



PRODUCT DATA SHEET

Pozzocrete 60

Partial Replacement of Portland Cement

Pozzocrete 60 is a high efficiency pozzolanic material, used as cement component with Portland clinker (i.e. as a partial replacement of Portland cements) .It is obtained by selection, processing and testing of power station fly ash resulting from the combustion of coal used at electricity generating power stations. It conforms to IS 3812 – Part I fly ash and is subjected to strict quality control.

General Information:

Presentation	Finely divided dry powder
Colour	Light grey
Bulk Weight	1.0 tonne/m ³
Specific density	2.3
Loss on Ignition	< 2.5%
Particle size	< 18 % retained on 45 micron sieve
Particle shape	Spherical
Package	30 kg bags, 1 tonne big-bags and bulk tankers

Recommended uses:

Concrete	General purpose plain and reinforced structural concrete with 28 day strength up to 50 MPa. Special purpose concrete, such as mass concrete, pre-cast concrete, pumpable concrete, self-compacting and self-levelling concrete.
Cement	Blended cements, with Pozzocrete 60 content up to 50%, such as sulfate and chloride resistant and low/very low heat cements.
Mortar	General purpose mortar for plastering/rendering, brickwork/blockwork. Specialised mortars for floor/wall tiles. Flowable mortars for use as structural fill in earthworks.
Grout	General purpose grouts for use in earthworks for the treatment of rock cracks. Grouts for earthworks to be used in anchors.



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Recommended dosages:

The proportions of Pozzocrete 60 and the other constituents in a mix should be determined by appropriate mix design method and testing of trial mix specimens. The proportion of Pozzocrete 60 used would depend on the required concrete properties, type of Portland cement (Portland clinker), admixtures used. The following figures are indicative.

Typical replacement levels with Pozzocrete 60

Product	Pozzocrete 60 % total cement content
Low grade concrete (up to 35 Mpa)	23 - 35
Medium grade concrete (35-50 Mpa)	25 - 35
Pre-cast concrete	20 - 35
Mass concrete	50
Pumpable concrete	30 - 35
Self compacting/levelling concrete	40
Mortars	15 - 35
Grouts	20 -50

Typical concrete performance with 25% Pozzocrete 60

Property	Better	Similar	Worse
Water Demand	Reduced, 5 - 8%		
Workability	Improved		
Stability	Improved Greatly		
Plastic Shrinkage	Reduced		
Plastic settlement	Reduced		
Setting Time	Increased 30 - 60 min		
Heat of Hydration	Reduced Greatly		
Long Term Strength	Increased 15 -20%		
28 day Strength		Similar	
Early Strength (7 days)			Reduced 10 - 15%
Required Curing Period		Similar	
Permeability	Reduced 2 - 5 times		
Sulfate Attack	Reduced Substantially		
Chloride Penetration	Reduced Substantially		
ASR Risk	Minimised		

Dirk India Pvt Ltd., Nashik. Tel. No. : +91 253 2322815 / 2810896 / 2810453