

Ref: CED/TFL/05/6977

Dated: 16-05-2025

Dated of Test: 18-06-2025 (Dr. Safeer Abbas)

To

**Mr. Manzoor Ahmad Joya (Resident Engineer)**  
**Nespak (Pvt.) Ltd.**  
**Establishment of Labour Colony at Quaid-E-Azam Business Park, M2-Motorway,**  
**Distt. Sheikhpura (Contract Package-C)**

Subject: **TESTING OF R.C.C. PIPE (ASTM C-76)**

Reference to your letter no: 3844/311/RE/118 on dated 05.05.2025 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	D-Load (0.01 inch)	D-Load Ultimate
	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(kg)	(kg)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	30	96.0	92.0	37.20	30.40	3.40	10530	22250	1195	2526

Witness by: Mr. Waqas Ahmed Zafar

Test Performed and Verified by:

To,

Ms. Mahwish Rana  
Material Engineer  
DHA Multan.  
(M/s One Step Builders)

Reference # CED/TFL **7086** (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 16-06-2025

Dated: 13-06-2025

**Tension Test Report** (Page – 1/1)

Date of Test 18-06-2025

Description GI Chain Link Fence Wire Tensile Test

Sr. No.	Description	Measured weight			Breaking Load	Remarks / Coil No.
	(mm)	Weight (g)	Length (cm)	Weight / Length (kg/m)	(kg)	
1	GI Chain Link Fence Wire	47	81.8	0.06	440	-
2	GI Chain Link Fence Wire	45	79.2	0.06	360	-
3	GI Chain Link Fence Wire	50	89.1	0.06	320	-
-	-	-			-	-
Only three samples for Test						

Test Performed and Verified by:

To,  
 Sub Divisional Officer  
 The Government Employees Security Institution  
 Earthfilling and Reconstruction of Boundary Wallat SSH Sargodha

Reference # CED/TFL 7089 (Dr. Usman Akmal)  
 Reference of the request letter # SS.DC(207)25/832

Dated: 17-06-2025  
 Dated: 16-06-2025

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

Date of Test 18-06-2025  
 Gauge Length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.380	3	0.377	0.110	0.112	3500	5000	70127	69073	100182	98675	1.2	15.0	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test														
# 3 Bar Bend Test Through 180 Degree is Satisfactory														

Test Performed and Verified by:

To,

Engr. Muhammad Salman Saqib (Resident Engineer)  
ARY Laguna DHA Gujranwala  
ARY Laguna Infrastructure Works Phase-01 DHA Gujranwala  
(Mughal)

Reference # CED/TFL 7090 (Dr. Usman Akmal)  
Reference of the request letter # ARY(Gujr.)/IS/Eng/RE/221/25

Dated: 17-06-2025  
Dated: 17-06-2025

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

Date of Test 18-06-2025  
Gauge Length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.373	3	0.373	0.110	0.11	3200	4400	64116	64408	88160	88561	1.2	15.0	-
2	0.374	3	0.374	0.110	0.11	3300	4400	66120	66134	88160	88178	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

#### Bend Test

# 3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Muhammad Salman Saqib (Resident Engineer)  
ARY Laguna DHA Gujranwala  
ARY Laguna Infrastructure Works Phase-01 DHA Gujranwala  
(Mughal Supreme)

Reference # CED/TFL 7090 (Dr. Usman Akmal)  
Reference of the request letter # ARY(Gujr.)/IS/Eng/RE/192/25

Dated: 17-06-2025  
Dated: 12-05-2025

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

Date of Test 18-06-2025  
Gauge Length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.360	3	0.367	0.110	0.106	3300	4600	66120	68674	92167	95728	1.2	15.0	-
2	0.359	3	0.367	0.110	0.106	3400	4500	68124	70998	90164	93967	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

#### Bend Test

# 3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Ahmad Jawad (Director Operations)  
Banu Mukhtar Products (Pvt.) Ltd.

Reference # CED/TFL **7091** (Dr. Usman Akmal)  
Reference of the request letter # Nil

Dated: 17-06-2025

Dated: 17-06-2025

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

Date of Test 18-06-2025

Gauge length 600 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	432.0	8800	86.33	10700	104.97	>3.50	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for test									

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

Test Performed and Verified by:

To,  
 Engr. Ahmad Jawad (Director Operations)  
 Banu Mukhtar Products (Pvt.) Ltd.

Reference # CED/TFL **7091** (Dr. Usman Akmal)  
 Reference of the request letter # Nil

Dated: 17-06-2025  
 Dated: 17-06-2025

**Tension Test Report** (Page -2/2)  
 Date of Test 18-06-2025  
 Gauge length 8 inches  
 Description PC Wire Tensile Test

Sr. No.	Weight	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (mm)	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.067	4	0.158	-	0.020	1680	2120	-	189040	-	238600	0.20	2.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: only one sample for tensile test														
Bend Test														

Test Performed and Verified by:

Ref: CED/TFL/05/6977

Dated: 16-05-2025

Dated of Test: 18-06-2025 (Dr. Safeer Abbas)

To

**Mr. Manzoor Ahmad Joya (Resident Engineer)**  
**Nespak (Pvt.) Ltd.**  
**Establishment of Labour Colony at Quaid-E-Azam Business Park, M2-Motorway,**  
**Distt. Sheikhpura (Contract Package-C)**

Subject: **TESTING OF R.C.C. PIPE (ASTM C-76)**

Reference to your letter no: 3844/311/RE/118 on dated 05.05.2025 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	D-Load (0.01 inch)	D-Load Ultimate
	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(kg)	(kg)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	30	96.0	92.0	37.20	30.40	3.40	10530	22250	1195	2526

Witness by: Mr. Waqas Ahmed Zafar

Test Performed and Verified by:



To,

Ms. Mahwish Rana  
Material Engineer  
DHA Multan.  
(M/s One Step Builders)

Reference # CED/TFL **7086** (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 16-06-2025

Dated: 13-06-2025

**Tension Test Report** (Page – 1/1)

Date of Test 18-06-2025

Description GI Chain Link Fence Wire Tensile Test

Sr. No.	Description	Measured weight			Breaking Load	Remarks / Coil No.
	(mm)	Weight (g)	Length (cm)	Weight / Length (kg/m)	(kg)	
1	GI Chain Link Fence Wire	47	81.8	0.06	440	-
2	GI Chain Link Fence Wire	45	79.2	0.06	360	-
3	GI Chain Link Fence Wire	50	89.1	0.06	320	-
-	-	-			-	-
Only three samples for Test						

Test Performed and Verified by:

To,  
 Sub Divisional Officer  
 The Government Employees Security Institution  
 Earthfilling and Reconstruction of Boundary Wallat SSH Sargodha

Reference # CED/TFL 7089 (Dr. Usman Akmal)  
 Reference of the request letter # SS.DC(207)25/832

Dated: 17-06-2025  
 Dated: 16-06-2025

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

Date of Test 18-06-2025  
 Gauge Length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3	0.377	0.110	0.112	3500	5000	70127	69073	100182	98675	1.2	15.0	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test														
# 3 Bar Bend Test Through 180 Degree is Satisfactory														

Test Performed and Verified by:

To,

Engr. Muhammad Salman Saqib (Resident Engineer)  
ARY Laguna DHA Gujranwala  
ARY Laguna Infrastructure Works Phase-01 DHA Gujranwala  
(Mughal)

Reference # CED/TFL 7090 (Dr. Usman Akmal)  
Reference of the request letter # ARY(Gujr.)/IS/Eng/RE/221/25

Dated: 17-06-2025  
Dated: 17-06-2025

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

Date of Test 18-06-2025  
Gauge Length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.373	3	0.373	0.110	0.11	3200	4400	64116	64408	88160	88561	1.2	15.0	-
2	0.374	3	0.374	0.110	0.11	3300	4400	66120	66134	88160	88178	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

#### Bend Test

# 3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Muhammad Salman Saqib (Resident Engineer)  
ARY Laguna DHA Gujranwala  
ARY Laguna Infrastructure Works Phase-01 DHA Gujranwala  
(Mughal Supreme)

Reference # CED/TFL 7090 (Dr. Usman Akmal)  
Reference of the request letter # ARY(Gujr.)/IS/Eng/RE/192/25

Dated: 17-06-2025  
Dated: 12-05-2025

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

Date of Test 18-06-2025  
Gauge Length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in <sup>2</sup> )		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.360	3	0.367	0.110	0.106	3300	4600	66120	68674	92167	95728	1.2	15.0	-
2	0.359	3	0.367	0.110	0.106	3400	4500	68124	70998	90164	93967	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

#### Bend Test

# 3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Ahmad Jawad (Director Operations)  
Banu Mukhtar Products (Pvt.) Ltd.

Reference # CED/TFL **7091** (Dr. Usman Akmal)  
Reference of the request letter # Nil

Dated: 17-06-2025

Dated: 17-06-2025

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

Date of Test 18-06-2025

Gauge length 600 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	432.0	8800	86.33	10700	104.97	>3.50	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for test									

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

Test Performed and Verified by:

To,  
 Engr. Ahmad Jawad (Director Operations)  
 Banu Mukhtar Products (Pvt.) Ltd.

Reference # CED/TFL **7091** (Dr. Usman Akmal)  
 Reference of the request letter # Nil

Dated: 17-06-2025

Dated: 17-06-2025

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

Date of Test 18-06-2025

Gauge length 8 inches

Description PC Wire Tensile Test

Sr. No.	Weight	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (mm)	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.067	4	0.158	-	0.020	1680	2120	-	189040	-	238600	0.20	2.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: only one sample for tensile test														
Bend Test														

Test Performed and Verified by: