



Material Certification Report

Brand: Skyway Cement
 Material: Slag Cement
 Grade: 100
 Date Range: November 1-30, 2021
 Lot Number: Multiple Lots

Certification

This cement meets the requirements of ASTM C989 and AASHTO M302 specifications for Grade 100 slag cement.

General Information

Supplier:	Skyway Cement Company LLC.	Source Location:	Skyway Cement Company LLC.
Address:	3020 East 103rd Street Chicago, IL 60617		3020 East 103rd Street Chicago, IL 60617
Telephone:	(872)302-5910	Contact:	Roberto Carrillo
Date Issued:	14-Dec-2021		

The following information is based on average test data during the test period.
 The data is typical of slag cement shipped by Skyway Cement Company LLC.; individual shipments may vary.

Test Data on ASTM Standard Requirements

Chemical			Physical		
Item	Limit ^A	Result	Item	Limit ^A	Result
Sulfide S (%)	2.5 max	0.98	+45 µm (No. 325) Sieve (%)	20 max	0.49
Sulfate Ion - SO ₃ (%)	-	0.00	Blaine Fineness (m ² /kg)	-	564
Aluminum Oxide (%)	-	10.31	Air Content (%)	12 max	4.62
Chloride - CL (%)	-	0.08	Slag Activity Index (%)		
Total Alkalies as Na ₂ O (%)	-	0.60	Avg 7 Day Index	-	78
			Avg 28 Day Index	95 min	106
			Compressive Strength - MPa (psi):		
			Slag + Reference Cement		
			7 Day	-	21 (3145)
			28 Day	-	38 (5608)
			Reference Cement ^B		
			7 Day	-	28 (4137)
			28 Day	-	36 (5274)

Reference Cement Qualification Data

Chemical			Physical		
Item	Limit ^A	Result	Item	Limit ^A	Result
Total Alkalies as Na ₂ O (%)	0.60 - 0.90	0.78	Blaine Fineness (m ² /kg)	-	335
C ₃ S	-	49.1	Compressive Strength - MPa (psi):		
C ₂ S	-	24.0	7 Day	-	28 (4111)
C ₃ A	-	10.0	28 Day	34.5 (5000) min	36 (5348)
C ₄ AF	-	7.2			

Notes

^ADashes in the limits columns means Not Applicable

^BReference cement results from procedure "Preparation of Specimens". Information on Reference Cement qualification available upon request.

Specific Gravity: 2.89

This data may have been reported on previous mill certificates. It is typical of the cement being currently shipped which was produced in November of 2021.

Quality Manager