STRUCTURAL ENGINEERING DIVISION

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

To,
Deputy Director (Engg)
LDA, Lahore
(Construction of 200 Bus Stop Shelters Including Bus Information and Scheduling System in Lahore, P-II)

Reference # CED/TFL **2226** (Dr. Usman Akmal) Dated: 02-11-2022
Reference of the request letter # DD(Engg.)/LDA/57 Dated: 01-11-2022

Tension Test Report (Page – 1/2)

Date of Test 10-11-2022
Gauge length 2 inches
Description Structure Steel / MS Pipe Square Type Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)		(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	MS Pipe Square	1	10.60x1.10	11.66	-------	800	-------	673	0.30	15.00	
2	MS Pipe Square	1.5	17.20x1.10	18.92	-------	1160	-------	601	0.10	5.00	
3	MS Pipe Square	2	26.40x1.10	29.04	-------	600	-------	203	0.20	10.00	
4	MS Pipe Square	3	26.20x1.60	41.92	-------	2320	-------	543	0.30	15.00	
5	MS Pipe Square	4	26.00x2.40	62.40	-------	2240	-------	352	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
Only Five Samples for Tensile Test											
Bend Test											

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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

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

To,
Deputy Director (Engg)
LDA, Lahore
(Construction of 200 Bus Stop Shelters Including Bus Information and Scheduling System in Lahore, P-II)

Reference # CED/TFL **2226** (Dr. Usman Akmal) Dated: 02-11-2022
Reference of the request letter # DD(Engg.)/LDA/57 Dated: 01-11-2022

Weight &Size Test Report (Page – 2/2)

Date of Test 10-11-2022
Description Structure Steel / MS Pipe Square Type Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Outer Dimension		Thickness	Remark
						X	Y		
	(inch)		(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	MS Pipe Square Type	1.0	87	101.65	0.86	25.80	25.60	1.10	
2	MS Pipe Square Type	1.5	136	103.30	1.32	37.60	37.60	1.10	
3	MS Pipe Square Type	2	167	104.10	1.60	45.30	44.75	1.10	
4	MS Pipe Square Type	3	367	104.20	3.52	75.50	76.30	1.50	
5	MS Pipe Square Type	4	791	104.90	7.54	102.60	100.00	2.40	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only Five Samples for Test									

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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

STRUCTURAL ENGINEERING DIVISION

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

To,
M/S Salman Developers
Grand Square Mall, Lahore
(Park House)

Reference # CED/TFL **2254** (Dr. Usman Akmal) Dated: 08-11-2022
Reference of the request letter # Nil Dated: 07-11-2022

Tension Test Report (Page -1/1)

Date of Test 10-11-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.379	3/8	0.377	0.11	0.112	3400	4800	68200	67180	96200	94900	1.30	16.3	
2	0.379	3/8	0.376	0.11	0.111	3400	4800	68200	67350	96200	95100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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

STRUCTURAL ENGINEERING DIVISION

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

To,
Director
Usman Ibrahim Construction
Construction of Tower A, Air Avenue

Reference # CED/TFL **2258** (Dr. Usman Akmal) Dated: 08-11-2022
Reference of the request letter # Nil Dated: 08-11-2022

Tension Test Report (Page -1/1)

Date of Test 10-11-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.416	3	0.395	0.11	0.122	4900	6200	98200	88350	124300	111800	0.90	11.3	
2	0.418	3	0.396	0.11	0.123	5000	6300	100200	89590	126300	112900	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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

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
NESPAK
Dualization of Lilla Interchange (M-2) vi P.D Khan to Jhelum I/C Bypass (2 Nos) Length 128 km, District Jhelum

Reference # CED/TFL **2259** (Dr. M Rizwan Riaz) Dated: 08-11-2022
Reference of the request letter # NESPAK/RE/JH/22/230 Dated: 07-11-2022

Tension Test Report (Page -1/1)

Date of Test 10-11-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	5.417	11	1.424	1.56	1.592	47600	63800	67300	65890	90200	88400	1.80	22.5	Amreli Steel
2	5.395	11	1.421	1.56	1.586	47200	64000	66700	65610	90500	89000	1.90	23.8	
3	5.207	11	1.396	1.56	1.531	39200	50600	55400	56450	71500	72900	1.50	18.8	Agha Steel
4	5.198	11	1.395	1.56	1.528	38400	49200	54300	55400	69600	71000	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only four samples for tensile and two samples for bend test

Bend Test

#11 Bar Bend Test Through 180º is Satisfactory

#11 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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

STRUCTURAL ENGINEERING DIVISION

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

To,
StarchPack (Private) Limited
StarchPack Greenfield Project at Kasur.

Reference # CED/TFL **2262** (Dr. M Rizwan Riaz) Dated: 10-11-2022
Reference of the request letter # NIL Dated: 10-11-2022

Tension Test Report (Page -1/1)

Date of Test 10-11-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (mm)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	5.356	36	35.96	1.58	1.574	49200	64800	68650	68880	90417	90800	1.50	18.8	
2	5.347	36	35.93	1.58	1.572	48600	64200	67812	68150	89579	90100	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
36mm Dia Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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