DIVISION: 05 00 00—METALS
SECTION: 05 40 00—COLD-FORMED METAL FRAMING
SECTION: 05 41 00—STRUCTURAL METAL STUD FRAMING
SECTION: 05 42 00—COLD-FORMED METAL JOIST FRAMING
DIVISION: 09 00 00—FINISHES
SECTION: 09 22 16.13—NON-STRUCTURAL METAL STUD FRAMING

REPORT HOLDER:

STEEL STUD MANUFACTURERS ASSOCIATION (SSMA)

35 EAST WACKER DRIVE, SUITE 850
CHICAGO, ILLINOIS 60601-2106

EVALUATION SUBJECT:

SSMA COLD-FORMED STEEL FRAMING

“2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence”
1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012 and 2009 International Residential Code® (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same in the ADIBC.

Property evaluated:
Structural

2.0 USES

The Steel Stud Manufacturers Association (SSMA) cold-formed steel framing members are used for framing of nonload-bearing interior walls, curtain walls, and load-bearing walls, floors and roofs.

3.0 DESCRIPTION

3.1 General:

The SSMA cold-formed steel framing members described in this report are factory-formed from coils of steel at
the facilities listed in Table 2. The cold-formed framing members include C-shapes (S-sections), tracks (T-sections), U-channels (U-sections), and hat furring channels (F-sections). The S-sections are manufactured with and without web punch-outs. All other framing members (T-sections, U-sections, and F-sections) are manufactured without punch-outs. When provided, the punch-outs have a width of 1 1/8 inches (38 mm) and a length of 4 inches (102 mm) in S-sections with a depth of 3 1/2 inches (89 mm) or greater. In S-sections with a depth of 4 inches (102 mm) in S-sections with a depth of 3 1/2 inches (89 mm) or greater. In S-sections with a depth between 1 1/8 inches (38 mm) and 2 1/2 inches (64 mm), punch-outs have a width of 1 1/4 inch (19 mm) and a length of 4 inches (102 mm). The punch-outs are spaced a minimum of 24 inches (610 mm) on center and have a minimum distance between the end of the member and the near edge of the punch-out of 10 inches (254 mm).

The SSMA S-sections, T-sections, U-sections, and F-sections are detailed in SSMA’s catalogue titled “Product Technical Guide,” copyrighted 2015, effective August 14, 2015, which is distributed with this report. The following tables, figures, and pages from the catalogue are part of this report:

- Material Specification Page 4
- General Product Information Page 5
- Definitions of Structural Property Symbols Page 6
- Section Properties (S-Sections) Pages 7–14
- Section Properties (T-Sections) Pages 15–18
- Members with a web height-to-thickness ratio in excess of 200 are outside the scope of this report.

All other items and pages in the “Product Technical Guide” are outside the scope of this report.

3.2 Material:

The SSMA metal framing members are cold-formed from steel coils conforming to ASTM A1003 Structural Grade 50 Type H (ST50H); ASTM A1003 Structural Grade 33 Type H (ST33H); ASTM A653 SS Grade 33; ASTM A653 SS Grade 50 Class 1; or ASTM A1003 Nonstructural Grade 33 (NS33).

The steel conforming to ASTM A653 must have a minimum metallic coating designation of G60 or A60 in accordance with ASTM A653 for applications other than interior nonload-bearing walls. The steel conforming to ASTM A653 may have a minimum metallic coating designation of G40 or A40 in accordance with ASTM A653 for interior nonload-bearing wall applications.

The steel conforming to ASTM A1003 ST50H or ST33H must have a minimum metallic coating designation of G60, A60, AZ50, GF30, T1-25, or T2-100 in accordance with ASTM A1003.

The steel conforming to ASTM A1003 NS33 must have a minimum metallic coating designation of G40, A40, AZ50, GF30, T1-25, or T2-100 in accordance with ASTM A1003.

4.0 DESIGN AND INSTALLATION

4.1 Design:

4.1.1 IBC Method: The section properties for the cold-formed steel framing members recognized in this report have been determined in accordance with the applicable edition of the North American Specification for Design of Cold-Formed Steel Structural Members (AISI S100). The moments listed in this report are allowable moments and are used with Allowable Strength Design (ASD) for flexural members with the compression flange fully braced. For other conditions of compression flange bracing, the allowable moment must be determined in accordance with the applicable edition of AISI S100. The design of flexural members must address combined bending and web crippling, and combined bending and shear, as applicable in accordance with the applicable edition of AISI S100.

4.1.2 IRC Method: The S-sections listed in Table 1 of this report qualify for use with prescriptive requirements of the IRC. T-sections with flange width of 1.250 inches (31.75 mm) or greater qualify for use with the prescriptive requirements of the IRC. For use of all other sections under the IRC, the cold-formed steel framing members must be limited to engineered structures, in accordance with IRC Section R301.1.3.
When the framing members are used to construct buildings that do not conform to the applicable requirements of IRC Sections R505.1, R603.1 or R804.1.1, and for framing members not identified in Table 1 of this report, the structural analysis and design must be in accordance with the IBC, as described in Section 4.1.1 of this report.

4.2 Installation:

The framing members must be installed in accordance with the applicable code, the approved plans and this report. If there is a conflict between the plans submitted for approval and this report, this report governs. The approved plans must be available at the jobsite at all times during installation.

5.0 CONDITIONS OF USE

The SSMA metal framing members described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The cold-formed steel members must be installed in accordance with the applicable code, the approved plans and this report.

5.2 Minimum uncoated base-metal thickness of the cold-formed steel members as delivered to the jobsite must be at least 95 percent of the design base-metal thickness.

5.3 Complete plans and calculations verifying compliance with this report must be submitted to the code official for each project at the time of permit application. The calculations and drawings must be prepared and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

5.4 Framing members cold-formed from NS33 steel are limited to use in interior nonload-bearing walls subject to a maximum 10 psf (478 Pa) transverse load. Framing members without the steel classification designated must be considered NS33 steel (see Section 7.0).

5.5 Framing members with a height-to-thickness (h/t) ratio of more than 200 must be provided with web stiffeners in accordance with Sections B1.2 and C3.2.2 of AISI S100 and holes or punch-outs in the web are outside the scope of this report.

5.6 The interior nonload-bearing wall assemblies are limited to interior installation where the superimposed axial load is zero pounds.

5.7 Design of the attachment of the interior nonload-bearing wall assemblies to the surrounding structure is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members (AC46), dated June 2012 (editorially revised April 2015).

6.2 Data in accordance with the ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members—Interior Nonload-bearing Wall Assemblies (AC86), dated May 2012 (editorially revised August 2015).

7.0 IDENTIFICATION

At a spacing not exceeding 96 inches (2440 mm) on center, each cold-formed steel member is stamped, stenciled or embossed with the company name or initials (see the listees at the beginning of this report); the acronym “ICC-ES”; the evaluation report number (ESR-3064P); and the minimum uncoated base-metal thickness in mils or decimal inches. For structural applications, the minimum yield strength and the protective coating designation (CP 60 or CP 90 as defined by AISI S200-12 or ASTM C955) are included. For nonstructural applications, the minimum specified yield strength if over 33 ksi (230 MPa); the metallic coating type and weight if other than ASTM A653 G40; and the designation “NS” are included.
### TABLE 1—C-SHAPES (S-SECTIONS) FOR USE WITH THE IRC

<table>
<thead>
<tr>
<th>IRC MEMBER DESIGNATION</th>
<th>EQUIVALENT SSMA MEMBER DESIGNATION</th>
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</thead>
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<td></td>
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<tr>
<td>350S162-t</td>
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### TABLE 2—MANUFACTURING LOCATIONS

<table>
<thead>
<tr>
<th>Allsteel &amp; Gypsum, Inc.</th>
<th>Frametek Steel Products</th>
<th>Steel Construction Systems – Orlando</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Lauderdale, FL 33311</td>
<td>Riverside, CA 92507</td>
<td>Orlando, FL 32837</td>
</tr>
<tr>
<td>Consolidated Fabricators, Corp. – Fontana</td>
<td>Olmar Supply Inc.</td>
<td>United Metal Products, Inc. – Corona</td>
</tr>
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<td>Fontana, CA 92335</td>
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<tr>
<td>Consolidated Fabricators, Corp. – Galt</td>
<td>Quail Run Building Materials, Inc.</td>
<td>United Metal Products, Inc. – Phoenix</td>
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<tr>
<td>Galt, CA 95632</td>
<td>Phoenix, AZ 85027</td>
<td>Phoenix, AZ 85043</td>
</tr>
<tr>
<td>Craco Manufacturing, Inc.</td>
<td>SCAFCO Corporation – Spokane</td>
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</tr>
<tr>
<td>York, SC 29745</td>
<td>Spokane, WA 99202</td>
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</tr>
<tr>
<td>Custom Stud, Inc.</td>
<td>SCAFCO Corporation – Stockton</td>
<td></td>
</tr>
<tr>
<td>Lakeville, MN 55044</td>
<td>Stockton, CA 95206</td>
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</tbody>
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Section: 09 22 16.13—Non-Structural Metal Stud Framing

REPORT HOLDER:

STEEL STUD MANUFACTURERS ASSOCIATION (SSMA)
35 EAST WACKER DRIVE, SUITE 850
CHICAGO, ILLINOIS 60601-2106
(312) 224-2570
www.ssma.com
info@ssma.com

EVALUATION SUBJECT:

SSMA COLD-FORMED STEEL FRAMING

1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that SSMA Cold-Formed Steel Framing, recognized in ICC-ES master report ESR-3064P, has also been evaluated for compliance with Chapters 16, 16A, 17, 17A, 22, and 22A of the codes noted below.

Applicable code editions:
- 2010 California Building Code (CBC)
- 2010 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:
The SSMA Cold-Formed Steel Framing, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3064P, complies with CBC Chapters 16, 16A, 17, 17A, 22, and 22A, provided the design and installation are in accordance with the International Building Code® (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 16, 16A, 17, 17A, 22, and 22A, as applicable.

2.2 CRC:
The SSMA Cold-Formed Steel Framing, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3064P, complies with CRC Chapters 5, 6 and 8, provided the design and installation are in accordance with the International Residential Code® (IRC) provisions noted in the master report.

This supplement expires concurrently with the master report, reissued February 2015 and revised September 2015.
1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that SSMA Cold-Formed Steel Framing, recognized in ICC-ES master report ESR-3064P, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2010 Florida Building Code—Building
- 2010 Florida Building Code—Residential

2.0 CONCLUSIONS

The SSMA Cold-Formed Steel Framing, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3064P, complies with the 2010 Florida Building Code—Building and the 2010 Florida Building Code—Residential, provided the design and installation are in accordance with the International Building Code® (IBC) provisions noted in the master report.

Use of the SSMA Cold-formed Steel Framing has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the 2010 Florida Building Code—Building and the 2010 Florida Building Code—Residential.

For products falling under Florida Rule 9N-3, verification that the report holder’s quality-assurance program is audited by a quality-assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued February 2015 and revised September 2015.
ESR-3064P CCC Supplement

Issued September 2015

This report is subject to renewal February 2016.


DIVISION: 05 00 00—METALS
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15 EAST WACKER DRIVE, SUITE 850
CHICAGO, ILLINOIS 60601-2106
(312) 224-2570
www.ssma.com
info@ssma.com

EVALUATION SUBJECT:

SSMA COLD-FORMED STEEL FRAMING

1.0 REPORT PURPOSE AND SCOPE

The purpose of this evaluation report supplement is to indicate that SSMA cold-formed steel C-shapes (studs) and tracks members, recognized in ICC-ES master report ESR-3064P and Section 3.0 of this supplement, are certified to be in compliance with the ICC-ES Code Compliance Certification Program. Studs and tracks are periodically checked for mechanical properties, coatings, dimensions and labeling.

1.0 LABELING

Certified products bear the following label:
### 3.0 CERTIFIED MANUFACTURING FACILITIES

<table>
<thead>
<tr>
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