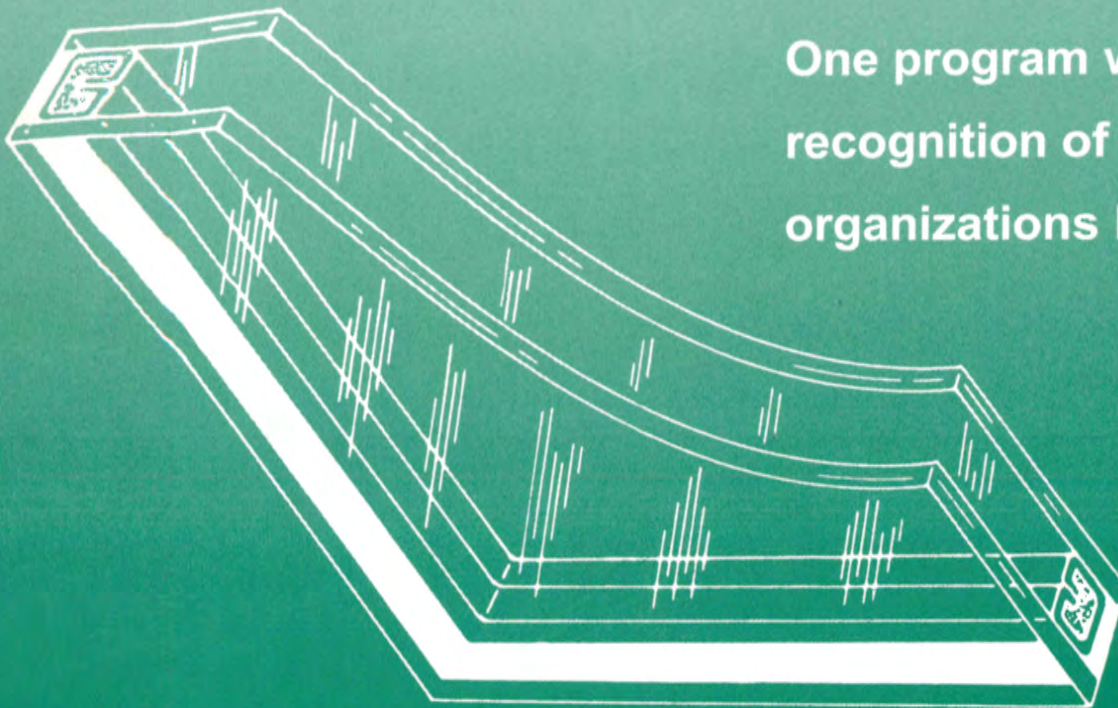


CERTIFIED PRODUCTS DIRECTORY

SEALED INSULATING GLASS
PHONE (315) 646-2234

AUGUST 2009



One program with the
recognition of 2 great
organizations IGCC®/IGMA®

IGCC® and IGMA® Certification programs have been combined into a single certification program designated IGCC®/IGMA®. IGCC® will license the use of the IGMA® trademark and direct certification with IGMA® support.

INSULATING GLASS

IGCC®

CERTIFICATION COUNCIL

IGMA

INSULATING
GLASS
MANUFACTURERS
ALLIANCE

CREDIBILITY IN INDUSTRY CERTIFICATION THROUGH ACTIVE PUBLIC PARTICIPATION

Visit Our Website @ WWW.IGCC.ORG

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Certification information and guidelines are included in the twice per year printing of the Certified Products Directory, or are available from IGCC® upon request. Re-printing of this information in any other manual, material or document without the written permission of IGCC® is in conflict with the desire of IGCC® and should not be interpreted as being endorsed by or affiliated with IGCC®.

IGCC®/IGMA® Program

The IGCC®/IGMA® Certification Program is the product of the effort to harmonize the legacy IGCC® and IGMA® certification programs. After several years of reviewing the two former certification processes, best practices were identified and on February 3rd, 2009 an agreement was signed where IGCC® shall license the use of the IGMA® certification mark in the administration of a single combined program known as IGCC®/IGMA®. The single program will operate under one set of requirements and guidelines and allow former participants in either IGCC® or IGMA® certification to label with IGCC®/IGMA® thus enjoying the greater recognition of both marks. IGCC® shall administer and govern the IGCC®/IGMA® program on behalf of IGMA® and IGCC® in accordance with the program requirements as set forth in the IGCC®/IGMA® Certified Products Directory and Procedural Guide.

The IGCC® Board of Governors is responsible, pursuant to the IGCC® Corporate Bylaws, for all corporate decisions concerning certification of products under the IGCC®/IGMA® Certification Program. The IGCC® Board will at all times be composed of individuals representing the public interest and individuals representing the insulating glass industry in equal proportion.

IGMA® may make recommendations to the IGCC® Board regarding the IGCC®/IGMA® Certification Program and may appeal any decision of the IGCC® regarding certification or the IGCC®/IGMA® Certification Program.

IGCC® PROGRAM CONCEPT

Manufacturers of sealed insulating glass units, consumers, specifiers and others who are responsible for or concerned with the quality and performance of products purchased in the public interest, recognizing a need for a sound product testing and performance certification program, have jointly established the Insulating Glass Certification Council (IGCC®). Founded in 1977, all IGCC® meetings are open to the public and public participation is encouraged.

IGCC® is a non-profit organization which sponsors and directs a program of periodic accelerated laboratory testing and plant audits to ensure continuing product performance through specified standards. The testing specifications used are outlined in "ASTM Specification E2190 for Sealed Insulating Glass." It is the policy of IGCC® to remain flexible in referencing specifications and test methods in order to best reflect changing technology and new developments.

IGCC®'s responsibilities through its administrator are to see that periodic audits and independent laboratory tests are performed on participating manufacturers' products and to validate the right of that manufacturer to use the IGCC® label on his product or products information claims. Additionally, IGCC® requires licensees to have a working quality assurance program for the fabrication of insulating glass. Adherence is verified during twice per year plant visits. These requirements were adopted to improve the overall quality of IG units in the program, and also to satisfy requirements established by the Department of Housing and Urban Development, HUD.

Management and control of the program is vested in a Board of Governors made up equally of industry and public interest members. The public interest representatives are empowered with 50 percent of the voting power to ensure against undue industry influence of IGCC® action.

The program is under the supervision of a qualified administrator who is not affiliated with any manufacturer of insulating glass, material supplier, or participating testing laboratory, and is hired by and responsible to the Insulating Glass Certification Council. The manufacturers of the products listed herein have certified that the labeled materials comply with the performance characteristics established by ASTM E2190. The compliance of the manufacturers with the requirements of that specification is validated periodically by the IGCC® administrator through audits and testing by an independent testing laboratory under his direction.

Every manufacturer of insulating glass is eligible and encouraged to apply for the right to use the IGCC® label. However, permission to use the label is not granted until an independent laboratory test verifies compliance with the requirements. Once all requirements have been met, each product is assigned an IGCC® number to identify the product, performance class, and the factory in which it is made. Throughout the year, IGCC® requires the manufacturer to certify that the labels are being used only on units that are produced in the same manner and with the same materials as the tested specimens. Based upon these declarations, IGCC® authorizes continued use of the IGCC® label and the product listing published in this directory.

The Insulating Glass Certification Council wishes to recognize the substantial contributions made by the Safety Glazing Certification Council, the Sealed Insulating Glass Manufacturers Association (SIGMA) (now known as IGMA), American Society for Testing and Materials (ASTM), National Institute of Standards & Technology (NIST), FHA, HUD, Public Interest Persons, the Industry, and particularly consumers. Without input from such a broad cross-section, this program would not be possible.

IGMA®

The Insulating Glass Manufacturers Alliance is a North American association of insulating glass manufacturers, suppliers of component materials and other industry related professionals dedicated to upgrading product / service performance by promoting awareness of technological developments in the industry. IGMA® provides the leadership required to assure the continued growth of the Insulating Glass Industry.

IGMA® was formed as the result of the merger of IGMAC (Insulating Glass Manufacturers Association of Canada) and SIGMA (Sealed Insulating Glass Manufacturers Association) in October 2000 to establish and advance insulating glass technologies and quality processes in order to create a standard of excellence that provides value to the insulating glass industry. As part of its mission, IGMA developed a voluntary certification program for insulating glass units.

The IGMA® Certification Program recognized the need for regular and impartial product testing, maintenance of quality control in the manufacturing process and identification of products that conform to these criteria. Manufacturers of insulating glass units were invited and encouraged to participate in the IGMA® Certification Program.

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Ray Wakefield, President
Jim Krahn, Vice President, Treasurer
Elaine Rodman, Secretary

IGCC® CERTIFICATION COMMITTEE

Joe Erb, Chairman

Membership and voting privileges on the IGCC® Certification Committee shall be extended to (a) each IGCC® Public Interest Governor (b) each IGCC® Business Community Governor (c) each IGCC® or IGMA® participant supplier (d) Public Interest representatives appointed by IGMA® and IGCC® Boards, and (e) each IGCC®/IGMA® participant Licensee who designates a representative to serve on the Certification Committee (listed below).

<u>Licensee</u>	<u>Primary Member</u>	<u>First Alternate</u>	<u>Second Alternate</u>
AGC Flat Glass North America	Mark B. Cody	Thomas Mewbourne	
Albemarle Glass Co., Inc.	Phyllis Coley		
All Counties Glass	Dane Treiber		
Alside Window Co-Midwest	Steve Harp	Lucas Pederson	
Arch Aluminum & Glass L.C.	Cliff Monroe		
Architectural Glass Products, LL	Sharon Gambill		
Architectural Window Mfg. Corp.	Greg Shaffer		
Architectural Windows & Doors	Ken Schnell		
Award Windows, Inc.	Scott Thistle		
Barracuda Manufacturing	Daniel Summers		
Berkowitz J. E., LP	Jim Stinsman		
Brin Northwestern Glass Co.	Stan Mariska	Doug Nelson	
Cardinal IG	Robert G. Spindler	Roger O'Shaughnessy	James Larsen
Changshu Hard Glass Co., Ltd.	Juck Li		
Classic Glass of Battle Creek Inc	Sharon VanNortwick		
Coastal Glass Distributors	Jim Coman		
Coral Industries Glass Division	Eric Fleming		
Craftsman Fabricated Products,	Brian Altwine		
Crystal Window & Door Systems	Bob Zhu		
Custom Glass Prod. Of Carolina	Steven Reeder		
Custom Glass Products Inc.	Victor Reeder	Eric Reeder	Joseph Oboikovitz
Desert Glass Products	Jerome Ellis		
Dlubak Corporation	Chris Cotton		
DongGuang CSG Architectural	Mr. Lu Xiaogang		
Dubuque Glass Company, Inc.	Tim Greenfiled		
Duo Seal Glass, LLC	Ron Bayer		
Eckelt Glas GmbH	Christian Eckelt		
EFCO Corporation	Mark Crane		
Emirates Glass L.L.C.	Jerry Dowling		
FAKRO GP Sp. Z.0.0.	Rafal Rynduch		
Fenplast, Inc.	Michel LeClerc		
Flat Glass Distributors	Tom Hanley		
Gentek Building Products Ltd.	John Mavin		
GGI Glass Distributors Corp.	Ron Vance		
Glass Dynamics	Michael Lankford	Conrad Lankford	
Glass Enterprises Inc.	Jean Yankanich		
Glass Professionals	Kevin Bauer		
GlassFab Tempering Services, I	Brian Frea		

<u>Licensee</u>	<u>Primary Member</u>	<u>First Alternate</u>	<u>Second Alternate</u>
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Glaz-Tech Industries, Inc.	Jack Brown		
Glenny Glass Co.	Draxton Smith		
Global Security Glazing	Mark Johnson		
Goldray USA	Frankie Mauras		
Guang Dong Golden Glass Tech	Wu Cong zhen		
Guardian Glass of Rogers Corp	Carrie L. Gillis	Kevin B. Olah	Daphinne Pedreschi
Gulf Glass Industries, LLC	Samih Fatayerji		
Hankuk Haniso Co.,Ltd.	HS Kim		
Hartung Glass Industries	Alan Kalbfleisch		
Harvey Industries, Inc.	Peter Gent		
Hehr Glass Company	Pete Adams		
Hurd Window and Doors, Inc.	James Sorge	Neil Raleigh	
Impact Safe Glass Co.	Dalton Schreiber		
Inde-Pane, Ltd.	Harvey Dubrofsky		
Insulated Glass of America, Inc.	Janet Holland	Louie Dean	
Insulite Glass Co., Inc.	Larry Vasholz		
Insulpane of Connecticut Ind	Jeff Wise		
Intigral	Mark Hutchinson	Mike Bayer	Susan Ordd
Jasan Glass - JSG	Kyungsoo Lee		
Jersey Tempered Glass, Inc	Mike Bouldin	John Latko	
Jiangmen Yamako Glass Co., Lt	Gary Cheng		
Kenyon Stained Glass Factory, I	Chris Kenyon		
KINRO, Inc.	Krish Kudva		
KML Windows, Inc.	Chris Parker		Gene Loubert
Louisville Plate Glass	Bill Stone		
Mannix Exterior Wall Systems, I	Jerry Esposito		
Marvin Windows	James Krahn	Douglas Steinbring	
Mid-American Glass, Inc.	Lou Magyar		
MLC Glass	Michele LoChirco		
Monarch Windows & Doors	Felix Winston		
Nashville Tempered Glass Corp.	Kevin Moore		
Northern Building Products, Inc.	Robert Pecorella		
Northwest Glass, Inc.	Ben Gillette		
Northwestern Inds, Inc.	Darrell Aldrich	Henry Heiss	Debbie Zimmer
NY Glass Products, Inc.	Jeffrey Newman		
ODL, Inc.	Chuck Pergler		
OKALUX GmbH	Harry Wirth		
Oldcastle Glass	Richard Wright	Robert Williams	
Oldcastle Glass CPG	Richard Wright	Robert Williams	
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Patio Enclosures, Inc.	Kent Nusser	Craig Cox	
PDC Glass & Metal Services	Ken Lancaster		
Pennsylvania Insulating Glass	Timothy Wilkins		

<u>Licensee</u>	<u>Primary Member</u>	<u>First Alternate</u>	<u>Second Alternate</u>
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PGT Industries	Tim Durham		
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PPG Inds. Inc.	John Hiding		
Prelco Inc.	Stephane Mercier	Emilie Lhopiteau	
ProTemp Glass, Inc.	Dan Muccelli		
Qatar Glass Industries	Jack Mansour		
Robert Bowden Inc.	Jim Ritchie		
Rochester Insulated Glass Inc.	Stanley Wolk		
S N E Enterprises, Inc.	Steve Laszinski	Scott Brehm	Mark Brandner
Sage Electrochromics Inc.	Jairo Sotto		
Serious Materials, Inc.	Robert S. Clarke		
Shanghai Yaohua Pilkington Gla	Sun Dahai		
Shenbo Special Architectural Gl	Bob Yang		
Shiang Yi Glass Co., Ltd	Jack Liao		
Shinn Fu Pair Glass Co.	Iduang Hsin Fu		
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Taiwan Glass USA Sales Corp.	Albert Wang		
Tecnoglass S.A.	Christian Daes		
Tempered Glass, Inc.	Doug Sampsel	Joel Wrenn	Matthew Sampsel
Thai-German Specialty Glass C	Zane Mercurio		
The Woodstone Company	Bonnie Thomas		
Thermoseal Industries	Richard Chubb	Larry Klick	
Thompson I.G. , LLC.	Heather Abbas		
Tianjin CSG Architectural Glass	Liu Zai Da		
Tower Glass Products Corp.	Barry Litt		
TRACO (Three Rivers Alum)-PA	Brad Fello		
Tradewood Industries, Ltd.	Brad Wheeler		
Tri-Star Glass	Doug Vail		
Trulite Industries, Ltd.	Gavan Durkin		
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W. A. Wilson Inc.	Bob Hartong	Mark Bond	Jody Campbell

<u>Licensee</u>	<u>Primary Member</u>	<u>First Alternate</u>	<u>Second Alternate</u>
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Winchester Industries	Micheal Sugrue		
Windsor Windows	David Hammond		
Wolverine Glass Products, Inc.	Mark McGann		
Xinyi Group (Glass) Co. Ltd.	Alfred Ngai		
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IN RECOGNITION OF PAST PRESIDENTS WHO SERVED IGCC® SINCE ITS INCEPTION

Roger D. O'Shaughnessy	Cardinal IG	1977-1979
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Colin S. Brady	Twin Pane	1981-1982
Robert G. Spindler	PPG	1982-1983
Jerry Catalano	Hordis Brothers	1983-1985
Dr. Joseph Minor	University of Missouri	1985-1989
Mitchell D. Edwards	SPI Glass Corp.	1989-1992
John Colapietro	Tempglass, Inc.	1992-1993
Robert G. Spindler	Cardinal IG	1993-1996
James Krahn	Marvin Windows	1996-1999
Mark Cody	AFG Industries	1999-2002
Lyle N. Krohnberg	Viracon, Inc.	2002-2004
Mike Grossman	Vitro America, Inc.	2004-2007

**MEETINGS OF THE
CERTIFICATION COMMITTEE**

The Certification Committee of the Insulating Glass Certification Council meets once every nine months. Interested persons may obtain minutes of earlier meetings by visiting the web-page at www.igcc.org or by contacting the Insulating Glass Certification Council.

By-laws and a copy of the annual tax return is available by contacting the Insulating Glass Certification Council which is a 501 (C)(3) Not-for-Profit corporation.

Certification in this directory is up to date as of the date of issue; however, products may be authorized to use the permanent label or authorization removed from time to time. Please contact the IGCC® office for the latest up-to-date information.

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CERTIFIED PRODUCT KEY

Sealant:

HMB	=	Hot Melt Butyl
MPS	=	Modified Polysulfide
MPU	=	Modified Polyurethane
PB	=	Polyisobutylene
PS	=	Polysulfide
PU	=	Polyurethane
SI	=	Silicone
PUMS	=	Polyurethane Modified Silicone
RHMB	=	Reactive Hot Melt Butyl
EPU	=	Extrudable Polyurethane

Construction Components:

K	=	Corner Key
J	=	Joiner
AP	=	Aperture Plug
ASM	=	Air Space Material (ex. Muntins)
CT	=	Capillary Tubes

Construction Materials:

AA	=	Anodized Aluminum
MA	=	Mill Finish Aluminum
AL	=	Aluminum
GS	=	Galvanized Steel
SS	=	Stainless Steel
TS	=	Tinplate Steel
SM	=	Mill Finished Steel
CS	=	Chrome Coated Steel
SO	=	Steel Other (Painted, etc.)
ZS	=	Nickel/Zinc Plated Steel
DC	=	Die Cast
PL	=	Plastic

Desiccant:

MS	=	Molecular Sieve
BL	=	Blended Desiccant
DM	=	Desiccated Matrix

Thermal Break:

DP	=	Desiccated Plastic
PF	=	Plastic Foam
P	=	Plastic

Spacer Systems - Generic:

BCS	=	Butyl Composite Spacer
BFS	=	Butyle Flexible Spacer
BPS	=	Butyl Polycarbonate Spacer
BSS	=	Butyl Sealant Spacer
FS	=	Foam Spacer
PCS	=	Polycarbonate Spacer
PHSS	=	Plastic Hybrid Stainless Steel
PSS	=	Polymer Spacer System
TBAA	=	Thermally Broken Anodized Aluminum
TBCA	=	Thermally Broken Coated Aluminum
TBCS	=	Thermally Broken Chrome Steel
TBGS	=	Thermally Broken Galvanized Steel
TBTS	=	Thermally Broken Tin Steel
TP	=	Thermoplastic Spacer

Substrate:

U	=	Uncoated
C3	=	Sputter Coated, Non-Edge Deleted (Soft)
C2	=	Sputter Coated, Edge Deleted (Soft)
C1	=	Pyrolytic Coated (Hard)
SCF	=	Suspended Coated Film

Fabrication Techniques:

S	=	Soldered
W	=	Welded
B	=	Brazed
BC	=	Bent Corners (1, 2, 3, or 4)
MC	=	Mechanical Connector (1, 2, 3, or 4)

Vapor Barrier:

AF	=	Aluminum Foil
B	=	Butyl
P	=	Plastic
MT	=	Mylar Tape

Gas Content: Ref. Page 53

Gas	=	GCIA (measured value for initial content
Content	=	90% or greater; after weathering, 80% or greater, under "new" program.

Note: The materials of construction as listed above are presented as general information only. The designations for the various component parts are generic and do not reflect specific product modifications or technical differences within a component. For more detailed information on components, contact your insulating glass supplier.

UNDER EACH COMPANY'S NAME IS THEIR IGCC®/IGMA® PERMANENT LABEL

IGCC®/IGMA® CERTIFIED PRODUCTS - ALPHABETICAL BY PLANT

LICENSEE	CERTIFICATION NUMBER	FRAME CONSTRUCTION	SUBSTRATE	SPACER	DESICCANT	SEALANT	GAS CONTENT
AGC Flat Glass North America 1201 Hwy 67 E Alvarado, TX 76009 817-477-1144	1790	BC4/PLJ	U/C2	MA	BL	PB/SI	
AGC 24 IGCC®/IGMA® E2190 '09	2374	BC3/MCI/ASM	U/C3	BCS	BCS	BCS	
AGC Flat Glass North America 365 McClurg Road-Suite E Boardman, OH 44512 330-965-1000							
AGC 61 IGCC®/IGMA® E2190 '09	2613	BC4/SSJ/ASM	U/C2	MA	BL	PB/PS	
AGC Flat Glass North America 575 Currant Rd. Fall River, MA 02720 508-675-9220							
AGC 7 IGCC®/IGMA® E2190 '09	2371	MC4/PLK/ASM	U/C2	MA	MS	PB/SI	
AGC Flat Glass North America 160 N. High Street Hebron, OH 43025-0220 740-929-2443	2372	MC4/PLK/ASM	U/C2	MA	MS	PB/PS	
AGC 15 IGCC®/IGMA® E2190 '09	1447	BC4/PLJ/ASM	U/C2	AA	MS	PB/MPS	
AGC Flat Glass North America 6600 Suemac Pl. Jacksonville, FL 32254-2792 904-786-6611	1456	MC4/PLK/ASM	U/C2	AA	BL	PB/SI	
AGC 02 IGCC®/IGMA® E2190 '09	2063	BC4/GSJ/ASM	U/C2	MA	MS	PB/PS	
AGC Flat Glass North America 2522 Westcott Blvd. Knoxville, TN 37923 865-691-2040	2220	BC4/GSJ/ASM	U/C2	MA	MS	PB/SI	
AGC 05 IGCC®/IGMA® E2190 '09	2356	MC4/PLK/ASM	U/C2	AA	MS	PB	Yes
AGC Flat Glass North America 3200 Austell Rd. Marietta, GA 30060 770-434-2041	2357	MC4/GSK/AP/ASM	U/C2	AA	MS	PB/SI	Yes
AGC 01 IGCC®/IGMA® E2190 '09	1782	BC3/MCI/ASM	U/C2	FS	FS	HMB	
AGC Flat Glass North America 1508 George Brown Drive Marshall, MI 49068 269-789-1267	2359	BC3/MCI/ASM	U/C2	BCS	BSS	BSS	
AGC 64 IGCC®/IGMA® E2190 '09	2584	BC3/MCI/AP/ASM	U/C2	TS	DM	HMB	

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AGC Flat Glass North America 710 Landry Opelousas, LA 70570 337-948-7447	2341	BC4/MT	U/C2	MA	BL	PB/SI	
AGC 88 IGCC®/IGMA® E2190 '09							
AGC Flat Glass North America 480 California Road Quakertown, PA 18951 215-538-9424	1784 2586	BC3/MCI/MT BC3/MCI/AP/ASM	U/C1 U/C2	FS TS	FS DM	PU HMB	
AGC 63 IGCC®/IGMA® E2190 '09							
AGC Flat Glass North America 207 Watlington Industrial Rd. Reidsville, NC 27320 336-342-3878	2007 2420 2585 2624	MC4/PLK BC3/MCI/ASM BC3/MCI/AP/ASM BC3/MCI/SSJ/ASM	U/C3 U/C3 U/C3 U/C3	AA BCS FS TS	MS BCS DM DM	PB/PU BCS HMB RHMB	
AGC 62 IGCC®/IGMA® E2190 '09							
AGC Flat Glass North America 6200 Gorman Rd. Richmond, VA 23231 804-222-0120	2099 2477	MC4/PLK/ASM MC4/PLK/ASM	U/C2 U/C2	MA MA	MS MS	PB/SI PB/PS	
AGC 10 IGCC®/IGMA® E2190 '09							
AGC Flat Glass North America 3515 South 300 West Salt Lake City, UT 84115 801-268-2521	2448	MC4/PLK	U/C2	MA	BL	PB/PS	
AGC 19 IGCC®/IGMA® E2190 '09							
AGC Flat Glass North America 5807 Business Park San Antonio, TX 78218 210-653-7790	2213 2355	BC3/MCI/SJ BC4/SJ	U/C2 U/C2	AA AA	BL BL	PB/MPS PB/SI	
AGC 226 IGCC®/IGMA® '09							
AGC Flat Glass North America 803 Prestige Pkwy Scotia, NY 12302 518-374-3812	2473	BC4/SJ/ASM	U/C3	MA	MS	PB/PS	
AGC 09 IGCC®/IGMA® E2190 '09							
Albemarle Glass Co., Inc. Albemarle Albemarle, NC 28001 704-982-3323 ALB IGCC®/IGMA® '09	2511	MC4/PLK/ASM	U/C1	AA	MS	HMB/PB	

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All Counties Glass 2020 East Miner Avenue Stockton, CA 95205 209-888-8720	2518	MC4/PLK/ASM	U/C2	AA	MS	PB/EPU	
ACG Stockton IGCC@IGMA® '09							
Alside Window Co.-Northwest	2587	BC3/MCI/MT/ASM	U/C3	FS	FS	HMB	Yes
19720 Bothell-Everett Highway Bothell, WA 98012 425-481-7101	2588	BC3/MCI/SS/ASM	U/C3	TS	DM	MPU/HMB	Yes
Alside Bothell IGCC@IGMA® '09							
Alside Window Co.-Midwest 3820 44th Ave. SW Cedar Rapids, IA 52401 319-390-4237	1133	BC3/MCI/ASM	U/C3	TS	DM	HMB	Yes
AWCMW IGCC@IGMA® '09							
Alside Window Co-SE 3800 Farmgate Road Kinston, NC 28501 252-527-5050	1148 2068 2577	BC3/MCI/ASM BC4/LC/ASM BC3/MCI/ASM	U/C3 U/C3 U/C3	TS FS TS	DM FS DM	HMB HMB HMB	Yes
AWCSE IGCC@IGMA® '09							
Alside Window Co-SW 7550 E. 30th St. Yuma, AZ 85365 928-344-6500	2070 2551	BC3/MCI/ASM BC3/MCI/MT/ASM	U/C1 U/C1	TS FS	DM FS	HMB HMB	Yes Yes
AWCSW IGCC@IGMA® '09							
Arch Aluminum 5434 Farmers Market 1488 Magnolia, TX 77354 800-348-0282	1988	BC4/SSJ	U/C1	AA	MS	PB/MPS	
MAG W32 IGCC@IGMA®2009							
Arch Aluminum & Glass 13251 George Weber Drive Rogers, MN 55374 763-428-0019	2481 2482	MC4/GSK/MT MC4/GSK/MT	U/C3 U/C3	GS GS	MS MS	PB/MPS PB/SI	
ROG W39 IGCC@IGMA® 2009							
Arch Aluminum & Glass 8531 E. 44th Street Tulsa, OK 74145 918-665-6655 TUL W41 IGCC@IGMA® '09	1960	BC4/ALJ	U/C2	AA	MS	MPU/HMB	

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Arch Aluminum & Glass Co. 19430 East San Jose St. City of Industry, CA 91730 909-594-0235	1976 1977	MC4/GSK/ASM MC4/GSK	U/C2 U/C2	AA AA	MS MS	PB/MPS PB/SI	
COI W29 IGCC@IGMA@2009							
Arch Aluminum & Glass Co., Inc. 11950 E. 33rd Ave. Aurora, CO 80010 303-340-4290	1990 1991	MC4/GSK/ASM MC4/GSK/ASM	U/C2 U/C2	AA AA	MS MS	PB/SI PB/MPS	
ARA W31 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 750 Cardinal Drive Bridgeport, NJ 08014 800-237-5148	1591	MC4/PLK	U/C2	AA	MS	PB/SI	
BPT W07 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 297 Ascot Parkway Cuyahoga Falls, OH 44223 330-923-3726	2635 2636	BC4/TSJ BC4/TSJ	U/C2 U/C2	AA AA	MS MS	PB/PS PB/SI	
CUF W24 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 7701 W. New York St. Indianapolis, IN 46214 800-876-0646	1323 2002	MC4/GSK/ASM MC4/GSK/ASM	U/C2 U/C2	AA AA	MS MS	PB/MPS PB/SI	
IND W14 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 2030 N.W. Progress Parkway Jackson, MS 39213 800-815-5658	1883 2495	MC4/PLK/ASM MC4/PLK/ASM	U/C2 U/C2	AA AA	MS MS	PB/SI PB/SI	
IAC W22 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 5700 South Moreland Road New Berlin, WI 53155 800-242-2071	2471 2478 2483 2484	BC4/PLJ/ASM MC4/PLK/ASM BC4/PLJ/ASM MC4/PLK/ASM	U/C2 U/C2 U/C2 U/C2	TBSS TBSS AA AA	MS MS MS MS	PB/SI PB/MPS PB/SI PB/MPS	
NBR W23 IGCC@IGMA@2009							
Arch Aluminum & Glass L.C. 3320-B Maggie Blvd. Orlando, FL 32811 800-367-7211	1821 1908	BC4/GSJ/ASM BC4/GSJ/ASM	U/C2 U/C2	AA AA	MS MS	PB/MPS PB/SI	
ORL W04 IGCC@IGMA@2009							

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Arch Aluminum & Glass L.C.	1597	MC4/GSK/ASM	U/C2	AA	MS	PB/SI	
1825 S. 43rd Avenue Phoenix, AZ 85009 800-854-8022	1598	MC4/GSK/ASM	U/C2	AA	MS	PB/MPS	
PHX W30 IGCC@IGMA® 2009							
Arch Aluminum & Glass L.C.	2329	MC4/GSK/ASM	U/C2	AA	MS	PB/MPS	
1655 South Awl Circle Salt Lake City, UT 84104 801-656-1660	2332	MC4/GSK/ASM	U/C2	AA	MS	PB/SI	
SLC W34 IGCC@IGMA® 2009							
Arch Aluminum & Glass L.C.	2254	MC4/GSK/ASM	U/C2	AA	MS	PB/MPS	
540 Industrial Court West Villa Rica, GA 30180 800-241-7462	2255	MC4/GSK/ASM	U/C2	AA	MS	PB/SI	
VRA W08 IGCC@IGMA® 2009							
Arch Aluminum & Glass L.C.	1485	MC4/PLK/ASM	U/C2	AA	MS	PB/MPS	
285 Northbrook Drive Youngsville, NC 27596 919-435-3050	1647	MC4/PLK/ASM	U/C2	AA	MS	PB/SI	
YGV W20 IGCC@IGMA® 2009							
Arch Tempered Glass Products	1749	MC4/GSK	U/C2	AA	MS	PB/SI	
4400 Cambridge Road Fort Worth, TX 76155 800-571-4832	1750	BC4/GSJ	U/C2	AA	MS	PB/MPS	
DAL W35 IGCC@IGMA® 2009							
Architectural Window Mfg. Corp. 359 Veterans Blvd. Rutherford, NJ 07070 201-939-2200	1579	BC4/GSJ	U/C1	AA	MS	PB/SI	
AWM IGCC@IGMA® '09							
Barracuda Manufacturing 48230 West Rd. Wixom, MI 48393 248-624-5050	2076	BC3/MC1/ASM	U/C2/U	FS/FS	FS/FS	HMB	Yes
Barracuda IGCC@IGMA® '09	2258	BC3/MC1/MT/ASM	U/C2	FS	FS	SI	
Berkowitz J. E., LP One Gateway Boulevard Pedricktown, NJ 08067 856-456-7800	1565	BC4/PLJ	U/C2	AA	MS	PB/SI	Yes
JEB IGCC@IGMA® '09	2317	MC4/PLK	U/C2	TBAA	MS	PB/SI	Yes

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Brin Northwestern Glass Co. 2300 N. 2nd Street Minneapolis, MN 55411 612-529-9671 BV IGCC®/IGMA® '09	1580	BC4/SSJ/AP/ASM	U/C2	MA	MS	PB/PU	Yes
Cardinal IG 4611 15th Ave N.W. Fargo, ND 58102 701-492-0920 CIG-6 IGCC®/IGMA® '09	1464 1492	BC4/MT/ASM BC4/ALJ/AF/ASM	U/C2/U U/C2/U	SS/SS AA/AA	MS/MS MS/MS	PB/SI PB/SI	Yes Yes
Cardinal IG 301 E. McSwain Drive Fremont, IN 46737 260-495-4105 CIG-5 IGCC®/IGMA® '09	1452 1453	BC4/GSJ/ASM BC4/ALJ/AF/ASM	U/C2/U U/C2/U	AA/AA SS/SS	MS/MS MS/MS	PB/SI PB/SI	Yes Yes
Cardinal IG Iowa 25 N. Greenfield, IA 50894 641-343-7113 CIG-2 IGCC®/IGMA® '09	1030	BC4/PLJ/ASM	U/C2/U	SS/SS	MS/MS	PB/SI	Yes
Cardinal IG 3125 Neal Creek Mill Road Hood River, OR 97031 541-354-1280 CIG-9 IGCC®/IGMA® '09	1923 1924	BC4/ALJ/ASM BC4/PLJ/ASM	U/C2/U U/C2/U	AA/AA SS/SS	MS/MS MS/MS	PB/SI PB/SI	Yes Yes
Cardinal IG 50 Elmwood Rd. Mountain Top, PA 18707 570-474-3109 CIG-11 IGCC®/IGMA® '09	2221 2222	BC4/ALJ/ASM BC4/PLJ/ASM	U/C2 U/C2	AA SS	MS MS	PB/SI PB/SI	Yes Yes
Cardinal IG 1011 E. Madison St. Spring Green, WI 53588 608-588-7415 CIG-3 IGCC®/IGMA® '09	1036 1306	BC4/PLJ/AF/ASM BC4/ALJ/AF/ASM	U/C2/U U/C2	SS/SS AA	MS/MS MS	PB/SI PB/SI	Yes Yes
Cardinal IG 1620 Town Line Rd Tomah, WI 54660 608-372-3300 CIG-4 IGCC®/IGMA® '09	1039 1295	BC4/PLJ/AF/ASM BC4/ALJ/AF/ASM	U/C2/U U/C2/U	SS/SS AA/AA	MS/MS MS/MS	PB/SI PB/SI	Yes Yes

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Cardinal IG	1970	BC4/GSJ/ASM	U/C2	SS	MS	PB/SI	Yes
2132 Cardinal Park Drive Vinton, VA 21179	1971	BC4/ALJ/ASM	U/C2	AA	MS	PB/SI	Yes
540-892-5600							
CIG-10 IGCC®/IGMA® '09							
Cardinal IG	1574	BC4/ALJ	U/C2	AA	MS	PB/SI	Yes
201 Cardinal Road	1718	BC4/PLJ	U/C2	SS	MS	PB/SI	Yes
Waxahachie, TX 75165							
972-937-4969							
CIG-8 IGCC®/IGMA® '09							
Classic Glass of Battle Creek Inc.	1004	BC4/GSJ/ASM	U/C1	AA	MS	PB/PS	
21472 M-37	1010	BC4/GSJ/ASM	U/C1	AA	MS	PB/SI	
Battle Creek, MI 49017	2392	BC4/GSJ/ASM	U/C1	TBMA	MS	PB/PS	
269-968-2791							
Classic Glass IGCC®/IGMA® '09							
Coastal Glass Distributors	1366	BC3/MC1/MT/ASM	U/C2	FS	FS	HMB	
7421 E. Spartan Blvd. Charleston, SC 29418-8462							
843-552-6377							
CGD IGCC®/IGMA® '09							
Coral Industries	2428	BC4/MT	U/C3	FS	FS	HMB	
3010 Rice Mine Road Tuscaloosa, AL 35406							
205-345-1013							
Coral IGCC®/IGMA® '09							
Craftsman Fabricated Products	1867	BC3/MC1/PLJ/AJ	U/C2	MA	MS	PB/PS	
4822 Southerland Houston, TX 77092	1868	BC3/MC1/PLJ/AJ	U/C2	MA	MS	PB/SI	
713-353-5800							
CFP IGCC®/IGMA® '09							
Custom Glass Prod. Of Carolina	2419	MC4/PLK	U/C2	AA	MS	PU	
1475 Harrison Rd. Salisbury, NC 28144							
704-633-4946							
CGPC IGCC®/IGMA® '09							
Custom Glass Products Inc.	1964	MC4/PLK	U/C3	AA	MS	PB/SI	
7515 Venture Circle Weston, WI 54476							
715-359-2252							
CGP IGCC®/IGMA® '09							

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Desert Glass Products 4700 Engineers Way Suite 101 North Las Vegas, NV 89031 866-657-8090	1919 1920	MC4/PLK/ASM MC4/PLK	U/C2 U/C2	AA AA	BL BL	PB/PS PB/SI	
Desert Glass IGCC®/IGMA® '09							
Dlubak Corporation 520 Chestnut St. Blairsville, PA 15717 724-459-9540	1996	MC4/PLK	U/C1	AA	MS	PB/SI	
Dlubak IGCC®/IGMA® '09							
DongGuang CSG Architectural Glass Co., Ltd. Xinji Village, Machong DongGuang City, GuangDong, China 86-755-27371028	1476	BC4/GSJ	U	AA	MS	HMB/PS	
CSG IGCC®/IGMA® 1476 '09							
Dubuque Glass Company, Inc. 801 Cedar Cross Rd. Dubuque, IA 52003 563-582-5475	2263	BC3/MC1/PLK	U/C2	AA	MS	PB/RHMB	
DGC IGCC®/IGMA® '09							
Duo Seal Glass, LLC 500 Nordhoff Place Englewood, NJ 07631 201-567-7902	2485 2486	MC4/PLK/ASM MC4/PLK/ASM	U/C1 U/C1	AA AA	MS MS	PB/PU PB/SI	
Duo Seal IGCC®/IGMA® '09							
Eckelt Glas GmbH ResthofstraBe 18 Steyr, A4403 Austria 430-725-2894	2228 2229 2230	BC4/SSJ BC4/SSJ BC4/SSJ	U/C1/U U/C1/U U/C1/U	MA/MA SS/SS SS/SS	MS/MS MS MS/MS	PB/PS PB/PS PB/SI	Yes Yes Yes
Eckelt IGCC®/IGMA® '09							
EFCO Corporation 1000 County Rd. & Bridle Ln. Monett, MO 65708 417-235-6011	2244	BC3/MC1/AP/ASM	U/C2	TS	DM	MPU/HMB	
EFCO IGCC®/IGMA® '09							
Emirates Glass L.L.C. Al Quoz Indl. Area #4 Dubai, United Arab Emirates 971-434-7151	2246 2334	MC4/ALK MC4/ALK	U/C1 U/C1	MA MA	MS MS	PB/PU PB/SI	
Emirates IGCC®/IGMA® '09							

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FAKRO GP Sp. Z.O.O. ul. Wegierska 144A 33-300 Nowy Sacz, Poland 481-844-4035	2042	BC2/MC2/PLK	U/C2	SS	MS	PB/PU	Yes
FAKRO IGCC®/IGMA® '09 Fenplast, Inc. 150 rue Brassard Delson, QC J5B 1X1 Canada 514-990-0012	2087	BC3/MC1/MT/ASM	U/C1	FS/FS	FS/FS	HMB	Yes
Fenplast IGCC®/IGMA® '09 Flat Glass Distributors 5355 Shawland Road Jacksonville, FL 32254 904-354-5413	2467	BC4/PLJ/ASM	U/C1	FS	FS	FS/HMB	
FGD IGCC®/IGMA® '09 Gentek Building Products Ltd. 6320 Colonel Talbot Rd. London, ON N6P 1J1 Canada 519-652-3246	2382	BC4/AP/ASM	U/C2	FS	FS	HMB	Yes
Genteck IGCC®/IGMA® '09 GGI Glass Distributors Corp. 101 Venture Way Secaucus, NJ 07096 201-553-1850	1963	MC4/PLK/ASM	U/C1	AA	MS	PB/SI	
GGI IGCC®/IGMA® '09 Glass Dynamics 8901 220 Bypass Stoneville, NC 27048 336-573-2393	1925	BC4/SSJ/ASM	U/C2	MA	MS	PB/SI	Yes
GDI IGCC®/IGMA® '09 Glass Enterprises Inc. 2277 New York Avenue Bensalem, PA 19020 215-638-1007	1436	BC4/SJ/ASM	U/C1	AA	MS	PB/PU	
Beta-Pane IGCC®/IGMA® 1436 '09 Glass Professionals 700 New York Avenue Des Moines, IA 50313 515-288-7427	2634	BC4/SS/ASM	U/C2	MA	MS	PB/PS	
GP IGCC®/IGMA® 1747 '09							

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GlassFab Tempering Services Inc. 1448 Mariani Court Tracy, CA 95376 209-229-1060	2461	MC4/PLK	U/C2	AA	MS	PB/SI	
GlassFab IGCC®/IGMA® '09							
Glaz Tech 8017 Edith Blvd. Albuquerque, NM 87113 505-898-1460	1285	MC4/PLK	U/C1	MA	MS	PB/MPS	
GTI Albuquerque IGCC®/IGMA® '09							
Glaz-Tech Industries 3702 Buckeye Pheonix, AZ 85009 866-624-3394	2331	MC4/PLK/ASM	U/C2	AA	BL	PB/HMB	
GTI Pheonix IGCC®/IGMA® '09							
Glaz-Tech Industries 2191 South 300 West Salt Lake City, UT 84115 801-467-3136	2330	MC4/PLK/ASM	U/C2	AA	MS	PB/HMB	
GTI SLC IGCC®/IGMA® '09							
Glaz-Tech Industries 150 Industrial Rd. Santa Teresa, NM 88008 505-589-4970	2340	MC4/PLK/ASM	U/C2	AA	MS	PB/PS	
GTI Santa Teresa IGCC®/IGMA® '09							
Glenny Glass Co. 209 Castleberry Court Milford, OH 45150 800-535-2133	2427	MC4/PLK/ASM	U/C1	MA	MS	PB/PS	
GLG IGCC®/IGMA® '09							
Global Security Glazing 616 Selfield Road Selma, AL 36703 334-875-1900	2003	MC4/PLK	U/C2	MA	MS	PB/SI	
Global IGCC®/IGMA® '09							
Goldray USA 35 Kent Avenue Brooklyn, NY 11211 718-388-7667	2410	BC4/MT	U/C1	FS	FS	PB/SI	
Goldray IGCC®/IGMA® '09							

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Graham Architectural Products 1551 Mt. Rose Ave. York, PA 17405 717-849-8100	1428	BC4/SJ/ASM	U/C1	AA	MS	PB/SI	
Graham IGCC@/IGMA@ '09							
Guang Dong Golden Glass Technologies Diejin Enterprise District Shantou College Road Shantou, Guang Dong, China GDGG IGCC@/IGMA@ '09	2386	BC4/GSJ	U/C1	MA	MS	PB/SI	
Guardian Fabrication Inc. 5 Cudworth Road Webster, MA 01570 508-943-6600	2312	BC2/MC2/PLK/ASM	U/C2	AA	MS	PB/SI	
Guardian Glass of Rogers Corp 1412 S. First St. Rogers, AR 72756 479-636-0888	2354	BC3/MCI/ASM	U/C2	BCS	MS	BCS	
GRD-062 IGCC@/IGMA@ '09							
Gulf Glass Industries, LLC 13th Industrial Area Sharjah, United Arab Emirates 971-653-8550	1710 2096	MC4/ALK MC4/ALK	U/C2 U/C2	MA MA	MS MS	PB/SI PB/PU	Yes
GGI IGCC@/IGMA@ 1710 '09							
Hankuk Haniso Co.,Ltd. Processed Glass Sector 585-14 Gajwa Dong Incheon, 404-250 Korea Hankuk IGCC@/IGMA@ '09	2387	BC4/MT	U/C2	AA	MS	PB/SI	
Hartung Glass Industries 8211 Siena Avenue Sacramento, CA 95828 916-266-5700	2327 2347	BC4/SJ/MT BC4/SJ/MT	U/C2 U/C2	MA MA	MS MS	PB/MPS PB/SI	Yes Yes
HGI SAC IGCC@/IGMA@ 08							
Hartung Glass Industries 173830 West Valley Highway Tukwila, WA 98188 800-552-2227	2493 2494 2515	MC4/PLK/ASM MC4/PLK/ASM BC4/SJ/MT/ASM	U/C2 U/C2 U/C3	MA MA FS/FS	MS MS FS/FS	PB/PS PB/SI HMB	Yes Yes Yes
HGI TUK IGCC@/IGMA@ 08							

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Harvey Industries, Inc.	1531	BC3/MC1/AP/ASM	U/C3	TS	DM	HMB	
30 Jack's Bridge Road	2205	BC3/MC1/MT/ASM	U/C2	BFS	BFS	BFS/PUMS	Yes
Londonderry, NH 03503-2145	2466	BC3/MC1/AP/ASM	U/C3/C3	TS/TS	DM	HMB/PUMS	
603-216-8300							
HII-1 IGCC@/IGMA® '09							
Harvey Industries, Inc.	1533	BC4/AP/ASM	U/C3	TS	DM	HMB	
570 Cottage Road							
Springfield, MA 01104							
413-788-0066							
HII-4 IGCC@/IGMA® '09							
Hehr Glass Company	1752	MC4/PLK	U/C1	AA	BL	PB/SI	
1021 Walnut Ave.	1796	MC4/PLK	U/C1	AA	BL	PB/PU	
Pomona, CA 91766							
909-628-5557							
HEHR Glass 1752 IGCC@/IGMA® '09							
Hurd Windows and Doors, Inc.	1815	MC4/PLK/ASM	U/C2	AA	MS	PB/MPU	Yes
1815 Water St.	1816	BC3/MC1/ASM	U/C2	TS	DM	MPU	Yes
Merrill, WI 54452	1818	BC4/GSJ/ASM	U/C2	SS	DM	MPU	Yes
715-748-1756							
HWDI IGCC@/IGMA® '09							
Impact Safe Glass Co.	1899	BC3/MC1/ASM	U/C2	BCS	BCS	BCS/HMB	
2705 N. 35th Street							
Tampa, FL 36535							
813-247-5528							
ISG IGCC@/IGMA® '09							
Inde-Pane, Ltd.	2319	BC3/MC1/ASM	U/C1	TS	DM	HMB	Yes
11111 Colbert							
Ville D'Anjou, QC H1J 2S1 Canada							
514-494-1575							
Inde-Pane IGCC@/IGMA® '09							
Insulated Glass of America, Inc.	2544	BC3/MC1/PLK/ASM	U/C2	AA	MS	PB/SI	
102 East Fields Street							
Dallas, NC 28034							
704-917-0880							
IGA IGCC@ E2190 '09							
Insulite Glass Co., Inc	1702	BC3/MC1/GSJ/ASM	U/C2	MA	MS	PB/SI	
780 W. Frontier Circle	2008	BC4/GSJ/ASM	U/C2	MA	MS	PB/PS	
Olathe, KS 66063-0803							
913-780-2233							
ISL IGCC@/IGMA® 1702 '09,							

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Insulpane of Connecticut Ind. 30 Edmond St. Hamden, CT 06517 203-865-8212	1966	BC3/MC1/PLK/ASM	U/C1	AA	MS	PB/PS	
	2208	MC4/PLK/ASM	U/C1	AA	MS	PB/HMB	
Insulpane CT IGCC®/IGMA® '09	1200	BC3/MC1/AP/ASM	U/C3	TS	DM	HMB	Yes
	2638	BC3/MC1/ASM	U/C3	FS	FS	HMB	Yes
	2639	BC3/MC1/ASM	U/C3/U	FS/FS	ES/FS	HMB	Yes
	2661	BC3/MC1/ASM	U/C2/U	SS/SS	DM/DM	RHMB/HMB	Yes
Intigral 125 E. Steels Corners Rd. Cuyahoga Falls, OH 44223 330-922-3944	2026	BC3/MC1/AP/ASM	U/C2	TS	DM	HMB	Yes
	EST 2026 IGCC®/IGMA® '09						
Intigral 7850 Northfield Rd. Walton Hills, OH 44146 440-439-0980	2238	BC3/MC1/AP/ASM	U/C3/U	TS/TS	DM/DM	RHMB/HMB	Yes
	2519	BC3/MC1/AP/ASM	U/C3	TS	DM	HMB	Yes
	2522	BC4/PLJ/ASM	U/C2/U	TS/TS	DM	RHMB/HMB	Yes
	2640	BC3/MC1/ASM	U/C3	FS	FS	HMB	Yes
EST IGCC®/IGMA® '09	1268	BC3/MC1/AP/ASM	U/C3	TS	DM	HMB	Yes
	1606	BC3/MC1/ASM	U/C3/U	FS/FS	FS/FS	HMB	Yes
	1724	BC3/MC1/AA/ASM	U/C3/U	TS/TS	DM	RHMB/HMB	Yes
	1788	BC3/MC1/AP/ASM	U/C3/U	TS	DM	PB/PU	Yes
EST IGCC®/IGMA® '09	2037	BC3/MC1/ASM	U/C3	TS	DM	RHMB/HMB	Yes
	2302	BC3/MC1/SSJ/ASM	U/C2/U	SS/SS	DM	RHMB	Yes
Jasan Glass - JSG 459-1 Neojo-Ri, Jori-Eup, Paju Gyeonggi, 413-821 South Korea 82-31-941-6289	2274	BC4/ALJ	U/C1	MA	MS	PB/SI	
	2275	BC4/SSJ	U/C2	SS	MS	PB/SI	
Jasan Glass 2274/2275 IGCC®/IGMA® '09	689	MC4/PLK/ASM	U/C3	AA	MS	PU/PU	
	750	MC4/PLK/ASM	U/C1	AA	MS	PB/PU	
Jersey Tempered Glass, Inc. 2035 Briggs Rd. Mt. Laurel, NJ 08054 856-273-8700	2391	BC3/MC1/PLK/ASM	U/C2	AA	MS	PU	
	JTG IGCC®/IGMA® '09						
Kenyon Stained Glass Factory, Inc. 5720 North Meadows Drive Grove City, OH 43123 614-539-8740	2391	BC3/MC1/PLK/ASM	U/C2	AA	MS	PU	
	Kenyon IGCC®/IGMA® '09						

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KINRO, Inc.	2560	BC3/MCI/ASM	U/C3	TS	DM	MPU/HMB	
2423 Messick Rd.	2568	BC3/MCI/MT/ASM	U/C3	FS	FS	HMB	
Goshen, IN 46526	2571	MC4/PLK/ASM	U/C3	AA	BL	HMB	
574-534-6660	2684	BC3/MCI/ASM	U	TS	DM	HMB	
KINRO IN IGCC@IGMA@'09							
KINRO, Inc.	2073	BC3/MCI/ASM	U/C3	TS	DM	HMB	Yes
944 N. Kings Rd.	2417	MC4/PLK/ASM	U/C3	AA	BL	HMB	
Nampa, ID 83687-3193	2535	BC3/MCI/ASM/CT	U/C3	TS	DM	HMB	Yes
208-466-4523							
KINRO ID IGCC@IGMA@'09							
KML Windows, Inc.	2373	BC4/MT/ASM	U/C1	FS	FS	RHMP	Yes
23 Buchanan Court	2565	BC4/MT	U/C1/U	FS/FS	FS/FS	RHMP	Yes
London, ON N5Z 4P9 Canada							
519-681-7014							
KML IGCC@IGMA@'09							
Louisville Plate Glass	1281	MC4/PLK	U/C2	AA	MS	PB/SI	
1401 W Broadway	1603	MC4/PLK	U/C2	AA	MS	PB/MPS	
Louisville, KY 40201							
502-584-6145							
LPG IGCC@IGMA@'09							
Mannix Exterior Wall Systems, Inc.	1746	MC4/PLK	U/C2	AA	MS	PB/PU	
345 Crooked Hill Road							
Brentwood, NY 11717							
631-231-0800							
Mannix IGCC@IGMA@ 1746 '09							
Marvin Windows	1848	MC4/PLK/ASM	U/C2	AA	MS	PB/PU	Yes
PO Box 100							
Warroad, MN 56763							
218-386-1430							
Marvin 01 IGCC@IGMA@'09							
Mid-American Glass	2315	MC4/PLK	U/C2	AA	MS	PB/RHMB	
147 S. Sturdevant St.							
Davenport, IA 52808-3428							
563-326-6294							
Mid American IGCC@IGMA@'09							
MLC Glass	2307	BC4/GSJ/ASM	U/C2	MA	MS	PB/FS	Yes
2553 23 Mile Road							
Shelby Township, MI 48316							
586-731-1630							
MLC IGCC@IGMA@'09							

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Monarch Windows & Doors PO Box 249 Anniston, AL 36202 256-831-7000	2536	BC4/ASM	U/C2	BCS	BCS	BCS	
Monarch Windows IGCC®/E2190 '09							
Nashville Tempered Glass Corp. 1860 Air Lane Drive Nashville, TN 37210 800-228-3729	1117 1184	BC3/MC1/PLK BC3/MC1/PLK	U/C2 U/C2	AA MA	MS MS	PB/PU PB/PU	
NTGC IGCC®/IGMA® '09							
Nashville Tempered Glass LLC 1241 Avondale Dr. Hendersonville, TN 37075 800-228-3729	2499	BC4/SSJ	U/C2	AA	MS	PB/MPS	
NTGC IGCC®/IGMA® '09							
Northern Building Products, Inc. 111 Central Ave. Teterboro, NJ 07608 201-943-6400	1973 2413	BC4/LC BC3/MC1/ASM	U/C1 U/C1	BSS BCS	BSS BCS	BSS BCS	
NBP IGCC®/IGMA® '09							
Northwest Glass, Inc. 127 Regal St. Billings, MT 59104 406-252-7196	865 2424	MC4/PLK/ASM MC4/PLK/ASM	U/C2 U/C2	AA AA	MS MS	PU/PU HMB	
NWG IGCC®/IGMA® '09							
Northwestern Inds, Inc. 2501 Commodore Way Seattle, WA 98199 206-285-3140	1635	BC2/MC2/PLK/ASM	U/C2	MA	MS	PB/SI	
NWI Sea WA IGCC® '09							
Northwestern Inds, Inc. East 30th Street Yuma, AZ 98365 206-285-3140	2249	BC4/SJ	U/C2	MA	MS	PB/SI	
N.W.I. IGCC®/IGMA® '09							
NY Glass Products, Inc. 45 Doat Street Buffalo, NY 14211 716-891-1000	1586	MC4/PLK/AP/ASM	U/C2	AA	MS	PB/PS	
NY Glass IGCC®/IGMA® 1586 '09							

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ODL, Inc. 215 E. Roosevelt Avenue Zeeland, MI 49464 616-772-9111	1892	BC3/MC1/MT/ASM	U/C1	BCS	BCS	BCS	
ODL IGCC@/IGMA@ '09							
ODL, Inc., Vidrio Decorativo Occidental S. A. de C. V. Poniente 4 Entre Borte 7 y Gral Pedro Hinojosa Ciudad Industrial H. Matamoros Tamps., Mexico 868-812-9152	2637	BC3/MC1/MT/ASM	U/C1	BCS	BCS	BCS	
VDO IGCC @ E2190 '09							
OKALUX GmbH Am Jospershecklein 1 97828 Marktheidenfeld-Atfeld Deutschland, Germany 939-190-0241	1866	MC4/PLK	U/C2	MA	MS	PB/SI	
OKA IGCC@/IGMA@'09							
Oldcastle Glass CPG 300 Cooperative Way Wright City, MO 63390 636-745-3030	2043 2206 2400	BC4/MC1/GSJ BC4/GSJ BC4/SSJ	U/C2 U/C2 U/C2	MA SS TBSS	MS MS MS	PB/SI PB/SI PB/SI	Yes Yes Yes
Oldcastle 35 IGCC@/IGMA@ E2190 '09							
Oldcastle Glass Albertville 5334 Barthel Drive Albertville, MN 55301 763-497-3212	1968 2501	BC4/PLJ/ ASM BC4/SSJ/ASM	U/C2 U/C2	MA SS	MS MS	PB/SI PB/SI	Yes Yes
Oldcastle 22 IGCC@/IGMA@ E2190 '09							
Oldcastle Glass Atlanta 14117 Industrial Park, NE Covington, GA 30014 678-212-7700	914	MC4/PLK/AP/ASM	U/C2	AA	MS	PB/SI	Yes
Oldcastle 42 IGCC@/IGMA@ E2190 '09							
Oldcastle Glass Bensenville 1001 Foster Ave. Bensenville, IL 60106 630-595-3750	1823	MC4/PLK	U/C2	AA	MS	PB/SI	
Oldcastle 23 IGCC@/IGMA@ E2190 '09							
Oldcastle Glass Burnips 4257 30th St. Burnips, MI 49314 616-896-8341	732 1424 2605	MC4/PLK MC4/PLK/ASM BC4/SSJ	U/C1 U/C1 U/C1	AA AA SS	MS MS MS	PB/SI PB/PU PB/SI	Yes Yes Yes
Oldcastle 28 IGCC@/IGMA@ E2190 '09							

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Oldcastle Glass Calgary	2430	BC3/MC1/MT/ASM	U/C2	FS/FS	FS	HMB	Yes
3815 - 72 Avenue SE	2431	MC4/PLK/ASM	U/C2/U	AA/AA	MS	PB/SI	Yes
Calgary, AB T2C2K3 Canada							
403-279-2544							
Oldcastle IGCC@IGMA@E2190 '09							
Oldcastle Glass Cheshire	1736	MC4/PLK/SJ	U/C1	MA	MS	PB/SI	
224 Sandbank Rd.							
Cheshire, CT 06410							
203-272-2211							
Oldcastle 16 IGCC@IGMA@E2190 '09							
Oldcastle Glass Chicago	1289	BC4/PLJ/ASM	U/C1	AA	MS	PB/RHMB	
4161 S Morgan St.	1986	MC4/PLK/ASM	U/C1	AA	MS	RHMB	
Chicago, IL 60609	1987	BC4/PLJ	U/C1	AA	MS	PB/SI	
773-523-8400							
Oldcastle 24 IGCC@IGMA@E2190 '09							
Oldcastle Glass Denver	932	BC2/MC2/PLK/ASM	U/C2	AA	MS	PB/SI	
11205 E. 37th Ave.	1496	BC3/MC1/PLK/CT/AS	U/C2	AA	MS	PB/MPS	
Denver, CO 80239	1940	BC3/MC1/CT/ASM	U/C2	FS	FS	RHMB	
303-371-5511	2606		U	AA			
Oldcastle 71 IGCC@IGMA@E2190 '09							
Oldcastle Glass Dist. Of Columbia	1714	MC4/PLK/ASM	U/C1	AA	MS	PB/SI	Yes
5415 Lee Highway							
Warrenton, VA 20187							
540-347-5600							
Oldcastle 13 IGCC@IGMA@E2190 '09							
Oldcastle Glass Fremont	1111	MC4/PLK/ASM	U/C2	AA	MS	PB/SI	
6850 Stevenson Blvd.	1979	MC4/PLK/ASM	U/C2	AA	MS	PB/MPS	
Fremont, CA 94538							
510-651-2292							
Oldcastle 84 IGCC@IGMA@E2190 '09							
Oldcastle Glass Grand Prairie	862	BC4/PLJ	U/C2	AA	MS	PB/SI	
1101 Fountain Pkwy.	2001	BC3/MC1/PLJ	U/C2	AA	MS	PB/HMB	
Grand Prairie, TX 75050							
972-647-4028							
Oldcastle 83 IGCC@IGMA@E2190 '09							
Oldcastle Glass Houston	1136	BC4/SSJ/ASM	U/C2	AA	MS	PB/HMB	
1331 W. Sam Houston Pkwy N.	1137	BC4/SSJ/ASM	U/C2	AA	MS	PB/SI	
Houston, TX 77043							
713-464-5611							
Oldcastle 65 IGCC@IGMA@E2190-08							

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Oldcastle Glass Indianapolis 4635 W. 84th St., Ste. 100 Indianapolis, IN 46268 317-876-1155	653 917	MC4/PLK/AP/ASM MC4/PLK/AP/ASM	U/C2 U/C2	MA MA	MS MS	PB/SI PB/PU	
Oldcastle 29 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Langley 5075 275th Street Langley, BC V4W 0A8 Canada 604-607-1300	2322 2323 2324	MC4/PLK/ASM MC4/PLK/ASM BC3/MC1/MT/ASM	U/C2 U/C2 U/C2	AA AA FS	MS MS FS	PB/HMB PB/SI HMB	Yes Yes Yes
Oldcastle 91 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Los Angeles 5631 Ferguson Dr. Los Angeles, CA 90022 323-887-6000	1437 1619	MC4/PLK/ASM MC4/PLK/ASM	U/C2 U/C2	AA AA	MS MS	PB/SI PB/MPS	
Oldcastle 74 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Miami 17851 NW Miami Court Miami, FL 33169 305-652-3350	1101	MC4/PLK/ASM	U/C1	AA	MS	PB/SI	
Oldcastle 82 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Milwaukee N48 WI 3334 Hampton Ave Menomonee Falls, WI 53051 262-781-9683	1999	MC4/PLK/ASM	U/C3	AA	MS	PB/RHMB	Yes
Oldcastle 32 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Montreal 12755 boul Industriel Pointe-aux-Trembles, QC H1A 4Z6 Canada 514-640-5355	2579 2580	MC4/PLK/ MC4/PLK	U/C2 U/C2	AA PHSS	MS MS	PB/SI PB/SI	Yes Yes
Oldcastle Montreal IGCC®/IGMA® '09							
Oldcastle Glass Moorestown 1500 Glen Ave., Techni Park Moorestown, NJ 08057 856-234-9222	2084	BC4/SJ/ASM	U/C1	AA	MS	PB/SI	Yes
Oldcastle 12 IGCC®/IGMA® E2190 '09							
Oldcastle Glass New York 895 Motor Pkwy. Hauppauge, NY 11788-8839 631-234-2200	1577 2235	BC3/MC1/MT BC4/ASM	U/C2 U/C2	TP MA	TP MS	TP/SI PB/SI	Yes Yes
Oldcastle 15 IGCC®/IGMA® E2190 '09							

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Oldcastle Glass Perrysburg	1584	BC4/AP/SJ	U/C2	AA	MS	PB/SI	Yes
Ampoint Industrial Park 291 "M" Street Perrysburg, OH 43551 419-666-2000	2642	BC4/AP/SJ	U/C2	PHSS	MS	PB/SI	Yes
Oldcastle 81 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Phoenix 3404 W. Papago St. Phoenix, AZ 85009 602-253-6980	1758	MC4/PLK/ASM	U/C2	AA	MS	PB/MPS	
	1766	MC4/PLK/ASM	U/C2	AA	MS	PB/SI	
Oldcastle 63 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Rock Hill 1900 Midland St. Rock Hill, SC 29731 803-366-5167	1167	MC4/PLK/ASM	U/C2	AA	MS	PB/SI	
Oldcastle 44 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Shawnee 10000 N. Harrison Shawnee, OK 74804 405-275-5510	1168	MC4/PLK	U/C2	AA	MS	PB/SI	
Oldcastle 61 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Tampa 5115 East Hartford St. Tampa, FL 33619 813-247-3184	1933	BC3/MC1/PLK/ASM	U/C2	AA	MS	PB/SI	
Oldcastle 43 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Telford 375 E. Church Ave. Telford, PA 18969 215-721-0400	857	BC4/SJ	U/C2	MA	MS	PB/SI	
Oldcastle 14 IGCC®/IGMA® E2190 '09							
Oldcastle Glass Toronto 2195 Langstaff Road Concord, ON L4K2B2 Canada 905-660-3806	2516	BC4/GSJ	U/C2	PHSS	MS	PB/SI	Yes
Oldcastle IGCC®/IGMA® E2190 '09							
Oldcastle Glass Vancouver 1611 S.E. Commerce Avenue Battle Ground, WA 98604 360-816-7777	1517	MC4/PLK/ASM	U/C2	AA	MS	PB/MPS	Yes
	1537	MC4/PLK/ASM	U/C2	AA	MS	PB/SI	Yes
	2311	BC4/PLK	U/C2	TBSS	MS	PB/MPS	
	2403	BC4/GSJ	U/C2	TBSS	MS	PB/MPS	Yes
Oldcastle 73 IGCC®/IGMA® E2190 '09							

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Oldcastle Glass Warrenton 1700 Daniel Boone Ind. Dr. Warrenton, MO 63383 636-456-3452	1604	MC4/PLK/ASM	U/C3	AA	MS	PB/SI	Yes
Oldcastle 21 IGCC®/IGMA®E2190 '09							
Oldcastle Glass Wausau 5103 Janice Ave. Schofield, WI 54476 715-359-2432	1178 1262 1312 1319	BC3/MCI/ASM BC3/MCI/MT/ASM BC3/PLK/ASM BC3/MCI/PLK/ASM	U/C2 U/C2 U/C2 U/C2	TS FS AA AA	DM FS MS MS	PB/PU PU PB/PU PB/SI	Yes Yes Yes Yes
Oldcastle 27 IGCC®/IGMA®E2190 '09	1962	BC3/MCI/ASM	U/C2	TS	DM	MPU	Yes
Paramount Windows 105 Panet Rd. Winnipeg, MB R2J 0S1 Canada 204-233-4966	2583 1992	BC4/SSJ BC3/MCI/MT/ASM	U/C2 U/C2	TBSS FS/FS	MS FS	PB/SI HMB	Yes Yes
Paramount Windows IGCC®/IGMA® '09							
Patio Enclosures, Inc. 720 East Highland Road Macedonia, OH 44056 330-468-0700	1851	BC4/GSJ	U/C1	FS	FS	RHMB	Yes
PEI IGCC®/IGMA® '09							
PDC Glass & Metal Services 100 Business Center Drive Cheswick, PA 15024 800-232-9050	2038 2260 2404	BC4/SJ BC4/GSJ/ASM BC4/SSJ/MT/ASM	U/C1 U/C1 U/C1	TBAA MA MA	MS MS MS	PB/SI PB/SI PB/MPS	
Perma-Pane IGCC®/IGMA® '09							
PDC Glass of Michigan Inc. 300 Dunn Street Plymouth, MI 48170 800-752-3522	2261 2277 2393 2394	MC4/PLK/ASM MC4/PLK/ASM MC4/PLK MC4/PLK	U/C2 U/C2 U/C2 U/C2	MA MA TBAA TBAA	MS MS MS MS	PB/SI PB/MPS PB/MPS PB/SI	
Perma-Pane IGCC®/IGMA® '09							
Pennsylvania Insulating Glass 6395 SR 103 N, Bldg 62 Lewistown, PA 17044 717-247-0560	2250 2406	MC4/PLK/ASM MC4/PLK/ASM	U/C1 U/C1	AA AA	MS MS	PB/PU PB/SI	
PAG IGCC®/IGMA® '09							
PFG Glass 27413 55th Avenue Langley, BC V4W 3Y1 Canada PFG IGCC®/IGMA® '09	2470 2578	BC3/MCI/MT BC3/MCI/MT/ASM	U/C2 U/C2/U	FS FS/FS	FS FS	PB/SI PUMS	Yes Yes

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PGT Industries 2121 Heilig Road Salisbury, NC 28146 704-638-6000 PGT IGCC®/IGMA® '09	2529	BC3/MC1/MT	U/C2	FS	FS	PB/SI	
PPG Inds. Inc. 8150 Industrial Blvd., Suite 200 Breinigsville, PA 18031 610-336-4358 PPG Allentown IGCC®/IGMA® '09	2297	BC3/MC1/SS/ASM	U/C3	TS	DM	PUMS	Yes
Preico Inc. 94 Boulevard Cartier Riviere-du-loup, QC G5R 2M9 Canada	1388 2268 2270	MC4/PLK/AP MC4/PLK/AP MC4/PLK/AP	U/C1 U/C1 U/C1	AA AA PCS	MS MS MS	PB/SI PB/PS PB/SI	Yes Yes Yes
418-862-2274 PRELCO IGCC®/IGMA® '09	2458 2459	MC4/PLK MC4/PLK	U/C1 U/C1	SS SS	MS MS	PB/SI PB/PS	Yes Yes
ProTemp Glass, Inc. 360 Applewood Crescent Concord, ON L4K 4Y2 Canada 905-760-0701 Protemp IGCC®/IGMA® '09	2226 2227	BC4/GSJ MC4/GSK	U/C1 U/C1	MA MA	MS MS	PB/PS PB/SI	Yes Yes
Robert Bowden, Inc. 850 White Circle Court Marietta, GA 30061 678-819-6175 RBI IGCC®/IGMA® '09	2433	BC4/PLJ/ASM	U/C2	BPS	BPS	BPS	
Rochester Insulated Glass Inc. No. 73 Merrick Circle Manchester, NY 14504 585-289-3611 RIG 451 IGCC®/IGMA® '09	451	BC4/PLJ	U/C2	AA	MS	PB/SI	
S N E Enterprises, Inc. 880 S. View Dr. Mosinee, WI 54455-0700 715-693-7000 SNE IGCC®/IGMA® '09	2508 2510	BC3/MC1/CT/ASM BC3/MC1/ASM	U/C2 U/C2	BPS BPS	BPS BPS	BPS BPS	
Serious Glass, Inc. 5400 Spine Road Boulder, CO 80301 303-530-1150 SM Alpen IGCC®/IGMA® E2190 '09	1939 1951	BC2/MC2/PLK/ASM BC2/MC2/GSJ	U/SCF U/SCF	TS/TS AA	MS MS	PB/PU PB/SI	

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Shanghai Yaohua Pilkington Glass Co., Ltd. - Shanghai SYPE	2523	BC4/GSJ	U/C2	AA	MS	PB/SI	
75 Kangliu Road, Pudong Shanghai, 201315 China	2524	BC4/GSJ	U/C2	AA	MS	PB/PS	
86-21-38108108 SYP 02 IGCC@/IGMA@'09							
Shanghai Yaohua Pilkington Glass Co., Ltd. - Tianjin SYPE	2525	BC4/GSJ	U/C2	AA	MS	PB/SI	
1 Huatai Road, Hi-tech Industrial Park Beichen	2526	BC4/GSJ	U/C2	AA	MS	PB/PS	
Tianjin, 300409 China							
86-22-8688202 SYP 03 IGCC@/IGMA@'09							
Shanghai Yaohua Pilkington Glass Co., Ltd.-Shanghai SYPB	1880	BC4/GSJ	U/C2	AA	MS	PB/SI	
611 Kanqiao Road, Pudong Shanghai, 201315 China	1881	BC4/GSJ	U/C2	AA	MS	PB/PS	
86-21-38108108 SYP 01 IGCC@/IGMA@'09							
Shenbo Special Architectural Glass Industrial Co., LTD	2573	BC4/GS/ASM	U/C3	MA	MS	PB/SI	
Macau Industry Zone, Zhange Village Guanlan Town							
Shenzhen, China							
(8522) 317-1258 HONGKONG SHENBO LIMITED IGCC@'09							
Shiang Yi Glass Co., Ltd	2009	MC4/PLK	U	SS	MS	PB/PS	
No. 2, Lane 176, Sec.1, ZhongXing Road							
Wugu Shiang, Taipei County 248							
Taiwan, China							
886-222-9919 SYG IGCC@/IGMA@'09							
Shinn Fu Pair Glass Co.	1822	MC4/PLK	U	AA	MS	PB/SI	
No. 1-1 Wen Ming 3 Street							
Kweishan, Taoyuan							
Taiwan, China							
886-332-8322 SFP IGCC@/IGMA@'09							
Sierra Pacific Windows	1637	BC3/MC1/CT/ASM	U/C2	FS	FS	HMB	
11605 Reading Road							
Red Bluff, CA 96080							
530-527-9620 SPW 1637 IGCC@/IGMA@'09							

<u>LICENSEE</u>	<u>CERTIFICATION NUMBER</u>	<u>FRAME CONSTRUCTION</u>	<u>SUBSTRATE</u>	<u>SPACER</u>	<u>DESICCANT</u>	<u>SEALANT</u>	<u>GAS CONTENT</u>
SIGCO, Inc.	1444	MC4/PLK/ASM	U/C3	AA	MS	PB/SI	Yes
48 Spiller Drive	1741	MC4/PLK/ASM	U/C3	AA	MS	PB/MPS	Yes
Westbrook, ME 04092	2203	MC4/PLK/ASM	U/C3	AA	MS	PB/SI	
207-775-2676	2465	MC4/PLK	U/C3	TBAA	MS	PB/SI	
SIGCO IGCC@IGMA@'09							
Solar Seal Co.	1079	BC4/PLJ/ASM	U/C2	AA	MS	PB/SI	Yes
55 Bristol Drive							
South Easton, MA 02375							
508-238-0112							
Solar Seal IGCC@IGMA@'09							
Southern Wholesale Glass	2360	BC3/MC1/MT/ASM	U	FS	FS	HMB/RHMB	
111 Industrial Blvd.							
Americus, GA 31719							
229-928-5656							
Southern Wholesale IGCC@IGMA@'09							
Syracuse Glass Co., Inc.	823	BC4/GSJ/ASM	U/C2	AA	BL	PB/PS	
1 General Motors Drive	828	BC4/GSJ/ASM	U/C2	AA	BL	PB/SI	Yes
Syracuse, NY 13206							
315-437-9971							
SGC IGCC@IGMA@'09							
Taiwan Glass USA Sales Corp.	2053	MC4/PLK	U/C1	AA	MS	PB/SI	
Taichung Port Industrial Center							
377 Tzui Chiang Rd., Kwan-Lien Ind. District							
Taichung, Taiwan							
503-682-2255							
Taiwan Glass Ind. Corp. 1356 IGCC@IGMA@'09							
Tecnoglass S.A.	1393	BC4/SSJ/AP	U	MA	MS	PB/PS	
Avenida Circunvalar a 100 mts	1813	BC4/SSJ/AP	U	MA	MS	PB/SI	
de la Via 40							
Barrinquilla, Columbia, South America							
57 5 373 4000							
Tecnoglass IGCC@IGMA@'09							
Tempered Glass, Inc.	1123	BC4/GSJ/AP	U/C2	MA	MS	PB/MPS	
605 Stonehill Drive	2089	BC4/GSJ/ASM	U/C2	MA	MS	PB/SI	
Atlanta, GA 30336							
404-346-7900							
TGI ATL IGCC@IGMA@'09							
Thai-German Specialty Glass Co., Ltd.	2059	BC4/ALJ	U/C1	AA	MS	HMB/PS	
41/8 Rama 3 Road	2067	BC4/PLK	U/C1	AA	MS	HMB/SI	
Shongnonsea, Yannawa							
Bangkok, 10120 Thailand							
662-294-6287							
TGSGC IGCC@IGMA@'09							

<u>LICENSEE</u>	<u>CERTIFICATION NUMBER</u>	<u>FRAME CONSTRUCTION</u>	<u>SUBSTRATE</u>	<u>SPACER</u>	<u>DESICCANT</u>	<u>SEALANT</u>	<u>GAS CONTENT</u>
Thompson I.G. LLC. 3196 Thompson Rd. Fenton Operation Fenton, MI 48430 810-629-9558 TIG IGCC@IGMA@'09	1367	MC4/PLK/ASM	U/C2	MA	MS	PB/PS	
Tianjin Fuyuan Road Wuqing Developmnet Area Tianjin, China 86-022-82173266 Tianjin IGCC@IGMA@ 09	2276 2336	BC4/LC BC4/LC	U U	AA AA	MS MS	HMB/SI PB/PS	Yes
Tower Glass Products Corp. 95 Horton Avenue Lynbrook, NY 11563 516-887-3300 Tower Glass Products IGCC@IGMA@ 1470 '09	1470	MC4/PLK/ASM	U/CI	AA	MS	PB/SI	
TRACO (Three Rivers Alum) 71 Progress Ave. Cranberry Ind. Pk. Cranberry Township, PA 16066-3596 724-776-7000 TRACO IGCC@IGMA@ 09	2021 2022	BC4/ASM BC4/SSJ/ASM	U/CI U/CI	TP MA	TP MS	TP/SI PB/SI	
TRACO (Three Rivers Alum) 2304 Silverdale Road Cranberry Ind. Pk. Johnson City, TN 37601 423-854-9300 TRACO JC IGCC@IGMA@ '09	2094	MC4/PLK	U/C2	AA	MS	MPU	
TRACO (Three Rivers Alum) 2400 Broadway Street Cranberry Ind. Pk. Red Oak, IA 51566 724-776-7000 TRACO IGCC@IGMA@ 09	1307	BC3/MC1/AP/ASM	U/C2	TS	DM	HMB	Yes
Tradewood Industries Ltd. 7 Wright Street St. Catharines, ON L2P 3J2 Canada 905-641-4949 TRADEWOOD IGCC@IGMA@ '09	2300	BC3/MC1/MT	U/CI	FS	FS	HMB	Yes

<u>LICENSEE</u>	<u>CERTIFICATION NUMBER</u>	<u>FRAME CONSTRUCTION</u>	<u>SUBSTRATE</u>	<u>SPACER</u>	<u>DESICCANT</u>	<u>SEALANT</u>	<u>GAS CONTENT</u>
Tri-Star Glass 5566 S. Gamett Rd. Tulsa, OK 74146 918-392-9678	2095	BC4/GSJ/ASM	U/C2	AA	MS	PB/PS	
Tri-Star IGCC@/IGMA@'09							
Trulite Industries, Ltd. 1820 Courtney Park Dr. Mississauga, ON L5T1W1 Canada 905-670-7040	2032 2223 2295	MC1/BC3/PLK BC4/PLJ BC4/PLJ	U/C1 U/C1 U/C1	AA MA SS	MS MS MS/MS	PB/SI PB/SI PB/SI	Yes Yes Yes
Trulite IGCC@/IGMA@'09							
Twin Pane Insulated Glass Co., Inc. 86 E. Horseblock Rd. Yaphank, NY 11980 631-924-1060	1528 2426	MC4/PLK/ASM BC4/PLJ/ASM	U/C1 U/C1	AA FS	MS FS	PB/SI HMB	
TP IGCC@/IGMA@'09							
United Plate Glass 1104 Lincoln County Parkway Lincolnton, NC 28092 828-970-6110	2462	MC4/PLK	U/C2	MA	MS	PB/PU	
UPG 01 IGCC@/IGMA@'09							
United Plate Glass Co., Inc. 108 Grundman Drive Butler, PA 16001 800-772-7783	1513 2271	BC4/SSJ/ASM BC3/MC1/AT	U/C1 U/C1	MA FS	MS FS	PB/PU PB/PU	Yes
UPG 02 IGCC@/IGMA@'09							
VELUX America Inc PO Box 5001 Greenwood, SC 29648-5001 864-941-4828	2035	BC4/PLJ	U/C1	SS	MS	PB/SI	Yes
Velux Veltherm GIGCC@/IGMA@'09							
Vidrios Marte SA de CV Tlalilco 138 col. Mexico City, Azcapotzalco CP, 02860 Mexico 525-541-3425	2288 2289 2339	BC3/MC1/PLK BC3/MC1/PLK BC4/SSJ	U U U	AA AA TBSS	MS MS MS	PB/PS PB/SI PB/PS	Yes Yes Yes
Vidrios MX IGCC@/IGMA@'09							
Vinyl Window Designs Ltd. 300 Chrislea Rd. Woodbridge, ON L4L 8A8 Canada 905-850-3222	2248 2472 2521	BC3/MC1/MT BC3/MC1/SK BC3/MC1/SSK	U/C1 U/C1 U/C1	FS TBTS SS	FS DM DM	HMB EPU PU	Yes Yes Yes
VWD IGCC@/IGMA@'09							

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Vinytume Products 3745 Hendricks Road Austintown, OH 44515 330-799-2000 VL IGCC®/IGMA®'09	1928	BC3/MC1/ASM	U/C2	FS	FS	HMB	Yes
Viracon Inc. 800 Park Drive Owatonna, MN 55060 507-451-9555 Viracon IGCC®/IGMA® Owatonna, MN '09	980 1462 1911	BC4/ALJ BC4/GSJ BC4/PLJ	U/C2/U U/C2/U U/C2/U	AA/AA MA/MA SS/SS	MS/MS MS/MS MS/MS	PB/SI PB/SI PB/SI	Yes Yes Yes
Viracon Inc. 1586 East Venture Drive St. George, UT 84790 435-652-6400 Viracon IGCC®/IGMA® St. George, UT '09	2363 2364 2552	BC4/GSJ BC4/SJ BC4/SJ/CT	U/C2 U/C2 U/C2	MA AA SS	MS MS MS	PB/SI PB/SI PB/SI	
Viracon Inc. 8373 Zell Miller Parkway Statesboro, GA 30458 912-871-3500 Viracon IGCC®/IGMA® Statesboro, GA '09	1529 1530	BC4/GSJ/AP BC4/GSJ/AP	U/C3 U/C3	MA AA	MS MS	PB/SI PB/SI	Yes Yes
Virginia Glass Products Corp. 347 Old Sand Rd. Ridgeway, VA 24148 800-368-3011 Virginia Glass Products Sureseal IGCC®/IGMA® E2190 '09	1810	BC4/MT	U/C1	TP	TP	TP/SI	Yes
Vitro America, Inc. 13007 Crossroads Parkway South City of Industry, CA 91746 800-303-4224 Vitro SFS IGCC®/IGMA® '09	2316 2599	MC4/PLK BC4/SSJ	U/C1 U/C2	AA AA	MS MS	PB/MPS PB/SI	
Vitro America, Inc. 12900 Nicholson Road Dallas, TX 75381-5547 972-484-3691 Vitro America IGCC®/IGMA® 703-09	703	BC4/GSJ	U/C1	AA	MS	PB/SI	
Vitro America, Inc. 2710 Patterson Street Greensboro, NC 27407 800-729-3909 Vitro Greensboro IGCC®/IGMA® '09	1761 2631	MC4/PLK/ASM MC4/PLK/ASM	U/C2 U/C2	AA AA	MS MS	PB/SI PB/PS	

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Vitro America, Inc. 3333 Holly Hall Houston, TX 77021 713-747-5430	2075	BC4/SSJ	U/C2	AA	MS	PB/SI	
Vitro Houston IGCC®/IGMA® '09							
Vitro America, Inc. 1513 North A St. Las Vegas, NV 89106 702-385-3095	2368 2369	MC4/PLK/CT MC4/PLK/ASM	U/C2 U/C2	AA AA	MS MS	PB/SI PB/MPS	
Vitro Las Vegas IGCC®/IGMA® '09							
W. A. Wilson Inc. 6 Linds. Pk. Dr. Wheeling, WV 26003 304-232-2200	1695 1697	MC4/PLK/ASM MC4/PLK/ASM	U/C1 U/C1	AA AA	MS MS	PB/PS PB/SI	
Starlite IGCC®/IGMA® '09							
Weather Shield Mfg. Inc. 710 E. Division St. Greenwood, WI 54437 715-267-5031	2487	BC3/MC1/MT/ASM	U/C2	BPS	BPS	BPS	
WS G IGCC®/IGMA® '09							
Weather Shield Mfg. Inc. Adams Avenue E. Ladysmith, WI 54848 715-748-2100	2490 2507	BC3/MC1/MT/ASM BC3/MC1/MT/ASM	U/C2 U/C2	BPS BPS	BPS BPS	BPS BPS	
WS L IGCC®/IGMA® '09							
Weather Shield Mfg. Inc. 2990 S. 8th W. Logan, UT 84321 435-753-6590	2489	BC3/MC1/MT/ASM	U/C2	BPS	BPS	BPS	
WS U IGCC®/IGMA® '09							
Weather Shield Mfg. Inc. One Weathershield Plaza Medford, WI 54451 715-748-2100	2488 2506	BC3/MC1/MT/ASM BC3/MC1/ASM	U/C2 U/C2	BPS FS	BPS FS	BPS RHMP	
WS Med IGCC®/IGMA® '09							
Weather Shield Mfg. Inc. 400 Legacy Lane Park Falls, WI 54552 715-762-3834	2204	BC3/MC1/MT/ASM	U/C2	BPS	BPS	BPS	
WS P IGCC®/IGMA® '09							

<u>LICENSEE</u>	<u>CERTIFICATION NUMBER</u>	<u>FRAME CONSTRUCTION</u>	<u>SUBSTRATE</u>	<u>SPACER</u>	<u>DESICCANT</u>	<u>SEALANT</u>	<u>GAS CONTENT</u>
West Coast Insulated Glass Products	2383	MC4/PLK/ASM	U/C2	AA	MS	PB/PU	
17730 Crusader Avenue	2384	MC4/PLK/ASM	U/C2	AA	MS	PU	
Cerritos, CA 90703	2385	MC4/PLK/ASM	U/C2	SS	MS	PB/PU	
562-653-9797							
West Coast Glass IGCC®/IGMA® '09							
Westeck Windows Mfg. Inc.	2041	BC4/MT	U/C2	FS	FS	HMB	Yes
8104 Evans Parkway							
Chilliwack, BC V2R 5R8 Canada							
604-792-6700							
Westeck IGCC®/IGMA® '09							
Western Reflections	18921	BC3/MC1/MT	U/C2	BCS	BCS	BCS	
215 E. Roosevelt Ave.							
Zeeland, MI 49464							
616-772-9111							
ODL IGCC®/IGMA® '09							
Western Reflections, Vidrio Decorativo Occidental S. A. de C.V.	26371	BC3/MC1/MT/ASM	U/C1	BCS	BCS	BCS	
Poniente 4 Entre Bore 7 y Gral Pedro Hinojosa							
Ciudad Industrial							
H. Matamoros Tamps, Mexico							
868-812-9152							
VDO IGCC®/IGMA® '09							
Western States Glass Corp.	2310	MC4/PLK/ASM	U/C3	AA	MS	PB/SI	
43443 Osgood Road	2546	MC4/PLK/ASM	U/C2	AA	MS	PB/PS	
Fremont, CA 94538							
510-623-5000							
Western States Glass IGCC®/IGMA® '09							
White Aluminum	2335	BC4/ALJ	U/C2	AA	MS	HMB/SI	
PO Box 2402							
Abu Dhabi, United Arab Emirates							
White Aluminum IGCC®/IGMA® '09							
Wholesale Glass Dist.	2279	BC4/SJ	U/C2	MA	MS	PB/SI	
1800 Transport Ave	2280	BC4/SJ	U/C2	MA	MS	PB/PS	
Memphis, TN 38116							
901-332-2200							
Wholesale Glass IGCC®/IGMA® '09							
Winchester Industries	2570	MC3/BC1/ASM	U/C1	BFS	BFS	BFS	
Route 286 E.							
Saltsburg, PA 15681							
724-639-3551							
WI IGCC®/IGMA® '09							

LICENSEE	CERTIFICATION NUMBER	FRAME CONSTRUCTION	SUBSTRATE	SPACER	DESICCANT	SEALANT	GAS CONTENT
Windsor Windows 2210 Stafford St. Ext. Monroe, NC 28110 704-283-7459	2349	BC3/MCI/MT/ASM	U/C2	FS	FS	HMB	Yes
Windsor Windows NC IGCC®/IGMA® '09							
Windsor Windows 900 South 19th Street West Des Moines, IA 50265 515-223-6660	2285	BC3/MCI/MT/ASM	U/C2	FS	FS	HMB/N/A	Yes
Windsor Windows IA IGCC®/IGMA® '09							
Wolverine Glass Products, Inc. 3119 Chicago Dr. S.W. Grandville, MI 49418 616-538-0100	2090	BC3/MCI/ASM	U/C	BSS	BSS	BSS	
WGP-05 IGCC®/IGMA® '09							
Xinyi Group (Glass) Co., Ltd. Xinyi Glass Industrial Zone Humen Town, Dongguan Guangdong, 52935 China 604-273-0813	2047 2350 2352 2353	MC4/PLK BC4/ALJ BC4/ALJ BC4/ALJ	U/C2 U/C2 U/C2 U/C2	SS MA TGI AA	MS MS MS MS	PB/SI PB/SI PB/SI PB/SI	Yes Yes Yes Yes
XYG IGCC®/IGMA® '09							
YKK AP America 3340 Chestney Road Macon, GA 31217 678-838-6077	2455	BC4/BCS/ASM	U/C2	BCS	BCS	PB	Yes
YKK-AP IGCC®/IGMA® '09							
Zadra Vetri SPA Via Tagliapietra, 33 Belluno, 32100 Italy 390-437-9346	1936 2299 2700	MC4/PLK MC4/PLK MC4/PLK	U/C2 U/C2 U/C2	TBMA AA MA	MS MS MS	PB/SI PB/SI PB/SI	
ZVS IGCC®/IGMA® '09							

"IGCC®/IGMA® PROTOTYPES IN PROGRESS"

The following candidate Licensees have a prototype test in progress for possible inclusion in the Program.

MANUFACTURERS

AAG – Al Abbar Glass	Dubai, UAE
AGC Flat Glass	Salt Lake City, UT
AGC Flat Glass	Boardman, OH
AGC Flat Glass	Marshall, MI
AGC Flat Glass	Reidsville, NC
Allweather Windows	Edmonton, AB
Alside Windows Co.	Kinston, NC
Arch Aluminum & Glass	Madison, TN
Architectural Glass Products	St. Louis, MO
Barber Glass	Collingwood, ON
Beijing Wuhuatianbao Glass	Beijing, China
Berdick Manufacturing	Coaldale, AB
Blue Star Glass	North Brunswick, NJ
Cascade Windows	Spokane, WA
Changshu Hard Glass	Changshu City, China
Coral Industries Glas Division	Tuscaloosa, AL
Crystal Window & Door Systems	Flushing, NY
Curved Glass Distributors	Derby, CT
DongGuang CSG Architectural	GuangDong China
Dynamic Windows & Doors	Abbotsford, BC
Flat Glass Distributing	Jacksonville, FL
Glass Fab Tempering	Tracy, CA
Glasswerks	South Gate, CA
Glaz-Tech Industries	Phoenix, AZ
Glaz-Tech Industries	Tucson, AZ
GuangDong Avic Special Glass	GuangDong, China
Guardian Fabrication	Webster, MA
Hartung Glass	Wilsonville, OR
Hartung Glass	Tukwila, WA
Harvey Industries	North Dartmouth, MA
High Tech Energy Saving Dorwin Co.	Qinhuangdao, China
Insulated Glass of America	Dallas, NC
Intigral, Inc.	Walton Hills, OH
Kinro	Goshen, IN
Lamiver Inc.	Montreal, QC
Les Industries Thermalite	Montreal, QC
Meixia Arts & Handicrafts	Fujian, China
Miroirs Laurier	Laurier Station, QC
MLC Glass	Shelby Township, MI
Norwood Classic Windows	Scoudouc, NB
OKALUX	Deutschland, Germany
Oldcastle Glass Calgary	Calgary, AB
Oldcastle Glass Toronto	Concord, ON
Oldcastle Glass Wausau	Schofield, WI
Pioneer Windows	Johnstown, NY
Prelco Inc.	Riviere-du-loup, QC
Qatar Glass Industries	Doha, Qatar
Sage Electrochromics Inc.,	Faribault, MN
Shenbo Special Architectural	Shenzhen, China

August 2009

Shanghai Haojing Glass
Tecnoglass S.A.
The Woodstone Company
Tri-Star Glass
Trutech Door Systems
Twin Pane Insulating Glass
Vidrios Marte SA de CV
Weathershield
Weathershield
Weathershield
West Coast Insulated Glass
Western States Glass
White Aluminum LLC
Winchester Industries
Window City Industries
Window Seal Glass
Xinhua Glass Processing
YKK-AP
Zadra Vetri SPA

Shanghai, China
Barranquilla, Columbia
North Walpole, NH
Tulsa, OK
Toronto, ON
Yaphank, NY
Tlatilco, Mexico City
Medord, WI
Park Falls, WI
Greenwood, WI
Cerritos, CA
Fremont, CA
Abu Dhabi, UAE
Saltsburg, PA
Vaughan, ON
Woodbridge, ON
Quinhuangdao City, China
Macon, GA
Belluno, Italy

NOTICE: In accordance with the terms of the Procedural Guide, the IGCC® Standard License Agreement, a manufacturer with a prototype product test in progress is not authorized to use the permanent Certification label for that product or to certify that its product is in compliance with Program Standards and Procedures until a passing prototype test report for that product is presented by the manufacturer to the Certification office and the manufacturer is otherwise in compliance with IGCC®/IGMA® Program Procedures.

PROCEDURAL GUIDE

{IGCC® Document II-10}

INSULATING GLASS CERTIFICATION COUNCIL AND INSULATING GLASS MANUFACTURERS ALLIANCE IGCC®/IGMA® CERTIFICATION PROGRAM FOR SEALED INSULATING GLASS

1.0 FOREWORD (Modified 2/03)

Acceptance of certified sealed insulating glass comes with the conviction that such certification assures a high level of quality and the integrity of the identifying mark or certification label is being reliably maintained by a competent certifying agency.

The existing ASTM specification(s) for sealed insulating glass provides a sound technical basis for the required quality of sealed insulating glass. With the addition of independent administration plus periodic routine in-plant visits and product evaluation, a program of product certification is developed in accordance with accepted standards. The certification program described here is predicated upon the concept of independent and impartial administration of the certification procedures in the IGCC® license agreement.

To ensure administration of the certification program in a uniform and equitable manner, this procedural guide has been prepared for the information and guidance of the licensees.

It should be noted that the "IGCC® License Agreement" is the governing document for operation of the certification program. This procedural guide, which is not an extension of that document, serves merely to describe the administrative procedures and routine operation of the certification program.

The standards utilized in the IGCC®/IGMA® program for authorizing certification to, are as follows:

ASTM E2190

2.0 GENERAL INFORMATION (Modified 8/09)

The Certification Concept

The IGCC®/IGMA® Certification Program is based upon the conviction that no standard of quality is good without the continuous adherence of the licensees to that standard. To buyers, specifiers, code officials and users, the IGCC®/IGMA® certification label offers the manufacturers assurance that his sealed insulating glass units have been produced in conformance to the ASTM specification(s).

Who Can Participate?

Every manufacturer of sealed insulating glass is eligible, on a voluntary basis, to participate.

Who Conducts the Program?

The Insulating Glass Certification Council (IGCC®) and the Insulating Glass Manufacturers Alliance (IGMA®), are the sponsors of this certification program. Under License with IGMA®, IGCC® administers and Governs the certification program under which the Administrator periodically checks and reports compliance of the manufacturers of products having the IGCC®/IGMA® certification label.

Administration

Administrative Management Systems, Inc. (AMS) is the independent administrator of the certification program. AMS maintains the IGCC®/IGMA® office of certification and handles the routine day-to-day business. All transactions are done in the name of IGCC®/IGMA®.

How Can You Become a Licensee?

The following steps must be accomplished before IGCC®/IGMA® can authorize a manufacturer to use the IGCC®/IGMA® permanent label:

- a) The manufacturer must present a passing prototype report from an approved IGCC®/IGMA® testing laboratory to the office of certification. Fabrication of prototype test samples shall be witnessed by the Administrators representative during a plant audit, at which time the manufacturers compliance with IGCC®/IGMA® Quality Assurance requirements is validated. (See section 10.0)
- b) The manufacturer signs two copies of the IGCC® License Agreement and sends these to the office of certification. IGCC® will countersign both copies and return one to the licensee.
- c) The licensee sends the office of certification the necessary certification fee.
- d) After receipt by the office of certification of the above, the administrator validates that particular model and sends to the licensee a "Notice of Authorization to Use the IGCC®/IGMA® Permanent Label." The permanent label must be affixed on each certified sealed insulating glass unit.
- e) The certified model will then be listed in the next published Certified Products Directory.

3.0 HOW THE CERTIFICATION PROGRAM WORKS (Modified 8/09)

American Society for Testing and Materials has test methods and specifications for sealed insulating glass. Sealed insulating glass must meet or exceed the applicable specification before it can be certified.

Recognized independent testing laboratories conduct all tests. The certification committee shall approve all laboratories, whose test reports are utilized by this certification program.

As the sole judge of compliance with the applicable specifications, the administrator authorizes a product, which has been approved to be listed in the Certified Products Directory.

Licensees label sealed insulating glass units in accordance with the labeling requirements established by the Certification Committee.

Approved products are listed in the Certified Products Directory, which is published every six months. It is sent to door, sash and building manufacturers, glazing contractors, homebuilders, architects, regulatory agencies and code-making groups, etc. Directory listings contain the licensee's name, plant location and product description.

The administrator verifies production at the licensee's manufacturing location during twice per year audits. During each of these audits, the manufacturer's compliance with IGCC®/IGMA® Quality Assurance requirements is validated. (See section 10.0) The prototype test will be considered as the test for the first year of certification. During the first year, two audits will take place at which time the inspector will compare current production with the product authorized to use the IGCC®/IGMA® permanent label. During the first audit in the second year, specimens will be fabricated for testing. IGCC®/IGMA® will ask the manufacturer to produce a minimum of twelve test specimens. The fabrication of these test specimens is witnessed and verifies that they are produced in accordance with the construction certified. During test specimen fabrication, only the IGCC®/IGMA auditor and employees of the licensee being audited shall be present. The licensee is instructed to send these test specimens to an approved IGCC®/IGMA® testing laboratory where they are tested. The specimens must be shipped to the laboratory within four weeks of fabrication. Tests are made at the laboratory recommended by the licensee and selected by the administrator from the approved list.

A monthly report listing the status of testing is mailed to the licensee by the office of certification on the 15th of each month. Upon completion of the test, the administrator mails results promptly to the licensee.

After initial certification (Prototype) testing, ASTM E2190 testing shall occur annually for the first 2 years of certification. If no failures occur, then testing may occur once every 2 years, at the discretion of the participant.

4.0 COMPLIANCE SAFEGUARDS (Modified 8/09)

How is Compliance Assured?

Any certified product found in the course of routine audit and evaluation not to be in compliance with the model description or quality assurance requirements is subject to having authorization to use the IGCC®/IGMA® permanent label removed. The licensee is sent a request for clarification giving thirty days in which to demonstrate to the satisfaction of the administrator that his product is in compliance with the model description that is certified. If he does not respond, a warning of possible removal of authorization to use the IGCC®/IGMA® permanent label is sent giving an additional thirty days to respond. If he

does not respond, authorization to use the IGCC®/IGMA® permanent label is **automatically terminated** at the end of that thirty-day period.

In the case of a routine test failing to comply with the specifications, the licensee will be officially notified that within 15 days he must respond by stating that a retest fabrication is requested and by paying all administrative and test fees. If there is no response within the 15 days, authorization to use the IGCC®/IGMA® permanent label is automatically terminated. If the retest option is accepted, the administrator will perform an audit and witness fabrication of the retest specimens within 45 days of payment of fees.

Challenging a Certified Product

Complaints of non-compliance from any corporation or business source will be investigated promptly upon receipt of the complaint in writing along with an appropriate surety deposit. A minimum surety deposit of \$1,500 will be required for each complaint of non-compliance. The surety deposit will be assessed at the rate of \$300 per man-day plus the reasonable cost of travel and other expenses entailed in resolving such incidents. Refunds of part or all of the surety deposit will be made when applicable. The surety deposit will cover all costs involved, unless the investigation proved non-compliance, in which case all costs will be borne by the licensee found to be in non-compliance.

Complaints by Consumers

The administrator shall receive and log the complaint. It will be the consumer's responsibility to identify the label, information appearing on the spacer of glass and advise the administrator of the same. Note: If no IGCC®/IGMA® label exists, the product has not been certified by the manufacturer to IGCC®/IGMA® and the administrator and IGCC®/IGMA® have no further responsibilities or options.

Once the consumer has identified the label, name, etc. and advised the administrator, the administrator shall respond, advising the consumer of the name, address, primary contact, model description and other pertinent information at hand as it pertains to the subject licensee. Note: If the complaint is being made for reasons of product appearance or failure such as glass quality, fogging, seal failure, dust, etc., the consumer shall be advised to contact the licensee for manufacturer directly. Some manufacturers and their dealers or distributors offer warranties on their products. Normal claims, procedures and legal remedies are available to consumers on a state-by-state basis.

If the consumer wishes to determine whether or not a labeled product is in compliance with the model described through an investigation by IGCC®/IGMA®, the corporation or business challenge procedure shall be utilized. The surety deposit shall be modified to \$400 and charges per man-day and shall be assessed against the surety deposit in the amount of \$300 plus reasonable travel costs and other expenses.

Withdrawal of Certified Product

Any product which has been authorized to use the IGCC®/IGMA® permanent label may be voluntarily withdrawn from the Certification Program by the licensee at any time.

5.0 COSTS (Modified 8/09)

What Does the Program Cost?

The initial administration fee will be based on the date of authorization to use the IGCC®/IGMA® permanent label in a manner that participation in the Certification Program will be on a February 1 to January 31 basis thereafter. If the authorization date is between August 1 and December 1, 50% of the administration fee for the first year will be charged for participation and will include one audit prior to the following February 1 date. A licensee is invoiced for each item that is certified and listed separately in the Certified Products Directory. An additional invoice for testing laboratory fees will be issued upon fabrication of test units.

Testing of these units will not begin until payment has been received. Should failure of these units occur during certification testing, any remaining balance will be refunded to the licensee upon request.

6.0 DOCUMENTS AND AGREEMENTS (Modified 8/09)

License Agreement

This agreement, incorporating independent program administration and routine, periodic, independent plant audits, sampling and evaluation, governs the relationship between IGCC® and the licensee.

Future amendments or revisions to the License Agreement will be recommended by the Certification Committee and enacted by the IGCC® Board of Governors.

Effective Date, Duration, and Termination

The License Agreement becomes effective on the date of its execution, has an initial duration of twelve months (adjustable to a February 1 to January 31 basis), and is automatically renewed for successive twelve month periods, unless either party gives notice, at least sixty days prior to date of expiration, that cancellation is requested or unless revoked by IGCC® for causes set forth in the document.

Administrative Service Agreement

This agreement entered into by IGCC® and Administrative Management Systems, Inc. (AMS) governs the relationship between IGCC® and AMS, the independent administrator. In general, it provides that the administrator:

- a) routinely audits licensee manufacturing facilities twice per year, and during the first audit in the second and subsequent years, witnesses fabrication of specimens for testing at one of the IGCC®/IGMA® approved testing laboratories,
- b) has the right to witness any and all testing,

- c) reviews all test reports in order to determine compliance of the certified product with the specifications,
- d) audits and recommends for approval, all test laboratory facilities for use in this certification program; test laboratories are recognized or approved by the certification committee,
- e) publishes and mails the IGCC®/IGMA® Certified Products Directory twice each year and handles all routine clerical duties of IGCC®/IGMA® with respect to certification matters,
- f) acts as IGCC® treasurer, invoicing licensees, maintaining a bank account and dispersing funds (fiscal reports are made to the Board of Governors),
- g) attends all scheduled meetings of the Certification Committee, and
- h) in all of its actions acts in the name of IGCC®.

IGCC®/IGMA® Administration Services and Exclusive Licensing Agreement

This agreement defines the relationship where IGMA® and IGCC® desire to combine the administration and marketing of their two certification programs into one certification program administered and governed by IGCC® under which both the IGCC® Mark and the IGMA® Mark are licensed to certification program participants meeting the requirements ("IGCC®/IGMA® Certification Program")

Procedural Guide

This guide outlines program procedures in accordance with the provisions of the License Agreement and the Administrative Service Agreement, for the guidance of those concerned with the procedural details of the Certification Program's operation. It covers the steps to be taken in any given procedural situation in the interest of equitable and uniform treatment of licensees and the preservation of the integrity of the certification program.

Certified Products Directory

This directory is the one document and publication that is normally in the public's eye and contains a listing of the certified seal insulating glass units of each licensee.

Certification Label

The licensee permanently affixes this certification mark to each unit of certified sealed insulating glass. This certification mark may be reference to the Licensee's listing in the Certified Products Directory. The listing then provides a product description including the company name, plant location, etc.

7.0 PROGRAM RESPONSIBILITY (Modified 8/09)

IGCC® Board of Governors

The IGCC® Board of Governors has overall responsibility for the well-being and acceptance of the Certification Program by the industry, building officials and the public. It also bears legal corporate responsibility.

IGMA® Board of Directors

The IGMA® Board of Directors may make recommendations to the IGCC® Board regarding the IGCC®/IGMA® Certification Program and may appeal any decision of IGCC® regarding certification or the IGCC®/IGMA® Certification Program.

IGCC® Certification Committee

The IGCC® Certification Committee has the responsibility for the general procedure and policy pertaining to operation of the Certification Program. As a part thereof, it

- a) establishes "guidelines",
- b) determines the applicability of the specifications in a specific situation where a question is raised by a licensee or the administrator,
- c) approves test laboratories,
- d) determines which of the specifications are to be designated effective for the purposes of product certification and the date or dates on which they become effective, and
- e) recommends to the IGCC® Board of Governors changes to be made in the License Agreement.

8.0 LABEL REQUIREMENTS (Modified 8/09)

THE IGCC®/IGMA® CERTIFICATION LABEL MUST BE PERMANENTLY MARKED ON A VISIBLE PORTION OF EACH SEALED INSULATING GLASS UNIT OR IT IS NOT CERTIFIED BY THE MANUFACTURER TO THE PUBLIC. The label shall be etched, sand blasted, embossed, printed, Painted or otherwise permanently marked on the spacer or at least one component pane of the sealed unit.

This label must be visible after installation in the building. The IGCC®/IGMA® permanent label must be in block capital letters and have a minimum height of 0.050 inches (1.27 mm). The letters IGCC®/IGMA® must be followed by the ® registration mark or a close facsimile, i.e., IGCC®/IGMA®. The IGCC®/IGMA® permanent label must contain the company identification (company name, trade name or company code), plant code*, registered "IGCC®/IGMA®" mark and a date code spanning no more than a 12 month period, plus or minus three months. The date code should commence with the beginning of each calendar year (effective for both the beginning and the ending of each period). Outdated spacers may be hand stamped to bring the label up to date. The plant code will

only be required when there is more than one plant with an IGCC®/IGMA® certified product operating under the same company name. The IGCC®/IGMA® permanent label must be affixed to certified products only at the time and place of manufacture. The labeling must be approved by the administrator. The permanent label must be affixed only to the sealed insulating glass units of the licensee's own manufacture which have been certified by the manufacturer through IGCC®/IGMA®.

The permanent label must not be sold, transferred or otherwise disposed of in any manner other than being affixed to the licensee's certified production. The permanent label must not be affixed to any product from which certification has been withdrawn or which is produced with a process basically different from the one used when certification was obtained.

Example of Minimum Label:

ABC Glass Co.(*) IGCC®/IGMA® '09

The IGCC®/IGMA® permanent label is listed under each company's name in the "Certified Products" section of this directory.

* A plant code will only be required when there is more than one plant with an IGCC®/IGMA® certified product operating under the same company name.

9.0 ADVERTISING GUIDELINES (Modified 8/09)

The following concepts are important to remember whether you are a participant, licensee in the IGCC®/IGMA® Certification Program, or a supplier to the sealed insulating glass industry. This discussion is intended to provide you with an accurate background description of the IGCC®/IGMA® Certification Program, to help you avoid making possibly misleading, deceptive, or ambiguous statements regarding the program in the advertising of your products.

- 1) IGCC®/IGMA® is the sponsor of a certification program. IGCC®/IGMA® does not certify products.
- 2) The administrator audits laboratories and checks their equipment, audits licensees' production and fabrication of specimens, and validates test reports and certification claims.
- 3) Laboratories test specimens to specific test methods and specifications referenced by IGCC®/IGMA®
- 4) Manufacturers/licensees "certify" their products, affirming that their products are constructed similarly to specimens which were audited, tested and found to pass the stated criteria. A Licensee's Certification Statement is the imprinting,

sandblasting, etching or other form of permanent marking of an IGCC®/IGMA® certification program designation and number to its product.

- 5) The IGCC®/IGMA® Certification Program does not have "members," inasmuch as the term "members" carries with it a connotation that some detailed criteria must be met in order to participate in the organization. Under the IGCC®/IGMA® concept, anyone can participate and "participants" simply must possess a "legitimate interest in the purposes of IGCC®/IGMA®." Manufacturers, on the other hand, which are "fabricators of sealed insulating glass units," become participants by virtue of executing a License Agreement with IGCC®. Any manufacturer of insulating glass may voluntarily enter into a License Agreement, provided that they intend to certify at least one product under the IGCC®/IGMA® Certification Program. Thus, the proper term to use for a manufacturer participant is "Licensee." A manufacturer, with a prototype in progress, is termed a "Candidate Licensee."
- 6) Unit specimens, not their components, are tested under the IGCC®/IGMA® program. Thus, if you are a supplier to the industry, statements indicating that your components have complied with the test methods would be incorrect. A better nomenclature for example, would be, that "Units tested to ASTM E2190 contained our X component have been found to meet the requirements of the specification(s)."
- 7) Should you have any questions concerning the IGCC®/IGMA® Certification Program, please contact:

Insulating Glass Certification Council
Mr. John G. Kent
PO Box 730, 100 West Main Street
Sackets Harbor, NY 13685
Telephone: 315-646-2234
Fax: 315-646-2297
E-mail: staff@amscert.com

10.0 QUALITY ASSURANCE PROGRAM (Modified 8/09)

IGCC®/IGMA® require licensees to have a working quality assurance program for the fabrication of insulating glass. As a minimum, the licensee's quality assurance system must comply with the general requirements of IGMA TM 4000 which established 1) general requirements for quality systems and 2) provides practical solutions for implementing such a system. IGCC®/IGMA® requires compliance to these general requirements of IGMA TM 4000 but does not define the specifics of the quality assurance system which should be appropriate for the type, range and volume of work performed.

Adherence is verified during twice per year plant visits. These requirements were adopted to improve the overall quality of IG units in the program, and also to satisfy requirements established by the Department of Housing and Urban Development, HUD, the National Fenestration Rating Council (NFRC) and other regulatory and consumer driven organizations.

A licensee's QA program shall comply with IGMA TM 4000 which establishes requirements for the following:

- 1) A quality systems manual
- 2) A designated person responsible for quality assurance
- 3) Process Control
- 4) Inspection and Testing (Spacer, Desiccant, Sealant, Gas Fill, Finished Product, Glass)
- 5) Calibration
- 6) Non-Conforming Products and Corrective Action
- 7) Storage and Handling
- 8) Field Service
- 9) Internal Quality Audits
- 10) Training
- 11) Statistical Techniques

11.0 GAS CONTENT INITIAL AND AFTER WEATHERING CERTIFICATION AND TESTING (GCIA) (Modified 8/09)

A licensee must certify to seal durability requirements to participate in the gas content program. The IGCC®/IGMA® Gas Content program is voluntary if gas content units will NOT use IGCC®/IGMA® marked spacer, but is mandatory if IGCC®/IGMA® marked spacer will be used for gas content units. The program is intended to demonstrate a licensee's ability to initially fill to a minimum level and the ability of the construction of the IG unit to retain a minimum gas content level after exposure to the ASTM E2190 weathering cycle.

Licensees meeting a tested initial gas content of 90% or greater and a final after weathering gas content of 80% or greater shall be identified in the Certified Products Directory (CPD) with the designation "GCIA" for "Gas Content, Initial and After Weathering". Both initial and after weathering gas content must be compliant in order to be listed as "GCIA". The gas content certification process will be as follows:

1. The normal minimum of twelve (12) 14x20-inch (355x505 mm) test units for seal durability, 14 for triple pane units, shall be fabricated under auditor witness during normal durability certification fabrication audits. All test units shall be gas filled with argon. All triple pane units shall have both cavities filled and tested. Per guideline G.19 as applicable, coated glass shall

be used and triple pane units shall have coated glass as the center lite only. The test lab shall randomly select ten (10) units for initial gas content testing except that units containing air space material (i.e. grills or muntins) shall not be considered for testing. Units shall be inspected for any damage, and any damaged units not used. Testing for gas content after weathering shall be performed on the 6 ASTM E2190 weathering test units.

2. Four (4) additional production units shall be randomly selected by the auditor from inventory and shipped with the 14x20-inch test units. Production units shall be 3 to 20 square feet (0.914 to 6.09 meters squared) nominally. Production units must be targeted for 90% fill or greater to be eligible for selection. When testing triple pane units, dual pane units shall be acceptable for selection as production units. All four (4) production units shall be tested for initial gas content.
3. Units shall be tested for initial and after weathering gas content percent by non-destructive spark emission spectrography (SES) in accordance with ASTM E2649 Determining Argon Concentration in Sealed Insulating Glass Units Using Spark Emission Spectroscopy. Up to two (2) test units (14" x 20") may be used to replace any unit broken in shipping or handling.
4. Laboratories shall report results of testing as "percent initial gas content" and "percent after weathering gas content" to the nearest whole percent.
5. The calculation of percent initial gas content of the ten (10) test units and the four (4) randomly selected production units shall be the average of all 14 units tested. The calculation of percent after weathering gas content shall be the average of all 6 weathered test units.
6. To be listed as complying with gas content certification, initial and after weathering (GCIA) the measured gas content level must be 90 percent or greater initially and 80% or greater after weathering. These levels were selected as levels that can reasonably be reached by insulating glass fabricators on a consistent basis. It takes into consideration a) variations that may occur in the filling process, and b) variations that may occur in the testing process. If a licensee feels that its gas content is consistently greater than these gas content values, the licensee can include this information in the licensee's literature.
7. It is recognized that actual production units (other than production units selected for this testing) may not necessarily be 90% or greater initial gas content but shall meet the manufacturer's stated initial content values.
8. Special arrangements need to be made if regulatory compliance is required for gas content other than argon (see certification guideline A.GC.1).

12.0 CERTIFICATION GUIDELINES AND INTERPRETATIONS

For guidance in labeling and certifying sealed insulating glass units the Certification Committee has adopted the following:

ALWAYS

12.1 The following situations permit the licensee to **always** certify the sealed insulating glass units with the same IGCC®/IGMA® number.

12.1.1 GLASS

A.GL.1

Any change in glass thickness from that tested. (Modified 3/15/06)

A.GL.2

Any change in glass tint or color from that tested (clear glass is required in test specimens).

A.GL.3

Any change in glass size from that tested (14 by 20 inches is required for test specimens).

A.GL.4

Any change in glass type (i.e. tempered, heat strengthened, laminated or patterned glass) from that tested (annealed glass is normally used in all test specimens).

A.GL.5

Any change in glass shape from that tested (rectangular glass is required in test specimens). This guideline permits the same IGCC®/IGMA® number for triangular, circle head, trapezoidal and other shapes.

A.GL.6

Any change in glass supplier from that tested.

A.GL.7 (Deleted 3/15/06)

A.GL.8 (Deleted 3/15/06)

12.1.2 SPACER

A.SP.1

Any change in air space dimension from that tested (one-quarter inch to one-half inch air space is allowed for testing).

A.SP.2

Any change in spacer wall thickness from that tested.

A.SP.3

Any change in spacer seam design (i.e. butt seam or lock seam) from that tested.

A.SP.4

Any change in supplier of spacer from that tested, everything remaining the same.

A.SP.5

Corners or connections which are soldered, welded, brazed or bent, but uncut, may be used interchangeably with the same IGCC®/IGMA® number. (Adopted 2/19/85)

A.SP.6

Corners or connections may be changed from mechanical connections (MS) to bent-uncut corners (BC), using the same IGCC®/IGMA® number utilizing joiners or corner keys of plastic, aluminum, stainless, or galvanized steel. (Adopted 10/18 /89, modified 5/14/08)

A.SP.7

Any change in spacer profile from that tested. (Adopted 7/29/04)

12.1.3 DESICCANT

A.DE.1

A manufacturer may use the same IGCC®/IGMA® number for units fabricated having air space equal to, or greater than 1/4-inch, provided the weight of desiccant per inch of perimeter edge remains the same or is greater than the model tested. On units fabricated having 3/16-inch air spaces, a manufacturer may use the same certification number, provided the manufacturer maintains the same weight of desiccant per inch of perimeter edge or as close to that value as possible. (Modified 7/28/99)

A.DE.2

A change in supplier of the same generic type of desiccant from that tested will not require a different IGCC®/IGMA® number.

A.DE.3

The use of the same desiccant manufactured in different particle size ranges will not require a different IGCC®/IGMA® number.

A.DE.4

An increase in the percentage of molecular sieve in a blended desiccant up to a maximum of 75% (defined as a "molecular sieve/silica gel" mix) will not require retest. Blends containing more than 75% molecular sieve shall be considered as molecular sieve desiccants and changes from these high sieve content blends (>75%) to 100% molecular sieve desiccants will not require retest. (Adopted 8/29/84, Modified 8/15/08)

A.DE.5

A licensee may change supplier of desiccant matrix provided that the licensee 1) immediately informs the administrator of the change, 2) provides written documentation that the adsorption capacity per perimeter edge of seal is equal to or greater than the matrix used in the original model, and 3) prepares test specimens at the time of the next scheduled inspection. (Adopted 4/29/97)

A.DE.6

Desiccant blends having more than 75% molecular sieve and less than 25% silica gel shall be considered as molecular sieve desiccants and fabricators may switch from the high molecular sieve content blends to 100% molecular sieve without retesting prior to their normal model certification test schedule. (Adopted 5/14/08)

12.1.4 SEALANT

A.SE.1

Any increase in moisture vapor transmission path length is an acceptable alternate for labeling.

A.SE.2

A licensee may use a temporary alternate sealant in the same generic class by a) notifying the administrator of the change, b) having test specimens witnessed by the administrator's representative at the next regular audit, and c) sending the test specimens to an IGCC®/IGMA® approved testing laboratory within four weeks of the test specimens' fabrication date. The licensee may temporarily use the certification label on a provisional basis commencing with written notification of the administrator and end when test results are received by the administrator. (Modified 6/7/90)

12.1.5 GAS CONTENT

A.GC.1

Any change in gas from that tested providing the same gas filling process is used; argon is required for testing.

NEVER

12.2 The following situations never permit the licensee to certify with the same IGCC®/IGMA® number. They require the use of a different IGCC®/IGMA® number.

12.2.1 SPACER

N.SP.1

A change in spacer material, i.e. aluminum to steel or any other material will require a different IGCC®/IGMA® number.

N.SP.2

A change in spacer surface finish, i.e. anodized to mill finish or hot dip to electro galvanized will require a different IGCC®/IGMA® number.

N.SP.3

A change in corner design from soldered, welded, braised or bent(BC) to mechanical corner(MC) will require a different IGCC®/IGMA® number. (Modified 5/14/08)

N.SP.4

A change in corner key material to another material, except to the same material as the spacer, will require a different IGCC®/IGMA® number. All plastic keys and joiners are considered generically equivalent. This guideline does not apply to A.SP.6. (Modified 5/14/08)

N.SP.5

If bent, uncut spacer corners or connections(BC) are changed to mechanically fastened spacer corners(MC); a new IGCC®/IGMA® number is required. (Adopted 2/19/85, Modified 5/14/08)

12.2.2 DESICCANT

N.DE.1

A change in generic type of desiccant will require a different IGCC®/IGMA® number. Generic types, for purpose of this guideline are molecular sieve, and blends of silica gel and molecular sieve up to 75% by weight molecular sieve. Blends containing more than 75% molecular sieve shall be classified as a molecular sieve generic type of desiccant. (Adopted 8/29/84, Modified 8/14/08)

12.2.3 SEALANT

N.SE.1

In a single sealant system, a change in generic type of sealant will require a different IGCC®/IGMA® number.

N.SE.2

In a two sealant system, a change in generic type of primary sealant will require a different IGCC®/IGMA® number.

N.SE.3

In a two sealant system, a change in generic type of secondary sealant will require a different IGCC®/IGMA® number.

N.SE.4

Any decrease in the minimum design moisture vapor transmission path length will require a different IGCC®/IGMA® number.

N.SE.5

Any increase in thickness of design moisture vapor transmission path (glass to spacer dimension) will require a different IGCC®/IGMA® number.

GENERAL

12.3 CLASS I - UNIT MODIFICATION

DEFINITIONS

Breather Tube - Tube inserted into the I.G. spacer and intended to be sealed prior to glazing of the unit.

Capillary Tube - Tube inserted into the I.G. spacer and intended to be left permanently open.

Capillary Tube and How It Is Related to Membrane - IGCC®/IGMA® observes that organically sealed insulating glass units are not actually hermetically sealed, but rather are composed of sealing systems which demonstrate sufficiently low water and gas transmission rates as to pass the accelerated weathering conditions imposed in ASTM standard(s). We acknowledge that certain capillary tube designs may also control the passage of water and gases in such a manner as to allow breathing but still demonstrate the ability to pass the test conditions.

G.0 - (Added Guideline – 8/14/85)

An I.G. construction incorporating a permanently open capillary tube will be considered and listed as equivalent to a previously IGCC®/IGMA® program certified I.G. model without a capillary tube, provided the following applies:

- a. Material and construction of the units are identical, except for the inclusion of the capillary tubes.
- b. Both sets of I.G. units reach the same performance level when tested according to ASTM standard(s). The units with capillary tubes need only be tested once.
- c. The test must be run by an IGCC®/IGMA® approved lab.
- d. Preparation of test specimens need not be witnessed. However, the test result must be reviewed and approved by the administrator.

G.1 Breather Tube (Temporarily Open Type)

A licensee is permitted to insert the open end of a breather tube in a bag or container of desiccant during shipment of a specimen to the test laboratory. The breather tube must be sealed prior to testing. (Adopted 8/14/85)

G.2 Breather Tube (Temporarily Open Type)

The addition of a breather tube is acceptable, for shipping only, even though not in the test specimen. The breather tube should be properly sealed before installation. (Adopted 8/14/85)

G.3 Edge Protection

The addition of edge protection such as metal banding, metallic foil, barrier coat, etc., is acceptable with the same IGCC®/IGMA® number.

G.8 Air Space Material

A minimum of two (2) of the twelve (12) test specimens shall be constructed utilizing all of the components of an air space material system, which are used in the ultimate product. Such systems may include but are not limited to blinds, films, decorative glass inserts, grills and muntins. When testing muntins or grills, test samples shall be fabricated dividing the sample into nine equal areas (3 by 3). A licensee may use the same IGCC®/IGMA® number for units manufactured without air space material providing regular testing has been accomplished in accordance with the above procedure. (Modified 7/29/04)

G. 15 Multiple Air Spaces

Multiple air space units may be certified with the same IGCC®/IGMA® number as single air space units, provided that the construction of each space complies with the guidelines for single space units; pressure communication of spaces is permitted, but not required. This guideline shall apply to multiple air space products that use glass or a suspended coated film (SCF) as an airspace barrier. For all new certified products and currently certified products after 1/1/09 testing of multiple air space units shall be performed initially and in lieu of single air space unit testing at least once each (4) years. (Modified 5/14/08)

G. 19 Coated Glass

An Insulating glass unit constructed with coated glass with the coating toward the air space (pyrolytic or sputter coated) shall be certified utilizing the same IGCC®/IGMA® number provided annual test units include one lite of the coated product per test sample. Only the highest volume coated product need be tested. Testing of sputter coated non-edge deleted will cover sputter coated edge deleted, Pyrolytic and uncoated (clear). Testing of sputter coated edge deleted will cover Pyrolytic and uncoated. Testing of Pyrolytic will cover Pyrolytic and uncoated. Testing uncoated (clear) will only cover uncoated (clear). (Modified 3/15/06)

G.26 Desiccant in 1/2-inch Air-Space Test Units

In cases where units are made for testing with 1/2-inch air-space, glass thickness shall remain within the guidelines already established and that the desiccant quantity shall be limited to a maximum of filling one-half of the perimeter. (Adopted 8/28/86) However, if equivalent desiccant quantity to a standard 1/4-inch air space unit can be demonstrated, filling of all sides will be allowed. (Modified 9/1/87)

It should be noted that the limitation upon desiccant quantity is done in order to maintain the relationship of quantity of desiccant within the 1/2-inch air space test unit identical with that of a 1/4-inch air space test unit since the moisture vapor transmission area in each of these units is identical. Filling 4 spacers of a 1/2-inch air space would give manufacturers having this larger air-space unit tested an unfair advantage. It was asked to point out that testing of units containing a 1/2-inch air space will undergo greater stress during the test and, therefore, is considered a more difficult test in this configuration. (Adopted 8/28/86)

G.27 Structural Modification, i.e. Hole for Gas Fill

A sealed insulating glass unit that has been structurally modified, i.e. hole or holes for gas filling, shall be tested annually for certification assembled with standard production procedures including these modifications. At the option of the manufacturer, the units may be tested with gas or air in the interspace. Non-gas-filled units shall be considered equivalent providing construction is identical except for the omission of the gas filling hole/holes. To accommodate this modification a nominal 1/2 inch \pm 1/16 inch gas or air space maybe tested under this guideline. (Modified 7/31/01)

G.29 IG Integrated Sash Technology

When testing IGCC®/IGMA® units using IG Integrated Sash Technology, IG fabricators would have the option of testing integrated IG units in one of two methods: 1) glass size shall be 14x20-inch and the sash shall be cut away to fit in a 14x20-inch testing opening, or 2) a larger sash which accommodates 14x20-inch glass may be tested. This option would need to be reviewed with the test lab ahead of time to ensure the test chamber can accommodate the larger sash size. All testing is completed with no glazing beads and all fabrication holes or simulated hole punches in place. If the sash is cut away, this function must be performed by the IG fabricator. (Adopted 5/3/05)

G.30 Applied Coatings to an IG Spacer and Spacer Components

An insulating glass unit utilizing an applied coating to an IG spacer and spacer components shall be initially certified under the normal certification testing process. The application of the coating will be documented in the product audit report. A coating may be added to or removed from an already certified product utilizing the same certification number by applying guideline G.5. Applied coatings would include, but not be limited to paints, coatings and adhesion promoters. (Adopted 5/14/08)

12.4 CLASS II - SPECIMEN

G.6 Specimens - Quantity (Modified 8/23/07)

No more than 4 additional test units (excluding production units for gas content test) shall be labeled by the auditor for testing (12 units required for double pane and 14 units required for triple pane.) When gas content testing (GCIA), ship the additional auditor "labeled" units to the testing laboratory.

G.9 Specimens - Production

When a licensee is producing only unlabeled units at the time of a plant audit, the licensee will be requested by the IGCC®/IGMA® inspector to label at least one unit in accordance with Guideline G.7 to permit completion of the audit. (The label may be hand scribed or crayon marked on the inside surface.)

G.10 Specimens - Production

If a licensee is not producing units at the time of an audit a labeled unit from inventory may be cut apart for inspection, provided that the date code is within the audit period.

G.11 Specimens - Production

A portion of the audit will be used to determine whether a licensee is using the IGCC®/IGMA® label on unauthorized units.

G.12 Specimens - Shipment

Units fabricated for test during an audit must be shipped directly to the approved test facility within four weeks of the date of fabrication. If they are not, the audit may be considered invalid and another audit must take place. But for normal in plant quality inspection processes performed by the manufacturer, there shall be no 'pre-testing' of any test sample being forwarded to the approved test facility. In situations where fabricated test units are deemed unacceptable for test by the licensee as a result of a normal plant quality inspection process, the licensee shall be allowed to re-fabricate test samples only once. This re-fabrication must occur within 45 days of the original fabrication. All costs related to this guideline are to be borne by the licensee. (Modified 5/14/08)

G.14 Specimen Frequency

The prototype test will be considered as the test for the first year of certification (providing application is made within 18 months from the date of the test report). This is effective for matters initiated after May 1982. The next fabrication for testing purposes will be in the first half of the second year.

G.31 Suspension of Testing

There may be situations where the program participant wishes to suspend testing (gas or durability) before completion. For prototype fabrications this shall be at the discretion of the program participant and has no effect on the certification listing. For certified unit testing, with consideration for guideline G.12, any suspension of the test, gas or durability, shall be deemed as a failure of that portion of the test. G.12 would not be applicable once testing has started. (Adopted 5/14/08)

12.5 CLASS III - EQUIVALENCY

G.5 Gray Area

Situations that are not included in the "Always" or "Never" categories listed above, fall into the gray area. The gray area situation is covered by Minutes item 10.10.77.10 and is repeated here.

When there is a change and the licensee desires to use the same IGCC®/IGMA® number, the licensee shall immediately notify the administrator with all details of the change and also satisfy either 1 or 2 below:

- 1) establish equivalency by passing the same level of ASTM test as certified to by:
 - a) having specimens tested at an IGCC®/IGMA® independent testing laboratory or
 - b) having specimens tested at an in house (licensee) facility, testing done in house by a licensee must be done under the surveillance of the administrator.

Specimens must be fabricated and submitted to the laboratory within two weeks after notification of the administrator. During the test period, the licensee may temporarily use the certification label on a provisional basis or:

- 2) demonstrate the equivalency of the change to the satisfaction of the Certification Committee or a subcommittee. (Specimens not required.)

G.21 Transfer

If a licensee manufactures the same model using the same technology at a different location, a IGCC®/IGMA® number with a temporary status will be issued provided that testing (durability and/or gas content) of the model is initiated at the next scheduled testing audit. This guideline may not be applied to products for which certification has been previously removed due to test failure. (Modified 12/06/06)

G.23 Equivalency

A licensee needs to establish equivalency for a model only once.

G.24 Vision Glass Areas

Special note should be taken that the ASTM E2190 test method only provides testing for "Vision glass areas." As such, it is only these types of units that fall within the IGCC®/IGMA® Certification Program. This, however, in no way precludes the ultimate use of these units in other applications, e.g. Spandrel units.

(Adopted 8/28/86) Labeled spacer may be used in IG units, other than vision glass, but in that case, certification does not apply. (Adopted 4/16/91)

G.28 Certifying Additional Constructions

A current licensee with currently certified products may certify additional constructions or replace a certified construction at the same plant location by having specimens tested at an IGCC®/IGMA® independent testing laboratory. These samples need not be witnessed by an IGCC®/IGMA® representative. Upon completion of passing test results the construction shall be eligible for IGCC®/IGMA® certification. IGCC®/IGMA® witnessed testing must occur at the next regular audit. (Adopted 7/28/99)

12.6 CLASS IV - APPEALS, REVIEW AND DE-CERTIFICATION

G.13 Monetary

The administrator shall remove authorization to use the IGCC®/IGMA® permanent label from all of any licensee's products for failure to pay monies due to IGCC®/IGMA® within 60 days of invoice date (reference License Agreement A. 13 and B.6).

G.16 Appeals

In cases where a routine test fails to comply with the specifications:

- 1) Upon notification of failure of routine test samples to reach the certified level, the licensee will be officially notified by certified mail, return receipt requested. Within 15 days the licensee must respond to the certified letter stating a retest fabrication is requested by paying all required administrative and test fees. If there is no response within 15 days, authorization to use the IGCC®/IGMA® permanent label will be removed.

If the retest option is accepted:

- a) Request for retest option is granted by IGCC®/IGMA® only upon receipt in full of any administrative and retest fees within 15 days of date of mailing of the notification of failure.
 - b) IGCC®/IGMA® will perform an audit and witness fabrication of retest specimens within 45 days of payment of fees in 1) above.
 - c) Licensee must ship and deliver retest specimens to the testing laboratory within 7 days of fabrication. (Copy of shipping papers and delivery receipt must be received by IGCC®/IGMA® within 14 days of fabrication of retest specimens.)
- 2) There is to be no change in certification status during the retest period. All routine audits will continue. Sample fabrication for subsequent routine testing of the questionable model will be suspended pending the outcome of the retest.
 - 3) If the retest units comply, they shall be considered as the next routine test.
 - 4) If the retest units fail, the licensee is issued a cease and desist order on use of the label immediately.
 - 5) The licensee may choose to accept certification at any level passed by the retest, although it might be a lower level than originally desired.

G.20 Authorization to use the IGCC®/IGMA® Permanent Label

Authorization to use the IGCC®/IGMA® permanent label will be removed if a routine audit discloses that a licensee is labeling units containing the same unauthorized construction for the third time.

G.22 Clarification of Due Process Appeal Process

Clarification of due process appeal process under License Agreement, Paragraph A.11:

A Licensee's appeal from a final adverse decision by the Administrator, under License Agreement Paragraph A.11, shall in the first instance be to the Certification Appeals Subcommittee of the Certification Committee, which acts as an executive committee for the Certification Committee in order to provide a prompt hearing for the Licensee and to act on the Licensee's appeal as quickly as possible. A decision by the Certification Appeals Subcommittee favorable to the Licensee shall be a final decision. A decision by the Certification Appeals Subcommittee adverse to the Licensee may be appealed to the full Certification Committee for a due process review and hearing. Such an appeal to the Certification Committee must be made in writing within 30 days of an adverse decision by the Certification Appeals Subcommittee and this appeal will be heard at the next regularly scheduled meeting of the Certification Committee. Pending a hearing by the Certification Committee on such an appeal, the Licensee may maintain certification for the product at issue.

SPECIFICATION USED FOR SEALED INSULATING GLASS

- **ASTM E2188**
- **ASTM E2189**
- **ASTM E2190**
- **ASTM E2649**

Specification may be obtained by contacting:

ASTM
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Telephone: (610) 832-9585
Web Address: www.astm.org

Adopted: May 13, 1977
Revised: August 1, 1981
Revised: January 15, 1986

IGCC® PARTICIPANT'S AGREEMENT

I have read the PURPOSES of the INSULATING GLASS CERTIFICATION COUNCIL and hereby declare that I have a legitimate interest in the goals of the Council. I further declare that I do not manufacture insulating glass units nor am I employed by any company, which is in such manufacturing business; as such I do not qualify to become a Licensee of the Insulating Glass Certification Council.

In view of the above declaration, I wish to be recognized as a "participant" in the Insulating Glass Certification Council.

Print Name: _____ Date: _____
Address: _____ Phone: _____
City: _____ State: _____ Zip: _____

My interest in the Council is: _____
Signature: _____

ARTICLE II

SECTION I - PURPOSES

The purposes of the Insulating Glass Certification Council shall be:

1. Promote public benefit by encouraging maintenance of the highest standards of excellence in the manufacture of insulating glass.
2. To encourage and cooperate in developing standards related to performance characteristics of insulating glass products.
3. To plan, organize, direct, coordinate and sponsor a certification program for insulating glass manufacturers to assure that their products meet applicable standards and/or performance requirements, adopted or approved by the Council.

ANNUAL FEE

The annual fee for a non-manufacturing participant will be \$350.00 per company. There will be no fee for public interest or consumer participants.

CREDIBILITY IN CERTIFICATION THROUGH ACTIVE PUBLIC PARTICIPATION

August 2009

**INSULATING GLASS CERTIFICATION COUNCIL, INC. ("IGCC" ®)
CERTIFICATION PROGRAM FOR SEALED INSULATING GLASS UNITS
STANDARD LICENSE AGREEMENT (as revised effective 3/15/06, and constituting the successor
effective agreement pursuant to the terms herein, for all preceding fully-executed IGCC®
Certification Program standard license agreements)**

This Agreement, made this _____ day of _____, 20___, by and between INSULATING GLASS CERTIFICATION COUNCIL, INC., an Illinois not-for-profit tax-exempt corporation having its administrative office at P.O. Box 730, Sackets Harbor, NY 13685 hereinafter called "LICENSOR" and _____ having its principal office at _____ hereinafter called "LICENSEE", hereby provides as follows:

WITNESSETH:

1. WHEREAS, Licensor is sponsoring a Certification Program for Insulating Glass Units, which will provide for (1) the validation of a manufacturer's certification of such products by means of independent laboratory testing to the requirements of applicable Specification(s) and applicable Test Method(s) and ASTM Standards; and under the further terms and conditions of the Certification Program set forth in this Agreement and the Program's Procedural Guide, and also providing for (2) the stipulation by each such manufacturer that the manufacturer maintains a quality assurance program which covers the production of all the units to which above clause (1) refers; and
2. WHEREAS, The responsibilities of IGCC®, the IGCC® Administrator and the independent laboratories are limited to the tasks set forth in this Certification Program; they do not endorse, warrant, or guarantee products validated or certified thereunder; and
3. WHEREAS, Licensor is willing to accept participation in said Certification Program by all manufacturers of Insulating Glass Units under the terms set forth herein; and
4. WHEREAS, Licensor is the uncontested sole owner of the mark and label "IGCC"®; the aforesaid mark/label, and/or other mark(s)/label(s) cross-licensed to Licensor, is/are hereby licensed by Licensor to Licensee and said label(s)/mark(s) shall be permitted to appear on Licensee's registered Certification Program labels which are permitted by Licensor to be affixed to the Insulating Glass Units complying with the pertinent requirements of the Certification Program; and
5. WHEREAS, the Licensor shall contract for the complete administration of the Program and the Administrator shall contract for services with the independent laboratories which meet the ethical, financial, and business experience standards of the American Council of Independent Laboratories or National Society of Professional Engineers for performance of tests and other administrative duties as are herein provided; and
6. WHEREAS, the Licensor shall appoint a "Certification Committee" comprised of representatives of IGCC® Certification Program Participant manufacturer licensees, including the Public Interest members of the IGCC® Board of Governors, and Participant Suppliers and Test Laboratories, and other Participant organizations and persons (including public interest representatives of said organizations), acting as a liaison between Licensor, Licensees and interested parties: meetings of this committee shall be called by the Chairman of the Certification Committee at least once each year; and

7. WHEREAS, the procedural guide, to be developed in accordance with paragraph B.4 shall be adhered to both by the Licensor and the Licensee; and
8. WHEREAS, the Administrator shall conduct all aspects of the program in accordance with the highest nationally recognized standards for conduct of such a program including HUD standards for accreditation of the Program and the Administrator as set forth in HUD's "Use of Materials Bulletin No. 82" ("HUD Building Product Standards and Certification Program for Sealed Insulating Glass Units"), which requires an accredited Program to include a quality assurance provision such that all participating manufacturers shall have quality assurance programs covering the production of the units to which Whereas Clause No. 1 above refers; and
9. WHEREAS, Licensee is willing to participate in and support said Program under the terms and conditions set forth in the Agreement.

Therefore, be it
RESOLVED, that it is agreed by and between the parties hereto as follows:

LICENSEE:

A.1) Shall sign this Agreement by providing the signature of its corporate officer or authorized representative, and also its primary IGCC® Engineering or Quality Dept. Contact, where noted herein.
A.2) Shall allow the Administrator's representative, without prior notice, free access at any time during regular business hours, to Licensee's place of manufacture of Insulating Glass Units certified hereunder and to witness the manufacture of samples which are to be tested for compliance with the requirements. Licensee's refusal to permit access for inspection purposes hereunder may be due cause for removal of its entire product listing from the Certification Directory and the withdrawal of its rights to affix Certification Labels thereto. Acceptable reasons for not permitting entrance for inspections would include strikes, acts of God, and circumstances beyond immediate control of the manufacturer. Areas which may have been set aside for research or prototype development may be restricted. It is understood that the Administrator or his representative shall be allowed to pick up samples from the field for inspection or testing. It is understood that periodic tests each year will be made on each model to be certified and that said tests will be made at the laboratory selected by the Administrator or Licensee from the approved list. Results of each test shall be promptly mailed to the IGCC® Administrator. IGCC® will notify

the Licensee of compliance or non-compliance. It is further understood that routine expense of sampling and testing will be borne by the Licensee. The Licensor will charge each Licensee accordingly and so contract with the Administrator. The Administrator will contract for testing with approved testing laboratories. Expenses for packaging, shipping, and purchasing of glass for testing will also be borne by the Licensee. These costs will be handled directly between the Administrator and each Licensee.

A.3) Shall affix to each of its certified products the permanent Certification Label, number and class assigned by the Licensor:

- a) Only at the time and place of manufacture; and
- b) Only to Insulating Glass Units of Licensee's own manufacture, which have been so approved by the Licensor.

A.4) Shall not sell, transfer or otherwise dispose of Certification Labels in any manner other than affixing to Licensee's certified production.

A.5) Shall not affix hereafter the IGCC® or other registered mark, or Participant's Certification Label registered with Licensor, to any product from which certification has been withdrawn or which is produced with a process basically different from the one used when certification was obtained. A model change shall be as defined by the IGCC® Certification Committee.

A.6) Shall upon a finding by the Licensor that a certified product of Licensee has been changed as defined by the Certification Committee have thirty (30) days in which to submit a request for waiver of retest or request a new inspection and retest at Licensee's expense if no waiver is granted. Failure of Licensee to act as required immediately above shall constitute due cause for exclusion of this product from the program.

A.7) May withdraw a certified product from the Program by written declaration and request for removal of said product from the Licensor's listing signed by the authorized representative of the Licensee.

A.8) Shall use all practical means at its command continuously to assure that its products hereunder certified fully comply with the Specification requirements, and are manufactured in the same manner as test specimens, and are subject to a quality assurance program maintained by Licensee, and Licensee shall so stipulate to the Administrator's representatives during the periodic visits of said representatives to Licensee's facilities described above in Section A.2) or when otherwise requested by the Administrator.

A.9) Shall refrain from using terms implying or claiming certification, validation, accreditation, or the like in connection with advertising referring to products which have not been validated, or from which validation of certification claim has been withheld or withdrawn or any other statement or term which might be interpreted as compliance with this program.

A.10) In connection with the advertising of model systems which the Licensor has approved and granted a certification number or label, the Licensee must use the following concepts as guidelines: Licensor (IGCC®) sponsors the Certification Program. Licensee (Manufacturer) certifies that the product is the same as the model which has been tested. Administrator validates the test results through Inspections according to the Licensor's guidelines.

A.11) Shall abide by the decision of the Administrator as to the compliance or non-compliance of Licensee's products with the requirements of the IGCC® Certification Program, determined in accordance with the requirements of the specification testing of such products. It is understood that the Administrator shall be the sole judge of compliance or non-compliance with the Specifications applicable to the IGCC® Certification Program, for purposes of Licensor's validation of Licensee's certification of

such a product under this Program. Where questions involving interpretation arise, the matter will be referred to the IGCC® Certification Committee for ruling.

A.12) Agrees that notice regarding the status of any of its certified products shall be carried in the Certification Directory.

A.13) Shall pay the participation fees shown in the Schedule of Fees, which is an APPENDIX hereof, upon signing of this Agreement and at each annual renewal thereof. It is understood, that this Schedule of Fees may be changed from time to time by the Licensor.

A.14) Agrees that the Administrator may, at his discretion, use any and all data, exclusive of Licensee's Company name, address, proprietary product designation or any other information which may provide clues as to the manufacture of the products, for the purpose of comparing test methods and correlating test methods with field performance.

A.15) Shall legibly and permanently mark each piece of its certified product in accordance with the marking requirements of the applicable standards and, in addition, include a symbol identifying the plant in which the product was made to comply with the standard for the purpose of identification under this Certification Program.

A.16) Shall furnish Licensor with any information regarding its product as may be necessary to properly identify Licensee's Certified Product for listing in Licensor's Certification Directory.

A.17) Shall regularly mail to the Administrator, at the same time as such material is furnished others, copies of its catalogs and other literature, excluding price and discount information, where such materials list Licensee's products certified hereunder.

A.18) Shall abide by and comply with all procedural details which the Administrator may prescribe for the implementation of the Certification Program, provided that such procedural details are not inconsistent with the provisions and purposes of this License Agreement.

A.19) Shall have the right, at its option, to designate a nominee from Licensee's organization for consideration by the Board of Governors for appointment to the Certification Committee.

LICENSOR:

B.1) Shall prepare and publish at least twice each year, with such interim supplements as may be desirable, a Certification Directory containing a listing of the Certified Insulating Glass Products which have been found by test to be in compliance with each required specification for each Licensee then in good standing with Licensor. This directory shall include the Licensee's assigned certification number, name, location and product certification status.

B.2) Shall promptly mail substantial quantities of each Directory and supplement to door, sash, and building products manufacturers, glazing contractors, home builders, architects, regulatory agencies and code-making groups, and publicize the Directory to trade publications.

B.3) Shall provide and maintain a list of approved laboratories qualified to perform tests required hereunder and to authorize tests herewith specified. Said list of approved laboratories is to be developed by the Certification Committee.

B.4) Shall prepare and maintain a procedural guide and the standard forms which may be adopted for use with the Licensee and the approved laboratories in connection with the operation of the Certification Program.

B.5) Shall hold all test reports and correspondence with Licensees and others, relating to Licensee's products or tests, in strict confidence, except for communication necessary to effect proper listing in the Certification Directory.

B.6) Shall not list in or remove from the Certification Directory any product or Licensee except on due notification from the Administrator to do so, except as provided in Paragraph A.7 above or because Licensee fails to pay applicable fees as provided in A.13 above.

B.7) Shall enter into a contract with an independent agency, whereby this independent agency will act as Administrator of the Certification Program for and on behalf of Licensor, to provide and authorize all sampling and testing, review and approve test data, perform periodic evaluations or other duties and functions herein provided for.

B.8) Shall conduct the Program in accordance with HUD standards or HUD accreditation of the Program as set forth in HUD's "Use of Materials Bulletin No. 82" ("HUD Building Product Standards and Certification Program for Sealed Insulating Glass Units").

IT IS FURTHER AGREED THAT:

C.1) A certification test hereunder denotes and is limited to a test in accordance with the requirements of the appropriate specifications and related test methods.

C.2) Each branch or affiliated plant of each Licensee manufacturer must be registered individually, and products therefrom tested and certified separately and apart from products manufactured in other plants or branches of any Licensee manufacturer.

C.3) A procedure exists for handling complaints of non-compliance which provides for samples of like product to be provided by Licensee in a specified manner for repetition of tests within thirty (30) days, the total cost of which, including test specimens, is to be borne by the complainant, unless the test proves non-compliance, in which case the costs will be borne by the Licensee; tests are to be initiated by the Licensor promptly upon receipt of a complaint in writing along with the appropriate surety deposit.

C.4) This agreement shall become effective on the date of signing and shall extend for a period of 12 months and shall be renewed automatically for successive periods of 12 months each, and remain in effect unless Licensor or Licensee, at least sixty (60) days prior to the date of expiration, gives notice in writing that cancellation or termination is requested (which shall be deemed agreed and effective at the conclusion of said notice period) and unless revoked and terminated by Licensor for causes set forth in this Agreement and in accordance with procedures set forth in the Agreement and the IGCC® Certification Program Procedural Guidelines.

C.5) If this agreement is terminated, then upon the effective date of such termination, Licensee shall:

- a) Not affix the registered quality Certification Labels to any product which Licensee shall thereafter manufacture; and
- b) Make no further reference to, or use of, Licensor's Certification Program or registered Certification Labels as used earlier in the Certification Program.

C.6) Licensor, in the event it shall be necessary to exclude Licensee from participation in the Certification Program in accordance with the provisions hereof, may do so by giving Licensee thirty (30) days written notice of Licensor's termination of the License Agreement.

C.7) The terms of this Agreement and any disputes arising from this Agreement, and any arbitration pursuant to this Agreement, shall be governed by the laws of the State of Illinois, in which Licensor is incorporated. The parties agree that all disputes relating to the interpretation of, or otherwise arising from the terms of, this Agreement not settled amicably between them will

be submitted (following a mandatory 20 day period in which no claim shall be submitted to arbitration and during which the parties will seek a mutually agreeable resolution of any claim or dispute) to binding contract arbitration, unless both parties consent to mediation or some other form of dispute resolution. In the event of contract arbitration, the arbitration will be conducted by a neutral third party arbitrator accepted by both parties. In the event that the parties do not agree to the appointment of any arbitrator, any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be resolved under the most-current Commercial Arbitration Rules of the American Arbitration Association. The place of the arbitration shall be in Illinois, or some other mutually agreeable location. In any arbitration proceeding, reasonable discovery of evidence shall be allowed, and strict conformity to legal rules of evidence shall not be necessary, and the parties may offer evidence as is relevant and material to the dispute, which shall be considered in the arbitrator's reasonable discretion. The arbitrator, exercising his or her discretion, shall conduct the proceedings with a view to expediting the resolution of the dispute. If any party submits an arbitration claim to enforce any of the terms of this Agreement, the prevailing party shall be entitled to recover reasonable attorneys fees and costs it may incur in connection with the arbitration proceeding. A final award by the arbitrator shall be enforceable in any court of competent jurisdiction.

C.8) In the event any part or parts of this Agreement are found to be void, the remaining provisions shall nevertheless be binding with the same effect as though the void parts were deleted.

C.9) The use of any Label governed by this Agreement on any unqualified product, or the use of any such Label by a manufacturing or assembly or other facility other than that registered will not be permitted by the Licensee, its employees, its representatives, and its agents. If the use of any Label in contravention of this Agreement is discovered, after a due process hearing review by the Certification Committee, the Licensor will have cause to institute or seek all or any of the following actions: a) Revocation of license; b) Imposition of an award in favor of Licensor of liquidated damages of five thousand dollars (\$5,000); c) Legal action preventing the Licensee from having the applicable Labels printed, attached, or used in any manner by Licensee, with the entire cost of such legal action to be borne by the Licensee.

C.10) In the event Licensor promptly notified all those to whom it has sent the then most recent issue of the Certification Directory or supplement thereto, as well as the National Better Business Bureau and the trade press, regarding any incorrect listing or reference to Licensee's product(s) published in any Certification Directory, supplement thereto, or elsewhere, Licensee agrees not to hold Licensor liable in any way for any damage caused by such incorrect listing or reference, unless such damage was the result of an intentional tort, willful act or gross negligence by Licensor.

C.11) Licensee shall indemnify and hold Licensor harmless as to any expense whatsoever for, or incurred in connection with, any claims, losses, or defense of claims or losses, which may be asserted by a third party against Licensor by reason of this Agreement and services performed hereunder, and shall name the Licensor, as its interest may appear, as an additionally insured party on any products liability insurance policy owned by the Licensee which affects those products of the Licensee certified under this Agreement; and proof of such coverage shall be sent by the Licensee to the Licensor within fifteen (15) days from the date of Certification or the date such coverage is secured, whichever first occurs.

August 2009

_____ shall make use of the others' trademarks, _____
_____ in any manner without the prior written
_____ er provided each party hereby authorizes the
_____ term of this Agreement, to state that the
_____ participant in this Certification Program.

executed between Licensor and Licensee, if Licensor and Licensee have executed any such predecessor IGCC® Standard License Agreement. If such a predecessor agreement was executed, that predecessor agreement is hereby cancelled, by mutual agreement, effective as of execution of THIS AGREEMENT (which is a successor standard agreement to the earlier IGCC® Standard License Agreement), with the 60 days notice of cancellation period for the predecessor agreement hereby waived by Licensee.

_____ AGREEMENT may not be transferred, assigned, or
_____ d of to any other company, individual, or
_____ without the express prior written consent of
_____ Licensor. By mutual agreement of Licensor and
_____ AGREEMENT supersedes and replaces the
_____ IGCC® Standard License Agreement, in the form

_____ Company _____

_____ Street Address _____

_____ City, State and Zip _____

_____ Telephone Number _____ Fax Number _____

_____ Title _____

_____ (Corporate Officer or Authorized Representative) _____
Date _____

_____ Title _____

_____ (by IGCC® Engineering or Quality Dept. Contact) _____
Date _____

_____ INSULATING GLASS CERTIFICATION COUNCIL, INC. (IGCC®)

_____ Title _____

Date _____

Insulating Glass Certification Council
P.O. Box 730, 100 West Main Street
Sackets Harbor, NY 13685
Telephone: (315) 646-2234 Fax: (315) 646-2297

_____ LICENSOR WILL BE RETURNED TO LICENSEE.

March 2006 Revision



PRESORTED
STANDARD
U.S. POSTAGE
PAID
PERMIT 369
SOUTH BEND, IN

P.O. Box 730
Sackets Harbor, NY 13685

CHANGE SERVICE REQUESTED