



## THE BENEFITS OF **KOMMERLING KÖDISPACE 4SG** **REACTIVE THERMOPLASTIC WARM EDGE SPACER**

H.B. Fuller's Ködispace 4SG Warm Edge Spacer System is the premier solution for both commercial and residential applications. Characterized by high energy efficiency, superior gas retention, and an automated process resulting in more precise spacer placement, Ködispace 4SG is currently the only reactive thermoplastic spacer system available.

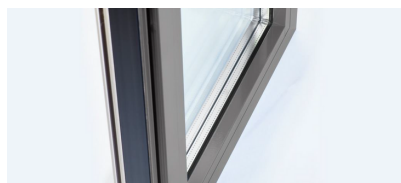
Features and benefits of Ködispace 4SG include:

- Reduced labor costs given the highly automated process
- Overall higher quality and more durable insulating glass (IG)
- Excellent energy performance
- Low moisture vapor transmission rate
- High flexibility
- Long service life

The patented formulation chemically bonds to glass and silicone secondary sealant. There is no spacer migration, and it has a higher temperature stability than standard insulating glass with PIB in addition to an increased resistance to incompatible glazing conditions. Its migration resistance is proven through extensive laboratory testing.

Warm edge spacers have a lower thermal conductivity than conventional aluminum spacers, resulting in a significant reduction of the thermal bridge in the border and minimized cooling of the insulating glass edge. For optimal performance, the warm edge must retain the argon gas filling. Few warm edge alternatives hold gas in as well as Ködispace 4SG. With Kodispace 4SG, the insulating glass unit stays gas-tight during normal expansion and compression cycling of the unit. This feature helps extend the life cycle of the insulating glass much better than other warm edge options.

The invisible thermoplastic spacer system ultimately results in a more visually appealing insulating glass, creating a harmonious connection between glass and frame. Additionally, the auto-adjusting application provides unparalleled flexible design freedom and triple glazing manufacturing precision.



Conventional metal spacer profile appears shiny with a perforated surface.



Ködispace 4SG profile appears matte black with a smooth surface.

Ködispace 4SG is certified to ASTM E2188/E2189/E2190 standards, and it is included on the IGCC/IGMA list of Reviewed Spacers and Integrated Spacer Systems. It fulfills the requirements of the EN 1279-2 and EN 1279-3 European standards, and after five cycles, the dew point remained below  $-40^{\circ}\text{C}$ , the max lav was 12 percent, and the gas content was still greater than 85 percent.

Additionally, based on HB Fuller's testing, the life expectancy of 4SG is greater than 40 years.