safety glazing certification council
P.O. BOX 730
SACKETS HARBOR, N. Y. 13685
PHONE 315-646-2234
FAX 315-646-2297

MINUTES OF EIGHTIETH MEETING OF THE CERTIFICATION COMMITTEE
APRIL 1 and 2, 2008
MARRIOTT INNER HARBOR at CAMDEN YARDS
BALTIMORE, MD

		Date and Votes Present 4/1/08	4/2/08
Members and Alternates Present			
AGC Fab.	Mark Cody	1	1
AGC Industries	Mark Cody	1	1
Arch Aluminum & Glass	Cliff Monroe	1	1
J.E. Berkowitz	Lance Hayes	1	1
Cardinal Glass	Bernie Herron	1	1
Consolidated Glass	Carl Carmen	1	1
Guardian Fabrication Inc.	Kevin Olah	1	1
Guardian Industries Corp.	Kevin Olah	1	1
Guardian Canada Corp	Henry Gorry	1	1
Viracon	Lyle Krohnberg	1	1
Members by Virtue of Being a Director			
Public Interest	Elaine Rodman	1	1
Public Interest	William Nugent	1	1
Public Interest	Peter Weismantle	1	1
Public Interest	June Willcott	1	1
	Votes	14	14
Guests			
Architectural Testing, Inc.	Scott Swaltek	Present	Present
Architectural Testing, Inc.	Christian Lapadat	Present	Absent
CPSC	Thomas Caton	Present	Present
GANA	Greg Carney	Present	Present
Quality Testing, Inc.	Dave Hungerford	Present	Absent
Solutia, Inc.	Julia Schimmelpenningh	Present	Present
Viracon	Brian Louks	Present	Present
Legal Counsel			
Schiff, Hardin LLP	William M. Hannay	Present	Present
Administrative Staff			
AMS, Inc.	John Kent	Present	Present
	Persons Present	21	19

4.1.08.1 The meeting was called to order at 1:35 by Chairman Mark Cody and a quorum declared. All present introduced themselves.

4.1.08.2 The minutes of the October 17 and 18, 2007 meeting were reviewed. A motion was made by Carmen/Krohnberg to approve the minutes as submitted.

Vote: Unanimous Affirmative
Motion Passed

4.1.08.3 **Legal Counsel's Report – W. Hannay**

A. SGCC Anti-Trust Guidelines were distributed to the group and read out loud (See Attachment #1).
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.

4.1.08.4 **Committee Structure**

(See Attachment #2)

A list of the committee structure of SGCC was presented. The list was reviewed and revisions suggested. Attachment #2 is the result of the suggested revisions.

4.1.08.5 **Board of Directors' Report – W. Nugent**

A. With the removal of the requirement of SGCC Licensee's to name SGCC as an additionally insured on product liability insurance, the Board has approved revisions to the SGCC License Agreement strengthening the indemnification provisions of the agreement. The new revised agreement will be circulated to all licensees for signature.
B. The make-up of the Board (currently at 4 public interest and 4 industry interest) was revised.
C. SGCC has reviewed it's policy mandating SGCC testing at approved laboratories located in the United States on several occasions. Upon further review by the Board, it was felt that this had been appropriately discussed and perhaps a revision to the laboratory agreement and perhaps by-laws was appropriate. Input was requested from the Certification Committee. Comments were discussed and a straw vote taken:

"In Favor of approval of non-US labs": 4 in Favor
10 Opposed

4.1.08.6 **Financial Report – E. Rodman**

(See Attachment #3)

4.1.08.7 **Administrator's Report – J. Kent**

(See Attachment #4)

4.1.08.8 **Quick Action Sub-committee Report**

There was no activity to report since the last meeting.

4.1.08.9 **Testing Laboratory Status**

(See Attachment #5)

4.1.08.10 **Customer Surveys**

(See Attachment #6)

Based on discussion at prior meetings and in an effort to gauge laboratory performance a customer survey was sent to all SGCC licensees. Questions were also included as to the auditor's performance and the administrative office's performance. This information has been updated since last meeting. Upon review the group felt the results showed generally favorable performance by all parties involved. It was agreed to share the results with participants and labs.

4.1.08.11 **Report Processing Time**

(See Attachment #7)

There have been concerns expressed over the last several meetings regarding delays with test reports and report processing time. A report was prepared at the last meeting but the dataset was relatively small. The report was updated for this meeting with a larger data set. No specific action was identified during discussion, although the administrator did state that work was in process to transmit all certification paperwork electronically which should reduce mailing transmittal time significantly.

4.1.08.12 **ANSI Z97.1 Update – K. Olah**

(See Attachment #8)

Discussion was held regarding SGCC undertaking a project to develop a new ANSI Z97.1 impactor to replace the current lead filled striking bag design which is no longer commercially produced. Comments were taken from representative of ANSI and CPSC present, as well as others. A straw vote was taken:

"Should SGCC become financially involved with the development of a new impactor design?"

Vote:	0	Yes
	Unanimous	No

4.1.08.13 **Program Testing Results Review**

(See Attachment #9)

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

4.1.08.14 **SGCC Review Comments of ANSI Z97.1**

(See Attachment #10)

The SGCC Administrative office has collected comments on the ANSI Z97.1 standard that have arisen during the operation of the certification and testing program. These comments have been forwarded to the ANSI Z97 committee. In an effort to facilitate discussion at the Z97.1 meeting scheduled for the following day, the comments were further reviewed at this meeting.

4.1.08.15 The meeting was recessed at 5:10 pm

4.2.08.1 The meeting was reconvened at 8:40 am

4.2.08.2 **SGCC Review Comments of ANSI Z97.1 (Continued)**

Review of comments continued. The applicability of ANSI Z97.1 to the International Building Code (IBC) was addressed. Although Z97 has limited applicability to the IBC, other specifications do make reference in such industries as state codes, appliances, lighting, display case and furniture.

4.2.08.3 **Certification of Laminated Glass**

(See Attachment # 11)

At the last meeting a motion was made to accept the recommendations of the laminated glass subcommittee in concept. The laminated glass subcommittee then had further communication to refine the laminated glass certification process. Attachment 11 includes the results of effort to date on this topic. Also included was a letter from Solutia voicing some concern with the proposed process. After significant review including review of Solutia's letter, a motion was made by Carmen/Monroe to "add a listing of applicable formulations under each interlayer brand. The list and supporting weathering data from the interlayer manufacturer and impact test reports from an SGCC approved lab to be provided by the interlayer manufacturer for all safety glazing application interlayer products."

Vote:	12	Affirmative
	0	Negative
	2	Abstentions
	Motion Passed	

Specific wording of the revisions to the guidelines as presented in Attachment 11 will be forwarded to the Laminated Glass review sub-committee prior to revisions in the CPD.

4.2.08.4 **Old Business**

None

4.2.08.5 **New Business**

ASTM is currently in the process of reviewing ASTM C1172 on laminated glass, and ASTM C1048 on heat treated glass is due for review. The feeling of several in the group is that these standards could help to clear a lot of the confusion over nominal thickness designations. Discussion was held and comments made to representatives of ASTM in the group.

4.2.08.6 **Next Meeting**

It was agreed that the next meeting, would be coordinated with the ANSI Z97.1 committee meeting in the Detroit MI area. The following tentative schedule was discussed.

Tuesday October 14th	PM	ANSI Z97.1 Meeting
Wednesday October 15th	AM	ANSI Z97.1 Meeting
	PM	SGCC Board Meeting
Thursday October 16th	AM	SGCC Certification Committee Meeting
	PM	SGCC Certification Committee Meeting

4.2.08.7 The meeting was adjourned by the chair at 11:43 am.

ATTACHMENT # 1

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.

October 2007

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

ATTACHMENT #2

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SGCC Committee Structure (as of 4/1/08)

SGCC Board of Directors	**President:** William Nugent
Scope: The overall affairs of the Council shall be managed by its Board of Directors.	
Members	
Public Interest	**Business Community**
William Nugent - President	Bernie Herron – Vice President
Peter Weismantle	Richard Paschel
June Willcott - Secretary	Carl Carmen
Elaine Rodman - Treasurer	Mark Cody

Sub Committee: Nominating	**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: Quick Action	**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	William Nugent
Certification Committee Chair	Mark Cody
Public Interest	June Willcott

Sub Committee: Time, Place and Marketing	**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: Laminated Glass Review	**Chair:** Rick Wright
Scope: Review SGCC guidelines for the certification of Laminated Glass	
Members	
Cliff Monroe	Greg Carney

ATTACHMENT #2

Sub Committee: Laboratory and QA Inspection	**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	Tim Moore	Rick Wright
Cliff Monroe	Mark Cody	

SGCC
safety glazing certification council

Annual Financial Comparison Summary
as of 3/24/08

Revenues	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008 (to date)
Administrative	$201,037	$259,563	$238,383	$300,770	$306,298	$478,848	$308,713
Testing	$263,298	$336,961	$360,036	$429,682	$317,424	$576,784	$572,201
Business Acct. income	N/A	$14,168	$30,959	$32,585	$38,700	$46,659	$37,200
Impactor Bags	N/A	N/A	N/A	N/A	$1,100	$1,430	$440
Test Labs Under Five	N/A	N/A	N/A	N/A	$2,000	$2,000	$1,000
Interest Income	$16,595	$10,960	$9,276	$9,057	$18,093	$18,629	$24,282
Total Revenues	**$480,930**	**$621,652**	**$638,654**	**$772,094**	**$683,615**	**$1,124,350**	**$943,836**

Expenses	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008 (to date)
Administrative	$201,037	$259,563	$238,383	$300,770	$306,298	$478,848	$308,713
Testing	$263,298	$290,445	$327,036	$429,682	$317,424	$540,072	$572,201
Accounting	$3,000	$3,000	$3,000	$3000	$3,000	$3,000	$3,000
Legal	$10,664	$14,999	$16,832	$20,160	$17,538	$19,771	$13,259
Board Meetings	$8,689	$8,638	$9,383	$9,877	$9,927	$9,289	$8,798
Miscellaneous	$773	$8,137	$1,576	($163)	$2,826	$1000	$0
Insurance	$3,560	$4,450	$5,340	$5,607	$5,607	$5,607	$5,607
Web Page	$4,215	$309	$548	$3,689	$1,925	$1,400	$1,400
Bank Charges	N/A	N/A	N/A	N/A	$1,558	$1,895	$2,393
Marketing	$22,356	$20,215	$20,592	$6,783	$0	$10,000	$10,000
Total Expenses	**$517,592**	**$606,756**	**$622,690**	**$779,405**	**$666,103**	**$1,070,882**	**$925,371**
Change in Net Assets	**($36,662)**	**$11,896**	**$15,964**	**($7,311)**	**$17,512**	**$53,468**	**$18,465**
Net Assets	**$129,349**	**$141,245**	**$157,209**	**$149,898**	**$167,410**	**$220,878**	**$239,343**

Investments	Initial Date of Purchase and Interest Rate	Initial Purchase Value	Current Interest Rate	Date of Maturity	Current Value as of 3/25/08
#1 First National Bank of Dryden	5/1997 5.05%	$45,000	3.70%	5/28/08	$80,455
#3 National City Bank	8/2000 7.15%	$90,000	4.30%	8/17/08	$108,469
#6 MBNA Invest Serv/Bk of America	12/2000 6.63%	$45,000	3.45%	12/11/08	$ 57,978
#7 Redwood National Bank	11/2001 2.75%	$95,000	3.0%	11/23/08	$103,133
#8 Community Investment Services **(Mutual Funds not a CD)**	11/2001 2.8%	$95,000	N/A	N/A	$112,515
#9 Key Bank	5/2007 4.65%	$80,000	4.65%	11/9/08	$83,177
#10 Alliance	5/2007 4.65%	$80,000	4.65%	5/18/08	$83,163
#11 Carthage Savings and Loan	3/2008 2.92%	$100,000	2.92%	3/25/09	$100,000

SGCC Banking Accounts	
Account	**Balance as of 3/24/08**
HSBC Checking Account	$1,403
HSBC Savings Account	$1,068
WSB Savings Account	$185,322

ADMINISTRATIVE REPORT

SGCC Spring Meeting
April 1 & 2, 2008

January 1, 2008 Certified Products Directory (CPD)

Cut-off Date	*Copies*	*Subscription List Mailing*
January 1, 2008	**2050**	**1878**

Certification **Removed** Since Publishing January 1, 2008 CPD

ANSI Program
None

CPSC Program
None

Composite Program

Grand Glass
SGCC #3057 3/16-inch TTG
SGCC #3058 1/4-inch TTG
SGCC #3059 3/8-inch TTG
SGCC #3300 1/2-inch TTG
SGCC #3301 1/4-inch TTG
SGCC #3302 3/8-inch TTG
SGCC #3303 1/2-inch LTG

Cardinal IG Waxahachie, TX
SGCC #3627 1/4-inch LTG

Certified Products **NOT** in January 1, 2008 CPD

ANSI Program
None

CPSC Program
None

Composite Program

AGC Flat Glass, Riverside, CA
SGCC #3922 1/8-inch TPG
SGCC #3923 5/32-inch TPG

Ashwood Commons, Bellevue, WA
SGCC #3876 3/8-inch TTG
SGCC #3877 1/2-inch TTG
SGCC #3878 5/8-inch TTG
SGCC #3879 3/4-inch TTG

Bronco Industries, Inc.; Delta, BC Canada
SGCC #3882 5/32-inch TTG
SGCC #3883 3/16-inch TTG
SGCC #3884 1/4-inch TTG

Commercial Insulating Glass Co., Cumberland City, TN
SGCC #3806 1/8-inch TTG
SGCC #3807 3/16-inch TTG
SGCC #3808 1/4-inch TTG

Dalian Huaying Glass Products Co., Ltd., Liao Ning China
SGCC #3856 1/8-inch TTG

Denver Glass Interiors, Inc. Englewood, CO
SGCC #3865 3/16-inch TTG
SGCC #3866 1/4-inch TTG
SGCC #3867 3/8-inch TTG
SGCC #3868 1/2-inch TTG
SGCC #3869 3/4-inch TTG

Glenny Glass, Milford, OH
SGCC #3842 5/32-inch TTG
SGCC #3843 3/16-inch TTG
SGCC #3844 1/4-inch TTG
SGCC #3845 3/8-inch TTG
SGCC #3846 1/2-inch TTG
SGCC #3847 3/4-inch TTG
SGCC #3848 5/32-inch TPG
SGCC #3849 3/16-inch TPG
SGCC #3850 1/4-inch TPG
SGCC #3968 1/8-inch TPG

Insulated Glass of America, Dallas, NC
SGCC #3859 1/8-inch TTG
SGCC #3861 3/16-inch TTG
SGCC #3862 1/4-inch TTG
SGCC #3863 3/8-inch TTG
SGCC #3864 1/2-inch TTG

MLC Windows & Doors, Shelby Township, MI
SGCC #3852 1/8-inch TTG
SGCC #3853 5/32-inch TTG
SGCC #3854 3/16-inch TTG
SGCC #3855 1/4-inch TTG

Oldcastle Glass Bensenville, Bensenville, IL
SGCC #3753 5/16-inch TBG

PGT Industries; Nokomis, FL
SGCC #3880 1/8-inch TPG
SGCC #3881 3/16-inch TPG

PT Roxy Prima Indo Products, Jakarta, Indonesia
SGCC #3851 3/16-inch TTG

SRT Glass, LLC, Shanghai China
SGCC #3766 5/16-inch TPG

SRT Glass, LLC, Kunshan City, China
SGCC #3767 5/16-inch TTG

Taiwan Glass, Taipei Taiwan
SGCC #3885 1/8-inch TTG
SGCC #3886 5/32-inch TTG
SGCC #3887 3/16-inch TTG
SGCC #3888 1/4-inch TTG
SGCC #3889 5/16-inch TTG
SGCC #3890 3/8-inch TTG
SGCC #3891 1/2-inch TTG
SGCC #3892 (S) 6mm LTG (.015)(b)
SGCC#3893 (H) 12mm LTG (.015)(b)

Name Changes since January 1, 2008 CPD

ACI Distribution
is now
Vitro America, Inc.

Pilkington Australia, Dandenong
is now
Viridian

Administrative Activity

November 2007	Mailing of Laminated Glass Proposal to participants
January 2008	Mailing of Lab Memo (RE: Report Errors and Delays)
January 2008	Mailing of SGCC Certified Products Directory
January 2008	SGCC Mailing of April 2008 Meeting Notice
February 2008	Mailing of Certification Minutes to attendees for October 2007 Meeting and notice to participants they were available on the website
February 2008	Mailing of 2nd Customer Survey
April 1, 2008	SGCC Mailing of L08 invoices

SGCC Participation Comparison

	F05 (AS OF 3/29/05)	**L05** (AS OF 10/11/05)	**F06** (AS OF 4/17/06)	**L06** (AS OF 10/5/06)	**F07** (AS OF 4/17/07)	**L07** (AS OF 10/2/07)	**F08** (AS OF 3/20/08)
No. of Participating Plants	164	166	199	206	213	221	234
% of increase in Plants	N/A	1.2%	19.9%	3.5%	3.4%	3.8%	5.9%
No. of Offshore Plants (Non US & Canada)	25	30	32	31	29	33	39
% of increase or decrease in Offshore Plants	N/A	20%	6.7%	-3.1%	-6.5%	13.8%	18.2%
No. of Licensees	100	102	105	106	113	123	136
Total Certified Products	867	894	1196	1276	1356	1433	1510
% of increase in Certified Products	N/A	3.1%	33.8%	6.7%	6.3%	5.7%	5.4%
ANSI Only	125	121	108	117	110	88	25
CPSC Only	58	51	62	50	52	39	39
COMPOSITE	684	722	1026	1109	1194	1306	1446

ATTACHMENT #4

Website Report

SGCC 2007-2008	Total Visitors	Most Visited Section	2nd Most Visited	3rd Most Visited	Downloads of CPD	Top Visiting Country & # of hits
October	3031	Who's Certified	Download Forms	Approved Labs	111	China with 87 visits
November	2691	Who's Certified	Download Forms	Initial Certification Process	118	China with 82 visits
December	2510	Who's Certified	Download Forms	Initial Certification Process	118	China with 72 visits
January	3100	Who's Certified	Download Forms	Initial Certification Process	121	China with 128 visits
February	4421	Who's Certified	Download Forms	Initial Certification Process	145	China with 1,494 visits

SGCC Testing Laboratory Status (as of 3/26/08)

5. *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. 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 fee of $1000 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.*

7. *Approval as an SGCC Approved Testing Laboratory may be removed for failure to adhere to any of the above provisions or failure to pay any outstanding fees older than 60 days.*

Company	Location	Auth Code	Date of Initial Approval	Date of Last Inspection	Approved by SGCC	Signed Agmt	Lab fee PAID
Architectural Testing Inc.	St. Paul, MN	2	10/6/92	8/20/07	4/25/07	9/9/04	
Architectural Testing Inc.	York, PA	2	6/30/85	3/23/07	4/25/07	10/26/04	
Architectural Testing Inc.	Fresno, CA	2	11/18/97	9/22/06	4/25/07	9/9/04	
Architectural Testing Inc.	Southlake, TX	2	7/1/04	10/9/07	4/25/07	6/25/04	
Architectural Testing Inc.	Tampa, FL	1	4/25/07	2/22/07	4/25/07	1/8/07	
Bowser-Morner, Inc.	Dayton, OH	2	1991	4/25/06	4/25/07	2/3/06	
Construction Consulting Laboratory West	Ontario, CA	1	11/19/97	6/13/07	4/25/07	9/7/04	
ETC Laboratories	Rochester, NY	2	3/8/94	10/13/05 Sch W/O 4/28/08	4/25/07	7/30/04	
Fenestration Testing Laboratories	Medley, FL	2	10/2/97	10/15/07	4/25/07	10/22/04	
Intertek	Cortland, NY	2	1981	12/15/06	4/25/07	6/23/04	
Quality Testing,	Everett, WA	1	10/14/97	12/14/06	4/25/07	2/2/06	
Rone Engineers, Ltd.	Dallas, TX	2	3/31/00	10/9/07	4/25/07	7/14/04	$1000 - Pd
Stork-Patzig Testing Laboratories	Des Moines, IA	2	6/11/99	12/18/07	4/25/07	4/4/05	
Stork-Southwestern Laboratories	Houston, TX	2	1/15/90	3/13/06	4/25/07	7/15/04	

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ATTACHMENT # 6

By instruction of the Certification Committee at the April 2007 SGCC Certification Committee meeting, the Administrator was directed to conduct a survey of SGCC licensees regarding laboratory performance. It was also determined that the administrative office and auditors should be included in this survey. The survey was initially distributed in September 2007 yielding 37 responses. The survey was again distributed in February of 2008 yielding 30 responses for a total of 67 responses.

The participants were asked to rate each based upon three specific areas on a scale of Unacceptable to Exceeds Expectations. The SGCC Administrative offices have computed the results on a scale of 1-5, *1 being Unacceptable, 2 being Needs Improvement, 3 being Acceptable, 4 being Above Average and 5 being Exceeds Expectations.* A comments section was also added so that the participants could add comments.

The comments from participants and results of labs, auditors and administrative office's performance are attached.

Comments from Participants:

"Very meaningful aspect of our industry. Thank you."

"I'm very happy with all of the above. Laboratory testing is a little long, but information is great. SGCC auditor Vicky Nikolaros does a great job. She is very thorough & courteous."

"Program works well!"

"We need better communication between the lab and customer instead of waiting for the customer to ask for progress. Why don't you automatically update me?"

"I have always found SGCC to be knowledgeable, friendly and a pleasure to deal with."

"Above average!"

"Reports of testing received within 3-4 months then next set of samples are sent. Auditor approved 45x45" patterned sample size, but it does not fit in lab test frame."

"Auditor very helpful. Always willing to answer questions."

"Usually receive very good response to questions. All other aspects of the program seem to run like clockwork. No problems on our part."

"Good stuff!"

"We have no problem with how SGCC administrates the project."

"Auditor always very helpful."

"Only issue is staff is Eastern time, we are pacific, -3 hrs. Sometimes staff in NY have left for day because of time difference."

"We applied and tested for composite certification. SGCC failed to process this upgrade correctly and I had to call twice to request the change be correctly documented."

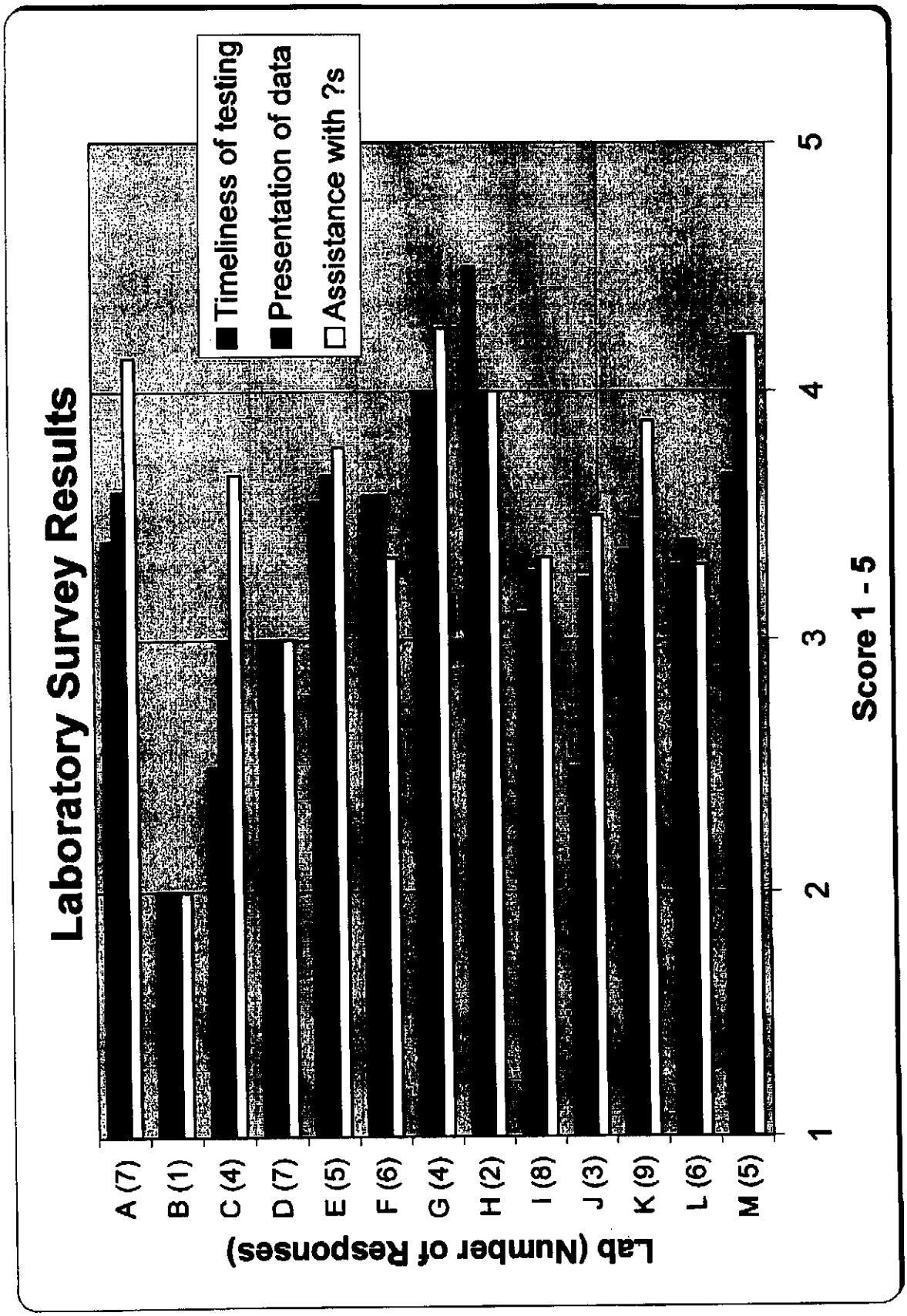
"Test lab moved and failed to notify me resulting in a delay and excess redistribution freight charges."

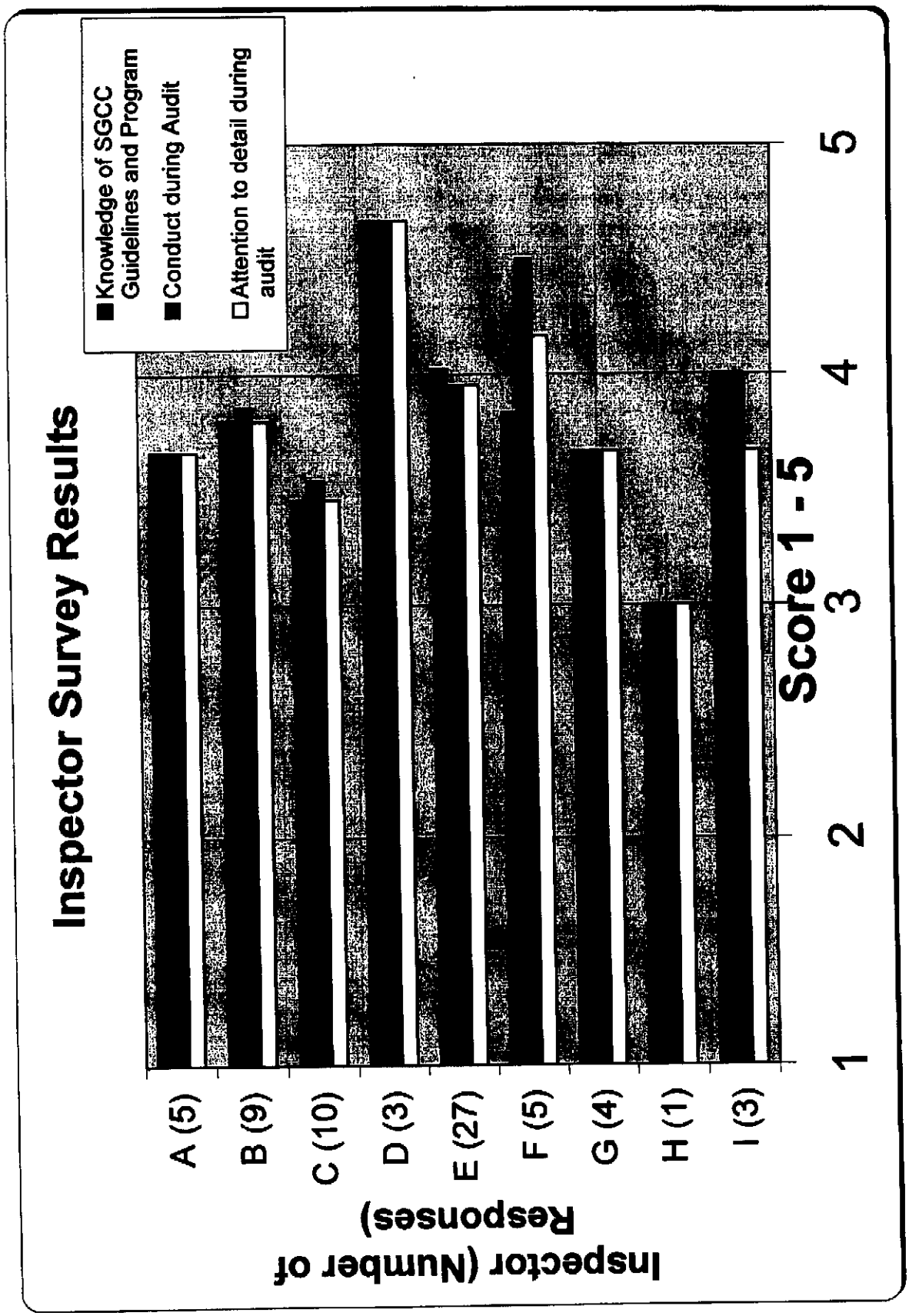
"Program works fine for us!"

"A pleasure to work with!"

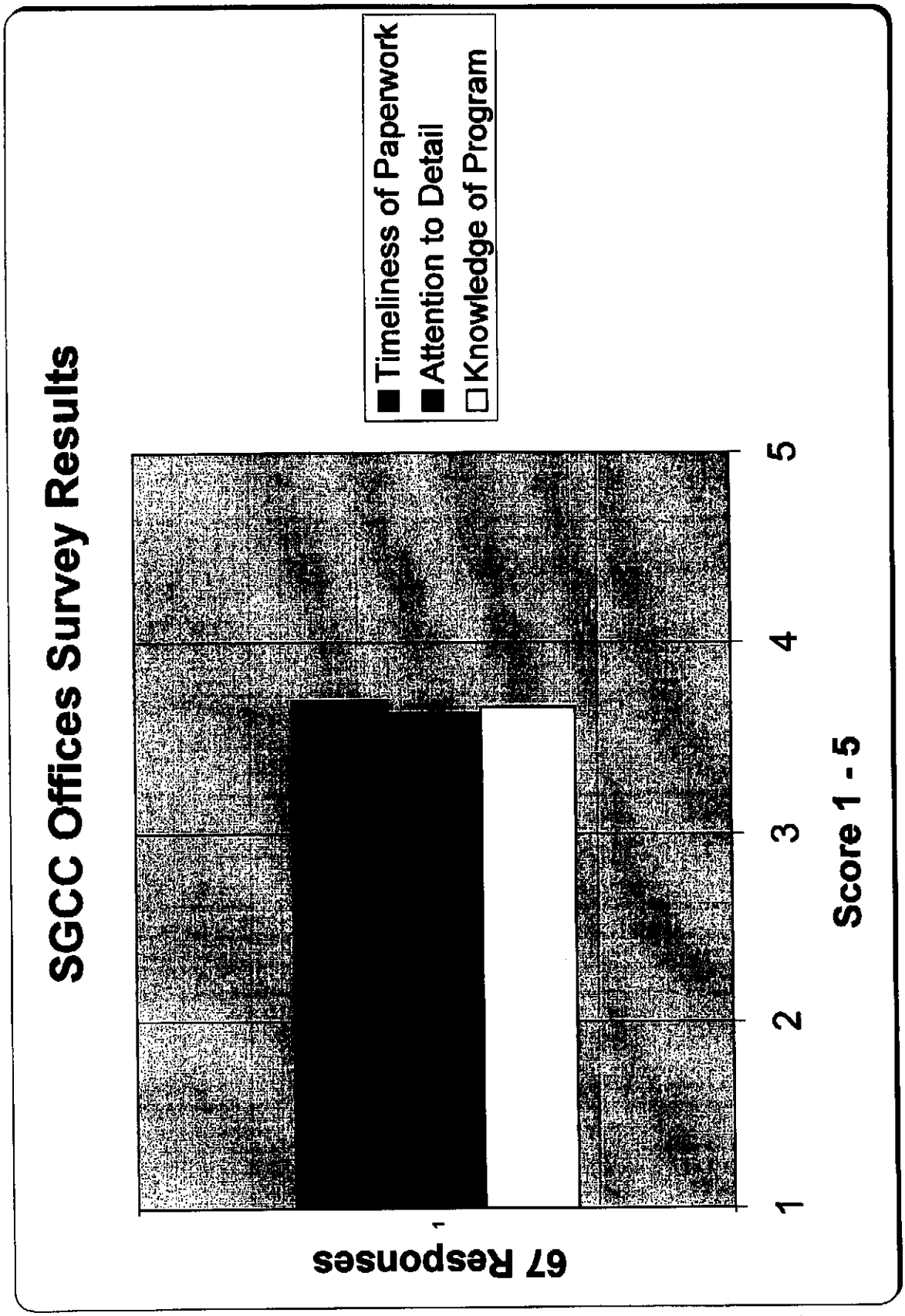
"Keep up the good work!"

"We don't usually need to contact the office but if it has been necessary, the people are VERY helpful."


Laboratory Survey Results
Timeliness of testing
Presentation of data
Assistance with ?s
Lab (Number of Responses)
A (7)
B (1)
C (4)
D (7)
E (5)
F (6)
G (4)
H (2)
I (8)
J (3)
K (9)
L (6)
M (5)
1
2
3
4
5
Score 1 - 5


Inspector Survey Results
Knowledge of SGCC Guidelines and Program
Conduct during Audit
Attention to detail during audit
Inspector (Number of Responses)
A (5)
B (9)
C (10)
D (3)
E (27)
F (5)
G (4)
H (1)
I (3)
Score 1 - 5
1
2
3
4
5

ATTACHMENT # 6



Report Processing Time

(Time Period L07 Averages, in Days as of 3/22/08) *Lab was not active in L07

Lab ID #	Selection Date to Lab Received Date	Lab Received Date to Test Date	Test Date to Report Date	Report Date to Report Received by SGCC Date	Selection Date Report Received by SGCC Date
100	34.5	18	19	2.1	73.6
125	40.1	34	22	1.5	97.6
150	31.4	20	11	1	63.4
175	66.9	80	11	1.5	159.4
185	N/A	N/A	N/A	N/A	N/A*
200	39.7	9.2	2.0	9.5	60.4
250	31.6	36	21	20	108.6
275	33.8	34	5.2	9.6	82.6
285	33	25	4.9	9.2	72.1
400	31.4	26	4.8	17	79.2
500	39.6	13	3.5	18	74.1
550	28.6	60	5	19	112.6
750	28.3	16	4.9	12	61.2
900	20.7	50	4.4	58	133

Example from database:

SGCC #	Cert Stat	Insp ID	Lab ID	Selection date		Lab rec'd date		Test date		Report date		Report rec'd date	Comments
Vitro America, Inc.						ACI04CA		Santa Fe Springs, CA					
3633	C	7	250	10/2/2007	49	11/20/2007	20	12/10/2007	26	1/5/2008	10	1/15/2008	
1157	C	7	250	10/2/2007	49	11/20/2007	20	12/10/2007	26	1/5/2008	10	1/15/2008	
1535	C	7	250	10/2/2007	49	11/20/2007	20	12/10/2007	26	1/5/2008	10	1/15/2008	
1179	C	7	250	10/2/2007	49	11/20/2007	15	12/5/2007	31	1/5/2008	10	1/15/2008	
640	C	7	250	10/2/2007	49	11/20/2007	15	12/5/2007	31	1/5/2008	10	1/15/2008	
1861	C	7	250	10/2/2007	49	11/20/2007	20	12/10/2007	26	1/5/2008	10	1/15/2008	
3634	C	7	250	10/2/2007	49	11/20/2007	20	12/10/2007	26	1/5/2008	10	1/15/2008	

ATTACHMENT #7

ASC Z97 Update

SGCC Meeting
April 1-2, 2008
Baltimore, MD

Full Committee Meetings
- Last meeting held on October 8 & 9, 2007 in Dallas, TX
- Next meetings:
  - April 2 & 3, 2008 in Baltimore, MD
  - October 14 & 15, 2008 Auburn Hills, MI

Steering Committee Meetings
- Last teleconference March 10, 2008
- Next meeting TBD

Membership
- 38 primary members; 26 alternates; 2 observers
- Membership Ballot (M07-0926.01) due November 2, 2007 – Passed

Ballot Results
- Affirm members for all task groups – Passed
- Membership of three additional members – Passed
- Affirm changes to ASC Z97 Procedures – Passed
- Affirm Scope, Purpose and Limitations – Failed on recirculation

Technical Interpretation
- No updates since TI-04.06.001

Website www.ansiz97.com
- January - December 2007: 22,273 total "Hits"
- On-line voting section for members is fully functional and the only method for voting

Scope Committee Task Group

- During the July 18, 2007 Teleconference, the development of two proposed scope documents were presented:
  - Impact-focused
  - Safety-focused
- A ballot (B07-0720.01) went out to the full consensus body for the Safety-focused Scope document (Due August 31st) – Passed
- The full committee reviewed all comments and the recirculation ballot (B07-0720.01RC) was sent out (Due November 15th) – Failed

Testing Requirements and Acceptance Criteria (TRAC) Task Group

- Task group met during the October 8 & 9, 2007 full committee meeting – each subgroup discussed current issues
  - Center Punch Fragmentation
  - Mode of Breakage
  - Weathering

Labeling & Reference Standards Task Groups

- No updates

ASC Z97 Update

SGCC Meeting
April 1-2, 2008
Baltimore, MD

ATTACHMENT #9

Program Testing Results

		2000	2001	2002	2003	2004	2005	2006	2007	F08 (as of 3/24/07)
Selections (Certification Period)	Total	1281	1373	1470	1536	1620	1729	2089	2549	
	Participant	925 (72)	755 (55)	627 (43)	365 (24)	682 (42)	925 (54)	851 (41)	1188 (47)	
	Inspector	356 (28)	618 (45)	843 (57)	1171 (76)	938 (58)	804 (46)	1238 (59)	1361 (53)	
	Total Tempered Products						1643 (95)	1958 (94)	2349 (92)	
	Total Laminated Products						86 (5)	131 (6)	200 (8)	
Product Failures (Calendar Year) % Total Failures/% Total Products	Total	21 (1.6)	33 (2.4)	26 (1.8)	31 (2)	36 (2.2)	31 (1.8)	65 (3.1)	71 (2.8)	7
	Participant Selected	7 (33/.5)	25 (76/1.8)	21 (81/1.4)	17 (55/1.1)	24 (67/1.5)	20 (65/1.2)	54 (83/2.6)	44 (62/1.7)	4
	Inspector Selected	14 (67/1.1)	8 (24/.6)	5 (19/.4)	14 (45/.9)	12 (33/.7)	11 (35/.6)	11 (17/.5)	27 (38/1)	3
	34x76	20 (95/1.6)	30 (91/2.2)	23 (88/1.6)	16 (52/1)	25 (69/1.5)	30 (97/1.7)	61 (94/3)	50 (70/2)	4
	Odd Size	1 (5/.1)	3 (9/.2)	3 (12/.2)	14 (45/.9)	6 (17/.4)	0	4 (6/.2)	4 6/.2)	0
	16x30 ('06) 24x42 ('07)			0	1 (3/.1)	5 (14/.3)	1 (3/.1)	0 **(Now 24X42)**	17 (24/.7)	3
Tempered Failures						24 (67/1.5)	25 (81/1.5)	48 (74/2.3)	48 (68/1.9)	3
Laminated Impact Failures						4 (11/.2)	5 (16/.2)	8 (12/.4)	20 (28/.8)	4
Laminated Boil Failures						8 (22/.5)	1 (3.2/.1)	9 (14/.4)	3 (4/.1)	0

ANSI Z97.1 – 2004 Review Comments

(John Kent 3-24-08 as collected from multiple sources)

	Pg	Par	Comment	Suggestion
	iv		"This forward ... ANSI Z97-1-2003"	Change to 2004 or next rev. year (addressed by ANSI errata 6/10/05)
	12	2	Why is ASTM C 1036 referenced (see 4.2)? Can a product that does not meet C 1036 thickness ranges (European product) be tested to Z97 or is 4.2 reference just applicable to nominal thickness? C1036 defines "nominal thickness" and states compliance is based on nominal thickness but is 1036 the only definition of a nominal thickness?	Discuss intent and clarify. Possible solution is "1036 or other national or international standards"
	12	2	Why is ASTM C 1048 referenced (see pg 15 tempered glass definition)? Concern has been raised that glass fabrication practices outside of 1048 (holes-notches) would not allow these products to be tested to Z97. Apparently changes on 1048 requirements have been made between the 97 version and current.	Suggest elimination of specification references, unless it is for a test method. Managing reference standard revisions can be difficult and can create trappings. Here for example, you can not meet Z97 without 1048 and you can not meet 1048 without Z97.
	15	Table 1 Note 2	Note 2 seems to contradict 5.1.4 (3) or at best is confusing. Should also consider section 4.7.	Re-word Note 2 "Only one test specimen needs to be Impacted and evaluated per 5.1.4. The remaining specimens need only be tested to and meet the hardness and modulus requirements.
	15	Table 1 Note 4	This note speaks to who may do the test. A test method should not specify this.	Delete "by either the laminate fabricator or the manufacturer of the interlayer or plastic glazing sheet material"
	15	Table 1 Note 5	Should note 5 apply to plastics weathering as well. At present note 5 only applies to OCG	Suggest note 5 should apply to plastics
	16	4.3	Testing of smaller size (L) samples creates added breakage to the impactor, also added safety of test personnel concerns. Samples less than 16 X 30 will not allow free passage of the impactor, thus how do you test (See ANSI Z97.1 TI-04.06.001 dated 12/13/06). Issue: 1. What minimum size can be safely tested? 2. How do you test smaller samples	In my opinion a redesign of the impactor would negate this issue. For short term fix, revise with wording of TI, but allow testing of smaller samples with the use of a "back-stop"
	18	5.1	"... to a uniform test temperature between 65F and 85F ..." . Most organizations performing this test, independent labs and manufacturers are doing so in a warehouse type space with limited temperature conditioning. If testing in Dallas in the summer or New York in the winter, it may be difficult to reach these temperatures and require testing at night for	Consider expanding the test temperature range from 65-85 to maybe 60 – 90?

			example. To encourage use of the standard, the temperature range should be as broad as possible unless a technical reason exists to restrict it.	
	18	5.1.1(1)	The dimensions of the main frame (≥ 3X5x1/4) are consistent with CPSC 16 CFR, but have been suggested to be greater than the "C4 X 7.25, moment of inertia of 4.5 in4" as referenced in ANSI Z97.1-84 (R1994).	In the interest of harmonization with CPSC, this does not present a problem but there should be recognition that a Z97.1-84 frame may not met Z97.1-04
	18	5.1.1(1)	The internal dimensions as stated in this section do not appear to be correct when compared to Figure 2 (see note 2)	32.9 vs. 33.25 and 74.9 vs. 75.25, The 33.25 x 75.25 appears to be correct
	19 - 22	Drawings	All drawings are difficult to read	Suggest re-do of all drawings
	19 - 22	Drawings	Figure 2 illustrates sub-frame for test of smaller samples but this is not referenced in the text. The smaller sub frame illustration adds confusion where Fig 2 is referenced. A similar situation exists with the bent glass drawings.	Suggest, remove reference to test of smaller samples in fig 2, add a new figure, and add text to reference the new figure. Suggest drawings and text reference be as follows: • Fig 1 – Impact test structure • Fig 2 – Impact test frame + details • Fig 3 – Bent Glass + details • Fig 4 – smaller sample testing
	20	Fig 2.1	Compare to 5.1.1 (2) 4th par and 5.1.3 (1). Is the intent to provide 10-15% compression of both rubber strips or collectively	Suggest to add clarifying wording that the shims are to be undersized 10-15% which would create a collective compression of both strips 10-15%
	21	Title	Title, not sure why there is a reference to > 1/8 inch, should be same for all thicknesses	Delete full title (appears this title is carried over from previous page)
	21	Fig 3	Again, showing bent glass test frame with apparently 2 options for smaller size testing. Drawings seem to illustrate smaller test samples but some dimensions don't seem to represent this.	Delete reference to smaller size testing and make drawing for standard Bent 34 X 76-inch sample
	New	New	There has been confusion for testing bent glass. Do you start with 76 X 34 wide (girth) and bent to something less (cord), or do you start with a sample wider than 34 and bend to 34?	Suggest drawings and text more clearly illustrate that you start with 34 X 76 and bend to something less. Revise text in last paragraph of sec. 4.4 to explain.
	22	Fig 3.3	Tube steel is illustrated, while in other figures and in sec 5.1.1 (1) "angle" is referenced. The center member in the drawing is also confusing.	Revise the drawing to show angle vs. tube and delete center member.
	24	Fig 4	Again, drawing is difficult to read. Also there have been test difficulties with the threaded rod breaking or bending. It would seem a larger rod would be desirable. CPSC states ¼ or 3/8	Revise drawing, state threaded rod ¼-inch or greater.
	24	5.1.1(4)	Centerline is 60 inches (152.4 mm)	Should be 1,524 mm
	25	5.1.1 (4) and Fig 2	When at rest ... the impactor shall be located no more than 0.5 inch (13mm) from the surface of the specimen. This is too tight and can	Suggest ... no more than 2.0 inches. Changing to 2 – inched would save considerable effort for labs and would

			require labs to have to re-adjust for changes in glass thickness. CPSC states Max ½-inch	only effect the impact vertical height about 1/30 of an inch
	26	5.1.3 new (4)	Question has arisen if upon breakage, particles still held in the frame should be considered in the search for the 10 largest. (4) as currently written seems redundant with 5.1.4	Re-word (4) – Inspect each test specimen after each impact, record and report whether it complied or did not comply with the requirements of section 5.1.4. Individual broken fragments still retained in the frame or that have fallen to the ground shall be considered in the evaluation.
	27	5.1.4	Discussion has occurred regarding samples that partially pull out or separate from the frame, is it a VOID test? Sample separation could be caused by low clamping force, obstructions in the gasket bite, or the stiffness or friction of the test sample. For OCG and Lami I have always believed that frame separation should not be considered a void test since it would yield a less severe test thus giving the benefit of the doubt to the producer. It has now been suggested that if the sample separates, it will "kink" and will be more susceptible to cracks and a failure.	Suggest, additional clarification to 5.1.4 (1) thru (6) to speak to partial separation. Do not consider it a void test, unless the test facility feels sample clamping is low or an obstruction in the gasket bite may have contributed to the separation.
	27	5.1.4 (3)	ASTM D 7906 should be 790	Change ASTM D 7906 to D 790
	28	5.1.4 (6)	What criteria shall cover say OCG or Lami that ... stays in frame, large pieces fall to floor but no hole develops?	Suggest either 1) change wording in (6) to read "the specimen partially or entirely separates ..." or 2) other comments provided to D. Evans.
	28	5.2.2	...but no bubbles or other defects shall develop ... What is the tolerance of a bubble. Some small bubbles (<1/32) may be normal tolerances in manufacturing.	Reference a minimum size defect. Add note to ensure no defects exist prior to test.
	28	5.2.2	Last line ... "in its stead"	Should this be "instead"
	30	5.3.2.2.1	73.5oF	I believe these should be "degree" symbols.
	34	6.1 (2)	... Z97.1-2003	Change to 2004 or next rev. year (addressed by ANSI errata 6/10/05)
	34	6.2 (2)	All glazing products including - missing paren	All glazing products (including ...
	General Comment		The standard should be re-arranged to group tempered, laminated, plastic and OCG in their own sections and create an appendix with the drawings of the various fixtures. Now there is a lot of jumping back and forth between sections.	

ATTACHMENT #11

Certification of Laminated Glass

1) November 5, 2007 Proposal

2) List of Accepted Interlayers

3) Revised Guidelines

4) Sample Listings

   a. Current Database Entries
   b. Sample by Manufacturer
   c. Sample by Product Type

5) Plant Worksheet

6) (SRF) Sample Receipt Form

7) Solutia Letter

ATTACHMENT #11

safety glazing certification council
P.O. BOX 730
SACKETS HARBOR, N. Y. 13685
PHONE 315-646-2234
FAX 315-646-2297

SGCC Proposal for the Certification of Laminated Glass
(November 5, 2007)

Summary

SGCC guidelines for the certification of laminated glass have been under review for the past several SGCC meetings. Historically SGCC certification was by overall nominal thickness as defined by ASTM C1036, which does not reflect the realities of how laminated glass is typically fabricated, ordered and processed in the marketplace. There can literally be an infinite number of laminated glass thicknesses. However, CPSC requirements are that "Specimens shall be tested for each nominal thickness ...".

In order to better reflect market realities, maintain compliance with CPSC requirements, and provide a more efficient process for laminated glass certification, the following proposal has been developed.

The concept of this proposal is that initial testing must be performed on each nominal thickness, as defined by ASTM C1036, of at least one brand of each generic category of interlayer material for which SGCC certification is desired. Ongoing certification shall be by two thickness classes (S = Standard, H = Heavy) and per generic category of interlayer. A list of accepted interlayer brands per generic category shall be maintained, and certification to one brand within the generic category will allow switching to other brands within the generic category on the list.

Despite thickness or generic class of interlayer, a product can only be certified to the performance requirements that it will consistently meet. Therefore, as illustrated in the sample Certified Products Directory (CPD) to follow, product 4444 (6mm LTG (b)(0.015) (CI) (B)) which will only pass Category I of CPSC and impact class B of ANSI, will need to be certified separately from product 5555 (LTG (b) (0.030) (CII)) which will pass Category II of CPSC and impact class A of ANSI.

SGCC List of Accepted Interlayer's:

SGCC shall maintain a list of accepted interlayers per generic category. For a specific model of interlayer to be placed on the accepted list, weathering data and impact data to the applicable reference standard (ANSI Z97.1 and/or CPSC 16CFR 1202) must be submitted to SGCC. Guideline L.10 shall apply for weathering data. Impact test reports must be provided by an SGCC licensee for testing done at an SGCC Approved Testing Laboratory.

Generic Interlayer Categories:

Generic Code	Description
(b)	Poly Vinyl Butral
(ip)	Ionoplast
(lc)	Liquid Resin-Multi Component
(lu)	Liquid Resin – UV Cure
(p)	Polyethylene Terephthalate
(f)	Fluorinated Ethylene Propylene
(u)	Polyurethane
(ev)	Ethylene-vinyl Acetate

Nominal Thickness:

Nominal thickness for laminated glass has been expanded from the standard ASTM C1036 ranges to eliminate "gaps" in ranges.

mm	Traditional (in)	Range (in)
3.0	1/8	0.115 – 0.148
4.0	5/32	0.149 - 0.179
5.0	3/16	0.180 – 0.218
6.0	¼	0.219 – 0.291
8.0	5/16	0.292 – 0.354
10.0	3/8	0.355 – 0.468
12.0	½	0.469 – 0.594
16.0	5/8	0.595 – And greater

Testing of 5/8 covers all thicker laminates. This guideline is in recognition that 1) such products are typically used for applications which require strength characteristics beyond normal human impact safety glazing and 2) SGCC testing has historically shown consistent compliance of such products.

Initial Testing:

Initial testing for certification of laminated glass at each fabrication facility will be with the thinnest interlayer for each nominal thickness (total laminate thickness of glass and interlayer) and each generic category of interlayer for which certification is desired. Testing performed by an SGCC Approved Laboratory within the prior 6 month certification period shall be accepted for initial testing, provided the specific brand of interlayer is identifiable.

Ongoing Certification:

Ongoing certification of laminated glass shall utilize the following thickness classes:

S = Standard	4 to 6mm	< 0.292* - inch (5/16) (7.4 mm)
H = Heavy	8 mm and greater	≥ 0.292 – inch (5/16) (7.4 mm)

(0.292 - inch was chosen as the break point since the "S" class should include all 0.030 interlayer products which utilize glass 1/8-inch, double, 3mm or less.)*

Regular audit sample selection procedures shall apply for laminated glass. For **"Participant"** selected samples, ongoing testing shall be with the thinnest interlayer and the thinnest product certified in each thickness class (S and/or H) and generic interlayer category. For **"Inspector"** selected samples, ongoing testing shall be with any thickness product in the certified thickness class (S and/or H) and generic interlayer category, at the discretion of the SGCC auditor.

Sample Certified Products Directory (CPD) Listing:

SGCC#	TEST STD	INCH	MM	TYPE	MAX SIZE	ANSI CLASS
4444	Composite	S	6	LTG (b)(.015)(C1)	U	B
5555	Composite	S	4-6	LTG (b) (.030)	U	A
6666	Composite	H	≥8	LTG (b) (.030)	U	A
7777	Composite	S	4-6	LTG (ip) (.030)	U	A
8888	Composite	H	8-12	LTG (ip) (.030)	U	A
9999	Composite	S	6	LTG (i) (0.030)	U	A

The inch column in the CPD shall indicate thickness class while the "MM" column shall indicate the range of thickness and any limitations. For example, SGCC 8888 (H) above is only certified up to 12mm.

SGCC Labeling Requirements:

SGCC labeling guidelines shall apply with the addition of the thickness class **designation, "S" or "H".**

Sample Labels: (Minimum Requirements)

ABC Glass – Plant 1
16 CFR 1201 I
ANSI Z97.1-2004
SGCC 4444 SUB

ABC Glass –Plant 1
16 CFR 1201 II
ANSI Z97.1-2004
SGCC 5555 SUA

ABC Glass – Plant 1
16 CFR 1201 II
ANSI Z97.1-2004
SGCC 6666 HUA

SGCC Reference Guidelines:

New

- An SGCC certified participant may use any interlayer supplier on the SGCC Accepted Interlayer List of the same generic category.

- SGCC plant audit worksheet will be revised to identify generic categories of interlayers and to ensure only interlayers on the accepted list are certified.

Existing

- Delete current SGCC guideline L.3, L.7 (first par.).

- Modify L.4 to read, "When a laminated glass is certified, other laminated glasses having a greater thickness of interlayer will be included in the certification".

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), four specimens shall be tested, or as noted in guideline G.27. (Revised 10/22/93)

L.8
When a laminated annealed glass is certified, other laminated glasses having the same 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.

L.10
For certification to ANSI Z97.1-2004, weathering tests on laminated glasses shall be performed on the thinnest construction of all components in clear glass with clear interlayer. Weathering tests shall only be required initially. Weathering data will be accepted from the glass fabricator, or a supplier, i.e. interlayer manufacturer.

Implementation Timeline:

November 1 to December 31, 2007	SGCC to solicit comments from interlayer suppliers, SGCC participants and interested parties. Working with the appropriate SGCC sub-committee(s) revisions to the proposal shall be made.
January 1, 2008	Laminated glass certification proposal shall be finalized. It will be printed in the January 08 SGCC CPD.
2008	SGCC participants shall work with the SGCC administrative office to transition to the new certification guidelines during the F08 (first of 2008) certification period. Should issues arise that make this impractical, transition can occur in L08 (last of 2008).
January 1, 2009	All SGCC Certified laminated products must comply to the new proposed laminated requirements.

SGCC List of Accepted Interlayers

(as of 3-27-08)

Generic Class	(b)	(b)	(b)	(b)	(b)	(ip)
Supplier	DuPont	Solutia	Solutia	Solutia	Solutia	DuPont
Interlayer Brand	Butacite®	Vanceva™Composite	Saflex® IIIG	Saflex® HP	Vanceva™ Advanced	SentryGlas®Plus
Weathering Data	DuPont Report dated 9/05	Solutia Report dated 7/05	Solutia Report dated 7/05	Solutia Report dated 7/05	Solutia Report dated 7/05	DuPont Report dated 9/05
Impact Data - Thinnest Interlayer Tested to Composite (ANSI Z97.1- 2004 and CPSC 16 CFR 1201)						
5/32 (4mm)						
3/16 (5mm)						
1/4 (6mm)	ATI Rpt 75630.01-201-37 (.030)		ATI Rpt: 81660.01-801-37 (.030)			
5/16 (8mm)	ATI 75630.03-201-37 (.060)		ATI Rpt 81142.02-401-37 (.030)			
3/8 (10mm)	ATI Rpt 75630.04-201-37 (.030)		ATI Rpt 81142.03-401-37 (.030)			
1/2 (12mm)			QTI Rpt SG 2007-939-K (.015)			
5/8 (16mm)						

Generic Code	Description	Generic Code	Description
(b)	Poly Vinyl Butral	(p)	Polyethylene Terephthalate
(ip)	Ionoplast	(f)	Fluorinated Ethylene Propylene
(lc)	Liquid Resin – Multi Component	(u)	Polyurethane
(lu)	Liquid Resin – UV Cure	(ev)	Ethylene-Vinyl Acetate

ATTACHMENT #11

3) Revised Guidelines

LAMINATED GLASS

(To be added 1/1/09) The concept for the certification of laminated glass is that initial testing must be performed on each nominal thickness, as defined by ASTM C1036, of at least one brand of each generic category of interlayer material for which SGCC certification is desired. Ongoing certification shall be by two thickness classes (S = Standard (<0.292 – inches), H = Heavy (≥0.292 –inches)) and per generic category of interlayer. A list of accepted interlayer brands per generic category shall be maintained, and certification to one brand within the generic category will allow switching to other brands within the generic category on the list (see "SGCC Proposal for the Certification of Laminated Glass" dated November 5, 2007 available at www.sgcc.org).

L.1 (To be revised 1/1/09)
Certification of clear ~~regular~~ laminated glass will also cover tinted, heat absorbing, and coated glasses, ~~and~~ 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), four specimens shall be tested or as noted in guideline G.27. (Revised 10/22/93)

L.2
In cases where certified laminated glass is normally not available for sampling the licensee may make an overrun (of four lights of prototype size that are to be marked with the date of production) when the item is in normal production and these will be accepted by the Administrator if other samples are not available. Otherwise, when production samples are not available the Administrator shall notify the licensee to submit prototype size samples to the Administrator within six weeks.

L.3 (To be deleted 1/1/09)
~~Certification of 7/32 inch laminated glass also covers SS/DS and vice versa.~~

L.4 (To be revised 1/1/09)
When a laminated glass is certified, other laminated glasses having ~~the same thickness or thicknesses of glass and~~ a greater thickness of ~~plastic~~ interlayer will be ~~considered to be of equal nominal thickness and will be~~ included in the certification.

L.5
Laminated safety glass need not be identified by type of base glass.

L .6 (To be revised 1/1/09)
Thickness of the ~~plastic~~ interlayer shall be measured by the SGCC® standard method.

L.7 (To be Revised 1/1/09)
~~For certification purposes the following thickness tolerances shall be used. Thickness tolerance shall apply only to the overall thickness. The plus tolerance shall be the sum of all the individual plus tolerances of each layer of the laminate. The minus tolerance shall be the sum of all of the individual minus tolerances of each layer of the laminate.~~

The tolerance of the ~~plastic~~ sheet interlayer shall be based on the nominal thickness of the interlayer with a plus tolerance of 0.002 and a minus tolerance of 0.004 inches.

The tolerance of resin cast interlayer shall be based on the nominal thickness of the interlayer with a plus tolerance of 0.015 and a minus tolerance of 0.005 inches. (Revised 3/16/90)

L.8 (To be revised 1/1/09)
When a laminated annealed glass is certified, other laminated glasses having the same thickness or thicknesses of heat strengthened or tempered glass and the same or greater thickness of ~~plastic~~ interlayer of the same generic category ~~chemical composition~~ will be considered to be included in the certification.

L.9 (To be revised 1/1/09)
When laminated glass is not available for routine sampling, the licensee submitted specimens must contain the identical thickness ~~plastic~~ interlayer that was contained in the prototype specimens.

L.10 (To be revised 1/1/09)
For certification to ANSI Z97.1-2004, weathering tests on laminated glasses shall be performed on the thinnest construction of all components in clear glass with clear interlayer ~~plastics~~. Weathering tests shall only be required initially. Weathering data will be accepted from the glass fabricator, or a supplier, i.e. interlayer manufacturer. (Added 10/21/05)

L.11 (Added 1/1/08)
An SGCC certified participant may use any interlayer supplier on the SGCC Accepted Interlayer List of the same generic category.

L.12 (added 1/1/08)
SGCC plant audit worksheet will be revised to identify generic categories of interlayers and to ensure only interlayers on the accepted list are certified.

Revision to labeling Requirements (To be added 1/7/08)

The permanent label must contain the correct SGCC® number, ANSI Z97.1-2004 and/or 16 CFR 1201 (and category), the nominal thickness, the letter U or L indicating certified size and the ANSI impact class (A, B or C). (Revised 10/21/05) At the discretion of the SGCC participant, for laminated glass, the actual thickness or thickness class may appear on the label.

4. Sample Listings

a) Current Database Entries (9)

3603	ARC01TX	(S)	6	(b)	(.030)	A
3620	TRA03GA	(S)	6	(b)	(.030)	A
3621	TRA03GA	(H)	8-12	(b)	(.060)	A
3718	INS01KS	(S)	6	(b)	(.030)	A
3720	INS01KS	(H)	8	(b)	(.060)	A
3723	INS01KS	(H)	10-12	(b)	(.030)	A
3892	TAI01TW	(S)	6	(b)	(.015)	A
3893	TAI01TW	(H)	12	(b)	(.015)	A
3969	OLD26FL	(S)	6	(b)	(.030)	A

b) Sample of CPD Listing by Manufacturer

Insulite Glass Co., Inc. ; Olathe, KS

3712	COMPOSITE	1/8	3.0	TTG		U	A
3713	COMPOSITE	5/32	4.0	TTG		U	A
3714	COMPOSITE	3/16	5.0	TTG		U	A
3715	COMPOSITE	1/4	6.0	TTG		U	A
3716	COMPOSITE	3/8	10.0	TTG		U	A
3717	COMPOSITE	1/2	12.0	TTG		U	A
3718	COMPOSITE	(S)	6	LTG (b)	(.030)	U	A
3720	COMPOSITE	(H)	8	LTG (b)	(.060)	U	A
3723	COMPOSITE	(H)	10-12	LTG (b)	(.030)	U	A

c) Sample of CPD Listing by Type

		SGCC #	Standard		Lab ID	Max Size Certified	ANSI CLAS
1/4 Inch Laminated Transparent Glass							
Oldcastle Glass Houston	Houston, TX	3162	COMPOSITE	(.030) (b)	550	U	A
Oldcastle Glass Langley	Burnaby, BC Canada	3217	COMPOSITE	(.015) (b)(C1)	750	U	B
Oldcastle Glass Tampa	Tampa, FL	3216	COMPOSITE	(.060) (b)	285	U	A
Oldcastle Glass Telford	Telford, PA	3781	COMPOSITE	(.030) (b)	100	U	A
Oldcastle Glass Wausau	Schofield, WI	3176	COMPOSITE	(.030) (b)	275	U	A
Saint Gobain Mexico, S.A. de C.V.	Morelos, Mexico	2269	ANSI ONLY	(.015) (b)	400	U	B
Saint Gobain Mexico, S.A. de C.V.	Morelos, Mexico	2743	COMPOSITE	(.030) (b)	400	U	A
Shanghai Yaohua Pilkington Glass	Shanghai, China	2779	COMPOSITE	(.030) (b)	285	U	A
Traco (Three Rivers Alum)	Cranberry Township, PA	2714	COMPOSITE	(.030) (b)	285	U	A
Vidrios Lirquen S.A.	Penco, Concepcion, Chili	2585	COMPOSITE	(.030) (b)	285	U	A
Viracon, Inc.	Statesboro, GA	3299	COMPOSITE	(.030) (b)	100	U	A
Viridian	Dandenong, Australia	3083	COMPOSITE	(.015) (b)	125	U	A
XYG Glass (Div. of Xinyi Grp (Glass) Co. Ltd.)	GuangDong, China	3058	COMPOSITE	(.030) (b)	125	U	A
(S) Laminated Transparent Glass							
6mm Arch Aluminum & Glass	Fort Worth, TX	3603	COMPOSITE	(.030) (b)	175	U	A
6mm Insulite Glass Co., Inc.	Olathe, KS	3718	COMPOSITE	(.030) (b)	150	U	A
6mm Oldcastle Glass Miami	Miami, FL	3969	COMPOSITE	(.030) (b)	285	U	A
6mm Taiwan Glass Industries Corp.	Taipei, Taiwan	3892	COMPOSITE	(.015) (b)	750	U	A
6mm Traco (Three Rivers Alum)	Bainbridge, GA	3620	COMPOSITE	(.030) (b)	0	U	A
(H) Laminated Transparent Glass							
8mm Insulite Glass Co., Inc.	Olathe, KS	3720	COMPOSITE	(.060) (b)	150	U	A
8-12mm Traco (Three Rivers Alum)	Bainbridge, GA	3621	COMPOSITE	(.060) (b)	0	U	A
11/32 Inch Laminated Transparent Glass							
Cardinal IG	Waxahachie, TX	3628	COMPOSITE	(.030) (b)	900	U	A
Cardinal LG	Ocala, FL	3511	COMPOSITE	(.030) (b)	285	U	A
Cardinal LG	Amery, WI	2483	COMPOSITE	(.030) (b)	150	U	A
3/8 Inch Laminated Transparent Glass							
Berkowitz, J.E.	Pedricktown, NJ	3750	COMPOSITE	(.030) (b)	100	U	A
Cardinal IG	Waxahachie, TX	3629	COMPOSITE	(.030) (b)	900	U	A

safety glazing certification council
P.O. BOX 730
SACKETS HARBOR, N.Y. 13685
PHONE: 315-646-2234
FAX: 315-646-2287
EMAIL: staff@amscert.com

March 22, 2008
Inspector 5

Below is the "L07" QA information for the indicated company. Please complete and/or confirm adherence at the "F08" Inspection.

		Date of Inspection:_____
Quality Assurance Requirements (Numbering refers to quality assurance program requirements contained in the SGCC Certified Products Directory (CPD))	**"L07" Results**	**"F08" Results**
List All SGCC Accepted Interlayer Brands Utilized for SGCC Certification at this Location		
1. **Quality Manual** – a document that identifies, describes and contains the workings of the quality system. (Yes, No, ISO Compliant)		
2. **QA representative** – designated point of contact for the quality system. (Name and title)		
3a. **Production testing** – including, but not limited to: **written procedures** for testing (Yes, No, Description)		
3a. i & ii **Type of testing performed** Tempered: Center punch test (For example GANA TD 101-04 and/or impactor test (For example ANSI Z97.1-2004 or CPSC 16 CFR 1201) Laminated: Pummel test, boil test, ball drop test (for example GANA LD 100-06)		
3b. **Frequency of production product testing,** as a minimum: Tempered: first of each product thickness per shift. Additional testing based upon sq. footage produced. Laminated: Based upon process, products produced and sq. footage, consult your interlayer supplier for guidance.		
3c. **Documentation and retention** of product testing records as a minimum: 10 years (state participants policy)		
L07 Comments and Discrepancies	**F08 Comments and Discrepancies**	

Inspector's signature: _____ QA Representative signature: _____ 1/9/07

ATTACHMENT #11

SGCC Sample Receipt Form

PO Box 730
Sackets Harbor, NY 13685
Phone: (315) 646-2234 Fax: (315) 646-2297

Inspector ID: 5

Product: Company:
Plant Location:
Plant ID:

SGCC #: F08
(H) (in) 8 (mm) U
Laminated Transparent Glass (b) (.060)
Test Std: COMPOSITE
Drop Height Class: A

Inspector: Sampled by: _____ Date Sampled: _____
Size Sampled: _____ No. Samples to be selected: 8
Interlayer Brand Selected/To Be Tested (For Laminated Samples): _____

Note: F08 selections may be of any size glass larger than 24x42" up to 34x76". Inspectors: Place a "P" after the SGCC No. if the samples will be "participant" selected, but inspector selected samples are preferred. This inspection and selection is to be unannounced. The participant has six (6) weeks from the sampled date to deliver test samples to the designated testing laboratory. Upon completion of this inspection, mail or email this form to the SGCC office.

Testing Laboratory: Architectural Testing Inc. St. Paul, MN Lab ID: 150

Note: After completing all the requested information below, this form is to be mailed to SGCC within 3 days of the date the sample is received at the laboratory. If sample is not received, call or mail this form to SGCC on _____.

DO NOT TEST UNTIL YOU RECEIVE AUTHORIZATION FROM SGCC

Date sample was received at Laboratory: _____ Size received: _____

Indicate if specimens are suitable for testing (yes or no and specimen number)

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

6. _____ 7. _____ 8. _____ 9. _____

Reproduce the information from the permanent label on each specimen. You may use a pencil rub copy of the label information if it is READABLE. If it is not reproducible in this manner, please hand write the label information. If all labels on each specimen are the same, please indicate "same".
*Are SGCC paper selection labels with Inspector's initials present? (Please check one) YES___ NO ___

This form is to be considered part of the final test report.

Administrator: Form received by SGCC: _____
Authorization to Test: _____
Report received by SGCC: _____

Saflex www.saflex.com

March 27, 2008

Mr. John Kent
SGCC

Re: SGCC Proposal for the Certification of Laminated Glass

Dear Mr. Kent –

This letter contains the information I have relayed to you verbally regarding our concern with the new proposal for SGCC Certification of Laminated Glass.

I want to make it clear that Solutia agrees with the general direction the new proposal is taking. We feel that this proposal simplifies the certification process and may encourage additional participation in the program. Our only concern revolves around the fact that SGCC will be developing accepted product lists for generic categories of interlayer's.

As an interlayer manufacturer, we feel compelled to inform you that we produce several grades and versions of interlayer's that are targeted for different applications. We can not govern which interlayer's may be used in the production of laminated glass, although we do provide technical assistance to both the laminator and downstream customer in making the optimum selection to meet their project needs. That said, some of the interlayer's are not specifically designed primarily for safety glazing performance when laminated. These products could in fact end up on the approved SGCC list under a generic category after passing a series of impacts. This is a concern due to unintentional product mis-use.

Our proposal to resolve this, does not affect the program as laid out for the laminators. It instead puts the qualification responsibility on the interlayer supplier. It would be applicable to each individual interlayer type seeking approval to be put on the SGCC "accepted interlayers" list. Our proposal is as follows:

For each interlayer seeking approval:

1. Manufacturer of the interlayer shall submit weathering information in accordance with the latest guidelines prescribed by SGCC.
2. Manufacturer will submit a test report from an SGCC certified laboratory showing composite testing compliance for each of the nominal thickness configurations required by CPSC 16 CFR 1201 (i.e.(Glass 1.Glass 2): Lami.Lami; 3.3; 4.4; 5.5; 6.6; 8.8; 10.10; 12.12 and 16.16.).
3. Interlayer shall be evaluated in the thinnest gauge to be used for each Class/Category of impact.
4. Interlayer type shall be clearly identified in product and on all reports.
5. Data is submitted, along with nominal fee if applicable, to SGCC for review, acceptance and issuance of an SGCC "compliance" number for the material.

Solutia Inc. • 730 Worcester Street • Springfield, MA 01151

(T) 413-730-3413 • (F) 508.861.0127 • (E) JCSCHI@Solutia.com

6. Interlayer specific information is listed by SGCC and maintained under their generic categories ensuring only those products listed may be used in the SGCC program.
7. Compliance must be demonstrated through testing once every three years through submission of the thinnest configuration for each impact class.
8. A statement indicating that the product has not been altered from the original formulation during that time must accompany this submission. If modifications to the formulation have occurred a full requalification will be necessary.

Although I am sure this will cause some discussion, it is our belief that this will ensure that the products being submitted for use in safety glazing are at least capable of providing the level of performance required. This will also cover the need to have each of the nominal configurations on record as being tested.

I understand that this will seem like overkill for "known" and existing products that we are currently familiar with, however, new products are constantly being introduced and will need to be addressed. These new products will likely fall under the generic categories that have been outlined in the SGCC proposal and may become a liability down the road.

Lastly, under the generic code portion of the proposal, we suggest adding (C) for combination or composite materials. We currently have a widely used interlayer that is a combination of those listed and would not cleanly fit under a single category as described.

Please give this your consideration. I am open to any comments and suggestions from the committee, and simply wanted to make you aware of our concerns regarding generic approval by type from a supplier side and offer one pathway around it.

I do plan on being at the SGCC meeting on April 2, 2008 in Baltimore (I will not be able to make the meeting on April 1, 2008).

Sincerely,

Julia C. Schimmelpenningh
Technical Applications Manager
Saflex, a unit of Solutia Inc.

Solutia Inc. • 730 Worcester Street • Springfield, MA 01151

(T) 413.730.3413 • (F) 508.861.0127 • (E) JCSCHI@Solutia.com