

Hybrid Super Spacer

A real breakthrough for high volume IG manufacturers

High volume, metal-spacer-based IG manufacturers are looking to adopt warm-edge technology. Many of them can now contemplate on doing so quickly and easily, say Edgetech engineers, and even be in the enviable position of offering their customers the second-best, energy-efficient edge-seal on the market today.

"The best, of course, is regular, half-inch Super Spacer, but the next best is still two thirds as good," says engineering director, Gerhard Reichert, "and that's a 1/4" Super Spacer"/1/4" metal spacer hybrid combination. For many large metal-based operations, there's minimal retooling necessary. They could make the switch tomorrow."

"With a year's worth of production at Thermalite Industries in Montreal, now under out belts, we're prepared to say Hybrid Super Spacer is a real breakthrough," Reichert states.

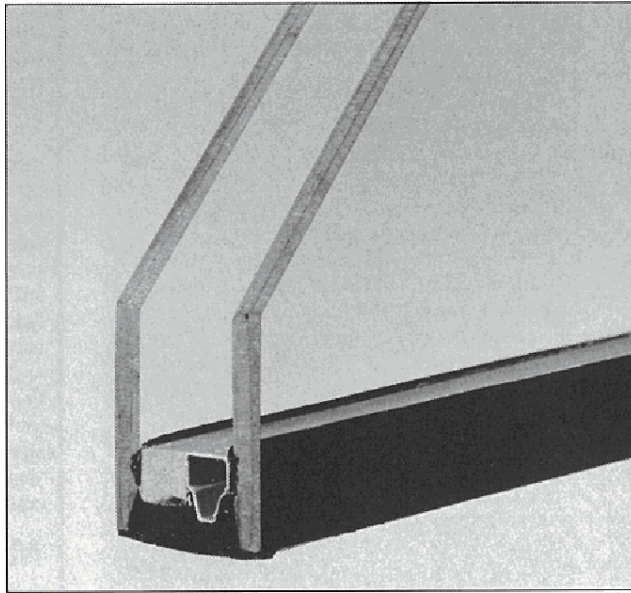
Thermalite president, Bill Marchitello, says, "Our company liked the thermal-break idea, right from the outset. We believed the advent of insulating spacers is obviously where thermals are going to lead, and we wanted to get on the bandwagon."

Probably the most important aspect of the company's decision to go ahead with a hybrid, says Marchitello, was the fact, that, "we could run it through our regular production."

Marketed throughout Quebec and eastern Ontario, under the trade name, R-Tech, "We've had no problems, and no returned product so far," he says, "and we've even gone through our first winter."

The most efficient large-volume production that Edgetech envisages for hybrid Super Spacer could exceed 1,000 units per shift, says Gerhard Reichert.

This is accomplished by using a simple piece of specially developed laminating equipment to



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adhere pre-notched Super Spacer™ to metal spacer lengths, after which the hybrid assembly is fed into linear butyl extrusion equipment, such as the GED system, and then the rigid spacer-frames assembled using special folding corner keys.

With hybrid production techniques under development for GED equipped operations, Edgetech engineers are also investigating the best approach to take with metal-spacer bending equipment.

One of the delights about hybrid Super Spacer is the ease with which a polyisobutylene dual-seal can be obtained, says Reichert. "Once the foam spacer has been adhered to the metal spacer, it's just a matter of conventionally applying PIB to the sides of the assembly and along the joint between the two

spacers."

"A big advantage of these PIB/hybrid units is that with conventional dual-seal technology, minimum long-term gas loss is assured," he says.

A dual seal Super Spacer hybrid assembly can be backed by essentially any sealant option including, solvent-based polysulphides from Morton International, and more permeable silicone sealants manufactured by Dow Corning and General Electric.

"IG manufacturers will find something else to like about hybrid Super Spacer'," adds Reichert. "It retains enough of the desiccant capacity of regular Super Spacer', that the messy task of bead-filling metal spacers can be completely eliminated," he explains, "thus actually boosting their existing IG production rates."

Making the switch to warm edge technology is a big step for IG manufacturers, but in choosing to do so, companies want to be assured of a thermally-competitive product.

"Hybrid Super Spacer even guarantees them that," says Reichert. "Computer analysis we've recently carried out indicates that as little as 1/8" of Super Spacer plus 3/8" metal spacer, can outperform mid-performance products like Swiggle Strip"

"It's because of the fact, that, when Swiggle Strip is installed in a typical compression glazing, it's zig-zag conductive metal core pushes through the butyl sealant and touches the glass," he says.

"Since computer analysis shows that the 1/4" hybrid can provide three times the improvement that Swiggle Strip does over metal spacers" says Reichert, "manufacturers can rest assured they'll have the best warm-edge spacer system on the market, apart from Super Spacer itself."

New low profile Super Spacer aimed at shallow sightline and divided-light markets

To accommodate the growing true-divided-light market for IG products, as well as the specialized sight-line needs of many of today's wood-window manufacturers, Edgetech is introducing a 20% lower-profiled Super Spacer' with still enough desiccant capacity to meet IG performance requirements.

Available in widths up to 5/8", and in the same custom colors as regular Super Spacer', Edgetech's new low profile product is "excellent" for true muntin-bar applications, and window-makers tooled-up for a three-eighths-inch sightline, says the company's technical director, Michael Glover.

Edgetech Minneapolis sales representative, Arne Wetsch, reports a growing popularity in true divided lights, with consumers of IG products, "and the big thing about TDL is that they're all edges."

"Low profile is a must for visual reasons," he says, "but more importantly, with a 10-fold increase in edge area, compared to a regular window, they

can give you a very cold effect unless you use an insulating spacer."

Wood-window manufacturers, particularly those in business prior to the mid-eighties, have a problem dealing with the higher sightlines (7/16") that have come about in today's "super" IG products. Three-eighths used to be the norm, and many wish to stay there to avoid the time lost in re-tooling, and the creation of undue inventory problems.

The problem is critical enough to these manufacturers that it is not unknown for whole truckloads of metal-spacered IG to have been sent back as they didn't meet the 3/8" requirement.

Edgetech's new low profile Super Spacer will advance us into new markets, as with true-divided-light, and give us a wider crack at some older ones, the wood-window people," says Glover. The product will be formally introduced at interGLASSmetal'91 in Houston, Texas.

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