

ST 91 SLIDING SYSTEM

With 20 mm glass fiber reinforced polyamide thermal break, this system provides the application in variant climates areas and minimum profile dimensions.

This system contains different options in itself as with glazing bead and U gasket without glazing bead. The structure of the system with EPDM gaskets provides high thermal performance features on air permeability, water tightness and resistance to wind load. As Euro Groove, it can be used with all opening mechanisms with different brands. The system enables multiple locking.

It has a profile wall thickness between 1.6 mm and 2.0 mm, the system allows glass usage between 4 mm to 24 mm. The system has 91 mm frame depth and 36 mm sash depth.



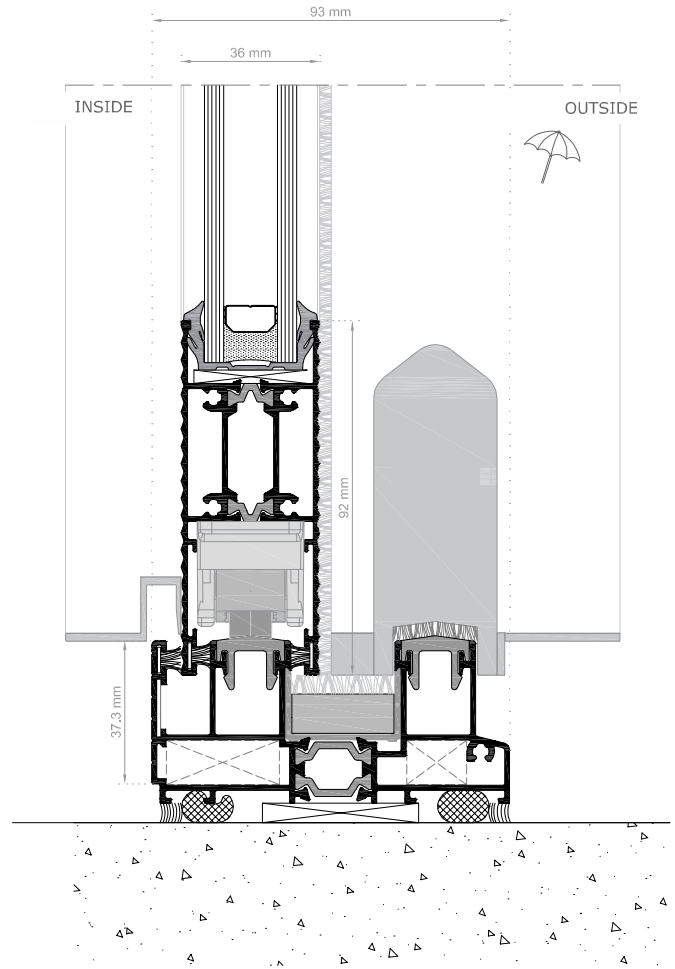
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TECHNICAL SPECIFICATIONS

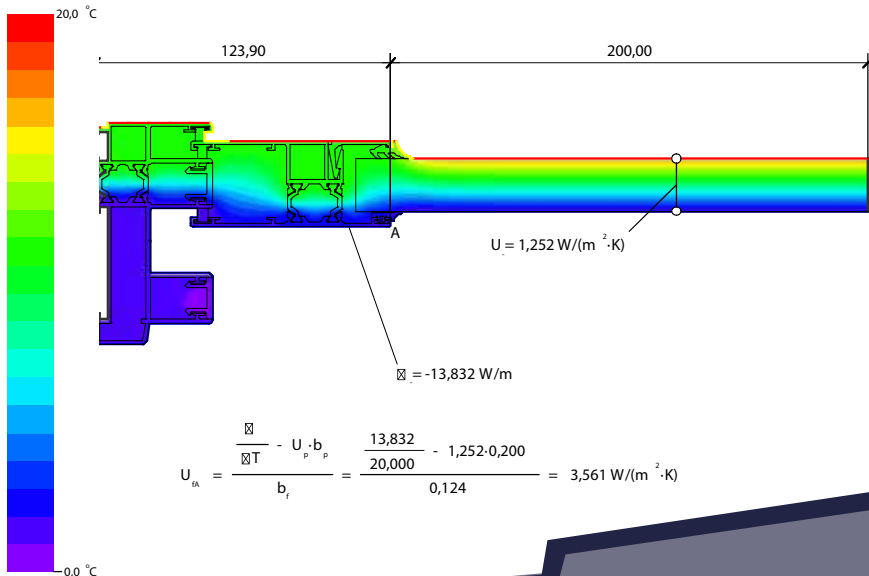
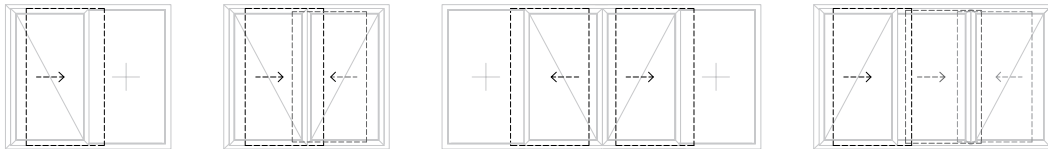
Frame Depth: 91 mm
 Sash Depth: 36 mm
 Frame Height: 42.3 mm
 Sash Height: 92 mm
 Frame-Sash Height: 125.3 mm
 Interlock Profile Visible Width: 20 mm
 Glass Thickness: 4 - 24 mm

PERFORMANCE FEATURES

Air Permeability: A4 - 600 Pa / EN 12207
 Water Tightness: 8A - 450 Pa / EN 12208
 Resistance to Wind Load: C3-B3 - 1200 Pa / EN 12210
 Thermal Insulation (Uf) < 2.3 W/m²K



INLINE SLIDING



Material	λ [W/(m·K)]
Aluminium (Si alloys)	160,000
EPDM (ethylene propylene diene monomer)	0,250
PVC, flexible	0,140
Panel	0,035
Polyamide 6.6 with 25% glass fibre	0,300
Unventilated air cavity	$E_{psi}=0,9/0,9$

Boundary Condition	q [W/m²]	ΔT [°C]	R [(m²·K)/W]
Exterior, frame	0,000	0,040	
Interior frame, normal	20,000	0,130	
Interior frame, reduced	20,000	0,200	
Symmetry/Model section	0,000		0,200

$$U_{fa} = \frac{\frac{\dot{Q}}{\Delta T} - U_p \cdot b_p}{b_f} = \frac{13,832}{0,124} - 1,252 \cdot 0,200 = 3,561 \text{ W/(m}^2 \cdot \text{K)}$$