TALLINN UNIVERSITY OF TECHNOLOGY
Department of Civil Engineering and Architecture
RESEARCH AND TESTING LABORATORY OF BUILDING MATERIALS
Accredited by the Estonian Accreditation Centre reg nr L004

Customer:
AS Uninaks

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21.10.2025

Experimental Report N° 914A/25

Assignment: Testing of dry mix

Product designation: Dry mix NAKS M200 04.09.2025 Liin nr 7
Forwarded to the laboratory by costumer on 11.09.2025, 25 kg.

Test method: EN 1015-11 and EN 1015-18.

The fresh mortar was prepared in accordance with EN 1015-2, using the water quantity, specified by manufacturer w = 0.17. The flow value was determined according to with EN 1015-3.
For determination of flexural and compressive strength, three test specimens with dimensions 40x40x160 mm were prepared according to EN 1015-11. Test specimens were cured: at temperature (20±2) °C and relative humidity (95±5) % for 2 days in the mould and 5 days with the mould removed and after that at temperature (20±2) °C and relative humidity (65±5) % for 21 days. The flexural and compressive strength were determined in accordance with EN 1015-11. The results are given in Table 1.
For determination of the water absorption of hardened mortar, the test specimens with dimensions 40x40x160 mm were prepared according to EN 1015-11 and EN 1015-18. Test specimens were cured at temperature (20±2) °C and relative humidity (95±5) % for 2 days in the mould and 5 days with the mould removed and after that 21 days at temperature (20±2) °C and relative humidity (65±5) % with the mould removed. Water absorption coefficient was determined following the requirements of EN 1015-18. At the end of curing period the four long faces of three specimens were sealed and broken into two halves to provide six half specimens. The specimens were dried to constant mass (M_0) at temperature (60±5) °C, placed on trey with their fracture surface down and immersed in water to a depth of 5 to 10 mm. The specimens were weighthed after 10 min (M_1) and 90 min (M_2) immersion. Coefficient of water absorption of each specimen was calculated $C = 0.1(M_2-M_1)$. The results are given in Table 2.

Test results:

Table 1: Flexural and compressive strength of dry mix marked as „NAKS M200 04.09.2025 Liin nr 7“ according to EVS-EN 1015-11

w = 0.17 Flow 132 mm

Preparing date	Testing date	Age, days	Flexural strength, N/mm²		Compressive strength, N/mm²		
			individual	mean	individual		mean
15.09.25	13.10.25	28	7.40	7.0	26.40	28.00	27.2
			6.85		26.90	27.05	
			6.65		27.20	27.45	

Table 2: Water absorption coefficient of dry mix marked as „NAKS M200 04.09.2025 Liin nr 7“ according to EVS-EN 1015-18

w = 0.17 Flow 132 mm Preparing date 15.09.25

Date / time of weighing	Serial number of half of specimen					
	1	2	3	4	5	6
	Weight of half of specimen, g					
after drying M_0						
15.10.25 11:00	239.01	228.55	238.78	233.53	231.84	235.84
after immersion 10 min M_1						
15.10.25 11:10	240.03	229.63	239.88	234.68	232.91	237.02
after immersion 90 min M_2						
15.10.25 12:30	241.52	231.07	241.40	236.24	234.44	238.55
Water absorption coefficient C, kg/(m^2·$min^{0,5}$)	0.15	0.15	0.15	0.15	0.15	0.15

The mean value of coefficient of water absorption C_m = 0,2 kg/(m^2·$min^{0,5}$)

The test results are valid to the described test sample only.

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