

**TS 4c 2016 Annual Meeting Summary**

**Meeting Date:** 8/1/2016

**Items approved by the TS for TS/Subcommittee/Concurrent Ballot**

Standard Designation	Summary of Proposed Changes	TS Only, Subcommittee Only or Concurrent? (TS / S / C)
M 235M/M235-13	Reconfirmation	TS
M 247-13	Reconfirmation	TS
M300-03	Reconfirmation	TS
T 346-13	Reconfirmation	TS

**New Task Forces Formed:**

Task Force Name	Summary of Task	Names of TF Members
None		
<b>Research Liaison:</b>		

**Other Action Items:**

None

AASHTO SOM 2016 Annual Meeting

TS 4c Attendance

**AASHTO SOM Annual Meeting 2016 TS 4C Attendance**

<b>First Name</b>	<b>Last Name</b>	<b>Organization</b>	<b>Email</b>	<b>Phone</b>	<b>Present</b>
Robert	Lauzon	CT DOT	robert.lauzon@ct.gov	860-258-0312	1
James Caleb	Hammons	MS DOT	jchammons@mdot.ms.gov	601-359-9770	1
Greg	Uherek	AMRL	guherek@amrl.net	240-436-4840	1
Todd	Ballen	3M	taballen@mmm.com	651-575-0851	1
David	Kuniega	PENNDOT	dkuniega@pa.gov	717-787-3966	1
Peter	Wu	GA DOT	pwu@dot.ga.gov	404-608-4840	1
Wallace	Heyen	NE DOR	walley.heyen@nebraska.gov	402-479-4677	1
Jeff	Seiders	Raba Kistner Infrastructure	jseiders@rkci.com	512-904-9177	1
Georgene	Geary	GGfGA Engineering, LLC	ggeary@ggfga.com	770-337-5817	1
Christopher	Leibrock	KS DOT	cleibrock@ksdot.org	785-296-6959	1
Steve	Smith	MS DOT	ssmith1714@mdot.ms.gov	601-249-5202	1
Chris	Gaudette	ORAFOL Americas Inc.	chris.gaudette@orafol.com	860-676-7100	1
Maria	Knake	AASHTO	mknake@amrl.net	240-436-4804	1
David	Entrekin	Future Labs, LLC	david@futurelabsllc.com	601-842-3004	1
Brandi	Mitchell	KY TC	brandi.mitchell@ky.gov	502-564-3160	1
Brian	Pfeifer	IL DOT	brian.pfeifer@illinois.gov	217-782-6585	1
Darren	Hazlett	TX DOT	darren.hazlett@txdot.gov	512-416-2456	1
Danny	Lane	TN DOT	danny.lane@tn.gov	615-350-4175	1
Gregg	Freeman	Kwik Bond Polymers	gregg@kwikbondpolymers.com	721-626-6643	1
Ross Oak""	Metcalfe	MT DOT	rmetcalfe@mt.gov	406-444-9201	1
Michael	Doran	TNDOT	michael.doran@tn.gov	615-350-4105	1
Thomas	Wood	Sherwin Williams	tmwood@sherwin.com	443-253-9036	1
William	Bailey	VADOT	bill.bailey@vdot.virginia.gov	804-328-3106	1
Jack	Springer	FHWA	jack.springer@dot.gov	202-493-3144	1
Robert	Dingess	Mercer Strategic	rdingess@mercstrategic.com	540-752-9600	1
Scott	Andrus	UTDOT	scottandrus@utah.gov	801-965-4859	1
Derrick	Castle	The Sherwin Williams Company	derrick.castle@sherwin.com	913-481-0612	1
Brad	Neitzke	FHWA	brad.neitzke@dot.gov	360-619-7725	1
John	Bilderback	ID DOT	john.bilderback@itd.idaho.gov	208-334-8426	1
Sejal	Barot	MD SHWA	sbarot@sha.state.md.us	443-572-5037	1
John	Crane	WV DOT	john.e.cane@wv.gov	304-558-7472	1

AASHTO SOM 2016 Annual Meeting  
TS 4c Attendance

Steven	Lenker	AMRL	slenker@amrl.net	240-436-4770	1
Jason	Schiro	Interplastic	jschiro@interplastic.com	651-481-6860	1
Richard	Baker	DBI Services, LLC	rbaker@dbiservices.com	804-539-5582	1
Michael	Sullivan	MS DOT	msullivan@mdot.ms.gov	601-359-1666	1
Jason	Davis	LADOTD	jason.davis@la.gov	225-248-4106	1
Timothy	Ramirez	PENNDOT	tramirez@pa.gov	717-783-6602	1
Denis	Boisvert	NH DOT	dboisvert@dot.state.nh.us	603-271-1545	1
Neoma	Cole	GA DOT	ncole@dot.ga.gov	404-608-4817	1
John	Grieco	MA DOT	john.grieco@dot.state.ma.us	617-951-0596	1
Deb	Kim	AASHTO	dkim@aaashto.org	202-624-5883	1
Scott	Seiter	OK DOT	sseiter@odot.org	405-521-2186	1
Lyndi	Blackburn	ALDOT	blackburnl@dot.state.al.us	334-206-2203	1

**SUBCOMMITTEE ON MATERIALS**

**2016 Annual Meeting-Greenville, SC**

**Monday, August 1, 2016**

**1:45 pm – 4:00 pm EST**

**TECHNICAL SECTION 4c**

**COATINGS, PAINTS, PRESERVATIVES, BONDING AGENTS AND TRAFFIC MARKINGS**

**I. Call to Order and Opening Remarks**

**II. Roll Call**

**Voting Members:**

<b>Name</b>	<b>State</b>	<b>Present</b>
Steve Ingram	AL	X
Phil Stolarski	CA	
Bob Lauzon (Vice Chair)	CT	X
Rick Douds	GA	X
Rick Kreider	KS	X
Brandi Mitchell	KY	X
Jason Davis	LA	X
Clement Fung	MA	X
Woody Hood	MD	
Matt Strizich	MT	X
Denis Boisvert	NH	
Eileen Sheehy	NJ	
Tim Ramirez	PA	X
Dave Kuniega, Chair	PA	X
Danny Lane	TN	X
Darren Hazlett	TX	X
Scott Andrus	UT	X
Bill Bailey	VA	X
Kelly Morse	IL	X

**Non-Voting Members:**

<b>Name</b>	<b>Affiliation</b>	<b>Present</b>
Evan Rothblatt	AASHTO	
Henry Lacinak	AASHTO	
Bob Lutz	AMRL	
Maria Knake	AMRL	X
Steven Lenker	AMRL	X

**Friends:**

Name	Affiliation	Present
Gene Carlson	3M Company	
Richard Baker	DBI Services	X
Al Innis	Holcim Inc.	
Robert Dingess	Mercer	X
Andy Anderson	Potters	X
Paul Carlson	TTI	
Greg Freeman	Kwikbond	X

### III. Approval of Technical Section Minutes

A motion was made to approve the minutes without correction by Tennessee, and a second was made by Montana. The motion passed.

### SOM TS 4c - Coatings, Paints, Preservatives, Bonding Agents, and Traffic Markings Standards

The chairman is looking for stewards for several of the standards that the Tech Section is responsible for. Please let the chairman know if you are interested.

<i>AASHTO Designation No.</i>	<i>Title</i>
M 133-12	Preservatives and Pressure Treatment Processes for Timber ( <a href="#">Scott Andrus, Utah</a> )
M 143-14	Sodium Chloride
M 144-14	Calcium Chloride
M 224-91 (2014)	Use of Protective Sealers for Portland Cement Concrete
M 233-86 (2014)	Boiled Linseed Oil Mixture for Treatment of Portland Cement Concrete
M 235M/M 235-13	Epoxy Resin Adhesives
M 237-96 (2014)	Epoxy Resin Adhesives for Bonding Traffic Markers to Hardened Portland Cement and Asphalt Concrete
M 247-13	Glass Beads Used in Pavement Markings
M 248-91 (2012)	Ready-Mixed White and Yellow Traffic Paints
M 249-12	White and Yellow Reflective Thermoplastic Striping Material (Solid Form) <a href="#">Rick Doubs (Georgia)</a>
M 300-03 (2012)	Inorganic Zinc-Rich Primer
R 31-09 (2014)	Evaluation of Protective Coating Systems for Structural Steel
T 143-13	Sampling and Testing Calcium Chloride for Roads and Structural Applications
T 237-05 (2014)	Testing Epoxy Resin Adhesive
T 250-05 (2014)	Thermoplastic Traffic Line Material
T 333-07 (2012)	Linear Coefficient of Shrinkage on Cure of Adhesive Systems
T 337-09 (2014)	Non-Instrumental Determination of Metallic Zinc in Zinc-Rich Primers
T 338-09 (2014)	Analysis of Structural Steel Coatings for Hindered Amine Light Stabilizer (HALS)
T 339-10 (2015)	Analysis of Structural Steel Coatings for Isocyanate Content
T 346-13	Glass Beads Used in Pavement Markings
MP 24-14	Waterborne White and Yellow Traffic Paints <a href="#">Dave Kuniega (Pennsylvania)</a>
PP 73-13	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete
PP 74-13	Determination of Size and Roundness of Glass Beads Used in Traffic Markings by Means of Computerized Optics
PP 79-14	High-Friction Surface Treatment for Asphalt and Concrete Pavements <a href="#">Danny Lane (Tennessee)</a>
TP 84-11 (2014)	Evaluation of Adhesive Anchors in Concrete Under Sustained Loading Conditions <a href="#">Vermont</a>
TP 96-13	Protective Sealers for Portland Cement Concrete
TP 106-13	Determination of Heavy Metal Content of Glass Beads Using X-Ray Fluorescence (XRF)
TP 111-14	Measuring Retroreflectivity of Pavement Marking Materials Using a Mobile Retroreflectivity Unit <a href="#">Bob Lauzon (CT)</a>

#### IV. Old Business

- A. SOM Ballot Items
- B. TS ballots
- C. **SOM\_TS 4c**

- i. Standards Requiring Reconfirmation
  1. **M 235M/M 235-13** Epoxy Resin Adhesives
  2. **M 247-13** Glass Beads Used in Pavement Markings
  3. **M 300-03 (2012)** Inorganic Zinc-Rich Primer
  4. **T 346-13** Glass Beads Used in Pavement Markings

There was no opposition from the members to send these items to ballot for reconfirmation. Additional comments will be collected during the balloting process.

#### D. Task Force Reports

- i. TF 11-C develop an unambiguous determination of transparent, clean, colorless as informed by NCHRP Report 743 ( Rob Dingess, Gene Carlson, Tony Wade, Jim Swisher, Dave Kuniega PA and Jerry McMahan- VT) affecting M247 – 13  
Dave Kuniega briefly discussed the goal of the task force, including review of NCHRP Report 743. The different parameters related to glass beads are interdependent. For this reason, it is difficult to specify one property of glass beads alone. The research indicates that you capture each of these properties quantifiably, you can determine the retroflective properties, and the research report includes a draft test standard. It was proposed that the standard go to Tech Section ballot. A motion was made by Tennessee and a second by Virginia to send the standard to Tech Section ballot as a provisional standard. The motion passed unopposed.
- ii. TF 11-D address wet weather performance and FAA color requirements CEI table requirements affecting M249-12 ( Bob Lauzon CT, Rob Dingess, Paul Carlson)  
ASTM has a standard E2177 for this procedure. At this point, the ASTM standard has a very large precision value. At this point, it is felt that it is premature to turn this into an AASHTO standard because of the high value of the precision statement. There are two questions that will be discussed at the roundtable related to this topic.
- iii. TF 13 A elimination of benzene dissolution in M235-13  
This is an analytical method that uses benzene. The goal of the TF is to remove benzene with alternatives due to safety concerns. The TF will continue to do more lab testing to see if toluene or an ashing method may be a good alternative. It was suggested that a round robin could be beneficial for this purpose as well. It was also suggested that a 20-7 research project could be beneficial. The following states will informally look at the NTPEP program on epoxy and epoxy anchors to see if there are materials available for some interlaboratory work with alternatives to benzene: Tennessee, Virginia, Pennsylvania, Florida. Pennsylvania will provide some alternative test methods that they are looking at in their state.
- iv. TF 14- 1 evaluate pavement marking friction tests and report back to TS on efficacy and recommended practice for friction measurement (TF members: Danny Lane (TN), Rob Dingess, Gene Carlson, Tony Wade, Sejal Barot (MD), Bouzid Chobain (FL))
  - A microgrip tester (a device that makes is easy to do friction testing – developed by NASA engineer), has been correlated to the grip tester and ASTM method. This will be submitted to TRB this year. Now that we have the ability to correlate, the device will be tried out by Florida DOT.
  - The ATTSa group will likely have a recommended standard in the next few weeks. It will be submitted to SOM before the mid-year call for review.
- v. TF 15-A TP 106 – result of negative on P & B; Combined with TF 13E for development/use of NIST reference standards.  
Combined with TF 13E. The method is an XRF field/hand held method to look for heavy metals in glass beads as a validation method as an alternative to HF. Danny Lane (TN) and Lyndi Blackburn (Alabama) are working on a similar project with thermoplastics for

SHRP2, which may be applicable to glass beads as well. Scott Andrus (UT) will continue to stay involved. Maine may wish to be involved, since this state was also selected to be part of the SHRP2 R07 project. The Chair will follow up to see if Maine would like to be involved as well. New Jersey drafted a standard based on XRF hand held. It is recommended that the TF members contact Eileen Sheehy for some background information on the background information that was used to create TP 106.

- vi. TF 15-B TP-84 Adequacy of test protocol when no failure at low load (Wild-VT and UT) – There does not seem to be a great deal of interest from the group in continuing on with this task group. The task group has been sunsetted for now. Massachusetts may have some more information on this topic in the future. If that is the case, a new task force may be formed at that time.
- vii. TF 15-C Standard specification on green bike lanes (friction and color box) (TN, KY, Freeman, Baker, Stenko)  
FHWA is in the process of getting a memo approved to send out to industry that tightens up the requirements of the color box.

**V. New Business**

**A. Research Proposals**

- Potential research proposal: Additional Aggregate types in lieu of bauxite for high friction surface treatments: Tennessee has been working on several test sections with different materials for this purpose, and will have results to report back soon. There was a great deal of discussion, and overall, the TS felt that additional information on aggregate types is truly needed. A new task force was formed, TF 16-A, to review PP 79 for revision based on research that has been completed and is currently being developed (synthesis). The group will report back at the mid-year web meeting to report back and to discuss whether a research needs statement is necessary. Task force members: Danny Lane (TN- CHAIR), Rick Douds (GA), Sejal Berout (Maryland), High Friction Surfacing Council (Richard Baker), David Entrekin (Future Labs), and Nathan Moore (MD)

- B. AASHTO Issues - The chair presented an email from Maribel Wong regarding new wording that will be entered into NTPEP Structural Steel Work Plan. A new task force, TF 16-B, to look at the changes proposed to the Structural Steel Workplan for NTPEP regarding color change testing for AASHTO R31. It was suggested that R31 be revised in order to reflect the clarification that is proposed to be added to the NTPEP Work Plan. A task force was formed to look at the changes proposed by NTPEP for inclusion in R31. Task force members: David Kuniega (PA), Jason Davis (LA), Brandy Mitchell (KY), Derrick Castle (Sherwin Williams)

C. NCHRP Issues - None

D. Correspondence, calls, meetings/ Presentation by Industry - None

E. Proposed New Standards

- i. Determination of the properties of transparent, clean, colorless, glass beads.

F. Proposed New Task Forces

Task Force Name	Summary of Task	Names of TF Members
TF 16-A	Review PP 79 for revision based on research that has been completed and is currently being developed (synthesis). The group will report back at the mid-year web meeting to report back and to discuss whether a research needs statement is necessary.	Danny Lane (TN- CHAIR), Rick Douds (GA), Sejal Berout (Maryland), High Friction Surfacing Council (Richard Baker), David Entrakin (ATTSA), Nathan Moore (MD)
TF 16-B	To look at the changes proposed to the Structural Steel Workplan for NTPEP regarding color change testing for AASHTO R31. It was suggested that R31 be revised in order to reflect the clarification that is proposed to be added to the NTPEP Work Plan. A task force was formed to look at the changes proposed by NTPEP for inclusion in R31.	David Kuniega (PA), Jason Davis (LA), Brandy Mitchell (KY), Derrick Castle (Sherwin Williams)

- G. Standards Requiring Reconfirmation (2016)
  - 1. **M 235M/M 235-13** Epoxy Resin Adhesives
  - 2. **M 247-13** Glass Beads Used in Pavement Markings
  - 3. **M 300-03 (2012)** Inorganic Zinc-Rich Primer
  - 4. **T 346-13** Glass Beads Used in Pavement Markings
- H. SOM Ballot Items (including any ASTM changes) – None.
- I. Stewards for standards - The chairman is looking for stewards for several of the standards that the Tech Section is responsible for. Please let the chairman know if you are interested.

**VI. Open Discussion**

- VII. Adjourn** – A motion was made to adjourn the meeting by Montana, and a second was made by Maryland. The meeting adjourned at approximately 3:40 PM