

Ref.Memo No-UE/Pirganj/46.02.8576.000.99.00124-913-597 Date-22/05/2025

Client : Contractor-Barendra Construction Ltd, Rajshahi
Scheme : Contract No-SupRb/Rang/Replace/22-23/W-436
Location: Construction of 301m.00m Long PSC Girder Bridge at Nundaha ghat over the Kartoa River, on road Chatra to Bilabari ghatat Ch-4500m, Upapazila-Pirganj, Dist- Rangpur. **Type of Specimen :** Stone Chips
Package No-CIB-Ran-W-27
Sampled By : UE & SAE

Quantity Collected from Field : **Quantity represented :**
Lab. Registration No. : P-400/61611 **Date of test:** 15/06/2025
Sample No : **Type of Specimen :** Stone Chips
Approximate Capacity of Wire Basket : 6.1 Litre **Nominal Max. Aggregate Size :** 20mm **Sieve for separating finer Particles (If excess amount) :** Total Specimen tested (since neqliqible) / (#4) Sieve
% Coarser Portion (Retained on (# 4) sieve, P₁ : **% of Finer Portion, P₂ :**

Description	Test No.-1	Test No.-2	Test No.-3
Weight of SSD Specimen in Air (B), gm	4725.00		
Weight of Saturated Specimen in Water (C), gm	2800.00		
Weight of Oven-Dried Specimen (A), gm	4678.00		
Temperature of Water (T); if other then 23 ± 1.7°C	24.50		
Specific Gravity of Water at Temperature T°C (G _T)	----		
Bulk Specific Gravity, 23/23°C, = A / (B-C) X G _T /G ₂₃	2.43		
Bulk Specific Gravity (SSD), 23/23°C, = B / (B-C) X G _T /G ₂₃	2.45		
Apparent Specific Gravity, 23/23°C, = A / (A-C) X G _T /G ₂₃	2.49		
Water Absorption, = $\frac{(B-A)}{A} \times 100$, %	1.0		
Average Specific Gravity, 23/23°C,	Bulk / Bulk (SSD) / Apparent		
Average Water Absorption, %			

NOTE: - Specific Gravity of Water at 24.2°C (G₂₄) = 0.9986
 - As per ASTM average of three of three tests is not necessary, though provision is kept in the datasheet.
 - Unit Wt. = Sp. Gr. X 1000 (Kg/m³) or Sp. Gr. X 62.4 (lb/cft)

Tested by : Lab. Technician

Comments : Bulk Specific Gravity (SSD) = 2.68

Md. Anarul Islam
 Md. Anarul Islam
 Sub-Assistant Engineer (Lab)
 LGED, Rangpur

22/06/2022
 Assistant Engineer
 LGED, Rangpur.

Senior Assistant Engineer
 LGED, Rangpur.

QUALITY CONTROL LABORATORY
DISRICT-RANGPUR

UNIT WEIGHT OF COARSE AGGREGATE (ASTM C-29)

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Contractor-Barendra Construction Ltd, Rajshahi

Location : Construction of 301m.00m Long PSC Girder Bridge at Nundaha ghat over the Kartoa River, on road Chatra to Pirganj ghat Ch-4500m, Upapazila-Pirganj, Dist- Rangpur.

Project No-CIB-Ran-W-27

Sample No : Type of Specimen : Stone Chips

Sampled By : Sampled Date :

Quantity Collected from Field : Quantity represented :

Registration No. : P-490/61613 Date of test: 15/06/2025

Maximum Size of Aggregate : 20mm

Method of Compaction : Rodding/Jigging/Shoveling Water Absorption (for SSD Unit Wt.) :

Method of Calibration :

Amount of Water to fill the selected Size of Mold : Kg. Water Temperature :

Apparent density : 998.8 kg/m³ Actual Volume of Mould : 0.00187 m³

Test No.	Wt. of Aggregate + Mould Kg	Wt. of Mould Kg	Wt. of Aggregate in Mould Kg	Unit Wt. of Aggregate, Kg/m ³	Result & Remarks
1	5.000	1.868	3.132	1675	

- S.S.D Unit Wt. = Oven dry Unit Wt. (1 + Water Absorption / 100)
- As per ASTM, average of three test (9 as shown above) is not required.
- mould size required as per ASTM :

Handwritten signature
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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

QUALITY CONTROL LABORATORY

DISTRICT-RANGPUR

Ref.Memo No-UE/Pirganj/46.02.8576.000.99.00124-913-597

Date-22/05/2025

Client : Contractor-Barendra Construction Ltd, Rajshahl

Location: Construction of 301m.00m Long PSC Girder Bridge at Nundaha ghat over the Kartoa River, on road Chatra to Gilabari ghatat Ch-4500m, Upapazila-Pirganj, Dist- Rangpur.

Package No- Package No-CIB-Ran-W-27

Sampled by : UE & SAE

Quantity Received :

Quantity represented :

Lab. Registration No. : P-490/61614

Date of test: 15/06/2025

Wt. of dry Sample . 300.0 gm
Wt. of Container = 0.0 gm
Wt. of dry Sample 300.0 gm

SIEVE Size		Cumulative weight Retained , (gm)	CUMULATIVE PERCENT RETAINED	PERCENT PASSING	SPECIFIED LIMIT
No	mm				
#4	4.75	0.00	0.00	100	
#8	2.36	15.00	5.00	95.00	
#16	1.18	85.00	28.33	71.67	
#30	0.600	190.00	63.33	36.67	
#50	0.300	261.00	87.00	13.00	
#100	0.150	288.00	96.00	4.00	
# 200	0.075	299.80	99.93	0.07	
Pan		300.00	100.00		

FM= 2.80

Amount of silt and clay =

0.07 %

Tested by :

Comments :

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26/6/22
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