

PORTLANDCEMENT
CEM I 42.5 R



. Certificate of compliance №870 is valid until 16.11.2024

Parameters	EN 197-1	Actually
Chemical make-up		
Heating dissipation	No more than 5 %	1.0 – 4.0 %
SiO ₂	" "	21.0-23.5%
Al ₂ O ₃	" "	6.3-7.0%
Fe ₂ O ₃	" "	3.0-4.0%
CaO	No more than 5 %	57,0-60.0%
MgO	1 % – 3.5 %	1.0-2.0%
SO ₃	<1%	2,3-3,5%
Alkali		0.6÷0.8%
Clinker make-up		
C ₃ S	not normalized	55.0 – 68.0%
C ₂ S	" "	16.0 – 22.0 %
C ₃ A	" "	7.0 – 10.0 %
C ₄ AF	" "	9 – 13 %
MgO	No more than 5 %	1.5-2.8%
Physical parameters		
Grinding rate (residue 008 on strainer)	No more than 15 %	0
Binding terms:		
Initial	No earlier than 60 min.	1.2 – 2.0 h,
End	No more than 10 h.	3.0 – 3.50 h.
Steady expansion	≤ 10mm	0.1-0.15 mm
Water consumption	Not normalized	30.0 – 33.5 %
Density	Not normalized	3,06 – 3,15g/cm ³
Specific surface	Not normalized	4000-4300cm ² /g
Breaking point		
Compressing:		
After 2 days	No less than 20 Mpa	25.0-27.0 Mpa
After 28 days	No less than 42.5 Mpa	49.0-52.0 Mpa

Plant quality manager

N. kesauri