COMPACTION OF CONCRETE

Compaction of concrete is the process adopted for expelling the entrapped air from the concrete

Method for compacting concrete

Hand compaction

Compaction by vibrator

Compaction by pressure and jolting

Compaction by spinning

Hand compaction

Adopted in case of unimportant concrete

This can be adopted when mechanical mean cannot be used

It consist of

- Roding
- Ramming
- Tamping

Roding

Poking the concrete with about 2m long 16 mm dia rod to poke the concrete reinforcement

Ramming

Should be done with care

Permitted in unreinforced foundation concrete in ground floor construction

Tamping

The thickness of conc should be comparatively less

Consist of beating the op surface by wooden cross beam

The section of wooden beam is about 10x10 cm

Compaction by vibrators

We can place the concrete economically when compared to hand compaction

The use of vibrators may be essential for the production of good concrete

Type of vibrators

Internal vibrator

Formwork vibrator

Table vibrator

Platform vibrator

Surface vibrator

Vibratory rollers

Compaction by pressure and jolting

This is one of the effective method of compacting dry concrete

Often used for compacting hollow block ,cavity blocks concrete blocks

The stiff concrete is vibrated pressed and also given jolts

With the combined action of the three the stiff conc gets compacted to an dense form to give good strength and volume

Compaction by spinning

This is one of the recent method of the compacting concrete

This is adopted for fabrication of concrete pipes

The plastic concrete when at every high speed get well compacted by centrifugal force

Potential products such as spun pipes are compacted by spinning process

Vibratory rollers

One of the recent methods of compacting very lean or dry concrete

The concrete compacted by rollers can be called as roller concrete

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