2006 SRC Code Solution
Sec. R104.9
SIPs as Shear Walls
Release Date: January 23, 2009

The following interpretation, policy or code alternate is intended to provide guidance to staff for consistency of review and is subject to change without notice. Application of this interpretation, policy or code alternate to specific projects may vary.

Code Issue:

Structural insulated panels (SIPs) have not received product approval by ICC Evaluation Services for use as shear walls in seismic design category D. Does DPD allow the use of SIPs as shear walls?

Code Alternate:

Yes, subject to providing, at application, the following:

- A completed Code Alternate Request form requesting the use of SIPs as shear walls, as an alternate to typical wood framed shear walls.
- A lateral design prepared by an engineer licensed in the State of Washington. The engineer of record shall be a structural engineer, or may be a civil engineer if the project does not require a structural engineer. The drawings, however, do not require a stamp unless otherwise required in the Code.
- A statement sealed by the engineer of record indicating that the SIP product, based on results contained in a test report*, is found to be equivalent to wood framed shear walls, in terms of strength, effectiveness, durability and safety for seismic design category D.
- SIP information and details on the plans, such as the SIP product name, manufacturer and connection details.

*The test report must be based on ICC-ES Acceptance Criteria AC04, prepared by an accredited testing agency, and indicate either approval of the SIPs for use in all seismic design categories or equivalency of the SIPs to code compliant wood framed shear walls in seismic design category D.

The structural insulated panels proposed for a project are still required to comply with all of the requirements outlined in the most current ICC-ES report for the product.

Special inspections will be required for SIP assemblies used as shear walls.

If you have questions about whether this code solution applies to your project:
- If you have submitted a permit application, contact the Building Code plan reviewer assigned to your application
- If you have not submitted an application, contact DPD Building Code Technical Support at 206-684-4630 or in person at the Applicant Services Center. Visit the Applicant Services Center website for more information about hours and location http://www.seattle.gov/dpd/Permits/Process_Overview/Location_Hours/default.asp