



Get the warm edge on productivity and performance.

Intercept™ insulating glass units perform better and cost less to manufacture.

Intercept insulating glass technology is the result of a joint development program between PPG Industries, an acknowledged glass industry leader, and GED, Inc., a leading producer of glass handling and fabricating equipment. It allows I.G. unit manufacturers to integrate automated warm edge spacer fabrication into their manufacturing lines, saving labor, reducing spacer material waste, and enabling manufacturers to produce I.G. units of superior thermal performance.



A personal computer controls operation of the Intercept I.G. system ensuring accurate spacer fabrication and virtually no material waste.

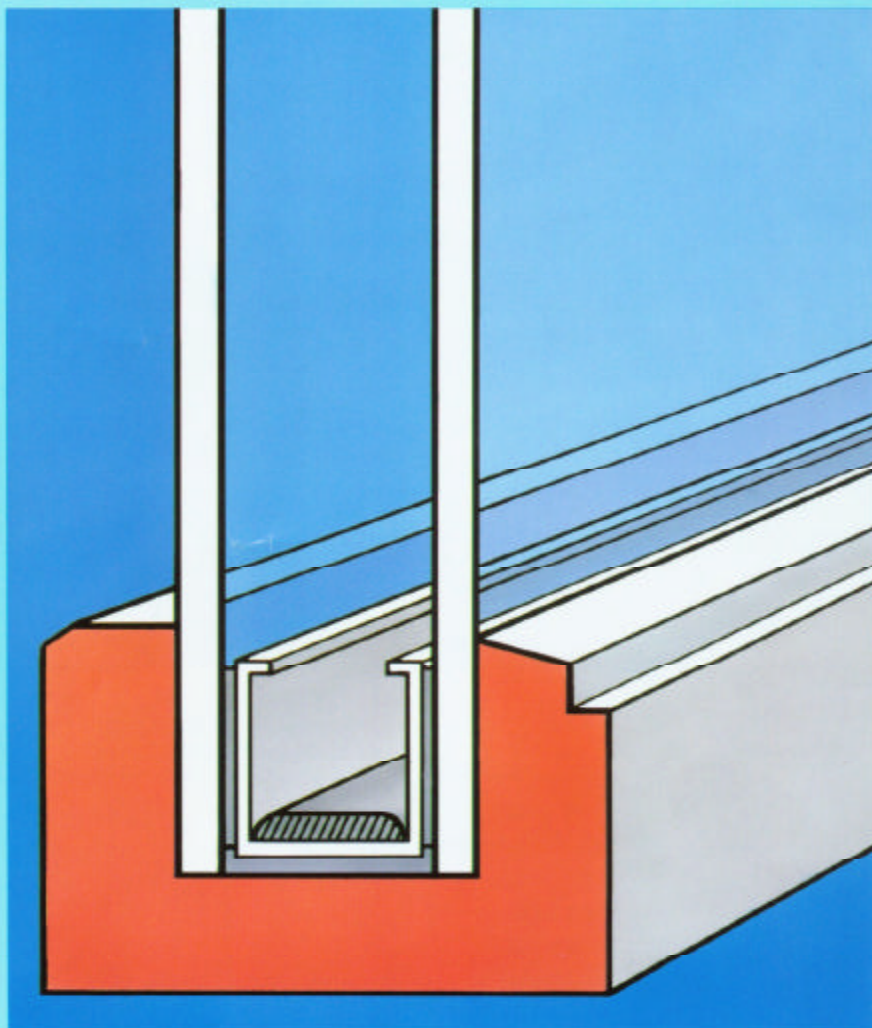
Stainless or plated steel strip is automatically fed into the fabricating machinery for forming and cutting of individual I.G. spacer units.



Desiccant and sealant are automatically applied to the one-piece Intercept I.G. spacer and the unit is ready for installation in the I.G. unit.

Intercept insulating glass technology centers around the automated fabrication of I.G. unit spacers. The Intercept I.G. spacers are made from thin stainless or plated steel strip, automatically formed into a one-piece glass spacer/structural support by computer-operated machinery.

Intercept I.G. technology creates an essentially one-piece spacer that also provides excellent structural

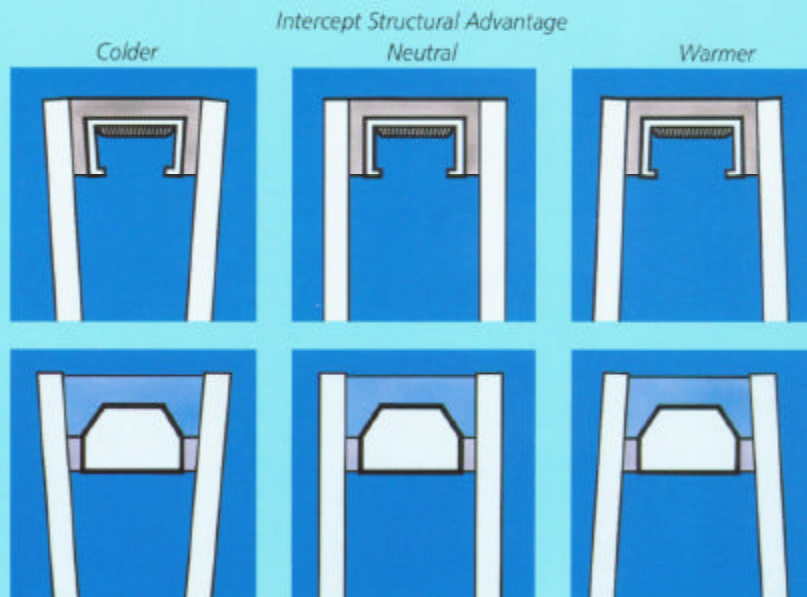


integrity for the I.G. unit in which it is installed. It helps you build "warm edge" I.G. units of superior thermal performance that are also aesthetically pleasing because the "low-profile" U-channel Intercept insulating glass spacer is hidden from sight by the sash.

If you manufacture insulating glass window and door units, you've probably heard a lot about the performance benefits of "warm edge" technology recently. Adding Intercept insulating glass technology to your manufacturing operation is the best way to realize these benefits — and help reduce your manufacturing costs at the same time.

Intercept warm edge technology gives you these important benefits:

- Warmer indoor glass edge temperatures (average 4-5°F) provide excellent condensation resistance.
- Outstanding argon gas retention because the Intercept I.G. spacer is essentially a one-piece unit without corner keys.
- Lower spacer material costs and less wastage vs. aluminum stock and other materials due to automated fabricating process.
- Lower assembly costs because of fewer steps in spacer manufacturing process — and spacer fabrication can easily be integrated into your production line, saving labor costs.



Intercept I.G. spacer (top) flexes instead of sealant during temperature changes. So it resists spacer movement and sealant failure.

- No glass edge preparation or degreasing necessary with proper material selection.
- Low-profile, U-channel Intercept I.G. spacer creates more aesthetically pleasing I.G. units.

Intercept I.G. technology vs. the competition.

Intercept insulating glass technology not only provides I.G. manufacturers with warm edge technology that offers superior thermal performance and aesthetics, it retains its performance over the years thanks to its innovative spacer system design.

With most competitive technologies, thermal cycling can weaken the sealant- to glass and sealant-to-spacer bonds. As the window shrinks and contracts, it can cause the spacer to

“walk” out of its original position and lose its bond to the glass, causing a seal failure. With Intercept I.G. technology, however, thermal cycling stress is absorbed primarily by the steel spacer material rather than the sealant. The result is a high resistance to spacer migration and improved unit seal longevity.

Which means better thermal performance integrity — and fewer call-back problems for you.

Incorporating Intercept insulating glass technology into your I.G. unit designs can provide labor and material savings. And the improved thermal performance your I.G. units will gain will make them more desirable to consumers.

For more information on how to get Intercept insulating glass technology for your operation, contact your PPG glass representative.

WINDOW UNIT COMPARISON - THERMAL PERFORMANCE			
	PPG Warm Edge (S.S. Spacer)	PPG Warm Edge (Steel Spacer)	Conventional Aluminum Spacer
Center U-Value	.26	.26	.26
Emissivity (low E glass)	.10	.10	.10
Edge U-Value	.55	.59	.63
Warm Edge Avg. Temp.	38.2°F	37.1°F	33.8°F
Frame U-Value	.23	.25	.26
Window U-Value	.33	.34	.35
Allow. RH @ 70°F	31%	30%	26%
Min. Roomside Bottom Temp.	30.0°F	30.0°F	26.0°F

(Conditions: 2.5mm Glass, 1/2" Spacer, Argon Gas Filled, Low-E, 0°F Outside, 70°F Inside)

Performance comparison of Intercept I.G. unit vs. competitive technologies.

The Intercept™ insulating unit and/or components to make the unit are covered by U.S. Patent Nos. 5,177,916 and/or 5,255,481 and/or one or more pending U.S. pending applications.



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