

Young modulus – thermal expansion @model

(1) $E \cdot \alpha_T^2 = k_{\alpha E} = \text{const}$

where

E	Young modulus
α_T	thermal expansion coefficient
$k_{\alpha E}$	universal constant

Typical value for rocks is $k_{\alpha E} = 15 \text{ Pa/K}^2$

See Also

[Physics](#) / [Mechanics](#) / [Continuum mechanics](#) / [Young modulus \(E\)](#)

Reference

R.E. Barker. J. Appl. Phys.34,1, 107(1963).