STEEL STRONG-WALL®: 1st-Story Wood Floor Systems

Steel Strong-Wall® panels designed for use on concrete foundations can be used with wood floor systems by extending the anchor bolts and installing compression nuts and solid blocking below the wall.

MATERIAL & FINISH: See page 10.

CODE: NEW ICC-ES ESR-1679
State of Florida FL5113

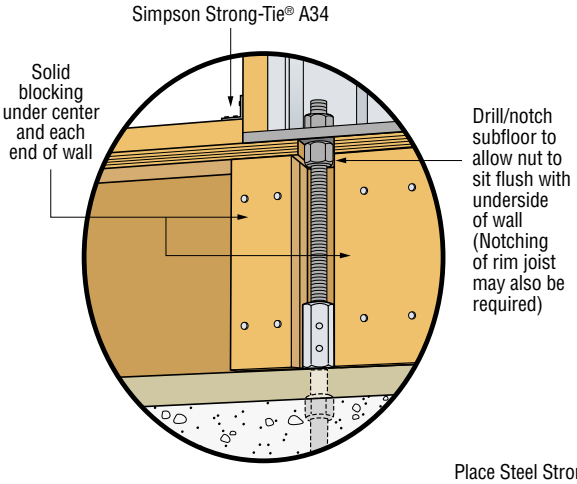
For product data and naming scheme information, see pages 10 and 11.

For a complete set of wall profile drawings, see page 10.

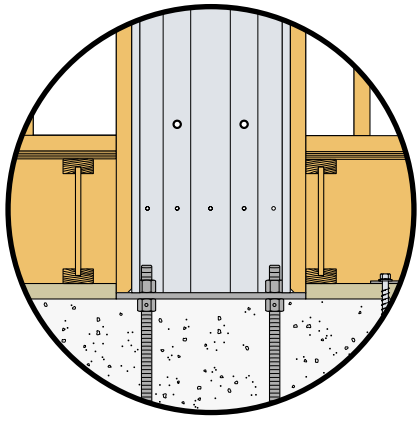
WOOD FIRST-FLOOR WALL CONNECTION KIT

Wall Width (in)	Model No.	Contents
12	SSW12-1KT	(1) Shear-Transfer Plate (with #14 self-drilling screws) (2) ¾" or 1"x18" Threaded Rods F1554 Grade 36 (2) Coupler Nuts (2) Heavy Hex Nuts Installation Instructions
15	SSW15-1KT	
18	SSW18-1KT	
21	SSW21-1KT	
24	SSW24-1KT	

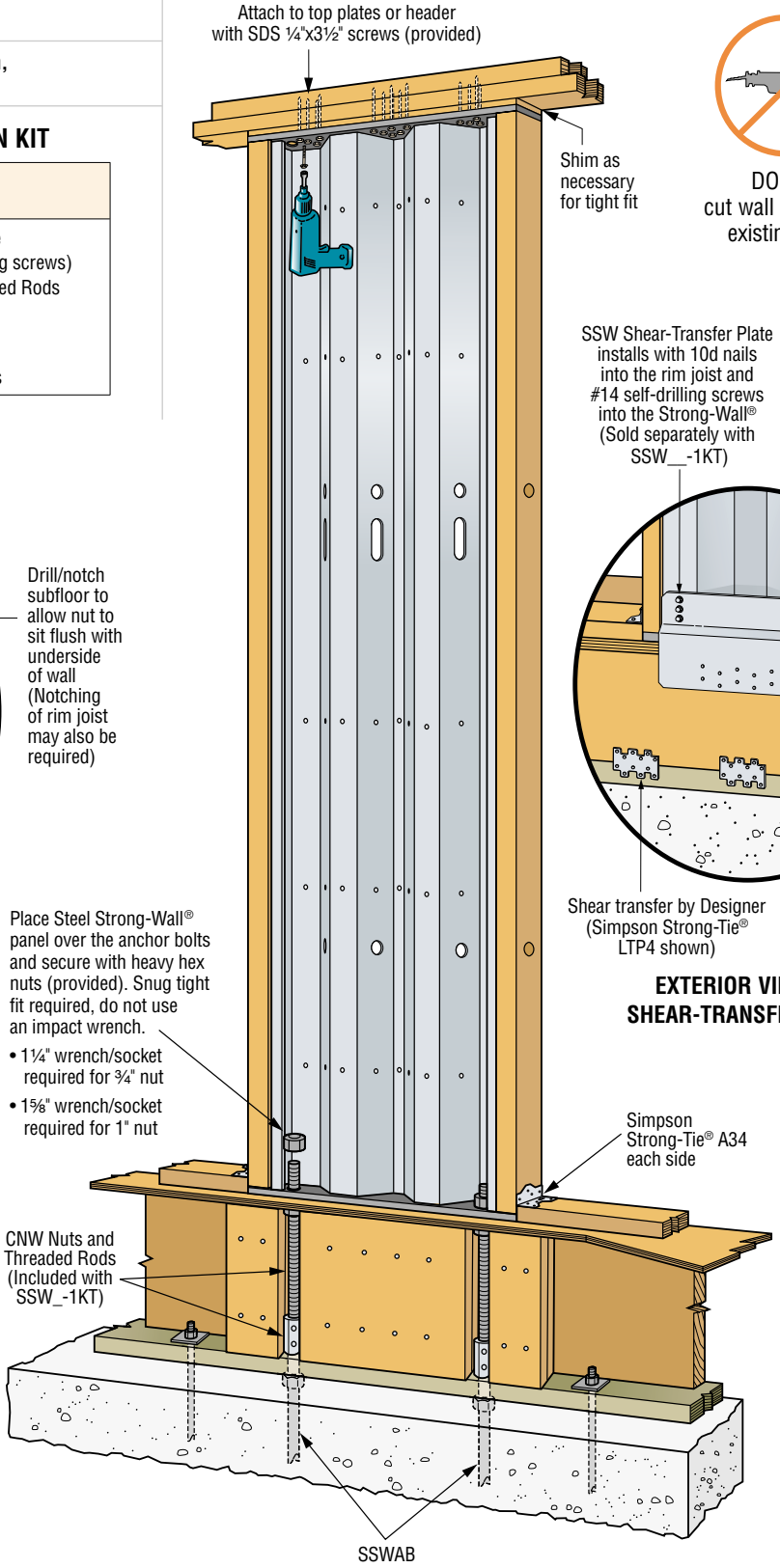
1. Two heavy hex nuts included with each wall.



BLOCKING/CONNECTION DETAIL
(See detail 10/SSW2 on page 62 for perpendicular blocking where required)



ALTERNATE 1ST-FLOOR INSTALLATION
Installation for 1st-floor wood-floor system. Specify taller wall model to allow for floor framing and use load values for installation on concrete pages 12-13.



DO NOT
cut wall or enlarge existing holes

EXTERIOR VIEW OF SHEAR-TRANSFER PLATE

STEEL STRONG-WALL®: 1st-Story Wood Floor Systems

2006 INTERNATIONAL BUILDING CODE®

SSW Model	Seismic[2]			Wind		
	Allowable ASD Shear Load V (lbs)	Drift at Allowable Shear (in)	Uplift at Allowable Shear[4] (lbs)	Allowable ASD Shear Load V (lbs)	Drift at Allowable Shear (in)	Uplift at Allowable Shear[4] (lbs)
SSW12x7	525	0.30	6110	525	0.30	6110
SSW15x7	1385	0.35	11980	1385	0.35	11980
SSW18x7	1830	0.27	11950	1830	0.27	11950
SSW21x7	2100	0.21	11015	2100	0.21	11015
SSW24x7	2450	0.17	10740	2450	0.17	10740
SSW12x8	450	0.36	6105	450	0.36	6105
SSW15x8	1185	0.42	11945	1185	0.42	11945
SSW18x8	1570	0.33	11950	1570	0.33	11950
SSW21x8	1955	0.27	11955	1955	0.27	11955
SSW24x8	2340	0.23	11955	2340	0.23	11955
SSW12x9	400	0.42	6125	400	0.42	6125
SSW15x9	1050	0.47	11945	1050	0.47	11945
SSW18x9	1390	0.38	11945	1390	0.38	11945
SSW21x9	1735	0.31	11975	1735	0.31	11975
SSW24x9	2075	0.26	11965	2075	0.26	11965
SSW12x10	360	0.48	6140	360	0.48	6140
SSW15x10	885	0.52	11220	945	0.56	11980
SSW18x10	1250	0.44	11965	1250	0.44	11965
SSW21x10	1555	0.33	11955	1555	0.33	11955
SSW24x10	1860	0.30	11950	1860	0.30	11950
SSW15x11	780	0.58	10900	855	0.63	11945
SSW18x11	1135	0.50	11975	1135	0.50	11975
SSW21x11	1410	0.40	11950	1410	0.40	11950
SSW24x11	1690	0.34	11970	1690	0.34	11970
SSW15x12	670	0.63	10230	785	0.74	11985
SSW18x12	1035	0.55	11935	1035	0.55	11935
SSW21x12	1290	0.45	11950	1290	0.45	11950
SSW24x12	1545	0.38	11960	1545	0.38	11960
SSW18x13	955	0.60	11945	955	0.60	11945
SSW21x13	1190	0.50	11960	1190	0.50	11960
SSW24x13	1425	0.42	11965	1425	0.42	11965

1. Loads are applicable to 1st-Story Raised Wood Floor installations supported on concrete or masonry foundations using the ASD basic (Section 1605.3.1) or the alternative basic (Section 1605.3.2) load combinations. Load values include evaluation of anchor rod compression capacity and do not require further evaluation by the Designer.
2. For seismic designs based on the 2006 IBC using R = 6.5. For other codes, use the seismic coefficients corresponding to light-frame bearing walls with wood structural panels or sheet steel panels.
3. Minimum standard-strength anchor bolts required. See pages 32-37 for SSWAB anchor bolt information and anchorage solutions.
4. Tabulated anchor tension (uplift) loads assume no resisting axial load. Anchor rod tension at design shear load and including the effect of axial load may be determined using the Strong-Wall Selector™ software or the following equation:
   $T = [(V \times h) / B] - P/2$, where: T = Anchor rod tension load (lbs)
   V = Design shear load (lbs)
   h = Strong-Wall® height per page 11 (in)
   P = Applied axial load (lbs)
   B = Anchor bolt centerline dimension (in)
   (6⅞" for SSW12, 9¼" for SSW15, 12¼" for SSW18, 15¼" for SSW21, and 18¼" for SSW24)
5. Allowable shear loads assume a maximum first-floor joist depth of 12". For allowable shear load with joists up to 16" deep, multiply table values by 0.93 for SSW12x models and 0.96 for other SSW widths.
6. Allowable shear loads are based on 1000 lbs. total uniformly distributed axial load acting on the entire panel in combination with the shear load. For allowable shear loads at 2000 lbs. uniformly distributed axial load, multiply table values by 0.92 for SSW12x models, and 0.96 for other SSW widths.