



Tablica toplinske izolacije – međukatna konstrukcija

$U_{\text{dop.}} = 1,40 \text{ [W/m}^2\text{K]}$ – najveća dopuštena vrijednost koeficijenta prolaska topline

Proračun koeficijenta prolaska topline $U \text{ [W/m}^2\text{K]}$

SLOJ	80 % POVRŠINE			20 % POVRŠINE		
	DEBLJIN A d[cm]	KOEFICIJEN T TOPL. VODLJ. $\lambda \text{ [w/mk]}$	d/λ $[\text{m}^2\text{k/w}]$	DEBLJIN A d[cm]	KOEFICIJEN T TOPL. VODLJ. $\lambda \text{ [w/mk]}$	d/λ $[\text{m}^2\text{k/w}]$
POLISTIRE N 0,02 t/m³	15,0	0,04	3,75			
KERAMZIT BETON 1,3 t/m³	8,0	0,5	0,16	20,0	0,5	0,4

$$R = \Sigma d/\lambda = 3,91 \text{ [m}^2\text{K/W]}$$

$$R_i = 1/\alpha_i = 0,13 \text{ [m}^2\text{K/W]}$$

$$R_e = 1/\alpha_e = 0,04 \text{ [m}^2\text{K/W]}$$

$$R = \Sigma d/\lambda = 0,4 \text{ [m}^2\text{K/W]}$$

$$R_i = 1/\alpha_i = 0,13 \text{ [m}^2\text{K/W]}$$

$$R_e = 1/\alpha_e = 0,04 \text{ [m}^2\text{K/W]}$$

$$R_k = 4,08 \text{ [m}^2\text{K/W]} - \text{koef. toplinskog otpora}$$

$$R_k = 0,57 \text{ [m}^2\text{K/W]}$$

$$U_1 = 1/4,08 \text{ [m}^2\text{K/W]} = 0,245 \text{ [W/m}^2\text{K]}$$

$$U_2 = 1/0,57 \text{ [m}^2\text{K/W]} = 1,754$$

$$U = 80 \% U_1 + 20 \% U_2 \rightarrow 0,80 \times 0,245 \text{ [W/m}^2\text{K]} + 0,20 \times 1,75 \text{ [W/m}^2\text{K]} = \mathbf{0,54 < 1,40 \text{ [W/m}^2\text{K]}}$$

Proizvođač:  **MARANA**