

CHETTINAD SUPER GRADE IS:1489 PART1:1991

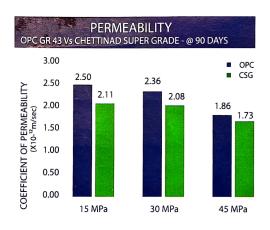


STRENGTH DURABILITY

CHETTINAD SUPER GRADE

FEATURES OF CHETTINAD SUPER GRADE

- Optimum setting time.
- Low heat of hydration due to optimum Calcium Oxide.
- High Specific Surface Area (Fineness) hence reduced Permeability
 & Better Workability gives smoother finish & larger coverage in plastering.
- Repeated Silica reaction to form Calcium Silica Hydrate Gel, which increases the strength and the density of concrete.
- It also resists chemical attack and is corrosion resistant.
- High ultimate strength.
- Lower water cement ratio.



PHYSICAL PROPERTIES OF CHETTINAD SUPER GRADE

Physical characteristics	Units	Requirements as per IS: 1489 (PART - 1)/1991	Chettinad Super Grade *	
FINENESS - SPECIFIC SURFACE	M²/Kg	300	340-350	
SETTING TIME a. Initial b. Final	Minute	Not less than 30	160	
	Minute	Not more than 600	220	
COMPRESSIVE STRENGTH a. 3 days b. 7 days c. 28 days	MPa	Not less than 16	22 - 25	
	Mpa	Not less than 22	30 - 33	
	Mpa	Not less than 33	48 - 50	

* Typical Test Results

APPLICATIONS OF CHETTINAD SUPER GRADE CEMENT

Chettinad Super Grade is suitable for most of the applications where normal cement can be used and is ideal for all construction works like:

- RCC work in normal building construction
- · Marine works
- Bridges, culverts, flyovers, etc...
- Effluent, sewage and water treatment plants
- Hydraulic structures
- Mass concrete works dams, spillways, canals, foundations, etc.
- · Retaining walls, culverts and drainage works
- · Plastering, brick work and finishing works

COMPRESSIVE STRENGTH UP ON AGEING (Kg / cm²) - M20 grade							
AGE	7d	28d	180d	1yr	2yrs		
CONCRETE WITH CSG	180	262	402	420	438		
HIGH GRADE CEMENT	210	294	350	353	357		