safety glazing certification council P.O. BOX 730 SACKETS HARBOR, N. Y. 13685 PHONE 315-648-2224

FAX 315-646-2297

MINUTES OF EIGHTY-FIRST MEETING OF THE **CERTIFICATION COMMITTEE OCTOBER 16, 2008** MOTOR CITY CASINO HOTEL DETROIT, MI

Members an	d Alternates Present		Date and Votes Present 10/16/08
AGC Fab.		Mark Cody	1
AGC Industri	es	Mark Cody	1
Arch Alumin	um & Glass	Cliff Monroe	1
Cardinal Glas	SS	Bernie Herron	1
Consolidated	Glass	Carl Carmen	1
Guardian Fab	rication Inc.	Kevin Olah	1
Guardian Indi	ustries Corp.	Kevin Olah	1
Prelco		Christian Lizotte	1
Viracon		Brian Louks	1
Members by	Virtue of Being a Dis	<u>rector</u>	
Public Interes	st	Elaine Rodman	1
Public Interes	st .	William Nugent	1
Public Interes	st	Peter Weismantle	1
Public Interes	st	June Willcott	1
_			Votes 13
<u>Guests</u>			
Architectural	Testing, Inc.	Scott Swaltek	Present
Legal Couns	<u>el</u>		
Schiff, Hardin	n LLP	William M. Hannay	Present
Administrat	ive Staff		
AMS, Inc.		John Kent	Present
			Persons Present 14
10.16.08.1	The meeting was cal All present introduce	_	y Chairman Mark Cody and a quorum declared.
10.16.08.2		April 1 and 2, 2008 me approve the minutes as sul	beting were reviewed. A motion was made by

Vote: Unanimous Affirmative Motion Passed

10.16.08.3 Committee Structure

(See Attachment #1)

A list of the committee structure of SGCC was presented and reviewed.

10.16.08.4 Legal Counsel's Report - W. Hannay

- A. SGCC Anti-Trust Guidelines were distributed to the group and read out loud (See Attachment #2).
- 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
- C. With the removal of the requirement of SGCC Licensee's to name SGCC as an additionally insured on product liability insurance, the SGCC Board had earlier approved revisions to the SGCC License Agreement strengthening the indemnification provisions of the agreement. The new revised agreement was circulated to all licensees for signature in early September 2008. To date, approximately 1/3 of agreements have been returned. The Administrator will work to obtain signed agreements from all current licenses (See Attachment #3).

10.16.08.5 Board of Directors' Report - W. Nugent

- A. The make-up of the SGCC Board has historically been at 5 Industry and 5 Public Interest Representatives. With the passing of Don Vild, the Board dropped to a 4 + 4 make-up. The Board is looking to return to a 5 + 5 make-up and candidates for Industry and Public interest will be sought.
- B. A group has been formed to look at revisions to the SGCC Lab agreement. The nature of the considered revisions will be discussed under agenda item 12 of this meeting.
- C. With the elimination of the requirement to name SGCC as an additionally insured on product liability insurance SGCC is looking at securing Errors and Omissions (E and O insurance. Initial attempts to secure a policy raised questions as to what was being covered. It was felt that more research was needed.
- D. Meeting attendance was reviewed. In an effort to get more people to the SGCC meetings, the Board intends to invite a guest speaker to future meetings.
- E. With changes in FDIC insurance limits, an improved way to manage SGCC's CD investments was reviewed.

10.16.08.6 Financial Report - E. Rodman

(See Attachment #4)

10.16.08.7 Administrator's Report – J. Kent

(See Attachment #5)

10.16.08.8 Quick Action Sub-committee Report

There was no activity to report since the last meeting.

10.16.08.9 SGCC Video

It had been suggested earlier for SGCC to develop a video clip of tempered, laminated and annealed glass testing. Preliminary video footage has been shot and a short sample clip was shared with the group. There was general support for the project to move forward and the following comments were provided:

- Keep under 5 minutes
- More footage of breakage less of set-up
- Add an introduction
- Refer to "non-safety" glass vs. "annealed" and show first on video
- · Add language how to become an SGCC licensee
- · Show actual labeled product

10.16.08.10 ANSI Z97.1 Update - K. Olah

The ANSI Z97.1 meeting was held during the previous day and a half. There was one membership ballot issue reviewed at the meeting. Most of the meeting was spent reviewing recommended revisions to the standard including revisions and a re-draw of the diagrams in the standard. After review it was approved to move the full revised standard to both full committee ballot and public comment. It is anticipated that the results from the public comment and ballot will be dealt with during spring 2009 and the standard review will be finalized by the end of 2009.

10.16.08.11 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.

10.16.08.12 Testing Laboratory Status

(See Attachment #7)

As directed at earlier meeting, a draft revision of the SGCC laboratory agreement has been prepared and reviewed by the SGCC Board. Opportunity for discussion was provided at this meeting. After consideration of comments, Mark Cody, Bill Hannay and John Kent were asked to finalize the document. Any further comments are welcome.

10.16.08.13 Lab Manual Guidelines

(See Attachment #8, as revised at meeting)

A. A motion was made by Willcott/Louks to adopt a new laboratory manual guideline G.28 as follows:

NEW INSTRUCTION G.28

ANSI Z97.1 2004 paragraph 5.1.3 (5) shall be interpreted to require the entire set, all individual specimens, to be tested regardless of the results of any individual specimen. This shall apply to all SGCC Testing.

Vote: Unanimous Affirmative Motion Passed

B. A motion was made by Monroe/Herron to adopt a new laboratory manual guideline G.29 as follows:

NEW INSTRUCTION G.29

When measuring the thickness of a specimen of glass, a minimum of two (2) measurements shall be taken at approximately the third points of each of two (2) contiguous sides. These readings shall be averaged for the reported thickness of the specimen.

Vote: Unanimous Affirmative Motion Passed

10.16.08.14 Certification of Laminated Glass

(See Attachment #9)

New guidelines for the certification of laminated glass were adopted starting 1/1/08 with an intended completion of the transition of all products by 1/1/09. The status of the transition was reviewed. At present 46 of 70 laminated certification entries have been converted to the new format.

An issue was raised regarding acceptable thickness tolerances for laminate interlayers (see CPD guideline L.7). Although specific wording was not determined there was general consensus that interlayer thickness shall be reported for determining nominal thickness only. The Laminated Glass Sub-committee was requested to develop new guideline wording.

10.16.08.15 Audit Procedures

(See Attachment #10)

The issue described in attachment #10 was discussed. It was felt that although the SGCC selection process will not always accomplish the most preferred method of selection, it was adequate in consideration of the realities of the fabrication process, namely made to order samples. As for the potential of participant selected 34 X 76-inch samples, participating fabricators need to be aware of the potential cost of test samples when they get into the program. No further action was taken.

10.16.08.16 International Standards Thickness Designations

(See Attachment #11, as revised at meeting)

A motion was made by Rodman/Louks to adopt revisions to guideline G29 as follows (The administrator was requested to review and revise SGCC labeling requirements accordingly):

G. 29

For the purposes of certification, the thickness requirements of Standard ASTM C1036, CEN or other nationally or internationally recognized thickness specifications shall apply. In all cases label information must be accurate for the nominal thickness of the applicable Standard. An indicator shall be used to identify Standards other than ASTM C1036 (e.g., EN for European Norm). If no indicator is used the product will be assumed to comply with ASTM C1036.

Vote: Unanimous Affirmative
Motion Passed

10.16.08.17 **CPD Revisions**

(See Attachment #12, as revised at meeting)

A number of revisions to the wording of the CPD were suggested. In general these revisions were to clean-up wording for SGCC program changes which had been made over the last few years. After discussion a motion was made by Cody/Weismantle to accept the CPD revisions as annotated.

Vote: 12 Affirmative

0 opposed1 Abstention

Motion Passed

10.16.08.18 Testing of Label Failure Samples

Under the current SGCC Guideline G.6 d) SGCC instructs the laboratory to hold test samples that have experienced a label failure for 30 days, and then test the original failed label samples. During this time the licensee is instructed to produce a second set of test samples, for retest. Should a product test or thickness failure occur on either the first or second set of test samples, third and fourth sets of test samples can occur. This all can add significant confusion for test labs and licensees. The value of testing "already failed" samples is questioned. The group discussed alternate approaches and provided the following general direction:

- A. Any failure, label, test or thickness constitutes a failure of that group.
- B. The Retest due to failure samples must then pass all requirements label, test and thickness.
- C. The first set of samples will be tested, for information only, unless otherwise requested not to be tested by the licensee.
- D. The Administrator was directed to write up appropriate guideline revisions reflecting this general guidance for consideration at the next meeting.

10.16.08.19 Old Business

Discussion occurred regarding the process of testing safety glazing in Canada. In general compliance is determined from the ANSI/CPSC test, which is viewed to be equivalent with the Canadian test method.

10.16.08.20 New Business

- A. In an effort to generate greater interest for SGCC meeting attendance, the SGCC Board intends to invite guest speakers to future meetings. A list of potential guest speakers has been prepared (see attachment #13).
- B. Suggestion was made to include as a standing agenda item a 30 minute open forum discussion.
- C. Suggestion was made to up-grade the look of the CPD and to include copy on CD
- D. The process for performing non-North American audits was reviewed and the concept of going to 1 SGCC audit per year. The Administrator was requested to review past meeting discussion on this topic for review at the next meeting.
- E. Discussion was held regarding the difficulty in testing different size samples. Significant effort is expended changing test frame fixturing. It was suggested to limit the number of sizes tested for a participating company.

10.16.08.21 Next Meeting

The next SGCC Certification Committee meeting will be held in October 2009. The SGCC board will next meet April 29th and 30th, 2009.

10.16.08.22 The meeting was adjourned by the chair at 2:57 pm.

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

SGCC Committee Structure (as of 10/7/08)

SGCC Board of Directors	President: William Nugent
Scope: The overall affairs of the Council shall be man	naged by its Board of Directors.
Me	mbers
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			
Administrator has rendered a decision that is r	nce provided to the Administrator or for which the 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 associate locations and specific dates for future meetings for s marketing plan.	d industry meetings; develop a list of possible ubmittal to participants for vote. Maintain SGCC
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 #1

Sub Committee: Laboratory a	and QA Inspection	Chair: Kevin Olah				
Scope: Address and resolve concernadministrator, and SGCC participant program quality assurance requirements	s. Development and mainter	ship between the laboratories, the nance of the laboratory testing manual and				
Members						
Bernie Herron	Tim Moore	Rick Wright				
Cliff Monroe	Mark Cody					

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 legallysensitive 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 2008

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



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

TO:

SGCC Licensees

FROM: SUBJECT:

John G. Kent, SGCC Administrative Manager Latest version of the SGCC License Agreement

DATE:

August 25, 2008

Earlier this year, the SGCC Board of Directors completed a review and authorized revisions to the standard SGCC Licensee Agreement. The license agreement is the document that defines the relationship between SGCC and your company and establishes the responsibilities of each party. One license agreement per "corporate entity" is to be signed prior to completion of SGCC certification. Although your company has already signed an earlier version of this document, due to the changes stated below, it is in the best interest of both parties if the most recent version is fully signed and executed.

We therefore request that you complete and sign both copies of the enclosed agreement and return both to the SGCC office. We will counter-sign both copies, file one and return the other to you.

On behalf of SGCC we thank you in advance for your cooperation in this matter and your continued support of the SGCC certification process.

Sincerely,

John G. Kent

Administrative Manager

SGCC Standard License Agreement Summary of Changes

(From last issue dated October 1999, to current version dated August 2008)

- (1) Replaced old paragraph A.15 (the Certificate of Insurance requirement) with a reference to new paragraph C.12(a) and (b), containing the expanded indemnification and hold harmless provision approved at the April board meeting.
- (2) Deleted the text of old paragraph C.12 and added the two new subsections (a) and (b).
- (3) Inserted a new paragraph C.14, containing the arbitration provision also approved at the April board meeting.
- (4) To clarify the requirement for testing to be performed by a laboratory located in the US, have inserted references to the U.S. into old paragraph B.3, so that it now reads:
 - 3) Shall provide and maintain a list of approved laboratories that are located in the United States and qualified to perform tests required hereunder and to authorize tests herewith specified. Said list of approved laboratories in the United States is to be developed by the Certification Committee.
- (5) Changed the SGCC address to the Sackets Harbor, NY location.
- (6) Revision to the Declaration (formerly the affidavit, Appendix A) to better clarify responsibility for signatures.



Annual Financial Comparison Summary

Revenues	2001/2002	2002/2003	002/2003 2003/2004 2004/2005	2004/2005	2005/2006	2006/2007	2007/2008
Administrative	\$201,037	\$259,563	\$238,383	\$300,770	\$306,298	\$478,848	\$491,427
Testing	\$263,298	\$336,961	\$360,036	\$429,682	\$317,424	\$576,784	\$794,936
Business Acct.	N/A	\$14,168	\$30,959	\$32,585	\$38,700	\$46,659	\$52,875
income							
Impactor Bags	N/A	A/A	∀N V	A/N	\$1,100	\$1,430	\$990
Test Labs Under Five	N/A	A/A	N/A	A/A	\$2,000	\$2,000	\$1,000
Interest Income	\$16,595	\$10,960	\$9,276	\$9,057	\$18,093	\$18,629	\$28,077
Total Revenues	\$480,930	\$621,652	\$638,654	\$772,094	\$683,615	\$1,124,350	\$1,369,305

Expenses	2001/2002	2002/2003	2003/2004	2004/2005	2002/2006	2006/2007	2007/2008
Administrative	\$201.037	\$259,563	\$238,383	\$300,770	\$306,298	\$478,848	\$491,427
Testina	\$263,298	\$290,445	\$327,036	\$429,682	\$317,424	\$540,072	\$794,935
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	\$24,050
Board Meetings	\$8,689	\$8,638	\$9,383	\$9,877	\$9,927	\$9,289	\$20,098
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	A/A	N/A	N/A	A/A	\$1,558	\$1,895	\$2,722
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	\$1,353,240
Change in Net Assets	(\$36,662)	\$11,896	\$15,964	(\$7,311)	\$17,512	\$53,468	\$16,065
Net Assets	\$129,349	\$141,245	\$157,209	\$149,898	\$167,410	\$220,878	\$236,943

Investments	Initial Date of Purchase and Interest Rate	Initial Purchase Value	Current Interest Rate	Date of Maturity	Comments	10/8/08
#1 First National Bank of Dryden	5/1997 5.05%	\$45,000	2.03%	5/28/10		\$81,605
#3 National City Bank	8/2000 7.15%	\$90,000	2.9%	12/17/09	Penalty of \$ 142 for early withdrawal of 20K to get below \$100K 10/3/08	\$90,667
#6 MBNA Invest Serv/Bank of America	12/2000 6.63%	\$45,000	3.45%	12/11/08		\$ 58,991
#7 Watertown Savings Bank (Formerly Redwood)	11/2001 2.75%	\$95,000	3.0%	11/23/08	WSB purchased Redwood – FDIC insurance is grandfathered for term	\$105,119
#8 Community Investment Services (Money market not CD or Stocks)	11/2001 2.8%	\$95,000	N/A	N/A	1\$ per share \$ market acct with Fidelity. Was told by broker that even with stock market situation it does not affect this account	\$113,700
#9 Key Bank	5/2007 4.65%	\$80,000	4.649%	11/9/08		\$85,144
#10 Alliance	5/2007 4.65%	\$80,000	2.23%	60/2/9		\$84,443
#11 Carthage Savings and Loan	3/2008 2.92%	\$100,000	2.92%	3/25/09		\$100,798
#12 BNC/SCB/WSB - CDARS	10/9/08 2.96%	\$100,000	2.96%	10/8/09	CDARS Program	\$100,000
					Total of all Certificates of Deposits	\$820,467

SGCC Banking Accounts	ng Accounts
Account	Balance as of 10/8/08
HSBC Checking Account	\$2,252
HSBC Savings Account	\$1,039
WSB Savings Account	\$76,162

ADMINISTRATIVE REPORT

SGCC Fall Meeting October 15 & 16, 2008

July 1, 2008 Certified Products Directory (CPD)

Cut-off Date

Copies

Subscription List Mailing

July 1, 2008

2140

1852

Certification Removed Since Publishing July 1, 2008 CPD

ANSI Program

None

CPSC Program

None

Composite Program

AGC Flat Glass North America; Hebron, OH SGCC# 3675 5/16-inch TTG

Cardinal CG; North Salt Lake, UT

SGCC# 3982 3/8-inch TTG SGCC# 3983 1/2-inch TTG

Contour Industries, Inc.; Surgoinsville, TN

SGCC# 1676 1/8-inch TPG

Denver Glass Products; Englewood, CO

SGCC# 3869 3/4-inch TTG

Trimlite, LLC; Ho Chi Minh City, Vietnam

SGCC #3784 1/8-inch TTG SGCC #3691 3/16-inch TTG SGCC #3795 1/8-inch TPG SGCC #3692 3/16-inch TTG

Vitro America, Inc.; Santa Clara, CA

SGCC# 2436 3/16-inch TTG SGCC# 1496 1/4-inch TTG SGCC# 1497 3/8-inch TTG SGCC# 1498 1/2-inch TTG SGCC# 2368 3/16-inch TPG

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

ANSI Program

None

CPSC Program

None

Composite Program

DeQuing Sanxing Plastic Chemical Co. Ltd.

SGCC #4055/8-inch TTG SGCC #4056 5/32-inch TTG SGCC #4057 3/16-inch TTG

Dongguan CSG Architectural Glass Co.

SGCC#3934 5/32-inch TTG SGCC#3935 3/16-inch TTG SGCC#3936 1/4-inch TTG SGCC#3937 5/16-inch TTG SGCC#3938 3/8-inch TTG SGCC#3939 12mm (3) TTG SGCC#3940 15mm (3) TTG SGCC#3941 3/4-inch TTG SGCC#3942 (S) (4-6mm) LTG

Pennsylvania Insulated Glass

SGCC# 3918 (S) (5-6mm) LTG SGCC# 3919 (H) (8-10mm) LTG

Rochester Insulated Glass

SGCC# 4065 1/4-inch TTG

WSD Glass, Inc.

SGCC# 4048 3/16-inch TTG SGCC# 4049 1/4-inch TTG SGCC# 4050 1/2-inch TTG SGCC# 4051 3/16-inch TPG SGCC# 4052 3/8-inch TTG SGCC# 4053 3/8-inch TPG

Zhangjiang Weiyu Fabricated Glass Co.

SGCC# 4093 1/8-inch TTG SGCC# 4094 3/16-inch TTG SGCC# 4095 1/4-inch TTG

Name Changes since July 1, 2008 CPD

N/A

Administrative Activity

July 2008 Mailing of SGCC Certified Products Directory

July 2008 SGCC Mailing of October 2008 Meeting Notice

August 2008 Mailing of Certification Minutes to attendees for April 2008

Meeting and notice to participants they were available on the

website

September 2008 Mailing of Revised License Agreement

September 2008 Mailing of Proof Letter

October 2008 SGCC Mailing of F09 invoices

SGCC Participation Comparison

	LO5 (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)	LO8 (AS OF 10/6/08)
No. of Participating Plants	166	199	206	213	234	221	245
% of increase in Plants	1.2%	19.9%	3.5%	3.4%	5.9%	-5.55%	10.86%
No. of Offshore Plants (Non US & Canada)	30	32	31	29	39	33	44
% of increase or decrease in Offshore Plants	20%	6.7%	-3.1%	-6.5%	18.2%	-13.8%	33.33%
No. of Licensees	102	105	106	113	136	123	147
Total Certified Products	894	1196	1276	1356	1510	1433	1513
% of increase in Certified Products	3.1%	33.8%	6.7%	6.3%	5.4%	-5.7%	5.6%
ANSI Only	121	108	117	110	25	88	23
CPSC Only	51	62	50	52	39	39	25
COMPOSITE	722	1026	1109	1194	1446	1306	1465

Website Report

SGCC 2008	Total Visitors	Most Visited Section	2 nd Most Visited	3 rd Most Visited	Downloads of CPD	Downloads of 2004 ANSI Standard Memo	Top Visiting Country & # of hits
April	5148	Who's Certified	Initial Process	Download Forms	284	130	China 1692
May	5083	Who's Certified	Initial Process	Download Forms	218	146	China 1614
June	5196	Who's Certified	Approved Labs	Download Forms	180	144	China 1579
July	5299	Who's Certified	Download Forms	About SGCC	N/A (Removed for new July CPD release)	143	China 1804
August	5171	Who's Certified	Download Forms	Initial Process	195	127	China 1706
Septem ber	4495	Who's Certified	Download Forms	About SGCC	183	113	China 1654

Program Testing Results

137	101 (~1	L J	2002	2003	2004	2005	2006	2007	F08 1324
925 (72) 356	I	755 (55)	(43) 843	365 (24)	682 (42) 938	925 (54)	851 (41) 1238	11 88 (47) 1361	(47) (697
(28)			(57)		(% c)	(46) 1643 (95)	(59) 195 8 (94)	(55) 2349 (92)	(55) 1240 (94)
						86 (5)	(6)	200	84 (6)
21 (1.6)		33 (2.4)	26 (1.8)	31 (2)	36 (2.2)	31 (1.8)	65 (3.1)	(2.8)	19 (1.4)
(33/.5)	25 (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)	8 (42/.6)
14 8 (67/1.1) (24	(24	8 (24/.6)	5 (19/.4)	14 (45/.9)	12 (33/.7)	(35/.6)	11 (17/.5)	27 (38/1)	11 (58)(.8)
20 30 (95/1.6) (91/2.2)	3(2.2)	23 (88/1.6)	16 (52/1)	25 (69/1.5)	30 (97/1.7)	61 (94/3)	50 (70/2)	11 (58)(.8)
(5/.1) (9/.2)	(9/.2		3 (12/.2)	14 (45/.9)	6 (17/.4)	0	4 (6/.2)	4 6/.2)	0
			0	1 (3/.1)	5 (14/.3)	1 (3/.1)	0 (Now 24X42)	(24/.7)	8 (42/.6)
					24 (67/1.5)	25 (81/1.5)	48 (74/2.3)	48 (68/1.9)	16 (84/1.2)
					4 (11/.2)	5 (16/.2)	(12/.4)	20 (28/.8)	1 (5/.1)
					8 (22/.5)	(3.2/.1)	9 (14/.4)	3 (4/.1)	2 (11/.1)

SGCC Testing Laboratory Status (as of October 7, 2008)

- 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	Date of	Date of	Approved	Signed	Lab fee
		Code	Initial Approval	Last Inspection	by SGCC	Agmt	PAID
Architectural	St. Paul, MN	2	10/6/92	8/20/07	4/25/07	9/9/04	
Testing Inc.							
Architectural	York, PA	2	6/30/85	3/23/07	4/25/07	10/26/04	
Testing Inc.							
Architectural	Fresno, CA	2	11/18/97	5/2/08	4/25/07	9/9/04	
Testing Inc.							
Architectural	Southlake, TX	2	7/1/04	10/9/07	4/25/07	6/25/04	
Testing Inc.							
Architectural	Tampa, FL	1	4/25/07	2/22/07	4/25/07	1/8/07	
Testing Inc.	•						
Bowser-Morner,	Dayton, OH	2	1991	4/25/06	4/25/07	2/3/06	
Inc.				Schd			
				10/17/08			
Construction	Ontario, CA	1	11/19/97	6/13/07	4/25/07	9/7/04	
Consulting							
Laboratory West				:			
ETC Laboratories	Rochester, NY	2	3/8/94	5/1/08	4/25/07	7/30/04	
Fenestration Testing	Medley, FL	2	10/2/97	10/15/07	4/25/07	10/22/04	
Laboratories							
Intertek	Cortland, NY	2	1981	12/15/06	4/25/07	6/23/04	
Quality Testing,	Everett, WA	1	10/14/97	4/9/08	4/25/07	2/2/06	
Rone Engineers,	Dallas, TX	2	3/31/00	10/9/07	4/25/07	7/14/04	\$1000 -
Ltd.							Pd
Stork-Patzig Testing	Des Moines, IA	2	6/11/99	12/18/07	4/25/07	4/4/05	
Laboratories							
Stork-Southwestern	Houston, TX	2	1/15/90	6/11/08	4/25/07	7/15/04	
Laboratories			1				

Laboratory Agreement Review

FROM April 08 SGCC Board Minutes

15.	C. Carmen	E. Rodman	Motion to change by-laws and/or test lab to US labs only.	5	P
t	i				

Suggested Additions:

- Laboratory must be located in the United States
- Clarify language on frequency of re-survey
- Clarify and revise laboratory audit fee
- Initial approval language, "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 fabrication facilities.

Lab	# of Plants Testing	Lab	# of Plants Testing	Lab	# of Plants Testing
Code	with that Lab	Code	with that Lab	Code	with that Lab
100	33	200	16	500	14
125	19	250	13	550	14
150	16	275	32	750	19
175	5	285	41	900	7
185 *	3	400	12		

^{*} Indicates lab has been in SGCC program less than a year



P.O. Box 730 SACKETS HARBOR, NY 13685 PHONE: 315-646-2234

FAX: 315-646-2297 staff@amscert.com

SAFETY GLAZING CERTIFICATION COUNCIL, INC. CERTIFICATION PROGRAM FOR SAFETY GLAZING MATERIALS USED IN BUILDINGS

TESTING LABORATORY AGREEMENT (Last Revised October 9, 2008 DRAFT)

This Agreement, made thisdate	ay of poration having its administra	_, 20, by and between	en SAFETY GLAZING Main St, P.O. Box 730,
outdon Haron, IVI 15055 (5555) und			("Laboratory")
having its principal office at		Ald a	
and its testing facility at			
WHEREAS, SGCC is sponsoring a quality architectural purposes, which will provide laboratory testing to the requirements of t American National Standard Z97.1 and/or C	e for certification of such sat the nationally recognized stan-	fety glazing materials b dards for such safety g	by means of independent

WHEREAS, SGCC through its Administrator wishes to contract for services with independent laboratories <u>located in the United States</u> which meet the ethical, financial and business experience standards of the American Council of Independent Laboratories or the National <u>Society of Professional Engineers</u> for performance of tests;

WHEREAS, SGCC has appointed a "Certification Committee" comprised of representative of participants and the public interest members of the board of directors acting as ex officio members to formulate, review, administer and apply its certification program and to serve as liaison between SGCC, licensees and interested parties, including its laboratories;

WHEREAS, the Procedural Guide set forth in SGCC's Certified Products Directory published serni-annually shall be adhered to by SGCC, its licensees, and its laboratories;

WHEREAS, Laboratory is willing to participate in and support said program under the terms and conditions set forth in this Agreement;

THEREFORE it is hereby agreed by and between the parties hereto as follows:

Laboratory is approved for testing in the ANSI, CPSC, and Composite certification programs conducted by SGCC so long as Laboratory performs its work in an acceptable manner and meets the following criteria:

- I. Laboratory is an independent testing laboratory <u>located in the United States</u> with no affiliation or financial interest in any company manufacturing or distributing any portion of the products being tested in the SGCC certification program or any other program in which they may be a participant and has neither officers nor employees financially interested in, or employed by, any manufacturer, supplier or owner of the materials to be tested.
- 2. Laboratory meets the ethical, financial and business experience standards of either the American Council of Independent Laboratories or the National Society of Professional Engineers.
- 3. All testing is conducted under the direct supervision of a professional engineer registered in the State in which the testing is performed and each test report shall contain his signature and seal. Testing shall be done in accordance with SGCC guidelines and reviewed by a professional engineer and each test report shall bear his/her seal and signature..

- 4. Any and all tests are conducted strictly in accordance with the specifications, SGCC guidelines and instructions received from the SGCC Administrator. Laboratory agrees that its apparatus will be in full and complete compliance with the standards and specifications utilized by SGCC and that technical competence and equipment shall be subject to review at any and all times by SGCC.
- 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. Further, statements from 5 licensees or perspective licensees must be submitted expressing interest in utilizing any new facility.
- 6. Ongoing laboratory approval is subject to approval by the SGCC Certification Committee and shall be for a period of two (2) years. During this two (2) year 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 Following initial approval, the laboratory shall pay a \$3,000 annual fee 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.
- <u>7.</u> Laboratory agrees to attend SGCC laboratory workshops, whenever convened, on reasonable notice <u>at their own expense.</u>
- 8. 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.

LABORATORY:	Company		_
	Street Address		_
	City, State, & Zip		-
	Company Phone No		_
	Ву	Title	
	Date		
SAFETY GLAZING	CERTIFICATION COUNCIL, INC.		
	Ву	Title	
	Date		

Lab Manual Guidelines

ISSUE #1:

It has been noted that ANSI Z97.1 2004 directs that a test should be terminated if any sample falls. This will negate an opportunity for an SGCC licensee to learn from testing all samples.

"5.1.3 (5) If any of the required specimens fail to comply with the requirements of section 5.1.4 terminate the test."

Suggest the addition of the following Laboratory Manual Guideline:

NEW INSTRUCTION G.28

ANSI Z97.1 2004 paragraph 5.1.3 (5) shall be interpreted to require the entire set, all individual specimens, to be tested regardless of the results of any individual specimen. This shall apply to all SGCC Testing.

ISSUE #2:

There does not appear to be a procedure for the measurement of the thickness of a lite of glass in either ANSI Z97.1, CPSC 16CFR1201, ASTM C1036 nor 1048. It is suggested to add the following procedure to the SGCC laboratory Manual:

NEW INSTRUCTION G.29

When measuring the thickness of a specimen of glass, a minimum of two (2) measurements shall be taken at approximately the third points of each of two (2) contiguous sides. These readings shall be averaged for the reported thickness of the specimen.

Certification of Laminated Glass

- 1) Sample Listings
 - a. Currently in the SGCC Database
 - b. In the Certified Products Directory by Plant
 - c. In the Certified Products Directory by Type
- 2) Interlayer Thickness Tolerance
 - a. Guideline L.7
 - b. Solutia Comment
 - c. Review Lab Manual Thickness Measurement Technique for Laminated Glass

1) Sample Listings

a) Current Database Entries (70) (Was 9 at April meeting) (24 remain to change)

SERE		hickness			inte laver	Drop
2780	PlantID SHA02CH	11 P(n) P 14		Attributes	Thickness	Class
2780 3621	TRA03GA	(H)	10-16+ 8-12	(b)	(.015)	A
3608		(H)	<u> </u>	(b)	(.060)	A
1	GUA03ON	(H)	8-12 12+	(b)	(.030)	A
3573	SHE01CH	(H)	12+ 16+	(b)	(.030)	A
3550	XYG01CH	(H)	INCOMES OF THE PROPERTY OF THE PROPERTY AND	(b)	(.060)	A
3510	CAR02FL XYG01CH	(H)	8-12	(b)	(.030)	
3489	and the second of the second of	(H)	8-12 8-12	(b)	(.030)	A
3435	VIT01CL	(H)		(b)	(.030)	
3408	VIW01PA	(H)	8	(b)	(.090)	A
3628	CAR05TX	(H)	8-12	(b)	(.030)	Α
3021	DLU01PA	(H)	12	(b)	(.030)	A
3482	PGT01FL	(H)	10-12	(ip)	(.090)	A
2748	TRA02PA	(H)	8-12	(ip)	(.090)	A
2719	TRA02PA	(H)	12	(b)	(.090)	A
2716	TRA02PA	(H)	10	(b)	(.030)	A
2715	TRA02PA	(H)	8 & 12	(b)	(.060)	A
2587	VID01CH	(H)	10-12	(b)	(.030)	Α
2527	COA02SC	(H)	8, 12	<u>(I)</u>	(.060)	Α
2462	CAR01WI	(H)	8-12	(b)	(.030)	. A
2426	PGT01FL	(H)	8-10	(b)	(.090)	Α
3385	SIM02OK	(H)	10	(b)	(.090)	Α
3723	INS01KS	(H)	10-12	(b)	(.030)	Α
3947	GUA01Ch	(H)	10-16+	(b)	(.030)	A
3919	PEN01PA	(H)	8-10	(b)	(.030)	Α
3975	TRA03GA	(H)	8-12	(i p)	(.090)	Α
4003	TEC01CL	, (H)	8-16+	(b)	(.030)	Α
3893	TAI01TW	(H)	12	(b)	(.015)	Α
3661	GAL01NJ	(H)	12	(1)	(.060)	Α
3720	INS01KS	(H)	8	(b)	(.060)	A
4030	TIA01CH	(H)	8-16+	(b)	(.030)	Α
3674	PGT01FL	(H)	10	(b)(p)	(.075)	Α
2952	WES01FL	(S)	8	(b)	(.090)	Α
2785	ARC02FL	(S)	6	(b)	(.030)	Α
2976	CAR01WI	(S)	5-6	(b)	(.030)	<u>A</u>
	SHA02CH	(S)	6	(b)	(.030)	Α
	OLD16FL	(S)	6	(b)	(.030)	A
2808	GUA03ON	(S)	4-6	(b)	(.030)	Α
3989	CAR05TX	: (S)	6	(b)	(.030)	Α
3940	DON02CH	(S)	4-6	(b)	(.060)	Α
2714	TRA02PA	(S)	6	(b)	(.030)	Α
3258	OLD10TX	(S)	6	(b)	(.030)	Α
2707	CRA01TX	(S)	6	(l)	(.030)	Α
2600	ARC06OH	(S)	6	(b)	(.030)	Α

2585	VID01CH	(S)	6	(b)	.030)	Α
4029	TIA01CH	(S)	6	(b)	(.030)	Α
4040	VIR03UT	(S)	6	(b)	(.030)	Α
1915	MIR01MN	(S)	6	(b)	(.030)	Α
4001	OLD17FL	(S)	6	(b)	(.030)	Α
1637	VIR01MN	(S)	5	(b)	(.030)	Α
3626	CAR05TX	(S)	6	(b)	(.030)	A
3718	INS01KS	(S)	6	(b)	(.030)	Α
3620	TRA03GA	(S)	6	(b)	(.030)	Α
3603	ARC01TX	(S)	6	(b)	(.030)	Α
3794	CRA01TX	(S)	6	(b)	(.030)	A
3536	ARC04GA	(S)	В	(b)	(.030)	ŀΑ
3832	CAR05TX	(S)	6	(b)(s)	(.030)	A
3509	CAR02FL	(S)	6	(b)	(.030)	Α
3198	OLD09CA	(S)	6	(b)	(.030)	A
4045	QIN02CH	(S)	6	(b)	(.030)	A
3056	XYG01CH	(S)	6	(b)	(.030)	A
3430	ARC03WI	(S)	6	(b)	(.030)	A
3918	PEN01PA	(S)	5-6	(b)	(.030)	A
3407	ARC06OH	(S)	6	(b)	(.030)	Α
3406	VIW01PA	(S)	6	(b)	(.090)	Α
3384	SIM02OK	(S)	6	(b)	(.090)	Α
3299	VIR02GA	(S)	6	(b)	(.030)	Α
3241	OLD21OH	(S)	6	(b)	(.030)	Α
3461	ARC05FL	(S)	6	(b)	(.030)	A
3162		(S)	i 6	(b)	(.030)	A
3892		(S)	6	(b)	(.015)	Α

b) In the Certified Products Directory by Plant

Cardina	il IG ; Waxat	achie, T	x						•	Cardina	ul LG ; Ocale	, FL					U	A
2328 2329 2330 2331 2397 4091 2399 3989 3628 3832 Cardina	COMPOSITE	1/8 5/32 3/16 1/4 1/8 5/32 3/16 (S) (H) (S)	4.0 5.0 6.0 3.0 4.0 5.0 6	TTG TTG TTG TPG TPG LTG LTG LTG	(m) (m) (b)	(.030) (.030) (.030)	U	A A A A A A A A	. !	3505 3506 3507 3508 3509 3510	COMPOSITE COMPOSITE COMPOSITE COMPOSITE COMPOSITE COMPOSITE	1/5 5/32 3/16 1/4 (S) (H)	4.0 5.0 6.0	TTG TTG TTG LTG LTG	(b)	ĺ	บ บ บ บ	A A A A
2976 2462 , 2240	COMPOSITE COMPOSITE	(S) (H) 5/16	8-12	LTG LTG LPG		(.030) (.030) (.030)	U	A A	٠									

	nal Yaohua f nal, China	ilkingt	on Glass	Co. 1	Ltd SY	PB ;		:		en Sanxin S en, China	ipecial (3lass Te	chnology C	io., L td. ;	
2778	COMPOSITE	5/32	40	TTG		U	Α	- !	3844	COMPOSITE	5/32	4.0	TTG (IN)	U	A
2777	COMPOSITE	3/16		TTG		ū	Ä	'	3567	COMPOSITE	1/4	6.0	TTG	IJ	Α
2761	COMPOSITE	1/4		ΠG		ŭ	Â	•	3568	COMPOSITE	5/16	6.0	TTG	U	A
	COMPOSITE	5/16		TTG		ŭ	Ä		3569	COMPOSITE	3/6	10.0	ΠG	Ų	' A
2762						Ü	Ä		3570	COMPOSITE	1/2	12.0	TTG	บ	A
2696	COMPOSITE	3/8		ΠG					3571	COMPOSITE	•		TTG (3)	U	
2763	COMPOSITE	1/2		TTG		U	A			COMPOSITE	3/4		TTG	U	A
2786	COMPOSITE	•	15.0	TTG	(4)	Ų	A		3572					(.030) U	A
2779	COMPOSITE	(S)	5	LTG	(b)	(.030) U	A		3573	COMPOSITE	(H)	12+	LTG (b)	(.550) 0	•
2780	COMPOSITE	(H)	10-16+	LTG	(b)	(.015) U	Α								

c) In the Certified Products Directory by Type

		SGCC#	<u>Standard</u>		<u>Lab ID</u>	<u>Max Size</u> <u>Certified</u>	ANSI CLASS
(S) Laminated Transparent Glass							
6mm Craftsman Tempered Glass	Houston, TX	3794	COMPOSITE	(.030) (b)	550	U	A
6mm insulite Glass Co., Inc.	Clathe, KS	3718	COMPOSITE	(d) (0EO.)	150	U.	A
6mm Mirror Factory	Plymouth, MN	1915	COMPOSITE	(.030) (b)	150	υ	A
6mm Oldcastle Glass Fremont	Freemont, CA	3198	COMPOSITE	(.030) (b)	125	U	A
6mm Oldcastie Glass Grand Prairie	Grand Prairie, TX	3258	COMPOSITE	(.030) (b)	175	U	A
6mm Oldcastle Glass Houston	Houston, TX	3162	COMPOSITE	(.030) (b)	550	U	Α
6mm Oldcastle Glass Miami	Mlami, FL	3969	COMPOSITE	(.030) (b)	265	U	A
6mm Oldcastle Glass Miami North	Miami, FL	4001	COMPOSITE	(.030) (b)	285	U	A
6mm Oldcastle Glass Perrysburg	Perryaburg, OH	3241	COMPÓSITE	(.030) (b)	275	U	A
6mm Qinhuangdao Jixiang Glass Industry	Qinhuungdao, Hebel Province, China	4045	COMPOSITE	(.030) (b)	750	V	A
6mm Shanghai Yaohua Pilkington Glass Co. Ltd SYPB	Shanghai, China	2779	COMPOSITE	(.030) (b)	125	U	۸
6mm Simonton Windows	McAlester, OK	3384	COMPOSITE	(.090) (b)	100	U	A
6mm Taiwan Glass Industries Corp.	Talpei, Taiwan	3892	COMPOSITE	(.015) (b)	750	U	A
6mm Traco (Three Rivers Alum)	Bainbridge, GA	3620	COMPOSITE	(.030) (b)	165	U	A
6mm Traco (Three Rivers Alum)	Cranberry Township, PA	2714	COMPOSITE	(.030) (b)	265	U	A
i 6mm Vidrios Lirquen S.A.	Penco, Concepcion, Chile	2585	COMPOSITE	(.030) (b)	285	U	A
6mm Viracon, Inc.	St. George, UT	4040	COMPOSITE	(.030) (b)	125	U	A
6mm Viracon, Inc.	Statesboro, GA	3299	COMPOSITE	(.030) (b)	100	U	A
6mm Viwinco, Inc.	Morgantown, PA	3406	COMPOSITE	(d) (090.)	100	U	A,
6mm XYG Glass (Div. of Xinyi Grp (Glass) Co. Ltd.)	GuangDong, China	3056	COMPOSITE	(.030) (b)	125	U	A
5/18 Inch Laminated Transparent Glass							
: PGT Industries	Salisbury, NC	3519	COMPOSITE	(.090) (b)	285	U	A
PGT Industries	Salisbury, NC	3525	COMPOSITE	(ip) (ip)	285	U	A
Saint Gobain Mexico, S.A. de C.V.	Morelos, Mexico	2332	COMPOSITE	(.030) (b)	400	U	A
Saint Gobaln Mexico, S.A. de C.V.	Morelos, Mexico	2268	ANSI ONLY	(.015) (b)	400	U	В
(H) Laminated Transparent Glass							
8-12mm Cardinal IG	Waxahachie, TX	3628	COMPOSITE	(.030) (b)	900	U	٨
8-12mm Cardinal LG	Ocala, FL	3510	COMPOSITE	(.030) (b)	265	U	A
8-12mm Cardinal LG	Amery, WI	2462	COMPOSITE	(d) (030)	150	U	A
8, 12mm Coastal Glass Distributors	Charleston, SC	2527	COMPOSITE	(.060) (t)	285	U	A
8-12mm Guardien Industries Canada Corp.	Rexdale, ON Canada	3608	COMPOSITE	(.030) (b)	275	u	A .
8mm Insulite Glass Co., Inc.	Olatha, KS	3720		(.060) (b)	150	U	A .
8-10mm Pennsylvania Insulating Glass	Lewistown, PA	3919		(d) (000.)	100	U	^
8-10mm PGT Industries	Nokomis, FL	2426		(d) (090.)	285	u v	A
8-16+mm Tecnoglass S.A.	Barranquilla, Colombia	4003		(.030) (b)	285	U	Â
8-12mm Traco (Three Rivers Alum)	Bainbridge, GA	3621		(d) (000) (d) (d)	185	U	Â
8 & 12mm Traco (Three Rivers Alum)	Cranberry Township, PA	2715		(d) (080.) (d) (080.)	285 185	U	Â
8-12mm Traco (Three Rivers Alum)	Bainbridge, GA	3975		(.090) (lp)	285	υ	Â
8-12mm Traco (Three Rivers Alum)	Cranberry Township, PA	2748		(.090) (ip) (.030) (b)	285	U	À
8-12mm Vitro Colombia S.A.	Cundinamarca, Colombia	3435		(.030) (b)	100	U	Ä
8mm Viwinco, Inc.	Morgantown, PA	3408 2952		(d) (090.) (d) (090.)	285	U	Ā
8mm Westshore Glass	Tampa, FL	3489		(.030) (b)	125	Ü	· A
8-12mm XYG Glass (Div. of Xinyi Grp (Glass) Co. Ltd.)	GuangDong, China		JOHN GOILE	(+22 0) (0)		<u>-</u> /	

2)

a) Guideline L.7

L.7

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 interlayers 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)

2)

b) Solutia's Comment

From:

Schimmelpenningh, Julia C [jcschi@solutia.com]

Sent:

Tuesday, September 09, 2008 4:34 PM

To:

AMS Staff

Cc:

Cliff Monroe

Subject:

interlayer thickness

I advocate +/- 0.003 inch tolerance for interlayer tolerance for ALL interlayers or stating just NOMINAL thickness for performance attributes.

Julie

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

c) Review Lab manual Thickness Measurement Technique for Laminated Glass

(From SGCC Lab Manual)

PROCEDURE ONE

FOR MEASURING THICKNESS OF PLASTIC INTERLAYER USED IN ORDINARY LAMINATED GLASS

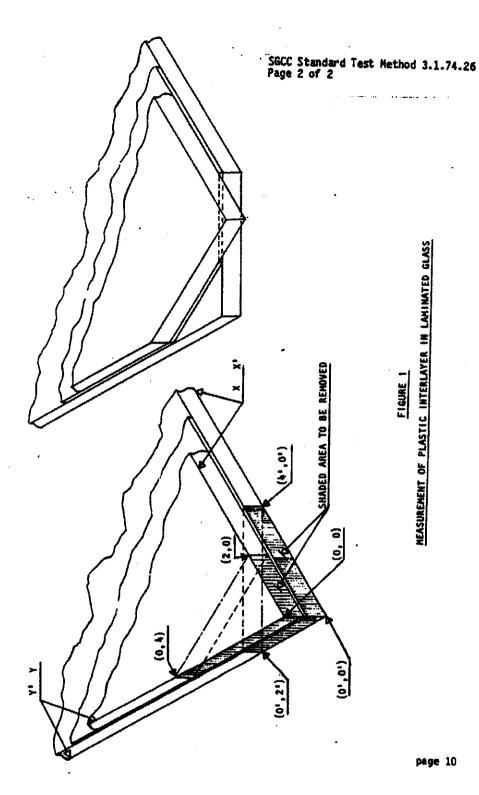
(See Figure 1 below)

- 1. Measure the thickness of the laminated sheet at three places; Compute the average.
- 2. At a corner of the sheet, score the glass on one side from (0,4) to (2,0) using an ordinary glass cutter.
- 3. Turn the sheet over and score the other side from (0', 2') to (4', 0').
- 4. Using a pair of cut running pliers, such a Red Devil #1936, run each of these scores, taking care not to crush the glass.
- 5. Warm the corner by contact with a hot plate, or steam bath, turning every few seconds, until the plastic starts to soften, separate and remove the two triangles of glass with a knife or spatula.
- 6. Scrape the newly exposed glass surfaces clean and measure each glass layer with a micrometer.
- 7. Subtract the sum of the glass thicknesses from the average thickness of the laminated sheet.
- 8. Report the difference as the thickness of the plastic interlayer.

PROCEDURE TWO

- 1. Measure the thickness of two (2) steel gauge blocks having nominal thicknesses of 0.125 and 0.500 inches. Measurement is to be made with a calibrated micrometer.
- 2. Calibrate the ultrasonic thickness gauge using the above steel gauge blocks as the standard. Note that calibration of the ultrasonic thickness gauge prior to each use and the use of couplers are required.
- 3. Measure the overall laminated sheet thickness at three (3) places near the corner selected. Compute the average of these readings.
- 4. Measure each lite of glass in the laminated sheet at the corner selected in step 3 above. Record these two (2) thicknesses and total them.
- 5. Subtract the total of the two (2) thicknesses obtained in step 4 above from the average thickness of the laminated sheet.
- 6. Report the difference as the thickness of the plastic interlayer.

NOTE: An ultrasonic thickness gauge demonstrating an accuracy of plus or minus 0.001 inches is mandatory. The transducer employed shall have a diameter of 0.500 to 1.000 inches. The frequency may be 2.25MHz, 5.0 Mhz or 10 Mhz



Audit Procedures

There is a hierarchy in the attempt to select SGCC testing samples, from most preferred to least preferred as follows:

- 1. Random Inspector selected (any size 24 X 42 to 34 X 76)
- 2. Witnessed Fabricated samples (any size 24 X 42 to 34 X 76)
- 3. Pre-run samples (any size 24 X 42 to 34 X 76)
- 4. Participant Selected (P) leave labels (Must be 34 X 76)

With the rapidly raising cost of energy, transportation, and glass there is an increased effort by participant to avoid 34 X 76 – inch samples. Increasingly auditors are being asked to stay to witness the fabrication of "smaller" samples to avoid #4 participant selected 34 X 76 –inch samples. This can add significant time to an auditor's schedule, and it is doubtful if an auditor would really know if an "adjustment" was made from the normal fabrication process. The below suggestion, which might partially resolve this issue has been made (revisions to guidelines have not been researched):

For all thicknesses ½ - inch or greater, allow on-going re-certification selection and testing of #4 Participant Selected Samples to be any size 24 X 42 up to 34 X 76.

Failure Data for Reference

Cert	Total 1/2 -inch or	Failures ½ -inch	Failures as a
Period	greater Cert	or greater	percent of total
L05	118	2	2%
F06	160	2	1%
L06	172	0	0%
F07	183	1	1%
L07	198	0	0%
F08	199	0	0%

International Standards Thickness Designations

An issue that has arisen is that the permanent label information does not always reflect the true nominal designation of the glass thickness. For example, if the glass is going to be marketed as 15mm (which is an EN572 designation) then the permanent label should state this and not the standard inch equivalent.

<u>REFERENCES</u>

Thickness category reference:

Nominal	EN 572		ASTM C1036	
	Min	Max	Min	Max
12mm (1/2)	11.7	12.3	11.91	13.49
15mm	14.5	15.5		
16mm (5/8)			15.09	16.66
19mm (3/4)	18	20	18.26	19.84

G.16

The nominal thickness designations in SGCC® authorized permanent labels for safety glazing materials may be shown in metric units. The thickness will be expressed in millimeters, limited to one decimal place, and will have the suffix "mm." (Revised 4/19/04)

G. 29

For the purposes of certification, the thickness requirements of Specification ASTM C1036, CEN or other nationally or internationally recognized thickness specifications shall apply. (Revised 4/26/07)

SUGGESTED REVISION:

G 29

For the purposes of certification, the thickness requirements of Standard ASTM C1036, CEN or other nationally or internationally recognized thickness specifications shall apply. In all cases label information must be accurate for the nominal thickness of the applicable Standard. An indicator shall be used to identify Standards other than ASTM C1036 (e.g., EN for European Norm). If no indicator is used the product will be assumed to comply with ASTM C1036.

CPD Revisions

~PROGRAM CONCEPT~

The Safety Glazing Certification Council (SGCC®) is a non-profit corporation, established in 1971 by manufacturers of safety glazing products, building code officials, and others concerned with public safety.

SGCC® maintains a program which provides for the certification of safety glazing materials found to be in compliance with one or both of the following specifications:

American National Standard for Safety Glazing Materials used in Buildings - Safety Performance Specifications and Methods of Test: ANSI Z97.1-2004

Consumer Product Safety Commission Safety Standard for Architectural Glazing Materials - codified at Title 16, Part 1201 of the Code of Federal Regulations: 16 CFR 1201

These specifications subject safety glazing materials, used in buildings and architectural products, to practical tests designed to reduce or eliminate unreasonable risk of death and injury when safety glazing material is broken by human contact.

The specification(s) to which a safety glazing material is certified by SGCC®, is at the direction of the licensee.

SGCC® responsibilities are threefold: to conduct an independent routine sampling and testing program; to approve and register the form of a licensee's label; and to withdraw the licensee's authority to use that label if certified products do not meet specification(s).

Management and control of SGCC® is vested in a board of directors, half representing industry and half representing the public interest. To prevent industry dominance of SGCC® actions, half the voting power of the board resides in the public interest directors regardless of the number of directors present at a meeting.

The certification program uses approved testing laboratories under the supervision of a qualified Administrator, retained by and responsible to SGCC®, who is unaffiliated with any licensee of safety glazing materials.

The licensee of a product listed in this directory has certified that the labeled material complies with the applicable specification(s). Compliance of a certified product with the applicable specification(s) is checked periodically by an approved testing laboratory under the supervision of SGCC®.

All manufacturers of safety glazing products are eligible and encouraged to apply for SGCC® certification. Products may also be licensed by non-manufacturers. (See "Who Can Become a Licensee.") However, products are not certified until a test to the applicable specification(s) conducted at an approved testing laboratory indicates compliance, the SGCC® certification invoice is paid, and SGCC® License Agreements are properly executed.

Once certified by SGCC®, a product is assigned an exclusive certification number to identify it and the plant at which it is made. After which, to ensure continued adherence to the specification(s), SGCC® independently selects, at least twice in each year, samples during <u>routine or</u> unannounced visits to the manufacturing plant or randomly from the market place to be tested to the applicable specification(s). Consequent to a test result showing compliance with the applicable specification(s) SGCC® authorizes the continued use of the certification number and the product listing in this directory.

This directory is divided into four three basic listings: the first is by numerical sequence of certified product numbers listing the licensee holding that number; the second is of manufacturing licensees listed alphabetically by plants and the approved products manufactured at those plants; the third is by non-manufacturing licensee's and their approved products; and the fourth is by product type listing all licensees and locations approved for each product type. There is also an alphabetical listing, by manufacturers, illustrating a label typical of the licensee. The Table of Contents lists various procedural and administrative information, as well as information as to where officers and directors may be located. Upon request, information from SGCC® concerning a statement of procedures or copies of minutes are available to manufacturers, public interest groups, and individuals.

PRODUCTS LISTED IN CERTIFIED PRODUCTS DIRECTORY

Approved products are listed in a Certified Products Directory. The directory is published every six months and is sent to door, sash and building products manufacturers, glazing contractors, home builders, architects, regulatory agencies, code-making groups, etc. Directory listings contain the licensee's name, and product description and examples of a label typical of that permanently affixed by a licensee to each piece of safety glazing material certified by SGCC®.

G.6

- a) All test specimens, except prototype samples, must be marked with the correct SGCC® permanent label prior to testing in order to be considered a valid sample. It is the responsibility of the licensee to ensure the specimens being represented to the Administrator's representative are properly labeled. The Administrator shall construe the absence of a correct permanent label as a failure to comply with the specifications. In such case of noncompliance, Sections a, c, and e of G.11 shall be followed. (Revised 3/16/90)
- b) The laboratory shall verify that the label complies with SGCC labeling requirements, has the correct SGCC® number, designation of the applicable specification(s) and CPSC categories, nominal thickness, and certified size designation (U or L).

SGCC Guest Speaker Topics

- 1) Glass and the Model Building Code (International Building Code)
 - a. Safety glazing requirements in the Code
 - b. General glazing requirements in the Code
 - c. Viewpoint of the local Code enforcement officer
 - d. The ICC Code development process
 - e. Glass and the Energy Code
- 2) The Consumer Product Safety Commission
 - a. Update on the commissions approach to safety standards for glazing
- 3) Quality systems in the manufacture and fabrication of glazing materials and systems
- 4) Glass testing
- 5) Why glass fails/breaks
- 6) Special glass fabrication issues: Notches, holes, bending, etc.
- 7) Hardware applications to ASTM C1048
- 8) Glass in furniture
- 9) Glass in the auto industry
- 10) Glass in appliances
- 11) Glass and "Sustainability".
- 12) New trends in the architectural use of glass
- 13)Laminated glass
 - a. Interlayer and make-up alternates and new technology
 - b. Trouble shooting
- 14)Tempered glass
 - a. Furnace manufacturer
 - b. Trouble shooting problems
- 15) Update from other industry groups:
 - a. IGCC
 - b. IGMA
 - c. GANA
 - d. ASTM