

| Refname     | DD:sdfTol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Label       | Stress distribution factor (Function) based on Pbtol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Symbol      | $J_{\text{tol}}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Units       | Unitless                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Equation    | $J_{\text{tol}} = \ln \left( \ln \left( \frac{1}{1 - P_{\text{btol}}} \right) \frac{\left( \frac{a}{1000} \frac{b}{1000} \right)^{m-1}}{k \left( E \cdot 1000 \left( \frac{h}{1000} \right)^2 \right)^m LDF} \right)$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Description | <p><math>J_{\text{tol}}</math> is the stress distribution factor (Function) based on Pbtol (Unitless)</p> <p><math>P_{\text{btol}}</math> is the tolerable probability of breakage (Unitless)</p> <p><math>a</math> is the plate length (long dimension) (m)</p> <p><math>b</math> is the plate width (short dimension) (m)</p> <p><math>m</math> is the surface flaw parameter (<math>\frac{\text{m}^{12}}{\text{N}^7}</math>)</p> <p><math>k</math> is the surface flaw parameter (<math>\frac{\text{m}^{12}}{\text{N}^7}</math>)</p> <p><math>E</math> is the modulus of elasticity of glass (Pa)</p> <p><math>h</math> is the minimum thickness (m)</p> <p><math>LDF</math> is the load duration factor (Unitless)</p> |