

Technical Evaluation Report

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DIVISION: 05 00 00-METALS
SECTION: 05 05 23-METAL FASTENINGS

THIS DOCUMENT CONTAINS (2) PAGES: THE FIRST PAGE MUST BEAR AN ORIGINAL SIGNATURE & SEAL OF THE CERTIFYING PE TO BE VALID FOR USE

(Issued August 21, 2018 Subject to Renew August 21, 2020)
(or next code cycle change)

EVALUATION SUBJECT: 8" Post to Beam Items #: 56610 (P2B-LS-8) 51710 (P2B-IW-8)

TER-6759

2015 International Building Code

REPORT HOLDER:

OZCO BUILDING PRODUCTS
216 N. INTERURBAN
RICHARDSON, TEXAS 75081
(469) 916-7503 | OZCOBP.COM

SCOPE OF EVALUATION (compliance with the following codes):

This Product Evaluation Report is being issued in accordance with the requirements of the 2015 International Building Code for generic use within the state seal shown per Section 104.11. The product noted on this report has been tested and/or evaluated as summarized herein. Re-evaluation of this product shall be required following pertinent International Building Code and local state code modifications or revisions.

SUBSTANTIATING DATA:

• Product Test Reports

Uplift and download forces and torsional moment for structural performance has been tested using the methods described by ASTM D 1761 Standard Test Methods for Mechanical Fasteners in Wood as per test report # D6706.01-119-16 by Architectural Testing, Inc (Report date: 06/13/14).

• Structural Engineering Calculations

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

Maximum allowable uplift capacity
Maximum allowable gravity capacity
Maximum torsional moment capacity
Anchor capacity
No 33% increase in allowable stress has been used in the design of this product.

INSTALLATION:

The product listed above shall be installed in strict compliance with the Product Evaluation Document (i.e. engineering drawing from the test report), along with all components noted therein.

The product components shall be of the material specified in the Product Evaluation Document. Bolts and screws must be installed in accordance with the applicable provisions in the NDS and anchor manufacturer's published installation instructions.

Full engagement shall be provided when connecting the steel flanges (lips) together for full capacity (leave 1/8" minimum length of uncovered lip past the outer steel plane surface).

LIMITATIONS & CONDITIONS OF USE:

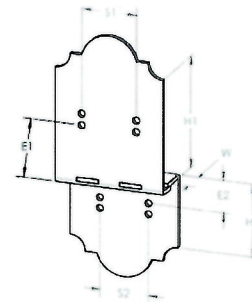
Use of this product shall be in strict accordance with the Product Evaluation Documents as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in this report. Host structure conditions which are not accounted for in this product's respective anchor schedule shall be designed for on a site-specific basis by a registered Professional Engineer.

Adjustment factors noted herein and all applicable codes shall be considered by the installer, where applicable.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Installer is responsible to protect against dissimilar materials.

Fasteners, including nuts and washers, for use in exterior conditions and in contact with preservative-treated wood or for fire-retardant-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Wood screws and lag screws shall be permitted to be of mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B 695, Class 55 minimum.



POST TO BEAM CONNECTOR

The post to beam connector architectural line provides an additional fastener to the bottom of joist and the final aesthetic finish, eliminating any further paint steps.

MATERIAL: Shall be 7 gauge steel (see Table 1) in accordance with ASTM A653 Grade 33 with minimum yield strength, $F_y = 33$ ksi and a minimum tensile strength, $F_u = 45$ ksi.

FINISH: Comprised of powder coated, hot dip galvanized steel conforming to ASTM A153.

ORIGINAL SIGNATURE AND RAISED SEAL
OR DIGITAL SEAL REQUIRED TO BE VALID PER CODE:

CA SEAL
Enrique Matta, P.E.
ERM CONSULTING INC.
PE# C55863

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INSTALLATION: Use all specified fasteners. Assembly kit includes fasteners for uniform finishing. See General Notes.

Use of post to beam connectors with engineered wood products and different wood species other than listed herein as Southern Yellow Pine (specific gravity, $G=0.55$) or Douglas Fir-Larch (specific gravity, $G=0.50$) are not covered under this report and shall be evaluated by a registered Professional Engineer. 6"x6" minimum wood post size and 2"x8" minimum wood beam size are required.

Use one drill for 3/8" dia. threaded rod and another drill for 1 1/16" dia. coupler connector with 1/16" maximum greater drill diameter.

Install the two-part assembly providing full engagement of lips at bearing base to obtain full load capacity. 1/8" past outer steel plane, min.

OPTIONS: For specific scenarios contact OZCO for custom solutions. Extended bottom flange also available.

Table 1: 8" Post to Beam Capacities

MODEL No.	MATERIAL	DIMENSIONS (IN)							FASTENERS			ALLOWABLE LOADS -DF/SP (LBS)			
		W	H1	H2	E1	E2	S1	S2	ANCHOR		QTY.	UPLIFT (160)	FLOOR (100)	SNOW (115)	ROOF (125)
P2B-LS-8	7 Ga	1-9/16	4-5/8	3	2-1/2	1-1/2	2-1/2	2-1/4	POST	1/4"x2-3/4" Screws	4	1,293	810	932	1,013
									BEAM	1/4"x3-3/4" Screws	4				
P2B-IW-8	7 Ga	1-9/16	4-5/8	3	2-1/2	1-1/2	2-1/2	2-1/4	POST	1/4"x2-3/4" Screws	4	1,293	810	932	1,013
									BEAM	1/4"x3-3/4" Screws	4				

GENERAL NOTES:

1- The tabulated allowable loads shown are based on Allowable Stress Design (ASD) and it is for a post to beam connector assembly with two connectors installed (one at each side of post). Loads have been increased for wind or earthquake loading, floor, snow or roof applications accordingly to load duration factor, CD under the 2015 National Design Specification for Wood Construction (NDS) with no further increase allowed. Load reduction may apply where other loads govern.

2- Tabulated allowable loads shown apply to connections into wood used under dry conditions with moisture content equal or less than 19% and where sustained temperatures are 100°F (37.8°C) or less. The allowable loads must be adjusted by the applicable factors for wet service conditions and higher temperatures in accordance with the National Design Specification for Wood Construction (NDS)

3- Screws provided with hex washer head lag bolts with 1-1/2" dia. hex washer cap plug. Minimum bending yield strength, $F_y = 70,000$ psi and ultimate tensile strength, $F_u = 74,000$ psi, inch thread penetration.

4- Designer shall consider effects on strength of lumber from new preservative treatments or fire-retardant treatments other than under National Design Specification for Wood Construction (NDS).

5- Screw penetration is into solid wood and does not include thickness of any finishes.

6- Wood post to be flush to wood beam or shall provide 2-3/4" minimum edge distance from upper anchor.

NOTES:

1- Uplift and gravity loads capacity shall be based on the member design calculated per code.

2- This product is not designed for welded or nailer applications.

LIMITATIONS & CONDITIONS OF USE:

Use of this product shall be in strict accordance with this TER as noted herein.

The supporting host structure shall be designed to resist all superimposed loads as determined by others on a site specific basis as may be required by the Authority Having Jurisdiction. Host structure conditions which are not accounted for in this product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer. No evaluation is offered for the host supporting structure by use of this document; Adjustment factors noted herein and the applicable codes must be considered, where applicable. All supporting components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Fasteners must penetrate the supporting members such that the full length of the threaded portion is embedded within the main member. This evaluation does not offer any evaluation to meet large missile impact debris requirements which typically are not required for this type of product.

IN ALL CONDITIONS IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER TO ENSURE THE HOST STRUCTURE IS CAPABLE OF WITHSTANDING THE RATED GRAVITY, LATERAL, AND UPLIFT FORCES BY SITE-SPECIFIC DESIGN. NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, IS OFFERED BY THIS ENGINEER AS TO THE INTEGRITY OF THE HOST STRUCTURE TO CARRY DESIGN FORCE LOADS INCURRED BY THIS UNIT.