

PORTLAND POZZOLAN

PHOENIX CEMENT® TYPE IP (25)



Phoenix Cement® Portland Pozzolan Type IP (25) cement meets all chemical and physical requirements of the current ASTM Specification C 595 and ASTM C 1157, as well as the requirements for Types IP and IP (HS) blended hydraulic cements. Phoenix Cement® Portland Pozzolan Type IP (25) is a blend of Phoenix Cement® Type I/II/V (LA) and ASTM C 618 Class F fly ash which is interground at the mill. It is a general, all-purpose cement for use in most general construction applications where a typical Type I/II/V (LA) cement would be used.



Strength, Set Time and Pumping Ability

Type IP (25) is designed to provide strength development and setting characteristics similar to those of a typical Type I, Type II or Type V cement. Note that no further substitution of cement with fly ash or other pozzolan is necessary or recommended.

Due to the spherical particle shape of the fly ash, the ball bearing effect in concrete leads to superior pumpability and homogeneity.

Salt River Materials Group has manufactured cement specifically designed for the Southwest since 1959. This experience enables Salt River Materials Group to continue to provide some of the highest quality cement products available. Salt River Materials Group is the commercial trade name for all marketing activities for Phoenix Cement Company and Salt River Sand and Rock.

Durability

As an intimate blend of Type I/II/V low alkali cement and Class F fly ash, Type IP (25) provides superior resistance to sulfate attack. ACI 232, Use of Fly Ash in Concrete, recommends Type V cement and Class F fly ash for the highest resistance to sulfate attack.

The low alkali cement portion combined with the Class F fly ash greatly minimizes the potential for damage due to alkalai-silica reactivity.

Uniformity

Testing after the blending process ensures consistency in strength, color, fineness, chemical composition and set time.

The Class F fly ash is subject to a rigorous quality assurance program meeting our own requirements that far exceed those of ASTM C 618.

Convenience

For producers with limited silo space or who simply want the many benefits of utilizing fly ash, Type IP (25) is the logical choice.

Availability

Produced year-round at our Clarkdale manufacturing facility 100 miles north of the Phoenix metro area, Type IP (25) is available in bulk and sack.

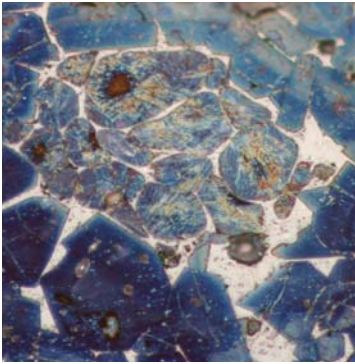
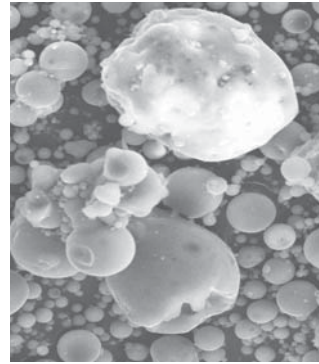


Photo micrographs of cement crystal structure



Limestone



Micrograph of Fly Ash particles

Mission Statement

Creating Opportunities and Solutions with Quality Products and Exceptional People

Values

Profitability The Right Way... Integrity, Accountability, Excellence



Clarkdale Shipping Facility



Cement Rotary Kiln, Clarkdale AZ



Sacking Operation, Clarkdale AZ

Chemical Analysis	Average Results	ASTM C 595 Specification
Calcium Oxide, CaO	49.02%	NA
Silicon Dioxide, SiO ₂	30.67%	NA
Aluminum Oxide, Al ₂ O ₃	8.62%	NA
Ferric Oxide, Fe ₂ O ₃	3.86%	NA
Magnesium Oxide, MgO	1.76%	6.00% Max
Sulfur Trioxide, SO ₃	2.73%	4.00% Max
Loss on Ignition	1.40%	5.00% Max
Physical Data		
Fineness, Blaine cm ² /gm	5260	NA
Specific Gravity	2.85	NA
Autoclave Expansion	-0.02%	0.80% Max
Air Content	5.0%	12% Max
Compressive Strength (psi)		
1 Day	1880	NA
3 Day	3310	1890 Min
7 Day	4070	2900 Min
28 Day	5710	3620 Min
Time of Setting, Vicat		
Initial Set	2:00	0:45 Min
Final Set	4:00	7:00 Max