ASH GROVE CEMENT COMPANY

Leamington Plant
PO Box 38069 Hwy 132
Leamington, Utah 84638
Phone #: (435)-857-1207

Blended Cement Type: IL(10)(HS)

Production Period: July 1, 2026 - July 31, 2026 Date: August 13, 2026

ASTM C595/C595M
REQUIREMENTS

CHEMICAL		
Item	**Spec. Limit**	**Test Result**
Sulfate as SO_3 (%)	3.0 max[A]	2.74
Loss on ignition (%)	10.0 max	4.8
Equivalent alkali content of portland cement (Na_2O_{eq} %)[E]	[B]	0.57
Limestone (%)	>5 and ≤15	9.3
$CaCO_3$ + $MgCO_3$ in limestone (%)	70 min	92
Optional information		
Equivalent alkali content of finished cement (Na_2O_{eq} %)	[B]	0.55

PHYSICAL		
Item	**Spec. Limit**	**Test Result**
Air content of mortar (volume %)	12 max	6.8
Blaine fineness (m^2/kg)	[B]	463
Fineness, No. 325 sieve (% retained)	[B]	2.3
Density (g/cm^3)	[B]	3.07
Compressive strength (psi)		
1 day	[B]	2,300
3 days	1,890 min	3,930
7 days	2,900 min	5,200
28 days[C]	3,620 min	6,700
Time of initial setting (Vicat)		
Not less than (minutes)	45	103
Not more than (minutes)	420	
Heat of hydration, C1702/C1702M, (kJ/kg)[C]		
3 days	[B]	
Mortar bar expansion, C1038/C1038M, (%)[C]	0.020 max[D]	0.011
Sulfate resistance, C1012/C1012M, (%)[C]		
Expansion at 180 days	0.05 max	0.05

[A] Default table maximum may be exceeded if Test Method ASTM C1038/C1038M limit is met.

[B] Not applicable.

[C] Test results for this production period may not be available and most recent test results provided (some data may be for information only).

[D] Required only if percent SO_3 exceeds the limit in Table 1.

[E] As per ASTM C1778, Portland Cement is defined as "Clinker + Gypsum" constituents and is to be used for calculating equivalent alkalis in the base cement.

We certify that the above described blended cement, at the time of shipment, meets the chemical and physical requirements of the ASTM C595/C595M Type IL and AASHTO M240 Blended Hydraulic Cement specifications.

Signature: Taylor Ellsworth Title: Quality Manager

Name: Taylor Ellsworth