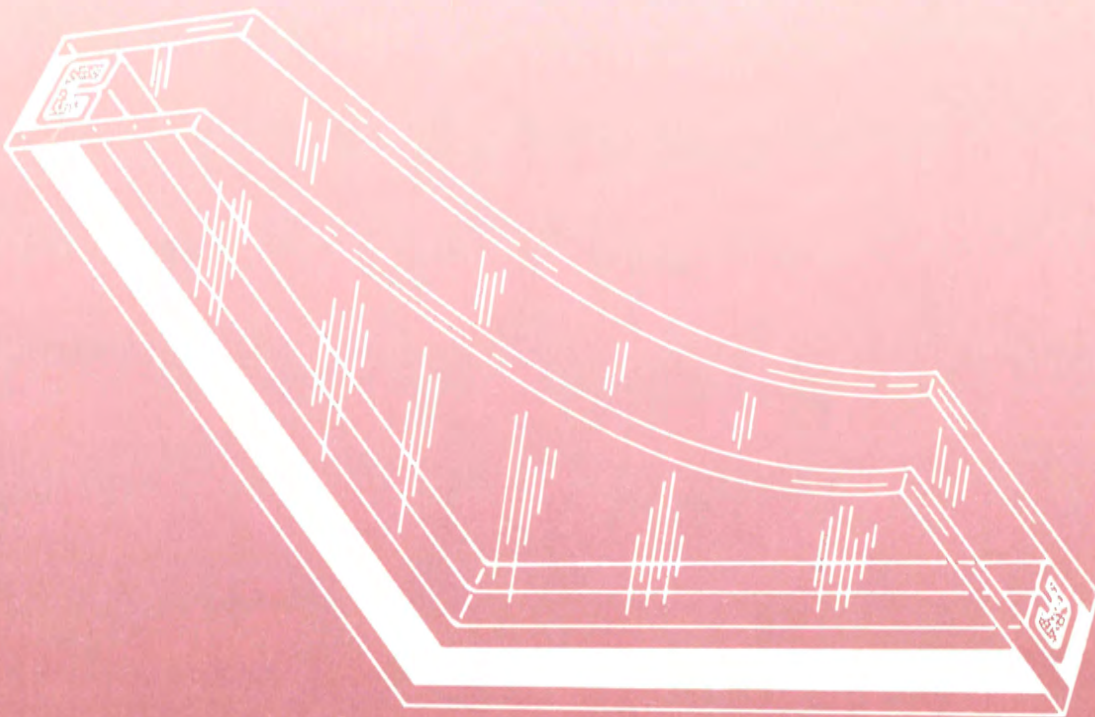


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CERTIFIED PRODUCTS DIRECTORY

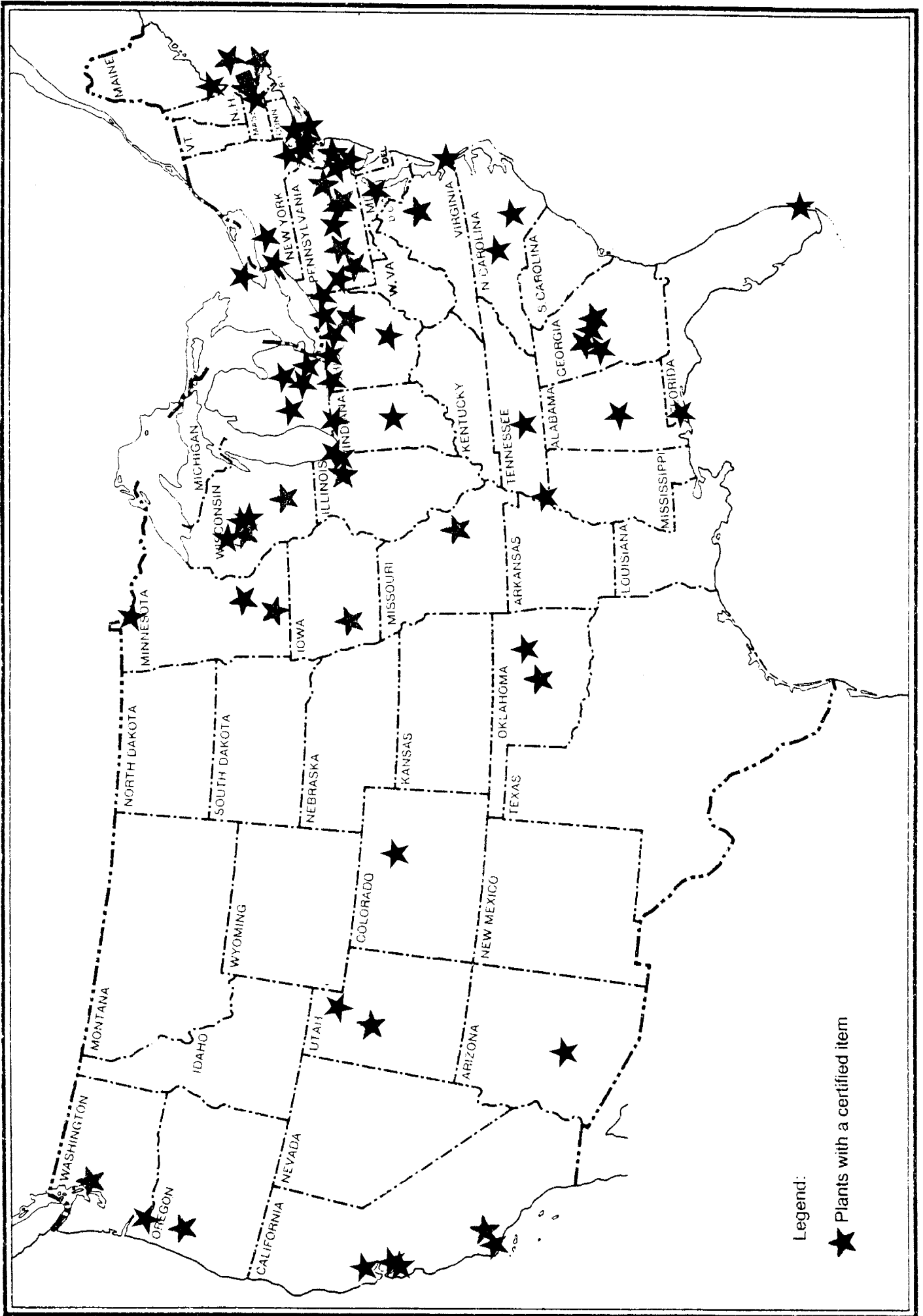
SEALED INSULATING GLASS

AUGUST 1, 1985



INSULATING GLASS CERTIFICATION COUNCIL

CREDIBILITY IN INDUSTRY CERTIFICATION THROUGH ACTIVE PUBLIC PARTICIPATION



Legend:
★ Plants with a certified item

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 Relates To Membrane — IGCC 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 E773 and E774. 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.

ADDITIONS OR REVISIONS

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 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 rating level when tested according to ASTM E774. The units with capillary tubes need only be tested once.
- c. The test must be run by an IGCC 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. (Revised 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. (Revised 8/14/85)

G.19 — Coated Glass (Coated to Edge)

A coated insulating glass unit shall be considered equivalent to certified insulating glass units made with uncoated glass, providing the test level readings are the same for both sets of I.G. units. Tests shall be by IGCC approved laboratories. Only the lowest light transmission product for which equivalency is desired need be tested, provided the outermost metallic layer contacting the sealant is the same composition for all visible light transmission. The equivalency shall apply for all coated products of the same generic type (i.e. metal or metal compounds that can be glazed monolithically), regardless of the source of manufacture or whether or not the application is by a vacuum deposition or sputtering process. The coated glass pane of such units may be 1/4-inch (6 mm) thickness. Preparation of test specimens need not be witnessed. However, the test result must be reviewed and approved by the Administrator. (Revised 8/14/85)

G.18 — Labeling

Wording to be determined. (Revised 8/14/85)

The following laboratory has been approved by IGCC to conduct tests in accordance with ASTM E773-83 and E774-84a:

Northwest Laboratories of Seattle, Inc.
1530 First Avenue South
Seattle, Washington 98134
Attention: Mr. Richard J. Schefsky

Telephone 206-662-0680

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 Relates To Membrane — IGCC 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 E773 and E774. 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.

ADDITIONS OR REVISIONS

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 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 rating level when tested according to ASTM E774. The units with capillary tubes need only be tested once.
- c. The test must be run by an IGCC 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.19 — Coated Glass (Coated to Edge)

A coated insulating glass unit shall be considered equivalent to certified insulating glass units made with uncoated glass, providing the test level readings are the same for both sets of I.G. units. Tests shall be by IGCC approved laboratories. Only the lowest light transmission product for which equivalency is desired need be tested, provided the outermost metallic layer contacting the sealant is the same composition for all visible light transmission. The equivalency shall apply for all coated products of the same generic type (i.e. metal or metal compounds that can be glazed monolithically), regardless of the source of manufacture or whether or not the application is by a vacuum deposition or sputtering process. The coated glass pane of such units may be 1/4-inch (6 mm) thickness. Preparation of test specimens need not be witnessed. However, the test result must be reviewed and approved by the Administrator. (Adopted 8/14/85)

G.18 — Labeling
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Attention: Mr. Richard J. Schefsky
Telephone 206-662-0680

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Insulating Glass Certification Council,® 1980

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). All IGCC Meetings are open to the public and public participation is encouraged.

IGCC is a nonprofit organization which sponsors and directs a program of periodic accelerated laboratory testing and unannounced plant inspections to insure continuing product performance through specified standards. The testing specifications used are outlined in "ASTM Specification E774-84a for Sealed Insulating Glass." This specification basically classifies sealed units into three categories; C, B, or A, depending upon durability in the accelerated testing. 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 inspections 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 product information claims.

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 per cent of the voting rights, and can veto any action, regardless of the number present at a meeting. This insures against industry dominance 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 E774-84a. The compliance of the manufacturers with the requirements of that specification is validated periodically by the IGCC administrator through inspections 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, American Society for Testing and Materials, The National Bureau of Standards, FHA, HUD, Public Interest Persons, the Industry, and particularly consumers. Without input from such a broad cross-section, this program would not be possible.

CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
A.B.S. Enterprises, Inc. 148 N.E. 48th Street Oklahoma City, Oklahoma 73118 405-528-7031	IGCC-166 CBA	DCK	U	AL	MS	PS
Acorn Building Components, Inc. 87 Taylor Street Quincy, Michigan 49082 517-639-3465	IGCC-362 CBA IGCC-365 CBA	NYK NYK	U U	AL AL	MS MS	PS PS
Advanced Coating Technology, Inc. 306 Beasley Drive Franklin, Tennessee 37064 615-790-6001	IGCC-248 CBA IGCC-253 CBA	ALK/S ALK/S	U/C U/C	AL AL	MS/SG MS/SG	B/PS B/S
Air Master Corporation 1211 Ford Road Bensalem, Pennsylvania 19020 215-638-8600	IGCC-376 CBA IGCC-377 CBA IGCC-380 CBA	NYK NYK NYK	U U U	AL AL AL	MS MS MS	PS HMB PU
Air Seal Insulating Glass Units Co. 522 Powell Street Gloucester City, New Jersey 08030 609-456-3922	IGCC-357 CBA	NYK	U	AL	MS	PS
Air-Win Manufacturing, Inc. 10 Dell Glen Avenue Lodi, New Jersey 07644 201-478-3044	IGCC-491 CBA	NYK	U	AL	MS/SG	PS
All Season Glass Co., Inc. 231 Herbert Avenue Closter, New Jersey 07624 201-767-8300	IGCC-509 CBA	NYK	U	AL	MS	HMB
Anderson Glass & Mirror Products 2816 Morse Road Columbus, Ohio 43229 614-476-4877	IGCC-332 CBA	NYK	U	AL	MS	PU
Antcliff Aluminum Products 2417 Judd Road Burton, Michigan 48529 313-742-5963	IGCC-471 CBA	NYK	U	AL	MS	PU
Assurance Glass Company P.O. Box 1452 Selma, Alabama 36701 205-875-1900	IGCC-420 CBA IGCC-421 CBA	NYK NYK	U U	AL AL	MS/SG MS/SG	B/PS B/S
B & G Glass & Mirror Company, Inc. 11866 Hubbard Livonia, Michigan 48150 313-522-0300	IGCC-466 CBA IGCC-467 CBA	NYK NYK	U U	AL AL	MS MS	B/PS B/S
J. E. Berkowitz, Inc. Delsea Drive & Harvard Avenue Route 47 Westville, New Jersey 08093 609-456-7800	IGCC-352 CBA IGCC-493 CBA	NYK NYK	U U	AL AL	MS MS	B/PS B/S
Better Thermo Unit 2+2 1530 Landmeier Road P.O. Box 1446 Elk Grove Village, Illinois 60007 312-593-2980	IGCC-164 CBA	ALK/S	U	AL	MS/SG	B/PS
Binning's Building Products Walser Road P.O. Box 868 Lexington, North Carolina 27292 704-249-9193	IGCC-239 CBA	NYK	U	AL	MS	HMB
Boss Glass Industries 321 Changebridge Road Pine Brook, New Jersey 07058 201-227-2200	IGCC-502 CBA	NYK	U	AL	MS	B/S

CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
Capitol Aluminum & Glass Corporation 1276 West Main Street Bellevue, Ohio 44811 419-483-7050	IGCC-484 CBA	NYK	U	ST	MS/SG	B/PS
Capitol Glass and Aluminum Corp. 3515 South 300 West Salt Lake City, Utah 84115 801-268-2521	IGCC-176 CBA IGCC-499 CBA	ALK/S PLK	U U	AL AL	MS/SG MS/SG	B/S B/PS
Capitol Products Corporation 6034 Carlisle Pike Mechanicsburg, Pennsylvania 17055 717-766-7661	IGCC-283 CBA IGCC-288 CBA	NYK NYK	U U	AL AL	MS/SG MS/SG	PS PS
Cardinal IG Iowa 25 North P. O. Box 99 Greenfield, Iowa 50849 515-743-2134	IGCC-311 CBA	ALK/S	U/C	AL	MS	B/S
Cardinal IG 7115 West Lake Street Minneapolis, Minnesota 55426 612-929-0317	IGCC-244 CBA	ALK/S	U/C	AL	MS	B/S
Cardinal IG 1011 East Madison Street Spring Green, Wisconsin 53588 608-588-7415	IGCC-324 CBA	ALK/S	U/C	AL	MS	B/S
Clearvue Insulating Glass Company 6515 Bessemer Avenue Cleveland, Ohio 44127 216-429-0209	IGCC-346 C	NYK	U	AL	MS/SG	PS
Dual Pane, Inc. 646 Spring Street Buffalo, New York 14204 716-853-5800	IGCC-321 CBA	BR	U	ST	MS	B/PS
Ecker Manufacturing Company 4055 10th Avenue New York, New York 10034 212-304-1300	IGCC-427 CBA IGCC-448 CBA	NYK NYK	U U	AL AL	MS MS	HMB PU
Economy Glass Corporation 365 Dorchester Avenue (Rear) South Boston, Massachusetts 02127 617-269-5000	IGCC-218 CBA	DCK	U	AL	MS	B/PS
Ellstrom Manufacturing, Inc. 1540 N.W. Ballard Way Seattle, Washington 98107 206-789-3000	IGCC-165 CBA IGCC-468 CBA	DCK DCK	U U	AL AL	MS/SG MS	PS PS
Energipane Insulating Glass Corporation 4716 West Lake Street Chicago, Illinois 60644 312-921-0200	IGCC-267 CBA	NYK	U	AL	MS/SG	B/PS
Floral Glass Industries, Inc. 224 Sandbank Road Cheshire, Connecticut 06410 203-272-2211	IGCC-503 CBA	W	U	AL	MS	B/S
Floral Glass Industries of Ohio 4520 Willow Parkway Cuyahoga Heights, Ohio 44125 216-341-2110	IGCC-333 CBA	W	U	AL	MS	B/S
Floral Insulating Glass Products, Inc. 895 Motor Parkway Hauppauge, New York 11787 516-692-2880	IGCC-223 CBA	W	U	AL	MS	B/S

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CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
Florian Greenhouse 64 Airport Road West Milford, New Jersey 07480 201-728-7800	IGCC-514 CBA	NYK	U	AL	MS	PU
Ford Glass Ltd. Subsidiary of Ford Glass Division 8484 Keele Street Concord, Ontario L4K 1B3 CANADA 416-363-7561	IGCC-319 CBA IGCC-429 CBA	NK/S NK/S	U U	AL AL	MS MS	B/PS B/S
General Glass Corporation 11205 East 37th Avenue Denver, Colorado 80238 303-371-5511	IGCC-245 CBA IGCC-269 CBA	NYK NYK	U U	AL AL	MS/SG MS/SG	PS HMB
Glasstemp, Inc. 1001 Foster Avenue Bensenville, Illinois 60106 312-595-3750	IGCC-455 CBA IGCC-456 CBA	ALK/S ALK/S	U/C U/C	AL AL	MS/SG MS/SG	B/PS B/S
Glastek Corporation 4024 Millersville Road Indianapolis, Indiana 46205 317-788-9978	IGCC-368 CBA IGCC-370 CBA	NYK ALK/S	U U	AL AL	MS MS	PU B/PU
Graham Architectural Products Corp. 1551 Mt. Rose Avenue York, Pennsylvania 17405 717-848-3755	IGCC-167 CBA IGCC-353 CBA	DCK NYK	U U	AL AL	MS/SG MS/SG	HMB HMB
Havlin-Witkin Corporation 750 Walsh Avenue P.O. Box 666 Santa Clara, California 95052 408-727-4711	IGCC-160 CBA IGCC-407 CBA	ALK/S ALK/S	U U	AL AL	MS/SG MS/SG	B/S B/S
Hoffer's, Inc. 5103 Janice Avenue Schofield, Wisconsin 54476 715-845-7221	IGCC-371 CBA	NYK	U	AL	MS	PS
Hordis Brothers, Inc. 22411 South Bonita Street Carson, California 90745 213-830-6460	IGCC-400 CBA IGCC-401 CBA IGCC-402 CBA	NYK NYK NYK	U U U	AL AL AL	MS MS MS	PS B/PS B/S
Hordis Brothers, Inc. 1100 N. W. 159th Drive Miami, Florida 33169 305-621-3664	IGCC-405 CBA	NYK	U	AL	MS	B/PS
Hordis Brothers, Inc. 1548 Stone Ridge Drive Stone Mountain, Georgia 30083 404-939-6900	IGCC-182 CBA IGCC-183 CBA IGCC-419 CBA	DCK DCK NYK	U U U	AL AL AL	MS MS MS	PS B/PS B/S
Hordis Brothers, Inc. 5334 Barthel Drive Albertville, Minnesota 55301 612-497-3212	IGCC-317 CBA IGCC-360 CBA IGCC-361 CBA	ALK/S ALK/S NYK	U U U	AL AL AL	MS MS MS	B/PU B/S B/PU
Hordis Brothers, Inc. P.O. Box 368 Warrenton, Missouri 63383 314-456-3452	IGCC-185 CBA IGCC-186 CBA IGCC-187 C IGCC-412 CBA IGCC-482 CBA IGCC-483 CBA	ALK/S ALK/S NYK NYK NYK ALK/S	U U U C U U	AL AL AL AL AL AL	MS MS MS MS MS MS	B/PS B/S PS B/S PU B/PU
Hordis Brothers, Inc. 825 Hylton Road Pennsauken, New Jersey 08110 609-662-0400	IGCC-386 CBA IGCC-432 CBA	NYK NYK	U C	AL AL	MS MS	B/S B/S
Hordis Brothers, Inc. 1500 Glen Avenue Moorestown, New Jersey 08057 609-234-9222	IGCC-494 CBA IGCC-495 CBA	NYK NYK	U U	AL AL	MS MS	B/S B/PU

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CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
Hurd Millwork Company 520 South Whelen Avenue Medford, Wisconsin 54451 715-748-2011	IGCC-276 CBA	NYK	U	AL	MS	PS
Independent Insulating Glass Company 3145 Columbus Avenue Chicago, Illinois 60652 312-925-2300	IGCC-328 CBA	PLK	U	AL	MS	B/PS
	IGCC-329 CBA	PLK	U	AL	MS	B/S
Independent Insulating Glass/Southeast, Inc. 520 Wharton Circle, S. W. Atlanta, Georgia 30336 404-691-3300	IGCC-500 CBA	PLK	U	AL	MS	B/PU
	IGCC-501 CBA	PLK	U	AL	MS	B/S
Insolair Industries, Inc. 909 Aldridge Road Vacaville, California 95688 707-446-4500	IGCC-238 CBA	W	U	AL	MS/SG	B/S
Insulpane, Inc. 335 Temple Hill Road New Windsor, New York 12550 914-562-8500	IGCC-492 CBA	NYK	U	AL	MS	B/PS
Interstate Glass Company, Inc. 3801 South Main Street South Bend, Indiana 46624 219-291-5150	IGCC-307 CBA	NYK	U	AL	MS/SG	PS
Kensington Manufacturing Company P.O. Box 571 Leechburg, Pennsylvania 15656 412-845-8133	IGCC-146 CBA	NYK	U	AL	MS	HMB
Labrador Glass Specialties 3233 East Corona Avenue Phoenix, Arizona 85040 602-243-4277	IGCC-418 CBA	NK/W	U	AL	MS	B/S
Lewistown Econopane Insulating Glass Co., Inc. 201 6th Avenue P. O. Box 248 Burnham, Pennsylvania 17009 717-242-0373	IGCC-344 CB	DCK	U	AL	MS	PS
Mannix Industries, Inc. 345 Crooked Hill Road Brentwood, New York 11717 516-231-0800	ICGG-446 CBA	NYK	U	AL	MS	PS
Marvin Windows P.O. Box 100 Warroad, Minnesota 56763 218-386-1430	IGCC-281 CBA	NYK	U	AL	MS/SG	HMB
	IGCC-303 CBA	NYK	U	AL	MS/SG	PU
	IGCC-496 CBA	NYK	U	AL	MS/SG	B/PU
Memphis Glass Insulators, Inc. 2950 Fleetbrook Memphis, Tennessee 38116 901-332-3287	IGCC-486 CBA	NYK	U	AL	MS	PS
	IGCC-487 CBA	NYK	U	AL	MS	B/PS
	IGCC-490 CBA	NYK	U	AL	MS	B/S
Mercer Industries, Inc. 2636 N.W. 26th Avenue P.O. Box 10166 Portland, Oregon 97210 503-226-2511	IGCC-177 CBA	NYK	U	AL	MS	PS
	IGCC-268 CBA	NYK	U	AL	MS	HMB
	IGCC-440 CBA	NYK	U	AL	MS	HMB
	IGCC-441 CBA	NYK	U	AL	MS	HMB/PS
Multipane of New England, Inc. 105 Norwood Avenue P.O. Box 368 Newtonville, Massachusetts 02160 617-964-8188	IGCC-327 CBA	DCK	U	AL	MS	B/PS
	IGCC-443 CBA	DCK	U	AL	MS	B/S
Norco Windows, Inc. P.O. Box 309 Hawkins, Wisconsin 54530 715-585-6311	IGCC-301 CBA	NYK	U	AL	MS/SG	PS

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CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
North American Manufacturing, Inc. 551 Concord Street Holliston, Massachusetts 01746 617-429-6300	IGCC-232 C	NYK	U	AL	MS	HMB
	IGCC-444 CBA	NYK	U	AL	MS	PS
Peco Industries, Inc. 3119 Hammonds Ferry Road P. O. Box 7375 Baltimore, Maryland 21227 301-247-5900	IGCC-342 CBA	NYK	U	AL	MS	PU
PPG Industries, Inc. 17851 N.W. Miami Court Miami, Florida 33169 305-652-3350	IGCC-240 CBA	ALK	U/C	ST	MS	B/HMB
PPG Industries, Inc. 500 Third Avenue Ford City, Pennsylvania 16226 412-763-1211	IGCC-159 CBA	NK/W	U/C	ST	SG	B/HMB
Rochester Insulated Glass, Inc. 5966 Collette Road P. O. Box 267 Victor, New York 14564 716-924-3024	IGCC-451 CBA	NYK	U	AL	MS	B/S
S N E Corporation 910 Cleveland Avenue P.O. Box 1007 Wausau, Wisconsin 54401 715-845-1161	IGCC-395 CBA	NYK	U	AL	MS	PU
Soft-Lite/Mintz Corporation 7009 Krick Road Bedford, Ohio 44146 216-232-9200	IGCC-465 CBA	NYK	U	AL	MS	HMB/PU
Solar Pane, Inc. 5 East Fairfield Drive P. O. Box 17920 Pensacola, Florida 32522 904-433-8218	IGCC-389 CBA	NYK	U	AL	MS/SG	B/HMB
Solar Seal Company 55 Bristol Drive South Easton, Massachusetts 02375 617-238-0112	IGCC-117 CBA	ALK/S	U	AL	MS	B/PS
	IGCC-163 CBA	ALK/S	U	AL	MS	B/S
Solar Seal South, Inc. 100 South Leadbetter Road Ashland, Virginia 23005 804-798-6051	IGCC-518 CBA	DCK	U	AL	MS	B/PS
Soule Glass Industries 299 Presumpscott Portland, Maine 04103 207-761-4385	IGCC-156 CBA	DCK	U	AL	MS	PS
Southern Wholesale Glass, Inc. 3200 Austell Road Marietta, Georgia 30060 404-434-2041	IGCC-141 CB	NYK	U	AL	MS	PS
Spectrum Glass Products P.O. Box 408 Clinton, North Carolina 28328 919-592-7101	IGCC-221 CBA	DCK/S	U/C	ST	MS/SG	B/PS
	IGCC-222 CBA	DCK/S	U/C	ST	MS/SG	B/S
Storm Weather Products, Inc. 3621 "B" Street Philadelphia, Pennsylvania 19134 215-425-5300	IGCC-379 CBA	NYK	U	AL	MS	PU
Sunglas Products, Inc. P. O. Box 963 Claremore, Oklahoma 74018 918-342-3344	IGCC-458 CBA	DCK	U/C	AL	MS/SG	B/PS
	IGCC-459 CBA	DCK	U/C	AL	MS/SG	B/S
	IGCC-460 CBA	NK/W	U/C	AL	MS/SG	B/PS
	IGCC-461 CBA	NK/W	U/C	AL	MS/SG	B/S

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CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
TAS, Inc. 11955 South Vincennes Blue Island, Illinois 60406 312-331-3644	IGCC-350 CBA	DCK	U	AL	MS/SG	B/PU
Tempglass, Inc. 291 "M" Street Willis Day Industrial Park Perrysburg, Ohio 43551 419-666-2000	IGCC-264 CBA	ALK/S	U	AL	MS/SG	B/S
Tempglass Eastern, Inc. 1441 Blue Ridge Industrial Park P.O. Box 928 Norcross, Georgia 30071 404-476-4123	IGCC-384 CBA	ALK/S	U	AL	MS	B/S
Tempglass Western, Inc. 48999 Kato Road Fremont, California 94539 415-651-2292	IGCC-406 CBA	ALK/S	U	AL	MS/SG	B/S
Thermo Systems, Inc. 5012 Packinghouse Road Denver, Colorado 80216 303-295-2723	IGCC-259 CBA	DCK/S	U	AL	MS	B/S
Thermoseal Glass Corporation 400 Water Street Gloucester City, New Jersey 08030 609-456-3109	IGCC-510 CBA	DCK	U	AL	MS/SG	PS
TRACO (Three Rivers Aluminum Company, Inc.) Cranberry Industrial Park P. O. Box 805 Warrendale, Pennsylvania 15095 412-776-7000	IGCC-439 CBA IGCC-453 CBA	NK/W NYK	U U	AL AL	MS MS/SG	B/S HMB
Twin Pane Corporation 640-E Bosch Court Lithia Springs, Georgia 30057 404-948-6092	IGCC-435 CBA IGCC-436 CBA	NYK NK/S	U U	AL AL	MS MS	B/PS B/PS
Twin Pane Corporation 214 West Defiance West Unity, Ohio 43570 419-924-2378	IGCC-519 CBA IGCC-520 CBA IGCC-521 CBA	NYK NK/S NK/S	U U U	AL AL AL	MS/SG MS/SG MS/SG	B/PS B/S B/PS
UltraTum 960 Seville Road Wadsworth, Ohio 44281 216-336-3523	IGCC-151 CBA	NYK	U	AL	MS	HMB
Varano Glass Company 422 Jefferson Avenue, S. E. Grand Rapids, Michigan 49503 616-459-3569	IGCC-470 CBA	NYK	U	AL	MS	PU
Viracon, Inc. 800 Park Drive P.O. Box 248 Owatonna, Minnesota 55060 507-451-9555	IGCC-153 CBA IGCC-169 CBA	ALK/S ALK/S	U/C U/C	AL AL	MS/SG MS/SG	B/PU B/S
Walker & Laberge Co., Inc. 7613 East Sewells Point Road Norfolk, Virginia 23513 804-587-8701	IGCC-345 CBA	NYK	U	AL	MS	B/S
Weather Shield Mfg., Inc. 675 East Allman Street P.O. Box 309 Medford, Wisconsin 54451 715-748-2100	IGCC-178 CBA IGCC-408 CBA	NYK NYK	U U	AL AL	MS MS	PU B/PU

CERTIFIED PRODUCTS

Licensee	IGCC Number	Corner Construction	Substrate	Spacer	Desiccant	Sealant
Weather Shield Mfg., Inc. 2990 South 8th West Route 1 Box 103 Logan, Utah 84321 801-753-6590	IGCC-277 CBA	NYK	U	AL	MS	PU
Weathervane Window, Inc. 5936 Ford Court Brighton, Michigan 48116 313-227-4900	IGCC-474 CBA	NYK	U	AL	MS	PU
Wisconsin Window Unit Company Div. of Hurd Millwork Company South Prospect Street P.O. Box 437 Merrill, Wisconsin 54452 715-536-5581	IGCC-372 CBA	NYK	U	AL	MS	PS

92 Allants
144 Products
3/15/85

CERTIFIED PRODUCTS KEY

Sealant:

- PS = Polysulfide
- PU = Polyurethane
- B = Polyisobutylene
- S = Silicone
- HMB = Hot melt butyl
- BSS = Butyl sealant spacer

Corner:

- ALK = Aluminum key
- DCK = Die cast key
- NYK = Nylon key
- PLK = Plastic key
- NK = No key

- S = Soldered
- W = Welded
- BR = Brazed

Desiccant:

- MS = Molecular sieve
- SG = Silica gel
- MS/SG = Blend of molecular sieve and silica gel

Spacer:

- AL = Aluminum
- ST = Steel

Substrate:

- U = Uncoated
- U/C = Uncoated/Coated

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.

• *SGCC Participants*

"PROTOTYPE IN PROGRESS"

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

MANUFACTURERS

CRAFTLINE CORPORATION MAUMEE, OHIO	NORTH AMERICAN MANUFACTURING, INC. HOLLISTON, MASSACHUSETTS
CUSTOM GLASS & FRAME, INC. CLEVELAND, OHIO	SOUTHERN WHOLESALE GLASS, INC. MARIETTA, GEORGIA
FLORAL GLASS INDUSTRIES OF OHIO, INC. CUYAHOGA HEIGHTS, OHIO	THERMALATOR MANUFACTURING CORP. EDISON, NEW JERSEY
MARVIN WINDOWS WARROAD, MINNESOTA	VIRACON, INC. OWATONNA, MINNESOTA
METROPOLITAN INSULATED GLASS CO. LIVERPOOL, NEW YORK	WEATHER SHIELD MFG., INC. MEDFORD, WISCONSIN

NOTICE

In accordance with the terms of the IGCC Procedural Guide, the IGCC Standard License Agreement and Appendix A (Affidavit) thereto, a manufacturer with a prototype product test in progress is not authorized to use an IGCC permanent label for that product or to certify that its product is in compliance with IGCC Program Standards and Procedures until a passing prototype test report for that product is presented by the manufacturer to the IGCC office and the manufacturer is otherwise in compliance with IGCC Program Procedures.

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In all matters concerning the administration and implementation of the IGCC Certification Program, correspondence may be directed to any of the following:

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Administrator
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ROSTER

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 Paul S. Toltz, General Glass

IGCC Officers

Gennaro J. Catalano, President
 Ed F. Scheuere11, Vice President
 John F. Thomas, Secretary
 Sylvia Lav, Treasurer

IGCC CERTIFICATION COMMITTEE

Harold Landsman, Chairman

<u>Licensee</u>	<u>Primary Member</u>	<u>First Alternate</u>	<u>Second Alternate</u>
Air Master Corporation	Harold L. Kapp		
Better Thermo Unit 2+2	Robert E. Trapp		
Binning's Building Products	Robert Luedy		
Capitol Aluminum & Glass Corp.	Robert C. Wagner		
Cardinal IG	Roger D. O'Shaughnessy	Robert G. Spindler	James Larsen
F.G.M. Insulating Glass Co., Inc.	Charles Kaplanek		
Ford Glass Ltd.	Richard L. Morrison		
General Glass Corporation	Paul Toltz	Randy Toltz	
Graham Architectural Products Corp.	Russell C. Trout		
Havlin-Witkin Corporation	Michael Foss	Curtis Bidstrup	
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Independent Insulating Glass Co.	Irving Feinman	Joseph M. Scalzo	Charles Gustafson
Interstate Glass Company, Inc.	James De Craene		
Marvin Windows	Doug Steinbring		
Peco Industries	Dan L. Monaco		
PPG Industries, Inc.	John M. Schlueter	Donald R. Cowan	Richard T. McGuire
Rochester Insulated Glass, Inc.	Stanley Wolk		
Solar Pane Insulating Glass, Inc.	Bradley J. Hanssen		
Solar Seal Company	Frederic P. Shaw, Jr.		
Soule Glass Industries	Preston J. Richardson		
Southern Wholesale Glass	Douglas A. Long		
Sunglas Products, Inc.	Richard L. Morrison	Mitchel Edwards	
Thermo Systems, Inc.	John T. Daluz		
TRACO	Robert P. Randall		
Twin Pane	H. J. "Bud" Shelton	Paul Daugherty	
Viracon, Inc.	Harold Landsman	Ken Ortman	James Cunningham
Weather Shield Mfg., Inc.	David Schield	James Sorge	

Members by virtue of being a governor

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Wiss, Janney, Elstner	Richard C. Elstner
I. M. Pei	Michael Flynn
Advanced Coating Technology	Wayne L. Hoffman
Consumer	Sylvia Lav
Texas Tech University	Joseph E. Minor
Consumer	E. F. Scheuere11
Supplier	John F. Thomas
Consumer	Donald J. Vild

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Claude F. Robb

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Mr. William J. Golla

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IGCC® LABEL REQUIREMENTS

THE IGCC 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 permanent label must be in block capital letters and have a minimum height of 0.050 inches. The letters IGCC must be followed by the Federal Registration Mark or a close facsimile, i.e. IGCC®.

The IGCC permanent label must contain the IGCC number, CBA, CB or C and a date code spanning no more than a six month period, plus or minus one month and commencing with the beginning of each calendar year (effective for both the beginning and ending of each period). The IGCC permanent label must be affixed to certified products only at the time and place of manufacture. Outdated spacers may be hand stamped to bring the label up to date.

The alpha part of the label (C, CB, or CBA) will be considered as part of the IGCC number. The permanent label must be affixed only to sealed insulating glass units of the licensee's own manufacture, which have been certified by the manufacturer through IGCC.

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 Labels:

IGCC® 999 CBA L80

IN RECOGNITION OF PAST PRESIDENTS WHO SERVED IGCC SINCE ITS INCEPTION

Roger D. O'Shaughnessy	Cardinal IG	1977 - 1979
Donald J. Vild	LOF Glass	1979 - 1981
Colin S. Brady	Twin Pane	1981 - 1982
Robert G. Spindler	PPG	1982 - 1983

MEETINGS OF THE
CERTIFICATION COMMITTEE

The Certification Committee of the Insulating Glass Certification Council met on February 19 and 20, 1985.

Interested persons may obtain minutes of these meetings by writing to the Insulating Glass Certification Council.

By-laws are also available by writing to the Insulating Glass Certification Council.

Certification in this directory is up to date as of August 1, 1985; 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.

Direct all requests or any comments to:

Insulating Glass Certification Council
Mr. Claude F. Robb
Administrator
ETL Testing Laboratories, Inc.
Route II - Industrial Park
P.O. Box 2040
Cortland, New York 13045

Telephone: 607-753-6711

* * * * *



Route 11 — Industrial Park
P. O. Box 2040
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INSULATING GLASS CERTIFICATION COUNCIL

A GUIDELINE FOR YOUR ASSISTANCE IN ADVERTISING YOUR PRODUCTS AND THEIR CERTIFICATION STATUS UNDER THE INSULATING GLASS CERTIFICATION COUNCIL ("IGCC") CERTIFICATION PROGRAM:

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

1. IGCC is the sponsor of a Certification Program. IGCC does not certify products.
2. The Administrator inspects laboratories and checks their equipment; inspects 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.
4. Manufacturer/Licensees "certify" their products, affirming that their products are constructed similarly to specimens which were inspected, 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 Certification Program designation and number to its product.
5. IGCC 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 concept, anyone can participate, and "participants" simply must possess a "legitimate interest in the purposes of IGCC." 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 with IGCC, provided it intends to certify at least one product under the IGCC 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 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 E774-81 containing our X component have been found to meet the requirements of Class Y."
7. Should you have any questions concerning the IGCC Certification Program, please contact:

Insulating Glass Certification Council
Mr. Claude F. Robb
Administrator
ETL Testing Laboratories, Inc.
Route 11 - Industrial Park
P.O. Box 2040
Cortland, New York 13045
Telephone: 607-753-6711

CREDIBILITY IN INDUSTRY CERTIFICATION THROUGH ACTIVE PUBLIC PARTICIPATION.

PROCEDURAL GUIDE

INSULATING GLASS CERTIFICATION COUNCIL CERTIFICATION PROGRAM FOR SEALED INSULATING GLASS

FOREWORD

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 E774-84a 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 insure 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.

GENERAL INFORMATION

The Certification Concept

The IGCC 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 certification label offers the manufacturer's assurance that his sealed insulating glass units have been produced in conformance to the ASTM specification E774-84a.

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, a non-profit corporation, is the sponsor of this certification program. IGCC supervises the certification program under which the administrator periodically checks and reports compliance of the manufacturers of products having the IGCC certification label.

Administration

ETL Testing Laboratories, Inc. (ETL) is the independent administrator of the certification program. ETL maintains the IGCC office of certification and handles the routine day-to-day business. All transactions are done in the name of IGCC.

How Can You Become a Licensee?

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

- a) The manufacturer must present a passing prototype report from an approved IGCC testing laboratory (fabrication of which was witnessed by the Administrator) to the IGCC office.
- b) The manufacturer signs two copies of the IGCC license agreement (including notarization of the Affidavit, Appendix A) and sends these to the IGCC office. IGCC will countersign both copies and return one to the licensee.

- c) The Appendix A, to the Licensee Agreement, contains a description of the model (prototype report attached) that will be authorized to use the IGCC permanent label.
- d) The licensee sends to IGCC the twelve-month certification fee.
- e) After receipt by IGCC of the above, the administrator validates that particular model and sends to the licensee a notice of authorization to use the IGCC permanent label. This number must be incorporated into the permanent label to be affixed on each certified sealed insulating glass unit.
- f) The certified model will then be listed in the next published certified products directory.

HOW THE CERTIFICATION PROGRAM WORKS

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.

IGCC recognized independent testing laboratories conduct all tests. All laboratories, whose test reports are utilized by this certification program, shall be approved by the IGCC certification committee.

Administrator Authorizes Certification

As a sole judge of compliance with the applicable specification, 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 IGCC certification committee.

Approved products are listed in the certified products directory, which is published at least every six months. It is sent to door, sash and building manufacturers, glazing contractors, home builders, 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 twice per year by making unannounced inspections. The prototype test will be considered as the test for the first year of certification. During the first year, two inspections will take place at which time the inspector will compare current production with the product authorized to use the IGCC permanent label. During the first inspection in the second year, specimens will be fabricated for testing. IGCC will ask the manufacturer to produce twelve test specimens. The fabrication of these twelve test specimens is witnessed by IGCC and IGCC verifies that they are produced in accordance with the construction certified. The licensee is instructed to send these test specimens to an official IGCC 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 IGCC on the 15th of each month.

Upon completion of the test, results are mailed promptly to the licensee by the administrator.

COMPLIANCE SAFEGUARDS

How is Compliance Assured?

Any certified product found in the course of routine inspection and evaluation not to be in compliance with the model description is subject to having authorization to use the IGCC 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 Permanent Label is sent by certified mail; return receipt requested, giving an additional thirty days to respond. If he does not respond, authorization to use the IGCC 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 by certified mail; return receipt requested that within 15 days he must respond, stating a retest fabrication is requested by paying all administrative and test fees. If there is no response within the 15 days, authorization to use the IGCC permanent label is automatically terminated. If the retest option is accepted, the administrator will perform an inspection 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 by IGCC 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 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. All costs involved will be paid from the complainant's surety deposit, unless the investigation proves 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; responding to the consumer with a certified products directory and instructions on how to locate the IGCC label.

It will be the consumer's responsibility to identify the label, number, class and date code which appear on the spacer or glass and advise the administrator of the same. Note: If no IGCC label exists, the product has not been certified by the manufacturer to IGCC and the administrator and IGCC have no further responsibilities or options.

Once the consumer has identified the label, number, 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 or 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, the corporation or business challenge procedure shall be utilized. The surety deposit shall be modified to \$400 and charges per man day 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 permanent label may be voluntarily withdrawn from the Certification Program by the licensee at any time.

COSTS

What Does the Program Cost?

The initial fee will be for a period of twelve months. However, the next invoice to a licensee will have the fees prorated to the nearest whole month in such a manner that participation in the Certification Program will be on a February 1 to January 31 basis. 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 prior to the six month period during which the specimens will be fabricated and tested.

Initial certification for each item will be for a period of twelve months commencing with acceptance of the license agreement. The next invoice will be prorated to a February 1 date.

CERTIFICATION PROGRAM DOCUMENTS AND AGREEMENTS

License Agreement

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

Future amendments or revisions to the license agreement will be recommended by the IGCC 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, additional periods of twelve months, 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 ETL Testing Laboratories, Inc., governs the relationship between IGCC and ETL, the independent administrator. In general, it provides that the administrator:

- a) routinely inspects licensee manufacturing facilities twice per year, and during the first inspection in the second and subsequent years, witnesses fabrication of specimens for testing at one of the IGCC 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) inspects and approves all test laboratory facilities for use in this certification program (test laboratories are recognized or approved by the IGCC certification committee)
- e) publishes and mails the IGCC certified products directory twice each year
- f) handles all routine clerical duties of IGCC with respect to certification matters
- g) acts as IGCC treasurer, invoicing licensees, maintaining a bank account and dispersing funds (fiscal reports are made to the IGCC Board of Governors)
- h) attends all scheduled meetings of the IGCC certification committee and
- i) in all of its actions acts in the name of IGCC.

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 sealed insulating glass units of each licensee.

Certification Label

This certification mark is permanently affixed to each unit of certified sealed insulating glass by the licensee. It contains a code that refers to the listing in the certified products directory. The listing then provides a product description including the company name, plant location, etc.

PROGRAM RESPONSIBILITY

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.

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
- e) recommends to the IGCC Board of Governors changes to be made in the license agreement.

CERTIFICATION GUIDELINES AND INTERPRETATIONS

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

ALWAYS

The following situations permit the licensee to always certify and label the sealed insulating glass units with the same IGCC number.

GLASS

A.GL.1

Any change in glass thickness from that tested (3/16 inch is required in test specimens).

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 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 number on triangular, circle head, trapezoidal and other shapes.

A.GL.6

Any change in glass supplier from that tested.

SPACER

A.SP.1

Any change in air space dimension from that tested (one-quarter inch air space is required in test specimens).

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 number. (Adopted 2/19/85)

A.SP.6

Mechanically fastened corners may be changed to bent, uncut corners using the same IGCC number, provided the remaining connections utilize the same mechanical fastening technique as previously certified. (Adopted 2/19/85)

DESICCANT

A.DE.1

A manufacturer may use the same certification number on units fabricated having air spaces equal to, or greater than, 1/4-inch provided the weight of desiccant per inch of edge remains the same or is greater than the model tested. On units fabricated having 3/16-inch air spaces, provided the manufacturer maintains the same weight of desiccant per inch of edge or as close to that value as possible.

A.DE.2

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

A.DE.3

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

A.DE.4

An increase in the percentage of molecular sieve in a blended desiccant (defined as a "molecular sieve/silica gel" mix) will not require retest unless the molecular sieve content exceeds 75% by weight. (Adopted 8/29/84)

SEALANT

A.SE.1

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

A.SE.2

Changes within a generic type of sealant shall use G-5 for demonstrating equivalency and to maintain the same IGCC number.

NEVER

The following situations never permit the licensee to certify and label with the same IGCC number. They require the use of a different IGCC number.

SPACER

N.SP.1

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

N.SP.3

A change in corner design from mechanical to soldered, welded or brazed and vice versa will require a different IGCC number.

N.SP.4

A change in corner key material to another material, except for same material as the spacer, will require a different IGCC number.

N.SP.5

If bent, uncut spacer corners or connections are changed to mechanically fastened spacer corners, a new IGCC number is required. (Adopted 2/19/85)

DESICCANT

N.DE.1

A change in generic type of desiccant will require a different IGCC number. Generic types, for purpose of this guideline, are silica gel, molecular sieve and blends of silica gel and molecular sieve up to 75% by weight molecular sieve. (Adopted 8/29/84)

SEALANT

N.SE.1

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

N.SE.2

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

N.SE.3

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

N.SE.4

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

N.SE.5

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

GENERAL

CLASS I - UNIT MODIFICATION

G.1 - Breather Tube

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.

G.2 - Breather Tube

The addition of a breather tube is acceptable even though not in the test specimen.

G.3 - Edge Protection

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

G.4 - Coated Glass

Inorganically coated glass may be used provided that the sealant or sealants contact the original glass substrate or contact silica or a glass-like material.

G.8 - Muntins

Test specimens shall be constructed utilizing all of the components of the muntin system which are used in the ultimate product and shall be situated in a four light divided arrangement in a diagonal pattern. The IGCC label cannot be used on a sealed insulating glass unit unless the tested prototype contained internal muntins.

G.15 - Multiple Air Spaces

Multiple air space units may be labeled with the same IGCC 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.

G.19 - Coated Glass (Coated to Edge)

A single test run at an IGCC approved laboratory to the same level on units having coated glass with similar results on the uncoated glass model would be an alternate for labeling for that particular coating and unit. The coated glass pane of such units may be of 1/4-inch (6 mm) thickness. Testing of units with the lowest visible light transmission shall be sufficient demonstration for that particular coating composition to be certified, provided the outermost layer contacting the sealant is the same composition for all visible light transmissions. Preparation of test specimens need not be witnessed. However, the test result must be reviewed and approved by the Administrator. (Adopted 8/29/84)

CLASS II - SPECIMEN

G.6 - Specimens - Quantity

A minimum of 12 specimens, up to a maximum of 24 specimens, will be fabricated for testing purposes. (No more than 12 specimens may be shipped to the laboratory at one time.)

G.9 - Specimens - Production

When a licensee is producing only unlabeled units at the time of an unannounced plant inspection, the licensee will be requested by the IGCC inspector to label at least one unit in accordance with Guideline G.7 to permit completion of the inspection. (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 unannounced inspection, a labeled unit from inventory may be cut apart for inspection, provided that the date code is within the inspection period.

G.11 - Specimens - Production

A portion of an unannounced inspection will be a check, to some degree, to determine whether a licensee is using an IGCC label on unauthorized units.

G.12 - Specimens - Shipment

Units fabricated for test during an unannounced inspection must be shipped within four weeks of the date of fabrication. If they are not, the inspection is considered invalid and another inspection must take place. All costs related to this guideline are to be borne by the licensee.

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.

CLASS III - LABELING

G.7 - Labeling

The permanent 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.

G.17 - Labeling - Qualification

A licensee may accept certification to any level passed on any test (retest, prototype, routine testing) under any IGCC supervised testing conditions.

G.18 - Labeling

The alpha part of the label (C, CB, or CBA) will be considered as part of the IGCC number.

CLASS IV - 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 number, the licensee shall:

- 1) immediately notify the administrator with all details of the change.
- 2) establish equivalency by passing the same level of ASTM test as certified to by:
 - a) having specimens tested at an IGCC independent testing laboratory or
 - b) having specimens tested at an in house (licensee) facility or
- 3) demonstrate the equivalency of the change to the satisfaction of the certification committee. (Specimens not required.)

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.

Testing done in house by a licensee must be done under the surveillance of the administrator.

G.21 - Transfer

If a licensee manufactures the same model using the same technology, at a different location, a certification number with a temporary status will be issued, provided that within sixty days a test be initiated. The model must pass the same level of test as the original model and shall be treated as a routine retest except appeals, reviews and reconsiderations will not be available.

G.23

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

CLASS V - APPEALS, REVIEWS AND DE-CERTIFICATION

G.13 - Monetary

The administrator shall remove authorization to use the IGCC permanent label from all of any licensees products for failure to pay monies due to IGCC within 30 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:

- a) 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 permanent label will be removed.

If the retest option is accepted:

- 1) Request for retest option is granted by IGCC only by receipt in full of any administrative and retest fees within 15 days of date of mailing of the notification of failure.
- 2) IGCC will perform an inspection and witness fabrication of retest specimens within 45 days of payment of fees in 1) above.
- 3) 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 within 14 days of fabrication of retest specimens.)
 - b) There is to be no change in certification status during the retest period.
 - c) All routine inspections will continue. Sample fabrication for subsequent routine testing of the questionable model will be suspended pending the outcome of the retest.
 - d) If the retest units comply, they shall be considered as the next routine text.
 - e) If the retest units fail, the licensee is issued a cease and desist order on use of the label immediately.
 - f) 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 permanent label will be removed if a routine inspection discloses that a licensee is labeling units containing the same unauthorized construction for the third time.

G.22

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 Quick Action 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 Quick Action Subcommittee favorable to the Licensee shall be a final decision. A decision by the Quick Action 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 Quick Action 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.

IGCC® APPROVED LABORATORIES PRESENTLY CONDUCTING TESTS
IN ACCORDANCE WITH ASTM E773-83 & E774-84A

LABORATORIES

Architectural Testing, Inc.
Two Interchange Place
York, Pennsylvania 17402-9899
Attention: Mr. Scott A. Warner

Telephone 717-846-7700

National Certified Testing Laboratories
One Interstate Plaza
York, Pennsylvania 17402
Attention: Mr. David G. Moyer

Telephone 717-846-1200

Jim Spetz Testing Laboratory
29308 Armadale Avenue
Wickliffe, Ohio 44092
Attention: Mr. James L. Spetz, P.E.

Telephone 216-944-3665

It should be noted that the name of ETL Testing Laboratories, Inc. has been removed from this list only because ETL is now the Administrative Manager of the IGCC program and this program does not permit the Administrator to be a participating testing laboratory for annual retests.

IN ADDITION TO THE ABOVE, THE FOLLOWING LABORATORY
IS APPROVED FOR TESTING "PROTOTYPE" UNITS:

ETL Testing Laboratories, Inc.
Route 11 - Industrial Park
P.O. Box 2040
Cortland, NY 13045
Attention: Mr. George F. Mosey
Telephone 607-753-6711



Adopted: May 13, 1977
Revised: August 1, 1981

Route 11 - Industrial Park
Cortland, New York 13045
Telephone: 607-753-6711

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 1 - 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 participant will be \$250.00 per company.

There will be no fee for public interest or consumer participants.

CREDIBILITY IN INDUSTRY CERTIFICATION THROUGH ACTIVE PUBLIC PARTICIPATION



INSULATING GLASS CERTIFICATION COUNCIL
 ETL TESTING LABORATORIES, INC.
 INDUSTRIAL PARK • ROUTE 11 • P.O. BOX 2040
 CORTLAND, N.Y. 13045
 PHONE 607-753-6711

IGCC DIRECTORY ORDER FORM

PLEASE SEND . . . _____ copies of IGCC® Certified
 Products Directory at \$2.00/copy = \$ _____ to:

EITHER MAKE COPY OR TEAR OUT HERE

_____ Name

_____ Company

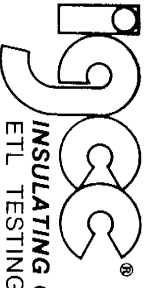
_____ Address

_____ City _____ State _____ Zip Code

8/85
 IGCC®

SPECIFICATION USED FOR SEALED INSULATING GLASS
ASTM E774-81

The program requires that the manufacturer shall certify and permanently label all sealed insulating glass units to class (C, CB, or CBA) through the Insulating Glass Certification Council (IGCC) program.



INSULATING GLASS CERTIFICATION COUNCIL
ETL TESTING LABORATORIES, INC.
INDUSTRIAL PARK • ROUTE 11 • P.O. BOX 2040
CORTLAND, N.Y. 13045-2040

Address Correction Requested

POSTAGE MUST BE
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CORTLAND, NEW YORK