# TEST REPORT

| | |
|---|---|
| Date | 2025-07-07 |
| Report Number | 0093-38-1-6015 |
| Client | Engage Building Products Inc. |
| 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 installations of FastPlank Systems installed in a vertical orientation.

## TEST SUMMARY

Ten (10) representative wall assemblies have been tested 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 Engage Building Products Inc. in Calgary, Alberta.

### TESTING PROCEDURE

The FastPlank cladding specimen was tested in accordance with ASTM E330/E330M-14 to evaluate structural performance under uniform static air pressure. The assembly walls were securely mounted in a sealed test chamber, and deflection measurement devices were positioned on the panels and support members as specified in the attachments. A uniform static air pressure equal to the target load was applied in the negative pressure direction and maintained for 10 seconds. Deflection was recorded during peak loading, and permanent deformation was assessed 1 to 5 minutes after unloading. The test load began at 15 psf and was increased in increments of 15 psf until ultimate failure of the specimen or framing. The specimen was monitored for structural deformation, fastener integrity, and overall performance, with results evaluated against the standard's allowable limits.

### PRODUCT DESCRIPTION

FastPlank Systems are aluminum cladding planks with fastening clips and trim accessories, serving as an exterior cladding. Planks are extruded 3/64" thick aluminum with a V-Notch™ profile, available in widths of 4" or 6" and lengths of 16'. The plank exterior surface is typically finished with a powder-coat paint in a variety of colors.

### ASSEMBLY DESCRIPTION

The framed walls were 60" wide and 120" tall using SPF No.2 dimensional lumber or 1-5/8" x 6" 33 ksi 18 ga. steel studs at 16" O.C. A variation of sheathing, blocking, strapping, Z-girt and hat channels were used as specimen substrates, per Table 1 details. Sheathing materials including 7/16" OSB, 5/8" Plywood, 1/2" Ext. Drywall or 7/16" OSB with 2" rigid insulation were fastened with #8 x 1½" screws, spaced at 8" O.C. Clips were placed vertically, fastened using #10 - 1-1/2" screws into wood, #12 - 1-1/2" or #12 – 3/4" screws into steel studs, per Table 1 details. FastPlank planks were installed vertically with a starter track at the base of the wall, and side and top trim on other sides to secure the panels. Some assemblies included horizontal and vertical trims at mod span joints, as described in table 1. Planks were locked into pre-mounted clips, and with V-Noth™ interlocking between planks, ensuring a tight interlock throughout installation.

**Table 1**: Test Assembly Configurations for FastPlank Vertical Planks.

| Test Series[1] | Configuration[2,3,4] | Fastener Substrate | Framing[5] | Fastener | Sheathing |
|---|---|---|---|---|---|
| FP-V-1[1] | Clips @ 32" O.C. straight, vertical | Sheathing Only | 2"x4" SPF No. 2 @ 16" O.C.: No blocking | #10 - 1-1/2" screw | 7/16" OSB |
| FP-V-2[1] | Clips @ 32" O.C. straight, vertical | Sheathing Only | 2"x4" SPF No. 2 @ 16" O.C.: No blocking – 4'x8' WALL | #10 - 1-1/2" screw | 7/16" OSB |
| FP-V-3 | Clips @ 32" O.C. straight, vertical | Sheathing Only | 2"x4" SPF No. 2 @ 16" O.C.: No blocking | #10 - 1-1/2" screw | 5/8" Plywood |
| FP-V-4[1] | Clips @ 32" O.C. straight, vertical | Steel Z-girt | 2"x4" SPF No. 2 @ 16" O.C. w/ horizontal 18 ga. 33 ksi 1.5" x 2" steel z-girt @ 32" O.C. | #10 – 16 x 3/4" Tek screw into Steel z-girt #10—1-1/2" screw into wood @ 16" O.C. | 7/16" OSB + 2" rigid insulation |
| FP-V-5 | Clips @ 32" O.C. staggered, vertical | Sheathing only | 2"x6" SPF No.2 @ 16" O.C.: No blocking | #10 – 1-1/2" screw | 7/16" OSB |
| FP-V-6 | Clips @ 32" O.C. staggered, vertical | Sheathing only | 2"x6" SPF No.2 @ 16" O.C.: No blocking – w/ horizontal and vertical joints | #10 – 1-1/2" screw | 7/16" OSB |
| FP-V-7 | Clips @ 32" O.C. staggered, vertical | Sheathing only | 1-5/8" x 6" 33 ksi 18 ga. Steel stud @ 16" O.C. | #10 – 1-1/2" screw into sheathing #12 – 1-1/2" screw into steel @ 16" O.C. | 7/16" OSB |
| FP-V-8 | Clips @ 32" O.C. staggered, vertical | Blocking @ 32" O.C. | 1-5/8" x 6" 33 ksi 18 ga. Steel stud @ 16" O.C. | #10 – 1-1/2" screw into sheathing #12 – 1-1/2" screw into steel @ 16" O.C. | 1/2" Ext. Drywall |
| FP-V-9 | Clips @ 48" O.C. staggered, vertical | Blocking @ 48" O.C., and aluminum strapping @ 48" O.C. | 1-5/8" x 6" 33 ksi 18 ga. Steel stud @ 16" O.C. w/ Blocking @ 48" O.C. alternating w/ 16 ga. Horizontal aluminum strapping @ 48" O.C. top of sheathing | #12 – 1-1/2" screw | 1/2" Ext. Drywall |
| FP-V-10 | Clips @ 16" O.C. straight, vertical | Steel hat channel | 1-5/8" x 6" 33 ksi 18 ga. Steel stud @ 16" O.C. w/ 7/8" x 1-1/4" 33 ksi 20 ga. Horizontal steel hat channel @ 16" O.C. onto sheathing | #12 – 3/4" screw into steel channel, #12 – 1-1/2" screw into each steel stud | 7/16" OSB |

1. Test series consists of testing completed on 3 test walls, with the exception of FP-V-1, FP-V-2, and FP-V-4 which were tested once.
2. A straight configuration consists of clips aligned along each plank separation with clips at each plank spaced as dimensioned.
3. A staggered configuration consists of clips aligned along every plank separation with the clip starting locations alternating between the first and second plank to create a staggered appearance. Clips at each plank spaced as dimensioned.
4. A vertical configuration represents planks installed vertically, parallel to stud framing, and consists of horizontally aligned (perpendicular to studs) clips with either a straight or staggered pattern and clip spacing as specified.
5. Test wall frames are 5' x 10', unless noted otherwise.

**Table 2:** FastPlank Vertical series ASTM E330 Testing Results

| Test | Load Data | | | | | Allowable Deflection at Deflection Service Load[2] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Max Load (psf) | Avg. Max Load (psf) | Deviation from Ave. | < 15% Variance | Allowable Deflection Service Load (ASD) (psf)[1] | L/180 Limit (in.) | Measured Deflection (in.)[2] | L/60 Limit (in.) | Measured Deflection (in.)[2] | Measure < Limit |
| | | | | | | Wall | | Plank | | |
| **FP-V-1-1** | 76 | 76 | 0.00% | OKAY | 27 | 0.67 | 0.38 | 0.53 | 0.14 | OKAY |
| **FP-V-2-1** | 76 | 76 | 0.00% | OKAY | 27 | 0.53 | 0.16 | 0.53 | 0.09 | OKAY |
| **FP-V-3-1** | 142 | 148 | 4.14% | OKAY | 50 | 0.67 | 0.41 | 0.53 | 0.30 | OKAY |
| **FP-V-3-2** | 141 | | 4.84% | OKAY | 49 | 0.67 | 0.57 | 0.53 | 0.18 | OKAY |
| **FP-V-3-3** | 160 | | 7.79% | OKAY | 56 | 0.67 | 0.63 | 0.53 | 0.21 | OKAY |
| **FP-V-4-1** | 91 | 91 | 0.00% | OKAY | 32 | 0.67 | 0.09 | 0.53 | 0.15 | OKAY |
| **FP-V-5-1** | 94 | 93 | 1.07% | OKAY | 33 | 0.67 | 0.17 | 0.53 | 0.13 | OKAY |
| **FP-V-5-2** | 91 | | 2.17% | OKAY | 32 | 0.67 | 0.19 | 0.53 | 0.13 | OKAY |
| **FP-V-5-3** | 93 | | 0.00% | OKAY | 33 | 0.67 | 0.21 | 0.53 | 0.11 | OKAY |
| **FP-V-6-1** | 91 | 98 | 7.41% | OKAY | 32 | 0.67 | 0.18 | 0.53 | 0.06 | OKAY |
| **FP-V-6-2** | 106 | | 7.84% | OKAY | 37 | 0.67 | 0.19 | 0.53 | 0.09 | OKAY |
| **FP-V-6-3** | 97 | | 1.03% | OKAY | 34 | 0.67 | 0.17 | 0.53 | 0.07 | OKAY |
| **FP-V-7-1** | 76 | 81 | 6.37% | OKAY | 27 | 0.67 | 0.14 | 0.53 | 0.15 | OKAY |
| **FP-V-7-2** | 90 | | 10.53% | OKAY | 32 | 0.67 | -[3] | 0.53 | -[3] | - |
| **FP-V-7-3** | 76 | | 6.37% | OKAY | 27 | 0.67 | 0.17 | 0.53 | 0.12 | OKAY |
| **FP-V-8-1** | 106 | 111 | 4.61% | OKAY | 37 | 0.67 | 0.08 | 0.53 | 0.20 | OKAY |
| **FP-V-8-2** | 121 | | 8.62% | OKAY | 42 | 0.67 | 0.12 | 0.53 | 0.12 | OKAY |
| **FP-V-8-3** | 106 | | 4.61% | OKAY | 37 | 0.67 | 0.11 | 0.53 | 0.13 | OKAY |
| **FP-V-9-1** | 89 | 101 | 12.63% | OKAY | 31 | 0.67 | 0.09 | 0.80 | 0.24 | OKAY |
| **FP-V-9-2** | 103 | | 1.96% | OKAY | 36 | 0.67 | 0.12 | 0.80 | 0.28 | OKAY |
| **FP-V-9-3** | 112 | | 10.33% | OKAY | 39 | 0.67 | 0.11 | 0.80 | 0.20 | OKAY |
| **FP-V-10-1** | 192 | 194 | 1.04% | OKAY | 67 | 0.67 | 0.23 | 0.27 | 0.07 | OKAY |
| **FP-V-10-2** | 195 | | 0.51% | OKAY | 68 | 0.67 | 0.18 | 0.27 | 0.07 | OKAY |
| **FP-V-10-3** | 195 | | 0.51% | OKAY | 68 | 0.67 | 0.21 | 0.27 | 0.06 | OKAY |

1. Allowable deflection and deflection service load determined using IBC Table 1604.3 *Deflection Limits* and ASCE 7-22 Chapter 30, *Wind Loads: Components and Cladding.*
2. A linear trendline was created for each data set and used to calculate the wall/plank deflection at the allowable deflection service load of the test series.
3. Measured wall deflection removed due to malfunctioning sensor.

**Table 3:** Testing Results Sets Summary

| Testing Configurations | Allowable Design Load ASD (psf) [1] (Negative Wind Pressure Only) |
|---|---|
| **FP-V-1** | 38 |
| **FP-V-2** | 38 |
| **FP-V-3** | 74 |
| **FP-V-4** | 45 |
| **FP-V-5** | 46 |
| **FP-V-6** | 49 |
| **FP-V-7** | 40 |
| **FP-V-8** | 56 |
| **FP-V-9** | 51 |
| **FP-V-10** | 97 |

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 24 of 24 scheduled ASTM E330/E330M-14 tests.

The listed tested assemblies have been tested in conformance 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 Table 1 has been prepared in a format with design information that is suitable to publish in engineering code compliance report documents based on the IBC and NBCC Codes.

The testing has considered negative wind pressure direction only.

## SIGNED

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

Craig Gao, Eng. Tech.

2025-07-07
Date

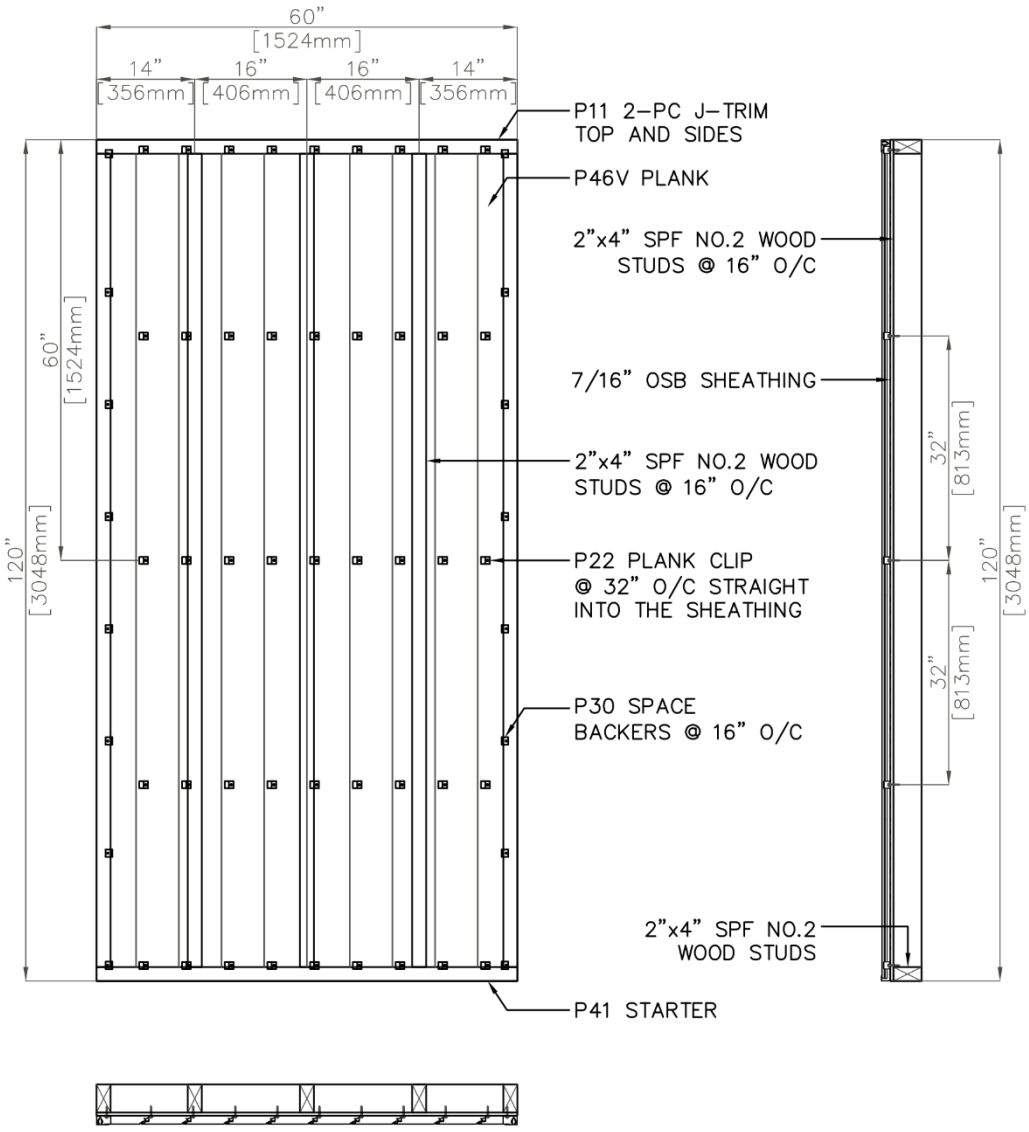
Chris Bowness, P.Eng., P.E.

2025-07-07
Date


-END OF REPORT-

**ATTACHMENTS:**

# FP–V–01 TEST WALL

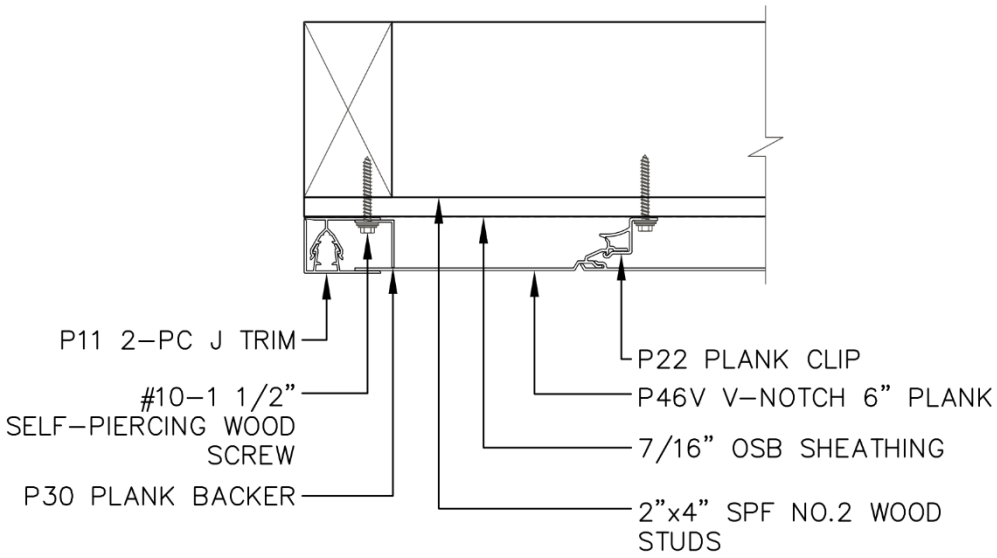



2x4 SPF No.2 @ 16" O.C – 5'x10' WALL
7/16" OSB
CLIPS FASTENED INTO SHEATHING @ 32" O/C STRAIGHT
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 1 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP1.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 | FASTPLANK - VERTICAL TERMINATION

N/A | NTS

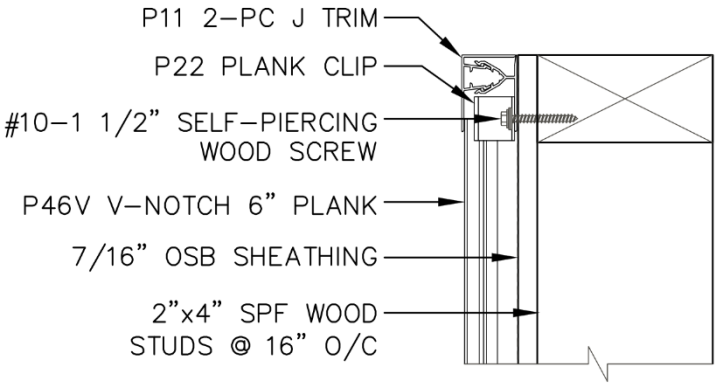


DESCRIPTION

ASTM E330 ASSEMBLY 1 FOR FASTPLANK

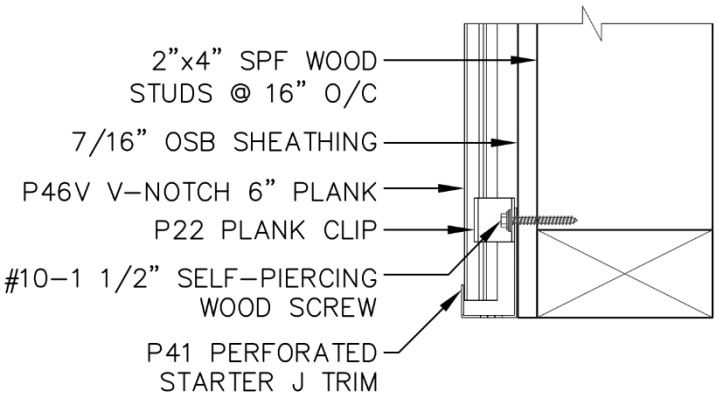
FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP1.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - TOP OF WALL

N/A NTS




2 FASTPLANK - STARTER

N/A NTS



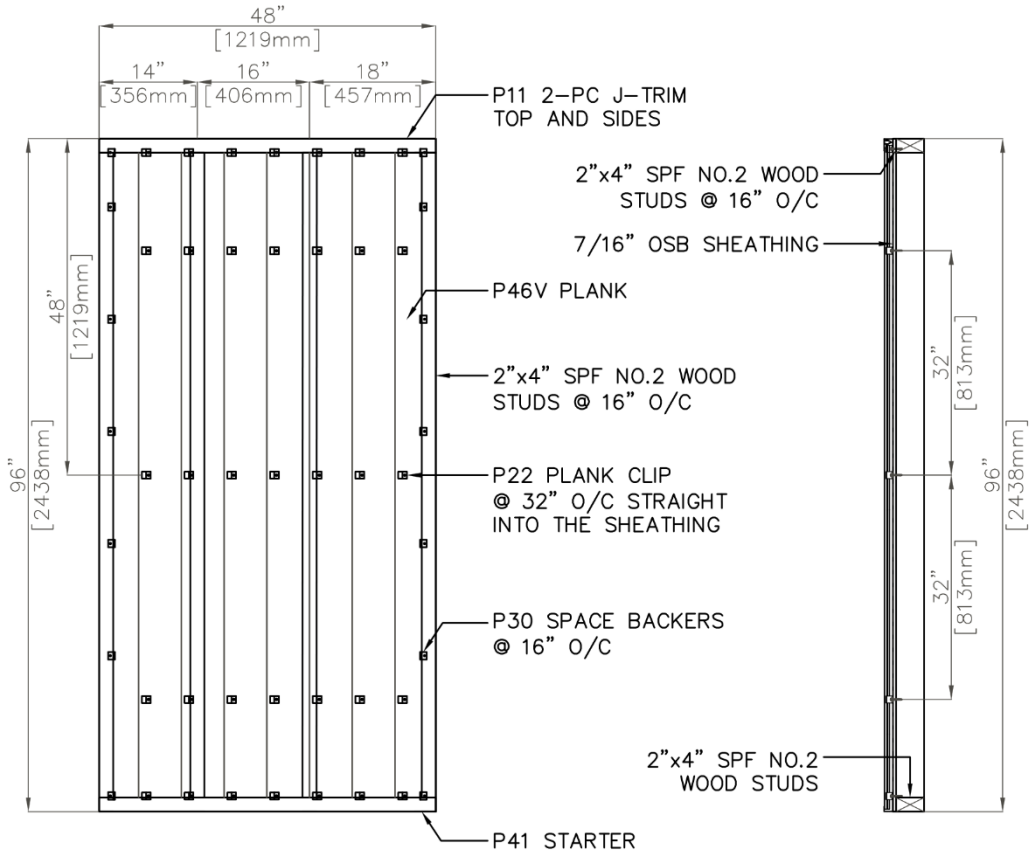
DESCRIPTION

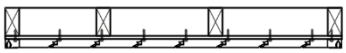
ASTM E330 ASSEMBLY 1 FOR FASTPLANK

Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP1.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–02 TEST WALL



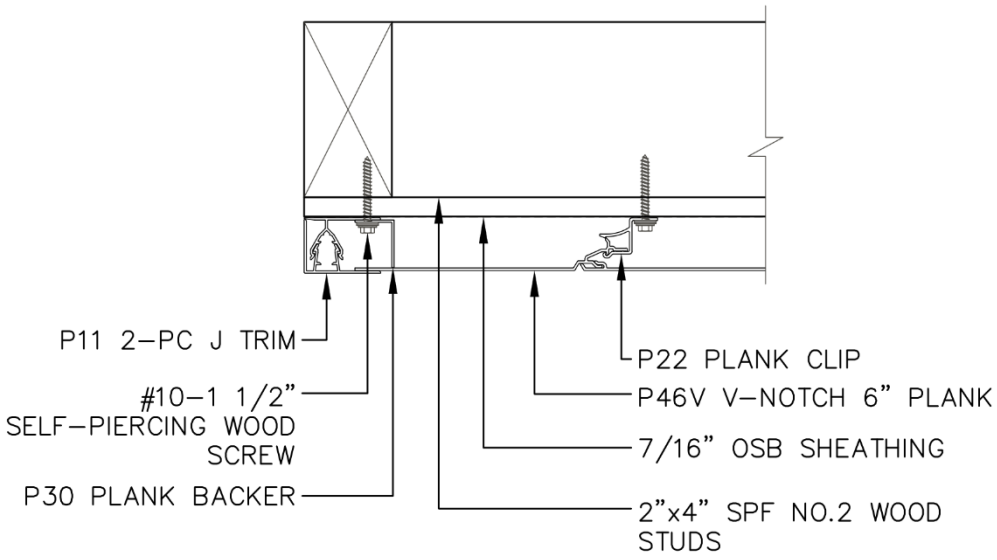
2x4 SPF No.2 @ 16" O.C – 4'x8' WALL
7/16" OSB
CLIPS FASTENED INTO SHEATHING @ 32" O/C STRAIGHT
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 2 FOR FASTPLANK

FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP2.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 | FASTPLANK - VERTICAL TERMINATION

N/A | NTS

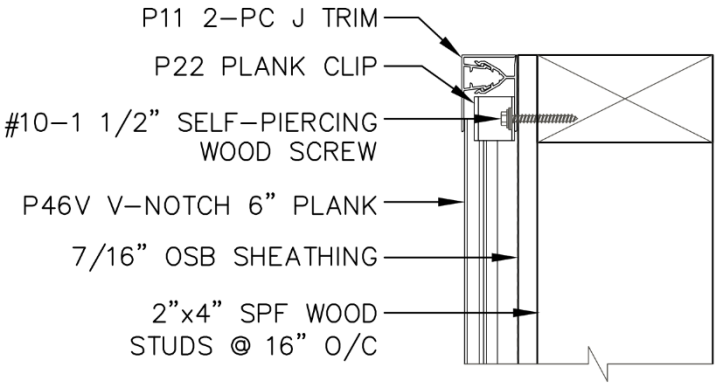


DESCRIPTION

ASTM E330 ASSEMBLY 2 FOR FASTPLANK

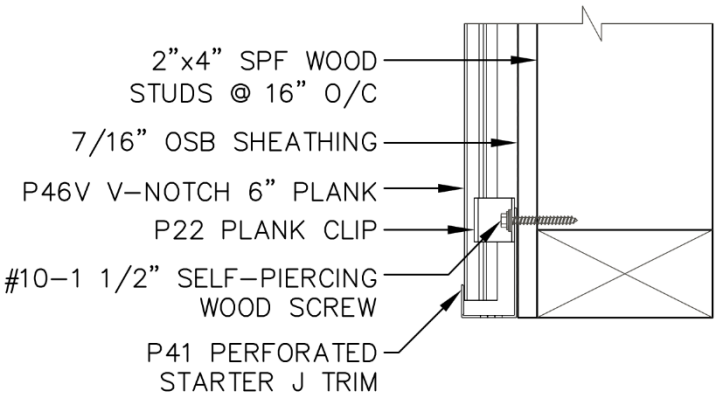
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP2.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - TOP OF WALL

N/A NTS




2 FASTPLANK - STARTER

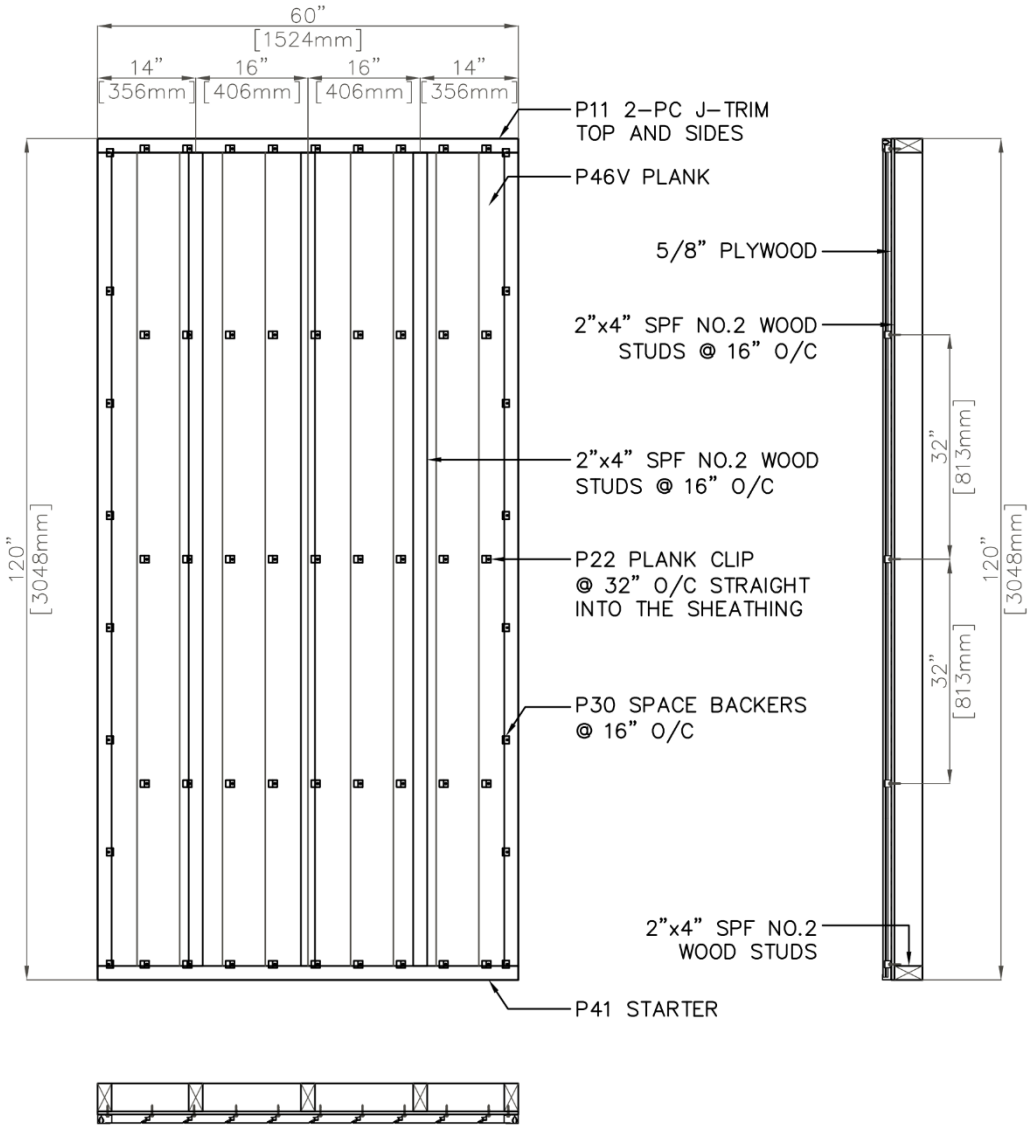
N/A NTS

DESCRIPTION

ASTM E330 ASSEMBLY 2 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP2.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–03 TEST WALL

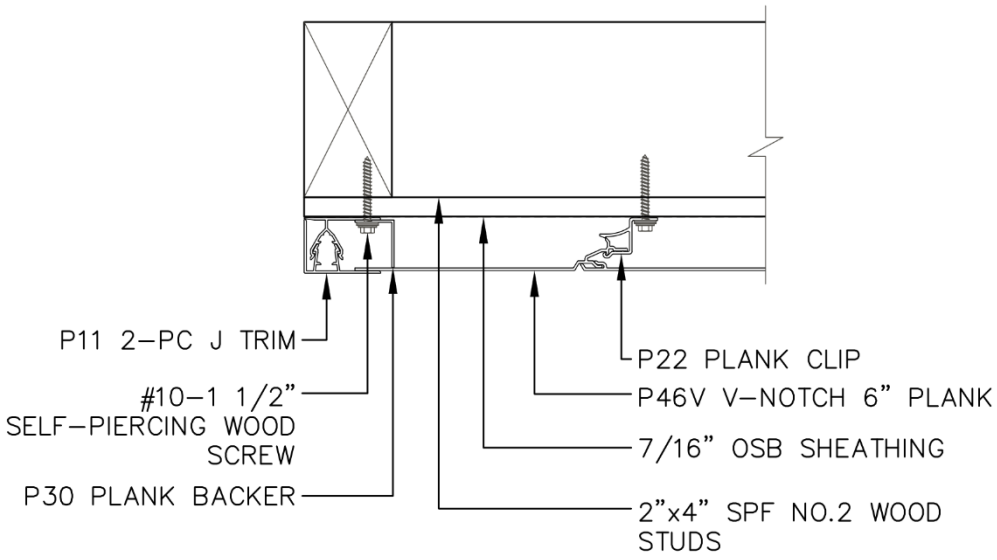



2x4 SPF No.2 @ 16" O.C – 5'x10' WALL
5/8" PLYWOOD
CLIPS FASTENED INTO SHEATHING @ 32" O/C STRAIGHT
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 3 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP3.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




# 1 FASTPLANK - VERTICAL TERMINATION

N/A | NTS

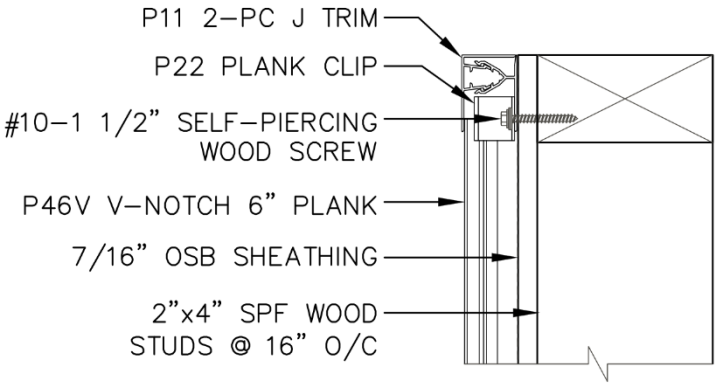


DESCRIPTION

ASTM E330 ASSEMBLY 3 FOR FASTPLANK

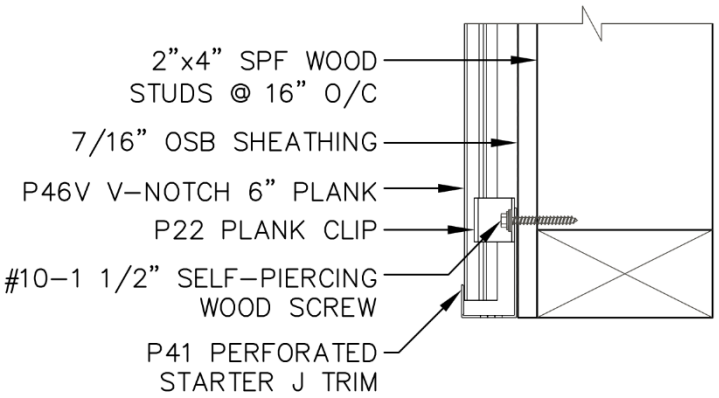
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP3.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - TOP OF WALL

N/A NTS




2 FASTPLANK - STARTER

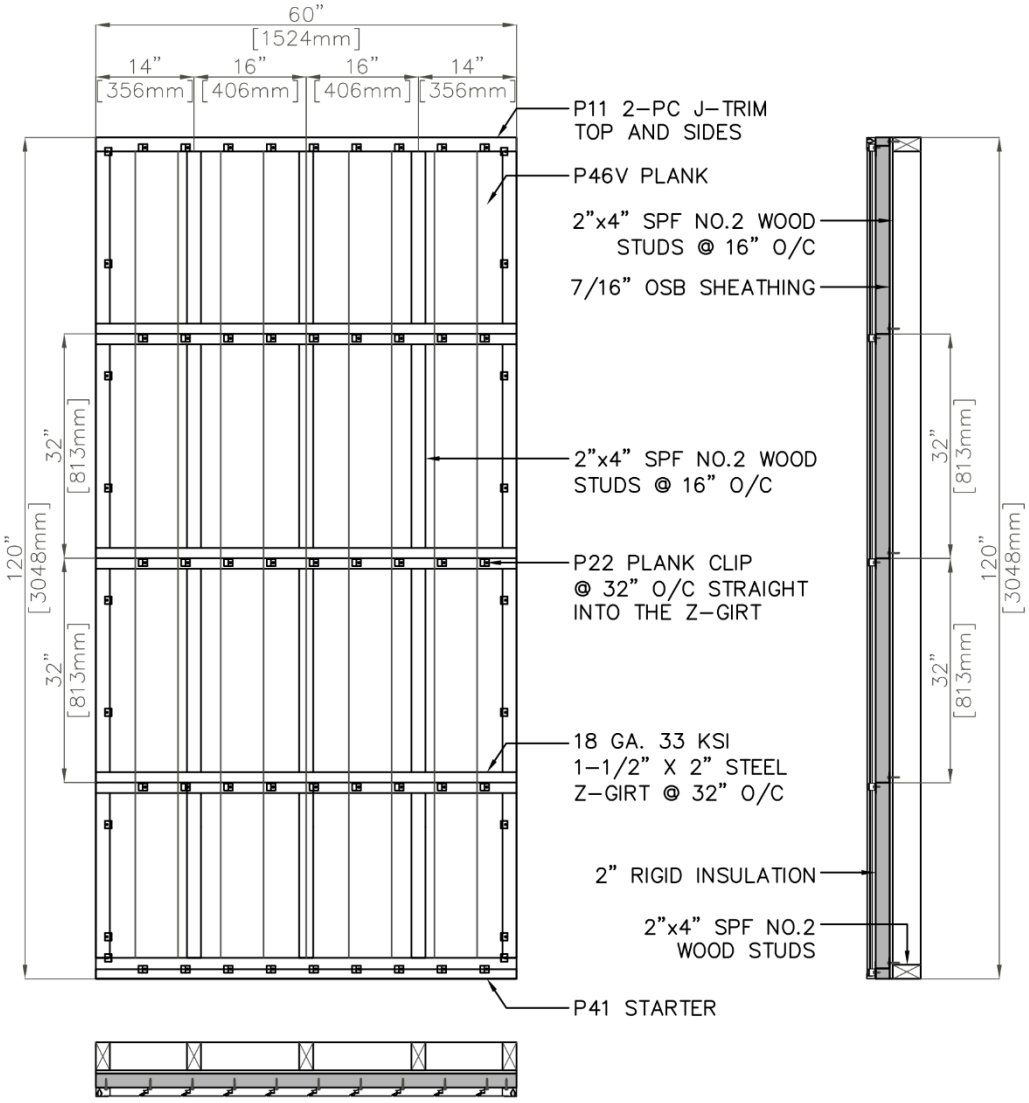
N/A NTS

DESCRIPTION

ASTM E330 ASSEMBLY 3 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP3.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–04 TEST WALL



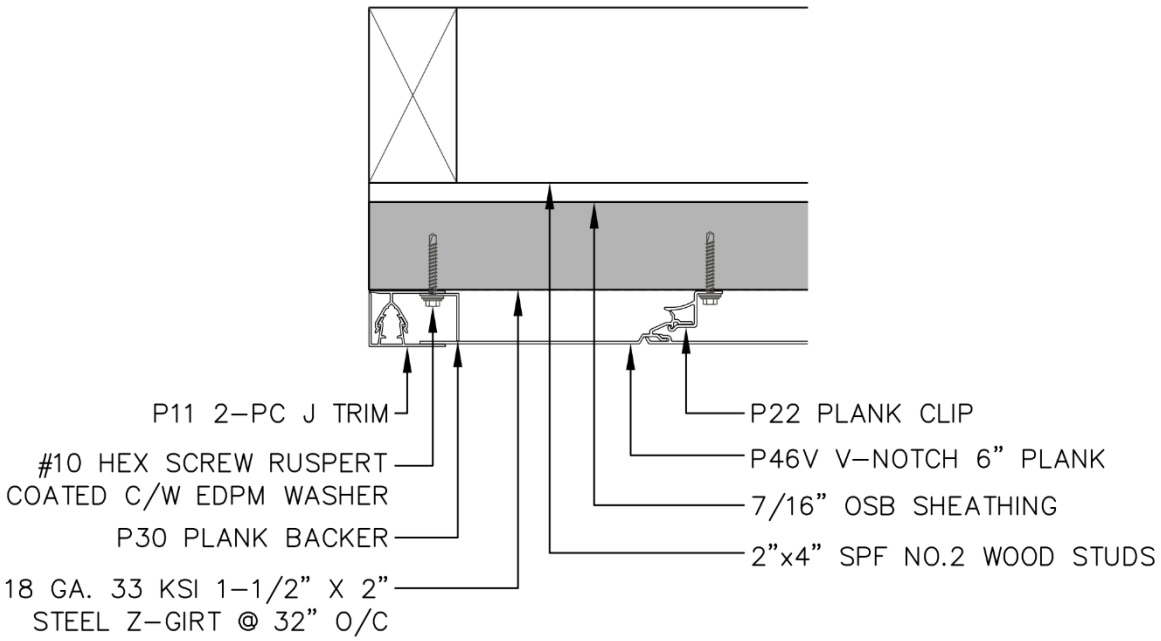

2x4 SPF No.2 @ 16" O/C W/
HORIZONTAL 18 GA. 33KSI 1.5" x 2" STEEL Z–GIRT @ 32" O/C – 5'x10' WALL
7/16" OSB + 2" RIGID INSULATION
CLIPS FASTENED INTO Z–GIRT @ 32" O/C STRAIGHT
SCREW: #10 –1–1/2" INTO WOOD & #12–3/4" TEK SCREW INTO Z–GIRT

DESCRIPTION

ASTM E330 ASSEMBLY 4 FOR FASTPLANK

FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP4.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 FASTPLANK - VERTICAL TERMINATION

N/A | NTS

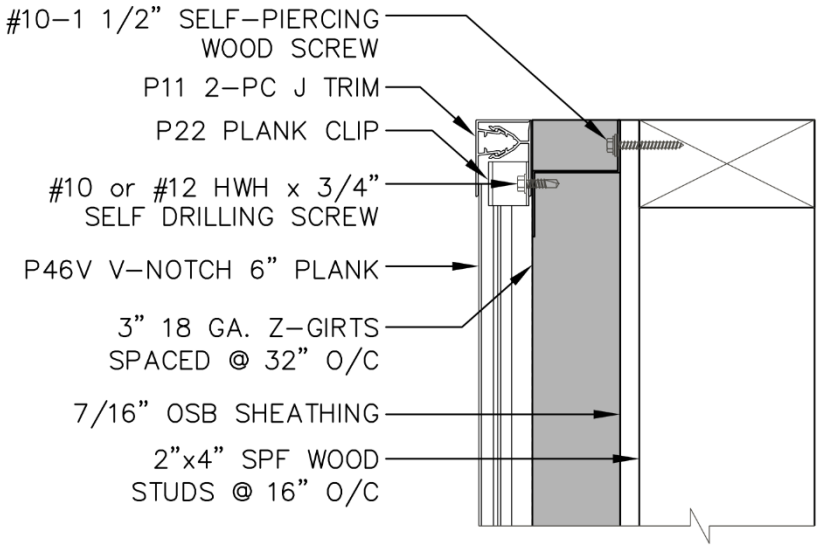


DESCRIPTION

ASTM E330 ASSEMBLY 4 FOR FASTPLANK

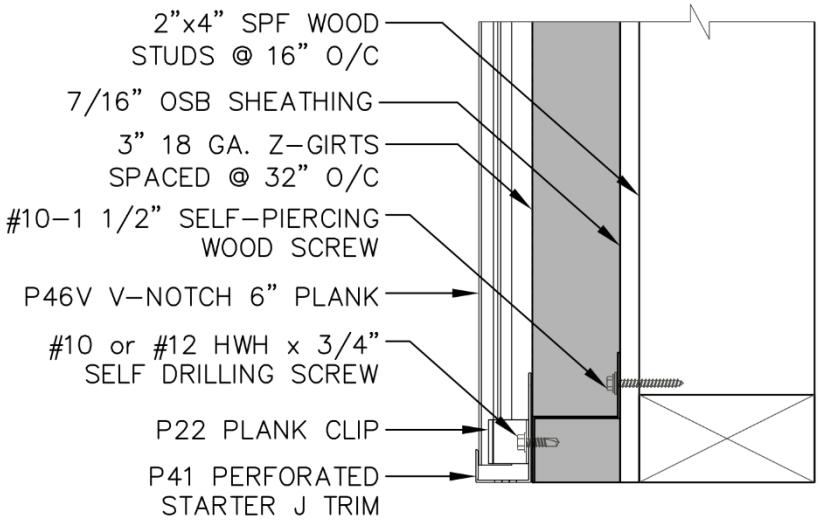
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP4.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 FASTPLANK - TOP OF WALL

N/A | NTS




## 2 FASTPLANK - STARTER

N/A | NTS

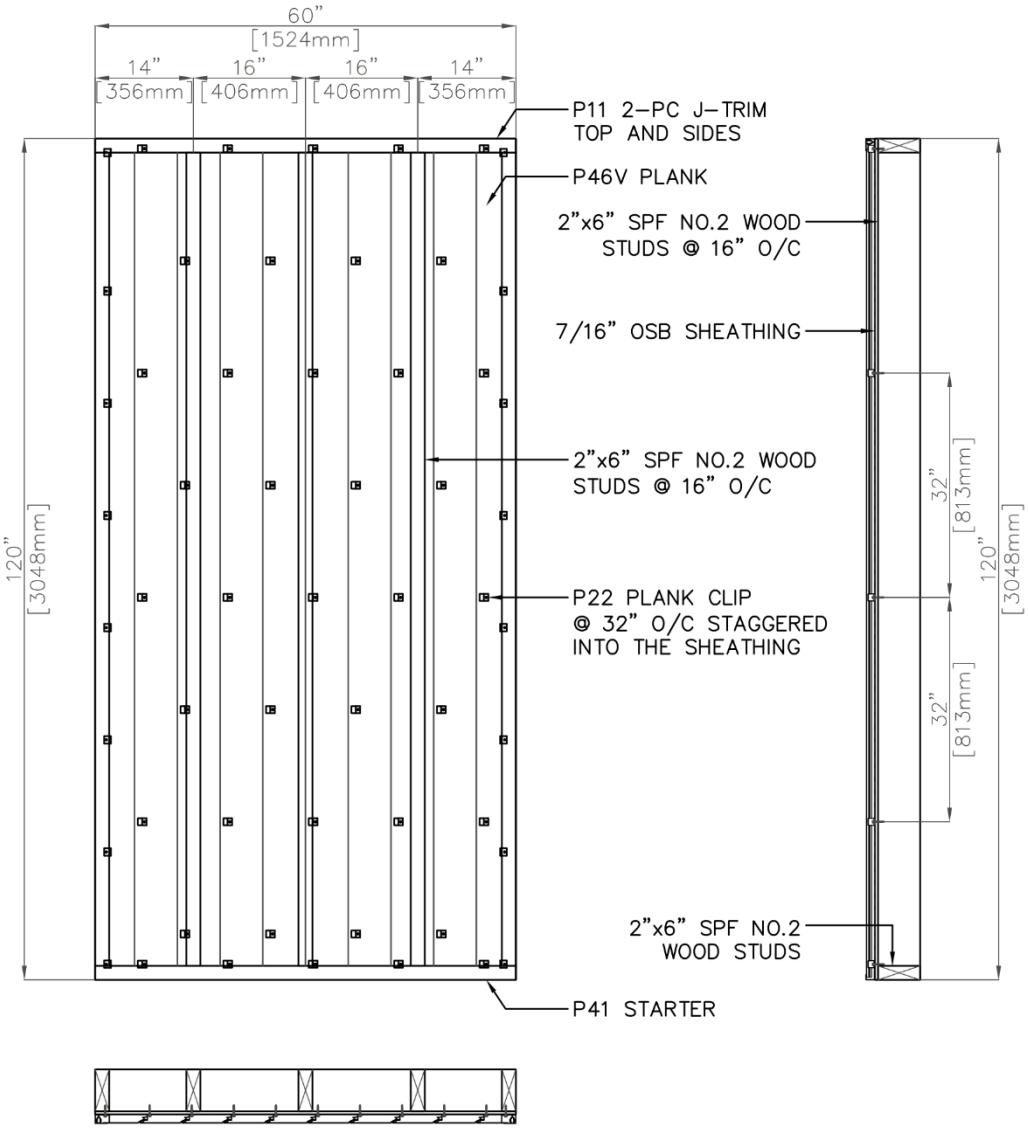
DESCRIPTION

ASTM E330 ASSEMBLY 4 FOR FASTPLANK

Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP4.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–05 TEST WALL

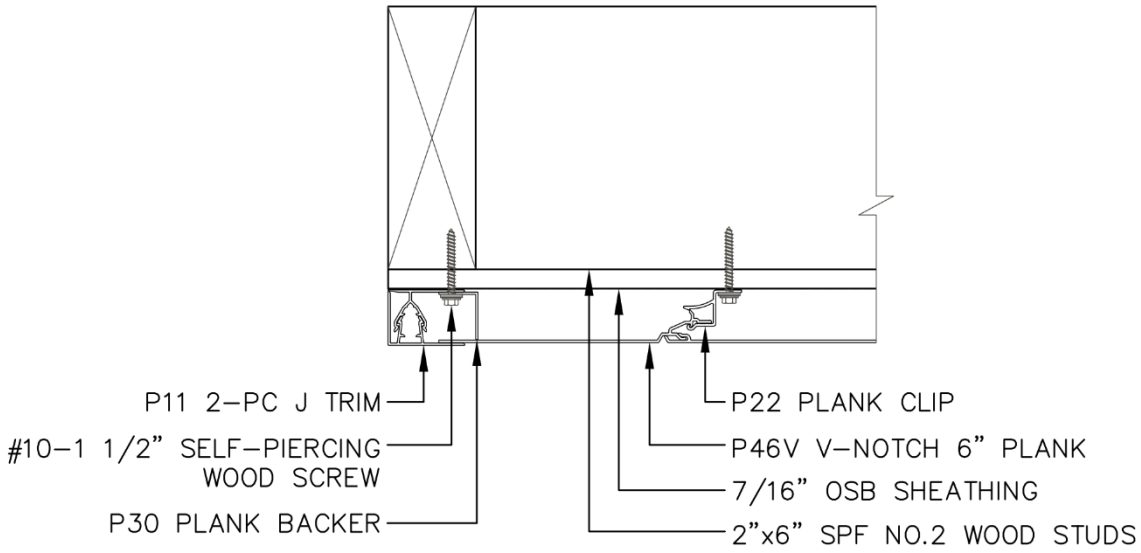



2x6 SPF No.2 @ 16" O.C – 5'x10' WALL
7/16" OSB
CLIPS FASTENED INTO SHEATHING @ 32" O/C STAGGERED
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 5 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP5.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 | FASTPLANK - VERTICAL TERMINATION

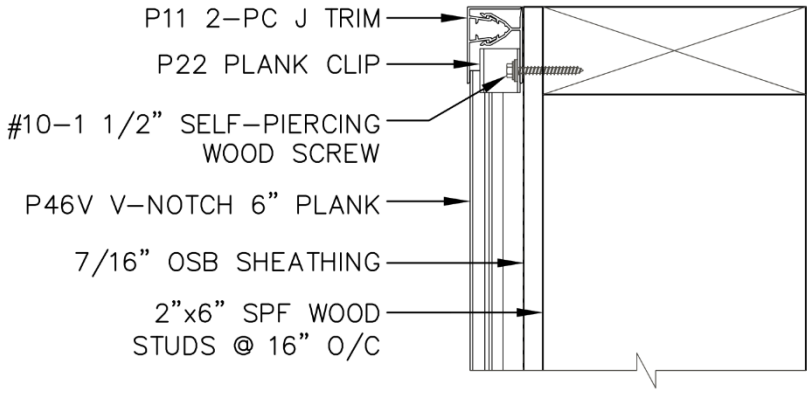
N/A | NTS



DESCRIPTION

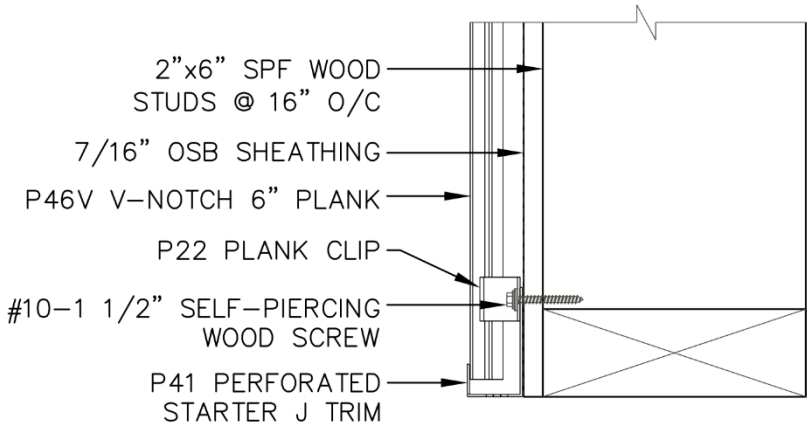
ASTM E330 ASSEMBLY 5 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP5.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - TOP OF WALL

N/A NTS




2 FASTPLANK - STARTER

N/A NTS



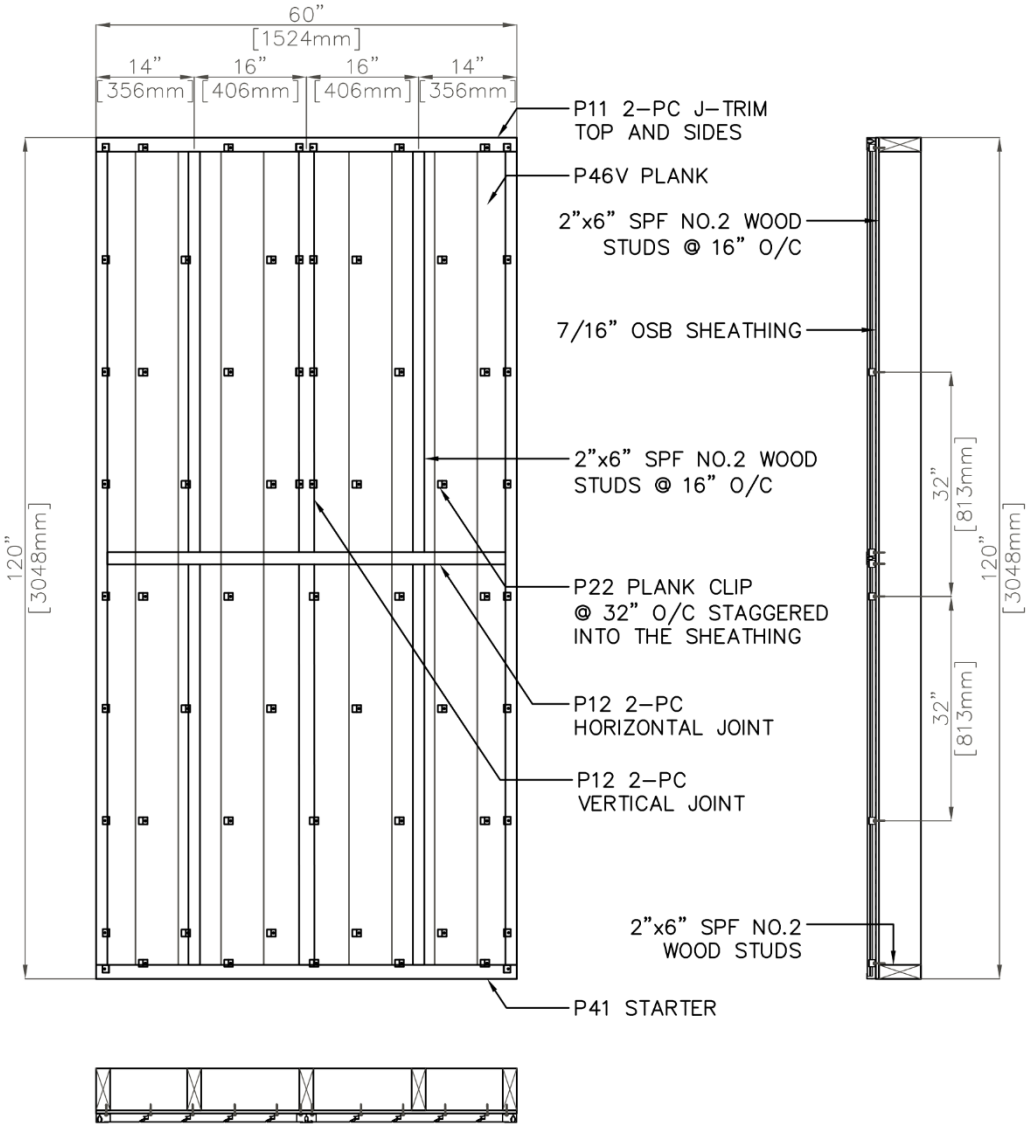
DESCRIPTION

ASTM E330 ASSEMBLY 5 FOR FASTPLANK

Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP5.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–06 TEST WALL

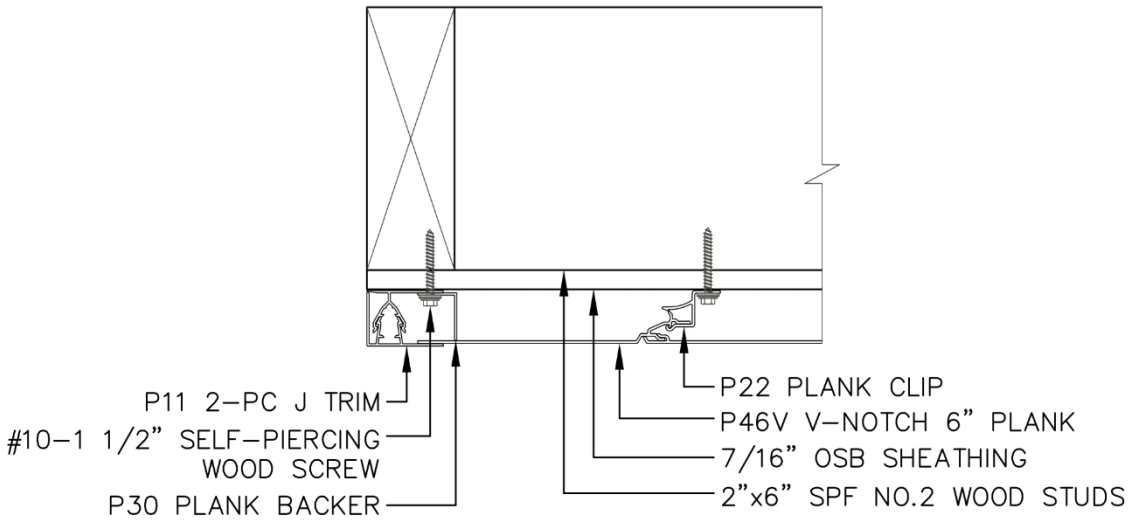



2x6 SPF No.2 @ 16" O.C – 5'x10' WALL WITH VERTICAL & HORIZONTAL JOINTS
7/16" OSB
CLIPS FASTENED INTO SHEATHING @ 32" O/C STAGGERED
SCREW: #10 –1–1/2"

DESCRIPTION

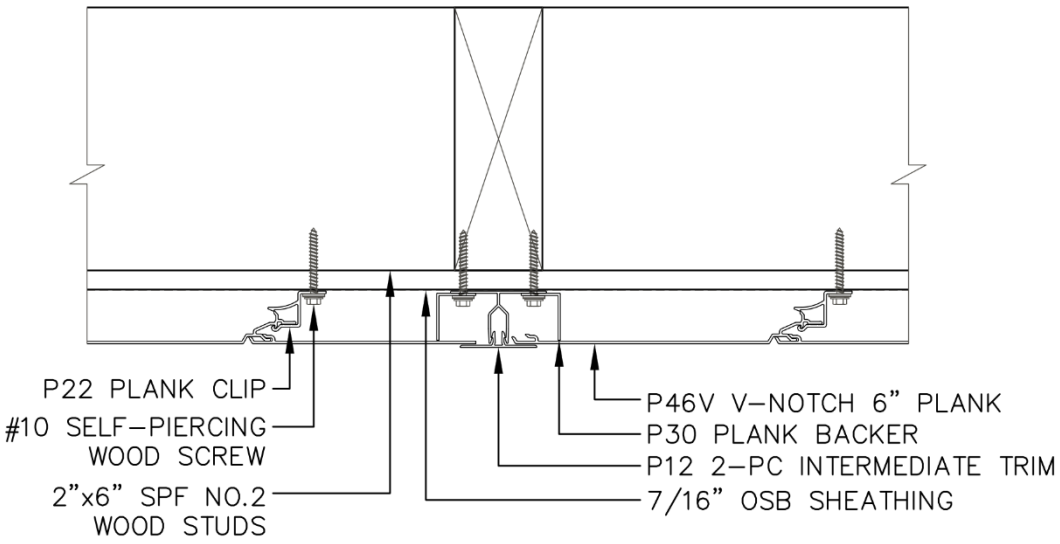
ASTM E330 ASSEMBLY 6 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP6.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - VERTICAL TERMINATION

N/A NTS



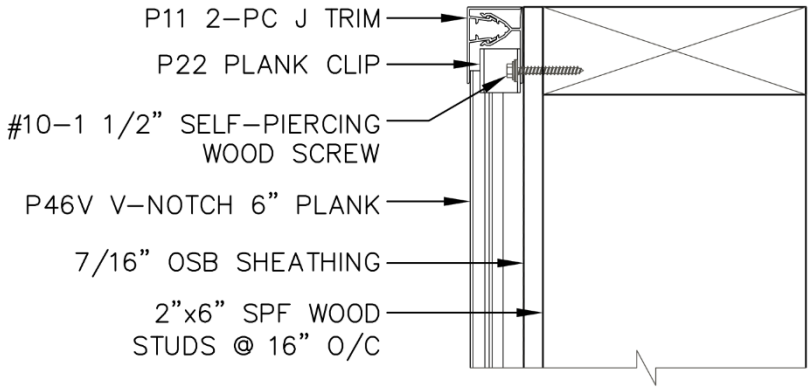

2 FASTPLANK - VERTICAL MAINBODY

N/A NTS

DESCRIPTION

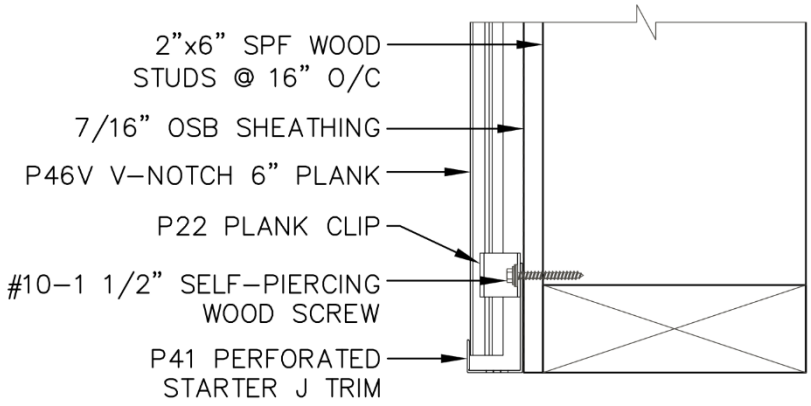
ASTM E330 ASSEMBLY 6 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP6.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 FASTPLANK - TOP OF WALL

N/A | NTS




## 2 FASTPLANK - STARTER

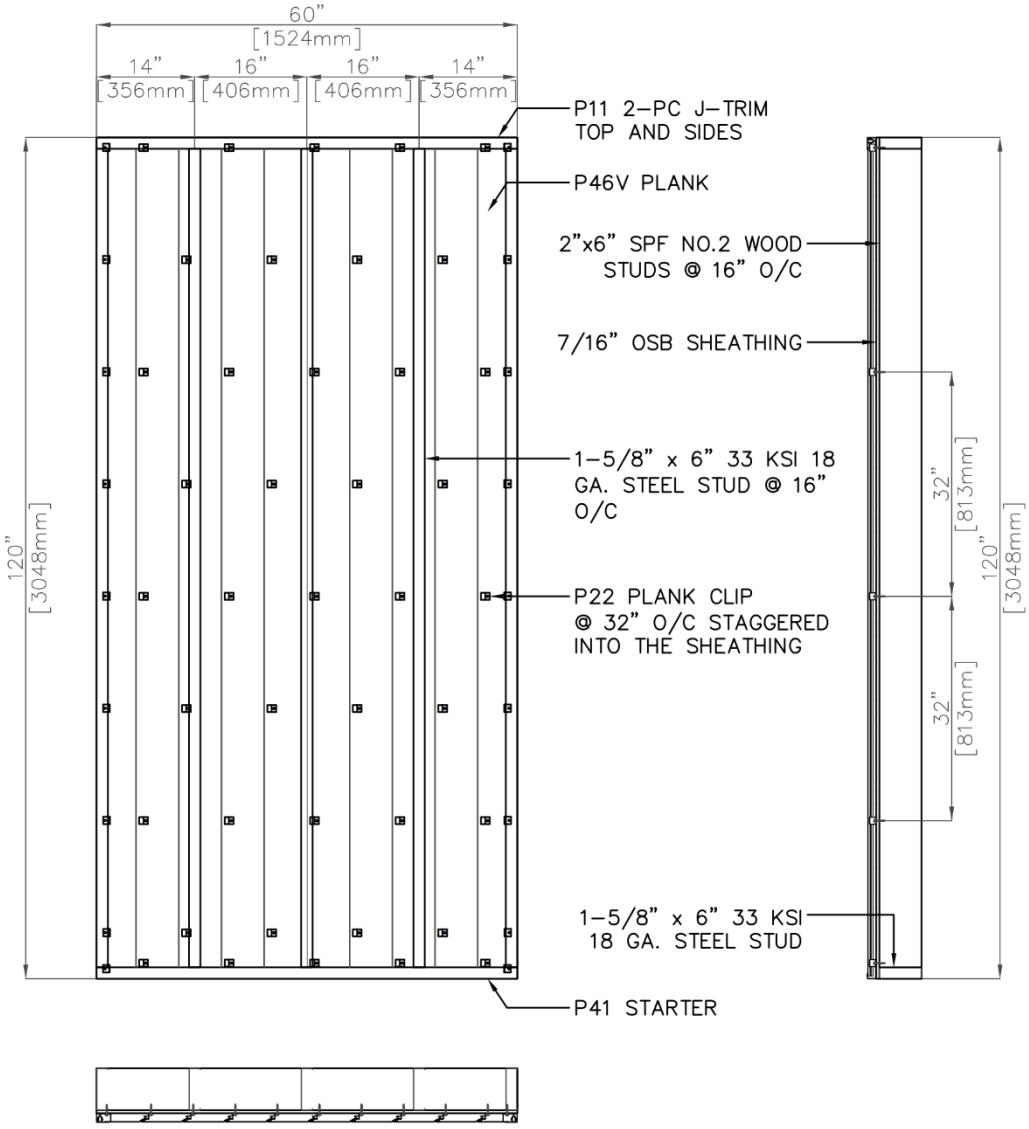
N/A | NTS

DESCRIPTION

ASTM E330 ASSEMBLY 6 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP6.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–07 TEST WALL



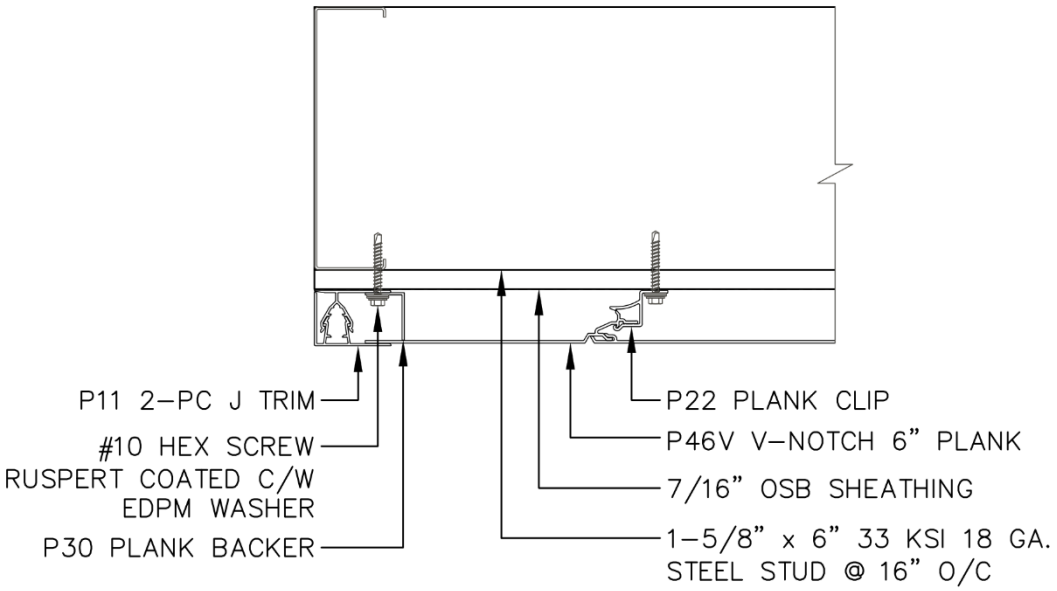

1–5/8 x 6 33KSI 18 GA STEEL STUD @ 16" O.C – 5'x10' WALL
7/16" OSB
CLIPS FASTENED INTO SHEATHING @ 32" O/C STAGGERED
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 7 FOR FASTPLANK

FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP7.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 | FASTPLANK - VERTICAL TERMINATION

N/A | NTS

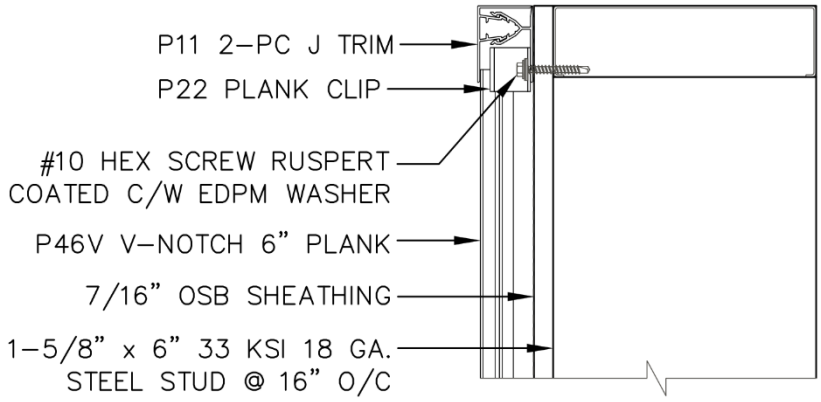


DESCRIPTION

ASTM E330 ASSEMBLY 7 FOR FASTPLANK

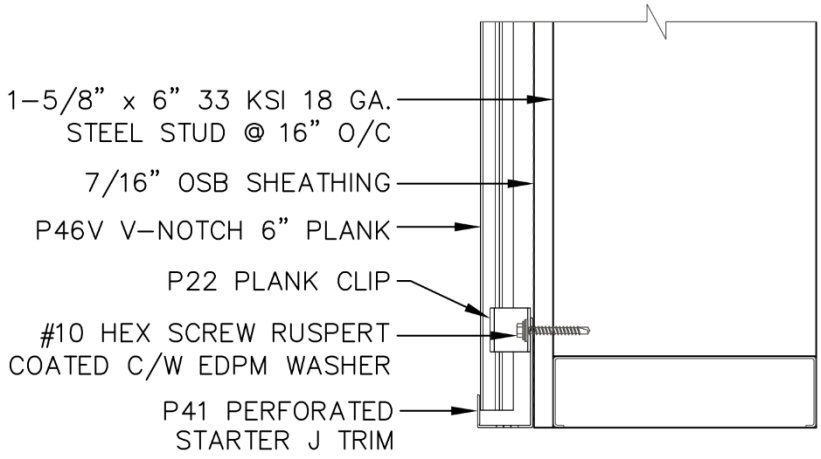
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP7.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 | FASTPLANK - TOP OF WALL

N/A | NTS




2 | FASTPLANK - STARTER

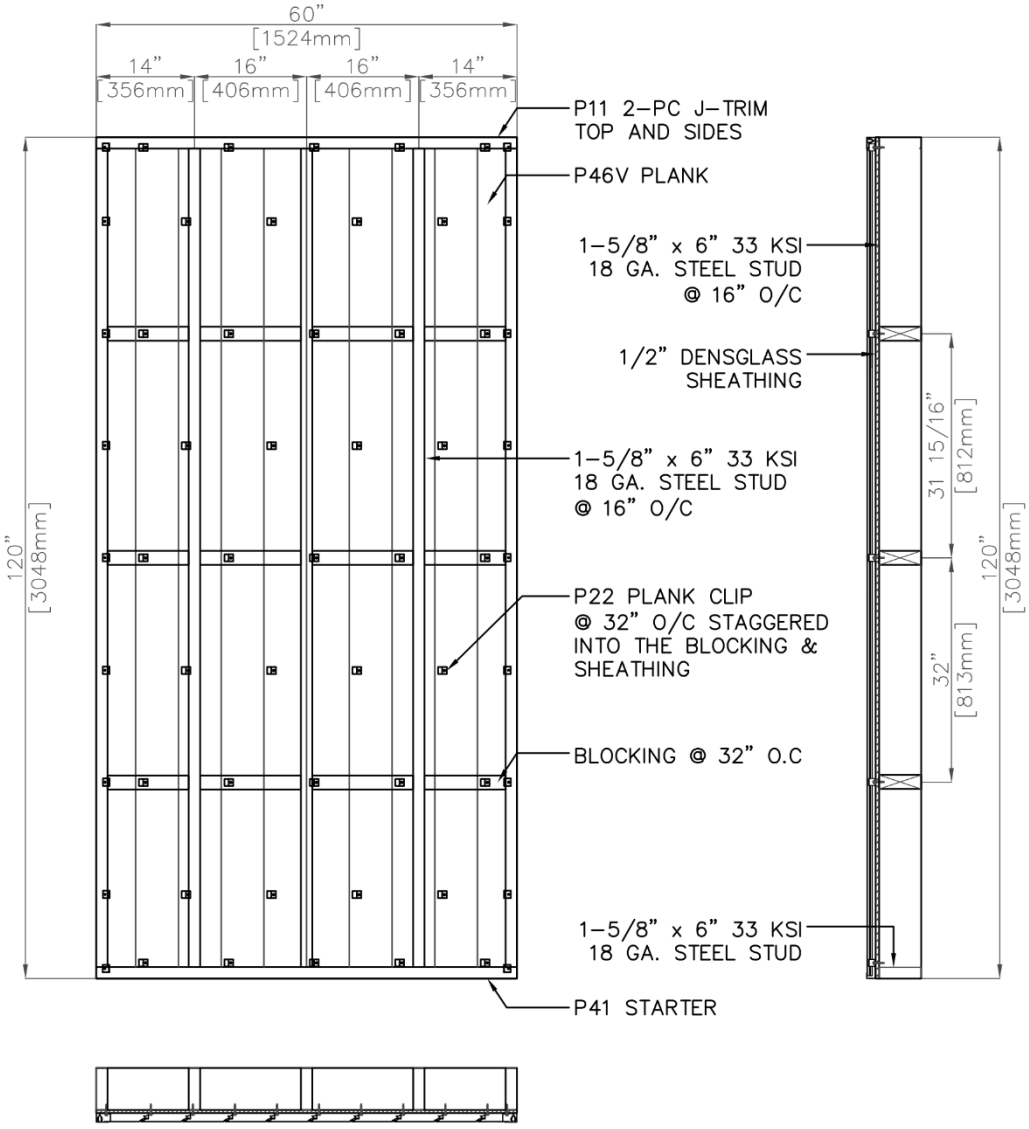
N/A | NTS

DESCRIPTION

ASTM E330 ASSEMBLY 7 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP7.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–08 TEST WALL




1–5/8 x 6 33KSI 18 GA STEEL STUD @ 16" O.C – 5'x10' WALL
1/2" DENSGLASS
CLIPS FASTENED INTO BLOCKING @ 32" O/C STRAIGHT
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 8 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP8.0 |
| DRWN BY | JB | |
| CHK BY | AS | |

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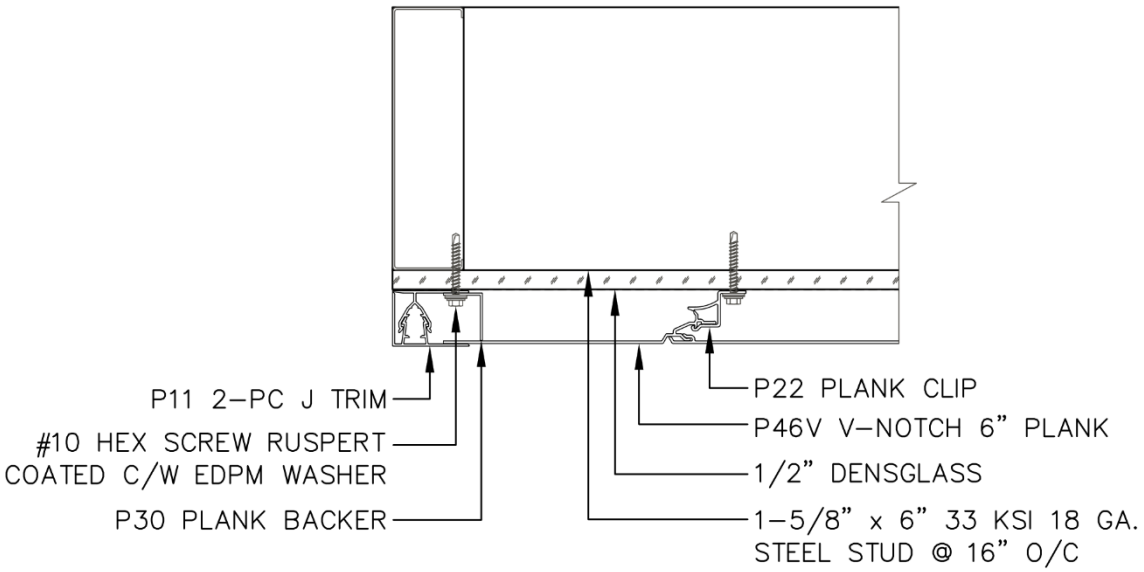
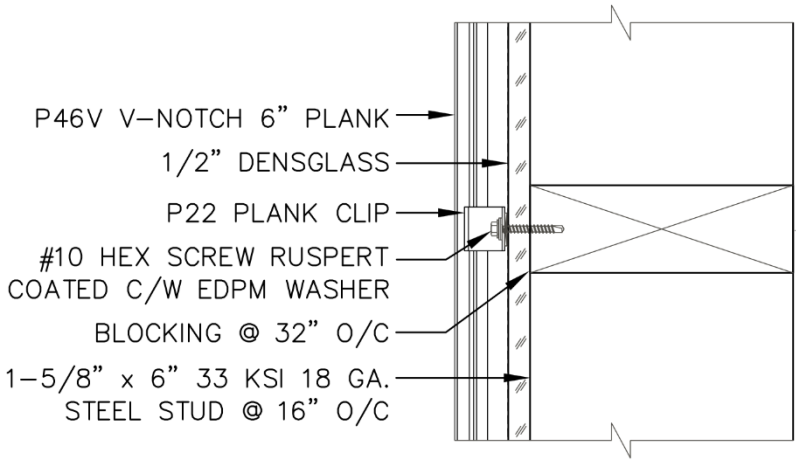



## 1 FASTPLANK - VERTICAL TERMINATION

N/A | NTS




## 2 FASTPLANK - BLOCKING DETAIL

N/A | NTS

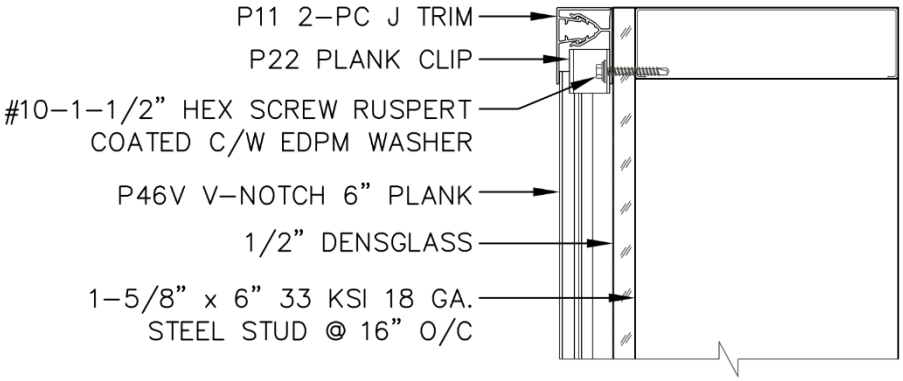


DESCRIPTION

ASTM E330 ASSEMBLY 8 FOR FASTPLANK

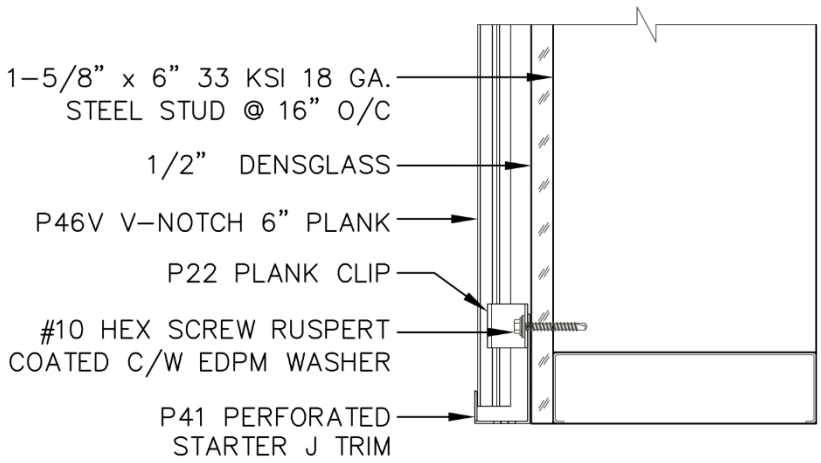
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP8.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 | FASTPLANK - TOP OF WALL

N/A | NTS




2 | FASTPLANK - STARTER

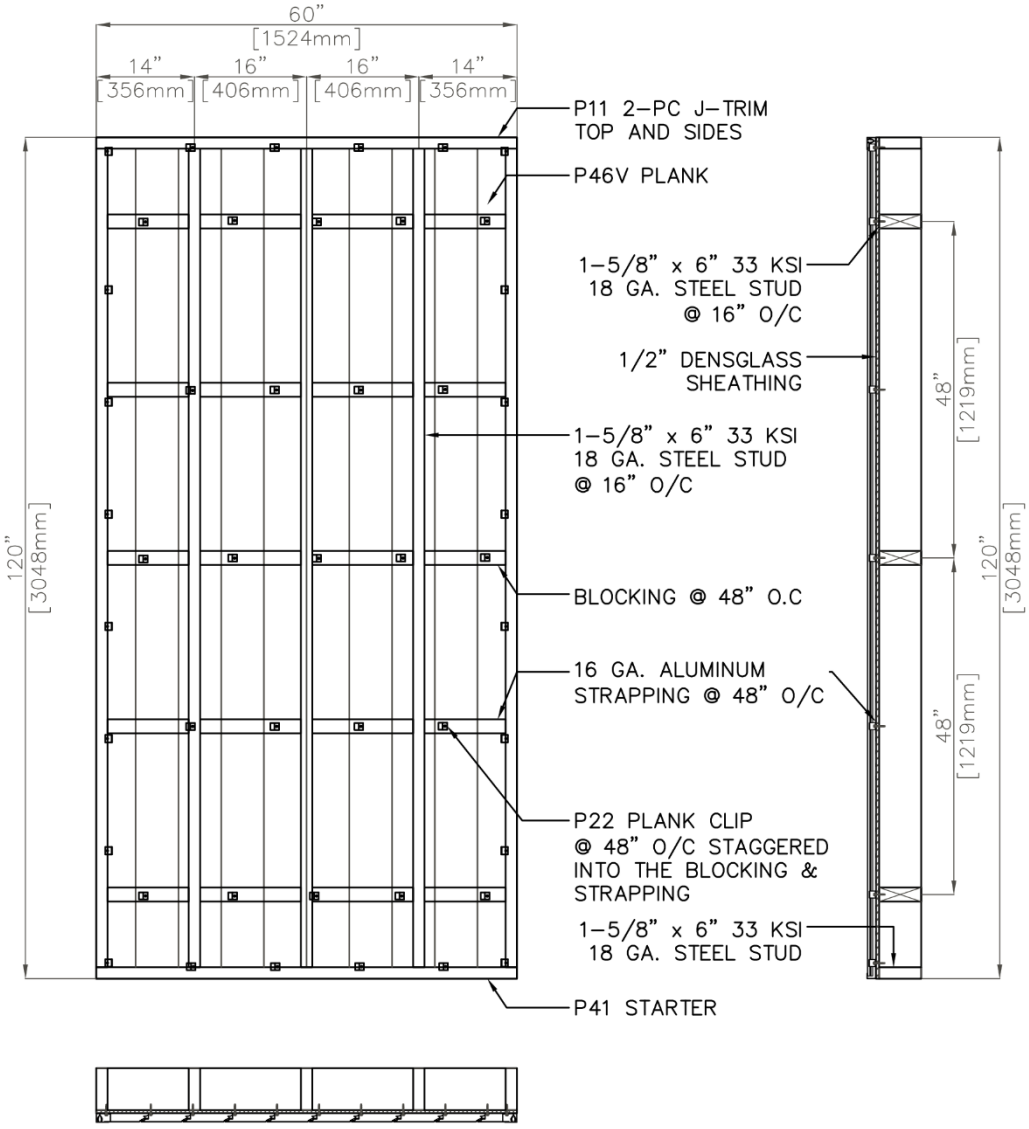
N/A | NTS

DESCRIPTION

ASTM E330 ASSEMBLY 8 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP8.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–09 TEST WALL




1–5/8 x 6 33KSI 18 GA STEEL STUD @ 16" O.C – 5'x10' WALL
1/2" DENSGLASS
CLIPS FASTENED INTO BLOCKING & STRAPPING @ 48" O/C STAGGERED
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 9 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP9.0 |
| DRWN BY | JB | |
| CHK BY | AS | |

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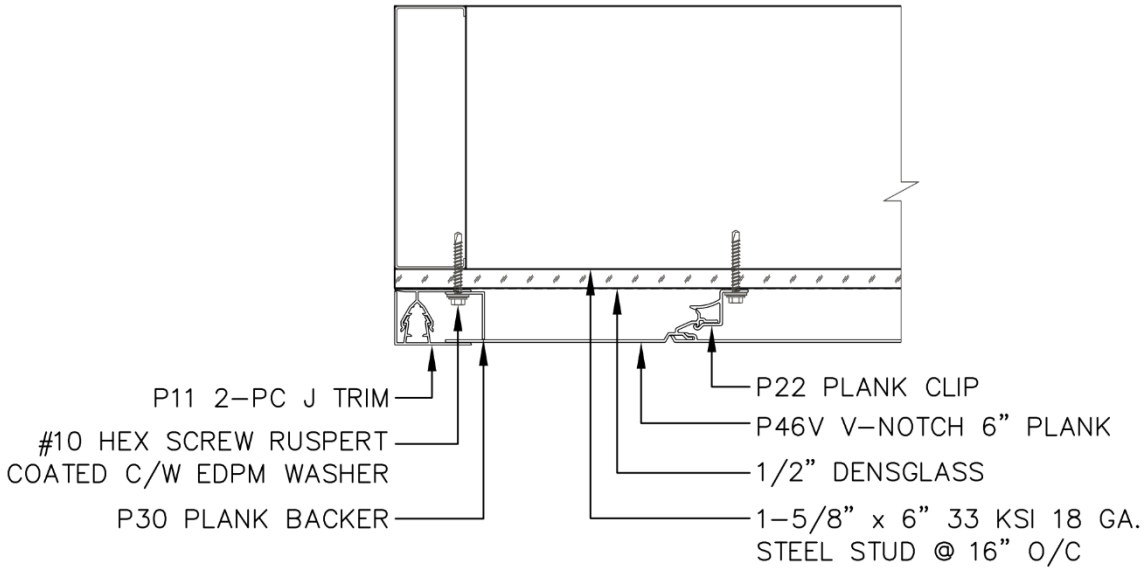



## 1 | FASTPLANK - VERTICAL TERMINATION

N/A | NTS

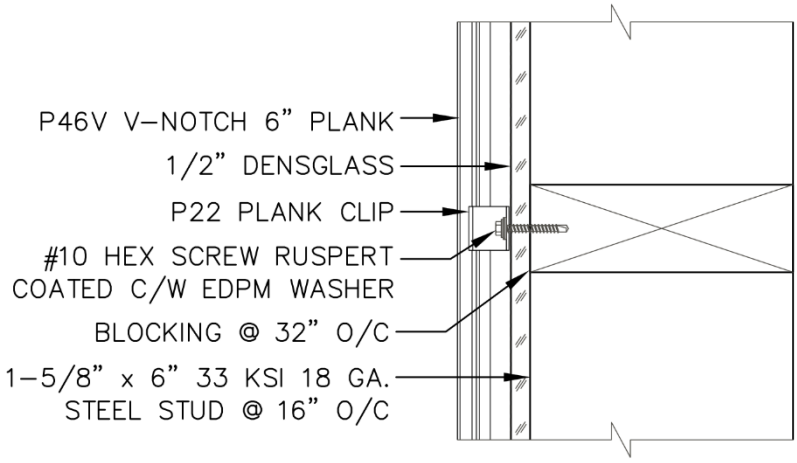


DESCRIPTION

ASTM E330 ASSEMBLY 9 FOR FASTPLANK

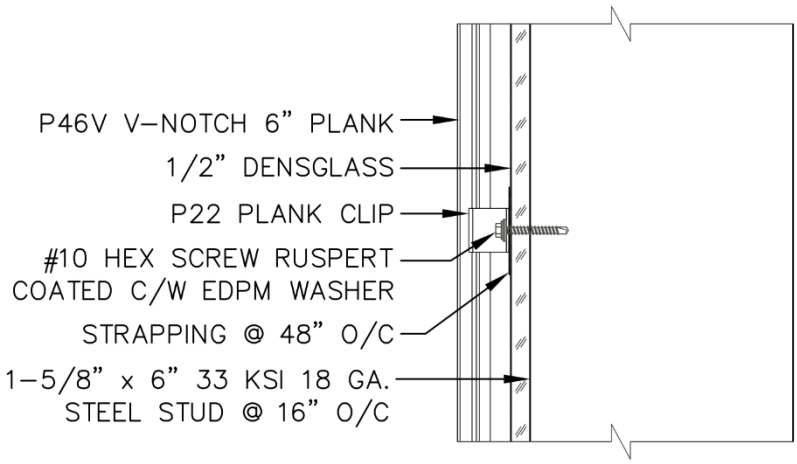
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP9.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 FASTPLANK - BLOCKING DETAIL

N/A | NTS




2 FASTPLANK - STRAPPING DETAIL

N/A | NTS

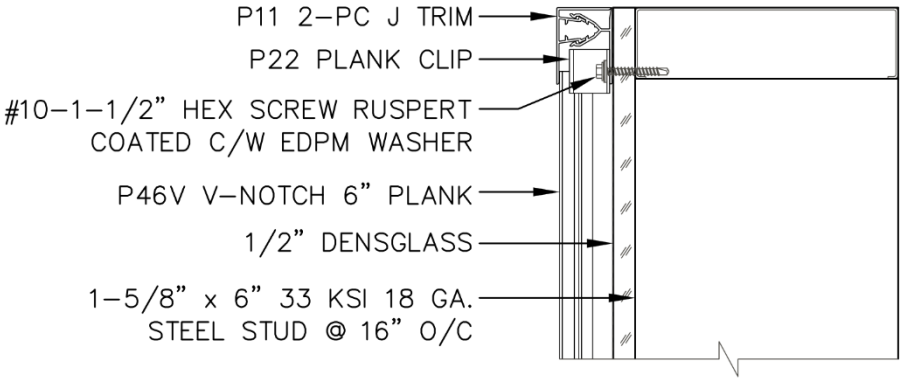


DESCRIPTION

ASTM E330 ASSEMBLY 9 FOR FASTPLANK

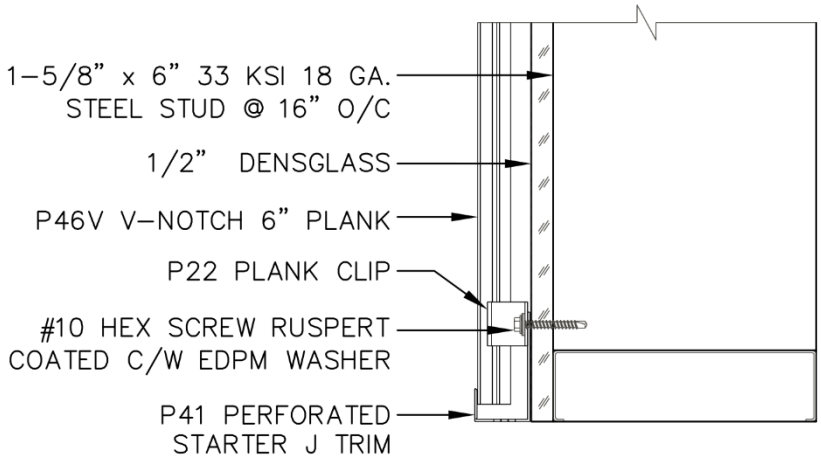
Fast Plank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP9.02 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 | FASTPLANK - TOP OF WALL

N/A | NTS




2 | FASTPLANK - STARTER

N/A | NTS



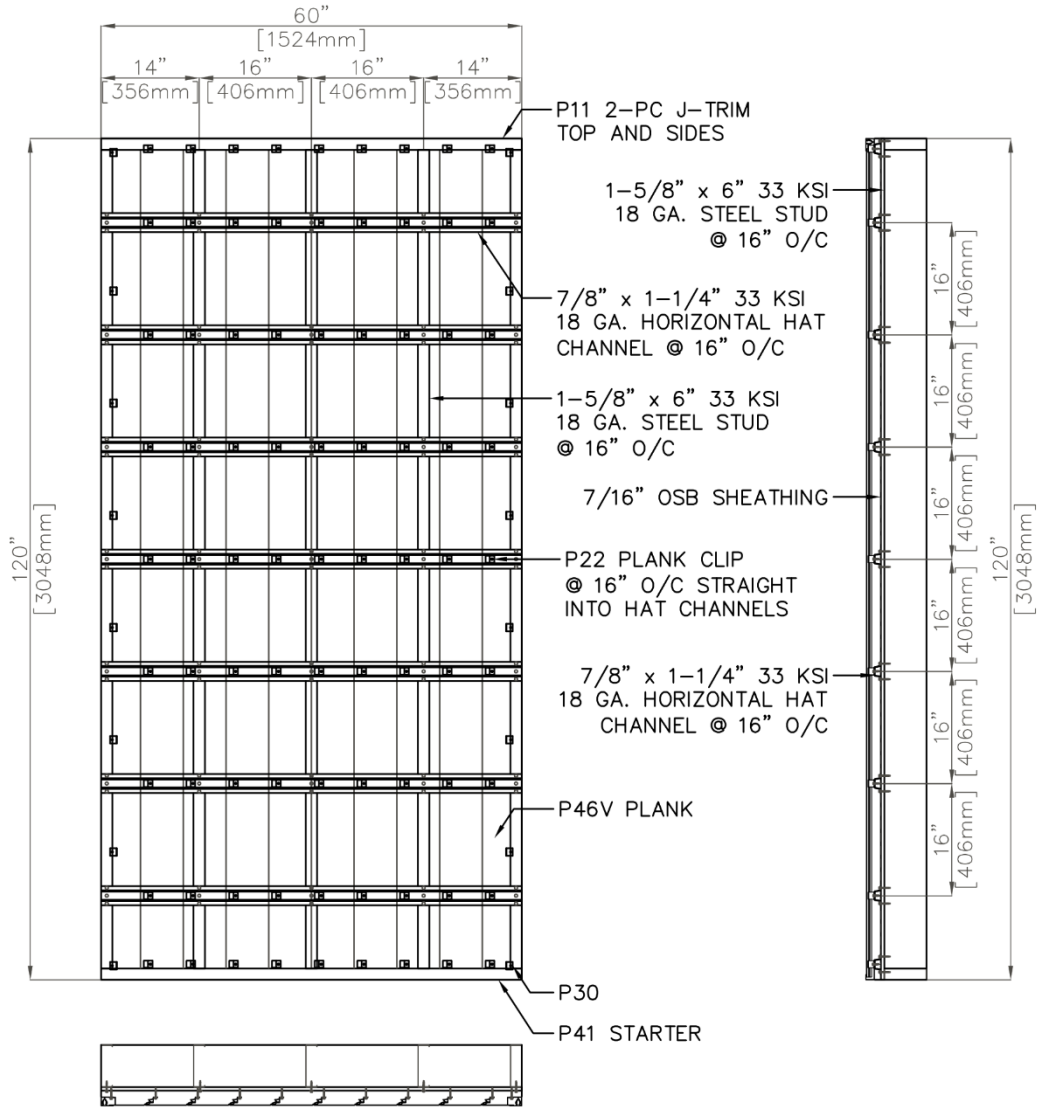
DESCRIPTION

ASTM E330 ASSEMBLY 9 FOR FASTPLANK

FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP9.03 |
| DRWN BY | JB | |
| CHK BY | AS | |

# FP–V–10 TEST WALL



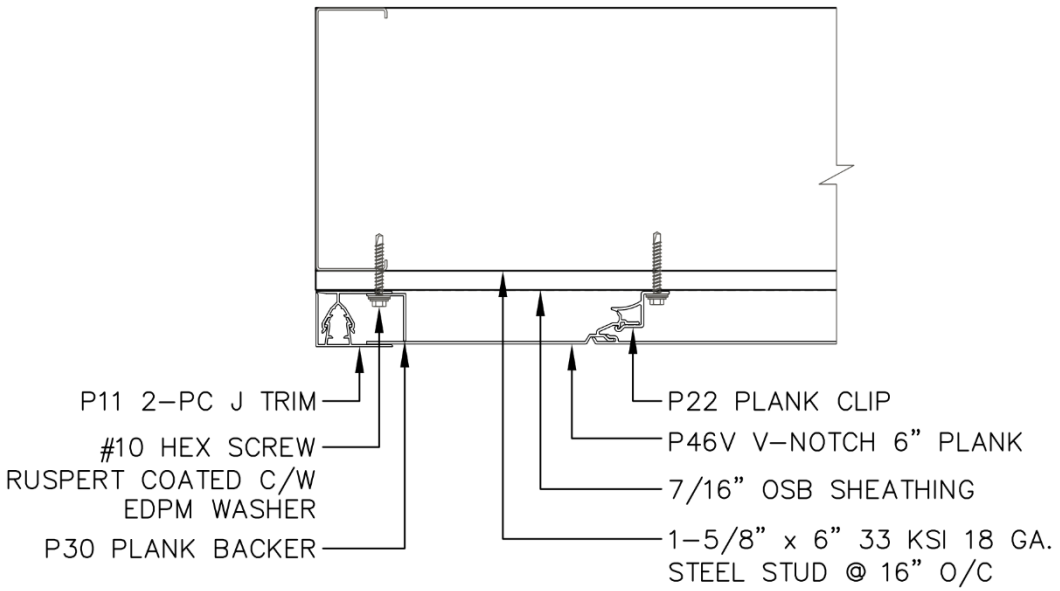

1–5/8 x 6 33KSI 18 GA STEEL STUD @ 16" O.C – 5'x10' WALL
7/8" x 1–1/4" 33 KSI 18 GA HORIZONTAL STEEL HAT CHANNEL @ 16" O/C INTO SHEATHING, 7/16" OSB
CLIPS FASTENED INTO HAT CHANNEL @ 16" O/C STAIGHT
SCREW: #10 –1–1/2"

DESCRIPTION

ASTM E330 ASSEMBLY 10 FOR FASTPLANK

FastPlank® Systems

| SCALE | NTS | DRAWING NUMBER |
|---|---|---|
| DATE | 06JUN2025 | FP10.0 |
| DRWN BY | JB | |
| CHK BY | AS | |




## 1 | FASTPLANK - VERTICAL TERMINATION

N/A | NTS

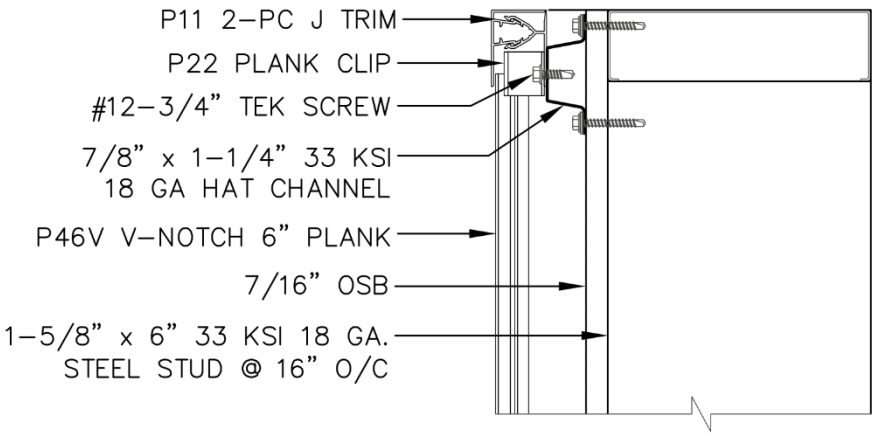


DESCRIPTION

ASTM E330 ASSEMBLY 10 FOR FASTPLANK

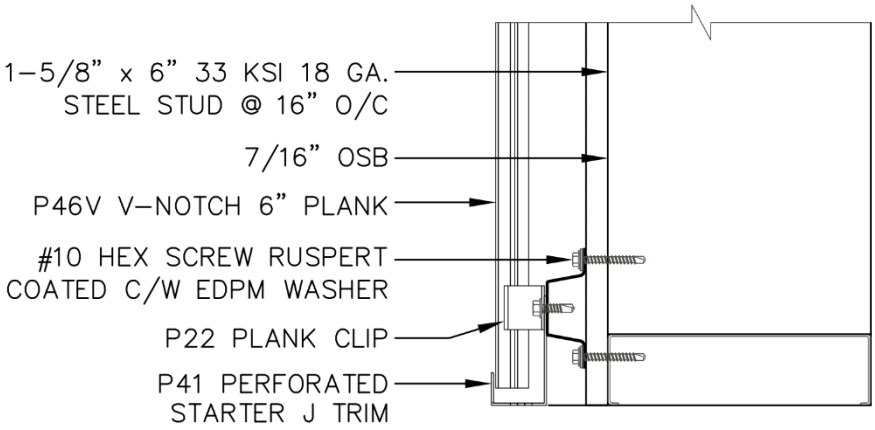
FastPlank® Systems

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP10.01 |
| DRWN BY | JB | |
| CHK BY | AS | |




1 | FASTPLANK - TOP OF WALL

N/A | NTS




2 | FASTPLANK - STARTER

N/A | NTS

DESCRIPTION

ASTM E330 ASSEMBLY 10 FOR FASTPLANK

| | | |
|---|---|---|
| SCALE | NTS | DRAWING NUMBER |
| DATE | 06JUN2025 | FP10.02 |
| DRWN BY | JB | |
| CHK BY | AS | |

FastPlank® Systems

Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-1-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/1/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

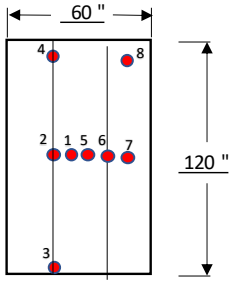
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 11:58 | Temp: | 21.1 |
| Finish: | 12:14 | %RH | 22 |

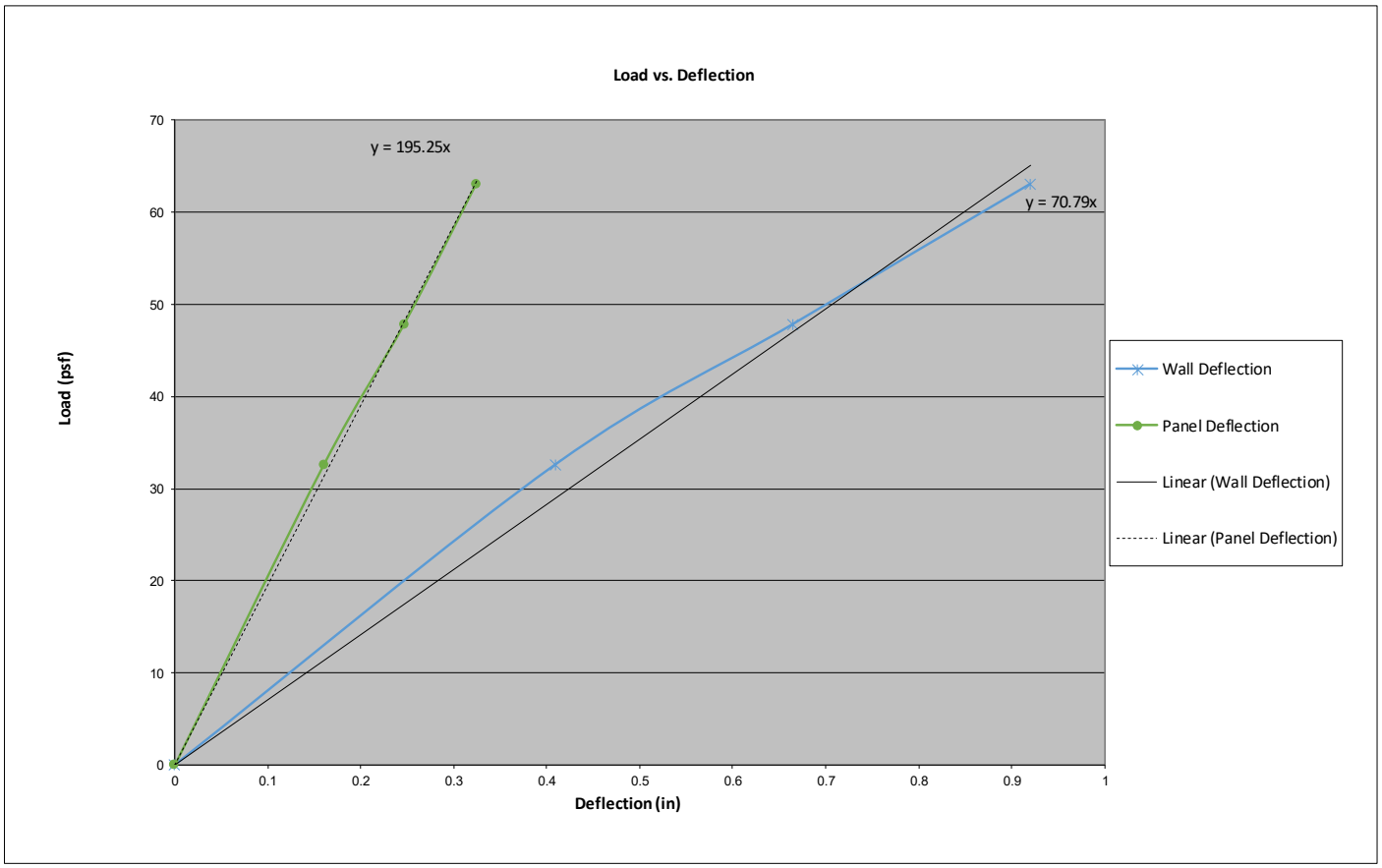
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | *15.0* | 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** | *32.6* | 10 sec. | *0.635* | *0.386* | *0.103* | *0.133* | *0.741* | *0.669* | *0.653* | *0.189* | |
| **0** | | 1-5mins | *0.023* | *0.019* | *0.010* | *0.009* | *0.029* | *0.029* | *0.027* | *0.008* | |
| **45** | *47.8* | 10 sec. | *1.010* | *0.617* | *0.173* | *0.196* | *1.184* | *1.083* | *1.049* | *0.280* | |
| **0** | | 1-5mins | *0.056* | *0.042* | *0.020* | *0.019* | *0.063* | *0.064* | *0.062* | *0.023* | |
| **60** | *63.0* | 10 sec. | *1.379* | *0.848* | *0.248* | *0.253* | *1.612* | *1.494* | *1.430* | *0.368* | |
| **0** | | 1-5mins | *0.089* | *0.058* | *0.030* | *0.028* | *0.089* | *0.092* | *0.087* | *0.035* | |
| **75** | *75.6* | 10 sec. | *1.601* | *1.005* | *0.310* | *0.288* | *2.230* | *1.773* | *1.702* | *0.427* | |
| **0** | | 1-5mins | *0.216* | *0.079* | *0.042* | *0.036* | *0.414* | *0.125* | *0.224* | *0.139* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **75.6** | Clips were pulled out of sheathing at 90 psf |

| Test#: | FP-V-1-1 | |
|---|---|---|
| Max Load | 75.6 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 37.8 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 26.5 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.3773 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1355 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **32.6** | 0.410 | 0.161 |
| **47.8** | 0.666 | 0.247 |
| **63.0** | 0.921 | 0.325 |
| **75.6** | 1.090 | 0.527 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-2-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/1/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

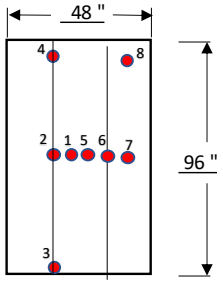
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 10:15 | Temp: | 21.1 |
| Finish: | 10:35 | %RH | 22 |

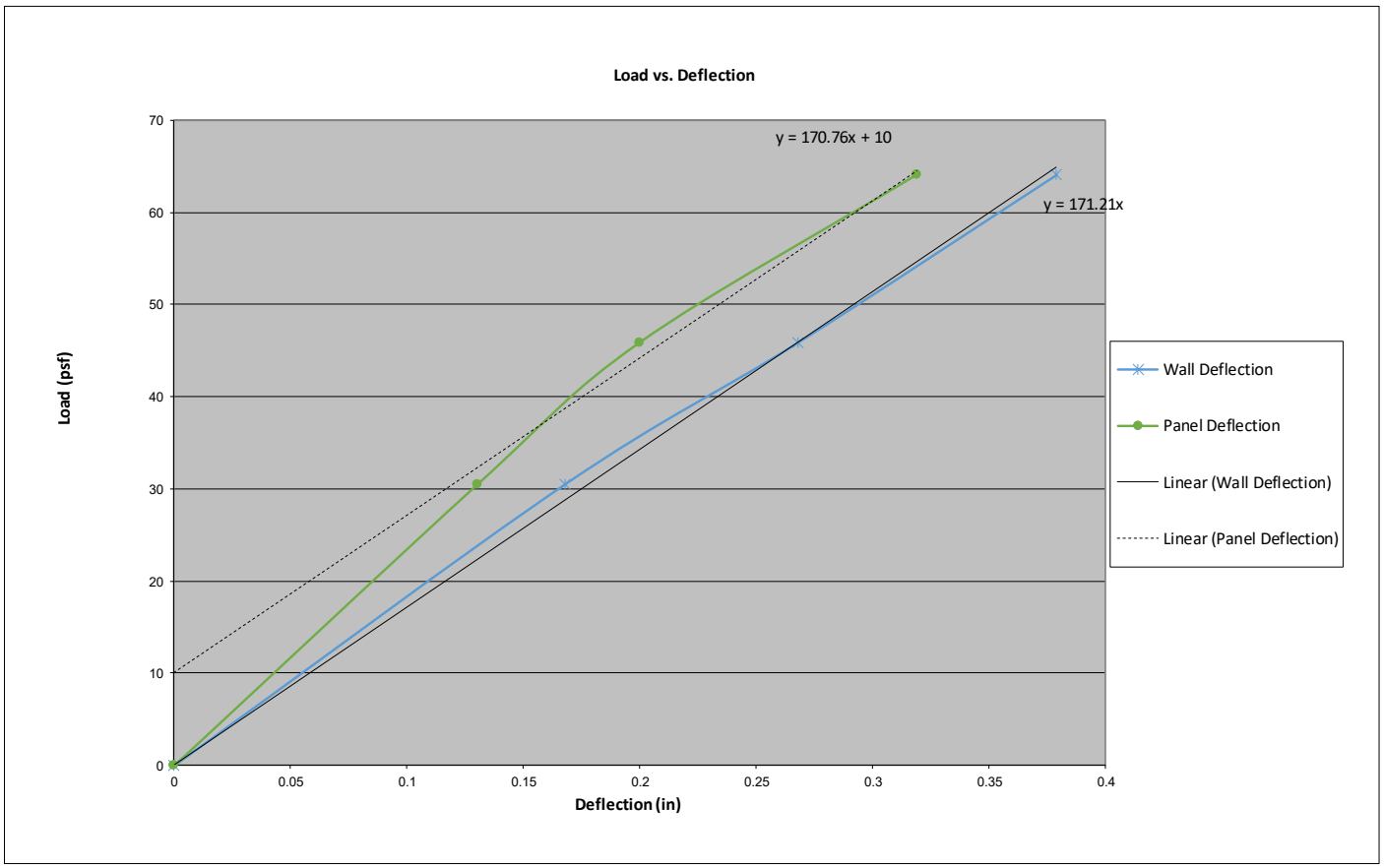
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 48.0 | 96.0 | 32 |

| 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** | *16.0* | 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** | *30.5* | 10 sec. | *0.366* | *0.248* | *0.087* | *0.109* | *0.427* | *0.284* | *0.321* | *0.108* | |
| **0** | | 1-5mins | *0.016* | *0.013* | *0.008* | *0.010* | *0.017* | *0.012* | *0.012* | *0.007* | |
| **45** | *45.9* | 10 sec. | *0.580* | *0.403* | *0.150* | *0.170* | *0.676* | *0.453* | *0.516* | *0.162* | |
| **0** | | 1-5mins | *0.037* | *0.027* | *0.019* | *0.022* | *0.037* | *0.026* | *0.029* | *0.016* | |
| **60** | *64.1* | 10 sec. | *0.853* | *0.597* | *0.236* | *0.245* | *1.024* | *0.642* | *0.817* | *0.222* | |
| **0** | | 1-5mins | *0.071* | *0.050* | *0.035* | *0.037* | *0.081* | *0.041* | *0.074* | *0.024* | |
| **75** | *75.6* | 10 sec. | *1.030* | *0.725* | *0.292* | *0.294* | *1.246* | *0.753* | *1.014* | *0.259* | |
| **0** | | 1-5mins | *0.088* | *0.062* | *0.044* | *0.047* | *0.110* | *0.047* | *0.105* | *0.028* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **75.6** | Clips were pulled out of sheathing at 90 PSF |

| Test#: | FP-V-2-1 | |
|---|---|---|
| Max Load | 75.6 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 37.8 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 26.4 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.533 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1552 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0920 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.5** | 0.168 | 0.131 |
| **45.9** | 0.268 | 0.200 |
| **64.1** | 0.379 | 0.319 |
| **75.6** | 0.446 | 0.399 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-3-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/1/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

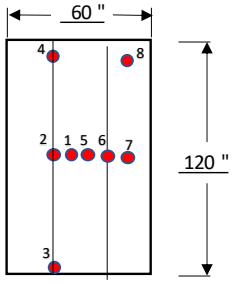
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 5/8" Plywood
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 14:19 | Temp: | 21.1 |
| Finish: | 14:48 | %RH | 24 |

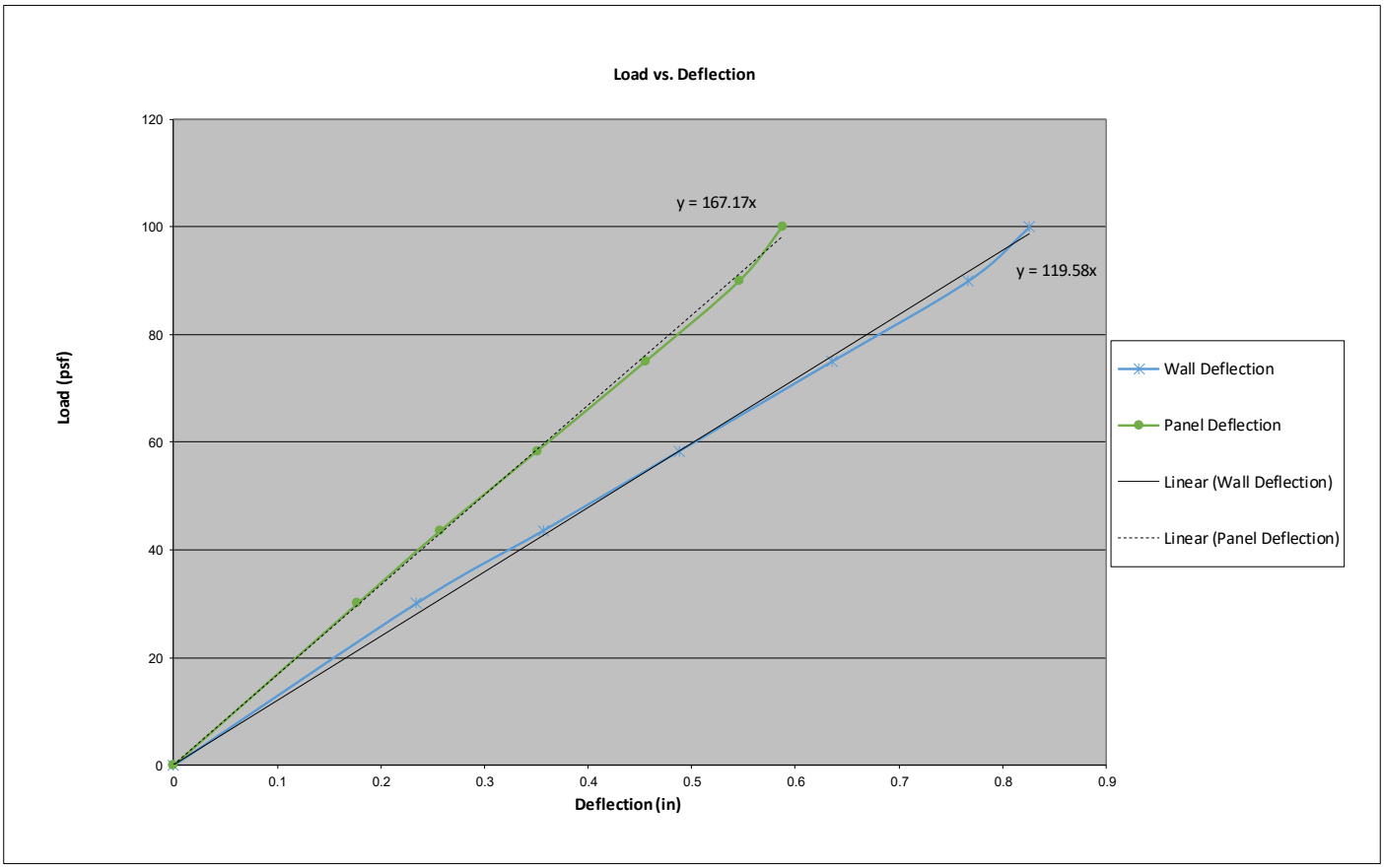
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | *15.0* | 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** | *30.1* | 10 sec. | *0.432* | *0.242* | *0.074* | *0.069* | *0.534* | *0.369* | *0.386* | *0.209* | |
| **0** | | 1-5mins | *0.014* | *0.012* | *0.007* | *0.004* | *0.021* | *0.019* | *0.018* | *0.011* | |
| **45** | *43.6* | 10 sec. | *0.648* | *0.374* | *0.119* | *0.105* | *0.804* | *0.563* | *0.584* | *0.303* | |
| **0** | | 1-5mins | *0.035* | *0.026* | *0.013* | *0.011* | *0.042* | *0.038* | *0.038* | *0.025* | |
| **60** | *58.4* | 10 sec. | *0.888* | *0.523* | *0.169* | *0.145* | *1.104* | *0.767* | *0.790* | *0.407* | |
| **0** | | 1-5mins | *0.057* | *0.042* | *0.020* | *0.023* | *0.066* | *0.058* | *58.000* | *0.039* | |
| **75** | *75.1* | 10 sec. | *1.160* | *0.694* | *0.228* | *0.191* | *1.441* | *0.996* | *1.015* | *0.519* | |
| **0** | | 1-5mins | *0.076* | *0.055* | *0.029* | *0.032* | *0.087* | *0.075* | *0.076* | *0.050* | |
| **90** | *90.0* | 10 sec. | *1.399* | *0.844* | *0.282* | *0.230* | *1.739* | *1.202* | *1.219* | *0.620* | |
| **0** | | 1-5mins | *0.092* | *0.067* | *0.037* | *0.038* | *0.106* | *0.091* | *0.093* | *0.059* | |
| **105** | *100.0* | 10 sec. | *1.517* | *0.923* | *0.320* | *0.261* | *1.891* | *1.310* | *1.330* | *0.670* | |
| **0** | | 1-5mins | *0.101* | *0.072* | *0.041* | *0.041* | *0.116* | *0.099* | *0.102* | *0.066* | |
| **120** | *130.6* | 10 sec. | *2.068* | *1.281* | *0.476* | *0.334* | *2.596* | *1.811* | *1.812* | *0.912* | |
| **0** | | 1-5mins | *0.132* | *0.088* | *0.071* | *0.048* | *0.158* | *0.126* | *0.146* | *0.085* | |
| **140** | *142.0* | 10 sec. | *2.264* | *1.403* | *0.519* | *0.363* | *2.847* | *1.985* | *1.985* | *1.013* | |
| **0** | | 1-5mins | *0.804* | *0.107* | *0.091* | *0.001* | *0.361* | *0.157* | *0.275* | *0.150* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **142.0** | Clips were engaged while going to 150 psf from the sheathing |

| Test#: | FP-V-3-1 | |
|---|---|---|
| Max Load | 142.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 71.0 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 49.7 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.4144 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.2973 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.1** | 0.234 | 0.178 |
| **43.6** | 0.357 | 0.258 |
| **58.4** | 0.488 | 0.351 |
| **75.1** | 0.636 | 0.456 |
| **90.0** | 0.767 | 0.546 |
| **100.0** | 0.826 | 0.588 |
| **130.6** | 1.141 | 0.786 |
| **142.0** | 1.253 | 0.862 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-3-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/21/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

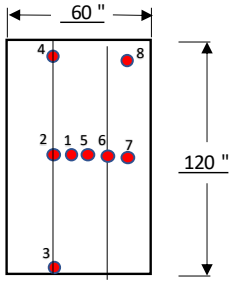
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 5/8" Plywood
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 14:33 | Temp: | 20 |
| Finish: | | %RH | 24 |

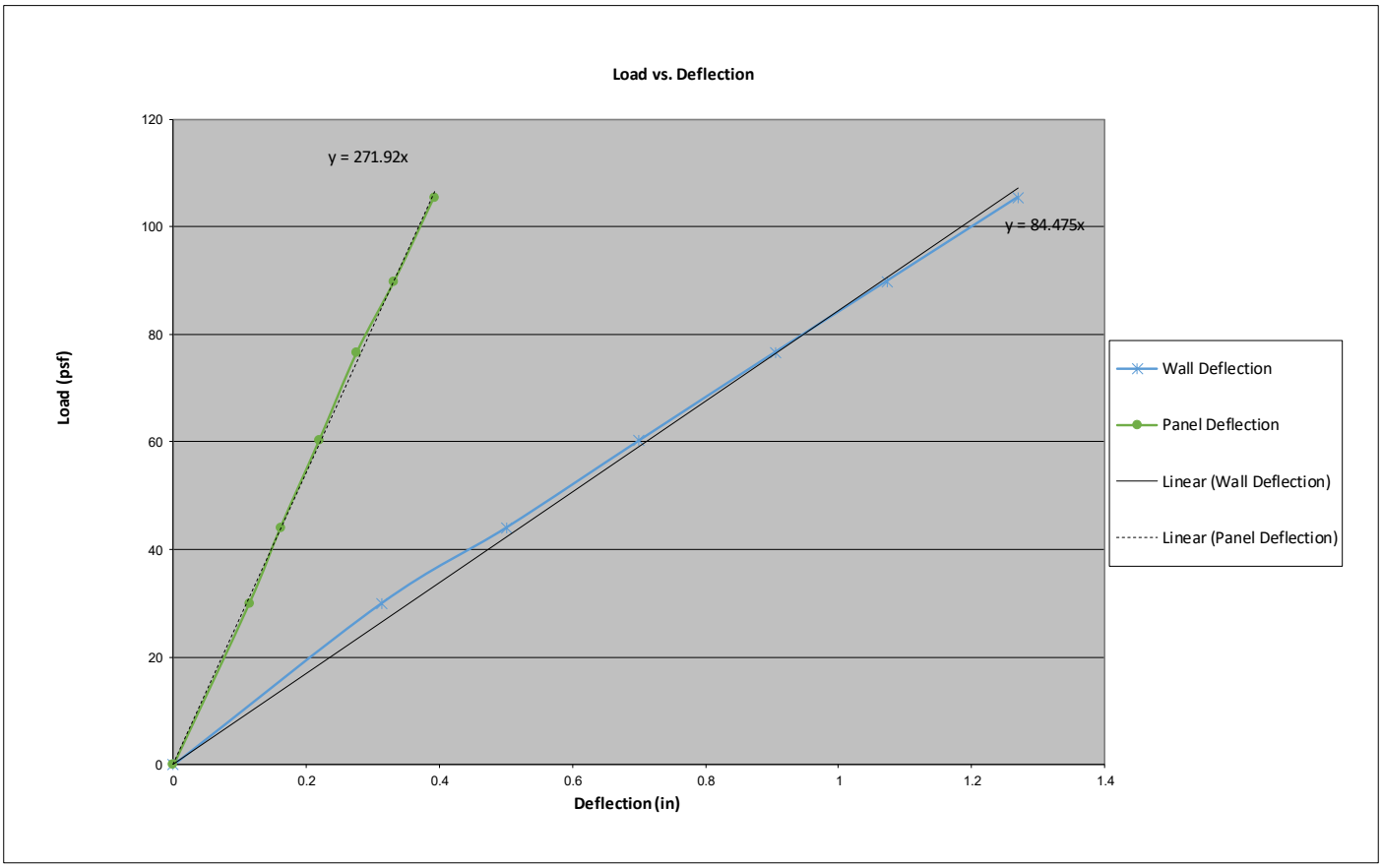
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *30.0* | 10 sec. | *0.486* | *0.337* | *0.080* | *0.076* | *0.523* | *0.444* | *0.477* | *0.115* | |
| **0** | | 1-5mins | *0.014* | *0.012* | *0.008* | *0.004* | *0.016* | *0.016* | *0.018* | *0.006* | |
| **45** | *44.1* | 10 sec. | *0.761* | *0.542* | *0.139* | *0.122* | *0.824* | *0.721* | *0.769* | *0.183* | |
| **0** | | 1-5mins | *0.030* | *0.025* | *0.022* | *0.008* | *0.033* | *0.036* | *0.040* | *0.014* | |
| **60** | *60.3* | 10 sec. | *1.062* | *0.761* | *0.203* | *0.171* | *1.150* | *1.013* | *1.070* | *0.250* | |
| **0** | | 1-5mins | *0.051* | *0.044* | *0.042* | *0.015* | *0.056* | *0.060* | *0.067* | *0.023* | |
| **75** | *76.7* | 10 sec. | *1.368* | *0.992* | *0.275* | *0.219* | *1.489* | *1.313* | *1.367* | *0.309* | |
| **0** | | 1-5mins | *0.073* | *0.061* | *0.059* | *0.021* | *0.078* | *0.084* | *0.091* | *0.027* | |
| **90** | *89.9* | 10 sec. | *1.610* | *1.174* | *0.326* | *0.256* | *1.781* | *1.553* | *1.608* | *0.358* | |
| **0** | | 1-5mins | *0.091* | *0.074* | *0.067* | *0.029* | *0.098* | *0.102* | *0.112* | *0.036* | |
| **105** | *105.5* | 10 sec. | *1.888* | *1.394* | *0.384* | *0.302* | *2.122* | *1.832* | *1.884* | *0.413* | |
| **0** | | 1-5mins | *0.116* | *0.093* | *0.073* | *0.039* | *0.123* | *0.122* | *0.137* | *0.045* | |
| **120** | *119.4* | 10 sec. | *2.181* | *1.576* | *0.438* | *0.345* | *2.533* | *2.072* | *2.129* | *0.460* | |
| **0** | | 1-5mins | *0.037* | *0.122* | *0.084* | *0.052* | *0.357* | *0.163* | *0.230* | *0.056* | |
| **140** | *140.6* | 10 sec. | *2.566* | *1.860* | *0.519* | *0.399* | *2.988* | *2.427* | *2.496* | *0.532* | |
| **0** | | 1-5mins | *0.056* | *0.124* | *0.089* | *0.066* | *0.408* | *0.170* | *0.263* | *0.067* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **140.6** | System failed at pressures 160 psf |

| Test#: | FP-V-3-2 | |
|---|---|---|
| Max Load | 140.6 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 70.3 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 49.2 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.5702 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1810 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.0** | 0.313 | 0.114 |
| **44.1** | 0.501 | 0.161 |
| **60.3** | 0.700 | 0.219 |
| **76.7** | 0.906 | 0.276 |
| **89.9** | 1.073 | 0.332 |
| **105.5** | 1.270 | 0.392 |
| **119.4** | 1.433 | 0.533 |
| **140.6** | 1.685 | 0.634 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-3-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/23/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

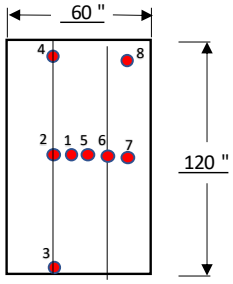
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 5/8" Plywood
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 19.4 |
| Finish: | 10:59 | %RH | 22 |

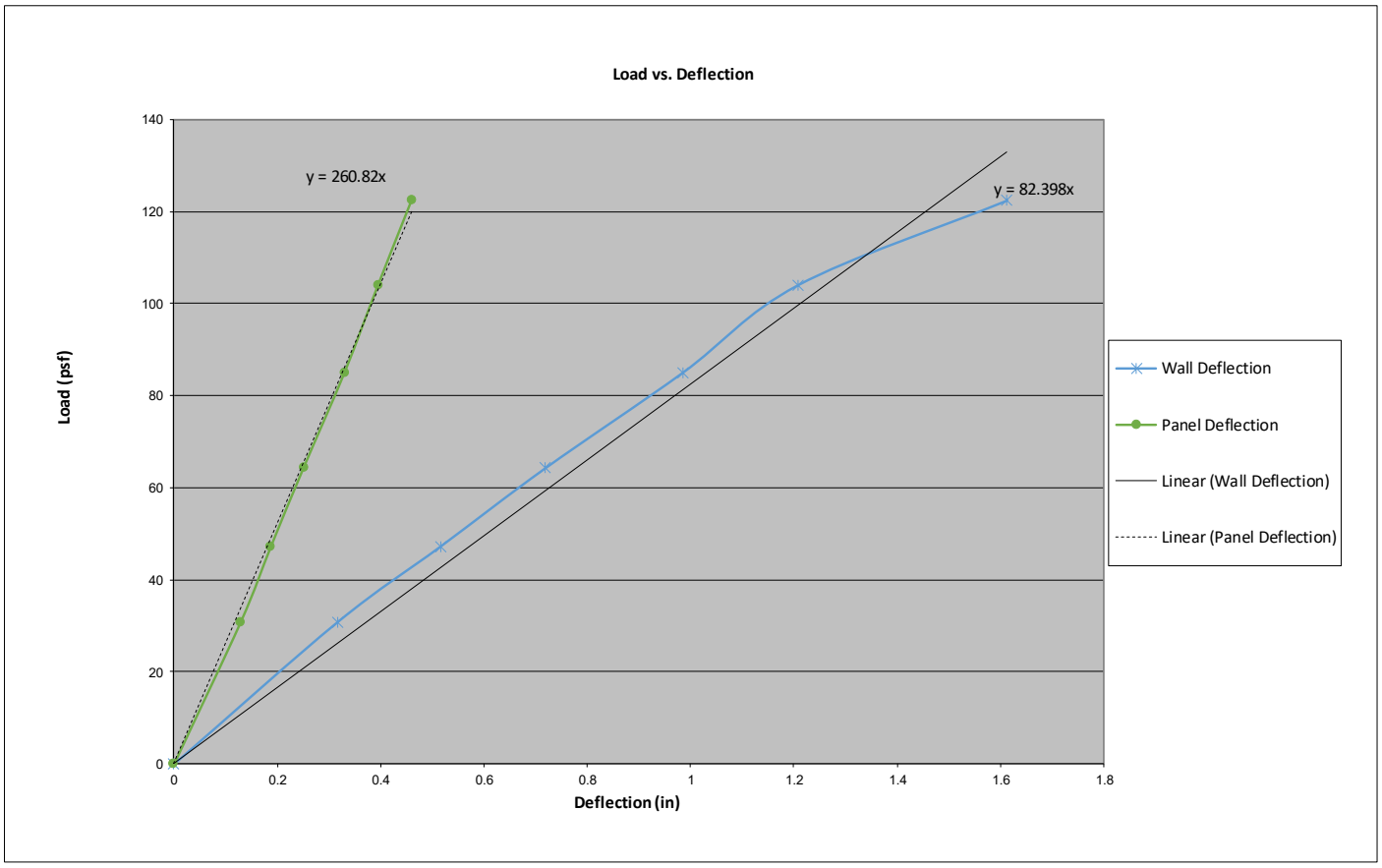
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *30.9* | 10 sec. | *0.530* | *0.377* | *0.124* | *0.099* | *0.586* | *0.480* | *0.554* | *0.569* | |
| **0** | | 1-5mins | *0.009* | *0.008* | *0.009* | *0.003* | *0.011* | *0.009* | *0.010* | *0.003* | |
| **45** | *47.3* | 10 sec. | *0.823* | *0.598* | *0.184* | *0.151* | *0.920* | *0.769* | *0.880* | *0.192* | |
| **0** | | 1-5mins | *0.024* | *0.019* | *0.015* | *0.007* | *0.024* | *0.024* | *0.024* | *0.006* | |
| **60** | *64.3* | 10 sec. | *1.128* | *0.822* | *0.244* | *0.205* | *1.261* | *1.065* | *1.216* | *0.259* | |
| **0** | | 1-5mins | *0.042* | *0.035* | *0.023* | *0.012* | *0.041* | *0.042* | *0.041* | *0.011* | |
| **75** | *85.0* | 10 sec. | *1.521* | *1.114* | *0.322* | *0.273* | *1.704* | *1.450* | *1.649* | *0.347* | |
| **0** | | 1-5mins | *0.052* | *0.046* | *0.029* | *0.017* | *0.056* | *0.054* | *0.056* | *0.015* | |
| **105** | *104.0* | 10 sec. | *1.851* | *1.363* | *0.389* | *0.335* | *2.079* | *1.776* | *2.011* | *0.424* | |
| **0** | | 1-5mins | *0.076* | *0.063* | *0.039* | *0.024* | *0.078* | *0.074* | *0.080* | *0.020* | |
| **120** | *122.4* | 10 sec. | *2.180* | *1.612* | *0.457* | *0.024* | *2.447* | *2.094* | *0.078* | *0.502* | Gauge 4 & 7 got stuck |
| **0** | | 1-5mins | *0.095* | *0.074* | *0.047* | *0.024* | *0.098* | *0.088* | *0.078* | *0.028* | |
| **140** | *147.0* | 10 sec. | *2.626* | *1.945* | *0.550* | *0.024* | *2.953* | *2.524* | *0.078* | *0.614* | |
| **0** | | 1-5mins | *0.105* | *0.950* | *0.560* | *0.024* | *0.147* | *0.950* | *0.078* | *0.035* | |
| **160** | *160.0* | 10 sec. | *2.913* | *2.139* | *0.605* | *0.024* | *3.363* | *2.761* | *0.078* | *0.679* | |
| **0** | | 1-5mins | *0.189* | *0.100* | *0.063* | *0.024* | *0.195* | *0.116* | *0.078* | *0.043* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **160.0** | Sheathing failed while going to pressures at 170 psf |

| Test#: | FP-V-3-3 | |
|---|---|---|
| Max Load | 160.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 80.0 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 56.0 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.6323 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.2147 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.9** | 0.317 | 0.130 |
| **47.3** | 0.516 | 0.188 |
| **64.3** | 0.719 | 0.251 |
| **85.0** | 0.985 | 0.331 |
| **104.0** | 1.208 | 0.396 |
| **122.4** | 1.613 | 0.461 |
| **147.0** | 1.948 | 0.555 |
| **160.0** | 2.136 | 0.688 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-4-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/7/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

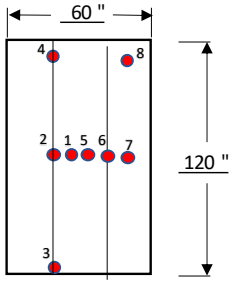
**Installation:**
Configuration: Studs 16" OC
Stud: 2x4 Wood Stud
Fastener: P22 32" OC into Sheathing
Sheathing: 7/16" OSB + 2" Rigid Insulation
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 12:21 | Temp: | 22 |
| Finish: | 12:39 | %RH | 21 |

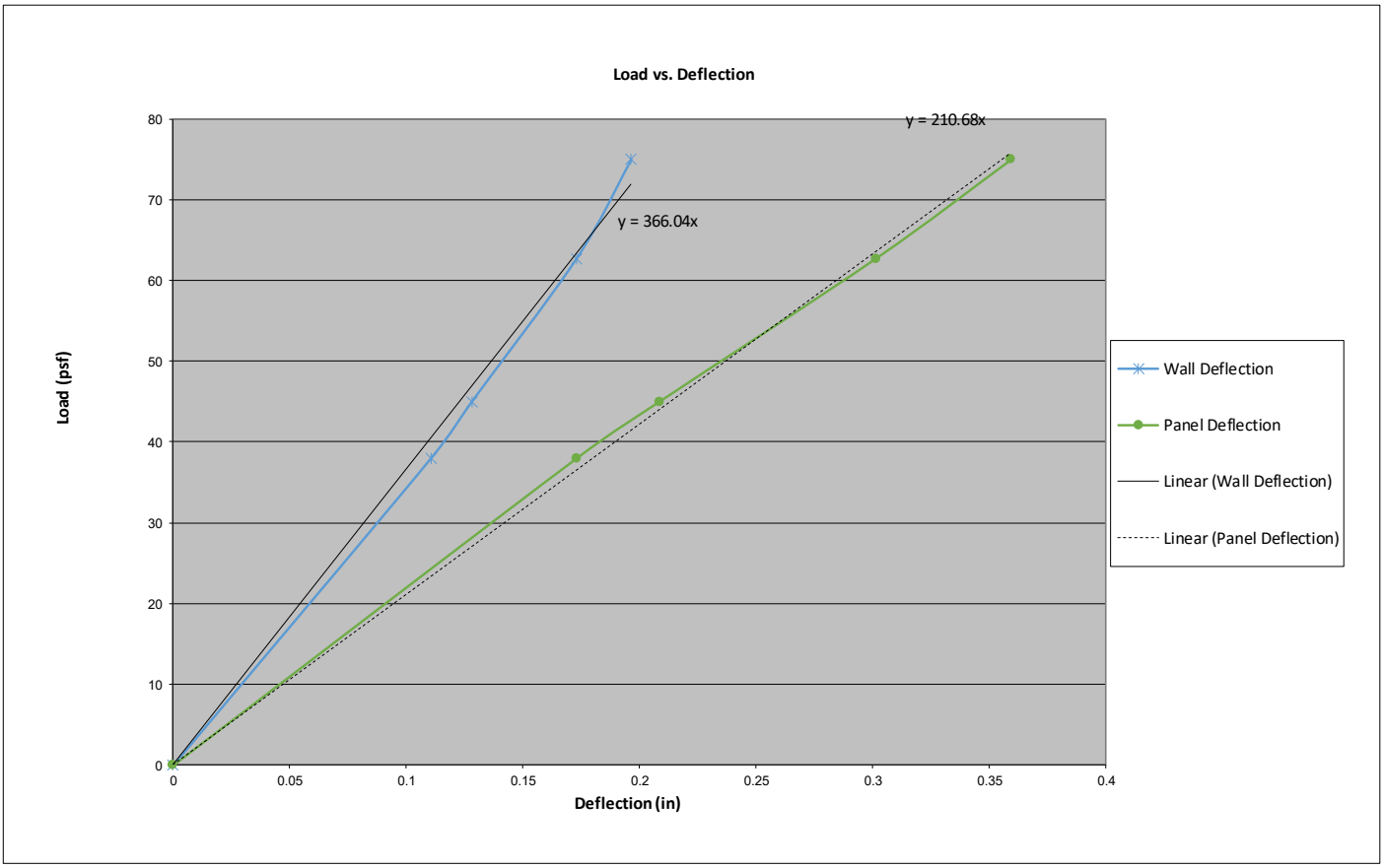
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | *15.0* | 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** | *38.0* | 10 sec. | *0.326* | *0.131* | *0.041* | *0.057* | *0.339* | *0.188* | *0.652* | *0.216* | |
| **0** | | 1-5mins | *0.015* | *0.007* | *0.006* | *0.004* | *0.018* | *0.013* | *0.038* | *0.021* | |
| **45** | *45.0* | 10 sec. | *0.387* | *0.154* | *0.050* | *0.069* | *0.405* | *0.221* | *0.778* | *0.266* | |
| **0** | | 1-5mins | *0.024* | *0.011* | *0.008* | *0.006* | *0.029* | *0.018* | *0.068* | *0.038* | |
| **60** | *62.8* | 10 sec. | *0.546* | *0.214* | *0.075* | *0.099* | *0.577* | *0.306* | *1.118* | *0.398* | |
| **0** | | 1-5mins | *0.051* | *0.020* | *0.013* | *0.015* | *0.066* | *0.034* | *0.186* | *0.087* | |
| **75** | *75.0* | 10 sec. | *0.640* | *0.249* | *0.092* | *0.117* | *0.681* | *0.353* | *1.312* | *0.474* | |
| **0** | | 1-5mins | *0.072* | *0.027* | *0.018* | *0.022* | *0.091* | *0.044* | *0.273* | *0.110* | |
| **90** | *90.8* | 10 sec. | *0.787* | *0.297* | *0.121* | *0.135* | *0.852* | *0.419* | *1.602* | *0.549* | |
| **0** | | 1-5mins | *0.110* | *0.035* | *0.023* | *0.027* | *0.137* | *0.053* | *0.372* | *0.136* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **90.8** | Clips were disengaged from Z-girts at pressures going to 105 psf |

| Test#: | FP-V-4-1 | |
|---|---|---|
| Max Load | 90.8 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 45.4 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 31.8 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.0868 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1509 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **38.0** | 0.111 | 0.173 |
| **45.0** | 0.128 | 0.209 |
| **62.8** | 0.173 | 0.302 |
| **75.0** | 0.197 | 0.360 |
| **90.8** | 0.230 | 0.462 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-5-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/8/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

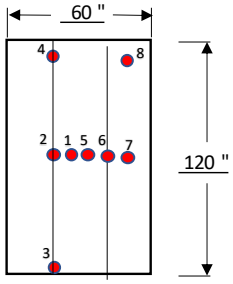
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Wood Stud
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 9:45 | Temp: | 22.4 |
| Finish: | 10:56 | %RH | 23 |

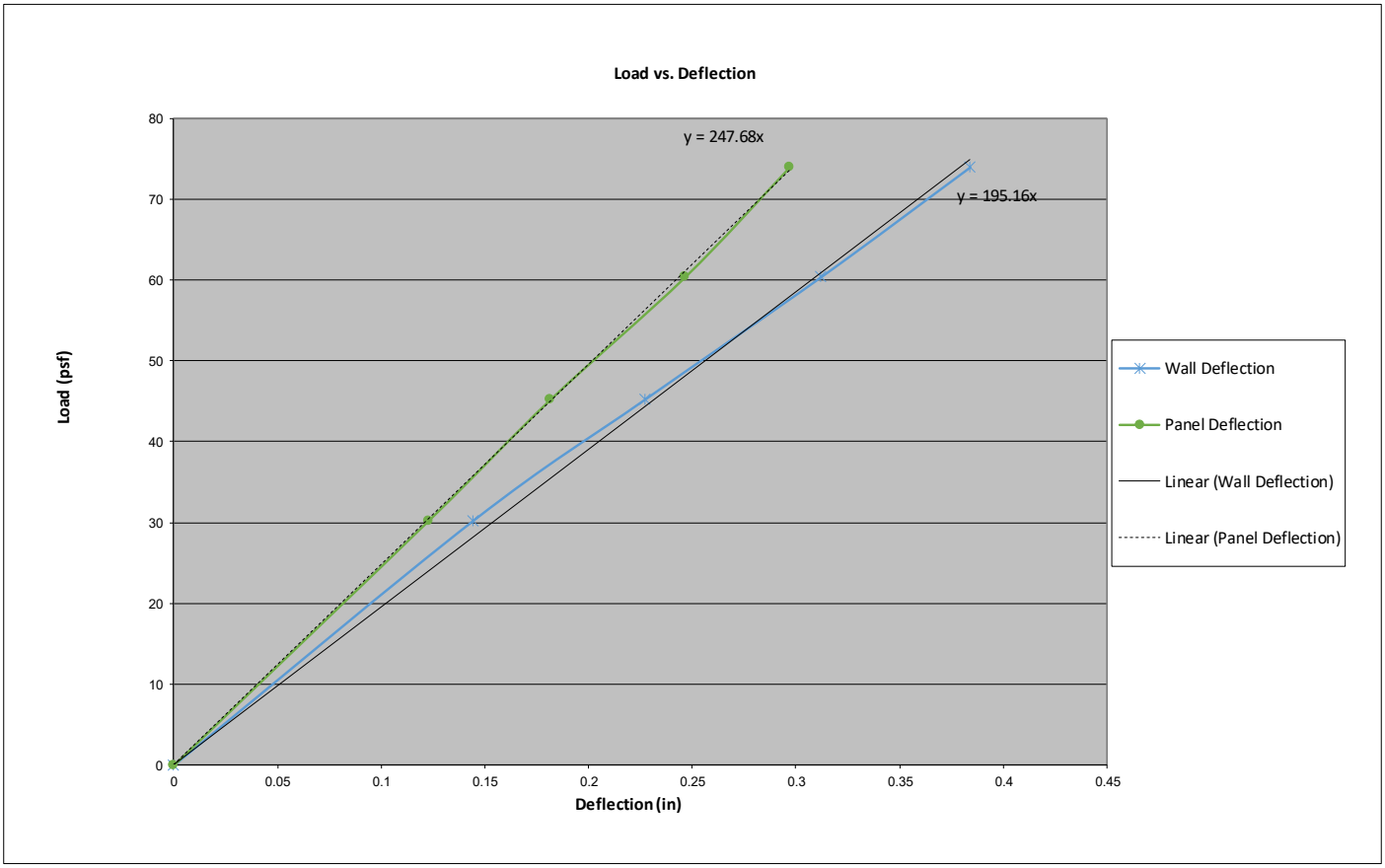
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | 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** | *30.3* | 10 sec. | *0.331* | *0.170* | *0.066* | *0.068* | *0.338* | *0.253* | *0.369* | *0.121* | |
| **0** | | 1-5mins | *0.016* | *0.010* | *0.008* | *0.006* | *0.015* | *0.015* | *0.016* | *0.007* | |
| **45** | *45.2* | 10 sec. | *0.514* | *0.273* | *0.118* | *0.107* | *0.528* | *0.406* | *0.576* | *0.183* | |
| **0** | | 1-5mins | *0.030* | *0.021* | *0.017* | *0.012* | *0.030* | *0.030* | *0.032* | *0.014* | |
| **60** | *60.4* | 10 sec. | *0.706* | *0.378* | *0.173* | *0.145* | *0.729* | *0.564* | *0.795* | *0.245* | |
| **0** | | 1-5mins | *0.047* | *0.031* | *0.030* | *0.017* | *0.048* | *0.045* | *0.051* | *0.021* | |
| **75** | *74.0* | 10 sec. | *0.867* | *0.469* | *0.226* | *0.175* | *0.896* | *0.700* | *0.982* | *0.297* | Tap failed. Retapping it. |
| **0** | | 1-5mins | *0.067* | *0.041* | *0.045* | *0.022* | *0.063* | *0.061* | *0.068* | *0.029* | |
| **90** | *93.5* | 10 sec. | *1.081* | *0.570* | *0.290* | *0.207* | *1.113* | *0.871* | *1.247* | *0.348* | |
| **0** | | 1-5mins | *0.047* | *0.032* | *0.047* | *0.012* | *0.052* | *0.047* | *0.059* | *0.016* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **93.5** | Clips failed at 105 psf by pulling out of sheathing |

| Test#: | FP-V-5-1 | |
|---|---|---|
| Max Load | 93.5 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 46.8 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 32.7 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1677 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1321 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.3** | 0.145 | 0.123 |
| **45.2** | 0.227 | 0.182 |
| **60.4** | 0.312 | 0.247 |
| **74.0** | 0.384 | 0.297 |
| **93.5** | 0.472 | 0.377 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-5-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/8/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

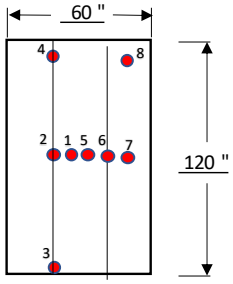
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Wood Stud
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 12:19 | Temp: | 22.4 |
| Finish: | 12:33 | %RH | 23 |

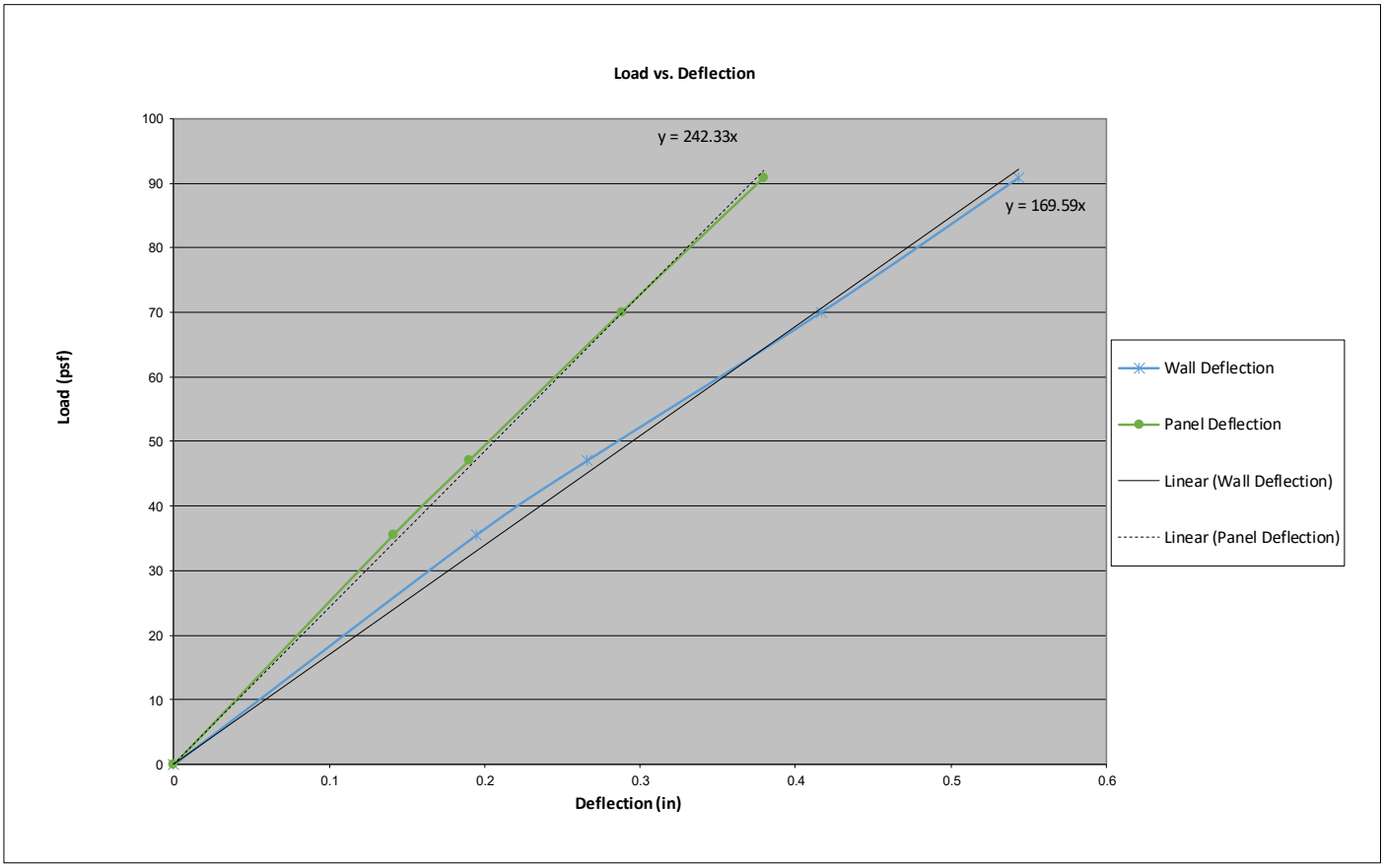
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *35.5* | 10 sec. | *0.409* | *0.220* | *0.096* | *0.099* | *0.457* | *0.364* | *0.463* | *0.190* | |
| **0** | | 1-5mins | *0.018* | *0.011* | *0.011* | *0.009* | *0.018* | *0.017* | *0.017* | *0.012* | |
| **45** | *47.1* | 10 sec. | *0.557* | *0.304* | *0.136* | *0.133* | *0.624* | *0.497* | *0.629* | *0.243* | |
| **0** | | 1-5mins | *0.031* | *0.018* | *0.020* | *0.014* | *0.030* | *0.030* | *0.032* | *0.022* | |
| **70** | *70.0* | 10 sec. | *0.861* | *0.479* | *0.223* | *0.197* | *0.968* | *0.774* | *0.994* | *0.342* | |
| **0** | | 1-5mins | *0.051* | *0.031* | *0.038* | *0.022* | *0.053* | *0.050* | *0.054* | *0.040* | |
| **90** | *90.8* | 10 sec. | *1.123* | *0.624* | *0.298* | *0.246* | *1.267* | *1.007* | *1.314* | *0.421* | |
| **0** | | 1-5mins | *0.074* | *0.042* | *0.055* | *0.029* | *0.076* | *0.069* | *0.084* | *0.054* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **90.8** | The clips were pulled out of the sheathing at going to pressure 105 psf |

| Test#: | FP-V-5-2 | |
|---|---|---|
| Max Load | 90.8 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 45.4 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 31.8 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1874 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1311 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **35.5** | 0.195 | 0.141 |
| **47.1** | 0.266 | 0.190 |
| **70.0** | 0.417 | 0.288 |
| **90.8** | 0.544 | 0.380 |
| **0.0** | #DIV/0! | #DIV/0! |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-5-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/9/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

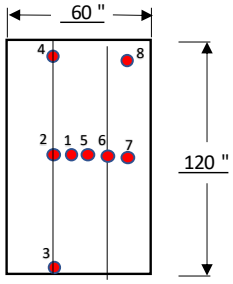
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Wood Stud
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 22 |
| Finish: | 9:40 | %RH | 21 |

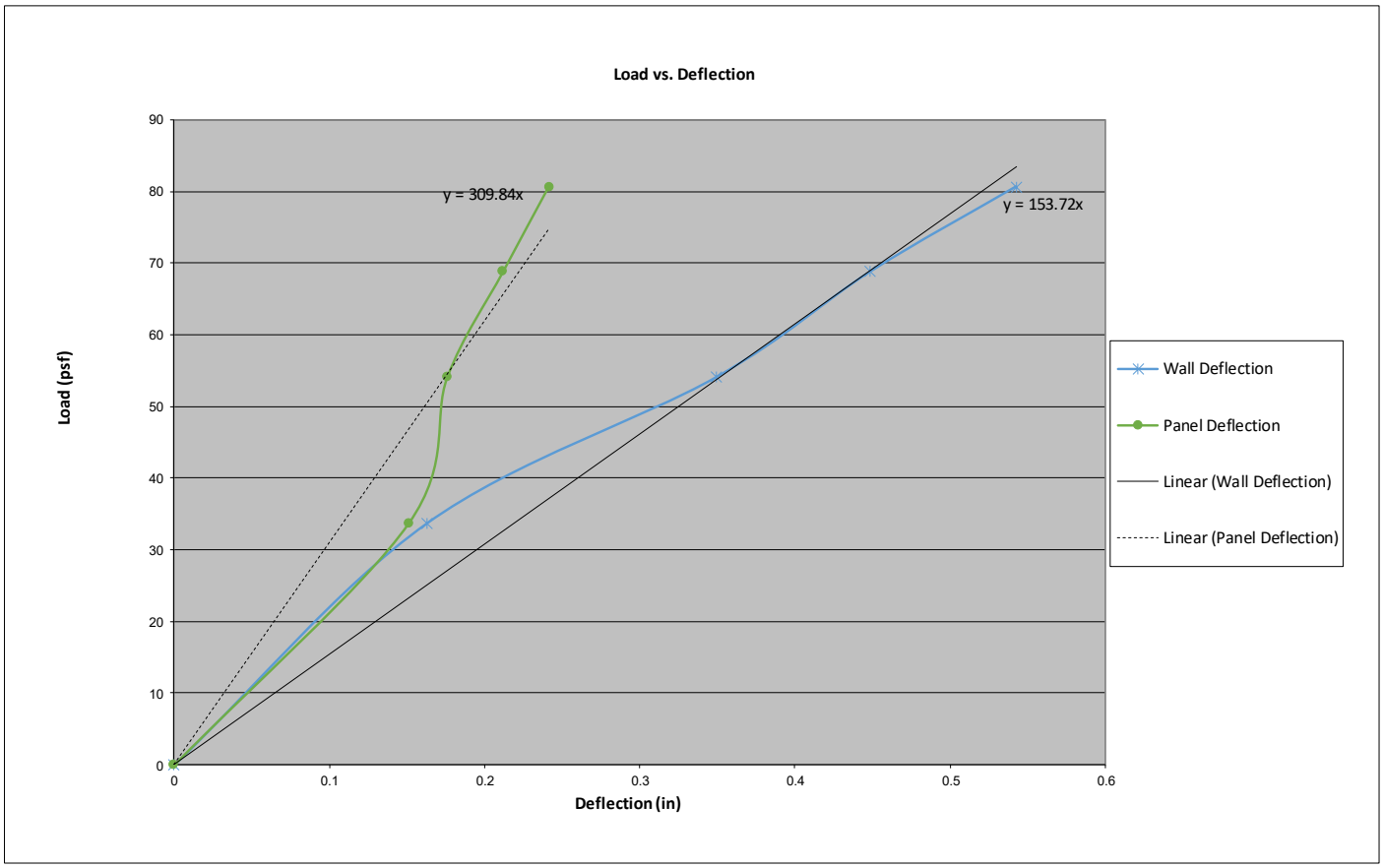
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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. | *0.464* | *0.309* | *0.118* | *0.245* | *0.526* | *0.379* | *0.509* | *0.221* | |
| **0** | | 1-5mins | *0.041* | *0.038* | *0.017* | *0.051* | *0.040* | *0.037* | *0.035* | *0.037* | |
| **45** | *54.1* | 10 sec. | *0.798* | *0.037* | *0.220* | *0.432* | *0.904* | *0.675* | *0.877* | *0.037* | |
| **0** | | 1-5mins | *0.112* | *0.037* | *0.035* | *0.154* | *0.110* | *0.097* | *0.090* | *0.037* | |
| **60** | *68.8* | 10 sec. | *0.969* | *0.037* | *0.278* | *0.477* | *1.107* | *0.826* | *1.089* | *0.037* | |
| **0** | | 1-5mins | *0.133* | *0.037* | *0.045* | *0.174* | *0.131* | *0.115* | *0.112* | *0.037* | |
| **75** | *80.7* | 10 sec. | *1.123* | *0.037* | *0.329* | *0.516* | *1.290* | *0.965* | *1.290* | *0.037* | |
| **0** | | 1-5mins | *0.152* | *0.037* | *0.053* | *0.192* | *0.151* | *0.133* | *0.138* | *0.037* | |
| **90** | *93.4* | 10 sec. | *1.282* | *0.037* | *0.377* | *0.554* | *1.482* | *1.115* | *1.499* | *0.037* | |
| **0** | | 1-5mins | *0.179* | *0.037* | *0.061* | *0.207* | *0.199* | *0.158* | *0.234* | *0.037* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** | **93.4** The clips were pulled out of the sheathing at pressure 105 psf |

| Test#: | FP-V-5-3 | |
|---|---|---|
| Max Load | 93.4 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 46.7 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 32.7 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.2127 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1055 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **33.7** | 0.163 | 0.151 |
| **54.1** | 0.349 | 0.176 |
| **68.8** | 0.449 | 0.212 |
| **80.7** | 0.543 | 0.242 |
| **0.0** | 0.000 | 0.000 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-6-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/10/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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: Studs 16" OC
Stud: 2x6 Wood Stud with Vertical and horizontal joints
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

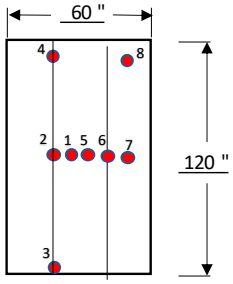
**Equipment:**

Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 13:34 | Temp: | 22.4 |
| Finish: | 13:55 | %RH | 21 |

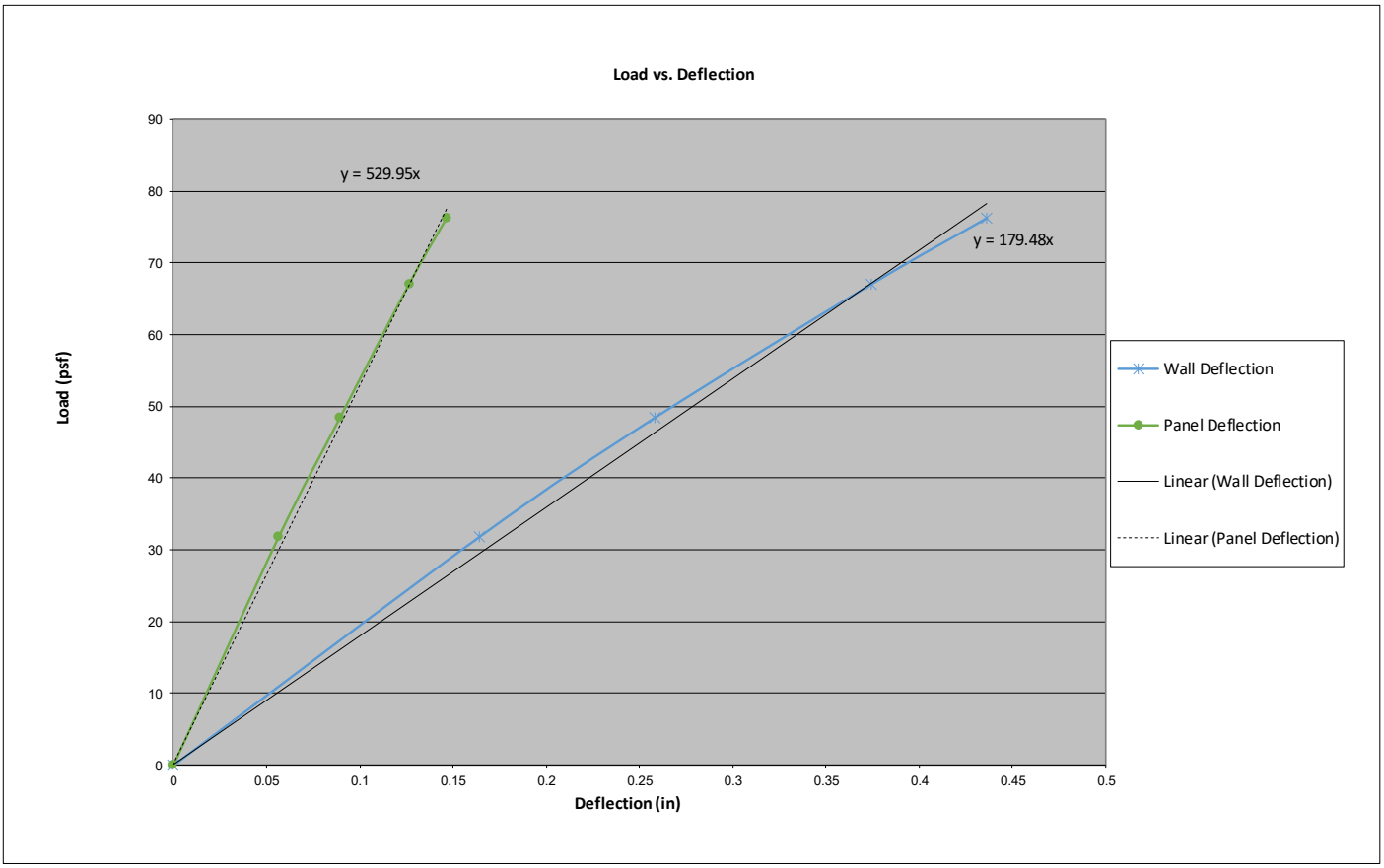
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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. | *0.291* | *0.225* | *0.079* | *0.129* | *0.358* | *0.311* | *0.335* | *0.221* | |
| **0** | | 1-5mins | *0.021* | *0.019* | *0.011* | *0.016* | *0.024* | *0.026* | *0.028* | *0.030* | |
| **45** | *48.5* | 10 sec. | *0.471* | *0.362* | *0.151* | *0.187* | *0.563* | *0.493* | *0.519* | *0.304* | |
| **0** | | 1-5mins | *0.041* | *0.036* | *0.026* | *0.027* | *0.044* | *0.049* | *0.052* | *0.049* | |
| **60** | *67.1* | 10 sec. | *0.685* | *0.530* | *0.250* | *0.247* | *0.814* | *0.716* | *0.733* | *0.385* | |
| **0** | | 1-5mins | *0.068* | *0.055* | *0.053* | *0.037* | *0.071* | *0.074* | *0.081* | *0.062* | |
| **75** | *76.2* | 10 sec. | *0.791* | *0.611* | *0.287* | *0.274* | *0.935* | *0.822* | *0.838* | *0.423* | |
| **0** | | 1-5mins | *0.078* | *0.061* | *0.058* | *0.040* | *0.080* | *0.083* | *0.090* | *0.069* | |
| **90** | *90.6* | 10 sec. | *0.947* | *0.729* | *0.331* | *0.315* | *1.121* | *0.980* | *0.994* | *0.483* | |
| **0** | | 1-5mins | *0.092* | *0.070* | *0.064* | *0.047* | *0.093* | *0.094* | *0.106* | *0.077* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **90.6** | Clips were pull out from the OSB at going pressure above 100 psf |

| Test#: | FP-V-6-1 | |
|---|---|---|
| Max Load | 90.6 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 45.3 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 31.7 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1766 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0598 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **31.8** | 0.164 | 0.057 |
| **48.5** | 0.259 | 0.089 |
| **67.1** | 0.375 | 0.127 |
| **76.2** | 0.436 | 0.147 |
| **90.6** | 0.532 | 0.180 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-6-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/11/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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: Studs 16" OC
Stud: 2x6 Wood Stud with Vertical and horizontal joints
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

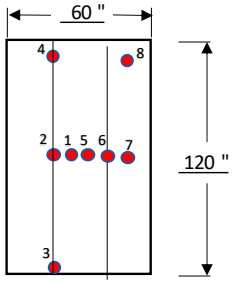
**Equipment:**

Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 14:00 | Temp: | 23.2 |
| Finish: | 14:17 | %RH | 19 |

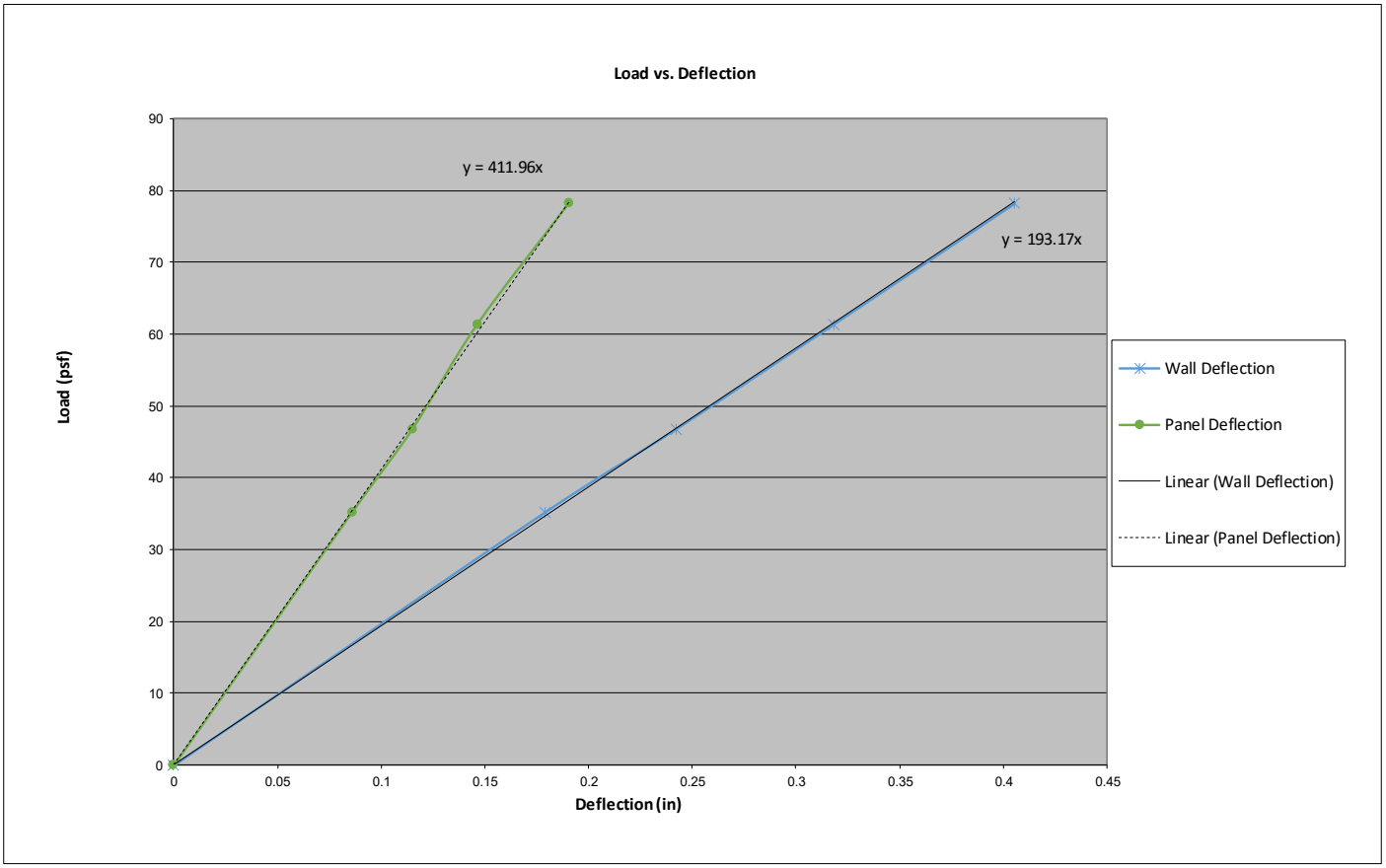
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *35.2* | 10 sec. | *0.357* | *0.253* | *0.084* | *0.128* | *0.385* | *0.317* | *0.322* | *0.196* | |
| **0** | | 1-5mins | *0.015* | *0.014* | *0.008* | *0.015* | *0.017* | *0.015* | *0.016* | *0.019* | |
| **45** | *46.7* | 10 sec. | *0.495* | *0.357* | *0.122* | *0.193* | *0.534* | *0.442* | *0.440* | *0.260* | |
| **0** | | 1-5mins | *0.031* | *0.027* | *0.015* | *0.032* | *0.033* | *0.030* | *0.031* | *0.035* | |
| **60** | *61.4* | 10 sec. | *0.670* | *0.493* | *0.174* | *0.287* | *0.721* | *0.605* | *0.591* | *0.342* | |
| **0** | | 1-5mins | *0.058* | *0.050* | *0.025* | *0.067* | *0.060* | *0.054* | *0.052* | *0.062* | |
| **75** | *78.2* | 10 sec. | *0.888* | *0.655* | *0.247* | *0.397* | *0.948* | *0.800* | *0.770* | *0.433* | |
| **0** | | 1-5mins | *0.101* | *0.090* | *0.038* | *0.123* | *0.102* | *0.090* | *0.084* | *0.100* | |
| **90** | *92.3* | 10 sec. | *1.066* | *0.787* | *0.313* | *0.473* | *1.129* | *0.958* | *0.923* | *0.099* | Gauge 8 was stuck |
| **0** | | 1-5mins | *0.133* | *0.118* | *0.049* | *0.161* | *0.131* | *0.117* | *0.110* | *0.099* | |
| **105** | *106.0* | 10 sec. | *1.260* | *0.919* | *0.387* | *0.539* | *1.328* | *1.119* | *1.072* | *0.099* | |
| **0** | | 1-5mins | *0.164* | *0.144* | *0.062* | *0.192* | *0.154* | *0.141* | *0.137* | *0.099* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **106.0** | Screws were pull out while going to pressures at 120 psf |

| Test#: | FP-V-6-2 | |
|---|---|---|
| Max Load | 106.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 53.0 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 37.1 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1921 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0901 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **35.2** | 0.179 | 0.086 |
| **46.7** | 0.242 | 0.115 |
| **61.4** | 0.319 | 0.147 |
| **78.2** | 0.406 | 0.191 |
| **92.3** | 0.480 | 0.225 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-6-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/14/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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: Studs 16" OC
Stud: 2x6 Wood Stud with Vertical and horizontal joints
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

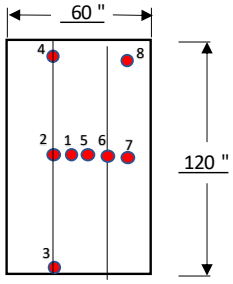
**Equipment:**

Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 8:48 | Temp: | 20 |
| Finish: | 9:05 | %RH | 20 |

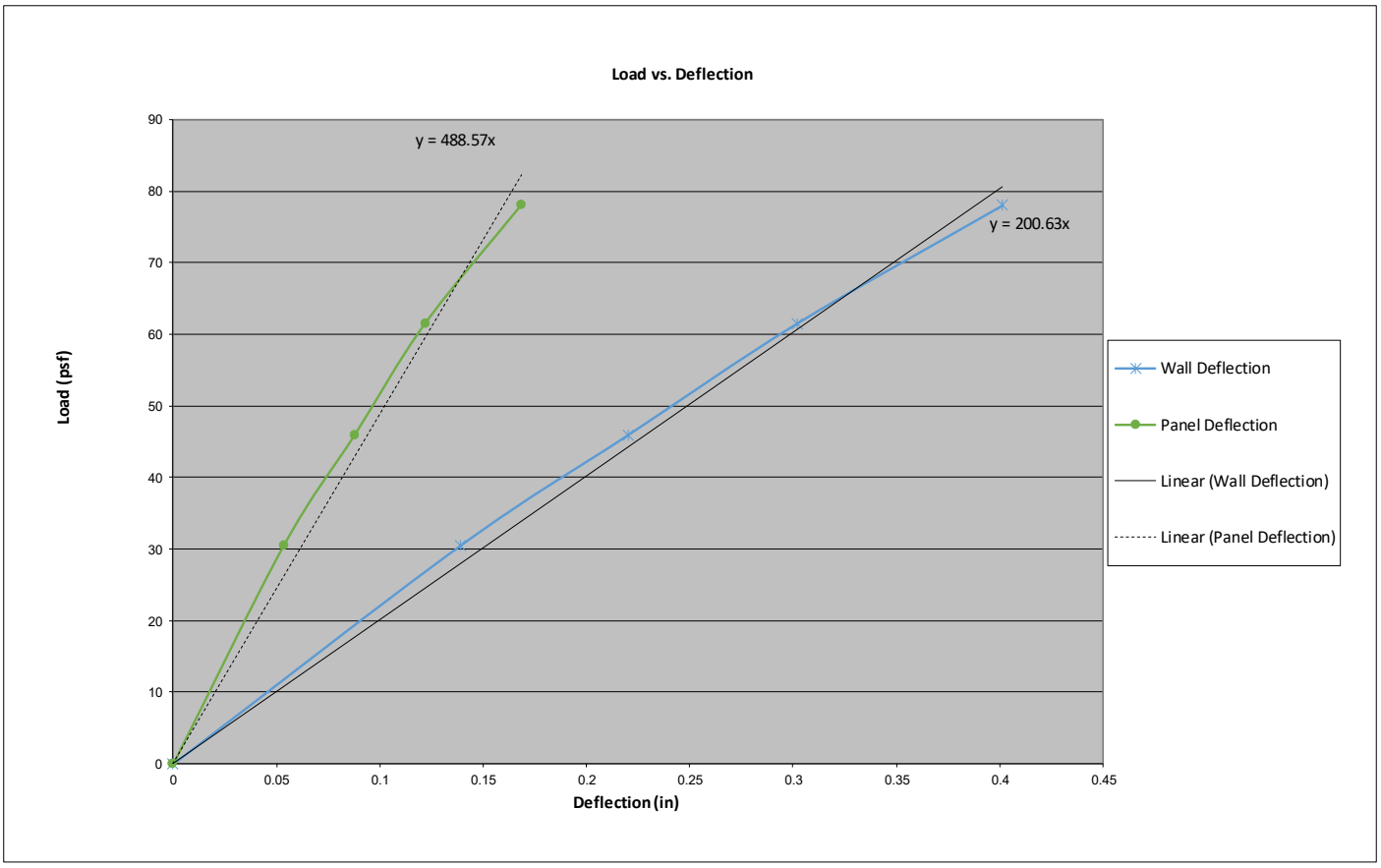
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *30.5* | 10 sec. | *0.265* | *0.184* | *0.084* | *0.075* | *0.279* | *0.253* | *0.299* | *0.132* | |
| **0** | | 1-5mins | *0.021* | *0.017* | *0.017* | *0.009* | *0.022* | *0.024* | *0.023* | *0.014* | |
| **45** | *46.0* | 10 sec. | *0.433* | *0.302* | *0.150* | *0.120* | *0.454* | *0.409* | *0.467* | *0.196* | |
| **0** | | 1-5mins | *0.038* | *0.029* | *0.035* | *0.017* | *0.040* | *0.041* | *0.038* | *0.026* | |
| **60** | *61.5* | 10 sec. | *0.600* | *0.422* | *0.217* | *0.168* | *0.633* | *0.567* | *0.632* | *0.263* | |
| **0** | | 1-5mins | *0.058* | *0.041* | *0.053* | *0.026* | *0.060* | *0.058* | *0.053* | *0.036* | |
| **75** | *78.0* | 10 sec. | *0.809* | *0.569* | *0.294* | *0.227* | *0.852* | *0.755* | *0.850* | *0.329* | |
| **0** | | 1-5mins | *0.087* | *0.057* | *0.072* | *0.037* | *0.078* | *0.074* | *0.062* | *0.028* | |
| **90** | *96.5* | 10 sec. | *0.975* | *0.693* | *0.349* | *0.278* | *0.986* | *0.871* | *1.095* | *0.551* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **96.5** | Clips were pulled out from the middle joint and planks were pulled out |

| Test#: | FP-V-6-3 | |
|---|---|---|
| Max Load | 96.5 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 48.3 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 33.8 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1683 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0691 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.5** | 0.139 | 0.054 |
| **46.0** | 0.221 | 0.088 |
| **61.5** | 0.302 | 0.122 |
| **78.0** | 0.402 | 0.169 |
| **96.5** | 0.469 | 0.199 |
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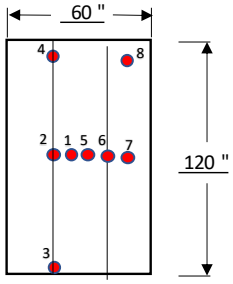
Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-7-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/16/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** Location: 101-4441 76 Ave. SE Calgary AB T2C2G8
Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 18 GA 33ksi Steel Stud
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**

| Pressure Chamber | Deflection Gauges( Phidget potentiometers) | |
|---|---|---|
| Motor: Core Sensors Model: CS10 - 2400100WB4/ | 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 |

| Gauge Locations (not to scale) |
|---|
| Gauge 1: plank |
| Gauge 2: Stud |
| Gauge 3: Stud |
| Gauge 4: Stud |
| Gauge 5: Plank |
| Gauge 6: Stud |
| Gauge 7: Plank |
| Gauge 8: Plank |




| | 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: | 8:38 | Temp: | 20.9 |
| Finish: | 8:57 | %RH | 22 |

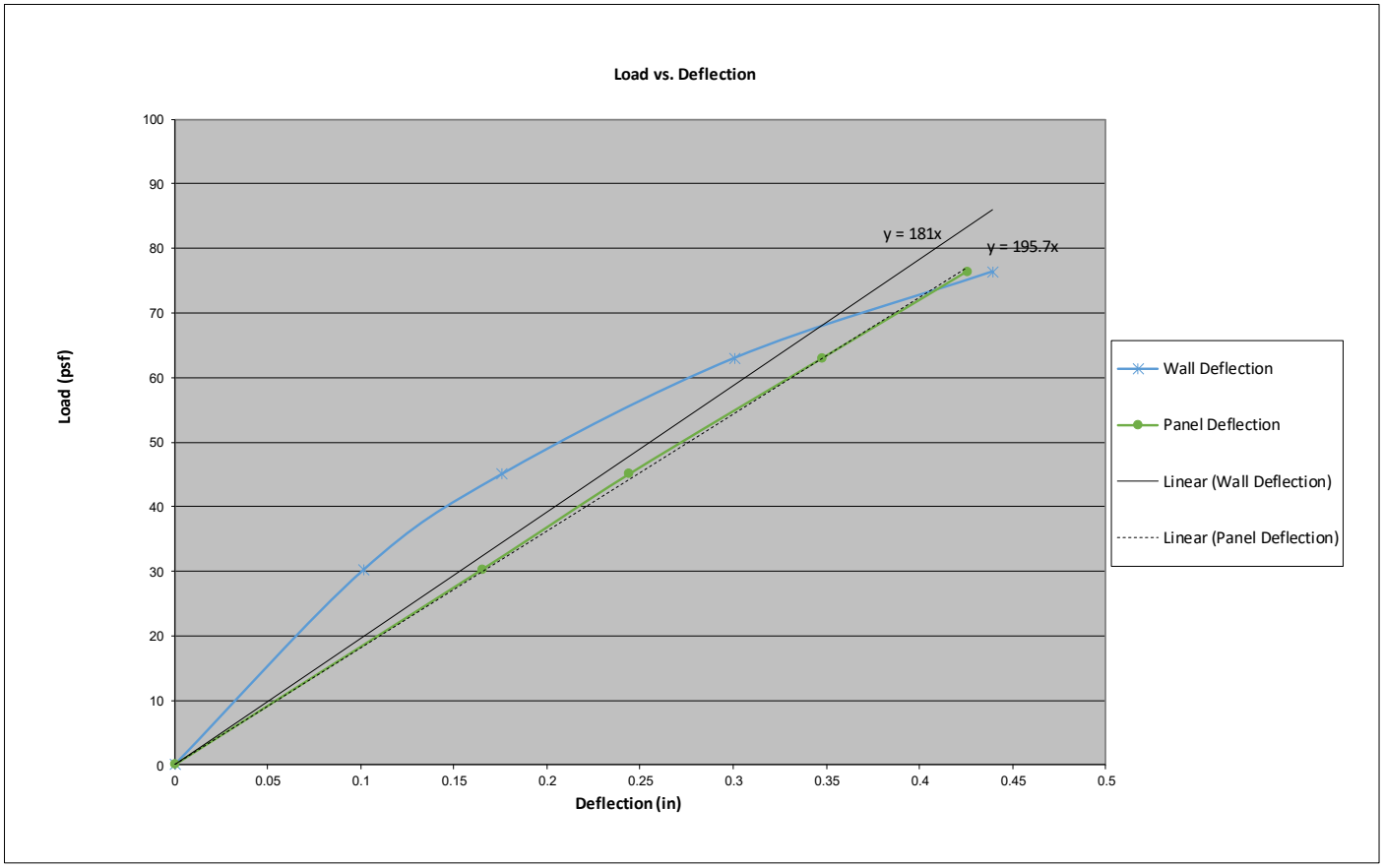
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *30.2* | 10 sec. | *0.327* | *0.184* | *0.089* | *0.076* | *0.371* | *0.298* | *0.365* | *0.100* | |
| **0** | | 1-5mins | *0.015* | *0.010* | *0.017* | *0.006* | *0.018* | *0.019* | *0.017* | *0.009* | |
| **45** | *45.0* | 10 sec. | *0.515* | *0.308* | *0.142* | *0.123* | *0.589* | *0.527* | *0.582* | *0.156* | |
| **0** | | 1-5mins | *0.032* | *0.022* | *0.032* | *0.013* | *0.037* | *0.035* | *0.036* | *0.017* | |
| **60** | *63.0* | 10 sec. | *0.789* | *0.498* | *0.210* | *0.185* | *0.903* | *0.950* | *0.925* | *0.226* | |
| **0** | | 1-5mins | *0.051* | *0.037* | *0.041* | *0.021* | *0.065* | *0.052* | *0.065* | *0.020* | |
| **75** | *76.4* | 10 sec. | *1.039* | *0.700* | *0.281* | *0.241* | *1.212* | *1.468* | *1.246* | *0.285* | |
| **0** | | 1-5mins | *0.082* | *0.051* | *0.060* | *0.027* | *0.101* | *0.074* | *0.106* | *0.024* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **76.4** | Clips were pulled out from the OSB at high pressures |

| Test#: | FP-V-7-1 | |
|---|---|---|
| Max Load | 76.4 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 38.2 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 26.7 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1366 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1477 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **30.2** | 0.102 | 0.165 |
| **45.0** | 0.176 | 0.244 |
| **63.0** | 0.301 | 0.348 |
| **76.4** | 0.439 | 0.426 |
| **0.0** | #DIV/0! | #DIV/0! |
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**INTENTIONALLY LEFT BLANK FOR 7-2**

**INTENTIONALLY LEFT BLANK FOR 7-2**

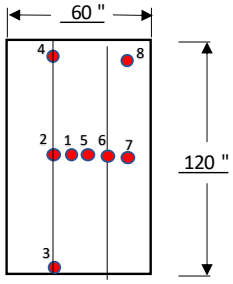
Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-7-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/16/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** Location: 101-4441 76 Ave. SE Calgary AB T2C2G8
Test Method(s): ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 18 GA 33ksi Steel Stud
Fastener: P22 32" O.C Staggered into Sheathing
Sheathing: 7/16" OSB
Air Seal:

**Equipment:**

| Pressure Chamber | Deflection Gauges( Phidget potentiometers) | |
|---|---|---|
| Motor: Core Sensors Model: CS10 - 2400100WB4/ | 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 |

| Gauge Locations (not to scale) |
|---|
| Gauge 1: plank |
| Gauge 2: Stud |
| Gauge 3: Stud |
| Gauge 4: Stud |
| Gauge 5: Plank |
| Gauge 6: Stud |
| Gauge 7: Plank |
| Gauge 8: Plank |




| | Description | Taken [✓] |
|---|---|---|
| Photo 1: | Before test, back of w all | ✓ |
| Photo 2: | Before test, front of w all | ✓ |
| Photo 3: | After test, back of w all | ✓ |
| Photo 4: | After test, front of w all | ✓ |
| Photo 5: | | |

| Time/Temp/RH: | | | |
|---|---|---|---|
| Start: | 10:08 | Temp: | 21 |
| Finish: | 10:22 | %RH | 21 |

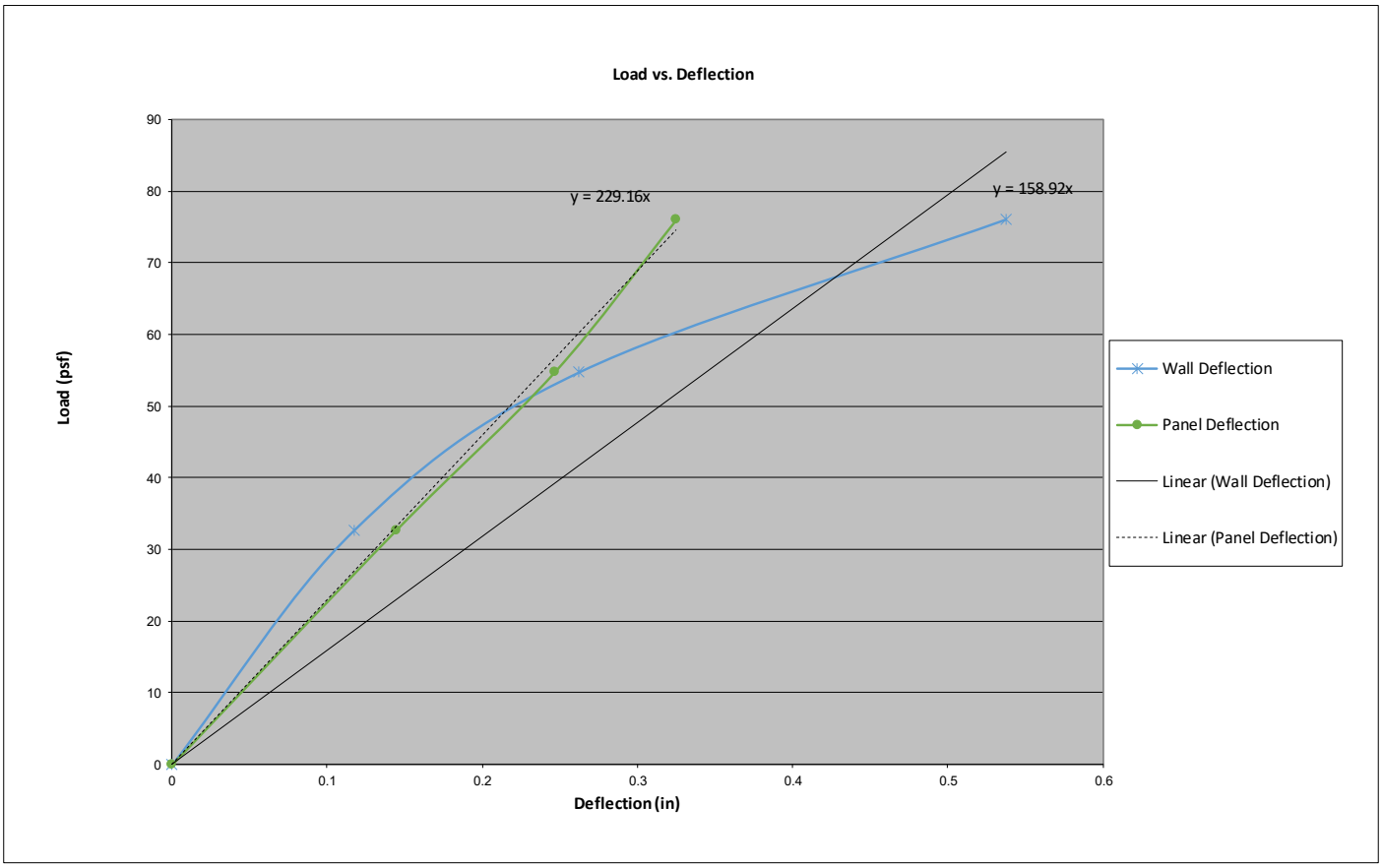
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *16.0* | 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** | *32.7* | 10 sec. | *0.339* | *0.219* | *0.123* | *0.080* | *0.388* | *0.328* | *0.382* | *0.106* | |
| **0** | | 1-5mins | *0.014* | *0.011* | *0.016* | *0.006* | *0.016* | *0.013* | *0.016* | *0.006* | |
| **45** | *54.7* | 10 sec. | *0.632* | *0.434* | *0.205* | *0.138* | *0.729* | *0.754* | *0.735* | *0.182* | |
| **0** | | 1-5mins | *0.029* | *0.025* | *0.030* | *0.012* | *0.037* | *0.029* | *0.036* | *0.010* | |
| **70** | *76.0* | 10 sec. | *1.030* | *0.796* | *0.302* | *0.215* | *1.212* | *1.620* | *1.250* | *0.270* | |
| **0** | | 1-5mins | *0.063* | *0.043* | *0.044* | *0.020* | *0.083* | *0.052* | *0.088* | *0.014* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **76.0** | Clips were pulled from OSB at pressure going to 90 PSF |

| Test#: | FP-V-7-3 | |
|---|---|---|
| Max Load | 76.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 38.0 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 26.6 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1674 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1161 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **32.7** | 0.118 | 0.145 |
| **54.7** | 0.263 | 0.247 |
| **76.0** | 0.538 | 0.325 |
| **0.0** | #DIV/0! | #DIV/0! |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-8-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 3/26/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

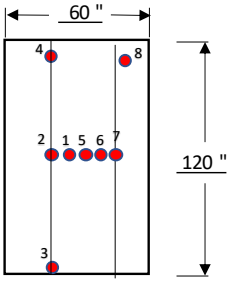
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 32" O.C into blocking
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 13:40 | Temp: | 23.3 |
| Finish: | 14:07 | %RH | 20 |

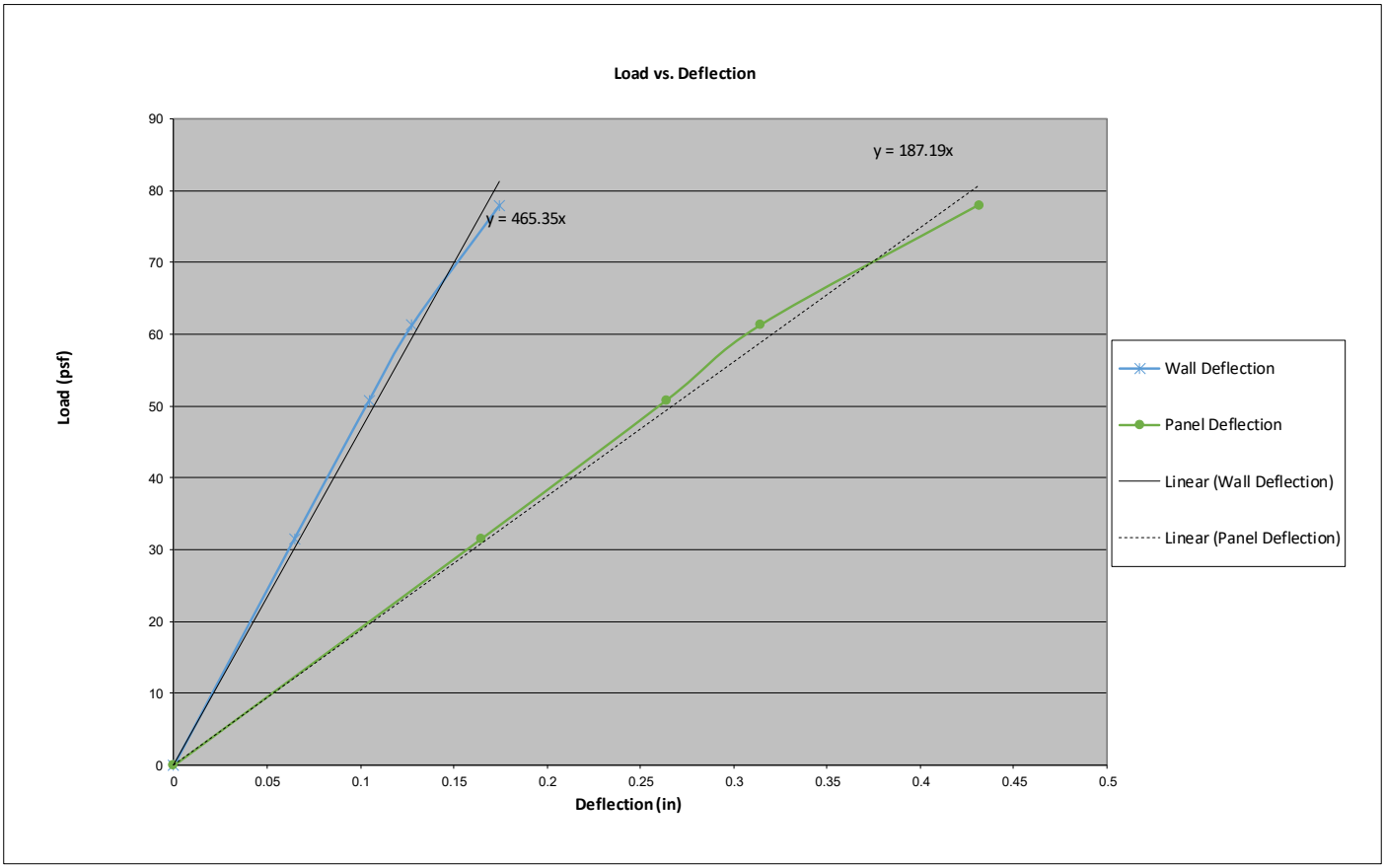
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *31.5* | 10 sec. | *0.322* | *0.180* | *0.089* | *0.090* | *0.328* | *0.310* | *0.154* | *0.134* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.008* | *0.007* | *0.012* | *0.012* | *0.009* | *0.008* | |
| **45** | *50.8* | 10 sec. | *0.015* | *0.011* | *0.154* | *0.141* | *0.525* | *0.507* | *0.252* | *0.207* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.023* | *0.019* | *0.034* | *0.035* | *0.023* | *0.021* | |
| **60** | *61.3* | 10 sec. | *0.015* | *0.011* | *0.185* | *0.168* | *0.630* | *0.607* | *0.304* | *0.244* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.031* | *0.026* | *0.044* | *0.047* | *0.030* | *0.028* | |
| **75** | *77.9* | 10 sec. | *0.015* | *0.011* | *0.228* | *0.209* | *0.800* | *0.849* | *0.393* | *0.287* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.040* | *0.035* | *0.067* | *0.115* | *0.049* | *0.031* | |
| **90** | *90.8* | 10 sec. | *0.015* | *0.011* | *0.258* | *0.236* | *0.920* | *0.968* | *0.457* | *0.330* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.047* | *0.042* | *0.080* | *0.123* | *0.056* | *0.043* | |
| **105** | *106.4* | 10 sec. | *0.015* | *0.011* | *0.292* | *0.267* | *1.067* | *1.137* | *0.525* | *0.377* | |
| **0** | | 1-5mins | *0.015* | *0.011* | *0.055* | *0.048* | *0.101* | *0.154* | *0.063* | *0.052* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **106.4** | Clip ripped out of the blocking while going to 120 PSF. |

| Test#: | FP-V-8-1 | |
|---|---|---|
| Max Load | 106.4 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 53.2 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 37.2 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.0800 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1989 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **31.5** | 0.065 | 0.165 |
| **50.8** | 0.105 | 0.264 |
| **61.3** | 0.128 | 0.315 |
| **77.9** | 0.175 | 0.432 |
| **90.8** | 0.210 | 0.487 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-8-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/2/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

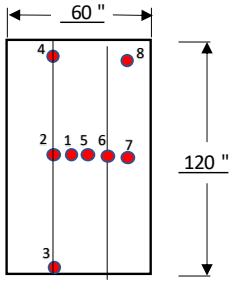
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 32" O.C into blocking
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 10:03 | Temp: | 21.6 |
| Finish: | 10:30 | %RH | 25 |

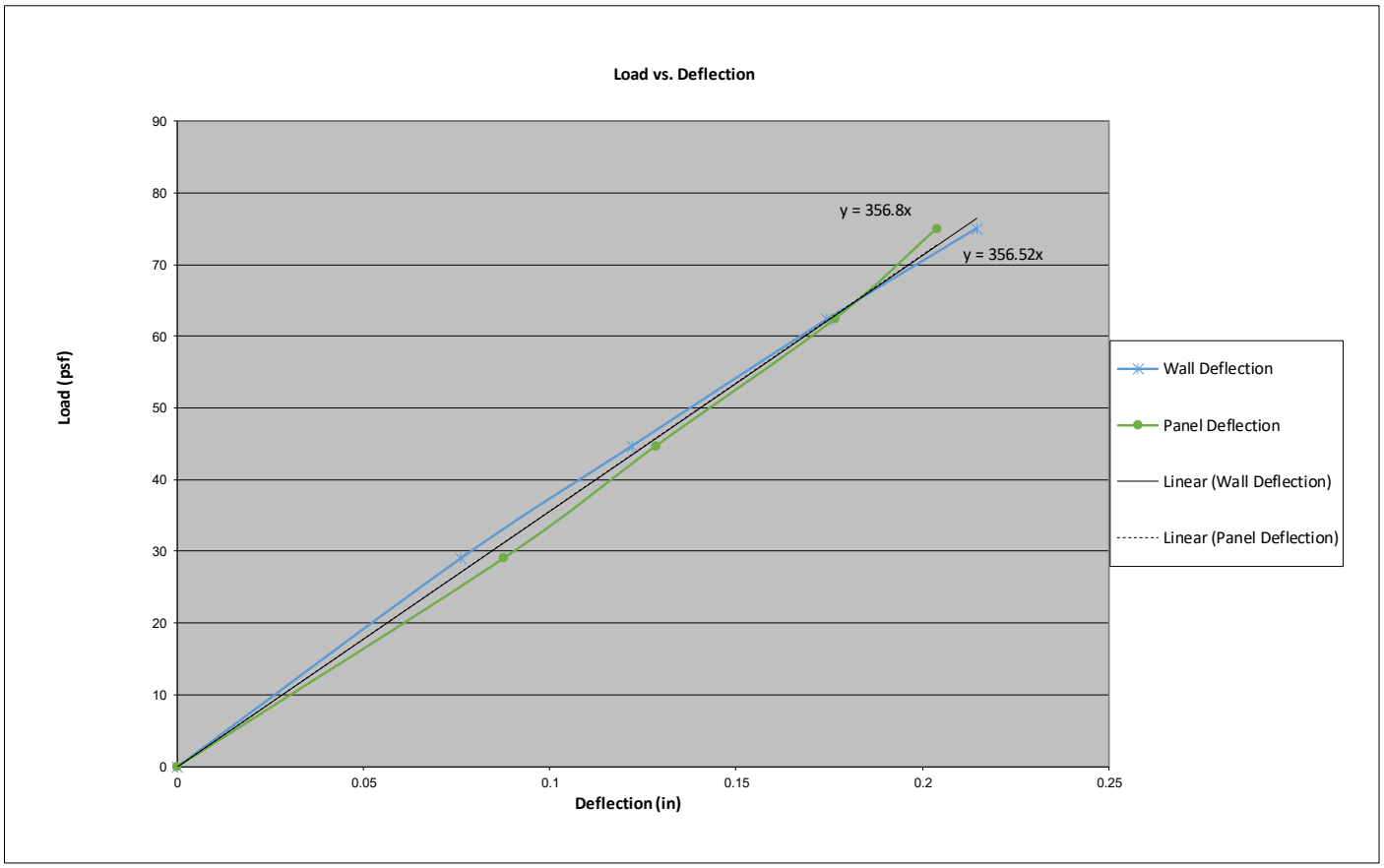
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *29.0* | 10 sec. | *0.232* | *0.129* | *0.049* | *0.078* | *0.222* | *0.150* | *0.210* | *0.096* | |
| **0** | | 1-5mins | *0.010* | *0.008* | *0.008* | *0.006* | *0.013* | *0.013* | *0.012* | *0.009* | |
| **45** | *44.7* | 10 sec. | *0.359* | *0.208* | *0.090* | *0.120* | *0.352* | *0.246* | *0.331* | *0.141* | |
| **0** | | 1-5mins | *0.023* | *0.019* | *0.020* | *0.014* | *0.029* | *0.029* | *0.027* | *0.016* | |
| **60** | *62.4* | 10 sec. | *0.506* | *0.303* | *0.144* | *0.163* | *0.503* | *0.353* | *0.467* | *0.191* | |
| **0** | | 1-5mins | *0.041* | *0.034* | *0.037* | *0.022* | *0.050* | *0.037* | *0.044* | *0.024* | |
| **75** | *75.0* | 10 sec. | *0.602* | *0.365* | *0.178* | *0.191* | *0.604* | *0.433* | *0.556* | *0.225* | |
| **0** | | 1-5mins | *0.059* | *0.046* | *0.048* | *0.028* | *0.066* | *0.056* | *0.060* | *0.029* | |
| **90** | *92.9* | 10 sec. | *0.764* | *0.477* | *0.233* | *0.233* | *0.777* | *0.577* | *0.704* | *0.280* | |
| **0** | | 1-5mins | *0.087* | *0.068* | *0.067* | *0.037* | *0.096* | *0.087* | *0.085* | *0.037* | |
| **105** | *107.9* | 10 sec. | *1.004* | *0.642* | *0.314* | *0.295* | *1.029* | *0.790* | *0.916* | *0.355* | |
| **0** | | 1-5mins | *0.150* | *0.113* | *0.100* | *0.053* | *0.162* | *0.143* | *0.141* | *0.049* | |
| **120** | *114.4* | 10 sec. | *1.057* | *0.674* | *0.325* | *0.307* | *1.081* | *0.832* | *0.963* | *0.376* | |
| **0** | | 1-5mins | *0.153* | *0.116* | *0.102* | *0.055* | *0.165* | *0.147* | *0.144* | *0.052* | |
| **125** | *121.0* | 10 sec. | *1.176* | *0.760* | *0.361* | *0.340* | *1.206* | *0.929* | *1.062* | *0.406* | |
| **0** | | 1-5mins | *0.197* | *0.140* | *0.117* | *0.065* | *0.210* | *0.184* | *0.181* | *0.060* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **121.0** | Clips were pulled out of the wood blocking |

| Test#: | FP-V-8-2 | |
|---|---|---|
| Max Load | 121.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 60.5 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 42.4 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1188 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1187 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **29.0** | 0.076 | 0.088 |
| **44.7** | 0.122 | 0.129 |
| **62.4** | 0.175 | 0.177 |
| **75.0** | 0.215 | 0.204 |
| **92.9** | 0.294 | 0.244 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-8-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 3/28/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

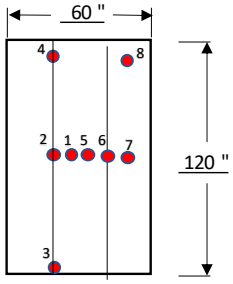
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 32" O.C into blocking
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | Description | Taken [✓] |
|---|---|---|
| Photo 1: | Before test, back of w all | ✓ |
| Photo 2: | Before test, front of w all | ✓ |
| Photo 3: | After test, back of w all | ✓ |
| Photo 4: | After test, front of w all | ✓ |
| Photo 5: | | |

| Time/Temp/RH: | | | |
|---|---|---|---|
| Start: | 14:00 | Temp: | 21 |
| Finish: | 14:24 | %RH | 21 |

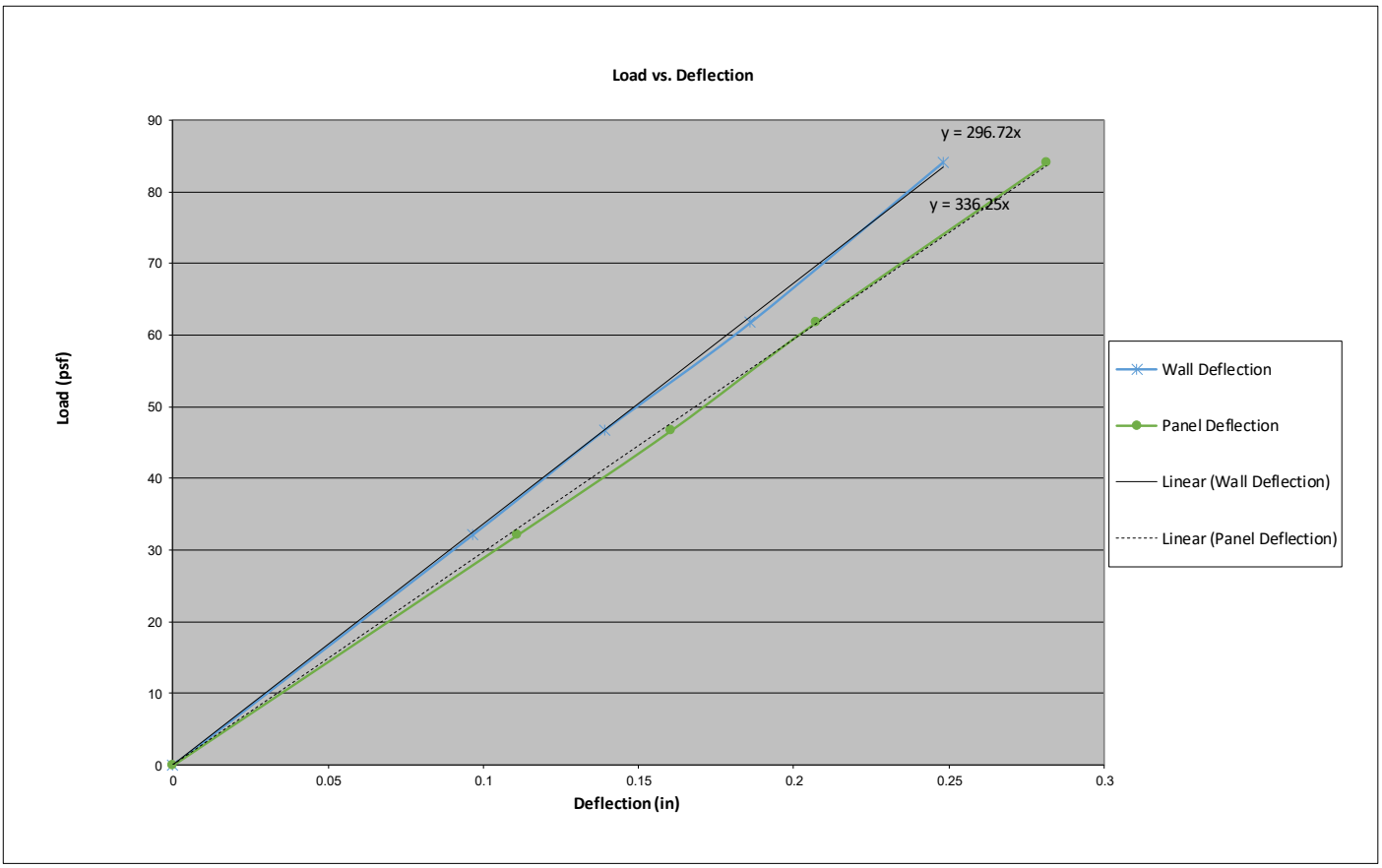
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 32 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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. | *0.268* | *0.126* | *0.090* | *0.066* | *0.303* | *0.223* | *0.278* | *0.101* | |
| **0** | | 1-5mins | *0.014* | *0.009* | *0.007* | *0.005* | *0.012* | *0.010* | *0.010* | *0.006* | |
| **45** | *46.7* | 10 sec. | *0.388* | *0.188* | *0.141* | *0.094* | *0.446* | *0.325* | *0.387* | *0.144* | |
| **0** | | 1-5mins | *0.025* | *0.016* | *0.019* | *0.011* | *0.024* | *0.019* | *0.022* | *0.012* | |
| **60** | *61.8* | 10 sec. | *0.501* | *0.247* | *0.168* | *0.116* | *0.569* | *0.409* | *0.499* | *0.183* | |
| **0** | | 1-5mins | *0.035* | *0.024* | *0.026* | *0.015* | *0.035* | *0.029* | *0.039* | *0.015* | |
| **75** | *84.1* | 10 sec. | *0.663* | *0.324* | *0.209* | *0.145* | *0.750* | *0.526* | *0.664* | *0.184* | |
| **0** | | 1-5mins | *0.054* | *0.034* | *0.035* | *0.022* | *0.056* | *0.039* | *0.063* | *0.034* | |
| **95** | *94.9* | 10 sec. | *0.767* | *0.369* | *0.236* | *0.163* | *0.855* | *0.607* | *0.650* | *0.247* | |
| **0** | | 1-5mins | *0.077* | *0.040* | *0.042* | *0.025* | *0.089* | *0.047* | *0.219* | *0.003* | |
| **105** | *106.2* | 10 sec. | *0.798* | *0.475* | *0.247* | *0.196* | *0.936* | *0.610* | *0.070* | *0.316* | |
| **0** | | 1-5mins | *0.080* | *0.052* | *0.052* | *0.029* | *0.085* | *0.063* | *0.043* | *0.028* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** | **106.2** | Screws were let go from the blocking at pressure above 100 psf |

| Test#: | FP-V-8-3 | |
|---|---|---|
| Max Load | 106.2 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 53.1 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 37.2 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.533 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1105 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.1252 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **32.2** | 0.097 | 0.111 |
| **46.7** | 0.139 | 0.161 |
| **61.8** | 0.186 | 0.207 |
| **84.1** | 0.248 | 0.282 |
| **94.9** | 0.289 | 0.323 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-9-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/28/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

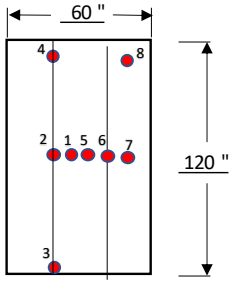
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 48" O.C STAGGERED INTO BLOCKING & STRAPPING
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | Description | Taken [✓] |
|---|---|---|
| Photo 1: | Before test, back of w all | ✓ |
| Photo 2: | Before test, front of w all | ✓ |
| Photo 3: | After test, back of w all | ✓ |
| Photo 4: | After test, front of w all | ✓ |
| Photo 5: | | |

| Time/Temp/RH: | | | |
|---|---|---|---|
| Start: | 9:55 | Temp: | 21.4 |
| Finish: | 10:12 | %RH | 24 |

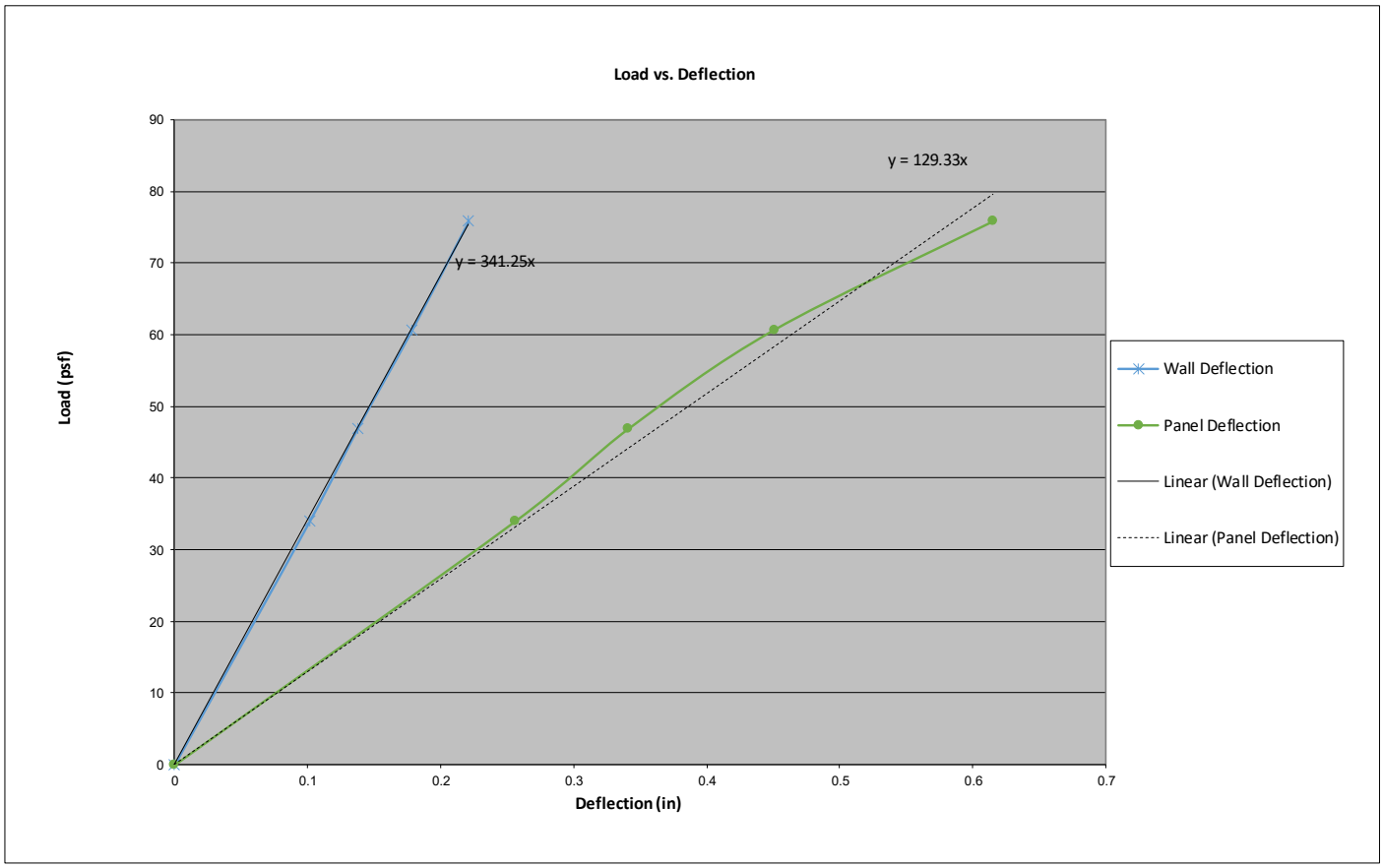
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 48 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *34.0* | 10 sec. | *0.457* | *0.133* | *0.068* | *0.065* | *0.391* | *0.203* | *0.466* | *0.132* | |
| **0** | | 1-5mins | *0.031* | *0.013* | *0.015* | *0.009* | *0.015* | *0.017* | *0.051* | *0.013* | |
| **45** | *46.9* | 10 sec. | *0.629* | *0.185* | *0.101* | *0.093* | *0.522* | *0.284* | *0.643* | *0.176* | |
| **0** | | 1-5mins | *0.043* | *0.020* | *0.025* | *0.015* | *0.032* | *0.027* | *0.071* | *0.018* | |
| **60** | *60.7* | 10 sec. | *0.842* | *0.245* | *0.141* | *0.116* | *0.673* | *0.369* | *0.826* | *0.228* | |
| **0** | | 1-5mins | *0.074* | *0.027* | *0.037* | *0.018* | *0.055* | *0.038* | *0.091* | *0.026* | |
| **75** | *75.9* | 10 sec. | *1.180* | *0.306* | *0.183* | *0.143* | *0.819* | *0.462* | *1.036* | *0.282* | |
| **0** | | 1-5mins | *0.150* | *0.035* | *0.050* | *0.024* | *0.091* | *0.052* | *0.130* | *0.030* | |
| **90** | *89.0* | 10 sec. | *1.375* | *0.356* | *0.218* | *0.164* | *0.901* | *0.541* | *1.704* | *0.326* | |
| **0** | | 1-5mins | *0.278* | *0.062* | *0.074* | *0.039* | *0.169* | *0.096* | *0.321* | *0.060* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **89.0** | Screws were pulled out from the blocking first and the strapping at high pressures |

| Test#: | FP-V-9-1 | |
|---|---|---|
| Max Load | 89.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 44.5 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 31.2 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.800 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.0913 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.2409 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **34.0** | 0.102 | 0.256 |
| **46.9** | 0.138 | 0.341 |
| **60.7** | 0.179 | 0.451 |
| **75.9** | 0.221 | 0.616 |
| **89.0** | 0.258 | 0.690 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-9-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 4/28/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

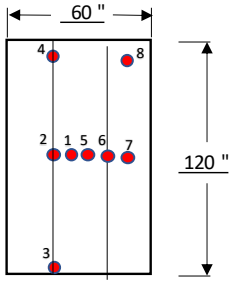
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 48" O.C STAGGERED INTO BLOCKING & STRAPPING
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | Description | Taken [✓] |
|---|---|---|
| Photo 1: | Before test, back of w all | ✓ |
| Photo 2: | Before test, front of w all | ✓ |
| Photo 3: | After test, back of w all | ✓ |
| Photo 4: | After test, front of w all | ✓ |
| Photo 5: | | |

| Time/Temp/RH: | | | |
|---|---|---|---|
| Start: | 11:49 | Temp: | 21.5 |
| Finish: | 12:09 | %RH | 24 |

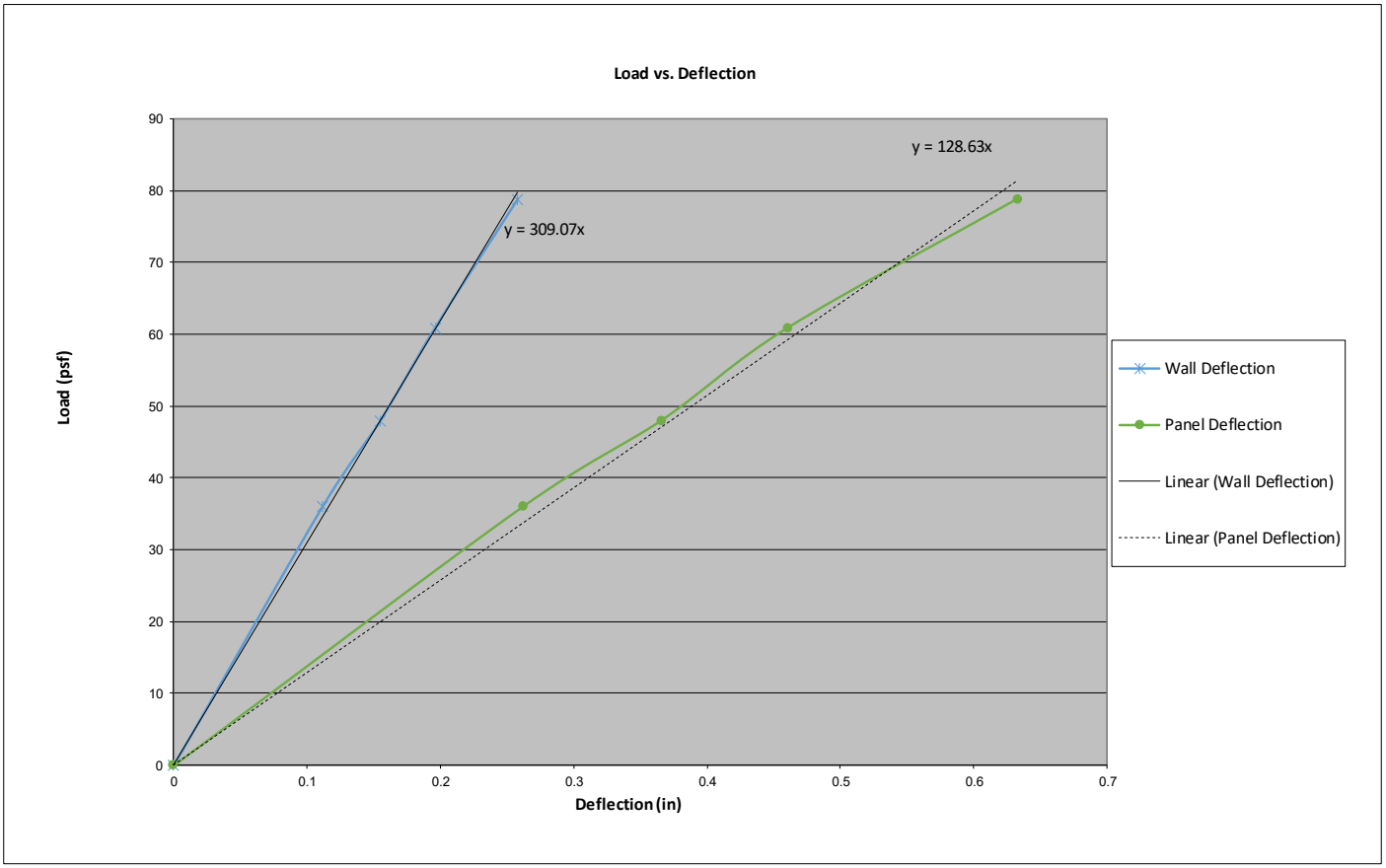
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 48 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *36.0* | 10 sec. | *0.518* | *0.169* | *0.086* | *0.089* | *0.404* | *0.229* | *0.517* | *0.121* | |
| **0** | | 1-5mins | *0.043* | *0.015* | *0.014* | *0.010* | *0.029* | *0.019* | *0.055* | *0.012* | |
| **45** | *48.0* | 10 sec. | *0.731* | *0.240* | *0.123* | *0.124* | *0.558* | *0.317* | *0.701* | *0.160* | |
| **0** | | 1-5mins | *0.070* | *0.027* | *0.026* | *0.017* | *0.053* | *0.032* | *0.067* | *0.016* | |
| **60** | *60.9* | 10 sec. | *0.927* | *0.310* | *0.160* | *0.157* | *0.704* | *0.399* | *0.884* | *0.199* | |
| **0** | | 1-5mins | *0.114* | *0.036* | *0.035* | *0.024* | *0.074* | *0.043* | *0.085* | *0.020* | |
| **75** | *78.8* | 10 sec. | *1.299* | *0.407* | *0.211* | *0.199* | *0.893* | *0.519* | *1.426* | *0.254* | |
| **0** | | 1-5mins | *0.218* | *0.049* | *0.047* | *0.033* | *0.118* | *0.057* | *0.198* | *0.024* | |
| **90** | *93.4* | 10 sec. | *1.490* | *0.470* | *0.251* | *0.033* | *1.031* | *0.595* | *1.688* | *0.295* | |
| **0** | | 1-5mins | *0.279* | *0.058* | *0.058* | *0.033* | *0.162* | *0.070* | *0.222* | *0.036* | |
| **105** | *102.6* | 10 sec. | *1.579* | *0.508* | *0.278* | *0.033* | *1.189* | *0.648* | *2.936* | *0.305* | |
| **0** | | 1-5mins | *0.455* | *0.068* | *0.069* | *0.033* | *0.239* | *0.081* | *0.569* | *0.055* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** | **102.6** | The clips were pulled out of the blocking first followed by the strapping at high pressures |

| Test#: | FP-V-9-2 | |
|---|---|---|
| Max Load | 102.6 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 51.3 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 35.9 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.800 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1162 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.2792 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **36.0** | 0.112 | 0.262 |
| **48.0** | 0.155 | 0.366 |
| **60.9** | 0.196 | 0.461 |
| **78.8** | 0.258 | 0.633 |
| **93.4** | 0.391 | 0.728 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-9-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 5/1/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

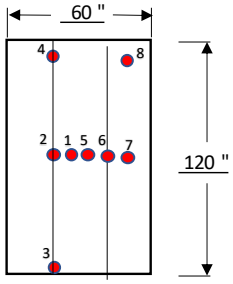
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 48" O.C STAGGERED INTO BLOCKING & STRAPPING
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 9:06 | Temp: | 22.3 |
| Finish: | 9:36 | %RH | 23 |

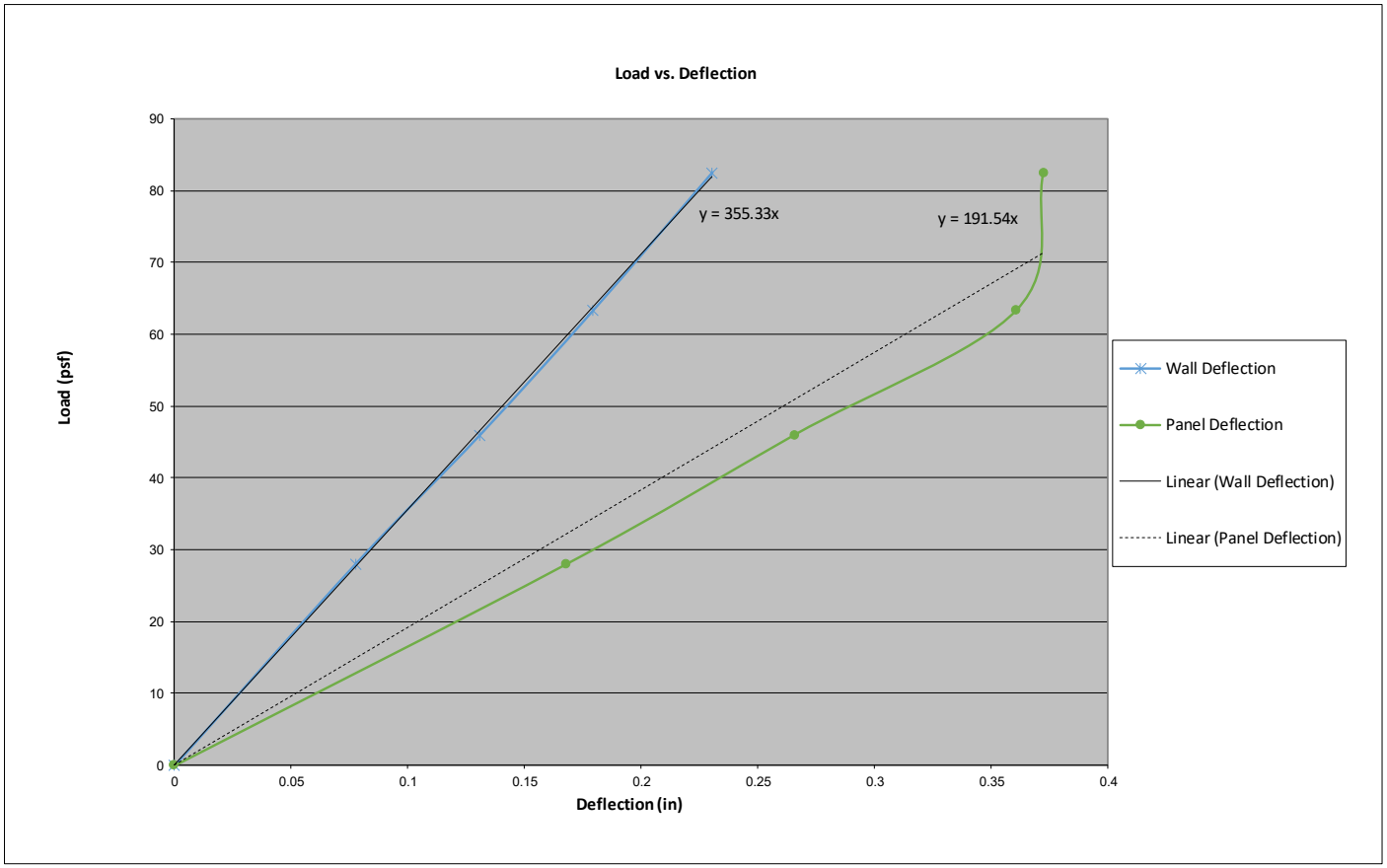
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 48 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *18.0* | 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** | *28.0* | 10 sec. | *0.312* | *0.110* | *0.058* | *0.057* | *0.294* | *0.160* | *0.386* | *0.099* | |
| **0** | | 1-5mins | *0.006* | *0.004* | *0.006* | *0.002* | *0.006* | *0.007* | *0.015* | *0.004* | |
| **45** | *46.0* | 10 sec. | *0.525* | *0.200* | *0.112* | *0.102* | *0.483* | *0.276* | *0.634* | *0.152* | |
| **0** | | 1-5mins | *0.022* | *0.015* | *0.020* | *0.011* | *0.025* | *0.021* | *0.056* | *0.007* | |
| **60** | *63.3* | 10 sec. | *0.725* | *0.267* | *0.156* | *0.135* | *0.647* | *0.383* | *0.870* | *0.209* | |
| **0** | | 1-5mins | *0.054* | *0.026* | *0.033* | *0.020* | *0.046* | *0.037* | *0.087* | *0.023* | |
| **75** | *82.4* | 10 sec. | *0.941* | *0.338* | *0.205* | *0.171* | *0.641* | *0.499* | *1.135* | *0.269* | |
| **0** | | 1-5mins | *0.146* | *0.038* | *0.047* | *0.028* | *0.080* | *0.054* | *0.133* | *0.030* | |
| **95** | *94.6* | 10 sec. | *1.187* | *0.385* | *0.239* | *0.195* | *0.920* | *0.576* | *1.607* | *0.309* | |
| **0** | | 1-5mins | *0.193* | *0.043* | *0.055* | *0.033* | *0.097* | *0.063* | *0.215* | *0.031* | |
| **105** | *112.3* | 10 sec. | *1.379* | *0.455* | *0.286* | *0.224* | *1.197* | *0.691* | *2.094* | *0.354* | |
| **0** | | 1-5mins | *0.391* | *0.063* | *0.074* | *0.047* | *0.240* | *0.091* | *0.287* | *0.038* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **112.3** | screws from clips were pulled out of the substrate at high pressures |

| Test#: | FP-V-9-3 | |
|---|---|---|
| Max Load | 112.3 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 56.1 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 39.3 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.800 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1106 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.2051 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **28.0** | 0.078 | 0.168 |
| **46.0** | 0.131 | 0.266 |
| **63.3** | 0.180 | 0.361 |
| **82.4** | 0.231 | 0.373 |
| **94.6** | 0.264 | 0.573 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-10-1** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 5/14/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

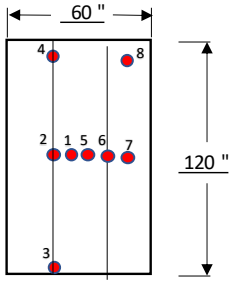
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 16" O.C. Straight into Hat Channels
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 14:22 | Temp: | 20.8 |
| Finish: | 14:51 | %RH | 35 |

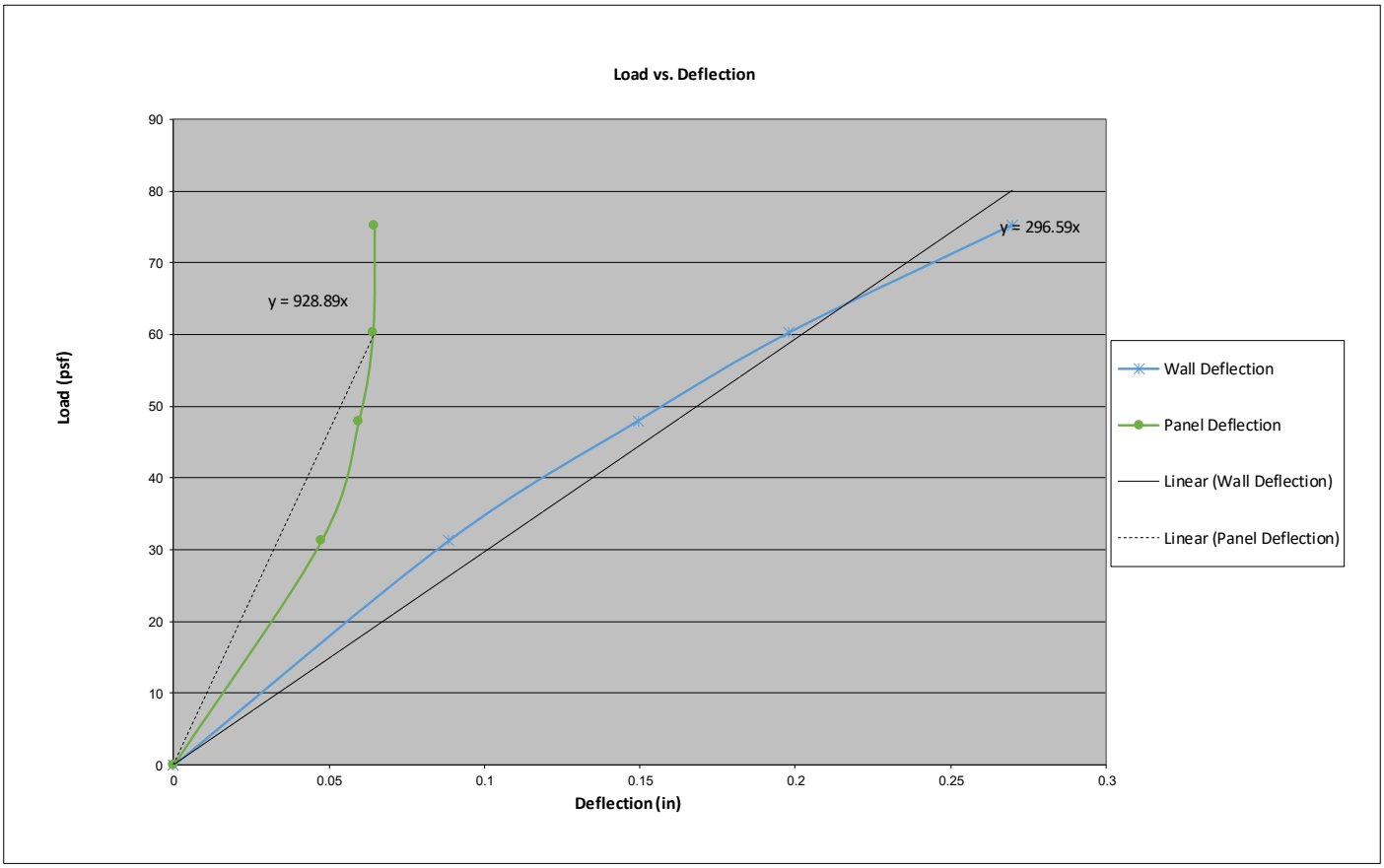
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 16 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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. | *0.188* | *0.140* | *0.073* | *0.048* | *0.205* | *0.158* | *0.194* | *0.061* | |
| **0** | | 1-5mins | *0.021* | *0.020* | *0.027* | *0.007* | *0.025* | *0.024* | *0.026* | *0.008* | |
| **45** | *48.0* | 10 sec. | *0.293* | *0.234* | *0.116* | *0.078* | *0.319* | *0.259* | *0.301* | *0.093* | |
| **0** | | 1-5mins | *0.030* | *0.028* | *0.039* | *0.009* | *0.035* | *0.034* | *0.035* | *0.010* | |
| **60** | *60.3* | 10 sec. | *0.368* | *0.309* | *0.151* | *0.099* | *0.406* | *0.337* | *0.379* | *0.115* | |
| **0** | | 1-5mins | *0.040* | *0.035* | *0.050* | *0.012* | *0.045* | *0.044* | *0.043* | *0.013* | |
| **75** | *75.3* | 10 sec. | *0.472* | *0.417* | *0.194* | *0.129* | *0.520* | *0.446* | *0.482* | *0.144* | |
| **0** | | 1-5mins | *0.052* | *0.046* | *0.059* | *0.016* | *0.060* | *0.056* | *0.057* | *0.016* | |
| **90** | *91.5* | 10 sec. | *0.587* | *0.550* | *0.239* | *0.161* | *0.647* | *0.577* | *0.600* | *0.174* | |
| **0** | | 1-5mins | *0.065* | *0.057* | *0.069* | *0.020* | *0.078* | *0.067* | *0.072* | *0.019* | |
| **120** | *120.0* | 10 sec. | *0.821* | *0.847* | *0.324* | *0.229* | *0.907* | *0.868* | *0.840* | *0.232* | |
| **0** | | 1-5mins | *0.098* | *0.080* | *0.084* | *0.029* | *0.113* | *0.086* | *0.108* | *0.024* | |
| **135** | *140.4* | 10 sec. | *1.021* | *1.134* | *0.392* | *0.284* | *1.129* | *1.158* | *1.045* | *0.275* | |
| **0** | | 1-5mins | *0.135* | *0.103* | *0.093* | *0.035* | *0.153* | *0.107* | *0.146* | *0.029* | |
| **170** | *169.0* | 10 sec. | *1.377* | *1.717* | *0.503* | *0.377* | *1.523* | *1.757* | *1.398* | *0.340* | |
| **0** | | 1-5mins | *0.220* | *0.167* | *0.112* | *0.049* | *0.250* | *0.161* | *0.231* | *0.041* | |
| **190** | *192.0* | 10 sec. | *2.319* | *3.352* | *0.645* | *0.547* | *2.554* | *3.291* | *2.146* | *0.442* | |
| **0** | | 1-5mins | *0.889* | *1.221* | *0.171* | *0.140* | *0.937* | *0.731* | *0.704* | *0.081* | |

| **Max Load (psf** | **192.0** | **Mode of Failure** |
|---|---|---|
| | | Large bang was heard. The steel studs were seen twisted and planks were pulled out while going to pressures at 220 psf |

| Test#: | FP-V-10-1 | |
|---|---|---|
| Max Load | 192.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 96.0 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 67.2 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.267 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.2266 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0723 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **31.3** | 0.089 | 0.048 |
| **48.0** | 0.150 | 0.060 |
| **60.3** | 0.198 | 0.064 |
| **75.3** | 0.270 | 0.065 |
| **91.5** | 0.364 | 0.054 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-10-2** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 5/20/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

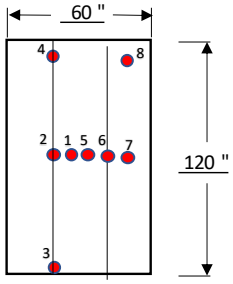
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 16" O.C. Straight into Hat Channels
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | Description | Taken [✓] |
|---|---|---|
| Photo 1: | Before test, back of w all | ✓ |
| Photo 2: | Before test, front of w all | ✓ |
| Photo 3: | After test, back of w all | ✓ |
| Photo 4: | After test, front of w all | ✓ |
| Photo 5: | | |

| Time/Temp/RH: | | | |
|---|---|---|---|
| Start: | 9:10 | Temp: | 20.8 |
| Finish: | 9:40 | %RH | 34 |

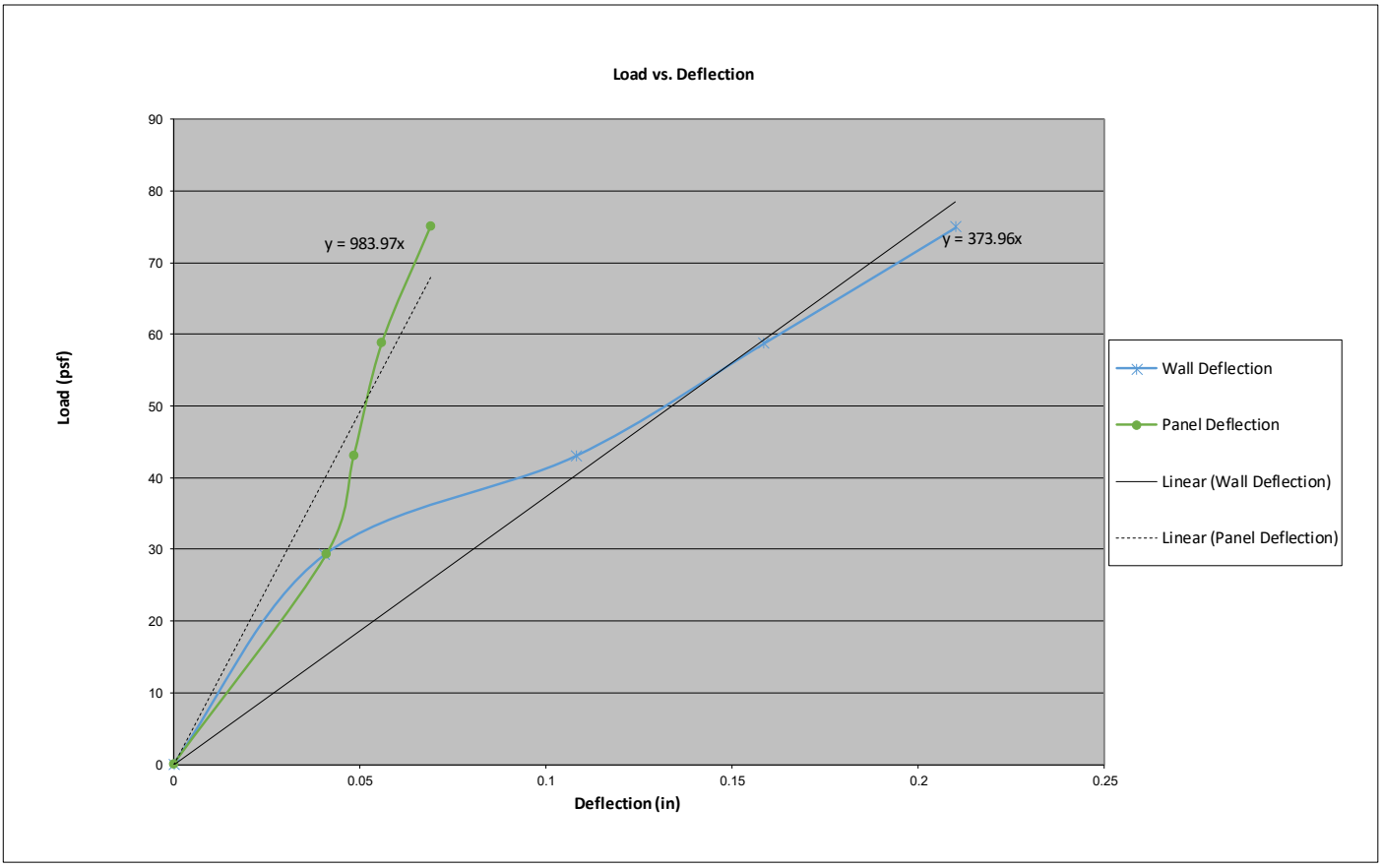
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 16 |

| 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 | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| 15 | *15.0* | 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. | *0.102* | *0.054* | *0.031* | *0.013* | *0.105* | *0.071* | *0.103* | *0.030* | |
| 0 | | 1-5mins | *0.003* | *0.002* | *0.004* | *0.000* | *0.003* | *0.004* | *0.002* | *0.001* | Blue tape failed. Retapin |
| 45 | *43.0* | 10 sec. | *0.215* | *0.149* | *0.077* | *0.060* | *0.235* | *0.204* | *0.229* | *0.070* | |
| 0 | | 1-5mins | *0.007* | *0.007* | *0.006* | *0.003* | *0.008* | *0.009* | *0.009* | *0.003* | |
| 60 | *58.7* | 10 sec. | *0.299* | *0.215* | *0.111* | *0.091* | *0.332* | *0.304* | *0.329* | *0.099* | |
| 0 | | 1-5mins | *0.014* | *0.013* | *0.010* | *0.008* | *0.016* | *0.017* | *0.019* | *0.005* | |
| 75 | *74.9* | 10 sec. | *0.394* | *0.290* | *0.151* | *0.123* | *0.438* | *0.404* | *0.443* | *0.136* | |
| 0 | | 1-5mins | *0.024* | *0.022* | *0.017* | *0.013* | *0.028* | *0.013* | *0.033* | *0.011* | |
| 90 | *88.0* | 10 sec. | *0.451* | *0.337* | *0.177* | *0.142* | *0.508* | *0.480* | *0.520* | *0.159* | |
| 0 | | 1-5mins | *0.033* | *0.029* | *0.023* | *0.017* | *0.039* | *0.025* | *0.044* | *0.015* | |
| 120 | *113.0* | 10 sec. | *0.639* | *0.492* | *0.258* | *0.195* | *0.725* | *0.739* | *0.738* | *0.218* | |
| 0 | | 1-5mins | *0.059* | *0.044* | *0.039* | *0.025* | *0.064* | *0.048* | *0.067* | *0.022* | |
| 150 | *150.0* | 10 sec. | *0.942* | *0.773* | *0.373* | *0.281* | *1.078* | *1.252* | *1.101* | *0.300* | |
| 0 | | 1-5mins | *0.116* | *0.078* | *0.067* | *0.041* | *0.126* | *0.093* | *0.127* | *0.033* | |
| 180 | *179.0* | 10 sec. | *1.241* | *1.099* | *0.474* | *0.355* | *1.439* | *1.846* | *1.466* | *0.360* | |
| 0 | | 1-5mins | *0.196* | *0.116* | *0.090* | *0.055* | *0.223* | *0.154* | *0.224* | *0.043* | |
| 200 | *195.0* | 10 sec. | *1.861* | *2.027* | *0.660* | *0.473* | *2.239* | *3.450* | *2.348* | *0.441* | |
| 0 | | 1-5mins | *0.686* | *0.532* | *0.180* | *0.096* | *0.870* | *0.926* | *1.002* | *0.087* | |

| | Mode of Failure |
|---|---|
| **Max Load (psf** **195.0** | Steel studs were start to bend which led the wall to fail completely high pressure. |

| Test#: | FP-V-10-2 | |
|---|---|---|
| Max Load | 195.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 97.5 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 68.3 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.267 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.1825 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0694 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **29.2** | 0.041 | 0.041 |
| **43.0** | 0.108 | 0.049 |
| **58.7** | 0.159 | 0.056 |
| **74.9** | 0.210 | 0.069 |
| **88.0** | 0.249 | 0.071 |
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Test: **Transverse Load - Negative Wind Load** **Test#: FP-V-10-3** Project#: 0093-6015
Client: Engage Building Products Inc. Technician(s): Ali
Date: 5/22/2025 Reviewer: Chris
Product: **FastPlank Systems, Vertical Orientation** 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*

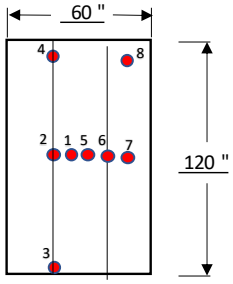
**Installation:**
Configuration: Studs 16" OC
Stud: 2x6 Steel Stud 18 Gauge 33 KSI
Fastener: P22 16" O.C. Straight into Hat Channels
Sheathing: 1/2" Densglass
Air Seal:

**Equipment:**
Pressure Chamber
Motor: Core Sensors Model: CS10 - 2400100WB4/
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: plank
Gauge 2: Stud
Gauge 3: Stud
Gauge 4: Stud
Gauge 5: Plank
Gauge 6: Stud
Gauge 7: Plank
Gauge 8: Plank




| | 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: | 14:15 | Temp: | 20.3 |
| Finish: | 14:50 | %RH | 35 |

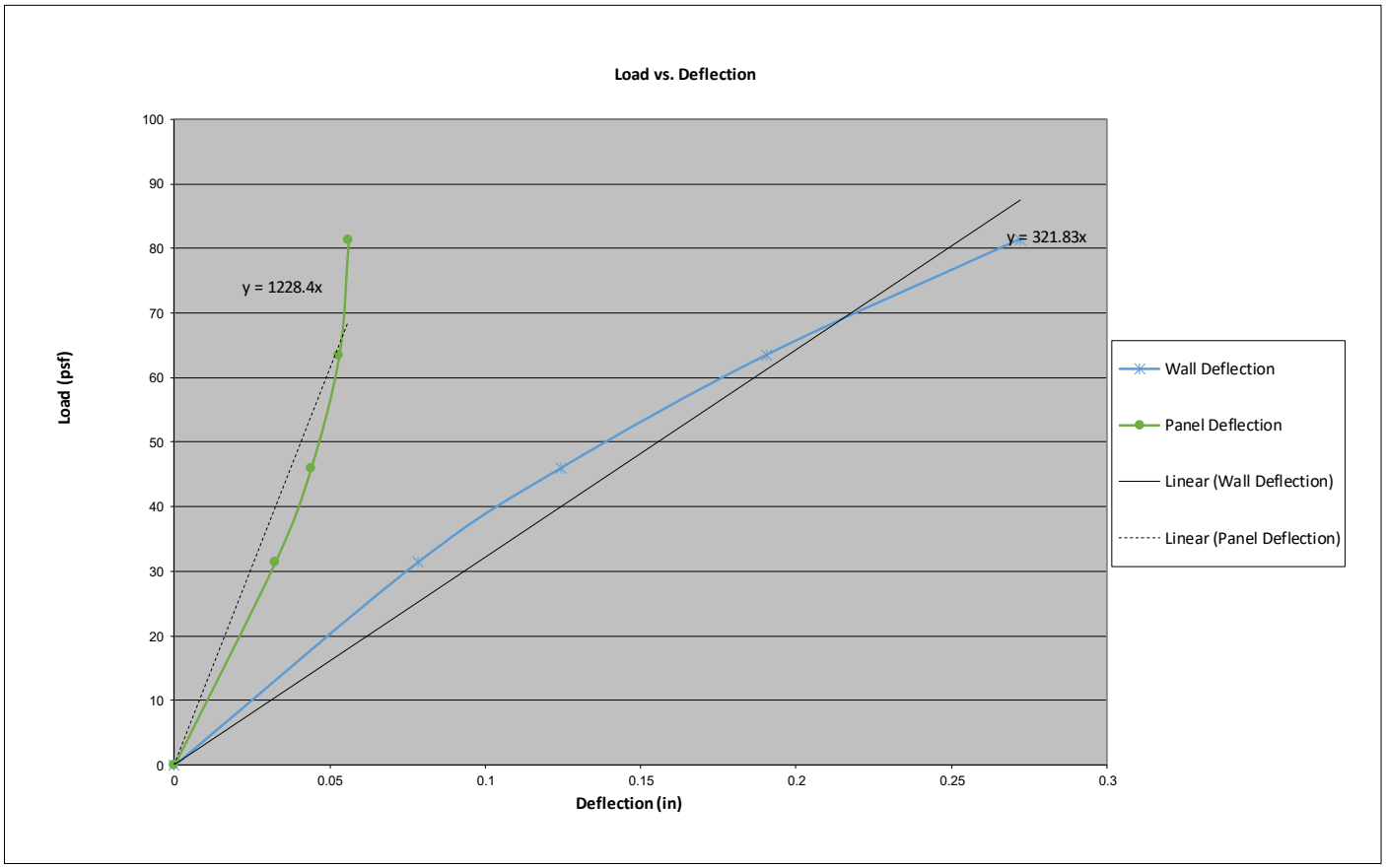
**Test Assembly**

| Width (in) | Length (in) | Panel Fastnener Spacing (in) |
|---|---|---|
| 60.0 | 120.0 | 16 |

| 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** | | immed. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| **15** | *15.0* | 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** | *31.5* | 10 sec. | *0.153* | *0.106* | *0.049* | *0.041* | *0.159* | *0.141* | *0.161* | *0.043* | |
| **0** | | 1-5mins | *0.000* | *0.000* | *0.001* | *0.000* | *0.001* | *0.001* | *0.002* | *0.000* | |
| **45** | *46.1* | 10 sec. | *0.232* | *0.168* | *0.075* | *0.062* | *0.242* | *0.218* | *0.237* | *0.064* | |
| **0** | | 1-5mins | *0.004* | *0.004* | *0.003* | *0.002* | *0.004* | *0.005* | *0.005* | *0.001* | |
| **60** | *63.5* | 10 sec. | *0.341* | *0.260* | *0.116* | *0.093* | *0.355* | *0.330* | *0.340* | *0.092* | |
| **0** | | 1-5mins | *0.018* | *0.016* | *0.015* | *0.008* | *0.019* | *0.021* | *0.020* | *0.005* | |
| **75** | *81.4* | 10 sec. | *0.465* | *0.373* | *0.165* | *0.127* | *0.483* | *0.463* | *0.456* | *0.123* | |
| **0** | | 1-5mins | *0.453* | *0.030* | *0.028* | *0.015* | *0.038* | *0.040* | *0.035* | *0.008* | |
| **110** | *108.5* | 10 sec. | *0.453* | *0.585* | *0.242* | *0.179* | *0.694* | *0.569* | *0.647* | *0.174* | |
| **0** | | 1-5mins | *0.453* | *0.054* | *0.045* | *0.024* | *0.070* | *0.073* | *0.061* | *0.011* | |
| **145** | *145.5* | 10 sec. | *1.079* | *1.123* | *0.348* | *0.257* | *1.113* | *1.387* | *0.992* | *0.244* | |
| **0** | | 1-5mins | *0.596* | *0.060* | *0.061* | *0.030* | *0.085* | *0.080* | *0.076* | *0.022* | |
| **180** | *195.0* | 10 sec. | *2.483* | *2.888* | *0.694* | *0.449* | *2.673* | *3.005* | *2.322* | *0.375* | |
| **0** | | 1-5mins | *1.129* | *1.098* | *0.237* | *0.126* | *1.254* | *2.033* | *1.089* | *0.078* | |

| | | Mode of Failure |
|---|---|---|
| **Max Load (psf** | **195.0** | Steel studs were bent at pressures and test was stopped. |

| Test#: | FP-V-10-3 | |
|---|---|---|
| Max Load | 195.0 | psf |
| Allowable Design Load (ASD) = Max Load / 2 | 97.5 | psf |
| Deflection Service Load (ASD) = Allowable * 0.7 | 68.3 | psf |
| Wall Deflection limit = L / 180 of wall height | 0.667 | in |
| Panel Deflection limit = L / 60 of panel anchor span | 0.267 | in |
| Wall Deflection @ Deflection Service Load (ASD) | 0.2121 | in |
| Panel Deflection @ Deflection Service Load (ASD) | 0.0556 | in |




| Target Load (psf) | Wall Deflection (= ga 2 + ga 6)/2 - (ga 3 + ga 4)/2 | Panel Deflection (= ga 1 + ga 5)/2 - (ga 2 + ga 6)/2 |
|---|---|---|
| **0.0** | 0.000 | 0.000 |
| **31.5** | 0.079 | 0.033 |
| **46.1** | 0.125 | 0.044 |
| **63.5** | 0.191 | 0.053 |
| **81.4** | 0.272 | 0.056 |
| **108.5** | 0.367 | -0.003 |
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