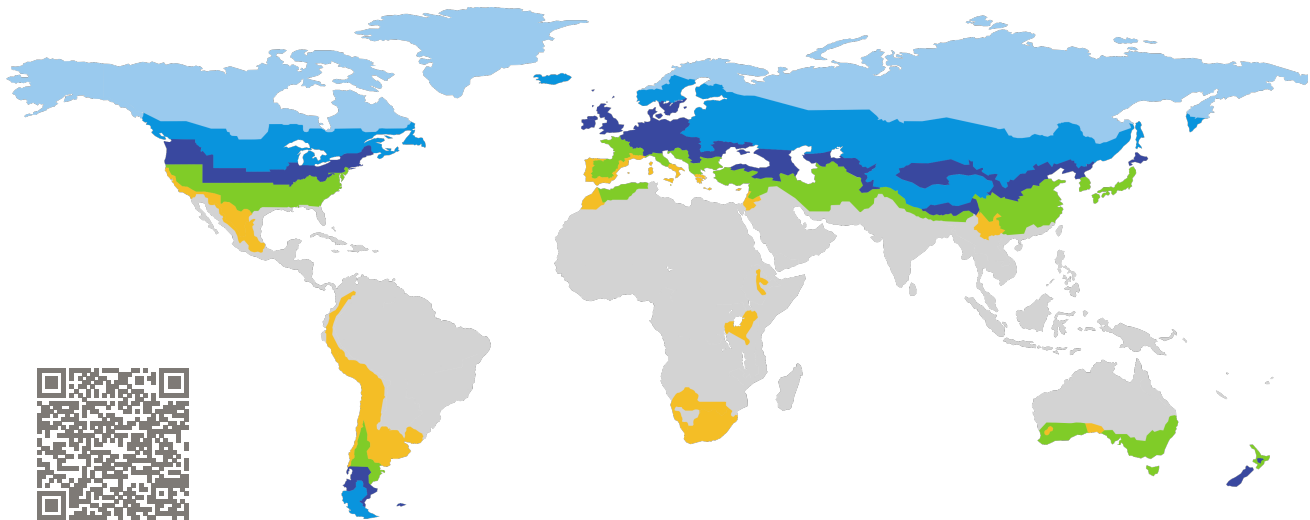


CERTIFICATE

Certified Passive House Component

Component-ID 0862sp01 valid until 31st December 2017

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: **Spacer for low-E-glazing**
Manufacturer: **Edgetech Europe GmbH,
Heinsberg,
Germany**
Product name: **Super Spacer Premium**

This certificate was awarded based on the following criteria:

Depending on the climatic region, the spacer prevents high surface temperatures, which can cause mould. At least 3 out of the 7 reference frames fulfilled the spacer hygiene criteria for the relevant climatic region.

Hygiene $f_{Rsi} \geq 0.80$

The specific resistance of the spacer's edges is greater than the climate-independent minimum requirement.

Efficiency $R_E = 6.11 \text{ m K/W} \geq 1.50 \text{ m K/W}$

| Type |
|----------------------------|
| Vollkunststoff |
| Height Box 2 |
| 4.70 mm |
| Thermal conductivity Box 2 |
| 0.15 W/(m K) |

Only valid with Hotmelt Butyl secondary seal.



Passive House
efficiency class

phE

phD

phC

phB

phA

phA+

www.passivehouse.com

**CERTIFIED
COMPONENT**

Passive House Institute

Description

Only valid with Hotmelt Butyl secondary seal.

Flexible spacer made from silicone foam with integrated drying agent and lateral adhesive.

Spacer height: 4.70 mm

Thermal conductivity: 0.15 W/(m K) (WA 17/1, ift Rosenheim)

Available spacer widths: 5.00–25.00 mm

| Appropriate secondary seal | Specific edge resistance R_E | Efficiency class |
|----------------------------|--------------------------------|------------------|
| Hotmelt Butyl | 7.82 m K/W | phA+ |
| Butyl | 7.82 m K/W | phA+ |

Explanation




































Spacers are categorized into different efficiency classes based on the resistance of their edges R_E . A secondary polysulfide sealant is typically used, unless the spacer is not approved for polysulfide. A detailed report with the calculations is available from either the manufacturer or the Passive House Institute.

The Passive House Institute has defined global component requirements for seven climate regions. In principle, components that have been certified for climates with higher requirements can also be used in climates with lower requirements. This may be economically advantageous.

Use in PHPP:

If individually calculated values are not available then the thermal bridge loss coefficient specified in this document can be used. In this case, the appropriate reference frame must be selected and a 10 % safety margin should be applied.

Further information regarding certification is available on www.passivehouse.com and www.passipedia.org.

| Climate | Reference frames calculated with Hotmelt Butyl | | | | |
|---------------------------------|---|---|---|---|---|
| | Arctic ✓ | Cool ✓ | Cool temperate ✓ | Warm temperate ✓ | Warm ✓ |
| Glass | Quadruple | Triple | Triple | Triple | Double |
| Glass package | 4/12/3/12/3/12/4 | 6/18/2/18/6 | 6/16/6/16/6 | 6/16/6/16/6 | 6/16/6 |
| Glass U-value | 0.35 W/(m ² K) | 0.52 W/(m ² K) | 0.70 W/(m ² K) | 0.70 W/(m ² K) | 1.20 W/(m ² K) |
| Timber-aluminium integral frame |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.48 | 0.62 | 0.73 | 0.87 | 1.03 |
| Ψ_g [W/(m K)] | 0.024 | 0.026 | 0.027 | 0.026 | 0.031 |
| f_{Rsi} [-] | 0.82 ✓ | 0.78 ✓ | 0.73 ✓ | 0.72 ✓ | 0.64 ✓ |
| Timber-aluminium |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.54 | 0.57 | 0.75 | 0.97 | 1.19 |
| Ψ_g [W/(m K)] | 0.025 | 0.026 | 0.027 | 0.027 | 0.033 |
| f_{Rsi} [-] | 0.79 | 0.76 ✓ | 0.71 ✓ | 0.68 ✓ | 0.56 ✓ |
| Timber |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.51 | 0.53 | 0.78 | 0.86 | 0.99 |
| Ψ_g [W/(m K)] | 0.022 | 0.024 | 0.025 | 0.026 | 0.031 |
| f_{Rsi} [-] | 0.80 ✓ | 0.46 | 0.75 ✓ | 0.74 ✓ | 0.64 ✓ |
| Vinyl |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.70 | 0.75 | 0.82 | 1.02 | 1.16 |
| Ψ_g [W/(m K)] | 0.026 | 0.027 | 0.029 | 0.030 | 0.036 |
| f_{Rsi} [-] | 0.80 ✓ | 0.78 ✓ | 0.75 ✓ | 0.74 ✓ | 0.63 ✓ |
| Aluminium |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.60 | 0.61 | 0.71 | 0.73 | 1.17 |
| Ψ_g [W/(m K)] | 0.025 | 0.027 | 0.029 | 0.029 | 0.037 |
| f_{Rsi} [-] | 0.82 ✓ | 0.81 ✓ | 0.78 ✓ | 0.78 ✓ | 0.65 ✓ |
| Curtain wall timber |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.60 | 0.65 | 0.66 | 0.71 | 1.11 |
| Ψ_g [W/(m K)] | 0.028 | 0.028 | 0.030 | 0.030 | 0.040 |
| f_{Rsi} [-] | 0.81 ✓ | 0.79 ✓ | 0.76 ✓ | 0.76 ✓ | 0.63 ✓ |
| Curtain wall aluminium |  |  |  |  |  |
| U_f [W/(m ² K)] | 0.67 | 0.73 | 0.75 | 0.79 | 1.33 |
| Ψ_g [W/(m K)] | 0.032 | 0.032 | 0.035 | 0.035 | 0.053 |
| f_{Rsi} [-] | 0.81 ✓ | 0.86 ✓ | 0.83 ✓ | 0.83 ✓ | 0.73 ✓ |

