



# PRODUCT SPECIFICATION SHEET:

# OZSLAG

## ADDED VALUE

*Better Performance*

- Lower permeability
- Decreases drying shrinkage
- Mitigates ASR
- Lowers embodied carbon emissions
- Improved workability
- Higher long-term compressive strength
- Increased sulfate protection
- Superior finishing qualities
- Reduce water demand
- Improved durability and resilience



**SCAN TO  
LEARN MORE!**

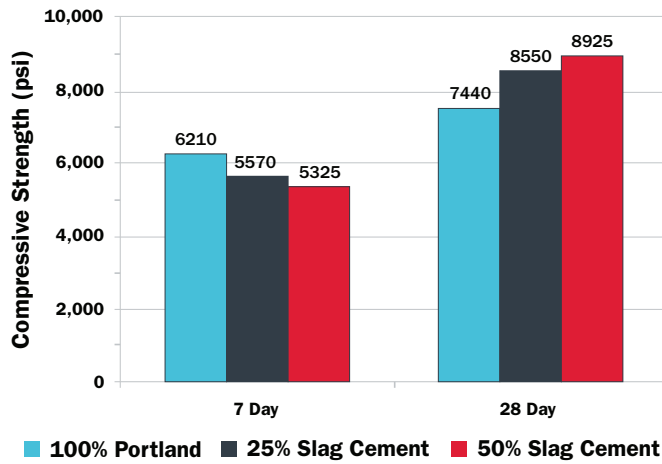
## SLAG CEMENT

### APPLICATIONS

Grade 100 Slag is a Ground Granulated Blast Furnace Slag that conforms to ASTM C989 Grade 100 Slag, AASHTO M302 Grade 100 Slag, and CSA A363 and CSA A23.5 Type S. The granules are produced with our own granulators and ground at our mill in East Chicago ensuring a consistent, high-quality final product. Slag cement is a latent hydraulic cement powder produced by grinding granulated slag from an iron-producing blast furnace. When used as a supplementary cementitious material (SCM) in concrete, it reacts similarly to Portland cement to form calcium silicate hydrate (CSH). It also provides the added benefit of reacting with calcium hydroxide released during the primary cement hydration process, generating additional CSH and improving the overall strength and durability of the concrete. Slag cement enhances resistance to chemical attack, reduces permeability, and lowers heat of hydration – making it suitable for demanding structural and environmental conditions. Its use also supports sustainable construction by reducing clinker content and associated carbon emissions.

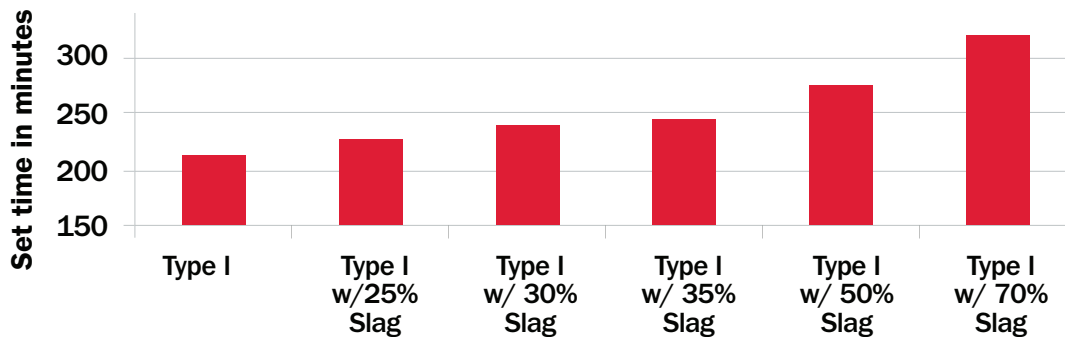
### USING SLAG CEMENT

Slag cement enhances concrete by improving uniformity, reducing permeability, and increasing chemical resistance. Its use in U.S. construction for over a century has demonstrated significant durability benefits, lowering life-cycle costs and environmental impact. When substituting slag cement for portland or blended cement, trial mixes are critical to verify performance under project-specific conditions. Replacement levels should be optimized based on application, exposure, and required properties, as they influence setting time, strength development, and durability. Proper evaluation ensures maximum benefit in service life and sustainability.



## CONCRETE TIME AT SET (70° F)

550 lb total cementitious (non-air), Type I/II, w/c = 0.48



CONCRETE APPLICATION	SLAG CEMENT
Concrete paving	25 to 50 percent
Exterior flatwork not exposed to deicer salts	25 to 50 percent
Exterior flatwork exposed to deicer salts with w/cm < 0.45	25 to 50 percent
Interior flatwork	25 to 50 percent
Basement floors	25 to 50 percent
Footings	30 to 65 percent
Walls and columns	25 to 50 percent
Tilt-up panels	20 to 50 percent
Prestressed concrete	20 to 50 percent
Precast concrete	20 to 50 percent
Concrete blocks	20 to 50 percent
Concrete pavers	20 to 50 percent
High strength	25 to 50 percent
Alkali-silica reaction mitigation	25 to 70 percent
Sulfate resistance	
Type II equivalence	25 to 50 percent
Type V equivalence	35 to 65 percent
Lower permeability	25 to 65 percent
Mass concrete	50 to 80 percent

Percentages indicate replacement for portland cement by mass. These replacement rates are for individual applications and are based on historical performance. Variations in material sources and environmental conditions may require alternate substitution rates. Testing should be done with local project materials to verify intended performance.

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