

i.tech

PRIMO

Benefits

- High early compressive strength
- Early deshuttering of form works possible
- Most suitable for high performance and high grade concrete (M25 and above)
- Slender and economical sections can be designed by structural consultants
- Reduction in construction time possible
- Consumption of steel in structures can be economized by structural designer

Applications

- General RCC works - High rise residential & commercial structures and industrial structures
- Precast concrete products - concrete blocks, panels, paver blocks, aerated auto clave blocks, railway sleepers
- Prestressed concrete components - beams, columns, slabs, silos, chimneys, etc.
- Suitable for readymix concrete
- Concreting at low temperatures
- White topping and concrete roads, highways, flyovers.
- Folded plates and shell roofs
- Suitable for defence structures like bunkers



Zuari Cement Italcementi Group

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Italcementi Group

Zuari Cement is a part of the Italcementi Group. Italcementi Group is the world's fifth largest cement producer. The group's companies combine the expertise, know-how and cultures of 22 countries across four continents.

Italcementi Group is a member of WBCSD, the World Business Council for Sustainable Development, and has adhered to the UN Global Compact, a strategic initiative promoted by the United Nations to align companies' operations and plans with universally accepted principles in the areas of ethics.

The business strategy of the group is focused on two fundamental assets – research and innovation. This vision, with a multidisciplinary approach to research, has enabled Italcementi Group to develop cutting-edge high-tech products – photocatalytic and transparent cements, for instance – and realize state-of-the-art buildings like i.lab, the group's new research and innovation centre, designed by Architect Richard Meier and certified Leed Platinum.

Investment in new products, materials and services, to best meet the needs of the building community, as well as customer focus are the group's strengths. That is why the company is committed to continuously developing new marketing tools, which are able to foster an even more effective and satisfactory relationship with the customer.

Italcementi Group, along with its subsidiary Zuari Cement, is strongly committed to the Indian market while strengthening its presence through organic and inorganic expansions, which include two manufacturing units at Sitapuram and Yerraguntla, along with a grinding centre at Chennai. Zuari Cement is developing a project of 3 million ton per year cement plant in North Karnataka and a large grinding unit is also being erected at Sholapur in Maharashtra. Additionally, a cement terminal is also being developed at Kochi, Kerala.

i.nova

i.nova is the innovative market approach through which Italcementi Group aims at offering its leadership in innovation to the building community.

i.nova groups all products – the various types of cement, concrete, mortar and lime – into 11 Performance Families in order to simplify the purchasing process and guarantee the same readily understandable approach, organized in a common language, to all customers from all world markets.

The i.nova branding system is designed as an explanatory guide, using a straightforward and intuitive visual language to provide customers with clearer and easier guidance on the group's product ranges, so that the right solution is immediately identified.

Through i.nova, Italcementi Group confirms its attention placed on customers by putting them at the centre of a strategy focused on delivering solutions (performance) according to their needs, instead of simply selling a product (best price - best product approach).

ZUARI CEMENT



The best roofing & concrete solutions

i.tech








PRIMO



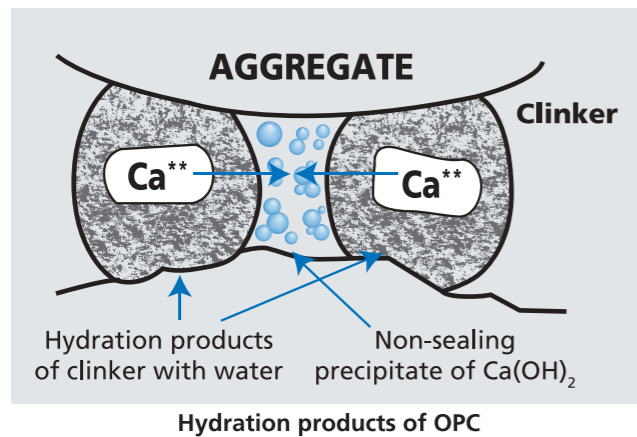
What if cement can make roofs stronger?

i.tech PRIMO is a superior Ordinary Portland Cement conforming to IS:12269-2013.

- 
Higher compressive strength approximate 62 Mpa in 28 days
- 
Early deshuttering of forms possible
- 
Most suitable for M25 grade concrete & above
- 
Slender & economical design
- 
Reduced time & steel consumption in construction possible

Hi-strength

i.tech PRIMO is a high performance Ordinary Portland Cement exceeding the codal requirements of IS: 12269-2013. It is produced by intergrinding high quality clinkers with superior C_3S content and high quality gypsum with performance additives.



i.tech PRIMO is a consistent high quality cement prepared from the finest raw materials, most suitable for all roofing and concrete solutions. Owing to optimum water demand, it contributes to a very low coefficient of permeability of the concrete prepared. This improves the density of the concrete matrix and increases the durability of the concrete. **i.tech PRIMO** is a high performance cement far exceeding the codal requirements of IS: 12269-2013. It is this very durability that translates into a wide variety of residential and commercial constructions and infrastructural works such as dams, canals, highways, roads and flyovers.



*Images used are for visual representation only.

High early compressive strength

i.tech PRIMO is ideal for fast-paced constructions where high early compressive strength has to be achieved. It attains 37 Mpa in 3 days as against 27 Mpa required by BIS.

High 28 days compressive strength

Optimum blend of the finest raw materials and higher fineness ensure that **i.tech PRIMO** attains high 28 days compressive strength of 62 Mpa, suitable for denser, durable and high performance concrete.

Most suitable for high performance concrete

For certain specialized works, such as prestressed concrete or certain items of precast concrete requiring consistently high strength concrete, **i.tech PRIMO** is the answer to the concrete industry's requirement of a special type of Ordinary Portland Cement having a compressive strength, that's much higher than the compressive strength limits of BIS.

Uses & Applications

i.tech PRIMO is used in RCC and prestressed concrete of higher grades, for roofs and other structures, cement grouts, instant plugging mortars, etc. Where initial higher strength is the criteria, it can also be used for high-rise building structures, prestressed concrete buildings, silos, precast concrete items such as paving blocks, tiles and building blocks, high grade concrete flyovers, runways, concrete roads, etc.

Reduced consumption of steel

In terms of design, consumption of steel in structures would be reduced due to the high compressive strength of **i.tech PRIMO**.

Reduced construction time

Qualities like lower initial setting time and increased early compressive strength ensure faster construction and saves on time significantly.

Quality Parameters**

Test Physical Requirement	i.tech PRIMO	IS: 12269-2013 (OPC 53)
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A. PHYSICAL REQUIREMENTS

FINENESS:

Specific Surface (Sq.mtr./kg)	290	> 225
Normal Consistency (%)	27	

SOUNDNESS:

Expansion of unaerated cement		
a) By Le Chatelier Method (mm)	1.0	<10
b) By Autoclave (%)	0.03	< 0.8

SETTING TIME:

a) Initial set (minutes)	160	> 30
b) Final set (minutes)	210	< 600

COMPRESSIVE STRENGTH: (MPa)

a) 3 days	37	> 27
b) 7 days	48	> 37
c) 28 days	62	> 53

PERFORMANCE IMPROVER

Performance Improver (%)	5	≤5
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B. CHEMICAL REQUIREMENTS:

Loss on ignition (%)	1.22	< 4.0
Insoluble Residue (%)	1.12	< 3.0
Magnesium Oxide (%)	1.53	<6.0
Lime Saturation Factor	0.95	0.8-1.02
Alumina Iron Ratio	0.83	0.66
Sulphuric Anhydride (%)	1.86	<3.0
Alkalies (%)	1	
Chlorides (%)	0.01	<0.10
C_3A (%)	6.5	

** Test results are subject to Lab norms as per the BIS

