



ENGINEERING EVALUATION REPORT

Date	June 1, 2021
File No.	0093-1-2
For	QuickPanel Systems Inc.
Address	4115 72nd Ave SE, Calgary, AB T2C 2G5

Subject

QuickPanel Systems with Larson by Alucoil FR 4mm ACM
NFPA 285 Fire Propagation Testing Results

Product Description

The product being evaluated is identified as an Aluminum Composite Material (ACM) exterior building cladding. The composite panel is nominally 4mm in thickness, composed of an inside and outside skin of nominal 0.5mm thick aluminum sheets bonded to a nominal 3mm thickness inner core of polyethylene with mineral (magnesium hydroxide) fire-retardant. Panels are fit in to QP Reveal aluminum horizontal and vertical track and fastened to the exterior wall framing. Further details of the components of complete tested wall assembly are provided in the Evaluation section.

Evaluation

Testing of the wall assembly has been conducted in accordance with NFPA 285, *Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components*, 2019 edition, on November 6, 2020, at Intertek Elmendorf, TX location. Intertek is an independent testing laboratory accredited by the International Code Council Accreditation Service (IAS).

The test report concludes that the test assembly described herein **met the conditions of acceptance** of the test standard.

TEST SPECIMEN DESCRIPTION

Interior Wall Gypsum Sheathing

5/8 in. C1396 type X gypsum wallboard was used as the interior cladding and is fastened 24 in. on center (oc) horizontally and every 12 in. vertically in a staggered fashion.

Base Wall Framing

20 GA 3-5/8 in. deep steel studs spaced 24 in. oc with steel track fastened horizontally along the top and bottom of the window opening as well as on the top and bottom of the wall assembly. 4 pcf mineral fiber fire blocking stuffed at floor lines.

Exterior Wall Gypsum Sheathing

Densglass wallboard in 1/2 in. thickness was used as the exterior sheathing and was fastened 24 in. oc horizontally and every 12 in. vertically in a staggered fashion.

Exterior Insulation

One layer of 2 in. thick DuPont Thermax fastened at the corners and installed horizontally over studs with the vertical edges lining up over the studs. DuPont LiquidArmor flashing/sealant was applied over the board joints. Metal z-girts installed between the foam boards provided as framework for which the boards were situated.

Air Gap Between Insulation and ACM Panels

There was an approximate air gap of 1/2 in. between the exterior insulation and the ACM Panels.



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STRUCTURAL TECHNOLOGIES · DESIGN · TESTING · CODE EVALUATION

Exterior Cladding

4 mm Larson by Alucoil ACM Panels installed with QuickPanel Systems EasyTrim reveals system. Continuous perforated metal flashing was installed horizontally every 2-1/2 ft and designated as QP 1. Over the QP 1 the general horizontal REVEAL® Trim was fastened and designated as QP 30. All Weather sheathing tape was applied over the QP 1 and QP 30. Tremco® Spectrem®1 was applied between the QP 30 and the QuickPanel® ACM panel. The ACM panels were installed within the QP 30 trims. Offset approximately 1 ft for the centerline of the window opening was the vertical main wall REVEAL® Trim designated as QP 33 and was installed in similar fashion as the QP 30.

Window Flashing

18 GA steel flashing of dimensions 7 in horizontally with a 2 in vertical lip were used as the window flashing. The 2 in vertical lip was installed between the wall base frame and the interior sheathing.

Drawings of the tested assembly that appear in the test report are provided in the attachments of this report.

Source Documents

The published versions of the following sources, current on the date of this evaluation, were used as reference material to support the conclusions made:

1. NFPA 285-19 results: Intertek report G104467050SAT-001 R2, dated 12/08/20.

Signed

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

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

2021-06-01

Date



ATTACHMENTS:

Test Assembly Drawings _____ (6 pages)

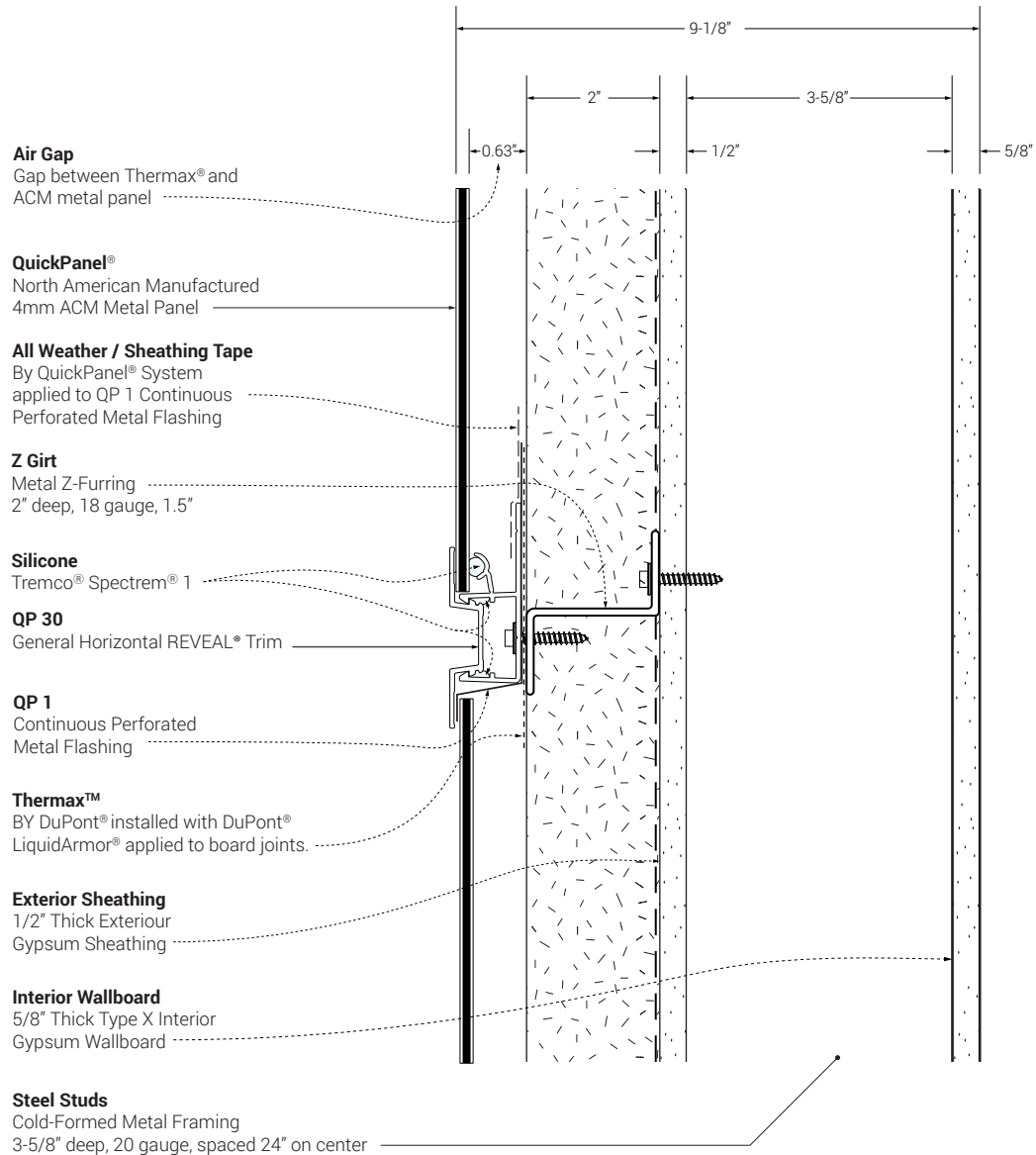
EVALUATION REPORT TERMS:

This report is a general evaluation of the testing standards as identified and applies only to the samples that were evaluated. It does not imply any endorsement or warranty, nor that the signatory Engineer is the Designer of Record of any construction project for which the information is used.

1A

Z GIRT VIEW

NTS



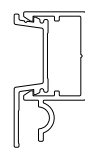
QUICKPANEL SYSTEM®

1-877-973-8746
 www.quickpanels.com
 info@quickpanels.com

4mm ACM QuickPanel®
 Pressure-Equalized Rainscreen
 System

by
 EasyTrim Reveals® Inc.

Scale: NTS Date: 11-16-2020



1A

HEADER & FLASHING DETAIL

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Air Gap

Gap between Thermax® and ACM metal panel

Steel Studs

Cold-Formed Metal Framing
3-5/8" deep, 20 gauge, spaced 24" on center

QuickPanel®

North American Manufactured
4mm ACM Metal Panel

Z Girt

Metal Z-Furring
2" deep, 18 gauge, 1.5" connection faces

All Weather / Sheathing Tape

By QuickPanel® System
applied to QP 1 Continuous
Perforated Metal Flashing

QP 34

Termination REVEAL® Trim

QP 02

Horizontal Flashing

Metal Flashing

By OTHER. 18-gauge steel installed
underneath QP 34 Termination
aaREVEAL® Trim Top Cap

Metal Flashing

By OTHER installed underneath QP 34
Termination REVEAL® Trim Top Cap

QP 34

Termination REVEAL® Trim

Thermax™

BY DuPont® installed with DuPont®
LiquidArmor® applied to board joints

Exterior Sheathing

1/2" Thick Exterior
Gypsum Sheathing

Interior Wallboard

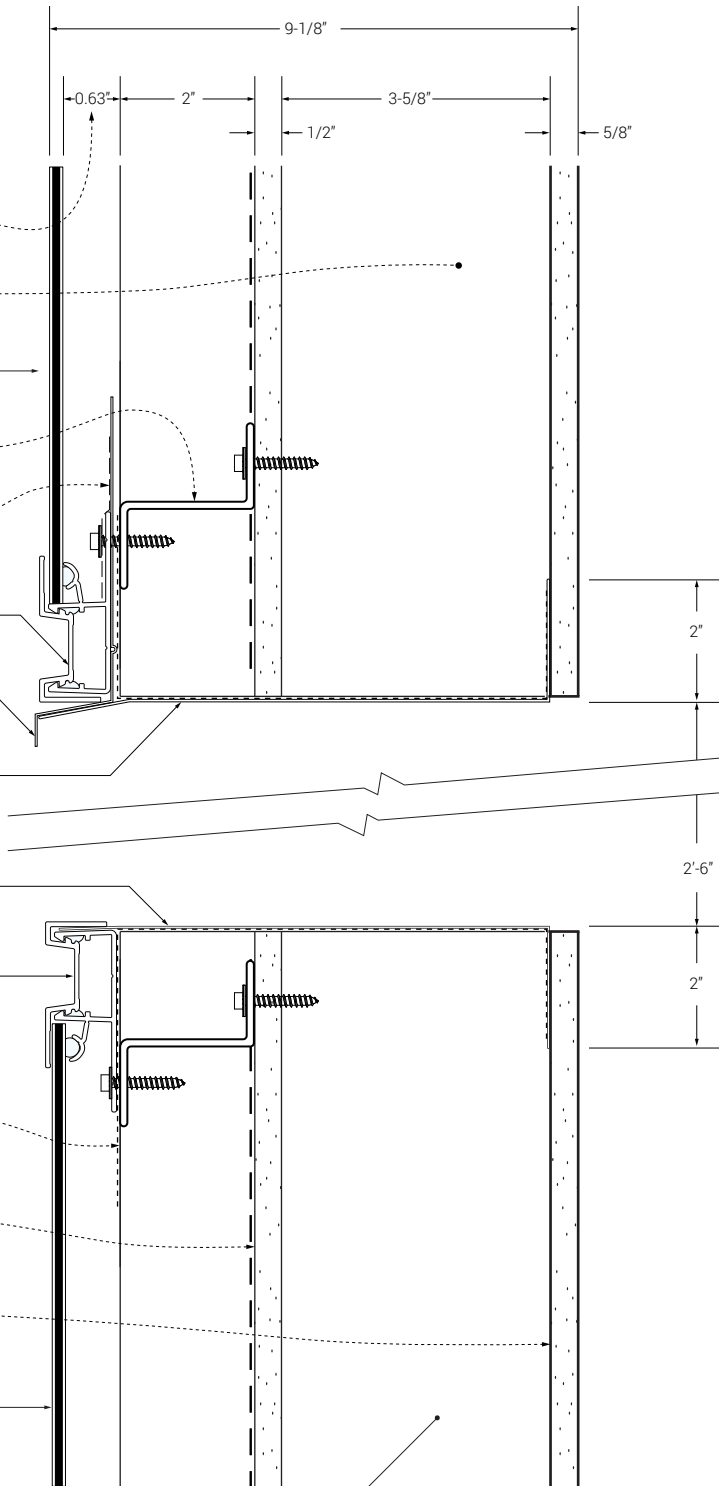
5/8" Thick Type X Interior
Gypsum Wallboard

QuickPanel®

North American Manufactured
4mm ACM Metal Panel

Steel Studs

Cold-Formed Metal Framing
3-5/8" deep, 20 gauge, spaced 24" on center



QUICKPANEL SYSTEM®

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**4mm ACM QuickPanel®
Pressure-Equalized Rainscreen
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1A

Z GIRT TOP VIEW

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4mm ACM QuickPanel®
Pressure-Equalized Rainscreen
System

Gypsum Wall Board
(Type X)
Trim Reveals® Inc.

Scale: NTS

Date: 11-16-2020

Thermax™
BY DuPont® installed with
DuPont® LiquidArmor®
applied to board joints.

QP 33
Vertical Main Wall
REVEAL® Trim

Silicone
Tremco® Spectrem® 1

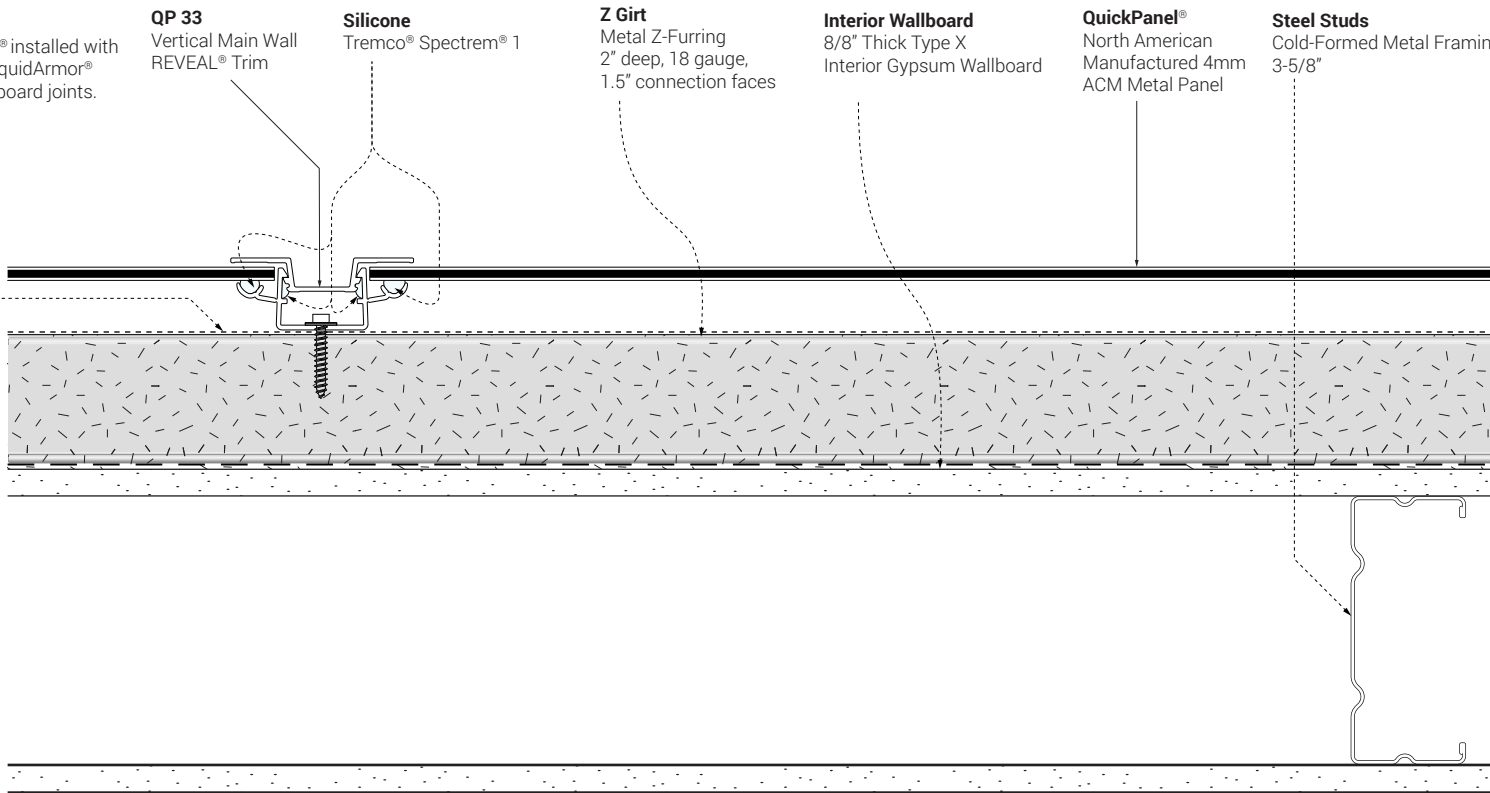
Z Girt
Metal Z-Furring
2" deep, 18 gauge,
1.5" connection faces

Interior Wallboard
8/8" Thick Type X
Interior Gypsum Wallboard

QuickPanel®
North American
Manufactured 4mm
ACM Metal Panel

Steel Studs
Cold-Formed Metal Framing
3-5/8"

Interior Wallboard
5/8" Thick Type X Interior
Gypsum Wallboard



1A HEADER & FLASHING DETAIL
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**4mm ACM QuickPanel®
Pressure-Equalized Rainscreen
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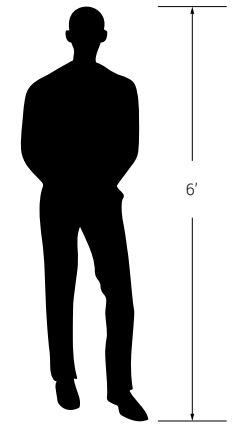
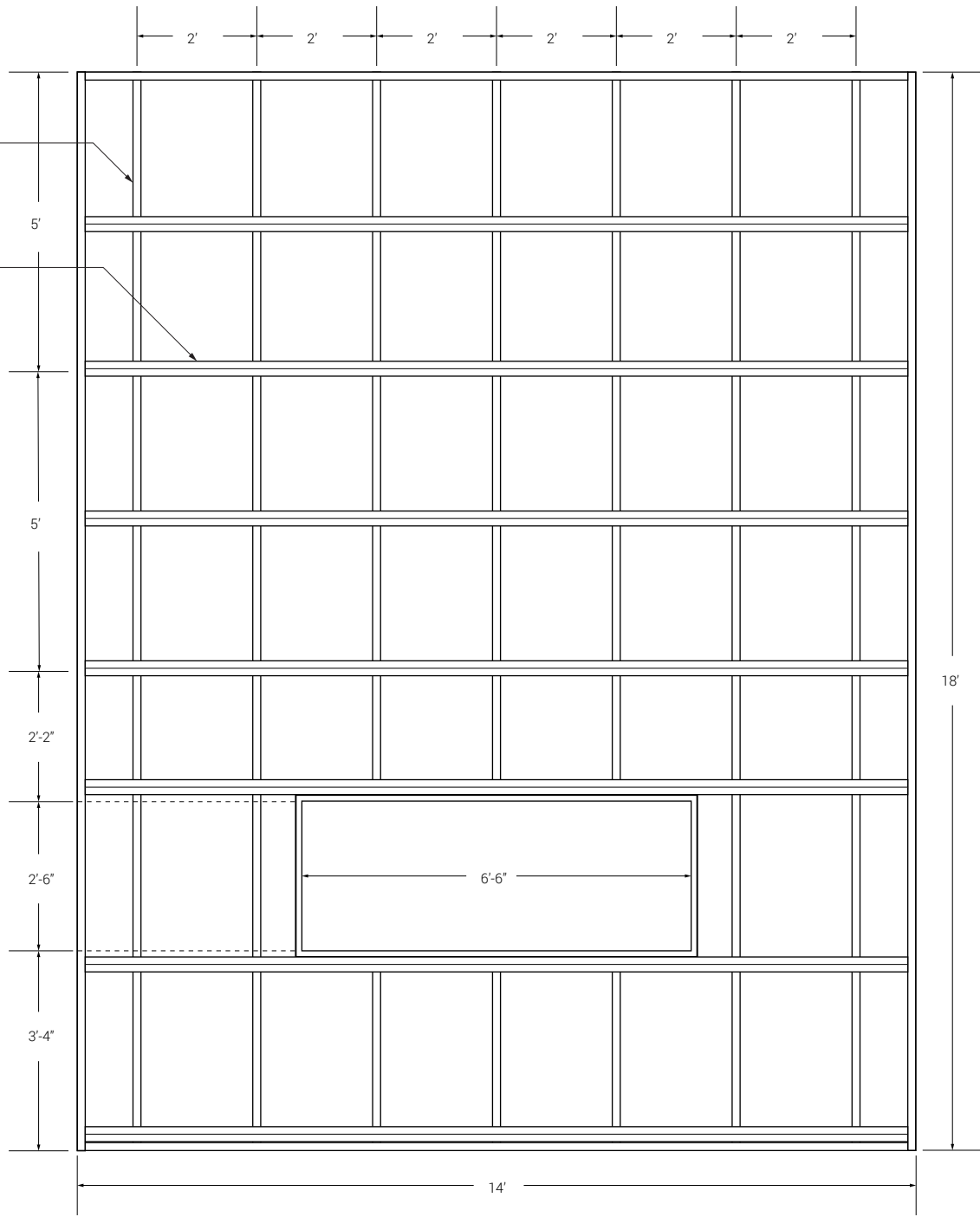
by
EasyTrim Reveals® Inc.

Scale: NTS

Date: 11-16-2020

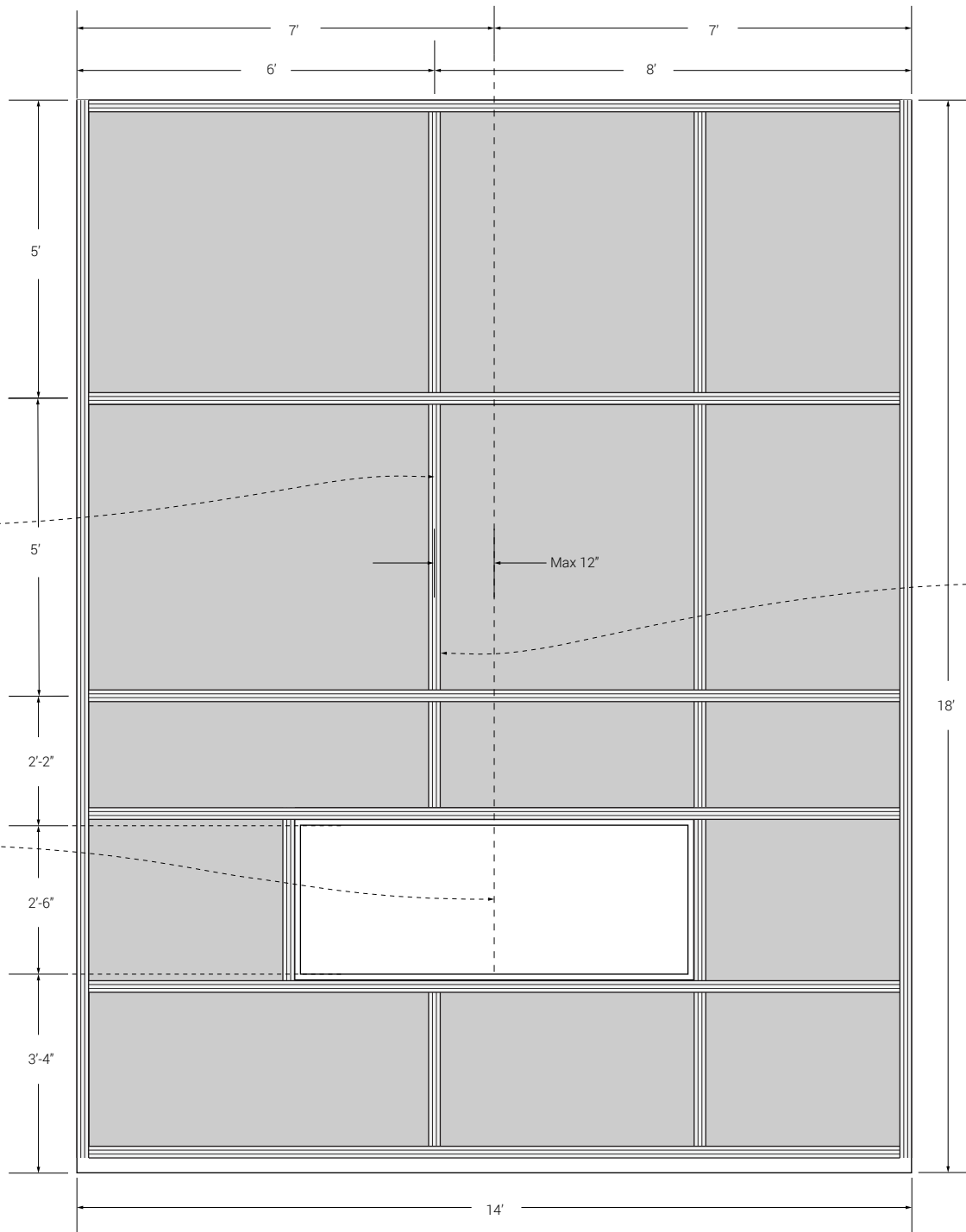
Steel Studs
Cold-Formed Metal Framing
3-5/8" 20 Gauge x 6

Z Girt
Metal Z-Furring

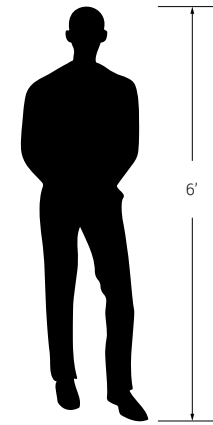


Vertical centerline joint located 1' to left of window centerline

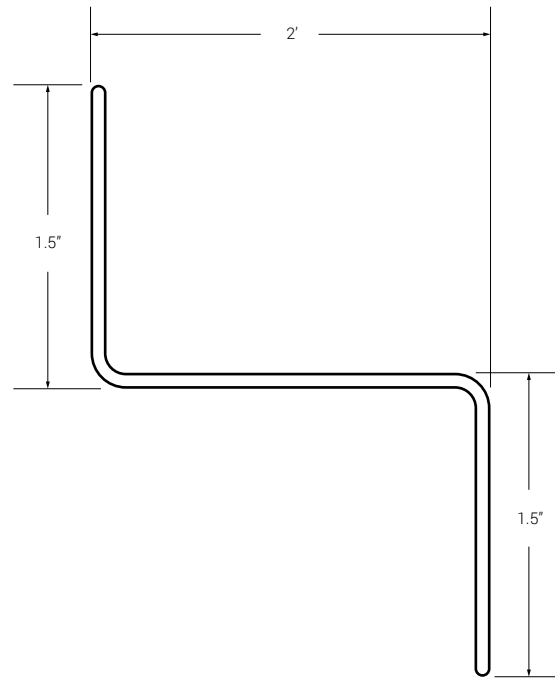
Window Centerline



Make sure ENTIRE joint assembly is no more than 1' off centerline. Do not position such that any piece of Reveal™ Trim piece is more than 1' off centerline of window.



1A Z GIRT
NTS



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