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**IGMA** INSULATING  
GLASS  
MANUFACTURERS  
ALLIANCE



# Publication Catalog

IGMA is committed to continuously improving our products and services in order that we may meet or exceed the expectations of our members.

**IGMA**



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# IGMA

INSULATING  
GLASS  
MANUFACTURERS  
ALLIANCE

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

IGMA was established as a not-for profit organization in the state of Illinois on October 2, 2000 as a result of a merger between the Insulating Glass Manufacturers Association of Canada (IGMAC) and the Sealed Insulating Glass Manufacturers Association (SIGMA). Member firms of both associations voted overwhelmingly in favor of the merger with the objective of combining both organizations' strengths and making more efficient use of available resources. The merger positions IGMA to effectively represent the interests of firms involved in the manufacture, sale and distribution of insulating glass units and their components throughout North America.

IGMA is an ISO 9000 registered organization. All publications, products and services are developed according to our ISO 9000 requirements and specifications.

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## DESIGN & FABRICATION

### Preventing Insulating Glass Failures

This manual provides insulating glass manufacturers with best practice recommendations and guidelines to use for testing, fabrication, packaging, shipment and glazing of insulating glass units to assist in achieving long term performance and to minimize seal failure using existing technology for edge seal design along with selection of sealants, desiccants, spacers, gases, glass and other components used for the manufacture of insulating glass.

TM-4100-03 (Member)..... \$75 USD  
TM-4100-03 (Non member) ..... \$144 USD

### Insulating Glass Manufacturing Quality Procedures

This manual provides a framework for an insulating glass manufacturer to use as the basis for a specific program geared to the unique requirements of each facility. The manual provides an outline and examples for in-plant quality control and is directed toward those areas in the manufacturing area to be measured and controlled.

TM-4000-02(07) (Member) ..... \$85 USD  
TM-4000-02(07) (Non member) ..... \$216 USD

### Guidelines for Commercial Insulating Glass Dimensional Tolerances

These guidelines should assist in achieving successful performance of organically-sealed insulating glass units and are not intended to limit the materials of construction, design, shape, size or other considerations of usage or exclude other possible dimensional tolerances depending upon specific circumstances.

TR-1200-83(07) (Member)..... \$15 USD  
TR-1200-83(07) (Non member) ..... \$30 USD

### Guidelines for the Testing of Moisture Vapor Transmission Rate (MVTR) and the Presentation of the Results

This bulletin provides standardized test method, sample configuration and units for reporting purposes.

TB-2701-95 (Member)..... \$15 USD  
TB-2701-95 (Non member)..... \$30 USD

### IGMA Guidelines for Use of Capillary / Breather Tubes

These guidelines discusses various attributes of capillary and breather tubes including advantages and disadvantages, workmanship and manufacturing considerations, storage and handling and glazing.

TB-1601-95(07) (Member)..... \$15 USD  
TB-1601-95(07) (Non member) ..... \$30 USD

### Guidelines for Sloped Glazing

Current sloped glazing design practices require careful consideration of insulating glass unit construction to ensure long-term performance. These guidelines address types of loading, code requirements, glass design, insulating glass sealant design and glazing system design.

TB-3001-01 (Member)..... \$10 USD  
TB-3001-01 (Non member)..... \$19 USD

### Insulating Glass Manufacturing Guidelines: Important Considerations

These guidelines provide a checklist to be considered for selection and compatibility of glass, desiccant, framework, sealant(s), gas filling, quality control, packaging & shipping of finished products, capillary / breather tubes and glazing.

TB-1400-91 (Member)..... \$15 USD  
TB-1400-91 (Non member)..... \$30 USD

### GD\_2008

The IGMAC Glass Design Software Program assists manufacturers, architects and engineers to calculate structural design of glass based on CGSB 12.20 and in compliance with the 2005 National Building Code of Canada. **The program includes 1 hour of technical support.**

GD\_2008 (Member)..... \$400 USD  
GD\_2008 (Non Member) ..... \$600 USD

**NOTE: The Glass Design Software Program is not included in the technical binder.**

### Technical Manual for Acoustical Glass Design

This manual provides design considerations for the elimination of interfering or distracting sound for various noise criteria classifications.

TM-6000-01 (Member) ..... \$48 USD  
TM-6000-01 (Non member) ..... \$91 USD

### Preventing Glass Breakage during IG Design, Manufacture, Transport, Installation and Use

This report addresses causes of glass breakage by reducing damage to edges, corners, and surfaces. This document covers IG design for applied loads, fabrication, storage & transport, installation and usage.

TR-3401-96 (Member)..... \$15 USD  
TR-3401-96 (Non member) ..... \$30 USD

## VOLUNTARY TEST METHODS FOR COMPONENTS

### Recommended Voluntary In-Plant Test Methods and Performance Criteria of Desiccants for Sealed Insulating Glass Units

This manual includes voluntary test methods and criteria performance for the particle size determination method, residual moisture content by heat of adsorption method, and loss of ignition or total volatile content

TM-2100-78(81) (Member) ..... \$20 USD  
TM-2100-78(81) (Non member) ..... \$36 USD

### Test Methods of Insulating Glass Sealants

This manual covers types of sealants, application test methods for sealant type, tables of test conditions to standardize temperature, mixing and volume conditions and specific tests.

TM-2400-76(90) (Member) ..... \$61 USD  
TM-2400-76(90) (Non member) ..... \$120 USD

### Voluntary Test Methods & Voluntary Performance Quality Assurance Criteria for Two Component Polysulfide Sealants Used In Manufacturing Sealed Insulating Glass Units

This manual includes information of test specimens, recommended voluntary test and performance quality assurance criteria with typical values based on laboratory test results, and various test methods.

TM-2301-85 (Member) ..... \$28 USD  
TM-2301-85 (Non member) ..... \$48 USD

### Sealant Manufacturers Minimum Sealant Dimensions and Placement Survey

This technical bulletin includes a chart of dual seal, hot melt extruded, single seal and Intercept™ spacers for silicone, hot melt, polysulfide, polyurethane and curing hot melt. This document includes depth of primary & secondary sealant, beneath spacer, total siteline, shoulder, thickness and thickness before press.

TB-1201-89(05) (Member) ..... \$15 USD  
TB-1201-89(05) (Non member) ..... \$30 USD

### Voluntary Test Methods & Voluntary Performance Quality Assurance Criteria for Spacers for Sealed Insulating Glass Units

This manual includes information of test specimens, recommended voluntary test and performance quality assurance criteria for hollow shaped spacers to accept edge sealant to minimize air leakage between the spacer and the glass.

TM-2000-76(82) (Member) ..... \$20 USD  
TM-2000-76(82) (Non member) ..... \$36 USD

## POST FABRICATION & INSTALLATION

### North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use

These advisory guidelines address the importance of good glazing practices and are intended for use by those who design, specify, manufacturer and install insulating glass units. These guidelines address glass types, framing, glazing clearances, setting blocks, spacer shims, glazing materials, glazing systems, receiving, storage & handling, glass protection & cleaning for both commercial and residential applications.

TM-3000-90(04) (Member) ..... \$75 USD  
TM-3000-90(04) (Non member) ..... \$150 USD

## POST FABRICATION & INSTALLATION

### Window Glazing for Durability (Residential)

This CD video addresses window glazing for residential applications.

TV-3100-02 (Member) .....	\$25 USD
TV-3100-02 (Non member).....	\$48 USD

### Voluntary Test Methods for Chemical Effects of Glazing Compounds on Elastomeric Edge Seals

This test method covers the procedure for an oven-type test of sample 6" X 6" insulating glass units exposed to glazing compounds or other materials which could contact units on the unbranded elastomeric edge seal.

TR-1000-75(91) (Member).....	\$10 USD
TR-1000-75(91) (Non member).....	\$19 USD

### Guidelines for IG Manufacturers' Studies of Sealant Compatibility

These guidelines address the determination of the compatibility of glazing sealants and glazing materials with the IG unit edge seal for a particular building project specification and test methods used.

TB-2403-91 (Member) .....	\$10 USD
TB-2403-91 (Non member).....	\$19 USD

### Voluntary Guidelines for the Identification of Visual Obstructions in the Airspace of Insulating Glass Units

These advisory guidelines may assist in the determination of unintended visual obstructions in the insulating glass unit airspace.

TM-3100-09 (Member) .....	\$50 USD
TM-3100-09 (Non member).....	\$90 USD

## CERTIFICATION

### IGCC-IGMA Certification Program Manual

The IGMA Certification Program is a third party certification program and provides for testing to the ASTM E 2190 standard test specification for Canada and the U.S. The program also provides for initial and after weathering gas concentration certification.

Program Manual (Member download) .....	\$0
Program Manual (Non member download).....	\$0

### IGMAC Certification Program Manual

The IGMA Certification Program is a third party certification program and provides for testing to the CGSB 12.8 standard test specification for Canada. The program also provides for initial and after weathering gas concentration certification

Program Manual (Member download) .....	\$0
Program Manual (Non member download).....	\$0

### ASTM E 2190 Information Sheet

This fact sheet addresses differences between the ASTM E 773/E774, CGSB 12.8 and ASTM E 2190 Standard Test Specifications.

Information Sheet (Member download).....	\$0
Information Sheet (Non member download) .....	\$0

### Test Method for Determining Argon Concentration in Sealed Insulating Glass Units Using Spark Emission Spectrography

This document has been withdrawn in favor of the ASTM standard that was published in 2009.

### IG Units Certified to ASTM E 773, E 774 Component Change Document

This technical bulletin addresses recommended allowable changes or components from test units to production units for glass, spacers, desiccants, sealants and unit construction.

TB-2802-95 (Member) .....	\$15 USD
TB-2802-95 (Non member).....	\$30 USD

## TECHNICAL REPORTS & BULLETINS – OTHER

### 25 Year Field Correlation Study Report (1980- 2005)

Jointly sponsored by the Department of Housing and Urban Development and the Sealed Insulating Glass Manufacturers Association (now IGMA), the study field evaluated ASTM E 774 Standard –certified insulating glass units. This study includes two phases. The initial study started in 1980 and Phase 2, started in 1990 incorporating newer technologies.

TR-4000-08 (Member).....	\$100 USD
TR-4000-08 (Non member) .....	\$500 USD

**NOTE: The 25 Year Correlation Study is included in the complete technical binder for members only.**

### Insulating Glass U-Value Document

This study examines one method of rating the u-values of insulating glass units by themselves. This report includes computer simulation results to determine the effect of spacer type, low-e coatings, argon gas filling and other variables on the U-values of sealed units. This document provides a comparative rating for different variables and is intended for use when the final window configuration is unknown.

TR-1401-96 (Member).....	\$15 USD
TR-1401-96 (Non member) .....	\$25 USD

### Definition of a Failed Unit

TB-1205-89 (Member).....	\$10 USD
TB-1205-89 (Non member) .....	\$19 USD

### Definition of a Gas Filled Unit

TB-1202-91 (Member).....	\$10 USD
TB-1202-91 (Non member) .....	\$19 USD

### Open Capillary Tube Survey, Final Survey

The survey objective was to determine the extent and nature of open capillary tube usage in the manufacture of insulating glass. Final results included size of tubes used in diameter and length, reasons for use, desiccant type used and number of sides filled, installation practices, position and direction, and rate and cause of failure with use.

TB-1600-90 (Member).....	\$10 USD
TB-1600-90 (Non member) .....	\$19 USD

## SIGMA GRAMS

### Making a Difference in Glass Deflection / Image Distortion

SG-2000-92 (Member) .....	\$8 USD
SG-2000-92 (Non member) .....	\$14.50 USD

### Pumping New Life into Old Buildings

SG-1992 (Member).....	\$8 USD
SG-1992 (Non member) .....	\$14.50 USD

### Structural Limitations of IG Units Under Uniform Loads

SG-1000-90 (Member) .....	\$8 USD
SG-1000-90 (Non member) .....	\$14.50 USD

### Through the Looking Glass: Architects Reflect on the Past, Present and Future of Glass

SG-3000-90 (Member) .....	\$8 USD
SG-3000-90 (Non member) .....	\$14.50 USD

### The Language of Sealed Insulating Glass Units

SG Volume XV-89(05) (Member).....	\$8 USD
SG-Volume XV-89(05) (Non member) .....	\$14.50 USD

## COMPLETE TECHNICAL BINDER

Member .....	\$575 USD
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