

Input Data-Sheet

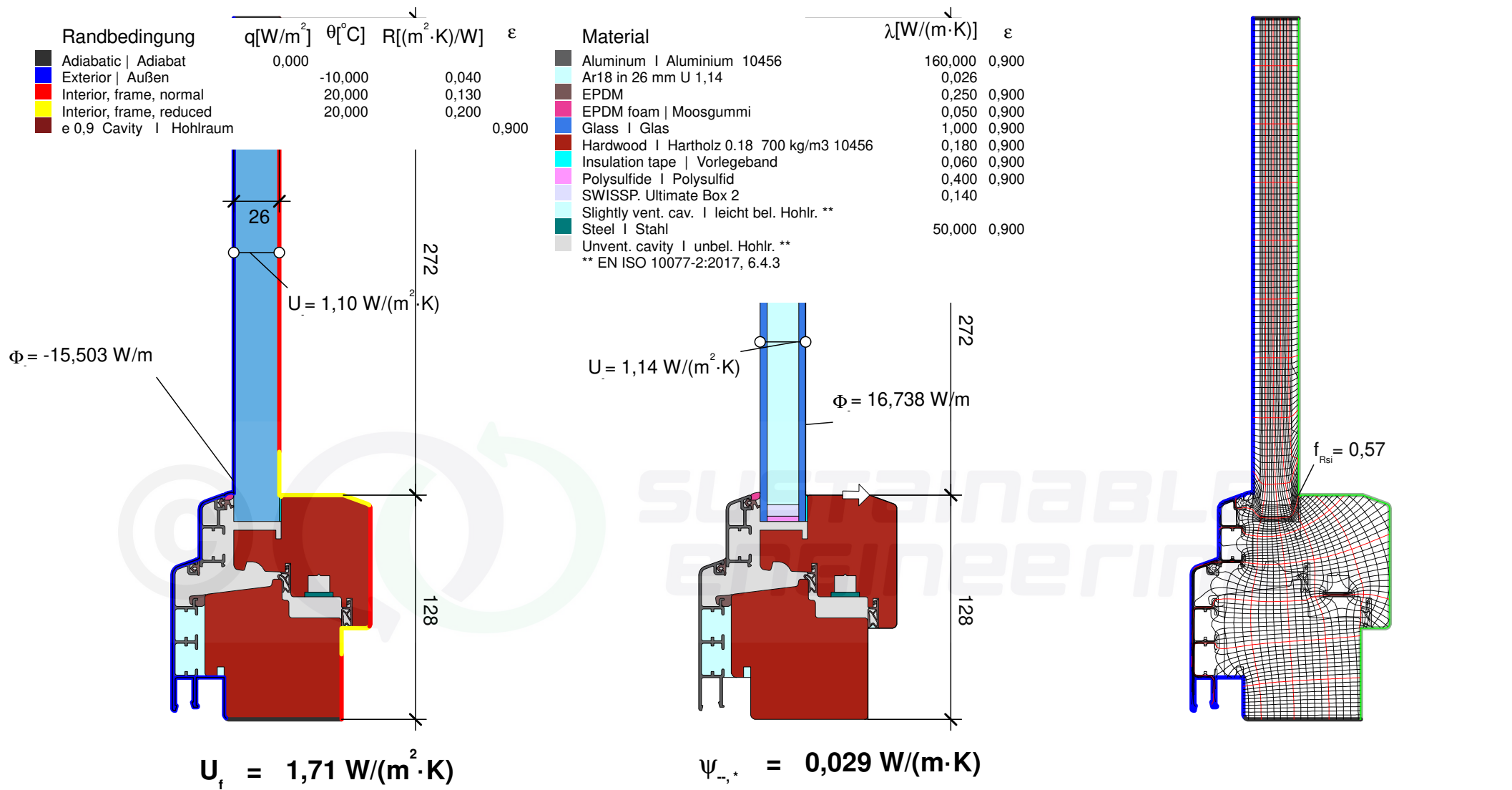
Short report | Based on ISO 10077-2 | Performed by: Passive House Institute Dr. Wolfgang Feist, Author: Dr.-Ing. Benjamin Krick

Description Average values for window size h*w 1.23 m * 1.48 m	Glazing U-value [W/(m²K)]	Uf value [W/(m²K)]				Frame Width [m]				Glazing Edge Ψ-value [W/(m²K)]				Temperature factor (min) f _{Rsi=0,25} [-]	Overall U-value [W/(m²K)]
		Sill	Side	Head	Average	Sill	Side	Head	Average	Sill	Side	Head	Average		
DesignLine 78 Oak Double	1,14	1,71	1,62	1,62	1,64	0,128	0,128	0,128	0,128	0,029	0,029	0,029	0,029	0,57	1,38
DesignLine 78 Larch Double	1,14	1,41	1,34	1,34	1,36	0,128	0,128	0,128	0,128	0,029	0,029	0,02895	0,029	0,57	1,29
DesignLine 90 Oak Triple	0,52	1,48	1,42	1,42	1,43	0,128	0,128	0,128	0,128	0,023	0,023	0,023	0,023	0,71	0,89
DesignLine 90 Larch Triple	0,52	1,21	1,16	1,16	1,17	0,128	0,128	0,128	0,128	0,023	0,023	0,023	0,023	0,72	0,80
DesignLine 90 PASSIVE	0,52	1,07	1,15	1,15	1,12	0,132	0,105	0,105	0,112	0,023	0,025	0,025	0,025	0,72	0,76

Drawings and material data were provided by the manufacturer. The sole responsibility for the provided information lies with the manufacturer.

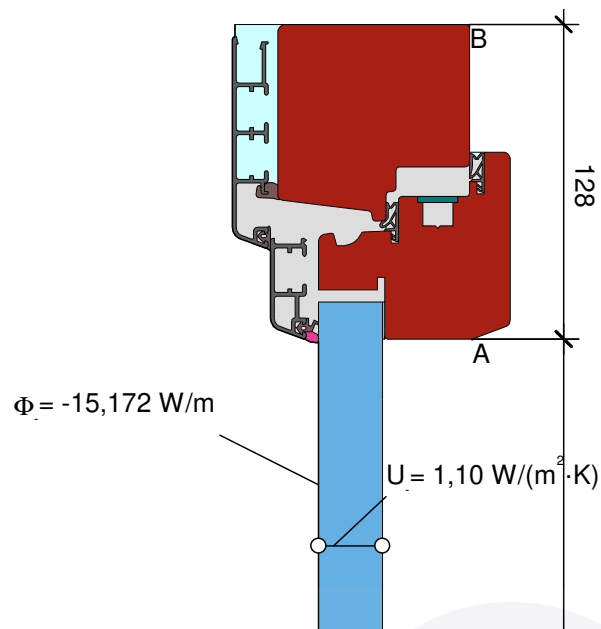
Recommended for climate zone

90 Oak Triple	 arctic	 cold	 cool, temperate	 warm, temperate	 warm	 hot	 very hot	
	 arctic	 cold	 cool, temperate	 warm, temperate	 warm	 hot	 very hot	



DesignLine 78 bottom | Oak | Double glazing

Randbedingung	$q[W/m^2]$	$\theta[^\circ C]$	$R[(m^2 \cdot K)/W]$	ε
Adiabatic Adiat	0,000			
Exterior Außen		-10,000	0,040	
e 0,9 Cavity Hohlraum				0,900
fRsi: Interior Innen		20,000	0,250	



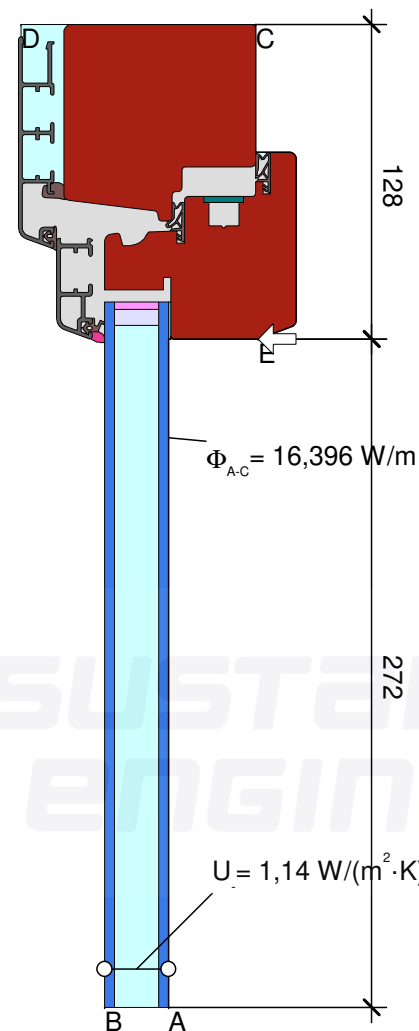
Material

	λ [W/(m·K)]	ϵ
Aluminum Aluminium 10456	160,000	0,900
Ar18 in 26 mm U 1,14	0,026	
EPDM	0,250	0,900
EPDM foam Moosgummi	0,050	0,900
Glass Glas	1,000	0,900
Hardwood Hartholz 0.18 700 kg/m3 10456	0,180	0,900
Insulation tape Vorlegeband	0,060	0,900
Polysulfide Polysulfid	0,400	0,900
SWISSP. Ultimate Box 2	0,140	
Slightly vent. cav. leicht bel. Hohlr. **		
Steel Stahl	50,000	0,900
Unvent. cavity unbel. Hohlr. **		

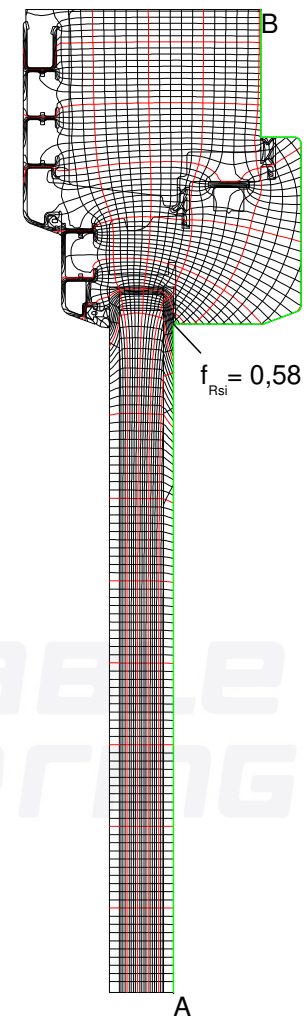
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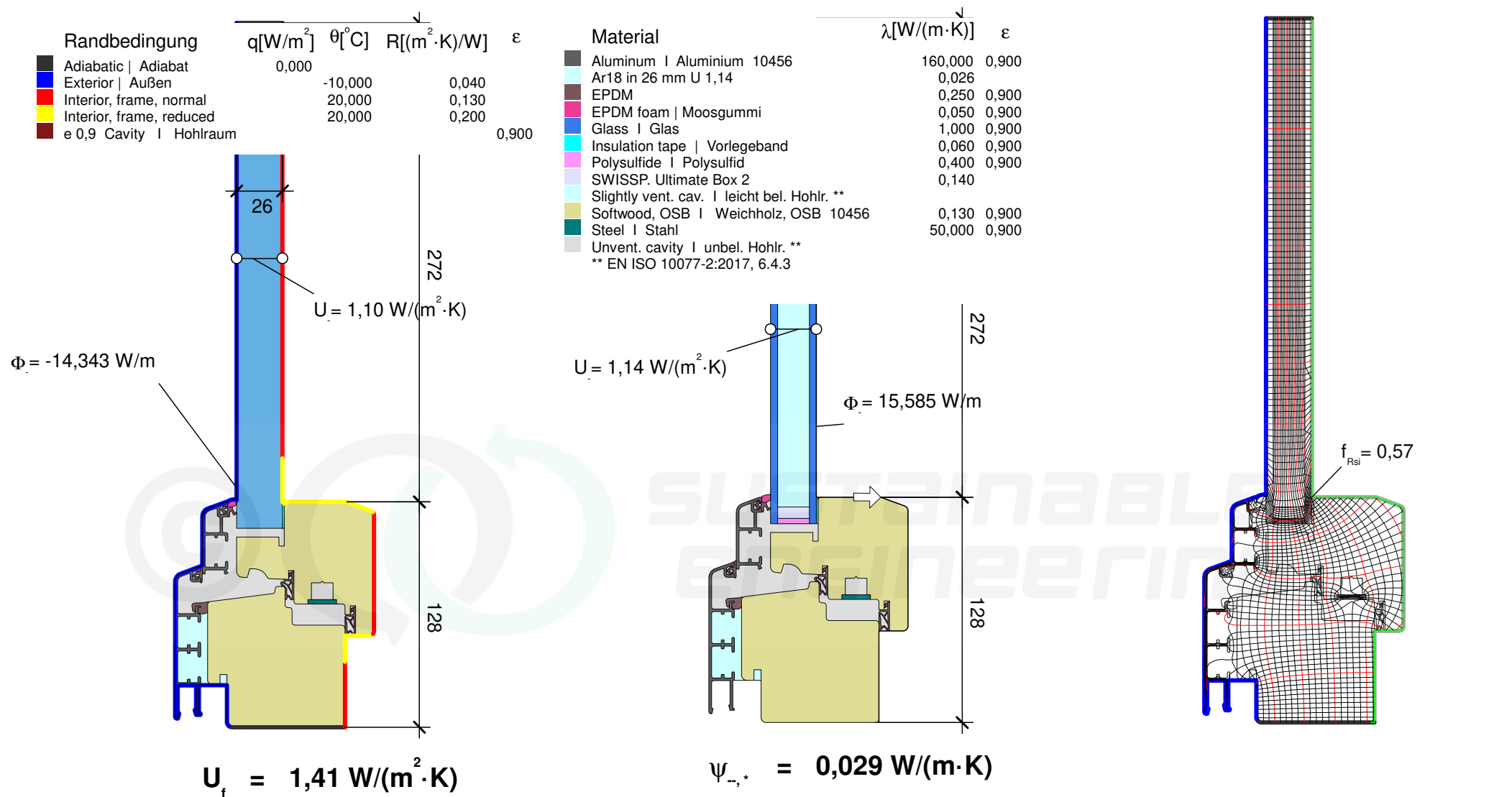
$$U_{f A,B} = 1,62 \text{ W/(m}^2 \cdot \text{K)}$$



$$\psi_{A-E-C,*} = 0,029 \text{ W/(m} \cdot \text{K)}$$

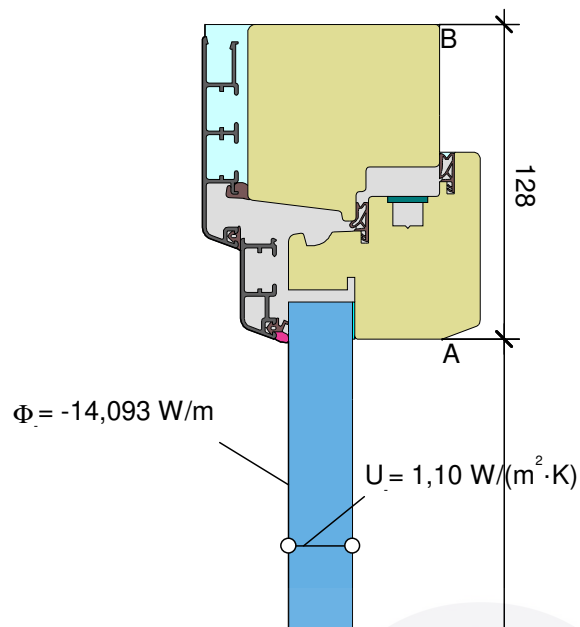


DesignLine 78 top/side | Oak | Double glazing



DesignLine 78 bottom | Larch | Double glazing

Randbedingung	$q[W/m^2]$	$\theta[^\circ C]$	$R[(m^2 \cdot K)/W]$	ε
Adiabatic Adiat	0,000			
Exterior Außen		-10,000	0,040	
e 0,9 Cavity Hohlraum				0,900
fRsi: Interior Innen		20,000	0,250	

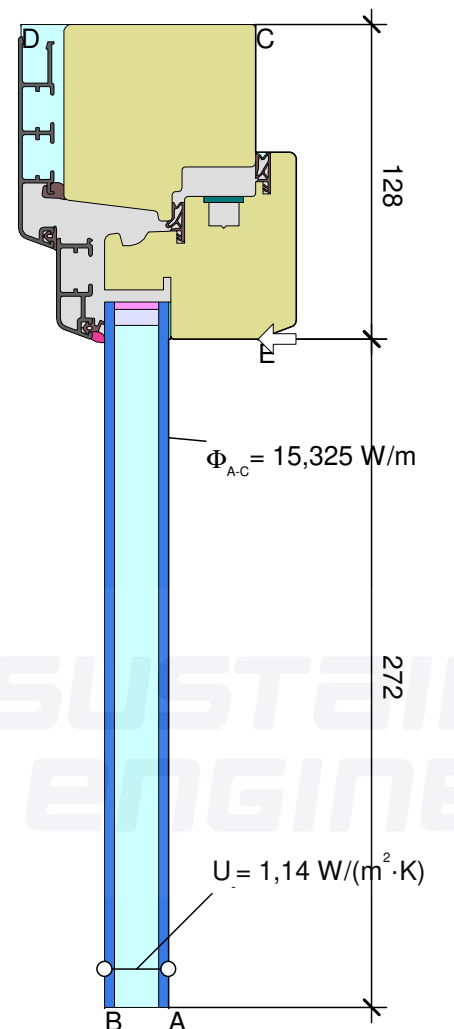


Material	λ [W/(m·K)]	ϵ
Aluminum Aluminium 10456	160,000	0,900
Ar18 in 26 mm U 1,14	0,026	
EPDM	0,250	0,900
EPDM foam Moosgummi	0,050	0,900
Glass Glas	1,000	0,900
Insulation tape Vorlegeband	0,060	0,900
Polysulfide Polysulfid	0,400	0,900
SWISSP. Ultimate Box 2	0,140	
Slightly vent. cav. leicht bel. Hohlr. **		
Softwood, OSB Weichholz, OSB 10456	0,130	0,900
Steel Stahl	50,000	0,900
Unvent. cavity unbel. Hohlr. **		

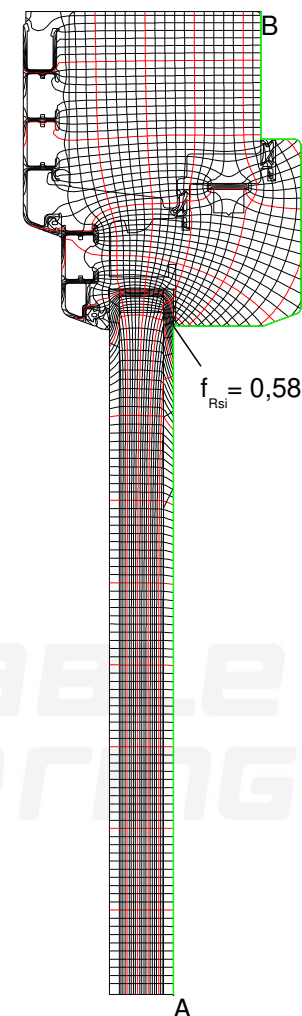
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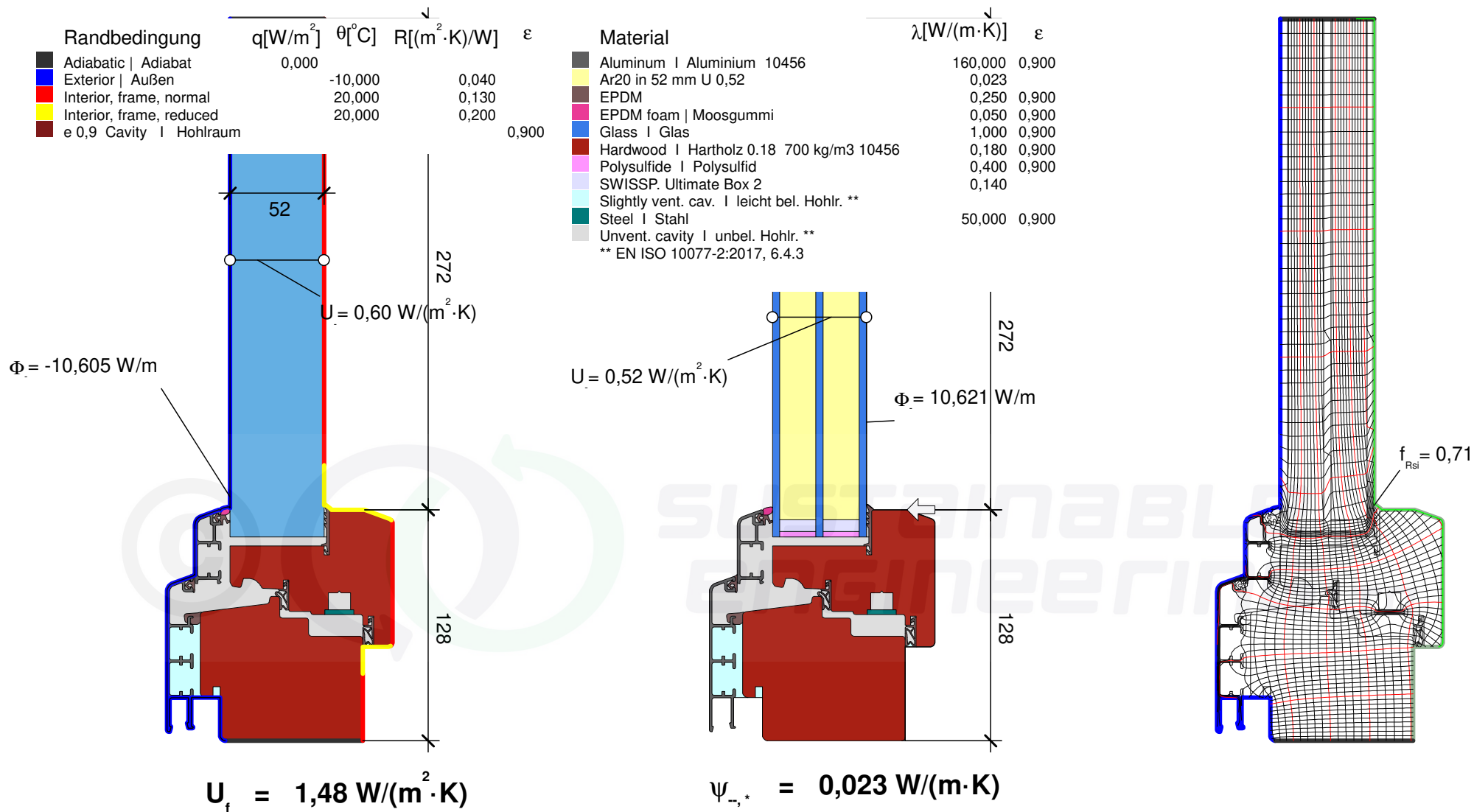
$$U_{f A,B} = 1,34 \text{ W/(m}^2 \cdot \text{K)}$$



$$\psi_{A-E-C,*} = 0,029 \text{ W/(m} \cdot \text{K)}$$

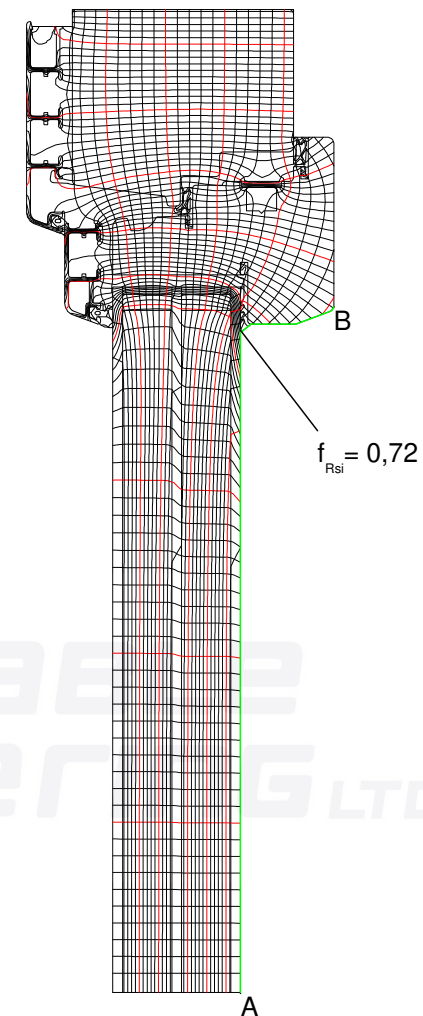
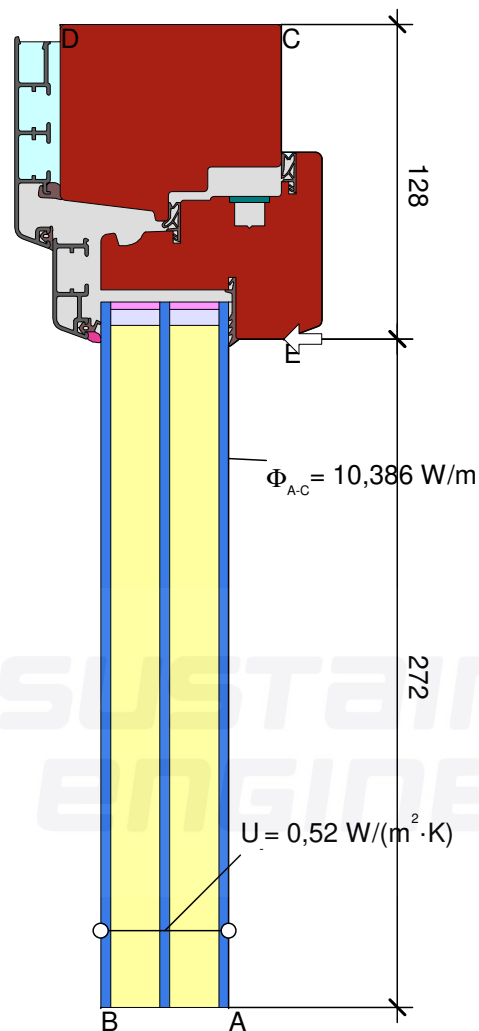
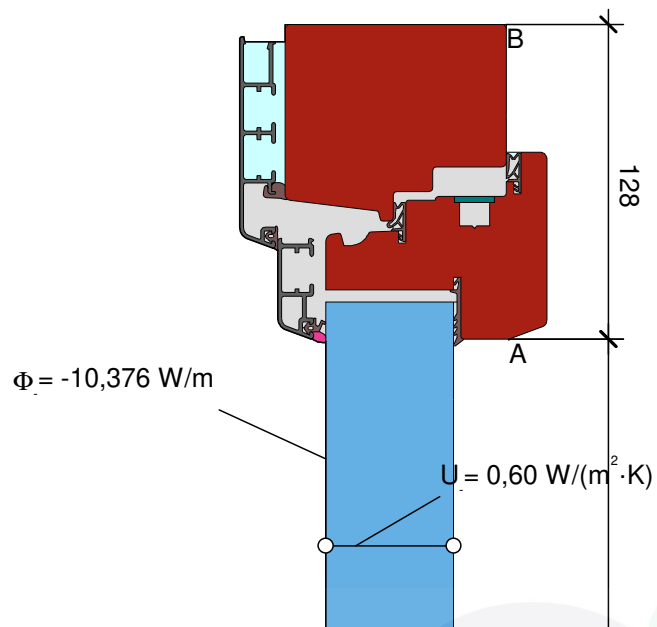


DesignLine 78 top/side | Larch | Double glazing



DesignLine 90 bottom | Oak | Triple glazing

Randbedingung	$q[W/m^2]$	$\theta[^\circ C]$	$R[(m^2 \cdot K)/W]$	ε
Adiabatic Adiat	0,000			
Exterior Außen		-10,000	0,040	
e 0,9 Cavity Hohlraum				0,900
fRsi: Interior Innen		20,000	0,250	



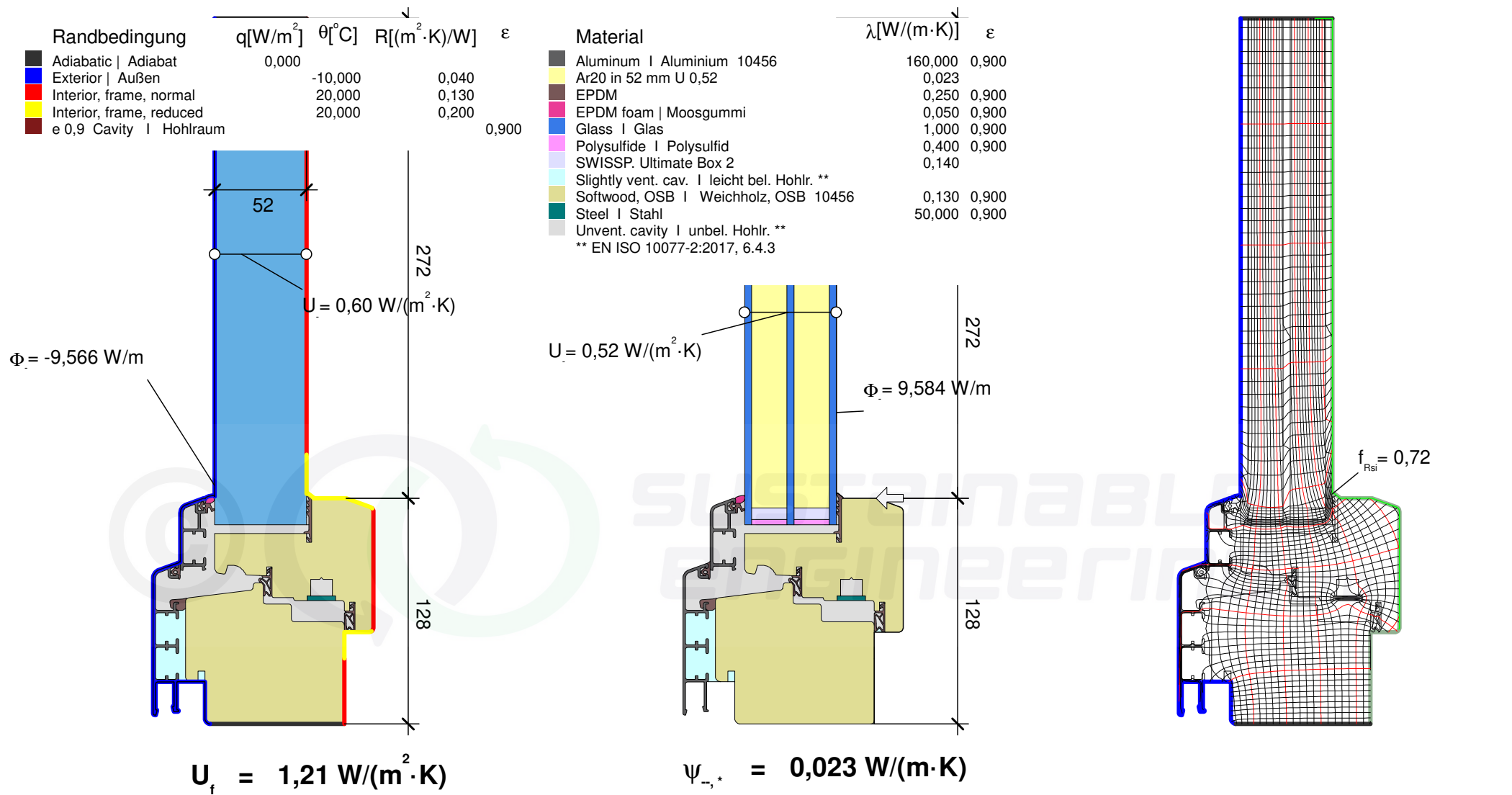
Material

	λ [W/(m·K)]	ϵ
Aluminum Aluminium 10456	160,000	0,900
Ar20 in 52 mm U 0,52	0,023	
EPDM	0,250	0,900
EPDM foam Moosgummi	0,050	0,900
Glass Glas	1,000	0,900
Hardwood Hartholz 0.18 700 kg/m3 10456	0,180	0,900
Polysulfide Polysulfid	0,400	0,900
SWISSP. Ultimate Box 2	0,140	
Slightly vent. cav. leicht bel. Hohlr. **		
Steel Stahl	50,000	0,900
Unvent. cavity unbel. Hohlr. **		

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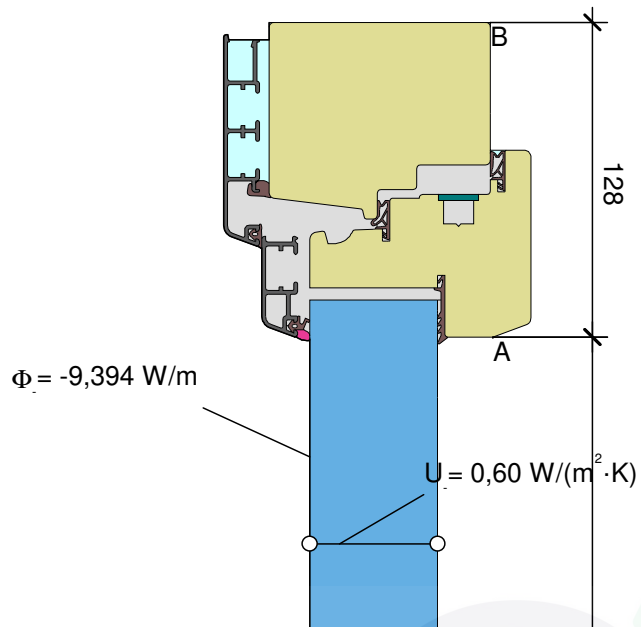
$$U_{f A,B} = 1,42 \text{ W/(m}^2 \cdot \text{K)}$$

DesignLine 90 top/side | Oak | Triple glazing



DesignLine 90 bottom | Larch | Triple glazing

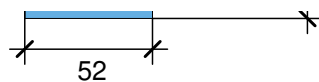
Randbedingung	$q[W/m^2]$	$\theta[^\circ C]$	$R[(m^2 \cdot K)/W]$	ε
Adiabatic Adiat	0,000			
Exterior Außen		-10,000	0,040	
e 0,9 Cavity Hohlraum				0,900
fRsi: Interior Innen		20,000	0,250	



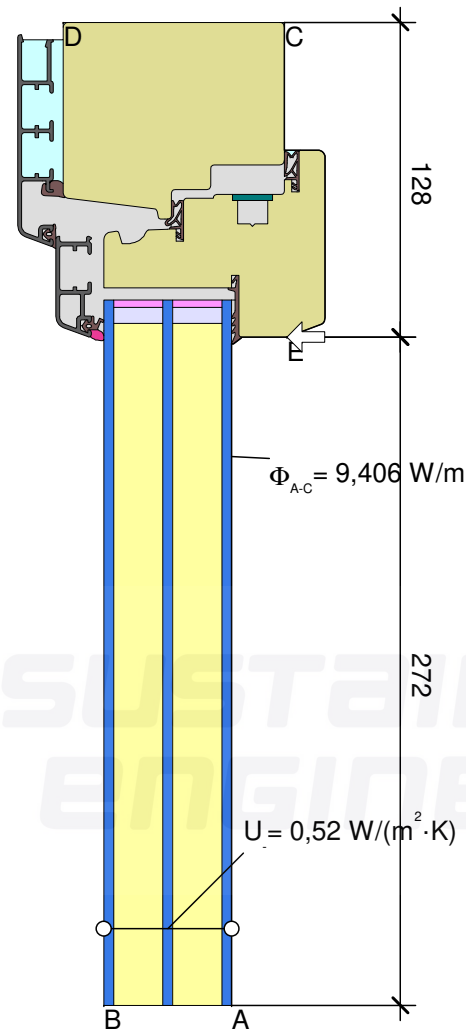
Material

Material	λ [W/(m·K)]	ϵ
Aluminum Aluminium 10456	160,000	0,900
Ar20 in 52 mm U 0,52	0,023	
EPDM	0,250	0,900
EPDM foam Moosgummi	0,050	0,900
Glass Glas	1,000	0,900
Polysulfide Polysulfid	0,400	0,900
SWISSP. Ultimate Box 2	0,140	
Slightly vent. cav. leicht bel. Hohlr. **		
Softwood, OSB Weichholz, OSB 10456	0,130	0,900
Steel Stahl	50,000	0,900
Unvent. cavity unbel. Hohlr. **		

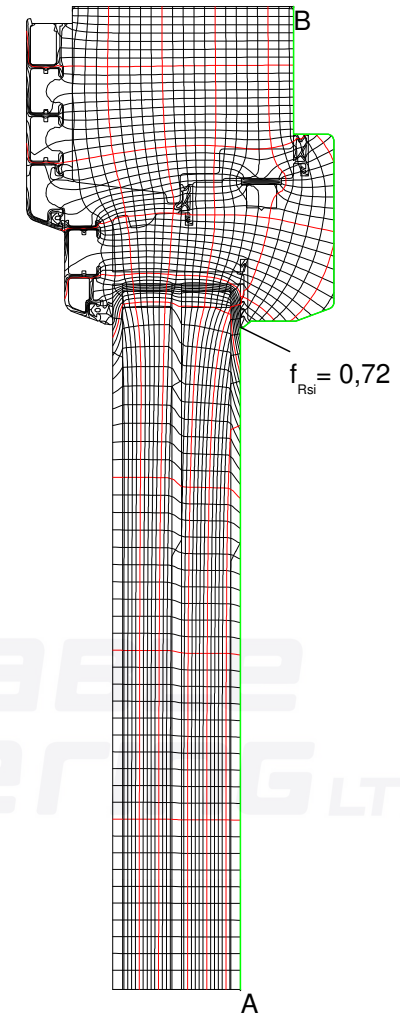
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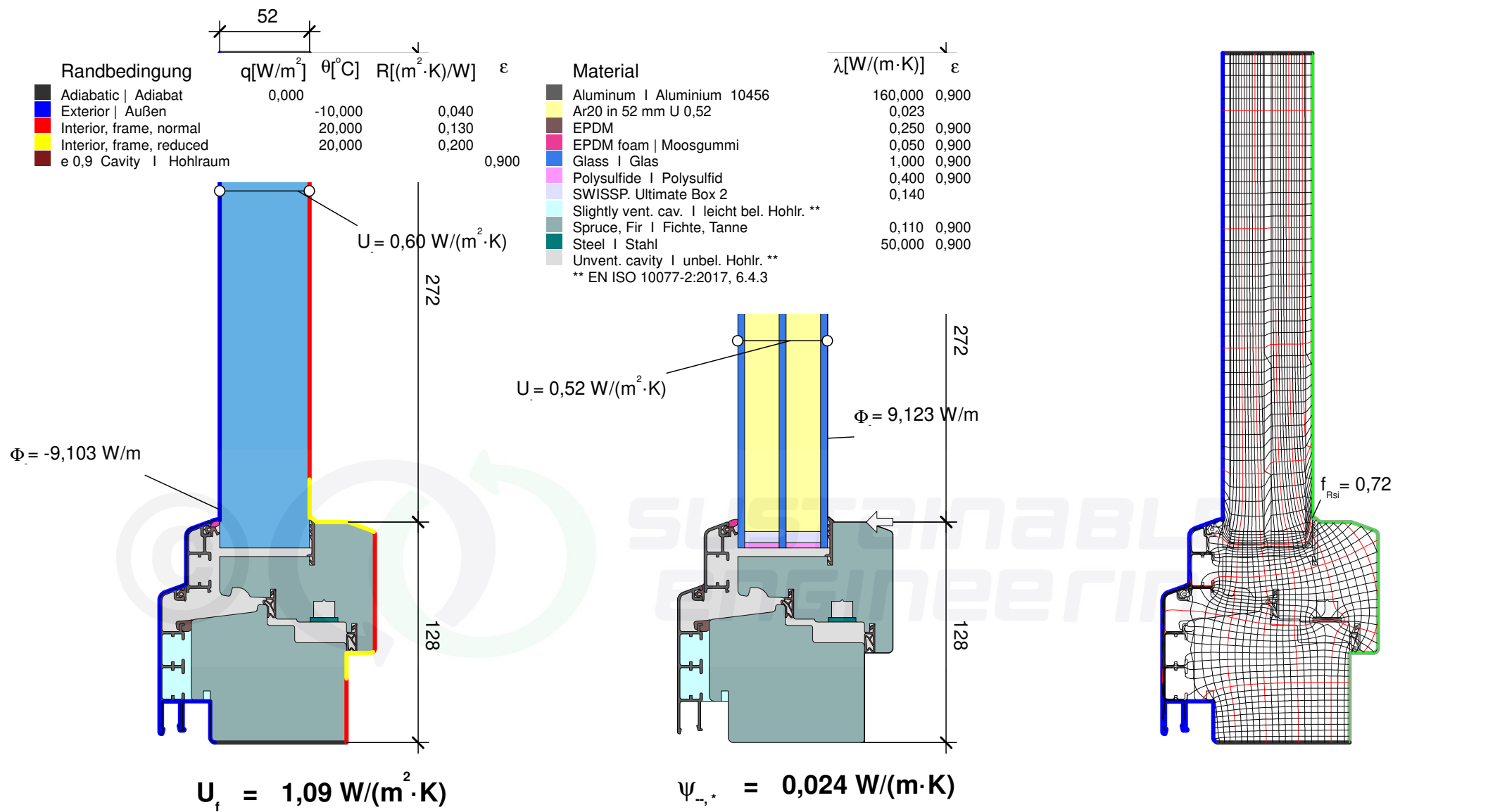
$$U_{f A,B} = 1,16 \text{ W/(m}^2 \cdot \text{K)}$$



$$\psi_{A-E-C,*} = 0,023 \text{ W/(m} \cdot \text{K)}$$

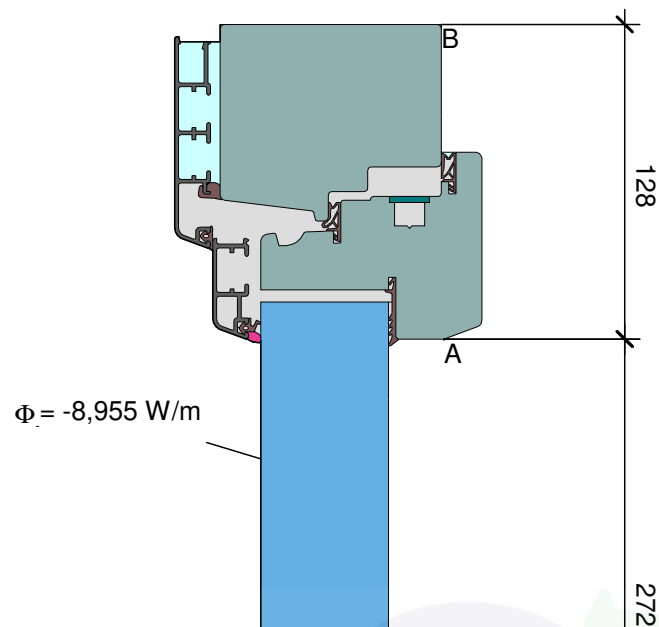


DesignLine 90 top/side | Larch | Triple glazing



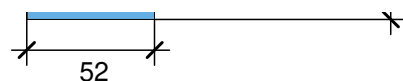
DesignLine 90 bottom | PASSIVE

Randbedingung	$q[W/m^2]$	$\theta[^\circ C]$	$R[(m^2 \cdot K)/W]$	ε
Adiabatic Adiat	0,000			
Exterior Außen		-10,000	0,040	
e 0,9 Cavity Hohlraum		20,000	0,250	0,900
fRsi: Interior Innen				

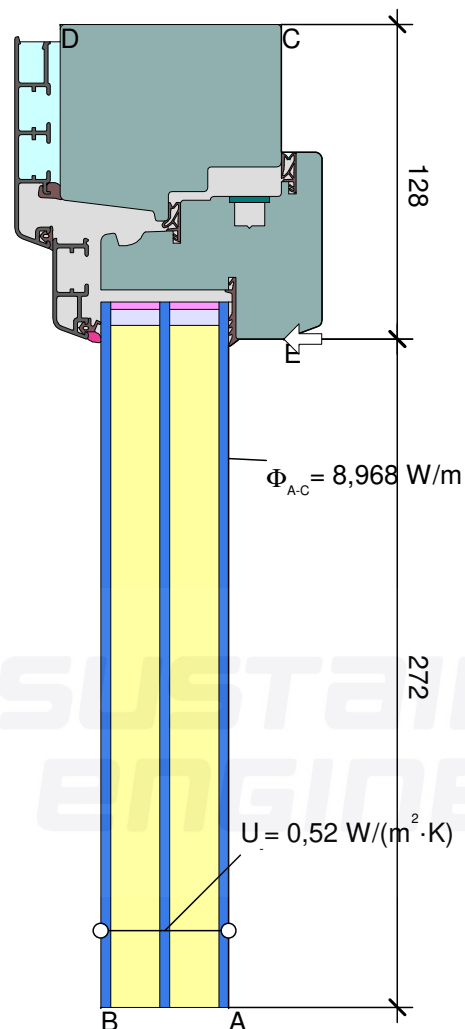


Material	λ [W/(m·K)]	ϵ
Aluminum Aluminium 10456	160,000	0,900
Ar20 in 52 mm U 0,52	0,023	
EPDM	0,250	0,900
EPDM foam Moosgummi	0,050	0,900
Glass Glas	1,000	0,900
Polysulfide Polysulfid	0,400	0,900
SWISSP. Ultimate Box 2	0,140	
Slightly vent. cav. leicht bel. Hohlr. **		
Spruce, Fir Fichte, Tanne	0,110	0,900
Steel Stahl	50,000	0,900
Unvent. cavity unbel. Hohlr. **		

** EN ISO 10077-2:2017, 6.4.3



$$U_{fA,B} = 1,05 \text{ W/(m}^2 \cdot \text{K)}$$



$$\psi_{A-E-C,*} = 0,023 \text{ W/(m} \cdot \text{K)}$$

