

## ICC-ES Evaluation Report

### ESR-2362

Reissued May 2023

*This report is subject to renewal May 2025.*

**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 EVALUATION SCOPE

**Compliance with the following codes:**

- 2021, 2018, 2015, 2012, 2009, and 2006 *International Building Code®* (IBC)
- 2021, 2018, 2015, 2012, 2009, and 2006 *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-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 wood framing members to which the Stabilizer™ is attached must be sawn lumber with a minimum specific gravity 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 as follows:

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

#### 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** A quality-control manual.

## 7.0 IDENTIFICATION

- 7.1** The MiTek Stabilizer™ is labeled with the product name, Stabilizer, and part length (16 or 24). The packaging is labeled with the MiTek name, the

Stabilizer™ stock number, and either the evaluation report number (ESR-2362) or the number of the ICC-ES index evaluation report for MiTek ([ESR-2685](#)).

- 7.2** 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](http://www.mitek-us.com)

TABLE 1—STABILIZER™ ALLOWABLE AXIAL LOADS

Stock No.	Steel Ga.	O.C. Spacing	Allowable Axial Loads (lbs.) <sup>1</sup>		
			Tension	Tension with Nail <sup>2</sup>	Compression
31-16	20	16	105	155	420
31-24	20	24	105	155	420

For SI: 1 pound = 4.448 N.

<sup>1</sup>Wood framing must have a minimum specific gravity of 0.42.

<sup>2</sup>Fastener must be one 8d or 10d common wire nail installed through one of the tooth slots of each web tab (see Figure 1).

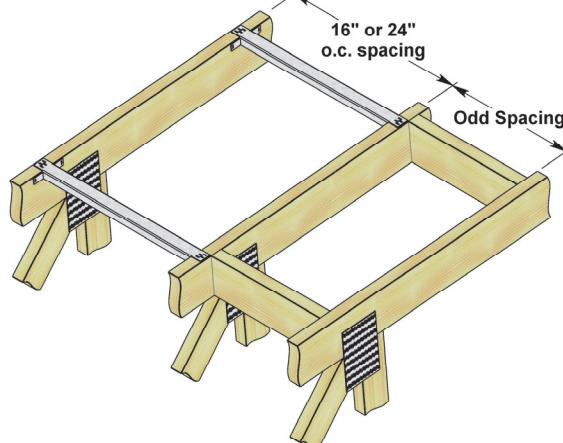
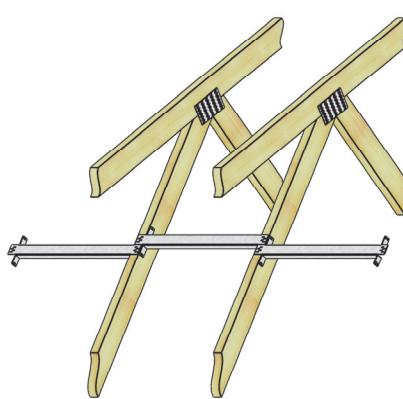
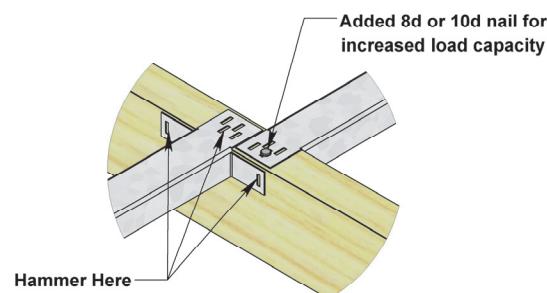
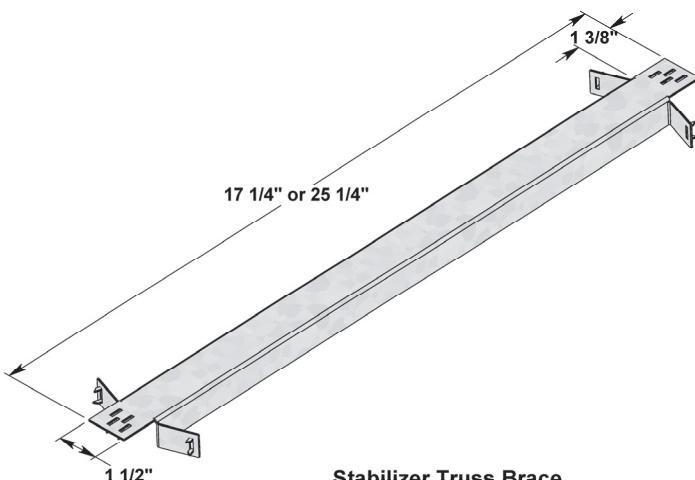


FIGURE 1—STABILIZER™ TRUSS BRACE AND TYPICAL INSTALLATIONS

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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 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.

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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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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 and 2020 Florida Building Code—Building
- 2023 and 2020 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*, provided the design requirements are 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 and 2018 *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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