

### Glossary

$f_{ck}$  = Characteristic compressive strength of concrete in  $N/mm^2$

$f_y$  = Characteristic tensile strength of steel in  $N/mm^2$

$\gamma_m$  = partial safety factor

$E_s$  = modulus of elasticity of steel

Partial safety factor for Concrete  $\gamma_m$ : 1.5

Partial safety factor for steel  $\gamma_m$ : 1.15

$C_u$  = total compressive force offered by the concrete

$T_u$  = total tensile force offered by the steel

$A_{st}$  = Area of tensile steel

$x_u$  = actual depth of neutral axis

$x_{ulim}$  = limiting value of depth of neutral axis

**Characteristic strength of materials:** Characteristic strength of materials is the strength of materials below which not more than 5% test results are expected to fall.