**Client Reference No.**: GT/LTR/240813-034 **Dated:** 13-08-2024

**SOM Lab Ref**: CED/SOM/4624 (**Page 1/4**) **Dated**: 13-08-2024

Test Type: Compressive Strength Test on Brick Ballast Cores

Test Performed by: Dr. Syed Asad Ali Gillani

Sana Meraj,

Civil Engineer,

**Building Standard Limited** 

Lahore

This is with reference to your above-mentioned letter and SOM receipt. The samples of brick ballast cores submitted in the Laboratory were tested to determine their compressive strength and the results are provided in the Table below.

Sample No.	Sample Description/Grid	Compressive Strength, MPa
1	Footing D	1.18
2	Footing C	1.08
3	Footing A	1.34

**Client Reference No.**: GT/LTR/240813-035 **Dated:** 13-08-2024

**SOM Lab Ref**: CED/SOM/4624 (**Page 2/4**) **Dated:** 13-08-2024

Test Type: Modulus of Rupture of Bricks

Test Performed by: Dr. Syed Asad Ali Gillani

Sana Meraj,

Civil Engineer,

**Building Standard Limited** 

Lahore

This is with reference to your above-mentioned letter and SOM receipt. The samples of bricks submitted in the Laboratory were tested to determine their modulus of rupture and the results are provided in the Table below.

Sample No.	Sample ID	Brick Dimensions, mm	Modulus of Rupture, MPa
1	B-21	225 x 114 x 70	5.42
2	B-16	225 x 110 x 69	5.92
3	B-9	225 x 110 x 73	6.47

**Client Reference No.**: GT/LTR/240813-036 **Dated:** 13-08-2024

**SOM Lab Ref**: CED/SOM/4624 (**Page 3/4**) **Dated**: 13-08-2024

Test Type: Splitting Tensile Strength of Wall Cores

Test Performed by: Dr. Syed Asad Ali Gillani

Sana Meraj,	
Civil Engineer,	
Building Standard Limited	

Lahore

This is with reference to your above-mentioned letter and SOM receipt. The samples of wall cores submitted in the Laboratory were tested to determine their splitting tensile strength and the results are provided in the Table below.

Sample No.	Sample Description/Grid	Core Dimensions, mm (Length x Diameter)	Splitting Tensile Strength, MPa
1	Location No. 1	104.65 x 93.8	1.13
2	Location No. 4	110 x 93.8	1.06
3	Location No. 13	108.3 x 93.8	1.02

**Client Reference No.**: GT/LTR/240813-037 **Dated**: 13-08-2024

**SOM Lab Ref**: CED/SOM/4624 (**Page 4/4**) **Dated:** 13-08-2024

Test Type: Compressive Strength Test on Lime Mortar

Test Performed by: Dr. Syed Asad Ali Gillani

Sana Meraj,

Civil Engineer,

**Building Standard Limited** 

Lahore

This is with reference to your above-mentioned letter and SOM receipt. The cubical samples of lime mortar submitted in the Laboratory were tested to determine their compressive strength and the results are provided in the Table below.

Sample No.	Sample Description/Grid	Dimensions, mm	Compressive Strength, MPa
1	Location No. 3	49.9 x 54.4 x 23.6	2.17
2	Location No. 2	50.3 x 48.9 x 19.65	1.69
3	Location No. 2A	45.4 x 52.9 x 19.0	1.97

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

Construction Company Sheikhupura.(Master Garments)

Tension Test & Bend Test

**SOM Lab** 

**ASTM-A-615** 

**Client Reference:** Steel Test Ref: 4619 (Page-1/1) 13-08-2024

**Test Specification:** 

Dated: Dated: 12-08-2024

Gauge Length: 8 inch Sample Type: Deformed Bar (FF Steel)

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.494	8	0.966	0.79	0.733	28.03	36.80	78260	84350	102730	110720	1.10	8.0	13.8	
2	1.442	6	0.735	0.44	0.424	13.56	18.67	67960	70520	93610	97140	1.40	8.0	17.5	
3	0.670	4	0.501	0.20	0.197	8.07	10.40	89030	90390	114660	116400	1.10	8.0	13.8	
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# **BEND TEST:**

Test:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

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

General Manager-Blue Bricks. (Blue World Shenzhen City)

**SOM Lab** 

**Client Reference:** BTS/Lab/001121 Ref: 4620 (Page-1/1) Dated: 13-08-2024

Dated: 13-08-2024

Test:

Tension Test & Bend Test **Test Specification:** ASTM-A-615

8 inch Sample Type: Deformed Bar (Aziz Steel) Gauge Length:

		J						- 7			`		,	,	
		С	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			ū	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.032	5	0.621	0.31	0.303	9.70	14.27	69040	70640	101530	103880	1.10	8.0	13.8	
2	0.664	4	0.498	0.20	0.195	5.93	8.97	65420	67100	98920	101460	1.20	8.0	15.0	
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BE	ND TE	ST:													
	# 5	Samp	le bend		Note:	-									
	# 4	Sample bend through 180 degrees Satisfactorily without any crack													
					Only F	our S	Sam	ples							
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Yasir Ahmad Test Performed By: Dr. /Engr. Asad Ali Gillani

GM-Works FF Steel Lahore.

**SOM Lab** 

 Client Reference:
 Nil
 Ref:
 4621 (Page-1/1)

 Dated:
 07-08-2024
 Dated:
 13-08-2024

**Test:** Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar (FF Steel)

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		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			L	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.481	6	0.744	0.44	0.435	14.80	19.80	74190	75040	99230	100370	1.20	8.0	15.0	1
2	1.481	6	0.744	0.44	0.435	14.90	19.75	74700	75560	98970	100110	1.20	8.0	15.0	2
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BE	ND TE	ST:													
		No Be	end test	perforr	ned						Note:	-			
		Only Two Samples Received and Tested										d			
Note	Note: Please always confirm the results of above report on web www.uet-civil.edu.pk														

Ali Raza Lahore. Test Performed By:

Dr. /Engr.

Asad Ali Gillani

**SOM Lab** 

 Client Reference:
 Nil
 Ref:
 4622 (Page-1/1)

 Dated:
 13-08-2024
 Dated:
 13-08-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	stress			Ц	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.691	8	1.004	0.79	0.791	28.46	37.33	79460	79360	104210	104080	1.40	8.0	17.5	
2	2.694	8	1.004	0.79	0.792	27.44	36.21	76610	76420	101080	100830	1.50	8.0	18.8	
3	1.499	6	0.749	0.44	0.441	13.93	19.95	69850	69690	99990	99770	1.40	8.0	17.5	
4	1.492	6	0.747	0.44	0.438	13.46	19.49	67450	67760	97690	98140	1.30	8.0	16.3	
5	1.038	5	0.623	0.31	0.305	10.83	14.50	77020	78280	103130	104820	1.20	8.0	15.0	
6	1.038	5	0.623	0.31	0.305	11.64	15.26	82820	84180	108570	110350	1.20	8.0	15.0	
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## **BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	Sample bend through 180 degrees Satisfactorily without any crack	Only Nine Samples
		Received and Tested

Design & Build Test Performed By: Dr. /Engr. Asad Ali Gillani

Gulberg II Lahore.(Bank Alfalah IBG GC Women University, Faisalabad)

**SOM Lab** 

 Client Reference:
 Nil
 Ref:
 4623 (Page-1/1)

 Dated:
 06-08-2024
 Dated:
 13-08-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			С		
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks	
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%		
1	1.482	6	0.745	0.44	0.436	14.75	19.11	73940	74610	95800	96680	1.30	8.0	16.3		
2	1.493	6	0.748	0.44	0.439	14.68	19.16	73580	73750	96060	96280	1.40	8.0	17.5		
3	0.663	4	0.498	0.20	0.195	6.70	8.43	73850	75750	92960	95350	1.30	8.0	16.3		
4	0.664	4	0.498	0.20	0.195	6.73	8.46	74190	76090	93300	95690	1.40	8.0	17.5		
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BE	ND TE	ST:														
											Note:					

	No Bend test performed	Note:-
		Only Four Samples
		Received and Tested
Nata Dia	and the second s	

Muhammad Hassan Khan

**Test Performed By:** 

Dr. /Engr.

Asad Ali Gillani

RE NESPAK. (Const of Carpet/PCC/Tuff Tile And Drainage Facilities in UC No.197, Dahaloki)

**SOM Lab** 

**Client Reference:** 3772/103/MHK/ADP/Dhaloki-(UI)/10 Ref: 4625 (Page-1/1) Dated: 13-08-2024

Dated: 13-08-2024

Test: Tension Test & Bend Test ASTM-A-615 **Test Specification:** 8 inch Sample Type: **Deformed Bar** Gauge Length:

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.673	4	0.502	0.20	0.198	7.46	9.19	82290	83120	101390	102420	1.10	8.0	13.8	
2	0.674	4	0.502	0.20	0.198	7.56	9.19	83410	84250	101390	102420	1.10	8.0	13.8	
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BE	BEND TEST:														

Sample bend through 180 degrees Satisfactorily without any crack	Note:-						
	Only Three Samples						
	Received and Tested						
	Sample bend through 180 degrees Satisfactorily without any crack						

Major Ahmad Sajjad Haider Test Performed By: Dr. /Engr. Asad Ali Gillani

GE(A) mtn. (Const Of BDE Office Block For HQ SC at Multan)

**SOM Lab** 

Client Reference: 6331/17/E-6 Ref: 4626 (Page-1/1) Dated: 13-08-2024

Dated: 02-08-2024

**Test Specification:** Test: Tension Test & Bend Test ASTM-A-615 8 inch Sample Type: **Deformed Bar** Gauge Length:

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			С	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.719	8	1.009	0.79	0.799	23.27	37.69	64970	64240	105210	104020	1.20	8.0	15.0	
2	2.691	8	1.004	0.79	0.791	23.34	37.41	65170	65090	104440	104310	1.30	8.0	16.3	
3	1.493	6	0.748	0.44	0.439	13.15	21.17	65910	66070	106130	106370	1.30	8.0	16.3	
4	1.492	6	0.747	0.44	0.438	13.25	21.27	66430	66730	106640	107120	1.20	8.0	15.0	
5	1.062	5	0.630	0.31	0.312	9.48	15.11	67450	67020	107480	106790	1.30	8.0	16.3	
6	1.055	5	0.628	0.31	0.310	9.58	15.11	68170	68170	107480	107480	1.20	8.0	15.0	
7	0.672	4	0.501	0.20	0.197	6.03	9.30	66550	67560	102520	104080	1.10	8.0	13.8	
8	0.671	4	0.501	0.20	0.197	5.91	9.12	65200	66190	100610	102140	1.00	8.0	12.5	
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## **BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	Sample bend through 180 degrees Satisfactorily without any crack	Only Twelve Samples
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Received and Tested

Saquib Akram, RE **Test Performed By:** Dr. /Engr. Asad Ali Gillani

NESPAK Lhr.(Construction of Road Karyal Dhonday Watna Lahore)

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

**SOM Lab** 

**Client Reference:** 3772/103/LDA-KARYAL/SA/04/03 Ref: 4627 (Page-1/1) 13-08-2024 Dated:

Dated: 12-08-2024

> **Test Specification: ASTM-A-615**

Test: Tension Test & Bend Test

8 inch Deformed Bar (Mughal Steel) Gauge Length: Sample Type:

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.666	4	0.500	0.20	0.196	6.85	8.69	75540	77080	95770	97730	1.20	8.0	15.0	
2	0.665	4	0.498	0.20	0.195	6.90	8.84	76100	78050	97460	99960	1.20	8.0	15.0	
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<u>BE</u>	ND TE	ST:													
	# 4 Sample bend through 180 degrees Satisfactorily without any crack								Note:	-					
								Only 1	hree	Sar	nples	6			
											Recei	eceived and Tested			
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SUNSHINE HEALT CARE

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Project Manager Sunshine.(Sunshine Medical Tower Shahdra)

SOM Lab

 Client Reference:
 Nil
 Ref:
 4628 (Page-1/1)

 Dated:
 12-08-2024
 Dated:
 13-08-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.646	8	0.995	0.79	0.778	24.38	34.66	68070	69120	96760	98250	1.30	8.0	16.3	
2	2.640	8	0.994	0.79	0.776	24.49	34.58	68360	69590	96530	98270	1.40	8.0	17.5	
3	1.493	6	0.748	0.44	0.439	16.01	19.57	80270	80450	98100	98330	1.10	8.0	13.8	
4	1.482	6	0.745	0.44	0.436	15.90	19.53	79710	80440	97900	98800	1.00	8.0	12.5	
5	0.671	4	0.501	0.20	0.197	6.98	9.28	77000	78170	102290	103850	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	7.65	10.16	84310	85590	112070	113780	1.00	8.0	12.5	
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## **BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Nine Samples
		Received and Tested