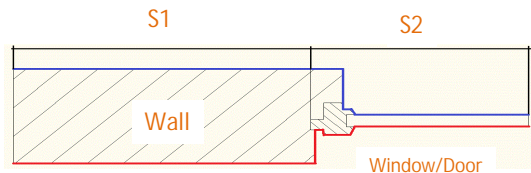


smartwin compact in solid timber Spain V2  
with and without venetian blind (Rafflamelle) side and top






$U_{1D}$ Wall	0,167	W/m²K
$U_{2D}$ Window	0,759	W/m²K
$U_{2D}$	0,296	W/m²K

projected X  
projected X

Length S1	1,500	m
Length S2	0,400	m
Total length	1,900	m

$L_{1D}$	0,553	W/mK
$L_{2D}$	0,562	W/mK

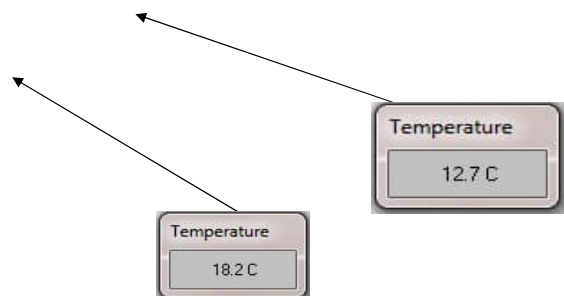
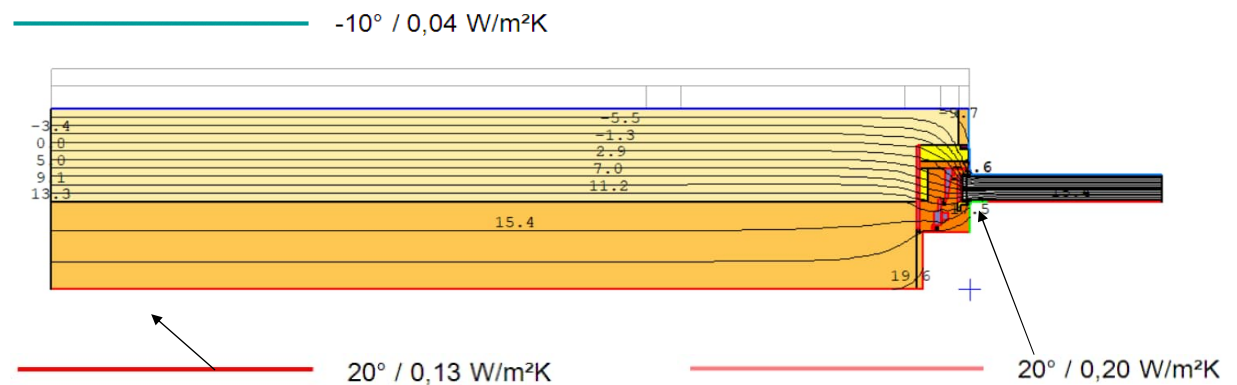
$\Psi_e$	0,008	W/mK
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PHI				
Boundary Conditions	$R_s$	$\theta$	$R_s$	$\theta$
	0,13	20,00	0,25	20,00
	0,13	20,00	0,20	20,00
	0,04	-10,00	0,04	-10,00
Psi-value			$fR_{Si}$	

lowest interior temperature:  
 $f_{RSi}$  at 20 °C / -10 °C

12,7°C
0,76 > 0,7 requirement fulfilled

#### Isotherms:



Project

Date 01.08.2018

Signature

F. Fuchs

smartwin compact in solid timber Spain V2  
side and top

$U_{1D}$ Wall	0,167	W/m²K
$U_{2D}$ Window	0,759	W/m²K
$U_{2D}$	0,300	W/m²K




Length S1	1,500	m
Length S2	0,400	m
Total length	1,900	m

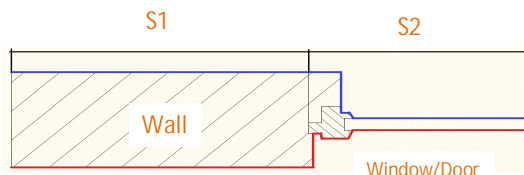
$L_{1D}$	0,553	W/mK
$L_{2D}$	0,569	W/mK

$\Psi_e$	0,016	W/mK
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lowest interior temperature:  
 $f_{RSI}$  at 20 °C / -10 °C

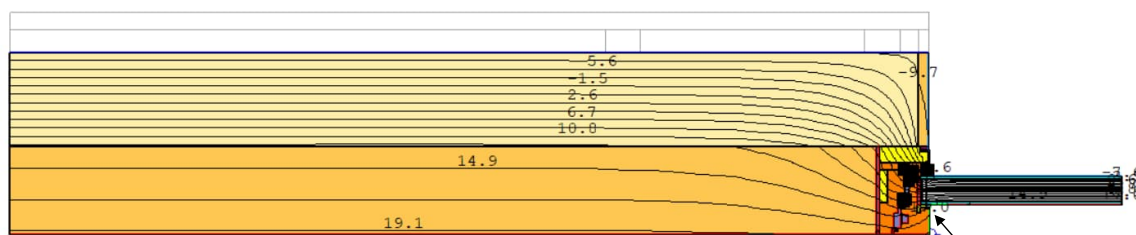
projected X  
projected X

PHI				
Boundary Conditions	$R_s$	$\theta$	$R_s$	$\theta$
	0,13	20,00	0,25	20,00
	0,13	20,00	0,20	20,00
	0,04	-10,00	0,04	-10,00
Psi-value			$f_{RSI}$	



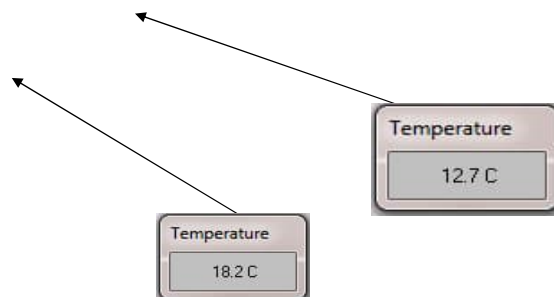
#### Isotherms:

 -10° / 0,04 W/m²K



 20° / 0,13 W/m²K

 20° / 0,20 W/m²K



Project

Date 01.08.2018

Signature

*F. F. F.*

smartwin compact solid timber top  
venetian blind (Rafflamelle)

$U_{1D}$ Wall	0,167	W/m <sup>2</sup> K
$U_{2D}$ Window	0,759	W/m <sup>2</sup> K
$U_{2D}$	0,323	W/m <sup>2</sup> K

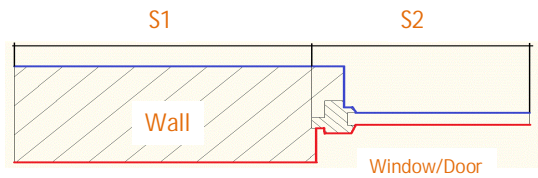
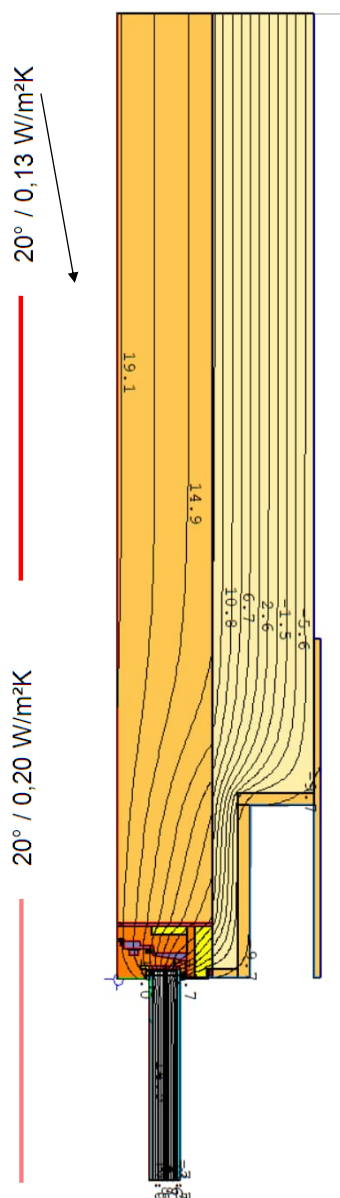
Length S1	1,500	m
Length S2	0,400	m
Total length	1,900	m

$L_{1D}$	0,553	W/mK
$L_{2D}$	0,614	W/mK




$\Psi_e$	0,061	W/mK
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lowest interior temperature:  
 $f_{RSI}$  at 20 °C / -10 °C

**Isotherms:**

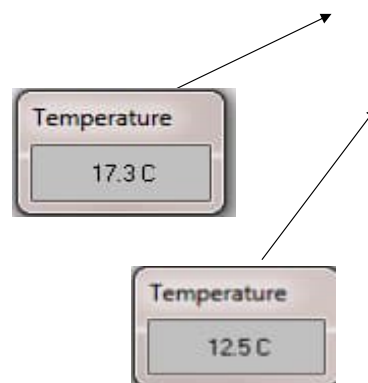



projected X  
projected X

PHI				
Boundary Conditions	$R_s$	$\theta$	$R_s$	$\theta$
	0,13	20,00	0,25	20,00
	0,13	20,00	0,20	20,00
	0,04	-10,00	0,04	-10,00
Psi-value			$fR_{si}$	

12,5°C
0,75

> 0,7 requirement fulfilled



Date	14.03.2022
Signature	

smartwin compact solid timber top  
venetian blind (Rafflamelle)

$U_{1D}$ Wall	0,167	W/m <sup>2</sup> K
$U_{2D}$ Window	0,759	W/m <sup>2</sup> K
$U_{2D}$	0,379	W/m <sup>2</sup> K

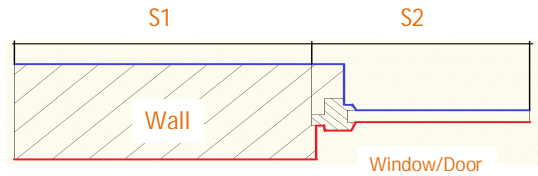
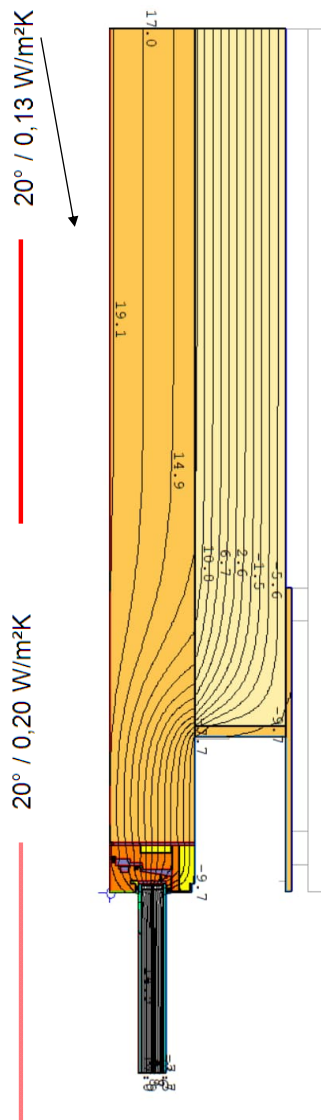
Length S1	1,500	m
Length S2	0,400	m
Total length	1,900	m

$L_{1D}$	0,553	W/mK
$L_{2D}$	0,719	W/mK




$\Psi_e$	0,166	W/mK
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lowest interior temperature:  
 $f_{RSI}$  at 20 °C / -10 °C

**Isotherms:**




projected X  
projected X

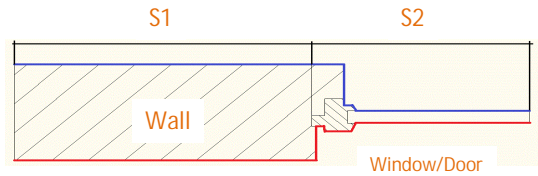
PHI				
Boundary Conditions	$R_s$	$\theta$	$R_s$	$\theta$
	0,13	20,00	0,25	20,00
	0,13	20,00	0,20	20,00
	0,04	-10,00	0,04	-10,00
Psi-value			$fR_{si}$	

12,5°C
0,75

> 0,7 requirement fulfilled



Date	14.03.2022
Signature	



smartwin compact solid timber Spain  
shading roller blind status quo




$U_{1D}$ Wall	0,186	W/m <sup>2</sup> K
$U_{2D}$ Window	0,771	W/m <sup>2</sup> K
$U_{2D}$	0,300	W/m <sup>2</sup> K

Length S1	1,715	m
Length S2	0,400	m
Total length	2,115	m

$L_{1D}$	0,627	W/mK
$L_{2D}$	0,635	W/mK

$\Psi_e$	0,008	W/mK
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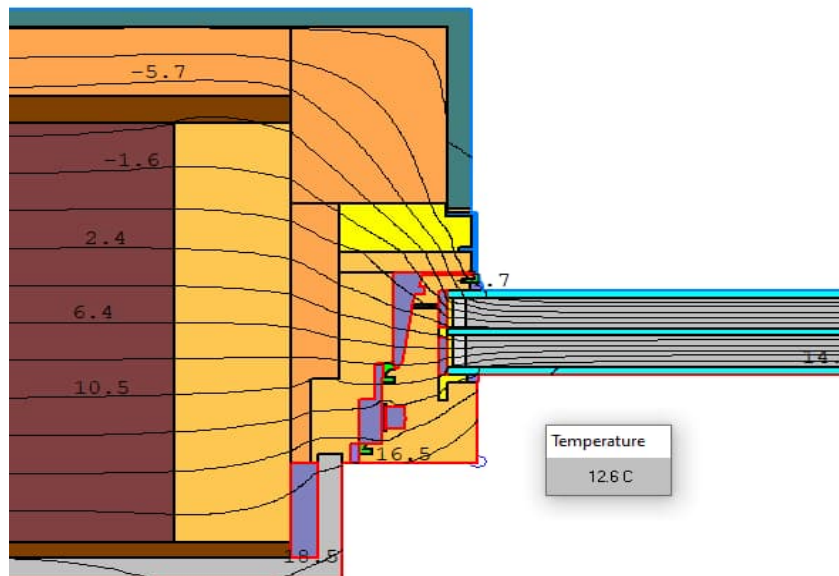
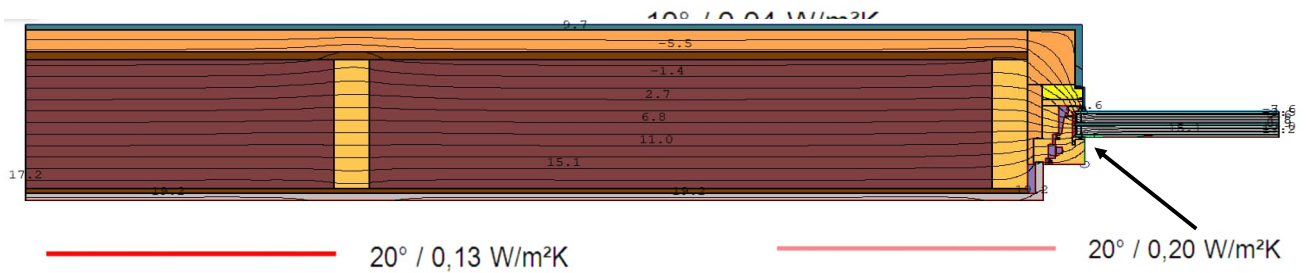
projected X  
projected X

PHI				
Boundary Conditions	$R_s$	$\theta$	$R_s$	$\theta$
	0,13	20,00	0,25	20,00
	0,13	20,00	0,20	20,00
	0,04	-10,00	0,04	-10,00
Psi-value			$f_{RSi}$	

lowest interior temperature:  
 $f_{RSi}$  at 20 °C / -10 °C

12,6°C
0,75 > 0,7 requirement fulfilled

**Isotherms:**



Temperature  
12,6 °C

Date	03.09.2020
Signature	