



DURA SLAG™

ASH GROVE CEMENT COMPANY

DURA SLAG™

DURA SLAG is a slag cement or a ground granulated blast furnace slag, which has hydraulic cement properties. Using slag cement as replacement for a portion of the portland cement can enhance plastic and hardened properties of concrete. DURA SLAG meets specifications in ASTM C989 Grade 100 and AASHTO T302.



Slag cement

SUSTAINABLE MATERIAL

DURA SLAG is a byproduct from iron manufacturing and meets the United States Green Building Council (USGBC) definition of a pre-consumer recycled material. It can be used on LEED projects to assist in achieving total project recycled material goals.

INCREASED CONCRETE DURABILITY

DURA SLAG increases concrete durability by making concrete less permeable. It can assist in reducing the effects of ASR (Alkali Silica Reactivity). In addition, slag increases the long term strength gain of concrete.

AIDS WORKABILITY AND ENHANCES FINISHING

DURA SLAG can effectively increase paste volume, improving the placement and finishing of concrete.

NO AIR ENTRAINMENT COMPATIBILITY ISSUES

DURA SLAG contains no carbon residue that can affect air entraining admixtures.

INCREASES ALBEDO

The light color of DURA SLAG can increase the ability of concrete to reflect light resulting in cooler localized temperatures and likely lower night time lighting requirements.

ENHANCES COLOR BRILLIANCE

When using colored concrete, expect to see more vivid hues or perhaps use less pigment to achieve the desired effect.

CONSISTENT CHEMISTRY

Iron production is a highly controlled chemical process that makes the chemistry of this material very consistent. DURA SLAG is manufactured at an ISO 9001 certified plant and is rigorously tested to assure quality.

LOWER HEAT OF HYDRATION FOR MASS CONCRETE

When substituting slag cement for portland cement in concrete the heat of hydration is lower. This can reduce thermal cracking in mass concrete structures.



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TYPICAL DATA

Parameter	ASTM Specs.	Reported
Chemical Properties		
Sulfide Sulfur as S, %	2.5 max.	0.8
Sulfate as SO ₃ , %	4.0 max.	1.0
Physical Properties		
Specific gravity	---	2.89
Fineness		
325 sieve, % retained	20 max	3.9
Blaine Fineness	n/a	463.0
Air in Mortar		
Air content, %	12 max.	6.3
Strength Activity Index Grade 100 % of Control		
7 Days	70 min.	84
28 Days	90 min.	110
Enhanced Concrete Properties		
Mortar Expansion at 45% Dura Slag ASTM C1567		
14 Days, % expansion	0.10 max.	0.06
Rapid Chloride Permeability ASTM C1202 @ 56 days		
Control (cement only) in Coulombs		2689
25% Dura Slag		1460

SPECIFICATIONS

ASTM C989 Grade 100
AASHTO M 302 Grade 100

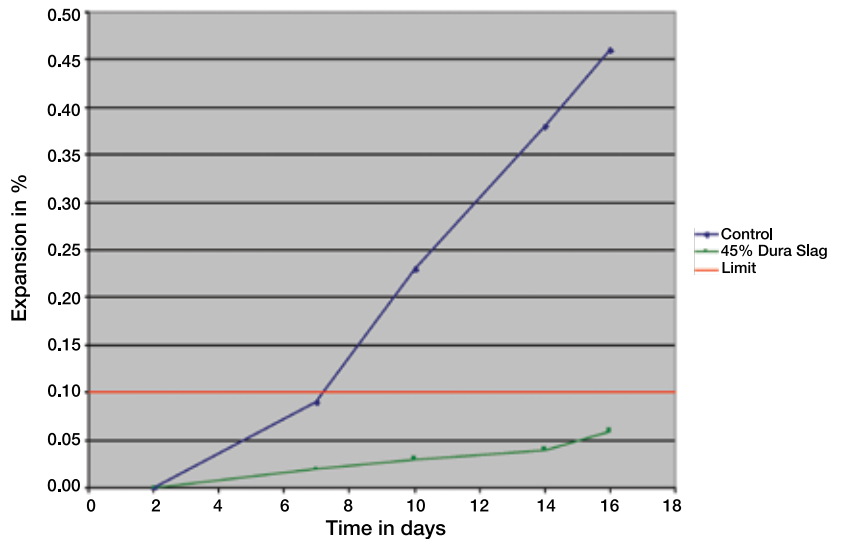
State approved

Dura Slag is on the Qualified Products List for the Oregon Department of Transportation (DOT) and Washington DOT.

For Further Information:

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C1260/C1567 Mortar Expansion



ASTM C1012 Rapid Chloride Permeability with Dura Slag

