

ESR-1579

ESR-1579 governs “Power-driven staples and nails for use in all types of building construction”. It lists the earthquake resisting capabilities of nails and staples manufactured by members of the International Staple, Nail and Tool Association (ISANTA). This document contains "Design Values and Allowable Load Tables" for individual nails and staples as well as for nailed or stapled shear walls that may not be listed in the International Building Code. ESR-1579 is available at the ICC website at: http://www.icc-es.org/reports/pdf_files/NES/Ner272.pdf

It is commonly used to determine the earthquake resistance of atypical designs using nails or staples. For example, if a designer needs to staple two pieces of wood together and also wants to know how much earthquake resistance (lateral load) this connection has. ESR-1579 may contain a table that lists lateral load values for staples that cannot be found in the International Building Code. This document also gives engineers various formulas they need to calculate the earthquake resistance of fasteners not listed in one of the ESR-1579 tables. Along with the hardware found in the Simpson Strong-Tie Catalog, nails and staples are the most common products used in wood frame seismic retrofit work. Anyone wishing to do this kind of work therefore needs to be familiar with ESR-1579.

ESR-1579 is published by the International Code Council (ICC) and is recognized as complying with the requirements of the International Building Code and the International Residential Code and the 1997 International Building Code.

ESR-1579 published values are either values found in tables in ESR-1579 or are values that have been “calculated” using the tables in ESR-1579 and modified through the use of engineering formulas.