



## **INTERIM POLICY ON MANUFACTURED NARROW SHEAR PANELS**

### ***BACKGROUND***

The County of Los Angeles Division of Building and Safety requires International Code Council (ICC) evaluation service report approval prior to the acceptance of manufactured products. ICC-ES is currently in the process of updating acceptance criteria and evaluation reports for manufactured narrow shear panels (MNSP) in order to show compliance with the 2006 International Building Code.

Since ICC reports for MNSP will not be available for several more months, the following guidelines shall be used to approve products such as Simpson strong walls, Hardy frames, TJ shear panels, etc. when the seismic design of a project is based on the 2008 L.A. County Building Code.

### ***INSTALLATION ACCEPTANCE CRITERIA***

Until test results and approval from ICC are available for review and evaluation, manufactured narrow shear panels are recommended for approval only when meeting **all** of the following installation and calculation criteria:

1. The panel may be installed only on the first and/or second story of light-framed construction.
2. Panels installed on the first story only, may be placed directly on the foundation, on a nut and washer with dry-pack, on a mudsill, or on a raised foundation, but *not* on a cripple wall.
  - A. Panels installed on a raised foundation shall be supported by full depth engineered lumber blocking or rim not less than nominal 4" in width that extends not less than 6" beyond the width of the wall. Bearing plates shall be installed where required by the wall manufacturer.
3. Panels may be stacked in a two-story configuration directly above one another, with the following requirements:
  - A. The panel on the first level shall be placed directly on the foundation and *not* on a sill plate or raised floor. The blocking or rim between floors shall be full depth engineered lumber blocking or rim not less than nominal 4" in width that extends not less than 6" beyond the width of the wall.
  - B. The panels shall be the same width and not less than 24". (i.e., 12", 15", 16", 18", and 21" stacked panels are not permitted.)
  - C. The hold-downs and through floor connector shall ensure that both panels act as one system.
4. Panels may be installed on the second level *without* a matching MNSP directly below only if the panel is at least 32" wide. All supporting horizontal framing shall be engineered lumber and appropriately designed by the engineer of record.

Structural irregularities and elements supporting discontinuous systems shall be designed to meet the requirements of ASCE 7-05 Section 12.3.3.

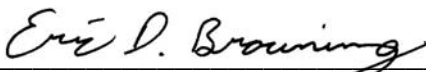
5. All installations shall use the respective manufacturer's approved anchor bolt template, and, except as modified herein, shall be installed per the approved manufacturer's installation instructions and specifications.
6. Structural observation by the engineer of record is required for anchor bolts, hold downs, and top and bottom connections for all MNSP.
7. A gap between the top of the panel and the header beam/girder shall not be permitted. Wood for the header shall be engineered lumber and have a moisture content of not more than 19% at the time it is installed.

### **CALCULATIONS ACCEPTANCE CRITERIA**

1. Design of the system shall be based on  $R = 4.5$ ,  $\Omega_o = 2.5$ , and  $C_d = 4$ .
- (3) If manufactured narrow shear panels are used in line with other types of walls (such as conventional wood sheathed structural panels), only one type of wall shall be considered as the lateral force resisting system on that line.
- (4) All MNSP shall be designed to fall within allowable code drift limitations including consideration for compression and crushing of wood members and change in moisture content.

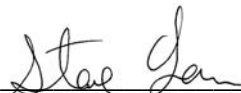
This policy is effective August 14, 2008 and shall remain in effect until repealed and replaced by the Building Plan Check and Research Sections. Contact Steve Lam, Fady Khalil, or Eric Browning, with any questions at 626-458-3173.

WRITTEN BY:



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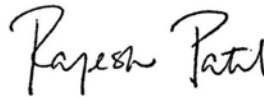
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