

Section-5

Q-1 Efflorescence:

- a) This defect is caused because of alkalis present in bricks. When bricks come in contact with moisture, water is absorbed by them.
- b) This absorbed water dries out by evaporation from the exposed faces, and as it does so, the soluble salts it contains crystallize out on the surface. On drying grey or white powder patches appear on the brick surface.
- c) This process often continues for many years depending on the quantity of salts present in the bricks and their solubility.
- d) The less soluble salt, such as Calcium sulphate, take much longer period to be leached out.
- e) Magnesium salts are very soluble and are ~~not~~ the most destructive.
- f) Bricks which have been saturated before their placement in masonry will be more prone to efflorescence than those under dry condition.

g) Efflorescence can be minimized by selecting proper clay materials for brick manufacturing, preventing moisture to come in contact with the masonry.

h) This can be achieved by providing waterproofing coping and by using water repellent material in mortars and by providing damp proof course.