

# Certificate

## Certified Passive House Component

for cool, temperate climates; valid until 31.12.2019

Passive House Institute  
Dr. Wolfgang Feist  
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Category: **Roller shutter**  
 Manufacturer: **HELLA Sonnen- + Wetterschutztech. GmbH**  
**9913 Abfaltersbach, AUSTRIA**  
 Product name: **TRAV®frame passiv M\_rol-IS**

The certification is based on a standard  
Passive House frame.

### This certificate was awarded based on the following criteria:

The installed window is calculated with the roller shutter box  
at the top and guide rails on both sides.  
The heat losses are determined with  $U_g = 0.70 \text{ W}/(\text{m}^2\text{K})$ ,  
for window dimensions of  $1.23 \text{ m} * 1.48 \text{ m}$  and with

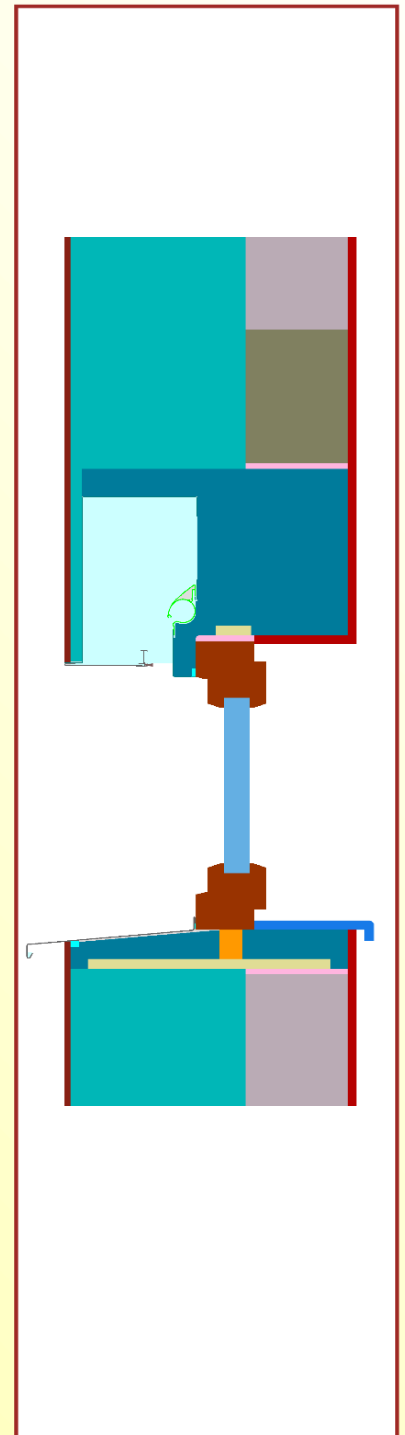
$$U_w = 0.79 \text{ W}/(\text{m}^2\text{K})$$

$$U_{w,\text{installed}} = 0.85 \text{ W}/(\text{m}^2\text{K}) \leq 0.85 \text{ W}/(\text{m}^2\text{K})$$

### This certificate was awarded based

$$f_{Rsi} = 0.25 \geq 0,70$$

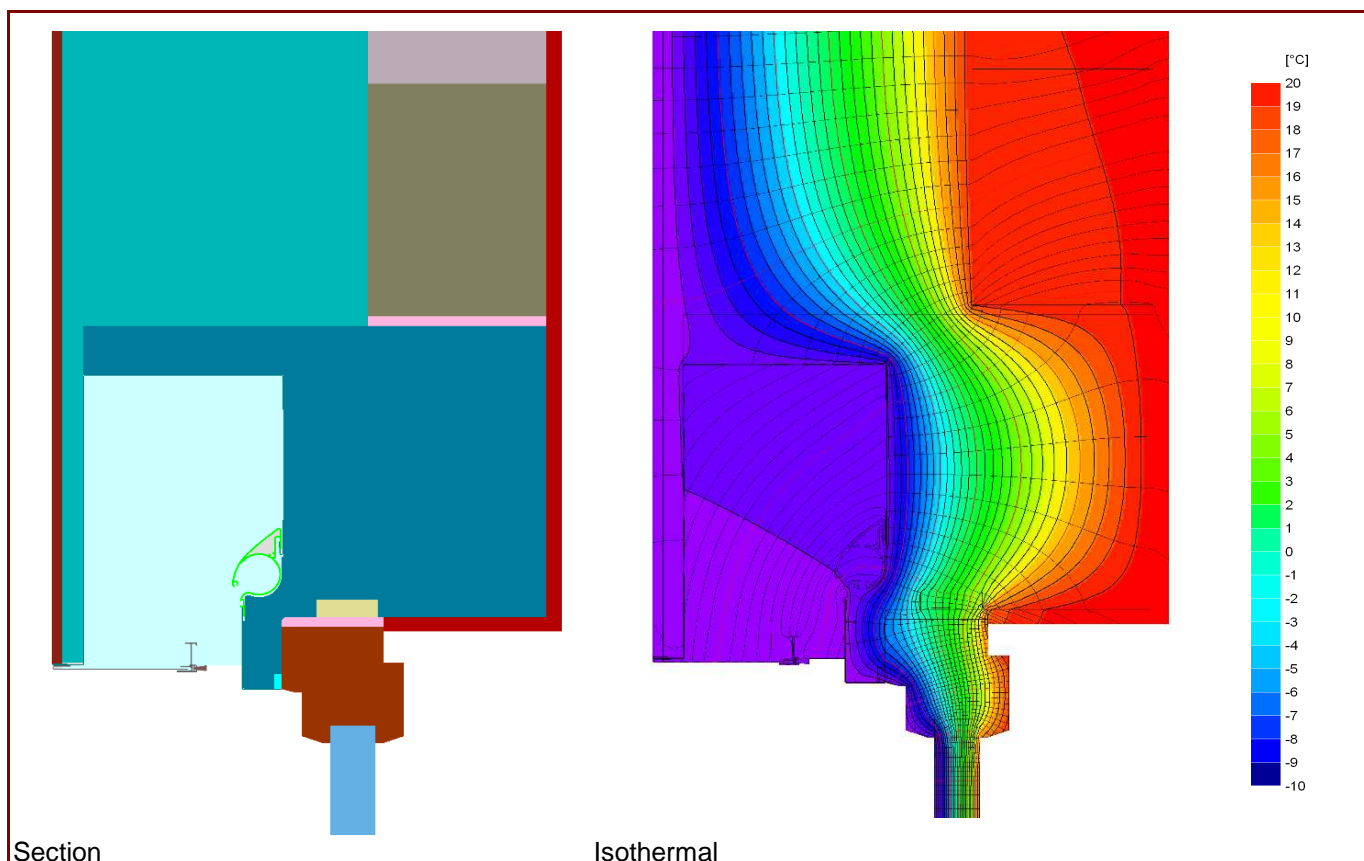
For further information, please see the data sheet



# Data Sheet HELLA Sonnen- und Wetterschutztechnik GmbH, TRAV@frame passiv M\_rol-IS

**Manufacturer** HELLA Sonnen- und Wetterschutztechnik GmbH  
 Abfaltersbach 125, 9913 Abfaltersbach, AUSTRIA  
 Tel.: +43 4846 6555 0  
 Email: office@hella.info, www.hella.info

**Window** standard Passive House frame



## Description

Insulated window reveal system ( $\lambda = 0,031 \text{ W}/(\text{mK})$ ) and roller shutter including insect protection screen.

## Thermal data for the window frame

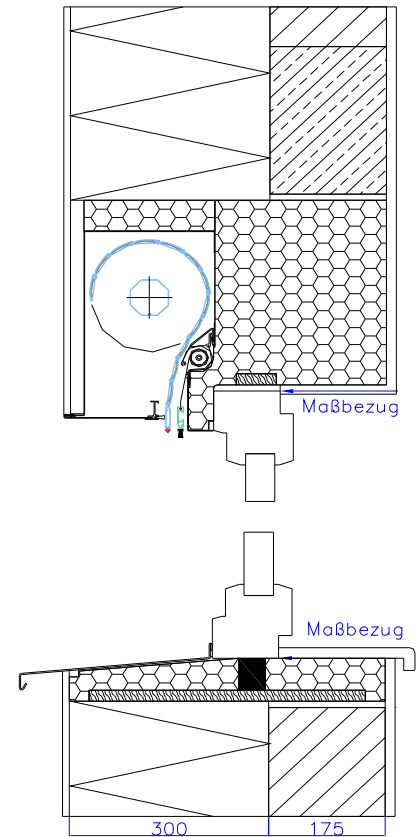
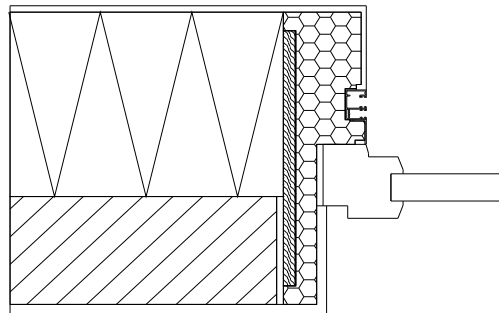
	$U_f$ -value [W/(m <sup>2</sup> K)]	Width [mm]	$\Psi_g$ [W/(mK)]	$f_{Rsi=0.25}$ [-]
spacer	SuperSpacer Tri-Seal*			
bottom	0.80	120	0.026	0.72
side/top	0.80	120	0.026	

\* Spacers of lower thermal quality lead to higher thermal losses and lower glass edge temperatures.

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## certified Installation

**Massivwand WDVS (300 mm WLG 035)**  
with a standard Passive House frame



### Installation based thermal bridge $\Psi_{\text{instal.}}$ in Passive House suitable wall

		EIFS (300 mm)
<b>Position</b>		
<b>bottom</b>	[W/(mK)]	0.030
<b>top</b>	[W/(mK)]	0.029
<b>side</b>	[W/(mK)]	0.008
<b><math>U_{W,\text{instal.}}</math></b>	[W/(m <sup>2</sup> K)]	0.85

### Explanatory notes

The window U-values were calculated based on a 1.23 m by 1.48 m window  $U_g = 0.70 \text{ W}/(\text{m}^2\text{K})$ . If better glazing is used, the window U-values decrease. The influence of a ceiling connection instead of a concrete lintel above the window is negligible as long as the EIFS is not weakened.

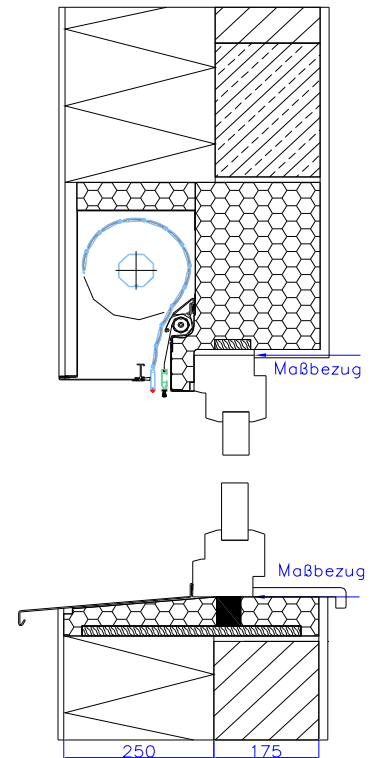
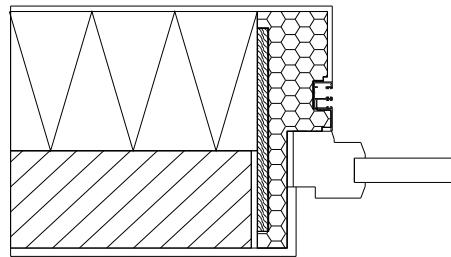
Dimensions refer to the outer edge of the window frame

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## additional installation situations

### EIFS (250 mm WLK 035)

with a standard Passive House frame



$\Psi_{\text{instal. bottom}}$	= 0.040 W/(mK)
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$\Psi_{\text{instal. top}}$	= 0.035 W/(mK)
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$\Psi_{\text{instal. side}}$	= 0.013 W/(mK)
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$U_{W, \text{instal.}}$	= 0.87 W/(m <sup>2</sup> K) *
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\* not certified.

This installation detail does not fulfill the criteria. The heat losses are higher, if the window frame is situated towards the masonry rather than in the insulation layer. These losses have to be compensated for elsewhere.