## CITY OF LOS ANGELES

**CALIFORNIA** 

DEPARTMENT OF **BUILDING AND SAFETY** 201 NORTH FIGUEROA STREET

LOS ANGELES, CA 90012

**VAN AMBATIELOS** PRESIDENT

BOARD OF

**BUILDING AND SAFETY** 

**COMMISSIONERS** 

JAVIER NUNEZ VICE PRESIDENT

ELVIN W. MOON

JOSELYN GEAGA-ROSENTHAL **GEORGE HOVAGUIMIAN** 

**ERIC GARCETTI MAYOR** 

OSAMA YOUNAN, P.E. GENERAL MANAGER SUPERINTENDENT OF BUILDING

ITW Building Components Group, Inc. 13825 West Business Center Drive, Unit A Lake Forest, IL 60045

RESEARCH REPORT: RR 24201

(CSI 06 17 53)

BASED UPON ICC EVALUATION SERVICE REPORT NO. ESR-1118

Attn: Stuart L. Lewis (847) 918-6473

REEVALUATION DUE

DATE: June 1, 2022 Issued Date: April 1, 2020 **2020 LABC** Code:

GENERAL APPROVAL - Technical Modification and Reevaluation - Alpine Wood Truss Connector Plates.

## **DETAILS**

The above assemblies and/or products are approved when in compliance with the use, description, design, installation, conditions of approval, and identification of Report No.ESR-1118, reissued January 1, 2019, of the ICC Evaluation Service, LLC. The report, in its entirety, is attached and made part of this general approval.

## The approval is subject to the following conditions:

- 1. Trusses utilizing these connector plates shall be fabricated in the shop of a licensed fabricator, approved by the Department.
- 2. All member ends to be connected shall be accurately cut and tightly fitted.
- 3. The plates shall be installed in pairs on opposite faces of members connected.
- 4. Each connector plate shall be identified as required by TPI 1 on Section 7 of Report No. ESR-1118.

RR 24201 Page 1 of 3 ITW Building Components Group, Inc

RE: Alpine Wood Truss Connector Plates

- 5. Trusses and connectors shall be designed in accordance with recognized engineering principles by a civil or structural engineer or architect licensed by the State of California. Plans and calculations shall be submitted to Structural Plan Check for their approval.
- 6. Connector size and location with respect to the edges and ends of wood members connected at each joint shall be completely detailed on the approved plans for each job.
- 7. Allowable lateral resistance values for the metal connector plates installed at the heel joint of a truss must be reduced in accordance with Sections 2303.4.6 and 2306.1 of the 2020 Los Angeles City Building Code. Heel joint applications shall be limited to trusses up to a maximum 35 foot span and a maximum truss spacing of 24 inches on center.
- 8. For use of the connectors on trusses with clear spans exceeding 38 feet, the allowable load of the connectors shall be two-thirds (½) of the values indicated in Table No. I of Evaluation Report No. ESR-1118. The connectors shall <u>not</u> be installed in members of trusses with clear spans exceeding 50 feet.
- 9. Stresses on the net steel section of the steel material of the plate shall not exceed the allowable stress in tension or shear, as permitted in Chapter 22 of the 2020 Los Angeles City Building Code.
- 10. The allowable connector loads for directions of load at angles between 0 to 90, with respect to the length of the plate, may be established by linear interpolation between the values for 0 and 90.

## **DISCUSSION**

The technical modification is to capture ICC-E.S. Evaluation Report, ESR-1118 and to capture compliance with the 2020 Los Angeles Building Code.

The report is in compliance with the 2020 Los Angeles Building Code.

This report is based on tests and analyses in accordance with the National Design Standard for Metal Plate Connected Wood Truss Construction, ANSI/TPI 1 and the ICC-ES Acceptance Criteria for Metal Hinge Plate Connectors for Wood Trusses (AC283), approved November 2015 (editorially revised April 2018) for Alpine hinge metal connectors.

This general approval will remain effective provided the Evaluation Report is maintained valid and unrevised with the issuing organization. Any revisions to the report must be submitted to this Department, with appropriate fee, for review in order 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.

ITW Building Components Group, Inc RE: Alpine Wood Truss Connector Plates

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.

DAVID CHANG, Chief Engineering Research Section 201 N. Figueroa St., Room 880 Los Angeles, CA 90012 Phone - 213-202-9812 Fax - 213-202-9943

EB RR24201 TLB2000065 R04/10/2020 2303/2304.4.2/2306.1

Attachment: ICC ES Report No. ESR-1118 (7 Pages)