concept C the composite structure is designed in accordance with EN 1994-1-1:2004 under non-seismic loads and in accordance with **Chapter 4** to resist earthquake action. The measures preventing involvement of the concrete are given in **5.5.5**.

5.1.2.6 – The design rules for dissipative composite structures (concept B), aim at the development of reliable local plastic mechanisms (dissipative zones) in the structure and of a reliable global plastic mechanism dissipating as much energy as possible under the design earthquake action. For each structural element or each structural type considered in this Chapter, rules allowing this general design objective to be achieved are given in **5.5** to **5.9** with reference to what are called the specific criteria. These criteria aim at the development of a global mechanical behaviour for which design provisions can be given.

5.1.2.7 – Structures designed in accordance with concept B shall belong to structural ductility class identified as *Normal Ductility Class* (DCN). This ductility class corresponds to increased ability of the structure to dissipate energy in plastic mechanisms, for which composite seismic design requirements are given in the remainder of **Chapter 5**.

5.1.3. Structural types and Behaviour Factors

5.1.3.1 – Composite steel-concrete structures shall be assigned to one of the following structural types according to the behaviour of their primary resisting structure under seismic actions:

(a) *Composite moment resisting frames* are those with the same definition and limitations as in **4.1.3.1(a)**, but in which beams and columns may be either structural steel or composite steel-concrete.

(b) *Composite concentrically braced frames* are those with the same definition and limitations as in **4.1.3.1(b)**. Columns and beams may be either structural steel or composite steel-concrete. Braces shall be structural steel.

(c) *Composite eccentrically braced frames* are those with the same definition and configurations as in **4.1.3.1(c)**. The members which do not contain the links may be either structural steel or composite steel-concrete. Other than for the slab, the links shall be structural steel. Energy dissipation shall occur only through yielding in bending or shear of these links.

(d) Inverted pendulum structures, have the same definition and limitations as in **4.1.3.1(i)**.

(e) Composite structural systems are those which behave essentially as reinforced concrete walls. The composite systems may belong to one of the following types:
− Type 1 corresponds to a steel or composite frame working together with concrete infill panels connected to the steel structure;
− Type 2 is a reinforced concrete wall in which encased steel sections connected to the concrete structure are used as vertical edge reinforcement;
− Type 3, steel or composite beams are used to couple two or more reinforced concrete or composite walls.

(f) Composite steel plate shear walls are those consisting of a vertical steel plate continuous over the height of the building with reinforced concrete encasement on one or both faces of the plate and of the structural steel or composite boundary members.