



WHO WE ARE



OUR PRODUCTS



WHAT WE OFFER



SUSTAINABILITY



OUR PEOPLE

**Ordinary Portland Cement (OPC) 43 Grade** is a premium quality cement manufactured from world renowned Narzi limestone. Made using next generation German Technology, the 43 Grade cement develops high early strength as well as high ultimate strength.

### Advantages

- ▶ Superior quality ensures substantial savings in cement consumption
- ▶ Development of very high compressive strength in early stages helps in early de-shuttering
- ▶ Superior resistance to sulphate attack due to less C3a content
- ▶ Low alkali content in cement provides protection against alkali aggregate reaction
- ▶ High fineness results in better workability enduring dense, durable concrete
- ▶ High early strength facilitates speedy construction

### Applications

- ▶ Suitable for residential, commercial, industrial structures, bridges and dams, highways, high-rise buildings, runways etc.
- ▶ Pre-stressed concrete
- ▶ Recommended for all types of RCC structures, concrete blocks, electric poles, paver blocks etc.



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**Ordinary Portland Cement (OPC) 53 Grade** which surpasses the requirements of IS12269-1987 Grade. It is produced by inter grinding of high grade clinker (with high C3S content) and right quality gypsum in predetermined proportions.

It is recognized for its high early strength and excellent ultimate strength because of its optimum particle size distribution, superior crystalline structure and balanced phase composition and hence widely used and suitable for speedy construction, durable concrete and economic concrete mix designs.

### Advantages

- ▶ Superior quality ensures substantial savings in cement consumption
- ▶ Development of very high compressive strength in early stages helps in early de-shuttering
- ▶ Superior resistance to sulphate attack due to less C3A content
- ▶ Durable Concrete
- ▶ Feasible for economical concrete mix designs
- ▶ Low percentage of alkalies, chlorides, magnesia and free lime results in longer life of concrete structures.

### Applications

- ▶ Suitable for Residential, Commercial, Industrial Structures, Bridges And Dams, Highways, high-rise Buildings, Runways etc.



**Portland Pozzolana Cement (PPC)** is a premium composite cement produced from superior quality Narzi limestone, using next generation German Technology to meet international standards. The cement is manufactured by inter-grinding high quality clinker with carefully chosen, good quality High Reactive Silica (HRS). Which is collected from Electro Static precipitators (ESP) and contains high quality gypsum.

### Hydration of blended cement

Ordinary Portland Cement + Water → C-S-H Gel + Ca(OH)<sub>2</sub> (Alkali)

High Reactive Silica(HRS) + Alkali → Secondary Gel Formation

As a result of the above secondary hydration, pore refinement takes place, making the concrete more impermeable to sulphate and chloride attacks. This makes the concrete structure more durable.

### Advantages

- Low heat of hydration
- Resistant to sulphate and chloride attacks
- Resistance to alkali silica reaction
- Reduction in water demand
- Reduced bleeding due to high fineness of cement

### Applications

- Mass concrete work
- Marine works
- Residential and commercial high rise buildings
- Industrial structures
- Suitable for wide range of applications as a



**Portland Slag Cement (PSC)** is a premium composite cement produced from superior quality Narzi limestone, using next generation German technology to meet international standards. Slag cement begins in an iron blast furnace. Carefully controlled amount of iron ore, along with limestone or dolomite are fed into a blast furnace and heated to 2,700°F. When molten, the iron is tapped for steel production and the slag is diverted to the granulator. Here, the slag is rapidly quenched with large quantities of water.

The process minimises crystallisation and forms granulated slag, which is composed principally of calcium aluminosilicate of lime, which has a glassy form. Formation of this glass provides slag cement with its cementitious properties. At this point, the slag possesses the consistency of fine sand. It is then dewatered and dried. Finally, the slag is ground to a fine powder and becomes slag cement, or it is inter-ground with Portland cement clinker to make a blended cement.

### Advantages

- ▶ Improved Workability
- ▶ Improved Resistance to chemical attack
- ▶ Reduced Permeability
- ▶ Improved Strength
- ▶ Environment Friendly
- ▶ Easier Finish

### Applications

- ▶ Residential, Commercial and Industrial Projects
- ▶ Dams and other mass concrete works
- ▶ Water Retaining Structures
- ▶ Concrete Roads and Flyovers
- ▶ Marine Constructions
- ▶ Pre-cast Concrete Products

