

Maj Tanveer Ahmad (R )  
Resident Engineer-2, ACES Sector -H, - DHA, Multan

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

**Client Reference:** ACES-DHAM-SEC-U-233

**Dated:** 21-08-2020

**SOM Lab Ref:** CED/SOM/2867 (Page-1/1)

**Dated:** 24-08-2020

**Test:** Tension Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar(MUGHAL 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.477	20	20.06	314	316	151.00	203.20	481	478	647	644	25.0	200	12.5	
2	2.490	20	20.10	314	317	153.20	203.50	488	483	648	642	22.5	200	11.3	
3	2.473	20	20.03	314	315	152.00	203.20	484	483	647	645	25.0	200	12.5	
4	2.467	20	20.00	314	314	153.70	205.00	489	490	653	653	22.5	200	11.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Four 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)

Maj Adnan Khalid ®

Test Performed By:

Dr. /Engr.

S Asad Ali Gillani

Dy Dir MTL, Development Of Graveyard Sector - V, DHA Ph-VIII (M/s Arfco)

Client Reference: 408/241/E/965/0020

Dated: 24-08-2020

SOM Lab Ref: CED/SOM/2870 (Page-1/1)

Dated: 24-08-2020

Test: Tension Test

Test Specification: ASTM-F-1554

Sample Type: J - Bolt

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	3.867	25	25.05	491	493	177.70	308.70	362	361	629	627	35.0	200	17.5	
2	3.873	25	25.07	491	493	177.20	308.20	361	360	628	625	27.5	200	13.8	
3	3.865	25	25.04	491	492	178.70	307.50	364	363	626	625	37.5	200	18.8	
4	3.970	25	25.38	491	506	147.50	231.00	300	292	471	457	42.5	200	21.3	
5	3.960	25	25.34	491	504	142.50	229.20	290	283	467	455	45.0	200	22.5	
6	3.926	25	25.23	491	500	145.00	227.70	295	290	464	456	47.5	200	23.8	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Six 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)

Syed Mohsin Ali  
 Manager QA/QC, Department, Bahria Town, (Pvt) Ltd Lahore

Test Performed By:

Dr. /Engr.

M. Irfan Ul  
 Hassan

Client Reference: QA/QC-Steel-2096

Dated: 22-08-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 2769(Page-1/1)

Dated: 24-08-2020

ASTM-A-615

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	2.716	8	1.008	0.79	0.798	28.03	36.90	78260	77480	103020	101990	1.20	8.0	15.0	
2	2.712	8	1.007	0.79	0.797	28.54	37.41	79680	78980	104440	103520	1.10	8.0	13.8	
3	1.468	6	0.741	0.44	0.431	15.90	19.47	79710	81370	97590	99630	1.30	8.0	16.3	
4	1.484	6	0.745	0.44	0.436	16.11	19.57	80730	81470	98100	99000	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 6	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)