

ICC-ES Evaluation Report

ESR-2362

Reissued May 2023

Revised May 2024

Subject to renewal May 2025

This report also contains:

- LABC Supplement
- CBC Supplement
- FBC Supplement

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| <p>DIVISION: 06 00 00— WOOD, PLASTICS AND COMPOSITES</p> <p>Section: 06 05 23— Wood, Plastic, and Composite Fastenings</p> | <p>REPORT HOLDER: MITEK INC.</p>  | <p>EVALUATION SUBJECT: MITEK STABILIZER™</p> |  |
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015 and 2012 [International Building Code® \(IBC\)](#)
- 2024, 2021, 2018, 2015 and 2012 [International Residential Code® \(IRC\)](#)

For evaluation for compliance with codes adopted by [Los Angeles Department of Building and Safety \(LADBS\)](#), see [ESR-2362 LABC and LARC Supplement](#).

Property evaluated:

Structural

2.0 USES

The MiTek Stabilizer™ is used as temporary or permanent lateral bracing for nominally 2-by wood truss members spaced 16 inches (406mm) or 24 inches (610 mm) on center.

3.0 DESCRIPTION

3.1 Stabilizer™ Truss Brace and Spacer:

The MiTek Stabilizer™ is a U-shape (channel) member manufactured from minimum No. 20 gage steel with a base metal thickness of 0.036 inch (0.91 mm) that conforms to ASTM A653 SS Grade 40, with a G60 galvanized coating. Each end of the connector has a web tab that laps over the member being braced, and two flange tabs that create the location points used to establish truss spacing. Each web tab features four staggered sets of integral teeth stamped and formed at right angles to the parent metal, and each flange tab has a single set of two integral teeth. Each tooth is 0.33-inch long (8 mm) with an approximate 22-degree twist at the pointed end. The two teeth form a slot that is 0.45-inch long (11 mm) and 0.125-inch wide (3 mm). The flange tabs, web tabs and integral teeth are identical at both ends of the Stabilizer™. See [Table 1](#) and [Figure 1](#) for allowable loads and typical installations.

3.2 Assembly Materials:

3.2.1 Wood: Nominally 2-by [1.5 inch (38 mm) actual width] wood truss members to which the Stabilizer™ is attached must be sawn lumber with a minimum assigned specific gravity, SG_{NDS} , of 0.42.

3.2.2 Nails: Nails used must be bright or hot-dipped galvanized carbon steel nails complying with specifications in ASTM F1667 and must have the properties shown below:

| FASTENER DESIGNATION | FASTENER LENGTH (inches) | SHANK DIAMETER (inch) | MINIMUM REQUIRED F _y (psi) |
|----------------------|--------------------------|-----------------------|---------------------------------------|
| 8d Common | 2.5 | 0.131 | 100,000 |
| 10d Common | 3.0 | 0.148 | 90,000 |

For SI: 1 inch = 25.4, 1 psi = 6.89 kPA.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The maximum allowable axial load capacity of the MiTek Stabilizer™ is as shown in [Table 1](#). Lateral bracing design, details and locations must comply with the requirements of IBC Section 2303.4 or IRC Section R802.10.3.

4.2 Installation:

The MiTek Stabilizer™ is installed at right angles in the plane of the nominally 2-by wood truss members by driving the teeth on the web tab of the Stabilizer™ down into the narrow edge of the wood truss member using a hammer. The flange tabs must then be secured by driving the teeth of each flange tab into the wide face of the truss member. The Stabilizer™ is properly installed when the web tab and flange tabs are flush with the truss member, with the teeth fully embedded into the truss member. The Stabilizer™ must be staggered in adjacent truss bays with the web tabs in side-to-side contact. The allowable axial load in tension may be increased to the value specified in [Table 1](#) when one 8d or 10d common wire nail is installed through one of the tooth slots of each web tab into the truss member, as illustrated in [Figure 1](#).

5.0 CONDITIONS OF USE:

The MiTek Stabilizer™ described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Stabilizer™ is located where there are no wood defects, such as knots.
- 5.2 The Stabilizer™ is limited to use with untreated lumber and dry service conditions.
- 5.3 The Stabilizer™ locations must be on the truss design drawings in accordance with Section 2303.4 of the IBC.
- 5.4 The Stabilizer™ is manufactured under an approved quality-control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Test reports on compression, tension, and moment capacity.
- 6.2 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated May 2022.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ESR-2362 or the number of the ICC-ES index evaluation report for MiTek, [ESR-2685](#)), along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, the MiTek Stabilizer™ is labeled with the product name, Stabilizer, and part length (16 or 24) and the packaging is labeled with the Stabilizer™ stock number.
- 7.3 The report holder's contact information is the following:

MITEK INC.
16023 SWINGLEY RIDGE ROAD
CHESTERFIELD, MISSOURI 63017
(800) 328-5934
www.mitek-us.com

TABLE 1— STABILIZER™ ALLOWABLE AXIAL LOADS

| Stock No. | Steel Ga. | O.C. Truss Spacing (in.) | Allowable Axial Loads (lbf) ¹ | | |
|-----------|-----------|--------------------------|--|--------------------------------|-------------|
| | | | Tension | Tension with Nail ² | Compression |
| 31-16 | 20 | 16 | 105 | 155 | 420 |
| 31-24 | 20 | 24 | 105 | 155 | 420 |

For SI: 1 lbf = 4.45 N.

¹Wood framing must have a minimum assigned specific gravity, SG_{NDS} , of 0.42.

²The nail must be one 8d or 10d common nail installed through one of the tooth slots of each web tab (see [Figure 1](#)).

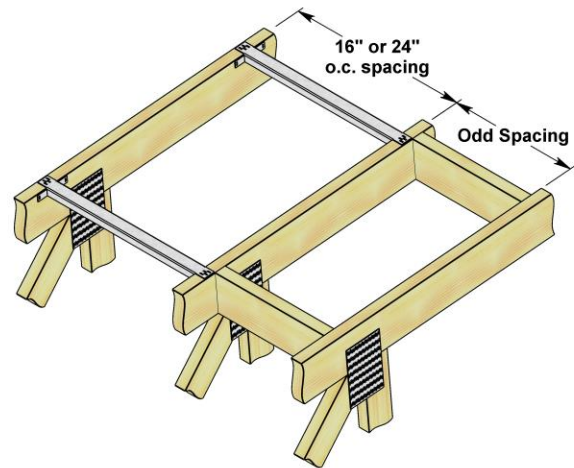
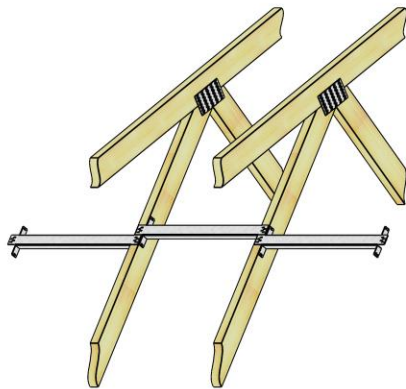
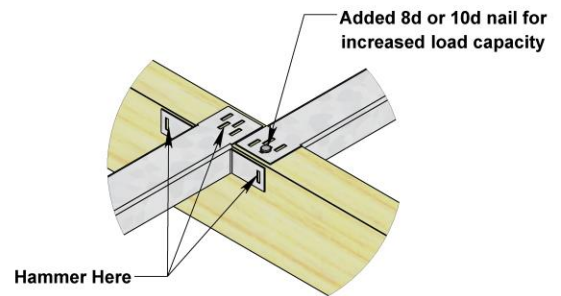
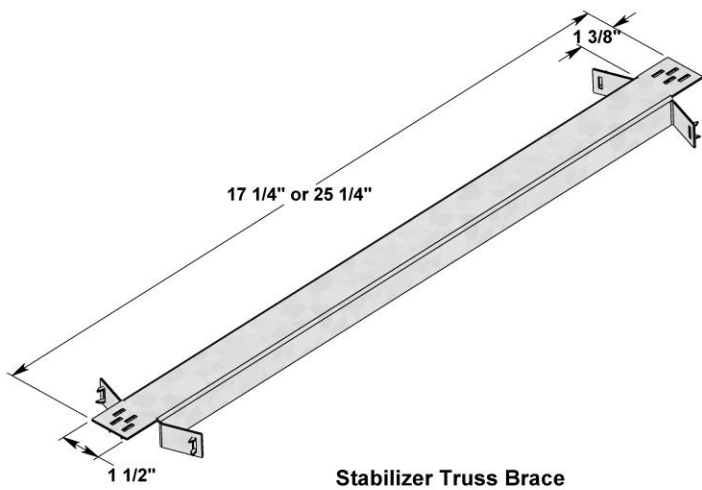


FIGURE 1—STABILIZER™ TRUSS BRACE AND TYPICAL INSTALLATIONS

DIVISION: 06 00 00—WOOD, PLASTICS, AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

MITEK INC.

EVALUATION SUBJECT:

MITEK® STABILIZER™

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the MiTek® Stabilizer™, described in ICC-ES evaluation report [ESR-2362](#), has 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:

- 2023 *City of Los Angeles Building Code* (LABC)
- 2023 *City of Los Angeles Residential Code* (LARC)

2.0 CONCLUSIONS

The MiTek® Stabilizer™, described in Sections 2.0 through 7.0 of the evaluation report [ESR-2362](#), complies with the LABC Chapter 23, and the LARC, and is subjected to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The MiTek® Stabilizer™ described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-2362](#).
- The design, installation, conditions of use and labeling are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report [ESR-2362](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16, 17 and 23, and LARC Section R802, as applicable.
- Metal connector teeth with 1/2 inch of the ends of truss wood members must be considered ineffective to carry any load.

This evaluation report supplement expires concurrently with the evaluation report ESR-2362, reissued May 2023 and revised May 2024.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

MITEK INC.

EVALUATION SUBJECT:

MITEK® STABILIZER™

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that the MiTek® Stabilizer™, described in ICC-ES evaluation report ESR-2362, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2022 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of the State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2022 California Residential Code (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The MiTek® Stabilizer™, described in Sections 2.0 through 7.0 of the evaluation report ESR-2362, complies with CBC Chapter 23, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report, and the additional requirements of the CBC Chapters 16, 17, and 23, as applicable.

2.1.1 OSHPD: OSHPD requirements as indicated in the CBC are beyond the scope of this supplement.

2.1.2 DSA: DSA requirements as indicated in the CBC are beyond the scope of this supplement.

2.2 CRC:

The MiTek® Stabilizer™, described in Sections 2.0 through 7.0 of the evaluation report ESR-2362, comply with the CRC Chapter 8, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report.

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

MITEK INC.

EVALUATION SUBJECT:

MITEK® STABILIZER™

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that the MiTek® Stabilizer™, described in ICC-ES report ESR-2362, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 *Florida Building Code—Building*
- 2023 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The MiTek® Stabilizer™, described in Sections 2.0 through 7.0 of the evaluation report ESR-2362, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2362 for the 2021 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, with the following conditions:

Use of the MiTek® Stabilizer™ has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential*.

For products falling under Florida Rule 61G20-3, 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).

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