$\Phi_{\text{yin}}$  = In buildings with floors modelled as rigid diaphragms, horizontal component of n'th mode shape in the y direction at i'th storey of building

 $\Phi_{\theta in}$  = In buildings with floors modelled as rigid diaphragms, rotational component of n'th mode shape around the vertical axis at i'th storey of building

 $\phi_y$  = Yield curvature corresponding to nominal plastic moment

 $\phi'_{y}$  = Curvature corresponding to first-yield

 $\Gamma_{xn}$  = Participation Factor of n'th mode for x direction earthquake

 $\gamma_{ov}$  = Material overstrength factor

 $\gamma_{\rm pb}$  = Factor applied to design value  $N_{\rm pl,Rd}$  of yield resistance in tension of the compression brace in a V bracing

 $\overline{\lambda}$  = Non-dimensional slenderness of a member as defined in EN 1993-1-1:2004

 $\mu_{0}$  = Curvature ductility factor

 $v_{\rm d}$  = Axial force in seismic design situation, normalised to  $A_{\rm c} f_{\rm cd}$ 

 $\Omega$  = Value of  $(R_{di}/E_{di}) \le q/I$  of the element *i* of the structure which has the highest influence on the effect  $E_F$  under consideration

 $\omega_{\rm w}$  = Mechanical ratio of vertical web reinforcement ( $\omega_{\rm v} = \rho_{\rm v} f_{\rm yd,v} / f_{\rm cd}$ )

 $\omega_{wd}$  = Mechanical volumetric ratio of confining reinforcement

 $\rho$  = Tension reinforcement ratio

 $\rho'$  = Compression reinforcement ratio

 $\rho_{max}$  = Maximum tension reinforcement ratio allowed in the critical region of a primary beam

 $\rho_{min}$  = Minimum tension reinforcement ratio to be provided along a beam

 $\theta_i$  = Second Order Effect Indicator defined at i'th storey of building

 $\theta_{\rm p}$  = Rotation capacity of the plastic hinge region

 $\sum M_{\rm Rb}$  = Sum of design values of moment resistances of beams framing in a joint in the direction considered

 $\sum M_{\rm Rc}$  = Sum of design values of moment resistances of columns framing in a joint in the direction considered

## 1.1.3. Reference Standards

**1.1.3.1** – The following standards are acceptable reference standards to be utilized in combination with this standard:

EN 1990: Eurocode – Basis of structural design

EN 1992-1-1: Eurocode 2 – Design of concrete structures – Part 1-1: General - Common rules for building and civil engineering structures

EN 1993-1-1: Eurocode 3 – Design of steel structures – Part 1-1: General - General rules

EN 1993-1-1: Eurocode 4 – Design of composite steel and concrete structures – Part 1-1: General rules and rules for buildings

EN 1997-1: Eurocode 7 – Geotechnical design – Part 1: General rules

EN 1998-5: Eurocode 8 – Design of structures for earthquake resistance – Part 5: Foundations, retaining structures and geotechnical aspects

**1.1.3.2** – Regarding the utilization of the above-referenced Eurocodes, National Application Documents of the United Kingdom may be applied.