



**BASEMENT WALL REINFORCEMENT DESIGN TABLES**

(Tables based on a 90 PCF soil pressure)

**WALL HEIGHT\* - 10 COURSES (up to 6'-10")**

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
4" X 2" X 1/4" 36" Max. Spacing 8", 10" or 12"	(2) 1" Dia. Bolts See Details 2-5 on S2-A (4) 1/2" Dia. Bolts See Details 2-5 on S2-B	(2) 5/8" Dia. Bolts See Details 10-13 on S4-A	(2) 1/2" Dia. Bolts See Details 18-22 on S6	(2) 1" Dia. Bolts See Details 6-7 on S3-A
5" X 2" X 3/16" 50" Max. Spacing 10" or 12"	(4) 5/8" Dia. Bolts See Details 2-5 on S2-B	(2) 3/4" Dia. Bolts See Details 10-13 on S4-B (4) 1/2" Dia. Bolts See Details 10-13 on S4-B	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(4) 5/8" Dia. Bolts See Details 6-7 on S3-B

**WALL HEIGHT\* - 11 COURSES (6'-10" to 7'-6")**

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
5" X 2" X 3/16" 36" Max. Spacing 8", 10", or 12"	(2) 1" Dia. Bolts See Details 2-5 on S2-A (4) 1/2" Dia. Bolts See Details 2-5 on S2-B	(2) 5/8" Dia. Bolts See Details 10-13 on S4-A	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(2) 1" Dia. Bolts See Details 6-7 on S3-A
6" X 2" X 3/16" 50" Max. Spacing 10", or 12"	(4) 3/4" Dia. Bolts See Details 2-5 on S2-B	(2) 1" Dia. Bolts See Details 10-13 on S4-A (4) 1/2" Dia. Bolts See Details 10-13 on S4-B	(2) 3/4" Dia. Bolts See Details 18-22 on S6	(4) 3/4" Dia. Bolts See Details 6-7 on S3-B

**WALL HEIGHT\* - 12 COURSES (7'-6" to 8'-2")**

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
5" X 3" X 1/4" 36" Max. Spacing 8", 10", or 12"	(4) 5/8" Dia. Bolts See Details 2-5 on S2-A	(2) 3/4" Dia. Bolts See Details 10-13 on S4-B (4) 1/2" Dia. Bolts See Details 10-13 on S4-B	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(4) 5/8" Dia. Bolts See Details 6-7 on S3-B
6" X 3" X 1/4" 50" Max. Spacing 10", or 12"	(4) 3/4" Dia. Bolts See Details 2-5 on S2-B	(2) 1" Dia. Bolts See Details 10-13 on S4-B (4) 5/8" Dia. Bolts See Details 10-13 on S4-B	(2) 1" Dia. Bolts See Details 18-22 on S6	(4) 3/4" Dia. Bolts See Details 6-7 on S3-B

\*Wall Height is top of floor to bottom of joist

\*\*Bottom Anchors : Min. (2) 1/2" dia. x 7" long expansion bolts into footing  
Or (2) 3/4" dia. x 4" long expansion bolts min. 3" into slab