

**CLIENT:** Litecon Corporation  
Calle 3, Numero 7 Parque  
Industrial Platah, Villa de  
Tezontepec Hidalgo CP43880

**Project No: MED-1241b**

**Report Date: April 3, 2024**

**SAMPLE ID:** Series: Litecon Firewall 2" Panel with Wood Studs

**SAMPLE DESCRIPTION:** 8'-0" (96") x 8'-0" (96") high; See page 3 for full description.

**SAMPLING DETAIL:** The test sample manufactured by Litecon Corporation were sampled by QA staff Idalmis Ortega on December 21, 2023.

**DATE OF RECEIPT:** Samples were received at the QAI Miami Laboratory on February 6, 2024.

**TESTING PERIOD:** March 6, 2024.

**TESTING LOCATION:** QAI Laboratory (QAI) – Miami, Florida, USA

**AUTHORIZATION:** QAI proposal number 23MB10192R2 dated October 19, 2023, signed by Leonel Borja Quality Manager, staff of Aircrete Mexico dated November 21, 2023.

**TEST PROCEDURE:** Testing to the following requirements:

- ASTM E90 -09 (reapproved 2016) Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- ASTM E2235-04 Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods
- ASTM E413-22 Classification for Rating Sound Insulation
- ASTM E1332-16 Standard Classification for Rating Outdoor-Indoor Sound Attenuation

**TEST RESULTS:** The Litecon 2-inch Firewall panel with wood studs achieved an STC 52 and OITC 37 when tested in accordance with the ASTM E90, ASTM E2235, ASTM E413, and ASTM E1332

**CONTENTS:** Test report pages 1 through 4.

**Prepared By**  
*Lusinda Delgado*  
**Lusinda Delgado**  
Technical Report Writer

**Signed for and on behalf of QAI Laboratory**  
*Jose Sanchez*  
**Jose Sanchez**  
Operation Manager

THIS REPORT IS THE CONFIDENTIAL PROPERTY OF THE CLIENT ADDRESSED. THE REPORT MAY ONLY BE REPRODUCED IN FULL. PUBLICATION OF EXTRACTS FROM THIS REPORT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM QAI. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED FOR THE INDIVIDUAL PROJECT FILE REFERENCED. THE RESULTS OF THIS REPORT PERTAIN ONLY TO THE SPECIFIC SAMPLE(S) EVALUATED. UNLESS SPECIFICALLY STATED OR IDENTIFIED OTHERWISE, QAI HAS UNTILIZED A SIMPLE ACCEPTANCE RULE TO MAKE CONFORMITY DECISIONS ON TESTING RESULTS CONTAINED IN THIS REPORT, AS APPLICABLE.



---

<b>Table of Contents</b>	<b>Page</b>	<b>Rev</b>
<b>Sample B-1</b>		
Description of Test Sample	3	1
Wall Construction	3	
Equipment	3	
Test Chamber Dimensions	3	
Results Sample B-1		
Acoustical Test	ASTM E90 3	
Notes Table	4	
Test Procedure	4	
Revision Table	4	1

Technician:  
Jose Sanchez

THIS REPORT IS THE CONFIDENTIAL PROPERTY OF THE CLIENT ADDRESSED. THE REPORT MAY ONLY BE REPRODUCED IN FULL. PUBLICATION OF EXTRACTS FROM THIS REPORT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM QAI. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED FOR THE INDIVIDUAL PROJECT FILE REFERENCED. THE RESULTS OF THIS REPORT PERTAIN ONLY TO THE SPECIFIC SAMPLE(S) EVALUATED. UNLESS SPECIFICALLY STATED OR IDENTIFIED OTHERWISE, QAI HAS UNTILIZED A SIMPLE ACCEPTANCE RULE TO MAKE CONFORMITY DECISIONS ON TESTING RESULTS CONTAINED IN THIS REPORT, AS APPLICABLE.



**DESCRIPTION OF SAMPLE**

Model Designation:	Series: Litecon Firewall 2" Panel with Wood Studs
Overall Size:	8'-0" (96") x 8'-0" (96") high
Size of Panel:	6'-8" (80") x 2'-0" (24") high x 0'-2" (2") thick
Weight of Sample:	5.12lbf/ft <sup>2</sup>
Sample: B-1	

**Wall Construction**

The Litecon fire panels were installed vertically and were stacked and staggered. The horizontal and vertical seams were sealed with an \*\*Litecon Adhesive Mortar. 2" x 4" wood studs spaced 16" inches in the center were installed on both sides of the wall using 2" x 2" x 2 1/2" burn clips. Each burn clip was fastened to the Litecon fire panel using two No. 8 x 1 1/2" sharp point type screws and to the stud using one No. 8 x 1 1/2" sharp point type screw. A 5/8" thick Type X drywall was installed on both sides of the wall.

**Equipment**

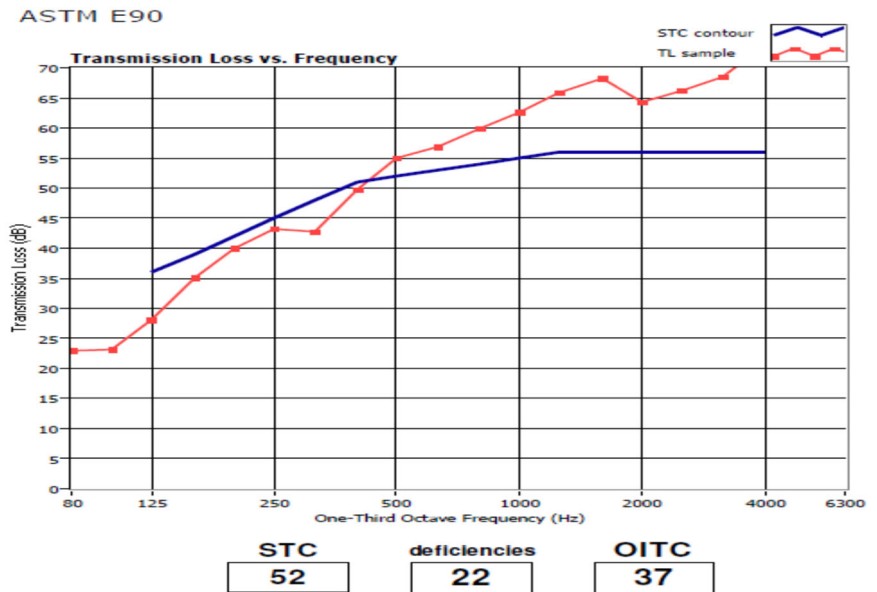
Instrument	Manufacture	Model	Description
Pressure microphone	Norsonic	1230	Microphone
Oscillating microphone boom	Norsonic	N265	Rotating microphone
Loudspeaker	JBL	SR4733X	Speaker
Amplifier system	QSC	RMX1850-HD	Amplifier
Dual band equalizer	DBX	DBX-1231	Equalizer

**Test Chamber Dimensions**

Receiving Room	7875 ft <sup>3</sup>
Source Room	6840 ft <sup>3</sup>

Room Conditions: 24.5°C R.H: 39% ATM: 1015hPa

Data Table	TL (db)	deficiencies	95% CI
80	23	-	4.39
100	23	-	2.39
125	28	8	2.17
160	35	4	1.93
200	40	2	0.73
250	43	2	1.15
315	43	5	1.82
400	50	1	0.53
500	55	0	1.49
630	57	0	0.46
800	60	0	1.00
1000	63	0	1.04
1250	66	0	0.98
1600	68	0	0.37
2000	64	0	0.57
2500	66	0	0.25
3150	69	0	0.25
4000	74	0	0.30



THIS REPORT IS THE CONFIDENTIAL PROPERTY OF THE CLIENT ADDRESSED. THE REPORT MAY ONLY BE REPRODUCED IN FULL. PUBLICATION OF EXTRACTS FROM THIS REPORT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM QAI. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED FOR THE INDIVIDUAL PROJECT FILE REFERENCED. THE RESULTS OF THIS REPORT PERTAIN ONLY TO THE SPECIFIC SAMPLE(S) EVALUATED. UNLESS SPECIFICALLY STATED OR IDENTIFIED OTHERWISE, QAI HAS UNTILIZED A SIMPLE ACCEPTANCE RULE TO MAKE CONFORMITY DECISIONS ON TESTING RESULTS CONTAINED IN THIS REPORT, AS APPLICABLE.



### Notes

\* designates measurements by laboratory

\*\* as per manufacturer

QAI does not have, nor does it intend to acquire or will acquire, a financial interest in any company manufacturing or distributing products tested or labeled by QAI. QAI is not owned, operated or controlled by any company manufacturing or distributing products it tests or labels.

Drawings referenced in this document are an integral part of this report, therefore, are required when distributing this test report. Test results obtained represent the actual value of the tested specimens and do not constitute opinion, endorsement or certification by this laboratory.

### Test Procedure

Samples were installed in a 96" by 96" wall opening and were approximately 1/4" from flush with the receive room side of the wall. A filler panel was installed in the wall opening and a sound transmission loss test was initially performed on the wall. Duct seal was used to seal the interior and exterior of the test samples to the wall opening.

The sensitivity of the microphones was checked with a calibrator before testing was performed.

The sound transmission loss values were obtained for a single direction.

Five measurements were conducted for the sound pressure level, background noise and sound absorption. Measurements were collected at each rotating microphone.

Data for flanking limit tests, repeatability measurements and reference specimen tests are available on request.

### REVISION HISTORY:

4/3/2024: Initial report release

4/10/2024: Corrected name of adhesive mortar used under wall construction.

\*\*\*\*\*END REPORT\*\*\*\*\*

THIS REPORT IS THE CONFIDENTIAL PROPERTY OF THE CLIENT ADDRESSED. THE REPORT MAY ONLY BE REPRODUCED IN FULL. PUBLICATION OF EXTRACTS FROM THIS REPORT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM QAI. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED FOR THE INDIVIDUAL PROJECT FILE REFERENCED. THE RESULTS OF THIS REPORT PERTAIN ONLY TO THE SPECIFIC SAMPLE(S) EVALUATED. UNLESS SPECIFICALLY STATED OR IDENTIFIED OTHERWISE, QAI HAS UNTILIZED A SIMPLE ACCEPTANCE RULE TO MAKE CONFORMITY DECISIONS ON TESTING RESULTS CONTAINED IN THIS REPORT, AS APPLICABLE.