



These minutes are for CSA/ICC committee use only. They are not to be reproduced or redistributed outside the committee without the prior permission of CSA or ICC. Please contact the CSA or ICC project manager for such permission.

Minutes of Meeting No. 8
CSA/ICC B805 Joint Technical Committee on
Rainwater Collection System Design and Installation
Tuesday-Thursday, May 10-12, 2016
 International Code Council, 3060 Saturn Street, Brea, CA, USA

Continuation teleconferences held June 24, 2016 and Jul 5, 2016

Contents

	Action Items
	Attendance List
M.8.0	Call to Order
M.8.1	Quorum
M.8.2	Review and Adoption of the Agenda for the Meeting
M.8.3	Review and Adoption of the Minutes of the Previous Meeting
M.8.4	Membership Review
M.8.4.1	Membership Changes Since the Last Meeting
M.8.5	Review of Publication Schedule
M.8.6	Report on Action Items
M.8.7	Overview of Procedure for Responding to Public Review Comments
M.8.8	Review and Discussion of the Public Review Comments
M.8.9	Approval of the Draft for the Second Public Review
M.8.10	Next Steps, Timing, Date and Location of Next Meeting
M.8.11	Closing Remarks and Adjournment
Appendix A	Task Force Open Projects
Appendix B	Agenda for the Meeting
Appendix C	Committee Membership Roster

Action Items		
No.	Action, Person Responsible, Report	Status, Due Date
AI.8.1	<u>Shawn Martin</u> and <u>Paul Gulletson</u> to schedule a 3 to 4 h teleconference during the week of June 13, for finishing the resolution of the public review comments responses. Jun. 24/16 report: The first conference call to continue meeting 8 was scheduled for June 24, 2016, at 11:00 a.m. EDT. Jul. 5/16:	Complete
AI.8.2	<u>Paul Gulletson</u> to merge and consolidate Tables 6.2.2 and 6.2.3. Jun. 24/16 report: Revised table is in latest draft.	Complete



CSA
Group



Action Items		
No.	Action, Person Responsible, Report	Status, Due Date
AI.8.3	<u>Paul Gulletson</u> to reorganize Table 7.2.1.4 as a result of consolidation of Tables 6.2.2 and 6.2.3. Jun. 24/16 report: Revised table is in latest draft.	Complete
AI.8.4	<u>Penh Tov</u> to develop an annex for site assessment and a water safety plan, including best design practices. Jun. 24/16 report: Action item is ongoing. It was clarified that the intent of the action item is to develop best-management practices.	Jul. 30/16
AI.8.5	<u>Penh Tov</u> to create a flowchart based on the one from DDOE 2013 for inclusion in Annex E. Jun. 24/16 report: Work is progressing. Jul. 5/16: This action item was merged with AI.8.11.	Complete
AI.8.6	<u>Dave Cantrell</u> to discuss with Dana Schmidt the requirements for underground tanks, including riser requirements. Jun. 24/16 report: Dave discussed underground issue with Dana and will report during the conference call.	Complete
AI.8.7	<u>Abraham I. Murra</u> to change all units in the standard to SI as primary with U.S. customary (yard/pound) in parentheses. Jun. 24/16 report: Most unit conversions were incorporated in the latest draft; however, additional technical input will be required from committee members for converting the units in Annexes C and D. The action item will remain open throughout the development of the draft. Jul. 5/16: Abraham Murra will communicate with Chris Despina to revise the units in Annex D.	Ongoing
AI.8.8	<u>Abraham I. Murra</u> to remove terms from the definitions clause that are not used in the standard. Jun. 24/16 report: The definitions were reviewed in detail; however, it was noted that review of definitions will be an ongoing task during the development of the standard.	Complete
AI.8.9	<u>Shawn Martin</u> and <u>Paul Gulletson</u> to propose resolutions to the public comments on the definitions. Jun. 24/16 report: Shawn, Paul, and Abraham proposed resolutions for outstanding comments, for discussion on June 24.	Complete
AI.8.10	<u>Troy Vassos</u> to provide a note for explaining the 25-person limit for rainwater harvesting systems. Jul. 5/16 report: It was agreed to remove the explanatory notes on the 25-person threshold.	Complete
AI.8.11	<u>Penh Tov</u> , <u>Nick Ashbolt</u> , <u>Duncan Ellison</u> , <u>Russ Jackson</u> , and <u>Troy Vassos</u> to revise Annex E, including creating a flowchart based on	Jul. 30/16



Action Items		
No.	Action, Person Responsible, Report	Status, Due Date
	the one from DDOE 2013.	

Attendance List – Face-to-Face Meeting (May 10-12, 2016)							
Name	Affiliation	Day 1		Day 2		Day 3	
		Pres	Abs	Pres	Abs	Pres	Abs
Voting members							
Alf Durnie (Co-Chair)	Alberta Municipal Affairs, Edmonton, AB	✓		✓		✓	
Philip Parisi (Co-Chair)	MG Engineering D.P.C., New York, NY	✓		✓		✓	
Nick Ashbolt	University of Alberta, Edmonton, AB	✓		✓		✓	
Dave Cantrell	Public Health-Seattle & King County, Seattle, WA	✓		✓		✓	
Chris Despins	Credit Valley Conservation, Mississauga, ON	✓T		✓T			✓
Pieter DeVries	UV Dynamics, London, ON	✓		✓		✓	
Justin DeWitt	Illinois Department of Public Health, Springfield, IL	✓		✓		✓	
Duncan Ellison	Cheffell Associates, Rockland, ON		✓		✓		✓
Russell Jackson	RainHarvest Systems, Pisgah Forest, NC	✓		✓		✓	
Judy MacDonald	Health Canada, Ottawa, ON	✓		✓		✓	
Ken Nentwig	Canadian Association for Rainwater Management (CANARM), Victoria, BC		✓		✓		✓
Robert M. O'Donnell	Aquanomix, LLC, Davidson, NC	✓T			✓		✓
Doug Pushard	HarvestH2o.com, Santa Fe, NM		✓		✓		✓
Joe Rogers	Nova Scotia Municipal Affairs, Dartmouth, NS		✓		✓	✓T	
Nancy Springer	Butte County Department of Development Services, Oroville, CA	✓		✓		✓	
Penh Tov	Interpump Supply Ltd., Fergus, ON	✓		✓		✓	
Troy Vassos	Troy David Vassos Inc., North Vancouver BC	✓T		✓T		✓T	
Mike Warren	Watertronics, Hartland, WI		✓		✓	✓T	



Attendance List – Face-to-Face Meeting (May 10-12, 2016)

Name	Affiliation	Day 1		Day 2		Day 3	
		Pres	Abs	Pres	Abs	Pres	Abs
		13	5	12	6	13	5
Alternates							
Proxies							
Associates							
Jeffrey Hugo	National Fire Sprinkler Association, Essexville, MI		✓		✓		✓
Linda Maley	Atlantis Water Management, Vancouver, BC		✓		✓		✓
Robert Rubin	North Carolina State University, Pittsboro, NC		✓		✓		✓
Dana Schmidt	Steel Tank Institute, Lake Zurich, IL		✓		✓		✓
Guests							
Carlos Borja	Los Angeles County Public Health, Los Angeles, CA	✓			✓		✓
Jason Carlson	UL, Northbrook, IL	✓		✓		✓	
Larry Kirkconnell	Plumbers, Steamfitters, Welders and Apprentices Local Union 582, Orange, CA	✓		✓		✓	
Bob Modica	Placentia, CA	✓		✓			✓
Armando Pulido	Apprentice & Journeymen Training Trust Fund, Van Nuys, CA	✓		✓			✓
Neal Shapiro	American Rainwater Catchment Systems Association (ARCSA), Santa Monica, CA	✓		✓			✓
Edward Van Giesen	BRAE Rainwater Technologies, Kansas City, KS		✓	✓		✓	
CSA and ICC Staff							
Paul Gulletson	CSA Group, Toronto, ON	✓		✓		✓	
Shawn Martin	ICC, Pittsburgh, PA	✓		✓		✓	
Abraham Murra	ICC, Oakville, ON	✓		✓			✓
Dave Walls	ICC, Brea, CA	✓		✓			✓

Notes:

(1) T indicates participation via teleconference and Webex



Attendance List – Conference Calls					
Name	Affiliation	Jun. 24/16		Jul. 5/16	
		Pres	Abs	Pres	Abs
Voting members					
Alf Durnie (Co-Chair)	Alberta Municipal Affairs, Edmonton, AB	✓		✓	
Philip Parisi (Co-Chair)	MG Engineering D.P.C., New York, NY		✓		✓
Nick Ashbolt	University of Alberta, Edmonton, AB	✓		✓	
Dave Cantrell	Public Health-Seattle & King County, Seattle, WA	✓		✓	
Chris Despins	Credit Valley Conservation, Mississauga, ON		✓		✓
Pieter DeVries	UV Dynamics, London, ON	✓		✓	
Justin DeWitt	Illinois Department of Public Health, Springfield, IL		✓		✓
Duncan Ellison	Cheffell Associates, Rockland, ON		✓		✓
Russell Jackson	RainHarvest Systems, Pisgah Forest, NC	✓			✓
Judy MacDonald	Health Canada, Ottawa, ON	✓		✓	
Ken Nentwig	Canadian Association for Rainwater Management (CANARM), Victoria, BC	✓		✓	
Robert M. O'Donnell	Aquanomix, LLC, Davidson, NC		✓		✓
Doug Pushard	HarvestH2o.com, Santa Fe, NM		✓		✓
Joe Rogers	Nova Scotia Municipal Affairs, Dartmouth, NS	✓		✓	
Nancy Springer	Butte County Department of Development Services, Oroville, CA		✓		✓
Penh Tov	Interpump Supply Ltd., Fergus, ON	✓		✓	
Troy Vassos	Troy David Vassos Inc., North Vancouver BC	✓		✓	
Mike Warren	Watertronics, Hartland, WI	✓			✓



Attendance List – Conference Calls					
Name	Affiliation	Jun. 24/16		Jul. 5/16	
		Pres	Abs	Pres	Abs
		11	7	9	9
Associates					
Jeffrey Hugo	National Fire Sprinkler Association, Essexville, MI		✓		✓
Linda Maley	Atlantis Water Management, Vancouver, BC	✓			✓
Robert Rubin	North Carolina State University, Pittsboro, NC		✓		✓
Dana Schmidt	Steel Tank Institute, Lake Zurich, IL		✓		✓
Edward Van Giesen	BRAE Rainwater Technologies, Kansas City, KS		✓	✓	
Guests					
Jason Carlson	UL, Northbrook, IL	✓		✓	
David Crawford	Rainwater Management Solutions, Salem, VA	✓			✓
Bernard McGovern	Blu-Gold Consulting	✓			✓
Gina Pallino	Tree People, Los Angeles, CA	✓			✓
Neal Shapiro	American Rainwater Catchment Systems Association (ARCSA), Santa Monica, CA		✓	✓	
Sandra Ungerson	AloPluvia Integrated Water Resource Management (ARCSA), AB	✓			✓
Bert Van Duin	City of Calgary, Calgary, AB	✓			✓
CSA and ICC Staff					
Paul Gulletson	CSA Group, Toronto, ON	✓		✓	
Shawn Martin	ICC, Pittsburgh, PA	✓		✓	
Abraham Murra	ICC, Oakville, ON	✓		✓	



M.8.0 Call to Order and Opening Remarks

The Co-Chairs of the Joint Technical Committee (JTC), Alf Durnie and Phil Parisi, welcomed the attendees and called the meeting to order at 8:30 a.m. on Day 1. On Day 2, the meeting was called to order at 8:30 a.m., and on Day 3 the meeting was called to order at 8:30 a.m. The attendees introduced themselves and housekeeping comments were made.

Alf Durnie reminded the members that the JTC is not a split committee; it is a single committee that reflects a North American effort to develop a North American rainwater-harvesting standard. Shawn Martin indicated that the next meeting will be scheduled for late summer or early fall to resolve comments arising from the second public review, and that there could be a third public review, depending on the number of changes made as a result of the second public review. One member expressed concern because the second public review would be held during a vacation period, but it was noted that the public review period could be extended if need be.

On June 24, Alf Durnie called the conference call meeting to order at 11:05 a.m. EDT; on July 5, Alf Durnie also called the conference call meeting to order at 11:05 a.m. EDT.

M.8.1 Quorum

At the time of this meeting, the JTC had 18 voting members.

On Day 1, 13 members were present at the meeting and therefore minimum quorum requirements (at least 50% of the voting members) were met. No voting members assigned proxies; therefore, a maximum of 13 votes could be cast at the meeting and the minimum number of affirmative votes required for carrying motions was the greater of:

50% of the voting membership:	$1/2 \times 18 = 9$	→ 9 , or
2/3 of the votes cast:	$2/3 \times 13 = 9$	→ 9.

On Day 2, 12 members were present at the meeting and therefore minimum quorum requirements (at least 50% of the voting members) were met. No voting members assigned proxies; therefore, a maximum of 12 votes could be cast at the meeting and the minimum number of affirmative votes required for carrying motions was the greater of:

50% of the voting membership:	$1/2 \times 18 = 9$	→ 9 , or
2/3 of the votes cast:	$2/3 \times 12 = 8$	→ 8.

On Day 3, 13 members were present at the meeting and therefore minimum quorum requirements (at least 50% of the voting members) were met. No voting members assigned proxies; therefore, a maximum of 13 votes could be cast at the meeting and the minimum number of affirmative votes required for carrying motions was the greater of:

50% of the voting membership:	$1/2 \times 18 = 9$	→ 9 , or
2/3 of the votes cast:	$2/3 \times 13 = 9$	→ 9.

On June 24, 11 members were present at the conference call meeting and therefore minimum quorum requirements (at least 50% of the voting members) were met. No voting members assigned proxies; therefore, a maximum of 11 votes could be cast at the meeting and the minimum number of affirmative votes required for carrying motions was the greater of:

50% of the voting membership:	$1/2 \times 18 = 9$	→ 9 , or
2/3 of the votes cast:	$2/3 \times 11 = 8$	→ 8.



On July 5, 9 members were present at the conference call meeting and therefore minimum quorum requirements (at least 50% of the voting members) were met. No voting members assigned proxies; therefore, a maximum of 9 votes could be cast at the meeting and the minimum number of affirmative votes required for carrying motions was the greater of:

50% of the voting membership: $1/2 \times 18 = 9 \rightarrow 9$, or
 2/3 of the votes cast: $2/3 \times 9 = 6 \rightarrow 6$.

M.8.2 Review and Adoption of the Agenda for the Meeting

The agenda was reviewed. Nancy Springer moved to adopt the modified agenda for the meeting; Dave Wallace seconded the motion and it carried unanimously. A copy of the agenda can be found in Appendix B.

M.8.3 Review and Adoption of the Minutes of the Previous Meeting

During the continuation teleconference meeting on June 24, 2016, the minutes from Meeting No. 7, held on June 23 to 25, 2015, in Mississauga, ON, were reviewed. Judy MacDonald moved to adopt the previous meeting minutes; Penh Tov seconded the motion, and it carried unanimously.

M.8.4 Membership Review

At the time of this meeting, the JTC matrix was balanced; therefore, the committee could make formal, binding decisions and cast votes. The following table shows the JTC matrix and membership by category:

CSA/ICC B805 JTC Voting Matrix		
General/Regulatory Interest (G)	Producer Interest (PI)	User Interest (UI)
Min: 6, Max: 6	Min: 6, Max: 6	Min: 6, Max: 6
1) Dave Cantrell	1) Russell Jackson	1) Nick Ashbolt
2) Justin DeWitt	2) Ken Nentwig	2) Chris Despins
3) Alf Durnie	3) Robert M. O'Donnell	3) Duncan Ellison
4) Judy MacDonald	4) Ms. Penh Tov	4) Philip F. Parisi
5) Joe Rogers	5) Pieter DeVries	5) Doug Pushard



6) Nancy Springer	6) Mike Warren	6) Troy Vassos
-------------------	----------------	----------------

M.8.4.1 Membership Changes Since the Last Meeting

- New voting members:
 - Nick Ashbolt, (new UI member, formerly associate), University of Alberta School of Public Health, Edmonton, AB
- New associates:
 - Edward Van Giesen, Watts Water Technologies, Watkinsville, GA
- Former voting members:
 - Khosrow Farahbakhsh, University of Guelph, Guelph, ON

M.8.5 Review of Publication Schedule

The co-chairs led a discussion of the overall project schedule and next meetings. It is worthwhile highlighting the following milestones:

- Feb 10-11, 2015: **Meeting 6 (face-to-face)** to develop draft and work on content for Public Review.
- June 23-25, 2015: **Meeting 7 (face-to-face)** to finalize content for Public Review.
- July 2015: Release draft for first public review and comment (60 days)
- May 10-12, 2016: **Meeting 8 (face-to-face)** to review and resolve PR 1 comments
- June 2016: Release draft for second public review and comment* (45 days)
- Sep-Oct 2016: **Meeting 9** to review and resolve PR 2 comments
- Nov 2016: Release draft for third public review and comment* (45 days)
- Jan 2017: **Meeting 10** to review and resolve PR 3 comments
- Feb 2017: Comprehensive edit and formatting of the draft by CSA Editorial Services
- Apr 2017: 30-day ballot to approve the standard
- May 2017: **Meeting 11** to resolve ballot negatives and comments
- June 2017: Draft submitted to CSA Editorial Services for final production
- July 2017: Publication

**Note: ICC's ANSI process requires that any changes to the draft to be offered for public review until no further comments are received. It is anticipated that at least two rounds of public review will be required.*

M.8.6 Report on Action Items

Completed action items are as follows:

Completed Action Items



CSA
Group



No.	Action, Person Responsible, Report	Status, Due Date
AI.1.7	Seek participants for task forces from stormwater industry, experts (Justin DeWitt – MWRD, Shawn Martin – NOWRA, EPA) Report: Rob Rubin, Bert Van Duin, Neal Shapiro recruited and participating in task forces. Shawn has Justin Dewitt's report. Chris reached out to some staff at Credit Valley Conservation but no response yet. Report: No responses from these individuals. Ongoing. Report Nov/14: Open Report Dec/14: No report Report Feb/15: Dan Nourian from NDS volunteered to assist in the area of system design for ground-level capture. Report May/16: Progressing	Ongoing
AI.6.5	Judy McDonald to obtain chlorine and chloramine thresholds and address contact time. Report May/16:	Report needed
AI.6.6	Duncan Ellison to create advisory note for Section 11.1.5 to suggest that some level of pre-treatment occur prior to the tank when there is the potential for elevated water temperatures. Report May/16:	Report needed
AI.7.1	Judy MacDonald to find a generic diagram to show generic flow of systems from collection to output. Many exist she will find a few to look at.	Complete
AI.7.2	Shawn Martin to check for duplication on NSF 61. Some of the duplication is intentional but it may appear more times than necessary in the standard Report May/16: Reviewed, no changes proposed.	Complete
AI.7.3	Need operations section in standard or delete "operations" from the scope. Should include ongoing monitoring and maintenance of system and follow up on water safety plan after the system is installed.	Confirm change to scope with committee. Ongoing.
AI.7.4	Penh Tov to provide an image to illustrate particle sizes and micron measurements for filtration to go in annex.	Complete
AI.7.5	Judy MacDonald to look into monitoring UVT	Report needed

M.8.7 Overview of Procedure for Responding to Public Review Comments

At the beginning of the meeting, Shawn Martin explained relevant details of the development process for CSA/ICC B805 and clarified the rights of the different participants. He also explained that



- each public comment would be discussed individually;
- members would be required to make a motion on the resolution of each comment;
- upon completion of the comment resolution, members would be asked to formally approve the comment resolution report as well as the new CSA/ICC B805 draft;
- once the committee had approved the new draft, it would be offered for a second public review, with the caveat that only the portions that had changed since the previous public review would be reviewed;
- comments from the second public review would be addressed in the same way as the first public review comments were addressed; and
- the draft standard would continue to be offered for public review, following the process described above, until there were no more comments, as required by ICC's ANSI-accredited process.

It was also noted that, under CSA's SCC-accredited process, abstentions were not allowed for votes. In other words, members present at the meeting had the obligation to vote.

M.8.8 Review and Discussion of the Public Review Comments

All of the public review comments received were discussed and dispositioned. It is worth noting the following:

- Comment 1: All editorial comments were disapproved in principle, to be addressed at the time of final editing and publication of the standard.
- Comment 5: there was significant discussion on the water safety plan, and it was agreed to further develop the water safety plan template in Annex E.
- Comment 8: the 25-person threshold comes from municipalities and the U.S. EPA classifying systems that serve more than 25 people as public utilities. However, the decision was to remove the statement in its entirety.
- Comment 8: Some of the statements made in the introduction were made to make readers of the standard aware that the committee had considered those matters.
- Comment 21: there was extensive discussion on the term "rain barrels" and if it should be defined by capacity (< 90 gal) or by application (gravity). It was agreed that most people will understand what a rain barrel is, and the intent was to prevent people from having to obtain a permit for installing rain barrels.
- Definitions: It was agreed to discuss all comments related to definitions at the end, once all other comments were addressed and it was clear that a definition was needed. In particular, there were lengthy discussions of the definitions of bypass, stormwater, and rainwater. (Comments 41 and 48).
- Comment 57: Following the discussion of the definition of "storage", the term was removed from the title on Clause 5.2.3.
- Comment 58: It was agreed to remove the definition for "third-party certification agency" and simplify the definition for "third-party certified".
- Comments 99 and 112: there was extensive discussion on risks and how they were determined. As a result, it was also agreed to merge Tables 6.2.2 and 6.2.3.
- Comment 118: there was significant discussion on the differences between "comply with" and "certified to". It was noted that "certified to" had financial implications on manufacturers. It was also noted that the codes required certification, so there was no need to require it in



the B805 standard, creating the potential for conflict. In the end, it was decided to use the term “certified to”. However, Troy Vassos indicated that he disagreed with the decision.

- Comments 119 and 157: there was extensive discussion on collection surfaces. Requiring that all rooftop material be certified to NSF P151 was discussed in great length. It was noted that there were not many materials in the marketplace that complied with P151, something that could make the B805 standard unenforceable and discourage its adoption by jurisdictions. In addition, requiring that all roofing materials (and collection surfaces) be certified could imply requiring certification for products such as solar collectors and siding. In the end, the comments were disapproved.
- Comment 145: as a result of the discussion of this comment, it was agreed to develop an annex for site assessment.
- Comment 148: It was agreed to revise Table 7.2.1.4 depending on the outcome of the revision and merger of Tables 6.2.2 and 6.2.3.
- Comment 162: it was noted that the B805 standard is for rainwater harvesting, not for surface water collection.
- Comment 199: minimum size of access openings was discussed extensively. The comment was disapproved, but it was decided to consult with other members with more expertise in that particular matter.
- Comment 282: There was a lengthy discussion on testing of large tanks, but at the end it was decided to leave the wording as it was in the current draft.
- Comment 283: It was noted that maintenance is outside of the scope of model codes. However, it was agreed to reference CSA B64.10.1, for the testing and inspection of backflow preventers. During the discussion, it was agreed to remove the references to backwater valves.

M.8.9 Approval of the Draft for the Second Public Review

It was noted that, because of the changes made to the CSA/ICC B805 draft as a result of the public review comment resolution, and in accordance with ICC’s ANSI-accredited standards development process, the draft will be offered for a second public review later in the summer. Therefore, the committee will be asked to vote and formally approve the public review resolution report as well as the revised CSA/ICC B805 draft before it is offered for the second public review.

M.8.10 Next Steps, Timing, Date and Location of Next Meeting

The next meeting was not scheduled at this time. It will be scheduled later on, once the public review opening and closing dates are determined.

M.8.11 Closing Remarks and Adjournment

Meeting 8 of the CSA/ICC JTC was adjourned at 5:30 p.m. on Day 1, resumed at 8:30 a.m. on Day 2, adjourned at 6:00 p.m. on Day 2, resumed at 8:30 a.m. on Day 3, and adjourned at 5:30 p.m. on Day 3.



To finalize the resolution of the public review comments, the meeting continued via conference calls on June 24 and July 5th, 2016, as follows: on June 24, the conference call meeting was called to order at 11:05 a.m. EDT and adjourned at 3:05 p.m. EDT; and on July 5th, 2016 the conference call meeting was called to order at 11:05 a.m. EDT and adjourned at 3:10 p.m. EDT



Appendix A

Task Force Open Projects



Open Task Force (TF) Projects — CSA/ICC B805 JTC		
Project No. & Title	Task Force (TF) Members	Mandate, Actions, Status
2014 Projects		
RWH-14-01 Storage sizing	Chris Despins (Chair) Justin Dewitt Jeff Hugo Russ Jackson Doug Pushard Joe Rogers Nancy Springer Penh Tov	<ul style="list-style-type: none"> • Apr/14: New project to investigate storage sizing. Include firefighting concerns (see Hawaii, p., 45). Sizing for water storage (short/long term, water efficiency target, fire reserve, etc), sizing for stormwater management (volume target, draw-down rate, mass balance). Yield coefficients. Reliability. • Jun/14: Action items: Add day tank sizing, Demand calculations (informative), Tank sizing methodologies (informative), System supply calculation (informative) • Aug/14: Action items: Add sizing for firefighter reserve, referencing NFPA standards, add provisions for stormwater treatment/storage. • Nov/14: No update. • Dec/14: Chris Despins, who was not in attendance, provided an interim draft in advance. He invited comments and plans to submit text for inclusion in the working draft prior to the next meeting. • Feb/15: Chris Despins to review sizing material as reflected in the latest draft. • May/16: The draft on Annex D on storage sizing was left out of the first public review draft. It was reworked and incorporated into the draft for the second public review. At the same time, Chris Despins evaluated the public review comments on the subject of storage sizing to develop proposed responses. Chris Despins developed a revised Annex D that was incorporated into the draft for the second public review.
RWH-14-02 Water quality (source and output)	Russ Jackson (Co-chair) Penh Tov (Co-chair) Dave Cantrell Chris Despins Pieter Devries	<ul style="list-style-type: none"> • Apr 2014: New project to investigate treated water quality (output), applications, and end use. Categorize by application/use. Data centre cooling, cooling tower makeup, landscape irrigation (surface/subsurface), toilet/urinal flushing, pool/spa fill, hose bibbs, vehicle washing, trap priming, automatic fire sprinklers, clothes



Open Task Force (TF) Projects — CSA/ICC B805 JTC		
Project No. & Title	Task Force (TF) Members	Mandate, Actions, Status
	Duncan Ellison Khosrow Farahbakhsh Wayne Galliher Judy MacDonald Linda Maley Ken Nentwig Rob O'Donnell Robert Rubin Nancy Springer Troy Vassos Mike Warren	<p>washing</p> <ul style="list-style-type: none"> • June 2014: Merge with Source Water Quality Group, scope revised to include both source and output waters. • August 2014: Refine usage tiers, combining evaporative cooling with non-potable, human contact applications. Review use of e. Coli as an indicator microorganism, seek input from microbiologists on criteria for usage tiers. • Nov 2014: Review usage tiers with water quality. • Dec 2014: Russ Jackson indicated the task force would take into account the feedback received at the ARCSA conference and would meet again soon to get back on track. There is the Water Safety Plan approach, different inputs on thresholds. Boiling those ideas into single document is the challenge. If we do this, it may make what we've already done irrelevant. • Feb 2015: Alf Durnie and Task Force to review water quality threshold levels in 11.1.3 with water quality experts. • May 2016: The task force evaluated the public review comments on the subject of water quality and developed proposed responses for committee review.
RWH-14-04 Control systems and design	Doug Pushard (Chair) Chris Despins Pieter Devries Ken Nentwig Rob O'Donnell Mike Warren	<ul style="list-style-type: none"> • Apr 2014: New project to investigate control systems and design. Include safety, listings • June 2014: The task force met and developed a draft framework for the section. The group also focused on a definition for control. The TC discussed controls for fire suppression systems, which the task force will look into further in their work. • August 2014: Action items: Convert approach to code text and locate appropriate provisions for each. • Nov 2014: Action items: Draft provisions for Section 10,



Open Task Force (TF) Projects — CSA/ICC B805 JTC		
Project No. & Title	Task Force (TF) Members	Mandate, Actions, Status
		<p>establish approach for residential vs. commercial.</p> <ul style="list-style-type: none"> • Dec 2014: Task force continues to refine the point-of-use water quality criteria and is investigating a prescriptive set of criteria to use as an alternate for smaller residential systems. • Feb 2015: Task force to consolidate and simplify controls provisions with more emphasis on performance requirements. Additional information needed on ozone disinfection system controls. • May 2016: The task force evaluated the public review comments on the subject of controls and developed proposed responses for committee review.
RWH-14-06 System components design and materials and Tanks Subgroup	Dave Cantrell (Chair) Dana Schmidt (Chair) Alf Durnie Judy MacDonald Phil Parisi Joe Rogers <i>Mark Falgatter</i> <i>Dan Nourian</i> <i>Shawn Strausbaugh</i>	<ul style="list-style-type: none"> • Apr 2014: Outlined, but not started. • June 2014: New project to address collection systems, piping, tanks, etc. Merge in backflow and cross-connection control. • August 2014: Action items: Continue to review language, incorporating information from other sources. Setup sub-groups to address specific issues such as tanks as needed. Review and refine committee feedback from Meeting #3. • Nov 2014: Action items: Continue to review, revise and draft language. Initiate work of new sub-groups (the working group on tanks led by Dana Schmidt was activated). • Dec 2014: Task force continues to develop and refine the text for system components based on committee feedback and resource documents. Sub-group for tanks headed by Dana Schmidt is working to develop text specific to tanks using CSA B126 and IPC material to begin. • Feb 2015: Revision and consolidation of tank materials for placement in a separate annex. Create generic system component terms for consistent usage throughout the document. Develop consistent terminology for the



Open Task Force (TF) Projects — CSA/ICC B805 JTC		
Project No. & Title	Task Force (TF) Members	Mandate, Actions, Status
		<p>indication of third-party certification vs. conformance for first party.</p> <ul style="list-style-type: none"> May 2016: The task force evaluated the public review comments on the subject of system components and design and developed proposed responses for committee review.



Appendix B

Agenda for the Meeting



International Code Council and Canadian Standards Association

BSR/CSA/ICC 805-201x Standard for Rainwater Harvesting Systems

MEETING #8 AGENDA: JOINT CONSENSUS COMMITTEE ON RAINWATER COLLECTION SYSTEM DESIGN AND INSTALLATION (IS-RCSDI)

Date

May 10-12, 2016, 8:30 AM - 5:00 PM PDT

Teleconference

1-866-946-0852 (toll free) /1-646-216-4900 (toll) (click here for other [global numbers](#)), PIN: 464 122 29#

Location

ICC Western Regional Office
3060 Saturn Street, Suite 100
Brea, CA USA

Webex: Password (all days): “water”

Day 1: <https://csagroup.webex.com/csagroup/j.php?MTID=mecb242b0b305ddc8dabf84b3a3562089>

Day 2: <https://csagroup.webex.com/csagroup/j.php?MTID=m9cacc0e23e29ae8ecb6568fc337b6d1d>

Day 3: <https://csagroup.webex.com/csagroup/j.php?MTID=mb0df350b7669d465883ba63f16966ce6>

Secretariats: [Shawn Martin](#), ICC; [Paul Gulletson](#), CSA

AGENDA

1. Meeting Opening
 - a. Opening Remarks, objective of the meeting, and housekeeping (Chairs, Shawn/Paul)
 - b. Quorum (Shawn/Paul)
 - c. Review and adoption of agenda (Chairs)
 - d. Review and adoption of minutes from Meeting #7(Chairs)
 - e. Membership review (Shawn/Paul)
 - f. Schedule review (Shawn/Paul)
2. Report on Outstanding Action Items (Shawn/Paul)
3. Overview of Process for Addressing Public Comments (Shawn/Paul)
 - a. Review/Discussion of Comments Received on First Public Review Draft (See Comments Matrix Attached)
4. Scheduling of Next Meeting
5. Adjourn



Appendix C

Committee Membership Coordinates

-----IMPORTANT NOTICE-----

This information may include personal contact data, that is protected by applicable privacy laws. CSA Members and all others accessing this information agree to use it for the sole purpose of CSA Standards Development work, and agree to securely handle and store such data, as well as securely destroy such data when no longer required. Any copying, distribution or disclosure of this information for any purpose other than Standards Development work is expressly prohibited. Visit CSA's website at www.csagroup.org/legal/ to find out how we protect your personal information.



2016-7-25 11:30:11 AM

MEDS Full Committee

File No.: B227

Class: 9426

Committee Name: Rainwater Collection Systems (B805)

1	Name: Prof. N. J. (Nicholas) Ashbolt Title: AB Innovates Translational Research Company: University of Alberta School of Public Health Address: South Academic Building Room 3-57D Edmonton, AB T6G 2G7 Canada Business : 780 492 5227 Cell Phone : 587 987-3166 E-Mail: ashbolt@ualberta.ca Position: M Status: V	Membership ID: 32541 Language: English Mail Stop: E-Mail 2: Matrix: UI
2	Name: Mr. D. (Dave) Cantrell Title: Chief Plumbing Inspector Company: Public Health-Seattle & King County Address: 401 Fifth Ave, Suite 1100 Seattle, WA 98104-1818 USA Business : 206 263-8493 Cell Phone : 206 510-4378 E-Mail: dave.cantrell@kingcounty.gov Position: M Status: V	Membership ID: 31861 Language: English Mail Stop: E-Mail 2: Matrix: RG
3	Name: Mr. C. (Chris) Despina Title: Water Resources Specialist Company: Credit Valley Conservation Authority Address: 1255 Old Derry Rd Mississauga, ON L5N 6R4 Canada Business : 905 670-1615 x288 E-Mail: cdespina@connectthedrops.ca Position: M Status: V	Membership ID: 31258 Language: English Mail Stop: E-Mail 2: cdespina@gmail.com Matrix: UI
4	Name: Mr. P. (Pieter) deVries Title: President Company: UVdynamics Inc. Address: 315 Neptune Cres London, ON N6M 1A9 Canada Business : 1 800 667-4629 Fax 1 : 519 452-1701 E-Mail: p.devries@uvdynamics.com Position: M Status: V	Membership ID: 28261 Language: English Mail Stop: E-Mail 2: Matrix: PI
5	Name: Mr. J. (Justin) DeWitt Title: Chief of General Engineering Company: Illinois Department of Public Health Address: 525 W Jefferson St Springfield, IL 62761 USA Business : 217 782-5830 Fax 1 : 217 785-5897 E-Mail: justin.dewitt@illinois.gov Position: M Status: V	Membership ID: 31870 Language: English Mail Stop: E-Mail 2: Matrix: RG
6	Name: Mr. F. (Franco) DiFolco Title: Technical Advisor	Membership ID: 23975 Language: English

	Company: CSA Group Address: 178 Rexdale Blvd Toronto, ON M9W 1R3 Canada Business : 416 747-2526 Fax 1 : 416 747-4149 E-Mail: franco.difolco@csagroup.org Position: X Status: E	Mail Stop:	E-Mail 2: Matrix: ZZ
7	Name: Mr. A. (Alf) Durnie Title: Chief Inspector / Administrator Company: Alberta Municipal Affairs Address: Public Safety Division 10155-102 St, Flr 16 Edmonton, AB T5J 4L4 Canada Business : 403 823-1680 Cell Phone : 403 820-2681 Fax 1 : 403 823-1756 Fax 2 : 780 427-8686 E-Mail: alf.durnie@gov.ab.ca Position: C Status: V Comments: Co-Chair dtd Apr 30/14 (Toll free: 1-866-421-6929)	Membership ID: 17739 Language: English Mail Stop:	E-Mail 2: Matrix: RG
8	Name: Mr. T. D. (Thomas Duncan) Ellison Title: Company: Cheffell Associates Address: 136 Edwards St, Unit 202 Rockland, ON K4K 1T5 Canada Business : 613 446-4219 Cell Phone : 613 882-4219 E-Mail: duncan.ellison@videotron.ca Position: M Status: V	Membership ID: 9698 Language: English Mail Stop:	E-Mail 2: Matrix: UI
9	Name: Mr. P. (Paul) Gulletson Title: Project Manager Company: CSA Group Address: 178 Rexdale Blvd Toronto, ON M9W 1R3 Canada Business : 416 747-4186 Fax 1 : 416 747-4149 E-Mail: paul.gulletson@csagroup.org Position: A Status: E	Membership ID: 29304 Language: English Mail Stop:	E-Mail 2: Matrix: ZZ
10	Name: Mr. J. M. (Jeffrey) Hugo Title: Manager of Codes, Engineering Company: National Fire Sprinkler Association Address: 1088 W Borton Rd Essexville, MI 48732 USA Business : 845 519-5963 E-Mail: hugo@nfsa.org Position: M Status: A	Membership ID: 32122 Language: English Mail Stop:	E-Mail 2: Matrix: ZZ
11	Name: Mr. R. (Russell) Jackson Title: Vice President of Sales Company: RainHarvest Systems, LLC Address: 6075 Parkway North Dr Cumming, GA 30040 USA Business : 770 889-2533 Fax 1 : 770 889-2577 E-Mail: russ@rainharvest.com Position: M Status: V	Membership ID: 31873 Language: English Mail Stop:	E-Mail 2: Matrix: PI
12	Name: Ms. J. A. (Judy) MacDonald Title: Water Quality Engineer Company: Health Canada Address: Water and Air Quality Bureau 269 Laurier Ave W Ottawa, ON K1A 0K9 Canada Business : 613 957-1507 Fax 1 : 613 952-2574 E-Mail: judy.macdonald@hc-sc.gc.ca Position: M Status: V	Membership ID: 8327 Language: English Mail Stop: AL 4903D	E-Mail 2: Matrix: RG

13	Name:	Ms. L. (Linda) Maley	Membership ID:	31570
	Title:	Business Development North America	Language:	English
	Company:	Atlantis Water Management	Mail Stop:	
	Address:	Granville Park PO Box 60583 Vancouver, BC V6H 4B9 Canada		
	Business :	604 817-8670		
	E-Mail:	linda@atlantis-america.com	E-Mail 2:	
	Position:	M Status: A	Matrix:	ZZ
<hr/>				
14	Name:	Mr. S. E. (Shawn) Martin	Membership ID:	25700
	Title:	Director, Technical Services	Language:	English
	Company:	Solar Rating and Certification Corporation (ICC-SRCC)	Mail Stop:	
	Address:	115 Main Entrance Dr Pittsburgh, PA 15228 USA		
	Business :	321 213-6037 x140		
	Cell Phone :	704 907-0436		
	E-Mail:	smartin@solar-rating.org	E-Mail 2:	smartin@iccsafe.org
	Position:	X Status: P	Matrix:	ZZ
	Comments:	Tel: 1 888.icc.safe (422.7233), ext. 7736		
<hr/>				
15	Name:	Mr. K. (Ken) Nentwig	Membership ID:	31244
	Title:	Governor, BC Jurisdiction	Language:	English
	Company:	Canadian Association for Rainwater Management	Mail Stop:	
	Address:	747 Princess Ave, 18 Victoria, BC V8T 1K5 Canada		
	Business :	250 999-2472		
	E-Mail:	ken@canarm.org	E-Mail 2:	
	Position:	M Status: V	Matrix:	PI
<hr/>				
16	Name:	Mr. R. (Robert) O'Donnell	Membership ID:	31864
	Title:	Partner	Language:	English
	Company:	Aquanomix, LLC	Mail Stop:	
	Address:	710 Northeast Dr, Suite 10 Davidson, NC 28036 USA		
	Business :	704 402-4373		
	E-Mail:	rodonnell@aquanomix.com	E-Mail 2:	
	Position:	M Status: V	Matrix:	PI
<hr/>				
17	Name:	Mr. P. F. (Philip) Parisi	Membership ID:	31876
	Title:	Sr. Plumbing & Fire Protection Engineer	Language:	English
	Company:	MG Engineering D.P.C.	Mail Stop:	
	Address:	116 West 32nd Street New York, NY 10001 USA		
	Business :	212 531-8363		
	Cell Phone :	917 733-9295		
	E-Mail:	philip.parisi@mgedpc.net	E-Mail 2:	pparisijr@verizon.net
	Position:	V Status: V	Matrix:	UI
<hr/>				
18	Name:	Mr. D. (Doug) Pushard	Membership ID:	31865
	Title:	Founder	Language:	English
	Company:	HarvestH2o.com	Mail Stop:	
	Address:	537 Garcia St Sante Fe, NM 87505 USA		
	Business :	505 603-5498		
	E-Mail:	doug@harvesth2o.com	E-Mail 2:	
	Position:	M Status: V	Matrix:	UI
<hr/>				
19	Name:	Mr. J. (Joe) Rogers	Membership ID:	22225
	Title:	Building Code Co-ordinator	Language:	English
	Company:	Government of Nova Scotia Department of Municipal Affairs	Mail Stop:	
	Address:	1505 Barrington St Halifax Central PO Box 231 Halifax, NS B3J 2M4 Canada		
	Business :	902 424-8046		
	E-Mail:	joe.rogers@novascotia.ca	E-Mail 2:	
	Position:	M Status: V	Matrix:	RG

20	Name:	Prof. R. (Robert) Rubin	Membership ID:	32132
	Title:	Professor Emeritus	Language:	English
	Company:	NCSU	Mail Stop:	
	Address:	192 Fearington Post Pittsboro, NC 27312 USA		
	Business :	919 545-3066		
	Cell Phone :	919 270-0344		
	E-Mail:	rubin@ncsu.edu	E-Mail 2:	
	Position:	M Status: A	Matrix:	ZZ
<hr/>				
21	Name:	Ms. D. (Dana) Schmidt	Membership ID:	32832
	Title:	Standards Engineer	Language:	English
	Company:	Steel Tank Institute A Division of STI/SPFA	Mail Stop:	
	Address:	944 Donata Crt Lake Zurich, IL 60047 USA		
	Business :	847 550-3832		
	Fax 1 :	847 438-8766		
	E-Mail:	dschmidt@steeltank.com	E-Mail 2:	
	Position:	M Status: A	Matrix:	ZZ
<hr/>				
22	Name:	Ms. N. (Nancy) Springer	Membership ID:	31859
	Title:	Building Division Manager	Language:	English
	Company:	Butte County Department of Develoment Services	Mail Stop:	
	Address:	7 County Center Dr Oroville, CA 95965 USA		
	Business :	530 538-7159		
	Cell Phone :	530 693-1559		
	Fax 1 :	530 538-7785		
	E-Mail:	nspringer@buttecounty.net	E-Mail 2:	
	Position:	M Status: V	Matrix:	RG
<hr/>				
23	Name:	Ms. P. (Penh) Tov	Membership ID:	25114
	Title:	Director, Rainwater & Water Reuse	Language:	English
	Company:	Interpump Supply Ltd.	Mail Stop:	
	Address:	580 Gartshore St Fergus, ON N1M 2B2 Canada		
	Business :	519 843-4232		
	Cell Phone :	416 770-8901		
	Fax 1 :	519 843-6476		
	E-Mail:	penh@interpump.ca	E-Mail 2:	
	Position:	M Status: V	Matrix:	PI
	Comments:	T: (877) 966-9444		
<hr/>				
24	Name:	Mr. G. E. (G. Edward) Van Giesen	Membership ID:	34199
	Title:	National Sales Mgr, Brae Rainwater Tech.	Language:	English
	Company:	Watts Water Technologies	Mail Stop:	
	Address:	1121 Brittain Estatic Dr Watkinsville, GA 30677 USA		
	Business :	706 910-2685		
	E-Mail:	edward.vangiesen@wattswater.com	E-Mail 2:	
	Position:	M Status: A	Matrix:	ZZ
<hr/>				
25	Name:	Dr. T. D. (Troy) Vassos	Membership ID:	27692
	Title:	Management Specialist, WT & IW	Language:	English
	Company:	Troy David Vassos Inc	Mail Stop:	
	Address:	3332 Redfern Place North Vancouver, BC V7N 3W1 Canada		
	Business :	604 657-6559		
	Cell Phone :	604 657-6559		
	E-Mail:	tvassos@aquadoc.ca	E-Mail 2:	tvassos@hotmail.com
	Position:	M Status: V	Matrix:	UI
<hr/>				
26	Name:	Mr. M. (Mike) Warren	Membership ID:	31869
	Title:	Product Manager	Language:	English
	Company:	Watertronics, Inc.	Mail Stop:	
	Address:	525 East Industrial Dr Hartland, WI 53029 USA		
	Business :	414 640-2496		
	Cell Phone :	414 640-2496		
	E-Mail:	mike.warren@watertronics.com	E-Mail 2:	
	Position:	M Status: V	Matrix:	PI

