

Test Performed by: S. Asad Ali Gillani

Resident Engineer

ESS-I-AAR Consultant.

WASA Multan.

(Resident Supervision of Re-Routing of 24", 18" & 12" i/d RCC Sewer Lines at Dehli-Multan Road from Babar Chowk to Darama Wala Morr, WASA Multan)

Client Reference No.: 5267/WASA

Dated: 16-07-2025

SOM Lab Ref: CED/SOM/1631(Page 1/1)

Dated: 08-08-2025

Test Type: Tensile Test & Bend Test

Sample Type: Deformed Bar

Gauge Length: 8 "

### Tensile Test & Bend Test Results

Sample No.	Weight (lb/ft)	Size of Sample (Inch)	Calculated Area (Inch <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (Psi)	Ultimate Tensile Stress (Psi)	% Elongation
1	0.167	1/4"	0.049	11.0	14.5	50470	66530	20.0
2	0.108	3/16	0.032	6.8	9.2	47780	64640	22.5
<b>BEND TEST:</b>								
1/4"	Sample bend through 180 degrees Satisfactorily without any crack							
3/16"	Sample bend through 180 degrees Satisfactorily without any crack							

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Test Performed by: S. Asad Ali Gillani

Hamid Javid

AE B&R

GE (Air) Rafiqui.

- a. Rehb/Uplifting of Secondary School (B-1, B-3)
- b. Rehb of Class Rooms Secondary School (B-5)
- c. Rehb/Uplifting of Class Rooms alongwith lavatory block, library and Computer lab (B-7, B-8)
- d. Rehb/Uplifting of admin block, 03 x Labs and hell of School at PAF base Rafiqui. (B-9)

Client Reference No.: 600-AU/16/E-6

Dated: 04-08-2025

SOM Lab Ref: CED/SOM/1633 (Page 1/1)

Dated: 08-08-2025

Test Type: Hardness Test

Sample Type: Girder

**Hardness Test Details:**

**Machine used: Avery Rockwell Hardness Testing Machines**

(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

**Hardness Test Results**

Sample No.	Sample Type	Hardness avg
1	Girder	HR -69.0- B

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M Umer Karimi  
Civil Engineer CARE-EPC Lahore.

Test Performed By: Dr. /Engr. Irfan UI Hassan

Client Reference: BS/250808-014  
SOM Lab Ref: CED/SOM/1632 (Page-1/2)  
Test: Tension Test & Bend Test  
Sample Type: Deformed Bar

Dated: 08-08-2025  
Dated: 08-08-2024  
Test Specification: ASTM-A 615  
Gauge Length: 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.922	25	25.23	491	500	280.20	346.00	571	561	705	692	32.5	200	16.3	
2	2.194	20	18.87	314	280	129.50	171.20	412	464	545	613	32.5	200	16.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M Umer Karimi  
Civil Engineer CARE-EPC Lahore.

**Test Performed By:** Dr. /Engr. Irfan Ul Hassan

**Client Reference:** BS/250808-015  
**SOM Lab Ref:** CED/SOM/1632 (Page-2/2)  
**Test:** Tension Test & Bend Test  
**Sample Type:** Deformed Bar

**Dated:** 08-08-2025  
**Dated:** 08-08-2024  
**Test Specification:** ASTM-A 615  
**Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.004	12	12.77	113	128	56.70	89.50	501	443	791	700	27.5	200	13.8	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only One Sample Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)