

Rashed Mehmood

Test Performed  
By:

Dr. /Engr. Asad Ali Gillani

CRE Zeeruk International (Pvt) Ltd.(Const Of Sialkot Kharian Motorway Project-SKM)

Client Reference: SKMP/CRE/2023/0163

Dated : 18-08-2023

SOM Lab Ref: CED/SOM/2789(Page-1/1)

Dated : 01-09-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar (Mughal Steel)

Gauge Length: 200 m

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	3.798	25	24.82	491	484	241.20	331.70	491	499	676	686	32.5	200	16.3	
2	3.779	25	24.76	491	481	241.70	328.00	492	503	668	682	35.0	200	17.5	
3	2.387	20	19.68	314	304	155.20	208.50	494	511	664	686	35.0	200	17.5	
4	2.449	20	19.93	314	312	146.00	205.20	465	468	653	658	37.5	200	18.8	
5	1.537	16	15.79	201	196	100.50	132.00	500	514	657	675	35.0	200	17.5	
6	1.531	16	15.76	201	195	101.50	132.20	505	521	658	679	32.5	200	16.3	
7	0.871	12	11.89	113	111	55.80	76.20	493	503	674	687	27.5	200	13.8	
8	0.871	12	11.89	113	111	55.00	76.20	486	496	674	687	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Twelve Samples Received and Tested</b>
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
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](http://www.uet-civil.edu.pk)

Minhaj  
Khizar

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

Sn. Civil Engr Pepsi NBC Guj.(Const Of ETP and Rain Water Collection Pit at NBC Gujranwala)

Client Reference: Nil

Dated : 01-09-2023

SOM Lab Ref: CED/SOM/2785(Page-2/2)

Dated : 01-09-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

Gauge Length: 200 m

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	m	%	
1	2.342	20	19.48	314	298	142.20	193.50	453	478	616	650	40.0	200	20.0	
2	2.354	20	19.54	314	300	141.70	193.00	451	473	614	644	40.0	200	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Three Samples Received and Tested</b>

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

Minhaj Khizar

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

Sn. Civil Engr Pepsi NBC Guj.(Const Of ETP and Rain Water Collection Pit at NBC Gujranwala)

Client Reference: Nil

Date: 01-09-2023

SOM Lab Ref: CED/SOM/2785(Page-1/2)

Date: 01-09-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

Gauge Length: 200 m

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	1.002	12	12.77	113	128	65.50	86.50	579	512	765	676	30.0	200	15.0	
2	0.998	12	12.72	113	127	65.00	86.00	575	512	760	677	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

12mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Three Samples Received and Tested</b>

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

Best Builders

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

Lahore.(New TCF Secondary School, Building in Karam Bagh Kharian)

Client Reference: Nil

SOM Lab

Ref: 2786 (Page-1/1)

Dated: 31-08-2023

Dated: 01-09-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Deformed Bar (Ittefaq

Gauge Length: 8 h

Sample Type:

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.521	6	0.754	0.44	0.447	14.42	18.96	72300	71170	95040	93550	1.10	8.0	13.8	
2	0.659	4	0.497	0.20	0.194	5.83	8.77	64300	66290	96670	99660	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Four Samples Received and Tested</b>
# 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](http://www.uet-civil.edu.pk)

Best Builders

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

Lahore.(New TCF Secondary School, Building in Roshan Basti Rahim Yar Khan)

Client Reference: Nil

SOM Lab

Ref: 2787 (Page-1/1)

Dated: 31-08-2023

Dated: 01-09-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Gauge Length: 8 h

Sample Type:

Deformed Bar (Ittefaq 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.765	8	1.017	0.79	0.813	25.76	34.42	71920	69880	96100	93390	1.30	8.0	16.3	
2	1.484	6	0.745	0.44	0.436	14.65	19.24	73430	74100	96420	97300	1.20	8.0	15.0	
3	0.663	4	0.498	0.20	0.195	5.93	8.79	65420	67100	96900	99380	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Six Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 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](http://www.uet-civil.edu.pk)

Engr. Mohsin Liaquat

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

Atiq Associates.(Main Gate Const. Al-Hafiz Garden Housing Scheme, Canal Road Lahore)

Client Reference: Nil

SOM Lab

Ref: 2788 (Page-1/1)

Dated: 31-08-2023

Dated: 01-09-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

inc

Deformed

Gauge Length: 8 h

Sample Type:

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.628	8	0.991	0.79	0.772	27.42	35.80	76550	78340	99950	102280	1.40	8.0	17.5	
2	2.626	8	0.991	0.79	0.772	27.49	35.63	76750	78540	99460	101780	1.50	8.0	18.8	
3	1.466	6	0.741	0.44	0.431	13.46	17.50	67450	68860	87730	89560	1.40	8.0	17.5	
4	1.482	6	0.745	0.44	0.436	13.71	17.71	68730	69360	88750	89570	1.50	8.0	18.8	
5	0.655	4	0.494	0.20	0.192	6.80	8.51	74980	78100	93860	97770	1.20	8.0	15.0	
6	0.660	4	0.497	0.20	0.194	6.70	8.43	73850	76140	92960	95840	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Nine Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 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](http://www.uet-civil.edu.pk)