## Constructional materials testing center of the State Budgetary Educational Institution of Higher Vocational Education "Pacific Ocean State University"

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## Appendix to Test report No. 5

## Frost-resistance of broken stone mixed with fraction of 5-20 mm

Product name: broken stone mixed with fraction of 5-20 mm, code of the Russian Classification of Production (RCP) 571110, code of Foreign

Economic Activity Commodity Nomenclature (FEACN) 2517 10 000 0

Supplier: Kalinichenko Individual Entrepreneur

Date of registration: 27.06.2013

Information about test unit: broken stone mixed with fraction of 5-20 mm (basalt). Kirovsky deposit of structural stone, Kirovsky settlement of the

Primorsky region, mass of 140 kgs.

Registration number of collected material: No. 3586

Test method: GOST 8269 0-97 "Mauntainous rock road-metal and gravel, industrial waste products for construction works"

*Date of testing:* 27.06 – 05.08.2013

## Accelerated frost resistance test of broken stone mixed with fraction of 5-20 mm

Fraction, mm	No. of sample	Mass of	Mass of sample	Mass loss after 3 cycles		Mass of samples	Mass loss after 5 cycles		Mass of samples	Mass loss after 10 cycles		Mass of samples	Mass loss after 15 cycles	
		sample before	after 3 cycles,	g	%	after 5 cycles,	g	%	after 10 cycles,	g	%	after 15 cycles,	g	%
		testing,	g			g			g			g		
5-10	1	1000	994.09	5.91	0.59	988.57	11.43	1.14	984.91	15.09	1.51	981.71	18.29	1.83
	2	1000	993.27	6.73	0.67	987.87	12.13	1.21	984.40	15.60	1.60	981.35	18.65	1.87
	Measurement average				0.63			1.18			1.56			1.85
10-20	1	1500	1490.86	9.14	0.61	1481.07	18.93	1.26	1477.49	22.51	1.50	1473.91	26.09	1.74
	2	1500	1491.27	8.73	0.58	1479.89	20.11	1.34	1477.94	22.06	1.47	1483.27	26.73	1.78
	Measurement average			0.60			1.30			1.49			1.76	
Measurement average:				0.60			1.28			1.50			1.77	
-mass loss after testing														
Requirements of GOST 8267-93														
<ul> <li>Mark of frost resistance</li> </ul>				F15			F25			F100			F300	
- mass loss after testing, no than %					10			10			5			2

**Decision:** on the basis of testing results and requirements of GOST 8267-93 "Mauntainous rock road-metal and gravel, industrial waste products for construction works" the broken stone mixed with a fraction of 5-20 mm belongs to mark F300 by frost-resistance.

Head of Constructional materials testing center

Professor /Signature/ N.I. Yarmolinskaya

Seal: Ministry of Education and Science of the Russian Federation State Budgetary Educational Institution of Higher Vocational Education "Pacific Ocean State University"