

Evaluation Report
of
Streamline Roofing & Construction, Inc.
“150 SL”

Metal Roof Assembly
for
Florida Product Approval
FL 7207.1 R1
Florida Building Code 2007
Per Rule 9B-72

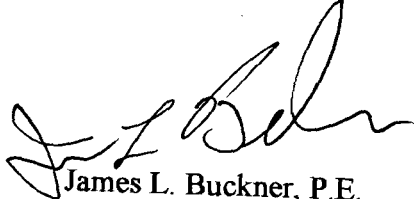
Method: 1 - D
Category: Roofing
Sub - Category: Metal Roofing

Product: “150 SL” Roof Panel
Material: Steel
Panel Thickness: 24 Gauge
Panel Width(s): 18” or 19.5”
Support Type: Steel Deck

Prepared for:
Streamline Roofing & Construction, Inc.
P.O. Box 2378
Tallahassee, Florida 32316

Prepared by:
James L. Buckner, P.E.
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Project Manager: Diana Galloway
Report No. 08-137-150-SL-18-S4S -ER
Date: 10 / 10 / 08

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James L. Buckner, P.E.
Florida, P.E. #31242
10/23/08

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Specialty Structural Engineering

CBUCK, Inc. Florida Certificate of Authorization # 8064

Manufacturer:	Streamline Roofing & Construction, Inc.
Product Name:	“150 SL”
Product Category:	Roofing
Product Sub-Category	Metal Roofing
Compliance Method:	State Product Approval Rule 9B-72.070 (1) (d)
Panel Description:	“150 SL”, Steel, Snap-Lock, Standing Seam Roof Panel attached to Steel Deck.
Panel Material / Standards:	Material: Steel Yield Strength: 40 ksi minimum Corrosion Resistance: Material shall comply with the Florida Building Code (FBC), 2007 Section 1507.4.3.
Panel Dimension(s)	Thickness: 24 gauge minimum Width: 18” or 19.5” Maximum (Net Coverage Width) Rib Height: 1-1/2”
Support Type:	Steel Deck (Design of support system is not included in this evaluation)
Support Description:	<ul style="list-style-type: none">• Thickness: 22 gauge minimum• Yield strength: 45 ksi minimum
Slope Range:	Minimum slope shall comply with FBC 2007, including Sections 1507.4.2, 1504.7 and in accordance with the Manufacturers recommendations.
Underlayment:	Underlayment shall be per manufacturer’s guidelines as required in FBC Section 1507.4.5.
Insulation:	(Optional) Rigid Insulation Board, 3” maximum thickness and shall comply with ASTM C 578 per FBC Section 1508.2.
Fire Classification:	Fire Classification is outside the scope of Rule 9B-72, and is therefore not included in this evaluation. Additional approved substrates may be added for Fire Classification purposes.

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Attachment Component Description:

Roof Panel Clip / Bearing Clip

Material: Steel
Type: One-piece, fixed clip
Thickness: 20 Gauge minimum
Strength: 40 ksi minimum
Dimensions: 1-9/16" (tall) x 4" (long) x 1-1/16" (wide) horizontal leg
Corrosion Resistance: Per FBC Section 1506.7

Panel to Support Fasteners

Size: #10 - 16 x 1" (3/4" minimum penetration through support)
Type: Low profile head self-drilling screws
Corrosion Resistance: Per FBC Section 1507.6.6 and 1507.4.4
Standard: Per SAE J78-1979

Installation:

Streamline "150 SL" Roof Panel Attached to Steel Deck:

METHOD 1: (18" Panel)

- 1. Design Uplift Pressure:** - 52.5 PSF (Safety Factor of 2:1)
- **Clip Spacing: 32" o.c.** maximum (along the length of the panel)
 - **THREE** Fasteners per Clip
 - Rib Interlock: Snap-Lock (Panel ribs shall be fully engaged to form an integral snap-lock.)
Minimum fastener penetration or embedment into steel deck, 3/4".

METHOD 2: (19.5" Panel)

- 2. Design Uplift Pressure:** - 37.5 PSF (Safety Factor of 2:1)
- **Clip Spacing: 32" o.c.** maximum (along the length of the panel)
 - **THREE** Fasteners per Clip
 - Rib Interlock: Snap-Lock (Panel ribs shall be fully engaged to form an integral snap-lock.)
Minimum fastener penetration or embedment into steel deck, 3/4".

METHODS 1 & 2:

Install the system in compliance with the attached installation method. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

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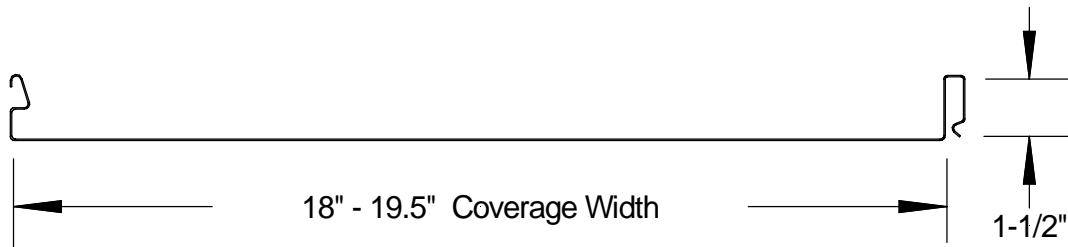
- Quality Assurance:** The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 9B-72.070 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Underwriter's Laboratories, Inc.** (FBC Organization #: QUA 1743)
- Performance Standards:** The product described herein has demonstrated compliance with:
- **UL580-94 – Test for Uplift Resistance of Roof Assemblies – with Revisions through February 1998.**
- Code Compliance:** The product described herein has demonstrated compliance with the Florida Building Code 2007, Section 1504.3.2
- Evaluation Report Scope:** This product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code, as related to Rule 9B-72.
- System Limitations:** The required design wind loads shall be determined for each project per FBC, 2007, Section 1609. Any rational analysis shall be prepared by a qualified design professional as required by FBC 2007, Sections 104, 105, 106. The maximum fastener/clip spacing listed herein shall not be exceeded. This report does not evaluate use of this product in the High Velocity Hurricane Zone.
- Referenced Data:**
1. UL Uplift Class 90
By Underwriters Laboratories, Inc., (FBC Organization #CER ID: 1739)
UL File # TGKX.467
Based on UL580-94 (with February 1998 Revisions) Uplift Test
 2. Quality Assurance
Underwriters Laboratories, Inc. (FBC Organization #QUA ID:1743)
 3. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization# ANE ID: 1916)
 4. Engineering Analysis
By CBUCK Engineering
Report #C08-137, Dated: 10/19/08

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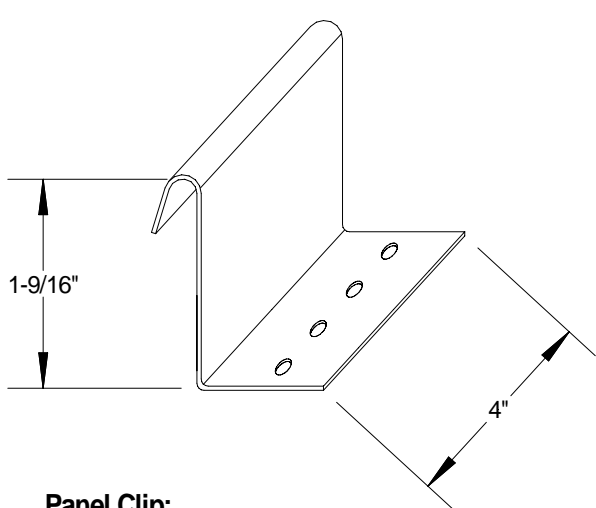
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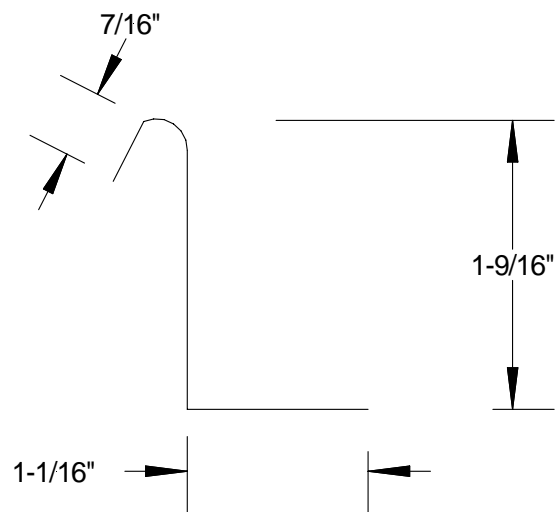
Installation Method Streamline Roofing & Construction, Inc. "150 SL" (24 Ga. Steel) Roof Panel Attached to Steel Deck



Panel Profile View



Panel Clip:
Minimum 20 GA
Corrosion Resistant or
Stainless Steel



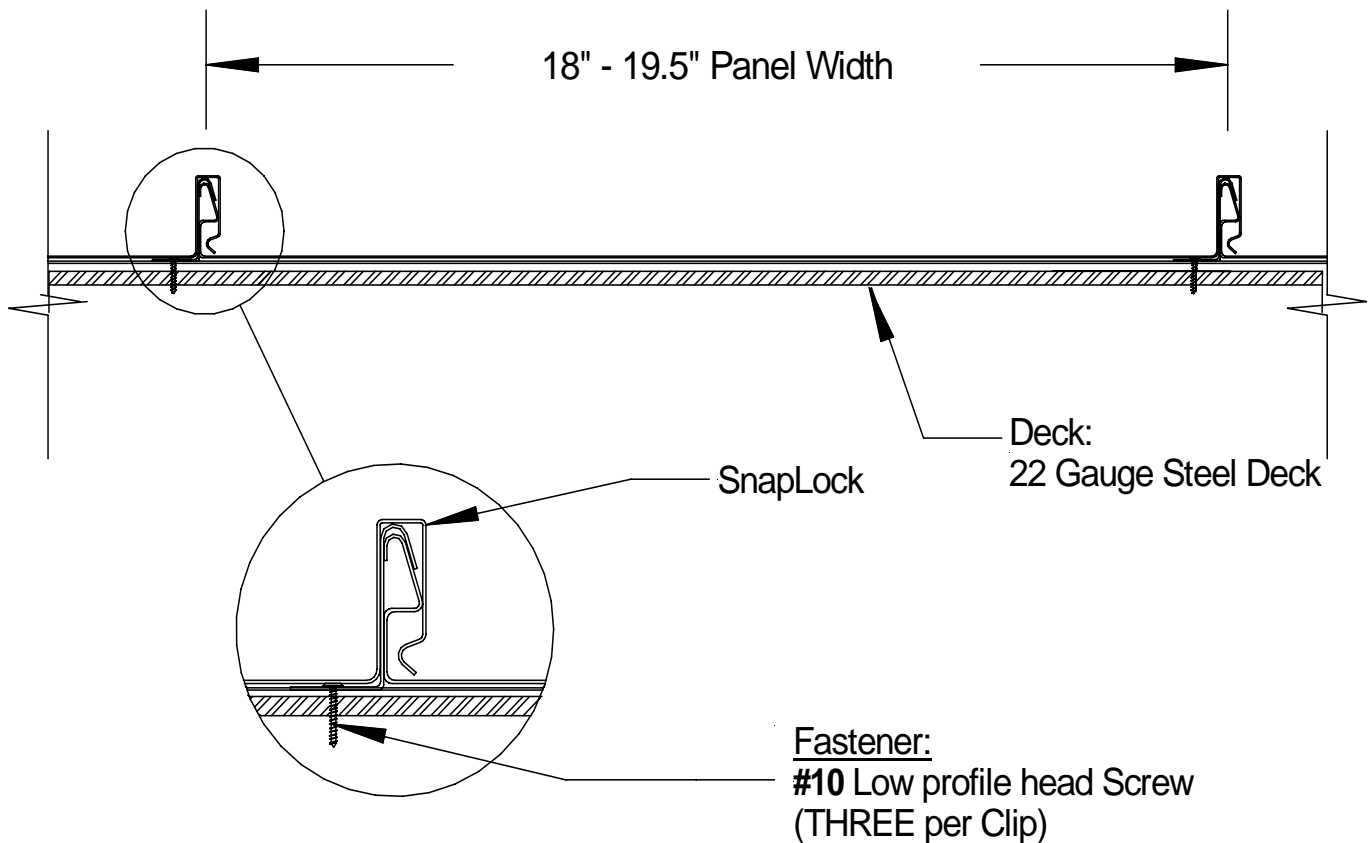
Panel Clip

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Installation Method Streamline Roofing & Construction, Inc. "150 SL" (24 Ga. Steel) Roof Panel Attached to Steel Deck



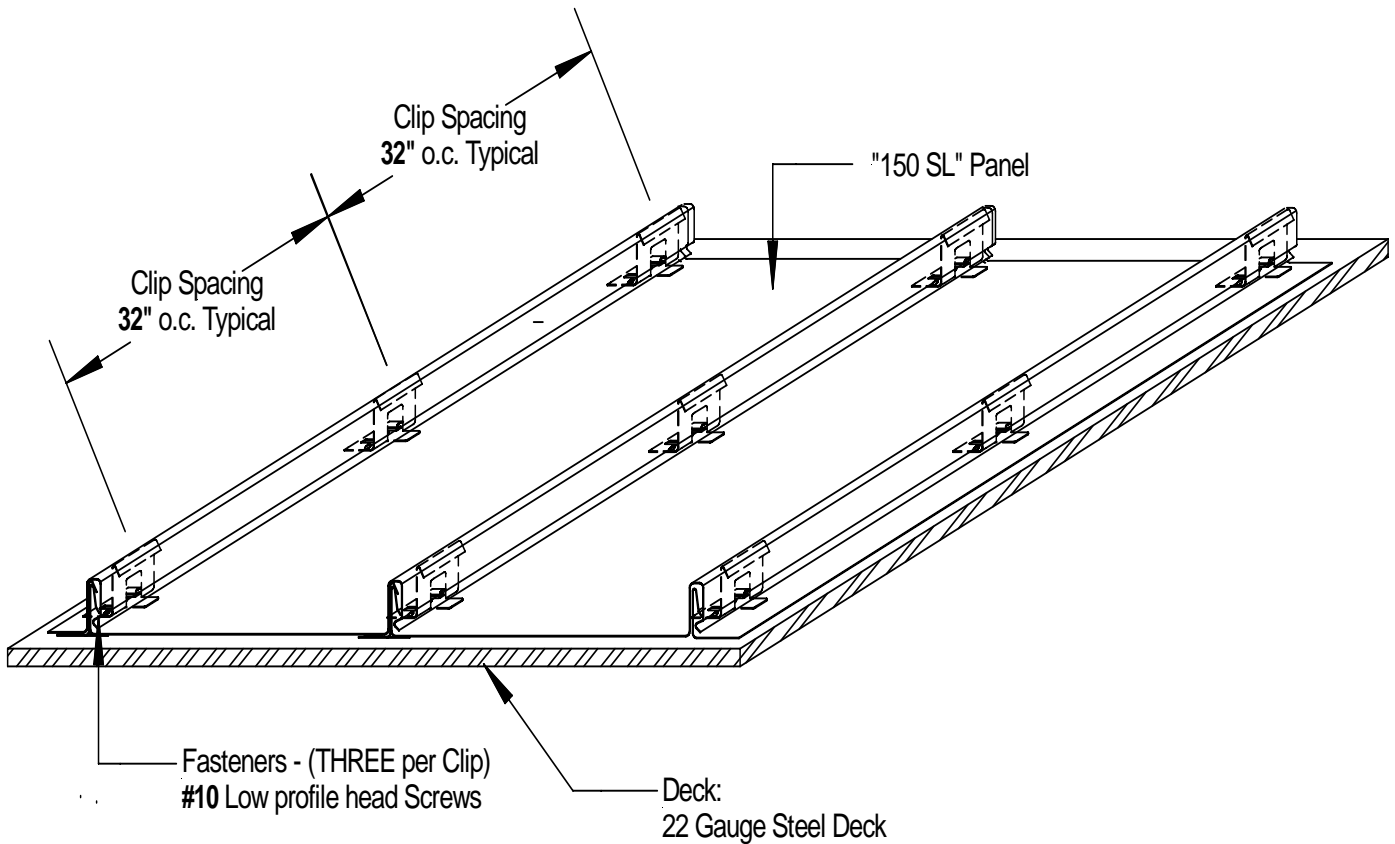
Typical Assembly Profile View

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Installation Method Streamline Roofing & Construction, Inc. "150 SL" (24 Ga. Steel) Roof Panel Attached to Steel Deck



Typical Assembly Isometric View

Optional Insulation:

Rigid Insulation Board, 3" maximum thickness and shall comply with ASTM C 578 per FBC Section 1508.2.