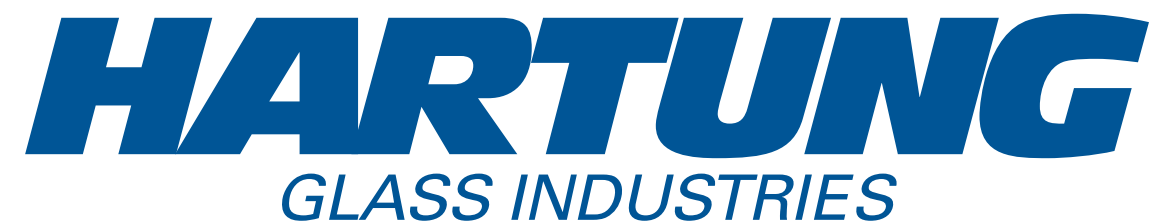


Hartung Glass Industries offers competitively priced, clean and fast Super Spacer IGUs with the widest selection of glass substrates on the West Coast.

All residential Insulating Glass Units are backed by Hartung's lifetime warranty.



For information, samples and locations:  
Toll Free: 1-800-552-2227  
sales@hartung-glass.com  
www.hartung-glass.com

*Super Spacer®*

www.hartung-glass.com

HIGH PERFORMANCE INSULATING GLASS UNITS  
PPG CARIBIA / PPG SOLARBAN 60 ON #3  
COMPLETE WITH  
SUPER SPACER WARM EDGE FOAM SPACER SYSTEM  
FAIRBANKS IMAGING CENTER, FAIRBANKS, AK  
GLAZING CONTRACTOR: BUCHER GLASS  
ARCHITECT: MARTHA HANLON ARCHITECTS, INC.

Ref# 7014 HGI Super Spacer Brochure



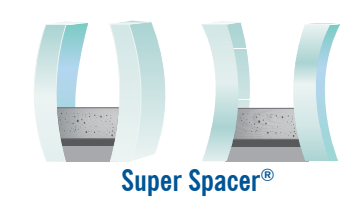
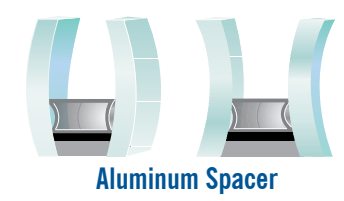
# Meet or exceed energy and code requirements with high performance Super Spacer Warm Edge IGUs from Hartung Glass Industries

## REDUCES SEALANT STRESS

Super Spacer's thermoset polymer material expands and contracts and always returns to its original shape.

Super Spacer sealed IG units last up to five times longer in durability tests than conventional single seal units.

Super Spacer features superior Argon gas retention.



## IMPROVES HEAT FLOW RESISTANCE

The all-foam formula blocks heat transfer and provides one of the best thermal performances available.

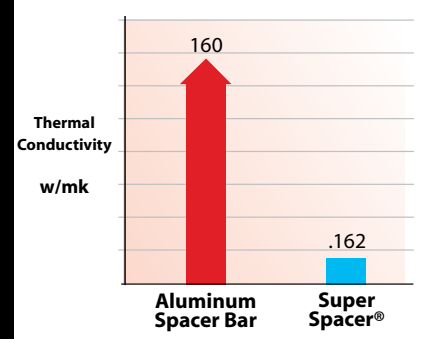
Super Spacer resists heat flow 950 times more than that of aluminum. This means lower energy costs, less condensation/frosting and reduced chances for mold growth.



## IMPROVES GLASS SURFACE TEMPERATURE

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

Super Spacer units withstand 140°F/60°C temperatures, 95-100% humidity and constant UV bombardment in the world's toughest durability test - The P-1 chamber.



## IMPROVES SOUND ABSORPTION

The closed-cell polymer foam in Super Spacer transmits very little sound compared to conventional aluminum spacers.

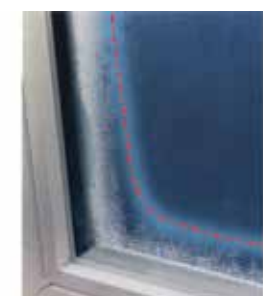
Acoustical laminated glass, Super Spacer and varying thicknesses of glass are recommended wherever noise from airplanes, trains or automobiles are a concern.



## IMPROVES CONDENSATION RESISTANCE

Mold needs moisture to grow. Moisture can increase the likelihood of fungi, viruses and mites that can cause infections, allergies and asthma.

The significantly reduced interior condensation or frosting means that the health problems associated with mold may be virtually eliminated.



A dual seal, Warm Edge IGU featuring the Super Spacer® system is better able to ensure NFRC ENERGY STAR® certification by providing the best thermal conductivity, the lowest U-Value among dual-seal systems and the best durability available.



## DSE Sealant

Passing international testing standards, Hartung Tukwila's residential units are manufactured using H.B. Fuller' Insul-Cure 5153 Reactive 'DSE' Sealant, the leading one-part curable sealant for insulating glass.

Insul-Cure is a premium dual seal equivalent "hybrid" sealant with proven durability, flexibility, shear resistance and cured bond strength. The lower moisture vapor transmission rate of the Insul-Cure DSE provides excellent barrier properties. Insul-Cure has no VOC's and is compatible with low-E coatings.

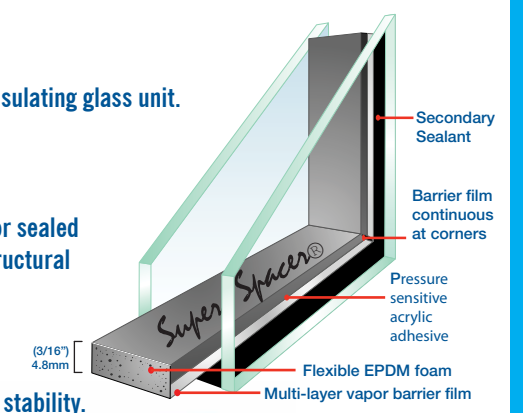
## What is Warm Edge Technology?

"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.

## What is Super Spacer?

Super Spacer® is a flexible, organic foam spacer that provides excellent perimeter insulation for sealed glazing units. The globally tested, award winning product is an extruded, thermoset polymer structural foam spacer with integrally incorporated desiccants. Super Spacer retains its flexibility over a wide temperature range, always returns to its original cured shape and has a low compression set.

Super Spacer exhibits excellent resistance to ozone, sunlight, oxidation and has excellent color stability.



Research proves that insulating glass units manufactured on automated lines have fewer seal failures than manually fabricated IGUs. Hartung Glass Industries currently has six automated insulating glass unit lines.

## Extreme weather performance in cold & hot climate conditions

Fairbanks, AK average winter low temperatures: -15°F (-26°C) to -25°F (-32°C)

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