

STRUCTURAL REPORT

STRUCTURAL SYSTEMS AND BUILDING SAFETY NEWS

CODE UPDATE

NEW 2009 IBC REQUIREMENTS FOR SOLE PLATE ANCHORAGE OF SHEAR WALLS

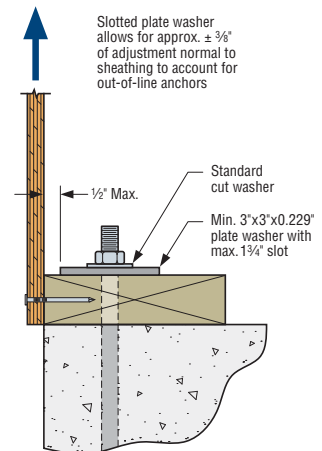
Since the 1997 Uniform Building Code, plate washers and 3x sole plates have been used in high seismic regions to limit splitting along the length of the sole plate at shear-resisting anchor rods. Recent cyclic testing has led to important changes to the sole plate and shear



anchorage requirements under the 2009 International Building Code (IBC).

The first change deals with the size of the sole plate. The 2006 IBC (Section 2305.3.11) required the use of a 3x sole plate for certain seismic conditions. This entire section was removed in the 2009 IBC, which now references the 2008 Special Design Provisions for Wind and Seismic (SDPWS-08). Based on tests of both 2x and 3x sole plates, the SDPWS-08 permits a 2x sole plate for all applications but requires the sheathed edge to be supported with a plate washer, regardless of sole plate size.

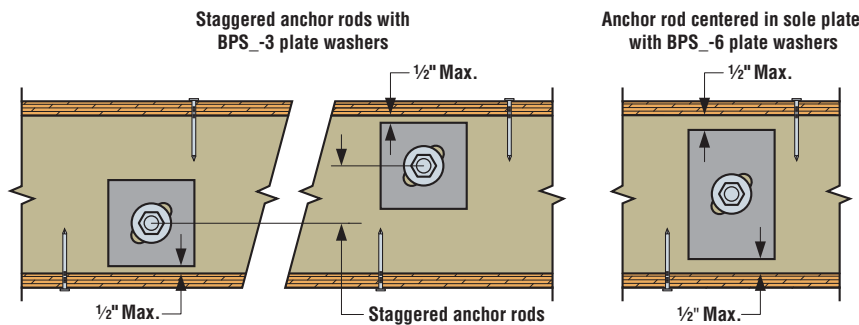
The second change requires the use of a plate washer for anchor rods resisting in-plane shear forces from wind or seismic loads, with a few exceptions outlined in SDPWS-08 Section 4.3.6.4.3. This is a new requirement for wind and is intended to create a ductile failure limit state.



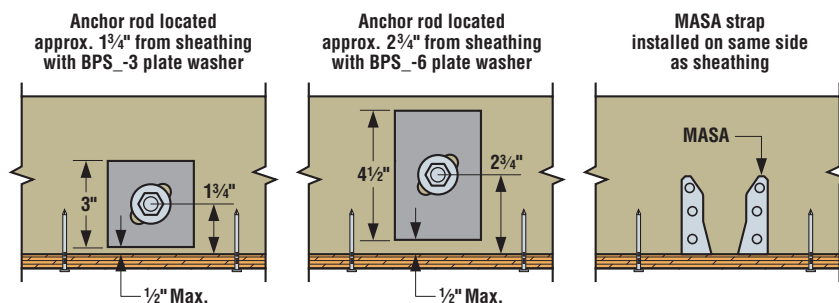
When a plate washer is required, it must be a minimum of 0.229"x3"x3" and must extend to within 1/2" of the sheathed edge of the sole plate. Slots are permitted in the plate washer to allow for a tolerance in anchor rod placement.

The 3x3 plate washer size works well with a 2x4 sole plate but when used with a 2x6 sole plate, it requires the anchor rod to be offset toward the sheathed edge. If the wall is sheathed on both sides, a staggered bolt pattern is required. The SDPWS-08 commentary suggests simply using larger plate washers, such as the new Simpson Strong-Tie® BPS-6 sizes, when anchor

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Shear Anchor Options for 2x6 Wall Sheathed on Both Sides



Shear Anchor Options for 2x6 Wall Sheathed on One Side

Model No	Thickness	Dimensions		Bolt Dia.
		W	L	
BP1/2-3	0.229	3	3	1/2
BP3/8-3	0.229	3	3	3/8
BPS1/2-3	0.229	3	3	1/2
BPS3/8-3	0.229	3	3	3/8
BPS1/2-6	0.229	3	4 1/2	1/2
BPS3/8-6	0.229	3	4 1/2	3/8
BPS3/4-6	0.229	3	4 1/2	3/4

NEW
NEW
NEW

- Standard cut washer required with BPS -3 or BPS -6 models (not provided) per the 2009 IRC and IBC.
- Available uncoated or with a hot-dip galvanized coating.
- The BP1/2 and BP3/8 are not slotted.

PRODUCT NEWS

THREE NEW FASTENER PRODUCTS LAUNCHED THIS FALL

Simpson Strong-Tie expands its screw product line with the introduction of three new structural fasteners for wood-to-wood and deck applications.



Strong Drive® SDWS ledger screw
Designed for securing deck ledgers, this low-profile, 0.22" diameter fastener is a safe, high-strength alternative to through-bolting and traditional lag screws. Featuring a patented 4-cut tip that eliminates pre-drilling and a unique thread design that provides superior holding power, the SDWS screw features a double-barrier coating to protect

against corrosion in preservative-treated wood applications.

Strong Drive® SDWH hex-head screw
Intended for structural and general-purpose fastening, the SDWH is a 0.195" diameter hex-head screw that requires less torque than comparable fasteners, making it easier to drive. With a corrosion-resistant coating, the SDWH is suitable for interior applications and exterior, preservative-treated wood applications.

Dexxter™ coated carbon-steel screw
Specifically designed for composite and encapsulated-composite decking, the new carbon-steel Dexxter™ fastener eases installation and offers a cleaner, less noticeable fastening solution. The screw's Type-17 tip easily pierces composite for faster starts while its Quik Guard® coating makes it suitable for use with many preservative-treated wood substrates. The Dexxter screw is available in several shades to match popular composite decking colors and is an approved fastener for the Trex® Transcend® decking and railing system.



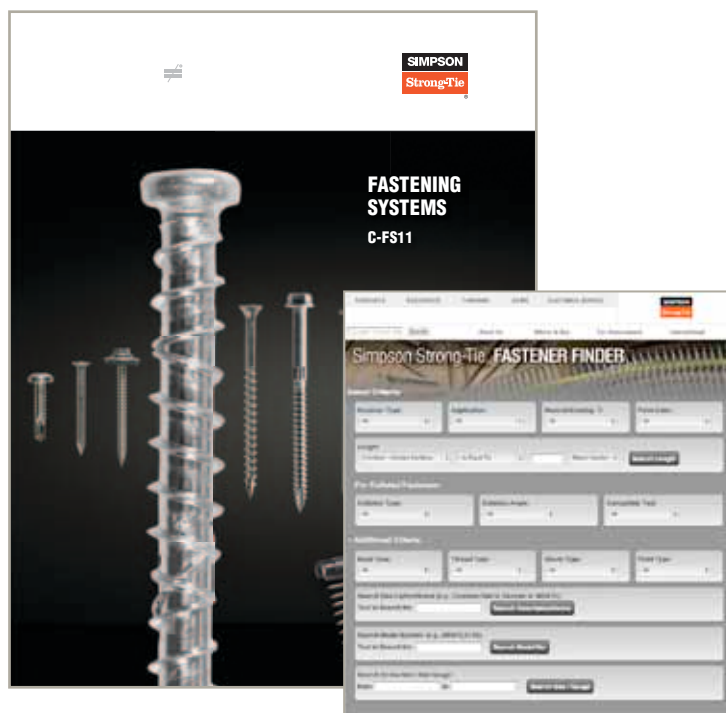
For more information about these and other fastening solutions, visit www.strongtie.com/fasten. ■

FASTENERS AT YOUR FINGERTIPS – NEW CATALOG AND ONLINE TOOL

The new 195-page *Fastening Systems Catalog* showcases our complete offering of structural, corrosion-resistant, stainless-steel and collated fasteners as well as our entire line of Quik Drive® auto-feed screw fastening systems.

In addition, Simpson Strong-Tie has launched its Fastener Finder. This online search tool provides customers with a quick and convenient way to search our wide array of fasteners. The search feature includes multiple criteria, such as application, fastener-type, finish/material and model number, so users can explore and find the right fastener for their project.

Bookmark www.strongtie.com/fastenerfinder. ■



WORKSHOPS & TRAINING

SOUTHEAST

Effective Selling with Simpson Strong-Tie Anchor Systems
McKinney, Texas Thursday, December 15

Introduction to Simpson Strong-Tie Anchor Systems Workshop
McKinney, Texas Wednesday, December 14

For more information regarding workshop content and for a complete schedule, visit the **Workshops and Training** section of our website at www.strongtie.com/workshops.

COMPANY NEWS

SIMPSON MANUFACTURING CO., INC. ANNOUNCES NEW CHAIRMAN AND CEO

Simpson Manufacturing Co., Inc. recently announced changes to its senior leadership team. Tom Fitzmyers, current President and CEO, will move to the role of Chairman. The Chairman's role is currently held by Barclay Simpson, the founder of the company. Simpson will move to the position of Chairman Emeritus and remain on the company's Board of Directors.

Fitzmyers has been with Simpson Manufacturing Co. since 1978 and has led the company as CEO since it went public in 1994. As Chairman, he will assume responsibility for investor relations.

Assuming Fitzmyers' role as President & CEO is Karen Colonias, current CFO and a 27-year veteran of the company. Colonias has played a significant role in the development and execution of the company's strategic business plans and directed the company's

acquisition efforts. In her new position, Colonias will lead the company as it continues its expansion beyond residential construction products into the commercial building products category.

Terry Kingsfather will continue in his role as President & CEO of Simpson Strong-Tie Company Inc., the largest subsidiary of Simpson Manufacturing Co. Kingsfather, who has been with the company for 32 years and has served as President & CEO for the last five, has successfully led the company through some of the most challenging times in the industry. He will continue to lead the sales and marketing efforts for Simpson Strong-Tie as the company places more emphasis on growing its product offering and brand name worldwide.

All new positions will be effective as of January 1, 2012. ■

BRAND NEWS

GROWING THE BRAND WITH OUR CUSTOMERS

As you may know, Simpson Strong-Tie Anchor Systems® is a part of the Simpson Strong-Tie Company and for the past 15+ years has been successful in reaching customers in the commercial, industrial and infrastructure markets. Today the Anchor Systems product line includes a wide array of adhesives, mechanical anchors, gas and

powder-actuated fastening tools, and drill bits. The company also continues to expand its connector, lateral systems, fasteners and fastening tools product lines.

Simpson Strong-Tie is committed to diversifying its product offering to serve the needs of customers while growing its brand globally. To reinforce that commitment, the company recently made the decision to brand all its product lines under the Simpson Strong-Tie® (orange and black) logo. This means the Anchor Systems (yellow and black) sub-brand will transition to the Simpson Strong-Tie (orange and black) brand. The Simpson Strong-Tie brand has built a 55-year history on strong customer relationships and engineered, tested and field-supported products. The brand transition will combine the strengths of both brands and increase the company's visibility in the commercial, industrial and infrastructure construction industry while making brand recognition easier for customers.

In the coming months, you'll notice a new logo on Anchor Systems literature, signage, packaging, website and other marketing and sales materials. The logo change will not have any effect on customer service or operations - customers will continue to work with the same Anchor Systems sales representative and field engineer and the company will continue to deliver on its promise of In the Specs, On the Job, At your Service™.

From its first days of operation, Simpson Strong-Tie has been dedicated to helping its customers succeed by providing exceptional products, full-service engineering and field support, product testing and training, and on-time product delivery. This is what the brand is built on and it will continue to be the foundation as we help customers' businesses grow and thrive. We look forward to continuing to serve all of you in the coming years. ■



Barclay Simpson

CODE UPDATE

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rods are centered on 2x6 sole plates. As an alternative to anchor rods with or without plate washers, anchor straps, such as a Simpson Strong-Tie® MASA mudsill anchor, may be used. The MASA is listed in ICC-ES report ESR-2555 for use with the 2009 IBC.

When the anchorage for the sole plate needs to be retrofit, a concrete masonry screw, like the Titen HD anchor may be used. For more information on these versatile products, see the "Titen HD® Anchors for Mudsill Applications" flier at www.strongtie.com/literature.

For more information on anchoring shear walls to concrete, see the August 2011 Structural Engineer magazine article at www.strongtie.com/articles. ■



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PRODUCT NEWS

SIMPSON STRONG-TIE TO SUPPLY SOFTWARE AND TRUSS PLATES TO THE U.S. COMPONENT INDUSTRY

Simpson Strong-Tie recently announced that it will supply software systems and truss plates to the U.S. component industry. Mike Bugbee, a 30-year veteran with the company, will be dedicated to developing and leading this business for Simpson Strong-Tie.

The truss and component industry has been an important part of the Simpson Strong-Tie® structural connector business for the past three decades. The company has developed many products that have helped expand the innovative use of trusses in light-frame design. Offering software and truss plates is a natural progression in the company's effort to support the component industry. To read the full news release, please visit strongtie.com/news. ■



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- ▶ **Simpson Manufacturing Co., Inc. Announces New Chairman and CEO**