

Sub.: RCC work procedure.

After discussion with structural engineers and our site engineers some basic guidelines, procedures and precautions that are to be followed at all sites are given below:

- a. Quality Control (QC) inspection should be done one day before the inspection by structural engineers and two days before casting the slab. Structural engineer inspection should be held atleast one day before casting the slab.
- b. Contractor, Project Manager and the concerned engineer must be present at the time of QC inspection and structural engineers inspection.
- c. Structural engineers and QC team should be informed about inspection atleast 2 days in advance. Intimation to QC team for inspection should be by email and /or SMS.
- d. Under no circumstances shall concreting be scheduled on the same day of inspection by QC or structural engineer.
- e. Reschedule concreting in case corrections are required. Quality should not be compromised to meet deadlines.
- f. QC team will whenever required stop the concreting until corrections are made. An intimation to stop concreting shall be sent by email and/or SMS and a copy shall be marked to the M.D.
- g. In case of major corrections second inspection by QC team and structural engineer must be undertaken before concreting.
- h. Precautions that must be taken at the time of rod bending
  - (i) Appropriate bearing must be given for cantilever and main beam rods.
  - (ii) Dovel bars must be left wherever beams and slabs have to be extended. Dovel bar length should be atleast 25% of span.
  - (iii) Slab steel spacing must be accurate.
  - (iv) Shuttering oil should not adhere to steel.
  - (v) Sunken slab should be at specified depth
  - (vi) Overlapping steel for columns must be appropriately cranked.
  - (vii) Extra bars should be placed across the beam.
  - (viii) Overlapping lengths for columns should be 45 to 50 D and beams 35 to 50 D.
  - (ix) Column reduction must be done in the middle of the beam and not above the slab.
  - (x) Chairs must be made from 10 mm rods and adequate nos. should be provided specially in cantilevers and steel near beams.
- i. In case of error in centerline of columns, wherever possible break and recast. When it is not possible to correct the column position, the same error should be repeated on all the floors. However, the position of beams should be kept in mind i.e., the entire beam must rest on the column.

- j. Column starters should be carefully casted with the water cement ratio of 0.4 weight by weight.
- k. Covering must be as specified by structural engineer. In general covering for slabs is  $\frac{1}{2}$ ", beams 1", Columns 40 mm and footings – 50 mm. Covering blocks must be casted atleast 3 days in advance with a cement sand ratio of 1:1.
- l. Bracing for atleast 50% of the props must be done. Bracing should undertaken at beam bottoms and diagonally at mid level of props.

Managing Director.