

GCC of America

Cherry Creek Plaza 1, 600 S. Cherry Street, 10th Floor, Glendale, CO 80246
 Sales (303) 739-5900 Customer Service (800) CALL GCC



MATERIAL CERTIFICATION REPORT GCC 3T

Plant: Rapid City
Address: 501 N. St Onge Street
 Rapid City, South Dakota
Contact: Gail B. Amicucci
Phone: (605) 721-7100

Cement Type: ASTM C595 1T (25P) (3P), ASTM C1157
Date Issued: 01-Oct-18
Production Period: 1-Sep-18
To: 30-Sep-18

STANDARD REQUIREMENTS ASTM 595/ASTM C1157

CHEMICAL		
Item	ASTM C595 Spec. Limit	Test Result
SiO ₂ (%)	A	29.5
Al ₂ O ₃ (%)	A	8.4
Fe ₂ O ₃ (%)	A	4.0
CaO (%)	A	48.5
MgO (%)	6.0 max	1.9
SO ₃ (%)	4.0 max	3.5
Loss on Ignition (%)	5.0 max	2.1
Na ₂ O (%)	A	1.71
K ₂ O (%)	A	0.96

PHYSICAL			
Item	ASTM C595 Spec. Limit	ASTM C1157 Spec. Limit	Test Result
Air Content (volume %)	12 max	12 max	11
Blaine Fineness (cm ² /g)	B	B	5960
Residue 45 μm (No. 325) Sieve (%)	B	B	6.5
Autoclave Expansion (%)	0.80 max	0.80 max	0.00
Autoclave Contraction (%)	0.20 max	B	-0.08
Mortar Bar Expansion	B	0.02	-
Compressive Strength			
3 days, MPa (psi)	13.0 (1890) min	13.0 (1890) min	26.0 (3780)
7 days, MPa (psi)	20.0 (2900) min	20.0 (2900) min	31.5 (4570)
28 days, MPa (psi) ^C	25.0 (3620) min	28.0 (4060) min	38.8 (5630)
Time of Setting, Initial Vicat (minutes)	45-420	45-420	136
Specific Gravity	B	B	2.92

OPTIONAL REQUIREMENTS ASTM C1157

PHYSICAL			
Item	ASTM C595 Spec. Limit		Test Result
False Set	50 min	50 min	79

^A Not applicable

^B No limit specified, data reported for information purpose only

^C Previous Month

GCC of America Cement is warranted to conform at the time of shipment with current ASTM C150/AASHTO M85/ASTM C1157. No other warranty is made or implied. Having no control over the use of its cements, GCC of America does not guarantee finished work. GCC is not responsible for any additives not stated in the Certificate of Compliance. GCC of America certifies that the data described above under "Processing Addition" represents the materials in the cement manufactured during the production period indicated.