

Suggested Civil engineering tips at construction site of school buildings to be followed by SMDC

- Cement mortar, when mixed with water should be consumed within 30 minutes
- Reduce the over sized metal to correct size by breaking
- Ensure that concrete/mortar mixed on steel plate, not on ground or RCC slab
- After filling the sand consolidation of sand by ramming with crowbar after flooding entire area with water
- Concreting of slab for toilets should be done with water proofing compound
- Provision should be kept for future expansion by providing bend for all projections like chajjas canopy and also slab
- 75 mm thick concrete should be laid over footing pedestal to maintain verticality and reinforcing bars shall be kinked and straightened to 40mm uniform cover all around.
- RCC columns at two ends and at centre should be raised first and then the remaining to maintain the alignment in school buildings
- During concreting cover blocks should be bind with wire to keep in position during concreting
- Reinforcement bars should be clean of grease, furniture mud etc. before placement
- Binding wires should be tied to bind the reinforcement from both diagonal directions
- Reinforcement bar once bent should not be rebind lap in reinforcement should not be staggered
- Reinforcement of slab should start from the edge of the support
- Removal of Vibrator from concrete should be ensured by filling with concrete if cavity formed due to prolonged uses
- Bricks used should be soaked in tank till bubble ceases.
- Bricks should be kept over planks not on ground during the work at site.

- Vertical joints should be broken and filled with mortar during brick work
- Bathrooms toilets must be provided with panelled door shutters only
- Nails should not be driven into window door frames when they are fixed in position
- Buffer block be positioned such that door handle should not touch the wall
- Kitchen platform should be at level of 32" above floor
- Wall exposed to the weather should be finished with water proofing cement
- Every pipe lines should be tested before they are concealed
- Soak pits should not be done where clay or black soil is met
- Ventilating pipe should be given in the first chamber
- Cement after 3 months storage, strength reduce by 20% after 6 months 30% and after 24 months by 50%
- Cement hags should be stored in a dry room on a raised wooden platform 15 to 23 cm above the floor and 30 cm away from wall. Bags should be stacked not more than 10 layers high to prevent bursting of bags in bottom layers. The bag should be placed close together to reduce circulation of air.