

# Numerical analysis of the thermal behaviour of RHTNEP roof hatch

Using EN ISO 10077: Thermal performance of windows, doors and shutters -  
Calculation of thermal transmittance

- Part 1 (ISO 10077-1:2017): General  
- Part 2 (ISO 10077-2:2017): Numerical method for frames

## SUMMARY

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### 3.1.3. Materials

As described in Chapter 2.3. Additional material properties provided by the customer:

- EPDM  $\lambda_{\text{EPDM}} = 0,06 \text{ W/mK}$

An equivalent thermal conductivity was calculated for air filled cavities according to ISO 10077-2 / Clause 6

### 3.2. Results of the analysis

Thermal transmittance of the hatch:  $U_w = 0,202 \text{ W/m}^2\text{K}$

Thermal resistance of the window:  $R_w = 4,956 \text{ m}^2\text{K/W}$

Budapest, 13.01.2025

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