

C_3.1. Determination of heating loads

Enclosure Type	Continuous façade Module 5x3						
Parameters	Af	Ag	Ug	Uf	ψ	l	A TOT
u.m	[m ²]	[m ²]	[W/m ² K]	[W/m ² K]	[W/mK]	[m]	[m ²]
Single window	4.3	10.7	3.3	7	0.08	15.5	15.0
Thermal Transmittance					Uw=	4.45	[W/m ² K]

$H_{T,e}$ TRANSMISSION LOSS COEFFICIENT TOWARDS THE ENVIRONMENT						
ORIENTATION	AREA [m ²]	AERIAL TRANSMITTANCE [W/m ² k]	EXPOSITION e _k [-]	$\sum_{k=1}^n A_k * U_k * e_k$		
Nord_Est	765.47	4.45	1.2	4091.60	[W/K]	
Nord_West	2704.56	4.45	1.15	13854.14	[W/K]	
Sud_Est	2194.25	4.45	1.1	10751.36	[W/K]	
Sud_West	765.47	4.45	1.05	3580.15	[W/K]	
			TOT	32277.25	[W/K]	

TRANSMISSION LOSS COEFFICIENT TOWARDS THE ENVIRONMENT LINEAR						
ORIENTATION	LENGTH [m]	LINEAR THERMAL TRANSMITTANCE [W/mK]	EXPOSITION e _k [-]	$\sum_{l=1}^m \psi_l \cdot l_l \cdot e_l$		
Nord_Est	1054.00	1.00	1.2	1264.80	[W/K]	
Nord_West	2431.00	1.00	1.15	2795.65	[W/K]	
Sud_Est	1975.40	1.00	1.1	2172.94	[W/K]	
Sud_West	1054.00	1.00	1.05	1106.70	[W/K]	
			TOT	7340.09	[W/K]	

TRANSMISSION LOSS COEFFICIENT TOWARDS UNHEATED ENVIRONMENT					
ORIENTATION	AREA [m ²]	TRANSMITTANCE [W/m ² k]	REDUCTION b _u [-]	$\sum_{k=1}^n A_k * U_k * b_u$	
Sud_Est_CS	510.31	5.80	0.8	2367.85	[W/K]