

Project information:

The Chilterns W1 apartments
Cavendish Court
11-15 Wigmore St, London

Material:

Reinforced Concrete Frame Structure

Material Analysis:

Reinforced Concrete is a composite material. It contains metal rods. It is used to create concrete frame structure for the building. In this project it's used for columns, horizontal beams, slabs and on the ground floor as walls. This is a frame on which cables, heating ect. comes on. All the cables and other elements come after it. Slabs are at the same time the actual floor. The material is inexpensive and relatively simple to produce on site.

It's main advantage is that it works in both compression and tension. First metal rods frame is created and then concrete is poured inside. Due to metal rods inside the concrete, it



Fabrication Process:

The Fabrication process is simple and can be done on site. The metal rods are assembled on the site. Around the rods the module or formwork is created and then the concrete is poured inside. The mix is made in concrete mixer and it contains cement, sand, stone chips and water. The mix is immediately ready to be poured inside the module. Once it's poured it takes couple of hours to solidify and dry. However, the material is not ready yet. It takes up to one month to reach its maximum strength and after that period the module can be removed.