

a. The codes of loads:

i. The live loads and the dead loads on the buildings:

The British code No: 6399 – the first part -1996 (BS 6399 part 1 1996) with observing the following exceptions that were mentioned in the above codes:

1. The live load on the mezzanine floor should not be less than (5) KN\m<sup>2</sup> in the commercial and the industrial buildings.
2. The live load should not be less than (3.5) KN\m<sup>2</sup> in the buildings of parking lots and the parking floors in the other buildings.
3. The live load in the flat slabs design and the post tensioning should not be less than (3) KN\m<sup>2</sup> in all the buildings which can be exposed to live loads less than this quantity. Also, the wall loads should be added to the live loads.

ii. The wind loads:

British code No: 6399 – the second part – 1995 (BS 6399 Part 1, 1995) or the British code No: 3 – the fifth chapter – the second part – 1972 (CP3: Chapter V: part 2: 1972) with observing the main wind speed in Dubai emirate which is (45) m\ sec.

iii. The live loads on the roofs:

British code No: 6399 – the third part – 1988 (BS 6399 Part 3 1988) with observing when calculating the dynamic effects and the load condensation resulting from the machines of air-conditioners, water tanks, sand accumulation on the roof edges and the effect of the landing of vertical aircrafts.

iv. The earthquake loads:

American uniform building code – chapter 16 –from the third division to the fifth – 1997 (UBC – Uniform Building Code – USA – chapter 16: Division III to V -1997) with observing the necessity of abiding by the following values for the factors that are mentioned in the equation of calculating the statics vertical forces that are equal to earthquake actions:-

1. The factor of intensity which depend on the area where it is taken depending on the ground of the (2A) area.
2. The factor of soil which is taken depending on the ground of (Se) factor for the littorals and the areas that have high underwater and sandy soil. This factor is taken on the ground of (Sa To Sd) for the mountain and the rocky areas.

b. The designing codes:-

i. The Foundations:

British code No: 8004 – 1986 (BS 8004:1986).

ii. The establishments of reinforced concrete or prestressed -concrete or plain concrete:-

British code No: (8110)

iii. The first part- 1997 – for designing and construction (BS 8110: part 1: 1997)

iv. The second part- 1985 – for special consideration in the design (BS 8110: part 2: 1985)

v. The third part – 1985 – the tables and the drawings of designing (BS 8110: part 3: 1985)

c. The metal establishments:

The British code No: 449 – the second part – 1969 or the British code No: 5950