
Refname**DD:sdf.tol**

Label

Stress Distribution Factor (Function) Based on Pbtol

Units

Unitless

Equation

$$J_{tol} = \log \left(\log \left(\frac{1}{1-P_{btol}} \right) \frac{\left(\frac{a}{1000} \frac{b}{1000} \right)^{m-1}}{k \left(\left(E \cdot 1000 \left(\frac{h}{1000} \right)^2 \right) \right)^m \cdot LDF} \right)$$

Description

J_{tol} is the stress distribution factor (Function) based on Pbtol

P_{btol} is the tolerable probability of breakage

a is the plate length (long dimension) (m)

b is the plate width (short dimension) (m)

m is the surface flaw parameter $\left(\frac{\text{m}^{12}}{\text{N}^7} \right)$

k is the surface flaw parameter $\left(\frac{\text{m}^{12}}{\text{N}^7} \right)$

E is the modulus of elasticity of glass (Pa)

h is the actual thickness (m)

LDF is the load duration factor
