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CALIFORNIA



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RESEARCH REPORT: RR 2725
(CSI # 03 15 00)
BASED UPON ICC ES EVALUATION
REPORT NO. ESR-2856

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

GENERAL APPROVAL - Reevaluation - Nelson Shear Connector Studs

DETAILS

The above products are approved under the use, description, design, installation, conditions of use, and identification in Evaluation Report No. ESR-2856 reissued October 1, 2015 of the ICC Evaluation Service, Incorporated. The report, in its entirety, is attached and made part of this general approval.

The approval is subject to the following conditions:

1. The design of composite members with shear connectors shall comply with the 2014 Los Angeles City Building Code.
2. Through-steel deck applications are limited to the following:
 - a) Three-quarter-inch diameter stud through one layer of no. 16 gage or thinner decks with a maximum 1.25-ounce-per square-foot galvanization complying with ASTM A 525, Class G90.
 - b) Three-quarter-inch diameter stud through two layers of no. 20 gage or thinner decks with a maximum 0.6-ounce-per-square-foot galvanization on each deck layer complying with ASTM A 525, Class G90.

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3. Installation of the Nelson Studs shall comply with this report, the manufacturer's instructions, Information Bulletin P/BC 2014-046, and the following:
 - a. The studs shall be installed only by operators qualified in accordance with AWS D1.1 Section 7.7.4 and who are thoroughly familiar with the installation equipment. A copy of the operating instructions for the equipment shall be at the job site at all times.
 - b. Any stud with weld showing less than a 360 degree flash shall be replaced or repaired in accordance with AWS D1.1 Section 7.7.3 and 7.7.5. Before welding a new stud where a defective one has been removed, the area shall be ground smooth and flush, or in the case of a pullout of the base metal, the pocket shall be filled with weld metal using the shielded metal arc process with low hydrogen welding electrodes and then ground off flush..
4. Special inspection in accordance with Section 1705.2 and 1705.3 of the 2014 Los Angeles City Building Code shall be provided for the welding of the Studs.
5. The approval includes Type CPL and CFL Studs of the same diameters (and diameters that are smaller by less than 1/8-inch) specified in the attached ICC-ES evaluation report. Use of the type CPL and CFL studs, Nelson standard threaded studs, as connectors shall be limited to the following allowable stresses on the net section of the studs:

13,600 psi shear
20,000 psi tension

DISCUSSION

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

The approval is based on Manufacturer's Stud Base Qualification Tests specified in AWS D1.1 Section 7.

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.

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.

Nelson Stud Welding, Inc.
RE: Nelson Shear Connector Studs

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-2856 (2 Pages).