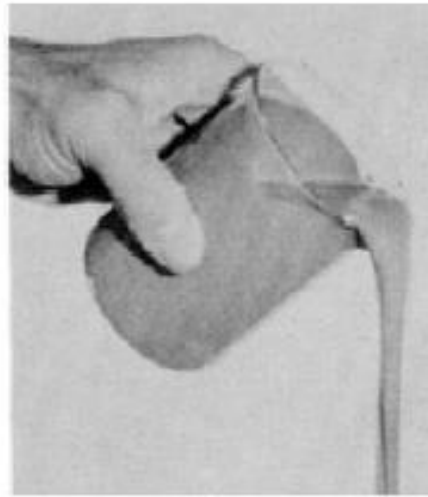


SUPERPLASTICISER ADDITION – BEFORE & AFTER AFFECT

No workability without
superplasticiser



Improved workability with
superplasticiser



FRESH CONCRETE / PLASTIC CONCRETE– REQUIREMENTS

Usually concrete mix is designed to achieve any set of desired properties while generally following are the seven basic requirements what a fresh mix should meet:

1. Consistency (degree of wetness) – required for proper mixing.
2. Uniformity – required for uniform mixing within batches & between batches
3. Flowability – required to flow into formwork & around rebar (congested reinforcement formwork)
4. Pumpability – required to pump cohesive mix for placement (vertical, horizontal & long distances)
5. Compactability – required for compacting fresh concrete in place with ease
6. Stability – free from segregation of ingredients during transporting, placing & compacting
7. Finishability – finishing surface with

HARDENED CONCRETE - REQUIREMENTS

Following are the key parameters of hardened concrete:

1. Compressive strength
2. Tensile strength
3. Flexural strength (compressive/tensile)
4. Shear strength
5. Impact strength