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Hilti, Inc.  
7250 Dallas Parkway, Suite 1000  
Plano, TX 75024

Attn: Hilti Technical Support  
(877)-872-6000

RESEARCH REPORT: RR 25296  
(CSI # 05 05 23)

BASED UPON ICC EVALUATION SERVICE  
REPORT NO. ESR-2197

REEVALUATION DUE  
DATE: March 1, 2018  
Issued Date: April 1, 2016  
Code: 2014 LABC

**GENERAL APPROVAL** – Reevaluation/Clerical Modification – Hilti X-HSN 24, X-ENP-19-L15, X-EDN19-THQ12 or X-EDNK22-THQ12 Fasteners and Self-Drilling Screws, Button Punches for Steel Deck and Concrete-Filled Diaphragm Attachment

## DETAILS

The above assemblies and/or products are approved when in compliance with the use, description, design, installation, conditions of use, and identification of Evaluation Report No. ESR-2197, reissued December 1, 2015, of the ICC Evaluation Service, Incorporated. The report, in its entirety, is attached and made part of this general approval.

The parts of Evaluation Report No. ESR-2197 marked by an asterisk are modified or deleted by the Los Angeles City Building Department from this approval.

### The approval is subject to the following conditions:

1. The following information shall be indicated on the plans to be reviewed by Structural Plan Check:
  - a. Cross-section details of the deck units.
  - b. Fastener details, at support, diaphragm boundaries, unit sides (if required), and for shear transfer elements.
  - c. Length of deck units.
  - d. Design shears.

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Hilti, Inc.

RE: Hilti X-HSN 24, X-ENP-19-L15, X-EDN19-THQ12 or X-EDNK22-THQ12 Fasteners and Self-Drilling Screws, Button Punches for Steel Deck and Concrete-Filled Diaphragm Attachment

2. Diaphragm shear values in the tables shall not be increased one-third for seismic or wind loading.
3. Where the diaphragm is used to provide wall anchorage, the end and side seam connections shall be structurally analyzed to determine whether they are adequate for this purpose.

## **DISCUSSION**

The Clerical Modification changes the address and contact phone number.

The report is in compliance with the 2014 Los Angeles City Building Code.

The approval is based on tests in accordance with ICC-ES Acceptance Criteria for Steel Deck (AC43), dated October 2010 (revised September 2013) and Fasteners Power-driven into Concrete, Steel and Masonry Elements (AC70), dated February 2013.

This general approval will remain effective provided the Evaluation Report is maintained valid and unrevised with the issuing organization. Any revision to the report must be submitted to this Department for review with appropriate fee to continue the approval of the revised report.

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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QN  
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TLB1600045  
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Attachment: ICC ES Report No. ESR-2197 (24 Pages)