



**CENTRUM STAVEBNÍHO INŽENÝRSTVÍ a.s.**  
(Building Engineering Centre, joint-stock company)  
Workplace in ZLÍN, K Cihelně 304, 764 32 ZLÍN - Louky

issued to

**Applicant:** DRUTEX S.A.  
Ul. Leberska 31, 77-100 Bytów, Poland

# CERTIFICATE

of the product characteristic

No. CV – 13 – 764/Z

**Product:** IGLO ENERGY Classic PVC Tilt and Turn window

**Manufacturer:** See Applicant

**Description:**

|                |  |
|----------------|--|
| Frame and sash | Frame 70001, reinforcement 250030; sash 70013, reinforcement 250026; in the window with insulating glass unit $U_g = 0,3 \text{ W/(m}^2 \cdot \text{K)}$ was used fibre-glass reinforcement  |
| Other profiles | glazing bead 70948 with extruded gasket  |
| Glazing        | Insulating triple glass unit 48 mm: 4 mm Thermofoat / 18 mm steel spacer or Swisspacer „V“, argon / 4 mm Float / 18 mm steel spacer or Swisspacer „V“, argon / 4 mm Thermofoat; declared value $U_g = 0,5 \text{ W/(m}^2 \cdot \text{K)}$<br>Insulating four glass unit 48 mm: PLANILUX 3 mm/PLANITHERM ULTRA N – Swisspacer „V“ 12 mm, krypton – PLANILUX 3 mm – Swisspacer „V“ 12 mm, krypton – PLANILUX 3 mm/PLANITHERM ULTRA N – Swisspacer „V“ 12 mm, krypton – PLANILUX 3 mm/PLANITHERM ULTRA N; declared value $U_g = 0,3 \text{ W/(m}^2 \cdot \text{K)}$ |
| Sealing        | Outer gasket: U-001; inner gasket: U-002; outer gasket of the glazing: U-001; central gasket: U-007  |
| Hardware       | All-Peripheral hardware MACO MULTI-MATIC, 9-point closure, safety-catch, 2x hung and tilt hinges, handle   |

**Result:**

| Title of tested parameter   | Testing method     | Result   |
|---|--------------------|--|
| Součinitel prostupu tepla $U_{st}$<br>- with steel spacer, $U_g = 0,5 \text{ W/(m}^2 \cdot \text{K)}$<br>- with Swisspacer „V“, $U_g = 0,5 \text{ W/(m}^2 \cdot \text{K)}$<br>- with Swisspacer „V“, $U_g = 0,3 \text{ W/(m}^2 \cdot \text{K)}$ | ČSN EN ISO 12567-1 | 0,87 $\text{W/(m}^2 \cdot \text{K)}$<br>0,81 $\text{W/(m}^2 \cdot \text{K)}$<br>0,59 $\text{W/(m}^2 \cdot \text{K)}$ |

**This Certificate proves the conformity of above given product properties with the required standard values:**

- The first and the second result  $U_{st} = U_w = 0,87$  and  $0,81 \text{ W/(m}^2 \cdot \text{K)}$  fulfils the standard ČSN 73 0540, part 2 for recommended thermal transmittance:  
 $U_w \leq U_{rec,20} = 1,2 \text{ W/(m}^2 \cdot \text{K)}$
- The third result  $U_{st} = U_w = 0,59 \text{ W/(m}^2 \cdot \text{K)}$  fulfils the standard ČSN 73 0540, part 2 for recommended thermal transmittance for passive buildings:  
 $U_w \leq U_{pas,20} = (0,80 \text{ až } 0,60) \text{ W/(m}^2 \cdot \text{K)}$

**Background documents:** Test report No. 288/13. CSI, a.s. Zlín, AO 212

*This Certificate applies only for a product which its specification is given in the test report in detail. It certifies only above given properties and neither implies nor substitutes certification in accordance with the Law No. 22/1997 Coll. on technical requirements for products.*

Issue date: **6.11.2013**  
Valid till: **6.11.2015**  
Elaborated by: Ing. Nizar Al-Hajjar



Ing. Zbislav Panovec, CSc.  
Workplace head