

PLACING OF CONCRETE

Placing of concrete

Concrete must be placed in a systematic manner to yield optimum results

Some situation where we used provide concrete

Placing concrete within earth mould

Placing concrete with large earth mould or timber plank form work

Placing concrete in layers with in timber or steel shutter

Placing concrete with in usual form work

Placing concrete under water

Placing concrete within earth mould

Concrete is invariably as foundation bed below the walls and columns

Before placing concrete

All loose earth must be removed

Roots of trees must be cut

If surface is dry must be made just damp

If it is too wet or rain soaked the water slush must be removed

Placing concrete with large earth mould or timber plank form work

For construction of road slabs,air field slabs and ground floor slabs in building conc os placed in this method

The ground surface must be free from loose earth pool of water ,grass or roots or leaves

The earth must be compacted well

Poly ethylene film is used in between conc ground to avoid absorption of moisture

Concrete is laid alternative layers to give enough scope for shrinkage

Placing concrete in layers with in timber or steel shutter

This can be used in the following cases

Dam construction

Construction of concrete abutments

Raft for a high rise building

The thickness of layers depend on

Method of compaction

Size of vibrator

Frequency of vibrator used

It is good for laying 15 to 30 cm thick layer of concrete ,for mass concrete it may varie from 35 to 45 cm

Its better to leave the top of the layer rough so that succeeding layer can have the good bond

Placing concrete with in usual form work

This can be adopt for Column ,beam and floors

Rules that should be followed while placing the concrete

- Check the reinforcements are correctly tied and placed
- Check the reinforcement is having appropriate cover
- The joints between plywood's or sheets properly plugged
- Mould releasing agent should be applied

The concrete must be placed very care fully a small quantity at a time so that they will not block the entry of subsequent concrete

Placing concrete under water

Concrete is often required to be placed under water or in a trench filled with slurry

In such a case use of bottom slurry buckets or tremie pipes are used

In the bottom bucket concrete is taken through water in a water tight box or bucket reaching final place of deposition

The bottom is made to open by some mechanism and the whole concrete is dumped slowly.

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