

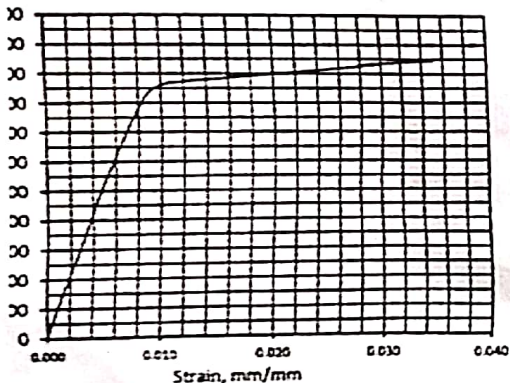


BRTC No.: 1103-54059/24-25 / CE-216/2025
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 Date of Test: 3/6/2025

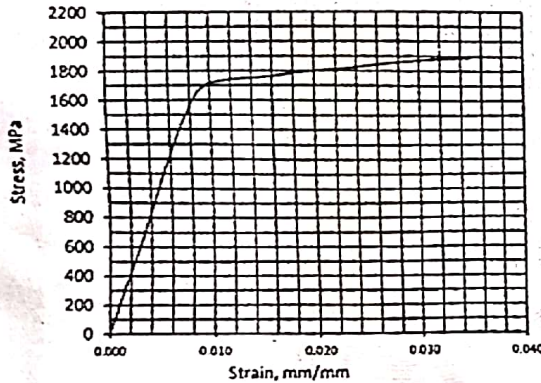
EST OF 7-WIRE PRESTRESSING STRAND (ASTM A416)

I. Musa, Executive Engineer
 LGED, Rangpur
 Construction of 30.100m long RC girder bridge at Nyundaha Ghat over the river Kartoa at Ch-4500m on Chitra GC to Gillabari Ghat via Nischintobati PS road under Pirgany, Rangpur.

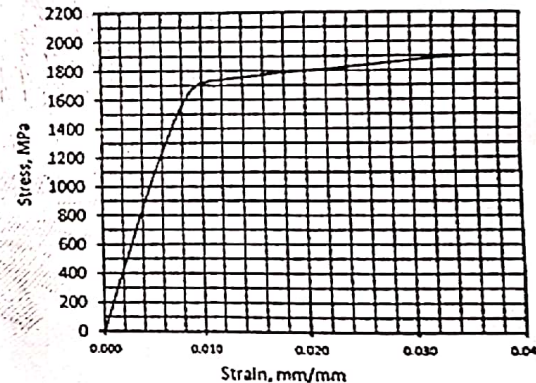
Sl. No.	Identification Mark	Nominal Dia (mm)	Cross sectional area (mm ²)	Actual Unit Weight (kg/m)	Average Actual Unit Weight (kg/m)	Yield or Proof Load (kN)	Average Yield or Proof Load (kN)	Ultimate Load (kN)	Average Ultimate Load (kN)	Elongation (%) (Gauge length = 600 mm)
1	-	15.24	142.5	1.119	1.119	246.0	245.0	276.0	276.0	3.5+
2	-	15.24	142.5	1.119	1.119	245.0	245.0	276.0	276.0	3.5+
3	-	15.24	142.5	1.118	1.118	245.0	245.0	277.0	277.0	3.5+



Stress-Strain Curve for Sample - 1



Stress-Strain Curve for Sample - 2



Stress-Strain Curve for Sample - 3

Sample	Young's Modulus (MPa)	Average Young's Modulus (MPa)
1	200400	200400
2	200400	
3	200500	

Standard Requirements of ASTM A416/A416M

Grade	Nominal Dia (mm)	Minimum Yield Strength at 1% Extension (kN)	Minimum Breaking Strength (kN)	Minimum elongation (%)
250	15.24	216.2	240	3.5
270	15.24	234.6	260	3.5

Note: Samples were received in sealed condition

Countersigned by:
 Prof. Dr. Moazzem Hossain, Test-In-Charge
 Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

Test Performed by:
 Dr. Shohel Rana
 Professor, Dept. of Civil Engg., BUET



04 June 2025

* Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that the re sent in a secure and sealed cover/packet/container under signature of the competent authority. In order to avoid fraudulent fabrication of test results, it is recommended that all test reports be collected by duty person, and not by the Contractor/Supplier.