

Cassonetto in PVC, semi-ventilato, con prolunga sul lato basso, pannello frontale da 24mm, **senza isolante interno**, veletta esterna in mattone forato da 80mm intonacato

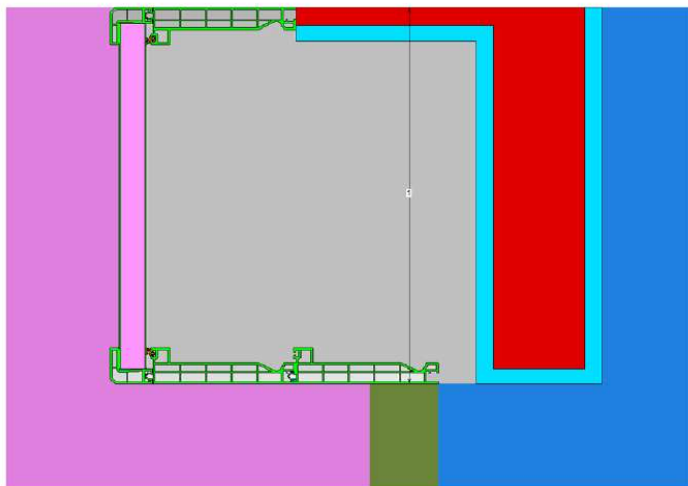
VALORE $U_{sb} = 1,7 \text{ W/m}^2\text{K}$

Thermal transmittance of a shutter box

Profile supplier	Deceuninck
Profile system	
Frame ID	Renovation Box; 24 mm xps panel
Standard	EN ISO 10077-2:2018
Software	Bisco v11
Calculator	
Date	05/03/2021

Simulation input data

Model



Boundary conditions

Colour ID	Name	Temperature [°C]	Surface resistance [m ² .K/W]
170	exterior	0	0.04
174	interior (normal), horizontal heat flow	20	0.13
191	adiabatic	0	∞
208	slightly ventilated cavity	0	0.3

Materials

Colour ID	Name	Thermal conductivity [W/(m.K)]	Emissivity [-]	EN ISO 10077-2:2018 Annex D
3	PVC rigid	0.17	0.9	x
36	Brick	0.4	0.9	
60	EPDM	0.25	0.9	x
69	Plaster	0.8	0.9	
86	XPS	0.032	0.9	
253	cavity <1x1 mm ²	0.028	0.9	
	unventilated cavities - radiosity method			



Framing the future together

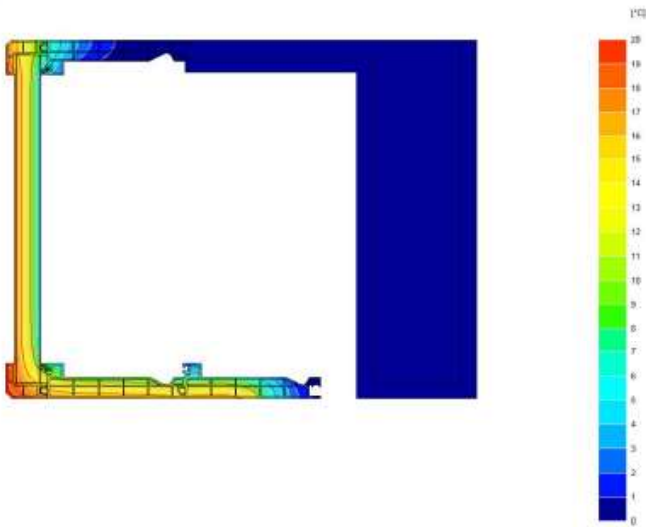
Calculation result

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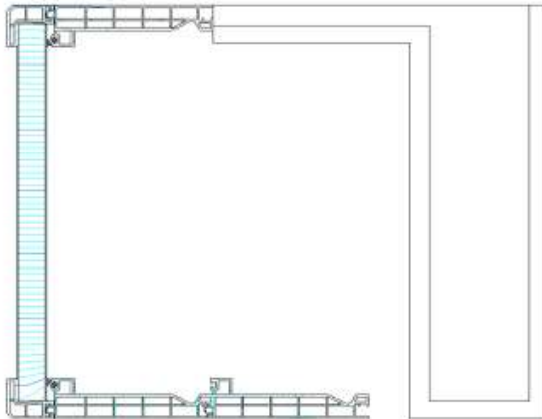
Thermal transmittance of the shutter box, U_{zb}	1.7	W/(m ² .K)
	(1.746)	
Total heat flow rate, Φ	12.572	W/m
Temperature difference between environments	20	°C
Thermal conductance, L^{2D}	0.629	W/(m.K)
Height of the roller shutter box, b_{zb}	0.3601	m

Graphic output

Isothermal lines



Heat flow lines



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