

3/8" MIN WIDTH HEADER BY DESIGNER. SEE (SSW) (5) FOR MULTIPLY HEADER REQUIREMENTS

PORTAL STRAP AND #14 SELF-DRILLING SCREWS (PROVIDED WITH SSW-PKT)

HEADER SUPPORT POST (BY DESIGNER) AT BEAM TO POST

STHD10 (HOLD-DOWN SHOWN) (1000LB UP-LIFT CAPACITY MIN.)

COLUMN BASE (BY DESIGNER)

STEEL STRONG-WALL (EXTERIOR FACE)

ROUGH OPENING HEIGHT

### STEEL STRONG-WALL SINGLE WALL PORTAL

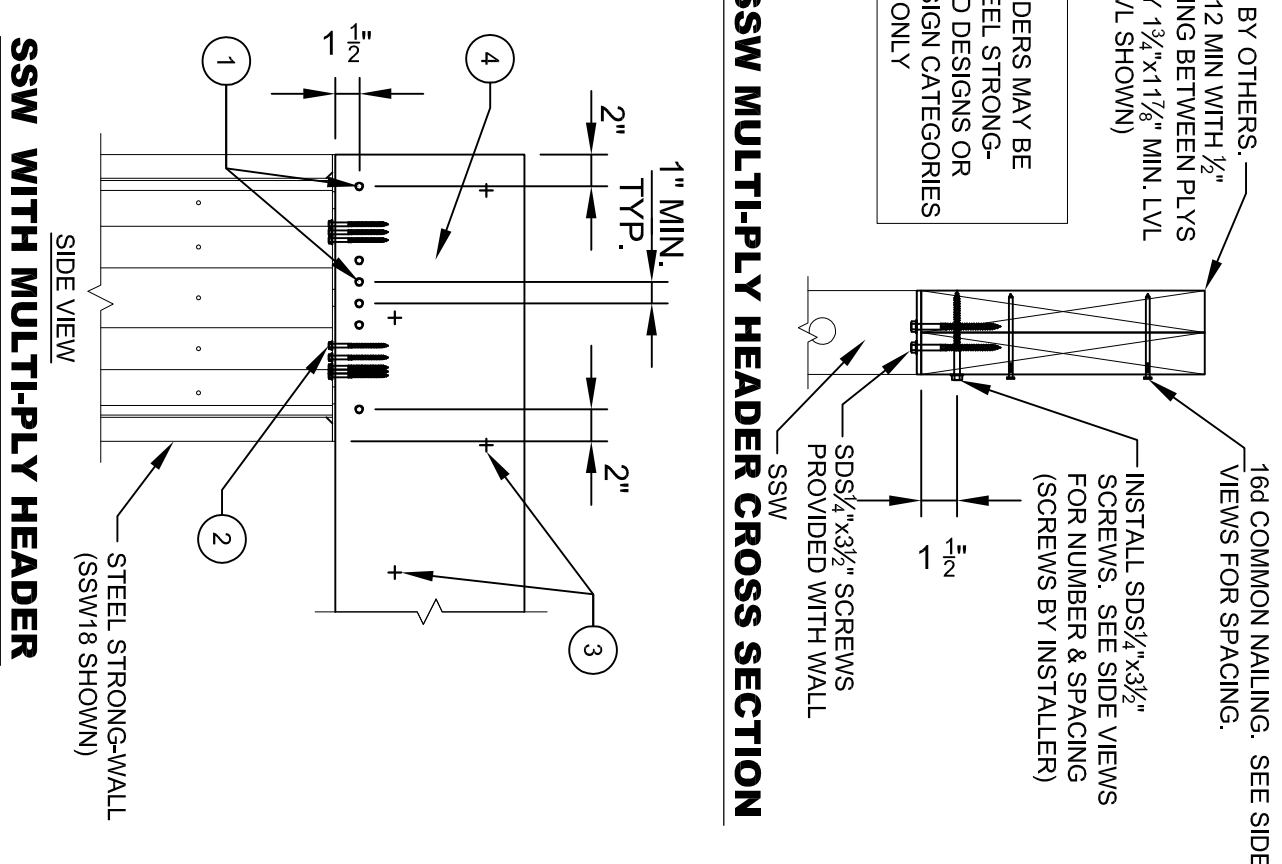
#### GARAGE HEADER ROUGH OPENING HEIGHT

MODEL NO.	H CURB	ROUGH OPENING HEIGHT
SSW12x7	5/2"	7'-1 1/2"
SSW15x7	6"	7'-2"
SSW18x7	6"	7'-2"
SSW12x7.4	0"	7'-1 1/2"
SSW15x7.4	0"	7'-1 1/2"
SSW18x7.4	0"	7'-1 1/2"
SSW12x8	5/2"	8'-2 1/2"
SSW15x8	6"	8'-2 1/2"
SSW18x8	6"	8'-3 1/2"

1. THE HEIGHT OF THE GARAGE CURB ABOVE THE GARAGE SLAB IS CRITICAL FOR THE ROUGH HEADER OPENING AT THE GARAGE RETURN WALLS.
2. SHIMS ARE NOT PROVIDED WITH STEEL STRONG-WALL.
3. FURRING DOWN GARAGE HEADER MAY BE NECESSARY FOR CORRECT ROUGH OPENING HEIGHT.

### 1

### MULTI-PLY HEADERS



HEADER BY OTHERS. 2 PLY 2x12 MIN WITH 1/2" SHEATHING BETWEEN PLYS OR 2 PLY 1 1/2"x1 1/2" MIN. LVL (2 PLY LVL SHOWN)

16d COMMON NAILING. SEE SIDE VIEWS FOR SPACING.

INSTALL SPS14x3 1/2" SCREWS (FOR NUMBER & SPACING (SCREWS BY INSTALLER))

PROVIDED WITH WALL SSW

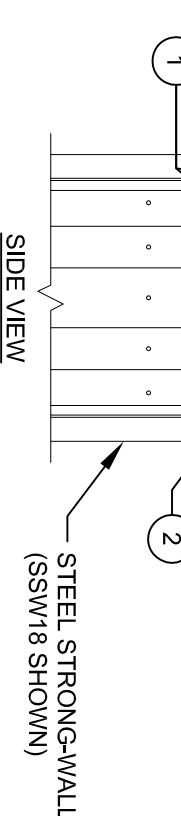
NOTE: MULTI-PLY HEADERS MAY BE USED WITH STEEL STRONG-WALL FOR WIND DESIGN OR IN SEISMIC DESIGN CATEGORIES (AC IBC & IRO ONLY)

#### SSW MULTI-PLY HEADER CROSS SECTION

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

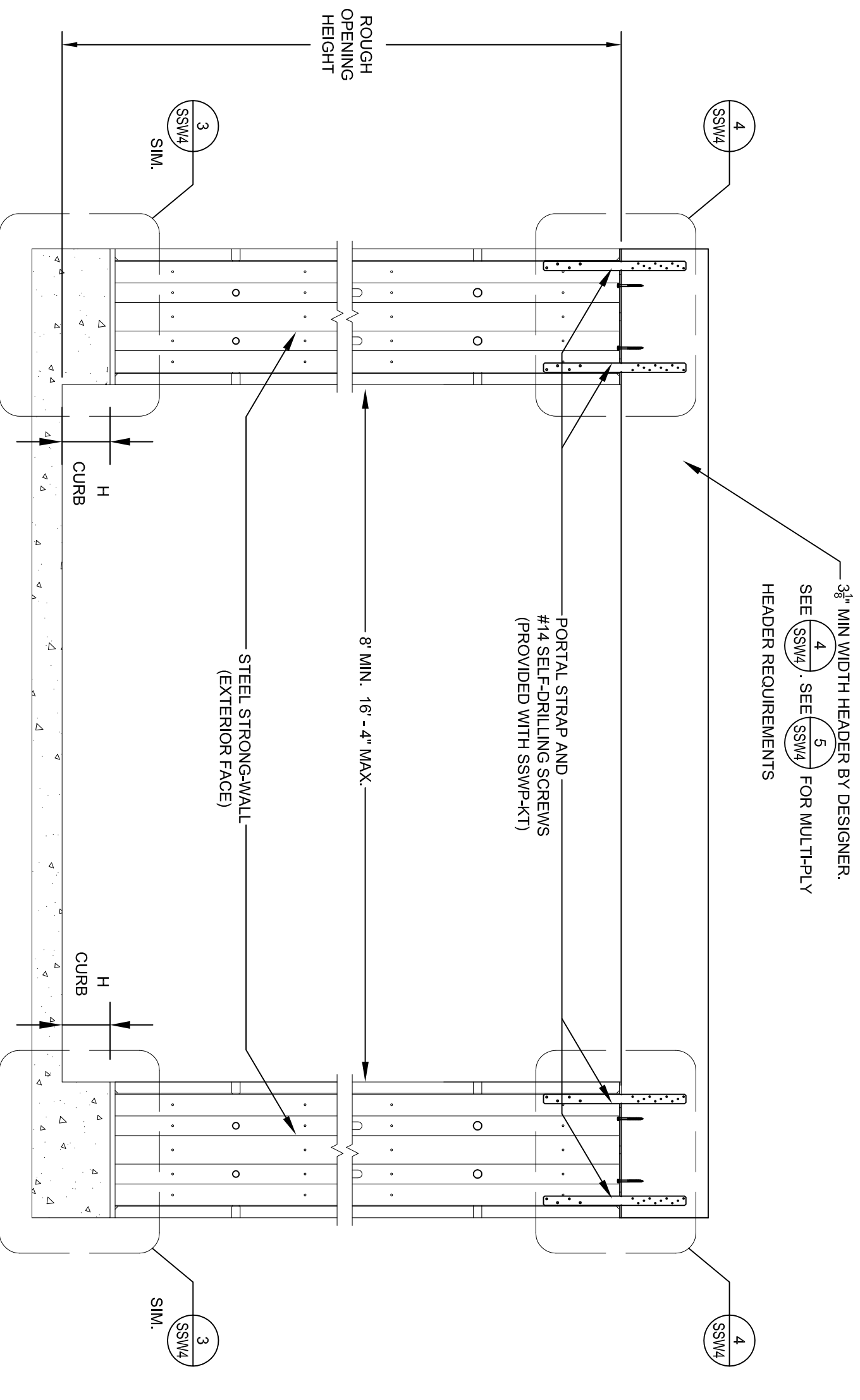
NOTE: PORTAL STRAP NOT SHOWN FOR CLARITY. REFER TO DETAIL 4/SSW4 FOR PORTAL STRAP INSTALLATION.

#### SSW WITH MULTI-PLY HEADER



1. INSTALL SPS 14x3 1/2" SCREWS HORIZONTALLY THROUGH LVL OR 2 X LUMBER HEADER PLYS. 4 SCREWS TOTAL FOR SSW15, SSW18, SSW21 AND SSW24.
2. SPS 14x3 1/2" SCREWS PROVIDED WITH WALL.
3. FASTEN PLYS TOGETHER WITH 16d COMMON NAILS AT 16" O.C. ALONG EACH EDGE OF BEAM.
4. 1/2" SHEATHING BETWEEN 2 X HEADER PLYS SHALL MATCH HEADER DEPTH AND EXTEND FULL WIDTH OF SSW, MINIMUM.

### 5



3/8" MIN WIDTH HEADER BY DESIGNER. SEE (SSW) (5) FOR MULTIPLY HEADER REQUIREMENTS

PORTAL STRAP AND #14 SELF-DRILLING SCREWS (PROVIDED WITH SSW-PKT)

STEEL STRONG-WALL (EXTERIOR FACE)

ROUGH OPENING HEIGHT

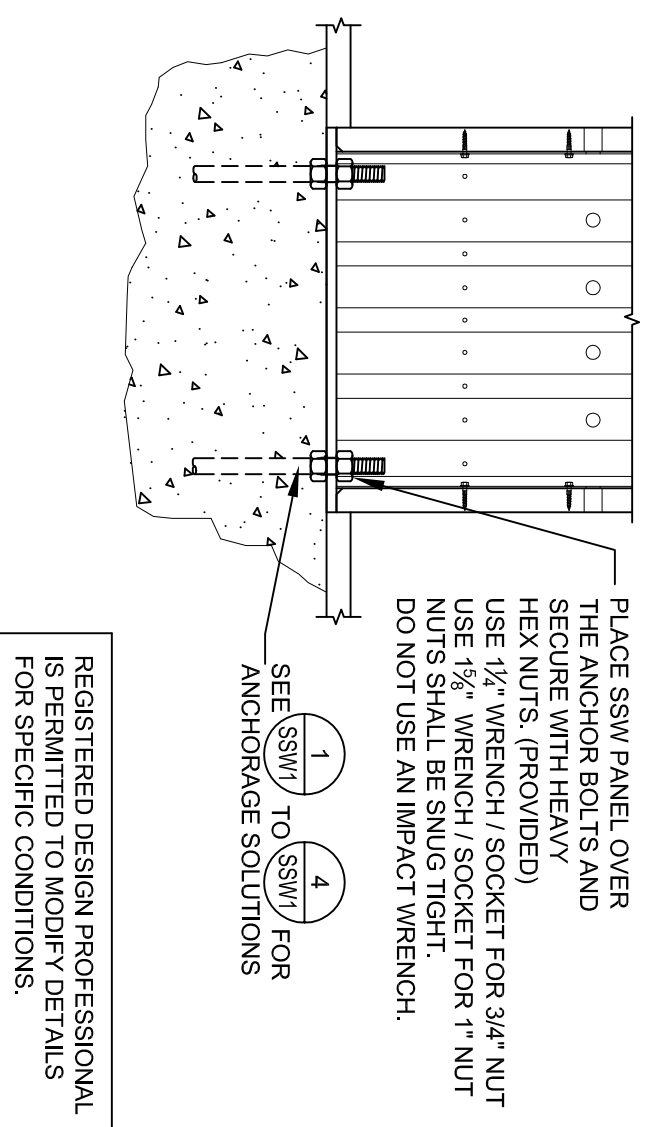
1. THE HEIGHT OF THE GARAGE CURB ABOVE THE GARAGE SLAB IS CRITICAL FOR THE ROUGH HEADER OPENING AT THE GARAGE RETURN WALLS.
2. SHIMS ARE NOT PROVIDED WITH STEEL STRONG-WALL.
3. FURRING DOWN GARAGE HEADER MAY BE NECESSARY FOR CORRECT ROUGH OPENING HEIGHT.

#### GARAGE HEADER ROUGH OPENING HEIGHT

MODEL NO.	H CURB	ROUGH OPENING HEIGHT
SSW12x7	5/2"	7'-1 1/2"
SSW15x7	6"	7'-2"
SSW18x7	6"	7'-2"
SSW12x7.4	0"	7'-1 1/2"
SSW15x7.4	0"	7'-1 1/2"
SSW18x7.4	0"	7'-1 1/2"
SSW12x8	5/2"	8'-2 1/2"
SSW15x8	6"	8'-2 1/2"
SSW18x8	6"	8'-3 1/2"

### STEEL STRONG-WALL DOUBLE WALL PORTAL

### 2



PLACE SSW PANEL OVER ANCHOR BOLTS AND HEX NUTS. (PROVIDED) USE 1/2" WRENCH / SOCKET FOR 3/4" NUT NUTS SHALL BE SNUG TIGHT. DO NOT USE AN IMPACT WRENCH.

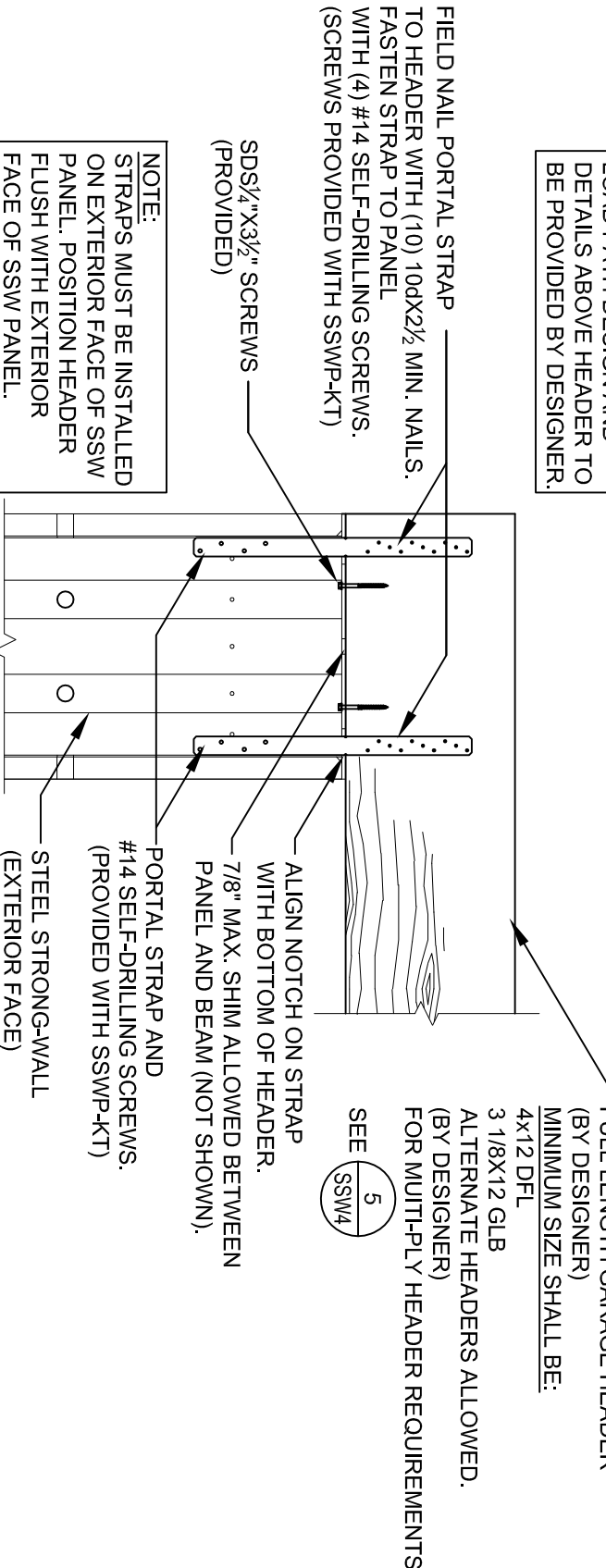
SEE (SSW) (4) FOR ANCHORAGE SOLUTIONS

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

### BASE PLATE CONNECTION

### 3

### TOP OF WALL CONNECTION



NOTE: PORTAL STRAP AND FASTENERS TO BE PROVIDED BY DESIGNER.

FIELD NAIL PORTAL STRAP 1/2"x2 1/2" MIN. NAILS. FASTEN STRAP TO PANEL WITH (4) #14 SELF-DRILLING SCREWS (SCREWS PROVIDED WITH SSW-PKT)

SSW12x7, 7/8" MAX. SHIM ALLOWED BETWEEN PANEL AND BEAM (NOT SHOWN), (PROVIDED)

NOTE: STRAPS MUST BE INSTALLED ON EXTERIOR FACE OF SSW PANEL. POSITION HEADER FLUSH WITH EXTERIOR FACE OF SSW PANEL.

STRAPS MUST BE INSTALLED ON EXTERIOR FACE OF SSW PANEL. POSITION HEADER FLUSH WITH EXTERIOR FACE OF SSW PANEL.

PORTAL STRAP AND #14 SELF-DRILLING SCREWS (PROVIDED WITH SSW-PKT)

STEEL STRONG-WALL (EXTERIOR FACE)

### 4

### NOTES

1. STEEL STRONG-WALL SHEARWALL IS MANUFACTURED AND TRADEMARKED BY SIMPSON STRONG-TIE COMPANY, INC. SIMPSON STRONG-TIE COMPANY, INC. IS AN ISO 9001 REGISTERED COMPANY.
2. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT.
3. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE SPECIFIER.
4. THE ENGINEER IS RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE AND FOR THE SELECTION OF THE SPECIFIC COMPONENTS FOR THE STEEL STRONG-WALL SYSTEM. PRIOR TO INSTALLATION OF ANY COMPONENTS FOR THE STEEL STRONG-WALL SYSTEM, IF ANY DISCREPANCIES ARE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE SPECIFIER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
5. INSTALLATION OF PRODUCT SHALL BE DONE IN CONFORMANCE TO THESE DRAWINGS. THE PERFORMANCE OF MODIFIED PRODUCTS OR ALTERED INSTALLATION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE SPECIFIER.
6. SIMPSON STRONG-TIE COMPANY, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS.
7. SIMPSON STRONG-TIE COMPANY, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS.
8. ALL HARDWARE CALLED OUT IS SIMPSON STRONG-TIE.

### 6

NO.	DATE	REVISIONS
0	9/21/2009	FIRST RELEASE

**SIMPSON Strong-Tie**  
 THERE IS NO EQUAL

SIMPSON STRONG-TIE COMPANY, INC.  
 HOME OFFICE:  
 5956 W. LAS POSITAS BLVD.  
 PLEASANTON, CA 94588  
 TEL: (800) 999-5099

**SIMPSON Strong-Tie**  
 THERE IS NO EQUAL

**STEEL STRONG-WALL**  
 PORTAL SYSTEM FRAMING DETAILS  
 ENGINEERED DESIGNS

NAME  
 DATE 9-21-2009  
 SCALE N.T.S.  
 CHECKED  
 SHEET  
**SSW4**  
 OF SHEETS  
 JOB NO.