

smartwin solar CC smartshell solid timber A

U_{1D} Wall	0,074	W/m ² K
U_{2D} Window	0,619	W/m ² K
U_{2D}	0,191	W/m ² K

projected X
projected X

Length S1	1,585	m
Length S2	0,400	m
Total length	1,985	m

PHI				
Boundary Conditions	R_s	θ	R_s	θ
	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}	

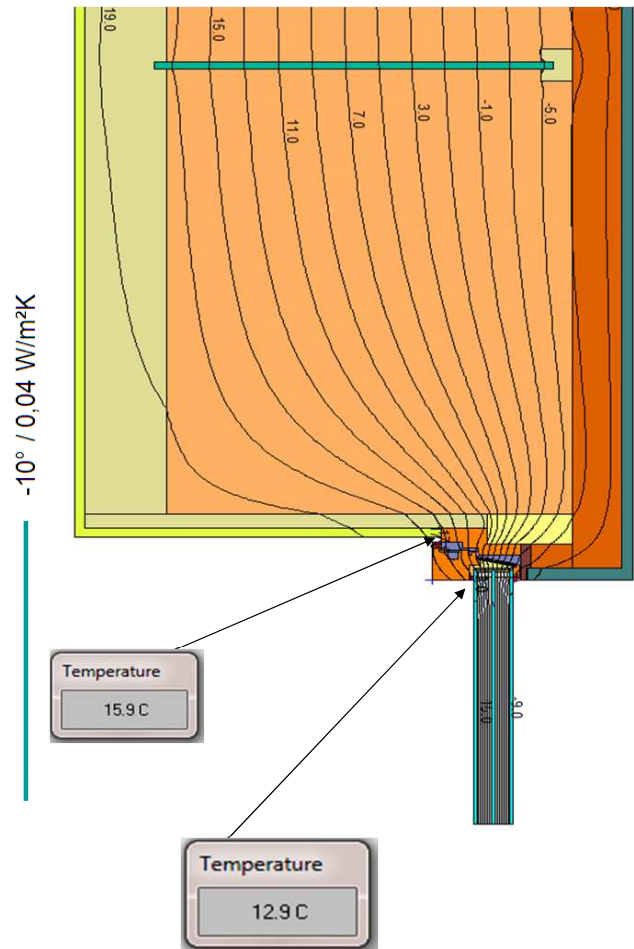
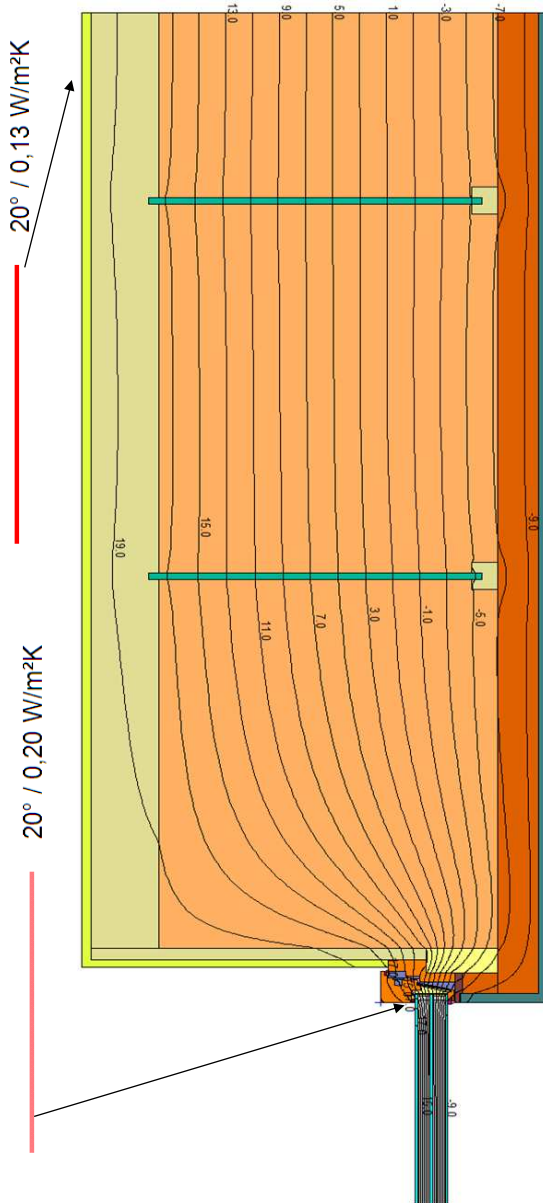
L_{1D}	0,364	W/mK
L_{2D}	0,379	W/mK

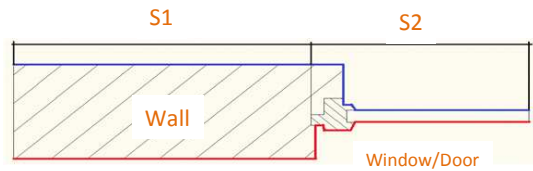
Ψ_e	0,015	W/mK
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lowest interior temperature:
 f_{RSi} at 20 °C / -10 °C

12,9°C	> 0,7 requirement fulfilled
0,76	

Isotherms:





smartwin solar CC smartshell solid timber A
venetian blind (Rafflamelle)

U_{1D} Wall	0,074	W/m ² K
U_{2D} Window	0,619	W/m ² K
U_{2D}	0,204	W/m ² K

Length S1	1,585	m
Length S2	0,400	m
Total length	1,985	m

L_{1D}	0,365	W/mK
L_{2D}	0,405	W/mK

Ψ_e	0,040	W/mK
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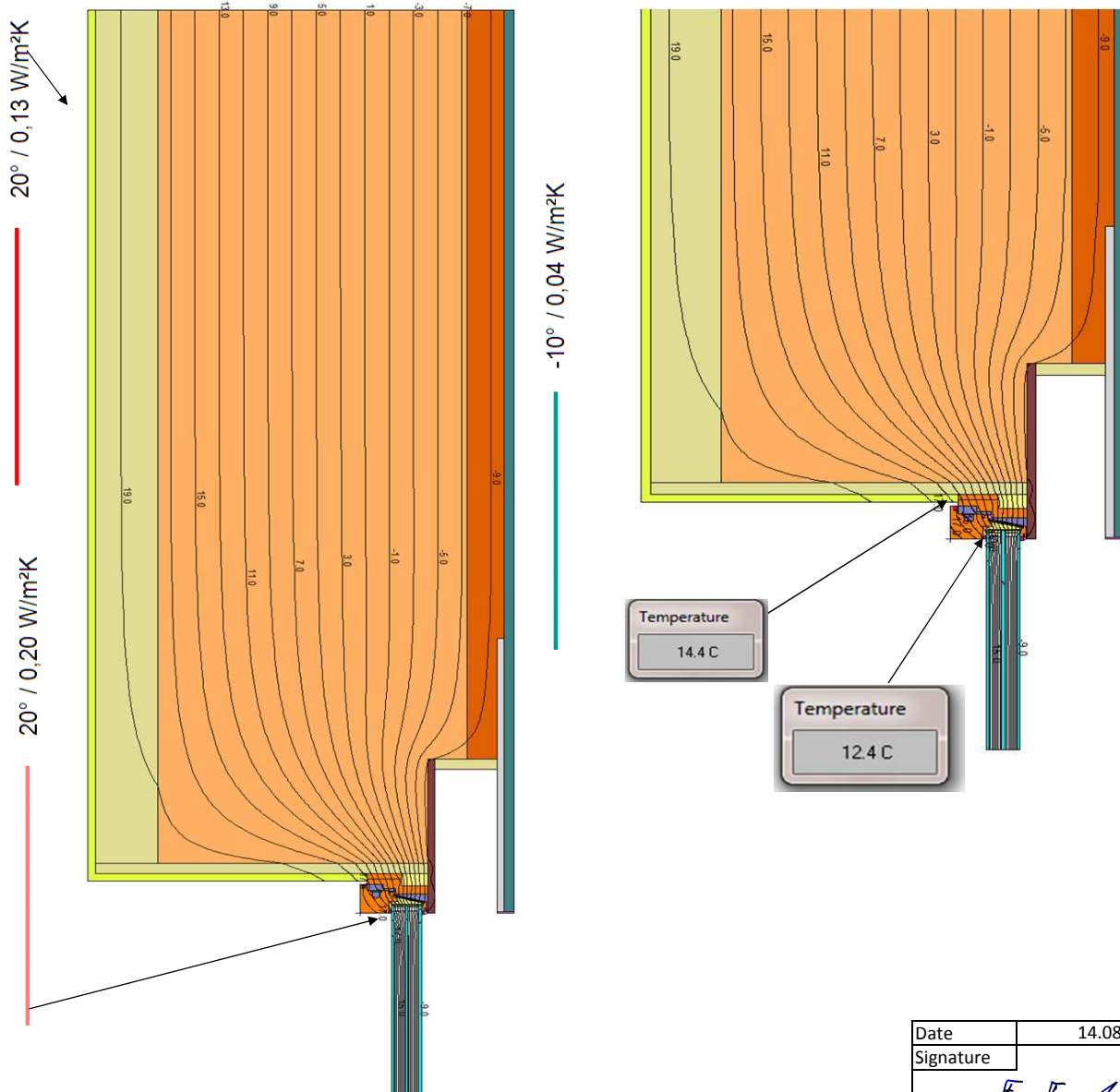
projected X
projected X

PHI				
Boundary Conditions	R_s	θ	R_s	θ
	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

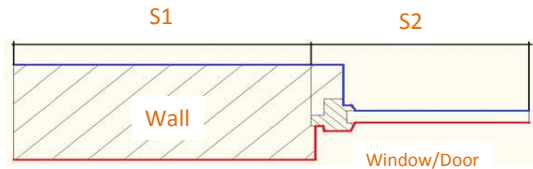
12,4°C
0,75 > 0,7 requirement fulfilled

Isotherms:



Date	14.08.2018
Signature	<i>F. Eberle</i>




smartwin solar CC smartshell solid timber A
venetian blind (Rafflamelle)



U_{1D} Wall	0,074	W/m ² K
U_{2D} Window	0,619	W/m ² K
U_{2D}	0,191	W/m ² K

projected X
projected X

Length S1	1,585	m
Length S2	0,400	m
Total length	1,985	m

PHI				
Boundary Conditions	R_s	θ	R_s	θ
	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}	

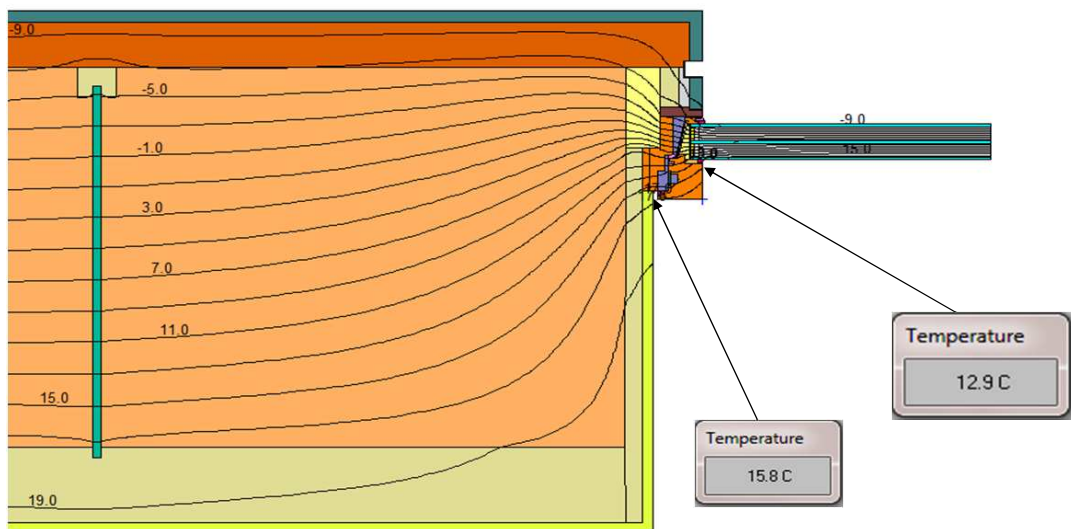
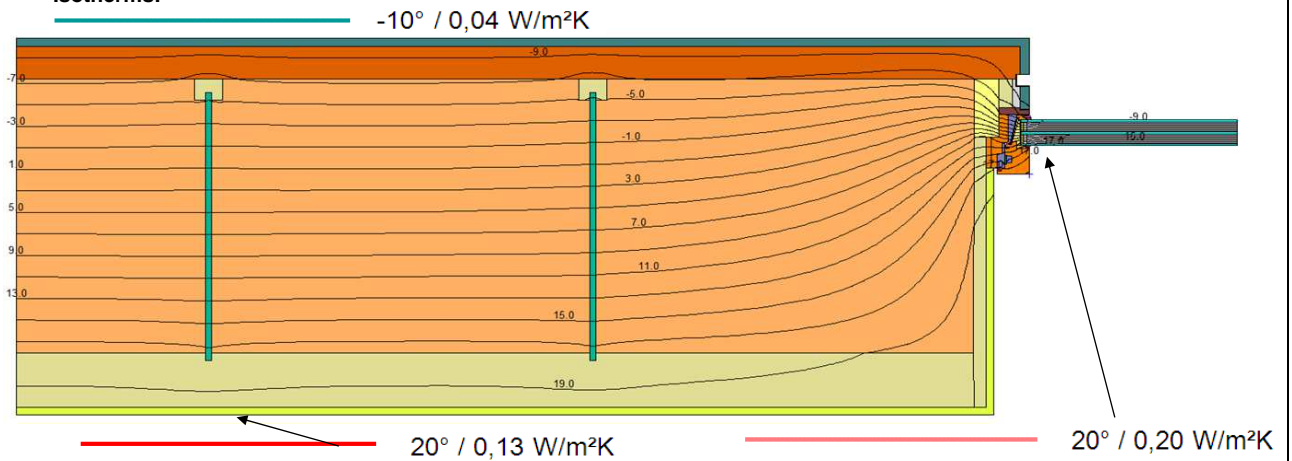
L_{1D}	0,364	W/mK	v
L_{2D}	0,380	W/mK	

Ψ_e **0,016** W/mK

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

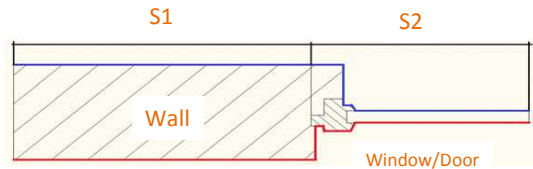
12,9°C	> 0,7 requirement fulfilled
0,76	

Isotherms:



Date	14.08.2018
Signature	<i>F. Kuster</i>




smartwin solar CC smartshell solid timber A



U_{1D} Wall	0,074	W/m ² K
U_{2D} Window	0,631	W/m ² K
U_{2D}	0,197	W/m ² K

projected X
projected X

Length S1	1,585	m
Length S2	0,400	m
Total length	1,985	m

PHI				
Boundary Conditions	R_s	θ	R_s	θ
	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}	

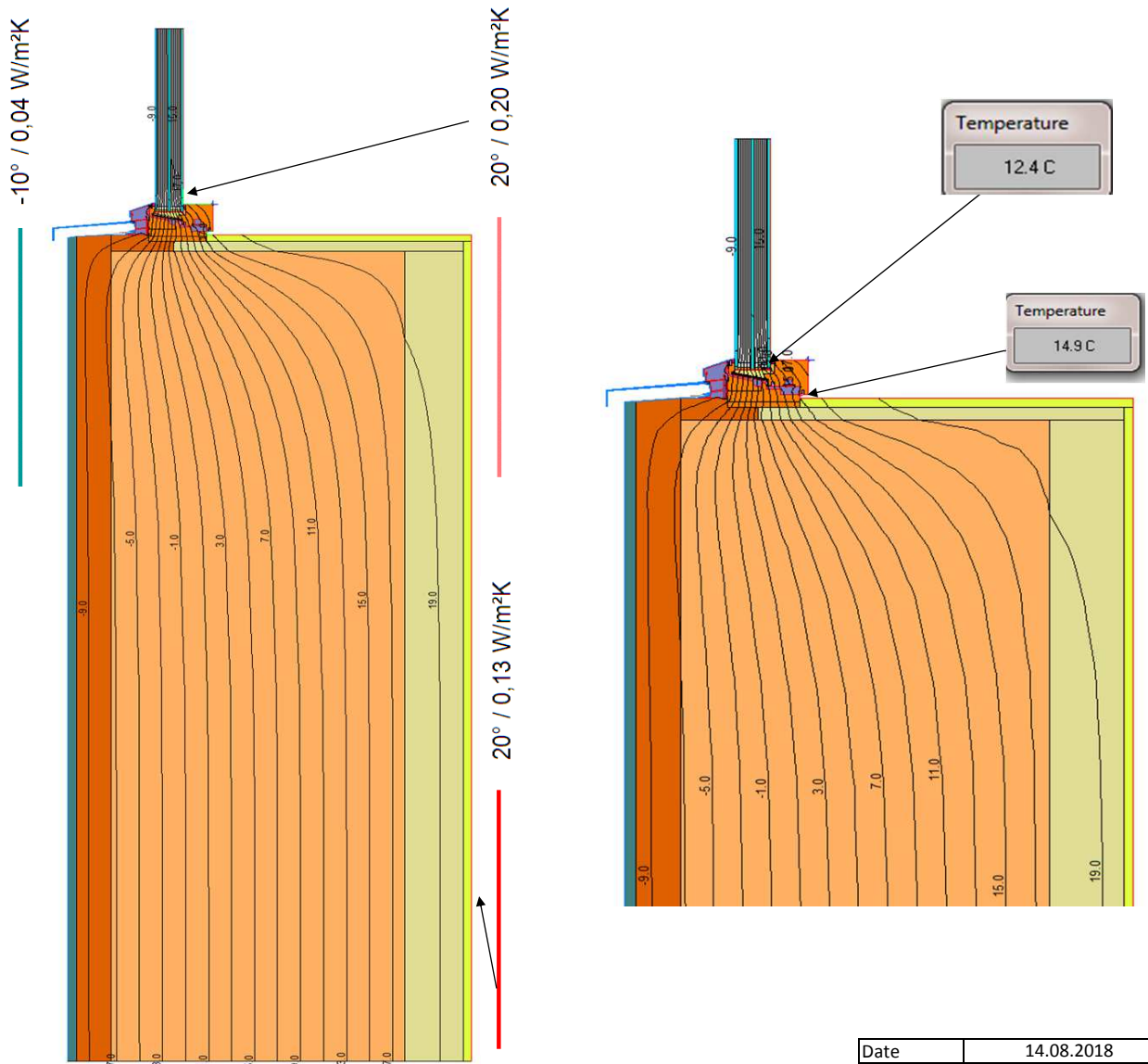
L_{1D}	0,369	W/mK
L_{2D}	0,391	W/mK


Ψ_e	0,022	W/mK
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lowest interior temperature:
 f_{RSi} at 20 °C / -10 °C

12,4°C	> 0,7 requirement fulfilled
0,75	

Isotherms:



Date	14.08.2018
Signature	

smartwin solar CC smartshell solid timber A

U _{1D} Wall	0,167	W/m ² K
U _{1D} Ceiling	0,108	W/m ² K
U _{2D} Window	0,642	W/m ² K
U _{2D}	0,172	W/m ² K

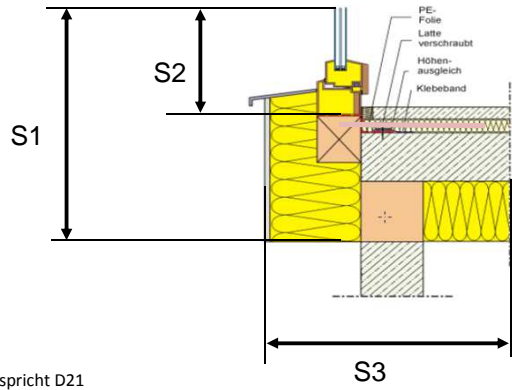
Length S1	1,005	m
Length S2	0,400	m
Length S3	3,015	m
Total length	4,020	m

L _{1D} Wall	0,101	W/mK
L _{1D} Ceiling	0,271	W/mK
L _{2D} window	0,257	W/mK
L _{2D}	0,691	W/mK

Ψ_e 0,062 W/mK

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

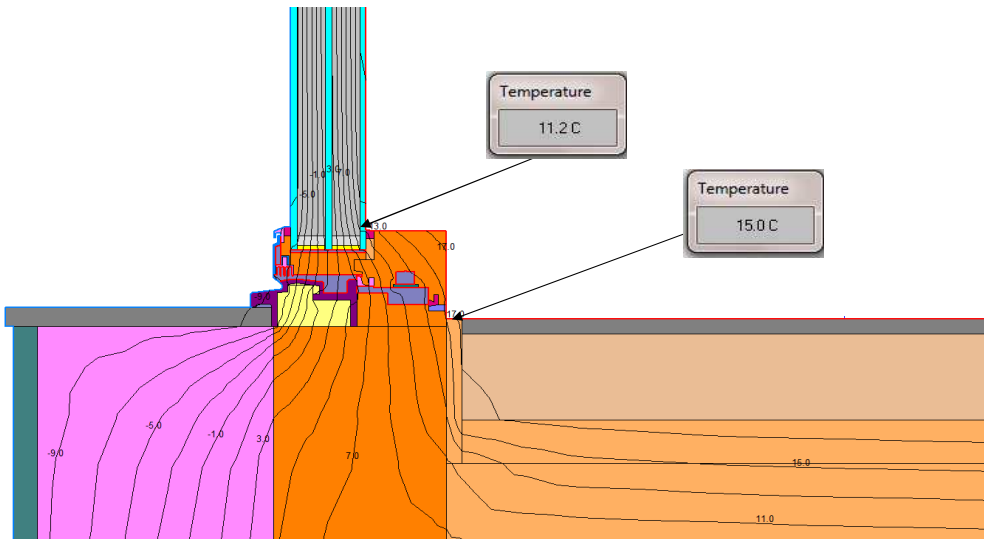
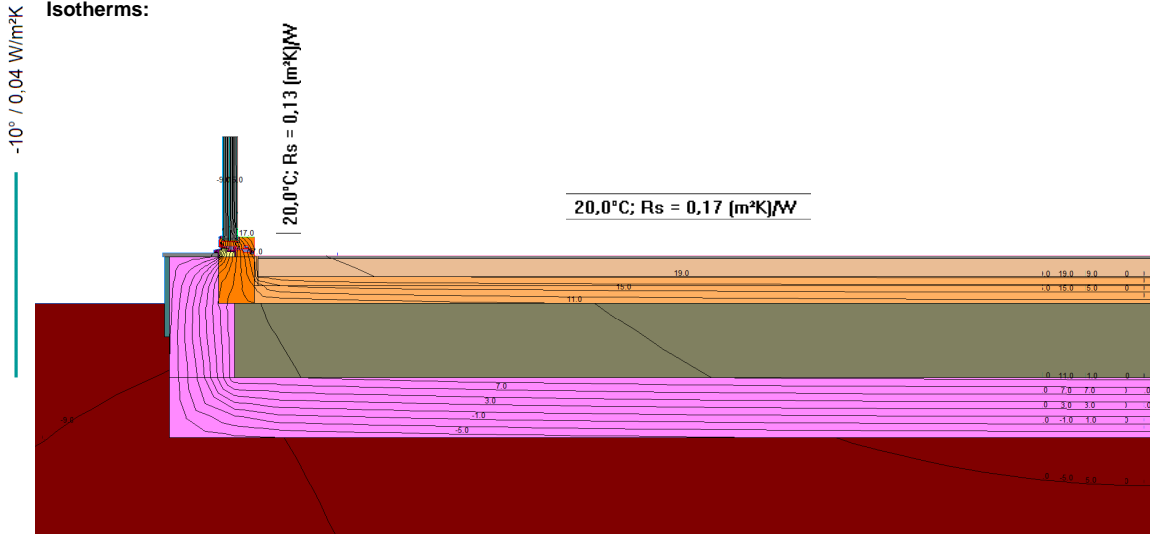
projected X
custom length (S1+S3) entspricht D21



PHI				
Boundary Conditions	R _s	θ	R _s	θ
	0,13	20,00	0,25	20,00
	0,17	20,00	0,25	20,00
	0,13	-10,00	0,04	-10,00
	0,17	-5,00	0,04	-5,00
	0,13	-5,00	0,04	-5,00
Psi-value			f _{RSI}	

11,2°C
0,71 > 0,7 requirement fulfilled

Isotherms:



Date	14.08.2018
Signature	