

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Assistant Resident Engineer NESPAK

Stom Water Drainge System from Haji Camp to River Ravi via Lakshmi Chowk, Mcleod Road, Nabha Road, Churburji and Sham Nagar to River Ravi (Package-II)

Reference # CED/TFL 37368 (Dr. Usman Akmal)

Dated: 16-11-2021

Reference of the request letter # 3882/11/MWA/SO-01/262 Dated: 11-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Ben;d Test as per ASTM-A615

Sr. No.	Weight			ize (in²) Paix		Yield load	Breaking Load		Yield Stress (psi)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal Actual		(kg)	(kg) (kg)		Actual	Nominal	Actual	(inch)	3 %	Re
1	0.380	3	0.377	0.11	0.112	3800	5000	76200	75070	100200	98800	1.00	12.5	teel
2	0.370	3	0.372	0.11	0.109	3800	5000	76200	77030	100200	101400	1.20	15.0	SJ Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Note: only two samples for tensile and one sample for bend test								1		1		
#2	Bend Test  #3 Bar Bend Test Through 180° is Satisfactory													
#3	Dar Ben	u rest	riirougr	1 100 18	s Sausia	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ACE, Danish School
Establishment of Daanish School (Boys & Girls) at Mankera District Bhakkar

Reference # CED/TFL 37369 (Dr. Usman Akmal)

Dated: 16-11-2021

Reference of the request letter # ACE/RE-PDS/MNK/BHK/21/464 Dated: 15-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight				rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Nominal Actual		% E	R
1	0.376	3/8	0.375	0.11	0.110	3500	5300	70200	69850	106200	105800	1.20	15.0	
2	0.376	3/8	0.375	0.11	0.111	3600	5300	72200	71730	106200	105600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	<u>'est</u>						
3/8	" Dia Ba	ır Bend	Test Th	rough	180° is \$	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
Project Manager
Zaheer Associates
AR Developers & Town Planers
Shapes Health Club in Garound Floor Slab K-Block Al-Rehman Garden Ph-II Lahore

Reference # CED/TFL <u>37370 (Dr. Usman Akmal)</u>
Reference of the request letter # Z.A/A.R/19-21
Dated: 16-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Ben;d Test as per ASTM-A615

Sr. No.	Weight				rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Nominal Actual		Actual	(inch)	I %	Re
1	0.376	3	0.375	0.11	0.110	3700	4700	74200	73860	94200	93900	1.10	13.8	Mughal Steel
2	0.372	3	0.373	0.11	0.109	3600	4800	72200	72600	96200	96800	1.20	15.0	Mug
-	•	-	1	•	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
	Bend Test													
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To,
Resident Engineer
Pillar & Sons
Rumanza Golf & Country Club, DHA Multan

Reference # CED/TFL <u>37372 (Dr. Usman Akmal)</u>

Reference of the request letter # P&S/OTH/GEN/00050

Dated: 16-11-2021

**Tension Test Report** (Page -1/2)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diam Si		Ar (ir	rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
<b>9</b> 1	(lbs/ft)	Nominal (#) Actual (inch)		Nominal	Actual	(kg)	(kg)	Nominal	Nominal Actual		Actual	(inch)	% E	Ŗ
1	0.378	3	0.376	0.11	0.111	3600	5200	72200	71380	104200	103100	1.10	13.8	S.J. Steel
2	0.378	3	0.376	0.11	0.111	3800	5200	76200	75410	104200	103200	0.80	10.0	Stee
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	ı	-	-	ı	-	-	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend 1	test			
#3	Bar Ben	d Test T	Through	1800 i	s Satisfa	ctory	Bend T	est						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To,
Resident Engineer
Pillar & Sons
Rumanza Golf & Country Club, DHA Multan

Reference # CED/TFL 37372 (Dr. Usman Akmal)

Reference of the request letter # P&S/OTH/GEN/00049

Dated: 16-11-2021

Dated: 09-11-2021

**Tension Test Report** (Page -2/2)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight				Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	Re
1	4.247	10	1.261	1.27	1.248	42600	54600	74000	75220	94800	96400	1.20	15.0	SJ Steel
2	4.227	10	1.258	1.27	1.243	39600	52800	68800	70250	91700	93700	1.20	15.0	SJ Stee
-	ī	-	ı	1	-	1	-	-	-	-	-	-	1	
-	ı	-	ı	ı	1	ı	-	-	-	-	-	-	ı	
-	ī	-	ı	1	-	1	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		1
							Bend T	est						
#10	) Bar Be	nd Test	Throug	gh 180°	is Satist	factory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S Mian Brothers Precast (Pvt) Ltd. Lahore

Reference # CED/TFL <u>37374 (Dr. Usman Akmal)</u>
Reference of the request letter # MBP/UET/21/0817

Dated: 17-11-2021

**Tension Test Report** (Page - 1/1)

Date of Test 18-11-2021 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause	_	Breal strength (6.2	clause	% Elongation	Remarks/ Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rema
1	9.53 (3/8")	432.0	440.0	9900	97.12	11200	109.87	>3.50	xx
2	11.11 (7/16")	582.0	587.0	13200	129.49	15000	147.15	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-			-	-

Only two samples for Test

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

# LANGE .

## STRUCTURAL ENGINEERING DIVISION

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
Mascon Associates (Pvt) Ltd
HA Consulting
Resident Supervision / PV Execution of Construction of Model Bazaar at Mianwali

Reference # CED/TFL <u>37375 (Dr. Usman Akmal)</u>

Reference of the request letter # MAC-HAC/MBMW/11-21/LAB/02

Dated: 17-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 2 inches

Description Sheet Steel Strip Tensile Test

Sr. No.	(mm)	(mm) Size of Strip	X Section Area	(ga) Yield load	Breaking (Sg) Load	(MPa)	Ultimate Stress	(ui) Elongation	% Elongation	Remarks
1	8	26.00x7.80	202.80	7000	11000	339	532	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
			Only One	Sample	for Tensil	e Test				
				Bend '	Гest					

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S Khawaja Wollen Mills (Pvt) Ltd Gujranwala

Reference # CED/TFL <u>37376 (Dr. Usman Akmal)</u>

Reference of the request letter # Nil

Dated: 17-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Ben;d Test as per ASTM-A615

Sr. No.	Weight					Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#) Actual (inch)		Nominal Actual		(kg)	(kg)	Nominal Actual		Nominal	Actual	(inch)	% E	Re
1	0.372	3	0.373	0.11	0.109	3900	5100	78200	78700	102200	103000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or bend t	est	1	I	1
							Bend T	est						
#3	#3 Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Assistant Director - I Building Research Station Lahore (Agha Arcon)

Reference # CED/TFL <u>37378 (Dr. Usman Akmal)</u>
Reference of the request letter # 154-R/3435

Dated: 17-11-2021

Dated: 16-11-2021

**Tension Test Report** (Page -1/1)

Date of Test 18-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)			Nominal Actual		(kg)	(kg)	Nominal Actual		Nominal	Actual	(inch)	∃ %	Re
1	0.375	3	0.375	0.11	0.110	3700	4800	74200	73980	96200	96000	1.00	12.5	
-	ı	-	-	ı	-	-	-	-	-	-	-	-	ı	
-	-	-	-	ı	-	-	-	-	-	-	-	-	ı	
-	-	-	-	ı	-	-	-	-	-	-	-	-	ı	
-	ı	-	-	1	-	-	-	-	-	-	-	-	1	
-	ı	-	-	1	-	-	-	-	-	-	-	-	1	
		1	N	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est	1	1	
	Bend Test													
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisfa	actory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples