



Multi-Comfort  
House

# SATE PARED EXTERIOR – CUBIERTA PLANA

V nbp-sp2012-1.0

**ISOVER**  
SAINT-GOBAIN

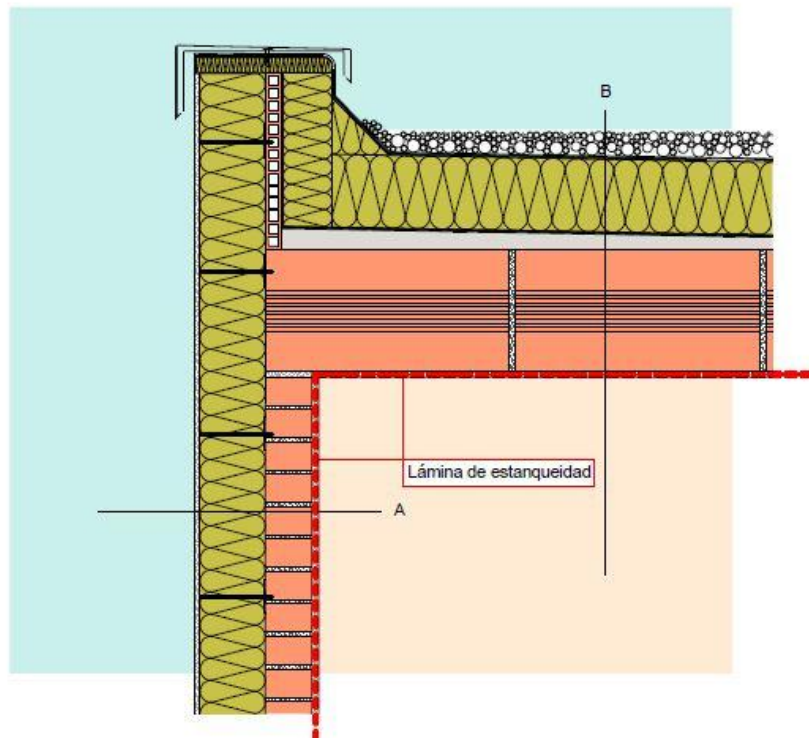
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## 1. DETALLE CONSTRUCTIVO

### A10-b

### SATE - Pared exterior - cubierta plana



#### Sección A en mm

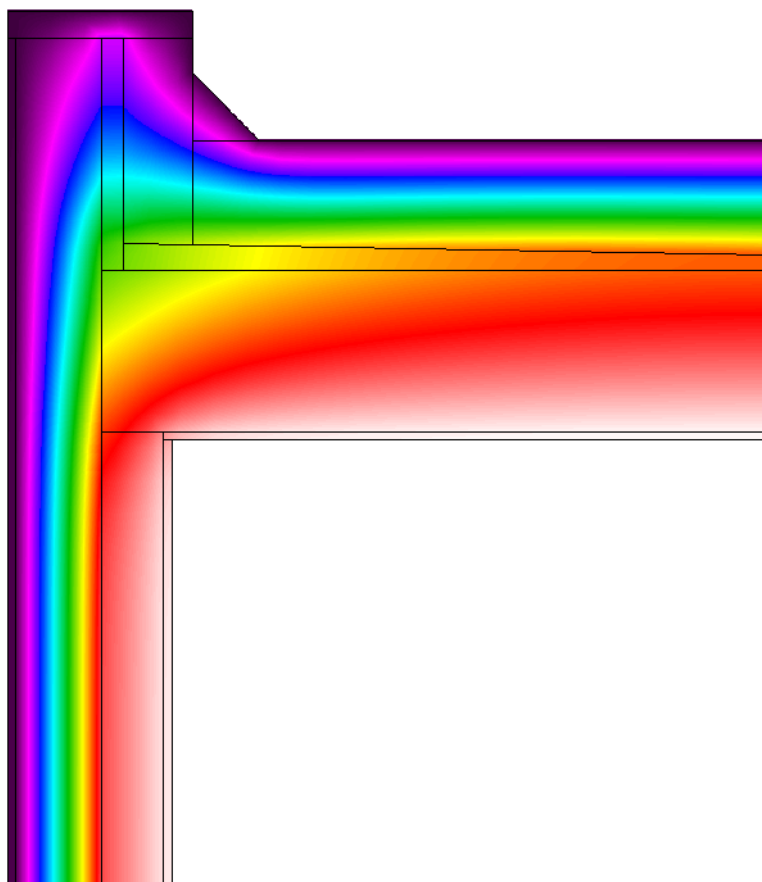
- 15 Revestimiento interior
- 115 Ladrillo cerámico perforado
- 160 Aislamiento ISOVER de lana de roca ISOFEX ( $\lambda=0,036$ )
- 15 Revestimiento exterior

#### Sección B en mm

- 50-70 Grava
- Protección frente al agua
- Capa de separación
- 180 Panel ISOVER de lana de roca IXXO ( $\lambda=0,039$ )
- Capa de separación
- 20-50 Capa de hormigón
- 300 Ladrillo cerámico (333 Kg/m<sup>2</sup>)
- 15 Revestimiento interior

## 2. ISOTHERMAS

homogen	U(Decke gg EB, horiz)=	0,166 W/m²K
	U(AW gg AL, vert)=	0,196 W/m²K
aus Therm Berechnung		
	U(Decke gg AL, horiz)=	0,115 W/m²K
	U(Wand erdberührt, vert)=	W/m²K
	U(Wand, vert)=	0,150 W/m²K
<b>Wärmestrom pro Längeneinheit</b>		
<b>homogen</b>		
	$Q/l=(U*b)*\text{delta } T=$	0,508 W/m
<b>Wärmestrom pro Längeneinheit</b>		
<b>Wärmebrücke</b>		
		0,180
		0,000
	$Q(\text{außen, horiz, vert})/l=(U*b)*\text{delta } T=$	0,244 W/m
Summe:		0,424 W/m
<b>Leitwertzuschlag L(Psi)</b>		<b>-0,084 W/mK</b>



### 3. CALCULO DE TRANSMITANCIA

Passive House Planning						
U-VALUES OF BUILDING ELEMENTS						
Building:						Wedge Shaped Building Element Layers and Still Air Spaces -> Secondary Calculation to the Right
<b>A10b Section A</b>						
Assembly No. Building Assembly Description						
Heat Transfer Resistance [m <sup>2</sup> K/W]				interior R <sub>si</sub> :	0,13	
				exterior R <sub>se</sub> :	0,04	
Area Section 1	λ [W/(mK)]	Area Section 2 (optional)	λ [W/(mK)]	Area Section 3 (optional)	λ [W/(mK)]	Total Width Thickness [mm]
1. internal rendering	0,700					15
2. ceramic perf bricks	0,250					115
3. ISOPEX	0,036					160
4. external rendering	1,000					15
5.						
6.						
7.						
8.						
			Percentage of Sec. 2	Percentage of Sec. 3		Total
						<b>30,5</b> cm
				U-Value:	<b>0,196</b>	W/(m <sup>2</sup> K)
<b>A10b Section B</b>						
Assembly No. Building Assembly Description						
Heat Transfer Resistance [m <sup>2</sup> K/W]				interior R <sub>si</sub> :	0,10	
				exterior R <sub>se</sub> :	0,04	
Area Section 1	λ [W/(mK)]	Area Section 2 (optional)	λ [W/(mK)]	Area Section 3 (optional)	λ [W/(mK)]	Total Width Thickness [mm]
1. screed	1,400					35
2. mineral wool slab IX	0,039					180
3. sloping concrete	2,300					35
4. ceramic bricks	0,250					300
5. internal rendering	0,700					15
6.						
7.						
8.						
			Percentage of Sec. 2	Percentage of Sec. 3		Total
						<b>56,5</b> cm
				U-Value:	<b>0,166</b>	W/(m <sup>2</sup> K)