

**EVALUATION REPORT OF
ACI BUILDING SYSTEMS, LLC'S
'ULTRALOK 216 & 218 PANELS'**

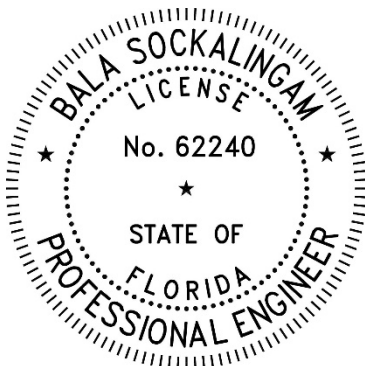
**FLORIDA BUILDING CODE 9TH EDITION (2026)
FLORIDA PRODUCT APPROVAL
FL 7396.4-R9
STRUCTURAL COMPONENTS
ROOF DECK**

**Prepared For:
ACI Building Systems, LLC
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PO Box 1316
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**Prepared By:
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (2 Pages)
Load Span Tables (5 Pages)**

**Report No. C3089-4
Date: 10.12.2026**



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

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Manufacturer:	ACI Building Systems, LLC
Product Name:	UltraLok 216 & 218
Panel Description:	Standing seam panel with 16" or 18" wide coverage and 2" high ribs
Materials:	Min 24 ga. with galvalume coated steel (ASTM A792) ($F_y = 50$ ksi). Corrosion resistant as per FBC 2026 Section 1507.4.3.
Support Description:	Min. 16 ga., 50 ksi steel section (Must be designed by others)
Slope:	1/4:12 or greater in accordance with FBC 2026 Section 1507.4.2
Design Uplift Pressure:	Allowable uplift loads are shown in the load span tables for 24 and 22 ga. UltraLok 216 & 218 panels with TripleLok and QuadLok Seams fastened with MC 1200, FC 11200, MPS 1200 or MPW 1200 Series clips. Maximum panel span is 5'. The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads. The factors of safety were determined in accordance with FBC 2026 Section 1504.9, ASTM E1592 test standard and the procedures of Section I6.3.1, K2.1.1 and K2.1.2 of the AISI S100-16(2020) w/S2-20.
Panel Attachment:	MC, FC, MPS or MPW clip with (2) 1/4"-14 x 1-1/2" long SDS per clip. Clips and fasteners are corrosion resistant as per FBC 2026 Section 1506.7 and 1507.4.4, respectively. For installation in areas within 3000 ft. of a saltwater coastline, clips and fasteners are corrosion resistant as per FBC 2026 Section 1711.
Test Standards:	Roof assembly tested in accordance with ASTM E1592-95, E1592-01, E1592-05(2012) & E1592-05(2017) 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.
Test Equivalency:	The test procedures in ASTM E1592-95, E1592-01 and E1592-05(2012) comply with test procedures prescribed in ASTM E1592-05(2017). The test procedures in FM 4470 (1992) comply with test procedures prescribed in FM 4470 (2022) Section 4.6 'Resistance to Foot Traffic'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2026 Section 1507.4.

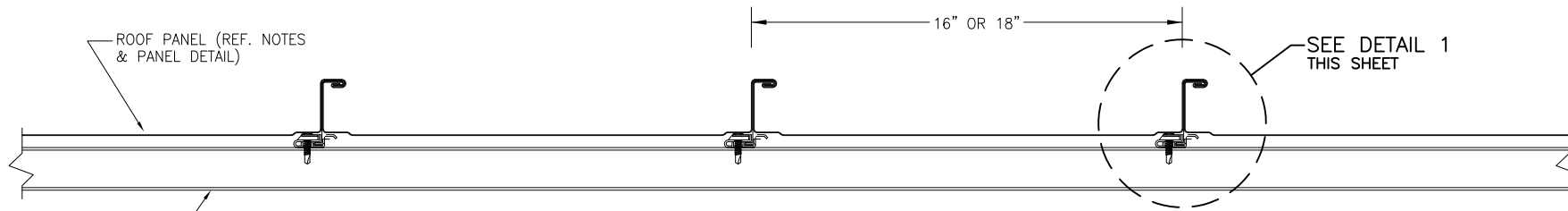
Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2026 Section 1609 or ASCE 7-22 using allowable stress design. The maximum panel span listed herein shall not be exceeded. The design pressure for reduced panel span may be computed using rational analysis prepared by a Florida Professional Engineer or based on ACI Building Systems' load span tables. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2026 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

Supporting Documents: ASTM E1592 Test Reports
ENCON Technology Inc.
C1432-1 & 2, Reporting Date 12/28/2005
C456-7, Reporting Date 7/23/1997
C2098-2, Reporting Date 1/6/2017
C2518-1 & 2, Reporting Date 11/30/2021
C2389-1, Reporting Date 11/24/2021

Force Engineering & Testing, Inc.
210-124T-13, Reporting Date 6/13/2013

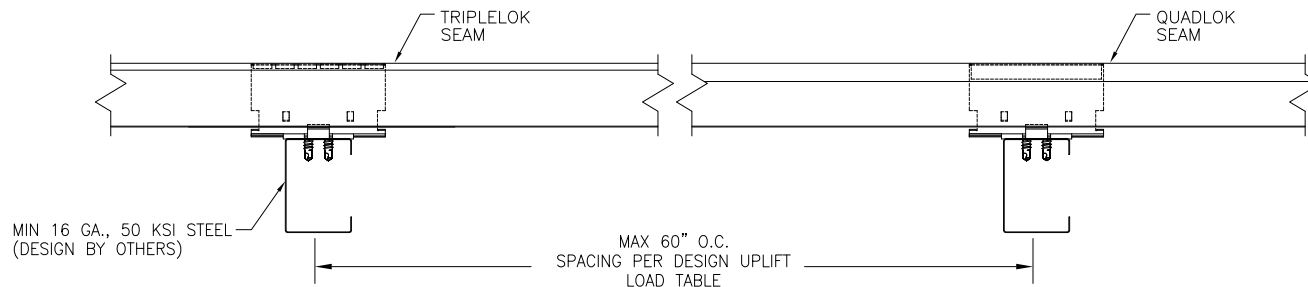
FM 4470 Test Report
ENCON Technology Inc.
C1669-1, Reporting Date 9/30/2009

(ACI Building Systems is authorized to use Building Research System's Test Reports)

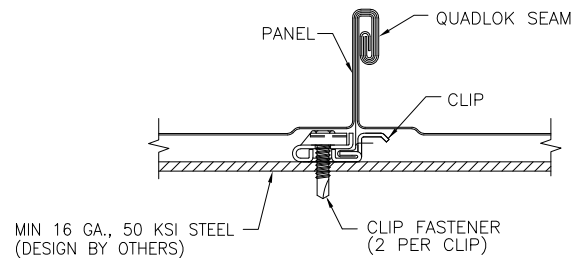
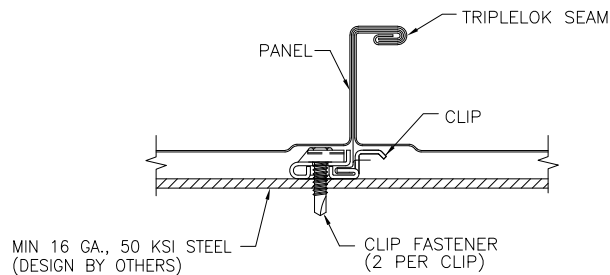


MIN 16 GA., 50 KSI STEEL
(DESIGN BY OTHERS)

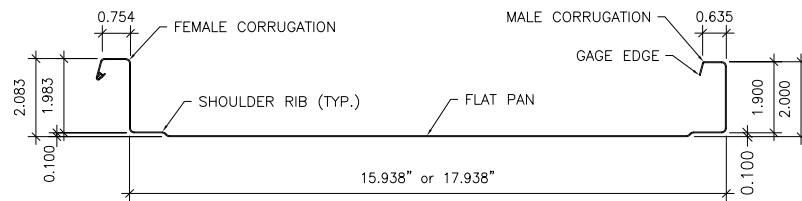
TYPICAL PANEL INSTALLATION X-SECTION



TYPICAL SIDE VIEW



CLIP SECTION VIEW
DETAIL 1

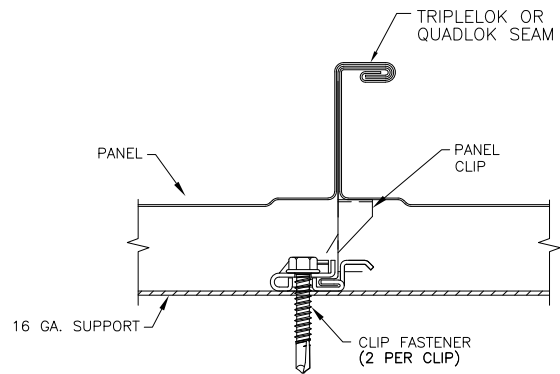


PANEL SECTION
(24 OR 22 GA.)

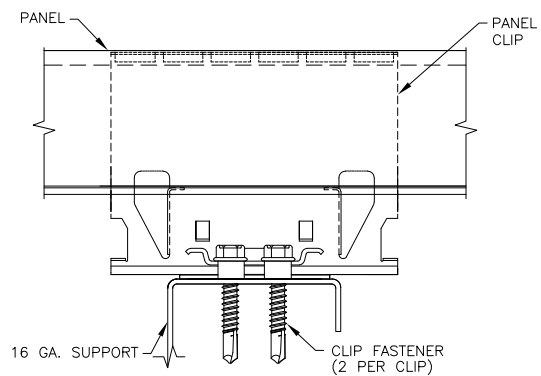
GENERAL NOTES:

1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE 24 GA. ($t = 0.022$ ") OR 22 GA. ($t = 0.028$ "). EFFECTIVE COVERING WIDTH OF PANEL = 16" OR 18".
3. THE ROOF PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THIS DRAWING.
4. REQUIRED DESIGN WIND LOADS SHALL BE DETERMINED FOR EACH PROJECT. THIS PANEL SYSTEM MAY NOT BE INSTALLED WHEN THE REQUIRED DESIGN WIND LOADS ARE GREATER THAN THE ALLOWABLE DESIGN LOADS.
5. CLIPS AND FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. PURLINS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.		CHECKED BY: K.S.	
PLOT:		DATE: 8/29/2023	
NO.	DATE	BY	REVISION DESCRIPTION
DRAWING TITLE: ULTRALOK 216 OR 218 PANEL			
CONSULTANTS: BALA SOCKALINGAM, PH.D., P.E.			
MANUFACTURER: ACI BUILDING SYSTEMS, LLC			
10125 HIGHWAY 6 WEST			
BATESVILLE, MS 38606			
662 563 4574			
1216 N LANSING AVE, SUITE C			
TULSA, OK 74106			
PHONE: 918-492-5992			
DRAWING NO. 3089-4		REV.	
PAGE NO.			
1		OF 2	

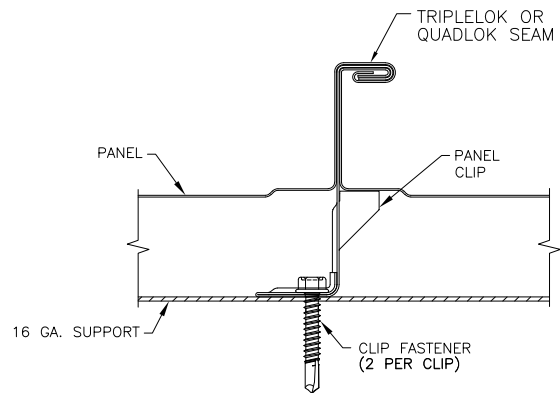


CLIP SECTION VIEW

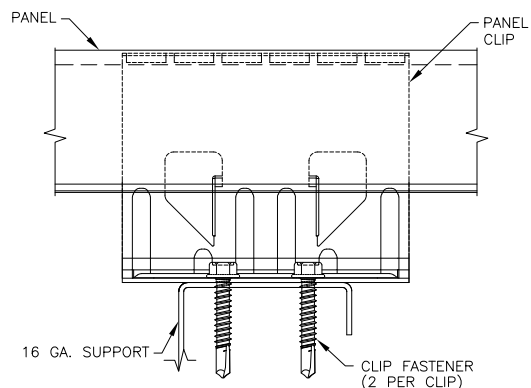


CLIP SIDE VIEW

MC 1200 SERIES CLIP
MC 1203, MC 1213 (SHOWN)

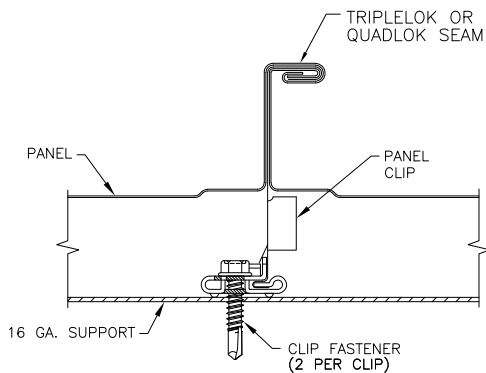


CLIP SECTION VIEW

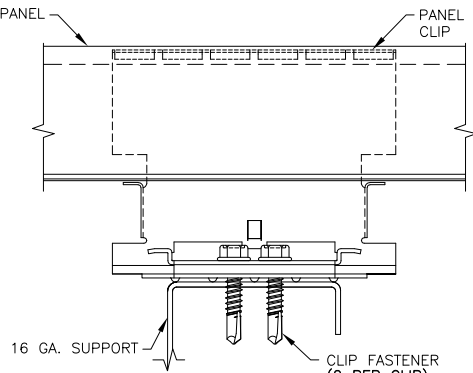


CLIP SIDE VIEW

FC 11200 SERIES CLIP
FC11200, FC 11203, FC 11213 (SHOWN)



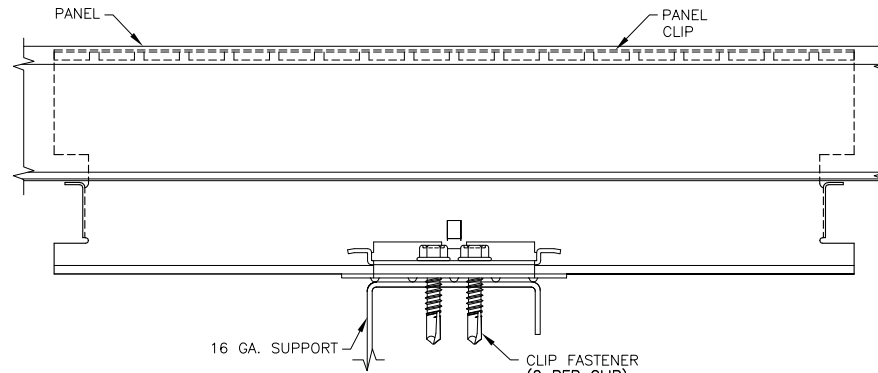
CLIP SECTION VIEW



CLIP SIDE VIEW

MPS 1200 SERIES CLIP

MPS 1203, MPS 1213 (SHOWN), MPS 1220



CLIP SIDE VIEW

MPW 1200 SERIES CLIP

MPW 1203-12, MPW 1213-12 (SHOWN)

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PLOT:	DATE: 8/29/2023
NO.	DATE
BY	
REVISION DESCRIPTION	
DRAWING TITLE ULTRALOK 216 OR 218 PANEL	
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E.	
MANUFACTURER ACI BUILDING SYSTEMS, LLC 10125 HIGHWAY 6 WEST BATESVILLE, MS 38606 662 563 4574	
1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5992	
DRAWING NO.	REV.
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ACI BUILDING SYSTEMS, LLC
Minimum 24 Ga. UltraLok 216 Panel Uplift Loads
With MC 1200 or FC 11200 Series Clips

Seam	Span (ft)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	2	232.3	136.4
	2.5		113.3
	3		94.4
	3.5		80.9
	4		70.8
	4.5		62.9
	5	96.5	56.6
QuadLok™	2	326.1	191.3
	2.5		157.6
	3		131.4
	3.5		112.6
	4		98.5
	4.5		87.6
	5	134.7	78.8

Notes:

- The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads imposed on the panel.
- The factor of safety was determined in accordance with the procedures of Section I6.3.1, K2.1.1 and K2.1.2 of the AISI S100-16(2020) w/S2-20. The factor of safety for the following tests:
2' 0" span with TripleLok™ Seam = 1.703
5' 0" span with TripleLok™ Seam = 1.704
2' 0" span with QuadLok™ Seam = 1.705
5' 0" span with QuadLok™ Seam = 1.709
- Panels must be installed as per Evaluation Report FL 7396.4 and ACI Building Systems current installation procedure.
- MC 1200 Series Clip: MC 1203, MC 1213 & FC 11200 Series Clip: FC11200, FC 11203, FC 11213
- Three or more spans condition.

ACI BUILDING SYSTEMS, LLC
Minimum 24 Ga. UltraLok 216 Panel Uplift Loads
With MPS 1200 Series Clips

Seam	Span (ft)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	2	358.4	210.6
	2.5		183.9
	3		153.3
	3.5		131.4
	4		115.0
	4.5		102.2
	5	156.7	92.0
QuadLok™	2	400.0	235.0
	2.5		196.5
	3		163.7
	3.5		140.3
	4		122.8
	4.5		109.2
	5	167.5	98.2

Notes:

- The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads imposed on the panel.
- The factor of safety was determined in accordance with the procedures of Section I6.3.1, K2.1.1 and K2.1.2 of the AISI S100-16(2020) w/S2-20. The factor of safety for the following tests:
2' 0" span with TripleLok™ Seam = 1.702
5' 0" span with TripleLok™ Seam = 1.704
2' 0" span with QuadLok™ Seam = 1.702
5' 0" span with QuadLok™ Seam = 1.705
- Panels must be installed as per Evaluation Report FL 7396.4 and ACI Building Systems current installation procedure.
- MPS 1200 Series Clip: MPS 1203, 1213, 1220
- Three or more spans condition.

ACI BUILDING SYSTEMS, LLC
Min. 24 Ga. UltraLok 216 Panel Uplift Loads
With MPW 1200 Series Clips

Seam	Span (ft)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	2	315.0	185.1
	2.5		164.2
	3		136.8
	3.5		117.3
	4		102.6
	4.5		91.2
	5	139.7	82.1

Notes:

1. The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads imposed on the panel.
2. The factor of safety was determined in accordance with the procedures of Section I6.3.1, K2.1.1 and K2.1.2 of the AISI S100-16(2020) w/S2-20. The factor of safety for the following tests:
2' 0" span with TripleLok™ Seam = 1.702
5' 0" span with TripleLok™ Seam = 1.702
3. Panels must be installed as per Evaluation Report FL 7396.4 and ACI Building Systems current installation procedure.
4. MPW 1200 Series Clip: MPW 1203-12, MPW 1213-12
5. Three or more spans condition.

ACI BUILDING SYSTEMS, LLC
UltraLok 218 Panel Uplift Loads
With MC 1200, MPS 1200 or FC 11200 Series Clips

Seam	Span (ft)	24 ga. UltraLok 218		22 ga. UltraLok 218	
		Ultimate Load (psf)	Design Load (psf)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	1.0	197.5	98.8		
	1.5		91.0		
	2.0		83.2		
	2.5		72.8	156.0	78.0
	3.0		60.7		72.8
	3.5		52.0		67.6
	4.0		45.5		62.4
	4.5		40.4		57.2
	5.0	72.8	36.4	104.0	52.0
QuadLok™	1.0	327.4	163.7		
	1.5		150.1		
	2.0		136.4		
	2.5		109.1		
	3.0		90.9		
	3.5		77.9		
	4.0		68.2		
	4.5		60.6		
	5.0	109.1	54.6		

Notes:

1. The bold numbers indicate test data.
2. The factor of safety was determined in accordance with the procedures of Section I6.3.1 of AISI AISI S100-16(2020) w/S2-20. The factor of safety was 2.0 for all tests.
3. Panels must be installed as per Evaluation Report FL 7396.4 and ACI Building Systems current installation procedure.
4. Three or more spans condition.

ACI BUILDING SYSTEMS, LLC
Minimum 24 Ga. UltraLok 218 Panel Uplift Loads
With MPW 1200 Series Clips

Seam	Span (ft)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	2	280.0	164.5
	2.5		136.1
	3		113.4
	3.5		97.2
	4		85.1
	4.5		75.6
	5	118.3	68.1

Notes:

1. The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads imposed on the panel.
2. The factor of safety was determined in accordance with the procedures of Section I6.3.1, K2.1.1 and K2.1.2 of the AISI S100-16(2020) w/S2-20. The factor of safety for the following tests:
2' 0" span with TripleLok™ Seam = 1.702
5' 0" span with TripleLok™ Seam = 1.738
3. Panels must be installed as per Evaluation Report FL 7396.4 and ACI Building Systems current installation procedure.
4. MPW 1200 Series Clip: MPW 1203-12, MPW 1213-12
5. Three or more spans condition.