



CLIENT:

ZS2 Technologies 9128 52nd Street S.E. Calgary AB T2C5A9

Project No: MED-1160

Report Date: November 22, 2023

SAMPLE ID:

Series: ZS2 SIP Wall

SAMPLING DETAIL:

The test sample manufactured by ZS2 Technologies was submitted directly to QAI by

the client. Samples were selected for testing by a QAI Laboratory staff member.

DATE OF RECEIPT:

Samples were received at the QAI Miami Laboratory on September 1, 2023, and in

good condition.

TESTING PERIOD:

October 27, 2023 through November 11, 2023.

TESTING LOCATION:

QAI Laboratories - Miami, Florida, USA

AUTHORIZATION:

QAI proposal number 23JL08011r1 dated August 3, 2023, signed by ZS2

Technologies staff Doug Brown, dated August 8, 2023.

TEST PROCEDURE:

Testing to the following requirements:

TAS 201-94 Impact Test Procedures

TAS 202-94 (loads) Criteria For Testing Impact & Nonimpact Resistant Building

Envelope Components Using Uniform Static Air Pressure

TAS 203-94 Criteria For Testing Products Subject To Cyclic Wind Pressure

Loading

TEST RESULTS:

The ZS2 SIP Wall achieved passing results found within this test report when tested

in accordance with the TAS 201, TAS 202 (loads) and TAS 203.

CONTENTS:

Test report pages 1 through 9.

Prepared By

Signed for and who behalf of QAI Laborater

Digitally signed by Jose Sanchez Date: 2023.11.28

15:38:35 -05'00'

Jose Sanchez **Operation Manager**

Lusinda Delgado **Technical Report Writer**

Qusinda Delgado

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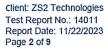
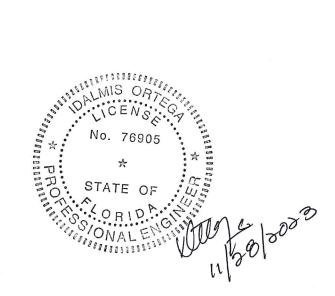


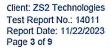


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Technicians: Alejandro Lomos Jose Sanchez

W/E: Professional Engineer: Idalmis Ortega, P.E. FL License No. 76905







DESCRIPTION OF SAMPLE					
Model Designation:	Series: ZS2 SIP Wall				
Overall Size:	96" wide by 120" height by 6 1/2" thick				
Overall Induvial Panel Size:	48" wide by 120" height by 6 1/2" thick				
Configuration:	0-0				
Sample A-1, B-1 and C-1					

Panel Construction

The ZS2 SIP panels are composed of 2 x 6 spruce pine wood as studs and top/bottom plate with an expanded polystyrene core (1 lb/cu. Ft) and a 1/2"-thick **Magnesium Oxide board on the interior and exterior. The MGO board was fastened to the studs and plates using 2 1/2" by 0.094" ring shank nails spaced at top and bottom 1" from the ends and 3" on center; left and right sides, 2 1/2" from the ends and 3" on center.

Top and Bottom Plate Installation

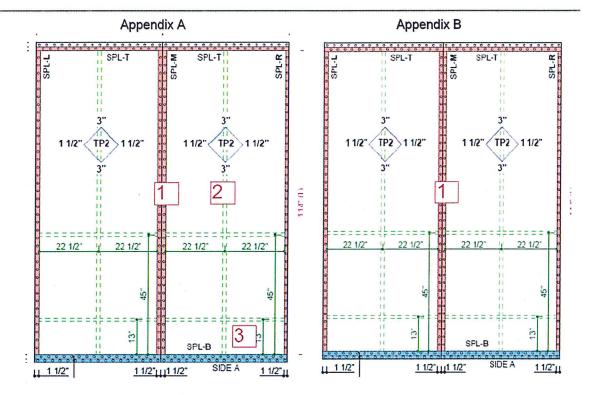
The top and bottom plates were fastened together using a 1/4" bead of adhesive type TiteBond and (3) No. 10 x 3" flat head wood screws to each stud.

Sample: A-1	Temperatur	e:	78.9°F	Barometric Reading: 29.86 inch	nes Hg			
Title of Test		Notes		2	- Table 1			
Large Missile I	mpact Test							
Missile Weigh	nt	Missile						
9.25 pounds		2" by 4"	by 92" long					
	see appendix A							
Impact	Speed	-	Results	Add. Info				
1	49.8 ft/s	sec	Passed					
2	49.9 ft/s	sec	Passed					
3	49.6 ft/s	sec	Passed					

Sample:	A-1	Tempe	erature: 7	rature: 78.9°F			etric Re	eading:	29.86 inches Hg	
Title	of Tes	st		Positive	Pressure	е		Notes		
Cyclic Wi	nd Loa	d Test		110.0 psf						
	see appendix B									
Range	Cycle	e M	easured	Reading#	Deflect	ion	Permanent Set		Recovery	Results
0.0-0.5	600	1.	0 sec	1	1.178"	(0.048"		96%	Passed
0.0-0.6	70	1.	0 sec							
0.0-1.3	1	1.	0 sec		2013 In 2 - 201 Pe				_	

Sample:	A-1 Te	emperature:	78.9°F	В	arometric l	Reading:	29.86 inche	s Hg
Title of Test Negative Press				e Pressure		Notes		
Cyclic W	ind Load	Test	110).0 psf				
see appendix B								
Range	Cycle	Measured	Reading#	Deflection	Perma	nent Set	Recovery	Results
0.0-0.5	600	1.0 sec	1	1.240"	0.056"		95%	Passed
0.0-0.6	70	1.0 sec						
0.0-1.3	1	1.0 sec						



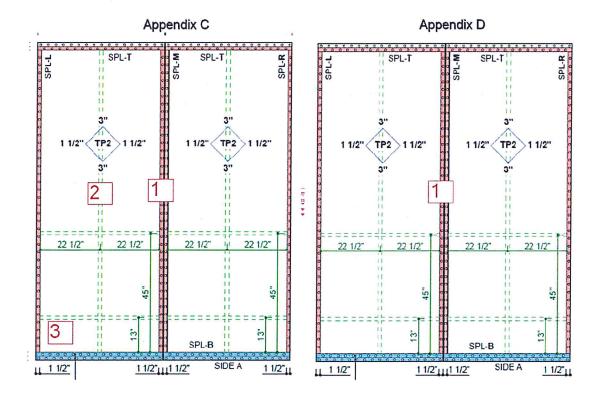


Sample: B-1	Femperatur	e:	79.8°F	Barometric Reading: 29.86 inches Hg				
Title of Test		Notes						
Large Missile Impact Test								
Missile Weight		Missile						
9.25 pounds 2" by 4" by 92" long								
	see appendix C							
Impact	Speed		Results	Add. Info				
1	49.7 ft/s	sec	Passed					
2	49.5 ft/s	sec	Passed					
3	49.9 ft/s	sec	Passed					

Sample:	B-1 Te	emperature:	79.8°F	Baro	metric R	eading:	29.86 inches Hg	
Title	of Test		Positive	Pressure		Notes		
Cyclic Wi	ind Load 7	Test	110.	0 psf				
	see appendix D							
Range	Cycle	Measured	Reading#	Deflection	Permanent Set		Recovery	Results
0.0-0.5	600	1.0 sec	1	1.243"	0.026"		98%	Passed
0.0-0.6	70	1.0 sec						
0.0-1.3	1	1.0 sec						



Sample	B-1 Te	emperature:	79.8°F	E	Reading:	29.86 inches	s Hg	
Title of Test			Negative	e Pressure		Notes		
Cyclic W	ind Load	Test	110	0.0 psf				
see appendix D								
Range	Cycle	Measured	Reading#	Deflection	n Permar	nent Set	Recovery	Results
0.0-0.5	600	1.0 sec	1	1.346"	0.038"		97%	Passed
0.0-0.6	70	1.0 sec						
0.0-1.3	1	1.0 sec						



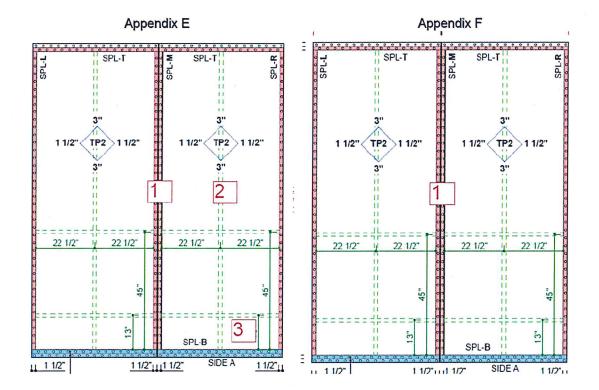
Sample: C-1	Temperatur	e:	79.8°F	Barometric Reading: 29.86 inches Hg				
Title of Test		Notes						
Large Missile I	Impact Test		4					
Missile Weigh	nt	Missile						
9.25 pounds 2" by 4" by 92" long								
	see appendix E							
Impact	Speed		Results	Add. Info				
1	49.9 ft/s	sec	Passed					
2	49.6 ft/s	sec	Passed					
3	49.8 ft/s	sec	Passed					





Sample:	C-1 T	emperature: 7	9.8°F	Baro	Barometric Reading: 29.86 inch			s Hg
Title	e of Test		Pressure		Notes			
Cyclic W	ind Load	Test	110.	0 psf				
see appendix F								
Range	Cycle	Measured	Reading#	Deflection	Permar	ent Set	Recovery	Results
0.0-0.5	600	1.0 sec	1	1.045"	0.036"		97%	Passed
0.0-0.6	70	1.0 sec						
0.0-1.3	1	1.0 sec						

Sample	C-1 To	emperature:	79.8°F	В	arometric l	Reading:	29.86 inche	s Hg
Titl	Title of Test Negative Pres					Notes		
Cyclic W	ind Load	Test	110).0 psf				
see appendix F								
Range	Cycle	Measured	Reading#	Deflection	Permai	nent Set	Recovery	Results
0.0-0.5	600	1.0 sec	1	1 1.149" 0.040"			97%	Passed
0.0-0.6	70	1.0 sec		-				
0.0-1.3	1	1.0 sec						







DESCRIPTION OF SAMPLE					
Model Designation:	Series: ZS2 SIP Wall				
Overall Size:	48" wide by 120" height by 6 1/2" thick	5			
Configuration:	0				
Sample D-1					

Panel Construction

The ZS2 SIP panel was composed of 2 x 6 spruce pine wood as studs and top/bottom plate with an expanded polystyrene core (1 lb/cu. Ft) and a 1/2"-thick **Magnesium Oxide board on the interior and exterior. The MGO board was fastened to the studs and plates using 2 1/2" by 0.094" ring shank nails spaced at top and bottom 1" from the ends and 3" on center; left and right sides, 2 1/2" from the ends and 3" on center.

Top and Bottom Plate Installation

The top and bottom plates were fastened together using a 1/4" bead of adhesive type TiteBond and (3) No. 10 x 3" flat head wood screws to each stud.

Sample: D-1 Temperature: 79.8°F		Barometric Reading: 29.88 inches Hg
Title of Test	Pressure	Notes
1/2 Structural Load Test Positive Load	82.5 psf	8
	Results	Passed

Sample: D-1	Temperature:	79.8°F	Barometric R	eading: 29.88 inches Hg
Title of Test		Pressure	Notes	
Design Load	Test Positive Load	110.0 psf		
see appendix G				
Reading#	Deflection	Permeant Set	Results	Add. Info
1	0.541"	0.030"	Passed	

Sample: D-1 Temperature: 79.8°F		Barometric Reading: 29.88 inches Hg
Title of Test	Pressure	Notes
1/2 Structural Load Test Negative Load	82.5 psf	
	Results	Passed

Sample: D-1	Temperature:	79.8°F	Barometric	Reading: 29.88 inches Hg
	Title of Test	Pressure	Notes	
Design Load Test Negative Load		110.0 psf		
		see append	dix G	
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.618"	0.042"	Passed	

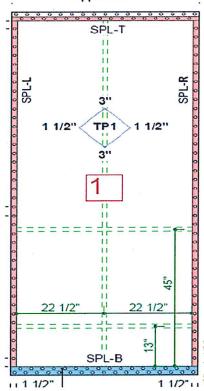
Sample: D-1 Temperatur	e: 79.8°F	Barometric	Reading: 29.88 inches Hg
Title of Test	Pressure	Notes	
Uniform Structural Test Posi	tive Load 165.0 psf		
	see append	dix G	
Reading# Deflection	Permanent Set	Results	Add. Info
1 1.037"	0.241"	Passed	





Sample: D-1 Temperature: 79.8°F		Barometric	: Reading: 29.88 inches Hg	
Title of Test Pressure		Notes		
Uniform Stru	Uniform Structural Test Negative Load 16			
	see appendix			
Reading#	Deflection	Permanent Set	Results	Add. Info
1	1.140"	0.188"	Passed	

Appendix G





Client: ZS2 Technologies Test Report No.: 14011 Report Date: 11/22/2023

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Notes

* designates measurements by laboratory

** as per manufacturer

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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.

At conclusion of above tests, there was no apparent damage to sample, glass or fasteners. Test specimens were covered with 1.5 mil plastic sheeting to seal from air leakage when load test were performed, however this had no effect on above results.

Remarks

Detailed drawings and digital video disc of testing will be retained by QAI for a period of five years from the original test date, and test report for a period of ten years. Due to the code cycle change of four years, it is recommended that this report be evaluated during the lifespan of this document.

This product was tested in accordance with the TAS 201, TAS 202 (loads) and TAS 203, with the deviation that one sample was tested.

REVISION HISTORY:

11/22/2023: Initial report release

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

TITLE

LUMBER TO BE No.2 S-P-F OR BETTER UNLESS OTHERWISE SPECIFIED AND DESIGNED IN ACCORDANCE WITH CAN-O86-19.

STUD/POST SIZING IS TYPICALLY 1" LESS THAN THE SPECIFIED PANEL THICKNESS. PLIES FOR POSTS AND SPLINES ARE TO BE AS SPECIFIED ON THE DRAWINGS.

Stud Size	Panel Thickness	Window and Door Jamb Recommendation*
2x4	4.5" THK PANEL	5-1/8" THK
2x6	6.5" THK PANEL	7-1/8" THK
2x8	8.25" THK PANEL	8-7/8" THK
2x10	10.25" THK PANEL	10-7/8" THK
2x12	12.25" THK PANEL	12-7/8" THK

*ASSUMES THE USE OF ONE LAYER OF 1/2" DRYWALL.

ENGINEERED WOOD BEAMS TO BE LAMINATED VENEER LUMBER (LVL) 2900Fb 2.0E OR APPROVED EQUIVALENT.

TECHPANEL TO BE FABRICATED IN ACCORDANCE WITH ZS2 PANEL BUILDING SYSTEM MANUAL

ZS2 PANEL EXPANDED POLYSTYRENE (EPS) CORE-INSULATION SHALL COMPLY WITH CAN/ULC-S701, TYPE 1 OR ASTM C578-01, TYPE 1.

1/4" BEAD OF ADHESIVE USED WITH PANELS MUST BE WOOD-TO-WOOD BONDING. ADHESIVES ARE NOT TO COME INTO CONTACT WITH EPS.

EXPANDING FOAM SEALANT IS REQUIRED WHEN SEALING JOINTS IN CONTACT WITH THE EPS FOAM INSULATION.

APPLY THE SEALANT IN A 1/4" BEADS, 2 ROWS FOR TECH PANELS UP TO AND INCLUDING 6.5" WIDTH, AND 3 ROWS FOR TECH PANELS UP TO AND INCLUDING 10.25" WIDTH. INSTALL ADHESIVES AS PER MANUFACTURES RECOMMENDATIONS. ADHESIVE ACCEPTABLE TO USE IS TITEBOND SUBFLOOR OR APPROVED EQUIVALENT.

ITEMS NOT SHOWN ON TECH PANEL DRAWINGS SUCH AS LINTELS, FLOOR JOISTS, ROOF TRUSSES, BEAMS, POSTS, TELEPOST LOADS TO BE ENGINEERED BY THE SUPPLIER OF THE MATERIAL OR THE ENGINEER OF RECORD.

TRUSS LAYOUTS, JOIST LAYOUTS, AND FOUNDATION TO BE PROVIDED TO THE SIP ENGINEER, CONFIRMING STRUCTURE LOADING THROUGHOUT ENTIRE BUILDING.

REFER TO THE MANUFACTURING DRAWINGS

BEFORE INSTALLING THE LAST PANEL ON A WALL MEASURE REMAINING DISTANCE AND COMPARE TO LAST PANEL DIMENSIONS. ADJUST PANEL ACCORDINGLY PRIOR TO INSTALLING.

TECHPANEL WALLS ARE WIDER THAN THE TYPICALLY FRAMED WALLS. OWNER/ARCH TO ENSURE WINDOW AND DOOR SUPPLIER ALLOWS FOR INCREASED THICKNESS AT JAMBS. REVIEW RECOMMENDED REQUIREMENTS IN TABLE ABOVE.

DON'T MAKE ANY FIELD MODIFICATIONS TO TECH PANELS, SUCH AS OPENINGS/PENETRATIONS, CHASES WITHOUT A REVIEW BY AN ZS2 DESIGN PROFESSIONAL OR THE TECH PANEL PROJECT ENGINEER.

RADON ACCOMODATIONS AND REQUIREMENTS ARE TO FOLLOW LOCAL BUILDING CODE.

PRIOR TO CONSTRUCTION:

IT IS VERY IMPORTANT TO READ AND UNDERSTAND THE BUILDING DETAILS THAT ARE SENT FOR YOUR BUILDING. WE ENCOURAGE YOU AND/OR YOUR CONTRACTOR/BUILDER TO REVIEW THESE BEFORE STARTING ON YOUR SIP PROJECT. CONTRACTOR/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HEREIN AND IS HELD RESPONSIBLE TO NOTIFY ZS2 OF ANY DISCREPANCIES FOR ADJUSTMENT.

ARCHITECTURAL:

IT IS RECOGNIZED THAT THIS PROJECT HAS A LOCAL REGISTERED ARCHITECT. AS SUCH, THESE DRAWINGS C/W THE STRUCTURAL ENGINEER 'S STAMP DO NOT INCLUDE ANY ARCHITECTURAL REQUIREMENTS SUCH AS: CODE CHECK PARAMETERS, ACCESS SPECIFICATIONS INTO EACH UNIT, FIRE RATINGS, EXTERIOR FINISH, ETC. THESE DRAWINGS ARE LIMITED TO STRUCTURAL DRAWINGS AND STRUCTURAL ENGINEERING FOR THE MODULAR UNITS C/W ZS2 SIP PANELS.

FOUNDATIONS:

FOUNDATIONS ARE TO BE DESIGNED BY THE ENGINEER OF RECORD. ZS2 DOES NOT ACCEPT ANY LIABILITY FOR POSSIBLE ERRORS OR DEFECTS WITHIN THE FOUNDATION WORKS THAT MAY HAVE A NEGATIVE IMPACT ON THE PANELS.

EXTERIOR FINISH:

ALTHOUGH THE EXTERIOR FINISH IS BEING DESIGNED AND INSTALLED BY OTHERS. IT IS IMPORTANT THAT THESE FINISHING MATERIALS RUN CONTINUOUS FROM ONE PANEL TO ANOTHER.

**** THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE PROPER WEATHER BARRIERS (I.E. HOUSE WRAPS, FLASHING, ROOF UNDERLAYMENT, MEMBRANE RAINSCREEN FLASHING, ETC..)

AN EXTERIOR AIR DIFFUSION AND WATER BARRIER CONTROL MUST BE INSTALLED AS PROVIDED BY THE COORDINATING PROFESSIONAL OF RECORD. ALL SYSTEMS AS PER MANUFACTURES RECOMMENDATIONS. INSTALL PROPER FLASHING AND SEALANTS AROUND ALL ROUGH OPENINGS AND PENETRATIONS AS REQUIRED FOR WOOD BUILDINGS. CONSULT YOUR LOCAL AUTHORITY AND AN CERTIFIED ENVELOPE CONSULTANT FOR AN ALTERNATIVE PRODUCT APPROVAL***

AN APPROVED INTERNAL VAPOR BARRIER RETARDER IS REQUIRED ON PANELS. THE INTERNAL VAPOR BARRIERS SHALL HAVE A PERMEANCE NOT GREATER THAN 60 NG/(Pa·S·m2), TESTED AND MEASURED IN ACCORDANCE WITH ASTM E96/E 96M, WATER VAPOR TRANSMISSION OF MATERIALS. AN APPROVED SYSTEM TO SEAL IS USING A 6MIL POLY C/W ACOUSTIC SEAL. WHEN USING AN ALTERNATIVE SYSTEM (COATINGs), CONSULT WITH A BUILDING ENVELOPE SPECIALIST OR PROJECT ENGINEER.



OAI LABORATORY

LABORATORY NUMBER: 14011

DATE: 11/28/2023

DRAWINGS VERIFIED BY: LD

technologies

23-2222

ZS2 QAI ASTM TESTS / FP#

PRIOR TO CONSTRUCTION: BUILDER/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HERE IN AND IS HELD RESPONSIBLE TO NOTIFY ANY DISCREPANCIES FOR ADJUSTMENT.

MANUFACTURING DRAWING SET

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- PANELS LABELLED SAME ALPHABETS
ARE ASSEMBLED AS JUMBO (SINGLE

- RING SHANK NAILS (3" O.C ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS) - PANEL STICKERS SHOULD BE FACING OUTSIDE AFTER INSTALL.

UNIT) IN FACTORY

- LIFTING LUGS FOR PANELS ON THE TOP PLATE. MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND

MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

	DRAWN BY	DT
	PM	BC
	PM CONTACT	BC -

REVISIONS

DATE	DESCRIPTION	APPROVED
		BC

SHEET NAME

TITLE

SHEET NO.

200



2023-11-14 10:18:07 AM

REV.

TEST: TAS **201** 6 1/2" SAMPLE **D**

1/2"

1 1/2"

H = 120" 10' - 0" 120" (S)

114" (F)

SPL-L

48" (S)

0

45" (F)

48" (L)

3"

TP2

1 1/2"

22 1/2"

SPL-T

22 1/2"

1/8"

1/8"

SPL-M

22 1/2"

48" (S)

45" (F)

SPL-T

1 1/2"

SPL-B

1 1/2" 1 1/2"

₁1/8"

96 1/8" (L)

SIDE A

45" (F)

48" (S)

B = 48"

4' - 0"

3"

TP2

22 1/2"

45"

1 1/2"]]

22 1/2"

SPL-

22 1/2"

LEGEND (S)- SHEATHING

(F)- FOAM

(L)- LUMBER

TYPE 1, LEAD IN SIDE A FOAM

LUMBER SPF #2 2 1/2" 19x0.094 RING SHANK

NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END

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ZS2 QAI ASTM TESTS / FP#

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MANUFACTURING DRAWING SET

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LEGEND

SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

- PANELS LABELLED SAME ALPHABETS ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY - RING SHANK NAILS (3" O.C
- ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS) - PANEL STICKERS SHOULD BE FACING
- OUTSIDE AFTER INSTALL. - LIFTING LUGS FOR PANELS ON THE TOP PLATE.
- MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

	DRAWN BY	DT
	РМ	BC
	PM CONTACT	BC -

REVISIONS

DATE	DESCRIPTION	APPROVED
		BC

SHEET NAME

TAS 201 - SAMPLE D

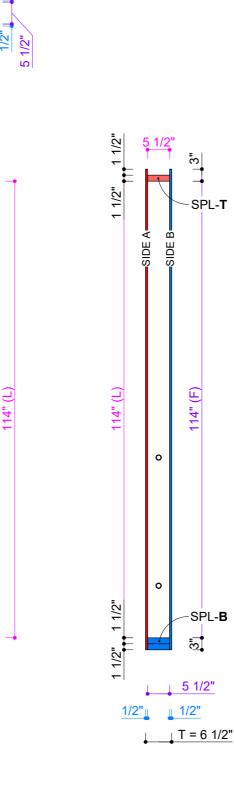
SHEET NO.

201.D





REV.



QAI LABORATORY

LABORATORY NUMBER: 14011

DATE: 11/28/2023

DRAWINGS VERIFIED BY: LD

REMOVABLE ITEMS: SITE INSTALLED

1 1/2"

45" (F)

48" (S)

B = 48"

4' - 0"

TEST: TAS **201** 6 1/2" SAMPLE E

H = 120" 10' - 0" 120" (S)

114" (F)

1 1/2"

REMOVABLE ITEMS: SITE INSTALLED

45" (F)

48" (S)

B = 48"4' - 0"

LEGEND (S)- SHEATHING

(F)- FOAM

FOAM LUMBER (L)- LUMBER

TYPE 1, LEAD IN SIDE A

SPF #2

2 1/2" 19x0.094 RING SHANK NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END

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ZS2 QAI ASTM TESTS / FP#

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MANUFACTURING DRAWING SET

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LEGEND

SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

- PANELS LABELLED SAME ALPHABETS ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY - RING SHANK NAILS (3" O.C

ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS)

- PANEL STICKERS SHOULD BE FACING OUTSIDE AFTER INSTALL. - LIFTING LUGS FOR PANELS ON THE TOP PLATE.

MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

	DRAWN BY	DT
	РМ	BC
	PM CONTACT	BC -

REVISIONS

DATE	DESCRIPTION	APPROVED	
		BC	

SHEET NAME

TAS 201 - SAMPLE E

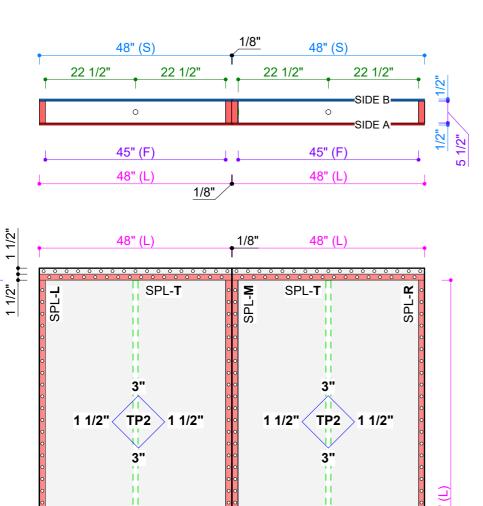
SHEET NO.

201.E





REV.



22 1/2"

SPL-B

1 1/2" | 1 1/2"

₁1/8"

96 1/8" (L)

SIDE A

45" (F)

48" (S)

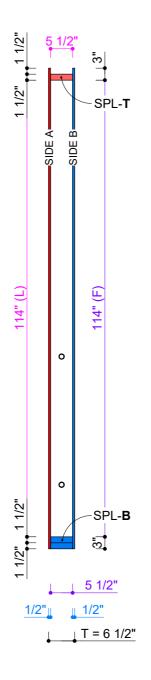
B = 48"

4' - 0"

45"

1 1/2"]]

22 1/2"





QAI LABORATORY LABORATORY NUMBER: 14011 DATE: 11/28/2023 **DRAWINGS VERIFIED BY: LD**

TEST: TAS **201** 6 1/2" SAMPLE F LEGEND (S)- SHEATHING (L)- LUMBER

(F)- FOAM

QAI LABORATORY

DATE: 11/28/2023

LABORATORY NUMBER: 14011

DRAWINGS VERIFIED BY: LD

LUMBER

TYPE 1, LEAD IN SIDE A

SPF #2

2 1/2" 19x0.094 RING SHANK NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END

technologies

23-2222

ZS2 QAI ASTM TESTS / FP#

PRIOR TO CONSTRUCTION: BUILDER/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HERE IN AND IS HELD RESPONSIBLE TO

MANUFACTURING DRAWING SET

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SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

- PANELS LABELLED SAME ALPHABETS ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY - RING SHANK NAILS (3" O.C ADHESIVE,(1/4" BEAD), AND SPRAY
- FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS) - PANEL STICKERS SHOULD BE FACING OUTSIDE AFTER INSTALL.
- LIFTING LUGS FOR PANELS ON THE TOP PLATE.

MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

DRAWN BY	DT
PM	BC
DM CONTACT	DC.

REVISIONS

DATE	DESCRIPTION	APPROVED	
		BC	

SHEET NAME

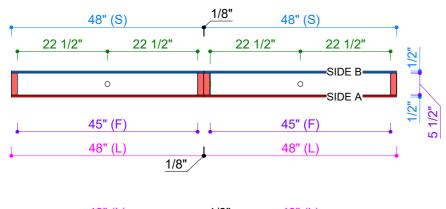
TAS 201 - SAMPLE F

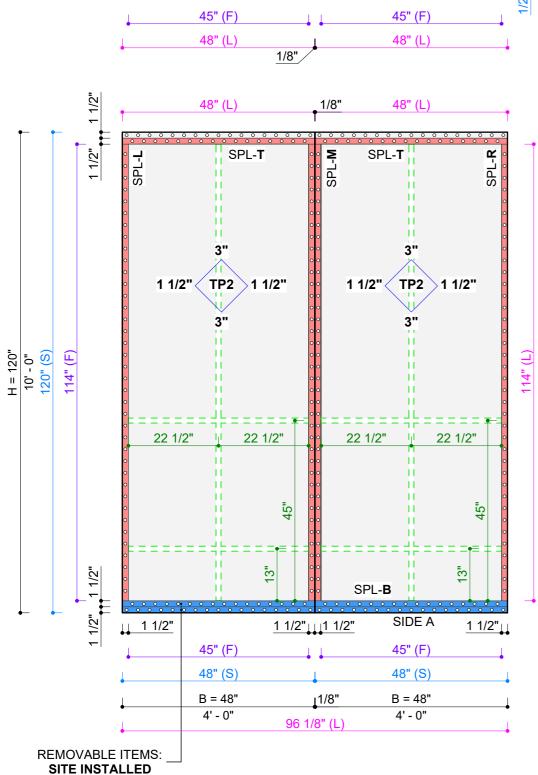
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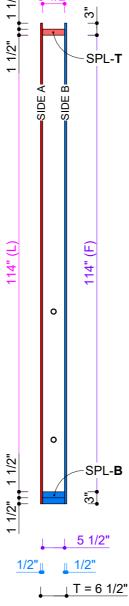
201.F













TEST: TAS **203** 6 1/2" SAMPLE A LEGEND (S)- SHEATHING (L)- LUMBER

(F)- FOAM

FOAM LUMBER

TYPE 1, LEAD IN SIDE A

NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END

SPF #2 2 1/2" 19x0.094 RING SHANK

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23-2222

ZS2 QAI ASTM TESTS / FP#

PRIOR TO CONSTRUCTION: BUILDER/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HERE IN AND IS HELD RESPONSIBLE TO

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SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY - RING SHANK NAILS (3" O.C ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10

- PANELS LABELLED SAME ALPHABETS

- PANELS) - PANEL STICKERS SHOULD BE FACING OUTSIDE AFTER INSTALL. - LIFTING LUGS FOR PANELS ON THE
- TOP PLATE.

MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

DRAWN BY	DT	
PM	BC	
PM CONTACT	BC -	

REVISIONS

DATE	DESCRIPTION	APPROVED
		BC

SHEET NAME

TAS 203 - SAMPLE A

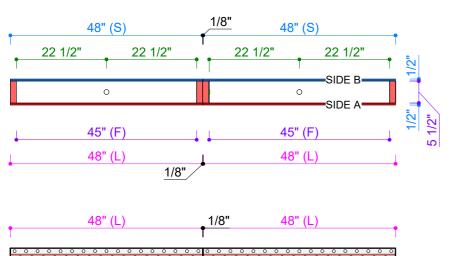
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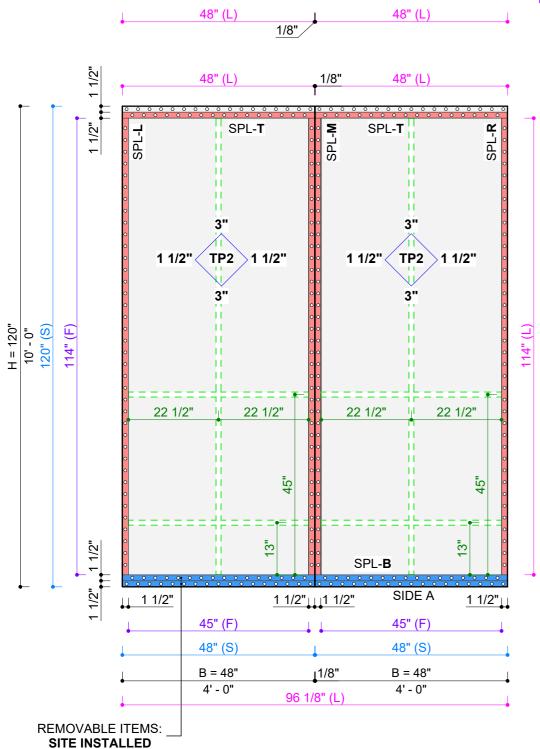
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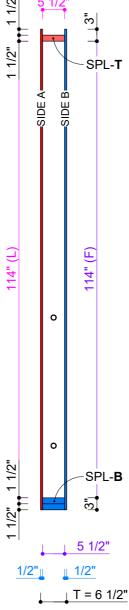




REV.









QAI LABORATORY LABORATORY NUMBER: 14011

DATE: 11/28/2023

DRAWINGS VERIFIED BY: LD

TAS **203** TEST: 6 1/2" SAMPLE B LEGEND (S)- SHEATHING (L)- LUMBER

(F)- FOAM

TYPE 1, LEAD IN SIDE A LUMBER SPF #2

2 1/2" 19x0.094 RING SHANK NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END technologies

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ZS2 QAI ASTM TESTS / FP#

PRIOR TO CONSTRUCTION: BUILDER/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HERE IN AND IS HELD RESPONSIBLE TO

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LEGEND

SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

- PANELS LABELLED SAME ALPHABETS ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY - RING SHANK NAILS (3" O.C

ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS) - PANEL STICKERS SHOULD BE FACING

OUTSIDE AFTER INSTALL. - LIFTING LUGS FOR PANELS ON THE TOP PLATE.

MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.

SITE ADDRESS

	DRAWN BY	DT
	PM	BC
	DM CONTACT	DC .

REVISIONS

DATE	DESCRIPTION	APPROVED
		BC

SHEET NAME

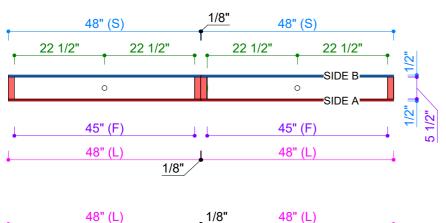
TAS 203 - SAMPLE B

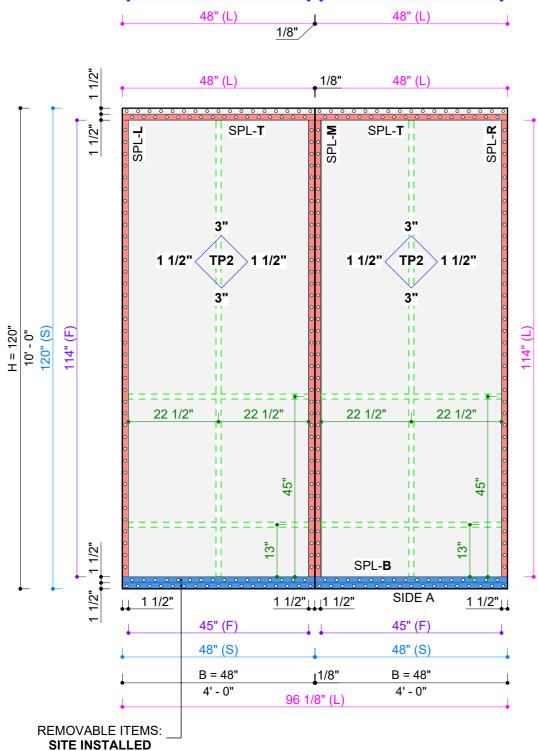
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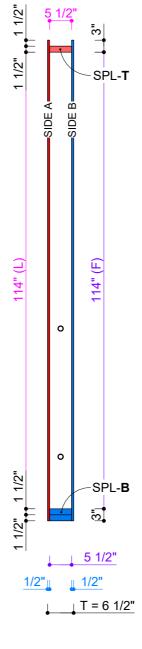
203.B













QAI LABORATORY LABORATORY NUMBER: 14011

DATE: 11/28/2023

DRAWINGS VERIFIED BY: LD

TEST: TAS **203** 6 1/2" SAMPLE **C**

(S)- SHEATHING

(F)- FOAM

QAI LABORATORY

DATE: 11/28/2023

LABORATORY NUMBER: 14011

DRAWINGS VERIFIED BY: LD

ING LUMBER

M TYPE 1, LEAD IN SIDE A

MBER SPF #2

STENER 2 1/2" 19x0.094 RING SHANK

NAILS, HDG @ 3" O.C. EDGE, 12" O.C. FIELD, 2.5" END technologies

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ZS2 QAI ASTM TESTS / FP#

PRIOR TO CONSTRUCTION; BUILDER/OWNER IS TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS NOTED HERE IN AND IS HELD RESPONSIBLE TO NOTIFY ANY DISCREPANCIES FOR ADJUSTMENT.

MANUFACTURING DRAWING SET

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LEGEND

SITE INSTALLED LUMBER

FACTORY INSTALLED LUMBER
TECHBOARD (SIDE A / SIDE B)

○ SIP SCREW HEAD

— OTHER STRUCTURE CENTERLINE

ARE ASSEMBLED AS JUMBO (SINGLE UNIT) IN FACTORY
- RING SHANK NAILS (3" O.C ADHESIVE,(1/4" BEAD), AND SPRAY

- PANELS LABELLED SAME ALPHABETS

- ADHESIVE,(1/4" BEAD), AND SPRAY FOAM PATTERN (2 ROWS FOR 2X6 & 2X4 PANELS, AND 3 ROWS FOR 2X10 PANELS) - PANEL STICKERS SHOULD BE FACING
- OUTSIDE AFTER INSTALL.
 LIFTING LUGS FOR PANELS ON THE TOP PLATE.
- MUST REFER TO ENGINEERING SET'S DETAILS FOR STRAPPING DETAILS AND OTHER DETAILS.



DRAWN BY	DT
PM	BC
PM CONTACT	BC -

REVISIONS

DATE	DESCRIPTION	APPROVED
		BC

SHEET NAME

TAS 203 - SAMPLE C

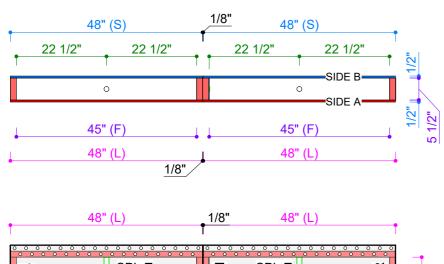
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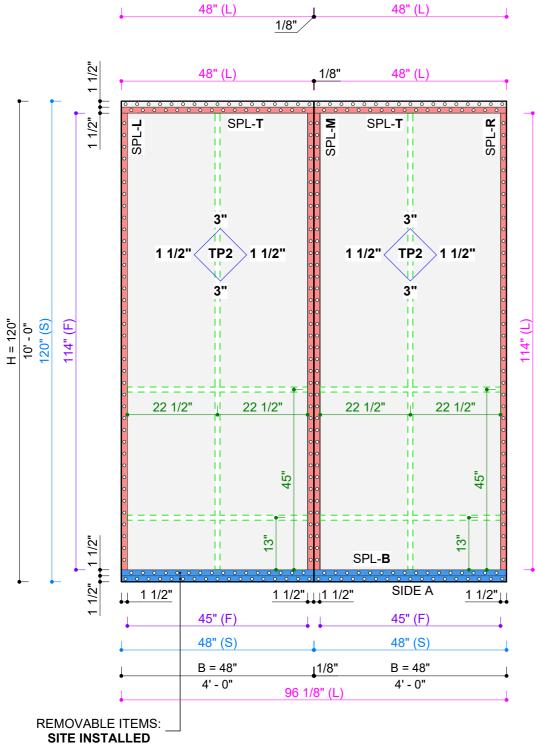
203.C

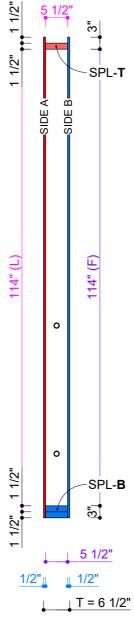




REV.







SPL-T

