



# EFFECTIVE WAYS OF TRANSPORTING & PLACING CONCRETE

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## TRANSPORTING

Concrete should be transported and placed at site/forms as quickly as possible without segregation, before commencement of setting.

### DIFFERENT MODES OF TRANSPORTING

Selection of the mode of transportation of concrete depends upon the size of the work and the rate at which the concrete is required to be produced/transported.

For Larger jobs -

- ✓ Crane, Bucket & Ropeway
- ✓ Skip & Hoist
- ✓ Wheel Barrow, Hand Cart
- ✓ Chute

For Smaller jobs -

- ✓ Manual (Pans/Ghamella)



Transported using skip & hoist

### POINTS TO REMEMBER WHILE TRANSPORTING

- ✓ The homogeneity of the concrete obtained at the time of mixing should be maintained while transporting till deposition
- ✓ There should be no segregation, drying up and stiffening of concrete while transporting
- ✓ Transport the concrete as quickly as possible (before one hour after adding the water) to maintain workability
- ✓ Avoid jerks while transporting the concrete – jerks leads to segregation



Transported using Pans

## PLACING

Deposition of concrete in its final designated position (e.g. into formwork) without segregation of ingredients.

### POINTS TO REMEMBER WHILE PLACING

- ✓ Before placing, formwork should be checked for the following
  - Correct alignment
  - Adequate supports – verticality of supports and horizontal bracing
  - Tightness of joints (closing the gaps) to prevent leakage of concrete grout
  - Provision of cover blocks between the reinforcement & shutter plates
  - Rigidity of base (the formwork props should rest on firm base)



Placing concrete over slab using wheel barrow

- ✓ Do not disturb the alignment of the formwork and reinforcement while placing concrete
- ✓ Place the concrete in horizontal layers of uniform thickness
- ✓ Do not push the concrete laterally using vibrators
- ✓ In case of slab concreting, place the concrete against or towards preceding layers & not away from it
- ✓ Do not throw concrete
- ✓ Height of pour should not be more than 1m, use chutes if the height exceeds 1m
- ✓ Do not allow people to walk over freshly laid concrete
- ✓ Place the concrete within 45 – 60min after mixing
- ✓ Start placing from the corner of the formwork in case of flat slabs and from the lowest level in case of sloping slabs



Wrong way of placing concrete