# THIRD PARTY TEST CERTIFICATES



# ISO 9001: 2015 CERTIFIED LABORATORY

Plot No.- 2240, M.I.E, Bahadurgarh-124507 (Hr.) Website: www.mcbtestinglab.com E-mail: mcbtestinglab@gmail.com

© 01276-268014, 9868658560

# TEST REPORT

Description of sample: GFRP Bar 40mm,

Sample No:-01,

Customer ID: AIIPL/WB/2021/505,

Letter Dated: - 24.12.2021

Issued to

Report No: MCBTL-12D00214598

Date of Report: 25.12.2021
Date of Testing: 24.12.2021
Date of Receipt: 23.12.2021

M/S ARC Insulation & Insulators Pvt. Ltd., 375, Prince Anwar Sha Road, Kolkata-700068.

SI. No	Parameters	Test Results	Method of test w.r.t. IS:
1.	Dia of Specimen, mm	40.00	Measurement
2.	Breaking Load, kN	820	
3.	Tensile Strength,	652.3	1608(P-1):2018

\*End of Test Report\*





# ISO 9001 : 2015 CERTIF

Plot No.- 2240, M.I.E, Bahadurgarh-124507 (Hr.)

Website: www.mcbtestinglab.com E-mail: mcbtestinglab@gmail.com 01276-268014, 9868658560

# TEST REPORT

Description of sample: GFRP Bar 40mm,

Sample No:-02,

Customer ID: AIIPL/WB/2021/505,

Letter Dated:- 24.12.2021

Issued to

M/S ARC Insulation & Insulators Pvt. Ltd.,

375, Prince Anwar Sha Road,

Kolkata-700068.

Report No: MCBTL-12D00214599 Date of Report: 25.12.2021 **Date of Testing**: 24.12.2021

Date of Receipt: 23.12.2021

	Test Results	Method of test w.r.t. IS
	101-1 (COST)	Measurement
Dia of Specimen, mm	0.00300000	
Breaking Load, kN	760	1608(P-1):2018
Tensile Strength,	604.6	1000
		Dia of Specimen, mm  40.00  Breaking Load, kN  760  Tensile Strength,

\*Fnd of Test Report\*





Testing House of Metals & Alloys. (ACCREDITED By NABL - ISO 17025)

Plot No. 14, Gopal Industrial Estate

Opp. Vallabhnagar,

Odhav,

Ahmedabad-382 415.

Phone

: 079-22891013 Mo : 9227220993

Telefax

: 079-22892804

Email

: divinelab\_nhp@rediffmail.com

Web site : www.divinelaboratory.com

#### **Mechanical Testing**

To,		Date :	21/12/2017	
Larsen & Toubro Limited (F	Heavy Civil Infrastructure IC) Society Ltd.,Popular House Building 2r	nd Floor,201,Above ICICI Bank,Opp.Sa	les India,Ashram R	oad,
Test	Tensile			
Test Method:	ASTM D7205			
st Performance At:	Divine Metallurgical Services P. I	Ltd		
Instrument Used:	MCS Make Universal Testing Ma	chine, UTE-150 Due Date of Calibrate	d 10.07.2018	
Customer Ref No. :	Ref:L&T/AMD/UG2/MT/2017/073,Date:20.12.2017			
Condition of Sample ;	Dia16mm GFRP Bar (Source:ARC insulation & Insulators Pvt.Ltd.)			
Nature Of Sample:	Test Piece GFRP Bar	Stamped as: -		100
Specification :	ASTM D7205			
Date Of Testing:	21/12/2017	Sample Drawn By : Party		-
Project:MEGA-UG2 Package- Co.Ltd,Consultant:MEGA-GE( D.L&T/MEGA/GFRP/01,Batcl	LA CONSOMUM OF SYSTRA-RUES-OF	xpress for Gandhinagar and A'Bad (ME CG-AECOM),Sampling Location:Kalup	EGA) ur Launching Shaft	Sample
Section Dimension (in mm)	S.NO.1		Min	Max
Area (in mm²)	Dia16			
Ultimate Load (in kn)	200.960			
JTS (in N/mm²)	181.350			
harks:	902.418		630.000	
Vitnessed By/ N.B.:	The Result meets as per Customer Requirement.  Mr.Avinash Pandey from "L&T", Mr.Bhaskar S.Rautela from "MEGA-GEC"			
ested By : Under NABL: Condition Of Reporting :	SAL	P BHASKAR S RAUTELA		zed Signa

1 Sample must be drawn by the party. The result relate only to the sample submitted by the party.

2 Any part or parts of the Test Report shall not be resproduced, for this the written request to the mandatory for the Customer.

3 Samples are store for fifteen days from the date of receipt.

For Reference Unity



Testing House of Metals & Alloys. (ACCREDITED By NABL - ISO 17025)

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: 079 22891013 Mo.: 9227220993

Telefax Email

: 079-22892804

: divinelab\_nhp@rediffmail.com

Web site : www.divinelaboratory.com

#### **Mechanical Testing**

To, 153704A		Date :	21/12/2017			
Larsen & Toubro Limited (I	Heavy Civil Infrastructure IC) Society Ltd.,Popular House Building 2r	nd Floor,201,Above ICICI Bank,Opp.Sa	les India,Ashram Re	oad		
Test:	Tensile					
Test Method:	ASTM D7205					
est Performance At:	Divine Metallurgical Services P.	Divine Melallurgical Services P. Ltd.				
Instrument Used:	MCS Make Universal Testing Ma	MCS Make Universal Testing Machine, UTE-150, Due Date of Calibrated 10.07,2018				
Customer Ref No. :	Ref:L&T/AMD/UG2/MT/2017/073	Ref:L&T/AMD/UG2/MT/2017/073.Date:20.12.2017				
Condition of Sample :	Dia16mm GFRP Bar (Source:AF	Dia16mm GFRP Bar (Source:ARC insulation & Insulators Pvt. I td.)				
Nature Of Sample :	Test Piece of GFRP Bar	Test Piece of GFRP Bar Stamped as : -				
Specification :	A <mark>STM D</mark> 7205					
Date Of Testing:	21/12/2017	Sample Drawn By : Party				
Project:MEGA-UG2 Package Co.Ltd,Consultant:MEGA-GE D:L&T/MEGA/GFRP/01,Batc	C(A Consortium of SYSTRA-RITES-O	xpress for Gandhinagar and A'Bad.(Ml CG-AECOM),Sampling Location:Kalup	EGA) our Launching Shaft	Sample		
Section Dimension (in mm)	S.NO.2 Dia16		Min	Max		
Area (in mm²)	200,960					
Ultimate Load (in kn)	190.050			-		
UTS (in N/mm²)	945.711		630.000			
marks:	The Result meets as per Custom	er Requirement				
		Mr.Bhaskar S.Rautela from "MEGA-G				

Condition Of Reporting:

(Under NABL)

1 Sample must be drawn by the party. The result relate only to the sample submitted by the Sample Sample 2. Any part or parts of the Test Report shall not be resproduced, for this , the written request to DLS is manual to 3. Samples are store for fifteen days from the date of receipt. dedo tocusioner

or Reference Or I



Testing House of Metals & Alloys. (ACCREDITED By NABL - ISO 17025)

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Telefax

: 079-22892804

**Email** 

: divinelab\_nhp@rediffmail.com Web site : www.divinelaboratory.com

**Mechanical Testing** 

Report No: T53705		Date :	21/12/2017				
To,							
Larsen & Toubro Limited (H	leavy Civil Infrastructure IC)						
Amit Corporation Housing 8 Ahmedabad.380009	Society Ltd., Popular House Building 2n	d Floor,201,Above ICICI Bank,Opp.Sa	ales India,Ashram R	load,			
Test:	Tensile						
Test Method:	ASTM D7205						
st Performance At:	Divine Metallurgical Services P. I	_td.					
Instrument Used:	MCS Make Universal Testing Ma	MCS Make Universal Testing Machine, UTE-150, Due Date of Calibrated 10.07.2018					
Customer Ref No.:	Ref:L&T/AMD/UG2/MT/2017/073	Ref:L&T/AMD/UG2/MT/2017/073,Date:20.12.2017					
Condition of Sample :	Dia28mm GFRP Bar (Source:AR	Dia28mm GFRP Bar (Source:ARC insulation & Insulators Pvt.Ltd.)					
Nature Of Sample:	Test Piece of GFRP Bar	Stamped as : -					
Specification:	ASTM D7205						
Date Of Testing :	21/12/2017	Sample Drawn By : Party					
Project:MEGA-UG2 Package- Co.Ltd,Consultant:MEGA-GEC D:L&T/MEGA/GFRP/02 Batch	L&T(A'Bad-Metro),Client:Metro-Link E: C(A Consortium of SYSTRA-RITES-O( n No.180917R28	cpress for Gandhinagar and A'Bad.(M CG-AECOM),Sampling Location:Kalur	EGA) our Launching Shaft	,Sample			
Section Dimension (in mm)	S.NO.1 Dia28		Min	Max			
Area (in mm²)	615.200						
Ultimate Load (in kn)	427.200						
UTS (in N/mm²)	694.408		595.000				
narks:	The Result meets as per Custome	er Requirement.					
Witnessed By/ N.B.:		Mr. Bhaskar S. Rautela from "MEGA-GI	EC"				

(Under NABL): Condition Of Reporting: BHASKAR S RAUTELA

1 Sample must be drawn by the party. The result relate only to the sample submitted by the Sample No. 1 Sample Submitted by the Sample Submitted by th

Authorized Signatory

G.M.

305

Fai Reference Units



Testing House of Metals & Allovs. (ACCREDITED By NABL - ISO 17025)

Plut No. 14, Gopal Industrial Estate

Opp. Vallabhnagar,

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: divinelab nhp@rediffmall.com

: www.divinelaboratory.com Web site

**Mechanical Testing** 

21/12/2017 T53705A Date: Report No: To. Larsen & Toubro Limited (Heavy Civil Infrastructure IC) Amit Corporation Housing Society Ltd., Popular House Building 2nd Floor, 201, Above ICICI Bank, Opp. Sales India, Ashram Road, Ahmedabad.380009 Tensile est Test Method: ASTM D7205 Divine Metallurgical Services P. Ltd. est Performance At: MCS Make Universal Testing Machine, UTE-150, Due Date of Calibrated 10.07.2018 Instrument Used: Ref:L&T/AMD/UG2/MT/2017/073 Date:20.12.2017 Customer Ref No. : Condition of Sample Dia28mm GFRP Bar (Source: ARC insulation & Insulators Pvt.Ltd.) Nature Of Sample: Test Piece of GFRP Bar Stamped as: -**ASTM D7205** Specification: 21/12/2017 Sample Drawn By : Party Date Of Testing: Project:MEGA-UG2 Package-L&T(A'Bad-Metro), Client:Metro-Link Express for Gandhinagar and A'Bad.(MEGA) Co.Ltd.Consultant:MEGA-GEC(A Consortium of SYSTRA-RITES-OCG-AECOM),Sampling Location:Kalupur Launching Shaft,Sample ID:L&T/MEGA/GFRP/02 Batch No.180917R28 SNO2 Min Max Section Dimension (in mm) Dia28 Area (in mm²) 615.200 Ultimate Load (in kn) 418.200 595.000 UTS (in N/mm²) 679.779 The Result meets as per Customer Réquirement. emarks: Mr.Avinash Pandey from "L&T" , Mr.Bhaskar S.Rautela from "MEGA-GEC" Witnessed By/ N.B.

Tested By

(Under NADL)

1 Sample must be drawn by the party. The result relate only to the sample submitted by the party TION ENGL GEC I US
2 Any part or parts of the Test Report shall not be resproduced, for this , the written request to DES is mandatory for the Customer
3 Samples are store for fifteen days from the date of receipt

Authorized Signatory

For Figitaliance Units



Testing House of Metals & Alloys. (ACCREDITED By NABL - ISO 17025)

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: divinelab\_nhp@rediffmail.com

: www.divinelaboratory.com Web site

#### Mechanical Testing

Report No: T53706		Date :	21/12/2017			
To, Larsen & Toubro Limited.(H Amit Corporation Housing S Ahmedabad.380009	leavy Civil Infrastructure IC) Society Ltd.,Popular House Building 2r	nd Floor,201,Above ICICI Bank,Opp.Sa		load,		
Test:	Tensile			-		
Test Method:	ASTM D7205					
st Performance At:	Divine Metallurgical Services P.	Divine Metallurgical Services P. Ltd.				
nstrument Use <mark>d :</mark>	MCS Make Universal Testing Ma	MCS Make Universal Testing Machine, UTE-150, Due Date of Calibrated 10.07.2018				
Customer Ref No. :	Ref:L&T/AMD/UG2/MT/2017/073,Date:20.12.2017					
Condition of Sample:	Dia32mm GFRP Bar (Source:ARC insulation & Insulators Pvt Ltd.)					
Nature Of Sample :	Test Piece of GFRP Bar	Stamped as : -				
Specification:	ASTM D7205					
Date Of Testing	21/12/2017	Sample Drawn By : Party				
Project:MEGA-UG2 Package- Co.Ltd.Consultant:MEGA-GE( D:L&T/MEGA/GFRP/03,Batcl	C(A Consortium of SYSTRA-RITES-O	xpress for Gandhinagar and A'Bad.(Mi CG-AECOM).Sampling Location:Kalup	EGA) our Launching Shaf	t,Sample		
Section Dimension (in mm)	S.NO.1 Dia32		Min	Max		
krea (in mm²)	818.999					
Jitimate Load (in kn)	568.950					
JTS (in N/mm²)	694.689		500.000			
narks:	The Result meets as per Custom	er Requirement.				
Vitnessed By/ N.B.:		Mr.Bhaskar S.Rautela from "MEGA-GE	FC"			

Tested By

(Under NABI V. V.) Condition Of Reporting BHASKAR S RAUTELA

Sample must be drawn by the party. The result relate only to the sample submitted by the party. The result relate only to the sample submitted by the party. The party of the Test Report shall not be resproduced, for this , the written request to DLS is mandatory for the Customer.

Samples are store for tifteen days from the date of receipt.

Authorized Signatory

G.M.

or Reference VIII)



Testing House of Metals & Alloys. (ACCREDITED By NABL - ISO 17025)

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Web site : www.divinelaboratory.com

#### **Mechanical Testing**

Report No: T53706A		Date :	21/12/2017		
To,					
	Heavy Civil Infrastructure IC)				
Amit Corporation Housing	Society Ltd.,Popular House Building 2	nd Floor,201,Above ICICI Bank Opp.Sal	es India Ashram Re	oad,	
Ahmedabad.380009	Tensile				
usew interest wa					
est Method	ASTM D7205	ASTM D7205			
st Performance At.	Divine Metallurgical Services P.	Divine Metallurgical Services P. Ltd.			
nstrument Used :	MCS Make Universal Testing M	MCS Make Universal Testing Machine, UTE-150, Due Date of Calibrated 10.07,2018			
Customer Ref No. :	Ref:L&T/AMD/UG2/M1/2017/07	Ref:L&T/AMD/UG2/MT/2017/0/3,Date:20.12.2017			
Condition of Sample :	Dia32mm GFRP Bar (Source:Al	Dia32mm GFRP Bar (Source:ARC insulation & Insulators Pvt.Ltd.)			
Nature Of Sample:	Test Piece of GFRP Bar	Test Piece of GFRP Bar Stamped as : -			
Specification :	ASTM D/205				
Date Of Testing:	21/12/2017	Sample Drawn By : Party			
roject:MEGA-UG2 Package o.Ltd,Consultant:MEGA-GE	-L&T(A'Bad-Metro), Client: Metro-Link E C(A Consortium of SYSTRA-RITES-C	Express for Gandhinagar and A'Bad.(ME DCG-AECOM),Sampling Location:Kalupi	EGA) ur Launching Shaft	Sample	
):L&T/MEGA/GFRP/03,Bato	th No.180917R32	is a second of the second of t	ar caaroning anan	CHILIPIC	
	S.NO.2		Min	Max	
ection Dimension (in mm)	Dia32				
rea (in mm²)	803.840				
litimate Load (in kn)	588.300				
JTS (in N/mm²)	731.862		500,000		
) (in iv/mm²)		The Result meets as per Customer Requirement.			
narks:		ner Requirement.		_	

(Under NABL) V.V-IV Condition Of Reporting :

1 Sample must be drawn by the party. The result relate only to the sample submitted by the section ENGR / GEC / UE
2. Any part or parts of the Test Report shall not be respiratived, for this , the written request to DCS is mandatory for the Customer.
3. Samples are store for lifteen days from the date of receipt.

For Reference Unity



# **Divine Metallurgical** Services Pvt. Ltd.

CIN U74900GJ2012PTC069436

- 14, Gopal Industrial Estate, Vallabhnagar BRTS, Odhav, Ahmedabad 382 415
- +91 79 2289 2804, +91 79 2289 1013, +91 92272 20993
- divinelab\_nhp@rediffmail.com, accounts@divinelaboratory.com

	Page 1 of 1
Date of Issue:	16-01-2024
Sample Received On:	16-01-2024
Test Performed at: DMS	PL, Ahmedabad.
-	ample Received On: est Performed at: DMS

	IN	FORMATION PROVIDI	ED BY THE CUST	TOMER	
Reference.	Dia10mm GFRP Batch No.2812 Make:ARC insul		Pvt Ltd.		
Description	RFI No./Sampe	D:581/108,Make:ARC	insulations and	l insulators Pvt Ltd.,Ba	atch No.281223R1
Stamped As	NIL			Sample Drawn By	customer
Nature of Sample	Dia10mm GFRP	Bar			
Specification	ASTM D7957:22				<del>/</del>
MECHANICAL	MECHANICAL	PROPERTIES OF GFRE	PAR		
Test Name : TENSILE					
Test Method : ASTM	1 D7205:2021   Dt	of Testing: 16-01-20	24		4
Fauinment - MCS 150	001/11/17/1/00				
Equipment . IVICS 13	OUKN UTM (DMSP.	L/07/04) Cal. Dt: 17-Ju	ın-2023		
	OOKN UTM (DMSP.	L/07/04) Cal. Dt: 17-Ju Result	un-2023		Requirement
Diameter (mm)			un-2023		Requirement
Diameter (mm) Cross- sectional area	(mm²)	Result	un-2023		
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr	(mm²)	Result 9.60	un-2023		Requirement
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr	(mm²)	9.60 72.382	un-2023		67-104
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr Ultimate tensile load U.T,S (in MPA)	(mm²) m) ·	9.60 72.382 100	un-2023		
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr Ultimate tensile load U.T,S (in MPA)	(mm²) m) ·	9.60 72.382 100 71.850	un-2023		67-104 59 min.
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr Ultimate tensile load U.T,S (in MPA) Ultimate Tensile Stra Stress at 0.6% Strain	(mm²) m) I (kN)	9.60 72.382 100 71.850 992.644	un-2023		67-104
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr Ultimate tensile load U.T.S (in MPA) Ultimate Tensile Stra Stress at 0.6% Strain Stress at 0.1% Strain	(mm²) m) I (kN)	Result 9.60 72.382 100 71.850 992.644 >2	un-2023		67-104 59 min.
Diameter (mm) Cross- sectional area Ext.Gauge Length(mr Ultimate tensile load U.T,S (in MPA) Ultimate Tensile Stra Stress at 0.6% Strain Stress at 0.1% Strain Young's Modulus Elas	(mm²) m) l (kN) in (%) sticity (in MPA)	Result  9.60  72.382  100  71.850  992.644  >2  281.54			67-104 59 min.

Tested By H.K.VAMJA / S.S.Prajapati

Reviewed Authorized by

V. H. KAKANI G.M.



Condition of Reporting:

1) DMSPL clarifies that sampling is not conducted by us; the provided report pertains solely to the sample submitted by the customer. 2) Reproduction of the report whole or part, requires explicit consent from DMSPL 3) DMSPL assumes no responsibility for authenticity of reproduced reports, including but not limited to meth conducted under ambient environmental conditions, unless explicitly specified otherwise. 6) While DMSPL endeavors to maintain accuracy, we are not liable for processes. 7) The test results are provided solely for informational purposes to the customer and do not confer any legal binding, 8) A Statement of Conformity unmeasured parameters in the Statement of Conformity.



# **Divine Metallurgical** Services Pvt. Ltd.

CIN U74900GJ2012PTC069436

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- divinelab\_nhp@rediffmail.com, accounts@divinelaboratory.com

	Test Certificate		Page 1 of 1
Test Certificate No.	DMSPL-24-051713-1	Date of Issue:	13-07-2024
Customer Name:	M/s. ARC INSULATION AND INSULATORS PVT. LTD.	Sample Received On:	09-07-2024
Customer Address:	PO. BAWALI, SANJUA MAHESHTALA ROAD	Test Performed at: DMS	PL, Ahmedabad.
	RAMDEVPUR, SOUTH 24 PARGANAS, WEST BENGAL -743384		

INFORMATION PROVIDED BY THE CUSTOMER						
Reference.	Batch No.010724R51		× ×			
Description	MS Grouting					
Stamped As	NIL	Sample Drawn By	customer			
Nature of Sample	Dia 51mm GFRP Rebar					
Specification	-					

MECHANICAL PROPERTIES OF GFRP BAR MECHANICAL

Test Name: TENSILE TESTING (STATIC)

Test Method: ASTM D7957:2022 | Dt. of Testing: 13-07-2024

Equipment: MCS 1500KN UTM (DMSPL/07/04) Cal. Dt: 18-Jun-2024

Equipment: IVICS 1300KN OTHER (DIV	51 L/07/04/ Call Del 10 Part ===	
	Result	
Cross- sectional area (mm²)	2027	
Ultimate tensile load (kN)	1250	
U.T.S (N/mm²)	616.675	
Note: GFRP Bar Remained unbroker	,Batch No. & Nature of Smaple A	Amended on Dated:02.08.2024

End of Report---

Reviewed & Authorized by







Management System:

As per ISO/IEC 17025:2017

CORPORATE IDENTITY NUMBER: U71200WB2023PTC262957

CORPORATE OFFICE:

256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063

LABORATORY 1: 256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 LABORATORY 2: 996, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 Contacts: (033) 2497 1903, M (+91) 9830020628 / M (+91) 9432219707

E-mail: omegalabinfo98@gmail.com

TEST REPORT									
Job ID No.: O	TSK	/JN/2024/12J-00017 -01	Date: 18.12.2024	Date: 18.12.2024					
Ref. No.	:	Letter Date:12.12.2024	Product Specification	:		256-2023 & D 7957			
Issued To	:	M/S: ARC Insulation & Insulators Pvt. Ltd. Vill-Ramdevpur, PO- Bawali, Dist-South 24 Parganas, Pin-743384	Test Specification	:	IS: 182	55-2023			
Description of Sample(s)	:	5nos. 6mm GFRP Bar for the following tests.  Brand: ARC  Sub: Testing of GFRP bars.	Seal / Stamp / Mark (if any)	:	Marked	d			
Test Parameters	:	U.T.S & M.O.E	Sample received on Sample tested on	:	12.12.2 17.12.2				

This is to certify that the above sample (S) has/have been tested with the following results:

## PHYSICAL PROPERTIES

SI. No.	Sample Mark		Batch No.	U.T.S. (N/mm²)	M.O.E (GPa)
1.		S-01		1046	54.0
2.	0	S-02		1042	53.9
3.	6mm GFRP Bar	S-03	111124R6	1060	66.2
4.	or rai	S-04		1057	65.1
5.		S-05		1081	64.7

REMARKS: The above submitted samples were duly tested in presence of Mr. Chandan Dey of ARC Insulation & Insulators Pvt. Ltd. on 17.12.2024.

Prepared By

♦♦♦♦ End of report ♦♦♦♦
---

For OMEGALAB TESTING SERVICES PVT. LTD.

A. PATRA (DAS) QUALITY MANAGER (AUTHORISED SIGNATORY)

Note:

\* The test report relates to the Sample(s) submitted by Customer.

\* The test report relates to the Sample(s) submitted by Customer.

★ Liability for return of sample(s) ceases after fifteen days unless adviced by concerned authority.

\* The reproduction of the report except in full is invalid without written approval of the laboratory management.

\* The test results referred in certificate are based on observations & measurements under the stated environmental conditions.

★ The Test Report cannot be used as an evidence in the court of Law, without written permission of the laboratory.

★ The Test Report without Embossing is INVALID.

#### **Branches & Sample Collection Centres:**

West Bengal: Haldia: Ganganarayan Appartment, Durgachak, Uttarpally (Near Primary School), Haldia, Purba-Midnapore, W.B. Pin-721602

Siliguri: C/O.: Dulal chandra Ghosh, Street Name - Narmada Bagan, Ward No.-46, Pradhan Nagar, Champasari, Darjeeling, Pin - 734003

**Jharkhand** 

Plot No.-891/1572, Khata No. 39/353 Mouza-Uttarasasan, Koushalyaganga, Dist. - Puri, Odisha, Pin - 751002 Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009

: C/O.: Dhirendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007 Tripura



Management System:

As per ISO/IEC 17025:2017

CORPORATE IDENTITY NUMBER: U71200WB2023PTC262957

CORPORATE OFFICE :

256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063

LABORATORY 1: 256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 LABORATORY 2: 996, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 Contacts: (033) 2497 1903, M (+91) 9830020628 / M (+91) 9432219707

E-mail: omegalabinfo98@gmail.com

		TEST REPOR	RT			
Job ID No.: O	TSK	(/JN/2024/12J-00017 -02	Date: 18.12.2024			Page: 1 of 1
Ref. No.	:	Letter Date:12.12.2024	Product Specification	:		18256-2023 & M D 7957
Issued To	:	M/S: ARC Insulation & Insulators Pvt. Ltd. Vill-Ramdevpur, PO- Bawali,	Test Specification	;		8255-2023
Description of Sample(s)	:	Dist-South 24 Parganas, Pin-743384 5nos. 8mm GFRP Bar for the following tests. Brand: ARC	Seal / Stamp / Mark (if any)	:	Mark	ked
Test Parameters	:	Sub: Testing of GFRP bars. U.T.S & M.O.E	Sample received on	:		2.2024
	Th	is in to portify that the all	Sample tested on	:	17.12	2.2024

This is to certify that the above sample (S) has/have been tested with the following results: 17.12.2024

# PHYSICAL PROPERTIES

SI. No.	Sample Mark		Batch No.	U.T.S. (N/mm²)	M.O.E (GPa)
1.		S-01		1211	63.0
2.	8mm	S-02		1131	64.4
3.	GFRP Bar	S-03	111124R8	1258	67.2
4.		S-04		1328	67.4
5.	PKS. The ob	S-05		1233	66.9

REMARKS: The above submitted samples were duly tested in presence of Mr. Chandan Dey of ARC Insulation & Insulators Pvt. Ltd. on 17.12.2024.

--⊹--- End of report -

RB Prepared By

For OMEGALAB TESTING SERVICES PVT. LTD

A. PATRA DAS QUALITY MANAGER (AUTHORISED SIGNATORY)

Odisha

Note:

\* The test report relates to the Sample(s) submitted by Customer.

\* Liability for return of sample(s) ceases after fifteen days unless adviced by concerned authority.

\* The reproduction of the report except in full is invalid without written approval of the laboratory management.

\* The test results referred in certificate are based on observations & measurements under the stated environmental conditions.

\* The Test Report cannot be used as an evidence in the court of Law, without written permission of the laboratory.

\* The Test Report without Embossing is INVALID.

# **Branches & Sample Collection Centres:**

West Bengal: Haldia: Ganganarayan Appartment, Durgachak, Uttarpally (Near Primary School), Haldia, Purba-Midnapore, W.B. Pin-721602

Siliguri : C/O.: Dulal chandra Ghosh, Street Name - Narmada Bagan, Ward No.-46, Pradhan Nagar, Champasari, Darjeeling, Pin - 734003 : Plot No.-891/1572, Khata No. 39/353 Mouza-Uttarasasan, Koushalyaganga, Dist. - Puri, Odisha, Pin - 751002

: Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009

: C/O.: Dhirendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007 Tripura



Management System:

As per ISO/IEC 17025:2017

CORPORATE IDENTITY NUMBER: U71200WB2023PTC262957

CORPORATE OFFICE

256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063

LABORATORY 1: 256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 LABORATORY 2: 996, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 Contacts: (033) 2497 1903, M (+91) 9830020628 / M (+91) 9432219707

E-mail: omegalabinfo98@gmail.com

TEST REPORT						
Job ID No.: O'	TSK	/JN/2024/12J-00017 -03	Date: 18.12.2024 Page: 1 o			ge: 1 of 1
Ref. No.	:	Letter Date:12.12.2024	Product Specification	÷	IS: 18256-2 ASTM D 795	
Issued To	:	M/S: ARC Insulation & Insulators Pvt. Ltd. Vill-Ramdevpur, PO- Bawali, Dist-South 24 Parganas, Pin-743384	Test Specification	:	IS: 18255-20	023
Description of Sample(s)	:	5nos. 10mm GFRP Bar for the following tests.  Brand: ARC  Sub: Testing of GFRP bars.	Seal / Stamp / Mark (if any)	:	Marked	
Test	:	U.T.S & M.O.E	Sample received on	:	12.12.2024	
Parameters			Sample tested on	:	17.12.2024	

This is to certify that the above sample (S) has/have been tested with the following results:

### PHYSICAL PROPERTIES

SI. No.	Sample N	lark	Batch No.	U.T.S. (N/mm²)	M.O.E (GPa)
1.		S-01		1096	56.0
2.		S-02		1093	56.2
3.	10mm GFRP Bar	S-03	111124R10	1047	56.4
4.	Of IXI Dai	S-04		1070	56.9
5.		S-05		1096	57.9

REMARKS: The above submitted samples were duly tested in presence of Mr. Chandan Dey of ARC Insulation & Insulators Pvt. Ltd. on 17,12.2024.

Prepared By

\*\*\* End of report \*\*\*

For OMEGALAB MESTING SERVICES PVT. LTD.

A. PATRA DAS)
QUALITY MANAGER
(AUTHORISED SIGNATORY)

#### Note

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#### **Branches & Sample Collection Centres:**

West Bengal: Haldia: Ganganarayan Appartment, Durgachak, Uttarpally (Near Primary School), Haldia, Purba-Midnapore, W.B. Pin-721602

Siliguri: C/O.: Dulal chandra Ghosh, Street Name - Narmada Bagan, Ward No.-46, Pradhan Nagar, Champasari, Darjeeling, Pin - 734003
Plot No.-891/1572, Khata No. 39/353 Mouza-Uttarasasan, Koushalyaganga, Dist. - Puri, Odisha, Pin - 751002

Jharkhand : Hill View

: Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009

Tripura : C/O.: Dhirendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007



Management System:

As per ISO/IEC 17025:2017

CORPORATE IDENTITY NUMBER: U71200WB2023PTC262957

CORPORATE OFFICE

256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063

LABORATORY 1: 256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 LABORATORY 2: 996, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 Contacts: (033) 2497 1903, M (+91) 9830020628 / M (+91) 9432219707

E-mail: omegalabinfo98@gmail.com

TEST REPORT							
Job ID No.: O	TSK	/JN/2024/12J-00017-04	Date: 18.12.2024	Page: 1 of 1			
Ref. No.	:	Letter Date:12.12.2024	Product Specification	:	IS: 18256-2023 & ASTM D 7957		
Issued To	:	M/S: ARC Insulation & Insulators Pvt. Ltd. Vill-Ramdevpur, PO- Bawali, Dist-South 24 Parganas, Pin-743384	Test Specification	:	IS: 18255-2023		
Description of Sample(s)	:	5nos. 12mm GFRP Bar for the following tests. Brand: ARC Sub: Testing of GFRP bars.	Seal / Stamp / Mark (if any)	:	Marked		
Test	:	U.T.S & M.O.E	Sample received on	:	12.12.2024		
Parameters			Sample tested on	:	17.12.2024		

This is to certify that the above sample (S) has/have been tested with the following results:

#### PHYSICAL PROPERTIES

SI. No.	Sample Mark		Batch No.	U.T.S. (N/mm²)	M.O.E (GPa)
1.		S-01		1043	53.4
2.		S-02		1061	53.8
3.	12mm GFRP Bar	S-03	111124R12	1088	54.0
4.	GFRF bai	S-04		1052	53.8
5.		S-05		1070	51.9

REMARKS: The above submitted samples were duly tested in presence of Mr. Chandan Dey of ARC Insulation & Insulators Pvt. Ltd. on 17.12.2024.

RBon Prepared By

⋄⋄⋄⋄ End of report ⋄⋄⋄⋄

FOR OMEGALAB THISTING SERVICES PVT. LTD.

A. PATRA (DAS) QUALITY MANAGER (AUTHORISED SIGNATORY)

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**Branches & Sample Collection Centres:** 

West Bengal: Haldia: Ganganarayan Appartment, Durgachak, Uttarpally (Near Primary School), Haldia, Purba-Midnapore, W.B. Pin-721602

Siliguri: C/O.: Dulal chandra Ghosh, Street Name - Narmada Bagan, Ward No.-46, Pradhan Nagar, Champasari, Darjeeling, Pin - 734003

: Plot No.-891/1572, Khata No. 39/353 Mouza-Uttarasasan, Koushalyaganga, Dist. - Puri, Odisha, Pin - 751002

Tripura

: Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009 Jharkhand : C/O.: Dhirendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007



Management System:

As per ISO/IEC 17025:2017

CORPORATE IDENTITY NUMBER: U71200WB2023PTC262957

CORPORATE OFFICE

256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063

LABORATORY 1: 256A, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 LABORATORY 2: 996, M. G. Road, Purbasan, Thakurpukur, Kolkata - 700063 Contacts: (033) 2497 1903, M (+91) 9830020628 / M (+91) 9432219707

E-mail: omegalabinfo98@gmail.com

TEST REPORT

JUB ID NO.	UI	SK/JN/2024/09R-00022-01	Date: 24.09.2024	Page: 1 of 1	
Ref. No.	:	Letter Date: 23.09.2024	Product Specification	:	Nil
Issued To	:	M/s- ARC Insulation & Insulators Pvt. Ltd. Vill- Ramdevpur, PO-Bawali, Dist- 24 Pgs (S), Pin-743384	Test Specification	:	IS:18255-2023
Description of Sample(s)	:	2nos. (1no. each 25mm & 32mm) GFRP Bar sample for the following tests.  Make: ARC	Seal / Stamp / Mark (if any)	:	Marked
Test	:	UTS & Modulus of Elasticity	Sample received on	:	23.09.2024
Parameters			Sample tested on	1.	23.09.2024

This is to certify that the above sample (S) has/have been tested with the following results:

## PHYSICAL PROPERTIES

SI. No.	Sample Mark	UTS (N/mm²)	Modulus of Elasticity (GPa)
1.	25mm GFRP Bar	1086	78.07
2.	32mm GFRP Bar	977	69.66

Remarks: The above submitted samples were duly tested in presence of Mr. Subhadip Roy of ARC Insulation & Insulators Pvt. Ltd. on 23.09.2024.

⋄⋄⋄⋄ End of Report ⋄⋄⋄⋄
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For OMEGALAB TESTING SERVICES PVT. LTD.

TECHNICAL MANAGER (MECH.- METAL/TEXTILE/PLASTIC) (AUTHORISED SIGNATORY)

Note:

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Branches & Sample Collection Centres :-

West Bengal: Haldia: Ganganarayan Appartment, Durgachak, Uttarpally (Near Primary School), Haldia, Purba-Midnapore, W.B. Pin-721602

Siliguri: C/O.: Samiran Kanti Kanungoe, Narmada Bagan, Ward No.-46, P.O. & P.S. Pradhan Nagar, Siliguri, Dist.-Darjeeling, Pin - 734003

Plot No.-891/1572, Khata No. 39/353 Mouza-Uttarasasan, Koushalyaganga, Dist. - Puri, Odisha, Pin - 751002 Odisha : Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009

**Jharkhand** : C/O.: Dhirendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007 Tripura