Engr. Zaheer Ud Din Babar **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani
Dy. General Manager (Works).HRL Engineering (Pvt.) Ltd.(Const Of sky Gardens Tower,Lahore)

Client Reference: HRLE/SKG/2023/123/635 **SOM Lab Ref:** 2155 (Page-1/1)
Dated: 08-05-2023 **Dated:** 08-05-2023

Test: Tension Test **Test Specification:** ASTM-A-615
Guage Length: 200 mm **Sample Type:** MS Deformed Bar (Afco 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	1.501	16	15.60	201	191	109.80	145.20	546	575	722	761	25.0	200	12.5	1
2	1.501	16	15.60	201	191	105.90	131.40	527	554	654	688	27.5	200	13.8	2
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BEND TEST:

16mm	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

Engr. Zaheer Ud Din Babar **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Dy. General Manager (Works).HRL Engineering (Pvt.) Ltd.(Const Of sky Gardens Tower,Lahore)

Client Reference: HRLE/SKG/2023/124/635 **SOM Lab Ref:** 2156 (Page-1/1)

Dated: 08-05-2023 **Dated:** 08-05-2023

Test: Tension Test **Test Specification:** ASTM-A-615

Guage Length: 200 mm **Sample Type:** MS Deformed Bar (Afco 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	4.633	28	27.41	616	590	255.00	411.00	414	433	667	697	32.5	200	16.3	1
2	4.942	28	28.31	616	630	267.00	426.00	433	425	692	677	37.5	200	18.8	2
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BEND TEST:

28mm	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

Fahad Manzil, ARE Pkg-4 **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

Indus Associate Consultant (JV) New Vision Khanozai.(Dualization Of Kuchlak-Zhob Sec of N-50)

Client Reference: RE/Pkg-IV/N-50/IAC/2023/290 **Dated:** 03-05-2023

SOM Lab Ref: CED/SOM/2157(Page-1/1) **Dated:** 08-05-2023

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: M S Deformed Bar (Faizan Steel) **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^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.978	25	25.41	491	507	250.70	327.50	511	495	667	646	37.5	200	18.8	
2	3.980	25	25.41	491	507	250.20	329.00	510	494	670	649	35.0	200	17.5	
3	2.461	20	19.98	314	314	173.20	217.00	551	553	691	693	30.0	200	15.0	
4	2.453	20	19.95	314	312	177.20	216.70	564	568	690	694	27.5	200	13.8	
5	1.534	16	15.77	201	195	115.90	142.70	576	594	710	731	27.5	200	13.8	
6	1.533	16	15.77	201	195	115.70	142.70	575	593	710	731	30.0	200	15.0	
7	0.996	12.7	12.71	123	127	75.70	93.50	617	597	762	737	27.5	200	13.8	
8	1.000	12.7	12.74	123	127	76.70	94.00	625	603	766	738	27.5	200	13.8	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
20mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack
12.7mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

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

Raja Muhammad Aqeel **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani
Astt Dir.Building Section DHA Gujranwala.(Const Of Villas Block-B)

Client Reference: 111/3/AD Bldgs/Gen/45 **SOM Lab Ref:** 2152 (Page-1/1)
Dated: 06-05-2023 **Dated:** 08-05-2023

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615
Gauge Length: 8 inch **Sample Type:** Deformed Bar (Batala 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	1.494	6	0.748	0.44	0.439	14.32	19.85	71790	71950	99480	99710	1.30	8.0	16.3	
2	1.491	6	0.747	0.44	0.438	14.30	19.80	71690	72020	99230	99680	1.30	8.0	16.3	
3	0.646	4	0.492	0.20	0.190	5.96	7.70	65760	69220	84870	89340	1.20	8.0	15.0	
4	0.646	4	0.492	0.20	0.190	6.12	7.72	67450	71000	85100	89570	1.10	8.0	13.8	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

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

Mr. Akif Culhaoglu **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

CEO HAMIDIYE FOUNDATION LAHORE.(Construction Of Plot No 103D3,IEP Town, Lahore)

Client Reference: Nil **SOM Lab Ref:** 2153 (Page-1/1)

Dated: 08-05-2023 **Dated:** 08-05-2023

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Kamran 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	1.463	6	0.740	0.44	0.430	11.69	17.49	58610	59970	87680	89720	1.60	8.0	20.0	
2	0.662	4	0.498	0.20	0.195	6.10	8.30	67220	68950	91500	93850	1.10	8.0	13.8	
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Malik Steel
Malik Steel Sales Depot Lahore.

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

Client Reference: Nil
Dated: 08-05-2023

SOM Lab
Ref: 2154 (Page-1/5)
Dated: 08-05-2023

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (Malik 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	1.531	6	0.757	0.44	0.450	12.49	19.98	62590	61200	100150	97920	1.40	8.0	17.5	H # 991
2	1.540	6	0.759	0.44	0.453	12.62	19.98	63260	61440	100150	97270	1.40	8.0	17.5	H # 991
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Malik Steel
Malik Steel Sales Depot Lahore.

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

Client Reference: Nil
Dated: 08-05-2023

SOM Lab
Ref: 2154 (Page-2/5)
Dated: 08-05-2023

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (Malik 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	1.535	6	0.758	0.44	0.451	12.18	19.88	61060	59570	99640	97210	1.20	8.0	15.0	H # 992
2	1.536	6	0.758	0.44	0.451	12.49	20.08	62590	61070	100660	98200	1.40	8.0	17.5	H # 992
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Malik Steel
Malik Steel Sales Depot Lahore.

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

Client Reference: Nil
Dated: 08-05-2023

SOM Lab
Ref: 2154 (Page-3/5)
Dated: 08-05-2023

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (Malik 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	1.557	6	0.764	0.44	0.458	12.59	20.13	63100	60620	100910	96950	1.40	8.0	17.5	H # 993
2	1.552	6	0.762	0.44	0.456	12.79	20.23	64130	61880	101420	97870	1.20	8.0	15.0	H # 993
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Malik Steel
Malik Steel Sales Depot Lahore.

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

Client Reference: Nil
Dated: 08-05-2023

SOM Lab
Ref: 2154 (Page-4/5)
Dated: 08-05-2023

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (Malik 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	1.515	6	0.753	0.44	0.445	12.39	19.75	62080	61390	98970	97860	1.40	8.0	17.5	H # 994
2	1.503	6	0.750	0.44	0.442	12.20	19.44	61160	60890	97440	97000	1.10	8.0	13.8	H # 994
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Malik Steel
Malik Steel Sales Depot Lahore.

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

Client Reference: Nil
Dated: 08-05-2023

SOM Lab
Ref: 2154 (Page-5/5)
Dated: 08-05-2023

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (Malik 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	1.521	6	0.754	0.44	0.447	12.61	19.67	63210	62220	98610	97070	1.30	8.0	16.3	H # 995
2	1.538	6	0.759	0.44	0.452	12.71	20.15	63720	62030	101020	98330	1.30	8.0	16.3	H # 995
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Taslim Alam **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

RE Nespak Zeroline Bridge,Kartarpur.(Const Of Bridge At Zeroline Kartarpur Sb Corridor)

Client Reference: 4371/021/TA/01/079 **SOM Lab Ref:** 2158 (Page-1/1)

Dated: 08-05-2023 **Dated:** 08-05-2023

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **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)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.662	6	0.788	0.44	0.488	16.02	21.87	80320	72420	109600	98820	1.40	8.0	17.5	
2	1.661	6	0.788	0.44	0.488	15.62	21.56	78280	70580	108070	97440	1.20	8.0	15.0	
3	1.088	5	0.638	0.31	0.320	10.31	13.66	73320	71030	97180	94140	1.20	8.0	15.0	
4	1.045	5	0.625	0.31	0.307	10.09	13.17	71800	72500	93700	94620	1.30	8.0	16.3	
5	0.586	4	0.468	0.20	0.172	5.61	7.29	61830	71890	80370	93460	1.30	8.0	16.3	
6	0.590	4	0.469	0.20	0.173	5.68	7.34	62610	72390	80940	93570	1.30	8.0	16.3	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 5	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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