

September 3, 1971



safety glazing certification council

certified products directory  
safety glazing material used in buildings

This directory is an essential and fundamental part of the Safety Glazing Certification Council, Inc. certification program.

This directory is up-dated and issued at least twice a year and is the only valid source of information concerning SGCC certified safety glazing materials. By specifying or using safety glazing materials that are listed herein, you can be assured that they comply with the "break safe characteristics" established by the American National Standard Z97.1-1966.

Safety Glazing Certification Council, Inc. (not for profit) is the sponsor of this certification program and is the certifying agency. Any safety glazing material, whether transparent or not, is eligible for certification in this program.

Every manufacturer of safety glazing material is eligible to participate, however his products are not accepted and certified until an independent laboratory test indicates compliance with the standard. Then, at least twice a year, SGCC independently selects samples during unannounced visits to the manufacturing plant or randomly from the market place. The re-examination of these samples is used to provide certification of a continuing nature. Based upon these re-evaluation reports SGCC authorizes continued use of the certification label and product listing in this certified products directory.

The presence of a permanent label (registered and approved by SGCC) will indicate whether the safety glazing material is in compliance with the "break safe characteristics" of ANS Z97.1-1966.

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

This directory (one of two to be published yearly) contains a listing of the Certified Safety Glazing Materials of each participant that is in good standing and whose products have been found by test and subsequent evaluation to be in compliance with the requirements of the Specifications.

## SAFETY GLAZING CERTIFICATION COUNCIL

Widespread use of high performance safety glazing materials in buildings can help to reduce accident frequency and severity. Many states, national lending agencies, sophisticated professionals and local regulatory authorities require the use of safety glazing materials in hazardous locations to reduce the frequency and severity of accidents associated with ordinary materials.

To aid professionals, contractors and owners in the specification and selection of safety glazing materials and to help inspectors identify safety glazing materials and distinguish them from other types, formal certification and labeling is essential.

The certification programs initiated separately by Glass Tempering Association and Safety Glazing Industry, Inc. several years ago have joined forces in the Safety Glazing Certification Council (SGCC). SGCC is a unique organization with balanced leadership equally representative of both public and manufacturing interests.

Building upon established practices, SGCC provides "third party independent laboratory certification" of safety glazing material performance characteristics with respect to the nationally recognized standard and test methods developed by American National Standards Institute. SGCC bases its certification upon product performance evaluation tests conducted at prescribed intervals by experienced professionals.

Types of safety glazing materials which meet all aspects of a nationally recognized standard may be so certified and labeled. Copies of SGCC's bylaws and procedures are available on request. Laboratories experienced in testing of safety glazing materials may qualify as testing agencies. Manufacturers are invited to apply for certification of their safety glazing products.

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

C-E Glass

Manufactured in  
Pennsauken, New Jersey

Unlimited size  
SGCC-51

1/8 inch tempered  
transparent glass

Tentative label



SGCC-51 1/8" U

Hamilton of Indiana, Inc.

Manufactured in  
Vincennes, Indiana

Unlimited size  
SGCC-54

1/8 inch tempered  
transparent glass

Tentative label

**TEMPER - TUF**

HAMILTON OF INDIANA

ANSI Z97.1-1966 1/8U

TEMPERED SHEET

SGCC-54

Libbey-Owens-Ford Company

Manufactured in Plant No. 6  
Rossford, Toledo, Ohio

Unlimited size  
SGCC-21 (formerly SGI-23)

1/8 inch tempered  
transparent glass

Tentative label



SGCC-21

PPG Industries, Inc.

Manufactured in  
Mt. Zion, Illinois

Unlimited size  
SGCC-59

1/8 inch tempered  
transparent glass

Tentative label

**PPG HERCULITE K**

ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-59 1/8"U 14

PPG Industries, Inc.

Manufactured in  
Crestline, Ohio

Size limited to 26 3/4" x 72"  
SGCC-60

1/8 inch tempered  
transparent glass

Tentative label

**PPG HERCULITE K**

ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-60 1/8"L 26

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

PPG Industries, Inc.

1/8 inch tempered  
transparent glass

Tentative label

Manufactured in  
Mt. Vernon, Ohio

**PPG** HERCULITE K

ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

Unlimited size  
SGCC-58

SGCC-58 1/8"U 11

Asahi Glass Company, Ltd.

3/16 inch tempered  
transparent glass

Tentative label

Manufactured in  
Tokyo, Japan

TEMPERLITE

TEMPERED SAFETY GLASS



Unlimited size  
SGCC-46 (formerly SGI-11)

USAS Z97-1-1966 ASAHI 187-U

SGCC-46

ASG Industries, Inc.

3/16 inch tempered  
transparent glass

Tentative label

Manufactured in  
Kingsport, Tennessee

TRU-TEMP  
TEMPERED  
SAFETY GLASS  
ANS Z97.1 1966  
3/16U

Unlimited size  
SGCC-28 (formerly SGI-21)

SGCC-28

C-E Glass

3/16 inch tempered  
transparent glass

Tentative label

Manufactured in  
Miami, Florida



USAS Z97.1-1966  
HORDIS BROS. INC.  
3/16" U  
SGCC-76

Unlimited size  
SGCC-76

Feather-lite Manufacturing Co.

3/16 inch tempered  
transparent glass

FEATHER-LITE  
SAFETY  
PANE

Manufactured in  
Hot Springs, Arkansas

TEMPERED SAFETY GLASS  
USAS Z 97.1-1966  
SGCC-11 3/16 U

Unlimited size  
SGCC-11 (formerly SGI-30)

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

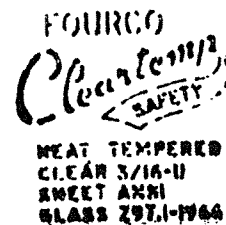
Fourco Glass Company

Manufactured in  
Fort Smith, Arkansas

Unlimited size  
SGCC-36

3/16 inch tempered  
transparent glass

Tentative label



SGCC-36

S.A. Glaverbel

Manufactured in  
Bruxelles, Belgium

Unlimited size  
SGCC-16 (formerly SGI-25)

3/16 inch tempered  
transparent glass

Tentative Label

**Glaverbel**  
GR - tempered 3/16"  
USAS Z 97.1 - 1966 188 U

SGCC-16

Guardian Industries Corporation

Manufactured in  
Torrance, California

Unlimited size  
SGCC-44

3/16 inch tempered  
transparent glass

Tentative label



3/16" U  
SGCC-44

Hamilton of Indiana, Inc.

Manufactured in  
Vincennes, Indiana

Unlimited size  
SGCC-56

3/16 inch tempered  
transparent glass

Tentative label

**TEMPER - TUF**  
HAMILTON OF INDIANA  
ANSI Z97.1-1966 3/16 U  
TEMPERED SHEET  
SGCC-56

Libbey-Owens-Ford Company

Manufactured in Plant No. 6  
Rossford, Toledo, Ohio

Unlimited size  
SGCC-20 (formerly SGI-13)

3/16 inch tempered  
transparent glass

Tentative label



SGCC-20



# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

PPG Industries, Inc.

Manufactured in  
Fresno, California

Unlimited size  
SGCC-64

3/16 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K  
ANSI Z-97 1-1966 3/16"-U  
TEMPERED SAFETY GLASS

SGCC-64 15

PPG Industries, Inc.

Manufactured in  
Mt. Zion, Illinois

Unlimited size  
SGCC-63

3/16 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K  
ANSI Z-97 1-1966 3/16"-U  
TEMPERED SAFETY GLASS

SGCC-63 14

PPG Industries, Inc.

Manufactured in  
Crestline, Ohio

Size limited to 26 3/4" by 72"  
SGCC-65

3/16 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-65 3/16"L 26

PPG Industries, Inc.

Manufactured in  
Mt. Vernon, Ohio

Unlimited size  
SGCC-62

3/16 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K  
ANSI Z-97 1-1966 3/16"-U  
TEMPERED SAFETY GLASS

SGCC-62 11

PPG Industries, Inc.

Manufactured in  
Fort City, Pennsylvania

Unlimited size  
SGCC-61

3/16 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K  
ANSI Z-97 1-1966 3/16"-U  
TEMPERED SAFETY GLASS

SGCC-61 5

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

Vidrierias De Llodio, S.A.

Manufactured in  
Spain

Unlimited size  
SGCC-38

3/16 inch tempered  
transparent glass

Tentative label

VIDRIERIAS DE LLODIO S.A.  
TEMPERIT  
ANSI Z97.1 - 1966 3/16" - U  
TEMPERED GLASS  
SGCC-38

Virginia Glass Products Corp.

Manufactured in  
Martinsville, Virginia

Unlimited size  
SGCC-12 (formerly SGI-46)

188 U tempered  
transparent glass

Tentative Label



SGCC-12

ASG Industries, Inc.

Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-32 (formerly SGI-42)

7/32 inch tempered  
transparent glass

Tentative label



SGCC-32

C-E Glass

Manufactured in  
Miami, Florida

Unlimited size  
SGCC-77

7/32 inch tempered  
transparent glass

Tentative label



C-E Glass

Manufactured in  
Pennsauken, New Jersey

Unlimited size  
SGCC-52

7/32 inch tempered  
transparent glass

Tentative label





# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

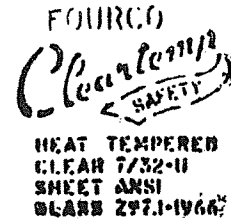
Fourco Glass Company

Manufactured in  
Fort Smith, Arkansas

Unlimited size  
SGCC-35

7/32 inch tempered  
transparent glass

Tentative label



SGCC-35

Guardian Industries Corporation

Manufactured in  
Fort Lauderdale, Florida

Unlimited size  
SGCC-39

7/32 inch tempered  
transparent glass

Tentative label



7/32" U  
SGCC-39

Hamilton of Indiana, Inc.

Manufactured in  
Vincennes, Indiana

Unlimited size  
SGCC-55

7/32 inch tempered  
transparent glass

Tentative label

**TEMPER - TUF**  
HAMILTON OF INDIANA  
ANSI Z97.1-1966 7/32U  
TEMPERED SHEET  
SGCC-55

PPG Industries, Inc.

Manufactured in  
Fresno, California

Unlimited size  
SGCC-69

7/32 inch tempered  
transparent glass

Tentative label

**PPG HERCULITE K**  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-69 7/32"U 15

PPG Industries, Inc.

Manufactured in  
Mt. Zion, Illinois

Unlimited size  
SGCC-68

7/32 inch tempered  
transparent glass

Tentative label

**PPG HERCULITE K**  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-68 7/32" U 14

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

PPG Industries, Inc.

Manufactured in  
Mt. Vernon, Ohio

Unlimited size  
SGCC-67

7/32 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K

ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-67 7/32"U 11

PPG Industries, Inc.

Manufactured in  
Ford City, Pennsylvania

Unlimited size  
SGCC-66

7/32 inch tempered  
transparent glass

Tentative label

**PPG** HERCULITE K

ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-66 7/32"U 5

Vidrierias De Llodio, S.A.

Manufactured in  
Spain

Unlimited size  
SGCC-37

7/32 inch tempered  
transparent glass

Tentative label

VIDRIERIAS DE LLODIO S.A.  
TEMPERIT  
ANSI Z97.1 - 1966 7/32" - U  
TEMPERED GLASS

SGCC- 37

Virginia Glass Products Corp.

Manufactured in  
Martinsville, Virginia

Unlimited size  
SGCC-13 (formerly SGI-47)

218 U tempered  
transparent glass

Tentative Label



SGCC-13

ASG Industries, Inc.

Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-24 (formerly SGI-15)

1/4 inch tempered  
transparent glass

Tentative label

TRU-TEMP  
TEMPERED  
SAFETY GLASS  
ANS Z97.1 1966  
1/4U

SGCC-24

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

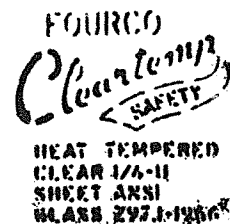
Fourco Glass Company

Manufactured in  
Fort Smith, Arkansas

Unlimited size  
SGCC-34

1/4 inch tempered  
transparent glass

Tentative label



SGCC-34

Guardian Industries Corporation

Manufactured in  
Torrance, California

Unlimited size  
SGCC-43

1/4 inch tempered  
transparent glass

Tentative label



1/4" U  
SGCC-43

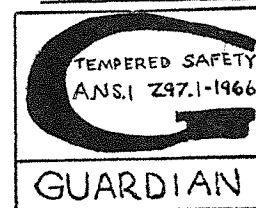
Guardian Industries Corporation

Manufactured in  
Fort Lauderdale, Florida

Unlimited size  
SGCC-40

1/4 inch tempered  
transparent glass

Tentative label



1/4" U  
SGCC-40

Hamilton of Indiana, Inc.

Manufactured in  
Vincennes, Indiana

Unlimited size  
SGCC-57

1/4 inch tempered  
transparent glass

Tentative label

**TEMPER - TUF**  
HAMILTON OF INDIANA  
ANSI Z97.1-1966 1/4U  
TEMPERED SHEET  
SGCC-57

Libbey-Owens-Ford Company

Manufactured in Plant No. 6  
Rossford, Toledo, Ohio

Unlimited size  
SGCC-19 (formerly SGI-12)

1/4 inch tempered  
transparent glass

Tentative label



SGCC-19

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

C-E Glass

Manufactured in  
Miami, Florida

Unlimited size  
SGCC-49

1/4 inch tempered  
transparent glass

Tentative label



SGCC-49

C-G Glass

Manufactured in  
Tampa, Florida

Unlimited size  
SGCC-47

1/4 inch tempered  
transparent glass

Tentative label



SGCC-47

C-E Glass

Manufactured in  
Stone Mountain, Georgia

Unlimited size  
SGCC-48

1/4 inch tempered  
transparent glass

Tentative label



SGCC-48

C-E Glass

Manufactured in  
Pennsauken, New Jersey

Unlimited size  
SGCC-53

1/4 inch tempered  
transparent glass

Tentative label



1/4" U  
SGCC-53

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

PPG Industries, Inc.

1/4 inch tempered  
transparent glass

Tentative label

Manufactured in  
Fresno, California

Unlimited size  
SGCC-73

**PPG** HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-73 1/4"U 15

PPG Industries, Inc.

1/4 inch tempered  
transparent glass

Tentative label

Manufactured in  
Mt. Zion, Illinois

Unlimited size  
SGCC-72

**PPG** HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-72 1/4"U 14

PPG Industries, Inc.

1/4 inch tempered  
transparent glass

Tentative label

Manufactured in  
Mt. Vernon, Ohio

Unlimited size  
SGCC-71

**PPG** HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-71 1/4" U 11

PPG Industries, Inc.

1/4 inch tempered  
transparent glass

Tentative label

Manufactured in  
Ford City, Pennsylvania

Unlimited size  
SGCC-70

**PPG** HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-70 1/4"U 5

Virginia Glass Products Corp.

250 U tempered  
transparent glass

Tentative Label

Manufactured in  
Martinsville, Virginia

Unlimited size  
SGCC-14 (formerly SGI-48)

**VIRGINIA GLASS**  
ANSI  
Z97.1-1966  
**TEMPER-GLAS**  
250-U  
TEMPERED  
**PRODUCTS**

SGCC-14

# TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANSI Z97.1-1966

ASG Industries, Inc.

Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-30 (formerly SGI-40)

3/8 inch tempered  
transparent glass

Tentative label

TRI-TEMP  
TEMPERED  
SAFETY GLASS  
ANSI Z97.1-1966  
3/8U



SGCC-30

Guardian Industries Corporation

Manufactured in  
Fort Lauderdale, Florida

Unlimited size  
SGCC-41

3/8 inch tempered  
transparent glass

Tentative label



3/8" U  
SGCC-41

PPG Industries, Inc.

Manufactured in  
Ford City, Pennsylvania

Unlimited size  
SGCC-74

3/8 inch tempered  
transparent glass

Tentative label

PPG HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-74 3/8"U 5

PPG Industries, Inc.

Manufactured in  
Ford City, Pennsylvania

Unlimited size  
SGCC-75

1/2 inch tempered  
transparent glass

Tentative label

PPG HERCULITE K  
ANSI Z-97 1-1966  
TEMPERED SAFETY GLASS

SGCC-75 1/2"U 5

# LAMINATED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

ASG Industries, Inc.

Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-27 (formerly SGI-20)

7/32 inch laminated  
transparent glass

Tentative label

SUPRATEST



LAMINATED SAFETY GLASS  
USAS Z97.1-1966 7/32 U

SGCC-27

Globe Glass Manufacturing Company

Manufactured in  
Elk Grove Village, Illinois

Unlimited size  
SGCC-45 (formerly SGI-36)

7/32 inch laminated  
transparent glass

Also covers:

5/16 inch Secur-Lite,  
clear and tinted  
9/32 inch Acousta-Pane 36,  
clear and tinted  
7/32 inch Twi-Lite

Tentative label

Laminated Safety Glass



218-U

ANS Z97.1-1966

SGCC-45

ASG Industries, Inc.

Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-26 (formerly SGI-19)

1/4 inch laminated  
transparent glass

Tentative label

SUPRATEST



LAMINATED SAFETY GLASS  
USAS Z97.1-1966 1/4 U

SGCC-26

Libbey-Owens-Ford Company

Manufactured in Plant No. 8  
East Toledo, Ohio

Unlimited size  
SGCC-23 (formerly SGI-50)

SS/SS laminated  
transparent glass

Tentative label



LAMINATED SAFETY GLASS

ANSI Z97.1-1955

SS/SS - U

SGCC-23

Libbey-Owens-Ford Company

Manufactured in Plant No. 8  
East Toledo, Ohio

Unlimited size  
SGCC-22 (formerly SGI-31)

SS/DS laminated  
transparent glass

Tentative label



LAMINATED SAFETY GLASS  
USAS Z97.1-1966  
SS/DS-U

SGCC-22



# TRANSPARENT WIRE GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

ASG Industries, Inc.


Manufactured in  
Kingsport, Tennessee

Unlimited size  
SGCC-29 (formerly SGI-26)

1/4 inch polished  
wire glass  
"Pinstripe"  
"Nu weld" Diamond  
"Nu weld" Square

Tentative label

POLISHED  
WIRE GLASS  
WIRED SAFETY  
GLASS  
ANS Z97.1 1966  
1/4U




SGCC-29

C-E Glass

Manufactured in  
St. Louis, Missouri

Unlimited size  
SGCC-15 (formerly SGI-45)

1/4 inch polished  
wire glass  
"Misco" wire glass  
"Baroque" wire glass



GLASS  
POL. WIRE GLASS  
ANS Z97.1-1966  
SGCC-15 1/4 U

# TEMPERED PATTERN GLASS

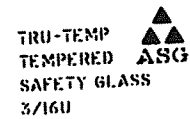
COMPLIES WITH "BREAK SAFE CHARACTERISTICS" OF ANS Z97.1-1966

ASG Industries, Inc.

3/16 inch tempered  
pattern glass

Tentative label

Manufactured in  
Kingsport, Tennessee



Unlimited size  
SGCC-33 (formerly SGI-43)

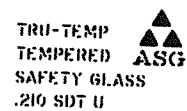
SGCC-33

ASG Industries, Inc.

210 SDT U tempered  
obscure pattern glass

Tentative label

Manufactured in  
Kingsport, Tennessee



Unlimited size  
SGCC-31 (formerly SGI-41)

SGCC-31

C-E Glass

0.210 inch tempered  
pattern glass

Tentative label

Manufactured in  
Miami, Florida



HORDIS BROS. INC.

Unlimited size  
SGCC-50

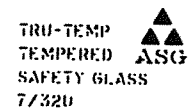
0.210 U  
SGCC-50

ASG Industries, Inc.

7/32 inch tempered  
obscure pattern glass  
Patterns: Aquatex,  
Industrex, Muralex,  
Velvex, Pattern No. 62

Tentative label

Manufactured in  
Kingsport, Tennessee



Unlimited size  
SGCC-25 (formerly SGI-16)

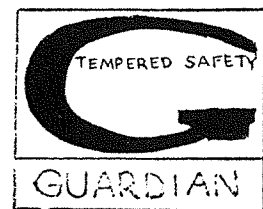
SGCC-25

Guardian Industries Corporation

7/32 inch tempered  
pattern glass

Tentative label

Manufactured in  
Fort Lauderdale, Florida



Unlimited size  
SGCC-42

7/32" U  
SGCC-42

# SAFETY PLASTIC SHEET FOR INTERIOR USE ONLY

COMPLIES WITH "BREAK SAFE CHARACTERISTICS" OF ANS Z97.1-1966

Intercosmic Plastics, Inc.

Manufactured in  
Miami, Florida

Unlimited size  
SGCC-17 (formerly SGI-39)

0.090 inch patterned  
safety plastic sheet  
(interior use only)

Tentative label

Intercosmic  
Miami, Florida

SGCC-17

Southern Plastics Company

Manufactured in  
Columbia, South Carolina

Unlimited size  
SGCC-18 (formerly SGI-38)

0.090 inch patterned  
safety plastic sheet  
(interior use only)

Tentative label

SOPLASCO 090U PS  
SGCC-18

CURRENT SAFETY GLAZING INDUSTRY CERTIFICATIONS THAT ARE NOT YET A PART OF THE SAFETY GLAZING CERTIFICATION COUNCIL PROGRAM:

## TEMPERED TRANSPARENT GLASS

IN FULL COMPLIANCE WITH ANS Z97.1-1966

Societa Italiava Vetro

3/16 inch tempered  
transparent glass

Tentative label

Manufactured in  
San Salvo Chieti, Italy

**SICURSIV**  
B S N

Tempered Safety Glass  
USAS Z97.1-1966 - 188 U  
SGI-27

Unlimited size  
SGI-27

Societa Italiava Vetro

7/32 inch tempered  
transparent glass

Tentative label

Manufactured in  
San Salvo Chieti, Italy

**SICURSIV**  
B S N

Tempered Safety Glass  
USAS Z97.1-1966 - 210 U  
SGI-28

Unlimited size  
SGI-28

Societa Italiava Vetro

1/4 inch tempered  
transparent glass

Tentative label

Manufactured in  
San Salvo Chieti, Italy

**SICURSIV**  
B C N

Tempered Safety Glass  
USAS Z97.1-1966 - 250 U  
SGI-29

Unlimited size  
SGI-29

## TEMPERED PATTERN GLASS

COMPLIES WITH "BREAK SAFE CHARACTERISTICS" OF ANS Z97.1-1966

Minex-Poland

.250 tempered  
obscure pattern glass

Tentative label

Manufactured in  
Jaroslawiec, Poland

A.T.P.

Tempered Safety Glass

Size limited to 28" x 68"  
SGI-44

.250 L SGI-44

## PROCEDURAL GUIDE

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

#### FORWARD

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 participants.

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 participants* 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 ANS Z34.1, prior to labeling safety glazing materials as conforming to ANS 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 and certifying agency. SGCC bears the legal responsibility of stating that a particular product is certified.

#### *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 Participant?*

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 testing laboratory indicating full and complete compliance with the Specifications, *namely* ANS 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 testing laboratories, which the manufacturer selects).
- c) The manufacturer sends to SGCC, the six-month certification fee of \$150, *for each item which is to be certified*.
- d) The manufacturer sends to SGCC a *black on white* copy of his proposed permanent label.

After receipt of *all* of the above four items, SGCC sends to the participant 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 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 participant. 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.

*Participants Label Safety Glazing Material* within the limits of the product size tested. If 34" by 76" 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 participants 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 Safety Glazing Material* from the participants' 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 participant and to 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 participant is given a 30-day grace period in which to demonstrate to the satisfaction of the Administrator that his product is in 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 \$150 per man day *plus* the reasonable costs of travel and 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 complainants' surety deposit, *unless* the investigation proves non-compliance, *in which case all costs will be borne by the participant 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 participant at any time.

#### **COSTS**

##### *What Does The Program Cost?*

The participant pays all projected fees to SGCC on a six-months basis, in advance. For each item that is certified and listed separately in the Certified Products Directory the fee is \$150 per six months, *plus* the fees paid to the Testing Laboratory by SGCC. (Minimum Testing Laboratory costs are, \$50 per item).

Initial certification for each item will be for a period of six months. However, the next invoice to a participant 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.

#### 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 participant.

*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 and 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 the date of expiration that cancellation is requested or unless revoked by SGCC for causes set forth in the document.

#### *Administration 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 participants, maintaining a bank account and dispersing funds (quarterly fiscal reports are made to the SGCC Certification Committee)
- h) contracts for testing with approved Test Laboratories
- 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 participants 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 participant.

### *Certification Label*

This Certification Mark is permanently affixed to each piece of certified safety glazing material by the participant. 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 participant 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*

*SGCC Board of Directors*  
Mr. Norman C Nitschke, Chairman  
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Phone: 419-849-2923

*SGCC Certification Committee*  
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*SGCC*  
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Administrator of Certification  
1640 West 32 Place  
Hialeah, Florida 33012  
Phone: 305-822-1141

## CERTIFICATION GUIDE LINES AND INTERPRETATIONS

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

1. Certification of any nominal thickness of tempered safety plate, float or sheet glass will also cover the other two types. ANS Z97.1 does not require the permanent trademark 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. Similarly laminated safety glass need not be identified by type of base glass.  
Since the minimum allowable thickness in Federal Specification DD-G-451c is different for plate/float and sheet glass of equal nominal thickness, SGCC may not in all cases be able to certify the glass tested meets this specification. When this situation arises, the participant upon the request of SGCC must furnish a statement indicating all plate/float and sheet of his manufacture meet the thickness requirements of Federal Specification DD-G-451c. Wired glass can be checked by SGCC for thickness compliance.
2. Certification of regular tempered or laminated glass will also cover tinted, heat absorbing and coated glasses of the same nominal thickness.
3. Certification of one patterned glass will also cover similar patterns of the same nominal thickness. The participant shall furnish to SGCC Certification Committee 6" by 6" samples of each type of patterned glass he wishes included in each group. These will be reviewed by the Certification Committee to evaluate their similarity to the pattern tested.
4. Certification of one wired glass will apply to other wired glasses providing: a) the glass thickness is nominally equal to that for the samples tested and b) the wire diameter is at least as great as for the samples tested. Additionally, 6" by 6" samples of all wired glass which the participant wishes to be certified shall be submitted to SGCC Certification Committee. These will be reviewed by the Certification Committee to evaluate their similarity to the wired glass tested. When a particular wired glass is suspect, initial compliance to ANS Z97.1 will be required. Subsequent retesting for compliance may be for any approved wired glass.
5. Certification of either flat glass or patterned glass will not cover the other except as noted in paragraph 6. (Flat glass designates ground and polished plate, float and sheet glass.)
6. 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.
7. 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.
8. Tests for initial compliance of safety glazing with ANS Z97.1 will be accepted from Electrical Testing Laboratories, Inc., Miami Testing Laboratory, Inc., Twining Laboratories of Southern California, Inc., or other testing laboratory subsequently approved by the SGCC Certification Committee.
9. Paragraph (3) section 4.1.3 of ANS Z97.1-1966 is intended to apply to plastics only and not other safety glazing materials.
10. In cases where routine evaluation samples fail to comply with the Specifications:
  - a) Within 30 days participant must submit samples to the Administrator that comply with the Specifications or certification of this product will be withdrawn (as provided in the license agreement).
  - b) Within 3 months the Administrator shall obtain an additional random sample for evaluation (in addition to the routine evaluation sample obtained at least twice a year). The costs involved shall be paid by the participant.
  - c) The Administrator shall be certain that the sample obtained in b) above is of recent production.
11. 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 participant shall notify the Administrator at least two weeks in advance of any production of such item.
12. Any type of safety glazing material that is laminated; including those with a sprayed on coating and those with an applied sheet material, must comply with the requirements of paragraph 4.2 of the ANS Z97.1-1966 (boil test).

13. Sheet plastic for interior use only do not have to comply with paragraph 4.3 of the ANS Z97.1-1966 (U V Weathering).
14. Sheet plastics for exterior use must comply with paragraph 4.3 of the ANS Z97.1-1966 (U V Weathering).
15. Some safety glazing materials such as laminated glass, wired glass and rigid plastic may be cut by a distributor or jobber after manufacture, and it is not practical for each piece to bear a permanent label when finally installed in a building. This shall be handled in one of two alternate ways.
- a) The distributor or jobber shall provide to the building or code official a written statement that all such smaller lights were cut from a larger piece that was properly labeled as shown in the SGCC Certified Products Directory.
- b) The dealer or distributor shall become a licensee of SGCC and affix his own label in accordance with the SGCC certification procedures.
16. Delisting procedures for certified products shall be as follows:
- When routine evaluation samples (or additional random samples, see SGCC GL 10) fail to comply with the Specifications:
- a) Written notice is sent to the participant by the administrator.
- b) Within 30 days participant must submit samples to the administrator that comply with the Specifications.
- c) Written notice of removal of certification is issued to the participant by the administrator if the samples are not received within the allotted 30 days or if the samples submitted fail to comply with the Specifications.
17. If a participant 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 b) of SGCC guide line 16, 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.
18. The administrator shall remove certification from all of any participants 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).
19. Specimen sizes up to 34 inches by 77 inches shall be valid samples when independently obtained by the administrator for purposes of routine evaluation.
20. In cases where the administrator samples and identifies specimens for routine evaluation on the participant's premises:
- a) The participant 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.
21. 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 for certification.
22. The SGCC Certified Products Directory shall be reissued and distributed every six months (about January 1 and July 1) or more often 1) at the request of the majority of the Certification Committee, 2) at the request of an individual participant, or 3) at the direction of the Board of Directors. When an individual participant requests the additional mailing, he will be charged the entire cost. Distribution at present is to all FHA field offices and all AAMA member companies. Each participant is requested to submit additional names for mailing.
23. ANS Z97.1-1966 and ANS Z34.1 allow testing of other than 34" by 76" sizes providing the initial compliance was based on this size.
24. Certification of one tint or color of rigid plastic will also cover other tints or colors of the same nominal thickness.
25. Certification of one patterned rigid plastic will also cover similar patterns of the same nominal thickness. The participant shall furnish to SGCC Certification Committee 6" by 6" samples of each type of patterned plastic he wished included in each group. These will be reviewed by the Certification Committee to evaluate their similarity to the pattern tested.

## SUMMARY OF SAFETY GLAZING LEGISLATURE

### States With Mandatory State Codes

|                |             |
|----------------|-------------|
| Indiana        | Wisconsin   |
| North Carolina | California  |
| Ohio           | Connecticut |

Indiana, North Carolina, Ohio and Connecticut have adopted the upgraded section on "Glass Subject to Impact Loads" developed by the Glass Door Safety Committee. Indiana and North Carolina adopted it verbatim, Ohio modified the format. Connecticut has adopted the requirements that appear in the 1970 edition of the Basic Building Code.

The Connecticut and California state codes apply to all construction.

### States Passing Safety Legislature

|          |   |  |
|----------|---|--|
| Florida  | - | House Bill No. 214 became law effective July 1, 1969. An amended version, Senate Bill No. 417, was passed by the legislature and became effective July 1, 1970.          |
| Oregon   | - | House Bill 1771, and the regulations developed by the Public Health Department, became law effective July 1, 1970.   |
| Maryland | - | Senate Bill No. 317 became effective July 1, 1969. House Bill 797 providing upgrading amendments to SB317 has been signed by the Governor. Effective date, July 1, 1971. |

### States Passing 1970 Version Of Model Bill

|               |   |  |
|---------------|---|--|
| California    | - | Assembly Bill No. 399 became law. Effective date, November 1970. Amendment has been introduced to eliminate permanent labeling requirement and to specifically define "adjacent fixed panels". |
| Georgia       | - | House Bill 412 became law. Effective date, July 1, 1970  |
| Kentucky      | - | House Bill 353 became law. Effective date, January 1, 1971.  |
| West Virginia | - | House Bill 504 became law. Effective date, July 1, 1971. Amendment excludes homes built for one and two families that were built prior to July 1, 1971.  |

### States Passing 1971 Version of Model Bill

|          |   |   |
|----------|---|---|
| Colorado | - | House Bill 1110 became law. Effective date, July 1, 1971.   |
| Delaware | - | Senate Bill 23 became law. Effective date, January 1, 1972.   |
| Illinois | - | Senate Bill 101 became law. Effective date, January 1, 1972. The bill applies to municipalities that have home rule, provided they do not pass more stringent requirements. In effect, the model bill is a minimum requirement for municipalities with home rule. |

- New Jersey - Assembly Bill 496 passed by legislature and sent to Governor for signature. Effective date, January 1, 1972.
- Oklahoma - House Bill 1350 became law. Effective date, January 1, 1972.
- Tennessee - Senate Bill 178 became law. Effective date, January 1, 1972.
- Pennsylvania - Senate Bill 29 became law. Effective date, January 1, 1972. Amendment requires an additional marking for safety glazing materials used in hazardous locations. Amendment only applies to public and commercial buildings.

States That Have Introduced Legislation, But Have Failed to Pass

- Massachusetts - Using 1971 version of model bill. Senate Bill 1401 passed and is awaiting house action. Effective date, January 1, 1972. Amendment has been introduced that would limit application to new construction and alterations to existing buildings.
- Michigan - Senate Bill 374 is in the Senate and set for action.
- Ohio - House Bill 9 has passed the house and is set for Senate hearing on July 20, 1971. Bill only applies to residential construction, all 1, 2, or 3 family units that are not covered by the state building code. The bill is much more stringent than the minimum standards established by the building code. The House Bill excludes replacement in storm doors that were in place prior to July 1972. It is anticipated that the Senate will not accept the storm door exclusion, thus necessitating a Joint Committee of the House and Senate hearing. Bill could be a long time passing in Ohio.
- New York - Bill is dead for 1971.
- Maryland - Does not have model bill, but has introduced amendment to existing legislation in this area.

7/27/71 This information received from Glass Tempering Association.



# Safe Sliding Glass Doors



## Quality Control

is one of the primary functions of the Architectural Aluminum Manufacturers Association. Members of the association set the quality standards for the products they make and these standards are enforced rigidly.

Products are tested by independent laboratories and awarded the AAMA Quality Certified sticker only if they measure up to these standards.

## Other safety tips

Even with safety glass, accidents can happen. To prevent a glass door accident at your house, go over these tips with the rest of the family, then practice them.

### 1. WATCH WHERE YOU'RE GOING

Never assume a glass door is open. **BE SURE.** If you're paying attention you can be sure you're going through the glass door and not the fixed glass panel next to it.

### 2. NO RUNNING, NO HORSEPLAY

Children playing near a glass door can too easily fall or be pushed through it. Children should be taught to play well away from all glass doors and windows.

### 3. KEEP DOORWAYS CLEAR

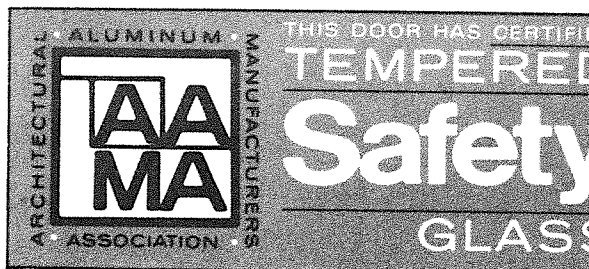
Scatter rugs, toys and other articles that may make someone slip or fall should be cleared from glass door areas. Check doorways often to make sure they remain clear.

### 4. DECORATE WITH DECALS

People run into glass doors because they don't see the glass. To make glass more visible, place decals or pressure sensitive tape at both the child's eye level and the adult's eye level.



In addition to the Quality Certified label, look for this Safety Glass sticker when you buy an aluminum sliding glass door.



These labels are your assurance that the product you are buying is the finest quality and will give you and your family years of safe service.

Published as a public service by

 **Architectural Aluminum**  
Manufacturers Association  
One East Wacker Drive, Chicago, Illinois 60601, (312) 828-9637

Published with the approval  
of the Architectural Aluminum  
Manufacturers Association.

Sliding glass doors can add beauty to your home by giving you a big view of all outdoors.



But any glass door can be a hazard unless safety precautions are taken.

**ASK FOR SAFETY GLASS**

Make sure that the glass doors and large fixed glass panels in your home or apartment are glazed with safety glass. Replace the annealed glass in your home with safety glass as soon as possible... it's a small price to pay for peace of mind.


# How to make sure the Aluminum Sliding Glass Doors you buy are really safe.

The Architectural Aluminum Manufacturers Association, whose members make more than 80 per cent of the sliding glass doors sold in this country, was in a position to recognize these dangers several years ago, and they decided to do something about them. AAMA formed a study group on glass door safety and discovered that the best way to prevent glass door injuries was to use safety glazing in all sliding glass doors. In 1969 the Federal Housing Administration, in response to this information, changed their minimum property standards to require safety glazing in all sliding glass doors.


## Why Safety Glass?

**The best defense against glass hazards is the use of safety glass in sliding glass doors and shower and tub enclosures. Unless you are positive you have safety glass, you don't have it. Make sure you specify safety glass.**

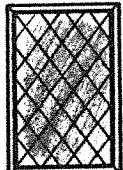
### There are three kinds of safety glass:



**TEMPERED** glass is like your automobile side and back windows. It is made by heat-treating the glass at a higher temperature than that used for regular annealed glass. If someone runs into this kind of glass it may not break at all, but if it does, tempered glass will break into small, safe pieces resembling rock salt.



**LAMINATED** glass is like your automobile windshield. It is made from two or more pieces of glass held together with a center ply of plastic material. If broken, the pieces of glass will cling to the plastic.



**WIRED** glass consists of a single sheet of glass with a layer of meshed wire completely imbedded in the glass. Wired glass is not heat-treated, and will break more easily than either tempered or laminated glass, but the wires serve to catch the broken pieces.

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



**safety glazing certification council**

**1640 west 32 place  
hialeah, florida 33012**

**THIRD CLASS MAIL**

**to**

