



safety glazing certification council

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**MINUTES OF EIGHTY-SIXTH
MEETING OF THE
CERTIFICATION COMMITTEE
SEPTEMBER 16 and 17, 2013
THE DUKE MANSION
CHARLOTTE, NC**

<u>Members and Alternates Present</u>		Date and Votes Present	
		<u>9/16/13</u>	<u>9/17/13</u>
AGC Fab.	Mark Cody	1	1
AGC Industries	Mark Cody	1	1
JE Berkowitz	Lance Hayes	1	1
Cardinal Glass	Bernie Herron	1	1
Consolidated Glass	Carl Carmen	1	1
Consolidated Glass	Shane Merryman	Present	Present
Guardian Fabrication Inc.	Kevin Olah	1	1
Guardian Industries Corp.	Kevin Olah	1	1
Guardian Industries Corp	Fred Bruce	Present	Present
Oldcastle Building Envelope	Cliff Monroe	1	1
Oldcastle Building Envelope	Rick Wright	Present	Present
Trulite	Jon Johnson	1	1
Viracon	Brian Louks	1	1
Viracon	Lyman Pierce	Present	Present

Members by Virtue of Being a Director

Public Interest	Patrick Loughran	1	1
Public Interest	Bill Nugent	1	1
Public Interest	Elaine Rodman	1	1
Public Interest	Peter Weismantle	1	1
Public Interest	June Willcott	1	1
		<hr/>	<hr/>
		Votes	
		15	15

Guests

Architectural Testing, Inc.	Irv Scott	Present	Present
Consultant	Chris Barry	Present	Present
Eastman	Julia Schimmelpenningh	Present	Present

Legal Counsel

Schiff, Hardin LLP	William M. Hannay	Present	Present
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Administrative Staff

AMS, Inc.	John Kent	Present	Present
AMS, Inc.	Brandy Redder	Present	Present

Persons Present	<hr/>	<hr/>
	23	23

- 9.16.13.1 The meeting was called to order at 1:00pm by Chairman Mark Cody and a quorum declared. All present introduced themselves.
- 9.16.13.2 A presentation was provided by Chris Barry Glass Consultant (formerly of Pilkington/LOF) entitled "Your Glass May Crack but it Must Not Harm You". Upon completion, time was allowed for questions. All thanked Mr. Barry.
- 9.16.13.3 The minutes of the October 10 and 11th, 2012 meeting were reviewed. A motion was made by Carmen/Herron to approve the minutes as submitted.

Vote: Unanimous Affirmative
Motion Passed

9.16.13.4 **Legal Counsel's Report – W. Hannay - (See attachment #1).**

- A. SGCC Anti-Trust Guidelines were distributed to the group and read out loud
- B. SGCC, a corporation incorporated under the Illinois General Not for Profit Corporation Act, is in good legal standing in the State of Illinois with no pending or threatened litigation.

9.16.13.5 **Committee Structure - (See Attachment #2)**

9.16.13.6 **Board of Directors' Report – P. Weismantle**

- A. There will be a participants meeting after this meeting where the nominating committee intends to present Mark Cody to replace Cliff Monroe on the Board.
- B. Financial matters of SGCC were reviewed and the Board agreed to maintain the business account fee at 50% for the F and L 2014 certification periods.
- C. SGCC had earlier agreed to accept credit card payments but to charge a convenience fee of 3.5%. The credit card account is in balance and current practices shall be maintained.
- D. The SGCC Board agreed in 2012 to join GICC and is currently a member. The primary intent is to monitor and develop a better understanding of code activity.
- E. The Board is considering ANSI accreditation to ISO 17065 and has approved \$5,000 to develop a report on the cost and effect.
- F. SGCC learned of an egregious fraudulent claim of SGCC certification and use of the logo. SGCC secured outside legal counsel and the matter was aggressively pursued. The fraudulent reference has been removed but SGCC shall continue to monitor.

9.16.13.7 **Financial Report – E. Rodman - (See Attachment #3)**

9.16.13.8 **Administrator's Report – J. Kent - (See Attachment #4)**

The current DRAFT of the SGCC video, which has been in development for the past several years, was shared with the group. After review it was agreed to 1) use "CPSC 16 CFR, 2) minimize the busy background during the standards section, 3) add more separation between the laminated glass section and the annealed glass section. With these changes the video shall be finalized and made available on the web page.

9.16.13.9 **Quick Action Sub-committee Report (QAC)**

In December 2012 the SGCC Quick Action Sub-committee addressed several issues pertaining to SGCC Certification to Canadian Standards. The sub-committee formulated an SGCC announcement, resolved testing issues and agreed to modifications to the SGCC Lab manual. The SGCC Lab manual modifications will be addressed under agenda item C10.

9.16.13.10 **Testing Laboratory Status - (See Attachment #5)**

- A. The status of SGCC Approved Testing Laboratories was reviewed. A motion was made by Rodman/Olah to approve all current laboratories for a 2 year term.

Vote: Unanimous Affirmative
Motion Passed

- B. At present SGCC does not require any type of formal quality systems accreditation to be an SGCC approved laboratory. After discussion a motion was made by Carmen/Monroe to require 3rd party laboratory accreditation to ISO 17025 as a condition of SGCC laboratory approval, with a 2 year transition period.

Vote: 13 Affirmative
 0 Negative
 2 Abstain
Motion Passed

- C. Revisions to the SGCC Laboratory manual to accommodate SGCC certification to Canadian standards were reviewed. A motion was made by Cody/Herron to accept revisions as noted.

Vote: Unanimous Affirmative
Motion Passed

9.16.13.11 **Program Testing Results Review - (See Attachment #6)**

Although no specific conclusions were drawn, the data was reviewed and its value recognized for consideration in future discussion.

9.16.13.12 **CPSC – (See Attachment #7)**

Relative to SGCC's Petition CP12-3 to replace the test protocol of CPSC 16 CFR 1201 with reference to ANSI Z97.1, CPSC has tentatively scheduled to issue a NPR (Notice of Proposed Rulemaking) by the end of fiscal year 2014, which is September 2014. Attachment #7 further explains this issue as well as providing an explanation on CPSC's proposal to revise compliance requirements. GICC and other associations submitted comments opposing the CPSC proposal which in effect would shift responsibility for CPSC compliance from the glass fabricator (SGCC Licensee) to the end product producer (window – door – company).

9.16.13.13 **ANSI Z97.1 (See Attachment #8)**

Kevin Olah provided the attached update. It was noted that the full standard was balloted July-August of this year but the ballot failed. The ANSI Z97.1 committee will be meeting following this meeting and time will be primarily focused on resolution of the negatives from the ballot.

9.16.13.14 **Canadian Certification – (See Attachment #9)**

SGCC Certification to Canadian standard CAN/CGSB 12.1-M90 for Tempered or Laminated Safety Glass was approved at the October 2012 meeting and has been introduced effective 1/1/13. Certification shall be for composite plus CAN/CGSB 12.1 (COMP+CAN). Currently just under 20% of plants in SGCC have participated.

9.16.13.15 **Heat Soak Certification – (See Attachment #10)**

DRAFT #2 (dated 9-4-13) was reviewed and discussed. Concern was expressed that since you can not test for heat soaked glass, how would SGCC know if product was heat soaked and therefore how could certification be authorized. There also seemed to be less interest in the topic compared to discussion from last meeting. Hearing no motion or firm direction, the issue will be tabled.

9.16.13.16 The meeting was adjourned for the day at 4:55pm by Chairman Mark Cody.

9.17.13.1 The meeting was called to order at 8:10am by Chairman Mark Cody and a quorum declared.

9.17.13.2 **Testing Range of Thickness For Tempered – (See Attachment #11)**

With the acceptance of the concept of testing range of thickness for laminated glass, SGCC has been asked to review the possibility of a similar concept for tempered glass. The data presented in the attachment, other than the anomaly at 7/32-inch, seems to show a linear trend for thickness vs. failures, with no obvious “cut-off” point. Hearing no motion, the issue was tabled.

9.17.13.3 **List of Patterned Glass – (See Attachment #12)**

A list of “Classified Tempered Glass Patterns” has been maintained in the SGCC CPD since the programs inception. The purpose of this list is to identify pattern depth classification (shallow, medium, deep) for a given pattern and thickness. Since the last meeting the list has been reformatted and circulated to several pattern glass producers for comment and update. After review, it was agreed to 1) list pattern supplier, 2) delete all patterns with no supplier associated, 3) circulate to suppliers one last time, response due by 12/1/13 and 4) publish the list in the next CPD and on the SGCC webpage.

9.17.13.4 **Tempered Vacuum Insulating Glass (VIG) – (See Attachment #13)**

SGCC has received inquiry how a safety vacuum IG unit might be tested. A hand out was prepared for this meeting addressing some concerns. After review the group agreed to 1) address laminated as well as tempered 2) present in the form of a question and answer 3) keep on the agenda for review at the next meeting. The attachment to these minutes show the results of this direction.

9.17.13.5 **Laminated Glass Specialty Configurations – (See Attachment #14)**

- A. It was agreed that further definition is needed of laminated specialty product (LSP) vs. regular laminated transparent glass (LTG). ANSI Z97.1 section 4.6 shall be referenced and Julia Schimmelpenningh volunteered to work with the administrator to develop definition.
- B. Until CPSC adopts the ANSI Z97.1 test method, non-symmetrical laminated test samples to CPSC will need to have one impact from each side/surface. Since SGCC does not always know if submitted test samples will be symmetrical or non-symmetrical a motion was made by Carmen/Weismantle to require 6 impact samples be selected for all COMPOSITE laminated glass testing where 4 samples will be tested to ANSI and 2 to CPSC. If samples are symmetrical, the lab may test 5 samples, 4 to ANSI and 1 to CPSC.

Vote: 14 Affirmative
1 Negative
0 Abstain
Motion Passed

- C. A motion was made by Johnson/Herron to identify laminated glass by its base glass heat treating where (A) = annealed, (HS) = heat strengthened, and (T) = tempered. Certification testing of (A) will certify (A), (HS), (T); certification testing of (HS) will certify (HS) and (T), and certification testing of (T) will only certify (T). Consider revisions to guideline L.8.

Vote: Unanimous Affirmative
Motion Passed

9.17.13.6 **Old Business**

NONE

9.17.13.7 **New Business**

NONE

9.17.13.8 **Next Meeting**

The next SGCC Certification Committee meeting is tentatively scheduled for October 1 and 2, 2014 in Nashville, TN.

- 9.17.13.9 The meeting was adjourned by the chair at 10:43 am.

SGCC ANTITRUST COMPLIANCE GUIDELINES

- A. It is the policy of SGCC to comply fully with the antitrust laws applicable to trade association activities.
- B. In furtherance of this policy, all SGCC meetings are attended by SGCC legal counsel, and the SGCC's officers, directors, and Administrator periodically consult with SGCC legal counsel.
- C. Each participant in SGCC activities has a responsibility to avoid any improper conduct from an antitrust standpoint. The following guidelines will assist in meeting this responsibility.
1. SGCC meetings are held solely to manage and operate SGCC and its certification program, in accordance with SGCC's corporate purposes, the SGCC Bylaws, and the Certified Products Directory.
 2. No participant in SGCC activities, including the certification program and standards development efforts (such as ANSI Z97.1), should attempt to misuse his or her position within SGCC to gain an unfair competitive advantage on behalf of his or her company.
 3. To avoid antitrust problems (either civil or criminal), the following legally-sensitive subjects should not be discussed by competitors at or during SGCC meetings:
 - a. Future marketing plans of specific competitors;
 - b. Any complaints or business plans relating to specific customers, suppliers, geographic markets or products;
 - c. Agreements between competitors to allocate markets, customers or products;
 - d. Agreements between competitors to refuse to deal with a supplier or a customer;
 - e. Purchasing plans or bidding plans (except privately between two parties with a vertical commercial relationship such as supplier and customer); or
 - f. Current or future price information and pricing plans, bidding plans, refund or rebate plans, discount plans, credit plans, specific product costs, profit margin information or terms of sale.

Any question regarding the legality of a discussion topic or business practice should be brought to the attention of SGCC legal counsel* or your company's individual legal counsel.

April 2010

* William M. Hannay, Schiff Hardin LLP, 7200 Sears Tower, Chicago, IL 60606; (312) 258-5617; (312) 258-5700 (fax); e-mail: whannay@schiffhardin.com.



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SGCC Committee Structure (as of 9/16/13)

SGCC Board of Directors		President: Peter Weismantle
Scope: The overall affairs of the Council shall be managed by its Board of Directors.		
Members		
<u>Public Interest</u>		<u>Business Community</u>
Peter Weismantle – President		Brian Louks – Vice President
June Willcott - Secretary		Carl Carmen
Elaine Rodman - Treasurer		Kevin Olah
William Nugent		Bernie Herron
Patrick Loughran		Cliff Monroe

Sub Committee: <u>Nominating</u>	Chair: Richard Paschel	Public Interest Member: Peter Weismantle
Scope: The Nominating sub committee is a subcommittee of the Board and appointed by the President to research and present a slate of SGCC Board nominees and officers for the annual SGCC participants meeting.		

Sub Committee: <u>Quick Action</u>	Chair: Mark Cody
Scope: Between meetings resolution of any issue, appeal or request for review that can not be dealt with by the administrator, or is beyond the guidance provided to the Administrator or for which the Administrator has rendered a decision that is not acceptable by the applicant.	
Members	
SGCC President	Peter Weismantle
Certification Committee Chair	Mark Cody
Public Interest	June Willcott

Sub Committee: <u>Time, Place and Marketing</u>	Chair: Elaine Rodman
Scope: Canvas for scheduled meetings of glass and associated industry meetings; develop a list of possible locations and specific dates for future meetings for submittal to participants for vote. Maintain SGCC marketing plan.	
Members	
Rick Wright	

Sub Committee: <u>Laboratory and QA Inspection</u>	Chair: Kevin Olah
Scope: Address and resolve concerns related to the interrelationship between the laboratories, the administrator, and SGCC participants. Development and maintenance of the laboratory testing manual and program quality assurance requirements.	
Members	
Bernie Herron	Rick Wright
Mark Cody	



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Annual Financial Comparison Summary

Attachment #03

Revenues	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
Administrative	\$306,298	\$478,848	\$491,427	\$534,680	\$526,949	\$537,804	\$573,698	\$526,839
Testing	\$317,424	\$576,784	\$794,936	\$819,085	\$673,050	\$849,675	\$989,037	\$1,003,728
Business Acct. Income (Fee)	\$38,700 (Full)	\$46,659 (Full)	\$52,875 (Full)	\$55,435 (Full)	\$30,165 (full/none)	\$0 (none)	\$15,905 (none/half)	\$32,297 (half)
Impactor Bags	\$1,100	\$1,430	\$990	\$1,540	\$1,980	\$1,395	\$75	\$600
Test Labs Under Five	\$2,000	\$2,000	\$1,000	\$1,000	\$0	\$0	\$0	\$0
Interest Income	\$18,093	\$18,629	\$28,077	\$26,591	\$15,440	\$14,685	\$5,490	\$8,740
Total Revenues	\$683,615	\$1,124,350	\$1,369,305	\$1,438,331	\$1,247,584	\$1,403,559	\$1,584,205	\$1,572,204
Test Fee Transfer	\$0	\$36,712	\$0	\$68,000	\$0	\$0	\$0	\$84,280
Total Revenue Discretionary	\$59,893	\$105,430	\$82,942	\$152,566	\$47,585	\$16,080	\$21,470	\$125,917

Expenses	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
Administrative	\$306,298	\$478,848	\$491,427	\$534,680	\$526,949	\$537,804	\$573,698	\$526,839
Testing	\$317,424	\$540,072	\$794,935	\$751,085	\$673,050	\$849,675	\$989,037	\$919,448
Accounting	\$3,000	\$3,000	\$3,000	\$3,000	\$3,165	\$3,100	\$3100	\$3,100
Legal	\$17,538	\$19,771	\$24,050	\$21,066	\$25,783	\$20,781	\$27,541	\$21,821
Meetings Exp	\$9,927	\$9,289	\$20,098	\$14,487	\$12,434	\$12,310	\$12,389	\$10,591
Miscellaneous	\$2,826	\$1000	\$0	\$0	\$3,913	\$4,424	\$167	\$0
Insurance	\$5,607	\$5,607	\$5,607	\$6,837	\$4,640	\$4,458	\$4,907	\$4,125
Web Page	\$1,925	\$1,400	\$1,400	\$1,639	\$1,250	\$5,512	\$0	\$0
Bank Charges	\$1,558	\$1,895	\$2,722	\$2,171	\$2,249	\$1,584	\$1,711	\$1,043
Marketing	\$0	\$10,000	\$10,000	\$12,430	\$149	\$0	\$0	\$0
Total Expenses	\$666,103	\$1,070,882	\$1,353,240	\$1,347,395	1,253,582	\$1,439,648	\$1,612,550	\$1,486,967
Change in Net Assets	\$17,512	\$53,468	\$16,065	\$90,936	(\$5,998)	(\$36,089)	(\$28,345)	\$85,237
Net Assets	\$167,410	\$220,878	\$236,943	\$327,879	\$321,881	\$285,792	\$257,447	\$342,684

Investments	Initial Date of Purchase and Interest Rate	Initial Purchase Value	Current Interest Rate	Date of Maturity	Comments	9/9/13	Plan of Action
#1 Key/Union Bank, N.A.	5/2013 .249%	\$230,000	Variable	5/9/18	5 year structured CD/3.05 quarterly cap - tied to S&P 500 Index	\$230,000	Maintain
#2 NBT (formerly Alliance)	5/2007 4.65%	\$80,000	.30%	7/1/14	12 month CD	\$229,882	Maintain
#3 Carthage Savings and Loan	3/2008 2.92%	\$100,000	.49%	6/24/14	12 month CD	\$230,304	Maintain
#4 First National Bank of Dryden	5/1997 5.05%	\$45,000	.70%	6/5/14	24 month CD interest added every 3 months	232,024	Maintain
#5 Community Bank NA	1/15/13 .25%	\$220,000	.25%	1/15/15	24 month CD	\$220,000	Maintain
#6 Watertown Savings Bank (Formerly Redweed)	11/23/04 2.65%	\$93,972	2.65%	11/23/12	48 month CD	X	Closed
#7 PNC Bank (formerly National City Bank)	8/2000 7.15%	\$90,000	.25%	12/17/12	12 month CD	X	Closed
#8 Bank of America (formerly MBNA Invest Serv)	12/2000 6.63%	\$45,000	.1%	12/11/12	12 month CD	X	Closed
Total of all Certificates of Deposits						\$1,142,210	

SGCC Banking Accounts	
Account	Balance as of 9/10/13
M&T Bank - Checking	\$2,038
Watertown Savings Bank - Savings	\$207,685

ADMINISTRATIVE REPORT

SGCC Fall Meeting
September 16-17, 2013

July 1, 2013 Certified Products Directory (CPD)

<i>Cut-off Date</i>	<i>Copies</i>	<i>Subscription List Mailing</i>
July 1, 2013	2726	2522

Certification Removed Since Publishing July 1, 2013 CPD

ANSI Program

None

CPSC Program

None

Composite Program

Anlin Industries, Clovis CA (Plant Decertification)
OldCastle BE Wright City MO: SGCC# 4833

Certification Added Since Publishing July 1, 2013 CPD

ANSI Program

None

CPSC Program

None

Composite Program

New Plants Added to program

Shanghai Yunduan (3 products)
 Shenzhen Shennanyi (3 products)

New Products Added to existing plants

Vidrio Bisel, Mexico: SGCC# 4969 (S) 6mm LTG
 Vidrio Bisel, Mexico: SGCC# 5056 (H) 10mm LTG

Certification Changes Since Publishing July 1, 2013 CPD

Oldcastle BE Denver CO: SGCC#4454 changed from 10mm+LTG to 8mm+ LTG

Notification of Manufacturer's Name Changes

Dongguan Taisheng Glass Co., Ltd. Guang Dong China: Is now listed as
Tai Sheng (Dong Guan) Glass Co., LTD

Consolidated Glass Holdings Inc. S. Easton, MA: Is now listed as Solar Seal Company

Administrative Activity

December 2012	Participants notified of CAN CGSB Canadian Standard Addition
January 2013	FAQ created with regards to CAN CGSB and placed on website
January 2013	Mailing of January 2013 Certified Products Directory
April 2013	Mailing of L13 Invoices
August 2013	Participants notified Element Laboratory Houston, TX no longer conducting SGCC Testing
August 2013	Mailing of July 2013 Certified Products Directory

	L08 As of Oct	F09 As of April	L09 As of Oct	F10 As of April	2010 As of Oct	2011 As of Oct	2012 As of Oct	2013 As of Sept
No. of Plants	245	242	252	241	245	256	262	275
% increase in Plants	+11%	-1%	+4%	-4%	+2%	+4%	+2%	+5%
Offshore Plants	44	46	50	43	50	50	57	59
% increase in Offshore Plants	33%	4%	9%	-14%	+16%	+/- 0%	+14%	+4%
No. of Licensees	147	145	154	150	152	160	168	178
Total Certified Products	1513	1507	1598	1531	1573	1651	1726	1789
% increase in Certified Products	6%	-0.4%	6%	-4%	+3%	+5%	+5%	+4%
ANSI Only	23	26	34	37	22	18	13	13
CPSC Only	25	18	20	7	18	18	18	17
COMPOSITE	1465	1463	1544	1487	1533	1615	1695	1392
Plants COMP+CAN								43
Products COMP+CAN								367

Website Report

SGCC 2012- 2013	Total Visits (% change from prior yr)	Most Visited Section	2nd Most Visited	3rd Most Visited	Down loads of CPD	Other Top Downloads	Top Visiting Countries
Oct 2012	16,028 -2%	Certified Product Search	Record of Compliance Testing	Certified Plants	385	Guidance for the SGCC Certification of Laminated Glass New ANSI Z97.1-2009	US China Ukraine
Nov 2012	15,851 +56%	Certified Product Search	Record of Compliance Testing	Certified Plants	266	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China Ukraine
Dec 2012	14,015 +100%	Certified Product Search	Certified Plants	Record of Compliance Testing	227	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China UAE

Jan 2013	22,623 +131%	Certified Product Search	Certified Plants	Record of Compliance Testing	394	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China UAE
Feb 2013	18,719 +21%	Certified Product Search	Record of Compliance Testing	Certified Plants	372	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China UAE
March 2013	23,596 +68%	Certified Product Search	Information	Record of Compliance Testing	571	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China UAE
April 2013	20,469 +62%	Certified Product Search	Certified Plants	Record of Compliance Testing	472	New ANSI Z97.1-2009 Approved Testing Laboratories	US China UAE
May 2013	23,565 +84%	Certified Product Search	Record of Compliance Testing	Certified Plants	519	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China Canada
June 2013	19,576 +19%	Certified Product Search	Certified Plants	Information	514	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US Canada China
July 2013	20,668 +56%	Certified Product Search	Certified Plants	Record of Compliance Testing	507	New ANSI Z97.1-2009 Approved Testing Laboratories	US Canada China/ Germany
Aug 2013	18,104 +25%	Certified Product Search	Certified Plants	Record of Compliance Testing	476	New ANSI Z97.1-2009 Guidance for the SGCC Certification of Laminated Glass	US China Canada

26% of visitors used a search engine to find the site:

Search terms used to find site:

SGCC

Safety Glazing Certification Council

Safety Glazing

ANZI 97.1

CPSC 16 CFR 1201

Glazing

sgcc.org

➤ **SGCC Video (DRAFT #3) is ready for review**

SGCC Testing Laboratory Status (as of 9/4/2013)

7. Laboratory Agrees that initial approval by the SGCC Certification Committee is contingent upon an initial survey of Laboratory's test facilities by the SGCC. Laboratory agrees to pay the cost of the initial survey and inspection of the testing facilities. In order for a test facility to be considered for initial approval, a letter of interest or intent to use must be provided from 5 certified fabrication facilities. Ongoing laboratory approval is subject to approval by the SGCC Certification Committee and shall be for a period of two (2) years. During this period the laboratories facilities shall be re-surveyed and all issues arising from this survey resolved. A non-refundable fee of \$3000 annually for each facility shall be charged for SGCC Laboratory approval and surveys. This fee shall be waived under the following conditions:

1. During the first 2 calendar years of initial SGCC Lab approval
2. When 5 or more SGCC participating plants have selected the facility as their designated testing laboratory for that year.

Company	Location	Date of Initial Approval	Date of Last Inspection	Approved by SGCC	Signed Agmt	# Plts	Lab fee
Architectural Testing Inc.	St. Paul, MN	10/6/92	2/10/12	10/25/11	10/14/09	21	
	York, PA	6/30/85	5/18/11 Tent 10/2/13 JK	10/25/11	10/15/09	55	
	Fresno, CA	11/18/97	11/30/12	10/25/11	10/08/09	23	
	Southlake, TX	7/1/04	10/26/11 Tent 10/17/13 EM	10/25/11	10/14/09	20	
	Tampa, FL	4/25/07	10/17/11 Tent 10/3/13 RM	10/25/11	10/15/09	3	X
	Lithia Springs, GA	5/17/12	3/28/12	5/17/12	5/17/12	13	
	Kent, WA	10/29/09	1/4/12	10/25/11	10/06/09	6	
Bowser-Morner, Inc.	Dayton, OH	1991	6/6/11 Tent 11/20/13 EM	10/25/11	10/01/09	14	
Construction Consulting Laboratory West	Ontario, CA	11/19/97	11/14/11 Tent 9/22/13 VN	10/25/11	9/29/09	16	
Fenestration Testing Laboratories	Medley, FL	10/2/97	10/24/11 Tent 10/5/13 RM	10/25/11	10/1/09	41	
Intertek	Cortland, NY	1981	10/20/11 Tent 10/23/13 JK	10/25/11	10/12/09	14	
NCTL	Everett, WA	10/14/97	1/13/12	10/25/11	10/15/09	17	
	York, PA	5/19/11	5/19/11 Tent 10/1/13 JK	10/25/11	5/19/11	4	X
Rone Engineers, Ltd.	Dallas, TX	3/31/00	10/26/11 Tent 10/15/13 EM	10/25/11	10/01/09	6	
Element Materials Technology	Des Moines, IA	6/11/99	11/15/11 Tent 11/14/13 EM	10/25/11	10/15/09	10	
Element Materials Technology	Houston, TX	No longer performing SGCC Testing as of 9/1/2013					
Element Materials Technology	Wausau, WI	11/29/11	11/29/11 Tent 10/13/13 VN	10/25/11	10/27/11	3	X

Program Testing Results

Attachment #06

	2004	2005	2006	2007	2008	2009	2010	2011	2012	F13 to date	
Selections (% of total products)	Total	1620	1729	2089	2549	2743	2846	2986	3146	3219	1648
	Participant	682 (42)	925 (54)	851 (41)	1188 (47)	1300 (47)	1356 (48)	1902 (64)	2263 (72)	2753 (86)	1533 (93)
	Inspector	938 (58)	804 (46)	1238 (59)	1361 (53)	1443 (53)	1490 (52)	1084 (36)	883 (28)	466 (14)	115 (7)
	Total Tempered Products		1643 (95)	1958 (94)	2349 (92)	2587 (94)	2705 (95)	2783 (93)	2876 (91)	2925 (91)	1495 (91)
	Total Laminated Products		86 (5)	131 (6)	200 (8)	156 (6)	141 (5)	203 (7)	131 (9)	294 (9)	153 (9)
Product Failures (Calendar Year) % Total Failures/% Total odd size testing	Total	36 (2.2)	31 (1.8)	65 (3.1)	71 (2.8)	66 (2.4)	66 (2.3)	72 (2.4)	98 (3.1)	99 (3.1)	33 (2.0)
	Participant Selected	24 (67/1.5)	20 (65/1.2)	54 (83/2.6)	44 (62/1.7)	35 (53/1.3)	47 (71/1.7)	65 (90/2.2)	76 (78/2.4)	85 (86/2.6)	31 (94/1.9)
	Inspector Selected	12 (33/7)	11 (35/6)	11 (17/5)	27 (38/1)	31 (47/1.1)	19 (29/7)	7 (10/2)	22 (22/7)	14 (14/4)	2 (6/1)
	34x76	25* (69/1.5)	30* (97/1.7)	61* (94/3)	50* (70/2)	47* (71/3.3)	54* (82/2)	70* (97/2.3)	98 (100/3.1)	99 (100/3.1)	33 (100/2)
Tempered Failures											
Laminated Impact Failures											
Laminated Boil Failures											

CPSC Update for SGCC (September 2013)

I. Revision of 16 CFR 1201 Awaits CPSC Action. On June 26, 2012, SGCC filed a petition requesting the CPSC to initiate a rulemaking to replace the current testing procedures for glazing materials codified at 16 CFR 1201.4, with those contained in ANSI Z97.1. On August 24, 2012, the Commission published our Petition for comment. On April 17, 2013, CPSC notified SGCC that it is granting SGCC's request to open a rulemaking proceeding to consider a long overdue revision to the federal safety standard for architectural glazing materials, 16 CFR 1201. The next step of the process will be for the staff to develop a briefing package with a draft Notice of Proposed Rulemaking (NPR) for the Commission's review. (We were told in July that the staff intends to forward a briefing package for this rulemaking to the Commission during fiscal year 2014, but we do not know exactly when.) If and when the Commission approves the draft NPR, it will be published in the Federal Register for comment. Staff would then review the comments received in response to the NPR and prepare a draft final rule for the Commission's final review and approval. The schedule for the issuance of the final rule will depend on the quantity and substance of the comments received in response to the NPR and consideration of agency resources.

II. GICC/GANA Urges CPSC Not to Shift Certification Obligations. With GANA Executive Committee approval, GICC, as a committee within GANA, submitted written comments to CPSC on July 29, 2013, urging CPSC to revise a CPSC proposal to shift the legal responsibility for certifying the compliance of safety glazing materials with 16 CFR 1201 from the glass fabricators, where it has always been, to their down-stream customers, specifically, to the door, shower/tub enclosure, and IG unit fabricators. Joining GICC in submitting these comments is a broad coalition of industry groups consisting of WDMA, IGMA, and AEC (Aluminum Extruders Council). AAMA submitted its own comments, but also supported GICC's.

The GICC Coalition comments respond to a recent (May 13, 2013) CPSC rulemaking proceeding announcement in which CPSC proposes substantial revisions to its regulations governing consumer product certification protocol, primarily for children's products and foreign-made goods subject to CPSC safety standards. Despite this narrow focus, CPSC's proposed revisions also apply to certifications of domestic non-children's products subject to CPSC safety standards such as architectural glazing materials.

In their joint comments, GICC and the other glass trade groups limited their objections to questioning the proposed definition of "finished products," a term critical to CPSC's proposal to require all CPSC-regulated "finished products" manufacturers – "regulated" typically because their products

incorporate a component part that is itself subject to a CPSC standard – to assume legal responsibility for issuing that product certification, certifying the finished product and all its component parts fully comply with the applicable safety standard. CPSC proposes to define “finished products” very broadly, too broadly, in GICC’s view, because it reaches the door/bath enclosure/IG unit fabricator.

The required certification must provide “consumers” and other end users 10 items of information – names, dates, addresses, telephone numbers, etc. The GICC Coalition comments point out that only safety glazing manufacturers have the testing capability and other information at hand necessary to complete and stand behind that certification and, for the past 36 years, they have been required by CPSC regulation to issue that certification of compliance. The Coalition comments request CPSC, in issuing the final version of its certification regulations, to maintain the *status quo* – keep certification with the glass fabricator – by revising the definition of “finished products” manufacturer to exclude down-stream fabricator-customers of the safety glazing manufacturers.

CPSC’s proposed certification regulations also would expand the scope of the information required to appear in the product certifications. The GICC Coalition did not object to, or otherwise comment on, that proposed expansion, having concluded that safety glazing fabricators will be able to obtain and display the additional information in their certifications without much difficulty.

Approximately 56 trade groups, consumer advocates, and companies submitted written comments to CPSC in response to the *Federal Register* notice. Most attack the provisions dealing with foreign imports and the additional burdens CPSC would impose upon importers, freight forwarders, and customs brokers in connection with foreign-product certification. I expect CPSC will take at least six months, and perhaps even years, to issue its final certification regulations, given the heavy public opposition its proposal has generated.

ASC Z97 **ANSI ACCREDITED STANDARDS COMMITTEE**

Safety Requirements for Architectural Glazing Materials

Chairman: K. Olah, 2300 Harmon Road, Auburn Hills, MI 48326, Phone: 248-340-2141; E-mail: KOLAH@Guardian.com

Secretary: J.C. Schimmelpenningh, 730 Worcester Street, Springfield, MA 01151, Phone: 413-730-3413; E-mail: JCSCHI@eastman.com

ASC Z97 Update September 12, 2013

ANSI Z97.1-2009 Standard

- Available for purchase at <http://www.ansiz97.com/purchase/>
- Interpretations have been issued and supplied for posting on the website. An ERRATA statement has also been issued February 11, 2011 with those modifications made to the standard.
- Ballot B13-0724.01 with all revisions for the 2014 standard failed. All comments and negatives will be reviewed at the September Full Committee Meeting.

Meeting Information

- Next Full Committee Meeting is scheduled for September 17-18, 2013 in Charlotte, NC
- Last Full Committee Meeting was held September 24, 2012 in Washington, DC
 - Two Task Groups* & three Working Groups met:
 - Testing Requirements & Acceptance Criteria (TRAC)
 - Test Apparatus Working Group – work is progressing to design a new impactor
 - Mode of Breakage Working Group – resolved and clarified issues related to breakage of organic coated glass and plastic breakage on impact; language was moved to the full committee ballot
 - Weathering Working Group – refined the weathering language for clarification and language moved to full committee for ballot
 - Labeling – restructured the language for clarification and will be adding a sample label; change were sent to full committee for ballot

****Any individuals interested in participating in a task or working group should contact Julie Schimmelpenningh directly at jcschi@eastman.com***

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JCSCHI@eastman.com

Membership

- 31 primary members; 19 alternates; 3 observers
- Committee must remain in balance according to ANSI Essential Requirements
 - There are six classifications of membership
 - No one group can exceed 33% of membership
- Currently have pending memberships due to balance requirements
- For new membership information please go to www.ansiz97.com and fill out a membership form

Website www.ansiz97.com

January - August 2013

Total "Visits": 42,269 (Avg. 5,283/month)

Top Five Visiting Countries

1. United States – 28,719 visits
2. China – 10,431 visits
3. Japan - 7181 visits
4. Canada – 427 visits
5. Germany - 255 visits

Steering Committee

- Next meeting is scheduled for September 17, 2013 in Charlotte, NC
- The Steering Committee will review the membership and next steps for the 2014 standard

10.11.12.3 **Canadian Certification – (See Attachment #10)**

Due to an increased interest in Certification to the Canadian Standard CAN/CGSB 12.1, SGCC has been asked to consider expanding its current certification program to include the Canadian standard. This issue has been raised in the past. After discussion a motion was made by Cody/Wright to proceed and implement SGCC certification to Canadian standard CAN/CGSB 12.1-M90 Tempered or Laminated Safety Glass, with an implementation date of 1/1/13. Certification shall be for composite plus CAN/CGSB 12.1 (COMP+CAN).

Vote: Unanimous Affirmative
Motion Passed

With this motion, SGCC shall allow laboratories located in Canada to apply for SGCC Approval. All SGCC information shall be reviewed and modified to accommodate this direction.

Sent: Friday, December 28, 2012 12:29 PM

TO: All SGCC Participants

FROM: John G. Kent – SGCC Administrative Manager

I am pleased to announce that at the fall 2012 SGCC Meeting it was agreed to “proceed and implement SGCC certification to the Canadian standard CAN/CGSB 12.1-M90 Tempered or Laminated Safety Glass”. This was done to answer a growing need for, and interest in, certification to the Canadian standard. This will be a voluntary option for current SGCC participants and will be made available starting January 2nd, 2013.

SGCC’s position is that current test sample selection and testing to ANSI Z97.1, CPSC 16CFR 1201 or Composite (ANSI and CPSC) will also qualify a product for CAN/CGSB 12.1-M90. No additional test sample selection or testing will be required. SGCC Certification to all 3 standards will be known as COMP+CAN and shall be listed as such in the SGCC Certified Products Directory (CPD) and online database at www.sgcc.org. You would also be eligible to SGCC logo your certified product with the CAN/CGSB 12.1-M90 designation, should you wish. We are in the process of contacting laboratories to develop appropriate test protocols and reporting requirements and there may be a nominal increase in laboratory and certification fees.

If you are interested in adding the Canadian standard to your current SGCC Certification, please contact our office at your convenience. In the mean time, we are available to answer any questions you may have.

As of August 2013

Plants COMP+CAN	43
Products COMP+CAN	367

Frequently Asked Questions Regarding Certification to Canadian Standard CAN/CGSB 12.1-M90

1. Can you give me an idea of the costs to certify to the Canadian Standard?

The cost of SGCC Canadian certification, Per 6 month certification cycle will be an additional \$40 for the first product certified and \$8 for each additional product certified. For example, if you have 7 products certified, it would be \$40 + 6 add prod's X \$8 = \$88 extra per 6 months. There may be an additional reporting fee from some test labs although others will not be charging anything extra at this time. SGCC has not yet heard back from all of the labs at this time.

2. Is a separate Test Report provided for CAN?

Although labs may have different policies, SGCC is recommending the Canadian standard is simply reference in the existing SGCC test report format.

3. Do you need to supply more test samples?

No, no additional testing is required. ANSI Z97.1 testing will cover the Canadian requirement. The reference of the Canadian standard will then just be an additional reporting function.

4. Do you have an example of safety glass logo with CAN information?

ABS Glass Tempered
16 CFR 1201 II
ANSI Z97.1-2009
4mm UA SGCC 9999
CAN/CGSB 12.1-M90

See example above. At present the reference to the Canadian standard, if included in an SGCC logo must appear below a line of separation. Once SGCC certified to the Canadian standard, the line of separation may be removed.

5. Is labeling to the Canadian standard mandatory?

No, once you are authorized to label (certified) you may label to one or more of the standards you have authorization for. However, if a product is not properly labeled (standard reference and other related SGCC label information) it is not certified.

6. What is the process for having Laminated Glass certified for the CAN standard?

The process is the same for laminated or tempered. The ANSI Z97.1 test can serve as the Canadian test and once the report is written and provided to SGCC, authorization to certify to the Canadian standard may be granted.

7. Can a plant certify to only the Canadian standard?

A: No, a plant must certify to COMPOSITE certification (ANSI + CPSC) before the Canadian standard can be added, to be known as COMP+CAN.

8. How will my certification appear in the SGCC Certified Products Directory?

A: The listing in the CPD will appear as follows: (example) SGCC#9999 1/4" TTG COMP+CAN

9: What do I need to do in order to get the process started?

A: Call the office and advise Cathy Kaehler that you wish to have the CAN/CGSB certification added. When your auditor makes his/her next visit, ask them to add it to your sample receipt form to notify the lab to add CAN/CGSB testing. If you are having prototype testing done, notify the lab that you wish to have the prototypes tested to Composite + CAN/CGSB.

SGCC Safety Characteristics of Tempered Glass After Heat Soak Certification

(DRAFT as of 9-4-13)

(Intended to be added as a new section of the SGCC Procedural Guide)

Introduction

Heat soaking of tempered safety glass is a process whereby tempered glass is heated and held at an elevated temperature for a period of time before being cooled. The purpose of heat soaking is to induce breakage in glass that might contain imperfections, while not eliminating the temper of the glass. By inducing breakage during the heat soak process, the likelihood of future field breakage may be reduced.

In recognition that the heat soak process, if performed incorrectly, can affect the safety characteristics of tempered safety glass, SGCC offers a voluntary program to verify the safety characteristics of heat soaked tempered glass. In offering a certification program to accomplish this goal, **SGCC makes no statement as to the effectiveness of heat soaking to reduce field breakage.** An SGCC Licensee participating in the SGCC heat soak certification process shall comply with all aspects of the SGCC certification process.

Test Sample Selection and Testing

For the products and thicknesses intended for heat soak certification, during regular twice per year audits, as with regular test samples, the SGCC Administrator shall identify tempered heat soaked specimens for routine selection and evaluation in lieu of non-heat soaked tempered glass, or request licensee's tempered heat soaked samples when none are available at the time of sampling. The licensee is permitted six weeks in which to effect delivery of said specimens to the SGCC approved Laboratory of the Licensee Participant's choice. The Laboratory shall conduct normal testing of these specimens (ANSI Z97.1, CPSC 16CFR 1201, CAN/CGSB 12.1). Testing of heat soaked tempered glass samples shall allow the Licensee Participant to also certify non-heat soaked tempered safety glass of the same type and thickness fabricated in the same manner as the heat soaked samples.

Auditing

As well as regular SGCC certification requirements, SGCC heat soak Licensee Participants will also be audited for adherence to the following quality assurance program requirements:

1. Verify records for heat soak process system calibration test (at 100% and 10% load) based on section 5.3 and 6 of BS EN 14179-1:2005; "Glass in building – Heat soaked thermally toughened soda lime silicate safety glass". Calibration to be done at least annually.
2. Verify procedures for heat soak production process, including monitoring of parameters for each load and means to identify tempered heat soaked glass from non-heat soaked tempered glass.

Labeling

Typical non-heat soaked tempered glass label:

ABS Glass
16 CFR 1201 II
ANSI Z97.1-2009
4mm UA SGCC 9999

Voluntary heat soaked tempered glass certification label:

ABS Glass
16 CFR 1201 II
ANSI Z97.1-2009
4mm UA S-SGCC 9999

Where S = Heat Soaked

Fees

- It is anticipated that test fees for heat soaked products would be the same as non-heat soaked tempered safety glass.
- There would be an additional administrative fee assessment to address the additional auditing and administrative obligations.

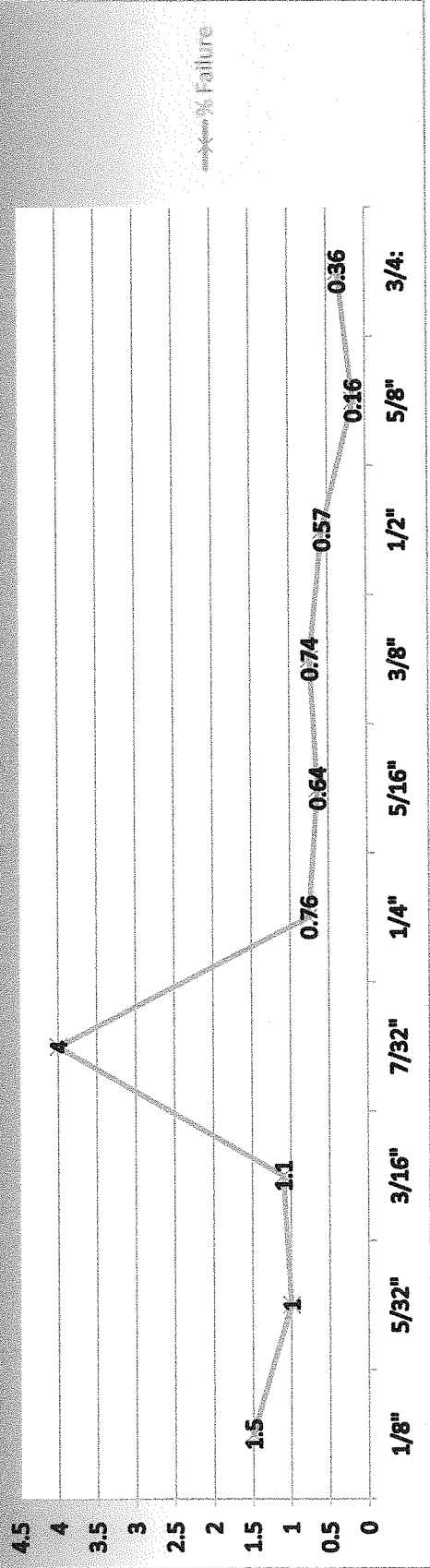
Testing Range of Thickness For Tempered – (see Attachment #14)

10.11.12.8 With the acceptance of the concept of testing range of thickness for laminated glass, SGCC has been asked to review the possibility of a similar concept for tempered glass. The data presented in the attachment was reviewed. After discussion the administrator was requested to calculate rate of failure = failures per thickness/plants X samples X years X 2 test per year

Range of Thickness Summary

Thickness	Number of Failures	Total Lites Fail	Total Lites Tested	% Failure
1/8"	59	102	6635	1.5
5/32"	37	55	5430	1
3/16"	56	90	8090	1.1
7/32"	2	4	96	4
1/4"	32	53	6935	0.76
5/16"	2	9	1410	0.64
3/8"	19	38	5120	0.74
1/2"	8	20	3535	0.57
5/8"	1	1	610	0.16
3/4:	1	5	1370	0.36

Range of Thickness Summary



Attachment #12

Classified Tempered Glass Patterns Key:

S (Shallow)

M (Medium)

D (Deep)

X (Pattern available but pattern depth not yet classified.)

Pattern Name	Manufacturer	1/8"	5/32"	3/16"	0.21	7/32"	1/4"	7 mm	5/16"	3/8"	1/2"
		3 mm	4 mm	5 mm		5.5 mm	6 mm		8 mm	10 mm	12 mm
Abstracto	Saint Gobain		D								
Altdeutsch F	Saint Gobain		S								
Altdeutsch K	Saint Gobain		S								
Antique	Saint Gobain		S								
Aqua	AGC	S	S	S			S				
Aquatex	AGC	S	S	S	S	S	S				
Aqui	AGC	S	S	S			S				
Arctic	Pilkington		D								
Arena C/SR Arena	Saint Gobain	S	S				S				
Austral	Pilkington		M								
Autumn	Pilkington		M				X				
Bamboo	AGC			D							
Bubble	Guardian	S	S	S		S	S			S	
Cascade	AGC				S	S					
Chantilly	Pilkington		S								
Charcoal Sticks	Pilkington		S								
Chinchilla	AGC			S	S	S					
Citrus	AGC	S	S	S							
Contora	Pilkington		S								
Cotswold	Pilkington		M				X				
Cross Reeded	AGC		D				M				
Delta	AGC		D				M				
Digital	Pilkington										
Estio	Guardian						M			M	M
Estriado/SR Estr	Saint Gobain		M				M				
Etre	Guardian		S				S			S	S
Everglade	Pilkington		M				X				
Flax	AGC	M	S	S	S	S					
Flemish	Pilkington		S				M				
Floralite	Guardian		M								
Florex	AGC	M	M								
Florielle	Pilkington		S								
Flutes	AGC			D			D				
Flutex	AGC			D			D			M	
Glacier	AGC	M	M	D			D			M	
Gluechip	Guardian	M	M	M		M	M				
Ground Glass	AGC	S	S	S			S				
Hammered	AGC	S	S	S			S				
Illusions	AGC	S	S	S			S				
Ima	Guardian						M			M	M
Industrex	AGC	S	S	S	S	S	S				
Kathedral Klein	AGC	S	S	S			S				
Kathedral Max	Saint Gobain		S	S				S			
Kathedral Min	Saint Gobain		S								
Konfeta	AGC		M								
Krystal Flutes	AGC			D			D				
Krystal Illusions	AGC	S	S	S			S				
Krystal Industrex	AGC	S	S	S			S			S	
Krystal Serenity	AGC	S	S	S			S				
Krystal Storm	AGC		S	S			S			S	
Laliva weiss	Saint Gobain		S								
Leaf	AGC	M									
Listral A	Saint Gobain		S								
Listral D	Saint Gobain		M								

Pattern Name	Manufacturer	1/8"	5/32"	3/16"		7/32"	1/4"		5/16"	3/8"	1/2"
		3 mm	4 mm	5 mm	0.21	5.5 mm	6 mm	7 mm	8 mm	10 mm	12 mm
Listral F	Saint Gobain		M								
Listral K	Saint Gobain		S								
Listral M	Saint Gobain		D								
Lozenge	Pilkington			D							
Madera	Saint Gobain		D								
Maris	Saint Gobain		M							M	
Master-Carre	Saint Gobain		M								
Master-Carre	Saint Gobain		M				M		M		
Master-Lens w	Saint Gobain		D				D		D		
Master-Ligne	Saint Gobain		M				M		M		
Master-Point	Saint Gobain		M				M		M	M	
Master-Ray	Saint Gobain		D				D		D		
Master-Shine	Saint Gobain		M				M		M		
Mayflower	Pilkington		S								
Minster	Pilkington		S								
Monumental M	Saint Gobain		D								
Monumental S	Saint Gobain		M							M	M
Morisco	Pilkington		M								
Niagara	Guardian	M	M	M		M	M				
Oak	Pilkington		S							S	S
Optica	Saint Gobain		M								
P-516	Guardian	S	S	S	S	S	S				
Pattern 62	AGC	S	S	S	S	S					
Pattern 73	AGC	M	M								
Pebbles	AGC		M				M				
Pelerine	Pilkington		S							S	
Pixels	AGC		M								
Rain	AGC	M	M	M			S				
Rattan	Pilkington	M									
Rayado	Pilkington			S							
Reeded	Pilkington		D				M				
Sahara	Saint Gobain		S								
Seashell	AGC			M		M				D	
Serenity	AGC	S	S	S			S				
Silvit	Saint Gobain		D						D		
Skytex	AGC				S						
Solatex	AGC	S	S	S							
Solite	AGC	S	S	S							
Sparkel	Pilkington		D							S	
Spotlyte	Saint Gobain		D							S	
Spraylite	Guardian	S	S	S	S	S	S			X	
SR Listral L	Saint Gobain						S		S	S	
Stippolite	Pilkington		S				X				
Storm	AGC		S	S			S				
Sunadex	AGC			S							
Sycamore	Pilkington		S				X				
Taffeta	Pilkington		S							M	
Tetra	Guardian		M								
Textured Flutex	AGC			D			D				
Thela	Saint Gobain		S				S	S			
Velvex	AGC	S	S	S	S	S					
Vison	Saint Gobain		S				S		S		
Warwick	Pilkington		S								
Waterdrop	Saint Gobain		M								
Wired 1/2"	Saint Gobain						S				
Wired 1/2"	Saint Gobain							S	M		
Wired Abstract	Saint Gobain										
Wired Listral	Saint Gobain						S				
Wired Waterdrop	Saint Gobain							M			
Yacare	Pilkington		M								
Zefiro weiss	Saint Gobain		M								

Tempered and Laminated Safety VIG

- 1) Q - How would a tempered VIG be tested – As a total unit with 2 pieces of glass fussed together?

A - Mechanically sealed VIG = Test monolithically
Heat Fused = Test as total unit

- 2) Q - VIG may have variable thickness (edge); is guideline T.7 applicable?

A - Yes

T.7

For purposes of impact test evaluation when breakage occurs, the average thickness of a tempered glass specimen containing grooves, bevels and other thickness altering fabrication shall be considered the average of the thinnest measurement of each of the ten (10) geometrically largest particles. This average thickness will then be used to determine the maximum allowable weight of the ten (10) largest particles. Upon successful completion of testing the thickness for the specimen shall be listed in the CPD as the thickness of the non-fabricated base glass. SGCC® views glue chip, beveling, and grooving as a fabrication process prior to tempering, and as such is not certified separately from the base glass thickness. (Example: Certification of 3/16" TTG would also cover 3/16" glue chip or beveled product.) (Revised 10/01/02)

- 3) Q - Some VIG's use a ceramic frit to fuss the edges, does guideline T.3 apply?

A - Yes, T.3 requires that the product would need to be tested and certified separately, from say the base glass (i.e. 1/4 VIG separately certified from 1/4 TTG). The ceramic frit may be applied only to the edge but if 2 different thicknesses are used, each thickness criteria would need to be used.

T.3

Certification of regular tempered glass will also cover tinted, heat absorbing, and coated glasses of the same nominal thickness where the coating does not alter substantially the post-breakage behavior of the glass substrate. A "substantial alteration" is one that would render the coated tempered glass in non-conformance with the applicable safety glazing standards. Glasses of the same nominal thickness with a ceramic or other material applied as a continuous or partial coating to one or more surfaces are also covered. (Modified 04/02/92)

- 4) Q - The ANSI TI on edge conditions would exempt the edge (frit) for the center punch test but not the impact test.

A - Correct

- 5) Q - What if VIG can not be made in minimum ANSI Z97.1 size (16 X 30 –inches)?

A - Per ANSI

- 6) Q - How would we identify safety VIG?

A - TVIG = Tempered VIG
LVIG = Laminated VIG

Laminated Glass Specialty Configuration

SGCC September 2013

Guideline Reference

G. 27

A licensee at time of prototype submission should determine if certification shall be for CPSC or ANSI, or both (Composite) OR Composite plus CAN/CGSB 12.1 (COMP+CAN). The licensee shall be issued only one SGCC® number for composite certification for each product. The licensee will submit four samples to be impact tested to ANSI Z97.1 and CAN/CGSB 12.1 and one specimen to be impact tested to 16 CFR 1201 (for all specimens that are not symmetrical from surface to surface a total of six impact test specimens must be submitted, four being tested to ANSI and CAN/CGSB 12.1 and two being tested to CPSC 16CFR 1201, with an equal number of specimens being impacted on each side). If any one specimen of the composite sample fails, the entire composite sample will be considered to have failed to comply with both standards. (Revised 10/10/12)

L.1

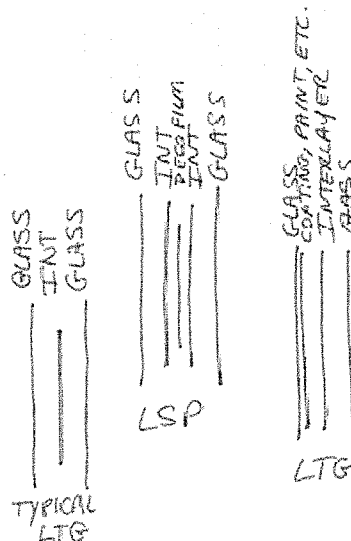
Certification of clear laminated glass will also cover tinted, heat absorbing, and coated glasses, clear or tinted interlayer, and both flat and bent laminates of the same nominal thickness. When testing to the impact test criteria in 16 CFR 1201.4(a)(1) only, four specimens shall be tested, or as noted in guideline G.27. (Revised 10/10/12)

L.8

When a laminated annealed glass is certified, other laminated glasses having the same nominal thickness or thicknesses of heat strengthened or tempered glass and the same or greater thickness of interlayer of the same generic category will be considered to be included in the certification. (Revised 4/2/08)

Issues:

1. **LSP vs. LTG** - What make-ups should be defined as LSP vs. LTG. Historically per L.1 LTG is for a coating on the #2 or 5 surface. LSP is when there is a removable insert, typically with 2 interlayers, but there are getting to be more diverse make-ups and added definition may be needed (solar panels, electrochromics, decorative particles).



2. **# Samples to test** - G.27 would suggest that additional testing (6 lites vs. 5) are needed when testing non-symmetrical samples. This presents some practical problems, since going to range of thickness testing, there could be an infinite number of make-ups and it is not always known prior to SGCC test sample selection if samples would be non-symmetrical. Is

there a difference between symmetrical surfaces and symmetrical make-ups? What is done when orientation is specified? This likely will be resolved once the CPSC test method goes away.

CPSC – For all specimens that are not symmetric from surface to surface, an equal number of specimens shall be impacted on each side.

ANSI Z97.1 – For asymmetric materials, the test shall be carried out on both sides using equal numbers of separate specimens.

3. **Heat treated (HT) laminated.** Relative to L.8, The assumption is that laminated annealed is tested and then that would allow certification of laminated HT. Laminated HT is an easier test, but 1) SGCC may not be informed of a test for laminated heat treated, and 2) more and more spec's are looking for testing on the configuration as installed. Does SGCC need to certify Laminated HT separately?