

# 10 mm CONCRETE AGGREGATE Product Code: ABF210

### PRODUCT DESCRIPTION

ASMS ABF210 is a single sized 10 mm concrete aggregate conforming to AS2758.1.

#### APPLICATIONS

**ABF210** is manufactured as an aggregate for use in concrete.

#### COMPOSITION AND MATERIALS

**ABF210** is produced by crushing and screening blast furnace slag to a single size 10 mm aggregate consisting of angular to roughly cubical shaped particles with a characteristically vesicular structure and rough surface texture. Aggregates are aged and watered to achieve the target SSD.

Blast furnace slag is the non-metallic product consisting essentially of silicates and aluminosilicates of calcium and other bases developed in a molten condition simultaneously with iron in a blast furnace.

Air-cooled blast furnace slag is a predominantly crystalline, solid rock-like material.

#### **ADVANTAGES**

- Consistent chemistry
- Excellent load bearing capacity
- Non-plastic
- Resistant to heat and fire
- Vesicular surface improves mechanical interlock
- Economic alternative to natural aggregates
- Effective utilisation of an industrial by-product conserving natural resources.

## TYPICAL GRADING

SIEVE	% PASSING	
13.2 mm	100	
9.5 mm	90	
6.7 mm	45	
4.75 mm	15	
2.36 mm	5	
1.18 mm	4	

#### **TYPICAL PHYSICAL PROPERTIES**

PROPERTY	UNIT	TYPICAL
Bulk Density (Loose)	t/m <sup>3</sup>	1.2-1.4
Bulk Density (Compacted)	t/m <sup>3</sup>	1.3-1.5
Particle Density (Apparent)	t/m³	2.7-2.9
Particle Density (Dry)	t/m <sup>3</sup>	2.5-2.7
Particle Density (SSD)	t/m³	2.6-2.8
Wet Strength	kN	70-90
Dry Strength	kN	80-100
Water Absorption	%	3-6
Chlorides	%	< 0.05
Sulphates as SO <sub>3</sub>	%	<0.2
Alkali Reactivity	-	Innocuous
Sugar	-	Free
Iron Unsoundness	-	Free

#### **OXIDE ANALYSIS**

CONSTITUENT	SYMBOL	%
Iron Oxide	FeO	0.5
Calcium Oxide	CaO	42
Silicon Dioxide	SiO <sub>2</sub>	35
Aluminium Oxide	$AI_2O_3$	14
Magnesium Oxide	MgO	6
Sulphur	S	0.5
Sodium Oxide	Na <sub>2</sub> O	0.3

# TECHNICAL AND CUSTOMER ENQUIRIES Telephone: (02) 4255 1125

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