

$$\alpha_m = \frac{1}{n} \sum_{i=1}^n \alpha_i \quad (1)$$

$$\alpha_m = \alpha_1 \frac{S_1}{S} + \alpha_2 \frac{S_2}{S} + \cdots + \alpha_n \frac{S_n}{S} = \frac{1}{S} \sum_{i=1}^n (\alpha_i \cdot S_i) \quad (2)$$

$$A_f = \alpha_f \cdot S \quad (3)$$

$$A_l = \sum_{i=1}^n (\alpha_i \cdot S_i) \quad (4)$$

$$A_{ob} = \sum_{j=1}^n (\alpha_j \cdot S_j) \quad (5)$$

$$A_T = A_l + A_{ob} = \sum_{i=1}^n (\alpha_i \cdot S_i) + \sum_{j=1}^n (\alpha_j \cdot S_j) \quad (6)$$

$$\alpha_m = \frac{A_T}{S} = \frac{1}{S} \left[\sum_{i=1}^n (\alpha_i \cdot S_i) + \sum_{j=1}^n (\alpha_j \cdot S_j) \right] \quad (7)$$

$$T = 0,161 \frac{V}{A} \quad (8)$$

$$f_{n_x n_y n_z} = \frac{C}{2} \sqrt{\left(\frac{n_x}{l_x}\right)^2 + \left(\frac{n_y}{l_y}\right)^2 + \left(\frac{n_z}{l_z}\right)^2} \quad (9)$$

$$f_r^2 = \frac{K}{4\pi^2} \frac{M_1 + M_2}{M_1 \cdot M_2} \quad (10)$$

$$f_r = \sqrt{\frac{1}{d} \left(\frac{1}{M_1} + \frac{1}{M_2} \right)} \quad (11)$$

$$f_{r_1} = 60 \sqrt{\frac{1}{d_3 + d_5} \left(\frac{M_2 + M_6}{M_2 \cdot M_6} \right)} \quad (12)$$

$$R_T = R_{M_2} + R_{M_4} + R_{M_6} + \left[10 \log(d_3 \cdot d_5) + 10 \log(\alpha_3 \cdot \alpha_5) + 10 \log \left(\frac{h+b}{h \cdot b} \right) \right] + 6 \quad (13)$$

$$R_2 = 10 \log \left(1 - n \frac{S_0}{S} \cdot 10^{0,1 \cdot R_1} \right) \quad (14)$$

Referencias

- [1] Control Acústico en los edificios. Rafael Serra Florensa & Francis de P. Labastida Azemar.
- [2] Aislamiento Acústico. A. Moreno Arranz & C. de la Colina.
- [3] Aislamiento Térmico y Acústico. Manuel Payá.
- [4] Acústica Arquitectónica. Manuel Recuero.
- [5] Ingeniería Acústica. Manuel Recuero.
- [6] Faltan Provisional