
1. plasticity	the ability of a material to withstand permanent deformation without failure
2. proof stress	a value calculated to substitute for yield strength when no obvious yield point exists for a material
3. second moment of area	a calculation based on cross-sectional areas used to predict the resistance of a beam to bending and deflection
4. shear	movement of a material in which parallel internal surfaces slide past one another
5. stiffness	a measure of rigidity; may also refer to a resistance to flexing
6. strain	the amount of deformation an object experiences compared to its original length
7. stress	the relationship between force and the cross-sectional area of a material
8. superstructure	items related to bridges including the roadway, footpaths, railings and supporting structural members
9. tension	forces applied to a body that attempt to stretch or make the body longer
10. timber	a naturally occurring composite material made up of cellulose and lignin
11. truss	a supportive structure consisting of beams or girders with members arranged in a triangulated configuration
12. ultimate tensile strength	the maximum stress a material can withstand before failing
13. vitreous	a term which describes a material that is glass-like in structure
14. wrought iron	a material consisting of a soft, ductile matrix of iron with large inclusions of slag, elongated by the forming process
15. yield point	the first point (load) at which a specimen yields and where an increase in strain occurs without an increase in strength
16. yield stress	the maximum engineering stress, in Mpa, at which permanent, non-elastic deformation begins
17. Young's modulus	the ratio of stress to strain within the elastic region of the stress-strain curve (prior to the yield point)
