Nomenclature ... (as of 4/25/2011)

A = Area, generic, cross section area, tributary area, bearing area

A_g = gross area of section

A_b = bearing area

b = width (of beam)

c = camber

C = Adjustment factor (generic); partial list of specific adjustment factors below

- C_D = Load Duration factor
- C_M = Wet Service factor
- C_t = Temperature factor
- C_P = Column stability factor
- C_L = Beam stability factor
- C_V = Volume factor (glulam and structural composite lumber)
- C_c = Curvature factor (glulam)
- C_F = Size factor (sawn lumber)
- C_r = Repetitive use factor
- C_i = incising factor

d = depth (of beam)

D = bolt diameter

D, DL = Dead load or effect of Dead load

Δ = deflection (sag)

e = eccentricity

E, E' = Modulus of Elasticity, Adjusted Modulus of Elasticity

E_{min}, E_{min}' = Reference, Allowable 'Minimum' Modulus of Elasticity (used for beam and column stability)

f = stress (generic)

f_b = extreme fiber bending stress

F, F' = Design value (stress), Allowable stress (generic)

F_b , F_b' = Design value for bending, Allowable bending stress

F_c, F_{cr} = Critical compressive stress (steel design), based on slenderness

F_y = Yield stress of steel

F_v , F_v' = Design value for shear parallel to grain, Allowable shear stress

$F_{c\perp}$, $F_{c\perp}'$ = Design value for compression perp. to grain, Allowable compression perp.

h = depth of beam

I = Importance factor (generic)

K = effective length factor (columns)

ℓ = lesser of: length of fastener in wood main member or total length of fastener in wood side member(s)

ℓ_b = bearing length

L = length (of beam, ledger, etc.)

L, L_x, L_y = Column length (generic), braced length with respect to buckling about x-axis, ... y-axis

L = Live load or effect of Live load

L_b = braced length (beam)

L_p = maximum unbraced length for which plastic moment can be achieved (beam)

LL = Live load

M = bending moment

M_p = plastic moment (steel beams)

M_n = nominal moment (strength)

M_u = factored moment (load) or maximum factored moment (load)

p = penetration (of nail in receiving member or threaded portion of screw in receiving member)

p = snow load (generic)

p_g = Ground Snow load

p_f = Flat Roof Snow load

p_s = Sloped Roof Snow load

P = axial force

P_n = nominal axial compressive strength (column)

P_u = factored axial load or maximum factored axial load

P', P = Allowable and Design value parallel to grain (split rings, shear plates, and timber rivets)

Q', Q = Allowable and Design value perpendicular to grain (split rings, shear plates, and timber rivets)

r, r_x, r_y = radius of gyration (generic, with respect to x-axis, with respect to y-axis)

R = radius of curvature (for a cambered or curved beam)

R = reaction (force)

s = spacing (of nails, bolts, etc.)

S = Section Modulus

S = Snow load or effect of Snow load

S = tributary width

SL = Snow load

t = time of fire resistance (minutes)

T = Tension force

V = shear force

v = unit shear

W = `whole' weight or load

W = Wind load or effect of Wind load

W', W = Allowable and Design Withdrawal load on a fastener (nail or lag screw) *per inch of penetration in main member.*

Z', Z = Allowable and Design value lateral load on a fastener (bolt, nail, etc.)

Z, Z_x = Plastic Section modulus

δ = deformation

Δ = Deflection

γ = specific weight (of material)

ϕ = Resistance factor or strength reduction factor

σ = area load

σ = stress

ω = distributed (`line') load ... typically in plf but sometimes pli and klf

ω_u = factored line load