QAI LABORATORIES
CERTIFICATION TESTING INSPECTION

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CLIENT: Aircrete Mexico
Calle 3, Numero 7 Parque
Industrial Platah, Villa de
Tezontepec Hidalgo CP43880

Project No: MED-0021	**Report Date:** November 28, 2022

SAMPLE ID: Litecon Fire Wall

SAMPLE DESCRIPTION: 8'-0" (96") by 7'-10 5/8" (94 5/8") high; See page 3 for full description.

SAMPLING DETAIL: The test sample manufactured by Aircrete Mexico was submitted directly to QAI by the client. Samples were independently selected for testing virtually by Jose Sanchez with QAI laboratories in Miami FL.

DATE OF RECEIPT: Samples were received at the QAI Miami Laboratory on August 10, 2022.

TESTING PERIOD: November 8, 2022

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

AUTHORIZATION: Proposal 22B04272R3, signed by Leonel Borja, dated April 27, 2022.

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 E2235-04Standard 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 fire wall achieved the results found on page 4 of this test report 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

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Technician:
Jose Sanchez

DESCRIPTION OF SAMPLE	
Model Designation:	Litecon Fire Wall
Overall Size:	8'-0" (96") by 7'-10 5/8" (94 5/8") high
Size of Fire Panel:	24" by 23 5/8" by 3" thick
Weight:	32 pounds/panel
Size of Fire Panel:	48" by 23 5/8" by 3" thick
Weight:	65 pounds/panel

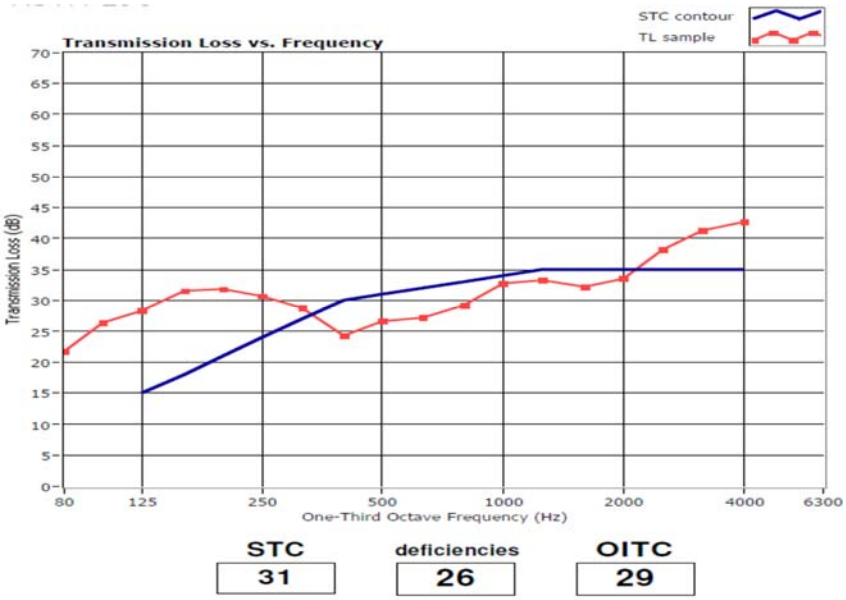
Wall Construction
The litecon firewall panels were stacked and staggered. Horizontal and vertical seams were sealed with Aircrete Adhesive Mortar. 2" by 2" by 2 1/2" long aluminum burn clips were installed on both sides of the wall, maintains a 1/2" gap between the litecon fire wall panel and 2" by 4" wood stud. Each burn clip was fastened to the fire wall panel using two No. 8 by 2" sharp point type screw and to wood stud using two No. 6 by 1 1/4" FH drywall screw.

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

Test Chamber Dimensions	
Receiving Room	7875 ft³
Source Room	6840 ft³

Room Conditions: 25.0°C R.H: 38% ATM: 1013 hPa

Data Table	TL (db)	deficiencies	95% CI
80	22	-	2.37
100	26	-	2.12
125	28	0	1.86
160	32	0	1.82
200	32	0	1.11
250	31	0	1.59
315	29	0	1.34
400	24	6	1.62
500	27	4	1.63
630	27	5	1.41
800	29	4	1.78
1000	33	1	1.11
1250	33	2	0.34
1600	32	3	0.31
2000	34	1	0.33
2500	38	0	0.34
3150	41	0	0.25
4000	43	0	0.28



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.

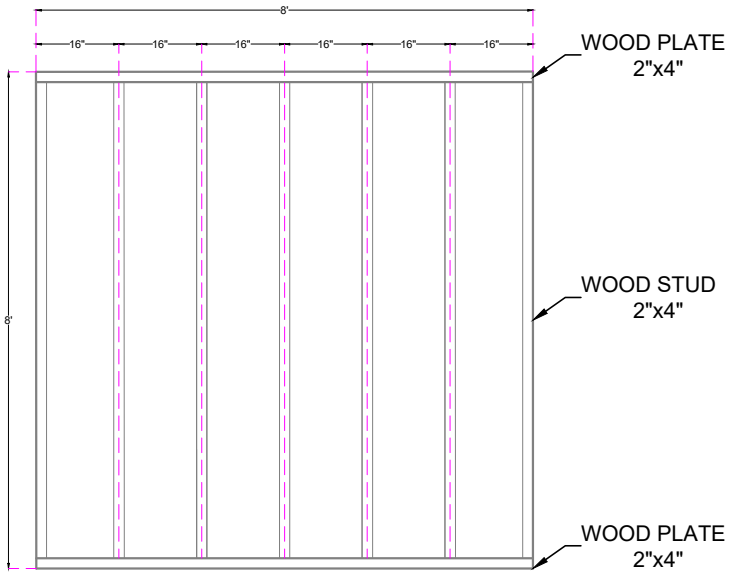
Drawings referenced in this document are an integral part of this report, therefore, are required when distributing this test report. Test results obtained represent the actual value of the tested specimens and do not constitute opinion, endorsement or certification by this laboratory.

REVISION HISTORY:
11/28/2022: Initial report release

*********END REPORT*********

LITECON AUTOCLAVED AERATED CONCRETE	INSTALLATION GUIDE				
	PRODUCT: LITECON FIREWALL PANEL				
	AREA: ENGINEERING	ELABORATED: C.V.T.S.	REVISED: V.G.C.	VERSION: V16 220815/*AS BUILT*	PAGE: 1 OF 5

WOOD FRAME INSTALLATION



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ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL

NOTES

1.- WOOD STUD SHOULD BE SYP (SOUTHERN YELLOW PINE)

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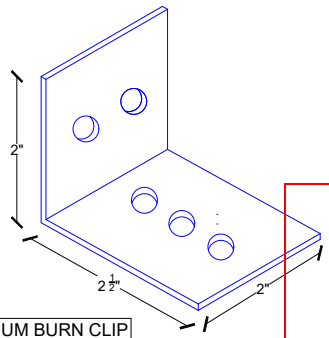
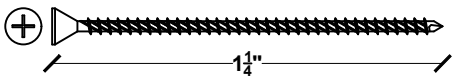
ALUMINUM BURN CLIP INSTALLATION



ALUMINUM BURN CLIP	
SIZE	THICKNESS
2" X 2" X 2½" LONG	0.050"

#6 "W" TYPE SCREWS



FASTENER FOR STUD

QAI LABORATORY
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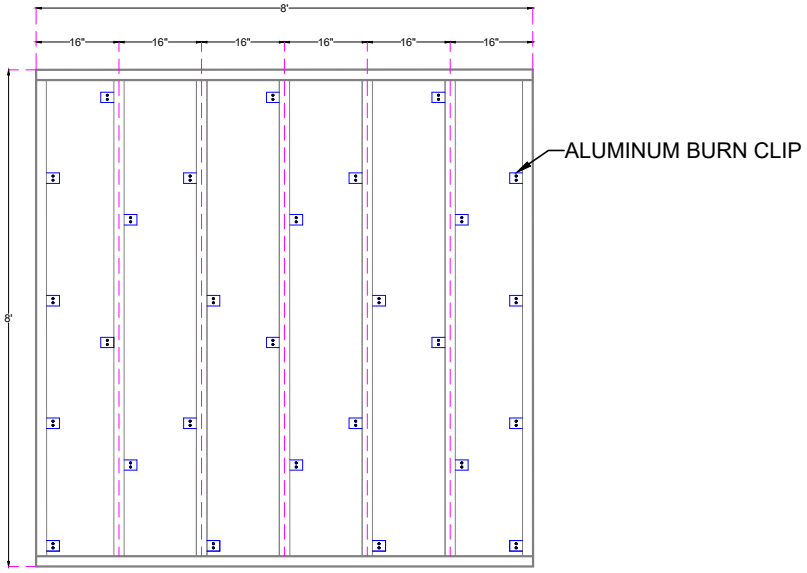

NOTES

1.- INSTALL THE ALUMINUM BURN CLIP WITH A #6 1-¼" "W" TYPE FASTENER COATED
2.- ALUMINUM BURN CLIPS SPACED MAX 16 IN. HORIZONTALLY AND 2 FT OC VERTICALLY
3.- INSTALL THE ALUMINUM BURN CLIP WITH 2 FASTENERS TO WOOD STUD
4.- THE LONGER SIDE OF THE CLIP MUST BE PLACED ONTO THE WOOD STUD

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL

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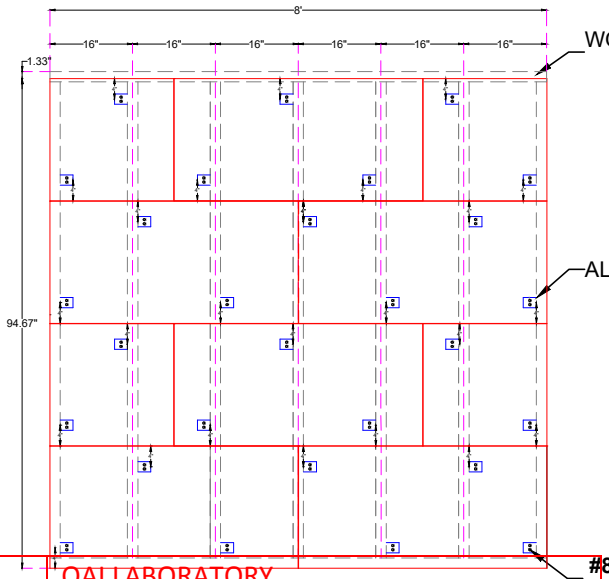
LITECON FIREWALL PANEL INSTALLATION



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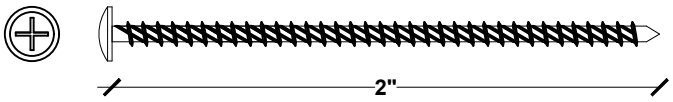
#8x2" SHARP POINT TYPE SCREW
MODIFIED TRUSS



FASTENER FOR LITECON FIREWALL PANEL

NOTES

1.- INSTALL THE ALUMINUM BURN CLIP WITH A #6 1-$\frac{1}{4}$" "W" TYPE FASTENER COATED

2.- INSTALL THE ALUMINUM BURN CLIP WITH 2 FASTENERS TO WOOD STUD AND 2 FASTENERS TO THE LITECON FIREWALL PANEL

3.- MINIMUM OF THREE ALUMINUM BURN CLIPS PER ENTIRE PANEL AND MINIMUM OF TWO IF CUT THE LITECON FIREWALL PANEL

4.- THE LONGER SIDE OF THE CLIP MUST BE PLACED ONTO THE WOOD STUD. BE SURE TO ALWAYS MAINTAIN A $\frac{1}{2}$" AIR GAP BETWEEN LITECON FIREWALL PANEL AND THE WOOD STUD

5.- ALUMINUM BURN CLIPS SPACED MAX 16 IN. HORIZONTALLY AND 2 FT OC VERTICALLY

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL

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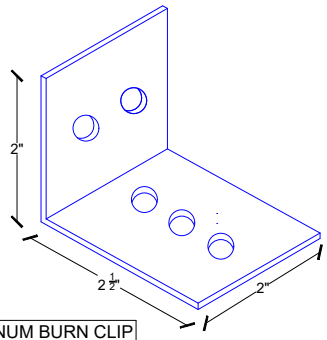
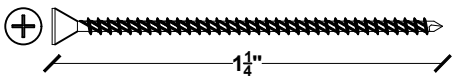
ALUMINUM BURN CLIP INSTALLATION



ALUMINUM BURN CLIP	
SIZE	THICKNESS
2" X 2" X 2½" LONG	0.050"

#6 "W" OR "S" TYPE SCREWS



FASTENER FOR STUD

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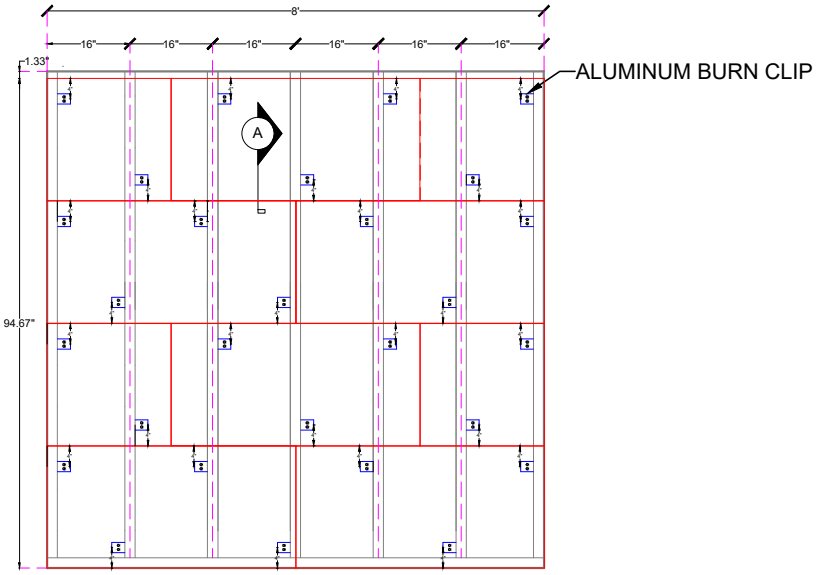

NOTES

1.- INSTALL THE ALUMINUM BURN CLIP WITH A #6 1-¼" "W" OR "S" TYPE FASTENER COATED

2.- INSTALL THE ALUMINUM BURN CLIP WITH 2 FASTENERS TO WOOD STUD AND 2 FASTENERS TO THE LITECON FIREWALL PANEL

3.- MINIMUM OF THREE ALUMINUM BURN CLIPS PER ENTIRE PANEL AND MINIMUM OF TWO IF CUT THE LITECON FIREWALL PANEL

4.- THE LONGER SIDE OF THE CLIP MUST BE PLACED ONTO THE WOOD STUD. BE SURE TO ALWAYS MAINTAIN A ½" AIR GAP BETWEEN LITECON FIREWALL PANEL AND THE WOOD STUD

5.- ALUMINUM BURN CLIPS SPACED MAX 16 IN. HORIZONTALLY AND 2 FT OC VERTICALLY

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL

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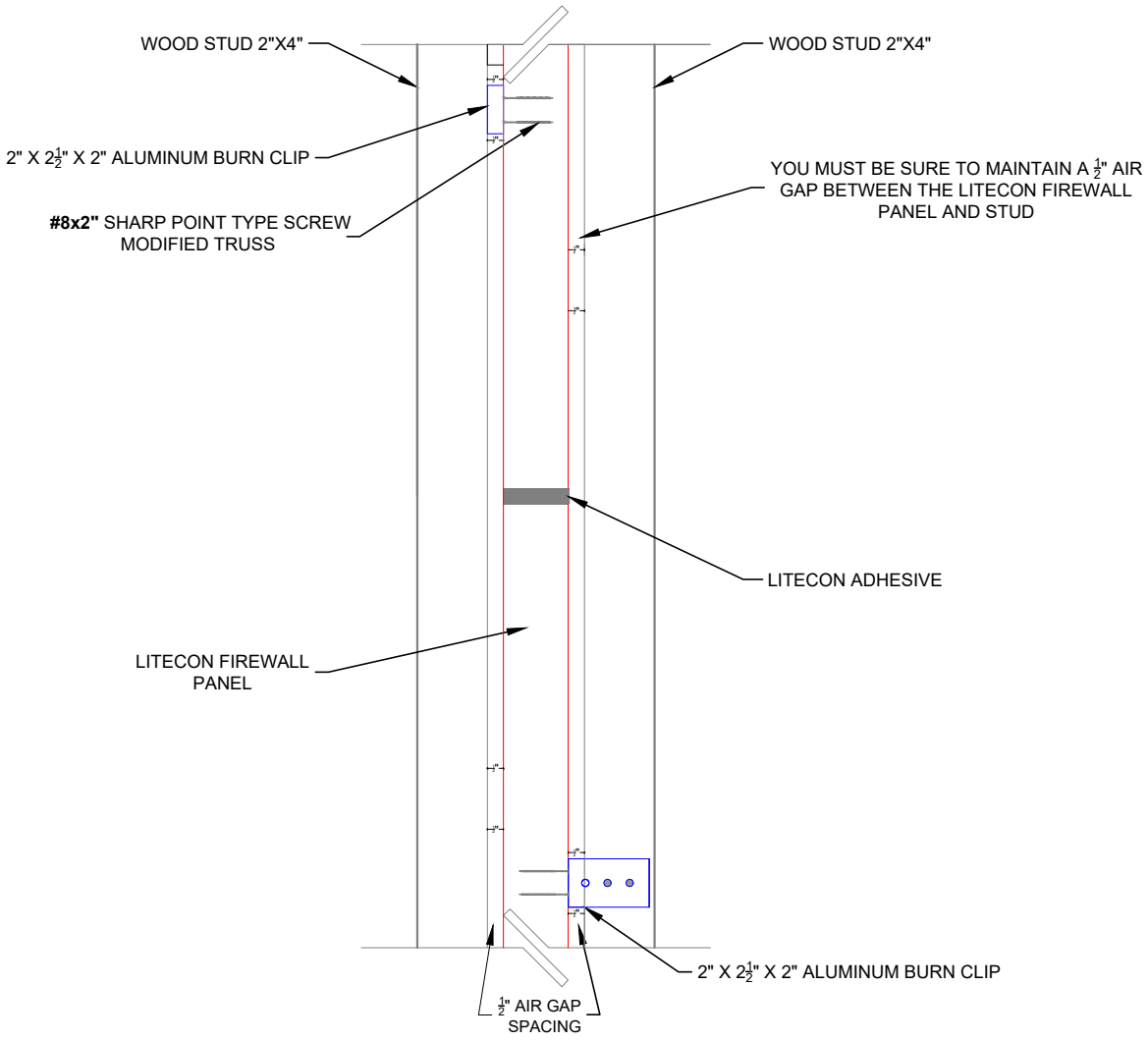
LITECON FIREWALL PANEL SECTION A



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