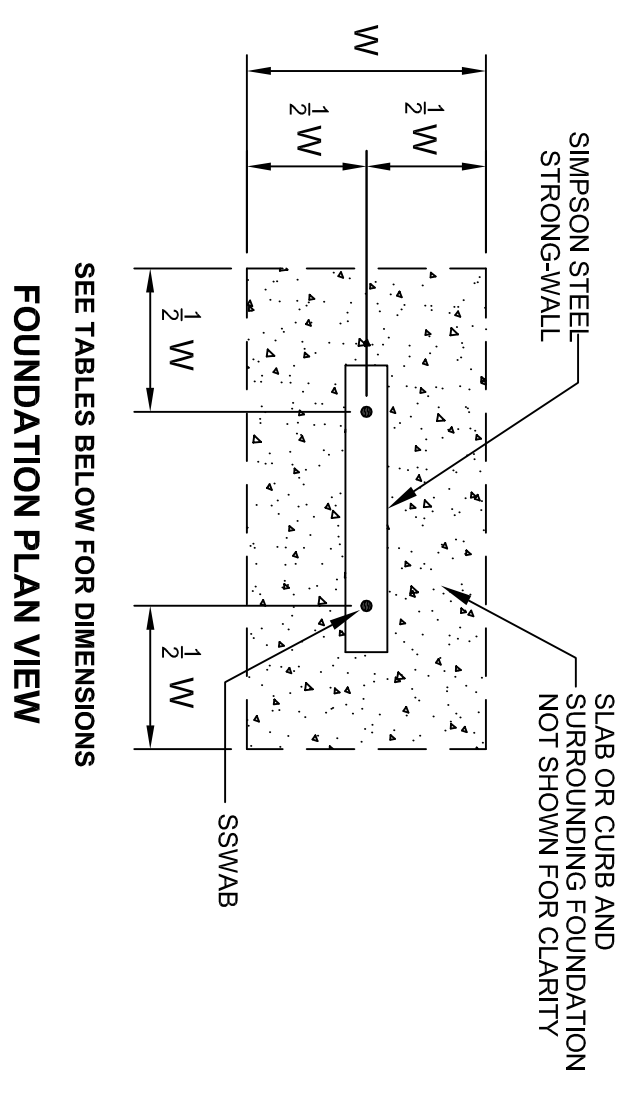


- NOTES:
 1. ANCHORAGE DESIGNS CONFORM TO ACI 318-05 AND ASSUME MINIMUM f'c=2,500 PSI CONCRETE.
 2. SEE DETAILS 1/SSW1 TO 3/SSW1 FOR TENSION ANCHORAGE.
 3. MAXIMUM H-le - de. SEE SSW1 AND 6SSW1 FOR LE.

STEEL STRONG-WALL ANCHORAGE - TYPICAL SECTIONS

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 2500 PSI CONCRETE

DESIGN CRITERIA	CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT		SSWAB 1" ANCHOR BOLT			
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)
SEISMIC	CRACKED	STANDARD	9,600	25	9	17,100	36	12
		HIGH STRENGTH	19,900	31	13	35,300	56	19
		STANDARD	9,600	21	7	17,100	32	11
	UNCRAKED	HIGH STRENGTH	19,900	34	12	35,300	49	17
		STANDARD	4,500	12	6	5,600	14	6
		STANDARD	6,900	20	6	12,700	30	8
WIND	CRACKED	STANDARD	9,600	26	7	17,100	30	10
		HIGH STRENGTH	11,100	22	8	22,400	35	12
		STANDARD	13,500	25	9	26,800	39	13
	UNCRAKED	HIGH STRENGTH	16,000	28	10	31,600	43	15
		STANDARD	19,900	33	11	35,300	47	16
		STANDARD	5,600	12	6	5,600	12	6
HIGH STRENGTH	CRACKED	STANDARD	9,600	18	6	12,000	26	9
		HIGH STRENGTH	11,200	19	7	17,100	28	10
		STANDARD	13,900	22	8	26,700	30	12
	UNCRAKED	HIGH STRENGTH	15,800	24	8	32,100	34	13
		STANDARD	11,200	18	7	22,100	26	9
		STANDARD	15,800	24	8	32,100	38	13
UNCRAKED	HIGH STRENGTH	19,900	29	10	35,300	41	14	



SEE TABLES BELOW FOR DIMENSIONS FOUNDATION PLAN VIEW

- NOTES:
 1. ANCHORAGE DESIGNS CONFORM TO ACI 318-05 APPENDIX D WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
 2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF SSWAB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (ASTM A449).
 3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDG C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318-05 SECTION D.3.3.4.
 4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDG C.
 5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS.
 6. THE REGISTERED DESIGN PROFESSIONAL MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
 7. REFER TO 1/SSW1 FOR GR.

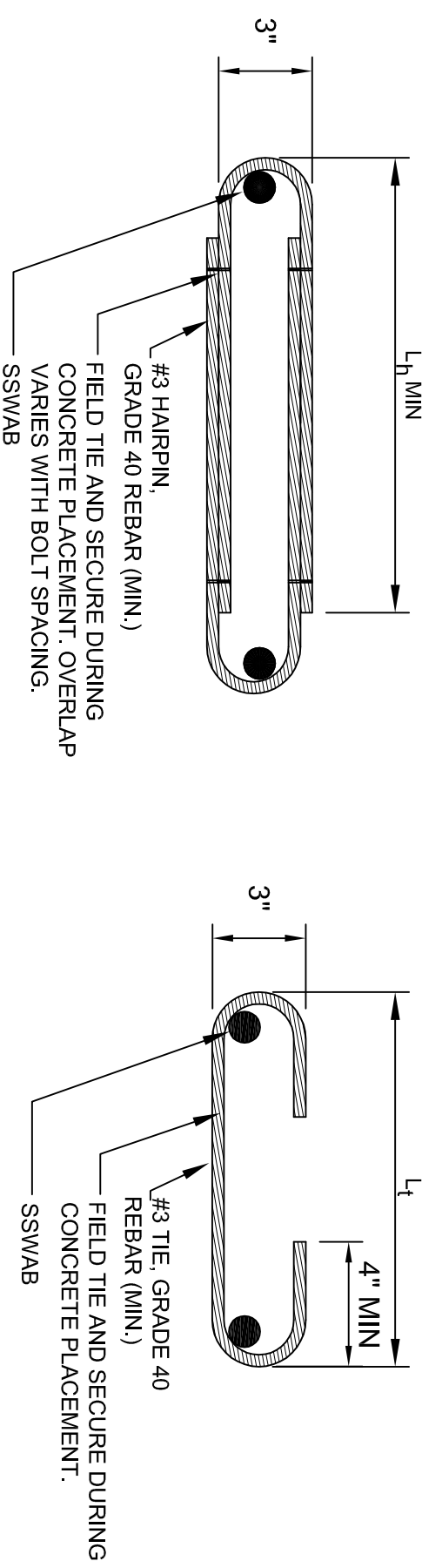
SSWAB TENSION ANCHORAGE SCHEDULE 2500 PSI

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 3500 PSI CONCRETE

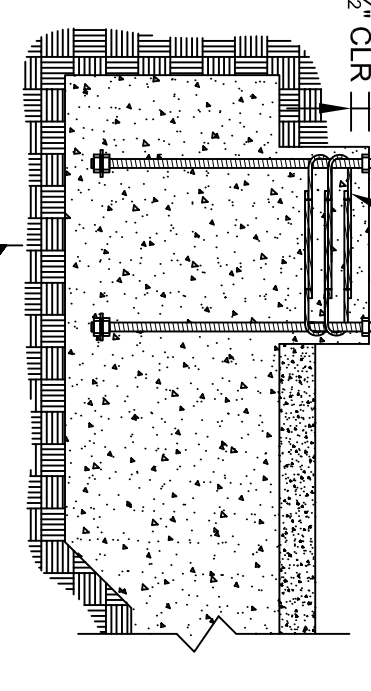
DESIGN CRITERIA	CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT		SSWAB 1" ANCHOR BOLT			
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)
SEISMIC	CRACKED	STANDARD	9,600	22	8	17,100	33	11
		HIGH STRENGTH	19,900	36	12	35,300	51	17
		STANDARD	9,600	19	7	17,100	28	10
	UNCRAKED	HIGH STRENGTH	19,900	31	11	35,300	44	15
		STANDARD	5,300	12	6	6,000	13	6
		STANDARD	9,600	18	6	13,200	22	8
WIND	CRACKED	STANDARD	11,400	23	7	17,100	27	9
		HIGH STRENGTH	14,100	20	8	23,000	32	11
		STANDARD	15,900	25	9	27,800	36	12
	UNCRAKED	HIGH STRENGTH	19,900	30	10	31,700	39	13
		STANDARD	6,300	14	6	6,600	12	6
		STANDARD	8,300	16	6	12,200	18	6
HIGH STRENGTH	CRACKED	STANDARD	9,600	16	6	17,100	23	8
		HIGH STRENGTH	11,200	17	6	22,400	27	9
		STANDARD	14,300	20	7	27,500	31	11
	UNCRAKED	HIGH STRENGTH	16,400	22	8	33,100	35	12
		STANDARD	11,200	16	6	22,100	26	9
		STANDARD	15,800	24	8	32,100	37	13

- NOTES:
 1. ANCHORAGE DESIGNS CONFORM TO ACI 318-05 APPENDIX D WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
 2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF SSWAB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
 3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDG C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318-05 SECTION D.3.3.4.
 4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDG C.
 5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE REGISTERED DESIGN PROFESSIONAL MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
 6. SEE 1/SSW1 AND ASSW1 FOR W AND DE.

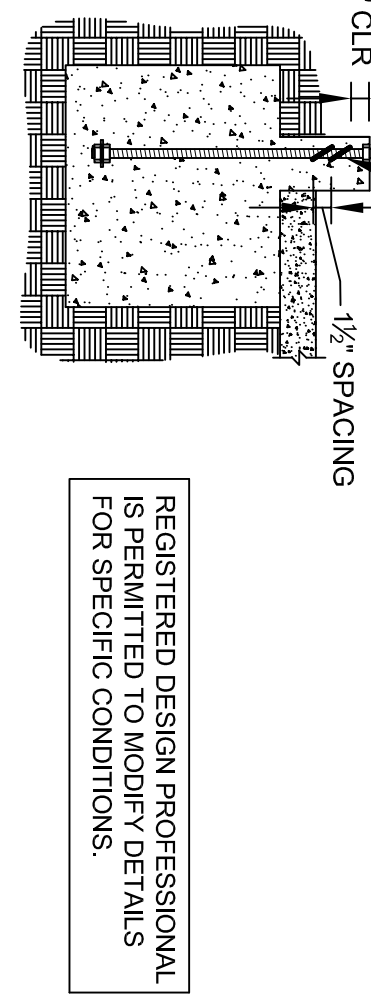
SSWAB TENSION ANCHORAGE SCHEDULE 3500/4500 PSI



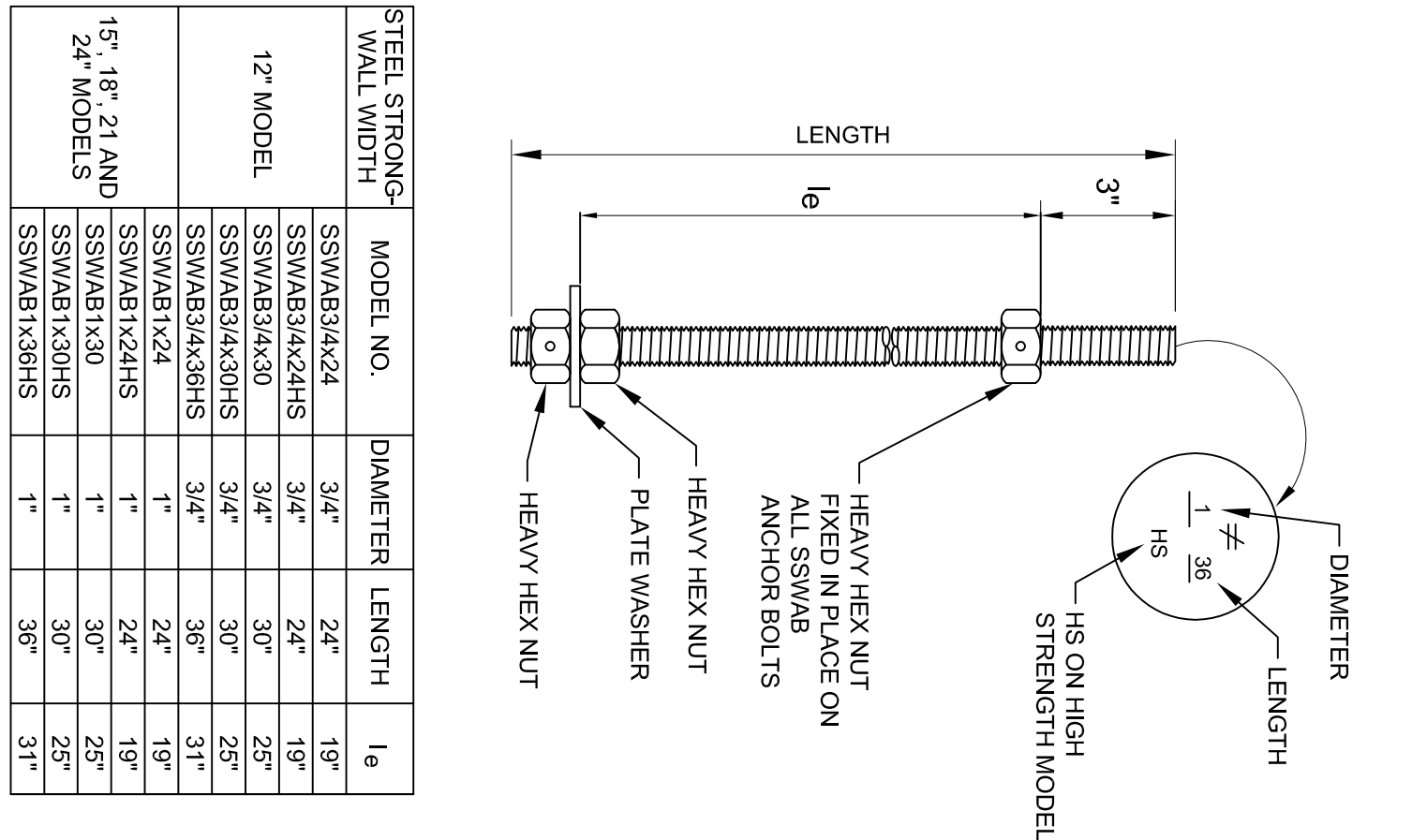
- HAIRPIN SHEAR REINFORCEMENT
 SEE TABLE FOR REQUIRED QUANTITY.
 #3 HAIRPIN (#3 THE SIMILAR).
 1/2" CLR. SEE TABLE FOR REQUIRED QUANTITY.
- TIE SHEAR REINFORCEMENT
 SEE TABLE FOR REQUIRED QUANTITY.
 #3 TIE (#3 THE SIMILAR).
 1/2" CLR. SEE TABLE FOR REQUIRED QUANTITY.



SECTION A-A



STEEL STRONG-WALL ANCHOR BOLT SHEAR ANCHORAGE



STEEL STRONG-WALL WIDTH

MODEL NO.	DIAMETER	LENGTH	le
SSWAB24x24	3/4"	24"	16"
SSWAB24x24HS	3/4"	24"	16"
SSWAB24x24HS	3/4"	30"	21"
SSWAB24x24HS	3/4"	36"	27"
SSWAB24x24HS	3/4"	36"	31"
SSWAB1-24HS	1"	24"	16"
SSWAB1-24HS	1"	24"	19"
SSWAB1-30HS	1"	30"	25"
SSWAB1-30HS	1"	30"	28"
SSWAB1-36HS	1"	36"	31"

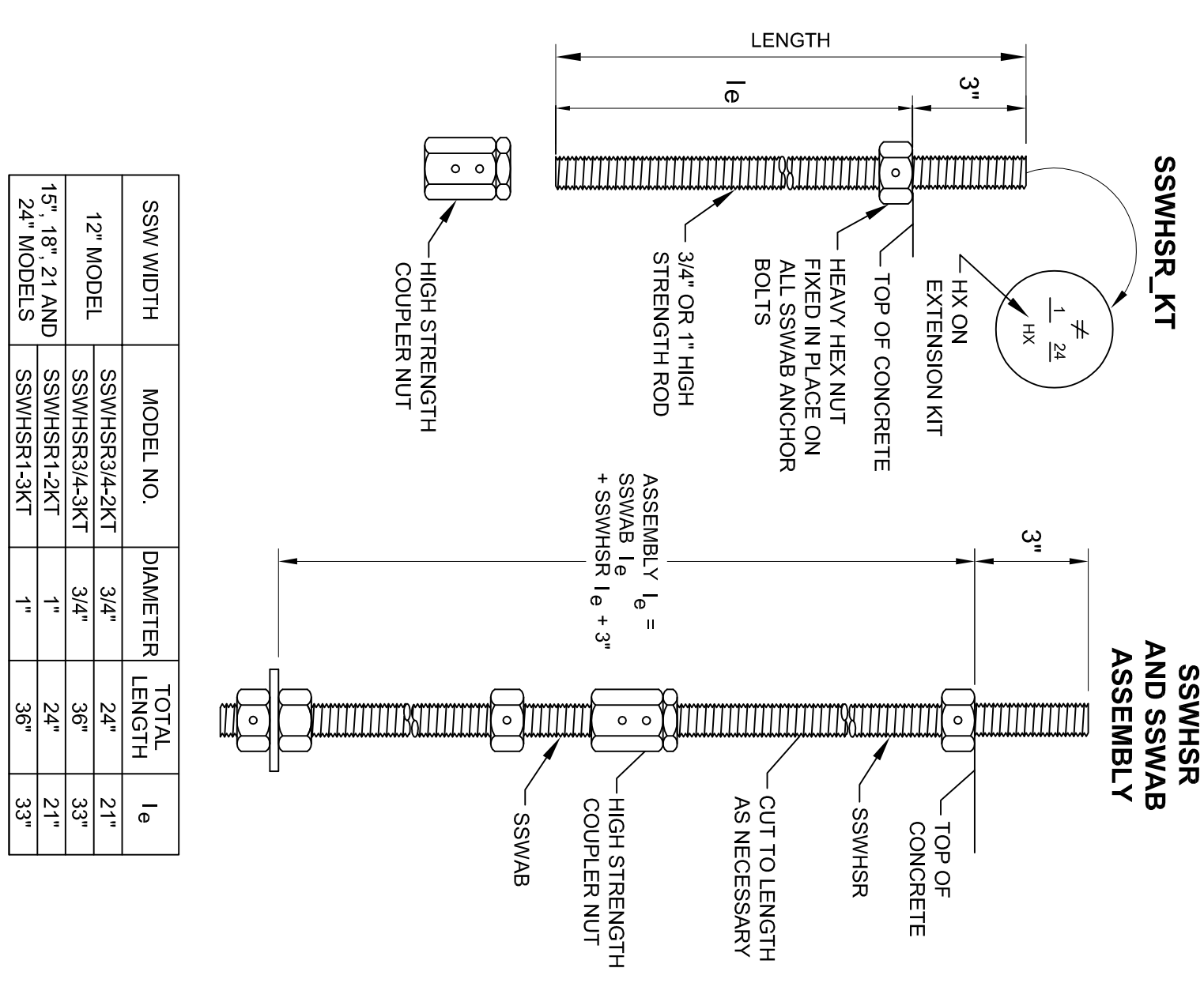
STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 4500 PSI CONCRETE

DESIGN CRITERIA	CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT		SSWAB 1" ANCHOR BOLT			
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)
SEISMIC	CRACKED	STANDARD	9,600	30	7	17,100	30	10
		HIGH STRENGTH	19,900	33	11	35,300	47	16
		STANDARD	9,600	28	6	17,100	26	9
	UNCRAKED	HIGH STRENGTH	19,900	36	10	35,300	41	14
		STANDARD	6,000	12	6	6,000	12	6
		STANDARD	7,600	14	6	12,900	20	7
WIND	CRACKED	STANDARD	9,600	17	6	17,100	25	9
		HIGH STRENGTH	11,100	18	6	22,600	29	10
		STANDARD	13,900	21	7	27,400	33	11
	UNCRAKED	HIGH STRENGTH	17,000	24	8	31,500	36	12
		STANDARD	7,500	12	6	35,300	40	14
		STANDARD	8,500	13	6	12,700	17	6
HIGH STRENGTH	CRACKED	STANDARD	9,600	15	6	17,100	22	8
		HIGH STRENGTH	10,500	16	6	22,600	25	9
		STANDARD	13,800	18	6	26,800	28	10
	UNCRAKED	HIGH STRENGTH	16,200	20	7	32,700	32	11
		STANDARD	11,200	14	6	22,100	26	9
		STANDARD	15,800	24	8	32,100	35	12

STEEL STRONG-WALL SHEAR ANCHORAGE

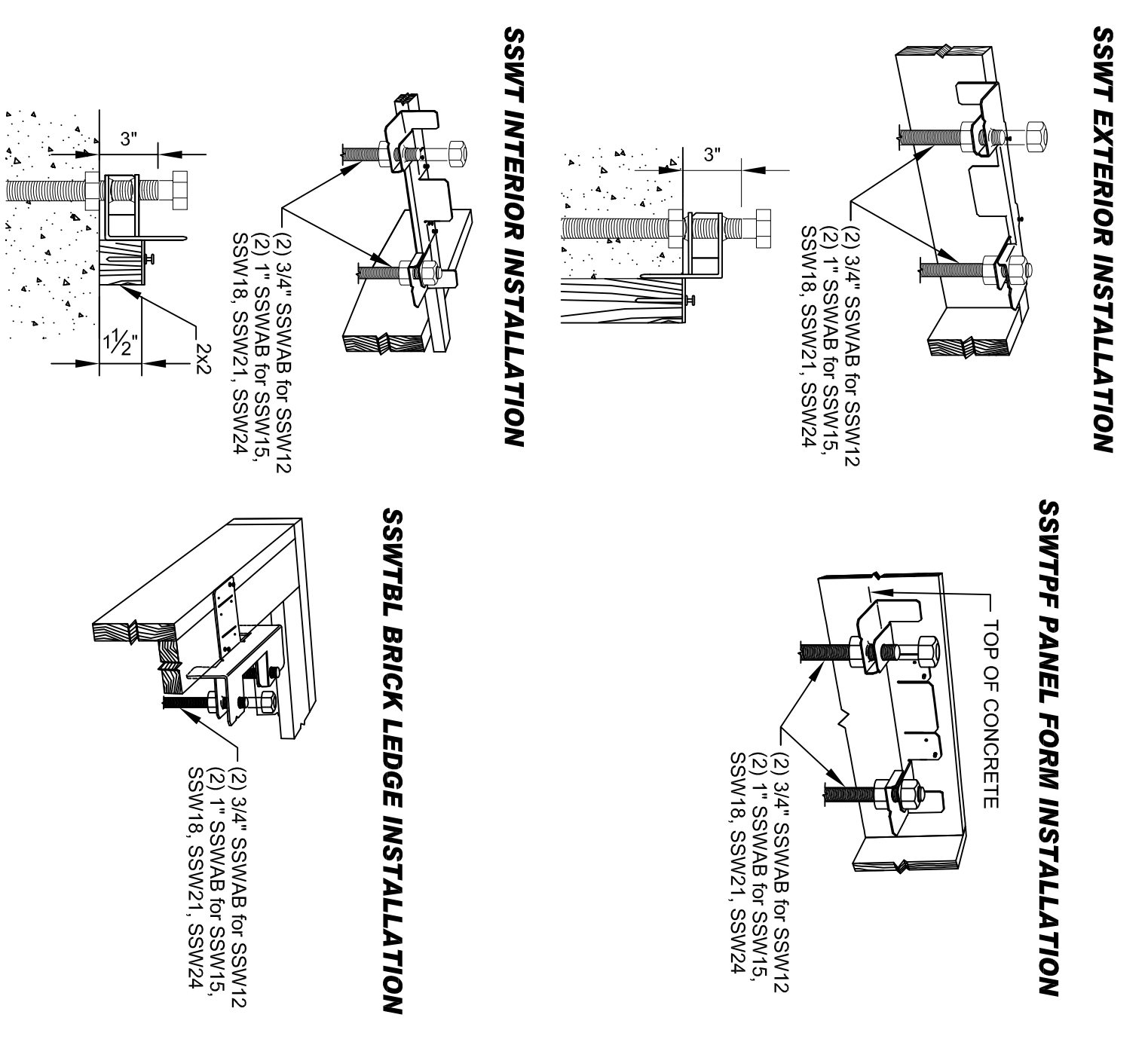
MODEL	Lh OR Lh (in)	SHEAR REINFORCEMENT WIDTH (in)	SEISMIC		WIND		
			MINIMUM CURB/WALL REINFORCEMENT WIDTH (in)	SHEAR REINFORCEMENT WIDTH (in)	ASD ALLOWABLE SHEAR LOAD V (lbs)	CRACKED	
SSW12	9	(1) #3 TIE	6	NONE REQUIRED	6	1370	980*
SSW15	12	(1) #3 TIE	6	NONE REQUIRED	6	1795*	1280*
SSW18	14	(1) #3 HAIRPIN	6 ¹	(1) #3 HAIRPIN	6	N/A	N/A
SSW21	15	(1) #3 HAIRPIN	6 ²	(1) #3 HAIRPIN	6	N/A	N/A
SSW24	17	(2) #3 HAIRPINS	6 ³	(2) #3 HAIRPINS	6	N/A	N/A

- NOTES:
 1. SHEAR ANCHORAGE DESIGNS CONFORM TO ACI 318-05 AND ASSUME MINIMUM f'c=2,500 PSI CONCRETE.
 2. SEE DETAILS 1/SSW1 TO 3/SSW1 FOR TENSION ANCHORAGE.
 3. SHEAR REINFORCEMENT IS NOT REQUIRED FOR PANELS INSTALLED ON A WOOD FLOOR, INTERIOR FOUNDATION APPLICATIONS (PANEL INSTALLED AWAY FROM EDGE OF CONCRETE), OR BRACED WALL PANEL APPLICATIONS.
 4. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDG C MAY USE WIND ANCHORAGE SOLUTIONS.
 5. IN SDG C MAY USE WIND ANCHORAGE SOLUTIONS.
 6. MINIMUM CURB/STEMWALL ALLOWABLE SHEAR IS 1145 LBS. USE SEISMIC SHEAR REINFORCEMENT FOR HIGHER SHEAR LOADS.
 7. 8" MINIMUM CURB/STEMWALL ALLOWABLE SHEAR IS 2015 LBS. UNCRACKED AND 1440 LBS. CRACKED. USE SEISMIC SHEAR REINFORCEMENT FOR HIGHER SHEAR LOADS.
 8. CONCRETE EDGE DISTANCE FOR ANCHORS MUST COMPLY WITH ACI 318 D.8.2.



SSWHR KIT

MODEL NO.	DIAMETER	LENGTH	le
SSWHR24x24KT	3/4"	24"	16"
SSWHR24x24KT	3/4"	30"	21"
SSWHR24x24KT	3/4"	36"	27"
SSWHR1-24KT	1"	24"	16"
SSWHR1-24KT	1"	24"	19"
SSWHR1-30KT	1"	30"	25"
SSWHR1-30KT	1"	30"	28"
SSWHR1-36KT	1"	36"	31"



SSW ANCHOR BOLT EXTENSION

SSW ANCHOR BOLT TEMPLATES

NO.	DATE	REVISIONS
1	9/21/2009	2006 IBC REVISIONS

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

STEEL STRONG-WALL ANCHORAGE DETAILS ENGINEERED DESIGNS

SIMPSON Strong-Tie
 THERE IS NO EQUAL

SSW1

NAME: 9-21-2009
 SCALE: N.T.S.
 CHECKED:
 SHEET:
 OF SHEETS: