



Cement

In this video you will learn how to identify good quality Cement.

Cement is a powdery binding substance containing a combination of various minerals that is used to make concrete and mortar.

There are two types of cement commonly used in construction:

OPC or Ordinary Portland Cement and

PPC or Portland Pozzolana Cement.

PPC has proven to have greater strength than OPC in the long term.

If a batch of cement is found to fail a quality test, it must be replaced to avoid endangering the project.

Make sure the cement is bought in sealed bags bearing an ISI mark. Also check the date of manufacturing. The strength of cement reduces with age and must usually be used within three months of the date of manufacture. Check if the actual weight of the cement is the same as what is specified on the bag.

The cement must be of a uniform colour with no variations. Typically, OPC is grey with a tint of green, while PPC is grey with a tint of red.

If you dip your hand into the cement, it should feel cool and not warm. The cement, if rubbed between the fingers should feel smooth and not granular. Good quality cement is free flowing and powdery. Granular cement is a sign of adulteration with sand. Cement that feels lumpy has absorbed moisture and is unfit for construction.

Take a bit of cement and drop it into a glass of water. The cement should completely sink as it is heavier than water. If there are any floating particles it is a sign of adulteration.

Add some water to the cement and make a thick paste. The cement paste should feel sticky between the fingers. If the paste gives out an earthy smell, it indicates the presence of pounded clay or silt. Now, apply this cement paste on a glass plate and flatten it with the blade of the Trowel. Immerse the glass plate into a bucket of water and let it stay for 24 hours. When the glass plate is removed, the cement should have set smoothly with no cracks. This is a sign of good quality cement.

You have now learned to identify good quality cement.

