GARIBALDI
GLASS since 1966



REACTIVE TPS®

REACTIVE THERMOPLASTIC SPACER

ONE INTEGRATED SYSTEM

Reactive TPS® integrates the spacer, desiccant, and primary seal into a single robotically applied system that chemically bonds to the glass and silicone secondary sealant. The result is a continuous, flexible edge seal engineered to maintain gas retention and thermal performance over the life of the unit.

PERFORMANCE ADVANTAGES

- **CHEMICAL BONDING TO GLASS**
  Molecularly bonds to glass and silicone sealants, eliminating the rigid corner stress points found in conventional spacer systems.
- **PRECISE SIGHTLINES**
  Robotically applied for accurate spacer alignment, dimensional consistency, and clean triple-glazed sightlines.
- **LOWER COST OF OWNERSHIP**
  Reduces common edge seal failures, extending IGU service life and lowering replacement costs.
- **LOWER EDGE HEAT LOSS**
  Reduces perimeter heat loss while supporting energy code compliance.
- **CLEAN EDGE AESTHETICS**
  No desiccant dust, or scalloping. A continuous black sightline across any framing system.
- **SUPERIOR GAS RETENTION**
  Maintains Argon content through all 10 rounds of EN 1279-3 progressive weathering, outperforming competing spacer systems in the test sequence.

REACTIVE TPS® vs HARD SPACER BAR

This warm edge system offers unlimited insulating glass unit [IGU] shapes and design, excellent thermal performance, maximum gas tightness, and low Moisture Vapor Transmission Rate [MVTR]. As a permanently flexible spacer, its high elasticity and chemical bonding result in better mechanical performance during environmental changes.

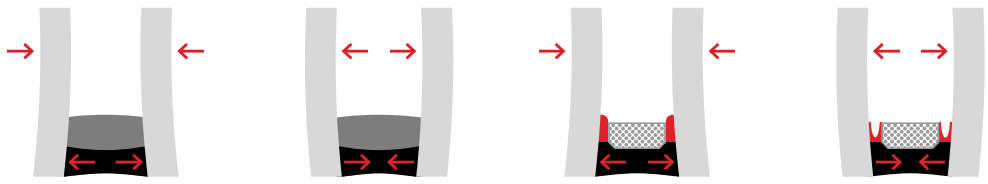


Figure 1: Reactive TPS® stays gas-tight during expansion and compression cycling of the unit. Stress is extended over the full spacer width and not concentrated only on the edges. This helps retain gas tightness and energy efficiency. Source: H.B. Fuller

FOR MORE INFORMATION PLEASE CONTACT YOUR SALES REPRESENTATIVE

FABRICATION CAPABILITIES

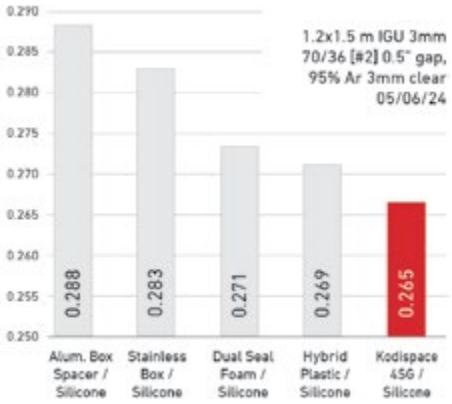
- Unit sizes from 12⅝" × 7" to 130" × 240" jumbos
- Double and triple Low-E configurations with integrated conveyor rotation to protect coated surfaces during assembly
- Up to 80mm overall unit thickness with precise dimensional consistency
- Enhanced glass adhesion through a 6mm chemically bonded interface, vs traditional 4mm butyl systems
- 3-sided offset production, on-line
- Stable to 90°C for high-heat and dark-framed applications

BUILT TO LAST

- Extended service life reduces IGU replacement frequency, lowering embodied carbon over the envelope lifecycle
- Sustained Argon retention and warm-edge construction improve centre-of-glass and edge U-values, supporting operational energy targets

WARM EDGE SYSTEM COMPARISON

Reactive TPS® sets the standard in edge seal performance with its significantly lower Edge Seal U-Factor, ensuring superior insulation and reduced heat loss.



Note: Performance data provided by H.B. Fuller.

PERFORMANCE COMPARISON

	Reactive TPS®	Foam Spacer	Hybrid Spacer	Stainless Steel
Gas Retention	●●●	●○○	●●○	●●○
Thermal Conductivity	●●●	●●●	●●●	●○○
Flexibility	●●●	●●○	●○○	●○○
Robotically Applied	●●●	●●●	-	-
Asthetics	●●●	●●○	●○○	●○○
Durability	●●●	●●○	●●○	●●○
Chemical Bonded to Glass	●●●	-	-	-
Higher Temperature Stability	●●●	-	-	-
Automated Thickness Application	●●●	-	-	-

Note: Performance data provided by H.B. Fuller.



EDGE SEAL COMPARARISON

The edge seal comparison below evaluates spacer systems through 10 rounds of progressive weathering per EN 1279-3. Reactive TPS® maintains above 90% Argon content through the full test sequence while competing systems reach frost point failure.

Edge Seal Comparison - Progressive Weathering [EN1279-3]

	Initial Argon Content	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Round 8	Round 9	Round 10
Reactive TPS®	**99**	**98**	**98**	**97**	**96**	**96**	**95**	**94**	**94**	**93**	**92**
Aluminum Spacer	93	93	92	92	91	89	Frost Point Failure				
Hybrid Spacer #1	92	92	91	90	89	86	Frost Point Failure				
Hybrid Spacer #2	91	90	90	90	86	Frost Point Failure					
Foam Spacer	95	93	85	Frost Point Failure							

Note: Performance data provided by H.B. Fuller.