

Perfect Concrete Choice



# COMPOSITE

all purpose cement

## Chettinad Cement COMPOSITE

Chettinad Cement, the largest cement producer in Tamilnadu has developed a new product Composite Cement in our laboratory as per BIS guidelines. The introduction of Chettinad Cement Composite in the market re-affirms our commitment to society for sustainable constructions. CCCPL is the pioneer in Tamilnadu cement industry to manufacture Composite Cement. For Composite Cement, BIS permits simultaneous use of Fly-ash and Granulated Slag as mineral additive.



## Perfect Blend of Slag & Silica for Superior Construction

Our Ariyalur plant becomes the first cement plant in Tamilnadu to develop composite cement after rigorous research and innovation.



## Unique Advantages Of Using Chettinad Cement

Chettinad Cement - Composite contains both, the features of PPC and PSC cement. It offers the following unique advantages:

- Higher long term strength
- Higher durability
- Enhanced consistency & homogeneity
- Superior smooth finish
- Improved concrete workability with better slump retention
- Repeated silica reaction to form Calcium Silica Hydrate Gel that improves strength & density of concrete
- Lower heat of hydration and shrinkage that prevents surface cracks
- Corrosion resistant properties that protects embedded steel reinforcement
- High chemical resistance (sea water, chloride & sulphate attacks)

### Physical Properties

Physical Characteristics	Units	BIS Specifications IS 16415: 2015	Chettinad Cement Composite
Fineness	Sq. M/ kg	Min 300	340 - 360
Setting Time			
Initial	Minutes	Min 30	100 - 130
Final	Minutes	Max 600	170 - 200
Compressive Strength			
3 Days	Mpa	Min 16	18 - 21
7 Days	Mpa	Min 22	26 - 28
28 Days	Mpa	Min 33	36 - 39

## Applications of Chettinad Cement

Chettinad Cement - Composite is suitable for most of the applications where normal cement is used and is ideal for all construction works like:

- All types of residential, commercial & industrial constructions
- Coastal & marine construction
- Concrete roads, bridges, flyovers, culverts & hydraulic structures
- Dams & mass concrete works
- Pre-cast concrete works
- Retaining walls & drainage works
- Effluent, sewage & water treatment plants
- Plastering brick work and flooring work



### Construction advantage

Composite cement due to its enriched silica reactivity from fly ash and slag leads to durable concrete. The slag and fly ash present in composite cement work like ball bearing around coarse cement particles. As a result it is very easy to work with concrete mixes & mortar to have dense concrete and wonderful finishing in plaster. Concrete made with this cement is highly impermeable & resistant to deterioration.

### Better sustainability and high durability

Concrete mixes with composite cement ensures greater sustainability due to its durable nature. Enhanced durability of the concrete leads the building more sustainable and lasting for generations. This also supplemented with resistance to sulphate and chloride attacks.

### Improved workability

Combination of fly ash and slag in composite cement leads to increased workability with optimum water demand. This eases the process of mixing, transporting, placing and compacting the concrete with desired results