About Us

APECS was established in 2012 by Hom Nath Adhikari and is the CEO & Founder. The firm came into existence given the shift in mandate of the then Standards and Quality Control Authority (which had the government operated construction testing laboratory) into Bhutan Standards Bureau.

Mr. Adhikari, who worked for over eight years in SQCA as an engineer and later as the head of Material Testing and Research Division, submitted the proposal to establish Bhutan's first private material testing laboratory recognizing the need for a robust lab that would fill the vacuum. The proposal was supported by the Bhutan Standards Bureau Board, and APECS was endorsed by the board on 14th March 2012.

APECS now caters to a wide range of clients both from private and government sectors. It also functions as third-party testing agency for construction product quality certification by BSB. It has a well-established laboratory and field-testing facilities and delivers quality results. It supports the governments' aim to promote quality in construction industry through quality control and quality assurance.

General Conditions:

1. Field Test charges are for Thimphu area only. Outing charges and transportation cost shall be added for tests in other Dzongkhags.
2. For all field tests; unless expressly agreed by ATH, labour and transportation cost is borne by the client.
3. Changes in the tests parameters and rates thereof may take place without prior notice of the clients.

Payment Conditions

For the following list of tests, advance payment has to be made;

1. For NDT Tests- 100% Advance.
2. For PPT, SPT, PLT- Atleast 50% or as mutually agreed
3. For Core cutting; Atleast 75% or as mutually agreed

Equipment Hiring Conditions

Equipment hiring is considered on a case-by-case basis. As such the following equipment are allowed for short term hiring;

1. Concrete cube mould
2. Dynamic Cone Penetration Equipment Set
3. Field Density Testing Equipment
4. Slump Tests Apparatus
5. Set of Sieves

For Information

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APECS TEST HOUSE

Since 2012

"Building a safer place for future"

ISO 9001 2015 CERTIFIED

Govt Reg No: CRC2280

TEST LIST & PRICING

July 2025 Edition

GEOTECHNICAL TESTS

Sl N	Type of Test	Quantity	Rate (Nu.)
1	Moisture Contents	1 Kg	400
2	Bulk Density	10-15Kg	700
3	Atterberg Limits	5 Kg	1600
4	Linear Shrinkage	2 Kg	1100
5	Specific gravity	1-2Kg	1000
6	Sieve Analysis	3-5 Kg	1350
7	Proctor Compaction Test	20-25 Kg	3500
8	Direct Shear Test	5 Kg	3900
9	California Bearing Ratio	15-20 Kg	5800
10	Permeability (falling)	10 kg	3500
11	Consolation test	15-20 Kg	5000
12	Sieve Analysis with Hydrometer	2-3 Kg	2850
13	Organic Content (physical)	1-2 Kg	800
14	Organic Content (Chemical)	1-2 Kg	2800
15	Chloride Content	1-2 Kg	3800
16	Sulphate Content	1-2 Kg	3800
17	pH of Soil	1 Kg	900

TEST ON COARSE AGGREGATE

Sl.NO	Type of Test	Quantity	Rate (Nu.)
1	Los Angles Abrasion test	20-30 Kg	2800
2	Aggregates Impact Test	8-10 Kg	1350
3	Aggregate crushing Value	15-20 Kg	2100
4	Load for 10% fines	20-25kg	2900
5	Specific Gravity	10 kg	2150
6	Flakiness & Elongation Index (Combined)	30-40kg	1700
7	Flakiness Index	30-40kg	950
8	Elongation Index	30-40 kg	950
9	Alkali Reactivity Test	4-5kg	2550
10	Gradation Test	5 kg	1350
11	Soundness Test	10-15 kg	6000
12	Striping Values Test	2 kg	1450
13	Water absorption	10kg	1050
14	Bulk Density	15-20kg	700
15	Mix Design GSB/WMM	60-80 kg each	7500 each
16	Organic matter (Physical)	1-2kg	1100
17	Porosity	5 Kg	2600
18	Slake Durability	10-12Kg	2400

TEST ON FINE AGGREGATE

SL.NO	Type of Test	Quantity	Rate(Nu)
1	Bulking of Sand	2kg	550
2	Grain Size Analysis	5kg	1350
3	Fineness Modulus of Sand	5kg	1350
4	Silt Content	2kg	550
5	Bulk Density	5kg	700
6	Organic Matter (Physical)	1-2kg	1100

TEST ON CEMENT CONCRETE

SL.NO	Type of Test	Quantity	Rate (Nu)
1	Concrete Mix Design	Per instance	22000
2	Slump Test	Per instance	1000

PHYSCIAL TESTS ON CEMENT

Sl.No	Types of Test	Quantity	Rate (Nu)
1	Compressive Strength Test (3, 7 & 28days)	6 cubes	4500
2	Fineness Test on IS 90 micron sieve	2kg	800
3	Consistency test	1kg	1700
4	Setting time-initial and final	2kg	1600
5	Soundness test	1kg	3050
6	Specific Gravity	1kg	3050
7	Air Permeability Test	5Kg	2500

COMPRESSIVE STRENGTH ON BUILDING MATERIALS

Sl.No	Types of Test	Quantity	Rate (Nu)
1	Concrete Cubes (Std Size)	3 cubes	800
2	Flexural Test	2 Piece	1650
3	Bricks (Std Size)	5 bricks	1800
4	Conc Hollow Blocks (Std Size)	5 blocks	1800
5	Masonry Blocks (Std Size)	3 Blocks	2200
6	AAC Blocks	5 Blocks	1800
7	Water Absorption	3 Pcs	1200
8	Linear Shrinkage AAC Blocks	3 Blocks	1100

TESTS ON BITUMEN/EMULSION

Sl.NO	Type of Test	Quantity	Rate (Nu.)
1	Bituminous Mix Design	5kg	20000
2	Penetration test	1kg	1500
3	Softening Point load test	1kg	1300
4	Flash & fire point	2kg	1550
5	Ductility test	1-2Kg	1800
6	Residue on 600mic.IS sieve(%) by mass	5kg	1700
7	Coagulation of emulsion at low temp	5kg	2500
8	Storage stability after 24 hour (% max)	5kg	2000
9	Centrifuge Extraction test	5kg	3450
10	Stability to Mixing with Cement	5kg	2200
11	Miscibility with water	5 kg	2850
13	Density test	1 kg	900
14	Lost on heating	1kg	1250
15	Penetration on residue from loss on heating	1kg	1600
16	Solubility in Trichloroethylene	1kg	2150
17	Determination of Viscosity	1kg	3000

FIELD TESTS

Sl No	Type of Test	Quantity	Rate (Nu.)
1	SPT for Bearing Capacity	Per Pit	22000
2	Plate Load Test	Per test	60000
3	Field/Dry Density	Per pit	1500
4	Bitumen Core Cutting	Per Test	5500
5	Field Density by core cutter	Per Pit	1650
6	Filed Density by SRM	Per Pit	2600
7	Field CBR test by DCP	Per Location	3200

TEST ON ROCK CORES/BLOCKS/ROCK LUMPS

Sl.No	Types of Test	Quantity	Rate (Nu)
1	Unconfined compressive strength	Per sample	3500
2	Water absorption	Per sample	1200
3	Point load Strength Index	Per sample	3000

NON-DESTRUCTIVE TESTING

Sl No	Type of Test	Quantity	Rate (Nu.)
1	Schmidt Hammer Test	1 location	3000
2	Ultrasonic Pulse Velocity	Per Test	4000
3	Profometer (Rebar Scanner)	Per Test	4500
4	Resipod (Corrosion Decetor)	Per Test	1800

NDT , SPT, PLT and bitumen core cutting are field test and their rate depends largely on the site conditions, number of tests, test locations, time and technical analysis .