

Test Performed by: Dr. S. Asad Ali Gillani

Engr Barkat Leghari,
Structural and Design Engr PMBMC
Punjab Model Bazaars Management Company Lahore
(Construction of Model Bazaar Okara)

Client Reference No.: PMBMC/SE/MBB/02

Dated: 22-03-2025

SOM Lab Ref: CED/SOM/1004-1016(Page-1/2)

Dated: 24-03-2025

Test Type: Hardness Test

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	GI Purlins (2mm)	HR – 57.5– B

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: Dr. S. Asad Ali Gillani

Engr Barkat Leghari,
Structural and Design Engr PMBMC
Punjab Model Bazaars Management Company Lahore
(Construction of Model Bazaar Okara)

Client Reference No.: PMBMC/SE/MBB/01

Dated: 22-03-2025

SOM Lab Ref: CED/SOM/1004-1016(Page-2/2)

Dated: 24-03-2025

Test Type: Hardness Test

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	Steel Sheet 8mm (Column & Rafters)	HR – 75.5– B
2	Steel Sheet 6mm (Column & Rafters)	HR – 69.66– B

Note: Please always confirm the results on web www.uet-civil.edu.pk

Nespak-Turk Pak JV.(Estb Of 200 Bedded Mother &Child Hospital & Nursing College at Distt Bwn)

Sample Type: Deformed Bar (FF Steel)

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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.537	16	15.80	201	196	90.50	125.50	450	462	624	641	35.0	200	17.5	
2	1.536	16	15.78	201	196	93.20	127.00	464	477	632	650	32.5	200	16.3	
3	0.880	12	11.95	113	112	64.20	84.20	568	573	745	752	32.5	200	16.3	
4	0.985	12	12.64	113	125	60.20	80.20	533	480	710	640	32.5	200	16.3	
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<u>BEND TEST:</u>															
16mm	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Six Samples Received and Tested				
12mm	Sample bend through 180 degrees Satisfactorily without any crack														
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk															

Dy. General Manager Works.Habib Rafiq Engineering (Pvt.) Ltd.(101 Tower,Lahore)

Dr. /Engr. Wasim Abbas

SOM Lab Ref: 1009 (P-1/1)

Dated: 25-03-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar (Hunza Steel)

[illegible]

BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Test Performed By: S. Asad Ali Gillani

Resident Engineer
NESPAK (Pvt) Ltd.

Pavement Rehb. Works of Pakistan Metro Bus System-Rawalpindi Section from Saddar to Faizabad.

Client Reference: 4786/AZ/CR-Cat Eye-28

Dated: 20-03-2025

SOM Laboratory Reference: CED/SOM/1013(Page-1/1)

Dated: 25-03-2025

Test: Flexural Test & Compressive Strength Tests

Sample Type: CAT – EYES (Brand -3Ms)

Test Specification: ASTM-D4280

Test Results

Sr. No.	Sample Type	Top Dimensions (mm)	Bottom Dimensions (mm)	Thickness (mm)	Inclination (Degree)	Flexural Load(kg)	Compression Load (Kg)
1	Cat-Eyes Yellow	69.3 x 42.3	102.1 x 88.6	18.7	30.24°	1142	---
2	Cat-Eyes Yellow	69.4 x 42.2	102.1 x 88.7	18.8	30.32°	---	10214

Note: Please always confirm the results of above report on web: www.uet-civil.edu.pk

Muhammad Imran Hafeez
Sr.Engr (C) WASO (SWP) PAEC D.G.Khan.

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: SWP/W(2537)/2023

Dated: 24-03-2025

SOM Lab

Ref: 1008 (Page-1/1)

Dated: 25-03-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

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)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.663	4	0.498	0.20	0.195	6.54	8.92	72170	74020	98360	100880	1.30	8.0	16.3	
2	0.659	4	0.497	0.20	0.194	6.57	8.99	72510	74750	99150	102210	1.10	8.0	13.8	
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<u>BEND TEST:</u>															
# 4	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Three Samples Received and Tested				
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk															

SDO B&R GE (Army)-II Sialkot Cantt.(Const 1 x Bn Office, 13 SR HQ 30 IIBG at Lahore Cantt)

Dr. /Engr. Asad Ali Gillani

Dated: 24-03-2025

Ref: 1010(Page-1/1)

Dated: 25-03-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar

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)				
	lb/ft	#	in	in²	in²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.643	8	0.995	0.79	0.777	25.35	34.88	70780	71960	97380	99010	1.40	8.0	17.5	
2	2.666	8	0.998	0.79	0.783	25.61	35.04	71490	72130	97810	98690	1.50	8.0	18.8	
3	1.505	6	0.750	0.44	0.442	14.05	20.10	70410	70090	100760	100300	1.20	8.0	15.0	
4	1.507	6	0.751	0.44	0.443	13.91	20.13	69750	69270	100910	100230	1.20	8.0	15.0	
5	1.047	5	0.626	0.31	0.308	10.70	13.91	76150	76640	98990	99640	1.20	8.0	15.0	
6	1.048	5	0.626	0.31	0.308	10.45	13.81	74340	74820	98270	98910	1.10	8.0	13.8	
7	0.672	4	0.501	0.20	0.197	6.68	9.25	73630	74750	101960	103510	1.10	8.0	13.8	
8	0.665	4	0.498	0.20	0.195	6.60	9.25	72730	74600	101960	104570	1.00	8.0	12.5	
9	0.668	4	0.500	0.20	0.196	5.05	6.73	55650	56780	74190	75710	1.60	8.0	20.0	
10	0.674	4	0.502	0.20	0.198	4.96	6.73	54750	55300	74190	74940	1.70	8.0	21.3	

BEND TEST:

--	No Bend test performed	Note:- Only Ten Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Abdul Saboor
Infitech Engineering Pvt Lahore.

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

Dated: 25-03-2025

SOM Lab

Ref: 1011 (Page-1/1)

Dated: 25-03-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

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)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.477	6	0.743	0.44	0.434	15.26	19.24	76490	77550	96420	97750	1.50	8.0	18.8	
2	1.488	6	0.746	0.44	0.437	13.73	18.42	68830	69300	92330	92960	1.60	8.0	20.0	
3	0.657	4	0.496	0.20	0.193	6.01	8.41	66320	68730	92740	96100	1.30	8.0	16.3	
4	0.661	4	0.497	0.20	0.194	6.14	8.15	67670	69770	89930	92710	1.40	8.0	17.5	
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<u>BEND TEST:</u>															
# 6	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Six Samples Received and Tested				
# 4	Sample bend through 180 degrees Satisfactorily without any crack														
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk															

Dr. /Engr. Wasim Abbas

SOM Lab

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25-03-2025

ASTM-A-615

Deformed Bar (Ittehad Steel)

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)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.702	8	1.005	0.79	0.794	32.42	39.60	90500	90040	110560	110000	1.00	8.0	12.5	
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Witnessed By:				Naeem Yaseen (Site Supervisor)											
<u>BEND TEST:</u>															
# 8		Sample bend through 180 degrees Satisfactorily without any crack									Note:- Only Two Samples Received and Tested				
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk															

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

QAQC Manager Zameen Development.(Const. Of JADE Project by Zameen Development,Lahore)

Dr. /Engr. Wasim Abbas

Dated: 25-03-2025

Ref: 1015 (Page-1/1)

Dated: 25-03-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-706

Gauge Length: 8 inch

Sample Type:

Def. Bar (H # SS-107)

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)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.631	4	0.485	0.20	0.185	5.25	7.90	57890	62590	87120	94180	1.60	8.0	20.0	
2	0.637	4	0.488	0.20	0.187	5.12	7.87	56430	60350	86780	92810	1.60	8.0	20.0	
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<u>BEND TEST:</u>															
# 4	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Three Samples Received and Tested				
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk															