ICC-ES Evaluation Report

ESR-2174

Reissued May 2026

This report also contains:

- **City of LA Supplement**

Subject to renewal May 2027

DIVISION: 05 00 00—METALS **Section: 05 05 23—Metal Fastenings** **DIVISION: 09 00 00—FINISHES** **Section: 09 22 16.23—Fasteners**	**REPORT HOLDER:** **ITW RAMSET**	**EVALUATION SUBJECT:** **GYP-FAST™ FASTENERS USED TO ATTACH GYPSUM SHEATHING TO METAL STUDS**	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, and 2009 *International Building Code*® (IBC)
- 2021, 2018, 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 sections in the ADIBC.

Property evaluated:

- Structural

2.0 USES

The GYP–FAST™ fasteners are used to attach gypsum sheathing to the exterior side of light-framed, cold-formed steel framing (CFS) members for curtain wall applications. The fasteners may be used to attach gypsum sheathing to steel studs in structures regulated by the IRC, provided an engineered design is submitted in accordance with Section R301.1.3 of the IRC.

3.0 DESCRIPTION

3.1 GYP-FAST Fasteners:

The fasteners are power-actuated fasteners formed from steel wire complying with ASTM A510 Grade 1060, heat-treated to a Rockwell C hardness of 44 to 48. The fastener is zinc-plated with a polymer finish, and has a tapered point with an annular thread and helical grooves on the shank. The fastener is $1^1/_2$ inches (38.1 mm) long, has a 0.140-inch (3.6 mm) knurled diameter [0.120-inch (3.mm) shank diameter], and has a 0.32-inch-diameter (8.1 mm) bugle head. The fasteners are available in 150-count collated coils. See Figure 1 for an image of the fastener.

3.2 Exterior Gypsum Sheathing:

Exterior gypsum sheathing must be one of the materials listed in Table 1.

3.3 Steel Framing:

Steel framing members must comply with one of the ASTM specifications listed in Section A3.1.1 of AISI S100-16(2020) w/S2-20 (Section A3.1.1 of AISI S100-16, Section A2.1.1 of AISI S100-12, and Section A2.1 of AISI S100-07/S2-10 and AISI S100-07 for the 2018, 2015, 2012 and 2009 IBC, respectively) and have the minimum uncoated base-metal thicknesses noted in Table 1. In addition, steel framing members must be manufactured from structural steel with a minimum yield strength of 33 ksi (228 MPa) and a minimum tensile strength of 45 ksi (310 MPa). The wall studs must have a minimum flange width of $1^5/_8$ inches (41 mm).

4.0 DESIGN AND INSTALLATION

4.1 Design:

Framing and sheathing information, framing and fastener spacing, fastener penetration, and allowable negative (outward) transverse loads are set forth in Table 1. The steel framing members and the sheathing must be designed to resist the applied transverse loads.

Design of the gypsum board sheathing material, the wall framing members and their connections must comply with applicable provisions of the code.

The ability of the fasteners to develop composite action between the gypsum board materials and the CFS framing has not been evaluated. Calculations addressing deflection of the wall framing must therefore be based on the stiffness of the steel framing only.

4.2 Installation:

The GYP-FAST™ fasteners must be installed using pneumatic tools or fuel-powered tools recommended by ITW Ramset. The fasteners must pierce the sheathing panels being fastened, and must protrude through the steel framing members a minimum of $^1/_2$ inch (12.7 mm). The head of the fastener must be flush with the sheathing. The fastener must not be over-driven.

5.0 CONDITIONS OF USE:

The GYP-FAST™ fasteners 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 fasteners are manufactured, identified, and installed in accordance with this report.

5.2 Calculations demonstrating that the design of the gypsum board materials, the wall framing and framing connections complies with the applicable code and Section 4.1 of this report must be submitted to the code official for approval. These calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is constructed.

5.3 Calculations demonstrating that the applied loads are less than the maximum allowable loads noted in Table 1 must be submitted to the code official for approval. These calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is constructed.

5.4 The gypsum board materials must be covered by a water-resistive barrier and exterior wall covering in accordance with the requirements of the applicable code.

5.5 The wall framing members and their installation must comply with the applicable code.

5.6 Compliance of the gypsum board materials with the applicable gypsum board material standard and the code must be justified to the satisfaction of the code official.

5.7 Use of gypsum board materials attached with the GYP-FAST fasteners to resist in-plane shear loads is outside the scope of this report.

5.8 The fasteners are manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Power-actuated Fasteners Used for Attaching Gypsum Board Materials to Cold-Formed Steel Wall Framing (AC259), dated November 2015 (Editorially revised February 2021).

7.0 IDENTIFICATION

7.1 Cartons of GYP-FAST™ fasteners must be labeled with the ITW Ramset name and address, the product name (GYP-FAST™) and the evaluation report number (ESR-2174). The head of each fastener bears the symbol shown in Figure 1.

7.2 The report holder's contact information is the following:

ITW RAMSET
155 HARLEM AVENUE, N3E
GLENVIEW, ILLINOIS 60025
(800) 848-5611
www.ramset.com
techsupport@itwccna.com

TABLE 1—ALLOWABLE NEGATIVE TRANSVERSE LOADS USING GYP-FAST™ FASTENERS[1,2,3,4]

SHEATHING	MINIMUM STEEL STUD BASE METAL THICKNESS (inch)	MAXIMUM STUD SPACING (inches)	FASTENER SPACING (inches)	ALLOWABLE NEGATIVE LOAD (psf)
5/8-inch GP DensGlass® Gold Fireguard Type X Sheathing	0.034 (20 ga.)	24	8	19
1/2-inch USG Sheetrock® Brand Gypsum Sheathing	0.034 (20 ga.)	24	8	10
5/8-inch USG Sheetrock® Brand Firecode® Core Type X Gypsum Sheathing	0.034 (20 ga.)	24	8	14
1/2-inch USG Fiberock® Brand Aquatough™	0.034 (20 ga.)	24	8	24

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

[1]The fasteners must be driven to a depth at which the shank pierces the steel, such that the tip of the fastener protrudes from the base metal a minimum of 1/2 inch.
[2]Tabulated values do not allow any overdriving of fasteners into sheathing.
[3]The minimum distance from the fasteners to the edge or the end of the sheathing is 3/8 inch.
[4]At the adjoining panel edges, the framing studs must be at least 1.5 inches wide, and the fasteners must be staggered.

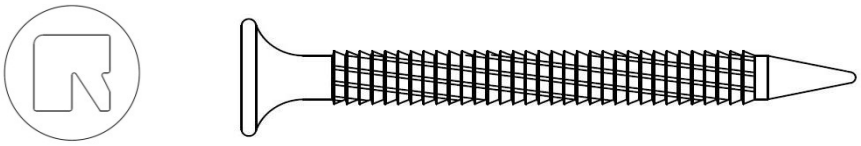

FIGURE 1—GYP–FAST™ FASTENER

DIVISION: 05 00 00—METALS
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REPORT HOLDER:

ITW RAMSET

EVALUATION SUBJECT:

GYP-FAST™ FASTENERS USED TO ATTACH GYPSUM SHEATHING TO METAL STUDS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that GYP-FAST™ fasteners, described in ICC-ES evaluation report ESR-2174, have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2020 *City of Los Angeles Building Code (LABC)*
- 2020 *City of Los Angeles Residential Code (LARC)*

2.0 CONCLUSIONS

The GYP-FAST™ fasteners, described in Sections 2.0 through 7.0 of the evaluation report ESR-2174, comply with the LABC Chapters 14, 22, 25 and the LARC, and are subjected to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The GYP-FAST™ fasteners described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-2174.
- The design, installation, conditions of use and identification of the GYP-FAST™ fasteners are in accordance with the 2018 *International Building Code®* (IBC) provisions noted in the evaluation report ESR-2174.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.
- The allowable negative transverse loads listed in the evaluation report are for the connection of the fasteners to attach gypsum sheathing to the exterior side of light-framed, cold-formed steel (CFS) framing members for curtain wall applications. The connection between the fasteners and the connected members must be checked for capacity (which may govern).

This supplement expires concurrently with the evaluation report, reissued May 2026.