Does your cement comply with South African Standards?

All cement used and sold for construction in South Africa **must** by law meet the requirements of the compulsory specifications as set out in this document.

DOES YOUR CEMENT HAVE A VALID NRCS LoA?

The National Regulator of Compulsory Specifications (NRCS) enforces *SANS 50197-1 & -5* and *SANS 50413-1.* All producers and importers must have a **Letter of Authority** (LoA) from the NRCS for each different cement type used in construction in South Africa. The NRCS only issues a LoA if the cement complies with

a) **SANS 50197-1 Cement – Part 1:** Composition, specification and conformity criteria for common cements.
b) **SANS 50413-1 Masonry Cement – Part 1:** Composition, specification and conformity criteria.
c) **SANS 50197-2 Cement – Part 2:** Conformity evaluation.
d) **SANS 50197-5 Cement:** Portland-composite cement CEM II/C-M and Composite cement CEM VI

NRCS LoA appearing on a bag is no guarantee that a LoA has been issued!

Contact the NRCS to confirm valid LoA

PO Box: NRCS Private Bag X25, Brooklyn 0075 ; Telephone: +27 12 482 8700

OR

View online at https://www.nrcs.org.za/business-units/cmm#db

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The role of the Certification Body:

An accredited third-party conformity assessment body appointed by the manufacture or importer to assess the conformity of cement against the requirements of the compulsory specification and recognized by the Regulator in terms of the NRCS's Conformity Assessment Policy. Below is the current list of accredited certification bodies for cement in South Africa who have been accredited by SANAS (South African National Accreditation System) and are recognized by the NRCS. The Certification Bodies evaluate compliance and conformance of the importer or manufacturer of cement for the South African market. A conforming cement bag will have the logo of the Certification Body as a guarantee of compliance.

SABS Logo	SABS logo appearing on the cement bags or on sales information
SABS South African Bureau of Standards	SABS APPROVED

SABPS Logo	SABBS logo appearing on the cement bags or on sales information
SABPS South African Allbrothers Products and Systems Certification (Pty)Ltd	SABPS SANS 50197-1/2 Certified

Cement Composition as defined in SANS 50197-1, -5

Main types	Notation of the products (types of cement)		Composition (percentage by mass)[a]										
			Main constituents										Minor additional constituents
			Clinker	Blastfurnace slag	Silica fume[b]	Pozzolana		Fly ash		Burnt shale	Limestone		
						Natural	Natural calcined	Siliceous	Calcareous				
	Type name	Type notation	K	S	D	P	Q	V	W	T	L	LL	
CEM I	Portland cement	CEM I	95 - 100	-	-	-	-	-	-	-	-	-	0 - 5
CEM II	Portland slag cement	CEM II A-S	80 – 94	6 – 20	-	-	-	-	-	-	-	-	0 - 5
		CEM II B-S	65 - 79	21 - 35	-	-	-	-	-	-	-	-	0 - 5
	Portland-silica fume cement	CEM II A-D	90 - 94	-	6 - 10	-	-	-	-	-	-	-	0 - 5
	Portlandpozzolana cement	CEM II A-P	80-94	-	-	6-20	-	-	-	-	-	-	0 - 5
		CEM II B-P	65-79	-	-	21-35	-	-	-	-	-	-	0 - 5
		CEM II A-Q	80-94	-	-	-	6-20	-	-	-	-	-	0 - 5
		CEM II B-Q	65-79	-	-	-	21-35	-	-	-	-	-	0 - 5
	Portland-fly ash cement	CEM II A-V	80-94	-	-	-	-	6-20	-	-	-	-	0 - 5
		CEM II B-V	65-79	-	-	-	-	21-35	-	-	-	-	0 - 5
		CEM II A-W	80-94	-	-	-	-	-	6-20	-	-	-	0 - 5
		CEM II B-W	65-79	-	-	-	-	-	21-35	-	-	-	0 - 5
	Portland-burnt shale cement	CEM II A-T	80-94	-	-	-	-	-	-	6-20	-	-	0 - 5
		CEM II B-T	65-79	-	-	-	-	-	-	21-35	-	-	0 - 5
	Portlandlimestone cement	CEM II A-L	80-94	-	-	-	-	-	-	-	6-20	-	0 - 5
		CEM II B-L	65-79	-	-	-	-	-	-	-	21-35	-	0 - 5
		CEM II A-LL	80-94	-	-	-	-	-	-	-	-	6-20	0 - 5
		CEM II B-LL	65-79	-	-	-	-	-	-	-	-	21-35	0 - 5
	Portlandcomposite cement[c d]	CEM II A-M	80-88	←----------12-20----------→									0 - 5
		CEM II B-M	65-79	←----------21-35----------→									0 - 5
		CEM II C-M	50-64	←----------36-50----------→									0 - 5

Main types	Notation of the products (types of cement)		Composition (percentage by mass)[a]										
			Main constituents										Minor additional constituents
			Clinker	Blastfurnace slag	Silica fume[b]	Pozzolana		Fly ash		Burnt shale	Limestone		
						Natural	Natural calcined	Siliceous	Calcareous				
	Type name	Type notation	K	S	D	P	Q	V	W	T	L	LL	
CEM III	Blast furnace cement	CEM III A	35-64	36-65	-	-	-	-	-	-	-	-	0 - 5
		CEM III B	20-34	66-80	-	-	-	-	-	-	-	-	0 - 5
		CEM III C	5-19	81-95	-	-	-	-	-	-	-	-	0 - 5
CEM IV	Pozzolanic cement[c]	CEM IV A	65-89	-	←----------11-35----------→					-	-	-	0 - 5
		CEM IV B	45-64	-	←----------36-55----------→					-	-	-	0 - 5
CEM V	Composite cement[c]	CEM V A	40-64	18-30	-	←----------18-30----------→			-	-	-	-	0 - 5
		CEM V B	20-38	31-50	-	←----------31-49----------→			-	-	-	-	0 – 5
CEM VI	Composite cement[c d]	CEM VI (S-P)	35-49	31-59	-	6-20	-	-	-	-	-	-	0 - 5
		CEM VI (S-V)	35-49	31-59	-	-	-	6-20	-	-	-	-	0 - 5
		CEM VI (S-L)	35-49	31-59	-	-	-	-	-	-	6-20	-	0 - 5
		CEM VI (S-LL)	35-49	31-59	-	-	-	-	-	-	-	6-20	0 - 5

Notes

a The values in the table refer to the sum of the main and minor additional constituents.

b The proportion of silica fume is limited to 10% (SANS 50197-1) and 6-10% by mass (SANS 50197-5).

c The number of main constituents other than clinker is limited to two and these main constituents shall be declared by designation of the cement.

d From SANS 50197-5

In conclusion:

Ensure that the cement used meets the required minimum standards for responsible and safe construction use.