$$\sigma_{th,a(i)} = \genfrac{}{}{0pt}{}{+}{(-)} \; \frac{E\alpha_L}{1-\nu} \frac{\Delta T_w}{2}$$

$$\Delta T_w = T_{Wi} - T_{Wa}$$

α_L Longitudinal expansion coefficient

ν Poisson's ratio

E Modulus of elasticity