



Test Report For

Laboratory Performance Testing of Dry Cladding System.

: Project :

: Testing For :

M/s. STONELAM SURFACES LLP. D-176, Mansarovar Garden, New Delhi – 110015

: Testing Laboratory :

FAÇADE INDIA TESTING INC H-23, Additional MIDC, Kudavali Village Murbad, Maharashtra State 421401.

Mock up Testing carried out on 3rd February 2022.

Test report prepared on 4th February 2022.

Disclaimer: FITI does not accept any liability whatsoever for the tampering or any unlawful alteration and or addition made in report documents either hard copy or sent via any electronic transmission media. Report and or certificates or any attachments shall NOT be reproduced in parts or in full without the prior written consent of the FITI. Report and or certificate issued are in good faith relate ONLY to the sample tested, does not imply performance outside of tested sample in any form and application. FITI test laboratory does not accept any liability whatsoever in nature outside the test agreement.



Index Table

Section	Sr. No.	56	Page
No.			Nos.
Α		Test Report Brief	1-2
В		Test Report in Detail	1-2
	1.0	Introduction	3
	2.0	Project Details	3
	3.0	Test Specimen	3
	4.0	Technical Parameters	3
	4.1	Testing Standards	3
	4.2	Testing Requirements	3-4
	4.3	Testing Equipments	4
	4.4	Testing Measurement Equipments	4
	5.0	Test Description	4
	5.1	Pre Load test For 50% of + ve Design Wind Pressure.	4
	5.2	Structural Performance Test @ 100% DWP (±Ve)	4-5
	5.3	Structural Performance Test @ 150% DWP (±Ve)	5
	5.4	Concentrated Load test at Panel Centre @115 kg	5-6
	5.5	Concentrated Load test at Panel Centre up to failure.	6
	6.0	Test Witnesses	6
	7.0	Test Results Summary	6
С		Enclosures	
	1.0	Witnessing Team Record Sheet	2
	2.0	Test Summary	1
	3.0	Test Report Work Sheets	4
	4.0	Test Photographs	7∙
	5.0	Test Photographs Including Controlled Disassembly	5
		Report	
	6.0	Test Specimen Drawing with Transducer Points	1





TEST REPORT

1. PROJECT

: SFS1(STONELAM-SYSTEM TEST)

2. TESTING LABORATORY

: Façade India Testing Inc. Plot No.H-23, Additional MIDC, Murbad, Thane

District, Maharashtra 421401.

3. TEST REPORT No.

: FITI/LAB/22/02/27

4. TEST CONDUCTED FOR

: M/s. STONELAM SURFACES LLP

D-176, Mansarovar Garden, New Delhi-110015.

esting Inc

5. PROJECT ADDRESS

: NA

6. TEST METHOD USED

: As per ASTM standards.

7. METHOD STATEMENT

: FITI/MET/22/01/29.

8. SPECIMEN RECEIVED

: 25th January 2022

9. SPECIMEN CONDITION

: Good.

10. TEST CONDUCTED ON

: 3rd February 2022.

11. TEST REPORT ISSUED ON

: 4th February 2022.

12. TEST RESULTS

: As per table below.

TEST DATE	TEST	AS PER STANDARD	TEST PRESSURE	PERMISSIBLE LIMIT	MEASURED VALUE
03.02.2022	Structural Performance @ DWP	ASTM E330/ E330M- 14(2021)	+2000 Pa	Deflection of Cladding Sheet & Structural members as per given criteria	Deflection of all members found within permissible limit
03.02.2022	Structural Performance @ DWP	ASTM E330/ E330M- 14(2021)	-2000 Pa	Deflection of Cladding Sheet & Structural members as per given criteria	Deflection of all members found within permissible limit
03.02.2022	Structural Performance @150% DWP	ASTM E330/ E330M- 14(2021)	+3000 Pa	Deformation of structural members as per given criteria. No failure of any component.	Deformation found within permissible limit. Also, no component failure observed.
03.02.2022	Structural Performance @150% DWP	ASTM E330/ E330M- 14(2021)	-3000 Pa	Deformation of structural members as per given criteria. No failure of any component.	Deformation found within permissible limit. Also, no component failure observed.





13. COMPLIANCE STATEMENT

: Dry Cladding system specimen was tested as described in this document and method statement.

Disclaimer: FITI does not accept any liability whatsoever for the tampering or any unlawful alteration and or addition made in report either hard copy or sent via any electronic transmission media. Report or any attachments shall NOT be reproduced in parts or in full without the prior written consent of the FITI. Report issued are in good faith relate ONLY to the sample tested, does not imply performance outside of tested sample in any form and application. FITI does not responsible for sampling & test results apply to the specimen only as received. Sample & report is not to be used for legal purpose. FITI is not responsible for design of the product and workmanship of fabrication & installation. FITI test laboratory does not accept any liability whatsoever in nature outside the testing contracts.

V.S. Raghuraman (Quality Manager)

Facade India Testing Inc



1.0 Introduction:

This Test Report is for full scale laboratory testing of Dry Cladding System for the project SFS1.

Full scale mockup testing was conducted as described herein, in accordance with the performance requirements of the project specifications and ASTM testing standards.

Testing was performed under an agreement with M/s. STONELAM SURFACES LLP and FAÇADE INDIA TESTING INC.Copies of Mockup details and project specifications are included in this document.

2.0 Project Details:

Project: SFS1

Customer: M/s. STONELAM SURFACES LLP.

3.0 Test Specimen:

Test specimen was full size Dry Cladding System of size 3000 mm Wide X 3000 mm Height. The mockup was installed by customer, on the structural test chamber, provided by the test laboratory. The test chamber was sealed at the perimeter of the curtain wall by sealant and was allowed to cure for 2-3 days. The test chamber was connected to test equipments prior to test. Test specimen drawing is enclosed in this document as annexure.

Mock-up system : Dry Cladding System

Size : Width 3 m x Height 3 m

Total area : 9 m²

4.0 Design Wind Pressure:

Project Design Wind Pressure is $\pm 2.0 \text{ kPa}(\pm 2000 \text{ Pa})$.

4.1 Testing Standards:

The tests were carried out in accordance with following standard:

4.1.1 Structural Performance As per ASTM E330/E330M-14(2021).

Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

4.2 Testing Requirements:

- a) Pre Load at 50% of + ve Design Wind Pressure.
- b) Structural Performance test at +ve Design Wind Pressure= +2000 Pascal.
- c) Structural Performance test at -ve Design Wind Pressure= -2000 Pascal.
- d) Structural Performance test at 150% +ve Design Wind Pressure = +3000 Pascal.
- e) Structural Performance test at 150% -ve Design Wind Pressure = -3000 Pascal.
- f) Concentrated Load test at Panel Centre: 115 kg



g) Concentrated Load test at Panel Centre up to failure: 185 kg.

4.3 Testing Equipments:

- a) Bi-Directional Vortex Blower & VFD.
- b) 8" Hose Duct.
- c) Test Chamber.
- d) Hydraulic Jack with Power Pack.

4.4 Testing Measurement Equipments:

- a) Digital Differential Pressure Transmitter.
- b) U Type Manometer.
- c) Hygrometer-Temperature & Relative Humidity Measurement.
- d) Deflection Transducers.
- e) IPC & SCADA Software.
- f) Load Cell with indicator

5.0 Test Description:

5.1 Pre Load test at 50% of +ve Design Wind Pressure.

Test was conducted on 3rd February 2022. A pre load equivalent to 50% positive design load applied to the chamber and specimen held for 10 sec before returning back to zero. The purpose to stabilize the specimen with test chamber. It was decided to proceed with Structural Performance Test at Design Wind Pressure.

5.2 Structural Performance Test @ Design Wind Pressure:

Structural Performance Test @ DWP chamber -ve

Structural Performance Test at Design Wind Pressure Chamber Negative was performed on 3rd february 2022 after completion of Pre Load Test. The structural performance test was conducted as described in the method statement. The deflection transducers were placed as shown in the drawing diagram and initial values were set zero. The pressure was decreased upto -1000 Pa (50% of design wind pressure) and held for 10 seconds and the deflection values were recorded before bringing back to the zero. Residual deflection values were set zero. After 3 min, chamber pressure decreased upto -2000 Pa (100% of design wind pressure) in chamber and held for 10 seconds and the deflection values were recorded before bringing back to the zero. The permissible deflection Vs actual deflections were compared. The actual deflections were found within permissible limit. Residual deflections were observed zero. The test was recorded as Compliance. The test record sheets with deflection values are included in the Annexure. It was decided to proceed with Structural Performance Test at Design Wind Pressure Chamber Positive.



Structural Performance Test @DWP chamber +ve

Structural Performance Test at Design Wind Pressure Chamber Positive was performed on 3rd February 2022 immediately after completion of Structural Performance Test at Design Wind Pressure Chamber Negative. The structural performance test was conducted as described in the method statement. The deflection transducers were placed as shown in the drawing diagram and initial values were set zero. The pressure was increased up to +1000 Pa (50% of design wind pressure) and held for 10 seconds and the deflection values were recorded before bringing back to the zero. Residual deflection values were set zero. After 3 min, chamber pressure increased up to +2000 Pa (100% of design wind pressure) in chamber and held for 10 seconds and the deflection values were recorded before bringing back to the zero. The permissible deflection Vs actual deflections were compared. The actual deflections were found within permissible limit. Residual deflections were observed zero. The test was recorded as Compliance. The test record sheets with deflection values are included in the Annexure. It was decided to proceed with Structural Performance Test @ 150% of DWP.

5.3 Structural Performance Test:

At 150% of Design Wind Pressure (chamber-ve)

Structural Performance Test Chamber Negative at 150% Design Wind Pressure was conducted on 3rd February 2022. Prior to the test initial values of deflection transducers were set zero. The chamber pressure was decreased up to -1500 Pa (75% of DWP) and held for 10 seconds, before bringing back to zero Pascal. Subsequently, chamber pressure was decreased up to -3000 Pa (150% of DWP) and held for 10 seconds before brining back to the zero. After waiting for five minute the residual deformation were recorded with the help of transducers. The actual deformation was compared and found within permissible limits. Also, no component failures were observed. Copy of test record sheet included in the Annexure. It was decided to proceed with Structural Performance Test Chamber Positive at 150% Design Wind Pressure.

At 150% of Design Wind Pressure (chamber+ve)

Structural Performance Test Chamber Positive at 150% Design Wind Pressure was conducted on 3rd February 2022. Prior to the test initial values of deflection transducers were set zero. The chamber pressure was increased up to +1500 Pa (75% of DWP) and held for 10 seconds, before bringing back to zero. Subsequently, chamber pressure was increased up to +3000 Pa (150% of DWP) and held for 10 seconds before bringing back to the zero. After waiting for five minute the residual deformation were recorded with the help of transducers. The actual deformation was compared and found within permissible limits. Also, no component failures were observed. The test was recorded as Compliance. Copy of test record sheet included in the Annexure. It was decided to proceed with Concentrated Load Test at Panel Centre.

5.4 Concentrated Load Test at Cladding Panel Centre: 115 kg

Concentrated Load Test at Panel Centre was performed on 3rd February 2022 immediately after completion of Structural Performance Test Chamber Positive at



150% Design Wind Pressure. The test was conducted for 115 kg concentrated load applied horizontally in push direction at one panel. The concentrated load was applied horizontally in push direction from outside at 300 mm x 300 mm surface area with the help of load cell and hydraulic jack. Maximum load was held for 60 seconds and deflection value of panel was recorded from inside. No failure of any component was observed. The test was recorded as Compliance. Copy of test record sheet included in the Annexure.

5.5 Concentrated Load Test at Panel Centre up to failure: 185 kg

Concentrated Load Test at Cladding Panel Centre up to failure was performed on $3^{\rm rd}$ February 2022 immediately after completion of concentrated load test @115 kg. The test was conducted to check maximum reserved strength of sheet. The concentrated load was applied horizontally in push direction from outside at 200 mm x 100 mm surface area. The load was applied gradually with the help of hydraulic jack. At 185 kg, sheet breakage was observed from inside and outside. The test was conducted for study purpose.

6.0 Test Witnesses:

The final testing was witnessed in whole by the following:

1	Mr. Sandeep Bagade	Customer	M/s. STONELAM SURFACES LLP
2	Mr. Sangh Pradeep	Customer	M/s. STONELAM SURFACES LLP
3	Mr. Chandra Prakash Vishwakarma	Customer	M/s. STONELAM SURFACES LLP

7.0 Cladding Wall System Test Results Summary:

Dry Cladding System was tested as described in this document and method statement and test results reported under clause 5.

This report is issued on behalf of Façade India Testing Inc.

For Façade India Testing Inc.

V.S. Raghuraman (Quality Manager)

PROJECT: SYSTEM TEST (STONELAM SURFACES LLP).

SYSTEM : DRY CLADDING SYSTEM.

MOCK UP PERFORMANCE TEST (PRE TEST)

FITI/LAB/22/02/27

DATE:01.02.2022

Sr. No.	Witnessing Person	Name of Organization	Sign
01.	Sangh Poradays Chandra Rakarh	Stonlam Surfaces	Sal.
02.	Chandra Rakash Vishwakarma	Stondom Rurfaces	(frakcish
03.			
04.			
05.			
06.			
07.			
08.			
09.			
10.			
11.			
12.			
13.			STA MURB

PROJECT: SYSTEM TEST (STONELAM SURFACES LLP).

SYSTEM : DRY CLADDING SYSTEM.

MOCK UP PERFORMANCE TEST (FINAL TEST)

FITI/LAB/22/02/27

DATE:03.02.2022

Sr.	Witnessing Person	Name of Organization	Sign
01.	Candelp Bagade	Görelam Sufaces	Alto
02.	Sough Pradeup	Stonlam Sus faces UP	Sant.
03.	Chandra Rakash Vish wakarma	Stonelam Rufaces	Chakaph
04.	Rajmoni Vishwakarma	PRU INFRASTRUCTURE PUTLTD	A 03/02/2022
05.			,
06.			
07.			
08.			
09.			
10.			
11.			
12.			
13			Deminate

FAÇADE INDIA TESTING INC

PERFORMANCE TEST REPORT SUMMARY

PROJECT: SFS1 (STONELAM-SYSTEM TEST)
SYSTEM: DRY CLADDING SYSTEM.

Test Date: 03.02.2022

SR. NO.	TEST DATE	TEST REPORT PAGE #	NAME OF TEST	AS PER STANDARD	TEST PRESSURE	TEST DURATION	PARAMETER TO TEST	PERMISSIBLE LIMIT	MEASURED VALUE	INFERENCE	REMARKS
1	03.02.2022	1	Structural Performance @ DWP	ASTM E330/E330M- 14(2021)	+2000 Pa	20 Min	Deflection of Aluminium members including cladding panel at +2000 Pa.			Compliance	Deflection values of all members found within permissible limit. No failure of any component.
							Laminam panel-1	2.5 mm	1.90 mm		
							Laminam panel-2	2.5 mm	1.96 mm		
							Aluminium profile	16.11 mm	7.42 mm		
2	03.02.2022	2	Structural Performance @ DWP	ASTM E330/E330M- 14(2021)	-2000 Pa	20 Min	Deflection of Aluminium members including cladding panel at -2000 Pa.			Compliance	Deflection values of all members found within permissible limit.No failure of any component.
							Laminam panel-1	2.5 mm	1.68 mm		
							Laminam panel-2	2.5 mm	1.68 mm		
							Aluminium profile	16.11 mm	6.85 mm		
3	03.02.2022	3	Structural Performance @ 150% DWP	ASTM E330/E330M- 14(2021)	+3000 Pa	20 Min	Permanent deformation or cladding panel failure.	Allowable permanent deformation value		Compliance	Deformation values of all members found within permissible limit. No failure of any component.
							Laminam panel-1	0.50 mm	0.15 mm		
					-		Laminam panel-2	0.50 mm	0.21 mm		
							Aluminium profile	2.82 mm	2.16 mm		
4	03.02.2022	3	Structural Performance @ 150% DWP	ASTM E330/E330M- 14(2021)	-3000 Pa	20 Min	Permanent deformation or cladding panel failure.	Allowable permanent deformation value		Compliance	Deformation values of all members found within permissible limit. No failure of any component.
							Laminam panel-1	0.50 mm	0.14 mm		
							Laminam panel-2	0.50 mm	0.21 mm		
							Aluminium profile	2.82 mm	1.40 mm		
5	03.02.2022	4	Concentrated Push Load Test	As per customer specification	115 KG	20 Min	To check strength of cladding panel against concentrated load @ 115 KG	No failure of any component	No failure of any component	Compliance	Load applied on 300mm X 300mm area . No failure of any component observed
6	03.02.2022	4	Concentrated Push Load Test up to failure	As per customer specification	185 KG	20 Min	To check maximun strength of cladding panel against concentrated load	Study Purpose	Sheet breakage observed at 185 kg	NA	Load applied on 200mmX100mm area. Laminam cladding sheet broken has reserved flexural strength upto 185 kg.



STRUCTURAL PERFORMANCE TEST AT 100 % DESIGN WIND PRESSURE

ASTM E 330/E330M-14(2021) (CHAMBER-VE)

FITI/LAB/22/02/27

TEST PRESSURE DIFFERENTIAL =

2000 Pa

DATE: 03/02/2022 14:27

PROJECT NAME: SFS1(STONELAM-SYSTEM TEST)

TEST CONDITION AT SITE:

OUT SIDE

IN SIDE

AMBIENT TEMPERATURE:

31.5 °C

29.5 °c

RELATIVE HUMIDITY:

60.0 %RH

75.0 %RH

SI. No.	ITEM	CHANNEL NO.'S.	DIFF. PRESSURE (Pa)	DEFLECT	DEFLECT @ 8(mm)	DEFLECT @ C (mm)	ACTUAL CENTRAL DEFLECTION =8-(A+C)/2(mm)	SPAN (L) mm	ALLOWABLE DEFLECTION (mm)	CONCLUSION
1	LANINAN PANEL-1	T1=Ch 8 T2=Ch 6	50%=1000 pa 100%=2000 pa					500	2.50	С
2	LANINAN PANEL-2	T3=Ch 1 T4=Ch 19 T5=Ch 4	50%=1000 pa	т4= 1.60	т5= 3.41	т6= 3.47	0.88	500	2.50	С
-	LANTHAN TANEE 2	T7=Ch 7	100%= 2000 pa 50%= 1000 pa					2820	16.11	C
3	ALU.PROFILE	19-011 20						2020	10.11	
4	NA	T10=Ch 44 T11=Ch 44 T12=Ch 44	50%=1000 pa 100%=2000 pa	Den anne		E CONTRACTOR OF THE CONTRACTOR		0	0.00	NA
5		T13=Ch 44	50%=1000 pa			C		0	0.00	NA

NOTE:

Test Engg

Authorised

Page no:1

TEST RESULT: COMPLIANCE.

STRUCTURAL PERFORMANCE TEST AT 100 % DESIGN WIND PRESSURE

ASTM E 330/E330M-14(2021) (CHAMBER+VE)

FITI/LAB/22/02/27

TEST PRESSURE DIFFERENTIAL = -2000 Pa

DATE: 03/02/2022 14:34

PROJECT NAME: SFS1(STONELAM-SYSTEM TEST)

TEST CONDITION AT SITE:

OUT SIDE

IN SIDE

AMBIENT TEMPERATURE:

31.5 °C

29.5 °C 75.0 %RH

RELATIVE HUMIDITY:

60.0 %RH

51. No.	ITEM	CHANNEL NO.'S.	DIFF. PRESSURE (Pa)	DEFLECT	DEFLECT @ B(mm)	DEFLECT @ C (mm)	ACTUAL CENTRAL DEFLECTION =B-(A+C)/2(mm)	SPAH (L) mm	ALLOWABLE DEFLECTION (mm)	CONCLUSION
1	LANINAN PANEL-1	T1=Ch 8 T2=Ch 6 T3=Ch 1	50%=1000 pa 100%=2000 pa					500	2,50	С
2	LANINAN PANEL-2	T4=Ch 19	50%=1000 pa 100%=2000 pa					500	2.50	С
3	ALU.PROFILE	T7=Ch 7	50%=1000 pa 100%=2000 pa	T7= 0.16	тв= 3.28 тв= 7.63	т9= 0.43 т9= 1.12	2.99 6.85	2820	16.11	С
4		T10=Ch 44	50%=1000 pa 100%=2000 pa	T10= 0.00 T10= 0.00	T11= 0.00	T12= 0.00	0.00	0	0.00	NA
5		T13=Ch 44		T13= 0.00	T14= 0.00	T15= 0.00	0.00	0	0.00	NA

NOTE:

TEST RESULT: COMPLIANCE.

Test Engg

Authorised

Page no: 2

STRUCTURAL PERFORMANCE TEST AT 150 % DESIGN WIND PRESSURE ASTM E 330/E330M-14 (2021)

4

Page no: 3

FITI/LAB/22/02/27

TEST PRESSURE DIFFERENTIAL = 3000 Pa
TEST PRESSURE DIFFERENTIAL = -3000 Pa

DATE: 03/02/2022 15:15

PROJECT NAME: SFS1(STONELAM-SYSTEM TEST)

TEST CONDITION AT SITE : OUT SIDE | IN SIDE

AMBIENT TEMPERATURE: 31.5 °C 30.0 °C

RELATIVE HUMIDITY: 72.0 %RH 80.0 %RH

PERMANENT PERMANENT ALLOWABLE CONCLUSION OBS. SPAN ANY ELEMENT DEFORMATION DEFORMATION **ELEMENT** DEFORMATION **FAILURE** NO. mm AT 3000 pa AT-3000 pa AT 3000 pa AT-3000 pa mm 0.15 mm 0.14 mm C C LANINAM PANEL-1 NO FAILURE 500 mm 0.500 1. C C 0.21 mm 0.21 mm NO FAILURE LANINAN PANEL-2 2. 500 mm 0.500 2.820 NO FAILURE C C ALU.PROFILE 2.16 mm 1.40 mm 2820 mm 3. 0.000 NA NA NA 0.00 mm $0.00 \, \text{mm}$ NA 4. mm NA NA 0.00 mm 0.00 mm NA NA 0.000 mm 5. NA 0.00 mm 6. 0.000 NA NA 0.00 mm0 mm NA

NOTE:

TEST RESULT: COMPLIANCE.

Test Engg

Authorised



FITI/LAB/22/02/27

CONCENTRATED LOAD TEST HORIZONTAL PUSH LOAD = 115 Kg

Date: 03/02/2022 15.40 PM

TEST TO FAILURE = 185Kg.

PROJECT NAME: SFS1(STONELAM SYSTEM TEST)

INTEST CONDITION AT SITE:

AMBIENT TEMPERATURE = 31.6 °C

RELATIVE HUMIDITY = 72.4 % RH

OBSERVATION LOAD(Kg)		OBSERVED DEFLECTION AT PANEL CENTRE (mm)	ALLOWABLE DEFLECTION (mm)	CONCLUSION	
1.	115 Kg	3.5 mm	NA	COMPLIANCE	

NOTE: No Failure Of Any Component Observed.

2. TEST TO FAILURE @ 185 Kg:

OBSERVATION: A CONCENTRATED LOAD APPLIED OVER ONE LOCATION IN PUSH DIRECTION.

LOAD ACHIEVED UPTO 185 KG BEFORE SHEET

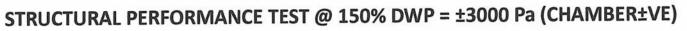
TEST RESULT: COMPLIANCE BREAKAGE. HENCE TEST CONCLUDED FOR MAXIMUM STRENGTH OF SHEET IS 185KG.

Authorised



STRUCTURAL PERFORMANCE TEST @ 100% DWP = ±2000 Pa (CHAMBER±VE)



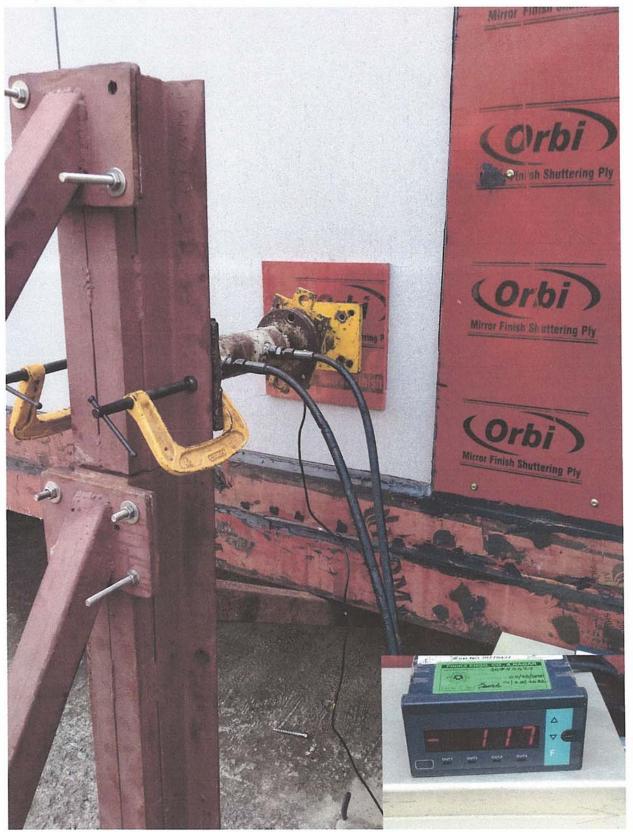




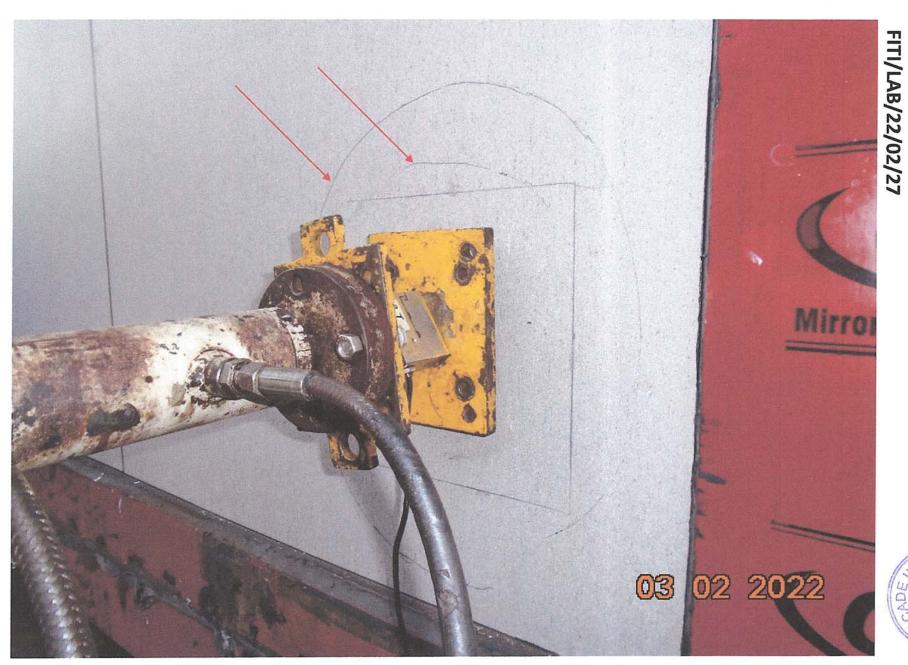


MURBAD Z A 421 401 D MURBAD Z A 221 401

FITI/LAB/22/02/27



CONCENTRATED LOAD TEST @ 115 KG



TEST TO FAILURE-CONCENTRATED LOAD TEST: 185 KG. BREAKAGE MARKS INDICATED BY ARROWS.







OBSERVATIONS TAKEN FROM INSIDE DURING CONCENTRATED LOAD TEST @ 115 KG AND 185 KG. NO BREKAGE WAS OBSERVED AT 115 KG. HOWEVER, CLADDING PANEL BRAEKAGE WAS OBSERVED AT 185 KG.



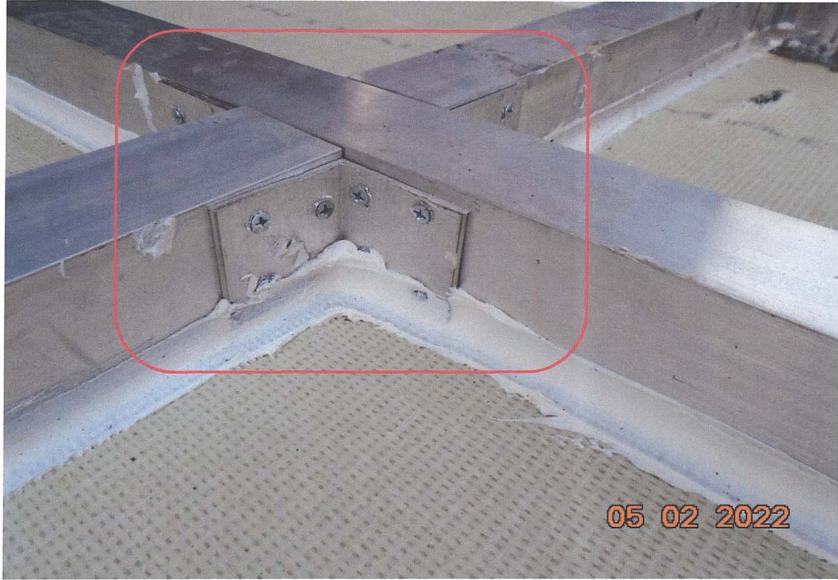


FINAL TEST TEAM PHOTOGRAPH

CONTROLLED DISASSEMBLY REPORT FOR PROJECT SFS1.

Controlled Disassembly Date: 5th February 2022.

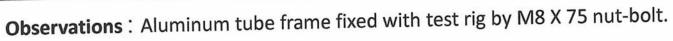




Observations: Aluminium tube of size 50X50X2 mm thk was used as mullion-transom frames. Transoms were connected with Mullion by means of using 50X50X5mm thk Aluminium L-angle and CSK screws of size 6x16. Frames and cladding panel junction was sealed with sealant. No damage observed at any joint.









Observation: Cladding panels were fixed with main frames with help of bonding tape sealant.





Observation: Sealant and bonding tape used in PMU installation.



