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McElroy Metals
1500 Hamilton Road
Bossier City, Louisiana 71111

RESEARCH REPORT: RR 26085
(CSI #07410)

Attn: Tommy Johnson
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REEVALUATION DUE
DATE: June 1, 2025
Issued Date: October 1, 2024
Code: 2020 LABC

GENERAL APPROVAL – Renewal – McElroy Metals Standing Seam Roof Panels

DETAILS

Metal Standing Seam Roof Panels are mechanically seamed on the jobsite to provide the standing seam between panels. The panels are formed from 22 and 24 gauge cold-formed sheet steel. The steel conforms to ASTM A792 Aluminum-Zinc coated, grade 50 steel.

The Metal Standing Seam Roof Panels profiles are as follows:

- 238T: This profile is formed to 16” or 18” wide panels with 2 3/8” high mechanically locking seams consisting of a metal panel and seam cap. See page 1 of attachment.
- MEDALLION-LOK: This profile is formed to 16” wide panels with 1 3/4” high mechanically locking seams. See page 2 of attachment.
- MAXIMA 216: This profile is formed to 16” wide panels with 2 1/6” high mechanically locking seams. See pages 3-5 of attachment.
- MAXIMA 218: This profile is formed to 18” wide panels with 2 1/16” high mechanically locking seams. See pages 6-7 of attachment.

Table 1 – Maximum Allowable Uplift Load Table

Panel	Steel Gauge	Panel Width	Panel Length	Spacing	Allowable Load (psf)
238T	24	16”	25’-6”	5’ O.C.	30.7
238T	24	16”	10’-6”	1’ O.C.	130.9
238T	24	18”	25’-6”	5’ O.C.	26.02
238T	24	18”	10’-6”	1’ O.C.	137.3

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MEDALLION- LOK	22	16"	15'-6"	5' O.C.	42.41
MEDALLION- LOK	22	16"	14'-6"	2' O.C.	42.45
MEDALLION- LOK	22	16"	12'-6"	1' O.C.	47.65
MEDALLION- LOK	24	16"	15'-6"	5' O.C.	21.4
MEDALLION- LOK	24	16"	14'-6"	2' O.C.	26.6
MEDALLION- LOK	24	16"	12'-6"	1' O.C.	31.8
MAXIMA 216	22	16"	25'-6"	5' O.C.	46.7
MAXIMA 216	22	16"	12'-6"	1' O.C.	152.2
MAXIMA 216 ⁽¹⁾	22	16"	10'-6"	1' O.C.	175.8
MAXIMA 216	24	16"	12'-6"	1' O.C.	110.35
MAXIMA 216	24	16"	25'-6"	5' O.C.	40.35
MAXIMA 218	22	18"	25'-6"	5' O.C.	42.4
MAXIMA 218	22	18"	12'-6"	1' O.C.	133.6
MAXIMA 218	24	18"	25'-6"	5' O.C.	39.55
MAXIMA 218	24	18"	12'-6"	1' O.C.	99.06

(1) The allowable load was achieved using S-5! Clamps at each clip. See pages 3-4 of attachment.

The approval is subject to the following conditions:

1. Each standing seam roof panel must be identified by the manufacturer's name, product designation, and material type and gage.
2. Standing Seam Panels must be installed in accordance with the manufacturer's published installation instructions. A copy of the manufacturer's installation instructions shall be available at the job site.
3. The overall performance of the roof structure, the adequacy of the existing building with new loads, and calculations demonstrating that the applied loads are less than the maximum allowable loads must be submitted to the structural plan check section for each project. The calculations must be prepared by a California registered Civil or Structural Engineer.
4. For Class A Roof Assembly – Panels must be installed without a roof deck on non-combustible framing per LABC 1505.2.
5. Roof panels are to be installed on roofs having a minimum slope of 2:12 (17 percent).

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6. The allowable wind uplift pressure on the steel panels shall not exceed those specified in table 1 of this report.
7. For all reroofing applications, the existing roof covering material must be removed to expose the plywood roof deck prior to the installation of the underlayment and the metal panels.
8. Underlayment applied in areas subject to high winds shall comply with section 1507.4.5 of the 2020 LABC.

DISCUSSION

The report is in compliance with the 2020 Los Angeles City Building Code.

The approval is based on compliance with the 2020 Los Angeles City Building Code. Wind uplift resistance was based on tests in accordance with ASTM E 1592 with a factor of safety of 2.0.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

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Attachment: Standing Seam Profiles (7-Pages).