

safety glazing certification council

ANSI Z97.1-1975
certified products directory
safety glazing material used in buildings

TABLE OF CONTENTS

Program Concept	7
Meetings this yearpage	
Membership Roster	
Board of Directorspage	
Certified Products (Numerically)page	
Certified Products (By Plant)page 10	
Pattern Glass Classification	
Certified Products (By Product)	
SGCC Label Requirementspage 2	
Licensee's and their Typical Labelspage 2	9
Participants without a certified product	8
Procedural Guide	9
Communicationspage 4	.4
SGCC Approved Laboratoriespage 4	-5
Guidelines for Certification	
ANSI Z97.1-1975	60

PROGRAM CONCEPT

The safety of the public is paramount. Manufacturers of safety glazing products, building code administrators and others responsible for the safety of the public, recognizing the need for a common standard for safety glazing materials, jointly established the Safety Glazing Certification Council (SGCC).

The Safety Glazing Certification Council is a non-profit organization which has established and maintains a program to administer periodic testing as outlined in American National Standard Z97.1-1975, an internationally recognized standard for safety glazing in buildings. This standard subjects glazing materials to a practical test to determine that if they are broken by human contact, they break in a manner that would minimize the likelihood of cutting or piercing injury. SGCC's responsibilities are threefold: to assure a periodic testing program is maintained; to approve and register the form of the manufacturer's label; and to withdraw the manufacturer's authority to use that label if its products do not meet ANSI Z97.1-1975 standards.

Management and control of the program is vested in a board of directors, half representing industry and half representing public interest. The public interest representatives are empowered to veto any action regardless of the number present at a meeting. This insures against industry dominance of SGCC actions. The organization is operated in compliance with the American National Standard Practice for Certification Procedures Z34.1-1947 (R1959).

The program uses independent testing laboratories under the supervision of a qualified administrator, who is a professional engineer. He is unaffiliated with any manufacturer of safety glazing materials, and is hired by and responsible to the Safety Glazing Certification Council. The manufacturer of the products listed herein has certified that the labeled materials comply with the safety characteristics established by ANSI Z97.1-1975. The compliance of the manufacturer with the requirements of that standard is being checked periodically by an independent testing laboratory under the supervision of SGCC.

Every manufacturer of safety glazing material is eligible and encouraged to apply for certification. However, his products are not accepted and certified until an independent laboratory test indicates compliance with the standard. Once certified, each product is assigned an SGCC certification number to identify it and the factory at which it is made. Then, at least twice a year SGCC independently selects samples during unannounced visits to the manufacturing plant or randomly from the market place to ensure continued adherence to the standard. Based on these re-evaluation reports SGCC authorizes continued use of the certification label and the product listing published in this directory.

The directory is divided into three basic listings: the first is by numerical sequence of certified product numbers listing the manufacturer holding that number; the second is of manufacturers listed alphabetically by plants and the approved products manufactured at those plants; the third is by products listing all manufacturers and their plants approved for each product. There is also an alphabetical listing by manufacturers illustrating a typical label of that manufacturer. The table of contents lists various procedural and administrative information, as well as information as to where officers and directors may be located.

Information from SGCC concerning a statement of procedures or copies of the minutes are available to manufacturers, public interest groups and individuals upon request.

MEETINGS OF THE CERTIFICATION COMMITTEE

The Certification Committee of the Safety Glazing Certification Council met on April 25 and September 26 during 1979. Interested persons may obtain minutes of these meetings by writing to the Safety Glazing Certification Council.

* * * * *

Certification in this directory is up-to-date as of January 1, 1980; however, products may be certified or certification removed from time to time. Please contact the SGCC office for the latest up-to-date information.

Requests for future copies of this directory, or any questions or comments should be directed to:

Mr. Robert A. Nance, P.E. Administrative Manager Safety Glazing Certification Council 1640 West 32 Place Hialeah, Florida 33012

Telephone 305-558-1352

SGCC BOARD OF DIRECTORS

Representing Public Interest

Mrs. Jean Cornwell, Consumer Phil Dykstra, National Safety Council Richard C. Elstner, Wiss, Janney, Elstner Mrs. Sylvia Lav, Consumer Joseph E. Minor, Texas Tech University Orville L. Pierson, Consumer

Representing Industry

Robert L. Brown, Virginia Glass Products Gene Gilbert, Ohio Plate Glass Company Robert D. Lauter, Tuf-flex Glass Donald J. Vild, Libbey-Owens-Ford Company Harold G. Warp, Flex-O-Glass Leigh T. Yates, Falconer Glass Industries

Honorary Non-voting Member: Norman Nitschke

SGCC Officers

Robert L. Brown, President Gene Gilbert, Vice President Orville L. Pierson, Vice President Joseph E. Minor, Secretary Robert D. Lauter, Assistant Secretary Mrs. Jean Cornwell, Treasurer

SGCC CERTIFICATION COMMITTEE

Irvin D. Fintel, Chairman

Harold G. Warp, Vice-chairman

Second Alternate

C.J. Youngblood

Richard H. Turner

Richard T. McGuire

Licensee
ASG Industries, Inc.
C-E Glass
Canadian Pittsburgh Industries
Central Glass Company
Chromallov-Safetee
Downey Glass Company
Falconer Glass Industries
Feather-lite
Flex-O-Glass, Inc.
Ford Motor Company
Fourco Glass Company
Guardian Industries Corporation
Hamilton Glass Products
LOF Glass, Inc.
Libbey-Owens-Ford Company Northwestern Industries
Ohio Plate Glass Company
Ohio Plate Glass Company PPG Industries, Inc.
Plaskolite, Inc.
Rotuba Extruders, Inc.
Sheffield Plastics, Inc.
Tempered Glass Corporation
Tempglass, Inc.
Tempglass Western, Inc.
Temp-Safe, Inc.
Temp-Tech Industries
Lexas Tempered Glass Company
rui-liex Glass, Inc.
Virginia Glass Products

Primary Member Thomas C. Carson Pieter Knorr D.A. Clark Shinichiro Furuno Earle D. Moiles Jim Pinsky Richard E. Turner Avery C. Fried Harold G. Warp Richard L. Morrison Billie G. Nichols Charles J. Cocagne Robert A. Moss Donald J. Vild Donald J. Vild Norman G. Heutmaker Gene Gilbert Richard T. McGuire William Klimek Homer H. Goldsberry Thomas Kradel Paul F. Tumey Irvin D. Fintel Robert B. Cobie Lewis E. Hunt, Jr. Bart Semeraro Hugh France Robert D. Lauter Robert L. Brown

William C. Cooke Robert W. Hickey W.C. Clanahan Takayoshi Sakaida Steve Zabetakis
Leigh T. Yates
Delbert Christensen E.L. Hendrickson John Linder Pat Weatherholt Gary L. Tate Sam E. Baldwin Sam E. Baldwin Timothy J. McQuade John Barr Charles R. Sutermaster Luis Weil Albert M. Bell Bernard W. Brooks Howard Bienenfeld James C. Clark
Thomas D. Boicey Joseph O. Kramer Brooks R. Leavitt

First Alternate

Robert Hayes
Ronald Purdue
A. William Lingnell, III
A. William Lingnell, III
James A. Millen
Eugene E. Drood
David P. Moorhead

Members from those without certified products:

Ferro Corporation Glasstech, Inc. Madico Mobay Plastic Safety Glazing Committee Saxon Industries Three M Company	

Paul W. Mitchell
A.J. Bartosic
Felix Shaikevch
Louis F. Masonick
LOUIS 1 . WASUITICK

Robert J. Weis

Robert Siegler

G.A. Berger

John F. Van Ness

Edward Mullery

Donald J. Vild

A.P. Stillman

Members by virtue of being a director:

Consumer National Safety Council Wiss, Janney, Elstner Consumer Texas Tech University Consumer

Mrs. Jean Cornwell Phil Dykstra Richard E. Elstner Mrs. Sylvia Lav Joseph E. Minor Orville L. Pierson

Legal Counsel:

Auditor:

Administrative Manager:

Administrative Staff:

Samuel Steen, Esquire

Joseph B. Press, CPA

Robert A. Nance, P.E.

Richard W. Abels Jan Nance

ANSI Z97.1-1975 6 SGCC; January 1, 1980

SGCC BOARD OF DIRECTORS

Representing Public Interest

Mrs. J. D. Cornwell, Jr. Route 4; Swan Lake Road Stockbridge, Georgia 30281 Telephone 404-633-1451

Mr. Phil Dykstra National Safety Council 444 North Michigan Avenue Chicago, Illinois 60611 Telephone 312-527-4800

Mr. Richard C. Elstner, S. E. Wiss, Janney, Elstner and Associates, Inc. Consulting and Research Engineers P.O. Box 10130 Honolulu, Hawaii 96816 Telephone 808-732-3633

Mrs. Sylvia Lav 71 Southgate Circle Massapequa Park, New York 11762 Telephone 516-798-6323

Dr. Joseph E. Minor, P.E. Institute for Disaster Research Texas Tech University P.O. Box 4089 Lubbock, Texas 79409 Telephone 806-742-3523

Dr. Orville L. Pierson 2120 Village of Pennbrook Levittown, Pennsylvania 19054 Telephone 215-547-2937 Representing Industry

Mr. Robert L. Brown Virginia Glass Products Corporation P.O. Box 5431 Martinsville, Virginia 24112 Telephone 703-956-3131

Mr. Gene Gilbert Ohio Plate Glass Company P.O. Box 671 Lewisburg, Ohio 45338 Telephone 513-962-2696

Mr. Robert D. Lauter Tuf-flex Glass, Inc. 811 Madison Avenue Toledo, Ohio 43695 Telephone 419-247-3770

Mr. Donald J. Vild Libbey-Owens-Ford Company 1701 East Broadway Toledo, Ohio 43605 Telephone 419-247-4231

Mr. Harold G. Warp Flex-O-Glass, Inc. 1100 North Cicero Avenue Chicago, Illinois 60651 Telephone 312-261-5200

Mr. Leigh T. Yates Falconer Glass Industries, Inc. 500 South Work Street Falconer, New York 14733

Honorary Non-Voting
Life Time Member
Mr. Norman Nitschke
Glasstech, Inc.
Willis Day Industrial Park
995 Fourth Street
Perrysburg, Ohio 43551
Telephone 419-661-9500

AAIAISHI PAP APARREIAFE

SGCC- 12 Virginia Glass SGCC- 14 Virginia Glass SGCC- 19 Libbey-Owens-Ford SGCC- 24 AFG Industries SGCC- 26 AFG Industries	SGCC- 209 Canadian Pittsburgh SGCC- 219 PPG Industries SGCC- 220 AFG Industries SGCC- 229 Tuf-flex Glass SGCC- 245 C-E Glass	SGCC- 373 LOF Glass SGCC- 374 LOF Glass SGCC- 375 LOF Glass SGCC- 378 Chromalloy-Safetee SGCC- 379 Chromalloy-Safetee
SGCC- 27 AFG Industries SGCC- 28 AFG Industries SGCC- 31 AFG Industries SGCC- 40 Guardian Industries SGCC- 41 Guardian Industries	SGCC- 246 C-E Glass SGCC- 249 PPG Industries SGCC- 250 PPG Industries SGCC- 251 Canadian Pittsburgh SGCC- 252 Tyre Brothers	SGCC- 380 Chromalloy-Safetee SGCC- 381 Chromalloy-Safetee SGCC- 382 PPG Industries SGCC- 385 C-E Glass SGCC- 386 Libbey-Owens-Ford
SGCC- 43 Guardian Industries SGCC- 47 C-E Glass SGCC- 49 C-E Glass SGCC- 54 Hamilton Glass SGCC- 56 Hamilton Glass	SGCC- 253 Tyre Brothers SGCC- 254 Tyre Brothers SGCC- 255 Tyre Brothers SGCC- 256 Tyre Brothers SGCC- 257 Tuf-flex Glass	SGCC- 390 Tuf-flex Glass SGCC- 391 Tuf-flex Glass SGCC- 392 Tuf-flex Glass SGCC- 396 Ford Motor Company SGCC- 397 Ford Motor Company
SGCC- 57 Hamilton Glass SGCC- 59 PPG Industries SGCC- 60 PPG Industries SGCC- 61 PPG Industries SGCC- 63 PPG Industries	SGCC- 258 Tuf-flex Glass SGCC- 263 Guardian Industries SGCC- 264 Guardian Industries SGCC- 265 C-E Glass SGCC- 266 PPG Industries	SGCC- 400 PPG Industries SGCC- 402 PPG Industries SGCC- 404 PPG Industries SGCC- 410 C-E Glass SGCC- 411 C-E Glass
SGCC- 64 PPG Industries SGCC- 70 PPG Industries SGCC- 73 PPG Industries SGCC- 76 C-E Glass SGCC- 89 AFG Industries	SGCC- 267 PPG Industries SGCC- 270 Tuf-flex Glass SGCC- 279 Ohio Plate Glass SGCC- 293 AFG Industries SGCC- 295 PPG Industries	SGCC- 412 C-E Glass SGCC- 413 C-E Glass SGCC- 414 C-E Glass SGCC- 421 Tempered Glass SGCC- 441 Temp-Safe
SGCC- 90 AFG Industries SGCC- 92 Virginia Glass SGCC- 93 Virginia Glass SGCC- 94 Virginia Glass SGCC- 95 Virginia Glass	SGCC- 297 AFG Industries SGCC- 298 Tuf-flex Glass SGCC- 300 Guardian Industries SGCC- 314 Tuf-flex Glass SGCC- 315 Tuf-flex Glass	SGCC- 444 Libbey-Owens-Ford SGCC- 446 PPG Industries SGCC- 449 Libbey-Owens-Ford SGCC- 452 C-E Glass SGCC- 453 C-E Glass
SGCC- 97 Guardian Industries SGCC- 98 Guardian Industries SGCC- 102 PPG Industries SGCC- 108 C-E Glass SGCC- 110 Texas Tempered	SGCC- 320 Tuf-flex Glass SGCC- 321 Tuf-flex Glass SGCC- 322 Tuf-flex Glass	SGCC- 454 PPG Industries SGCC- 455 PPG Industries SGCC- 456 PPG Industries SGCC- 458 Guardian Industries SGCC- 464 Libbey-Owens-Ford
SGCC- 118 Flex-O-Glass SGCC- 129 Hamilton Glass SGCC- 131 Guardian Industries SGCC- 137 Texas Tempered SGCC- 141 AFG Industries	SGCC- 328 Ohio Plate Glass SGCC- 330 C-E Glass SGCC- 331 C-E Glass SGCC- 336 C-E Glass SGCC- 337 Tempered Glass	SGCC- 471 Guardian Industries SGCC- 474 PPG Industries SGCC- 475 PPG Industries SGCC- 482 Tuf-flex Glass SGCC- 483 Tuf-flex Glass
SGCC- 150 Libbey-Owens-Ford SGCC- 151 Libbey-Owens-Ford SGCC- 152 Plaskolite SGCC- 157 Chromalloy-Safetee SGCC- 160 Guardian Industries	SGCC- 338 Tempered Glass SGCC- 341 Ford Motor Company SGCC- 342 Ford Motor Company SGCC- 344 C-E Glass SGCC- 345 C-E Glass	SGCC- 487 Guardian Industries SGCC- 488 Temp-Safe SGCC- 489 C-E Glass SGCC- 490 Tuf-flex Glass SGCC- 491 Tuf-flex Glass
SGCC- 173 Sheffield Plastics SGCC- 181 Chromalloy-Safetee SGCC- 182 Chromalloy-Safetee SGCC- 185 Ohio Plate Glass SGCC- 186 Ohio Plate Glass	SGCC- 346 C-E Glass SGCC- 348 Tempered Glass SGCC- 350 LOF Glass SGCC- 351 LOF Glass SGCC- 352 LOF Glass	SGCC- 499 AFG Industries SGCC- 508 Central Glass SGCC- 514 Downey Glass SGCC- 515 Downey Glass SGCC- 516 Downey Glass
SGCC- 188 Ohio Plate Glass SGCC- 194 PPG Industries SGCC- 195 PPG Industries	SGCC- 360 C-E Glass SGCC- 361 C-E Glass SGCC- 371 C-E Glass	SGCC- 520 Anglass Industries SGCC- 525 Tuf-flex Glass SGCC- 532 Temp-Safe

SGCC- 543 Central Glass	SGCC- 693 Tuf-flex Glass	SGCC- 975 Pacific Tempering
SGCC- 544 Libbey-Owens-Ford	SGCC- 695 Tuf-flex Glass	SGCC- 978 C-E-Glass
SGCC- 545 LOF Glass	SGCC- 700 Doulton Tempered	SGCC- 979 Tempglass Eastern
SGOC- 562 Ohio Plate Glass	SGCC- 701 Northwestern Industries	SGCC- 980 Tempglass Eastern
SGCC- 567 Manchester Products	SGCC- 702 Northwestern Industries	SGCC- 981 Tempglass Eastern
3000 - 307 Manones of the same		anno coo T Contonn
SGCC- 570 Texas Tempered	SGCC- 703 Northwestern Industries	SGCC- 982 Tempglass Eastern
SGCC- 583 Artistic Glass	SGCC- 704 Northwestern Industries	SGCC- 985 Temp-Tech
SGCC- 584 Artistic Glass	SGCC- 707 Northwestern Industries	SGCC- 986 Temp-Tech
SGCC- 585 Artistic Glass	SGCC- 708 Falconer Glass	SGCC- 987 Tempglass Eastern
SGCC- 586 Feather-lite	SGCC- 709 Falconer Glass	SGCC- 988 Tempglass Eastern
		SGCC- 989 Bennett's
SGCC- 587 AFG Industries	SGCC- 710 Falconer Glass	SGCC- 909 Bennett's
SGCC- 588 AFG Industries	SGCC- 711 Falconer Glass	SGCC- 991 Bennett's
SGCC- 592 Tempglass	SGCC- 712 Falconer Glass	SGCC- 997 Bennett's
SGCC- 593 Tempglass	SGCC- 723 Tempglass Western	SGCC- 993 Bennett's
SGCC- 594 Tempglass	SGCC- 724 Tempglass Western	3GCC- 333 Delinett 3
	ann de Touris Mantaga	SGCC- 994 Bennett's
SGCC- 595 Tempglass	SGCC- 725 Tempglass Western	SGCC- 997 Romsit
SGCC- 597 Tempglass	SGCC- 726 Tempglass Western	SGCC- 999 Anglass Industries
SGCC- 598 AFG Industries	SGCC- 818 Tuf-flex Glass	SGCC-1000 Anglass Industries
SGCC- 600 Doulton Tempered	SGCC- 889 C-E Glass	SGCC-1002 Downey Glass
SGCC- 601 Doulton Tempered	SGCC- 891 Tempglass Western	3000 1002 0011101 0120
	coop soc C E Class	SGCC-1004 Guardian Industries
SGCC- 603 Downey Glass	SGCC- 896 C-E Glass	SGCC-1005 C-E Glass
SGCC- 604 Downey Glass	SGCC- 900 Chromalloy-Safetee	SGCC-1006 C-E Glass
SGCC- 605 Downey Glass	SGCC- 904 C-E Glass	SGCC-1007 C-E Glass
SGCC- 606 Downey Glass	SGCC- 914 C-E Glass SGCC- 920 Northwestern Industries	SGCC-1008 C-E Glass
SGCC- 607 Downey Glass	SGCC= 920 NOT TIMESTELL THINGS TO	
	SGCC- 921 Tuf-flex Glass	SGCC-1009 C-E Glass
SGCC- 608 Downey Glass	SGCC- 922 Romsit	SGCC-1011 AFG Industries
SGCC- 609 Downey Glass	SGCC- 927 PPG Industries	SGCC-1012 Cal-Temp
SGCC- 610 Feather-lite	SGCC- 933 Guardian Industries	SGCC-1013 San Diego Tempering
SGCC- 617 Guardian Industries	SGCC- 934 Guardian Industries	SGCC-1014 San Diego Tempering
SGCC- 619 C-E Glass	3000 - 334 Oudi didir , maaa	
acco con C.F. Class	SGCC- 935 Downey Glass	SGCC-1015 San Diego Tempering
SGCC- 620 C-E Glass SGCC- 621 Hamilton Glass	SGCC- 940 C-E Glass	SGCC-1016 San Diego Tempering
SGUC 670 Parmay Class	SGCC- 941 C-E Glass	SGCC-1020 General Glass
SGCC- 630 Downey Glass SGCC- 631 Guardian Industries	SGCC- 945 C-E Glass	SGCC-1021 General Glass
SGCC- 633 Guardian Industries	SGCC- 946 Cascade Tempering	SGCC-1034 Shaw Glass
2000- 022 Gray digit illigration		
SGCC- 638 Cal-Temp	SGCC- 947 Cascade Tempering	SGCC-1035 Shaw Glass
SGCC- 639 Cal-Temp	SGCC- 948 Tempglass Western	SGCC-1038 AFG Industries
SGCC- 640 Cal-Temp	SGCC- 949 AFG Industries	SGCC-1039 Tempglass
SGCC- 641 Cal-Temp	SGCC- 952 PPG Industries	SGCC-1040 Tempglass
SGCC- 647 PPG Industries	SGCC- 953 Guardian Industries	SGCC-1041 Ardco
3000 047 11 0 111 day 1 1 30		0000 1042 Ardon
SGCC- 648 PPG Industries	SGCC- 955 AFG Industries	SGCC-1042 Ardco
SGCC- 653 PPG Industries	SGCC- 956 Cascade Tempering	SGCC-1043 Tempglass Southern
SGCC- 654 Ohio Plate Glass	SGCC- 957 Cascade Tempering	SGCC-1044 Tempglass Southern
SGCC- 662 Guardian Industries	SGCC- 963 AFG Industries	SGCC-1045 Tempglass Southern SGCC-1046 Tempglass Southern
SGCC- 668 Texas Tempered	SGCC- 964 Guardian Industries	2000-1040 rempgrass sournern
		SGCC-1049 Ardco
SGCC- 669 Texas Tempered	SGCC- 966 Tuf-flex Glass	SGCC-1049 Ardeo SGCC-1050 Ohio Plate Glass
SGCC- 674 Carolina Processed Glass	SGCC- 968 Guardian Industries	SGCC-1050 Child Flate Glass
SGCC- 675 PPG Industries	SGCC- 969 Guardian Industries	SGCC-1057 C-E Glass
SGCC- 676 PPG Industries	SGCC- 970 Guardian Industries	0000 1072 O E Class
0000	once out of the lader-thing	SGCC=1004 C=E Glass
SGCC- 678 Downey Glass	SGCC- 971 Guardian Industries	SGCC-1054 C-E Glass
SGCC- 678 Downey Glass	SGCC- 971 Guardian Industries	
SGCC- 678 Downey Glass SGCC- 679 PPG Industries	SGCC- 971 Guardian Industries SGCC- 972 Pacific Tempering	SGCC-1055 Pacific Tempering
SGCC- 678 Downey Glass SGCC- 679 PPG Industries SGCC- 680 PPG Industries	SGCC- 971 Guardian Industries SGCC- 972 Pacific Tempering SGCC- 973 Pacific Tempering	SGCC-1055 Pacific Tempering SGCC-1056 Temp-Safe
SGCC- 678 Downey Glass SGCC- 679 PPG Industries	SGCC- 971 Guardian Industries SGCC- 972 Pacific Tempering	SGCC-1055 Pacific Tempering

AFG Indust SGCC- 297 SGCC- 963 SGCC- 293 SGCC-1038	5/32 1/4	inch tempered inch tempered inch tempered	West Virginia transparent glass transparent glass transparent glass pattern glass (s)	Unlir Unlir	nited mited	size size size
AFG Indust SGCC- 598 SGCC- 955 SGCC- 220 SGCC- 89 SGCC- 90 SGCC- 587 SGCC- 588	5/32 3/16 1/4 3/8	inch tempered inch tempered inch tempered inch tempered inch tempered	Tennessee transparent glass transparent glass transparent glass transparent glass transparent glass transparent glass pattern glass (s) pattern glass (s)	Unlin Unlin Unlin Unlin Unlin	nited nited nited nited	size size size size size size size
AFG Indust SGCC- 949 SGCC- 28 SGCC- 24 SGCC- 141 SGCC- 31 SGCC- 27 SGCC- 26 SGCC- 499 SGCC-1011	3/32 3/16 1/4 1/8 7/32 7/32 1/4 1/8:1/4	inch tempered inch tempered inch tempered inch tempered inch laminated inch laminated inch laminated	Tennessee transparent glass transparent glass transparent glass pattern glass (s) pattern glass (s) transparent glass (0.030) transparent glass (0.030) transparent glass (0.030) transparent glass (0.030) pattern glass (0.030) (s)	Unlin Unlin Unlin Unlin	nited	size size size size size size size
SGCC- 929 SGCC-1000	dustries, 1/8 i 3/16 i 1/4 i	Inc.; San Fer inch tempered inch tempered inch tempered o, Illinois	rnando, California transparent glass transparent glass transparent glass	Unlim Unlim Unlim	nited nited nited	size size size
SGCC-1042 SGCC-1049 Artistic G	3/16 i 1/4 i lass Produ	inch tempered inch tempered ucts Company;	transparent glass transparent glass transparent glass Trumbauersville, Pennsylvania	Unlim Unlim Unlim	ited	size
SGCC- 584 SGCC- 585 Bennett's;	3/16 i 1/4 i Salt Lake	nch tempered nch tempered e City, Utah	transparent glass transparent glass transparent glass	13" 18" 18"	by by by	19" 24" 24"
SGCC- 989 SGCC- 990 SGCC- 991 SGCC- 992 SGCC- 994 SGCC- 993	1/4 i 3/8 i 1/2 i 210 i	nch tempered nch tempered nch tempered nch tempered	pattern glass (m)	Unlim Unlim Unlim Unlim Unlim Unlim	ited ited ited ited	size size size size
C-E Glass; SGCC- 108 SGCC- 371 SGCC-1008 SGCC-1054	1/4 i 3/8 i 210 i	nch tempered nch tempered nch tempered	transparent glass pattern glass (s)	Unlim Unlim Unlim Unlim	ited ited	size size

CERTIFIED PRODUCTS ALPHABETICAL BY PLANT

C-E Glass;			Unlimited size
SGCC- 453	1/8	inch tempered transparent glass	Unlimited size
SGCC- 410	3/16	inch tempered transparent glass	Unlimited size
SGCC- 411	1/4	inch tempered transparent glass	Unlimited size
SGCC- 412	3/8	inch tempered transparent glass	Unlimited size
SGCC- 413	1/2	inch tempered transparent glass	Unlimited size
SGCC- 452	1/8	<pre>inch tempered pattern glass (s) inch tempered pattern glass (m)</pre>	Unlimited size
SGCC- 941	5/32	inch tempered pattern glass (s)	Unlimited size
SGCC- 414	3/16 7/32	inch tempered pattern glass (s)	Unlimited size
SGCC- 619 SGCC- 620	7/32 7/32	inch tempered pattern glass (m)	Unlimited size
3600- 620	11 32	Then reliiper ed partier it grass tim	
C-E Glass;	Cinnami	nson, New Jersey	Halimihad aima
SGCC- 489	1/8	inch tempered transparent glass	Unlimited size
SGCC- 940	5/32	inch tempered transparent glass	Unlimited size Unlimited size
SGCC- 245	3/16	inch tempered transparent glass	Unlimited size
SGCC- 246	1/4	inch tempered transparent glass	Unlimited size
SGCC- 345	3/8	inch tempered transparent glass	Unlimited size
SGCC- 346		inch tempered transparent glass	Unlimited size
SGCC- 265	7/32	inch tempered pattern glass (s)	Ultililited Size
C-E Glass	Fullert	on, California	
SGCC-1052	5/32	inch tempered pattern glass (s)	Unlimited size
SGCC-1032		inch tempered pattern glass (s)	Unlimited size
3000- 914	2/10	Then Tomper ou parties it greet ter	
C-E Glass;	Lancast	er, Ohio; Slocum Street	708 608
SGCC- 978	1/8	inch tempered transparent glass	30" by 60" 30" by 39"
SGCC- 330	3/16	inch tempered transparent glass	•
SGCÇ- 331		inch tempered transparent glass	
SGCC-1051	1/4	inch tempered transparent glass	30" by 55"
C-E Glass;	Miami.	Florida	
SGCC- 76	3/16	inch tempered transparent glass	Unlimited size
SGCC- 49	1/4	inch tempered transparent glass	Unlimited size
SGCC-1006	210	inch tempered pattern glass (s)	Unlimited size
SGCC-1007	7/32	inch tempered pattern glass (m)	Unlimited size
C-E Glass;		Florida	Unlimited size
SGCC- 385	3/16	inch tempered transparent glass	Unlimited size
SGCC- 47	1/4	inch tempered transparent glass	Unlimited size
SGCC- 889	3/8	inch tempered transparent glass	Unlimited size
SGCC- 896	1/2	inch tempered transparent glass	Unlimited size
SGCC-1005	7/32	inch tempered pattern glass (d)	OH THITTEG 5120
C-E Glass:	Warrent	on, Missouri	
SGCC- 360	1/8	inch tempered transparent glass	Unlimited size
SGCC- 945	5/32	inch tempered transparent glass	Unlimited size
SGCC- 336	3/16	inch tempered transparent glass	Unlimited size
SGCC- 361	1/4	inch tempered transparent glass	Unlimited size
SGCC- 904	1/8	inch tempered pattern glass (s)	Unlimited size
SGCC-1009	3/16	inch tempered pattern glass (s)	Unlimited size
SGCC- 344	7/32	inch tempered pattern glass (s)	Unlimited size

CEKIIFIED PRODUCIS ALPHABETICAL BY PLANT

Cal-Temp; Santa Fe SGCC-1012 3/16	Springs, California	
SGCC- 638 1/4	inch tempered transparent glass inch tempered transparent glass	Unlimited size
SGCC- 639 3/8	inch tempered transparent glass	Unlimited size Unlimited size
SGCC- 640 1/2	inch tempered transparent glass	Unlimited size
SGCC- 641 7/32	inch tempered pattern glass (s)	Unlimited size
		0117 1111 100 3120
Canadian Pittsburg	gh Industries, Ltd.; Owen Sound, Ontario, Canada	
SGCC- 251 1/8	inch tempered transparent glass	Unlimited size
SGCC- 209 3/16	inch tempered transparent glass	Unlimited size
0		
Carolina Processed	d Glass, Inc.; Rock Hill, South Carolina	
SGCC- 674 3/8	inch tempered transparent glass	Unlimited size
Cascada Tampanina	Last W. Market A.	
Cascade Tempering, SGCC- 946 3/16		
SGCC- 947 1/4	inch tempered transparent glass	Unlimited size
SGCC- 956 3/8	inch tempered transparent glass inch tempered transparent glass	Unlimited size
SGCC- 957 1/2	inch tempered transparent glass	Unlimited size
1,2	Then reliipered it disparent grass	Unlimited size
Central Glass Comp	pany, Ltd.; Tokyo, Japan	
SGCC- 508 1/4	inch polished wired glass (3/4 inch diamond mesh)	Unlimited size
SGCC- 543 1/4	inch polished wired glass (1/2 inch square mesh)	Unlimited size
	The second of th	011111111100 3120
Chromalloy-Safetee	e Glass Division; King of Prussia, Pennsylvania	
SGCC- 900 3/16	inch tempered transparent glass	Unlimited size
SGCC- 157 1/4	inch tempered transparent glass	Unlimited size
SGCC- 181 3/8	inch tempered transparent glass	Unlimited size
SGCC- 182 1/2	inch tempered transparent glass	Unlimited size
SGCC- 378 7/32	inch laminated transparent glass (0.015)	Unlimited size
SGCC- 379 1/4	inch laminated transparent glass (0.015)	Unlimited size
SGCC- 380 3/8	inch laminated transparent glass (0.015)	Unlimited size
SGCC- 381 1/2	inch laminated transparent glass (0.015)	Unlimited size
Doulton Tempored (Close 1+d . Predford France	
SGCC- 600 5/32	Glass, Ltd.; Bradford, England	
SGCC- 700 3/16	inch tempered transparent glass	Unlimited size
SGCC- 601 1/4	inch tempered transparent glass	Unlimited size
0000 001 1/4	inch tempered transparent glass	Unlimited size
Downey Glass Compa	any; Downey, California	
SGCC- 603 1/8	inch tempered transparent glass	Unlimited size
SGCC-1002 5/32	inch tempered transparent glass	Unlimited size
SGCC- 606 3/16	inch tempered transparent glass	Unlimited size
SGCC- 609 1/4	inch tempered transparent glass	Unlimited size
SGCC- 604 1/8	inch tempered pattern glass (s)	Unlimited size
SGCC- 605 1/8	inch tempered pattern glass (m)	Unlimited size
SGCC- 607 3/16	inch tempered pattern glass (s)	Unlimited size
SGCC- 608 7/32	inch tempered pattern glass (s)	Unlimited size
Downsy Oler o		
Downey Glass Compa	any; Los Angeles, California	
SGCC- 630 3/16 SGCC- 514 1/4	inch tempered transparent glass	Unlimited size
	inch tempered transparent glass	Unlimited size
	inch tempered transparent glass	Unlimited size
SGCC- 516 1/2 SGCC- 935 3/16	inch tempered transparent glass	Unlimited size
SGCC- 678 7/32	inch tempered pattern glass (s)	Unlimited size
000 010 1/32	inch tempered pattern glass (s)	Unlimited size

ANSI Z97.1-1975

12 SGCC; January 1, 1980

CEKIIFIED PRODUCIS ALPRABELICAL BY PLANT

Falconer Glass Industries, Inc.; Falconer, New York SGCC- 708 3/16 inch tempered transparent glass SGCC- 709 1/4 inch tempered transparent glass SGCC- 710 3/8 inch tempered transparent glass SGCC- 711 1/2 inch tempered transparent glass SGCC- 712 3/4 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Feather-lite Manufacturing Company; Malvern, Arkansas SGCC- 586 1/8 inch tempered transparent glass SGCC- 610 3/16 inch tempered transparent glass	Unlimited size Unlimited size
Flex-O-Glass, Inc.; Dixon, Illinois SGCC- 118 0.080 inch through 0.125 inch smooth extruded acryli	c Unlimited size
Ford Motor Company; Dearborn, Michigan SGCC- 341 1/8 inch tempered transparent glass SGCC- 396 5/32 inch tempered transparent glass SGCC- 342 3/16 inch tempered transparent glass SGCC- 397 1/4 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size
General Glass Corporation; Denver, Colorado SGCC-1020 3/16 inch tempered transparent glass SGCC-1021 1/4 inch tempered transparent glass	Unlimited size Unlimited size
Guardian Industries Corporation; Carleton, Michigan SGCC- 933 1/8 inch tempered transparent glass SGCC- 934 5/32 inch tempered transparent glass SGCC- 631 3/16 inch tempered transparent glass SGCC- 131 1/4 inch tempered transparent glass SGCC- 160 3/8 inch tempered transparent glass SGCC- 263 1/2 inch tempered transparent glass	Unlimited size
Guardian Industries Corporation; Fort Lauderdale, Florida SGCC- 633 3/16 inch tempered transparent glass SGCC- 40 1/4 inch tempered transparent glass SGCC- 41 3/8 inch tempered transparent glass SGCC-1004 1/2 inch tempered transparent glass SGCC- 617 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Guardian Industries Corporation; Kingsburg, California SGCC- 968 1/8 inch tempered transparent glass SGCC- 969 5/32 inch tempered transparent glass SGCC- 970 3/16 inch tempered transparent glass SGCC- 971 1/4 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size
Guardian Industries Corporation; Torrance, California SGCC- 964 3/16 inch tempered transparent glass SGCC- 43 1/4 inch tempered transparent glass SGCC- 97 3/8 inch tempered transparent glass SGCC- 98 1/2 inch tempered transparent glass SGCC- 264 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Guardian Industries Corporation; Upper Sandusky, Ohio SGCC- 458 7/32 inch laminated transparent glass (0.015) SGCC- 487 1/4 inch laminated transparent glass (0.015)	Unlimited size Unlimited size

ANSI Z97.1-1975 January 1, 1980; SGCC 13

CERTIFIED PRODUCIS ALPHABELICAL BY PLANI

Guardian Industries Corporation; Webster, Massachusetts	
SGCC- 300 1/8 inch tempered transparent glass	Unlimited size
SGCC- 953 3/16 inch tempered transparent glass	Unlimited size
SGCC- 662 1/4 inch tempered transparent glass	Unlimited size
SGCC- 471 3/8 inch tempered transparent glass	Unlimited size
Then tempered it disparem grass	
Hamilton Glass Products; Vincennes, Indiana	
SGCC- 54 1/8 inch tempered transparent glass	Unlimited size
SGCC- 56 3/16 inch tempered transparent glass	Unlimited size
SGCC- 57 1/4 inch tempered transparent glass	Unlimited size
SGCC- 621 1/8 inch tempered pattern glass (s)	Unlimited size
SGCC- 129 7/32 inch tempered pattern glass (s)	Unlimited size
LOF Glass, Inc.; Laurinburg, North Carolina	
SGCC- 350 1/8 inch tempered transparent glass	Unlimited size
SGCC- 545 5/32 inch tempered transparent glass	Unlimited size
SGCC- 351 3/16 inch tempered transparent glass	Unlimited size
SGCC- 352 1/4 inch tempered transparent glass	Unlimited size
SGCC- 373 5/16 inch tempered transparent glass	Unlimited size
SGCC- 374 3/8 inch tempered transparent glass	Unlimited size
SGCC- 375 1/2 inch tempered transparent glass	Unlimited size
Libbon Overs Ford Company Deserted Obia	
Libbey-Owens-Ford Company; Rossford, Ohio SGCC- 386 3/16 inch tempered transparent glass	Unlimited size
\cdot	Unlimited size Unlimited size
· · · · · · · · · · · · · · · · · · ·	
	Unlimited size
· · · · · · · · · · · · · · · · · · ·	Unlimited size Unlimited size
	Unlimited size Unlimited size
SGCC- 444 7/8 inch tempered transparent glass	Offi fill fed 512e
Manchester Products Company; Chatsworth, California	
SGCC- 567 0.100 inch smooth extruded acrylic	Unlimited size
1000 507 0.100 Then shooth extraded delytte	01111111100 3120
Northwestern Industries, Inc.; Seattle, Washington	
SGCC- 701 1/8 inch tempered transparent glass	Unlimited size
SGCC- 702 5/32 inch tempered transparent glass	Unlimited size
SGCC- 703 3/16 inch tempered transparent glass	Unlimited size
SGCC- 704 1/4 inch tempered transparent glass	Unlimited size
SGCC- 920 5/32 inch tempered pattern glass (m)	Unlimited size
SGCC- 707 7/32 inch tempered pattern glass (s)	Unlimited size
Ohio Plate Glass Company; Lewisburg, Ohio	
SGCC-1050 1/8 inch tempered transparent glass	Unlimited size
SGCC- 185 3/16 inch tempered transparent glass	Unlimited size
SGCC- 279 7/32 inch tempered transparent glass	Unlimited size
SGCC- 186 1/4 inch tempered transparent glass	Unlimited size
SGCC- 654 1/8 inch tempered pattern glass (m)	Unlimited size
SGCC- 188 3/16 inch tempered pattern glass (s)	Unlimited size
SGCC- 328 3/16 inch tempered pattern glass (d)	Unlimited size
SGCC- 562 7/32 inch tempered pattern glass (s)	Unlimited size

CERTIFIED PRODUCTS ALPHABETICAL BY PLANT

PPG Industries, Inc.; Baltimore, Maryland	
SGCC- 454 3/16 inch tempered transparent glass	Unlimited size
SGCC- 455 1/4 inch tempered transparent glass	Unlimited size
SGCC- 474 3/8 inch tempered transparent glass	Unlimited size
SGCC- 475 1/2 inch tempered transparent glass	Unlimited size
SGCC- 952 3/4 inch tempered transparent glass	Unlimited size
SGCC- 456 7/32 inch tempered pattern glass (s)	Unlimited size
	344 444 24 24 26
PPG Industries, Inc.; Carlisle, Pennsylvania	
SGCC- 250 1/8 inch tempered transparent glass	Unlimited size
SGCC- 675 5/32 inch tempered transparent glass SGCC- 249 3/16 inch tempered transparent glass	Unlimited size
and a second and a second a se	Unlimited size
SGCC- 382 1/4 inch tempered transparent glass	Unlimited size
PPG Industries, Inc.; Chicago, Illinois	
SGCC- 266 3/16 inch tempered transparent glass	Unlimited size
SGCC- 267 1/4 inch tempered transparent glass	Unlimited size
SGCC- 647 3/8 inch tempered transparent glass	Unlimited size
SGCC- 648 1/2 inch tempered transparent glass	Unlimited size
SGCC- 653 7/32 inch tempered pattern glass (s)	Unlimited size
DDC 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	•
PPG Industries, Inc.; Crestline, Ohio SGCC- 60 1/8 inch tempered transparent glass	
The state of the s	Unlimited size
The state of the s	Unlimited size
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Unlimited size
1 9,000	Unlimited size
SGCC- 446 3/16 inch tempered pattern glass (d)	Unlimited size
PPG Industries, Inc.; Dallas, Texas	
SGCC- 400 3/16 inch tempered transparent glass	Unlimited size
SGCC- 402 1/4 inch tempered transparent glass	Unlimited size
SGCC- 404 7/32 inch tempered pattern glass (s)	Unlimited size
PPG Industries, Inc.; Ford City, Pennsylvania	
SGCC- 61 3/16 inch tempered transparent glass SGCC- 70 1/4 inch tempered transparent glass	Unlimited size
SGCC- 70 1/4 inch tempered transparent glass	Unlimited size
PPG Industries, Inc.; Fresno, California	
SGCC- 295 1/8 inch tempered transparent glass	Unlimited size
SGCC- 676 5/32 inch tempered transparent glass	Unlimited size
SGCC- 64 3/16 inch tempered transparent glass	Unlimited size
SGCC- 73 1/4 inch tempered transparent glass	Unlimited size
PPG Industries, Inc.; Miami, Florida SGCC- 195 3/16 inch tempered transparent glass	
The state of the s	Unlimited size
The state of the s	Unlimited size
SGCC- 219 7/32 inch tempered pattern glass (s)	Unlimited size
PPG Industries, Inc.; Mt. Zion, Illinois	
SGCC- 59 1/8 inch tempered transparent glass	Unlimited size
SGCC- 680 5/32 inch tempered transparent glass	Unlimited size
SGCC- 63 3/16 inch tempered transparent glass	Unlimited size
	· · · · · · · · · · · · · · · · · · ·

CERTIFIED PRODUCTS ALPHABETICAL BY PLANT

Pacific Tempering Company, Inc.; Long Beach, California SGCC- 972 3/16 inch tempered transparent glass SGCC- 974 1/4 inch tempered transparent glass SGCC- 975 3/8 inch tempered transparent glass SGCC-1055 1/2 inch tempered transparent glass SGCC- 973 7/32 inch tempered pattern glass (s) Plaskolite, Inc.; Columbus, Ohio SGCC- 152 0.080 inch and greater thicknesses smooth extruded acrylic	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Romsit; Medias, Romania SGCC- 922 5/32 inch tempered transparent glass SGCC- 997 3/16 inch tempered transparent glass	Unlimited size Unlimited size
Rotuba Extruders, Inc.; Linden, New Jersey SGCC- 316 0.080 inch and greater thicknesses smooth extruded acrylic	Unlimited size
San Diego Tempering, Inc.; San Diego, California SGCC-1013 3/16 inch tempered transparent glass SGCC-1014 1/4 inch tempered transparent glass SGCC-1015 3/8 inch tempered transparent glass SGCC-1016 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size
Shaw Glass Company, Inc.; Stoughton, Massachusetts SGCC-1034 3/16 inch tempered transparent glass SGCC-1035 1/4 inch tempered transparent glass	Unlimited size Unlimited size
Sheffield Plastics, Inc.; Sheffield, Massachusetts SGCC- 173 0.080 inch through 0.125 inch smooth extruded acrylic	Unlimited size
Temp-Safe, Inc.; Edmond, Oklahoma SGCC-1056 3/16 inch tempered transparent glass SGCC- 441 1/4 inch tempered transparent glass SGCC- 532 3/8 inch tempered transparent glass SGCC- 488 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size
Temp-Tech Industries, Inc.; Chicago, Illinois SGCC- 985 3/16 inch tempered transparent glass SGCC- 986 1/4 inch tempered transparent glass	Unlimited size Unlimited size
Tempered Glass Corporation; Tampa, Florida SGCC-1057 3/16 inch tempered transparent glass SGCC- 337 1/4 inch tempered transparent glass SGCC- 348 3/8 inch tempered transparent glass SGCC- 338 1/2 inch tempered transparent glass SGCC- 421 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tempglass, Inc.; Perrysburg, Ohio SGCC-1039 1/8 inch tempered transparent glass SGCC-1040 5/32 inch tempered transparent glass SGCC- 592 3/16 inch tempered transparent glass SGCC- 593 1/4 inch tempered transparent glass SGCC- 594 3/8 inch tempered transparent glass SGCC- 595 1/2 inch tempered transparent glass SGCC- 597 7/32 inch tempered pattern glass (s)	Unlimited size

CEKIIFIED PRODUCIO ALPHABEIICAL BY PLANI

Tempglass Eastern, Inc.; Norcross, Georgia SGCC- 979 1/8 inch tempered transparent glass SGCC- 980 5/32 inch tempered transparent glass SGCC- 981 3/16 inch tempered transparent glass SGCC- 982 1/4 inch tempered transparent glass SGCC- 987 1/8 inch tempered pattern glass (s) SGCC- 988 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tempglass Southern, Inc.; Grand Prairie, Texas SGCC-1043 3/16 inch tempered transparent glass SGCC-1044 1/4 inch tempered transparent glass SGCC-1045 3/8 inch tempered transparent glass SGCC-1046 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size
Tempglass Western, Inc.; Fremont, California SGCC- 723 3/16 inch tempered transparent glass SGCC- 724 1/4 inch tempered transparent glass SGCC- 725 3/8 inch tempered transparent glass SGCC- 726 1/2 inch tempered transparent glass SGCC- 948 3/4 inch tempered transparent glass SGCC- 891 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Texas Tempered Glass Company; Houston, Texas SGCC- 110 3/16 inch tempered transparent glass SGCC- 137 1/4 inch tempered transparent glass SGCC- 668 3/8 inch tempered transparent glass SGCC- 669 1/2 inch tempered transparent glass SGCC- 570 7/32 inch laminated transparent glass (0.030)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tuf-flex Glass, Inc.; Atlanta, Georgia SGCC- 320 3/16 inch tempered transparent glass SGCC- 321 1/4 inch tempered transparent glass SGCC- 692 5/16 inch tempered transparent glass SGCC- 322 3/8 inch tempered transparent glass SGCC- 323 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tuf-flex Glass, Inc.; Elmhurst, Illinois SGCC- 257 3/16 inch tempered transparent glass SGCC- 229 1/4 inch tempered transparent glass SGCC- 693 5/16 inch tempered transparent glass SGCC- 258 3/8 inch tempered transparent glass SGCC- 270 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tuf-flex Glass, Inc.; Irving, Texas SGCC- 921 3/16 inch tempered transparent glass SGCC- 390 1/4 inch tempered transparent glass SGCC- 391 3/8 inch tempered transparent glass SGCC- 392 1/2 inch tempered transparent glass SGCC- 818 7/32 inch tempered pattern glass (s)	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size
Tuf-flex Glass, Inc.; Saddle Brook, New Jersey SGCC- 525 3/16 inch tempered transparent glass SGCC- 298 1/4 inch tempered transparent glass SGCC- 695 5/16 inch tempered transparent glass SGCC- 314 3/8 inch tempered transparent glass SGCC- 315 1/2 inch tempered transparent glass	Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size

ANSI Z97.1-1975 January 1, 1980; SGCC 17

CERTIFIED PRODUCIS ALPHABETICAL BY PLANI

SGCC- 490 3/16 inch tempered transparent glass SGCC- 491 1/4 inch tempered transparent glass SGCC- 482 3/8 inch tempered transparent glass SGCC- 483 1/2 inch tempered transparent glass SGCC- 966 7/32 inch tempered pattern glass SGCC- 966 7/32 inch tempered pattern glass SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass SGCC- 256 7/32 inch tempered transparent glass SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 92 7/32 inch tempered transparent glass SGCC- 93 3/4 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glas	Tuf-flex Glass,	Inc.; Union City,	, California	
SGCC- 482 3/8 inch tempered transparent glass SGCC- 483 1/2 inch tempered transparent glass SGCC- 966 7/32 inch tempered pattern glass (s) Tyre Brothers Glass Company; Los Angeles, California SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 15 3/8 inch tempered transparent glass SGCC- 16 1/4 inch tempered transparent glass SGCC- 17 1/4 inch tempered transparent glass SGCC- 18 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size	SGCC- 490 3/16	inch tempered	transparent glass	Unlimited size
SGCC- 483 1/2 inch tempered transparent glass SGCC- 966 7/32 inch tempered pattern glass (s) Tyre Brothers Glass Company; Los Angeles, California SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass	SGCC- 491 1/4	inch tempered	transparent glass	Unlimited size
SGCC- 966 7/32 inch tempered pattern glass (s) Tyre Brothers Glass Company; Los Angeles, California SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size	SGCC- 482 3/8	inch tempered	transparent glass	Unlimited size
Tyre Brothers Glass Company; Los Angeles, California SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size	SGCC- 483 1/2	inch tempered	transparent glass	Unlimited size
SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size	SGCC- 966 7/32	inch tempered	pattern glass (s)	Unlimited size
SGCC- 252 3/16 inch tempered transparent glass SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size	Tyre Brothers G	lace Company. Loc	Angolog California	
SGCC- 253 1/4 inch tempered transparent glass SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 96 3/4 inch tempered transparent glass SGCC- 97 3/4 inch tempered transparent glass	SGCC- 252 3/16			Haliwithad aims
SGCC- 254 3/8 inch tempered transparent glass SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size				
SGCC- 255 1/2 inch tempered transparent glass SGCC- 256 7/32 inch tempered pattern glass (s) Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size		•		
Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size Unlimited size			transparent glass	
Virginia Glass Products Corporation; Martinsville, Virginia SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size	SGCC- 255 1/2	inch tempered	transparent glass	Unlimited size
SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size	SGCC- 256 7/32	inch tempered	pattern glass (s)	Unlimited size
SGCC- 12 3/16 inch tempered transparent glass SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size Unlimited size	Virginia Glass (Products Corporat	ion. Martinevillo Virginia	
SGCC- 14 1/4 inch tempered transparent glass SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size Unlimited size				
SGCC- 93 3/8 inch tempered transparent glass SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size	,	,	•	
SGCC- 94 1/2 inch tempered transparent glass SGCC- 95 3/4 inch tempered transparent glass Unlimited size Unlimited size				Unlimited size
SGCC- 95 3/4 inch tempered transparent glass Unlimited size	SGCC- 93 3/8	inch tempered	transparent glass	Unlimited size
The state of the s	SGCC- 94 1/2	inch tempered	transparent glass	Unlimited size
	SGCC- 95 3/4	inch tempered	transparent glass	Unlimited size
	SGCC- 92 7/32			Unlimited size

.

CLASSIFIED TEMPERED GLASS PATTERNS

1/8 inch shallow (01) P-516 (34) Velvex (82) Pattern 62 (120) Sunadex	(02) Luxlite (36) Ribbed (83) Pointex	(03) Factrolite (37) Aquatex (86) Showerlite	(09) Spray Lite (38) Finetex (87) Heliolite	(32) Muralex (39) Industrex (117) Solatex
1/8 inch medium (04) Rattan (11) Flemish (56) Syenite	(05) Cotswold (31) Skytex (57) Pattern 229	(06) Patchwork (33) Seashell	(07) Burlap (35) Flax	(08) Smooth Rough (52) Pattern 73
1/8 inch deep (10) Autumn				
5/32 inch shallow (59) Luxlite (74) Ribbed (118) Solatex	(60) Factrolite (75) Aquatex (121) Sunadex	(64) Spray Lite (76) Finetex	(70) Muralex (81) Pattern 6	(72) Velvex (88) Pattern 100
5/32 inch medium (61) Cotswold (71) Seashell (80) Pattern 76	(62) Burlap (73) Flax	(63) Smooth Rough (77) Pattern 73	(66) Flemish (78) Syenite	(69) Skytex (79) Pattern 229
5/32 inch deep (65) Autumn	(67) Oceanic	(68) Roundel		
3/16 inch shallow (50) Pattern 62 (122) Sunadex	(51) P-516	(54) Shower lite	(116) Heliolite	(119) Solatex
3/16 inch medium (58) Pattern 76				
3/16 inch deep (12) Oceanic	(13) Roundel	(41) Lozenge		
(12) 00041110	(10)110411401	(11) ====1.9		
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite (105) Cascade	(90) Muralex (95) Pattern 62 (100) Luxlite (106) Pluralite	(91) Industrex (96) Spray Lite (101) J-3 (108) Flax	(92) Aquatex (97) Burlap (102) P-516 (110) Skytex	(93) Pattern 100 (98) Factrolite (103) Smooth Rough (115) Chinchilla
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite	(90) Muralex (95) Pattern 62 (100) Luxlite	(91) Industrex (96) Spray Lite (101) J-3	(97) Burlap (102) P-516	(98) Factrolite (103) Smooth Rough
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite (105) Cascade	(90) Muralex (95) Pattern 62 (100) Luxlite (106) Pluralite	(91) Industrex (96) Spray Lite (101) J-3 (108) Flax	(97) Burlap (102) P-516 (110) Skytex	(98) Factrolite (103) Smooth Rough (115) Chinchilla
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite (105) Cascade 210 medium (107) Seashell 210 deep	(90) Muralex (95) Pattern 62 (100) Luxlite (106) Pluralite (109) Beadex	(91) Industrex (96) Spray Lite (101) J-3 (108) Flax	(97) Burlap (102) P-516 (110) Skytex	(98) Factrolite (103) Smooth Rough (115) Chinchilla
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite (105) Cascade 210 medium (107) Seashell 210 deep (104) Lozenge 7/32 inch shallow (14) Velvex (19) Pattern 6 (24) Satinlite (30) Cascade	(90) Muralex (95) Pattern 62 (100) Luxlite (106) Pluralite (109) Beadex (114) Broad Lite (15) Muralex (20) Pattern 62 (25) Luxlite	(91) Industrex (96) Spray Lite (101) J-3 (108) Flax (111) Syenite (16) Industrex (21) Spray Lite (26) J-3	(97) Burlap (102) P-516 (110) Skytex (112) Flemish (17) Aquatex (22) Burlap (27) P-516	(98) Factrolite (103) Smooth Rough (115) Chinchilla (113) Textured Linex (18) Pattern 100 (23) Factrolite (28) Smooth Rough
210 shallow (89) Velvex (94) Pattern 6 (99) Satinlite (105) Cascade 210 medium (107) Seashell 210 deep (104) Lozenge 7/32 inch shallow (14) Velvex (19) Pattern 6 (24) Satinlite (30) Cascade (84) Chinchilla 7/32 inch medium	(90) Muralex (95) Pattern 62 (100) Luxlite (106) Pluralite (109) Beadex (114) Broad Lite (15) Muralex (20) Pattern 62 (25) Luxlite (42) Pluralite	(91) Industrex (96) Spray Lite (101) J-3 (108) Flax (111) Syenite (16) Industrex (21) Spray Lite (26) J-3 (44) Flax	(97) Burlap (102) P-516 (110) Skytex (112) Flemish (17) Aquatex (22) Burlap (27) P-516 (46) Skytex	(98) Factrolite (103) Smooth Rough (115) Chinchilla (113) Textured Linex (18) Pattern 100 (23) Factrolite (28) Smooth Rough (55) Textured Plate

ANSI Z97.1-1975 January 1, 1980; SGCC 19

TEMPERED TRANSPARENT GLASS		
1/8 inch tempered transparent glass		
AFG Industries, Inc.; Clarksburg, West Virginia	SGCC- 297	Unlimited size
AFG Industries, Inc.; Greenland, Tennessee	SGCC- 598	
Anglass Industries, Inc.; San Fernando, California	SGCC- 520	
Ardco, Inc.; Chicago, Illinois	SGCC-1041	
Artistic Glass Products Company; Trumbauersville, Pennsylvania	SGCC- 583	
C-E Glass; Carson, California	SGCC- 453	
C-E Glass; Cinnaminson, New Jersey	SGCC- 489	
C-E Glass; Lancaster, Ohio; Slocum Street	SGCC- 978	30" by 60"
C-E Glass; Warrenton, Missouri	SGCC- 360	Unlimited size
Canadian Pittsburgh Industries, Ltd.; Owen Sound, Ontario, Canada	SGCC- 251	
Downey Glass Company; Downey, California	SGCC- 603	
Feather-lite Manufacturing Company; Malvern, Arkansas	SGCC- 586	Unlimited size
Ford Motor Company; Dearborn, Michigan	SGCC- 341	Unlimited size
Guardian Industries Corporation; Carleton, Michigan	SGCC- 933	Unlimited size
Guardian Industries Corporation; Kingsburg, California	SGCC- 968	Unlimited size
Guardian Industries Corporation; Webster, Massachusetts	SGCC- 300	Unlimited size
Hamilton Glass Products; Vincennes, Indiana	SGCC- 54	Unlimited size
LOF Glass, Inc.; Laurinburg, North Carolina	SGCC- 350	
Northwestern Industries, Inc.; Seattle, Washington	SGCC- 701	
Ohio Plate Glass Company; Lewisburg, Ohio	SGCC-1050	
PPG Industries, Inc.; Carlisle, Pennsylvania	SGCC- 250	
PPG Industries, Inc.; Crestline, Ohio	SGCC- 60	
PPG Industries, Inc.; Fresno, California	SGCC- 295	
PPG Industries, Inc.; Mt. Zion, Illinois	SGCC- 297	
Tempglass, Inc.; Perrysburg, Ohio	SGCC-1039	
Tempglass Eastern, Inc.; Norcross, Georgia	SGCC- 979	Unlimited size
5/32 inch tempered transparent glass		
AFG Industries, Inc.; Clarksburg, West Virginia	SGCC- 963	Unlimited size
AFG Industries, Inc.; Greenland, Tennessee	SGCC- 955	Unlimited size
AFG Industries, Inc.; Kingsport, Tennessee	SGCC- 949	Unlimited size
C-E Glass; Cinnaminson, New Jersey	SGCC- 940	Unlimited size
C-E Glass; Warrenton, Missouri	SGCC- 945	Unlimited size
Doulton Tempered Glass, Ltd.; Bradford, England	SGCC- 600	Unlimited size
Downey Glass Company; Downey, California	SGCC-1002	Unlimited size
Ford Motor Company; Dearborn, Michigan	SGCC- 396	Unlimited size
Guardian Industries Corporation; Carleton, Michigan	SGCC- 934	
Guardian Industries Corporation; Kingsburg, California	SGCC- 969	
1 OF Glass Inc Laurinburg North Caroline		
LOF Glass, Inc.; Laurinburg, North Carolina	SGCC- 545	
Northwestern Industries, Inc.; Seattle, Washington	SGCC- 702	
PPG Industries, Inc.; Carlisle, Pennsylvania	SGCC- 675	
PPG Industries, Inc.; Crestline, Ohio	SGCC- 679	
PPG Industries, Inc.; Fresno, California	SGCC- 676	
PPG Industries, Inc.; Mt. Zion, Illinois	SGCC- 680	
Romsit; Medias, Romania	SGCC- 922	
Tempglass, Inc.; Perrysburg, Ohio	SGCC-1040	·
Tempglass Eastern, Inc.; Norcross, Georgia	SGCC- 980	Unlimited size

CEKIILIED LKADACIO RI LKADACI IILE

```
3/16 inch tempered transparent glass
AFG Industries, Inc.; Greenland, Tennessee
                                                                      SGCC- 220
                                                                                 Unlimited size
AFG Industries, Inc.; Kingsport, Tennessee
                                                                      SGCC- 28
                                                                                 Unlimited size
                                                                      SGCC- 999
Anglass Industries, Inc.; San Fernando, California
                                                                                 Unlimited size
Ardco, Inc.; Chicago, Illinois
                                                                      SGCC-1042
                                                                                 Unlimited size
Artistic Glass Products Company; Trumbauersville, Pennsylvania
                                                                      SGCC- 584
                                                                                 18"
                                                                                      bν
                                                                                            24"
Bennett's; Salt Lake City, Utah
                                                                      SGCC- 989
                                                                                 Unlimited size
C-E Glass; Carson, California
                                                                      SGCC- 410
                                                                                 Unlimited size
C-E Glass; Cinnaminson, New Jersey
                                                                      SGCC- 245
                                                                                 Unlimited size
C-E Glass; Lancaster, Ohio; Slocum Street
                                                                      SGCC- 330
                                                                                 30"
                                                                                      bу
C-E Glass; Miami, Florida
                                                                      SGCC- 76
                                                                                 Unlimited size
                                                                      SGCC- 385
C-E Glass; Tampa, Florida
                                                                                 Unlimited size
C-E Glass: Warrenton. Missouri
                                                                      SGCC- 336
                                                                                 Unlimited size
Cal-Temp; Santa Fe Springs, California
                                                                      SGCC-1012
                                                                                 Unlimited size
Canadian Pittsburgh Industries, Ltd.; Owen Sound, Ontario, Canada
                                                                      SGCC- 209
                                                                                 Unlimited size
Cascade Tempering, Inc.; Vancouver, Washington
                                                                      SGCC- 946 Unlimited size
Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania
                                                                      SGCC- 900
                                                                                 Unlimited size
Doulton Tempered Glass, Ltd.; Bradford, England
                                                                      SGCC- 700 Unlimited size
Downey Glass Company; Downey, California
                                                                      SGCC- 606
                                                                                Unlimited size
Downey Glass Company; Los Angeles, California
                                                                      SGCC- 630
                                                                                Unlimited size
Falconer Glass Industries, Inc.; Falconer, New York
                                                                      SGCC- 708
                                                                                Unlimited size
Feather-lite Manufacturing Company; Malvern, Arkansas
                                                                      SGCC- 610
                                                                                Unlimited size
Ford Motor Company; Dearborn, Michigan
                                                                      SGCC- 342 Unlimited size
General Glass Corporation; Denver, Colorado
                                                                      SGCC-1020
                                                                                Unlimited size
Guardian Industries Corporation; Carleton, Michigan
                                                                      SGCC- 631
                                                                                Unlimited size
Guardian Industries Corporation; Fort Lauderdale, Florida
                                                                      SGCC- 633
                                                                                Unlimited size
Guardian Industries Corporation; Kingsburg, California
                                                                     SGCC- 970
                                                                                Unlimited size
Guardian Industries Corporation; Torrance, California
                                                                      SGCC- 964
                                                                                Unlimited size
Guardian Industries Corporation; Webster, Massachusetts
                                                                     SGCC- 953
                                                                                Unlimited size
Hamilton Glass Products; Vincennes, Indiana
                                                                     SGCC- 56
                                                                                Unlimited size
LOF Glass, Inc.; Laurinburg, North Carolina
                                                                     SGCC- 351
                                                                                Unlimited size
Libbey-Owens-Ford Company; Rossford, Ohio
                                                                     SGCC- 386
                                                                                Unlimited size
Northwestern Industries, Inc.; Seattle, Washington
                                                                     SGCC- 703
                                                                                Unlimited size
Ohio Plate Glass Company; Lewisburg, Ohio
                                                                     SGCC- 185
                                                                                Unlimited size
PPG Industries, Inc.; Baltimore, Maryland
                                                                     SGCC- 454
                                                                                Unlimited size
PPG Industries, Inc.; Carlisle, Pennsylvania
                                                                     SGCC- 249
                                                                                Unlimited size
PPG Industries, Inc.; Chicago, Illinois
                                                                     SGCC- 266
                                                                                Unlimited size
PPG Industries, Inc.; Crestline, Ohio
                                                                     SGCC- 927
                                                                                Unlimited size
PPG Industries, Inc.; Dallas, Texas
                                                                     SGCC- 400
                                                                                Unlimited size
PPG Industries, Inc.; Ford City, Pennsylvania
                                                                     SGCC- 61
                                                                                Unlimited size
PPG Industries, Inc.; Fresno, California
                                                                     SGCC- 64
                                                                                Unlimited size
PPG Industries, Inc.; Miami, Florida
                                                                     SGCC- 195
                                                                                Unlimited size
PPG Industries, Inc.; Mt. Zion, Illinois
                                                                     SGCC- 63
                                                                                Unlimited size
Pacific Tempering Company, Inc.; Long Beach, California
                                                                     SGCC- 972
                                                                                Unlimited size
Romsit; Medias, Romania
                                                                     SGCC- 997
                                                                                Unlimited size
San Diego Tempering, Inc.; San Diego, California
                                                                     SGCC-1013
                                                                                Unlimited size
Shaw Glass Company, Inc.; Stoughton, Massachusetts
                                                                     SGCC-1034
                                                                                Unlimited size
Temp-Safe, Inc.; Edmond, Oklahoma
                                                                     SGCC-1056
                                                                                Unlimited size
Temp-Tech Industries, Inc.; Chicago, Illinois
                                                                     SGCC- 985
                                                                                Unlimited size
Tempered Glass Corporation; Tampa, Florida
                                                                     SGCC-1057
                                                                               Unlimited size
```

3/16 inch tempered transparent glass - continued Tempglass, Inc.; Perrysburg, Ohio Tempglass Eastern, Inc.; Norcross, Georgia Tempglass Southern, Inc.; Grand Prairie, Texas Tempglass Western, Inc.; Fremont, California Texas Tempered Glass Company; Houston, Texas Tuf-flex Glass, Inc.; Atlanta, Georgia Tuf-flex Glass, Inc.; Elmhurst, Illinois Tuf-flex Glass, Inc.; Irving, Texas Tuf-flex Glass, Inc.; Saddle Brook, New Jersey Tuf-flex Glass, Inc.; Union City, California Tyre Brothers Glass Company; Los Angeles, California Virginia Glass Products Corporation; Martinsville, Virginia	SGCC- 592 SGCC- 981 SGCC-1043 SGCC- 723 SGCC- 110 SGCC- 320 SGCC- 257 SGCC- 921 SGCC- 525 SGCC- 490 SGCC- 252 SGCC- 12	Unlimited size
7/32 inch tempered transparent glass C-E Glass; Lancaster, Ohio; Slocum Street Ohio Plate Glass Company; Lewisburg, Ohio	SGCC- 331 SGCC- 279	30" by 39" Unlimited size
AFG Industries, Inc.; Clarksburg, West Virginia AFG Industries, Inc.; Greenland, Tennessee AFG Industries, Inc.; Kingsport, Tennessee AFG Industries, Inc.; Kingsport, Tennessee Anglass Industries, Inc.; San Fernando, California Ardco, Inc.; Chicago, Illinois Artistic Glass Products Company; Trumbauersville, Pennsylvania Bennett's; Salt Lake City, Utah C-E Glass; Atlanta, Georgia C-E Glass; Carson, California C-E Glass; Cinnaminson, New Jersey C-E Glass; Lancaster, Ohio; Slocum Street C-E Glass; Miami, Florida C-E Glass; Miami, Florida C-E Glass; Warrenton, Missouri Cal-Temp; Santa Fe Springs, California Cascade Tempering, Inc.; Vancouver, Washington Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania Doulton Tempered Glass, Ltd.; Bradford, England Downey Glass Company; Downey, California Downey Glass Company; Los Angeles, California Falconer Glass Industries, Inc.; Falconer, New York Ford Motor Company; Dearborn, Michigan General Glass Corporation; Denver, Colorado Guardian Industries Corporation; Carleton, Michigan Guardian Industries Corporation; Fort Lauderdale, Florida Guardian Industries Corporation; Torrance, California Guardian Industries Corporation; Webster, Massachusetts Hamilton Glass Products; Vincennes, Indiana LOF Glass, Inc.; Laurinburg, North Carolina Libbey-Owens-Ford Company; Rossford, Ohio Northwestern Industries, Inc.; Seattle, Washington	SGCC- 24 SGCC-1000 SGCC-1049 SGCC- 585 SGCC- 990 SGCC- 108 SGCC- 1051 SGCC- 246 SGCC-1051 SGCC- 49 SGCC- 361 SGCC- 638 SGCC- 947 SGCC- 638 SGCC- 947 SGCC- 157 SGCC- 601 SGCC- 609 SGCC- 514 SGCC- 397 SGCC- 1021 SGCC- 131 SGCC- 131 SGCC- 40 SGCC- 971 SGCC- 43 SGCC- 57 SGCC- 57 SGCC- 352 SGCC- 19	Unlimited size

```
1/4 inch tempered transparent glass - continued
                                                                      SGCC- 186 Unlimited size
Ohio Plate Glass Company; Lewisburg, Ohio
                                                                      SGCC- 455 Unlimited size
PPG Industries, Inc.; Baltimore, Maryland
                                                                      SGCC- 382 Unlimited size
PPG Industries, Inc.; Carlisle, Pennsylvania
PPG Industries, Inc.; Chicago, Illinois
                                                                      SGCC- 267 Unlimited size
                                                                      SGCC- 102 Unlimited size
PPG Industries, Inc.; Crestline, Ohio
                                                                      SGCC- 402 Unlimited size
PPG Industries, Inc.; Dallas, Texas
                                                                      SGCC- 70 Unlimited size
PPG Industries, Inc.; Ford City, Pennsylvania
                                                                      SGCC- 73
                                                                                Unlimited size
PPG Industries, Inc.; Fresno, California
                                                                      SGCC- 194
PPG Industries, Inc.; Miami, Florida
                                                                                Unlimited size
Pacific Tempering Company, Inc.; Long Beach, California
                                                                      SGCC- 974
                                                                                Unlimited size
San Diego Tempering, Inc.; San Diego, California
                                                                     SGCC-1014 Unlimited size
Shaw Glass Company, Inc.; Stoughton, Massachusetts
                                                                     SGCC-1035 Unlimited size
                                                                     SGCC- 441 Unlimited size
Temp-Safe, Inc.; Edmond, Oklahoma
                                                                     SGCC- 986
                                                                                Unlimited size
Temp-Tech Industries, Inc.; Chicago, Illinois
                                                                     SGCC- 337
                                                                                Unlimited size
Tempered Glass Corporation; Tampa, Florida
                                                                     SGCC- 593 Unlimited size
Tempglass, Inc.; Perrysburg, Ohio
                                                                     SGCC- 982 Unlimited size
Tempglass Eastern, Inc.; Norcross, Georgia
                                                                     SGCC-1044
                                                                                Unlimited size
Tempglass Southern, Inc.; Grand Prairie, Texas
                                                                     SGCC- 724 Unlimited size
Tempglass Western, Inc.; Fremont, California
                                                                     SGCC- 137 Unlimited size
Texas Tempered Glass Company; Houston, Texas
                                                                     SGCC- 321 Unlimited size
Tuf-flex Glass, Inc.; Atlanta, Georgia
Tuf-flex Glass, Inc.; Elmhurst, Illinois
                                                                     SGCC- 229
                                                                                Unlimited size
                                                                     SGCC- 390 Unlimited size
Tuf-flex Glass, Inc.; Irving, Texas
Tuf-flex Glass, Inc.; Saddle Brook, New Jersey
                                                                     SGCC- 298 Unlimited size
                                                                     SGCC- 491
                                                                                Unlimited size
Tuf-flex Glass, Inc.; Union City, California
                                                                     SGCC- 253
                                                                               Unlimited size
Tyre Brothers Glass Company; Los Angeles, California
                                                                     SGCC- 14
                                                                               Unlimited size
Virginia Glass Products Corporation; Martinsville, Virginia
5/16 inch tempered transparent glass
                                                                     SGCC- 373 Unlimited size
LOF Glass, Inc.; Laurinburg, North Carolina
                                                                     SGCC- 464 Unlimited size
Libbey-Owens-Ford Company; Rossford, Ohio
                                                                     SGCC- 692 Unlimited size
Tuf-flex Glass, Inc.; Atlanta, Georgia
Tuf-flex Glass, Inc.; Elmhurst, Illinois
                                                                     SGCC- 693 Unlimited size
Tuf-flex Glass, Inc.; Saddle Brook, New Jersey
                                                                     SGCC- 695 Unlimited size
3/8 inch tempered transparent glass
                                                                     SGCC- 90 Unlimited size
AFG Industries, Inc.; Greenland, Tennessee
Bennett's; Salt Lake City, Utah
                                                                     SGCC- 991
                                                                                Unlimited size
                                                                     SGCC- 371
                                                                                Unlimited size
C-E Glass; Atlanta, Georgia
                                                                     SGCC- 412
                                                                                Unlimited size
C-E Glass; Carson, California
                                                                     SGCC- 345
C-E Glass; Cinnaminson, New Jersey
                                                                                Unlimited size
                                                                     SGCC- 889
C-E Glass; Tampa, Florida
                                                                                Unlimited size
                                                                     SGCC- 639
Cal-Temp; Santa Fe Springs, California
                                                                                Unlimited size
Carolina Processed Glass, Inc.; Rock Hill, South Carolina
                                                                     SGCC- 674
                                                                                Unlimited size
                                                                     SGCC- 956
                                                                                Unlimited size
Cascade Tempering, Inc.; Vancouver, Washington
Chromalloy-Safetee Glass Division: King of Prussia, Pennsylvania
                                                                     SGCC- 181
                                                                                Unlimited size
                                                                     SGCC- 515
                                                                                Unlimited size
Downey Glass Company; Los Angeles, California
                                                                     SGCC- 710
Falconer Glass Industries, Inc.; Falconer, New York
                                                                                Unlimited size
                                                                     SGCC- 160
                                                                                Unlimited size
Guardian Industries Corporation; Carleton, Michigan
Guardian Industries Corporation; Fort Lauderdale, Florida
                                                                     SGCC- 41
                                                                                Unlimited size
```

```
3/8 inch tempered transparent glass - continued
Guardian Industries Corporation; Torrance, California
                                                                      SGCC- 97
                                                                                 Unlimited size
                                                                      SGCC- 471
Guardian Industries Corporation; Webster, Massachusetts
                                                                                 Unlimited size
LOF Glass, Inc.; Laurinburg, North Carolina
                                                                      SGCC- 374
                                                                                 Unlimited size
                                                                      SGCC- 449
                                                                                 Unlimited size
Libbey-Owens-Ford Company; Rossford, Ohio
PPG Industries, Inc.; Baltimore, Maryland
                                                                      SGCC- 474
                                                                                 Unlimited size
PPG Industries, Inc.; Chicago, Illinois
                                                                      SGCC- 647
                                                                                 Unlimited size
                                                                      SGCC- 975
                                                                                 Unlimited size
Pacific Tempering Company, Inc.; Long Beach, California
San Diego Tempering, Inc.; San Diego, California
                                                                      SGCC-1015
                                                                                 Unlimited size
Temp-Safe, Inc.; Edmond, Oklahoma
                                                                      SGCC- 532
                                                                                 Unlimited size
                                                                      SGCC- 348
Tempered Glass Corporation; Tampa, Florida
                                                                                 Unlimited size
Tempglass, Inc.; Perrysburg, Ohio
                                                                      SGCC- 594
                                                                                 Unlimited size
                                                                                 Unlimited size
Tempglass Southern, Inc.; Grand Prairie, Texas
                                                                      SGCC-1045
Tempglass Western, Inc.; Fremont, California
                                                                      SGCC- 725
                                                                                 Unlimited size
Texas Tempered Glass Company; Houston, Texas
                                                                      SGCC- 668
                                                                                 Unlimited size
                                                                      SGCC- 322
                                                                                 Unlimited size
Tuf-flex Glass, Inc.; Atlanta, Georgia
Tuf-flex Glass, Inc.; Elmhurst, Illinois
                                                                      SGCC- 258
                                                                                 Unlimited size
                                                                      SGCC- 391
                                                                                 Unlimited size
Tuf-flex Glass, Inc.; Irving, Texas
Tuf-flex Glass, Inc.; Saddle Brook, New Jersey
                                                                      SGCC- 314
                                                                                 Unlimited size
Tuf-flex Glass, Inc.; Union City, California
                                                                      SGCC- 482
                                                                                 Unlimited size
Tyre Brothers Glass Company; Los Angeles, California
                                                                      SGCC- 254
                                                                                 Unlimited size
Virginia Glass Products Corporation; Martinsville, Virginia
                                                                      SGCC- 93
                                                                                 Unlimited size
1/2 inch tempered transparent glass
Bennett's; Salt Lake City, Utah
                                                                      SGCC- 992
                                                                                 Unlimited size
                                                                                 Unlimited size
C-E Glass; Carson, California
                                                                      SGCC- 413
C-E Glass; Cinnaminson, New Jersey
                                                                      SGCC- 346
                                                                                 Unlimited size
                                                                      SGCC- 896
                                                                                 Unlimited size
C-E Glass; Tampa, Florida
                                                                      SGCC- 640
                                                                                 Unlimited size
Cal-Temp; Santa Fe Springs, California
                                                                      SGCC- 957
                                                                                 Unlimited size
Cascade Tempering, Inc.; Vancouver, Washington
                                                                      SGCC- 182
Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania
                                                                                 Unlimited size
Downey Glass Company; Los Angeles, California
                                                                      SGCC- 516
                                                                                 Unlimited size
                                                                      SGCC- 711
                                                                                 Unlimited size
Falconer Glass Industries, Inc.; Falconer, New York
                                                                      SGCC- 263
                                                                                 Unlimited size
Guardian Industries Corporation; Carleton, Michigan
Guardian Industries Corporation; Fort Lauderdale, Florida
                                                                      SGCC-1004
                                                                                 Unlimited size
Guardian Industries Corporation; Torrance, California
                                                                                 Unlimited size
                                                                      SGCC- 98
                                                                      SGCC- 375
LOF Glass, Inc.; Laurinburg, North Carolina
                                                                                 Unlimited size
                                                                      SGCC- 150
                                                                                 Unlimited size
Libbey-Owens-Ford Company; Rossford, Ohio
                                                                      SGCC- 475
                                                                                 Unlimited size
PPG Industries, Inc.; Baltimore, Maryland
PPG Industries, Inc.; Chicago, Illinois
                                                                      SGCC- 648
                                                                                 Unlimited size
Pacific Tempering Company, Inc.; Long Beach, California
                                                                      SGCC-1055
                                                                                 Unlimited size
San Diego Tempering, Inc.; San Diego, California
                                                                      SGCC-1016
                                                                                 Unlimited size
                                                                      SGCC- 488
                                                                                 Unlimited size
Temp-Safe, Inc.; Edmond, Oklahoma
                                                                      SGCC- 338
Tempered Glass Corporation; Tampa, Florida
                                                                                 Unlimited size
                                                                      SGCC- 595
                                                                                 Unlimited size
Tempglass, Inc.; Perrysburg, Ohio
Tempglass Southern, Inc.; Grand Prairie, Texas
                                                                      SGCC-1046
                                                                                 Unlimited size
Tempglass Western, Inc.; Fremont, California
                                                                      SGCC- 726
                                                                                 Unlimited size
Texas Tempered Glass Company; Houston, Texas
                                                                      SGCC- 669
                                                                                 Unlimited size
                                                                      SGCC- 323
                                                                                 Unlimited size
Tuf-flex Glass, Inc.; Atlanta, Georgia
Tuf-flex Glass, Inc.; Elmhurst, Illinois
                                                                      SGCC- 270
                                                                                 Unlimited size
Tuf-flex Glass, Inc.; Irving, Texas
                                                                      SGCC- 392
                                                                                 Unlimited size
```

LENIITIED INVUVIJ DI INVUVI IIIE

1/2 inch tempered transparent glass - continued Tuf-flex Glass, Inc.; Saddle Brook, New Jersey Tuf-flex Glass, Inc.; Union City, California Tyre Brothers Glass Company; Los Angeles, California Virginia Glass Products Corporation; Martinsville, Virginia	SGCC- 315 Unlimited size SGCC- 483 Unlimited size SGCC- 255 Unlimited size SGCC- 94 Unlimited size
5/8 inch tempered transparent glass Libbey-Owens-Ford Company; Rossford, Ohio	SGCC- 544 Unlimited size
3/4 inch tempered transparent glass Falconer Glass Industries, Inc.; Falconer, New York Libbey-Owens-Ford Company; Rossford, Ohio PPG Industries, Inc.; Baltimore, Maryland Tempglass Western, Inc.; Fremont, California Virginia Glass Products Corporation; Martinsville, Virginia	SGCC- 712 Unlimited size SGCC- 151 Unlimited size SGCC- 952 Unlimited size SGCC- 948 Unlimited size SGCC- 95 Unlimited size
7/8 inch tempered transparent glass Libbey-Owens-Ford Company; Rossford, Ohio	SGCC- 444 Unlimited size
TEMPERED PATTERN GLASS 1/8 inch tempered pattern glass (shallow patterns) AFG Industries, Inc.; Clarksburg, West Virginia AFG Industries, Inc.; Greenland, Tennessee AFG Industries, Inc.; Kingsport, Tennessee C-E Glass; Carson, California C-E Glass; Warrenton, Missouri Downey Glass Company; Downey, California Hamilton Glass Products; Vincennes, Indiana Tempglass Eastern, Inc.; Norcross, Georgia	SGCC-1038 Unlimited size SGCC- 587 Unlimited size SGCC- 141 Unlimited size SGCC- 452 Unlimited size SGCC- 904 Unlimited size SGCC- 604 Unlimited size SGCC- 621 Unlimited size SGCC- 987 Unlimited size
1/8 inch tempered pattern glass (medium patterns) Downey Glass Company; Downey, California Ohio Plate Glass Company; Lewisburg, Ohio	SGCC- 605 Unlimited size SGCC- 654 Unlimited size
5/32 inch tempered pattern glass (shallow patterns) C-E Glass; Fullerton, California	SGCC-1052 Unlimited size
5/32 inch tempered pattern glass (medium patterns) C-E Glass; Carson, California Northwestern Industries, Inc.; Seattle, Washington	SGCC- 941 Unlimited size SGCC- 920 Unlimited size
3/16 inch tempered pattern glass (shallow patterns) C-E Glass; Carson, California C-E Glass; Fullerton, California C-E Glass; Warrenton, Missouri Downey Glass Company; Downey, California Downey Glass Company; Los Angeles, California Ohio Plate Glass Company; Lewisburg, Ohio 3/16 inch tempered pattern glass (deep patterns) Ohio Plate Glass Company; Lewisburg, Ohio PPG Industries, Inc.; Crestline, Ohio	SGCC- 414 Unlimited size SGCC- 914 Unlimited size SGCC-1009 Unlimited size SGCC- 607 Unlimited size SGCC- 935 Unlimited size SGCC- 188 Unlimited size SGCC- 328 Unlimited size SGCC- 446 Unlimited size

ANSI Z97.1-1975 January 1, 1980; SGCC 25

CEKLIHIFD LKODOCI2 RI LKODOCI IILE

210 inch tempered pattern glass (shallow patterns) C-E Glass; Atlanta, Georgia C-E Glass; Miami, Florida		Unlimited size Unlimited size
210 inch tempered pattern glass (medium patterns) Bennett's; Salt Lake City, Utah	SGCC- 994	Unlimited size
AFG Industries, Inc.; Greenland, Tennessee AFG Industries, Inc.; Kingsport, Tennessee Bennett's; Salt Lake City, Utah C-E Glass; Atlanta, Georgia C-E Glass; Carson, California C-E Glass; Cinnaminson, New Jersey C-E Glass; Warrenton, Missouri Cal-Temp; Santa Fe Springs, California Downey Glass Company; Downey, California Guardian Industries Corporation; Fort Lauderdale, Florida Guardian Industries Corporation; Fort Lauderdale, Florida Guardian Industries Corporation; Torrance, California Hamilton Glass Products; Vincennes, Indiana Northwestern Industries, Inc.; Seattle, Washington Ohio Plate Glass Company; Lewisburg, Ohio PPG Industries, Inc.; Baltimore, Maryland PPG Industries, Inc.; Chicago, Illinois PPG Industries, Inc.; Chicago, Illinois PPG Industries, Inc.; Miami, Florida Pacific Tempering Company, Inc.; Long Beach, California Tempered Glass Corporation; Tampa, Florida Tempglass, Inc.; Perrysburg, Ohio Tempglass Eastern, Inc.; Norcross, Georgia Tempglass Western, Inc.; Fremont, California Tuf-flex Glass, Inc.; Union City, California Tyre Brothers Glass Company; Los Angeles, California Virginia Glass Products Corporation; Martinsville, Virginia	SGCC- 588 SGCC- 31 SGCC- 993 SGCC-1054 SGCC- 619 SGCC- 265 SGCC- 344 SGCC- 608 SGCC- 678 SGCC- 678 SGCC- 264 SGCC- 707 SGCC- 264 SGCC- 707 SGCC- 562 SGCC- 456 SGCC- 456 SGCC- 456 SGCC- 456 SGCC- 456 SGCC- 498 SGCC- 421 SGCC- 597 SGCC- 988 SGCC- 891 SGCC- 818 SGCC- 966 SGCC- 92	Unlimited size
7/32 inch tempered pattern glass (medium patterns) C-E Glass; Carson, California C-E Glass; Miami, Florida		Unlimited size Unlimited size
7/32 inch tempered pattern glass (deep patterns) C-E Glass; Tampa, Florida	SGCC-1005	Unlimited size
LAMINATED GLASS 7/32 inch laminated transparent glass AFG Industries, Inc.; Kingsport, Tennessee Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania Guardian Industries Corporation; Upper Sandusky, Ohio Texas Tempered Glass Company; Houston, Texas	SGCC- 378 SGCC- 458	Unlimited size Unlimited size Unlimited size Unlimited size

7/32 inch laminated pattern glass (s) AFG Industries, Inc.; Kingsport, Tennessee	SGCC-1011	Unlimited size	ACCUPATION OF STREET STREET, S
1/4 inch laminated transparent glass AFG Industries, Inc.; Kingsport, Tennessee Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania Guardian Industries Corporation; Upper Sandusky, Ohio	SGCC- 379	Unlimited size Unlimited size Unlimited size	asi cera i mata imdirespolaribativi tricatifetti sidoti irretali
3/8 inch laminated transparent glass Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania	SGCC- 380	Unlimited size	54946ForDeterroritistry/cd/884wike
1/8:1/4 inch laminated transparent glass AFG Industries, Inc.; Kingsport, Tennessee	SGCC- 499	Unlimited size	keessakakakakakakaessakakaa
1/2 inch laminated transparent glass Chromalloy-Safetee Glass Division; King of Prussia, Pennsylvania	SGCC- 381	Unlimited size	China especial contraction of the contraction of th
TRANSPARENT WIRED GLASS 1/4 inch polished wired glass Central Glass Company, Ltd.; Tokyo, Japan Central Glass Company, Ltd.; Tokyo, Japan		Unlimited size Unlimited size	dilinoonidalmonnis patri sernituupelidejiblioogi aja jiropatpion
SAFETY PLASTIC SHEET 0.080 inch and greater thicknesses acrylic Plaskolite, Inc.; Columbus, Ohio Rotuba Extruders, Inc.; Linden, New Jersey		Unlimited size Unlimited size	
0.080 through 0.125 inch acrylic Flex-O-Glass, Inc.; Dixon, Illinois Sheffield Plastics, Inc.; Sheffield, Massachusetts		Unlimited size Unlimited size	vézeniatorsándóttervásolódicióoxivásolólást.
0.100 inch acrylic Manchester Products Company: Chatsworth, California	SGCC- 567	Unlimited size	(Salucture) (Calability) (Albinos) (Salucture)

* * * * * * * * * * * * * * * * *

SGCC LABEL REQUIREMENTS

The SGCC certification label must be permanently marked on each piece of safety glazing material or else it is not covered by the SGCC certification program. The typical labels reproduced in this certified products directory are the same size that you will find on each piece of safety glazing material.

The permanent label must contain the SGCC number, ANSI Z97.1-1975, the nominal thickness, and the letter U or L indicating certified size.

For labeling purposes, a line of demarcation shall separate those standards covered by the SGCC number from any other standards the licensee wishes to reference.

For purposes of Guideline G.6 "SGCC-xxx/yyy" shall be the only correct designation other than "SGCC-xxx and SGCC-yyy" when an identical item is in both the ANSI and CPSC programs. This is effective for the L79 sampling. (See examples below.)

"After having successfully passed the appropriate tests, like products and materials produced in the same manner as samples submitted per test shall be legibly and permanently marked in one corner with ... the characters "ANSI Z97.1-1975 - "INDOOR USE ONLY" and shall be marked also with the manufacturer's distinctive mark or designation." Quoted from ANSI Z97.1-1975.

"Organic-coated glass materials shall be permanently marked on the organic coating with a label, including the phrase, "GLAZE THIS SIDE IN" to indicate to the installer, inspector, or user which side of the organic-coated glass should be exposed to the elements if there is a specific side that should be exposed." Quoted from ANSI Z97.1-1975.

The permanent label must contain identification of the plant in which the product was made and the name or trade mark of the licensee. (The SGCC number does this by reference to this certified products directory.)

The permanent label must be affixed to certified products only at the time and place of manufacture.

The permanent label must be affixed only to safety glazing materials of the licensee's own manufacture, which are certified in the SGCC program.

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.

EXAMPLES:

ANSI Z97.1-1975 16 CFR 1201 II SGCC-123/691 1/4

ANSI Z97.1-1975 SGCC-123 1/4 U 16 CFR 1201 II SGCC-691

AFG INDUSTRIES, INC. P.O. Box 929 Kingsport, Tennessee 37662

TEMPERED
16 CFR 1201.CII
ANSI Z97.I 1975
I/4U SGCC-24
AFG OOI

ANGLASS INDUSTRIES, INC. 12364 Gladstone Avenue San Fernando, California 91342



ARDCO, INC. 12400 South Laramine Avenue Chicago, Illinois 60658

> OF CO TEMPER - GARD ANSI 297.1-1975 SGCC- 1041 1/8U

ARTISTIC GLASS PRODUCTS COMPANY P.O. Box 785 Quakertown, Pennsylvania 18951

> ANSI-Z97.I-1975 16 CFR 1201 I & II SGCC 583 A19 178

BENNETT'S 2132 South 300 West Salt Lake City, Utah 84115

BERNETS

ANSI 297.I-1975
16 CFR 1201-I, II
\$600-990 1/4 U

C-E GLASS

700 Union Landing and River Roads Cinnaminson, New Jersey 08077

GLASS
ARM-R-CLAD®
SAFETY TEMPERED
ANSI Z97.1-1978
SGCC 489 1/8 U
16 CFR 1201-I,II

CAL-TEMP; CALIFORNIA GLASS DISTRIBUTORS

9010 South Norwalk Boulevard Santa Fe Springs, California 90670

CAL TEMP

1/4U.—SGCC-638 ANSI-Z97.1 1975 16 CFR 1201-II SFS-I

CANADIAN PITTSBURGH INDUSTRIES, LTD.

1299 20th Street, East Owen Sound, Ontario, Canada

CPI HERCULITE®K

CAN2-12.1

TREMP'E DOT 165

ANSI Z 97.1-1975 SGCC-209 3/16"U

CAROLINA PROCESSED GLASS, INC.

1900 Midland Street Rock Hill, South Carolina 29730

Tentative Label

ANSI Z97.1-1975 SGCC-674 3/8U CASCADE TEMPERING, INC.

2000 East Columbia Way; Building 5 Vancouver, Washington 98611

CASCADE TEMPERING ANSI Z97.1-1975 16 CFR 1201 CII SGCC 956 3/8U 02/79

ANSI Z97.1-1975 30 SGCC; January 1, 1980

CENTRAL GLASS COMPANY, LTD. c/o Mitsui and Company, (U.S.A.), Inc. 200 Park Avenue New York, New York 10017

POLISHED WIRED GLASS



CENTRAL GLASS CO., LTD. Wired Safety Glass ANSI 297.1-1975-1/4U SGCC-508 **CHROMALLOY-SAFETEE GLASS DIVISION**

250 King Manor Drive King of Prussia, Pennsylvania 19406

Tentative Label

ANSI Z97.1-1975 SGCC-379 1/4U

DOULTON TEMPERED GLASS, LTD.

Ripley Road Bradford, West Yorkshire BD47TP England

TEMPERED SAFETY GLASS

ANSI 297-1- 1975 DTG SGCC-601 ¼ U

DOWNEY GLASS COMPANY 5631 Ferguson Drive Los Angeles, California 90022



FALCONER GLASS INDUSTRIES, INC. 500 South Work Street Falconer, New York 14733

FALCONER GLASS IND., INC.
DURASAFE 3/4" U
TEMPERED SAFETY GLASS
ANSI Z97.1-1975
16CFR 1201 II SGCC-712

FEATHER-LITE MANUFACTURING COMPANY

1210 East Maple Road Troy, Michigan 48084

SAFETY PANE

TEMPERED SAFETY GLASS ANSI 297.1-1975 SGCC-586 I/8U FLEX-O-GLASS, INC. 1100 North Cicero Avenue Chicago, Illinois 60651

FLEX - O - GLAZE TMACRYLIC SAFETY GLAZING 16 CFR 1201 CII .100 U

ANSI Z97.1-75 SGCC-118

FORD MOTOR COMPANY GLASS DIVISION

300 Renaissance Center; P.O. Box 43343 Detroit, Michigan 48243

> FORD TEMPERED SAFETY GLASS ANSI 297.1-1975 SGCC-342/729 IGGER 1201,II 86 3/16 U

GENERAL GLASS CORPORATION

P.O. Box 38711 Denver, Colorado 80238

GENERAL GLASS CORP.

HLATTEMPTM

DENVER 3/16"U 9

ANSI Z97.I-1975 SGCC-1020
16 CFRIZ0I-LII SGCC-1025

GUARDIAN INDUSTRIES CORPORATION 43043 West Nine Mile Road

Northville, Michigan 48167

GUARDIAN
CARLETON, MICH.
ANSI Z97.I-1975
SAFETY TEMPERED
SGCC 160 3/8 U
16 CFR 1201 II
CGSB 12-GP-1

HAMILTON GLASS PRODUCTS

2000 Chestnut Street Vincennes, Indiana 47591

TEMPER-TUF
HAMILTON GLASS PRODUCTS
VINCENNES, INDIANA
ANSI Z97.1-1975
3/16U SGCC-56
TEMPERED SAFETY GLASS
16CFR 1201 CPSC II
579001

LOF GLASS, INC. P.O. Box 830 Laurinburg, North Carolina 28352



LIBBEY-OWENS-FORD COMPANY

1701 East Broadway Toledo, Ohio 43605



MANCHESTER PRODUCTS COMPANY 8966 Mason Avenue

Chatsworth, California 91311

MANCHESTER PRODUCTS CO. ANSI-Z97.1 1975 100U SGCC 567 NORTHWESTERN INDUSTRIES, INC. 2501 West Commodore Way

2501 West Commodore Way Seattle, Washington 98199

TEMPERED SAFETY GLASS

[ואל]

SGCC- 701 1/8 -U ANSIZ97.1-1975 IGCFRIZ0ICII CGSB-12-GP-1

OHIO PLATE GLASS COMPANY

P.O. Box 671 Lewisburg, Ohio 45338

> TEMPERED SGCC 1050/714 OHTO PLATE I/8"-U 16CFRI201-II ANSI Z97.I-1975

PPG INDUSTRIES, INC. 1000 RIDC Plaza P.O. Box 2811 Pittsburgh, Pennsylvania 15230

> PPG HERCULITE K TEMPERED SAFETY GLASS 16CFRI201 CII ANSI Z-97.1-1975 1/8"U SGCC-295 15GH 3678

PACIFIC TEMPERING COMPANY, INC. 2845 East Broadway Long Beach, California 90803

LB TEMP ANSI Z97.1 1975 16 CFR 1201.CII 7/32U SGCC-973

PLASKOLITE, INC. 1770 Joyce Avenue Columbus, Ohio 43219

> plaskolite SAFETY GLAZING SGCC-152 ANSI Z97.1-1975 16CFR-1201 C11 PE-18-77-8-.100U

ROMSIT c/o Vitco, Inc. 31 Warren Place Mount Vernon, New York 10550

> TEMPERED SAFETY GLASS ROMSIT - MEDIAS 16 CFR 1201 11 ANSI Z97.1-1975 SGCC - 922 - 5/32 U

ROTUBA EXTRUDERS, INC. 1401 Park Avenue South Linden, New Jersey 07036

ROTUBAGLAZ® 16 CFR 1201, I/II ACRYLIC SAFETY GLAZING ANSI Z97.1-1975 SGCC-316 .080U **SAN DIEGO TEMPERING, INC.** 8221 Arjons Drive San Diego, California 92126

Tentative Label

ANSI Z97.1-1975 SGCC-1013 3/16U

SHAW GLASS COMPANY, INC. 213 Turnpike Street Stoughton, Massachusetts 02072

SOLAR TEMP. 16 CFR 1201 II

ANSI Z 97.1 1975 1/4 U SGCC 1035

SHEFFIELD PLASTICS, INC. Salisbury Road Sheffield, Massachusetts 01257

> ACRY-PANE ANSI Z97.1-1975 I6 CFR I201 II SGCC I73 K2497 .095U

TEMP-SAFE, INC. 3000 South Kelly Edmond, Oklahoma 73034

TEMP-SAFE TEMPERED SAFETY GLASS ANSI Z97.I-1975 SGCC-488-I/2 0

TEMP-TECH INDUSTRIES, INC. 6166 South Sayre Chicago, Illinois 60638

TEMPERUD GLASS E E 16 CFR 1201 C II M C ANSI 297,1-1975 H SGCC 986-124"H

TEMPERED GLASS CORPORATION

6900 Adamo Drive Tampa, Florida 33619

> TEMCO SGCC-338 .500U SGCC-834 16 CFR 120I-II ANSI Z97.1 1975

TEMPGLASS, INC.Willis Day Industrial Park 291 "M" Street
Perrysburg, Ohio 43551

TEMPGLASS, INC. 16 CFR 1201 CII ANSI Z97.1-1975 SGCC 594 3/8"-U (1)

TEMPGLASS EASTERN, INC.Blueridge Industrial Park
P.O. Box 928
Norcross, Georgia 30071

TEMPGLASS EASTERN ANSI 2974-1975 16 CFR 1201-11 SGCC-979 1/8" U 07 79 **TEMPGLASS SOUTHERN, INC.** 1101 Fountain Parkway Grand Prairie, Texas 75051

TEMPGLASS SOUTHERN ANS1 297.1 - 1975 SGCC 1046 1/2" U 16 CFR 1201 II

TEMPGLASS WESTERN, INC. 48999 Kato Road Fremont, California 94538

TEMPGLASS WESTERN ANSI Z97.1 - 1975 SGCC 948 3/4" - U 16 CFR 1201 - 11 SGCC 948

TEXAS TEMPERED GLASS COMPANY 1331 West Belt Drive Houston, Texas 77043

> TTG ANSI Z97.1-1975 .375U SGCC 668 16 CFR 1201-2 TEXAS TEMPERED GLASS CO. HOUSTON, TEXAS

TUF-FLEX GLASS, INC. 811 Madison Avenue Toledo, Ohio 43695

- Tuf-flex Glass Inc. 5/16*-U C TEMPERED SAFETY GLASS ANSI 297.1-1975 16 CFR 1201-1&11
- SGCC-692

TYRE BROTHERS GLASS COMPANY

3008 South San Pedro Street Los Angeles, California 90051

Tentative Label

ANSI Z97.1-1975 SGCC-252 3/16U **VIRGINIA GLASS PRODUCTS CORPORATION** P.O. Box 5431

Martinsville, Virginia 24112



SGCC PARTICIPANTS WITHOUT A CERTIFIED PRODUCT

Mr. Henry S. Byrne Mobay Chemical Company Penn Lincoln Parkway West Pittsburgh, Pennsylvania 15205

Mr. Roger S. Green Madico 64 Industrial Parkway Woburn, Massachusetts 01801

Mr. Norman Nitschke Glasstech, Inc. Willis Day Industrial Park 995 Fourth Street Perrysburg, Ohio 43551 Mr. Thomas R. Roberts Ferro Corporation 60 Greenway Drive Pittsburgh, Pennsylvania 15204

Mr. Barry Skolnick Saxon Industries Cranbury, New Jersey 08512

Mr. Caryl E. Twitchell 3M Company 3M Center Building 230-BC8 St. Paul, Minnesota 55101

Dr. George L. Graf, Jr.
Plastic Safety Glazing Committee
c/o E.I. Dupont de Nemours and Company
Plastics Products and Resins Department
Chestnut Run
Wilmington, Delaware 19898

PROCEDURAL GUIDE

SAFETY GLAZING CERTIFICATION COUNCIL CERTIFICATION PROGRAM FOR SAFETY GLAZING MATERIALS USED IN BUILDINGS

FOREWORD

Acceptance of a certified product containing safety glazing materials comes with the conviction that such certification assures a high level of safety and quality and that the integrity of the identifying mark or certification label is being reliably maintained by a competent certifying agency.

The provisions of American National Standard Z97.1 provide a sound technical basis for the required high level of safety. With the addition of independent administration plus periodic routine sampling and product evaluation, a program of product certification is developed in accordance with the accepted American National Standards as contained in American National Standard Z34.1. The Certification Program described here is predicated upon the concept of independent and impartial administration of the certification procedures which are incorporated in the SGCC 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 SGCC 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 procedure and routine operation of the Certification Program.

GENERAL INFORMATION

The Certification Concept

The SGCC Certification Program is based on the conviction that no standard of safety or quality is good without the *continuous adherence of the licensees* to that standard.

To buyers, specifiers, code officials and users, the SGCC certification label offers the manufacturer's assurance that his safety glazing material has been produced in conformance to American National Standard Z97.1 covering safety glazing materials used in buildings.

Many state laws, municipal ordinances and building codes require that all glazing installed in certain pre-defined *hazardous* locations comply with the ANSI standard. This standard, promulgated by the American National Standards Institute, *requires* certification in accordance with ANSI Z34.1 prior to labeling safety glazing materials as conforming to ANSI Z97.1.

Who Can Participate?

Every manufacturer of safety glazing materials is eligible, on a voluntary basis, to participate.

Who Conducts the Program?

The Safety Glazing Certification Council, a non-profit corporation, is the sponsor of this certification program. SGCC supervises the certification program under which the Administrator periodically checks and reports compliance of the manufacturers of products having the SGCC certification label with the requirements of ANSI Z97.1.

Administration

Certification Services Corporation (CSC), is the independent *Administrator* of the Certification Program. CSC maintains the SGCC Office of Certification and handles the routine day to day business. All transactions are done in the name of SGCC.

How Can You Become a Licensee?

The following must be accomplished before SGCC can certify an item of safety glazing material:

- a) The manufacturer signs two copies of the SGCC License Agreement (including notarization of the Affidavit, Appendix A) and sends these to SGCC. SGCC will countersign both copies and return one to the manufacturer.
- b) The manufacturer sends to SGCC one copy of a valid test report from an official SGCC-recognized prototype testing laboratory indicating full and complete compliance with the Specifications, namely ANSI Z97.1. (This is the "initial" or "prototype" testing and the sample is furnished by the manufacturer directly to any one of the SGCC-recognized independent commercial prototype testing laboratories, which the manufacturer selects.)
- c) The manufacturer sends to SGCC the six-month certification fee for each item which is to be certified.

After receipt of *all* of the above items, SGCC sends to the licensee a Notice of Product Certification which includes a SGCC Certification Number. This number *must* be incorporated into the permanent label to be affixed on each piece of certified safety glazing material. The certified item will then be listed in the next published Certified Products Directory.

HOW THE CERTIFICATION PROGRAM WORKS

The American National Standards Institute sets safety standards and safety glazing materials must meet or exceed applicable ANSI standards before they can be certified by SGCC. Specifications for safety glazing materials used in buildings are developed and reviewed at least every five years by ANSI.

SGCC-recognized independent prototype testing laboratories conduct all tests. All laboratories, whose test reports are utilized by this Certification Program, shall be approved by the SGCC Certification Committee. Initial or prototype tests are performed at the testing laboratory selected by the licensee. Routine evaluation samples are tested by the testing laboratory selected by the Administrator.

Administrator Authorizes Certification

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

Licensees label safety glazing material within the limits of the product size tested. If 34 by 76 inches is the initial or prototype test size, then certification is extended to all sizes and the label contains a letter U, designating such unlimited size. The letter L, contained within the label, denotes that certification is limited to the width and length of the initial or prototype test size.

Products Listed in Certified Products Directory

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 products manufacturers, glazing contractors, home builders, architects, regulatory agencies and code-making groups, etc. Directory listings contain the licensees name, plant location, product description and a copy of the actual label that is *permanently* marked upon each piece of certified safety glazing material.

The administrator samples certified glazing material from the licensee's inventory once every six months.

An approved testing laboratory determines compliance of these samples with the Specifications. Tests are made either at the place of manufacture or at the laboratory selected by the Administrator from the approved list. Results of each test are mailed promptly to the licensee by the Administrator.

COMPLIANCE SAFEGUARDS

How is Compliance Assured?

Any certified product found in the course of routine sampling and evaluation not to be in compliance with the Specifications, is subject to having certification removed. The licensee is given a 30-day grace period in which to demonstrate to the satisfaction of the Administrator that his product is compliance. If he does not, certification is *automatically terminated* at the end of the 30-day period.

Challenging a Certified Product

Complaints of non-compliance from any source will be investigated promptly by SGCC upon receipt of the complaint in writing along with an appropriate surety deposit. A minimum surety deposit of \$1,000 will be required for each complaint of non-compliance. The surety deposit will be assessed at the rate of \$250 per man day *plus* the reasonable costs of travel and the maintenance 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 complaintant'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*.

Withdrawal of Certified Product

Any product which has been certified may be voluntarily withdrawn from the Certification Program by the licensee at any time.

COSTS

What Does The Program Cost?

The licensee pays all projected fees to SGCC on a six-month basis, in advance. A licensee is invoiced for each item that is certified and listed separately in the Certified Products Directory. The invoice will include the fees for future routine evaluation testing.

Initial certification for each item will be for a period of six 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 January 1 to July 1 and July 1 to January 1 basis.

Program Costs:

\$440 administrative fee plus \$30 contingency fund fee per six months plus necessary laboratory fees for the first item at a plant for the ANSI program.

\$55 administrative fee plus \$15 contingency fund fee per six months plus necessary laboratory fees for each subsequent item at the same plant for the ANSI program.

\$550 administrative fee plus \$30 contingency fund fee per six months plus necessary laboratory fees for the first item at a plant for the composite program.

\$70 administrative fee plus \$15 contingency fund fee per six months plus necessary laboratory fees for each subsequent item at the same plant for the composite program.

CERTIFICATION PROGRAM DOCUMENTS AND AGREEMENTS

License Agreement

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

Future amendments or revisions to the License Agreement will be recommended by the SGCC Certification Committee and enacted by the SGCC Board of Directors.

Effective Date, Duration and Termination

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

Upon proper execution and acceptance by SGCC the *preissued certification number bond* informs a licensee of the exact mark of an item to be certified in the future. Thus he can purchase the proper marking equipment before the item is actually certified. If the licensee marks this number upon production prior to actual certification the bond is forfeited to SGCC.

Upon proper execution and acceptance by SGCC the *test release bonds* permits the continuation of certification of an item even though the production facilities are shut down. If the licensee does not notify SGCC within one week of the resumption of production the bond is forfeited to SGCC.

Administrative Service Agreement

This agreement, entered into by SGCC and Certification Services Corporation, governs the relationship between SGCC and CSC, the independent Administrator. In general, it provides that the Administrator:

- a) samples certified products routinely
- 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 in-plant and test laboratory test facilities for use in this Certification Program (test laboratories are "recognized" or approved by the SGCC Certification Committee)
- e) publishes and mails the SGCC Certified Products Directory on or about each January 1 and July 1
- f) handles all routine clerical duties of SGCC with respect to certification matters

- g) acts as SGCC treasurer, invoicing licensees, maintaining a bank account and dispersing funds (fiscal reports are made to the SGCC Certification Committee)
- h) furnishes all testing except for prototype tests
- i) attends all scheduled meetings of the SGCC Certification Committee and
- j) in all of its actions acts in the name of SGCC.

Procedural Guide

This guide outlines program procedures in accordance with the provisions of the License Agreement and the Administration 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 safety glazing materials of each licensee.

Certification Label

This certification mark is permanently affixed to each piece of certified safety glazing material by the licensee. It contains a code that refers to the listing in the Certified Products Directory. The listing then provides a complete product description including the company name, plant location, etc.

PROGRAM RESPONSIBILITY

The SGCC Board of Directors 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 SGCC 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 certification "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 SGCC Board of Directors changes to be made in the License Agreement.

COMMUNICATIONS

In all matters concerning the administration and implementation of the SGCC certification program, correspondence may be directed to any of the following:

SGCC Board of Directors

Mr. Robert L. Brown, Chairman Virginia Glass Products Corporation P.O. Box 5431 Martinsville, Virginia 24112

Telephone 703-956-3131

SGCC Certification Committee Mr. Irvin D. Fintel, Chairman Tempglass, Inc. Willis Day Industrial Park 291 "M" Street Perrysburg, Ohio 43551

Telephone 419-666-2000

SGCC Mr. Robert A. Nance, P.E. Administrative Manager 1640 West 32 Place Hialeah, Florida 33012

Telephone 305-558-1352

SGCC APPROVED TESTING LABORATORIES

Bowser-Morner Testing Laboratories, Inc. 420 Davis Avenue; Box 51 Dayton, Ohio 45401 Attention: Mr. R. J. Rosencrans Telephone 513-253-8805

Miami Testing Laboratory, Inc. 1640 West 32 Place Hialeah, Florida 33012 Attention: Mr. James W. Bailey Telephone 305-822-1141

ETL Testing Laboratories, Inc. 1960 Will Ross Court Chamblee, Georgia 30341 Attention: Mr. Burr Bachler Telephone 404-458-7763

ETL Testing Laboratories, Inc. Route 11 Industrial Park Cortland, New York 13045 Attention: Mr. Claude F. Robb Telephone 607-753-6711 Patzig Testing Laboratories Company, Inc. 3922 Delaware Avenue Des Moines, Iowa 50313 Attention: Mr. Byron A. Marks, P.E. Telephone 515-266-5101

Inspection and Research Laboratory, Inc. 4749 West State Street; Building H Ontario, California 91761 Attention: Mr. W. Bradford Smith Telephone 714-591-1789

Southwestern Laboratories 2900 Cullen Street Fort Worth, Texas 76101 Attention: Mr. Wayne Tessener Telephone 817-332-5181

CERTIFICATION GUIDELINES AND INTERPRETATIONS

For guidance in certifying safety glazing materials the SGCC Certification Committee has adopted the following:

GENERAL

G.1

Participation in the certification program will be on a January 1 to July 1 and July 1 to January 1 basis. Charges will be prorated to the nearest whole month based on the date of approval of certification.

Tests for initial compliance of safety glazing materials to ANSI Z97.1-1975 will be accepted from any testing laboratory approved by the SGCC certification committee.

Paragraph (1) Section 4.1.3 of ANSI Z97.1-1975 is intended to apply to laminated, wired and organic coated glass only. Paragraph (2) is intended to apply to tempered glass only. Paragraph (3) is intended to apply to plastics only. Paragraph (4) is intended to apply to any safety glazing material.

For insulating glass units to be considered safety glazing material, each light in the construction must be of safety glazing material.

The SGCC item number when used as part of a permanent label designates the name of the licensee (participant) and also the location of the manufacturing plant since the Certified Products Directory which lists the item number and pertinent data is published twice a year.

G.6

- a) All test specimens except for prototype samples, must be marked with the correct SGCC permanent label prior to testing in order to be considered a valid sample. The administrator shall construe the absence of a correct permanent label as a failure to comply with the Specifications. In such cases of noncompliance, Sections a.c., and e of G.11 shall be followed.
- b) The laboratory shall verify that the label has the correct SGCC number, designation of the ANSI standard, nominal thickness, and certified size designation (U or L).

For labeling purposes, a demarcation line shall separate those standards covered by the SGCC number from any other standards the licensee wishes to reference.

- c) The testing laboratory is to advise the administrator of any specimen that does not in fact bear the correct SGCC permanent label and will be instructed by the administrator not to test but hold the sample.
- d) The administrator will inform the licensee of the situation and direct (by letter) the testing laboratory to commence testing no later than 30 days hence. Until that time the testing laboratory is instructed to make these specimens available to the licensee at their convenience (the specimens are to remain at the testing laboratory) in order that the licensee may point out or show them that in fact the SGCC permanent label is correct or agree that in fact the correct SGCC permanent label is not present. (In cases of any dispute between the licensee and the testing laboratory the decision of the administrator shall be final.) The licensee shall not mark specimens after receipt at the testing laboratory.
- e) As of January 1, 1978 the SGCC permanent label must contain ANSI Z97.1-1975 in order to be considered a correct permanent label for puposes of Guideline G.6.
- f) For exterior plastics the SGCC permanent label must contain ANSI Z97.1-1975 (a). (See Guideline P.E.1.)

G.7

Safety glazing materials for which certification is requested for indoor use only shall be subjected to the provisions of section 4.1 (impact tests) and 4.5 (aging tests) of ANSI Z97.1-1975 irrespective of the composition or construction of the glazing material. Like products and materials produced in the same manner as samples submitted for test shall be legibly and permanently marked in one corner with the words "Indoor Use Only" and the SGCC identification number.

After initial compliance with a sample size as stated in Table 1, testing of other sizes which represent the sizes manufactured may be allowed, provided however that all sizes produced up to the size provided by Table 1, ANSI Z97.1-1975 are exposed to selection for testing.

Specimen sizes up to 34 inches by 77 inches shall be valid samples when independently obtained by the administrator for purposes of routine evaluation.

In cases where the administrator samples and identifies specimens for routine evaluation on the licensee's premises or requests licensee's samples when none are available at the time of sampling:

- a) The licensee be permitted 6 weeks in which to effect delivery of said specimens to the administrator's designated testing laboratory.
- b) Failure to act as specified above shall be construed by the administrator as failure of the said specimens to comply with the Specifications and the administrator shall act as provided for in License Agreement A.6.

In cases where a routine evaluation sample fails to comply with the Specifications:

a) Written notice and an invoice shall be sent to the licensee by the administrator stating that within 30 days from the date of such notice the licensee must submit a retest sample to the testing laboratory designated by the administrator.

Certification shall be removed if the sample and payment are not received within the alloted 30 days or if the sample submitted fails to comply with the Specifications.

- b) Within 3 months the administrator shall obtain an additional random sample for evaluation (in addition to the routine evaluation sample obtained twice a year). The administrator shall be certain that this additional sample is of recent production.
- c) At the option of the administrator, specimens submitted under (a) above shall be either prototype size and pattern or identical to those previously sampled and of recent production.
- d) Certification shall be removed if the additional random sample obtained in (b) above fails to comply with the Specifications.
- e) All costs related to G.11 are to be borne by the licensee.

If a licensee who manufactures a certified product outside the 48 contiguous States feels that in a particular instance that he will be unable to act as provided for in paragraph a) of SGCC Guideline G. 11, he should notify the administrator. The administrator will then contact the Chairman of the Certification Committee for a decision as to what action is to be taken.

In cases where a certified item is produced infrequently or in small quantities so as to make it difficult for the administrator to obtain routine evaluation samples, the licensee shall notify the administrator at least two weeks in advance of any production of such item.

G.14

The administrator shall remove certification from all of any licensee's products for failure to pay any monies due to SGCC within 30 days of invoice date. (Reference License Agreement A.2, A.12 and B.6.)

In the situation where a licensee desires to recertify a product that previously had certification removed because of failure to comply with the Specifications (label and thickness tolerances excepted), the product shall be routinely sampled four times during the first year. The costs involved shall be paid by the licensee.

G.16

The nominal thickness designations in SGCC authorized permanent labels for safety glazing materials may be shown in metric units. The thickness wil be expressed in millimeters, limited to two decimal places, and will have the suffix "mm".

All safety glazing materials that are not symmetrical from surface to surface, shall be impacted two specimens on one side and two specimens on the other side.

G.18

Certified and permanently labeled safety glazing materials such as laminated glass, wired glass, rigid plastic or organic coated glass may be cut into smaller pieces by a distributor or installer after manufacture and it is not practical for each such smaller piece to bear a manufacturer's permanent label when finally installed in a building. When this is the case, then the distributor or installer shall apply a permanent label to each piece, which states his name and certifies that he cut the piece from material that was properly labeled in accordance with the requirements of SGCC.

For the purpose of this guideline, a permanent label is defined as one that will remain permanently legible and would be destroyed in attempts to remove it from the product.

G.19

The semi-annual invoicing date for certification fees shall be April 1 and October 1 of each year and the administrator is instructed to take those steps necessary to remove certification from licensees for failure of payment prior to closing date of the certified products directory.

G.20

For certification purposes a panel of glazing material composed of multiple components (such as leaded glass) may be tested and interpreted as a unit.

G 21

A preissued SGCC certification number shall be issued by the administrator upon receipt of a properly executed license agreement and a properly executed bond form in the amount of \$10,000. The condition of the bond is such that if the licensee does not label any safety glazing material with the preissued certification number prior to formal certification then the bond shall be void.

G.22

In the case of wired glass, plastics and organic coated glass certification of a patterned product may be extended to cover other patterns provided:

- a) The nominal thickness of the proposed alternate and all aspects other than pattern are the same as the certified product.
- b) The administrator of the certification program is provided with a copy of a prototype test from an approved laboratory, showing satisfactory compliance with the impact requirements of ANSI Z97.1-1975 for each alternate pattern proposed.
- c) The certification committee is provided with a 6 by 6 inch sample of each proposed alternate for its record and file. This must be sent to the administrator of the certification program.

After admission under blanket certification covering patterned products, any such patterns available may be selected by the administrator for routine ampling and testing.

n the case where a routine evaluation sample covered under a blanket ertification fails to comply with the Specifications, the situation requires that nat particular product be submitted for the retest sample required by the fuideline G.11a and also that that particular product be sampled by the dministrator for the additional sample required by Guideline G.11b.

i.23

here may be instances when a production facility is temporarily inoperative. his could be caused by, but not limited to, equipment repair or replacement, bor difficulties, energy or material shortages or economic considerations. s a consequence, samples for routine testing may not be available for long priods. The licensee may desire to retain certification during the shuttern period. This shall be done as follows:

Prior to or within 2 weeks, after the shutdown the licensee shall inform a SGCC administrator by registered mail.

The SGCC administrator will immediately supply the licensee with test ease bond forms for submission by the licensee.

Within 2 weeks after receipt of the bond forms, the licensee shall submit m to the SGCC administrator. A separate bond shall be submitted for ch certified product affected.

- d) During the period covered by the bond the licensee shall retain certification, contingent upon payment of normal certification fees and meeting all other licensee obligations. Bonds will terminate 90 days after application but may be renewed by the licensee any number of times. Renewal is an obligation of the licensee and requires all steps listed herein.
- e) Within one week after re-activation of the production facility the licensee shall 1) notify the SGCC administrator by registered mail and 2) submit samples from the first weeks production to an SGCC approved laboratory for testing. In cases where more than one certified product is produced with the same equipment, samples of each must be furnished for testing within the first month. These will be considered as the routine samples for retesting for the six months period during which they are submitted.
- f) Failure by the licensee to comply with any of the preceding shall be the basis for removal of certification from the affected products.

G.24

When a licensee's production equipment will not produce a size of 34 by 76 inches and the licensee wishes to certify a) a size whose smaller dimension exceeds 34 inches, material shall be tested whose smaller dimension is 34 inches or b) a size whose larger dimension exceeds 76 inches, material shall be tested whose larger dimension is 76 inches.

G.25

When a licensee specifically and voluntarily desires to use an SGCC permanent label on their product that denotes compliance with ANSI Z97.1-1966, ANSI Z97.1-1972 and ANSI Z97.1-1975 or combination thereof, that they notify SGCC in writing of the certified item that they desire to so mark. SGCC will, at the request of the licensee, conduct compliance tests to ANSI Z97.1-1966, ANSI Z97.1-1972 and ANSI Z97.1-1975 or combination thereof. A single set of four test specimens will be impacted to determine impact test requirements of all standards. Upon successful completion of compliance tests the safety glazing materials are permanently labeled and listed in the SGCC certified products directory as having met the requirements of 1966, 1972 and 1975 versions or combination thereof of the ANSI Z97.1 standard. Any costs involved shall be paid by the licensee.

G.26

Any label that can be removed intact shall not be considered permanent and is not acceptable to SGCC.

G.27

A licensee, by executing a supplementary license agreement, can elect to be in both 16 CFR 1201 and ANSI Z97.1-1975 programs under one SGCC number provided the licensee submits four specimens to be impact tested to ANSI Z97.1-1975 and one specimen to be impact tested to 16 CFR 1201 (all architectural safety glazing materials that are not symmetrical from surface to surface, shall be impacted one specimen on one side and one specimen on the other side for 16 CFR 1201). If any one specimen of the composite sample fails, the entire composite sample will be considered to have failed to comply with both specifications.

G.28

The administrator shall construe noncompliance with thickness tolerances as a failure to comply with the Specifications. In such cases of non compliance, Sections a,c, and e of G. 11 shall be followed.

G.29

For the purposes of certification, the thickness requirements of Federal Specification DD-G-451D shall apply.

G.30

For certification purposes, the minimum thickness shall be 0.092 and the maximum thickness shall be 0.108 inches for 0.100 inch glass.

TEMPERED TRANSPARENT GLASS

T.1

Certification of either flat glass or patterned glass will not cover the other except as noted in Guideline T.2. (Flat glass designates ground and polished plate, float and sheet glass.)

T.2

Polished plate glass and the rough plate glass blank from which it is produced will be considered to be of equal nominal thickness. Certification of tempered flat glass will therefore be interpreted as including tempered rough plate blank.

T.3

Certification of regular tempered glass will also cover tinted, heat absorbing and coated glasses of the same nominal thickness. Glasses of the same nominal thickness with a ceramic material applied as a continuous or partial coating to one or more surfaces prior to tempering are also covered.

T.4

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

Certification of any nominal thickness of tempered safety plate, float or sheet glass will also cover the other two types. ANSI Z97.1 does not require the permanent label on tempered safety glass to specify which type of glass is used. Nor is it required that the test specimens be identified in this regard.

Prototype test shall be conducted on bent specimens sampled from normal production run. The specimen size shall have a surface area of at least 50 percent of the maximum size for which certification is desired. Routine tests may be performed on bent specimens or flat specimens fabricated using the same tempering furnace. The test appartus shall be modified to clamp the vertical straight edges and to support the concave side of the curved edges. Impact shall be on the convex surface.

TEMPERED PATTERN GLASS

For purposes of certification, the nominal thickness of patterned, figured, or rough rolled glass are the common fractions found in DD-G-451D. The permanent label must contain this fraction or a metric or decimal dimension within the tolerance of his thickness as published in DD-G-451D.

The patterns in each thickness will be classified as to the ratio of minimum to maximum thickness as follows:

Pattern depth class Ratio 0.90 or above Shallow pattern glass 0.80 to 0.89 Medium pattern glass Deep pattern glass 0.79 or below

Certification will be by nominal thickness and pattern depth class. Any pattern in a certified thickness and pattern depth class is certified.

New or unlisted patterns must be submitted to the pattern subcommittee for classification and file, prior to certification. After measurement, the new pattern will be assigned to a pattern depth class.

In the case of 5/32 inch tempered pattern glass refer to DD-G-1403B because this thickness is not included in DD-G-451D.

Certification of deep also covers medium and shallow patterns of the same nominal thickness.

Certification of medium also covers shallow patterns of the same nominal thickness.

The maximum thickness shall be recorded when measuring the thickness of pattern glass.

TP.3

For tempered pattern glass, one specimen must be weighed and weight of ten square inches determined from the weight, width and height of that specimen to use for test purposes.

TP.4

For certification purposes, the nominal thickness of 210 tempered pattern glass shall be 0.210 inches and thickness tolerances shall be plus 0.031 inches and minus 0.016 inches.

LAMINATED GLASS

Certification of regular laminated glass will also cover tinted, heat absorbing and coated glasses, both flat and bent of the same nominal thickness.

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

1..3 Certification of 7/32 inch laminated glass also covers SS/DS and vice versa.

When a laminated glass is certified, other laminated glasses having the same thickness or thicknesses of glass and a greater thickness of plastic interlayer will be considered to be of equal nominal thickness and to be included in the certification.

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

Thickness of the plastic interlayer shall be measured by the SGCC standard method.

For certification purposes the following thickness tolerances shall be used: Thickness tolerance shall apply only to the overall nominal thickness. The plus tolerance shall be the sum of all of the individual plus tolerances of each layer of the laminate. The minus tolerance shall be the sum of all of the individual minus tolerances of each layer of the laminate. Polyurethane interlayer shall have a thickness tolerance of plus or minus 0.015 inches.

The tolerance of the polyvinylbutyral (PVB) shall be based on the nominal thickness of the interlayer with a plus tolerance of 0.002 and a minus tolerance of 0.004 inches.

WIRED GLASS

W.1

Certification of one polished wired glass may be applied to other polished wired glasses provided:

- a) The glass thickness of the candidate glass is nominally equal to the thickness of the glass that is certified.
- b) The wire diameter of the candidate glass is at least as great as the wire diameter in the glass that is certified.
- c) The spacing of the wires in the candidate glass is no greater than the spacing of the wires in the glass that is certified.
- d) The certification committee has been presented with a copy of the results of a test indicating that compliance of the candidate glass with the requirements of ANSI Z97.1-1975 impact testing has been made.

After admission under the blanket certification covering wired glasses, all wired glasses so certified must be exposed to random sampling at each examination although only one will probably be selected for testing.

PLASTICS - GENERAL

Certification of one tint or color of rigid plastic will also cover other tints, colors, flat configurations or bent and formed configurations.

For certifying all plastics covering a range of thicknesses, prototype impac tests are required of the minimum thickness and also of the maximum thickness (except that 0.250 inch thickness would be tested if the maximum thickness exceeds 0.250 inches). Only one certification number will be issued and shall be marked upon all thicknesses. Routine re-evaluation samples are to be selected by the administrator from any of the certified thicknesses.

The following thickness tolerances shall be used for certification purposes

Outdoor use plastic materials Class 1. Cast acrylic. (Including continuousl

ANSI Z97.1-1975 48 SGCC; January 1, 1980 cast sheet): As specified in Federal Specification LP-391, latest issue.

Outdoor use plastic materials Class 2. Extruded acrylic: As specified in Federal Specification LP-507, latest issue.

Outdoor use plastic materials Class 3. Extruded polycarbonate: As specified in Federal Specification P-46144, latest issue.

Indoor use plastic materials Class 1: Plus or minus 10 percent of nominal thickness.

The maximum thickness shall be recorded when measuring the thickness of patterned plastics.

Certification of either smooth plastic or patterned plastic will not cover the other.

PLASTICS - EXTERIOR USE

Sheet plastics for exterior use must comply with ANSI Z97.1a-1977.

Certification of plastics for exterior use shall be permitted prior to completion of ANSI Z97.1-1975. Weathering Tests (paragraph 4.3) provided that a considered expert opinion states that the infrared spectrogram indicates that the plastic is an acrylic or UV inhibited polycarbonate of proven weatherability. Certification shall be removed if compliance with the weathering test is not demonstrated within six months of the certification date.

PE.3

For all plastics requiring UV weathering tests an infrared spectrogram shall be obtained of all prototype weathering specimens. An infrared spectrogram shall be obtained of all routine re-evaluation samples and shall be compared with that of the prototype in lieu of conducting weathering test. The spectral scan shall be made using a minimum film thickness of 0.002 inches or its equivalent.

When initial Charpy unnotched specimens do not break, then notched specimens shall be used for both initial and exposed Charpy impact testing. The specimens shall be notched prior to UV exposure and the notched surface shall be exposed to the UV.

PLASTICS - INDOOR USE ONLY

Sheet plastics used in indoor applications only, do not have to comply with paragraph 4.3 of ANSI Z97.1-1975 (UV Weathering) but must comply with)aragraph 4.5.

71.2

he permanent label authorized by SGCC must include "Indoor Use Only".

43

or all indoor plastics requiring aging tests, an infrared spectrogram shall be btained of all prototype aging specimens. An infrared spectrogram shall be btained of all routine re-evaluation samples and shall be compared with nat of the prototype in lieu of conducting aging tests. The spectral scan shall e made using a minimum film thickness of 0.002 inches or its equivalent.

EADED PATTERNED ANNEALED GLASS

3.1

ertification of one leaded patterned glass (annealed) may be extended to over other patterns (on the glass surface) provided:

- a) The nominal thickness of the proposed alternate and all aspects other than pattern are the same as the certified product.
- b) The administrator of the certification program is provided with a copy of a prototype test from an approved laboratory, showing satisfactory compliance with the impact requirements of ANSI Z97.1-1975 for each alternate pattern proposed.
- c) The certification committee is provided with a 6 by 6 inch sample of each proposed alternate for its record and file. This must be sent to the administrator of the certification program.
- d) After admission under blanket certification covering leaded patterned annealed glass, any such patterns available may be selected by the administrator for routine testing.

LG.2

Certification of one diamond shaped leaded patterned (annealed) glass may be extended to cover other sizes of diamonds provided:

- a) All aspects of the product except diamond size is the same as the certified product.
- b) The administrator of the certification program is provided with a copy of a prototype test from an approved laboratory, showing satisfactory compliance with the impact requirements of ANSI Z97.1-1975 for each alternate size diamond proposed.
- c) The certification committee is provided with a 6 by 6 inch or a proper and representative sample of each proposed alternate for its record and file. This must be sent to the administrator of the certification program.

After admission under blanket certification, any such size diamond available may be selected by the administrator for routine testing.

For leaded diamond patterned annealed glass the tolerance for diagonal came center dimensions shall be plus or minus 12 percent.

Prototype samples must have diagonal came center dimensions 10 percent greater than nominal. Diamond size listed in the certified products directory shall be nominal dimensions.

ORGANIC COATED GLASS

Thickness of the applied plastic coating shall be measured by the SGCC standard method.

AG.2

The SGCC authorized permanent label, which complies with Guideline G.26 must be imprinted upon or applied to a surface of the plastic for all plastic coated annealed glasses.

AG.3

Prototype test shall be conducted on bent specimens of the surface area at least 50 percent of the maximum size for which certification is desired. Routine tests may be conducted on flat or bent specimens. The test appartus shall be modified to clamp the vertical straight edges and to support the concave side of the curved edges. Two specimens shall have organic coating on the concave surface and two on the convex surface. Impact shall be on the convex surface.

> ANSI Z97.1-1975 January 1, 1980; SGCC 49

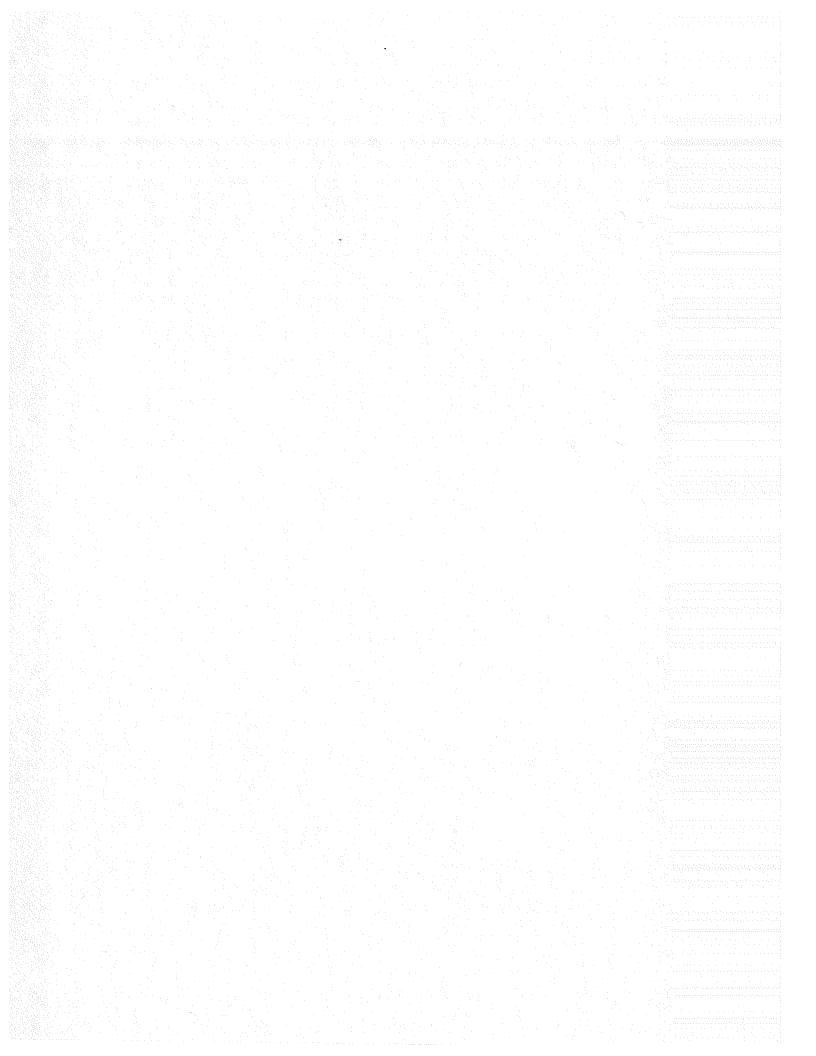
ANSI Z97.1-1975 Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings

The purpose of ANSI Z97.1-1975 is to prescribe the functional properties of safety glazing materials so that they can be used in any place in buildings for which they possess the requisite characteristics. Intended to serve as a convenient reference for building officials, this new and important document is designed to provide a basis for standards that may be incorporated in federal, state, and local regulations.

Copies of ANSI Z97.1-1975 may be obtained from:

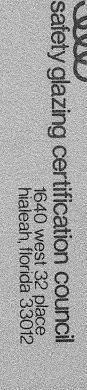
American National Standards Institute 1430 Broadway New York, New York 10018

ANSI Z97.1-1975 50 SGCC; January 1, 1980



future editions of this certified products directory will be sent to individuals making a request on their corporate letterhead.

ADDRESS CORRECTION REQUESTED



THIRD CLASS MAIL

ゟ゙

NON-PROFIT ORGANIZATION
U.S. POSTAGE
PAID
HIALEAH, FLORIDA
Permit Number 256