

CODE

COMMENTARY

- ε_t = net tensile strain in extreme layer of longitudinal tension reinforcement at nominal strength, excluding strains due to effective prestress, creep, shrinkage, and temperature
- ε_{ty} = value of net tensile strain in the extreme layer of longitudinal tension reinforcement used to define a compression-controlled section
- θ = angle between axis of strut, compression diagonal, or compression field and the tension chord of the members
- λ = modification factor to reflect the reduced mechanical properties of lightweight concrete relative to normalweight concrete of the same compressive strength
- λ_a = modification factor to reflect the reduced mechanical properties of lightweight concrete in certain concrete anchorage applications
- λ_s = factor used to modify shear strength based on the effects of member depth, commonly referred to as the size effect factor.
- λ_{Δ} = multiplier used for additional deflection due to long-term effects
- μ = coefficient of friction
- ξ = time-dependent factor for sustained load
- ρ = ratio of A_s to bd
- ρ' = ratio of A_s' to bd
- ρ_{ℓ} = ratio of area of distributed longitudinal reinforcement to gross concrete area perpendicular to that reinforcement
- ρ_p = ratio of A_{ps} to bd_p
- ρ_s = ratio of volume of spiral reinforcement to total volume of core confined by the spiral, measured out-to-out of spirals
- ρ_t = ratio of area of distributed transverse reinforcement to gross concrete area perpendicular to that reinforcement
- ρ_v = ratio of tie reinforcement area to area of contact surface
- ρ_w = ratio of A_s to $b_w d$
- ϕ = strength reduction factor
- ϕ_p = strength reduction factor for moment in pretensioned member at cross section closest to the end of the member where all strands are fully developed
- τ_{cr} = characteristic bond stress of adhesive anchor in cracked concrete, MPa

λ = in most cases, the reduction in mechanical properties is caused by the reduced ratio of tensile-to-compressive strength of lightweight concrete compared to normalweight concrete. There are instances in the Code where λ is used as a modifier to reduce expected performance of lightweight concrete where the reduction is not related directly to tensile strength.

ζ = exponent symbol in tensile/shear force interaction equation

ϕ_K = stiffness reduction factor

σ = wall boundary extreme fiber concrete nominal compressive stress, MPa