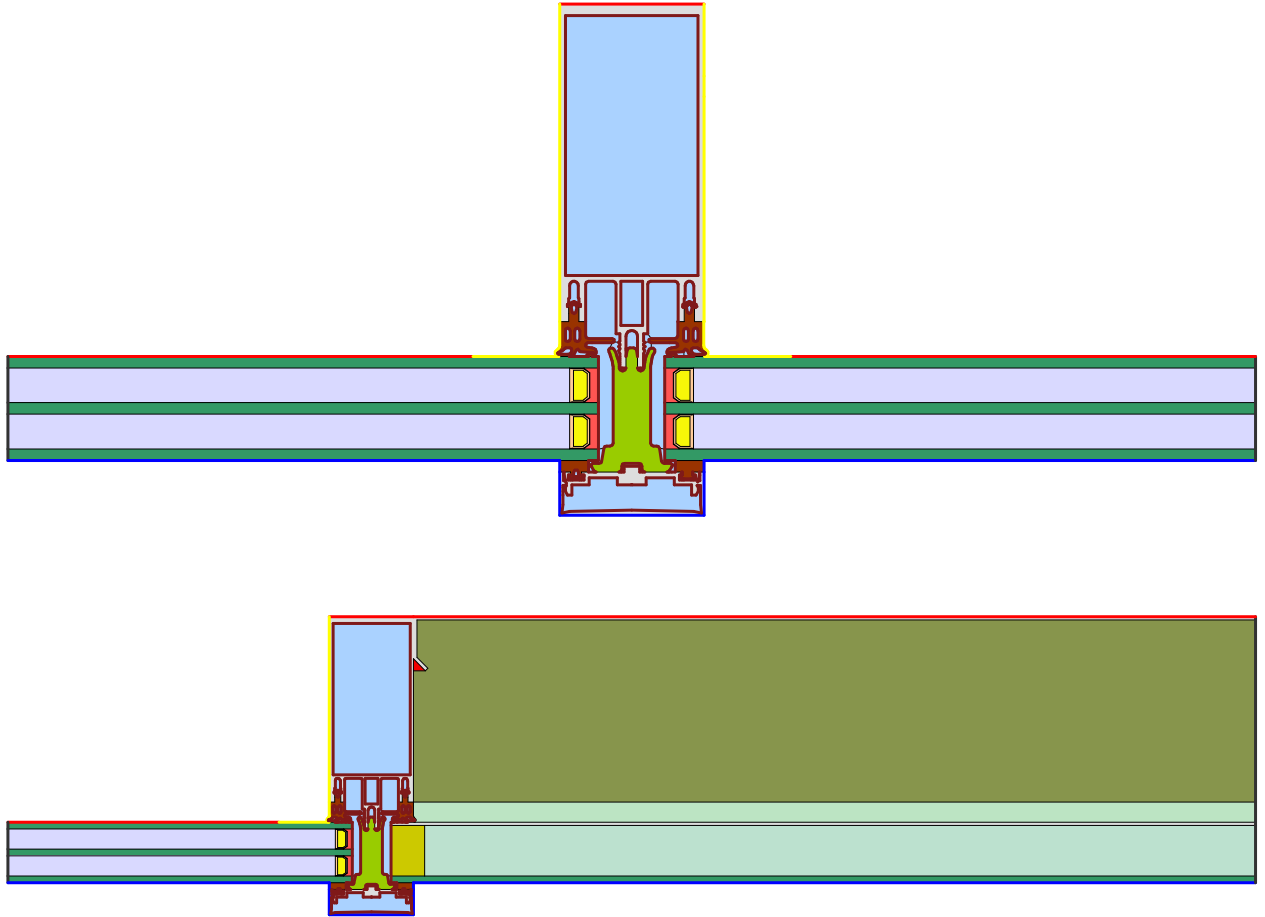
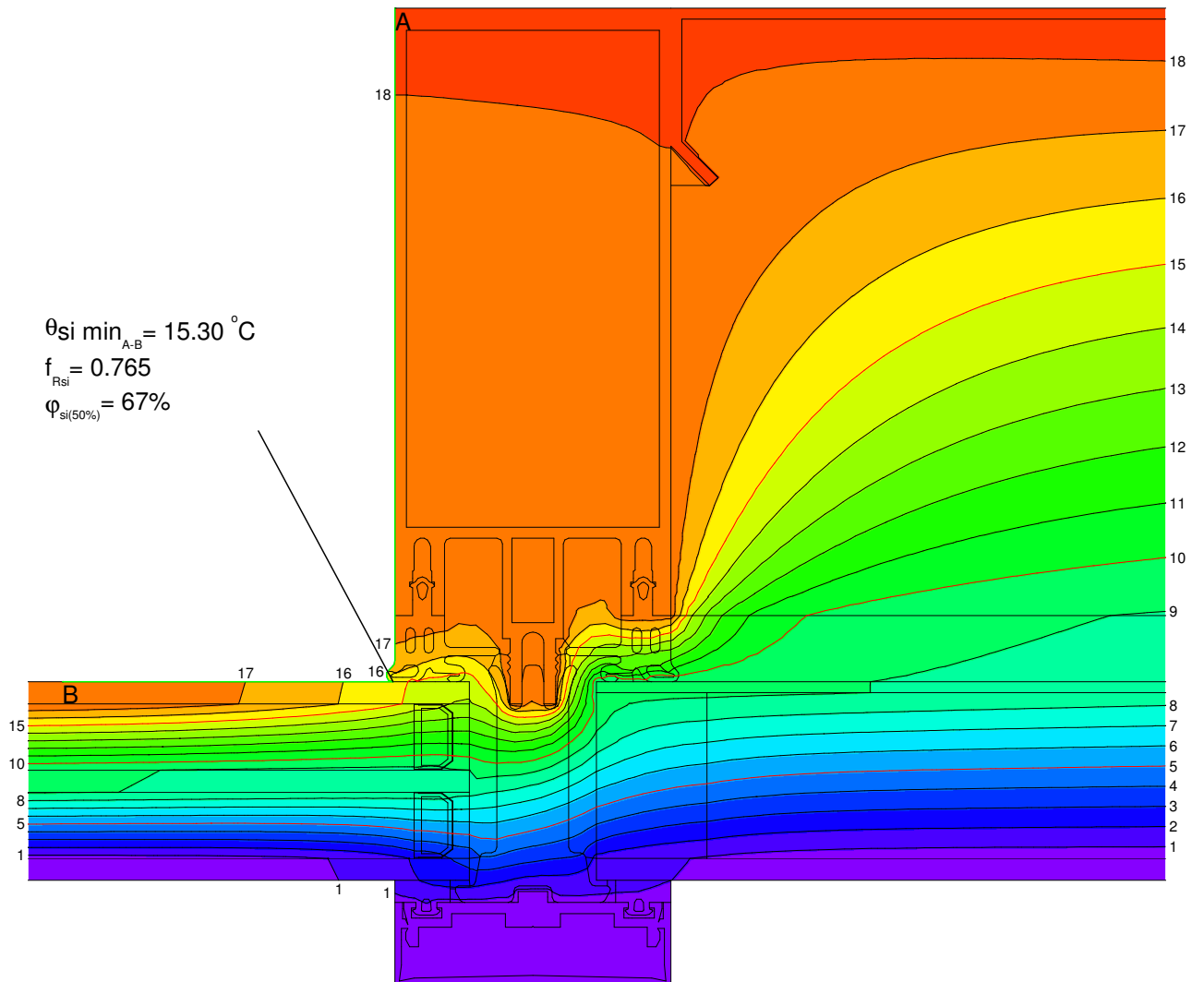
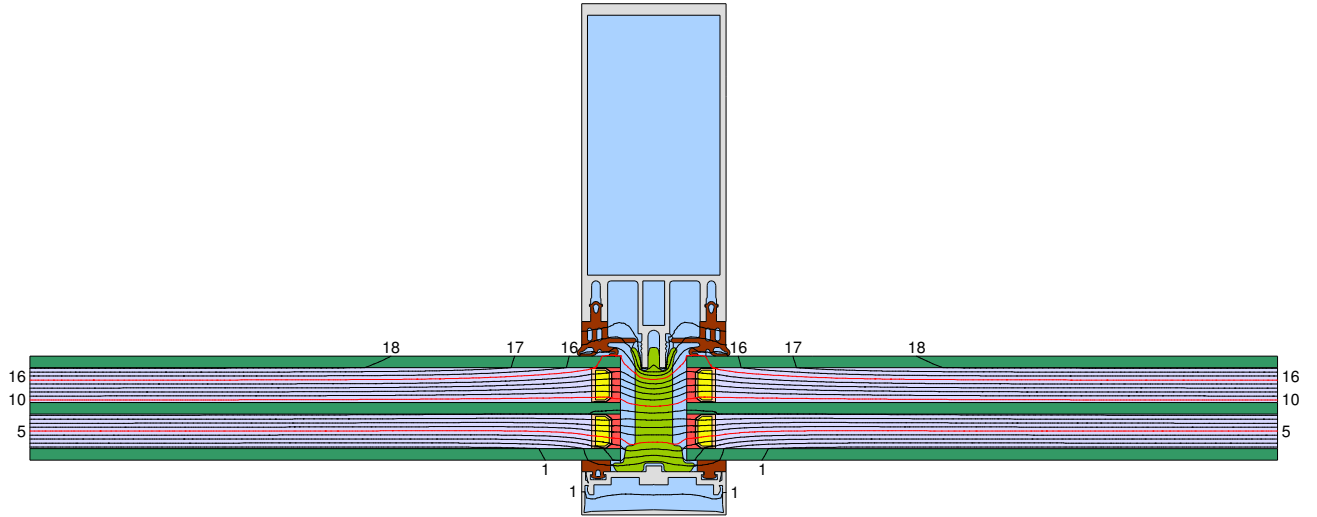


Input

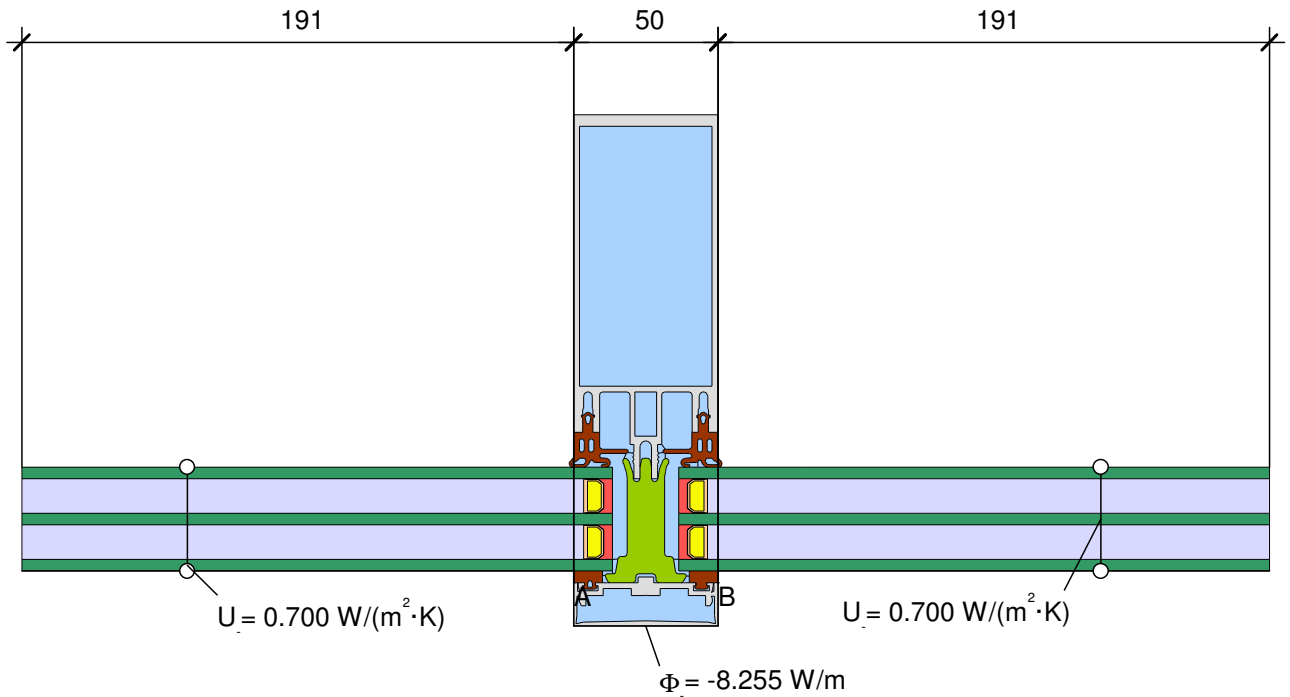


Material	λ [W/(m·K)]	ϵ	Randbedingung	q [W/m ²]	θ [°C]	R [(m ² ·K)/W]	ϵ
Aluminium	160.000	0.900	Epsilon 0.9				0.900
Butyl (Isobuten), heissgeschmolzen	0.240		exterior frame	0.000		0.040	
EPDM	0.250	0.900	interior frame, reduced	20.000		0.200	
Edelstahl, Fa. Ensinger	1.000		interior frame, standard	20.000		0.130	
Gasfüllung(21)	0.019		symmetry/Model section	0.000			
Gasfüllung(22)	0.019						
Luftschicht, schwach belüftet, horizontal, Dicke: 12 mm	0.152						
Mineralische und pflanzliche Faserdämmstoffe WLG 035	0.035						
Phonotherm	0.075	0.900					
Polysulfid (1)	0.400	0.900					
Polyurethan (PUR)-Hartschaum WLG 035	0.035						
Silicagel (Trockenmittel) (1)	0.130						
Super Illen	0.040	0.900					
Tecatherm, Fa. Ensinger	0.230						
Unventilated air cavity	anisotrop						
silicone	0.350						
soda lime	1.000	0.900					

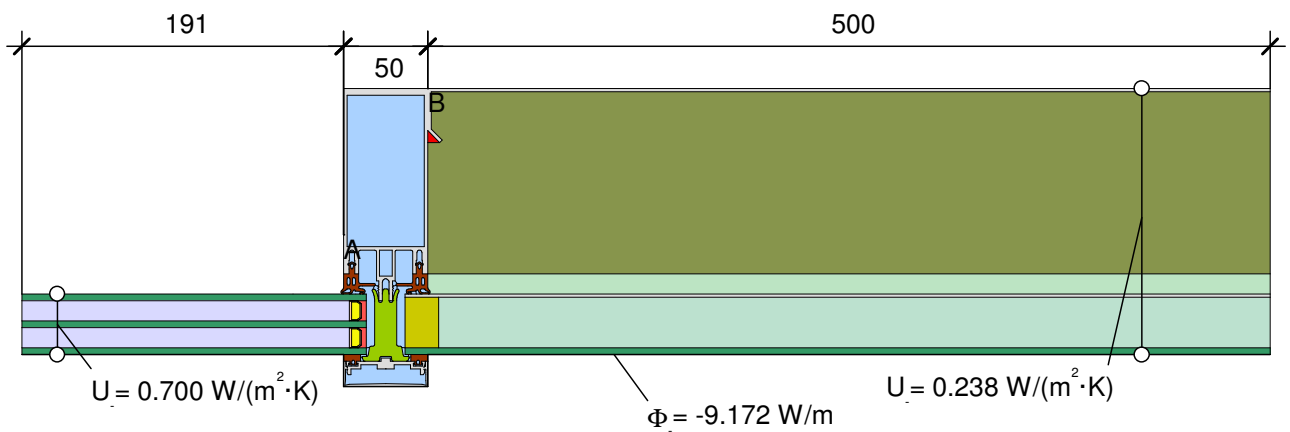
Temperatures



U Joint

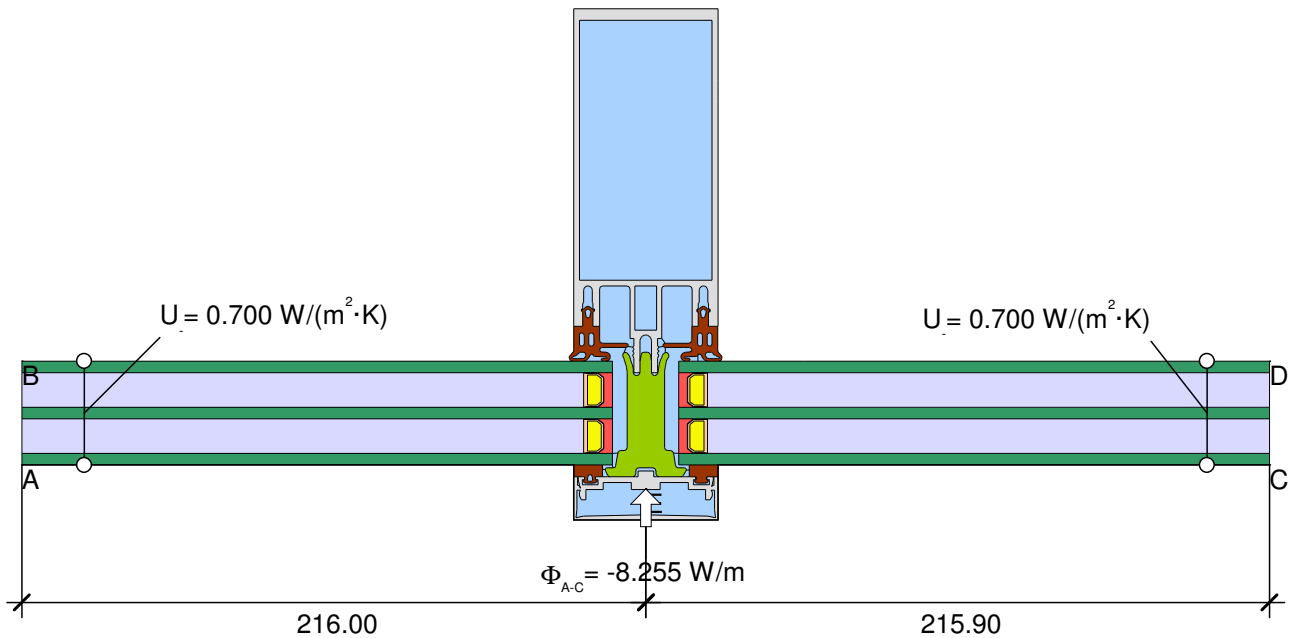


$$U_{TJ,A,B} = \frac{\frac{\Phi}{\Delta T} - U_{g1} \cdot b_{g1} - U_{g2} \cdot b_{g2}}{b_f} = \frac{\frac{8.255}{20.000} - 0.700 \cdot 0.191 - 0.700 \cdot 0.191}{0.050} = 2.91 \text{ W}/(\text{m}^2 \cdot \text{K})$$

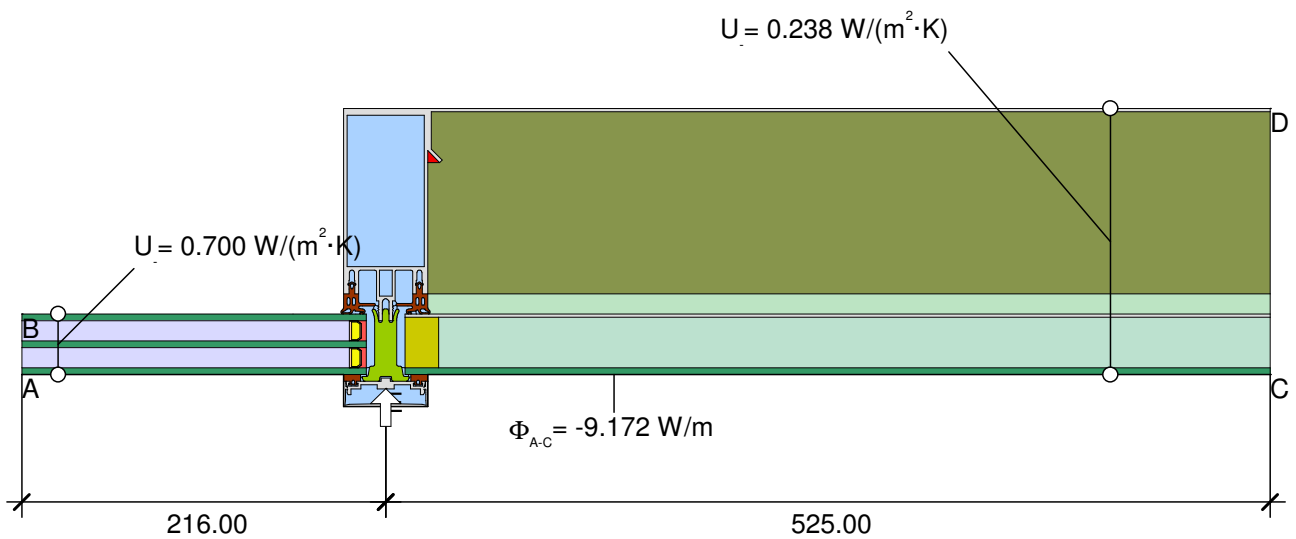


$$U_{TJ,A,B} = \frac{\frac{\Phi}{\Delta T} - U_{g1} \cdot b_{g1} - U_{g2} \cdot b_{g2}}{b_f} = \frac{\frac{9.172}{20.000} - 0.700 \cdot 0.191 - 0.238 \cdot 0.500}{0.050} = 4.11 \text{ W}/(\text{m}^2 \cdot \text{K})$$

Psi Joint



$$\psi_{A-E-C} = \frac{\Phi}{\Delta T} - U_1 \cdot b_1 - U_2 \cdot b_2 = \frac{8.255}{20.000} - 0.700 \cdot 0.216 - 0.700 \cdot 0.216 = 0.110 \text{ W}/(\text{m} \cdot \text{K})$$



$$\psi_{A-E-C} = \frac{\Phi}{\Delta T} - U_1 \cdot b_1 - U_2 \cdot b_2 = \frac{9.172}{20.000} - 0.700 \cdot 0.216 - 0.238 \cdot 0.525 = 0.182 \text{ W}/(\text{m} \cdot \text{K})$$