

DEPARTMENT OF NANOMATERIALS AND CERAMIC ENGINEERING (NCE), BUET, DHAKA
APPROVED RATES FOR TESTING MATERIALS AND SERVICES

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Effective from February, 2026

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S.N.	Name of Tests	Test Rate
Cement and Cement Clinker		
1	Insoluble Residue	6,705.00
2	Loss on Ignition	6,705.00
*3	Compositional Analysis Using XRF: Aluminium Oxide (Al ₂ O ₃), Ferric Oxide (Fe ₂ O ₃), Silicon Dioxide (SiO ₂), Sulfur Trioxide (SO ₃), Magnesium Oxide (MgO), Sodium Oxide (Na ₂ O), Potassium Oxide(K ₂ O), Calcium Oxide (CaO), Titanium dioxide (TiO ₂) Chloride Content (Cl ⁻) etc., Total Alkali Content (Na ₂ O _{equiv.}) and Lime Saturation Factor (LSF) *Prerequisite: Loss on Ignition (BDT 6,705)	26,820.00
4	Compound Compositional Analysis using XRD (including compositional analysis of S.N. 3): Tricalcium Silicate (C ₃ S), Dicalcium Silicate (C ₂ S), Tricalcium Aluminate (C ₃ A), Tetra-calcium Alumino-ferrite (C ₄ AF), Free Lime (CaO)	40,230.00
5	Package (All the above four tests)	67,045.00
Clay/Soil/Sand		
6	Composition analysis Using XRF	26,820.00
7	Moisture Content/ loss on drying	4,025.00
8	Compound Compositional Analysis using XRD (including compositional analysis of S.N. 3)	80,455.00
9	Clay/Mud/Mica Content	12,720.00
10	Sieve Analysis	10,600.00
11	pH Test of Gypsum/Clay	8,480.00
Glass and Glass Raw Materials		
12	Surface Flatness (Roller Wave)	10,727.00
13	Surface Stress	21,200.00
14	Edge Stress	21,200.00
15	Through Thickness Stress Distribution (Internal Stress)	10,730.00
16	Air/tin side identification of glass	10,600.00
17	Flexural Strength/Modulus of rupture	26,500.00
18	Impact test	10,070.00
19	Fracture Pattern Test for Tempered Glass	15,900.00
20	Chemical Composition Analysis of Glass/Raw Materials Using XRF	26,820.00
21	% Transmittance and % Absorbance	13,410.00
22	% Reflectance and % Absorbance	13,410.00
23	Refractive index at 380 to 780 nm Air/ glass; Glass/ air	13,410.00
24	Hardness (Moh's Scale/Vickers/Knoop)	8,590.00
25	Comment for Tempered or Non-tempered	6,890.00
26	Edge requirements: Shell-chip, V-chip	10,730.00
27	Curvature % measurement	21,455.00
28	Squareness measurement	3,290.00
29	Density Measurement/ Specific Gravity	5,035.00
30	Softening Point (in °C)	33,920.00
31	Coefficient of Linear Expansion	26,500.00
32	Solar Heat Gain coefficient	
33	Solar Energy Spectrum (% Transmittance and % Absorbance)	13,410.00
34	Solar Energy Spectrum (% Reflectance and % Absorbance)	13,410.00
35	U-Value	
36	UV Protection	13,410.00
37	Glass Transition Temperature (T _g)	26,500.00
38	Specific Heat	53,000.00
39	Dimensional Measurement	3,290.00
40	Glass Sheet thickness tolerance measurement	3,290.00
41	XRD	40,230.00

S.N.	Name of Tests	Test Rate
Ceramic Tiles/Ceramic Raw Materials/Sanitary Ware		
42	Dimension	2,650.00
43	Straightness of sides	2,015.00
44	Rectangularity	2,015.00
45	Surface Flatness (centre curvature)	2,015.00
46	Surface Quality	2,015.00
47	Flexural Strength/Modulus of rupture	3,710.00
48	Breaking Load	3,710.00
49	Compressive Strength	8,735.00
50	Water absorption	3,710.00
51	Pin abrasion test	2,685.00
52	Impact test	2,685.00
53	Glossiness measurement	2,685.00
54	Chemical Composition Analysis of Raw Materials Using XRF	26,820.00
55	Chemical Composition Analysis of Ceramic Tiles Using XRF	26,820.00
56	Chemical Composition Analysis of Glaze Using XRF	26,820.00
57	Thermal shock measurement	10,730.00
58	Chemical resistance (qualitative)	13,410.00
59	Resistance to stains	13,410.00
60	Chemical Composition Analysis of Tiles/ Ceramic Raw Materials	26,820.00
61	Surface Hardness (Moh's Scale/Vickers)	8,590.00
Pavement/Paver tiles		
62	Compressive Strength	8,735.00
63	Flexural Strength	3,710.00
64	Water absorption	3,710.00
65	Dimension	2,650.00
Bricks		
66	Chemical Composition Analysis Using XRF	26,820.00
67	Initial Rate of Absorption	13,409.00
68	Water absorption	3,710.00
69	Compressive Strength	4,030.00
70	Dimension	2,650.00
Stone (Marble, Granite, Others)		
71	Surface Abrasion	2,685.00
72	Flexural Strength/Modulus of rupture	6,150.00
73	Water Absorption	6,575.00
74	Compressive Strength	8,735.00
75	Hardness	10,600.00
76	Density/Unit Weight/Specific Gravity	5,035.00
77	Chemical Composition Analysis Using XRF	26,820.00
78	Coarse Aggregate Analysis by XRD	40,230.00
Commode and Basin		
79	Flush Flow Rate	21,200.00
Catalyst		
80	Compositional Analysis Using XRF	80,455.00
Microstructure, Topography, Elemental Analysis and Elemental Mapping		
81	SEM	26,820.00
82	EDX	26,820.00
83	SEM+EDX	40,230.00
84	EDX mapping	26,820.00
85	Sample preparation by mechanical polishing	5,300.00
86	Sample preparation by Cross Section Polisher (CP)	10,600.00
87	Comment	12,190.00
Calibration Machine		
88	Blaine Air Permeability Apparatus	24,165.00

Notes: i) Field visit fee: Inside Dhaka City = Tk. 15,000; Outside Dhaka = Tk. 25,000
 ii) All test procedures comply with ASTM and EN standards.
 iii) VAT (15%) included with the total test fees.