

# GLOBALLY PROVEN, WARM EDGE, STRUCTURAL SILICONE SPACER

## *High-Performance 3Seal IG available from JEB*



Royal Alexandra Hospital  
Edmonton, Alberta



Capital Reforma Condo and Hotel  
Mexico City, Mexico

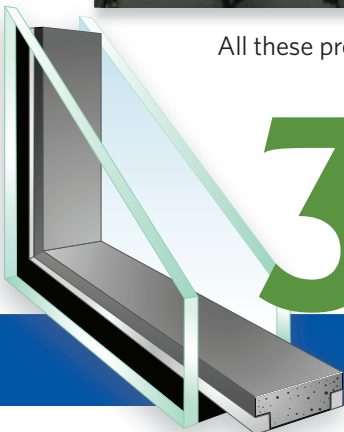


GS Jongro Tower  
Seoul, Korea



Gostiny Dvor Exhibition Center  
Moscow, Russia

All these prestigious jobs used IGs with structural silicone spacer, and were manufactured by a local fabricator.



**3 JEB Seal**

**JE BERKOWITZ, LP**  
ARCHITECTURAL GLASS SINCE 1920

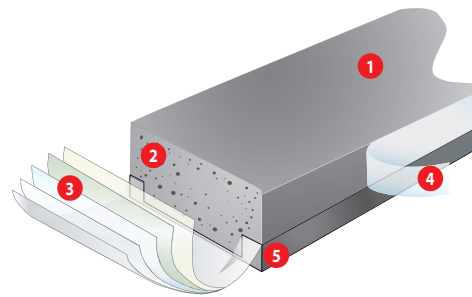


# JEB 3Seal IG Advantages

- 1. Structural acrylic adhesive,** secures spacer in the correct position and holds captive the PIB.
- 2. Superior quality PIB application,** 'just-in-time', hot applied, fully automated application for maximum PIB adhesion to glass.
- 3. Two-part silicone,** mixed and metered just prior to application, the sealant cures to a durable, high-modulus, flexible silicone seal that is chemically stable and creates a weather tight bond and UV resistance.

## JEB 3Seal spacer construction

1. Smooth, matte finish; non-reflective.
2. No metal, integral 3A desiccant.
3. Proprietary multi-layer vapor barrier.
4. Structural acrylic adhesive.
5. PIB primary seal applied robotically.

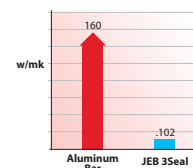


## Reduces Sealant Stress

Structural silicone spacer with unique triple-seal designed to satisfy the toughest commercial glazing demands, including structural silicone glazing. With shock absorbing properties and robust construction, JEB 3Seal is an energy-efficient solution that compensates for common glazing stresses found in extreme climates, including wind loads, snow loads, driving rain, fluctuating temperatures and barometric pressure. Because of its resiliency, JEB 3Seal reduces stress cracks and premature seal failure compared to metal-based systems.

## Maximizes Heat-Flow Resistance

Resists heat flow at a rate of 1,500 times more than that of aluminum. This means lower energy costs, less condensation/frosting, and reduced chances for mold growth.

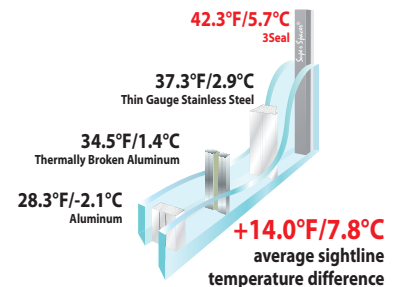


Thermal Conductivity Chart

## Improves Glass Surface Temperature

Extremely low thermal conductivity means less variation in surface temperature of IG unit.

Surface temperature of glass at sightline (edge of the IG units) with JEB 3Seal is typically 14°F / 7.8°C warmer than with conventional aluminum spacer.



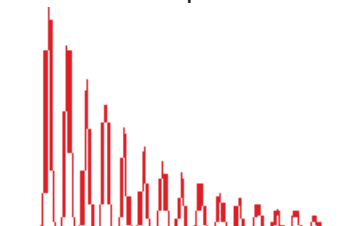
## Improves Condensation Resistance (CRF)

Significantly reduced tendency of IG units fabricated with JEB 3Seal to exhibit interior condensation or frosting means that health problems associated with mold may be reduced compared with metallic spacers.

Research done by Health Canada found that JEB 3Seal helped IG units stay in the optimum, low-humidity zone that reduces mold and bacteria growth.

## Promotes Sound Attenuation

Closed-cell polymer transmits less sound than conventional aluminum spacers or partial metal, warm edge spacers. Use wherever noise from airplanes, trains or automobiles may be a problem for building occupants.



# *Do not settle for center of glass performance only.*

## **JEB 3Seal IG gives you high performance for the entire unit.**

### **State-of-the-Art Glass Fabrication Equipment**

**Our highly automated glass line requires no manual manipulation.** This dramatically improves quality. The robotic equipment provides an incredible level of accuracy for a fast and efficient material flow.

The production line involves specialized equipment including:

1. Automated glass washing machine.
2. JEB 3Seal robotic applicator ensures consistent spacer alignment.
3. Fully automated gas filling for constant glass-fill rates.
4. Robotic sealing for accurate vertical sealing of two-part silicone.
5. Capable of both rectangular and complex shapes.

### **100% inspection of every unit at the end of the line.**

For you, this translates to **complete peace of mind**. You have the confidence that your IG Unit is manufactured with the **highest quality standards** and will provide **long-lasting, durable performance**.

## **Specifying JEB 3Seal IG**

### **1. Insulating Glass Unit Makeup:**

- a. Outboard Lite
  - 1) Glass Type:
  - 2) Glass Thickness:
- b. Airspace
  - 1) Spacer: **JEB 3Seal**
  - 2) Nominal Thickness: [ 3/8" to 1" ]
  - 3) Gas Fill: [Air] [Argon]
- c. Inboard Lite
  - 1) Glass Type:
  - 2) Glass Thickness:

### **2. Performance Characteristics**

- a. Visible Transmittance:  %
- b. Visible Reflectance:  %
- c. Winter U-value:
- d. Solar Heat Gain Coefficient (SHGC):
- e. Light to Solar Gain (LSG):

**3. Provide hermetically sealed IG units** with a thermoset silicone spacer incorporating integral 3A desiccant in all sides, a triple seal design consisting of a pre-applied acrylic adhesive for spacer to glass bonding, a hot-applied captive polyisobutylene primary seal and a two part structural silicone secondary seal.

### **4. North American – Harmonized IGCC Certification**

- a. Insulating glass units are certified through the Insulating Glass Certification Council (IGCC) and Insulating Glass Manufacturers Alliance (IGMA) to ASTM E2190.

### **System Description**

JEB 3Seal is a structural silicone product providing maximum perimeter insulation for sealed insulating glass units. It is desiccant filled and has pre-applied adhesive for bonding to the glass with a vapor barrier backing.

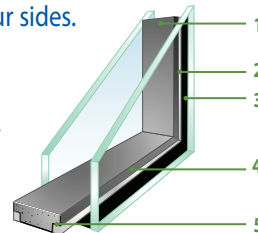
### **Manufacturer**

JE Berkowitz, LP Architectural Glass • One Gateway Boulevard  
Pedricktown, New Jersey 08067 • USA • T: 856.456.7800  
Toll Free: 800.257.7827 • [www.jeberkowitz.com](http://www.jeberkowitz.com)

### **Submittal**

**JEB 3Seal** features a continuous vapor barrier backing across the profiled back of the spacer and is engineered to accept both a butyl primary seal and a silicone secondary seal.

1. Thermoset structural silicone spacer containing no metal with integral 3A desiccant in all four sides.
2. PIB primary seal after-applied.
3. Two-part silicone secondary seal.
4. Pressure-sensitive acrylic adhesive.
5. Pre-applied advanced multi-layer vapor barrier.



indicates your selection

**\*\*For specification assistance contact Gary McQueen @ 410.441.4114 or [gmcqueen@jeberkowitz.com](mailto:gmcqueen@jeberkowitz.com)**





**JE Berkowitz, LP** began operations in 1920 in the Philadelphia metro area. Under the leadership of three family generations, it has grown into a leading, architectural glass fabricator. Today, located in Pedricktown, New Jersey, on a 23-acre site, we operate in a 252,000 square foot facility, employing over 250 people, and operating with the newest and most precise glass fabrication equipment.

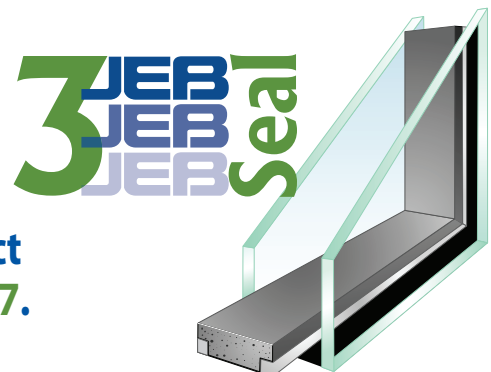
Our architectural glass fabrication capabilities include: insulating glass, heat-treated glass, heat-soak testing, silkscreen and spandrel glass, laminated glass, all-glass doors and entrances and point-supported glass systems and canopies, for both the domestic and overseas markets.

Our commitment is to constantly improve the quality of our architectural products and services to ensure top performance for your projects. We are certified with the International Quality and Service Standards set out by ISO 9001.

We value our relationships with the architectural community, our customers, and our suppliers. JE Berkowitz, LP offers unique solutions to the needs of the building community, both in the pre-construction and construction phases of a project, while promoting eco-friendly products and delivering systems that contribute to LEED certification for your project.

**Get the JEB 3Seal Advantage with JEB 3Seal IG**

**To learn more about JEB 3Seal IG by JEB contact JEB at 856.456.7800 or toll free at 800.257.7827.**



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