


# **SUPER SPACER® STRUCTURAL FOAM SPACER SYSTEMS**

for high-performance, Warm Edge insulating glass units



 **Edgetech**

We're there for you at every turn! 



## What is Warm Edge Technology?

"Warm Edge" refers to the thermal conductivity of the spacer used to separate the lites of an insulating glass unit. If the spacer material is less conductive than conventional aluminum, it is called warm edge.

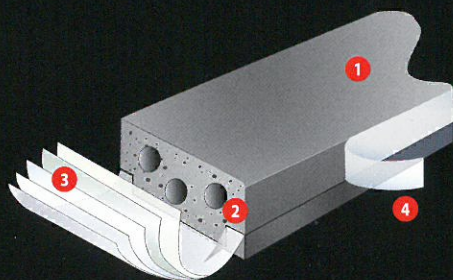
Most of the newer spacers perform better than aluminum, but still contain some metal - often steel or aluminum wrapped in butyl rubber - and this metal is highly conductive.

## What is Super Spacer?

Super Spacer® is an extruded, thermoset polymer structural silicone foam spacer with integrally incorporated desiccants. The shape of the thermoset polymer material is set during heat curing and can't be reshaped through reheating. Super Spacer retains its flexibility over a wide temperature range, always returns to its original cured shape and has a low compression set.

The silicone formula of Super Spacer exhibits excellent resistance to ozone, sunlight, oxidation and has excellent color stability.

## Super Spacer Construction

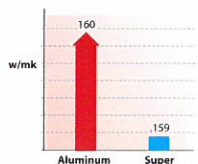


1. Smooth, matte finish guaranteed against blistering and bubbling.
2. Thermoset silicone foam matrix.
3. Proprietary multi-layer vapor barrier.
4. Structural adhesive combines with perimeter edge sealant for dual seal performance and durability.

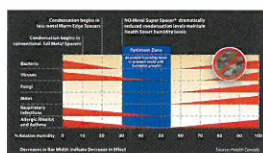
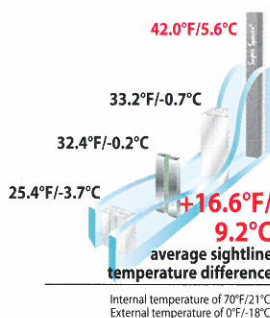
## The NO-Metal Advantage

The edge of an IG unit is the most vulnerable part of the glass to heating and cooling losses, condensation and frosting. Edgetech's Super Spacer contains NO-Metal and is one of the most thermally efficient IG spacers available today.

# Super Spacer® Features



Thermal Conductivity Chart



Optimum Humidity Chart



## Reduces Sealant Stress

Super Spacer's thermoset silicone polymer material expands and contracts and always returns to its original shape. Rigid spacers do not accommodate the natural expansion and contraction caused by UV exposure, thermal expansion, wind loads and barometric pressure. The results are stress cracks that eventually lead to seal failure.

Super Spacer sealed IG units last up to five times longer in durability tests than conventional single seal units. Super Spacer features superior Argon and Krypton gas retention.

## Improves Heat Flow Resistance

Super Spacer resists heat flow at a rate of 950 times more than that of aluminum. This means lower energy costs, less condensation/frosting and reduced chances for mold growth.

## Improves Glass Surface Temperature

Super Spacer's extremely low thermal conductivity means less variation in the surface temperature of the IG unit.

The surface temperature of the glass at the sightline, or the edge of the IG units, with Super Spacer is typically 16.6°F (9.2°C) warmer than with a conventional aluminum spacer.

## Improves Condensation Resistance

Mold needs moisture to grow. The significantly reduced tendency of IG units fabricated with Super Spacer to exhibit interior condensation or frosting means that the health problems associated with mold can be almost eliminated.

Health Canada research found that Super Spacer helped IG units stay in the optimum low-humidity zone that prevents mold and bacteria growth.

## Improves Sound Absorption

The closed-cell polymer foam in Super Spacer transmits very little sound compared to conventional aluminum spacers or less-metal warm edge spacers.

We recommend using Super Spacer wherever noise from airplanes, trains or automobiles may be a problem for building occupants.

## Globally Tested and Proven with Awards

Super Spacer is the world's first polymer foam, NO-Metal warm edge spacer. Over 70 million feet of Super Spacer is used annually worldwide since the start of production over 18 years ago. Edgetech received the 1994 "Solar Company of the Year" award issued by Solar Energy Society of Canada, Inc. Edgetech is also an Energy Star Partner.

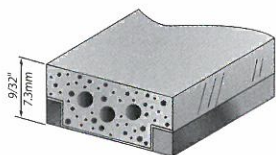
Testing Data is available to show that IG's made with Super Spacer meets or exceeds standards used in the USA, Canada, Germany, Great Britain, Norway, China and Europe. It also meets Dade County Hurricane standards.





# Super Spacer Selection Chart

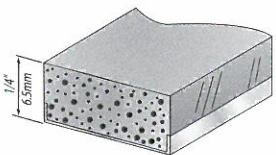
## for Architectural Structural and Captured Glazing Units



### TRISEAL™

Available sizes: 0.323" (8.2mm) to 0.874" (22.2mm) airspace  
 Standard Color: Black, Grey and Aluminum Grey  
 Optional Colors: Are Available (Minimum Order Required)  
 Custom Options: As defined by Specifier (Minimum Order Required)

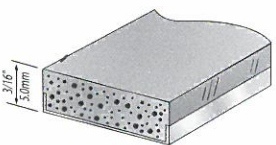
## for Architectural Captured Glazing Units



### PREMIUM PLUS

(Recommended for IG greater than 65 sq. ft.)

Available sizes: 0.125" (3.2mm) to 0.787" (20.0mm) airspace  
 Standard Colors: Black, Grey and Aluminum Grey  
 Optional Colors: Are Available (Minimum Order Required)  
 Custom Options: As defined by Specifier (Minimum Order Required)



### PREMIUM

Available sizes: 0.188" (4.8mm) to 0.787" (20.0mm) airspace  
 Standard Colors: Black, Grey and Aluminum Grey  
 Optional Colors: Are Available (Minimum Order Required)  
 Custom Options: As defined by Specifier (Minimum Order Required)

## COMPARISON OF SUPER SPACER PRODUCT PERFORMANCE

	Aluminum Spacer	Stainless	TriSeal™	Premium/Premium Plus
Glass Surface Temperature	Poor	Good	Excellent	Excellent
Thermal Performance	Poor	Good	Excellent	Excellent
Condensation Resistance	Poor	Good	Excellent	Excellent
Edge Seal Integrity	Good	Very Good	Excellent	Excellent
Dew Point Drop	Good	Good	Excellent	Excellent
Sound Absorption	Good	Good	Excellent	Excellent
Sealant Stress Reduction	Good	Very Good	Excellent	Excellent
Compression Set	Good	Good	Excellent	Excellent
UV Resistance	Excellent	Excellent	Excellent	Excellent
Desiccant Capacity	Excellent	Excellent	Excellent	Excellent*
Structural Strength	Excellent	Excellent	Excellent	Excellent
Volatile Out-Gassing	Pass	Pass	Pass	Pass
Triple Glaze	Yes	Yes	Yes	Yes
Wind Loading	Very Good	Very Good	Excellent	Excellent
Captured Glazing	Yes	Yes	Yes	Yes
Structural Glazing	Yes	Yes	Yes	No
Compatible with Performance Coatings	Yes	Yes	Yes	Yes
Standard Colors	Varies	Varies	Three	Three
Optional Colors	Available	Available	Available	Available
Custom Colors	Available	Available	Available	Available



# Specifying Super Spacer®

## PART 1 - GENERAL

### References (contact Edgetech for details)

1. United States ASTM E773/E774 for Class CBA.
2. United States NFRC label for Energy Star performance.
3. United States ASTM E2188/ E2189/ E2190 for HIGS.
4. Canadian CGSB 12.8 - M90, minimum 90% initial Argon fill (when required).
5. Industry type P-1 testing.
6. European CEN 1279 Parts 2, 3, and 6.
7. French Standard CSTB for CEKAL.

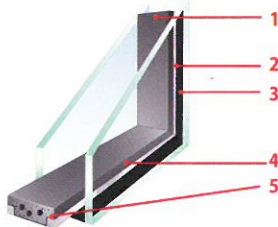
### System Description

Super Spacer is a flexible, silicone foam product providing maximum perimeter insulation for sealed insulating glass units. It is desiccant filled with pre-applied adhesive for bonding to the glass with a vapor barrier backing.

### Submittals

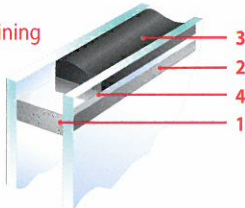
**Super Spacer® TriSeal™** features a continuous vapor barrier backing across the profiled back of the spacer, and is engineered to accept both a butyl primary seal and a silicone secondary seal.

- 1 Thermoset structural silicone foam containing NO-Metal with integral 3A desiccant
- 2 PIB primary seal
- 3 Silicone, Polyurethane, Polysulfide, DSE/DSA's or Hot Melt secondary seal
- 4 Pressure-sensitive acrylic adhesive
- 5 Pre-applied advanced multi-layer vapor barrier



**Super Spacer® Premium Plus and Premium** are flexible, silicone foam spacers that provide the maximum in perimeter insulation for sealed glazing units.

- 1 Thermoset structural silicone foam containing NO-Metal with integral 3A desiccant
- 2 Pre-applied sealant/adhesive for glass bonding
- 3 Secondary Sealant
- 4 Pre-applied advanced multi-layer vapor barrier



### Quality Assurance

Edgetech is an Energy Star® Partner. The company has also earned the Solar Company of the Year Award from the Solar Energy Society of Canada Inc. and the Crystal Achievement Award for various marketing programs.

### Warranty

Edgetech warrants that the Product (Super Spacer Premium Plus, Premium, and/or TriSeal) will be free from manufacturing defects at the time of shipping from Edgetech. Further, Edgetech agrees to replace any Product (Super Spacer Premium Plus, Premium, Super Spacer and/or TriSeal) that fails because of manufacturing defect. Super Spacer Premium Plus, Premium, and/or TriSeal are guaranteed not to blister or bubble within 40 years of purchase.

This warranty applies under conditions of normal use by window manufacturers and does not apply to defects that result from intentional damage, improper storage or excessive exposure prior to use. This warranty does not apply to edge-seal workmanship, which is the responsibility of the insulating glass manufacturer.

## PART 2 - PRODUCTS

### Manufacturer

Edgetech I.G. Inc. • 800 Cochran Avenue • Cambridge, Ohio 43725  
T: 740.439.2338 • Toll Free: 866.TRUEWARM • F: 740.439.0121  
[www.superspacer.com](http://www.superspacer.com)

Edgetech UK • Stonebridge House, Rowley Drive • Stonebridge Trading Estate  
Coventry, England CV3 4FG • T: +44 (0) 2476 639931 • F: +44 (0) 2476 639727  
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T: +49 (0)2131 606 844 • F: +49 (0)2131 606 843 • [info@edgetech-europe.com](mailto:info@edgetech-europe.com)  
[www.superspacer.com](http://www.superspacer.com)

### Insulating Glass Units

#### Specification Description:

**Super Spacer TriSeal**—a triple seal design suitable for Structural Glazing, consisting of a thermoset foam spacer incorporating integral 3A desiccant, pre-applied adhesive for glass bonding, a captive polyisobutylene primary seal, and a structural seal.

**Super Spacer**—a reverse dual seal design consisting of a thermoset foam spacer, multi-layer vapor barrier and preapplied sealant/adhesive for glass bonding requiring a secondary seal.

Please refer to [superspacer.com/techinfo/bulletins](http://superspacer.com/techinfo/bulletins) for recommended IG sealants Technical Bulletin RD0018.

## PART 3 - EXECUTION

### Installation

No special procedures required for IG units fabricated with the Super Spacer system.

### Field Quality

No special inspection procedures required for IG units fabricated with the Super Spacer system.

### Protection

Follow usual requirements for protecting IG units.

**AVAILABILITY** Super Spacer products are available throughout the world through insulating glass manufacturers, dealers, distributors and direct from Edgetech I.G. Inc. Please contact the location nearest you for further information, technical data, specifications, samples or a list of insulating glass fabricators using Super Spacer.

