced masonry and unreinforced masonry would address the intent of the public comment which seems to have been to bring clarity to what these two terms mean in the context of TMS 402.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-GR-131 #131	Negative	Mr. John G. Tawresey johntaw@aol.com	<p>20-GR-131</p> <p>As written</p> <p><i>Masonry, unreinforced</i> "Masonry in which the tensile resistance of masonry is taken into consideration and the resistance of reinforcing steel, if present, is neglected.</p> <p>Comment: Reinforcement in unreinforced masonry is taken into consideration for crack control. The reinforcement resistance is considered. I suggest parallel language to Masonry, reinforced.</p> <p>Suggested language</p> <p><i>Masonry, reinforced</i> "Masonry in which reinforcement acting in conjunction with the masonry is <i>not</i> used <i>in design</i> to resist forces.</p>		1
		Mr. John M. Hochwalt johnh@kpf.com	As noted for 20-GR-130, better aligning the definitions of reinforced masonry and unreinforced masonry would address the intent of the public comment which seems to have been to bring clarity to what these two terms mean in the context of TMS 402.		1
20-GR-135 #135	Affirmative With Comment	Dr. Chukwuma Ganiru Ekwueme cekwueme@thorntomasetti.com	Would it be better to say in accordance with the <u>relative</u> rigidities...? The rigidities of the walls and diaphragm only mean something in comparison to each other.		1
		Dr. Richard M. Bennett rmbennett@utk.edu	<p>The commentary needs work.</p> <p>The first sentence does not make sense: The design assumptions for masonry buildings include the use of a lateral-force-resisting system. Change to something like: The design assumptions for masonry buildings include the distribution of forces to the lateral-force-resisting system.</p> <p>With the change in the code, the second sentence is not needed.</p> <p>Editorially change ASCE 7 to ASCE/SEI 7.</p> <p>ASCE/SEI 7 does not provide information about the methods used to distribute load to the lateral force-resisting system. It just has information on permitted assumptions (i.e. rigid diaphragm or flexible diaphragm). You have to go to other sources to then see how the analysis is done. I would suggest not adding the sentence.</p>		1
		Mr. Alan Robinson arobinson@trseinc.com	I do not think this change is necessary. For flexible diaphragm, the distribution is still based on the difference in member stiffness between the diaphragm and the vertical lateral force resisting system. When the vertical lateral force resisting system is much stiffer than the diaphragm, then the forces are distributed by tributary area. The added language in the commentary is good, but the code language could be left as is.		1
		Mr. Thomas Michael Corcoran tmcocoran@comcast.net	<p>Seems like we're partially saying what's intended. Suggest revising to the following or something similar:</p> <p>Lateral loads shall be distributed to the lateral-force-resisting system by:</p> <p>a) In proportion to their rigidities considering the rigidity of the horizontal bracing system or rigid diaphragms.</p> <p>b) In proportion to the tributary area of the vertical resisting element when using flexible diaphragms.</p> <p>and shall comply with the requirements of this section.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
	Negative	Dr. Daniel P. Abrams d-abrams@illinois.edu	<p>Though the word "rigidity" is often used as a replacement for "stiffness" there is a distinct difference in definitions. Rigid behavior connotes an infinite stiffness rather than a finite relative stiffness. Thus, please replace "rigidities" with "stiffnesses" in the proposed revision to Sec. 4.1.6. Also, since the "structural system" consists of both vertical and horizontal elements, the floor diaphragms are part of such systems rather than being additional to them.</p> <p>Moreover, the term "loads" is typically reserved for those actions applied to a building system such as dead, live, wind, snow, etc. The term "forces" are actions applied to elements of the system.</p> <p>Thus, I suggest the following wording to Code Sec. 4.1.6.</p> <p>4.1.6 Lateral load-force distribution</p> <p><i>Lateral loads forces shall be distributed to the structural system in accordance with the rigidities-relative stiffnesses of the structural system elements including and of the horizontal diaphragms, and shall comply with the requirements of this section.</i></p>		1
		Mr. John M. Hochwalt johnh@kpff.com	<p>I am supportive of the commentary addition but opposed to the revision to the code. The existing "member stiffnesses" is better than the proposed "rigidities of the structural system" because it better captures that forces are being distributed to individual components or members of the structural system. In addition it is unnecessary to explicitly reference horizontal diaphragms as they are commonly understood to be part of the structural system - just like foundations, for example, are understood to be part of the structural system.</p>		1
20-GR-169 #169	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	<p>I agree with the commenter, but do not feel strong enough to vote negative.</p> <p>I understand the argument from section 1.4, but we need to be careful how strong we argue this. We say ASCE/SEI 7 is fully adopted, but Chapter 14 of ASCE/SEI 7 modifies TMS 402. So are we saying we fully agree with the modifications?</p>		1
	Negative	Mr. David T. Biggs biggsconsulting@att.net	I agree with the 19-GR-200.		1
		Mr. John M. Hochwalt johnh@kpff.com	<p>Section 1.4 can be distilled down to the following phrases: "Standards . . . cited in this Code . . . are declared to be part of this Code as if fully set forth in this document." My understanding of "cited" is that these standards are incorporated to the extent that they are cited. For example, in Section 4.1.2 we reference ASCE 7 for load combinations. The means that the load combination provisions in ASCE 7 are incorporated "as if fully set forth in this document", not that the standard as a whole has been incorporated. We do not, for example, want the modifications to the masonry code in Chapter 14 of ASCE 7 to be adopted.</p> <p>While we have discrete citations of TMS 602 in the Code, I believe that we want the specification to be adopted in its entirety - not just the specific provisions referenced in the Code. There should be a general requirement that construction be in conformance with TMS 602 for the provisions of the code to be applicable.</p>		1
20-GR-200 #200	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu	Affirm		1
	Affirmative With Comment	Mr. James A. Farny jfarny@cement.org	I am ok with the proposed change but agree with the negative voter's second point that "design assumptions" should be an acceptable term. I don't have a strong preference for either approach.		1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	Consider changing "the basis for the design" to "the basis of design" in both code and commentary. This is a more commonly used phrase and reads better.		1
		Mr. David L. Pierson davep@arwengineers.com	I agree with the negative voter. The wording "design assumptions" is the commonly used vernacular by engineers. Of course the design is finished - but we use this term often throughout the code. I think the code is fine without these changes.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
	Negative	Mr. John M. Hochwalt johnh@kpff.com	The existing language is better than the proposed language, and is consistent with how practitioners describe and think about the design process. As one example, as a designer I assume the compressive strength of the masonry when designing the structure, and then I specify in the contract documents a minimum compressive strength consistent with my assumption. Only once the structure is constructed and the appropriate testing is performed is the strength known and my original assumption validated (or not).		1
20-GR-217 #217	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	Proposed change 20-GR-044 specifies certain information required on the drawings. How will this proposed change be reconciled with the new provisions in 20-GR-044 if both proposals pass?		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	I think the proposed language is an improvement, but I suggest further evaluation be done and a future change considered to require movement joints to be shown, or areas where they cannot be shown, and/or notes that clearly indicate that movement joints are not required, or that specific locatin of the joints is not required, due to the design basis or the anticipated building behavior.		1
		Mr. Thomas Michael Corcoran tmcorcoran@comcast.net	See my comment in ballot "20-GR-044 #044"		1
20-GR-219 #219	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu	Affirm		1
	Affirmative With Comment	Mr. David L. Pierson davep@arwengineers.com	I assume, though not stated in the response/rationale, that the subcommittee proposes to carry this comment over into the next cycle?		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	The ballot does not note that the comment will be considered in the future - this would be a good idea as more guidance can be given that will provide clarity to designers, consistency in design and better performance of constructed masonry.		1
20-PI-149 #149	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Editorially change 16" to 16 in. (406 mm).		1
		Mr. Brian E. Trimble btrimble@imiweb.org	The metric equivalent must be added to new Section 12.1.5.1.3.		1
		Mr. Charles B. Clark Jr. cclark@bia.org	In proposed Code Section 12.1.5.1.3, change "16"" to become "16 in. (406 mm)" In Code Commentary 12.1.5.1, new proposed paragraph, fourth line, change "...Sections 12.1.5.1..." to "...Section 12.1.5.1..."		1
		Mr. David L. Pierson davep@arwengineers.com	For clarity, I suggest showing linf and hinf in the Figure CC-12.1-1.		1
		Mr. John M. Hochwalt johnh@kpff.com	Please see attached for suggested enhancements to commentary figure CC-12.1-1.	Figure_CC-12.1-1_Hochwalt.pdf	1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Dr. Daniel P. Abrams d-abrams@illinois.edu	In Sec. 12.1.5.1 the terms "any dimension" may be misconstrued to include the dimension normal to the infill plane, i.e. the infill thickness. If this wording is interpreted as such, then no openings of any size would be allowed in an infill thicker than 6 inches. I doubt if this is the intention. Perhaps it would be better to replace "any dimension" with "width or length". Figure CC-12.1-1 needs more clarification. The bounding frame should be shown as columns and beams for context (rather than shaded rectangles) and the figure should be designated as an elevation view. Dimensions should be given to locate the hatched areas. Dimension lines should follow standard format practice with arrows at their ends. Lines from the dimension lines should be drawn consistently (either hidden from bounding frame or shown, but not both).		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
		Mr. Thomas Michael Corcoran tmcorcoran@comcast.net	Figure CC-12.1-1 requires more definition such as: 1. Define linf and hinf on the figure. 2. Define the white area of the figure. 3. Can the code 12.1.5.1 and 12.1.5.1.1 maximum opening size and cumulative area of openings requirements be shown on the figure? 4. Give the figure a title such as "generic (or common, universal, etc) infill wall elevation".		1
		Ms. Heather A. Sustersic hsustersic@colbycoengineering.com	The proposed language appears to assume that the infill wall is designed to span vertically. What if the wall is designed to span horizontally? Also, please add that the openings should not interrupt bond beams, whether reinforcement is present or not.		1
20-RC-002 #045	Affirmative With Comment	Dr. Daniel P. Abrams d-abrams@illinois.edu	Two dimensions are added at the top of Figure CC-6.1-8 yet the same two dimensions are shown near the bottom of the wall. Showing this dimension four times will no doubt confuse, let alone showing more than once.		1
		Mr. Alan Robinson arobinson@trseinc.com	I agree with the first part of the comment from Hochwalt. The language "When terminal development lengths for positive and negative reinforcement occur coincidentally" is not well defined. As Hochwalt states, what does "terminal development length" mean? Is that the distance from the critical section? If so, does "coincidentally" mean only when the entire ld lengths for both bars coincide? Also, how does this work with two curtains of steel?		1
		Mr. David L. Pierson davep@arwengineers.com	Following up with Hochwalt's comment, could the wording "occur coincidentally" be changed to "overlap"? (I think, in plain English, to "occur coincidentally" is to "coincide".) Just something to consider. Maybe for next cycle.		1
		Mr. James A. Farny jfarny@cement.org	In response to the subcommittee comment about development lengths that "occur coincidentally" perhaps "are adjacent to each other" would be a clearer way to state that.		1
		Mr. John M. Hochwalt johnh@kpff.com	Just repeating the comment I made at subcommittee: I find the phrase "When terminal development lengths for positive and negative reinforcement occur coincidentally", which is used twice in the commentary, confusing. First, "terminal development length" sounds like it is a defined term that we should know the meaning of, but it is not. Second, "coincidentally" sounds they are happening in parallel, but I believe the situation we describing is where the two lengths are happening in sequence. What if we the commentary said instead "In lieu or providing the development lengths and bar extensions shown in Figure CC-6.1-8, the reinforcing may be made continuous with an appropriate splice."		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	I generally agree with the SC commenter and hope that the proposed language would be considered in the next cycle.		1
	Comment Non-Voting	Mr. Robert M. Chamra rhamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
Negative	Mr. David T. Biggs biggsconsulting@att.net	I'm more confused by the ballot than what exists. I suggest no change.		1	

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-RC-003 #037	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	<p>Is there still an issue here? I could interpret the "or" in 2.4 D.1 as meaning if I use stainless steel wire I don't have to meet any of the requirements of A951. I think the intent is just to allow the stainless steel material, but all the other requirements of A951, such as knurling, weld shear strength, dimensions and tolerances, etc still apply. I don't know that I have the best solution but perhaps something along the lines of:</p> <p>2.4 D.1 Conforms to ASTM A951</p> <p>Exception: AISI Type 304 or Type 316 stainless steel wire conforming to ASTM A580/A580M, having a minimum yield strength of 45 ksi (310 MPa) and a minimum ultimate tensile strength of 90 ksi (620 MPa) is permitted to be used.</p> <p>Maybe add some commentary saying the exception is just for the material, and all other requirements of A951 have to be met.</p> <p>A better long-term solution is to change A951. Currently A951 does permit A580/A580M, Type 304, but there is an issue that the material properties (minimum yield of 70 ksi) do not work for stainless steel. Have A951 permit both Type 304 and Type 316, and change their requirements for stainless steel to the yield and ultimate we are establishing while keeping the requirements for carbon the same. This would be a good task for Mark McGinley.</p>		1
		Mr. John M. Hochwalt johnh@kpf.com	In hindsight, it seems like it may not be clear that when joint reinforcement is fabricated with ASTM A580 stainless steel wire that the fabrication itself - welding and knurling of the wires - must still be in conformance with ASTM A951. How about ". . . or is fabricated <u>in accordance with ASTM A951</u> with AISI Type 304 . . ."?		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-RC-012 #095	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	<p>Nicely written ballot!</p> <p>Editorially add (51.7 MPa) after 7,500 psi in two locations.</p> <p>Not related to this ballot, but as I was checking the notation, there is gamma, gamma-h, and then in a completely different location in the list gamma-d. It seems all the gammas should be consecutive. I don't know the Greek alphabet well enough to know where they should be.</p>		1
		Mr. Alan Robinson arobinson@trseinc.com	The language in the commentary "It is expected that a more refined and potentially less conservative equation for l_{dh} will be developed for a future addition of this code." is not helpful. At this time, there does not seem to be enough research on this topic to say whether a new provision will or will not be developed in the future.		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	Please look at the equivalent embedment provided by the hooked bars in the next cycle, as suggested.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-RC-013 #063	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	Is the anchorage for single wire proposed by these changes equivalent to the ones with cross wires? Has there been any testing to show these details are appropriate or equivalent to the ladder type joint reinforcing? This proposal is better than the lack of any details currently in the code, but these details should be verified during the next cycle.		1
		Mr. Scott W. Walkowicz scott@walkowiczce.com	Please look at the deformed wire restrictions in light of those noted for joint reinforcement, in the next cycle.		1
		Mr. Thomas Michael Corcoran tmcorcoran@comcast.net	Seems like the 4" overlap figure shown in Figure CC-6.1-4 would provide better vertical Reinforcement confinement than the 3" wire extension figure. Is confinement a concern or a requirement?		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-RC-015	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Nothing is ever easy. I like the ballot, but the cross-sectional area is not always easily defined. For example, are the screws in the Zap Screwlock, https://www.barsplice.com/zap-screwlok.html , included in the cross-sectional area? Or the port that sticks out in Cadweld splices, https://www.erico.com/newsdetail.asp?newsid=82 . I would think not, but I may be wrong. A little commentary about whether minor protrusions are considered part of the cross-sectional area or not would be helpful. Thank you.		1

#086 Number	Comment Type	Commenter	Comment	Comment File	Totals
		Mr. Alan Robinson arobinson@trseinc.com	Would it be clearer to place these new requirements (Section 6.1.7.2.3) into the appropriate sections in 6.1.3 and 6.1.4 to have all size and placement limits in one location in the code.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-RC-016 #127	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-RC-017 #211	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	I agree with the comments from Hochwalt. The language "Include sufficient notes and/or details to illustrate necessary unit geometry and unit placement limits for compliance with the design basis" is written as a code requirement, not commentary and therefore should be in the code. As Hochwalt states, the language "Other bond patterns and unit alignment should be considered when calculating the gross grout space" should indicate that this is only necessary when the proposed bond pattern or unit alignment is different from the standard patterns of stacked bond or one-half running bond.		1
		Mr. David L. Pierson davep@arwengineers.com	Agreeing with Hochwalt's second comment, change the last sentence in that second paragraph as follows: "Other bond patterns and unit alignments may require special consideration in the calculation of gross grout space."		1
		Mr. John M. Hochwalt johnh@kpff.com	Just repeating my comments from the subcommittee ballot: It seems like the phrase "Include sufficient notes and/or details to illustrate necessary unit geometry and unit placement limits for compliance with the design basis" belongs not in the commentary but in Section 1.2. Section 1.2.3 does provide a "catch all" requirement, but it would be good to make this specific to include bond pattern and either unit geometry or minimum gross grout space. I also think the phrase "Other bond patterns and unit alignment should be considered when calculating the gross grout space" is potentially confusing. I think we are trying to say that if you are considering something other than stack bond or half unit running bond, that you need to look at what that means for gross grout space. As it reads, though, it might lead some to think that it is expected that the designer consider "what if" scenarios.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SL-003 #087	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com	I understand Thompson's negative and support the concept of not forcing reinforcement into non-participating partitions... to a degree. It seems reasonable to include the provision for SDC C and higher as is being done. If there is more to the discussion, then it should be considered next cycle, but this seems to advance the clarity of the existing provisions, not add new...		1
20-SL-006 #094	Affirmative With Comment	Mr. Brian E. Trimble btrimble@imiweb.org	I would recommend that the word "lateral" be added before "tie" in new Section 7.4.4.2.1 to differentiate from other types of ties (vener and wall). I spent some time clarifying all references to ties throughout the code as we made the transition to veneer tie. :)		1
20-SL-009 #114	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu	Two comments: 1) Consider dropping the use of "critical value" and "critical neutral axis", instead simply refer to ccr. This occurs at two locations, one in the paragraph immediately before Figure CC -9.3-3 of Commentary to 9.3.5.6.2.3 and in first sentence of item (a) of Commentary to 9.3.5.6.2.5.. Note that ccr is the neutral axis meeting the condition of Eq. 2a or 2b at the critical section of the wall (chosen at the base of the wall). It is odd to call it the "critical" neutral axis. 2) Equation 6 has a typo, (1.5 Cd dne) in the denominator needs to be replaced with (d MCE).		1
		Dr. Richard M. Bennett rmbennett@utk.edu	Section 11.3.6.6.2 also needs to be changed similar to the changes in 9.3.5.6.2.3.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
		Mr. Brian E. Trimble btrimble@imiweb.org	In new wording of subparagraphs 1 and 2 of Section 7.2.4, the phrase "in the code" should be "in this code". I believe that is the appropriate phrasing that is now used throughout the document.		1
		Mr. David L. Pierson davep@arwengineers.com	My only concern is that the ASCE 7-22 just got published. I assume the final language in the published version matches the public comment version which was referenced in this ballot?		1
20-SL-014 #163	Affirmative With Comment	Mr. David L. Pierson davep@arwengineers.com	I assume, then, that by voting affirmative, I am voting that the language listed under "Response/Rationale" is the committee's response to the public comment. And that this will be addressed by the committee in the next cycle.		1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	With the commentary language from the previous Section 6.1.8.1 being moved to Section 6.1.8, it is implied that all shear reinforcing is horizontal "...the requirements of Section 6.1.8 only apply to horizontal shear reinforcement." The language should be changed to delete the word "horizontal" in two locations.		1
20-SL-018 #116	Negative	Dr. Richard M. Bennett rmbennett@utk.edu	<p>I agree with the changes to Chapter 6. This would be very helpful.</p> <p>I do not agree with requiring hooks for all prescriptive reinforcement for special reinforced shear walls. There are several reasons for this.</p> <ol style="list-style-type: none"> 1. We have discussed whether prescriptive horizontal reinforcement should be required to be hooked for years. We reached a resolution earlier, when the requirement for hooks was deleted from Chapter 7. To now require all horizontal reinforcement to be hooked is a huge change late in the cycle. 2. The data provided did not really show a difference between hooked bars and straight bars. I don't think it could be argued that there is a statistically significant difference from Figure 8. 3. John Hochwalt provides a compelling argument for not requiring hooked bars for prescriptive reinforcement in TMS Responds, Vol. 16, No. 1, March 2018. At a minimum if the shear demand is low enough hooks should not be required. Given the shear capacity provisions, it seems a reasonable limit would be $2/5.5 \cdot 1.5 = 0.54$, or if the shear demand is than half the shear strength of the masonry then hooks would not be required. (The 1.5 is the R factor for unreinforced masonry; the 2 is for the shear capacity design provisions doubling the shear). Or even $2/5.5=0.36$, or if the shear demand were about 1/3 of the masonry shear strength hooks would not be required. Or even more conservative, $1.5/5.5=0.27$, or if the shear demand is less than 1/4 of the masonry shear strength hooks would not be required. 4. With the Rigid Wall, Flexible Diaphragm procedure introduced in ASCE/SEI 7, the walls are not relied upon for ductility. There does not seem to be a compelling reason to require hooked bars in this case. <p>A reasonable compromise this late in the cycle would be to keep special shear walls as in 2016. Make the change in Chapter 6, require shear reinforcement in special walls to be hooked, and leave it open as to whether prescriptive horizontal reinforcement needs to be hooked or not and try to provide better guidance next cycle.</p>		1
		Mr. David L. Pierson davep@arwengineers.com	<p>In my humble opinion, this is a very, very problematic change. In SDC "D", which is much of the western states, Engineers have no option to use anything other than Special Shear Walls, even though many of those walls have shear stresses in the wall that approach 5 psi or lower (Think Big-Box, i.e. a large market for masonry if we can keep it). The prescriptive horizontal reinforcing will never be engaged. This provision would force such walls to have hooked ends on the horizontal bars, which is ridiculous.</p> <p>Ironically, the public comment begins with this sentence...."The requirement to hook all horizontal reinforcement regardless of strength or ductility needs is too onerous"... This is TRUE, even for SDC "D" when demands are low.</p> <p>This is really a problem that ASCE 7 has created, by eliminating the option for any walls other than "Special" in SDC "D". But for now, we need to recognize that many special walls in SDC "D" do not need the horizontal reinforcing to resist loads, so please don't force a hook at the ends of prescriptive reinforcing.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-SL-019 #037	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu	Thank you for the very detailed analysis.		1
20-SL-020 #104	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Without all the background I think most users will find it strange for prestressed walls to appear somewhat out of the blue in Table 9.3.5.6.1. I think a better solution would be to modify 7.3.2.11 (d) to say: The requirements for <u>special reinforced shear walls</u> of Section 9.3.5.6 shall be met.		1
		Mr. Alan Robinson arobinson@trseinc.com	The full name of the wall is "Special Reinforced Prestressed Shear Wall". Therefore, the added language in Table 9.3.5.6.1 should be ", special reinforced prestressed".		1
20-SL-021 #139	Affirmative With Comment	Dr. Andres Lepage alepage@ku.edu	Consider adding a sentence in Commentary to 7.3.2 or 12.1.1 to avoid the confusion brought up by the commenter.		1
	Negative	Mr. David T. Biggs biggsconsulting@att.net	I don't disagree with much of what the subcommittee is proposing but deleting the term "mild" reinforcement is a bigger issue. It shows up in Chapters 4, 7 and 10. The ballot does not address all instances. In TMS 402 and 602, the definition is "Reinforcement â€" Nonprestressed steel reinforcement." "Bonded" reinforcement is not included. TMS 602 has both bonded and unbonded prestressing tendons. I suggest the subcommittee limit its proposed changes to seismic issues or work with the other subcommittees to address the "mild" reinforcement terminology issue.		1
20-SL-023 #147	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	The added commentary language "that is appropriate for columns designed with an R value not exceeding 1.5 per Section 7.4.3.2.4." is not necessary and does not need to be added. If this minimum reinforcement is appropriate for columns in Seismic Design Category D and above, why would it not be the same in Seismic Design Category C and above where the requirement for R = 1.5 is located. If it is only because the forces are higher in Seismic Design Category D, then the added commentary is not correct.		1
	Negative	Mr. David L. Pierson davep@arwengineers.com	This new proposed provision is not required. I believe that 7.3.1 and the exception to 7.3.1 cover what this is trying to address. What should change, honestly, is the commentary that was modified with the passage of 19-SL-11. That commentary should be modified as follows: "Non-isolated columns not involved in the seismic force resisting system should also...." Then, if you want to give some direction, add commentary to 7.3.1 which directs the engineer to Section 7.4.4.2.1 for reinforcing non-isolated columns if they are doing a compatability analysis per the exception. Also, the addition of the word "participating" in 7.4.4.2.1 is not needed since it is a subsection to 7.4.4.2 which is "Design of participating elements". And the word "non-participating" is not required in 7.4.4.1.1 since it is a sub-section of 7.4.4.1 which is "Design of non-participating elements"		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
		Mr. John G. Tawresey johntaw@aol.com	<p>20-SL-023</p> <p>As written:</p> <p>7.4.4.1.1 <i>Minimum reinforcement for non-participating masonry columns</i> " Lateral ties conforming to the requirements of Section 7.4.4.2.1 shall be provided for a length equal to twice the larger column dimension from the top and bottom of the column at each floor.</p> <p>Comment: One of the column dimensions is its height.</p> <p>Suggested language:</p> <p>7.4.4.1.1 <i>Minimum reinforcement for non-participating masonry columns</i> " Lateral ties conforming to the requirements of Section 7.4.4.2.1 shall be provided for a length equal to twice the larger column <u>plan</u> dimension from the top and bottom of the column at each floor.</p>		1
	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	<p>I still think the exception to the requirements of Section 7.4.4.2.1 should indicate the requirements of Section 7.4.1.2.1 apply. Section 7.4.4.2 replace the requirements of Section 7.4.1.2.1, so it could be read that if the exception is used, no dowels are required. I think the exception should read "Exception: Only compliance with Section 7.4.1.2.1 is required if there is no tension at the wall to foundation interface when in-plane forces at the interface are evaluated using R not greater than 1.5."</p> <p>In the commentary to Section 7.4.4.2.1, Seismic Design Category C is referenced even though this section is for Seismic Design Category D and above.</p>		1
		Mr. Paul G. Scott pscott@ctsaz.com	<p>Consider leaving he decision to use foundation dowels up to the SEOR.</p>		1
		Dr. William Mark McGinley m.mcginley@louisville.edu	<p>I generally beleive that requireing dowels at the base of walls are a good goal. However, many walls (participating or otherwise) in lower siemic design acategories (and loads) have relatively large amounts of vertical reinforcing for out of plane wind loading, especially if tall. The way I read your proposed change I would have to provide 25% of the wind bar area in the dowels (out-of-plane) into the foundation this seems excessive. I agree that dowels may be needed even in low seimics design conditions, but this should only be a small amount of rebar, especially where you would have only a small amounts of developed base bars for inplane loading. I would happy to withdraw my negtive if I have misinterpreted these new provsions.</p> <p>Futhermore: (not related to my main concern but comments)</p> <ol style="list-style-type: none"> 1. Much the rationale used relates to concrete beam and slab connections (these do need contiuity to develop resistance and ensure agaist collapse). The base of massorny walls do not need this same protection or continuity. If the shear wall can slide and large energy disipation occures (in plane). 2. What about the top of the wall? I would be suppportive of requiring a minum uplift at the wall bond beam and wall foundation interface ralated to typical wind uplift forces. I think this would get to where you want to be with dowela and address a bigger concern in my mind. 		1
20-SL-024 #137					

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
	Negative	Mr. David L. Pierson davep@arwengineers.com	<p>I agree that this can be looked at next cycle, and I agree that you have identified a lot of issues to be considered.</p> <p>I have a real problem with requiring all of these dowels to be fully developed for fy, as the proposed provision requires. I agree that this might required for hooked dowels, but we want that to be blamed on ACI rather than on TMS - so I think we should leave it alone.</p> <p>If we require anchorage into the concrete element below, then we should just drop it there - the engineer needs to go to ACI to complete the design, and it is out of our hands. We simply state that the dowels must be adequately anchored into concrete footings or foundations. I don't see why we should specify that the development into the foundation element must be for the yield strength. Straight dowels still get the $A_{srequired}/A_{sprovided}$ reduction and hooked dowels don't (ACI 25.4.10.1) - but that is ACI, not TMS.</p> <p>Bottom line - In my opinion it is better not to do this rather than have this provision in for an entire cycle before we figure out the right solution. As I have stated in earlier votes on this topic, the truth is that wall-to-foundation connections are required per Section 4.1.1, and both IBC and ASCE 7 have similar requirements.</p>		1
		Mr. David T. Biggs biggsconsulting@att.net	<p>Thanks for the considerable effort that went into this ballot.</p> <p>I agree with the concept of addressing participating elements.</p> <p>One of my concerns comes with 7.4.1.2.1: Item c) deals with what vertical bars are "provided". So, if the "design" requires prescriptive reinforcement at say 120" yet the engineer details bars at 48", the engineer is then required to include dowel area based upon the "provided" bars even though the number of vertical bars are a choice, not a design requirement.</p> <p>Additionally, there is no provision for spacing of the dowels. Therefore, if #6 vertical bars are placed at 48" oc, #6 dowels can be placed at 192" oc and meet the provision. Does that really add resiliency?</p> <p>I suggest deleting c).</p> <p>The second concern is with 7.4.4.2.1 item a). It seems excessive for all cases since it makes no disinction between whether the flexural shear reinforcement is distributed over the wall length or concentrated at the ends (trim steel). If the trim steel provides the tension reinforcement, those bars are already required to be developed by code. The remaining vertical steel does not have to be developed for flexural tension. In that case, why can't the 25% rule from 7.4.1.2.1c) be used?</p> <p>What if boundary elements are used?</p> <p>I suggest editing the proposal for walls designed with either trim steel and boundary elements.</p>		1
	Affirmative	Dr. Richard M. Bennett rmbennett@utk.edu	<p>I think the response should be: Public Comment only requires a response, no change to document</p> <p>The public comment asks a question, so I am not sure how we can disagree with that. We responded to the question, and made no change to the document.</p>		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-SM-012		Mr. John M. Hochwalt johnh@kpff.com	<p>I agree with the response that further definition of a column is not necessary.</p> <p>I do not agree, however, that the element described in the comment can be designed as a column, given the current definition of column. Specifically, the definition excludes elements that are constructed integrally with a wall. In my understanding, there are at least two reasons why elements that are constructed integrally with walls are not designed as columns. The most important of these is that columns are not required to comply with the out-of-plane wall provisions. If, for example, the element described by the commenter was supporting the jambs of overhead doors, it might be subject to considerable out-of-plane load and, if being designed in accordance with Chapter 9, should be designed considering P-delta effects as is required for walls. The second reason is that in-plane walls and columns are treated differently in Chapter 7.</p> <p>As a practical matter, I would like to see a member like that described by the commenter detailed like a column due to its potentially critical role in maintaining structural integrity. As a result, I do think the condition described by the commenter deserves further consideration next cycle.</p>		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-016 #016	Affirmative With Comment	Mr. John Chryslar jc@masonryinstitute.org	Response should check box 4 (Committee unable to fully develop a response to Public Comment), instead of box 2.		1
	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com	This is an important topic and theoretical and physical testing should be done to determine when (what limits) torsional design matters in masonry beams, and then the appropriate methodology for determining the torsional capacity of beams and how that torsion is resolved as a point moment into adjacent members (jamb elements, etc...).		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-017 #017	Affirmative	Mr. Thomas Michael Corcoran tmcocoran@comcast.net	Suggest adding the words "strength and" to the proposed addition: All masonry beams are reinforced to provide "strength and" ductility.		1
	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Suggest an editorial revision to: Masonry beams are required to be reinforced to provide ductility.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Mr. John G. Tawresey johntaw@aol.com	<p>20-SM-017</p> <p>As written</p> <p>5.2 " Beams</p> <p>All masonry beams are reinforced to provide ductility.</p> <p>Comment: There are other reasons for reinforcing masonry beams.</p> <p>Suggested language</p> <p>All masonry beams are reinforced to provide ductility.</p>		1
20-SM-018-019 #018, 019	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-020 #020	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-021 #021	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu	I agree that the design criteria can be used with a single course. However, the public comment relates to the definition, which to me does not allow a single course because it says "successive courses." I would suggest revising the definition to: Corbel " A projection of a <u>course</u> or successive courses from the face of masonry.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-SM-022A #022	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-022B #022	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	The proposed language is similar to the language proposed for 20-SM-111. Suggest the language be coordinated so that this change reads: <i>5.1.1 Wall Intersections</i> Masonry walls depending upon <u>intersecting masonry walls one another for lateral support</u> , or upon pilasters within those walls <u>for lateral support</u> , shall be anchored or bonded at locations where they meet or intersect per Section 5.1.1.1 or 5.1.1.2. Masonry walls that <u>intersect and</u> do not require lateral support from other walls or pilasters within those walls shall be designed in accordance with Section 5.1.1.3		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-022C #022	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-028-029 #028, 029	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpf.com	I'm not confident it will be obvious to all users that the intent is that the 50 psi limit be checked considering any eccentricity that is present, given that the 2000 lb load applies regardless of eccentricity. It seems like it would be prudent to add some commentary about how the 50 psi limit should be checked.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-078 #078	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Mr. John M. Hochwalt johnh@kpf.com	While the nomenclature "h" and the definition of "effective height" are interchangeable, the language used in 5.3.1.1 (a) - "distance between lateral supports" is not interchangeable with those terms. The distance between lateral supports of a cantilevered column is undefined, and if a masonry column occurs in a building subject to sidesway, the effective height may be greater than the distance between lateral supports. Or, as Figure CC-5.3-1 notes, in some cases the effective height could be less than the distance between lateral supports. If, as the ballot states, the commentary to 5.3.1.1 (a) is correct, I would propose that the code provision for 5.3.1.1 (a) be revised to read "The effective height of a column shall not exceed . . ." I would be willing to support such a proposal. Unsurprisingly, I agree that the public comment that the figure illustrating effective height would be of more use in Chapter 2 where effective height is defined, as the design of all compression members requires determination of effective height, rather than providing the commentary only in the discussion of columns. Note that the figure itself references "column, wall, or pilaster" demonstrating that it belongs in a more generally applicable section of the commentary, rather than the commentary for the column provisions.		1
20-SM-111 #111	Affirmative With Comment	Mr. Alan Robinson arobinson@trseinc.com	The language ", or upon structural members" has already been deleted from this section as per proposal 17-SM-027. Therefore, this proposal should read: <i>5.1.1.2 Design of lateral supports for walls, without composite action at the intersections</i> Masonry walls depending upon <u>intersecting masonry supporting walls or pilasters for lateral support, without composite action between those members</u> , shall be anchored to the supporting walls or pilasters <u>those members</u> in accordance with sections 5.1.1.2.1 through 5.1.1.2.3.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Mr. John M. Hochwalt johnh@kpf.com	This ballot is duplicative with 20-SM-22B, and I have a slight preference for ballot 20-SM-22B.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-SM-136 #136	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-190 #190	Affirmative With Comment	Mr. Scott W. Walkowicz scott@walkowiczce.com	Please carry forward for consideration in the next cycle!		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-SM-197 #197	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	The term reinforced masonry beams is used three times in the commentary to this section. We might as well delete reinforced in those three locations and save three words. :)		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-039, 201 #039 201	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com	It appears that the only place "cavity wall" appears in TMS 402 is this definition. Why are we defining something that is apparently irrelevant to the provisions? "Cavity wall" does make an appearance in the commentary to TMS 602 3.4 C, but that wouldn't seem to be a reason to define this term in TMS 402.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-040 #040	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-056, 067 #056 067	Affirmative With Comment	Dr. William Mark McGinley m.mcginley@louisville.edu	I suggest the folloing rewording of the sentence The strength could be controlled by within the assembly, such as a shear failure in a cement backer unit or within other layers within the system. The strength could be controlled by within the assembly, <u>by such as</u> a shear failure in a cement backer unit or within other layers within the system.		1
		Mr. Alan Robinson arobinson@trseinc.com	Suggest change to commentary section add the word "elsewhere" before "within the assembly" so that the change reads as: 13.3.2.1 <i>Permitted units</i> - The design strengths are based on bond between the unit and the mortar, and the backing and the mortar. The strength of other components in the system also needs to be considered. The strength could be controlled by the backing elsewhere within the assembly, such as a shear failure in a cement backer unit or within other layers within the system.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-066 #066	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-097A #097	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-106, 143, 170 #106 143 170	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-151A #151	Affirmative With Comment	Dr. Richard M. Bennett rmbennett@utk.edu	Minor editorial correction. Minimum W1.7 (MW11) wire where the length of the wire that is parallel to and within the veneer be <u>is</u> at least 2 in. (50.8 mm) long.		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-155 #155	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1

Item Number	Comment Type	Commenter	Comment	Comment File	Totals
20-VG-158, 165 #158 165	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Mr. John M. Hochwalt johnh@kpff.com	Dry stack masonry is prohibited in TMS 402 compliant designs by Section 1.1.1 of TMS 402 which states "This Code provides minimum requirements for the structural design and construction of masonry consisting of masonry units bedded in mortar." If the intent is to allow dry stack joints in some adhered veneers, this needs to be addressed as a change or exception in the code.		1
20-VG-174 #174	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
	Negative	Dr. Richard M. Bennett rmbennett@utk.edu	<p>This needs to be coordinated with ballot item 20-VG-056-067. That item, dealing with the definition of backing, modifies the commentary as follows:</p> <p>Lath and scratch coat are not required when adhered masonry veneer units are applied directly to certain backings (concrete, concrete masonry, or cement backer units) due to adequate bond.</p> <p>This ballot item changes the sentence to:</p> <p>Lath and scratch coat are not required when adhered masonry veneer units are applied directly to certain backings (concrete, concrete masonry, or cement backer units) due to <u>that provide</u> adequate bond.</p> <p>My negative will be withdrawn once we figure out how to reconcile the two ballots should both pass.</p> <p>Note also that backing is used in the following added sentence to the commentary, and that may need to be modified based on ballot 20-VG-056-067.</p> <p>Differential movement between adhered veneer units and the backing should be considered as their incompatibility may result in cracks or debonding.</p>		1
20-VG-209A #209	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-210, 212A, #210, 212	Affirmative With Comment	Mr. John M. Hochwalt johnh@kpff.com	I have some misgivings about the inclusion of "and insulation" since insulation may occur at various locations in the wall assembly, including places that would clearly be within the building. If it is acceptable to have water in the cavity insulation, perhaps that insulation should be considered as part of the drainage space. Or perhaps this provision should reference cavity instead of drainage space?		1
	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
20-VG-214A #214	Comment Non-Voting	Mr. Robert M. Chamra rchamra@buildingdx.com	Corresponding Member: Affirmative without comment.		1
Totals					207