CHAPTER 1
GENERAL REQUIREMENTS

1.1. SCOPE, NOTATIONS, REFERENCE STANDARDS

1.1.1. Scope

1.1.1.1 – This standard covers the seismic analysis and design requirements of reinforced concrete and steel building structures to be constructed within boundaries of Emirate of Dubai.

1.1.1.2 – This standard is applicable to low- to medium rise buildings as well as to tall buildings, as defined in **1.3.1**.

(a) All parts of this standard excluding **Chapters 6** and **7** are applicable to low- to medium rise buildings.

(b) Special seismic analysis and design requirements applicable to tall buildings are given in **Chapters 6** and **7**. Parts of sections **1.2** and **1.3** of **Chapter 1** as well as parts of **Chapter 2** that are referred to in **Chapter 6** are also applicable to tall buildings.

1.1.1.3 – Civil engineering structures other than buildings are outside the scope of this code.

1.1.1.4 – Base-isolated buildings as well as buildings equipped with active or passive control systems and devices are outside the scope of this code.

1.1.2. Notations

A = Gross area of seismic link
A_c = Total effective area of structural walls in the first storey for empirical calculation of predominant period in the eartquake direction [m^2]
A_e = Maximum acceleration acting on nonstructural element or component
A_j = Effective area of the j'th structural walls in the first storey for empirical calculation of predominant period in the eartquake direction [m^2]
A_{pl} = Horizontal area of the plate
A_{st} = Area of one leg of the transverse reinforcement; area of stiffener
B_e = Amplification factor for nonstructural element or component
b = Width of the flange
b_b = Width of composite beam or bearing width of the concrete of the slab on the column
b_c = Cross sectional dimension of column
b_e = Partial effective width of flange on each side of the steel web
b_{eff} = Effective flange width of beam in tension at the face of a supporting column; total effective width of concrete flange
b_i = Distance between consecutive bars engaged by a corner of a tie or a cross-tie in a column
b_o = Width of a confined core in a column or in the boundary element of a wall (to centerline of hoops)
b_w = Width of the web of a beam
b_{wo} = Web thickness of wall
C_t = Empirical factor for the calculation of predominant period in the earthquake