

Technical Data Sheet

Capital Enterprises White Cement

PRODUCT CODE CAP-WCM-CPT-525N-B50	CLASSIFICATION CEM I 52.5 N	REFERENCE STANDARD EN 197-1
SUPPLIER Capital Enterprises, Qatar	ISSUE DATE 10 August 2026	REVISION 01

PHYSICAL PROPERTIES

PROPERTY	UNIT	RESULT	STANDARD
Fineness, specific surface (Blaine)	cm²/g	4200	—
Soundness, Le Chatelier expansion	mm	0.2	max 10
Compressive strength, 2 days	MPa	23	min 10
Compressive strength, 7 days	MPa	42	—
Compressive strength, 28 days	MPa	58	min 52.5
Initial setting time (Vicat)	min	130	min 60
Final setting time (Vicat)	min	170	—
Whiteness	—	91.4	—
Whiteness, Y-value	%	81.6	—

CHEMICAL COMPOSITION

CONSTITUENT	SYMBOL	UNIT	RESULT	STANDARD
Silicon dioxide	SiO₂	%	23.2	—
Aluminium trioxide	Al₂O₃	%	4.45	—
Iron oxide	FeO	%	0.18	—
Iron trioxide	Fe₂O₃	%	0.39	—
Calcium oxide	CaO	%	64.8	—
Magnesium oxide	MgO	%	2.1	max 5
Sulphur trioxide	SO₃	%	2.4	max 3.5
Sodium oxide	Na₂O	%	0.22	—
Potassium oxide	K₂O	%	0.28	—
Chloride	Cl⁻	%	0.014	max 0.1
Insoluble residue	IR	%	0.1	max 5
Loss on ignition	LOI	%	2.3	max 5

CALCULATED COMPOUNDS

PARAMETER	SYMBOL	UNIT	RESULT	STANDARD
Lime saturation factor	LSF	—	91.96	—



Tricalcium silicate	C_3S	%	50.11	—
Tricalcium aluminate	C_3A	%	11.13	—
Total alkali	$Na_2O + 0.658 K_2O$	%	0.40	max 0.6

APPLICATIONS

- Architectural and structural concrete where a white or light finish is specified
- Terrazzo tile and cast terrazzo flooring
- Precast and GRC facade elements
- Cement tile, kerbstone and interlocking paver production
- White and coloured mortars, renders and fine plasterwork
- Tile adhesives, grouts and dry-mix formulations
- Cast stone and decorative architectural elements

PACKING AND SUPPLY

- 50 kg bag (net 50 kg $\pm 1\%$)
- Jumbo bag (FIBC)
- Bulk tanker

HANDLING AND STORAGE

- Store under cover, clear of the ground, in dry and well-ventilated conditions.
- Keep bags sealed until use. Protect from moisture and direct weather exposure.
- Rotate stock on a first-in, first-out basis.
- Refer to the Safety Data Sheet for personal protective equipment and first-aid measures before handling.

TECHNICAL NOTES

Low iron content is the principal driver of whiteness. Fe_2O_3 at 0.39% supports the reported whiteness value.

Total alkali of 0.40% is within the 0.6% low-alkali threshold, suitable where alkali-silica reaction is a design consideration.

Colour consistency between deliveries is controlled against a retained master reference sample.

Source of test data: Manufacturer's test certificate, held on file with Capitaly Enterprises.