

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 E2235-04 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 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

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 UTILIZED A SIMPLE ACCEPTANCE RULE TO MAKE CONFORMITY DECISIONS ON TESTING RESULTS CONTAINED IN THIS REPORT, AS APPLICABLE.



Table of Contents	Page	Rev
Sample A-1		
Description of Test Sample	3	
Wall Construction	3	
Equipment	3	
Test Chamber Dimensions	4	
Results Sample A-1		
Acoustical Test	ASTM E90	4

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:	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.

5/8" type X drywall was located on both sides of the wall and fastened to the wood studs using a single row of No. 6 by 1 1/4" FH drywall screws spaced 12" on center.

Equipment

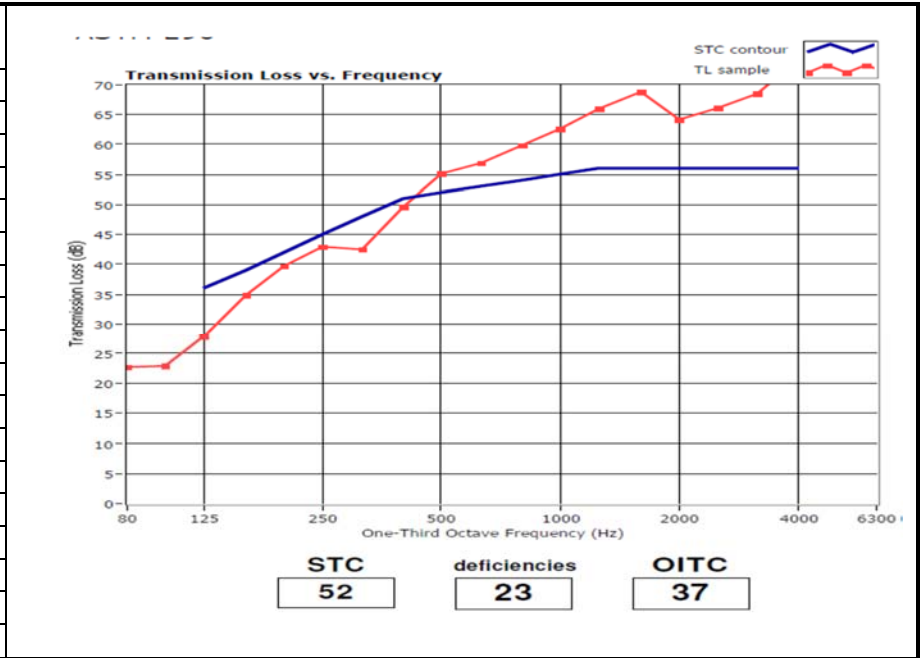
Instrument	Manufacture	Model	Description
Pressure microphone	Norsonic	1230	Microphone
Oscillating microphone boom	Norsonic	N265	Rotating microphone
Loud speaker	JBL	SR4733X	Speaker
Amplifier system	QSC	RMX1850-HD	Amplifier
Dual band equalizer	DBX	DBX-1231	Equalizer



Test Chamber Dimensions	
Receiving Room	7875 ft ³
Source Room	6840 ft ³

Room Conditions: 26.5°C R.H: 38% ATM: 1015 hPa

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	42	6	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	69	0	0.37
2000	64	0	0.57
2500	66	0	0.25
3150	68	0	0.25
4000	74	0	0.30



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*****

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.

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL + GYPSUM WALLBOARD

INSTALLATION GUIDE



PRODUCT:

LITECON FIREWALL PANEL

AREA:
ENGINEERING

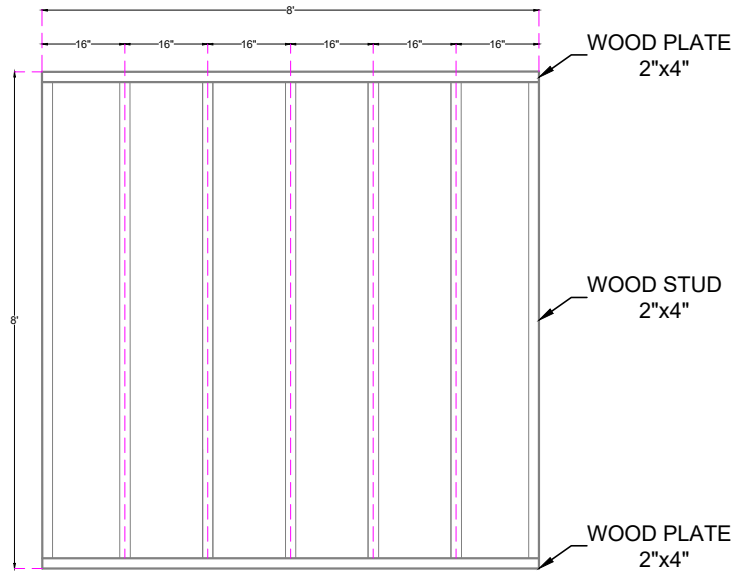
ELABORATED:
C.V.T.S.

REVISED:
V.G.C.

VERSION:
V16 220815/AS BUILT

PAGE:
1 OF 5

WOOD FRAME INSTALLATION



QAI LABORATORY

LABORATORY NUMBER: 13180

DATE: 11/28/2022

DRAWINGS VERIFIED BY: LD

NOTES

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



QAI LABORATORY

LABORATORY NUMBER: 13180

DATE: 11/28/2022

DRAWINGS VERIFIED BY: LD

INSTALLATION GUIDE



PRODUCT:

LITECON FIREWALL PANEL

AREA:
ENGINEERING

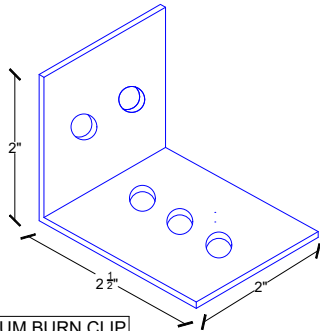
ELABORATED:
C.V.T.S.

REVISED:
V.G.C.

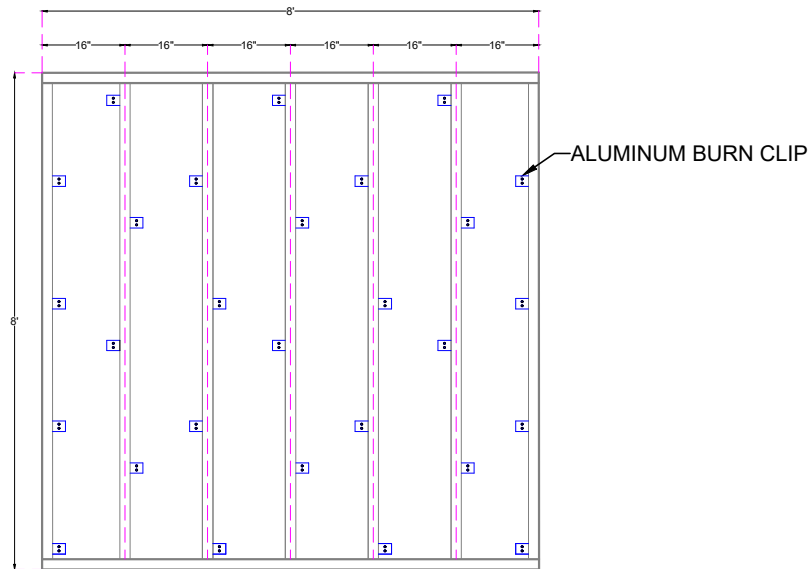
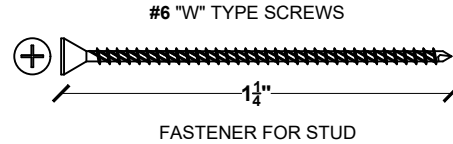
VERSION:
V16 220815/AS BUILT

PAGE:
2 OF 5

ALUMINUM BURN CLIP INSTALLATION



ALUMINUM BURN CLIP	
SIZE	THICKNESS
2" X 2" X 2 1/2" LONG	0.050"



NOTES

- 1.- INSTALL THE ALUMINUM BURN CLIP WITH A #6 1-1/4" "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 + GYPSUM WALLBOARD

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL + GYPSUM WALLBOARD

INSTALLATION GUIDE



PRODUCT:

LITECON FIREWALL PANEL

AREA:
ENGINEERING

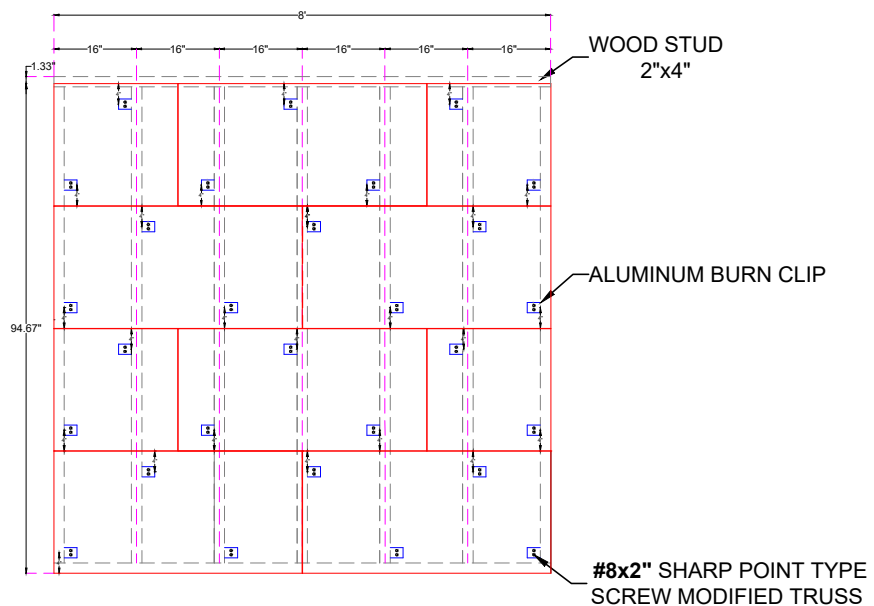
ELABORATED:
C.V.T.S.

REVISED:
V.G.C.

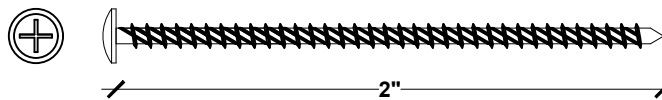
VERSION:
V16 220815/AS BUILT

PAGE:
3 OF 5

LITECON FIREWALL PANEL INSTALLATION



	QAI LABORATORY
	LABORATORY NUMBER: 13180
	DATE: 11/28/2022
	DRAWINGS VERIFIED BY: [Signature]



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

INSTALLATION GUIDE



PRODUCT:

LITECON FIREWALL PANEL

AREA:
ENGINEERING

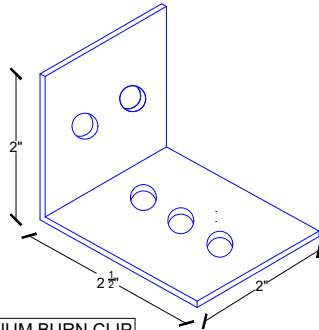
ELABORATED:
C.V.T.S.

REVISED:
V.G.C.

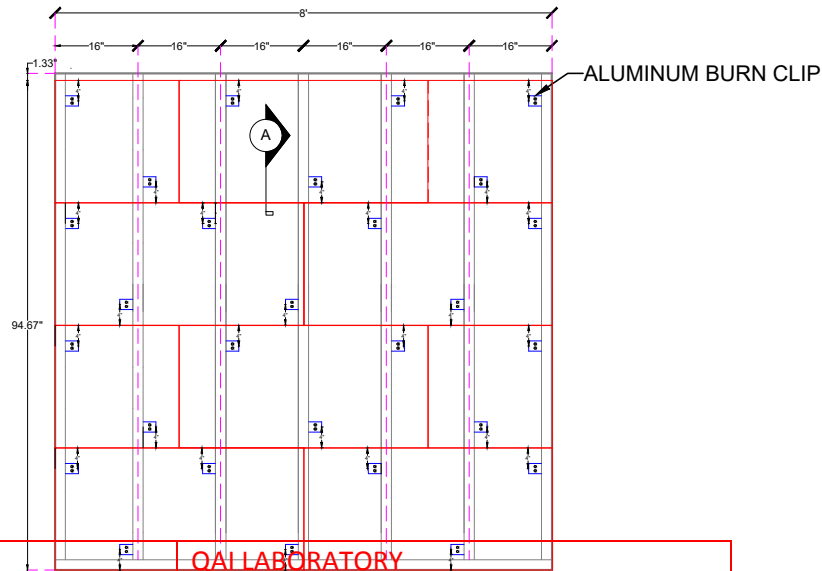
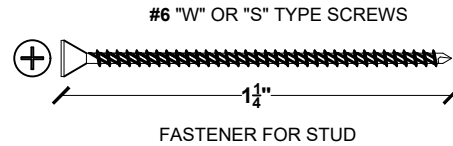
VERSION:
V16 220815/AS BUILT

PAGE:
4 OF 5

ALUMINUM BURN CLIP INSTALLATION



ALUMINUM BURN CLIP	
SIZE	THICKNESS
2" X 2" X 2 1/2" LONG	0.050"



QAI LABORATORY

LABORATORY NUMBER: 13180

DATE: 11/28/2022

DRAWINGS VERIFIED BY: LD

NOTES

- 1.- INSTALL THE ALUMINUM BURN CLIP WITH A #6 1-1/4" "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 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



PRODUCT:

LITECON FIREWALL PANEL

AREA:
ENGINEERING

ELABORATED:
C.V.T.S.

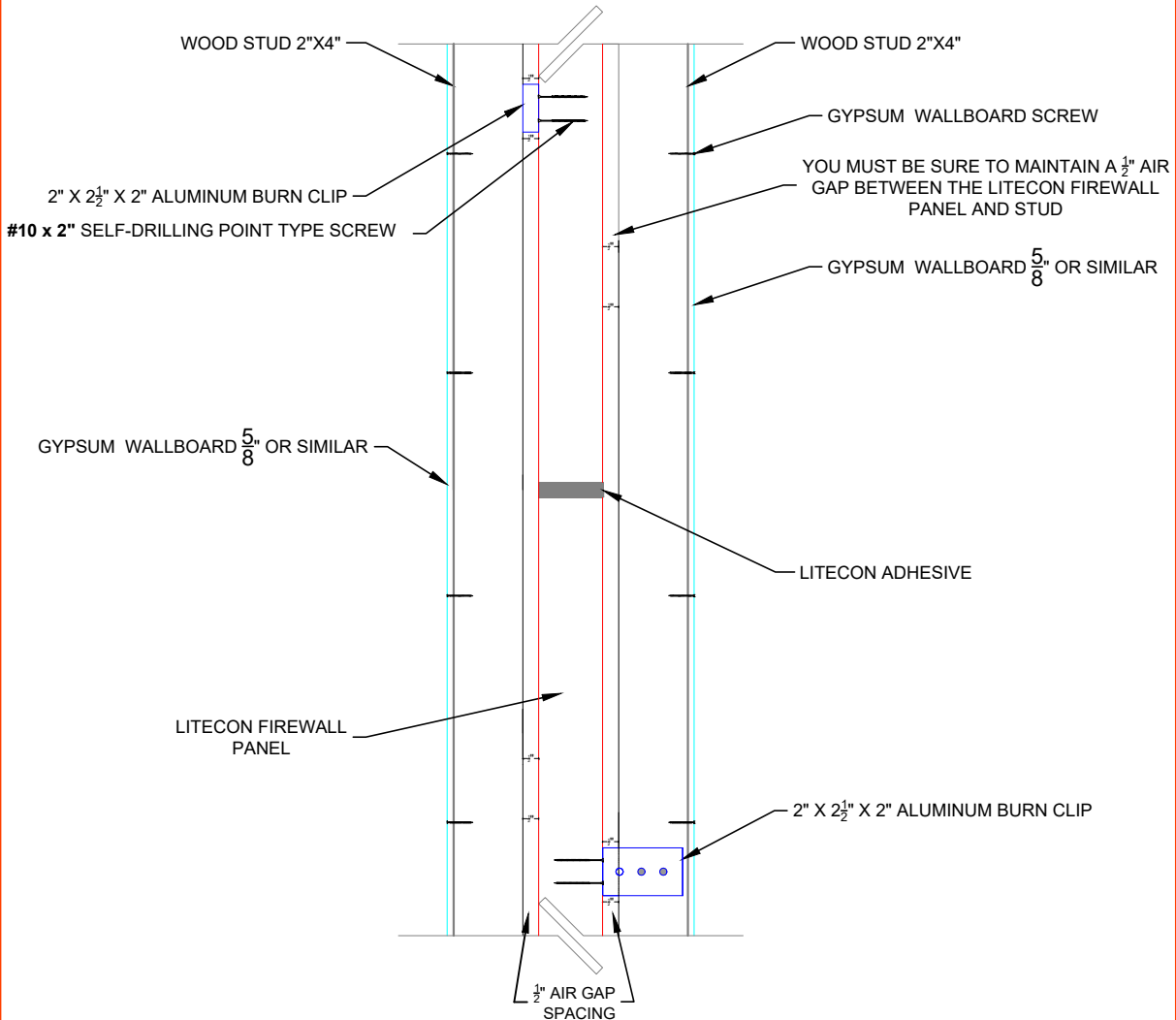
REVISED:
V.G.C.

VERSION:
V16 220801/AS BUILT

PAGE:
5 OF 5

LITECON FIREWALL PANEL SECTION A

ACOUSTIC TEST 8 FT: LITECON FIREWALL PANEL + GYPSUM WALLBOARD



NOTES

- 1.- DRYWALL SCREWS #6 X $1\frac{5}{8}$ " ARE RECOMMENDED (FOR ATTACHING GYPSUM BOARD TO WOOD STUD)



QAI LABORATORY

LABORATORY NUMBER: 13180

DATE: 11/28/2022

DRAWINGS VERIFIED BY: LD