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RESEARCH REPORT: 25730
(CSI # 06 12 19)

BASED UPON ICC EVALUATION SERVICE
REPORT NO. ESR-2652

REEVALUATION DUE
DATE: October 1, 2018
Issued Date: April 1, 2017
Code: 2017 LABC

GENERAL APPROVAL – Clerical Modification- Strong-Wall® SB Shear Panel

DETAILS

The above assemblies and/or products are approved when in compliance with the use, description, design, installation, conditions of use, and identification in Report No. ESR-2652, reissued April 1, 2016, of the ICC Evaluation Service, LLC. The report, in its entirety, is attached and made part of this general approval.

The parts of Report No. 2652 marked by the asterisks have been deleted or revised by the City of Los Angeles Building and Safety Department from this approval.

The approval is subject to the following conditions:

1. The Strong-Wall® SB Shear Brace may be used for wood framed buildings classified as Type V construction. The Strong-Wall® SB Shear Panel installation may be used in stacked, 2-story construction using an MSK (Multi-story Kit) when the lower story is placed on a concrete foundation.
2. ASD design loads and drifts shall not exceed the allowable loads and drifts noted in the report.
3. Building design calculations and details shall be prepared by an engineer or architect licensed in the state of California and approved by the structural plan check engineer.

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4. Continuous inspection by Deputy Inspectors shall be provided during installation of hold-down anchor bolts prior to pouring concrete.
5. For seismic design of Strong-Wall® Shear Brace, the following design coefficients and factors shall be utilized:

Response modification coefficient, R	6.5
System overstrength factor, Ω_0	3
Deflection amplification factor, Cd	4

6. When designing with Strong-Wall® SB Shear Panel the engineer of the record shall check:
 - All beams under the Strong-Wall® SB Shear Panel for uplift and overturning.
 - Foundation design for overturning, compression and tension.
 - The allowable vertical load on header.
 - The hold-down bolt capacity based on reduced edge and end distances detailed on plans.
 - The drag force at top plates from lateral force distribution in the same shear wall line.
 - Bearing pressure to the sill plate when there are additional vertical loads on top of the Strong-Wall® Shear Brace.
7. When Strong-Wall® SB Shear Panel are used in line with other types of panels, only one type shall be considered as the lateral resistance element, except approved by structural plan check on a case by case basis.
8. When braced wall panels are required by Section 2308 of the 2017 City of Los Angeles Building Code, Strong-Wall® SB Shear Panel can be used only if engineering calculations are provided.
9. Gap between the panel and the header beam/girder shall not be permitted. Lumber for the header or solid filler pieces shall have moisture content not more than 19% at the time it is fastened to the panel.
10. Panels located in exterior walls shall be covered with an approved weather-resistant exterior wall envelope complying with Section 1403 of the 2017 city of Los Angeles Building code.
11. Structural Observation shall be required for the construction of all Portal Frames.
12. The Portal Frame header must be designed for the load combinations specified in Section 1605 of the 2017 Los Angeles City Building Code. Concrete Grade Beam shall be designed to resist the moment of the Portal Frame.

13. Each 18-inch wide brace, 9-ft high, and each 24-inch-wide brace up to 10-ft high may replace on a one-to-one basis, each 4 feet of braced wall panel or each length of alternate braced wall panel specified in Table R602.10.4 of the 2017 Los Angeles Residential Code (LARC). Strong-Wall® SB Shear Panel not meeting this width requirement may be used when an engineered design is provided in accordance with Section R301.1.3 of the 2017 Los Angeles Residential Code.
14. Panels must be installed with the published installation instructions by the manufacturer.
15. Fabrication of Strong-Wall® SB Shear Panel shall be in a shop of a fabricator licensed by the City of Los Angeles Building Department, in accordance with the Manufacturing Standards submitted to the Department.
16. All products involving welding shall be fabricated in the shop of a Los Angeles City licensed fabricator.
17. Test data verifying the properties of the steel, by the mill or by an approved testing agency, shall be obtained for each shipment. The data shall be kept on file and submitted to the Department upon request.

DISCUSSION

The clerical modification is to update the report to the 2017 City of Los Angeles Building Code.

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

The approval is based on data in accordance with the ICC-Acceptance Criteria for Prefabricated Wood Shear Panels (AC-130), dated January 2013 and data in accordance with the ICC-ES Acceptance Criteria for Joist Hangers and Similar Devices (AC13), dated June 2015. Additional data was submitted for the anchorage to concrete in accordance with ACI 318-11.

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.

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.

Simpson Strong-Tie Co., Inc.
Re: Strong Wall[®] SB Shear Panel

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.

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Attachment: ICC ES Report No. ESR-2652 (40 Pages)