



TEST REPORT

Date	2025-04-17
Report Number	0093-30-2-5934
Client	Engage Building Products
Address	101-4441 76th Ave SE, Calgary, AB T2C 2G8

SUBJECT

Summary conclusion and application of test results derived from ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*, completed for Easy Trim's QuickPanel 3mm Aluminum Plate Systems.

TEST SUMMARY

Twenty-seven (27) representative wall assemblies have been tested for Transverse Load – Negative Wind Load in accordance with ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*, at EasyTrim Reveals in Calgary, Alberta.

PRODUCT DESCRIPTION

QuickPanel 3mm Aluminum Plate Systems are aluminum panels with back framing stiffeners affixed to framing, serving as an exterior wall covering.

3mm Plate: 100% solid 3003 H14 aluminum with a nominal 3mm thickness, and a maximum width of 62" (1575mm), and can be custom cut to length.

Stiffeners: The stiffeners are two-piece 6063-T6 aluminum shaped in to the dimensions shown in the part drawings in the appendix.

Fasteners And Adhesives: The fastener used is #10-12 x 1-1/2" HWH Self Drilling Screw in to framing, and 1/16" Double sided tape with silicone along the points of contact, frame and stiffener.



Table 1: Quick Panel Test Assemblies Configurations

Test Series	Configuration	Stiffener Fixing	Framing	Fastener	Sheathing
QH2	3 Horizontal Panel Stiffeners @ 30" o/c	Attached QP backplate. One screw through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer, Dowsil 995 silicon and double-sided tape	½" Drywall
QH5	No Stiffeners	None	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer, Dowsil 995 silicon and double-sided tape	½" Drywall
QJ1	4 Horizontal Stiffeners @ 24" o/c	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 16 ga 50 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer and double-sided tape	½" Drywall
QJ2	9 Horizontal Stiffeners @ 12" o/c	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 16 ga 50 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer and double-sided tape	½" Drywall
QJ4	4 Horizontal Stiffeners @ 24" o/c	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer and double-sided tape	½" Drywall
QJ6	1 Horizontal stiffener centered	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer and double-sided tape	½" Drywall
QJ7	4 Horizontal Stiffeners @ 24" o/c	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer, Dowsil 995 silicon and double-sided tape	½" Drywall
QJ8	9 Horizontal Stiffeners @ 12" o/c	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer, Dowsil 995 silicon and double-sided tape	½" Drywall
QJ9	1 Horizontal stiffener centered	Attached to nailing fin of vertical QP backplate. Two screws through stud and tape to panel.	2x6 18 ga 33 ksi steel stud @ 16" o/c.	#10-12 x 1-1/2" HWH self driving screw c/w EDPM washer, Dowsil 995 silicon and double-sided tape	½" Drywall



Table 2: Testing Results

Test	Load Data					Allowable Deflection ^{1,3} at Deflection Service Load				
	Max Load (psf)	Max Load Ave. (psf)	Deviation from Ave.	< 15% Variance	Deflection Service Load (psf) ¹	L/180 Limit (in.)	Measured Deflection (in.) ²	L/60 Limit (in.)	Measured Deflection (in.) ²	Measure > Limit
						Wall		Panel		
QH2-1	104.6	117.9	12.7%	OKAY	36.6	0.667	0.078	0.50	0.209	OKAY
QH2-2	135.2		14.7%	OKAY	47.3	0.667	0.124	0.50	0.336	OKAY
QH2-3	114.0		3.4%	OKAY	39.9	0.667	0.158	0.50	0.256	OKAY
QH5-1	60.3	66.6	10.4%	OKAY	21.1	0.667	N/A	1.00	1.46	EXCEEDS ⁴
QH5-2	71.0		6.6%	OKAY	24.9	0.667	N/A	1.00	1.47	EXCEEDS ⁴
QH5-3	68.6		3%	OKAY	24.0	0.667	N/A	1.00	1.58	EXCEEDS ⁴
QJ1-1	176.6	160.8	9.8%	OKAY	61.8	0.667	0.170	0.40	0.203	OKAY
QJ1-2	145.1		10.8%	OKAY	50.8	0.667	0.115	0.40	0.166	OKAY
QJ1-3	160.7		0.06%	OKAY	56.2	0.667	0.181	0.40	0.166	OKAY
QJ2-1	238.0	240.8	1.2%	OKAY	83.3	0.667	0.054	0.20	0.057	OKAY
QJ2-2	224.5		7.3%	OKAY	78.6	0.667	0.172	0.20	0.067	OKAY
QJ2-3	260		7.9%	OKAY	91.0	0.667	0.205	0.20	0.089	OKAY
QJ4-1	190.4	181.6	4.8%	OKAY	66.6	0.667	0.069	0.40	0.108	OKAY
QJ4-2	180.0		0.8%	OKAY	63.0	0.667	0.161	0.40	0.115	OKAY
QJ4-3	174.5		4.1%	OKAY	61.1	0.667	0.150	0.40	0.090	OKAY
QJ6-1	97.8	98.5	0.7%	OKAY	34.2	0.667	0.064	1.00	0.662	OKAY
QJ6-2	106.1		7.7%	OKAY	37.1	0.667	0.216	1.00	0.580	OKAY
QJ6-3	91.6		7.5%	OKAY	32.1	0.667	0.052	1.00	0.176	OKAY
QJ7-1	164.5	176.0	7.0%	OKAY	57.6	0.667	0.142	0.40	0.077	OKAY
QJ7-2	180.7		2.7%	OKAY	63.2	0.667	0.134	0.40	0.156	OKAY
QJ7-3	182.9		3.9%	OKAY	64.0	0.667	0.138	0.40	0.162	OKAY
QJ8-1	306.1	309.5	1.1%	OKAY	107.1	0.667	0.281	0.20	0.015	OKAY
QJ8-2	302.2		2.4%	OKAY	105.8	0.667	0.259	0.20	0.085	OKAY
QJ8-3	320.1		3.4%	OKAY	112.0	0.667	0.269	0.20	0.015	OKAY
QJ9-1	157.8	149.9	5.3%	OKAY	55.2	0.667	0.152	1.00	0.732	OKAY
QJ9-2	143.1		4.7%	OKAY	50.1	0.667	0.103	1.00	0.163	OKAY
QJ9-3	148.9		0.7%	OKAY	52.1	0.667	0.104	1.00	0.794	OKAY

1. Allowable Deflection Service Load is equal to Allowable Design Load multiplied by 0.7.
2. A linear trendline was created for each data set and used to calculate the wall/panel deflection at the Allowable Deflection Service Load of the test series.
3. Span (L) is the distance between anchorage points of the element being considered.
4. The allowable design load for this series will be adjusted in Table 3.



Table 3: Testing Results Sets Summary

Test Configs	Allowable Design Load ASD (psf) ¹
QH2	58.9
QH5	21.1
QJ1	80.4
QJ2	120.4
QJ4	90.8
QJ6	49.2
QJ7	88.0
QJ8	154.7
QJ9	74.9

1. Allowable design load is lesser of:

- i. Average max test load divided by safety factor of 2.
- ii. Test load divided by 0.7 when panel reaches service deflection limit.
- iii. If data set has samples that exceed 15% tolerance, lowest result divided by safety factor of 2.

CONCLUSION

This test report includes twenty-seven (27) representative wall assemblies that have been tested for Transverse Load – Negative Wind Load in accordance with the criteria of ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*).

The testing results in Table 2 have been evaluated by engineering design methodology in general accordance with ASCE7-22 and has been prepared in a format with design information that is based on the IBC and NBCC Codes. The results are intended to be for informational purposes at this time and not suitable for distribution or use for code compliance or building design.

SIGNED

This report has been prepared and reviewed on behalf of BOCA by:



Sami Teitzel

2025-04-21
Date



Chris Bowness, P.Eng., P.E.

2025-04-21
Date

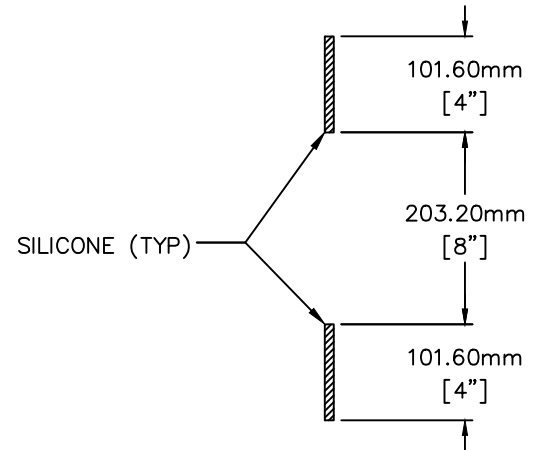
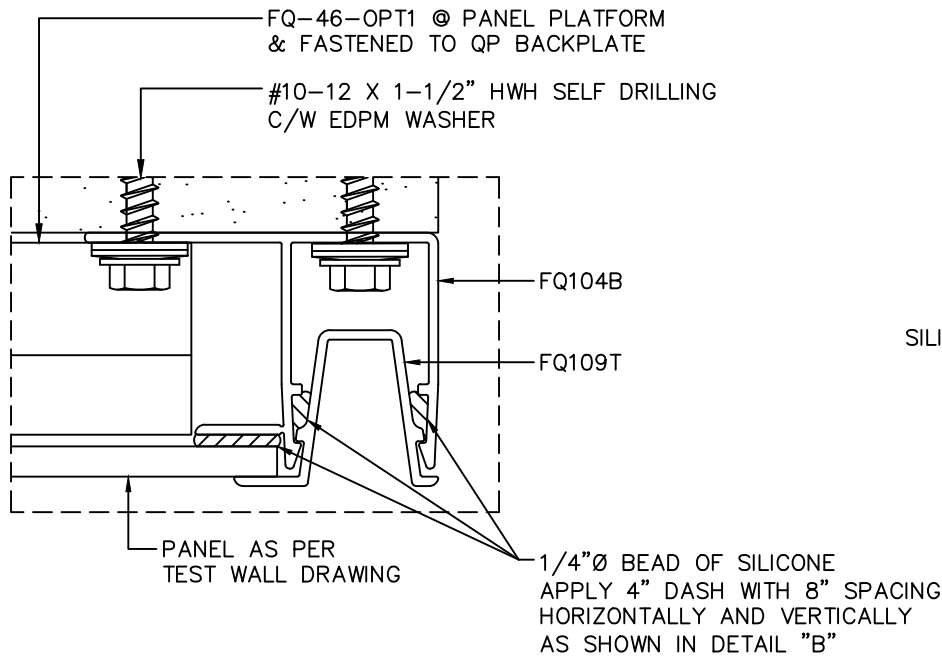




ATTACHMENTS:

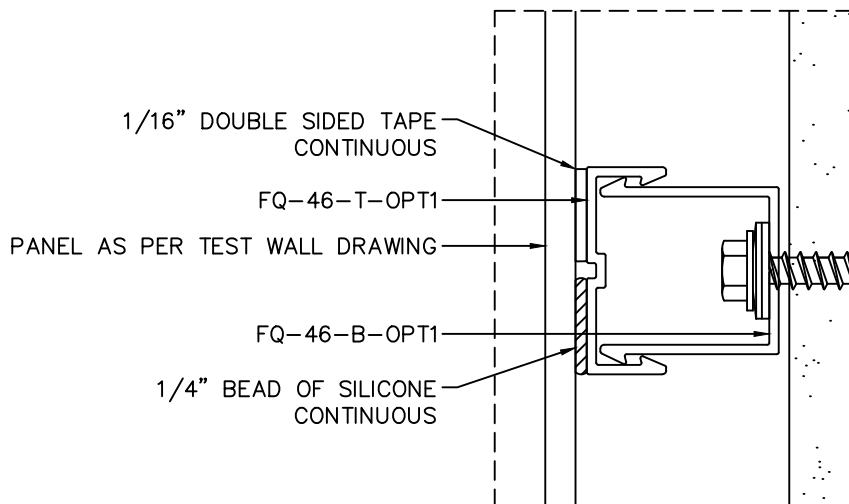
1. QH Test Assembly Drawings	Pg. 6 – 8
2. QJ Test Assembly Drawings	Pg. 9 – 18
3. QH 2 Test Results	Pg. 19 – 24
4. QH 5 Test Results	Pg. 25 – 30
5. QJ 1 Test Results	Pg. 31 – 36
6. QJ 2 Test Results	Pg. 37 – 42
7. QJ 4 Test Results	Pg. 43 – 48
8. QJ 6 Test Results	Pg. 49 – 54
9. QJ 7 Test Results	Pg. 55 – 60
10. QJ 8 Test Results	Pg. 61 – 66
11. QJ 9 Test Results	Pg. 67 – 72

QH TEST DETAILS 1 of 1



A QH FAB & SILICONE
Scale: NTS

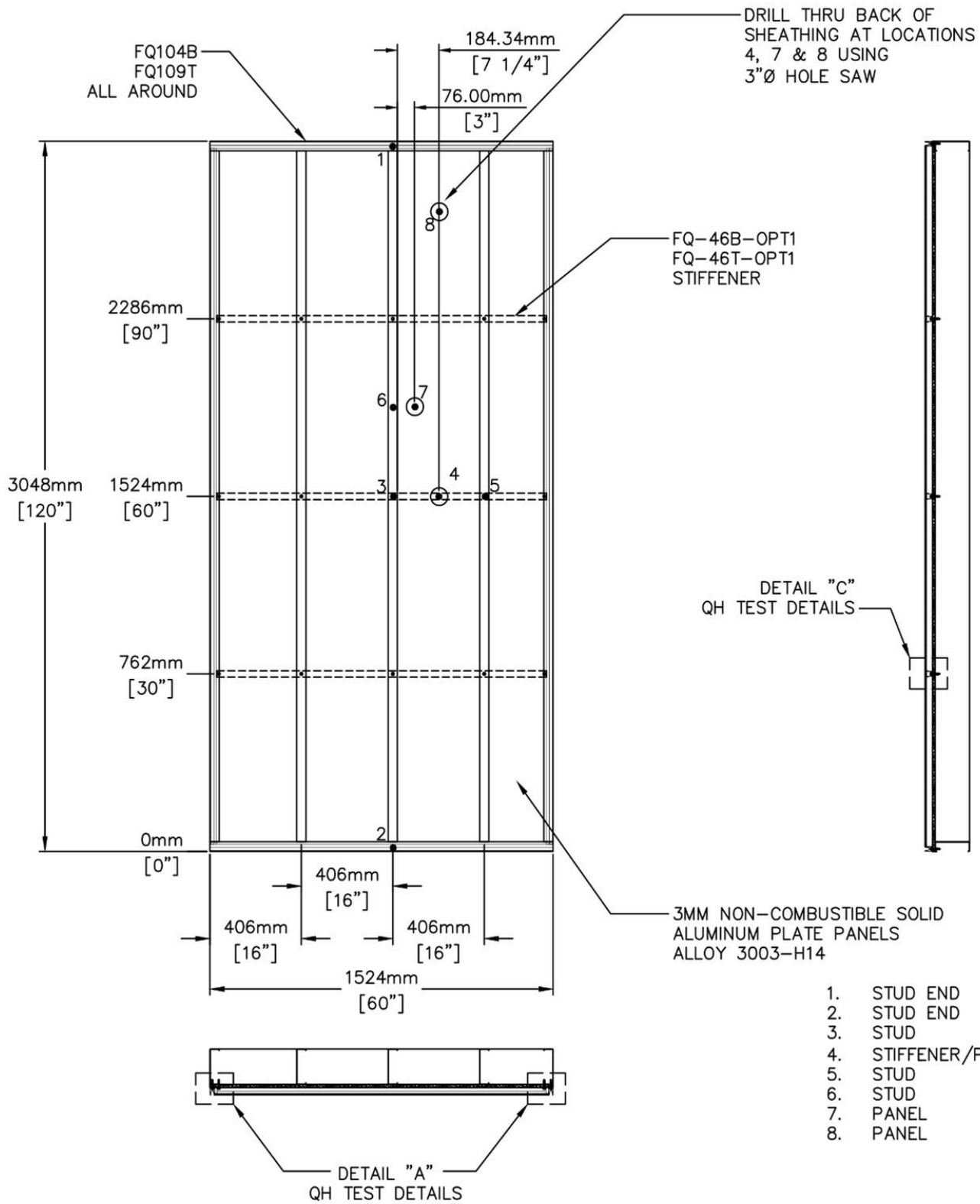
B QH SILICONE
Scale: NTS



C FQ-46-OPT1 HORIZONTAL STIFFENER
Scale: NTS

SILICONE TO BE DOWSIL 995
SILICONE STRUCTURAL SEALANT

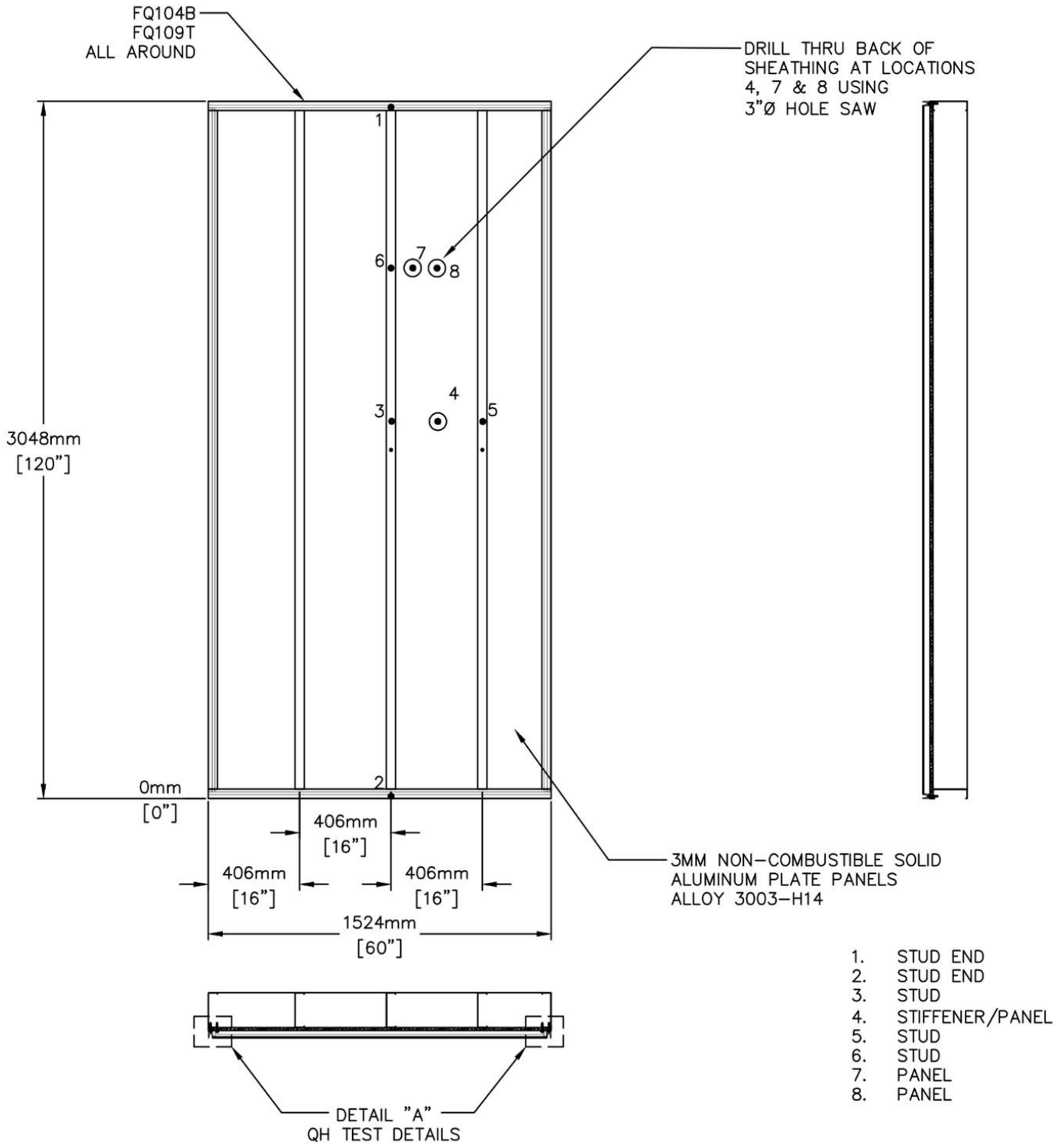
QH2 TEST WALL



THREE MOCK-UP REQUIRED
 2x6 18 Ga.(33KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM NON-COMBUSTIBLE SOLID ALUMINUM PLATE PANELS ALLOY 3003-H14
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER

SENSORS LOCATION UPDATED 15JUL2024
 25JUN2024

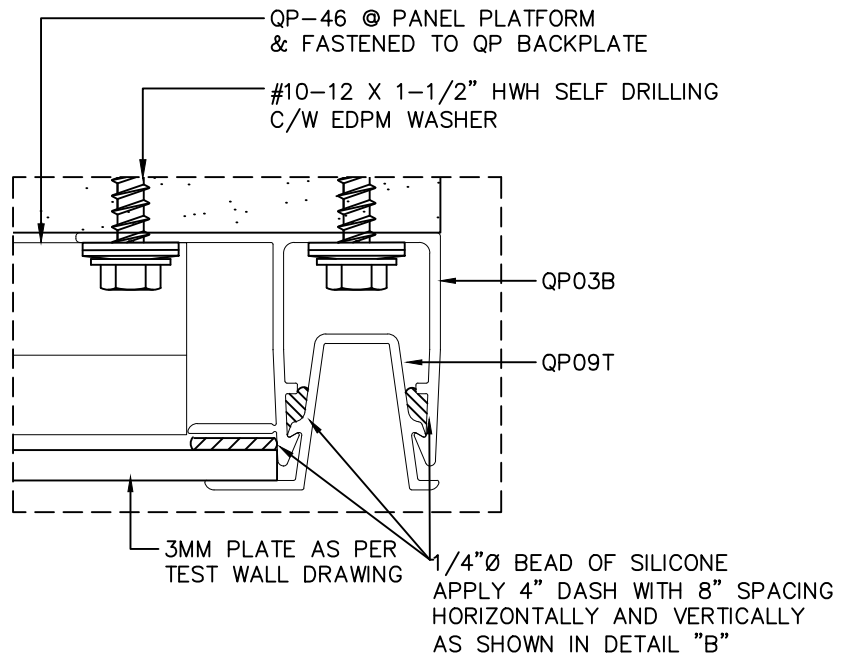
QH5 TEST WALL



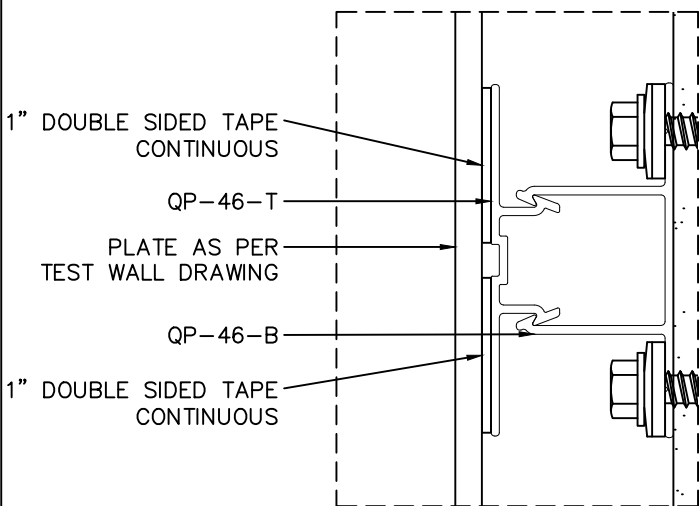
THREE MOCK-UP REQUIRED
 2x6 18 Ga.(33KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM NON-COMBUSTIBLE SOLID ALUMINUM PLATE PANELS ALLOY 3003-H14
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER

SENSORS LOCATION UPDATED 15JUL2024
 25JUN2024

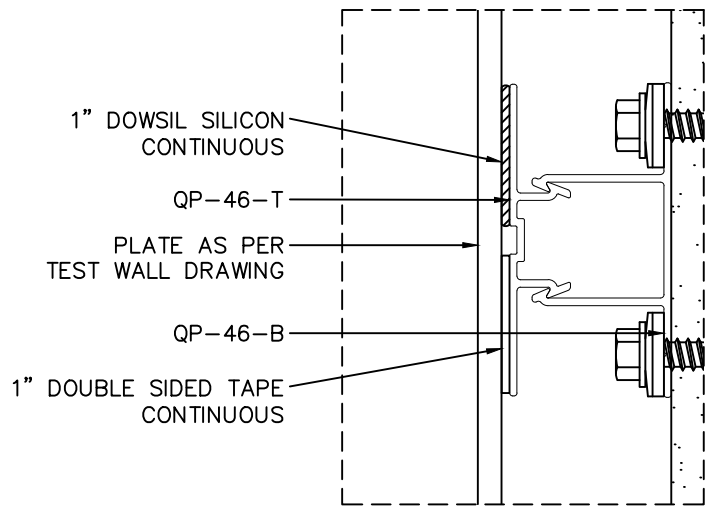
QJ TEST DETAILS 1 of 1



A QI FAB & SILICONE
Scale: NTS



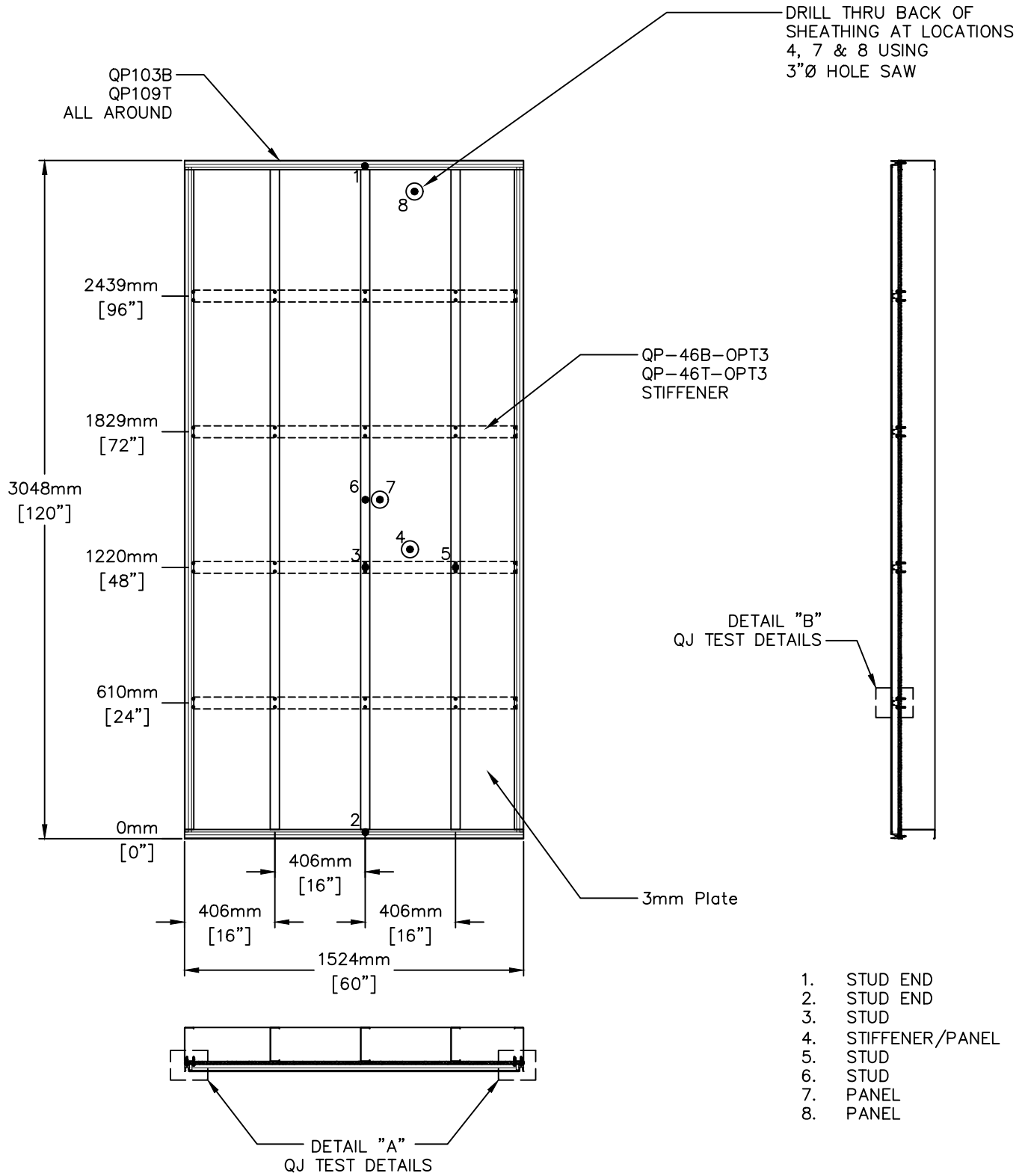
B QP-46-OPT3 HORIZONTAL STIFFENER
Scale: NTS



C QP-46-OPT2 HORIZONTAL STIFFENER
Scale: NTS

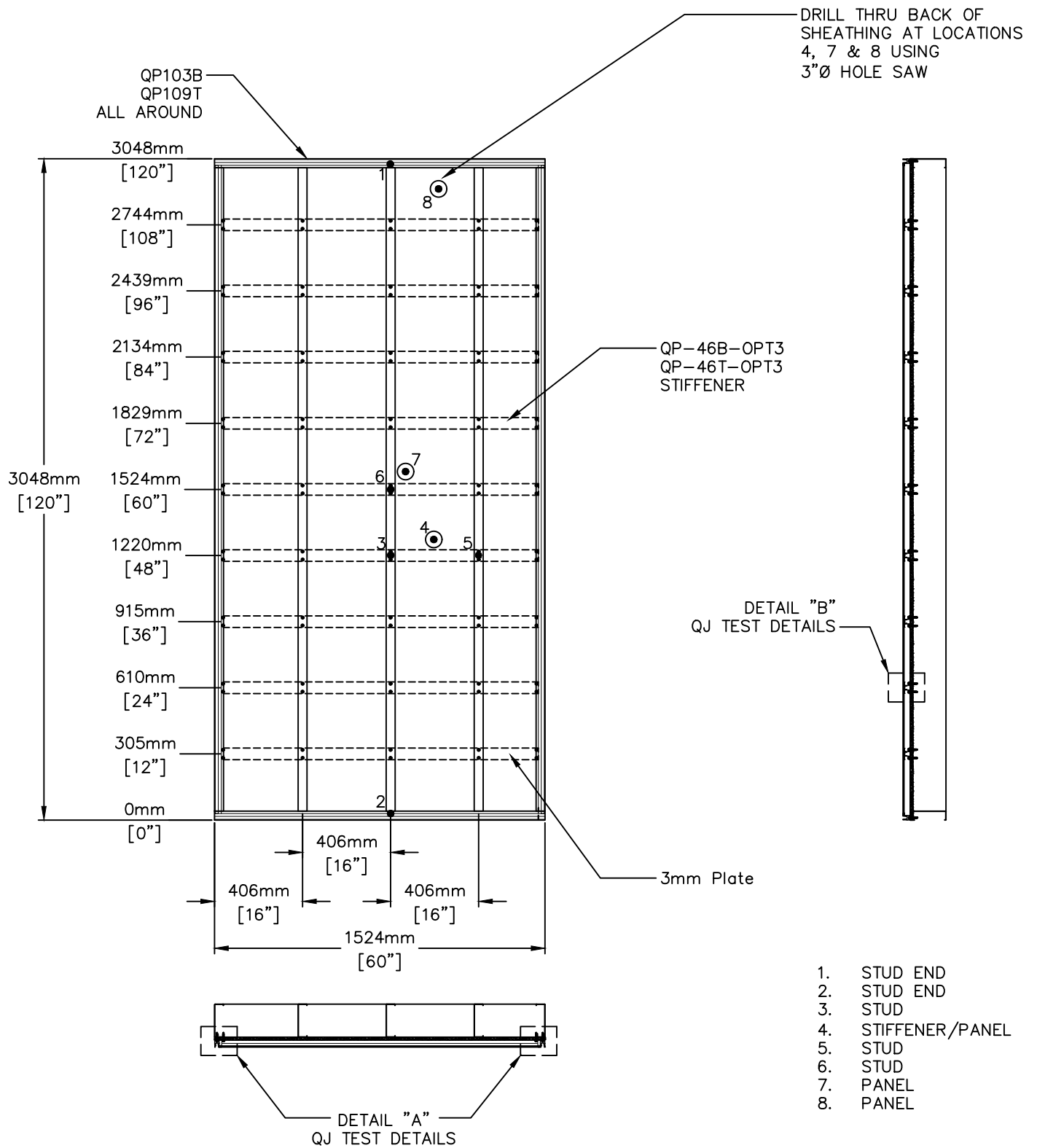
SILICONE TO BE DOWSIL 995
3M DOUBLE SIDED TAP

QJ1 TEST WALL



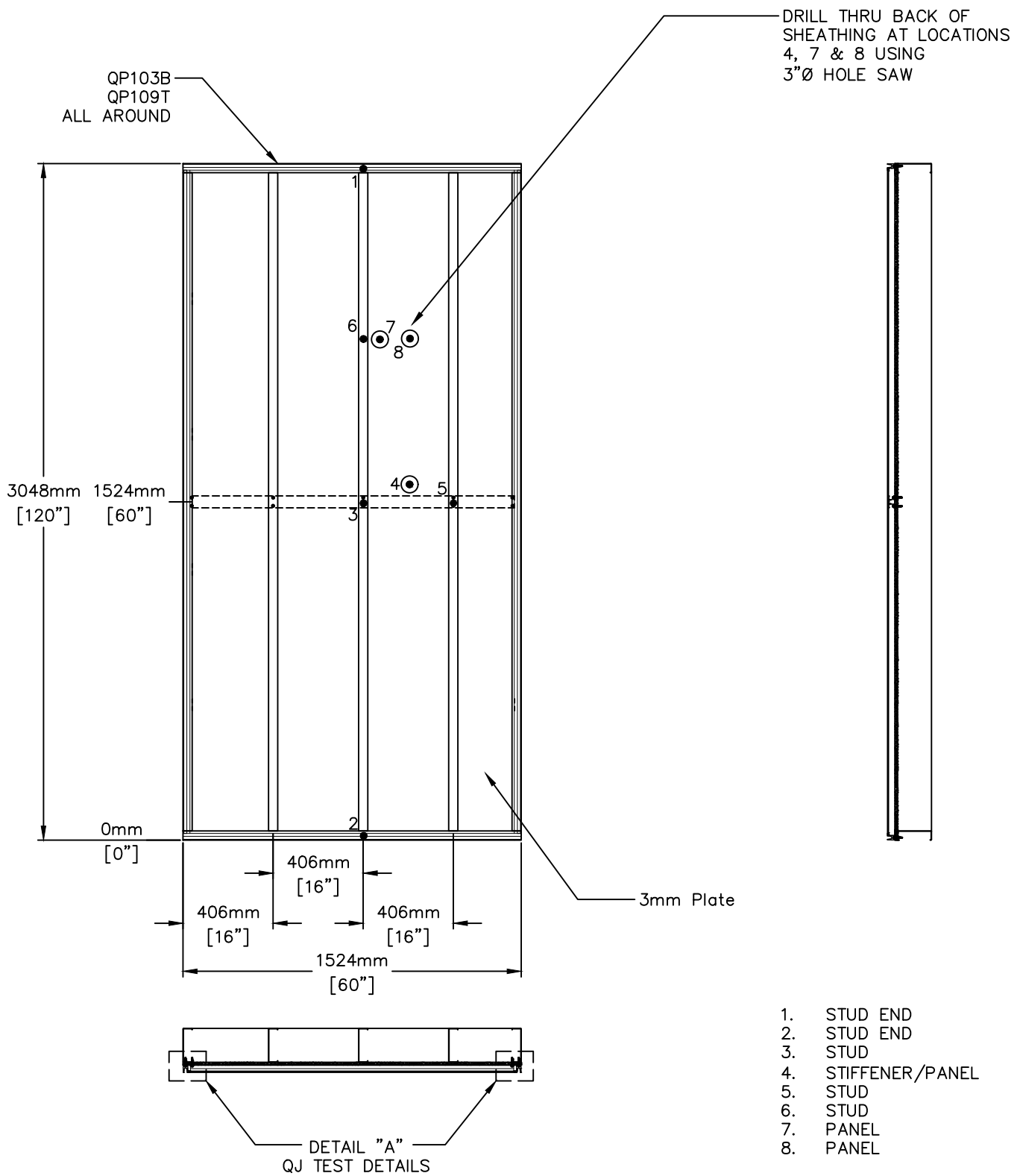
THREE MOCK-UP REQUIRED
 2x6 16 Ga.(50KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE ON STIFFENERS

QJ2 TEST WALL



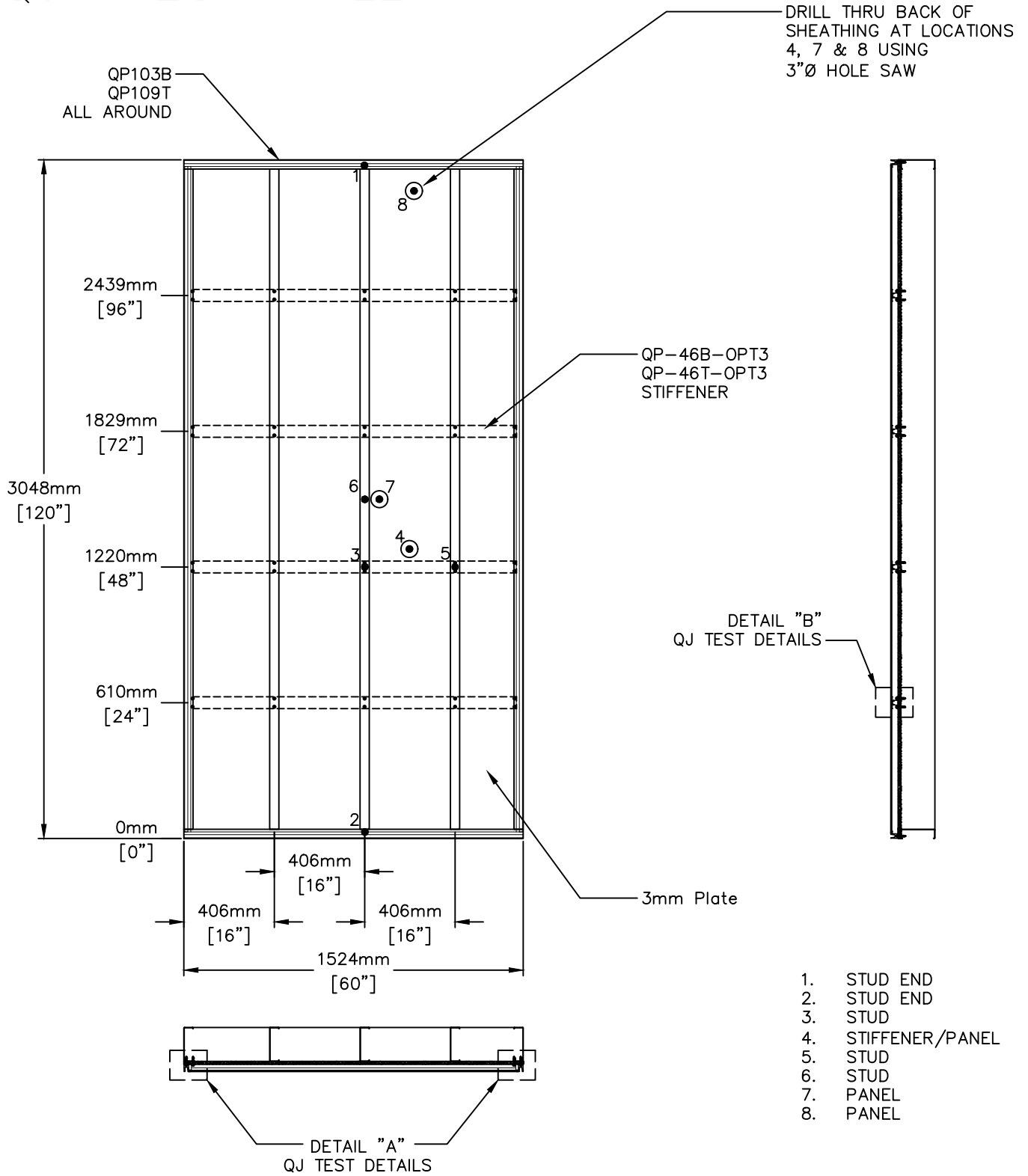
THREE MOCK-UP REQUIRED
 2x6 16 Ga.(50KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE ON PANEL STIFFENERS

QJ3 TEST WALL



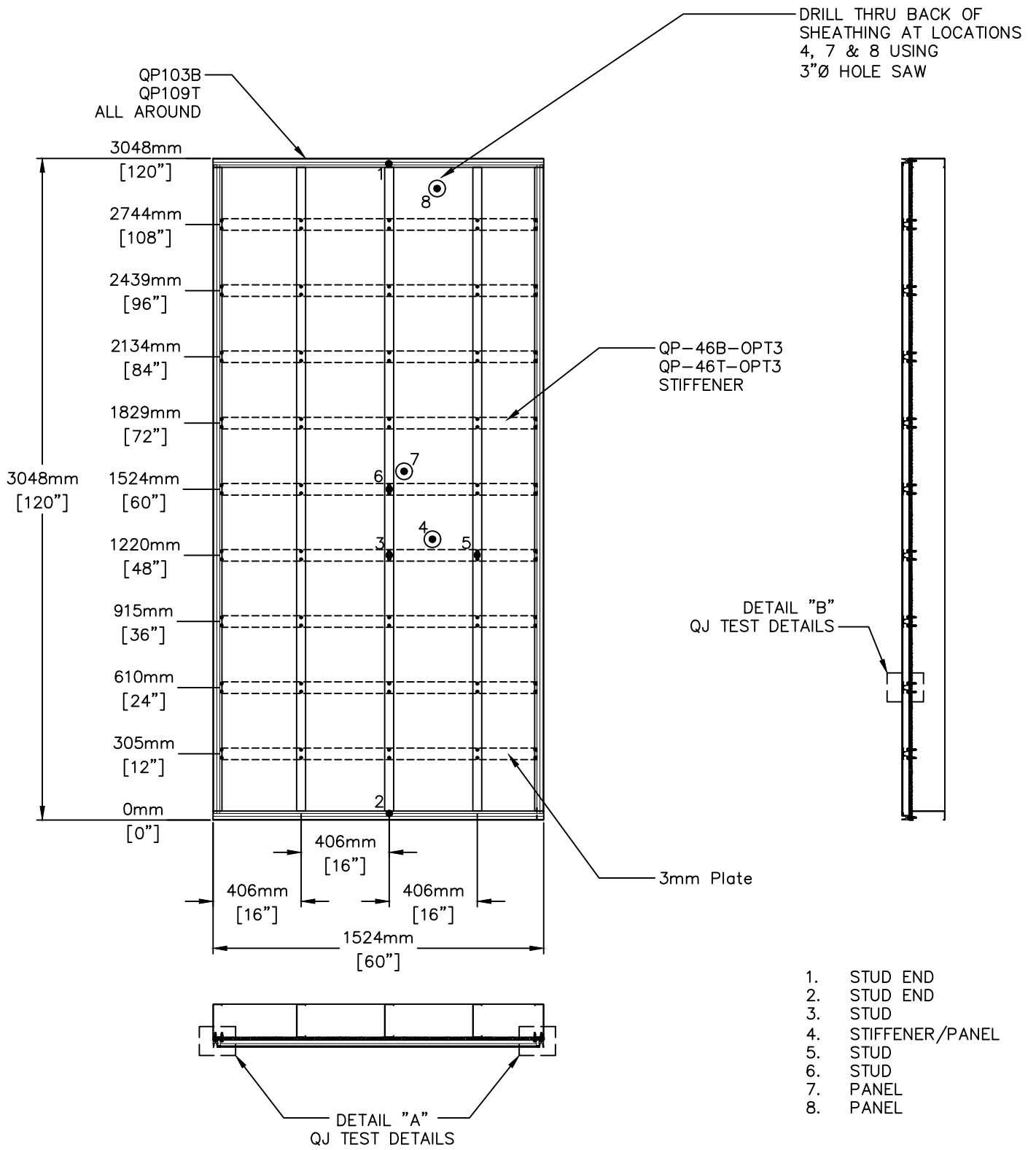
THREE MOCK-UP REQUIRED
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 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLESIDED TAPE ON PANEL STIFFENER

QJ4 TEST WALL



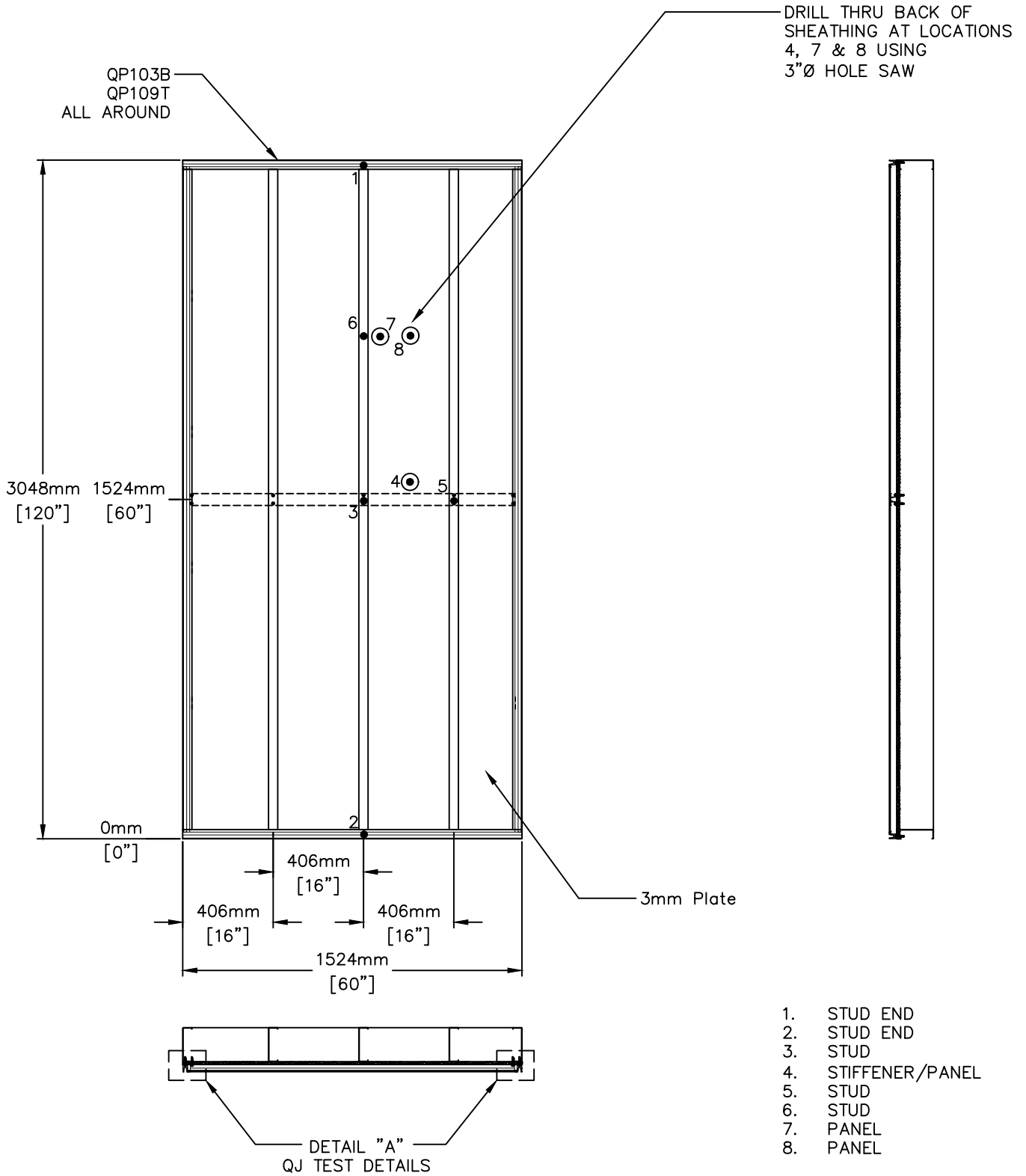
THREE MOCK-UP REQUIRED
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 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE ON STIFFENERS

QJ5 TEST WALL



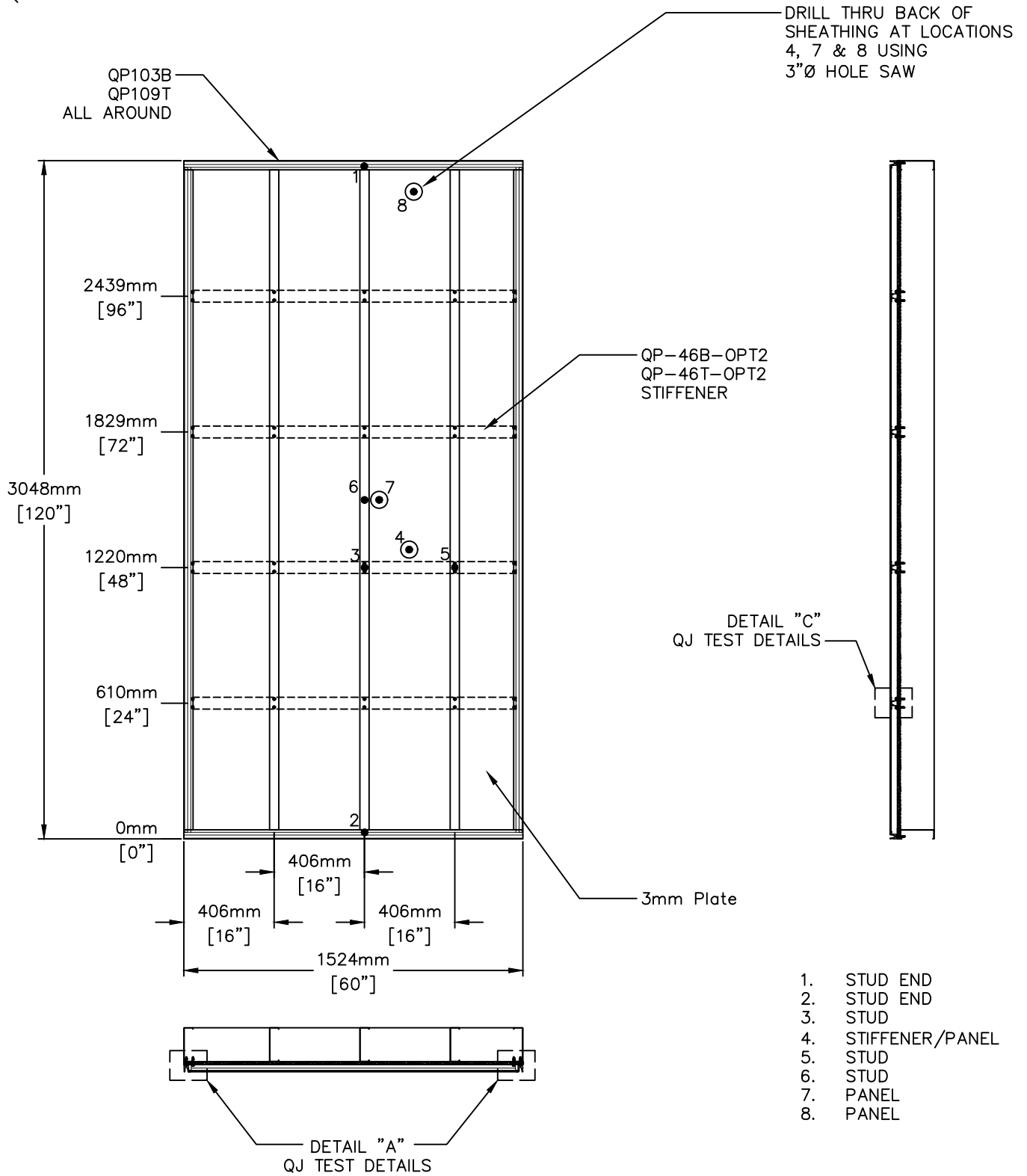
THREE MOCK-UP REQUIRED
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 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE ON PANEL STIFFENERS

QJ6 TEST WALL



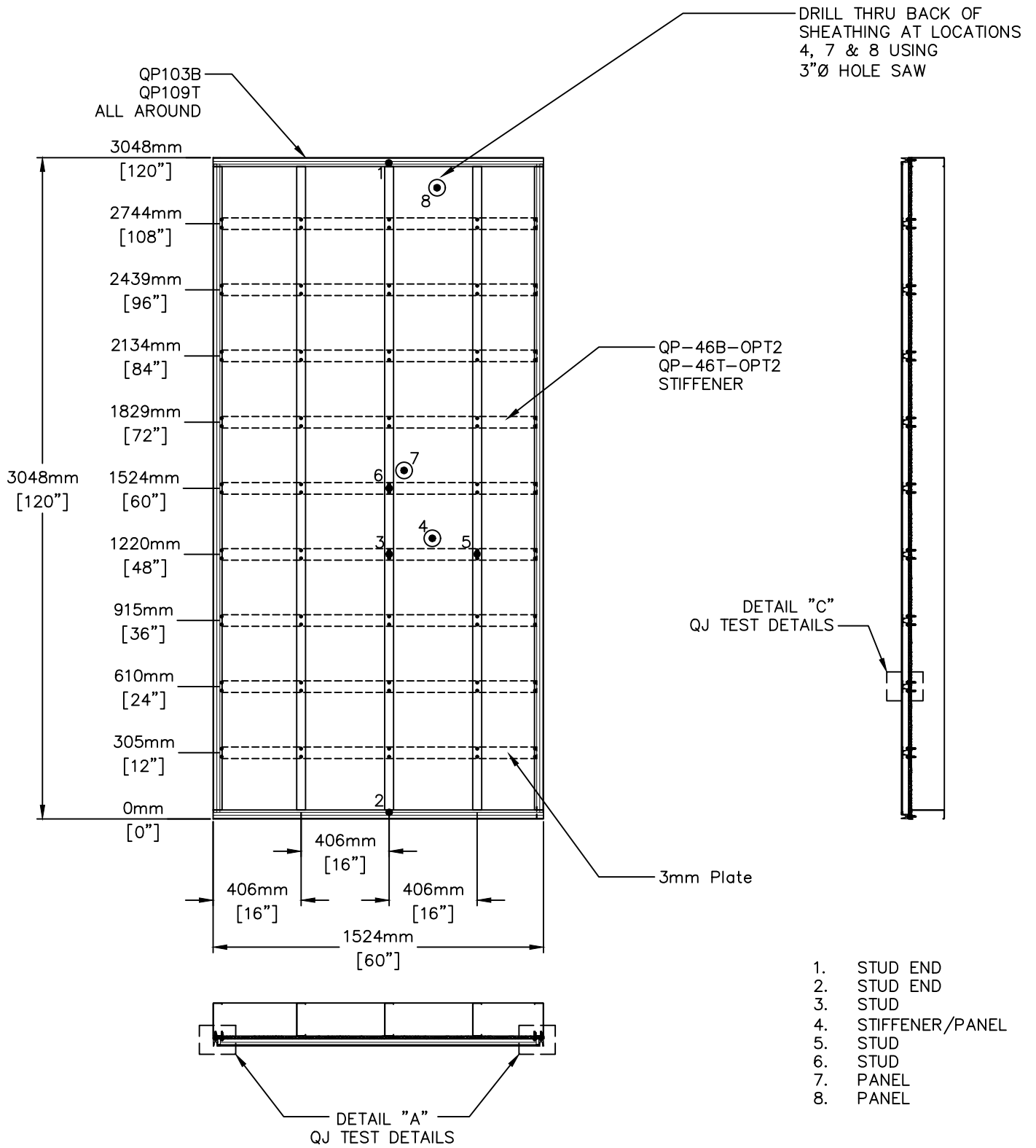
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 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLESIDED TAPE ON PANEL STIFFENER

QJ7 TEST WALL



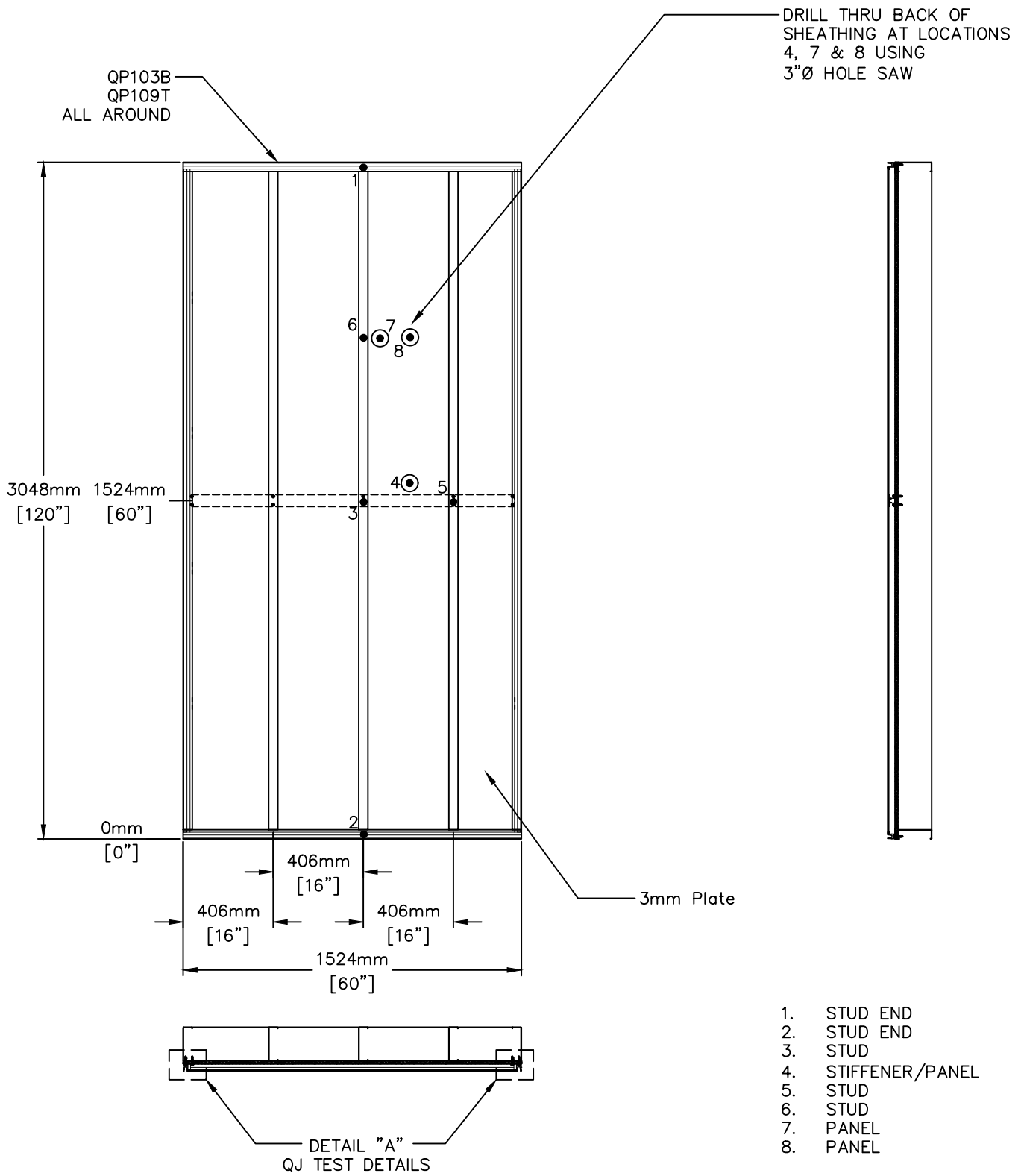
THREE MOCK-UP REQUIRED
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 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE & SILICON ON STIFFENERS

QJ8 TEST WALL



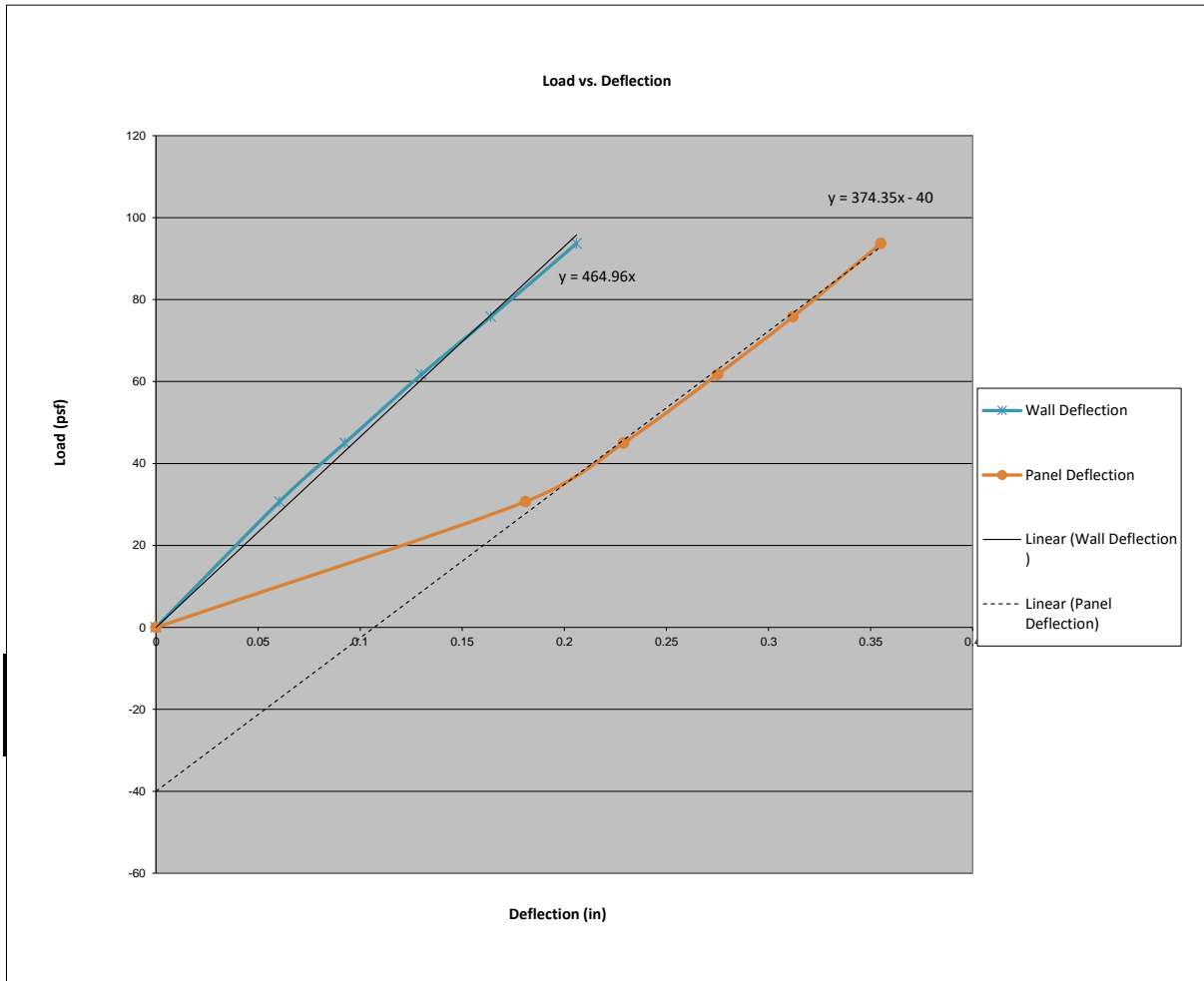
THREE MOCK-UP REQUIRED
 2x6 18 Ga.(33KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLE SIDED 3M TAPE & SILICON ON PANEL STIFFENERS

QJ9 TEST WALL



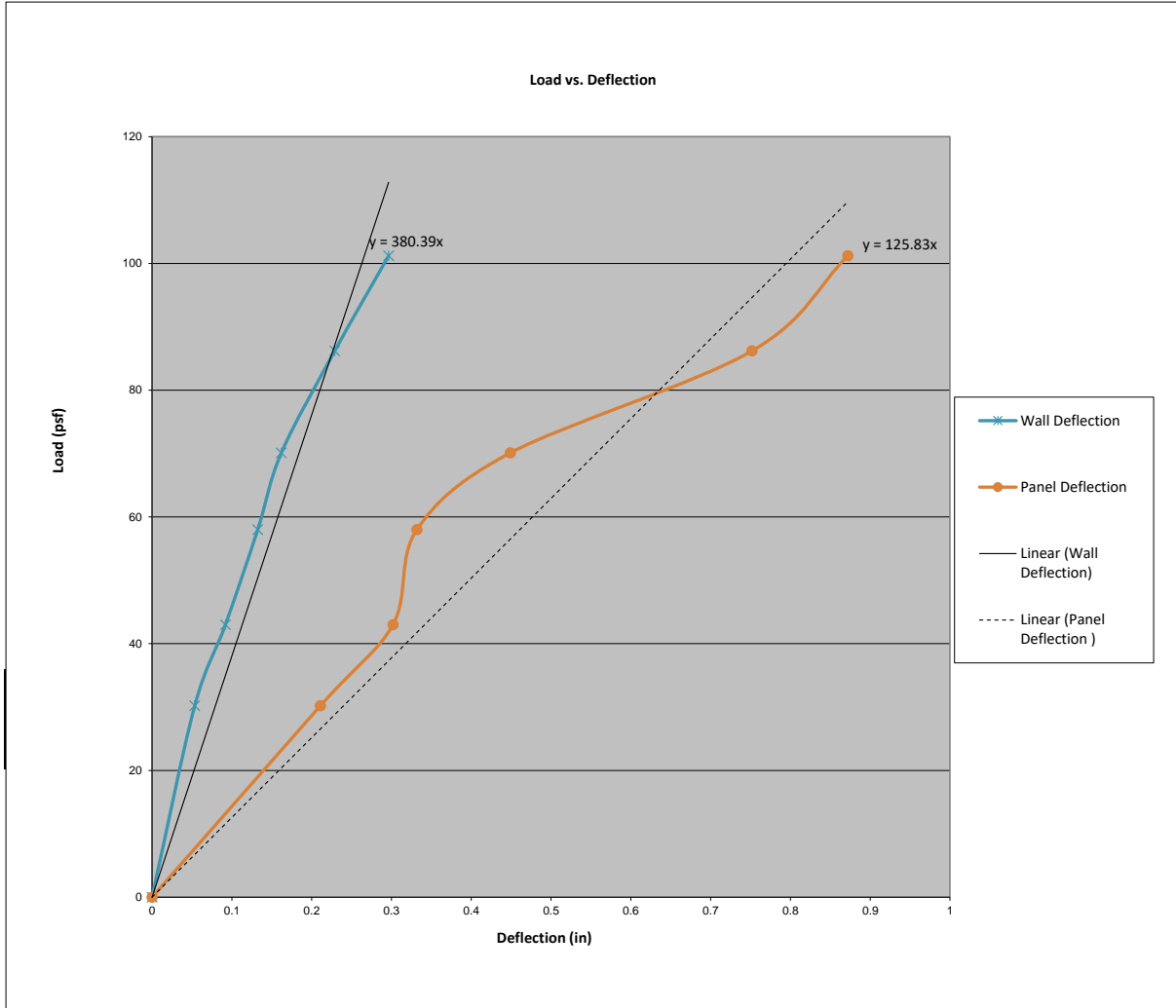
THREE MOCK-UP REQUIRED
 2x6 18 Ga.(33KSI) STEEL STUDS W/ 1/2" DENSGLASS
 3MM Plate
 #10-12 X 1-1/2" HWH SELF DRILLING C/W EDPM WASHER
 DOUBLESIDED 3M TAPE & SILICON ON PANEL STIFFENER

Test#:	QH2-1
Max Load	104.6 psf
Allowable Design Load (ASD) = Max Load / 2	52.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	36.6 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.500 in
Wall Deflection @ Deflection Service Load (ASD)	0.0787 in
Panel Deflection @ Deflection Service Load (ASD)	0.2087 in



Target Load (psf)	Wall Deflection (= ga 3 - (ga 1 + ga 2)/2) (in)	Panel Deflection (= ga 7 - ga 6)
0.0	0.000	0.000
30.7	0.061	0.181
45.0	0.093	0.229
61.7	0.130	0.275
75.8	0.164	0.312
93.7	0.206	0.355
104.6	0.233	0.385

Test#:	QH2-2
Max Load	135.2 psf
Allowable Design Load (ASD) = Max Load / 2	67.6 psf
Deflection Service Load (ASD) = Allowable * 0.7	47.3 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.500 in
Wall Deflection @ Deflection Service Load (ASD)	0.1244 in
Panel Deflection @ Deflection Service Load (ASD)	0.3364 in



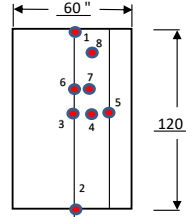
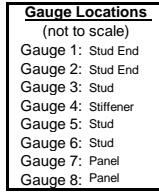
Target Load (psf)	Wall Deflection (= ga 3 - (ga 2 + ga 1)/2) (in)	panel Deflection (= ga7 - ga 6)
0.0	0.000	0.000
30.2	0.054	0.211
43.0	0.092	0.302
58.0	0.133	0.332
70.1	0.162	0.449
86.2	0.229	0.752
101.2	0.297	0.872
112.0	0.380	0.985
135.2	-0.809	1.083

BOCA ENGINEERING CO. | SPAR
STRUCTURAL CIVIL CONSULTANTS

Test: **Transverse Load - Negative Wind Load** Test#: **QH2-3**
 Client: Easy Trim
 Date: 04-10-2024
 Product: **Quick Panel**
 Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2J

Installation:
 Configuration: Panel Stiffeners 30" o/c
 Framing: 2x6 steel stud, 33ksi
 Fastener: #10-12x1-1/2 Self Drilling
 Sheathing: 1/2" densglass
 Air Seal: Tape used to air seal panel gaps, tape will not influence test results



Equipment:	Deflection Gauges(Phidget potentiometers)
Pressure Chamber	Sensor 1: S/N - F29B
Motor: Core Sensors Model: CS10 - 24C	Sensor 2: S/N - 9BFA
Press. Controller: S/N - G205141344	Sensor 3: S/N - 87CE
Pressure Sensors:	Sensor 4: S/N - F16B
+/- 2 kPa: p/n 1136	Sensor 5: S/N - F14E
+/- 7 kPa: p/n 1137	Sensor 6: S/N - F28I
50 kPa: p/n 1138	Sensor 7: S/N - F174
Phidget: S/N - 5015249240311	Sensor 8: S/N - F282

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:		
Start:	8:50 AM	Temp: 18 °C
Finish:	9:27 AM	%RH 32 %RH

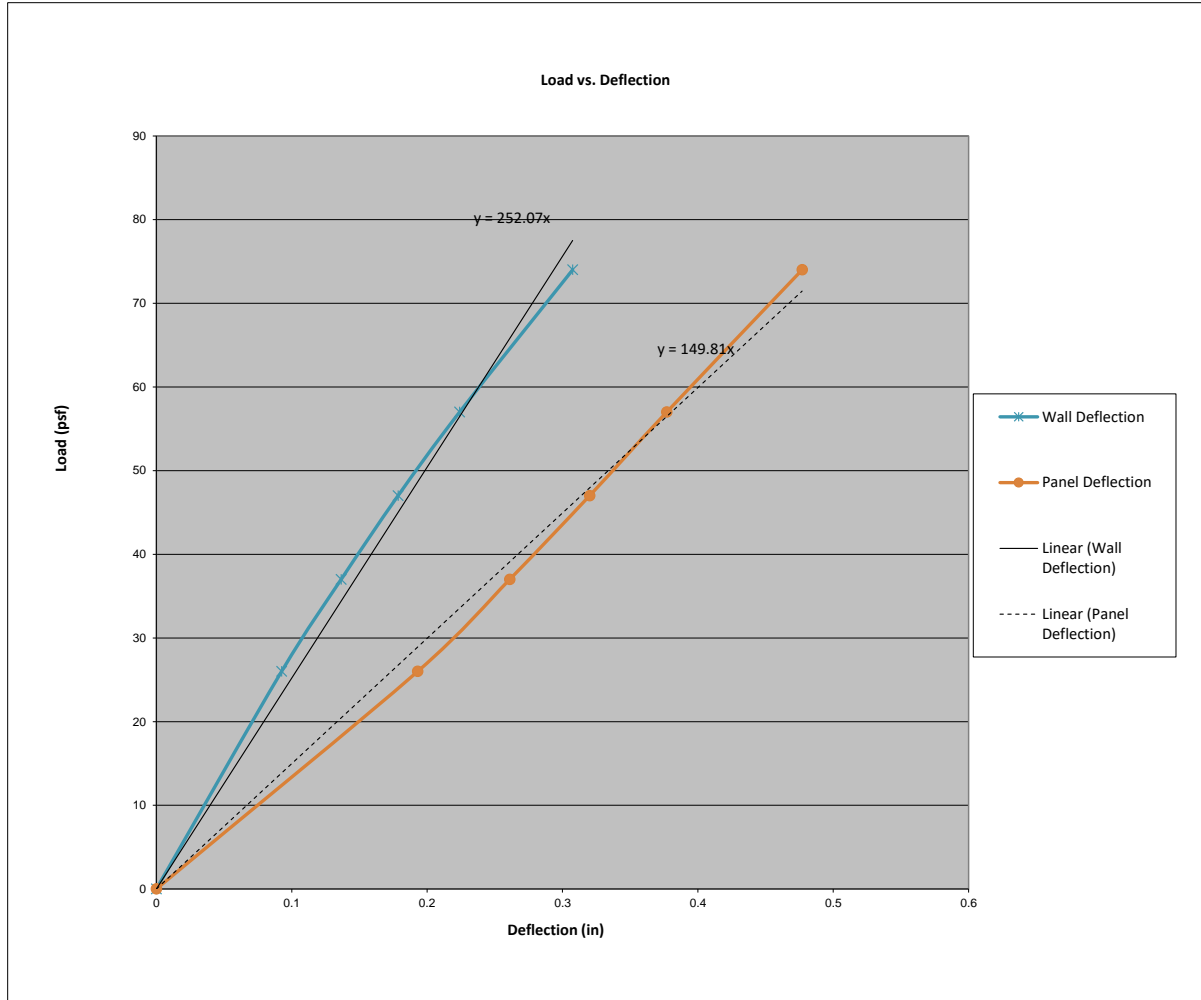
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	30

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	imed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	17.5	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins									
30	26.0	10 sec.	0.049	0.070	0.152	0.212	0.114	0.115	0.308	0.149	
0		1-5mins	0.003	0.008	0.008	0.007	0.006	0.007	0.007	0.008	
40	37.0	10 sec.	0.073	0.100	0.223	0.297	0.174	0.158	0.419	0.217	
0		1-5mins	0.007	0.016	0.017	0.013	0.015	0.008	0.013	0.004	
50	47.0	10 sec.	0.095	0.126	0.289	0.374	0.224	0.193	0.513	0.286	
0		1-5mins	0.011	0.024	0.023	0.020	0.019	0.014	0.021	0.013	
60	57.0	10 sec.	0.118	0.150	0.358	0.471	0.285	0.227	0.604	0.356	
0		1-5mins	0.018	0.031	0.035	0.044	0.029	0.018	0.032	0.013	
75	74.0	10 sec.	0.152	0.187	0.477	0.680	0.381	0.277	0.754	0.475	
0		1-5mins	0.028	0.040	0.051	0.068	0.043	0.025	0.042	0.027	
95	95.0	10 sec.	0.201	0.235	0.633	0.822	0.504	0.343	0.061	0.652	
0		1-5mins	0.033	0.051	0.071	0.104	0.062	0.031	0.064	0.043	
115	114.0	10 sec.	0.254	0.282	0.815	0.877	0.648	0.404	1.199	0.868	
0		1-5mins	0.041	0.061	0.095	0.160	0.081	0.039	0.110	0.062	

Mode of Failure	
Max Load (psf)	114.0

Top cap of panel stiffener disengaged from back plate.

Test#:	QH2-3
Max Load	114.0 psf
Allowable Design Load (ASD) = Max Load / 2	57.0 psf
Deflection Service Load (ASD) = Allowable * 0.7	39.9 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.500 in
Wall Deflection @ Deflection Service Load (ASD)	0.1583 in
Panel Deflection @ Deflection Service Load (ASD)	0.2565 in



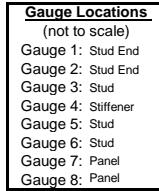
Target Load (psf)	Wall Deflection (= ga 3 - (ga 2 + ga 1)/2) (in)	Panel Deflection (= ga 7 - ga 6)
0.0	0.000	0.000
26.0	0.093	0.193
37.0	0.137	0.261
47.0	0.179	0.320
57.0	0.224	0.377
74.0	0.308	0.477
95.0	0.415	0.282
114.0	0.547	0.795

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Test: **Transverse Load - Negative Wind Load** Test#: **QH5-1**
 Client: Easy Trim
 Date: 23-09-2024
 Product: **Quick Panel**
 Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Project#: 0093
 Technician(s): Ali, Jordan
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2T

Installation:
 Configuration: No Panel Stiffeners
 Framing: 2x6 steel stud, 33ksi
 Fastener: #10-12x1-1/2 Self Drilling
 Sheathing: 1/2" densglass
 Air Seal: Tape used to air seal panel gaps, tape will not influence test results



Equipment:

Pressure Chamber	Deflection Gauges(Phidget potentiometers)
Motor: Core Sensors Model: CS10 - 2400	Sensor 1: S/N - F29B
Press. Controller: S/N - G205141344	Sensor 2: S/N - 9BFA
Pressure Sensors:	Sensor 3: S/N - 87CE
+/- 2 kPa: p/n 1136	Sensor 4: S/N - F16B
+/- 7 kPa: p/n 1137	Sensor 5: S/N - F14E
50 kPa: p/n 1138	Sensor 6: S/N - F28I
Phidget: S/N - 5015249240311	Sensor 7: S/N - F174
	Sensor 8: S/N - F282

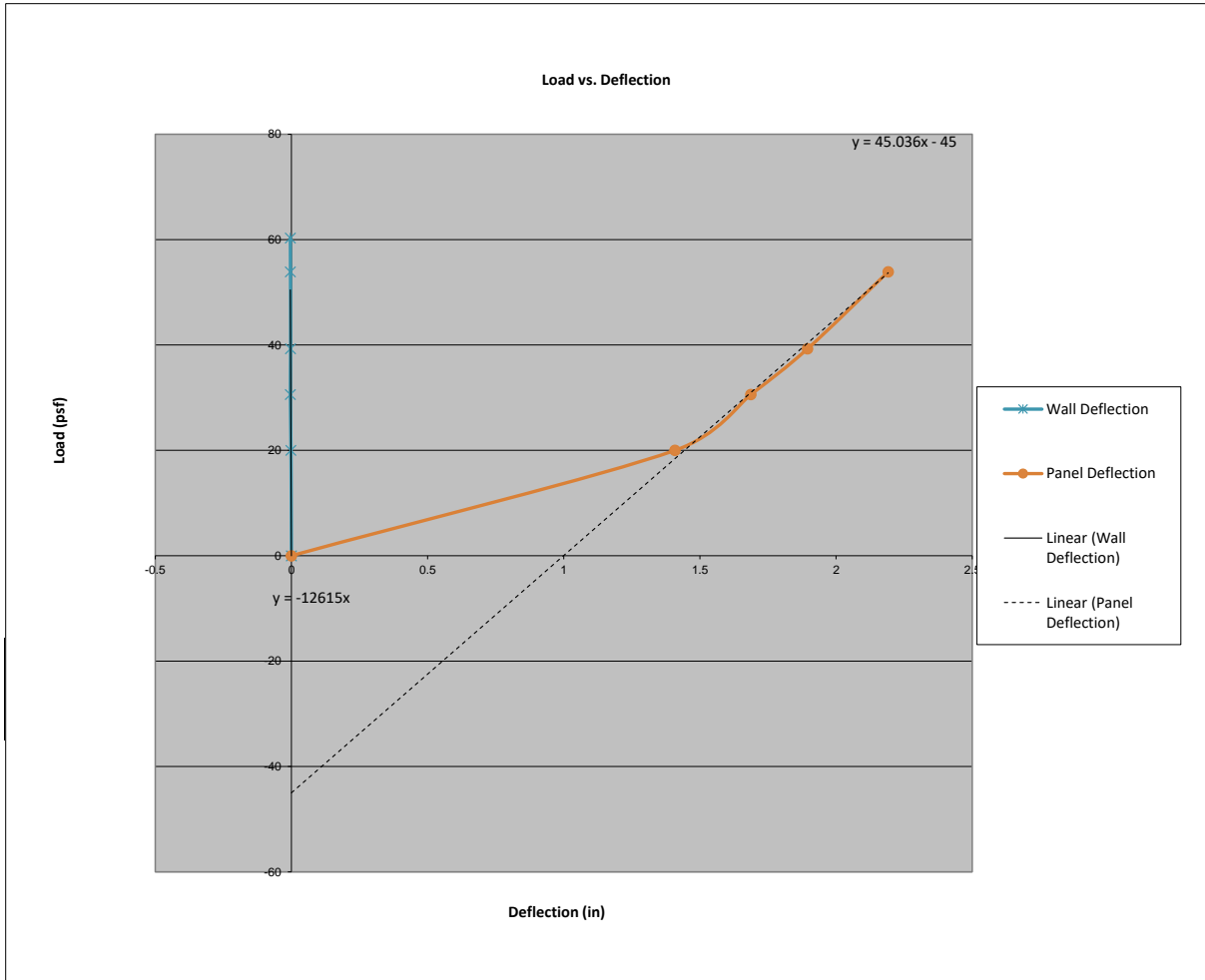
	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	2:09 PM	Temp:	21 °C
Finish:	2:33 PM	%RH	37 %RH

Test Assembly											
Width (in)			Length (in)				Panel Anchor Spacing (in)				
60.0			120.0				60				
Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	11.0	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins									
20	20.0	10 sec.	0.028	0.021	0.023	1.430	0.020	1.199	1.259	0.025	
0		1-5mins	0.004	0.010	0.007	0.056	0.006	0.044	0.044	0.005	
30	30.6	10 sec.	0.039	0.033	0.032	1.719	0.032	1.449	1.507	0.035	
0		1-5mins	0.007	0.015	0.010	0.113	0.010	0.091	0.089	0.008	
40	39.3	10 sec.	0.045	0.041	0.040	1.935	0.039	1.638	1.698	0.042	
0		1-5mins	0.009	0.018	0.013	0.156	0.013	0.127	0.123	0.010	
50	53.9	10 sec.	0.054	0.051	0.049	2.242	0.052	1.916	1.975	0.050	
0		1-5mins	0.011	0.022	0.016	0.237	0.017	0.186	0.181	0.012	
60	60.3	10 sec.	0.058	0.058	0.054	2.435	0.057	2.090	2.157	0.051	
0		1-5mins	0.012	0.026	0.018	0.293	0.019	0.233	0.229	0.014	

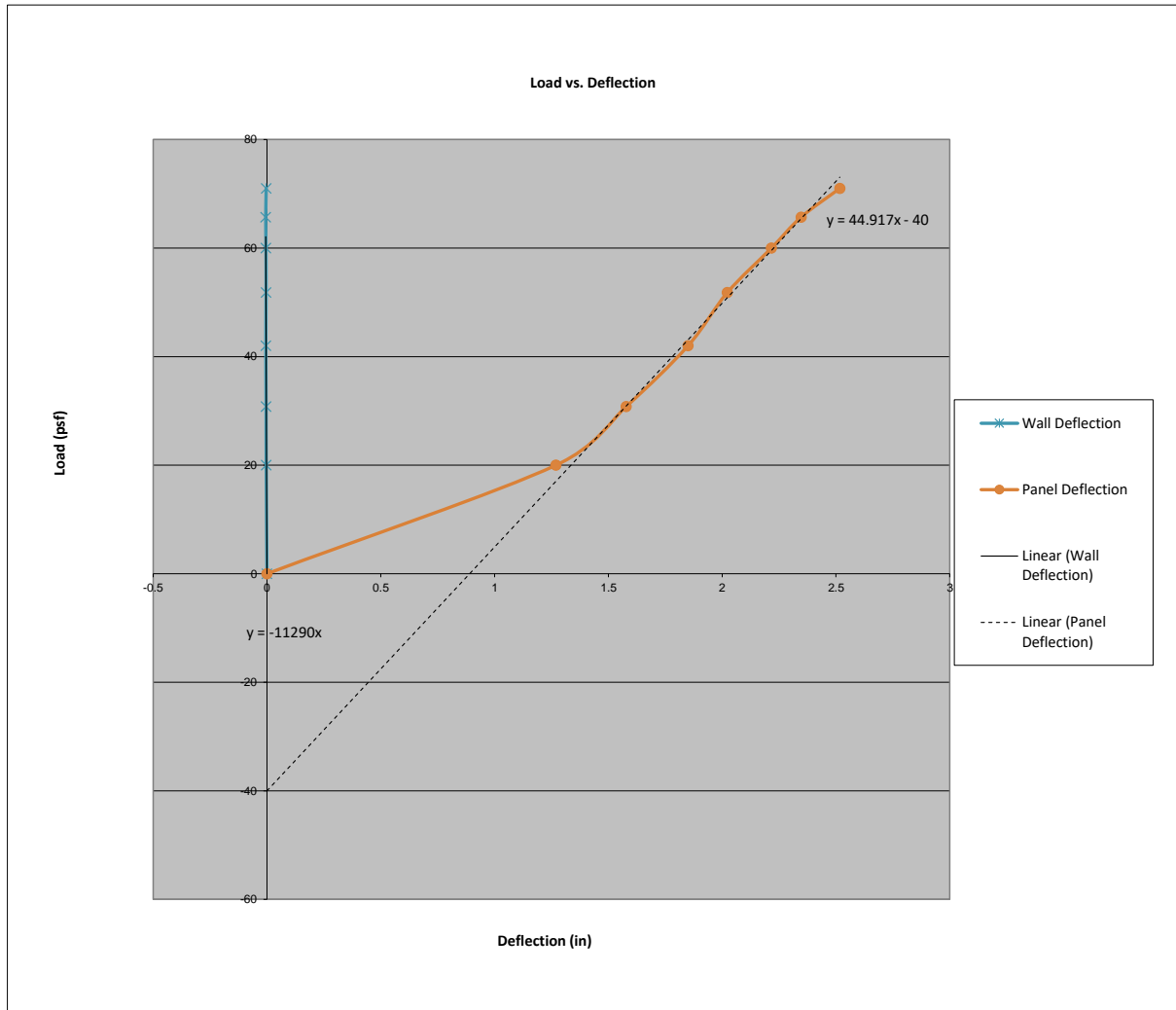
Mode of Failure		
Max Load (psf)	60.3	ACM Panel disengaged from the top cap of the side trims all around.

Test#:	QH5-1	
Max Load		60.3 psf
Allowable Design Load (ASD) = Max Load / 2		30.2 psf
Deflection Service Load (ASD) = Allowable * 0.7		21.1 psf
Wall Deflection limit = L / 180 of wall height		0.667 in
Panel Deflection limit = L / 60 of panel anchor span		1.000 in
Wall Deflection @ Deflection Service Load (ASD)		-0.0017 in
Panel Deflection @ Deflection Service Load (ASD)		1.4937 in



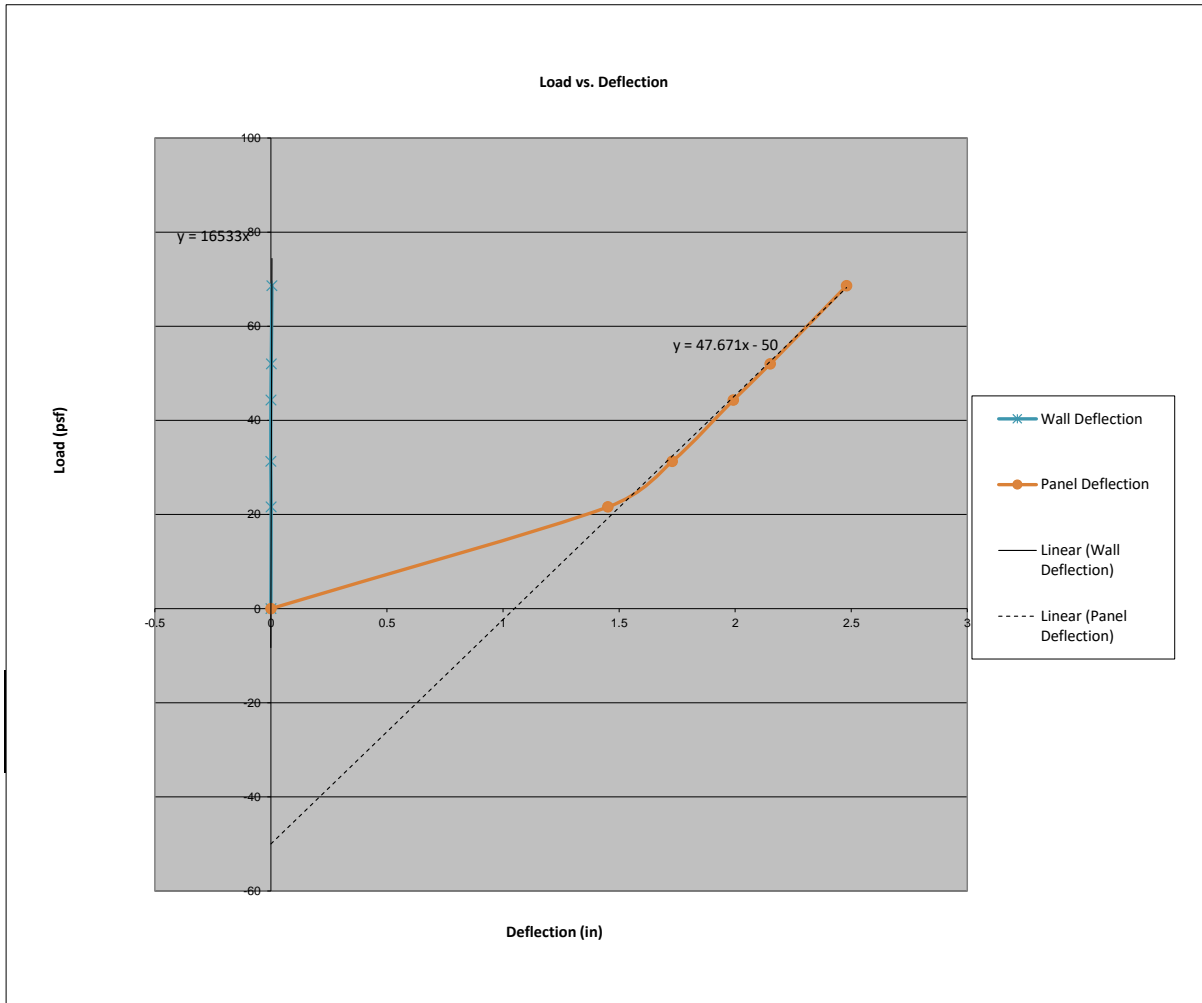
Target Load (psf)	Wall Deflection (= $ga_3 - (ga_1 + ga_2)/2$) (in)	panel Deflection (= $ga_4 - (ga_3 + ga_5)/2$) (in)
0.0	0.000	0.000
20.0	-0.002	1.409
30.6	-0.004	1.687
39.3	-0.003	1.896
53.9	-0.004	2.192
60.3	-0.004	2.380

Test#:	QH5-2	
Max Load		71.0 psf
Allowable Design Load (ASD) = Max Load / 2		35.5 psf
Deflection Service Load (ASD) = Allowable * 0.7		24.9 psf
Wall Deflection limit = L / 180 of wall height		0.667 in
Panel Deflection limit = L / 60 of panel anchor span		1.000 in
Wall Deflection @ Deflection Service Load (ASD)		-0.0022 in
Panel Deflection @ Deflection Service Load (ASD)		1.4706 in



Target Load (psf)	Wall Deflection (= ga 3 - ga 2 + ga 1/2) (in)	panel Deflection (= ga 4 - ga 3 + ga 5/2) (in)
0.0	0.000	0.000
20.0	-0.004	1.270
30.8	-0.004	1.578
42.0	-0.005	1.850
51.8	-0.004	2.023
60.0	-0.005	2.217
65.7	-0.006	2.347
71.0	-0.004	2.517

Test#:	QH5-3(2)
Max Load	68.6 psf
Allowable Design Load (ASD) = Max Load / 2	34.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	24.0 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	1.000 in
Wall Deflection @ Deflection Service Load (ASD)	0.0015 in
Panel Deflection @ Deflection Service Load (ASD)	1.5835 in



Target Load (psf)	Wall Deflection (= ga 3 - (ga 2 + ga 1)/2) (in)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2) (in)
0	0	0
21.6	0.001	1.4515
31.3	-0.0005	1.729
44.3	0	1.992
52	0.0015	2.151
68.6	0.0045	2.48

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ1-1**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/6/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

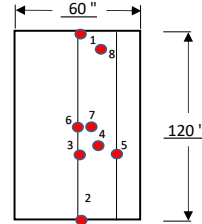
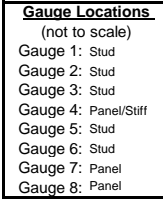
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	10:30	Temp:	21.4
Finish:	11:03	%RH:	40

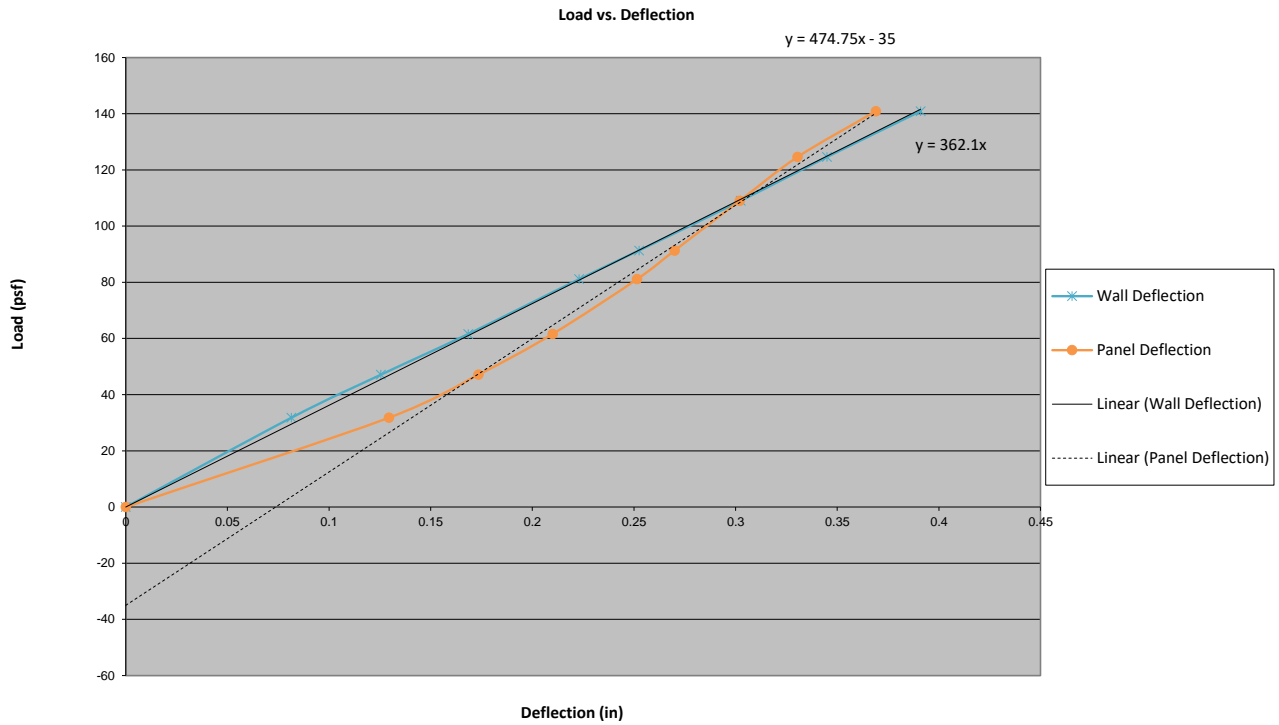
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	17	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins									
30	31.8	10 sec.	0.057	0.06	0.139	0.249	0.1	0.14	0.171	0.159	
0		1-5mins	0.005	0.014	0.008	0.011	0.005	0.011	0.014	0.005	
45	47.1	10 sec.	0.085	0.094	0.212	0.356	0.153	0.215	0.259	0.223	
0		1-5mins	0.009	0.02	0.014	0.017	0.009	0.018	0.021	0.008	
60	61.6	10 sec.	0.112	0.129	0.285	0.455	0.205	0.289	0.342	0.275	
0		1-5mins	0.013	0.025	0.019	0.022	0.013	0.024	0.029	0.011	
75	81.1	10 sec.	0.147	0.179	0.382	0.581	0.277	0.386	0.453	0.339	
0		1-5mins	0.019	0.034	0.028	0.032	0.02	0.033	0.04	0.016	
90	91.3	10 sec.	0.166	0.207	0.436	0.646	0.316	0.439	0.515	0.37	
0		1-5mins	0.023	0.04	0.033	0.038	0.026	0.039	0.047	0.022	
105	109	10 sec.	0.197	0.254	0.528	0.758	0.384	0.528	0.62	0.421	
0		1-5mins	0.03	0.05	0.042	0.051	0.033	0.049	0.059	0.027	
125	124.6	10 sec.	0.224	0.298	0.608	0.858	0.447	0.606	0.716	0.466	
0		1-5mins	0.036	0.058	0.05	0.06	0.041	0.058	0.07	0.034	
140	140.9	10 sec.	0.252	0.338	0.69	0.97	0.512	0.686	0.821	0.516	
0		1-5mins	0.045	0.07	0.063	0.08	0.053	0.07	0.092	0.044	
155	155.4	10 sec.	0.276	0.372	0.758	1.067	0.569	0.753	0.916	0.555	
0		1-5mins	0.051	0.082	0.078	0.097	0.064	0.085	0.108	0.052	
170	176.6	10 sec.	0.309	0.416	0.851	1.21	0.644	0.845	1.059	0.613	
0		1-5mins	0.061	0.092	0.094	0.12	0.075	0.102	0.132	0.064	

Mode of Failure		
Max Load (psf)	176.6	The double sided tape failed from the panel side while going to pressure at 190 PSF.

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Test#:	QJ1-1
Max Load	176.6 psf
Allowable Design Load (ASD) = Max Load / 2	88.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	61.8 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1702 in
Panel Deflection @ Deflection Service Load (ASD)	0.2032 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 + (ga 3 + ga 5)/2)
0.0	0.000	0.000
31.8	0.082	0.130
47.1	0.126	0.174
61.6	0.169	0.210
81.1	0.223	0.252
91.3	0.253	0.270
109.0	0.303	0.302
124.6	0.345	0.331
140.9	0.391	0.369
155.4	0.429	0.404
176.6	0.483	0.463

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ1-2**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/10/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

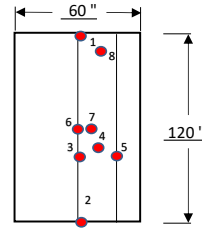
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:		
Start:	11:26	Temp: 21
Finish:	12:15	%RH: 18

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	32	10 sec.	0.076	0.065	0.152	0.25	0.122	0.145	0.178	0.193	
0		1-5mins	0.002	0.002	0.002	0.001	0.002	0.001	0.003	0.003	
45	46.7	10 sec.	0.098	0.094	0.215	0.343	0.169	0.206	0.256	0.249	
0		1-5mins	0.003	0.003	0.004	0.004	0.004	0.003	0.006	0.005	
60	60.6	10 sec.	0.117	0.122	0.274	0.428	0.213	0.262	0.324	0.296	
0		1-5mins	0.005	0.005	0.006	0.007	0.006	0.006	0.009	0.007	
75	79.8	10 sec.	0.144	0.167	0.359	0.538	0.274	0.342	0.42	0.358	
0		1-5mins	0.009	0.01	0.01	0.012	0.01	0.011	0.013	0.011	
90	94.6	10 sec.	0.171	0.212	0.435	0.63	0.327	0.41	0.506	0.405	
0		1-5mins	0.014	0.019	0.019	0.021	0.018	0.019	0.025	0.017	
110	115.1	10 sec.	0.208	0.277	0.539	0.758	0.402	0.507	0.627	0.47	
0		1-5mins	0.023	0.032	0.031	0.038	0.03	0.03	0.042	0.025	
125	128.9	10 sec.	0.233	0.319	0.609	0.85	0.455	0.572	0.719	0.514	
0		1-5mins	0.03	0.04	0.039	0.051	0.038	0.039	0.053	0.032	
140	145.1	10 sec.	0.235	0.353	0.654	0.975	0.508	0.605	0.932	0.726	
0		1-5mins	0.036	0.048	0.046	0.069	0.049	0.047	0.087	0.073	

Mode of Failure		
Max Load (psf)	145.1	The top cap of panel stiffener disengaged from the backplate while going to 160 PSF

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 2/10/2025
 Product: **QuickPanel**

Test#: **QJ1-3**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

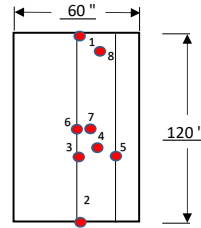
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



Time/Temp/RH:	
Start: 2:03	Temp: 22.1
Finish: 2:36	%RH: 18

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

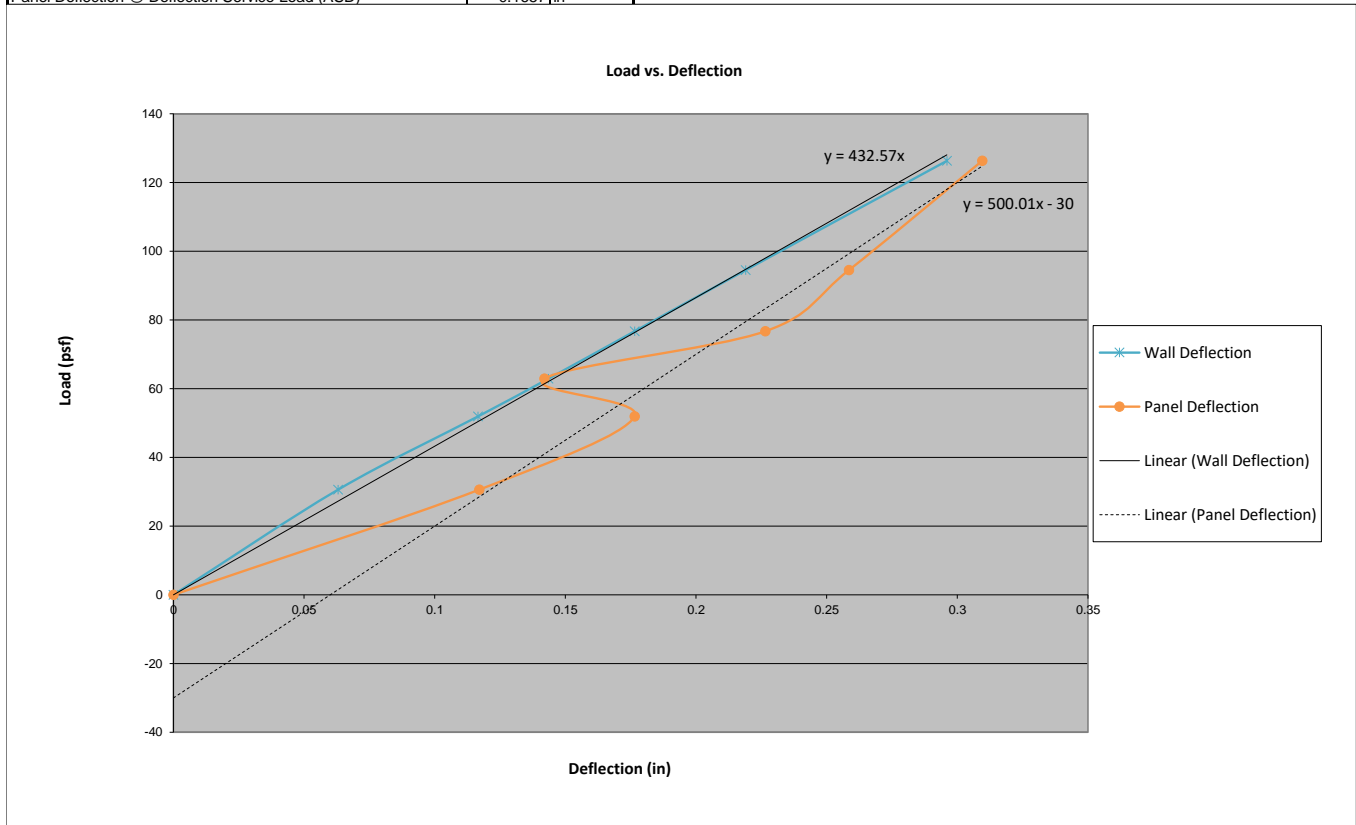
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15.5	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	30.6	10 sec.	0.063	0.055	0.131	0.229	0.093	0.122	0.158	0.15	
0		1-5mins	0.003	0.005	0.004	0.003	0.004	0.005	0.004	0.005	
45	51.9	10 sec.	0.106	0.117	0.239	0.384	0.176	0.228	0.282	0.254	
0		1-5mins	0.012	0.02	0.016	0.018	0.015	0.017	0.019	0.016	
60	62.9	10 sec.	0.129	0.15	0.292	0.395	0.214	0.283	0.346	0.303	
0		1-5mins	0.017	0.028	0.019	0.017	0.014	0.023	0.027	0.021	
75	76.7	10 sec.	0.157	0.19	0.361	0.541	0.268	0.35	0.423	0.358	
0		1-5mins	0.023	0.036	0.026	0.025	0.022	0.031	0.037	0.03	
90	94.5	10 sec.	0.196	0.244	0.454	0.657	0.343	0.439	0.525	0.429	
0		1-5mins	0.033	0.046	0.038	0.041	0.034	0.042	0.05	0.042	
120	126.3	10 sec.	0.253	0.329	0.611	0.848	0.466	0.587	0.703	0.538	
0		1-5mins	0.046	0.059	0.051	0.059	0.046	0.058	0.074	0.059	
135	140.4	10 sec.	0.279	0.369	0.682	0.942	0.527	0.656	0.787	0.583	
0		1-5mins	0.054	0.069	0.06	0.074	0.055	0.066	0.089	0.069	
155	160.7	10 sec.	0.054	0.069	0.788	1.084	0.612	0.751	0.906	0.649	
0		1-5mins	0.054	0.069	0.076	0.1	0.068	0.078	0.113	0.082	

Mode of Failure		
Max Load (psf)	160.7	The top cap of panel stiffener disengaged from the backplate while going to 160 PSF

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Test#:	QJ1-3
Max Load	160.7 psf
Allowable Design Load (ASD) = Max Load / 2	80.4 psf
Deflection Service Load (ASD) = Allowable * 0.7	56.2 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1807 in
Panel Deflection @ Deflection Service Load (ASD)	0.1657 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
30.6	0.063	0.117
51.9	0.117	0.177
62.9	0.144	0.142
76.7	0.177	0.227
94.5	0.219	0.259
126.3	0.296	0.310
140.4	0.332	0.338
160.7	0.690	0.384

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 2/11/2025
 Product: **QuickPanel**

Test#: **QJ2-1**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

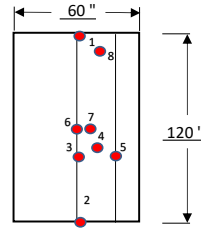
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



Time/Temp/RH:			
Start:	1:50	Temp:	23.4
Finish:	2:30	%RH:	16

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations	
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
0		1-5mins	Zero Deflection Gauges									
30	31.8	10 sec.	0.095	0.123	0.188	0.195	0.163	0.123	0.205	0.186		
0		1-5mins	0.037	0.046	0.054	0.053	0.049	0.041	0.054	0.051		
45	52.5	10 sec.	0.126	0.165	0.272	0.286	0.234	0.167	0.297	0.269		
0		1-5mins	0.038	0.047	0.056	0.056	0.05	0.042	0.056	0.052		
60	66.3	10 sec.	0.148	0.197	0.333	0.353	0.288	0.2	0.362	0.331		
0		1-5mins	0.041	0.052	0.061	0.061	0.054	0.044	0.059	0.056		
75	82	10 sec.	0.189	0.248	0.418	0.44	0.359	0.248	0.453	0.417		
0		1-5mins	0.05	0.063	0.074	0.074	0.064	0.052	0.073	0.069		
90	101.9	10 sec.	0.251	0.32	0.538	0.569	0.45	0.326	0.585	0.54		
0		1-5mins	0.072	0.081	0.098	0.094	0.081	0.071	0.098	0.093		
120	120.1	10 sec.	0.321	0.387	0.654	0.689	0.555	0.409	0.71	0.656		
0		1-5mins	0.103	0.1	0.125	0.12	0.102	0.098	0.126	0.122		
140	145.7	10 sec.	0.445	0.476	0.818	0.865	0.685	0.559	0.896	0.828		
0		1-5mins	0.169	0.124	0.172	0.164	0.134	0.152	0.172	0.17		
160	161.8	10 sec.	0.519	0.529	0.923	0.978	0.771	0.655	1.019	0.936		
0		1-5mins	0.204	0.138	0.196	0.191	0.157	0.189	0.201	0.197		
180	178.5	10 sec.	0.585	0.578	1.018	1.085	0.851	0.736	1.135	1.036		
0		1-5mins	0.238	0.149	0.221	0.217	0.181	0.226	0.233	0.222	Retapping the wall	
220	238	10 sec.	0.647	0.583	1.224	1.34	1.028	0.86	1.397	1.181		

Mode of Failure	
Max Load (psf)	238.0
Double Sided tape failed on panel stiffeners	

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 2/25/2025
 Product: **QuickPanel**

Test#: **QJ2-2**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

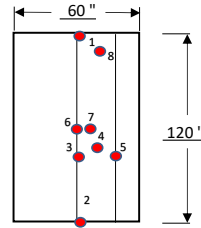
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



Time/Temp/RH:	
Start: 10:18	Temp: 24.9
Finish: 10:55	%RH: 17

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

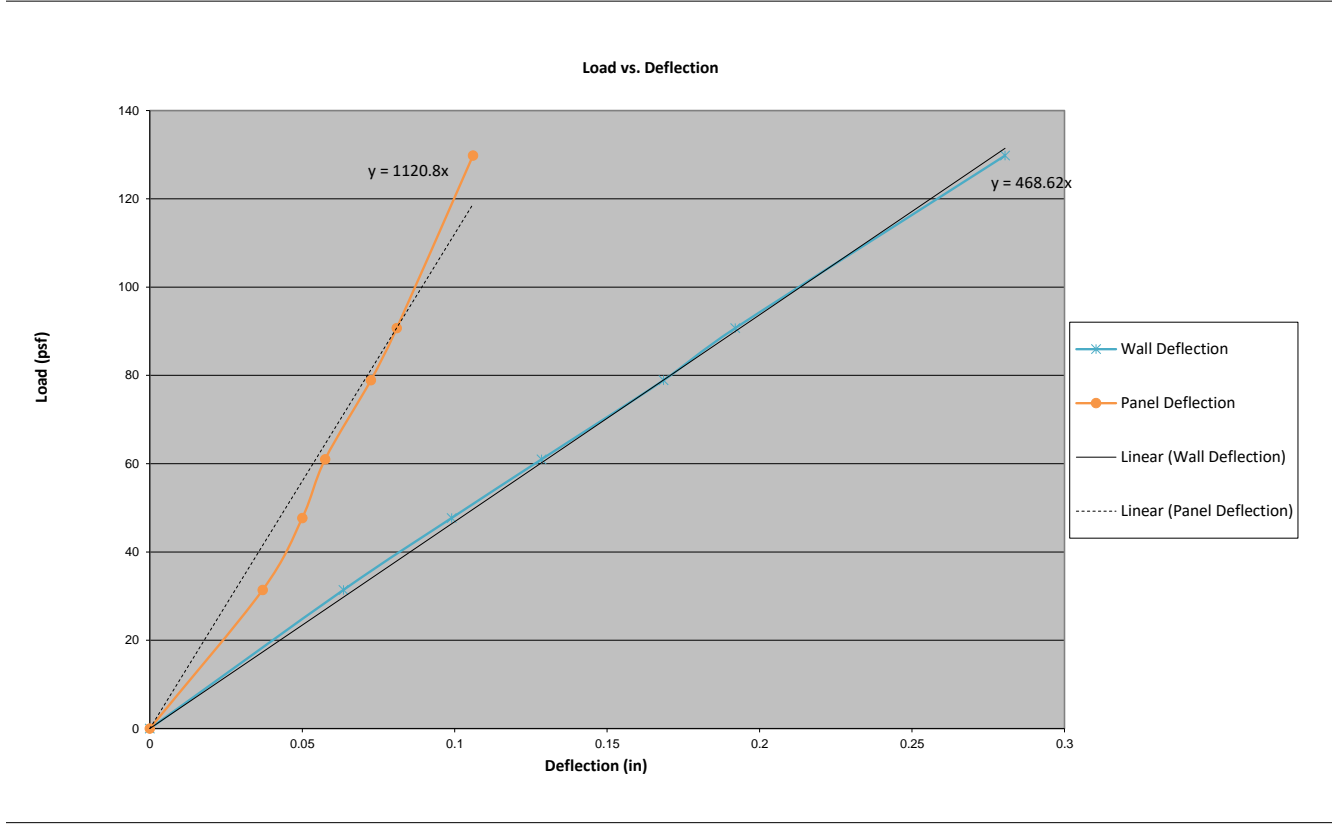
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations	
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
0		1-5mins	Zero Deflection Gauges									
30	31.4	10 sec.	0.063	0.066	0.128	0.15	0.098	0.128	0.133	0.051		
0		1-5mins	0.006	0.008	0.007	0.009	0.006	0.006	0.009	0.007		
45	47.7	10 sec.	0.097	0.111	0.203	0.23	0.157	0.203	0.207	0.083		
0		1-5mins	0.014	0.021	0.018	0.02	0.015	0.011	0.019	0.018		
60	61	10 sec.	0.125	0.152	0.27	0.296	0.207	0.267	0.272	0.107		
0		1-5mins	0.018	0.034	0.027	0.028	0.023	0.015	0.028	0.026		
75	78.9	10 sec.	0.161	0.21	0.361	0.389	0.272	0.354	0.359	0.136		
0		1-5mins	0.024	0.051	0.04	0.042	0.035	0.018	0.04	0.037		
90	90.7	10 sec.	0.184	0.25	0.421	0.448	0.313	0.409	0.413	0.154		
0		1-5mins	0.027	0.06	0.05	0.052	0.043	0.022	0.05	0.045		
120	129.8	10 sec.	0.252	0.357	0.605	0.632	0.447	0.585	0.592	0.221		
0		1-5mins	0.037	0.08	0.07	0.073	0.06	0.026	0.065	0.061		
150	146.4	10 sec.	0.281	0.403	0.688	0.715	0.505	0.664	0.678	0.249		
0		1-5mins	0.041	0.091	0.083	0.086	0.069	0.03	0.076	0.071		
165	168.4	10 sec.	0.316	0.459	0.794	0.827	0.584	0.764	0.787	0.289		
0		1-5mins	0.046	0.102	0.097	0.101	0.081	0.035	0.092	0.083		
180	184.2	10 sec.	0.343	0.5	0.875	0.914	0.641	0.84	0.867	0.318		
0		1-5mins	0.051	0.114	0.112	0.116	0.092	0.038	0.105	0.096		
200	210.5	10 sec.	0.39	0.568	1.001	1.053	0.731	0.957	0.998	0.374		
0		1-5mins	0.06	0.122	0.127	0.135	0.103	0.044	0.119	0.111		
230	224.5	10 sec.	0.43	0.138	0.613	1.092	1.177	1.042	1.105	0.421		
0		1-5mins	0.071	0.134	0.147	0.158	0.118	0.053	0.139	0.128		

Mode of Failure	
Max Load (psf)	224.5
Double Sided tape failed on panel stiffeners.	

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Test#:	QJ2-2
Max Load	224.5 psf
Allowable Design Load (ASD) = Max Load / 2	112.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	78.6 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.200 in
Wall Deflection @ Deflection Service Load (ASD)	0.1677 in
Panel Deflection @ Deflection Service Load (ASD)	0.0673 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
31.4	0.064	0.037
47.7	0.099	0.050
61.0	0.129	0.058
78.9	0.169	0.073
90.7	0.192	0.081
129.8	0.281	0.106
146.4	0.322	0.119
168.4	0.377	0.138
184.2	0.419	0.156
210.5	0.478	0.187
224.5	0.758	0.197

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 2/25/2025
 Product: **QuickPanel**

Test#: **QJ2-3**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 16 gauge 50 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

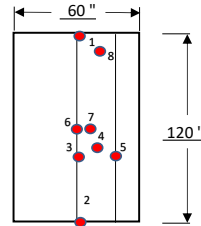
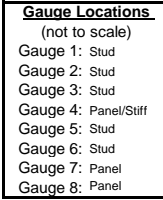
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	1:07	Temp:	23.8
Finish:	1:50	%RH:	16

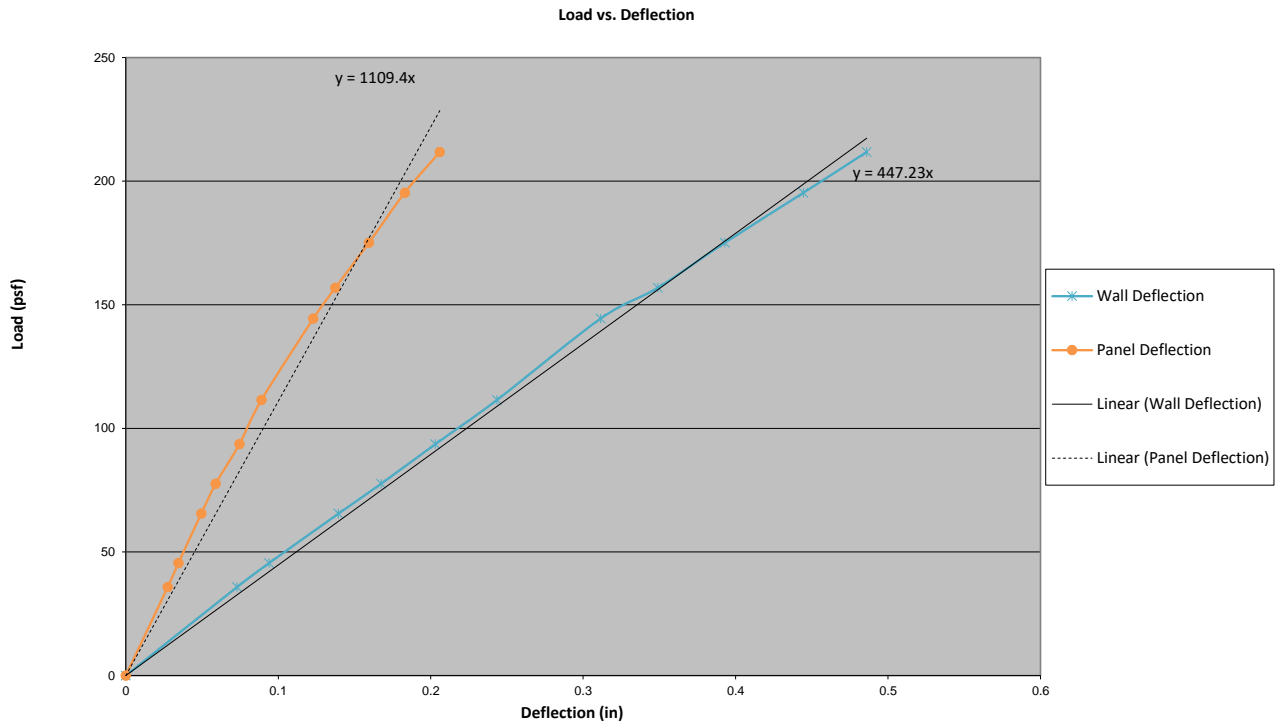
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	20	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Deflection Gauges								
0	35.8	10 sec.	0.071	0.069	0.141	0.16	0.124	0.143	0.158	0.071	
0		1-5mins	0.001	0.001	0.001	0	0.001	0	0.002	0.001	
45	45.5	10 sec.	0.084	0.088	0.177	0.201	0.156	0.18	0.202	0.082	
0		1-5mins	0.002	0.001	0.001	0.001	0.001	0.001	0.003	0.002	
60	65.5	10 sec.	0.111	0.126	0.258	0.291	0.225	0.258	0.293	0.111	
0		1-5mins	0.004	0.005	0.005	0.004	0.004	0.003	0.007	0.005	
75	77.6	10 sec.	0.132	0.155	0.312	0.352	0.274	0.311	0.355	0.13	
0		1-5mins	0.008	0.011	0.01	0.012	0.01	0.006	0.013	0.011	
95	93.6	10 sec.	0.161	0.203	0.39	0.441	0.343	0.385	0.443	0.158	
0		1-5mins	0.011	0.021	0.018	0.02	0.017	0.012	0.021	0.018	
110	111.5	10 sec.	0.194	0.257	0.477	0.536	0.417	0.469	0.537	0.187	
0		1-5mins	0.017	0.036	0.03	0.037	0.029	0.018	0.035	0.03	
140	144.4	10 sec.	0.249	0.348	0.628	0.711	0.548	0.61	0.715	0.617	
0		1-5mins	0.027	0.059	0.051	0.06	0.049	0.026	0.056	0.049	
160	156.9	10 sec.	0.272	0.388	0.691	0.784	0.602	0.679	0.787	0.266	
0		1-5mins	0.033	0.07	0.061	0.074	0.059	0.028	0.066	0.06	
180	175.1	10 sec.	0.309	0.435	0.779	0.888	0.678	0.765	0.888	0.303	
0		1-5mins	0.043	0.086	0.077	0.092	0.073	0.037	0.087	0.0765	
190	195.3	10 sec.	0.347	0.484	0.874	1.001	0.762	0.86	1.007	0.348	
0		1-5mins	0.052	0.096	0.092	0.109	0.087	0.043	0.106	0.092	
205	211.8	10 sec.	0.379	0.525	0.953	1.098	0.831	0.938	1.1	0.385	
0		1-5mins	0.059	0.108	0.106	0.127	0.102	0.049	0.128	0.106	
225	232.7	10 sec.	0.421	0.576	1.052	1.226	0.921	1.039	1.238	0.433	
0		1-5mins	0.069	0.123	0.126	0.155	0.121	0.056	0.152	0.125	
250	247.5	10 sec.	0.455	0.621	1.129	1.337	0.993	1.117	1.352	0.483	
0		1-5mins	0.075	0.135	0.14	0.167	0.137	0.063	0.173	0.141	
260	260	10 sec.	0.509	0.701	1.263	1.517	1.111	1.244	1.563	0.555	
0		1-5mins	0.09	0.16	0.174	0.214	0.173	0.083	0.226	0.174	

Mode of Failure		
Max Load (psf)	260.0	Double Sided tape failed while going to PSF 275

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Test#:	QJ2-3
Max Load	260.0 psf
Allowable Design Load (ASD) = Max Load / 2	130.0 psf
Deflection Service Load (ASD) = Allowable * 0.7	91.0 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.200 in
Wall Deflection @ Deflection Service Load (ASD)	0.2052 in
Panel Deflection @ Deflection Service Load (ASD)	0.0891 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
35.8	0.073	0.028
45.5	0.094	0.035
65.5	0.140	0.050
77.6	0.168	0.059
93.6	0.203	0.075
111.5	0.244	0.089
144.4	0.312	0.123
156.9	0.349	0.138
175.1	0.393	0.160
195.3	0.445	0.183
211.8	0.486	0.206

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ4-1**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/20/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

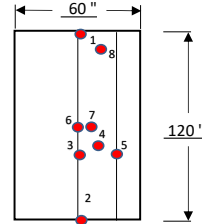
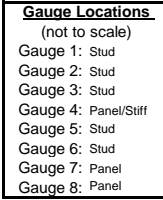
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	8:53	Temp:	20.5
Finish:	9:22	%RH:	18

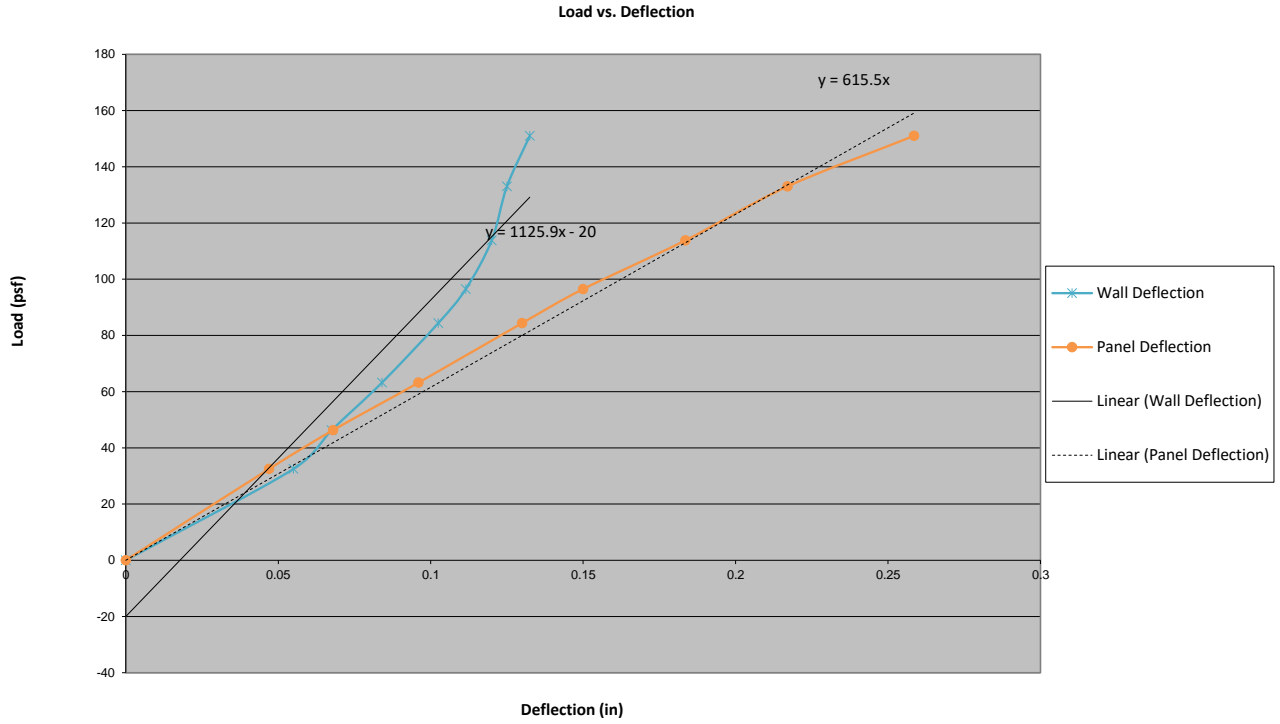
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	18	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	32.5	10 sec.	0.076	0.084	0.156	0.188	0.126	0.135	0.176	0.144	
0		1-5mins	0.001	0	0	0	0.001	0.001	0.001	0.001	
45	46.3	10 sec.	0.105	0.124	0.224	0.271	0.182	0.182	0.252	0.207	
0		1-5mins	0.006	0.005	0.005	0.005	0.005	0.006	0.007	0.006	
60	63.2	10 sec.	0.151	0.179	0.321	0.387	0.261	0.249	0.359	0.297	
0		1-5mins	0.02	0.021	0.021	0.022	0.019	0.019	0.025	0.023	
75	84.4	10 sec.	0.196	0.249	0.437	0.526	0.355	0.325	0.491	0.402	
0		1-5mins	0.031	0.039	0.038	0.039	0.034	0.032	0.045	0.038	
90	96.5	10 sec.	0.219	0.29	0.501	0.604	0.407	0.366	0.566	0.461	
0		1-5mins	0.044	0.061	0.059	0.071	0.056	0.048	0.072	0.057	
110	113.8	10 sec.	0.251	0.349	0.594	0.723	0.485	0.42	0.675	0.544	
0		1-5mins	0.044	0.061	0.059	0.071	0.056	0.048	0.072	0.057	
130	133	10 sec.	0.288	0.416	0.694	0.85	0.572	0.477	0.798	0.635	
0		1-5mins	0.053	0.08	0.075	0.095	0.072	0.06	0.094	0.07	
150	151	10 sec.	0.323	0.472	0.79	0.98	0.653	0.53	0.919	0.719	
0		1-5mins	0.06	0.091	0.088	0.117	0.085	0.064	0.114	0.081	
165	164.6	10 sec.	0.349	0.463	0.807	1.168	0.68	0.573	1.001	0.753	
0		1-5mins	0.068	0.104	0.103	0.176	0.102	0.075	0.146	0.093	
190	190.4	10 sec.	0.393	0.493	0.911	1.381	0.774	0.629	1.145	0.847	
0		1-5mins	0.077	0.104	0.114	0.225	0.119	0.08	0.18	0.108	

Mode of Failure		
Max Load (psf)	190.4	Double Sided tape failed on panel stiffener while going to PSF 210.

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Test#:	QJ4-1
Max Load	190.4 psf
Allowable Design Load (ASD) = Max Load / 2	95.2 psf
Deflection Service Load (ASD) = Allowable * 0.7	66.6 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.0689 in
Panel Deflection @ Deflection Service Load (ASD)	0.1084 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
32.5	0.055	0.047
46.3	0.068	0.068
63.2	0.084	0.096
84.4	0.103	0.130
96.5	0.112	0.150
113.8	0.120	0.184
133.0	0.125	0.217
151.0	0.133	0.259
164.6	0.167	0.425
190.4	0.186	0.539

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ4-2**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/28/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

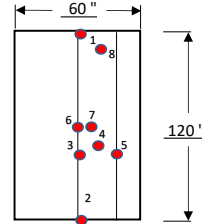
Deflection Gauges(Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)

- Gauge 1: Stud
- Gauge 2: Stud
- Gauge 3: Stud
- Gauge 4: Panel/Stiff
- Gauge 5: Stud
- Gauge 6: Stud
- Gauge 7: Panel
- Gauge 8: Panel



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	12:00	Temp:	24.3
Finish:	12:33	%RH:	17

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	imed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	16	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	40	10 sec.	0.101	0.111	0.21	0.267	0.185	0.204	0.25	0.155	
0		1-5mins	0.011	0.02	0.02	0.02	0.017	0.02	0.021	0.014	
55	56.6	10 sec.	0.136	0.161	0.304	0.379	0.266	0.296	0.358	0.211	
0		1-5mins	0.016	0.033	0.032	0.034	0.027	0.031	0.033	0.022	
90	90.1	10 sec.	0.197	0.266	0.49	0.61	0.421	0.471	0.573	0.318	
0		1-5mins	0.024	0.061	0.056	0.052	0.045	0.052	0.057	0.034	
120	117.6	10 sec.	0.244	0.346	0.633	0.791	0.538	0.602	0.744	0.395	
0		1-5mins	0.031	0.08	0.075	0.091	0.062	0.069	0.084	0.044	
140	145.6	10 sec.	0.291	0.424	0.771	0.993	0.651	0.736	0.932	0.479	
0		1-5mins	0.037	0.095	0.096	0.127	0.081	0.086	0.119	0.054	
160	158.4	10 sec.	0.31	0.46	0.831	1.101	0.702	0.794	1.039	0.536	
0		1-5mins	0.039	0.103	0.108	0.159	0.094	0.1	0.186	0.096	
180	180	10 sec.	0.305	0.503	0.893	1.28	0.785	0.839	1.453	0.696	

Mode of Failure		
Max Load (psf)	180.0	Double sided tape disengaged from the panel stiffener vtop cap and ACM Panel.

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ4-3**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/28/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

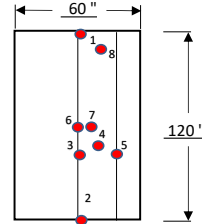
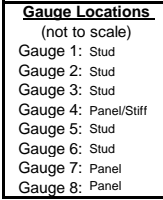
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	10:23	Temp:	23.5
Finish:	11:06	%RH:	17

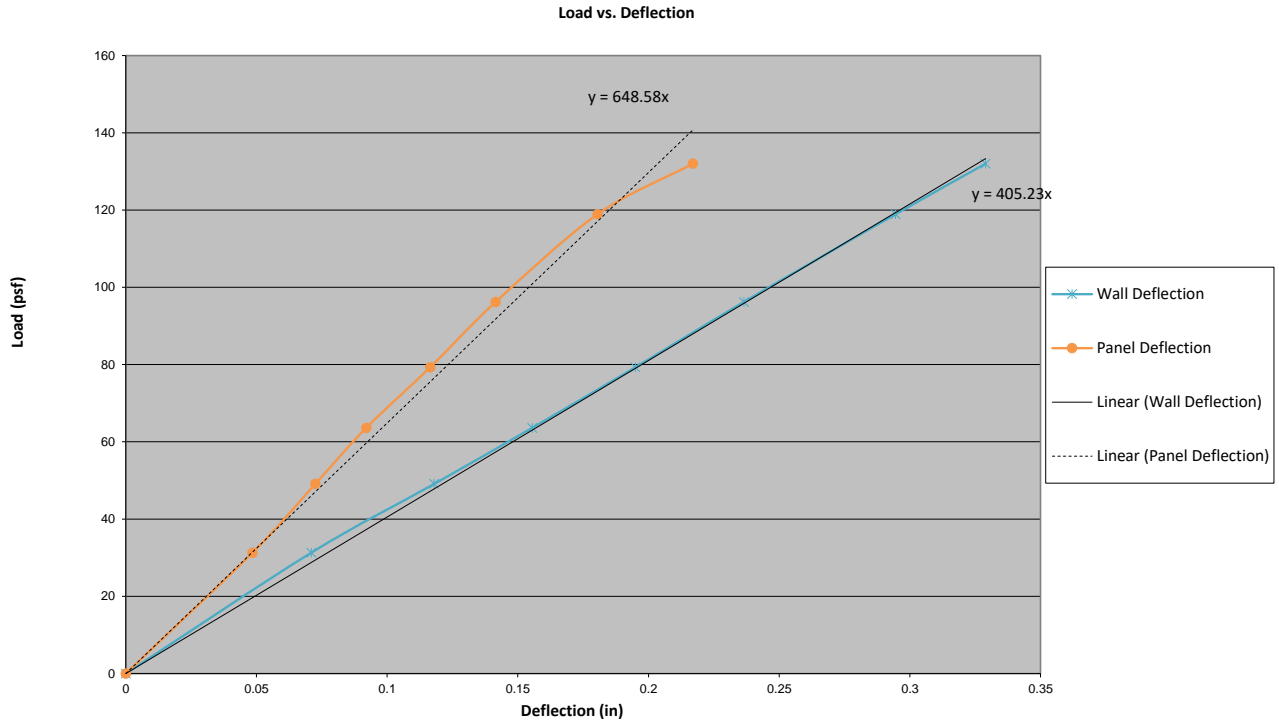
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	31.3	10 sec.	0.099	0.099	0.168	0.208	0.151	0.17	0.192	0.158	
0		1-5mins	0.011	0.014	0.012	0.015	0.013	0.014	0.016	0.011	
45	49.1	10 sec.	0.151	0.163	0.276	0.334	0.247	0.275	0.312	0.231	
0		1-5mins	0.019	0.029	0.026	0.03	0.027	0.02	0.031	0.027	
60	63.6	10 sec.	0.191	0.212	0.361	0.433	0.321	0.357	0.408	0.283	
0		1-5mins	0.027	0.042	0.041	0.046	0.04	0.04	0.047	0.029	
75	79.3	10 sec.	0.224	0.264	0.448	0.54	0.399	0.439	0.51	0.338	
0		1-5mins	0.034	0.056	0.053	0.06	0.055	0.052	0.061	0.036	
90	96.2	10 sec.	0.259	0.32	0.539	0.652	0.482	0.526	0.617	0.394	
0		1-5mins	0.04	0.07	0.065	0.077	0.069	0.062	0.075	0.044	
115	118.9	10 sec.	0.302	0.387	0.655	0.8	0.584	0.639	0.766	0.466	
0		1-5mins	0.046	0.087	0.08	0.109	0.088	0.076	0.098	0.052	
130	132	10 sec.	0.328	0.424	0.723	0.9	0.643	0.705	0.861	0.507	
0		1-5mins	0.05	0.093	0.09	0.123	0.096	0.084	0.112	0.061	
150	161.6	10 sec.	0.382	0.495	0.871	1.104	0.764	0.849	1.067	0.59	
0		1-5mins	0.058	0.106	0.111	0.166	0.115	0.103	0.147	0.071	
175	174.5	10 sec.	0.374	0.506	0.888	1.315	0.794	0.853	1.542	0.65	
0		1-5mins	0.059	0.11	0.121	0.246	0.135	0.131	0.347	0.112	

Mode of Failure		
Max Load (psf)	174.5	Double Sided tape disengaged from the panel stiffener top cap and ACM Panel while going to 190 PSF.

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Test#:	QJ4-3
Max Load	174.5 psf
Allowable Design Load (ASD) = Max Load / 2	87.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	61.1 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1502 in
Panel Deflection @ Deflection Service Load (ASD)	0.0898 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
31.3	0.071	0.049
49.1	0.118	0.073
63.6	0.156	0.092
79.3	0.195	0.117
96.2	0.237	0.142
118.9	0.295	0.181
132.0	0.329	0.217
161.6	0.411	0.287
174.5	0.413	0.474

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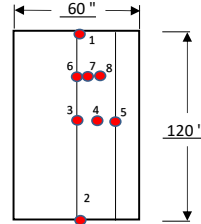
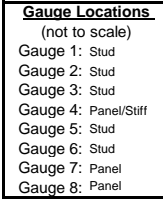
Test: **Transverse Load - Negative Wind Load** Test#: **QJ6-1**
 Client: EasyTrim
 Date: 2/21/2025
 Product: **QuickPanel**
 Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Installation:
 Configuration: 60" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:
Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)
 Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282



Time/Temp/RH:	
Start: 10:23	Temp: 23.5
Finish: 11:06	%RH: 17

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	60

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	17	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	31.9	10 sec.	0.053	0.05	0.117	0.207	0.099	0.107	0.708	0.717	
0		1-5mins	0.004	0.007	0.006	0.01	0.007	0.006	0.025	0.025	
45	53.5	10 sec.	0.087	0.095	0.189	0.357	0.175	0.179	0.969	0.975	
0		1-5mins	0.008	0.015	0.002	0.026	0.014	0.012	0.053	0.053	
60	64.7	10 sec.	0.103	0.112	0.228	0.436	0.214	0.213	1.083	1.093	
0		1-5mins	0.01	0.012	0.001	0.04	0.019	0.015	0.073	0.074	
75	78.3	10 sec.	0.122	0.141	0.28	0.537	0.262	0.254	1.216	1.224	
0		1-5mins	0.012	0.018	0.006	0.064	0.023	0.019	0.104	0.1	
90	97.8	10 sec.	0.147	0.18	0.347	0.686	0.324	0.308	1.399	1.406	
0		1-5mins	0.015	0.026	0.013	0.113	0.029	0.023	0.162	0.156	

Mode of Failure		
Max Load (psf)	97.8	Double Sided tape failed on the panel stiffener top cap.

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ6-2**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 1/29/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 60" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

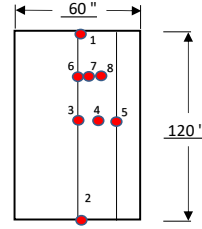
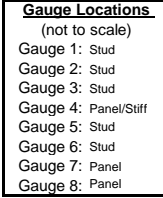
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	10:30	Temp:	22.8
Finish:	10:45	%RH:	16

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	60

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	17.6	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	32	10 sec.	0.066	0.108	0.209	0.269	0.16	0.178	0.726	0.742	
0		1-5mins	0.004	0.018	0.014	0.016	0.012	0.01	0.02	0.02	
45	48.7	10 sec.	0.099	0.171	0.343	0.419	0.252	0.294	0.942	0.954	
0		1-5mins	0.009	0.038	0.029	0.04	0.027	0.021	0.043	0.045	
60	64	10 sec.	0.133	0.233	0.494	0.567	0.352	0.421	1.127	1.134	
0		1-5mins	0.013	0.054	0.037	0.065	0.041	0.031	0.074	0.073	
75	77.4	10 sec.	0.162	0.282	0.651	0.706	0.452	0.551	1.283	1.281	
0		1-5mins	0.017	0.062	0.043	0.09	0.054	0.039	0.102	0.099	
90	91.7	10 sec.	0.192	0.344	0.884	0.885	0.638	0.731	1.446	1.436	
0		1-5mins	0.021	0.07	0.055	0.126	0.069	0.047	0.14	0.135	
105	106.1	10 sec.	0.234	0.432	1.339	1.178	0.951	1.073	1.659	1.624	
0		1-5mins	0.023	0.078	0.076	0.209	0.09	0.06	0.214	0.2	

Mode of Failure		
Max Load (psf)	106.1	Double Sided tape failed on the panel stiffener top cap going to 120 PSF.

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ6-3**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 2/24/2025

Reviewer: Chris

Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 60" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer

Equipment:

Pressure Chamber

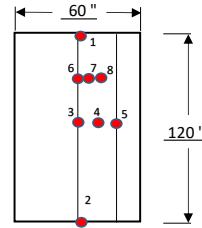
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



Time/Temp/RH:	
Start: 1:46	Temp: 23.2
Finish: 2:21	%RH: 19

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	60

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	17	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	31.8	10 sec.	0.051	0.057	0.106	0.29	0.102	0.721	0.783	0.081	
0		1-5mins	0.001	0.002	0.006	0.007	0.004	0.019	0.025	0.024	
45	53.2	10 sec.	0.08	0.092	0.174	0.448	0.164	0.985	1.022	0.138	
0		1-5mins	0.001	0.003	0.006	0.008	0.005	0.019	0.025	0.028	
60	63.5	10 sec.	0.093	0.108	0.204	0.525	0.191	0.163	1.121	1.084	
0		1-5mins	0.002	0.004	0.008	0.014	0.007	0.021	0.033	0.034	
75	82.3	10 sec.	0.116	0.139	0.262	0.679	0.245	1.26	1.298	0.216	
0		1-5mins	0.003	0.009	0.013	0.037	0.012	0.025	0.056	0.056	
90	91.6	10 sec.	0.128	0.159	0.292	0.822	0.274	1.358	1.399	0.241	
0		1-5mins	0.005	0.013	0.016	0.059	0.016	0.028	0.082	0.081	

Mode of Failure		
Max Load (psf)	91.6	Double Sided tape failed on the panel stiffener top cap.

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ7-1**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 3/3/2025

Reviewer: Chris

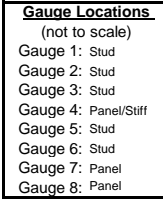
Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon



Equipment:

Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	9:15	Temp:	23.5
Finish:	9:41	%RH:	19

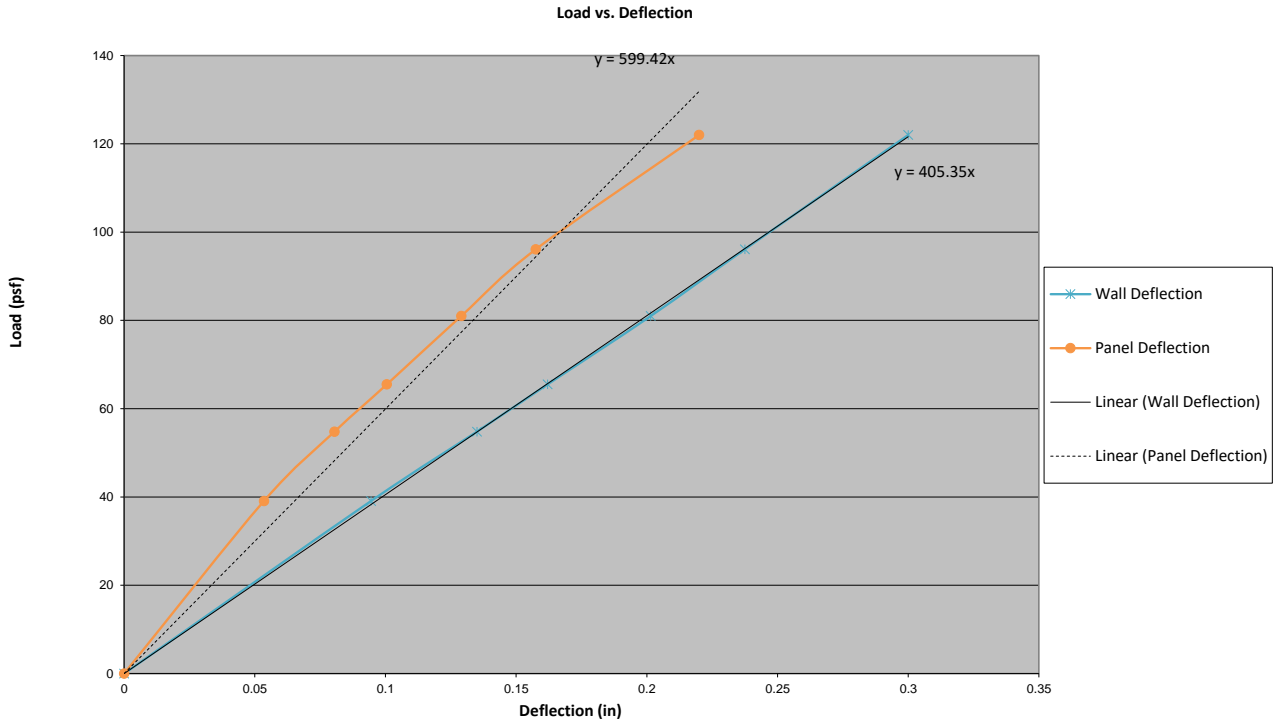
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15.4	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	39.1	10 sec.	0.109	0.096	0.192	0.234	0.169	0.197	0.239	0.194	
0		1-5mins	0.011	0.016	0.015	0.013	0.011	0.01	0.016	0.014	
50	54.8	10 sec.	0.156	0.142	0.276	0.341	0.245	0.284	0.349	0.26	
0		1-5mins	0.021	0.028	0.027	0.026	0.023	0.027	0.028	0.017	
65	65.5	10 sec.	0.185	0.177	0.335	0.418	0.3	0.343	0.427	0.303	
0		1-5mins	0.027	0.037	0.036	0.037	0.032	0.035	0.038	0.022	
80	81	10 sec.	0.217	0.226	0.416	0.525	0.376	0.423	0.53	0.356	
0		1-5mins	0.033	0.051	0.049	0.051	0.045	0.045	0.051	0.029	
95	96.1	10 sec.	0.248	0.281	0.499	0.635	0.456	0.502	0.639	0.411	
0		1-5mins	0.038	0.066	0.061	0.068	0.06	0.055	0.063	0.034	
120	122	10 sec.	0.299	0.373	0.636	0.834	0.592	0.636	0.828	0.506	
0		1-5mins	0.045	0.09	0.079	0.103	0.082	0.069	0.091	0.044	
140	138	10 sec.	0.327	0.427	0.716	0.961	0.671	0.714	0.953	0.555	
0		1-5mins	0.05	0.105	0.092	0.13	0.096	0.076	0.116	0.049	
160	164.5	10 sec.	0.367	0.491	0.841	1.146	0.794	0.837	1.159	0.67	
0		1-5mins	0.054	0.121	0.105	0.17	0.115	0.088	0.178	0.072	

Mode of Failure		
Max Load (psf)	164.5	Panel Stiffener screws pulled out from the steel studs.

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Test#:	QJ7-1
Max Load	164.5 psf
Allowable Design Load (ASD) = Max Load / 2	82.3 psf
Deflection Service Load (ASD) = Allowable * 0.7	57.6 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1420 in
Panel Deflection @ Deflection Service Load (ASD)	0.0772 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5))
0.0	0.000	0.000
39.1	0.095	0.054
54.8	0.135	0.081
65.5	0.162	0.101
81.0	0.202	0.129
96.1	0.238	0.158
122.0	0.300	0.220
138.0	0.337	0.268
164.5	0.408	0.329

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 3/3/2025
 Product: **QuickPanel**

Test#: **QJ7-2**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

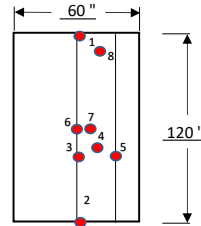
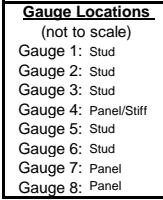
Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

Equipment:

Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)
 Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

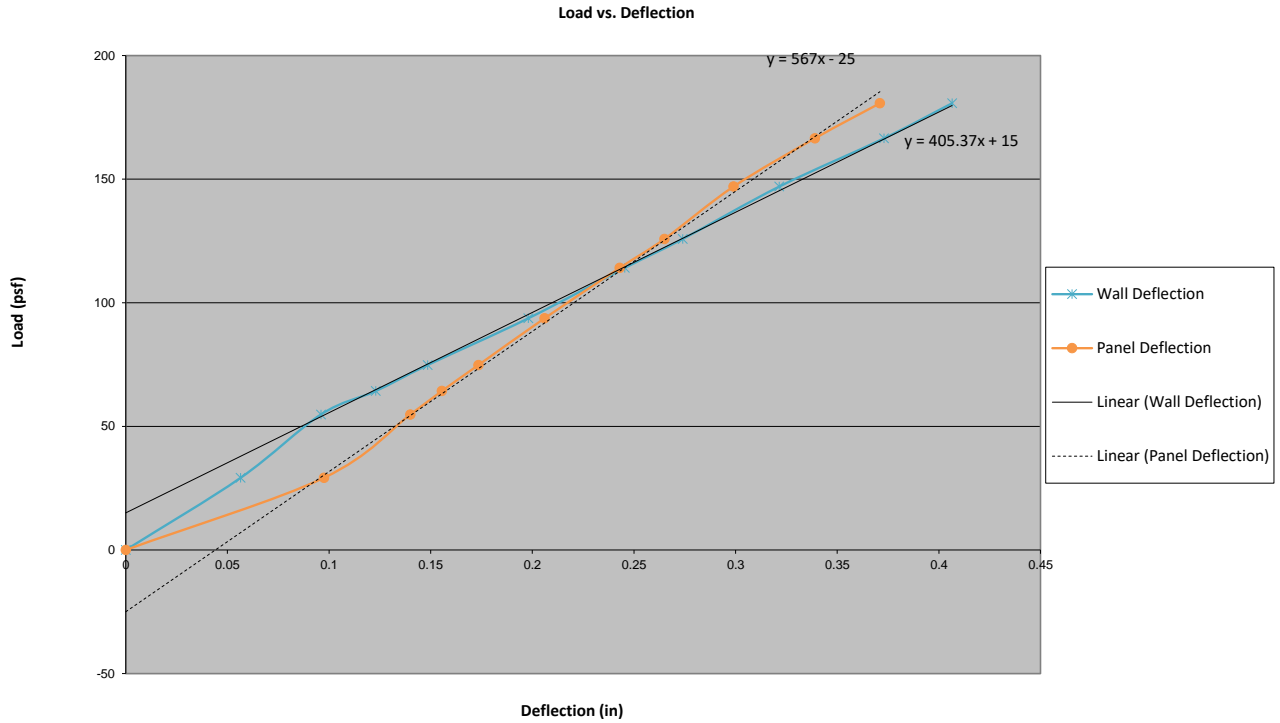
Time/Temp/RH:			
Start:	3:18	Temp:	25.2
Finish:	4:03	%RH:	21

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	14	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	29.2	10 sec.	0.097	0.088	0.151	0.226	0.106	0.149	0.215	0.159	
0		1-5mins	0.01	0.007	0.008	0.007	0.006	0.009	0.007	0.013	
45	54.8	10 sec.	0.169	0.177	0.295	0.395	0.215	0.269	0.372	0.262	
0		1-5mins	0.029	0.024	0.026	0.021	0.02	0.005	0.021	0.034	
60	64.3	10 sec.	0.193	0.209	0.35	0.46	0.259	0.324	0.433	0.297	
0		1-5mins	0.038	0.032	0.035	0.03	0.029	0.014	0.03	0.045	
75	74.8	10 sec.	0.215	0.24	0.402	0.524	0.299	0.376	0.491	0.334	
0		1-5mins	0.046	0.04	0.044	0.038	0.036	0.023	0.04	0.052	
90	93.7	10 sec.	0.253	0.297	0.5	0.642	0.372	0.473	0.602	0.398	
0		1-5mins	0.057	0.054	0.057	0.052	0.05	0.036	0.054	0.064	
105	114.1	10 sec.	0.295	0.362	0.607	0.771	0.449	0.574	0.72	0.464	
0		1-5mins	0.067	0.071	0.073	0.07	0.065	0.049	0.07	0.074	
120	125.8	10 sec.	0.32	0.404	0.669	0.846	0.493	0.636	0.792	0.699	
0		1-5mins	0.073	0.086	0.087	0.085	0.075	0.058	0.085	0.08	
145	147	10 sec.	0.357	0.456	0.761	0.958	0.557	0.728	0.902	0.551	
0		1-5mins	0.078	0.098	0.097	0.103	0.085	0.066	0.1	0.085	
160	166.5	10 sec.	0.4	0.512	0.86	1.082	0.626	0.829	1.023	0.61	
0		1-5mins	0.083	0.113	0.112	0.122	0.098	0.077	0.123	0.091	
180	180.7	10 sec.	0.43	0.551	0.928	1.171	0.672	0.897	1.104	0.648	
0		1-5mins	0.087	0.124	0.125	0.144	0.108	0.085	0.141	0.095	

Mode of Failure		
Max Load (psf)	180.7	Steel studs bended and panel stiffeners where let go

Test#:	QJ7-2
Max Load	180.7 psf
Allowable Design Load (ASD) = Max Load / 2	90.4 psf
Deflection Service Load (ASD) = Allowable * 0.7	63.2 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1343 in
Panel Deflection @ Deflection Service Load (ASD)	0.1561 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5))
0.0	0.000	0.000
29.2	0.057	0.098
54.8	0.096	0.140
64.3	0.123	0.156
74.8	0.149	0.174
93.7	0.198	0.206
114.1	0.246	0.243
125.8	0.274	0.265
147.0	0.322	0.299
166.5	0.373	0.339
180.7	0.407	0.371

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Test: **Transverse Load - Negative Wind Load**

Test#: **QJ7-3**

Project#: 0093

Client: EasyTrim

Technician(s): Ali

Date: 3/4/2025

Reviewer: Chris

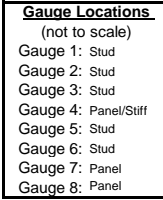
Product: **QuickPanel**

Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 24" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon



Equipment:

Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)
 Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	9:55	Temp:	22.9
Finish:	10:21	%RH:	19

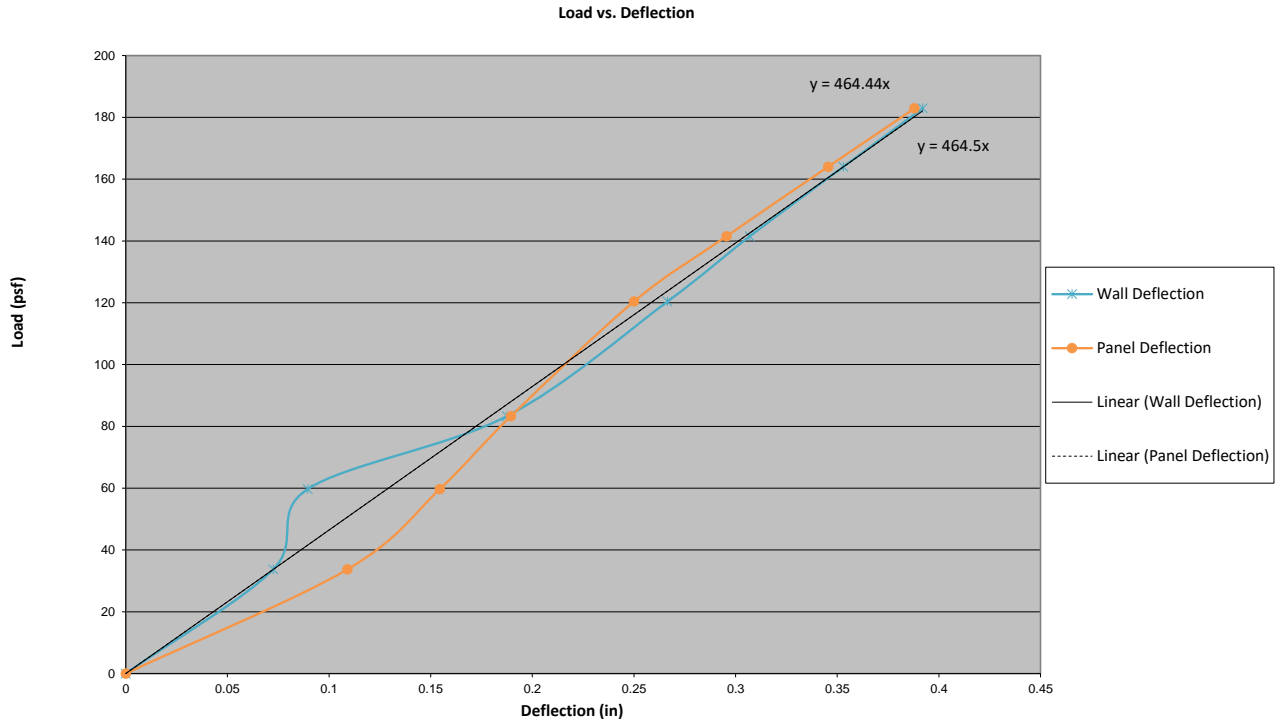
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	24

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15.7	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	33.7	10 sec.	0.101	0.102	0.178	0.263	0.13	0.174	0.239	0.164	
0		1-5mins	0.001	0.001	0.001	0.002	0.001	0.001	0.004	0.001	
60	59.7	10 sec.	0.154	0.165	0.304	0.418	0.223	0.249	0.381	0.294	
0		1-5mins	0.004	0.003	0.003	0.001	0.003	0.002	0.004	0.003	
80	83.3	10 sec.	0.19	0.213	0.405	0.54	0.296	0.389	0.494	0.312	
0		1-5mins	0.004	0.005	0.005	0	0.005	0.005	0.007	0.003	
120	120.4	10 sec.	0.248	0.309	0.576	0.745	0.414	0.545	0.686	0.392	
0		1-5mins	0.009	0.019	0.016	0.013	0.014	0.014	0.007	0.003	
140	141.5	10 sec.	0.289	0.377	0.679	0.879	0.488	0.64	0.811	0.443	
0		1-5mins	0.014	0.035	0.028	0.036	0.022	0.023	0.03	0.001	
160	164	10 sec.	0.33	0.452	0.796	1.027	0.567	0.744	0.951	0.489	
0		1-5mins	0.018	0.052	0.042	0.064	0.034	0.033	0.06	0.001	
180	182.9	10 sec.	0.364	0.516	0.892	1.151	0.634	0.832	1.073	0.532	
0		1-5mins	0.022	0.068	0.056	0.091	0.045	0.043	0.09	0.005	

Mode of Failure		
Max Load (psf)	182.9	Screw from panel stiffeners were pull out while going to 220 psf.

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Test#:	QJ7-3
Max Load	182.9 psf
Allowable Design Load (ASD) = Max Load / 2	91.5 psf
Deflection Service Load (ASD) = Allowable * 0.7	64.0 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.400 in
Wall Deflection @ Deflection Service Load (ASD)	0.1378 in
Panel Deflection @ Deflection Service Load (ASD)	0.1619 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5))
0.0	0.000	0.000
33.7	0.073	0.109
59.7	0.090	0.155
83.3	0.188	0.190
120.4	0.267	0.250
141.5	0.307	0.296
164.0	0.353	0.346
182.9	0.392	0.388

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 3/5/2025
 Product: **QuickPanel**

Test#: **QJ8-1**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

Equipment:

Pressure Chamber

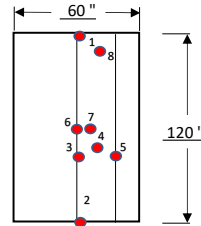
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

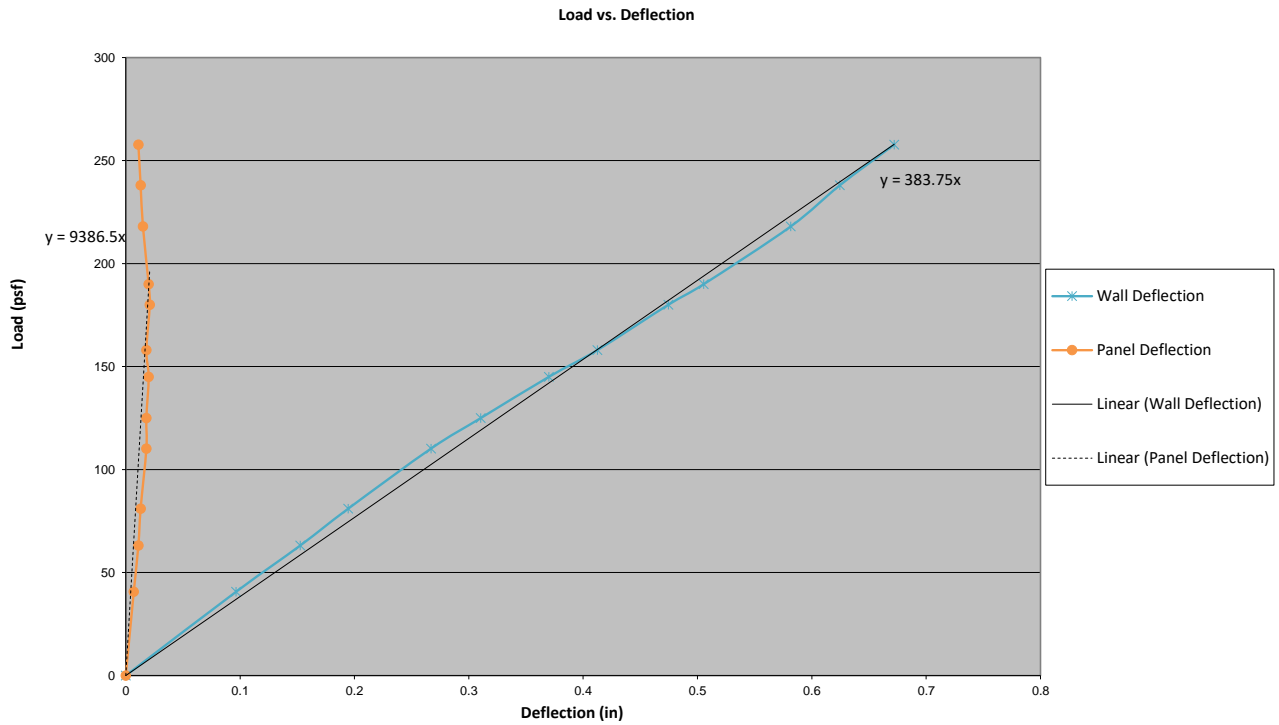
Time/Temp/RH:		
Start:	3:23	Temp: 23
Finish:	4:11	%RH: 18

Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15.6	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
0	40.7	10 sec.	0.094	0.095	0.184	0.189	0.129	0.191	0.198	0.089	
0		1-5mins	0.006	0.008	0.005	0.005	0.006	0.005	0.006	0.007	
60	63.1	10 sec.	0.159	0.176	0.311	0.318	0.217	0.32	0.331	0.146	
0		1-5mins	0.022	0.025	0.02	0.02	0.017	0.02	0.022	0.022	
80	81	10 sec.	0.209	0.244	0.415	0.421	0.288	0.421	0.434	0.186	
0		1-5mins	0.034	0.041	0.035	0.033	0.027	0.032	0.036	0.034	
100	110.2	10 sec.	0.277	0.345	0.574	0.583	0.4	0.578	0.596	0.25	
0		1-5mins	0.05	0.05	0.054	0.05	0.042	0.034	0.054	0.049	
120	125	10 sec.	0.312	0.389	0.655	0.666	0.456	0.661	0.679	0.279	
0		1-5mins	0.061	0.064	0.066	0.062	0.052	0.045	0.066	0.058	
140	145	10 sec.	0.355	0.451	0.765	0.776	0.53	0.773	0.793	0.32	
0		1-5mins	0.072	0.079	0.079	0.074	0.062	0.057	0.077	0.069	
160	158	10 sec.	0.383	0.494	0.839	0.852	0.581	0.851	0.869	0.349	
0		1-5mins	0.079	0.089	0.09	0.083	0.069	0.065	0.086	0.073	
180	180	10 sec.	0.426	0.559	0.953	0.967	0.659	0.967	0.988	0.381	
0		1-5mins	0.087	0.102	0.102	0.1	0.078	0.077	0.1	0.08	
200	190	10 sec.	0.449	0.596	0.58	1.026	0.699	1.028	1.048	0.412	
0		1-5mins	0.095	0.116	0.114	0.111	0.087	0.087	0.111	0.088	
220	218	10 sec.	0.51	0.741	1.184	1.197	0.821	1.207	1.222	0.468	
0		1-5mins	0.106	0.159	0.143	0.139	0.107	0.115	0.138	0.095	
240	238	10 sec.	0.558	0.837	1.3	1.308	0.902	1.322	1.335	0.507	
0		1-5mins	0.117	0.192	0.166	0.159	0.123	0.137	0.159	0.102	
260	257.7	10 sec.	0.633	0.985	1.463	1.462	1.017	1.481	1.492	0.562	
0		1-5mins	0.133	0.246	0.2	0.189	0.148	0.17	0.19	0.11	
280	286.2	10 sec.	0.782	1.187	1.723	1.702	1.187	1.757	1.74	0.654	
0		1-5mins	0.19	0.353	0.302	0.294	0.213	0.268	0.293	0.123	
300	306.1	10 sec.	0.852	1.534	0.301	1.925	1.352	0.2	1.95	0.707	
0		1-5mins	0.205	0.479	0.301	0.381	0.269	0.339	0.367	0.129	
320	320	10 sec.	0.9	1.623	0.301	2.027	1.419	2.097	2.062	0.752	

Mode of Failure		
Max Load (psf)	306.1	Steel studs started to bend. Test Discontinued

Test#:	QJ8-1
Max Load	306.1 psf
Allowable Design Load (ASD) = Max Load / 2	153.1 psf
Deflection Service Load (ASD) = Allowable * 0.7	107.1 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.200 in
Wall Deflection @ Deflection Service Load (ASD)	0.2812 in
Panel Deflection @ Deflection Service Load (ASD)	0.0145 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 7 - ga 6)
0.0	0.000	0.000
40.7	0.097	0.007
63.1	0.153	0.011
81.0	0.195	0.013
110.2	0.267	0.018
125.0	0.311	0.018
145.0	0.370	0.020
158.0	0.413	0.018
180.0	0.475	0.021
190.0	0.506	0.020
218.0	0.582	0.015
238.0	0.625	0.013
257.7	0.672	0.011
286.2	0.773	-0.017
306.1	-0.993	1.750
320.0	0.836	-0.035

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 3/6/2025
 Product: **QuickPanel**

Test#: **QJ8-2**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

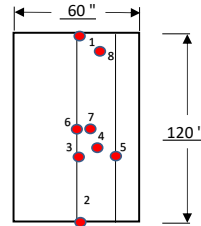
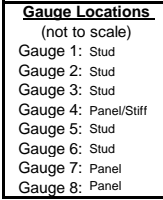
Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

Equipment:

Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1:	S/N - F29B
Sensor 2:	S/N - 9BFA
Sensor 3:	S/N - 87CE
Sensor 4:	S/N - F16B
Sensor 5:	S/N - F14E
Sensor 6:	S/N - F28I
Sensor 7:	S/N - F174
Sensor 8:	S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:	
Start:	4:05
Temp:	21.9
Finish:	4:38
%RH:	18

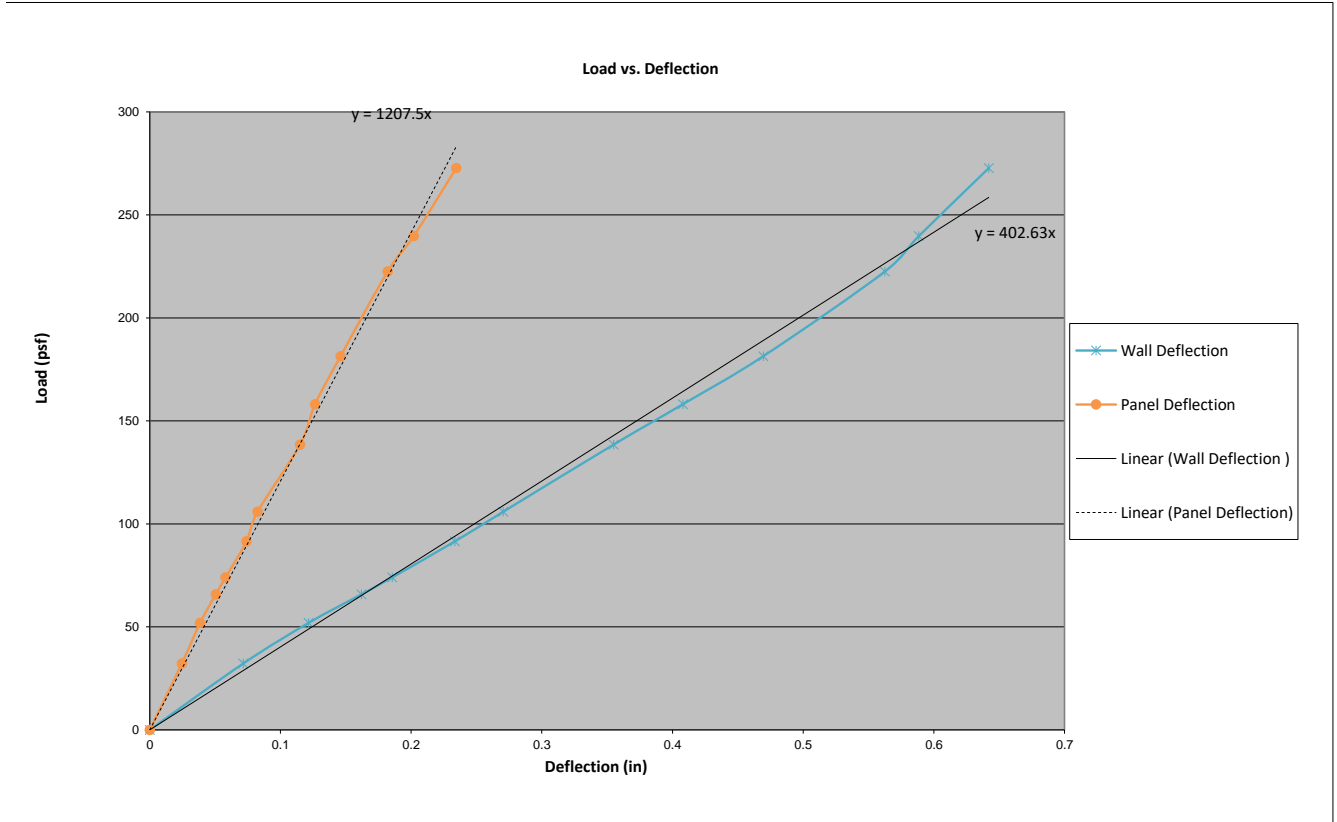
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	32.2	10 sec.	0.102	0.085	0.157	0.156	0.106	0.165	0.175	0.091	
0		1-5mins	0.008	0.01	0.011	0.011	0.007	0.009	0.01	0.009	
45	51.9	10 sec.	0.174	0.145	0.271	0.266	0.184	0.281	0.288	0.154	
0		1-5mins	0.025	0.025	0.029	0.028	0.019	0.028	0.026	0.024	
60	65.8	10 sec.	0.218	0.188	0.351	0.348	0.244	0.365	0.369	0.19	
0		1-5mins	0.036	0.039	0.041	0.039	0.029	0.041	0.039	0.035	
75	74	10 sec.	0.243	0.216	0.399	0.394	0.273	0.415	0.416	0.212	
0		1-5mins	0.044	0.047	0.05	0.048	0.036	0.05	0.046	0.04	
90	91.5	10 sec.	0.296	0.273	0.498	0.492	0.338	0.518	0.516	0.252	
0		1-5mins	0.06	0.063	0.066	0.061	0.045	0.066	0.063	0.051	
105	105.9	10 sec.	0.337	0.324	0.581	0.569	0.392	0.601	0.597	0.283	
0		1-5mins	0.074	0.078	0.08	0.073	0.053	0.079	0.075	0.06	
120	138.5	10 sec.	0.415	0.441	0.758	0.747	0.506	0.783	0.074	0.346	Gauge 7 stuck
0		1-5mins	0.101	0.11	0.11	0.1	0.054	0.108	0.074	0.078	
150	158.1	10 sec.	0.458	0.514	0.868	0.856	0.591	0.894	0.074	0.385	
0		1-5mins	0.111	0.134	0.127	0.122	0.072	0.124	0.074	0.084	
175	181.4	10 sec.	0.508	0.601	0.998	0.991	0.692	1.024	0.074	0.429	
0		1-5mins	0.122	0.163	0.149	0.145	0.092	0.145	0.074	0.092	
220	222.5	10 sec.	0.613	0.788	1.238	1.238	0.874	1.263	0.074	0.518	
0		1-5mins	0.147	0.232	0.196	0.195	0.133	0.188	0.074	0.108	
240	239.7	10 sec.	0.701	0.9	1.361	1.366	0.967	1.389	0.074	0.573	
0		1-5mins	0.173	0.264	0.225	0.225	0.158	0.215	0.074	0.119	
280	272.7	10 sec.	0.861	1.117	1.607	1.613	1.15	1.631	0.074	0.684	
0		1-5mins	0.217	0.355	0.296	0.296	0.213	0.281	0.074	0.136	
290	285.8	10 sec.	0.968	1.216	1.727	1.752	1.243	1.755	0.074	0.752	
0		1-5mins	0.268	0.402	0.342	0.355	0.251	0.328	0.074	0.16	
310	302.2	10 sec.	1.059	1.612	2.027	2.008	1.412	2.03	0.074	0.902	
0		1-5mins	0.285	0.587	0.472	0.474	0.332	0.443	0.074	0.166	
320	317	10 sec.	1.143	1.686	2.141	2.111	1.488	2.146	0.453	0.883	

Mode of Failure		
Max Load (psf)	302.2	Steel studs started to bend. Test Discontinued

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Test#:	QJ8-2
Max Load	302.2 psf
Allowable Design Load (ASD) = Max Load / 2	151.1 psf
Deflection Service Load (ASD) = Allowable * 0.7	105.8 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.200 in
Wall Deflection @ Deflection Service Load (ASD)	0.2591 in
Panel Deflection @ Deflection Service Load (ASD)	0.0847 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 4 - (ga 3 + ga 5)/2)
0.0	0.000	0.000
32.2	0.072	0.025
51.9	0.122	0.039
65.8	0.162	0.051
74.0	0.186	0.058
91.5	0.234	0.074
105.9	0.271	0.083
138.5	0.355	0.115
158.1	0.408	0.127
181.4	0.470	0.146
222.5	0.563	0.182
239.7	0.589	0.202
272.7	0.642	0.235
285.8	0.663	0.267
302.2	0.695	0.289
317.0	0.732	0.297

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STRUCTURAL CIVIL CONSULTANTS

Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 3/7/2025
 Product: **QuickPanel**

Test#: **QJ8-3**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 12" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

Equipment:

Pressure Chamber

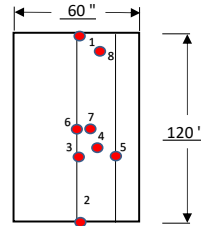
Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282

Gauge Locations

(not to scale)
 Gauge 1: Stud
 Gauge 2: Stud
 Gauge 3: Stud
 Gauge 4: Panel/Stiff
 Gauge 5: Stud
 Gauge 6: Stud
 Gauge 7: Panel
 Gauge 8: Panel



Time/Temp/RH:	
Start: 1:32	Temp: 19
Finish: 2:10	%RH: 19

	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

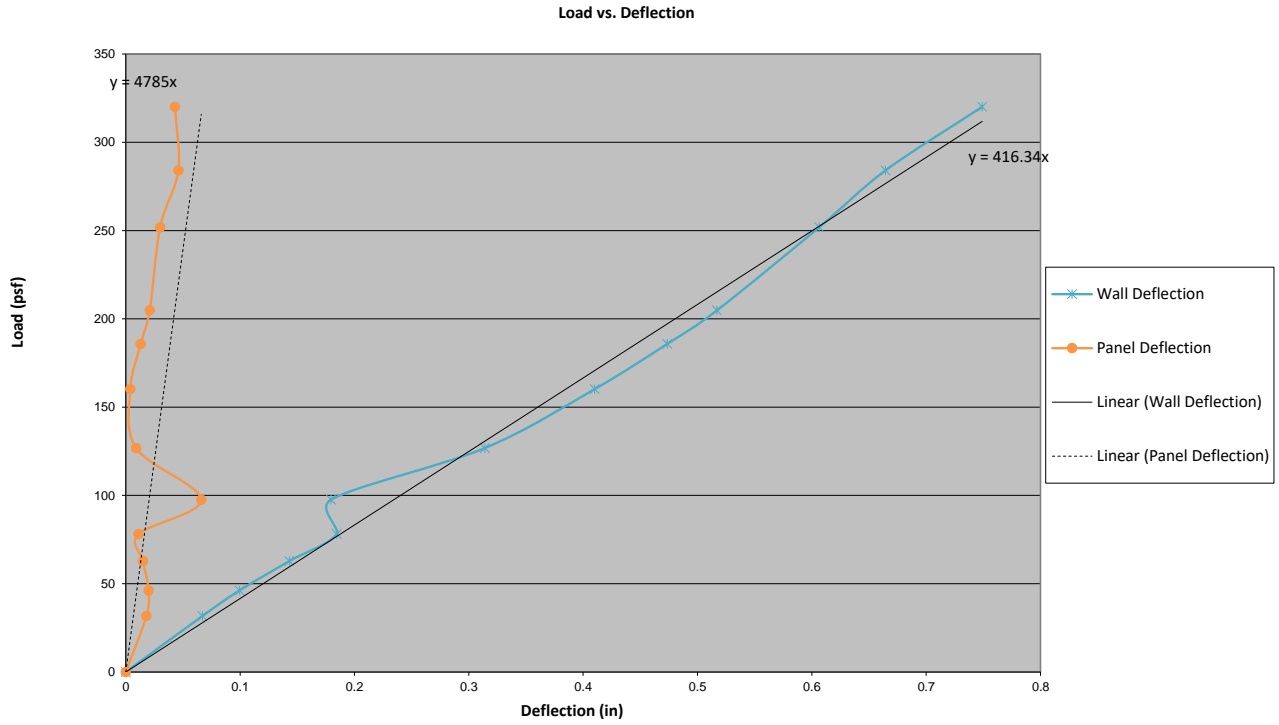
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	12

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	31.7	10 sec.	0.081	0.067	0.142	0.154	0.095	0.141	0.159	0.071	
0		1-5mins	0.007	0.012	0	0.01	0.007	0.009	0.009	0.005	
45	46.2	10 sec.	0.109	0.092	0.184	0.212	0.135	0.2	0.22	0.091	
0		1-5mins	0.001	0.003	0.002	0.004	0.001	0.001	0.003	0.002	
60	62.8	10 sec.	0.146	0.152	0.272	0.303	0.198	0.292	0.307	0.123	
0		1-5mins	0.006	0.022	0.015	0.018	0.013	0.014	0.017	0.007	
75	78.1	10 sec.	0.181	0.224	0.364	0.398	0.266	0.387	0.398	0.148	
0		1-5mins	0.011	0.045	0.033	0.035	0.029	0.03	0.034	0.01	Gauge 3 & 5 Stuck
90	97.6	10 sec.	0.226	0.319	0.032	0.521	0.029	0.452	0.518	0.185	
0		1-5mins	0.022	0.072	0.032	0.056	0.029	0.05	0.054	0.015	
120	126.8	10 sec.	0.291	0.425	0.032	0.679	0.029	0.672	0.681	0.24	
0		1-5mins	0.032	0.101	0.032	0.081	0.029	0.071	0.075	0.023	
160	160.2	10 sec.	0.36	0.52	0.032	0.852	0.029	0.85	0.854	0.302	
0		1-5mins	0.043	0.121	0.032	0.102	0.029	0.087	0.093	0.03	
180	185.8	10 sec.	0.414	0.597	0.032	0.983	0.029	0.979	0.992	0.351	
0		1-5mins	0.056	0.139	0.032	0.122	0.029	0.102	0.112	0.036	
200	204.8	10 sec.	0.457	0.665	0.032	1.082	0.029	1.078	1.099	0.39	
0		1-5mins	0.067	0.158	0.032	0.14	0.029	0.116	0.128	0.04	
240	251.9	10 sec.	0.608	0.891	0.032	1.362	0.029	1.356	1.386	0.498	
0		1-5mins	0.11	0.227	0.032	0.194	0.029	0.166	0.177	0.051	
280	284.1	10 sec.	0.757	1.062	0.032	1.579	0.029	1.574	1.62	0.592	
0		1-5mins	0.163	0.29	0.032	0.235	0.029	0.221	0.221	0.061	
320	320.1	10 sec.	0.94	1.28	0.032	1.861	0.029	1.859	1.902	0.705	
0		1-5mins	0.237	0.426	0.032	0.344	0.029	0.333	0.329	0.086	

Mode of Failure		
Max Load (psf)	320.1	Steel studs started to bend. Test Discontinued

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Test#:	QJ8-3
Max Load	320.1 psf
Allowable Design Load (ASD) = Max Load / 2	160.1 psf
Deflection Service Load (ASD) = Allowable * 0.7	112.0 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	0.200 in
Wall Deflection @ Deflection Service Load (ASD)	0.2691 in
Panel Deflection @ Deflection Service Load (ASD)	0.0146 in



Target Load (psf)	Wall Deflection (= ga 6 - (ga 1 + ga 2)/2)	Panel Deflection (= ga 7 - ga 6)
0.0	0.000	0.000
31.7	0.067	0.018
46.2	0.100	0.020
62.8	0.143	0.015
78.1	0.185	0.011
97.6	0.180	0.066
126.8	0.314	0.009
160.2	0.410	0.004
185.8	0.474	0.013
204.8	0.517	0.021
251.9	0.607	0.030
284.1	0.665	0.046
320.1	0.749	0.043

BOCA ENGINEERING CO. | SPAR
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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 1/23/2025
 Product: **QuickPanel**

Test#: **QJ9-1**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

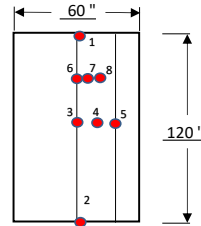
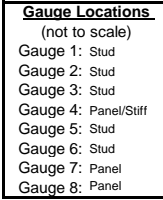
Installation:

Configuration: 60" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

Equipment:

Pressure Chamber
 Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges (Phidget potentiometers)
 Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	11:42	Temp:	21.5
Finish:	12:30	%RH:	18

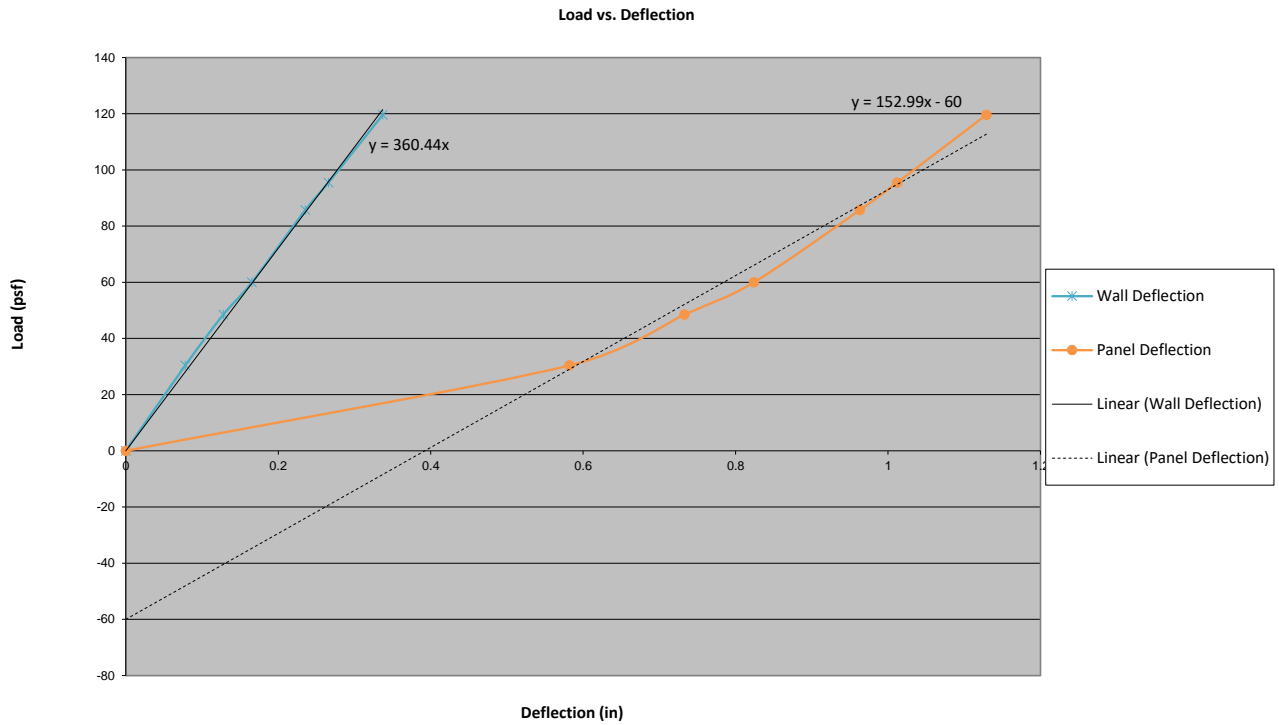
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	60

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	15.5	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	30.4	10 sec.	0.058	0.044	0.129	0.185	0.083	0.101	0.683	0.645	
0		1-5mins	0.005	0.007	0.008	0.011	0.007	0.007	0.02	0.019	
45	48.5	10 sec.	0.101	0.081	0.219	0.299	0.145	0.174	0.907	0.865	
0		1-5mins	0.015	0.015	0.019	0.026	0.018	0.019	0.05	0.049	
60	60	10 sec.	0.131	0.108	0.285	0.385	0.192	0.223	1.047	1.003	
0		1-5mins	0.025	0.021	0.028	0.039	0.027	0.029	0.074	0.075	
75	85.7	10 sec.	0.184	0.155	0.405	0.545	0.28	0.318	1.281	1.23	
0		1-5mins	0.044	0.03	0.045	0.065	0.045	0.047	0.116	0.12	
95	95.5	10 sec.	0.201	0.171	0.452	0.608	0.309	0.353	1.365	1.312	
0		1-5mins	0.05	0.034	0.051	0.079	0.052	0.053	0.136	0.138	
110	119.6	10 sec.	0.235	0.209	0.559	0.772	0.37	0.42	1.549	1.495	
0		1-5mins	0.06	0.042	0.064	0.119	0.059	0.046	0.18	0.179	
130	132.7	10 sec.	0.252	0.231	0.615	0.867	0.406	0.462	1.649	1.588	
0		1-5mins	0.066	0.047	0.071	0.147	0.065	0.052	0.211	0.208	
145	146.6	10 sec.	0.269	0.248	0.672	0.978	0.447	0.504	1.75	1.682	
0		1-5mins	0.07	0.05	0.075	0.184	0.071	0.057	0.246	0.24	
155	157.8	10 sec.	0.285	0.263	0.731	1.074	0.483	0.544	1.838	1.763	
0		1-5mins	0.072	0.056	0.08	0.2	0.076	0.059	0.246	0.269	

Mode of Failure		
Max Load (psf)	157.8	Double Sided tape failed when going up to 165 PSF on the panel side.

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Test#:	QJ9-1
Max Load	157.8 psf
Allowable Design Load (ASD) = Max Load / 2	78.9 psf
Deflection Service Load (ASD) = Allowable * 0.7	55.2 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	1.000 in
Wall Deflection @ Deflection Service Load (ASD)	0.1517 in
Panel Deflection @ Deflection Service Load (ASD)	0.7324 in



Target Load (psf)	Wall Deflection = $ga \cdot 3 - (ga \cdot 1 + ga \cdot 2) / 2$ (in)	Panel Deflection = $ga \cdot 7 - ga \cdot 6$
0.0	0.000	0.000
30.4	0.078	0.582
48.5	0.128	0.733
60.0	0.166	0.824
85.7	0.236	0.963
95.5	0.266	1.012
119.6	0.337	1.129
132.7	0.374	1.187
146.6	0.414	1.246
157.8	0.457	1.294

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Test: **Transverse Load - Negative Wind Load**
 Client: EasyTrim
 Date: 1/28/2025
 Product: **QuickPanel**

Test#: **QJ9-2**

Project#: 0093
 Technician(s): Ali
 Reviewer: Chris
 Location: 101-4441 76 Ave. SE Calgary AB T2C2G8

Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Installation:

Configuration: 60" OC Stiffeners
 Framing: 2x6 steel stud, 18 gauge 33 KSI
 Fastener: #10-1x1-1/2 HWH
 Sheathing: 1/2" Drywall
 Air Seal: 3M Double Sided Tape w/ Primer & Silicon

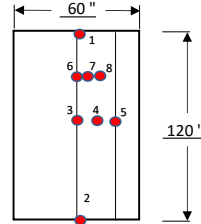
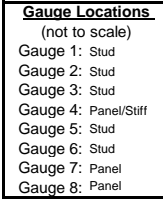
Equipment:

Pressure Chamber

Motor: Core Sensors Model: CS10 - 2400
 Press. Controller: S/N - G205141344
 Pressure Sensors:
 +/- 2 kPa: p/n 1136
 +/- 7 kPa: p/n 1137
 50 kPa: p/n 1138
 Phidget: S/N - 5015249240311

Deflection Gauges(Phidget potentiometers)

Sensor 1: S/N - F29B
 Sensor 2: S/N - 9BFA
 Sensor 3: S/N - 87CE
 Sensor 4: S/N - F16B
 Sensor 5: S/N - F14E
 Sensor 6: S/N - F28I
 Sensor 7: S/N - F174
 Sensor 8: S/N - F282



	Description	Taken [✓]
Photo 1:	Before test, back of wall	✓
Photo 2:	Before test, front of wall	✓
Photo 3:	After test, back of wall	✓
Photo 4:	After test, front of wall	✓
Photo 5:		

Time/Temp/RH:			
Start:	9:30	Temp:	22.4
Finish:	10:01	%RH:	18

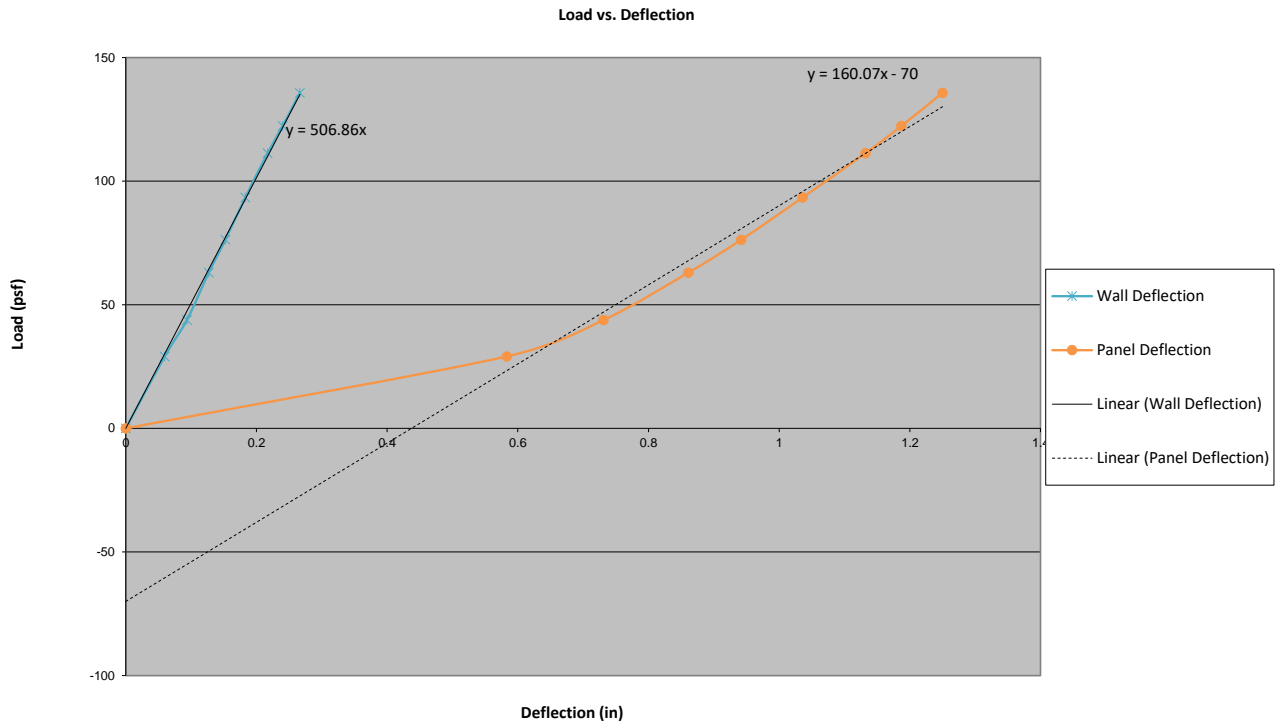
Test Assembly		
Width (in)	Length (in)	Panel Anchor Spacing (in)
60.0	120.0	60

Target Load (psf)	Actual Load (psf)	Time	Gauge 1 (in.)	Gauge 2 (in.)	Gauge 3 (in.)	Gauge 4 (in.)	Gauge 5 (in.)	Gauge 6 (in.)	Gauge 7 (in.)	Gauge 8 (in.)	Observations
0	0.0	immed.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	18	10 sec.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0		1-5mins	Zero Deflection Gauges								
30	33.1	10 sec.	0.056	0.054	0.121	0.189	0.086	0.706	0.762	0.098	
0		1-5mins	0.005	0.007	0.007	0.008	0.005	0.018	0.016	0.006	
45	47.2	10 sec.	0.081	0.084	0.178	0.277	0.127	0.87	0.932	0.144	
0		1-5mins	0.01	0.013	0.014	0.019	0.011	0.036	0.032	0.013	
60	60.9	10 sec.	0.104	0.114	0.237	0.367	0.168	1.006	1.072	0.188	
0		1-5mins	0.014	0.018	0.022	0.032	0.015	0.051	0.047	0.019	
80	80.4	10 sec.	0.131	0.157	0.312	0.5	0.22	1.18	1.259	0.243	
0		1-5mins	0.02	0.027	0.036	0.06	0.023	0.077	0.074	0.025	
95	97	10 sec.	0.152	0.196	0.373	0.618	0.265	1.324	1.401	0.289	
0		1-5mins	0.024	0.036	0.045	0.092	0.028	0.107	0.106	0.03	
110	111.1	10 sec.	0.169	0.226	0.422	0.712	0.3	1.429	1.508	0.324	
0		1-5mins	0.028	0.043	0.052	0.121	0.033	0.135	0.135	0.036	
125	128.7	10 sec.	0.187	0.256	0.48	0.855	0.343	1.56	1.645	0.366	
0		1-5mins	0.031	0.05	0.059	0.177	0.038	0.184	0.186	0.041	
140	143.1	10 sec.	0.205	0.286	0.553	1.086	0.36	1.68	1.77	0.414	
0		1-5mins	0.035	0.059	0.075	0.202	0.045	0.205	0.2	0.045	

Mode of Failure		
Max Load (psf)	143.1	Screws of Panel stiffeners were pulled out of steel stud.

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Test#:	QJ9-3
Max Load	148.9 psf
Allowable Design Load (ASD) = Max Load / 2	74.5 psf
Deflection Service Load (ASD) = Allowable * 0.7	52.1 psf
Wall Deflection limit = L / 180 of wall height	0.667 in
Panel Deflection limit = L / 60 of panel anchor span	1.000 in
Wall Deflection @ Deflection Service Load (ASD)	0.1043 in
Panel Deflection @ Deflection Service Load (ASD)	0.7940 in



Target Load (psf)	Wall Deflection = $ga \cdot 3 - (ga \cdot 1 + ga \cdot 2)/2$ (in)	Panel Deflection = $ga \cdot 7 - ga \cdot 6$
0.0	0.000	0.000
29.1	0.060	0.583
43.8	0.094	0.731
63.0	0.127	0.861
76.3	0.153	0.942
93.4	0.183	1.036
111.3	0.217	1.132
122.3	0.240	1.187
135.7	0.267	1.250
148.9	0.309	1.337