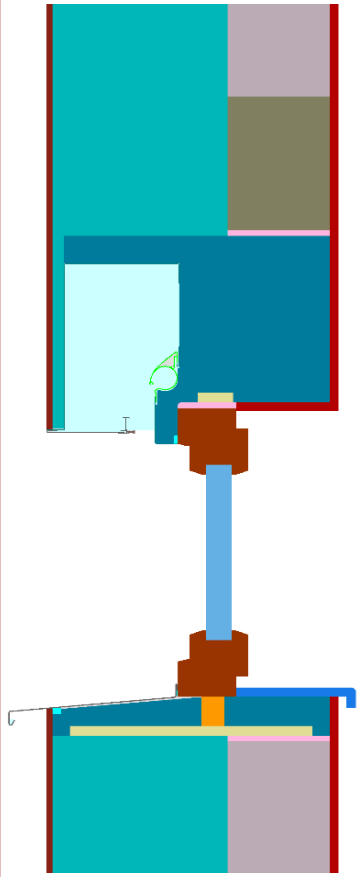
# Certificate

**Certified Passive House Component**
for cool, temperate climates; valid until 31.12.2018

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
GERMANY

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 Ug = 0.70 W/(m²K), for window dimensions of 1.23 m * 1.48 m and with

$U_w$ = 0.79 W/(m²K)

**$U_{W,installed}$ = 0.85 W/(m²K) ≤ 0.85 W/(m²K)**

## This certificate was awarded based

**$f_{Rsi = 0.25}$ ≥ 0,70**

For further information, please see the data sheet

**www.passivehouse.com**

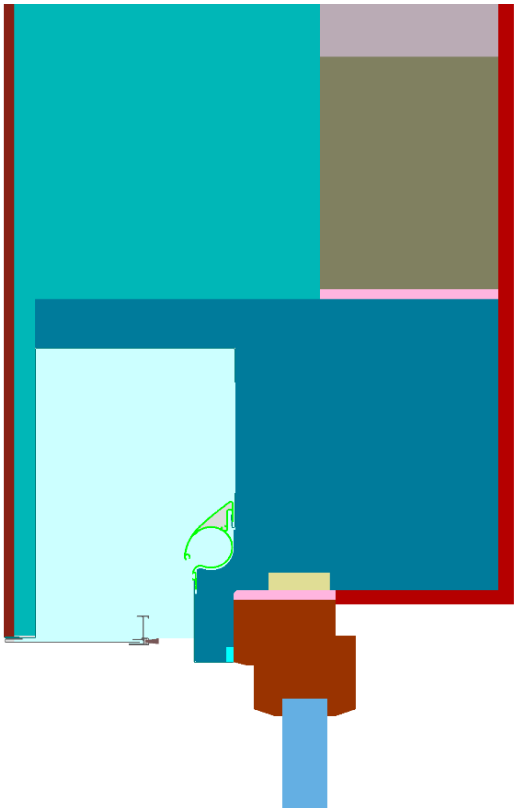
**0881rs03**

CERTIFIED COMPONENT
Passive House Institute

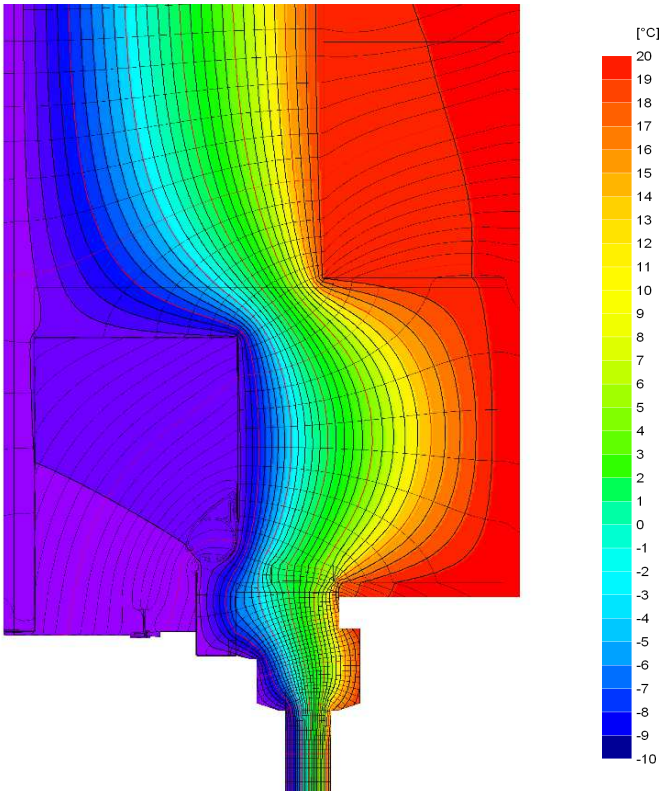
# Data Sheet HELLA Sonnen- und Wetterschutztechnik GmbH, TRAV®frame passiv M_rol-IS

**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



Section




Isothermal

## Description

Insulated window reveal system (λ = 0,031 W/(mK)) and roller shutter including insect protection screen.

## Thermal data for the window frame

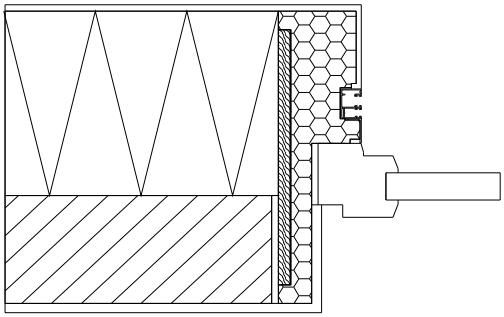
| | $U_f$-value [W/(m²K)] | Width [mm] | $\Psi_g$ [W/(mK)] | $f_{Rsi=0.25}$ [-] |
|---|---|---|---|---|
| spacer | | | SuperSpacer Tri-Seal* | |
| bottom | 0.80 | 120 | 0.026 | 0.72 |
| side/top | 0.80 | 120 | 0.026 | |

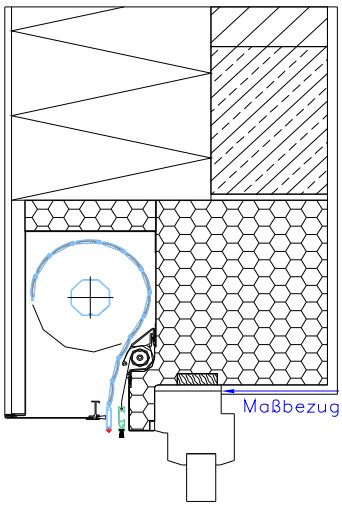
* Spacers of lower thermal quality lead to higher thermal losses and lower glass edge temperatures.

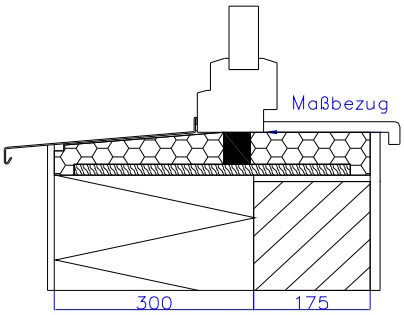
# Data Sheet HELLA Sonnen- + Wetterschutztech. GmbH, TRAV®frame passiv M_rol-IS

**certified Installation**

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






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

| Position | | EIFS (300 mm) |
|---|---|---|
| **bottom** | [W/(mK)] | 0.030 |
| **top** | [W/(mK)] | 0.029 |
| **side** | [W/(mK)] | 0.008 |
| $U_{W,instal.}$ | [W/(m²K)] | 0.85 |

## Explanatory notes

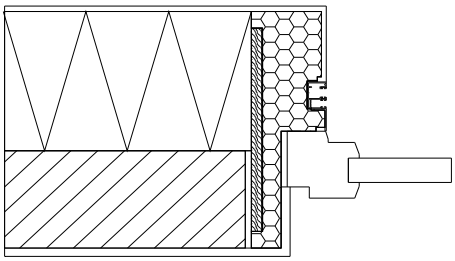
The window U-vlues were calculated based on a 1.23 m by 1.48 m window $U_g$ = 0.70 W/(m²K). If better glazing is used, the window U-values decrease. The influence of a ceiling connection instead of a concrete lintel above the window is negligible as long as the EIFS is not weakened.

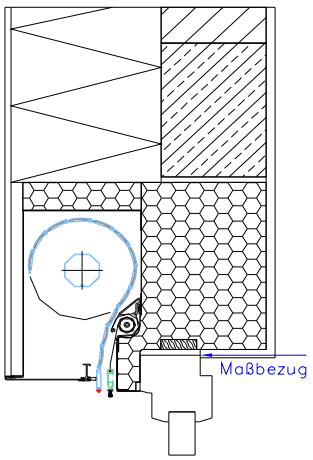
Dimensions refer to the outer edge of the window frame

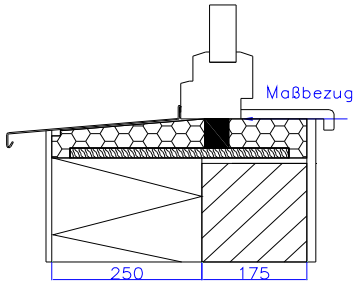
# Date Sheet HELLA Sonnen- und Wetterschutztechnik GmbH, TRAV®frame passiv M_rol-IS

## additional installation situations

**EIFS (250 mm WLG 035)**
with a standard Passive House frame






| | |
|---|---|
| $\Psi_{instal.}$ bottom | = 0.040 W/(mK) |
| $\Psi_{instal.}$ top | = 0.035 W/(mK) |
| $\Psi_{instal.}$ side | = 0.013 W/(mK) |
| $U_{W, instal.}$ | = 0.87 W/(m²K) * |

* 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.