

# CERTIFICATE

## Certified Passive House Component

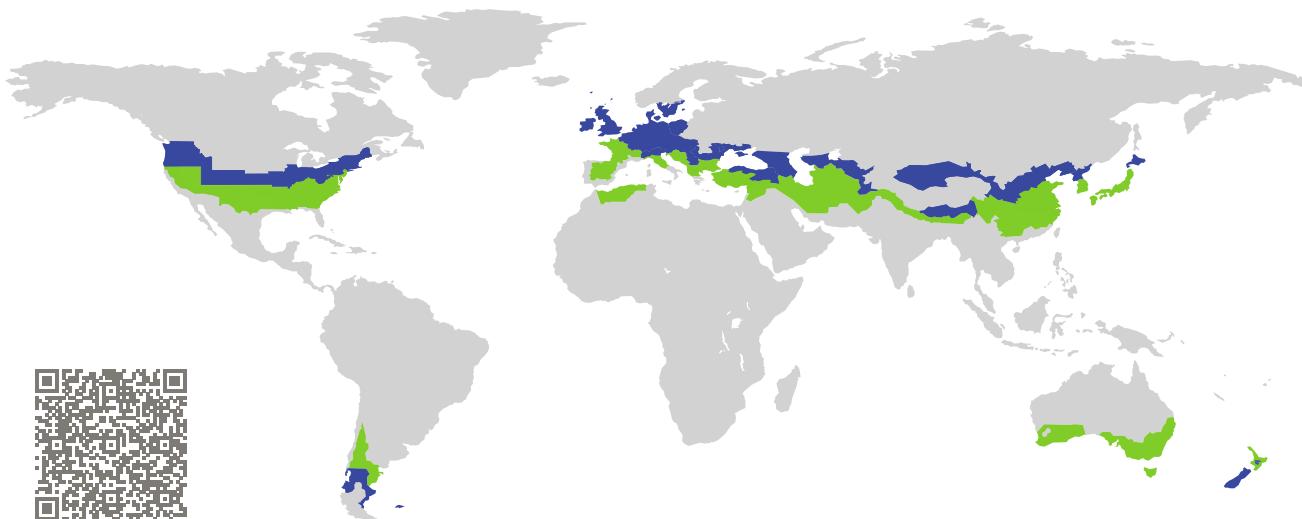
Component-ID 1504sp03 valid until 31st December 2026

Passive House Institute

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Category: **Spacer for low-E-glazing**

Manufacturer: **ROLLTECH A/S,**  
**Hjorring,**  
**Denmark**

Product name: **CHROMATECH ultra S**

Type
Plastic with stainless steel
Height Box 2
6.85 mm
Thermal conductivity Box 2
0.320 W/(m K)



Hygiene  $f_{Rsi} \geq 0.70$

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

Efficiency  $R_E = 3.40 \text{ m K/W} \geq 1.50 \text{ m K/W}$

cool, temperate climate



**CERTIFIED  
COMPONENT**

Passive House Institute

Passive House  
efficiency class

phE

phD

phC

phB

phA

phA<sup>+</sup>

## ROLLTECH A/S

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### Description

Spacer Bar in stainless steel (0.10 mm combined with a special Plastic Top).

Spacer height: 6.85 mm

Thermal conductivity: 0.320 W/(m K) (WA-17/1 measured)

Available spacer widths: 8, 10, 12, 13, 14, 15, 16, 18, 20, 22 and 24 mm

Appropriate secondary seal	Specific edge resistance $R_E$	Efficiency class
Polysulfide	3.40 m K/W	phB
Polyurethane	3.40 m K/W	phB
Silicone	3.60 m K/W	phB

### 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](http://www.passivehouse.com) and [www.passipedia.org](http://www.passipedia.org) .

Climate	Reference frames calculated with Polysulfide				
	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 <sup>2</sup> K)	0.52 W/(m <sup>2</sup> K)	0.70 W/(m <sup>2</sup> K)	0.70 W/(m <sup>2</sup> K)	1.20 W/(m <sup>2</sup> K)
Timber-aluminium integral frame					
$U_f$ [W/(m <sup>2</sup> K)]	0.48	0.62	0.73	0.87	1.03
$\Psi_g$ [W/(m K)]	0.038	0.041	0.040	0.039	0.043
$f_{Rsi}$ [-]	0.77	0.73	0.70 ✓	0.68 ✓	0.58 ✓
Timber-aluminium					
$U_f$ [W/(m <sup>2</sup> K)]	0.54	0.57	0.75	0.97	1.19
$\Psi_g$ [W/(m K)]	0.041	0.043	0.043	0.042	0.048
$f_{Rsi}$ [-]	0.73	0.71	0.66	0.64	0.52
Timber					
$U_f$ [W/(m <sup>2</sup> K)]	0.51	0.53	0.78	0.86	0.99
$\Psi_g$ [W/(m K)]	0.036	0.040	0.039	0.039	0.043
$f_{Rsi}$ [-]	0.75	0.74	0.71 ✓	0.71 ✓	0.60 ✓
Vinyl					
$U_f$ [W/(m <sup>2</sup> K)]	0.70	0.75	0.82	1.02	1.16
$\Psi_g$ [W/(m K)]	0.041	0.044	0.044	0.045	0.050
$f_{Rsi}$ [-]	0.76	0.73	0.71 ✓	0.70 ✓	0.61 ✓
Aluminium					
$U_f$ [W/(m <sup>2</sup> K)]	0.60	0.61	0.71	0.73	1.17
$\Psi_g$ [W/(m K)]	0.044	0.048	0.049	0.049	0.055
$f_{Rsi}$ [-]	0.77	0.76 ✓	0.74 ✓	0.74 ✓	0.61 ✓
Curtain wall timber					
$U_f$ [W/(m <sup>2</sup> K)]	0.60	0.65	0.66	0.71	1.11
$\Psi_g$ [W/(m K)]	0.057	0.056	0.058	0.058	0.070
$f_{Rsi}$ [-]	0.71	0.70	0.67	0.67 ✓	0.53
Curtain wall aluminium					
$U_f$ [W/(m <sup>2</sup> K)]	0.67	0.73	0.73	0.79	1.33
$\Psi_g$ [W/(m K)]	0.067	0.067	0.070	0.070	0.095
$f_{Rsi}$ [-]	0.80 ✓	0.78 ✓	0.76 ✓	0.76 ✓	0.64 ✓

