Accreditation No: LAB 037

Awarded to

Glass & Ceramics Research Centre (GCRC), Pakistan Council of Scientific & Industrial Research (PCSIR) Labs. Complex. Lahore 54600, Pakistan.

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **24-08-2006** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2017.**

The accreditation requires regular surveillance, and is valid until **16-06-2028.**

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

29-11-2025
Date

SD
Director General

Testing Laboratory.

Accreditation scope of Glass & Ceramics Research Centre (GCRC), Pakistan Council of Scientific & Industrial Research (PCSIR) Laboratories Complex, Lahore 54600, Pakistan.

Permanent laboratory premises [X]

Materials/ Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
Glass & Ceramics Research Centre (GCRC) Laboratories			
Cement	Physiochemical Testing	Moisture Content	ASTM C114;2018
		Loss on ignition (LOI)	
		Acid Insoluble Residue (IR)	
		Silica (SiO_2), Dry	
		Alumina (Al_2O_3), Dry	
		Iron oxide (Fe_2O_3)	
		Calcia (CaO), Dry	
		Magnesia (MgO), Dry	
		Soda (Na_2O)	
		Potash (K_2O)	
		Sulphur trioxide (SO_3), Dry	
	Phases	Lime Saturation Factor (LSF)	PS 232:1983 [5.1] ASTM C 150:2022
		Tricalcium Silicate (C3S)	
		Dicalcium Silicate (C2S)	
		Tricalcium Aluminate (C3A)	
		Tetracalcium Aluminoferrite (C4AF)	
		Free Moisture	ASTM C 25:2019
		Loss on ignition (LOI)	
		Silica (SiO_2), Dry	
		Alumina (Al_2O_3), Dry	
		Iron oxide (Fe_2O_3)	

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Limestone	Chemical Testing	Calcia (CaO), Dry	
		Magnesia (MgO) , Dry	
		Soda (Na_2O)	
		Potash (K_2O)	
		Carbon dioxide (CO_2)	
		Calcium Carbonate ($CaCO_3$)	
		Magnesium Carbonate ($MgCO_3$)	
		Total Sulfur (S)	
		Total Carbon (C)	
		Combined (R_2O_3)	
Sanitary Wares: White bodies (Porous/Vitreous)	Physical Testing	Dimensions	GS SASO 1024:1998 [2] BS 31:1999 [2] BS EN 14688 :2006
		Dangerous Substance	BS-EN 14688:2006[4.9] ASTM C 738::2016[6]
		Water Absorption	GS-SASO 1024:1998 [2] BS 3402:1969 [6] ASTM C 97:2018 [7-9]
		Crazing	GS-SASO 1024:1998 [3] BS 3402:1969[7] ASTM C 424:2020 [5-6]
		Resistance to Attack Test	GS-SASO 1024:1998 [4-7]
		Thickness	GS SASO 1024:1998[9]
		Marking	GS-SASO 1024:1998[9]
White ware Clays	Chemical Testing	Free Moisture	ASTM C 323:2016
		Loss on ignition (LOI)	
		Silica (SiO_2), Dry	
		Combined (R_2O_3), Dry	
		Iron Oxide (Fe_2O_3)	
		Alumina (Al_2O_3), Dry	
		Calcium Oxide, (CaO), Dry	
		Magnesium Oxide, (MgO), Dry	
		Carbon, (C) Dry	

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		Calcium Carbonate, ($CaCO_3$)	
		Magnesium Carbonate, ($MgCO_3$)	
		Carbon Dioxide, (CO_2)	
Tiles	**Chemical Testing**	**Dangerous substances**	**ISO 10545 -15:2021 [5-10]**
		Water absorption	**ASTM C 373;2016 [6-8]**
		Crazing	**ASTM C 554:2016 [6,7]**
		Resistance to: **I- chemical.** **II-staining,** **III-burning**	**ASTM C 650:2014 [4-9]** **ASTM C 1378:2014 [6-7]**
	Physical Testing	**Thickness**	**ISO 10545 -2:1995 [3]**
		Dimensions **i. Length** **ii. Width** **iii. Straightness** **iv. Rectangularity** **v. Flatness**	**ISO 10545 -2:1995 [2,4-6]**

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