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 Billings, Montana 59108-0190
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www.skgeotechnical.com

Compressive Strength of Sandstone Cube ASTM D 2938

Date: February 2, 2021

Project: 20-3890L Laboratory Testing
 Sandstone Properties
 Ryegate Quarry

To:

MontanaFrontierSandstone@gmail.com
 1300 Lockwood Rd, Building B
 Billings, Montana 59101

Field Data:		Design Data:
Set number:	RYG 8" Layer	Spec. slump, in.: NA
Date cast:	NA	Spec. air, %: NA
Time cast:	NA	Spec. strength: NA
Measured slump, in.:	NA	Concrete by: NA
Measured air content, %:	NA	Mix design: NA
Concrete temp, ° F:	NA	
Air temp, ° F:	NA	
Unit weight, pcf:	NA	
Water added at site, gallons:	NA	
Volume of load, yd ³ :	NA	
Truck:	NA	
Ticket:	NA	
Drilling by:	Saw cut & delivered by client	
Location:	Ryegate 8" Layer	

Laboratory Data:					
Cube #	A	B	C	D	
Date received	01/29/21	01/29/21	01/29/21	01/29/21	
Date tested	02/02/21	02/02/21	02/02/21	02/02/21	
Cut Height, in	3.960	3.950			
Cut Cross-Section Area, in ²	15.761	15.567			
L/D ratio	0.997	1.001			
L/D Strength Correction	0.870	0.871			
Maximum load, lbs	280,930	251,620			
Compressive strength, psi	15,510	14,080			
Caliper density, air dry pcf *	159.6	158.2			

Remarks: * Caliper volume and density include air voids. Projects may specify a minimum specific gravity (voidless) and maximum absorption. Submersed specific gravity and absorption at nondestructive tests and are available on request. Lab photos available on request.
 All cube material retained until notified.



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Date: February 2, 2021

Project: 20-3890L Laboratory Testing
Sandstone Properties
Ryegate Quarry

To: Mr. Jake Barth
MontanaFrontierSandstone@gmail.com
1300 Lockwood Rd, Building B
Billings, Montana 59101

Field Data:		Design Data:	
Set number:	RYG 18" Layer	Spec. slump, in.:	NA
Date cast:	NA	Spec. air, %:	NA
Time cast:	NA	Spec. strength:	NA
Measured slump, in.:	NA	Concrete by:	NA
Measured air content, %:	NA	Mix design:	NA
Concrete temp, ° F:	NA		
Air temp, ° F:	NA		
Unit weight, pcf:	NA		
Water added at site, gallons:	NA		
Volume of load, yd ³ :	NA		
Truck:	NA		
Ticket:	NA		
Drilling by:	Saw cut & delivered by client		
Location:	Ryegate 18" Layer		

Laboratory Data:					
Cube #	A	B	C	D	
Date received	01/29/21	01/29/21	01/29/21	01/29/21	
Date tested	02/02/21	02/02/21	02/02/21	02/02/21	
Cut Height, in	3.949	3.847			
Cut Cross-Section Area, in ²	15.540	15.732			
L/D ratio	1.002	0.970			
L/D Strength Correction	0.871	0.863			
Maximum load, lbs	256,120	273,360			
Compressive strength, psi	14,360	14,990			
Caliper density, air dry pcf *	161.8	162.5			

Remarks: * Caliper volume and density include air voids. Projects may specify a minimum specific gravity (voidless) and maximum absorption. Submersed specific gravity and absorption at nondestructive tests and are available on request. Lab photos available on request.
All cube material retained until notified.