



Government of Nepal
Ministry of Urban Development
Department of Urban Development & Building Construction
National Research Centre for Building Technology
Babar Mahal, Kathmandu

Format for Material Tests

May 2022

TESTS ON CEMENT



Government of Nepal
Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, NePal

FINENESS OF CEMENT

As per IS: 4031 (Part 1): 1996

Project: Sampling date:
Client: Source of Materials:
Consultant: Location of Materials:
Contractor: Lab Room Humidity:
Contract No.:
Description of Sample:
Ref. Letter no.
Lab ref. No.:
Test date

Determination number					
Temp. of the Laboratory					°C
A	Wt. of cement sample				gms
B	Wt. of 90 micron sieve residue sample				gms
C1	Wt of residue(R1)				gms
C2	Wt of residue(R2)				gms
C3	Wt of residue(R3)				gms
C4	Average Wt of residue				gms
C5	Fineness (%)				%
AVERAGE VALUE					%

FINENESS OF CEMENT = %

Remarks :

Tested by:	Checked by:	Verified by:

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Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, Nepal

SOUNDNESS OF CEMENT

As per IS: 4031 (Part 3)- 1988 Le-Chatelier Method

Project: Sampling date:
Client: Source of Materials:
Consultant: Location of Materials:
Contractor: Lab Room Humidity:
Contract No.:
Description of Sample:
Ref. Letter no.
Lab ref. No.:
Test date:

Determination number				
Percentage of water added				
Temp. of the Laboratory				°C
Temp. of mixing water				°C
Temp. of mix				°C
A	Initial distance between the two points of the indicators of the equipment			mm
B	Final distance between the two points of the indicators of the equipment			mm
C	Expansion of cement (B-A)			mm
AVERAGE VALUE				mm

SOUNDNESS OF CEMENT = mm

Remarks :

Tested by:	Checked by:	Verified by:

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SETTING TIME OF CEMENT

As per IS: 4031 (Part 5)- 1988

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____
Description of Sample: _____
Ref. Letter no. _____
Lab ref. No.: _____
Test date _____

Determination number	1	hrs	mins
Temp. of the Laboratory °C			
Temp. of mixing water °C			
Normal consistency (%)			
Time when water is added to cement (t ₁)			
Time at Initial setting (t ₂)			
Total Time taken for Initial setting = (t ₂ - t ₁)			
Time at Final setting (t ₃)			
Total Time taken for final setting = (t ₃ - t ₁)			

INITIAL SETTING TIME OF CEMENT = _____ Minute

FINAL SETTING TIME OF CEMENT = _____ Minute

Tested by:	Checked by:	Verified by:	

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DETERMINATION OF COMPRESSIVE STRENGTH OF CEMENT

As per IS: 4031 (Part 6)- 1988

Project: _____ Sampling date: _____
 Client: _____ Source of Materials: _____
 Consultant: _____ Location of Materials: _____
 Contractor: _____ Lab Room Humidity: _____
 Contract No.: _____ Name of Cement: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab ref. No.: _____
 Test date: _____

Mix proportion : 1:3
 Water required = $(P/4+3) * Total\ Mass =$ _____ ml
 Normal Consistency of Cement : _____ %
 Laboratory Room Temperature : _____ °C
 Water Temperature: _____ °C
 Mix Temperature: _____ °C
 Curing Temperature: _____ °C

Ingredient for 9 cubes

Cement	_____	gm
Sand I	_____	gm
Sand II	_____	gm
Sand III	_____	gm
Total Mass	_____	gm
Water	_____	ml
W/C	_____	

Cube no.	_____	_____	_____	_____	_____	_____	_____	_____	_____	
Length of cube, L	cm	_____	_____	_____	_____	_____	_____	_____	_____	
Breadth of cube, B	cm	_____	_____	_____	_____	_____	_____	_____	_____	
Height of cube, H	cm	_____	_____	_____	_____	_____	_____	_____	_____	
Volume of cube, V=(LxBxH)/10 ⁹	cm ³	_____	_____	_____	_____	_____	_____	_____	_____	
Weight of cube,	gm.	_____	_____	_____	_____	_____	_____	_____	_____	
Density, D=m/V	gm/cc	_____	_____	_____	_____	_____	_____	_____	_____	
Loaded area, A	mm ²	_____	_____	_____	_____	_____	_____	_____	_____	
Date of Casting	_____									
Date of Test	_____									
Age when tested	days	_____								
Load	KN	_____	_____	_____	_____	_____	_____	_____	_____	
Corrected load, M	KN	_____	_____	_____	_____	_____	_____	_____	_____	
Corrected strength,	N/mm ²	_____	_____	_____	_____	_____	_____	_____	_____	
Average strength	N/mm ²	_____								

Remarks _____

Tested by: _____ Checked by: _____ Verified by: _____

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NORMAL CONSISTENCY OF CEMENT

As per IS: 4031 (Part 4) - 1988

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____
Description of Sample: _____
Ref. Letter no. _____
Lab ref. No.: _____
Test date: _____

Determination number					
Percentage of water added					
Temp. of the Laboratory					°C
Temp. of mixing water					°C
Temp. of mix					°C
A	Wt. of cement				gms
B	Wt. of water added				gms
C1	Initial reading of indicator				mm
C2	Final reading of indicator				mm
C	Penetration of plunger(C1-C2)				mm
AVERAGE VALUE					mm

NORMAL CONSISTENCY OF CEMENT = _____ %

WATER / CEMENT RATIO (B/A) = _____

Remarks :

Tested by:	Checked by:	Verified by:

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**TESTS ON
AGGREGATES**



Government of Nepal
Ministry of Urban Development
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Babarmahal, Kathmandu, Nepal

SPECIFIC GRAVITY OF COARSE AGGREGATE

As per IS : 2386 (Part III) - 1963

Project:

Client:

Consultant:

Contractor:

Contract No.:

Description of Sample:

Ref. Letter no.

Lab Ref. No.:

Test date:

Sampling date:

Source of Materials:

Location of Materials:

Description	Unit	Sample No.		Average
		1	2	
Wt. of Sample + basket suspended in water	gms			
Wt. basket suspended in water	gms			
Wt. of saturated sample in water (C)	gms			
Wt. of sat. surface dry Sample (B)	gms			
Wt. of oven dry Sample (A)	gms			
Absorption = $(B-A)/A * 100$	%			
Apparent G = $A/(A-C)$				
Bulk G (oven dry) = $A/(B-C)$				

NOTE A) SOAK SAMPLES FOR 24 HOURS TO OBTAIN BULK SPECIFIC GRAVITY

Remarks:

Tested by:	Checked by:	Verified by:

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LIGHT WEIGHT PIECES IN AGG. (COAL & LIGNITE)

As per IS : 2386 (Part II) - 1963

Project:

Client:

Consultant:

Contractor:

Contract No.:

Description of Sample:

Ref. Letter no.

Lab Ref. No.:

Test date:

Sampling date:

Source of Materials:

Location of Materials:

Lab Room Humidity:

Lab Room Temperature:

Specific Gravity & Chemical (Liquid) Composition

S.N	Liquid	Sp. Gravity (Tested)	Composition (% by wt.)	Combined Sp. Gravity of Liquid	Remarks
1	Tetrabromoethane				
2	Benzene				
3	Bromoform				
4	Carbon tetrachloride				
5	Monobromobenzene				

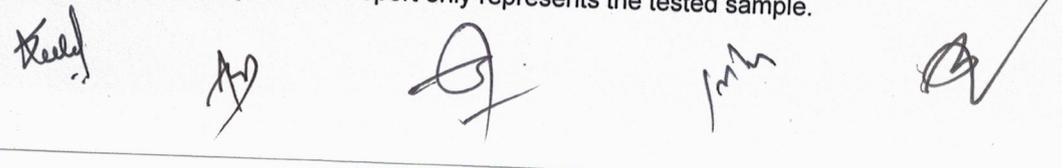
Determination of Light Weight Pieces

S.N	Description	Unit	1	2	3
1	Wt. of Sample Coarser than 4.75 μ m	gms			
2	Wt. of Skimmer (Filter Paper) before Pouring the liquid	gms			
3	Wt. of Skimmer (Filter Paper) after Pouring the liquid	gms			
4	Wt. of Floating Pieces	gms			
5	Determination of Light pieces	%			
	Average Light Weight Pieces	%			

Remarks:

Tested by:	Checked by:	Verified by:

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DETERMINATION OF CLAY LUMPS (COARSE AGGREGATE)
As per IS : 2386 (Part II) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Date: _____

Weight of Sample (Min. gr)	Weight of Test sample (W1)	Seive size		Size of Sieve Residue of Clay Lumps	Wt. of Sample Retained (W2)	clay lumps %
		Passing(mm)	Retained(mm)			
3000		40	20	4.75		
2000		20	10	4.75		
1000		10	4.75	2.36		
Average clay lumps value						

Remarks:

Tested by: _____ **Checked by:** _____ **Verified by:** _____

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SOUNDNESS TEST OF COARSE AGGREGATE
 As per IS: 2386 (Part V)- 1963

Project: _____ Sampling date: _____
 Client: _____ Source of Materials: _____
 Consultant: _____ Location of Materials: _____
 Contractor: _____ Lab Room Humidity: _____
 Contract No.: _____ Lab Room Temperature: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab Ref. No.: _____
 Test date: _____

Wt. of Oven dry sample before washing (A) : _____
 Wt. of dry sample after washing (B) : _____
SEIVE TEST BEFORE SOAKING

Seive (mm)	Retained Wt. (C)	% Retained (C/A x100) (D)	Fraction No.	Wt. of Fraction Retained (E)	Sample Required. For Test if Col. D ≥ 5%
75			5		3000± 300
63					3000± 300
50			4		3000± 300
40					2000± 200
25			3		1000± 50
20					500± 30
12.5			2		670± 10
10					300± 5
4.75			1		300± 5
< 4.75					None Tested
Total					

IMMERSION 5 CYCLE IN THE SOLUTION

Fraction	Fraction. Wt. (F)	Seive (mm)	Wt. Retained (G)	% Loss F- G/Fx100 (H)	Avg. Wt. Loss (%)
5		50.0			
4		31.5			
3		16.0			
2		8.0			
1		4.0			
X					
Total					

Sodium Sulphate Solution (%) = _____

Remarks:

Tested by: _____ Checked by: _____ Verified by: _____

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AGGREGATE IMPACT VALUE

As per IS : 2386 (Part IV) - 1963

Project: _____
 Client: _____
 Consultant: _____
 Contractor: _____
 Contract No.: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab Ref. No.: _____
 Test date: _____

Sampling date: _____
 Source of Materials: _____
 Location of Materials: _____
 Lab Room Humidity: _____
 Lab Room Temperature: _____

S.No.	Description	Unit	Sample No.			Remarks
			1	2	3	
1	Wt. of cylindrical, W1 g	gm				
2	Total Wt. of a agg. + cylindrical, W2 g	gm				
3	Weight of Aggregate (W2 - W1) = W3 g	gm				
4	Wt. of Agg. passing on 2.36 mm sieve after the test = W4 g	gm				
5	Aggregate impact value, % = $W4/W3 \times 100$	%				
6	Average Aggregate impact value	%				

Remarks: _____

Tested by: _____

Checked by: _____

Verified by: _____

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Kaly *AS* *1mm* *3* *मणि राम गेला*



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Babarmahal, Kathmandu, Nepal

AGGREGATE CRUSHING VALUE

As per IS : 2386 (Part IV) - 1963

Project: _____
Client: _____
Consultant: _____
Contractor: _____
Contract No.: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

Sampling date: _____
Source of Materials: _____
Location of Materials: _____
Lab Room Humidity: _____
Lab Room Temperature: _____

S.No.	Description	Unit	Sample No.		Remarks
1	Total Wt. of a agg. + cylindrical, W1 g	gm			
2	Wt. of cylinder, W2 g	gm			
3	Weight of Aggregate (W1 - W2) = W3 g	gm			
4	Wt. of Agg. passing on 2.36 mm sieve after the test = W4 g	gm			
5	Aggregate Crushing value, % = $W4/W3 \times 100$	%			
6	Average Aggregate Crushing value	%			

Remarks: _____

Tested by: _____

Checked by: _____

Verified by: _____

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 Babarmahal, Kathmandu, Nepal

Los Angeles Abrasion Value (LAA)
 As per IS : 2386 (Part IV) - 1963

Project: _____ Sampling date: _____
 Client: _____ Source of Materials: _____
 Consultant: _____ Location of Materials: _____
 Contractor: _____ Lab Room Humidity: _____
 Contract No.: _____ Lab Room Temperature: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab Ref. No.: _____
 Test date: _____

Sieve Size (mm)		Mass of Indicated Sizes (g)						
Passing	Retained on	A	B	C	D	E	F	G
80.00	63.00	-----	-----	-----	-----	2500±50	-----	-----
63.00	50.00	-----	-----	-----	-----	2500±50	-----	-----
50.00	40.00	-----	-----	-----	-----	5000±100	5000±100	-----
40.00	25.00	1250 ± 25	-----	-----	-----	-----	5000±100	5000±100
25.00	20.00	1250 ± 25	-----	-----	-----	-----	-----	5000±100
20.00	12.50	1250 ± 10	2500 ± 10	-----	-----	-----	-----	-----
12.50	10.00	1250 ± 10	2500 ± 10	-----	-----	-----	-----	-----
10.00	6.30	-----	-----	2500 ± 10	-----	-----	-----	-----
6.30	4.75	-----	-----	2500 ± 10	-----	-----	-----	-----
4.75	2.36	-----	-----	-----	5000 ± 10	-----	-----	-----
Total		5000 ± 10	5000 ± 10	5000 ± 10	5000 ± 10	10000±200	10000±200	10000±200
No of Spheres		12	11	8	6	12	12	12

General Remarks :- No. of Revolutions = 500 for grading A, B, C & D and 1000 for E, F & G grading.

Testing of Materials

Specimen No.	Grade	No. of Charges	No. of Revolution	Weight Before Test (g)	Weight in grams after test			Loss in grams	Percent wear	Mean wear in percent
					Retained on 1.7 mm Sieve.	Passing through 1.7 mm Sieve	Total quantity available			
1										
2										

Remarks:

Tested by: _____

Checked by: _____

Verified by: _____

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UNIT WEIGHT OF 20MM COARSE AGGREGATE

As per IS : 2386 (Part III) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Ref. No.: _____
Test date: _____

S.No.	Description	Unit	Sample No.			Remarks
			I	II	III	
A	Rodded Unit Weight					
1	Wt. of mould	gm				
2	Wt. of mould + sample	gm				
3	Wt. of the Sample, W1	gm				
4	Vol. of the Mould, W2	cm ³				
5	Unit Weight, (W1/W2)	gm/cc				
6	Average compacted unit Weight	gm/cc				
B	Loose Unit Weight					
1	Wt. of mould	gm				
2	Wt. of mould + sample	gm				
3	Wt. of the Sample, W1	gm				
4	Vol. of the Mould, W2	cm ³				
5	Unit Weight, (W1/W2)	gm/cc				
6	Average Loose unit Weight	gm/cc				
C	Average unit weight	gm/cc				

Remarks:

Tested by:

Checked by:

Verified by:

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ELONGATION INDEX (EI)
As per IS : 2386 (Part I) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

Fraction Size	Sieve Size(mm)	Elongation			Remarks
		Test wt. (g)	Wt.retained (g)	% Elongation	
> 15% 200 pieces minimum	63 - 50				
	50 - 40				
>5 <15% 100 pieces minimum	40 - 31.5				
	31.5 - 25				
<5% Not Tested	25 - 20				
	20 - 16				
	16 - 12.5				
	12.5 - 10				
	10 - 6.3				
Total Wt.					
Elongation Index (EI)=					

Remarks:

Tested by: _____ Checked by: _____ Verified by: _____

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FLAKINESS INDEX (FI)
As per IS : 2386 (Part I) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

Fraction Size	Sieve Size(mm)	Flakiness			Remarks
		wt. of total sample (g)	Wt. of passing sample (g)	% Flaky	
> 15% 200 pieces minimum	63 - 50				
	50 - 40				
>5 <15% 100 pieces minimum	40 - 31.5				
	31.5 - 25				
<5% Not Tested	25 - 20				
	20 - 16				
	16 - 12.5				
	12.5 - 10				
	10 - 6.3				
Total Wt.					
Flakiness Index (FI)=					

Remarks:

Tested by: _____ Checked by: _____ Verified by: _____

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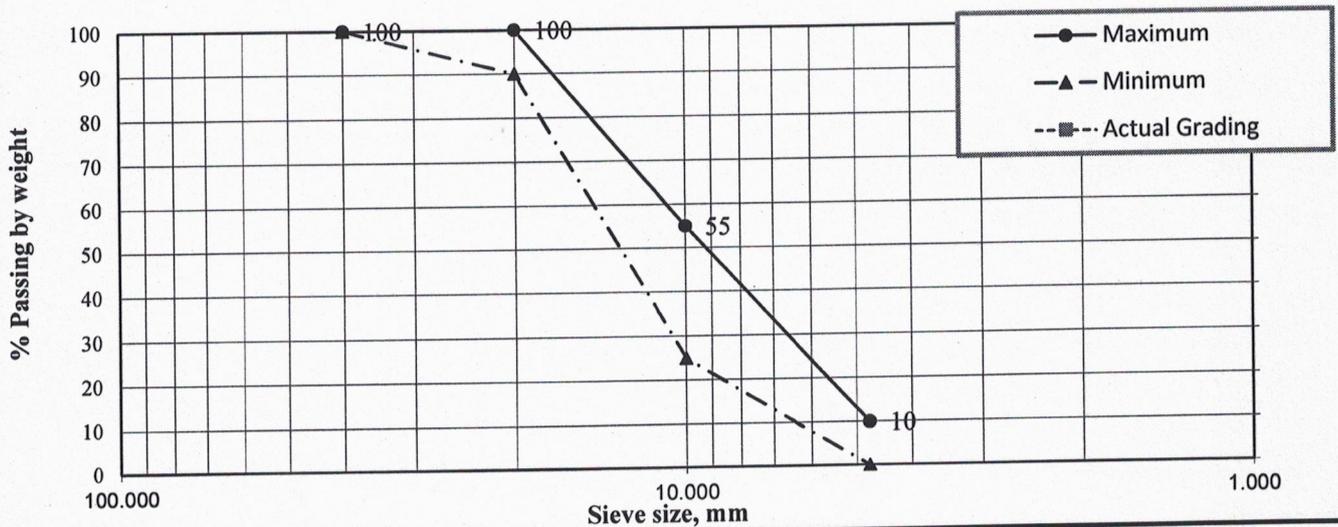
GRADATION TEST OF COARSE AGGREGATE
 As per IS: 2386 (Part I) – 1963

Project: _____ Sampling date: _____
 Client: _____ Source of Materials: _____
 Consultant: _____ Location of Materials: _____
 Contractor: _____ Lab Room Humidity: _____
 Contract No.: _____ Lab Room Temperature: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab Ref. No.: _____
 Test date: _____
 Total wt. of the sample (gm): _____

A. SIEVING DATA

Sieve Size (mm)	Weight Retained	Cumulative Weight Retained	Cumulative Retained (%)	% Passing	Specification Limits (Graded) IS 383 Table 7	
					Minimum %	Maximum
40.000					100	100
20.000					90	100
10.000					25	55
4.750					0	10
Pan						
Total Wt. , gm						

GRAIN SIZE DISTRIBUTION



Remarks:

Tested by: _____ **Checked by:** _____ **Verified by:** _____

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Babarmahal, Kathmandu, NePal

SOUNDNESS OF FINE AGGREGATE
As per IS : 2386 (Part V) - 1963

Project: Sampling date:
Client: Source of Materials:
Consultant: Location of Materials:
Contractor: Lab Room Humidity:
Contract No.: Lab Room Temperature:
Description of Sample:
Ref. Letter no.:
Lab Ref. No.:
Test date:

Wt. of Oven dry sample before washing (A) : gm

Wt. of dry sample after washing (B) :

SEIVE TEST BEFORE SOAKING

SEIVE TEST AFTER SOAKING

Seive (mm)	(C) Retained Wt. (gms)	(D) %Retained (C/A x100)	Sample Required. For Test if D.> 5%	Fraction	(E) Wt. sample Size(g)	(F) Wt.Ret (g)	(G) %Loss (E- F / E) x 100	Corrected Avg.Wt. Loss(%) (DxG/100)
9.5			-	9.5				
4.75			100gms	4.75				
2.36			100gms	2.36				
1.18			100gms	1.18				
0.600			100gms	0.600				
0.300			100gms	0.300				
<0.300				Total				
Total								

Sodium Sulphate Solution (%) =

Remarks:

Specific Gravity of Sodium Sulphate Solution 1.155

Tested by:

Checked by:

Verified by:

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CLAY LUMPS TEST
As per IS : 2386 (Part II) - 1963

Project: Sampling date:
Client: Source of Materials:
Consultant: Location of Materials:
Contractor: Lab Room Humidity:
Contract No.: Lab Room Temperature:
Description of Sample:
Ref. Letter no.
Lab Ref. No.:
Test date:

Weight of sample (Min. gm)	Weight of Test sample (W1)	Seive size		Size of Sieve Residue of	Wt. of Sample Retained	Clay lumps (%)
		Passing(mm)	Retained(mm)			
100		4.75	1.18	0.85		
100		4.75	1.18	0.85		
100		4.75	1.18	0.85		
Average clay lumps value						

Remarks:

Tested by:

Checked by:

Verified by:

Samples are not taken by us. This report only represents the tested sample.

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ई. मणि राम गेलाल
सचिव



Government of Nepal
Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, Nepal

UNIT WEIGHT OF FINE AGGREGATE
As per IS : 2386 (Part III) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

S.No.	Description	Unit	Sample No.			Remarks
			I	II	III	
A	Rodded Unit Weight					
1	Wt. of mould	gm				
2	Wt. of mould + sample	gm				
3	Wt. of the Sample, W1	gm				
4	Vol. of the Mould, W2	cm ³				
5	Unit Weight, (W1/W2)	gm/cc				
6	Average compacted unit Weight	gm/cc				
B	Loose Unit Weight					
1	Wt. of mould	gm				
2	Wt. of mould + sample	gm				
3	Wt. of the Sample, W1	gm				
4	Vol. of the Mould, W2	cm ³				
5	Unit Weight, (W1/W2)	gm/cc				
6	Average Loose unit Weight	gm/cc				
C	Average unit weight	gm/cc				

Remarks:

Tested by: _____ Checked by: _____ Verified by: _____

Samples are not taken by us. This report only represents the tested sample.

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Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, Nepal

SPECIFIC GRAVITY OF FINE AGGREGATE

As per IS : 2386 (Part III) - 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

S.No.	Description	Unit	Sample no.		Average Value	Remarks
			1	2		
1	Wt. of the Pycnometer (M1)	gm				
2	Wt. of the Pycnometer + dry Sample (M2)	gm				
3	Wt. of the Pycnometer + Sample + Water (M3)	gm				
4	Wt. of the Pycnometer + Water (M4)	gm				
5	Wt. of dry sample (Ms=M2-M1)	gm				
6	Specific Gravity of water at temp. TS (Gw)					
7	Bulk Specific Gravity ((Gw*Ms)/(Ms+M4-M3))					
8	Wt. of wet sample	gm				
9	Wt. of dry sample	gm				
10	Water absorption	%				

Remarks:

Tested by:

Checked by:

Verified by:

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Government of Nepal
Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, Nepal

CLAY AND SILT CONTENT TEST
As per IS: 2386 (Part I) – 1963

Project: _____ Sampling date: _____
Client: _____ Source of Materials: _____
Consultant: _____ Location of Materials: _____
Contractor: _____ Lab Room Humidity: _____
Contract No.: _____ Lab Room Temperature: _____
Description of Sample: _____
Ref. Letter no. _____
Lab Ref. No.: _____
Test date: _____

S.No.	Description	Unit	Sample No.			Remarks
			I	II	III	
1	Total Weight of the sample	gm				
2	Weight of the sample Retained on 0.075 mm sieve	gm				
3	Weight of the sample Passing through 0.075 mm sieve	gm				
4	% of sample passing through 0.075 mm sieve clay & silt	%				
5	Average Clay & silt content %	%				

Remarks:

Tested by: _____	Checked by: _____	Verified by: _____

Samples are not taken by us. This report only represents the tested sample.

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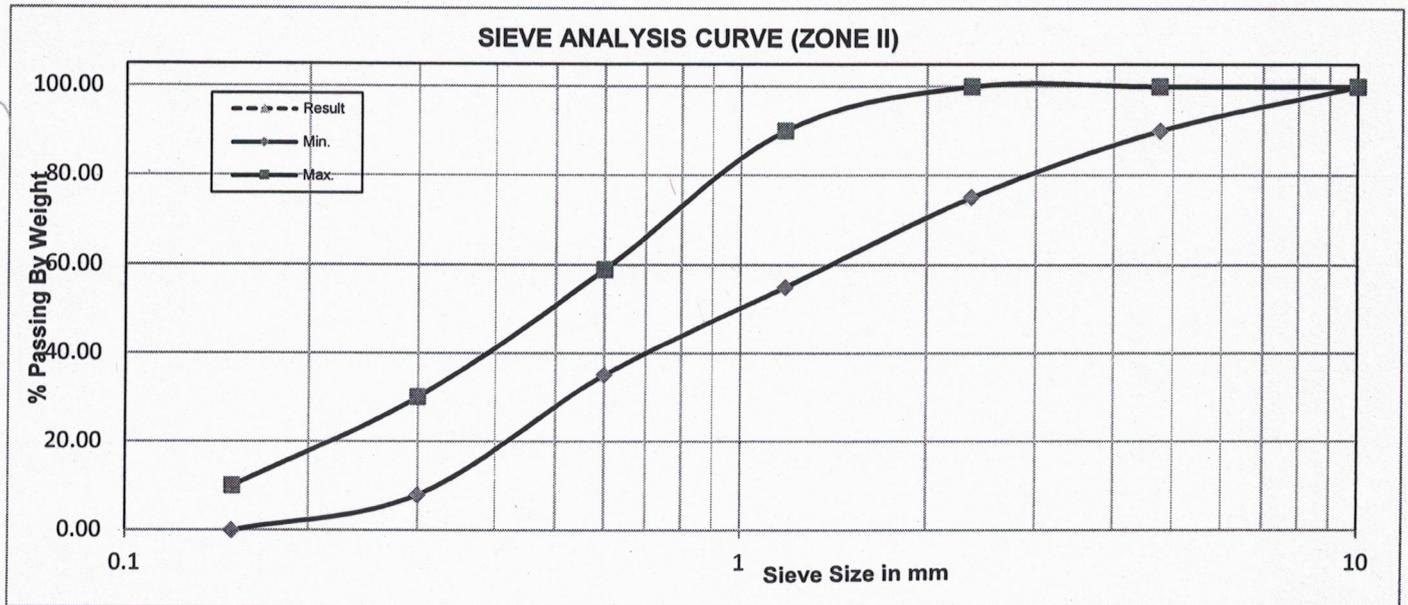
Government of Nepal
 Ministry of Urban Development
 Department of Urban Development and Building Construction
 National Research Center for Building Technology
 Babarmahal, Kathmandu, Nepal

GRADATION OF FINE AGGREGATE

As per IS: 2386 (Part I) – 1963

Project: _____ Sampling date: _____
 Client: _____ Source of Materials: _____
 Consultant: _____ Location of Materials: _____
 Contractor: _____ Lab Room Humidity: _____
 Contract No.: _____ Lab Room Temperature: _____
 Description of Sample: _____
 Ref. Letter no. _____
 Lab Ref. No.: _____
 Total wt. of the sample (gm): _____
 Test date: _____

Sieve Size in mm	Actual Obtained			Specification		Remarks
	Wt. Retained	Cumulative Wt.Retained	% Passing	% Passing, Min.	% Passing, Max.	
10				100	100	
4.75				90	100	
2.36				75	100	
1.18				55	90	
0.6				35	59	
0.3				8	30	
0.15				0	10	
Pan						



Remarks:

Tested by: _____ Checked by: _____ Verified by: _____

Samples are not taken by us. This report only represents the tested sample.

मणि राम गेलाल

**TESTS ON
CONCRETE**



Government of Nepal
Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, Nepal

COMPRESSIVE STRENGTH TEST OF CONCRETE CUBE

As per IS:516 - 1959

Project: Sampling date:
Client: Location of Sample:
Consultant: Lab Room Humidity:
Contractor: Lab Room Temperature:
Contract No.: Machine:
Description of Sample:
Ref. Letter no.
Lab Ref. No.:
Test date:

Concrete Grade

Cube no.		1	2	3
Time of Casting				
Date of Test				
Age when tested	days			
Size of cube, (LxBxH)	cm		(15*15*15)cm	
Volume of cube(V)	m ³		0.003375	
Weight of cube,	kg.			
Density, D=m/V	Kg/m ³			
Average density	Kg/m ³			
Breaking Load	KN			
Corrected load	KN			
Corrected strength	N/mm ²			
Average strength	N/mm ²			

Remarks:

Tested by: Checked by: Verified by:

Sample are not taken by us. This report only represents the tested sample.

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सचिव

TESTS ON BRICKS



Government of Nepal
Ministry of Urban Development
Department of Urban Development and Building Construction
National Research Center for Building Technology
Babarmahal, Kathmandu, NePal
BRICK TEST

Water Absorption of Brick As per IS: 3495 (Part 2): 1992
Compressive Strength of Brick As per IS: 3495 (Part 1): 1992

Project: Sampling date:
Client: Source of Materials:
Consultant: Location of Materials:
Contractor: Lab Room Humidity:
Contract No.:
Description of Sample:
Ref. Letter no.
Lab ref. No.:
Test date:

Brick No.	1	2	3	4	5	
Length						cm
Breadth						cm
Height						cm
Surface Area						cm ²
Breaking Load						Kn
Breaking Strength						N/mm ²
Average Breaking Strength						N/mm ²
Weight of Dry Brick						Kg
Weight of Wet Brick						Kg
Weight of Water						Kg
Water Absorption						%
Average Water Absorption						%

Remarks :

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Tested by: Checked by: Verified by:

Samples are not taken by us. This report only represents the tested sample.

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ई. मणि राम गेलाल
सचिव

