

SLAB DESIGNS - SQUARE AND RECTANGULAR STRUCTURES (TABLE 6)
(ALL SLABS 8" THICK EXCEPT AS NOTED - REINFORCING PARALLEL TO SHORT WAY AND LONG WAY)

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 3'-6" x UNLIMITED			
≥ 0.5' < 8'	B10	≥ 0.5' < 24'	B10
8' < 13'	B5.5	24' - 40'	B5.5
13' < 31'	C6.5		
31' - 40'	D7		
SIZE: 4' x UNLIMITED			
≥ 0.5' < 7'	B5.5	≥ 0.5' < 15'	B10
7' < 19'	C6.5	15' < 29'	B5.5
19' < 31'	D7	29' - 40'	C6.5
31' - 40'	E5		
SIZE: 5' x 5'			
≥ 0.5' < 3'	C6.5	≥ 0.5' < 3'	C6.5
3' < 7'	B5.5	3' < 13'	C6.5
7' < 22'	C6.5	13' < 22'	D7
22' < 29'	D7	22' < 29'	D4.5
29' - 40'	E5	29' - 40'	E5
SIZE: 5' x 6'			
≥ 0.5' < 12'	C6.5	≥ 0.5' < 3'	C6.5
12' < 26'	D7	3' < 9'	B5.5
26' - 40'	E5	9' < 23'	C3.5
		23' < 35'	D4.5
		35' - 40'	E5
SIZE: 5' x 7'			
≥ 0.5' < 10'	C6.5	≥ 0.5' < 10'	B5.5
10' < 20'	D7	10' < 31'	C3.5
20' < 34'	E5	31' - 40'	D4.5
34' - 40'	F5		
SIZE: 5' x 8'			
≥ 0.5' < 7'	C6.5	≥ 0.5' < 8'	B10
7' < 13'	D7	8' < 17'	B5.5
13' < 24'	E5	17' < 25'	C6.5
24' - 40'	F5	25' - 40'	C3.5
SIZE: 5' x 9'			
≥ 0.5' < 8'	C6.5	≥ 0.5' < 14'	B10
8' < 14'	D7	14' < 24'	B5.5
14' < 25'	E5	24' < 34'	C6.5
25' - 40'	F5	34' - 40'	C3.5
SIZE: 5' x UNLIMITED			
≥ 0.5' < 8'	C6.5	≥ 0.5' < 14'	B10
8' < 14'	D7	14' < 24'	B5.5
14' < 25'	E5	24' < 34'	C6.5
25' - 40'	F5	34' - 40'	C3.5

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 6' x 6'			
≥ 0.5' < 13'	C6.5	≥ 0.5' < 10'	C3.5
13' < 23'	D7	10' < 18'	D4.5
23' - 40'	E5	18' < 27'	E5
		27' < 33'	E3
		33' - 40'	F5
SIZE: 6' x 7'			
≥ 0.5' < 8'	C6.5	≥ 0.5' < 8'	C6.5
8' < 16'	D7	8' < 12'	C3.5
16' < 28'	E5	12' < 21'	D4.5
28' - 40'	F5	21' < 28'	E5
		28' < 35'	E3
		35' - 40'	F5
SIZE: 6' x 8'			
≥ 0.5' < 6'	C6.5	≥ 0.5' < 6'	B5.5
6' < 13'	D7	6' < 11'	C6.5
13' < 22'	E5	11' < 17'	C3.5
22' < 35'	F5	17' < 22'	D4.5
35' - 40'	G5	22' < 32'	E5
		32' - 40'	E3
SIZE: 6' x 9'			
≥ 0.5' < 8'	D7	≥ 0.5' < 8'	B5.5
8' < 14'	E5	8' < 14'	C6.5
14' < 24'	F5	14' < 21'	C3.5
24' - 34'	G5	21' < 25'	D4.5
		25' - 34'	E5
SIZE: 6' x UNLIMITED			
≥ 0.5' < 8'	D7	≥ 0.5' < 8'	B5.5
8' < 14'	E5	8' < 14'	C6.5
14' < 24'	F5	14' < 21'	C3.5
24' - 34'	G5	21' < 25'	D4.5
		25' - 34'	E5
SIZE: 7' x 7'			
≥ 0.5' < 8'	C6.5	≥ 0.5' < 4'	C6.5
8' < 15'	D7	4' < 7'	C3.5
15' < 26'	E5	7' < 11'	D4.5
26' - 40'	F5	11' < 22'	E3
		22' < 32'	F3.5
		32' - 40'	G3.5
SIZE: 7' x 8'			
≥ 0.5' < 5'	C6.5	≥ 0.5' < 5'	C6.5
5' < 11'	D7	5' < 8'	C3.5
11' < 19'	E5	8' < 13'	D4.5
19' < 30'	F5	13' < 22'	E3
30' - 40'	G5	22' < 30'	F3.5
		30' - 40'	G3.5
SIZE: 7' x 9'			
≥ 0.5' < 9'	D7	≥ 0.5' < 7'	C6.5
9' < 15'	E5	7' < 10'	C3.5
15' < 25'	F5	10' < 14'	D4.5
25' - 34'	G5	14' < 21'	E5
		21' < 29'	F5
		29' - 34'	F3.5

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 8' x 8'			
≥ 0.5' < 10'	D7	≥ 0.5' < 9'	D4.5
10' < 19'	E5	9' < 13'	E5
19' - 30'	F5	13' < 18'	F5
		18' < 23'	F3.5
		23' - 30'	G3.5
SIZE: 8' x 9'			
≥ 0.5' < 8'	D7	≥ 0.5' < 7'	D7
8' < 14'	E5	7' < 9'	D4.5
14' < 23'	F5	9' < 15'	E3
23' - 31'	G3.5	15' < 20'	F5
		20' < 23'	F3.5
		23' - 31'	G3.5
SIZE: 9' x 9'			
≥ 0.5' < 8'	D7	≥ 0.5' < 7'	D4
8' < 14'	E5	7' < 10'	E5
14' < 22'	F5	10' < 17'	F3.5
		17' < 22'	G3.5
SIZE: 9' x 9' x 10" SLAB THICKNESS			
22' < 36'	F5	22' < 31'	F3.5
36' - 40'	G5	31' - 40'	G3.5
SIZE: 10' x 10' x 10" SLAB THICKNESS			
≥ 0.5' < 7'	C6.5	≥ 0.5' < 6'	C6.5
7' < 10'	D7	6' < 9'	D4.5
10' < 18'	E5	9' < 15'	E5
18' < 27'	F5	15' < 22'	F5
27' - 32'	G5	22' - 32'	G3.5
SIZE: 12' x 12' x 12" SLAB THICKNESS			
≥ 0.5' < 10'	D7	≥ 0.5' < 8'	D7
10' < 16'	E5	8' < 14'	E5
16' < 25'	F5	14' < 22'	F5
25' - 35'	G5	22' < 30'	G5
		30' - 35'	H4

REINFORCING SCHEDULE				
SCHEDULE	GRADE 60 BARS OR 65 KSI & 70 KSI WELDED WIRE FABRIC			
	MAXIMUM SPACING			
SCHEDULE	GRADE 60 AREA (in ² /ft)	GR 60 BARS	WWF EQUIV. AREA*	
			65 KSI	70 KSI
A12	0.20	12"	8"	8"
A6	0.20	6"	5"	4 ¹ / ₂ "
B10	0.24	10"	8"	7 ¹ / ₂ "
B5.5	0.24	5 ¹ / ₂ "	5"	4"
C6.5	0.37	6 ¹ / ₂ "	6"	5"
C3.5	0.37	3 ¹ / ₂ "	3"	2 ¹ / ₂ "
D7	0.53	7"	6"	5"
D4.5	0.53	4 ¹ / ₂ "	4"	3 ¹ / ₂ "
E5	0.73	5"	4"	4"
E3	0.73	3"	3"	3"
F5	1.06	5"	4"	4"
F3.5	1.06	3 ¹ / ₂ "	3"	3"
G5	1.45	5"	4"	4"
G3.5	1.45	3 ¹ / ₂ "	3"	3"
H4	1.75	4"	3"	3"

*Equivalent Area Welded Wire Fabric may be substituted in accordance with Index No. 201, Sheet 4.

SLAB DESIGNS - ROUND STRUCTURES (TABLE 7)

SLAB DEPTH	SLAB THICKNESS	REINF. (2 WAYS) SCHEDULE
SIZE: 3'-6" DIAMETER		
≥ 2' - 15'	6" Precast	C6.5
≥ 0.5' < 30'	8"	A6
30' - 40'	8"	B5.5
SIZE: 4'-0" DIAMETER		
≥ 0.5' < 19'	8"	A6
19' < 30'	8"	B5.5
30' - 40'	8"	C6.5
SIZE: 5'-0" DIAMETER		
≥ 0.5' < 15'	8"	B5.5
15' < 26'	8"	C6.5
26' < 35'	8"	D7
35' - 40'	8"	D4.5
SIZE: 6'-0" DIAMETER		
≥ 0.5' < 9'	8"	B5.5
9' < 15'	8"	C6.5
15' < 22'	8"	C3.5
22' < 30'	8"	D4.5
30' - 40'	8"	E5
SIZE: 7'-0" DIAMETER		
≥ 0.5' < 8'	8"	C3.5
8' < 16'	8"	D4.5
16' < 23'	8"	E5
23' < 27'	8"	E3
27' - 40'	8"	F3.5
SIZE: 8'-0" DIAMETER		
≥ 0.5' < 10'	8"	D4.5
10' < 16'	8"	E5
16' < 19'	8"	E3
19' < 29'	8"	F3.5
29' - 40'	10"	F5
SIZE: 10'-0" DIAMETER		
≥ 0.5' < 12'	10"	D4.5
12' < 20'	10"	E5
20' < 28'	10"	F5
28' - 40'	10"	G3.5
SIZE: 12'-0" DIAMETER		
≥ 0.5' < 8'	10"	D4.5
8' < 13'	10"	E5
13' < 18'	10"	F5
18' < 26'	10"	G3.5
26' - 40'	12"	G3.5

GENERAL NOTES

- Size is the inside dimension(s) of a structure.
- Slab reinforcement is appropriate for top, intermediate, and bottom slabs.
- Bottom Slabs for precast 3'-6" x 3'-6" rectangular structures at 15' depth or less, may be 6" thick.
- Slab depth is measured from finished grade to top of slab.
- Wall depth is measured to the top of the bottom slab for boxes and to the top of the intermediate slab for risers.
- Wall height is the distance between top of lower slab to bottom of upper slab. Maximum wall height is 12' for wall lengths exceeding 5', or 10' for wall lengths exceeding 12'.
- Wall lengths exceeding 6'-0" require two layers of reinforcing (See Table 8) with 2" of cover from the horizontal bars to the inside and outside faces for each layer.
- Wall lengths exceeding the dimensions or depths shown in Table 8, or 12'-0" diameter require a special design.
- Wall thickness and reinforcing for rectangular structures is the same for both long and short sides.

WALL DESIGNS - RECTANGULAR STRUCTURES (TABLE 8)

VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS
WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE	
SIZE: 3'-6" & RISERS				
≥ 1.17' - 40'	A12	≥ 1.17' < 10'	B10	6"/8"
		10' < 18'	B5.5	6"/8"
		18' < 29'	C6.5	6"/8"
		29' - 40'	C3.5	6"/8"
SIZE: 4'-0"				
≥ 1.17' - 40'	A12	≥ 1.17' < 6'	B10	6"/8"
		6' < 10'	B5.5	6"/8"
		10' < 20'	C6.5	6"/8"
		20' < 28'	C3.5	6"/8"
		28' - 40'	D4.5	6"/8"
SIZE: 5'-0"				
≥ 1.17' - 40'	A12	≥ 1.17' < 5'	B5.5	6"/8"
		5' < 9'	C6.5	6"/8"
		9' < 15'	C3.5	6"/8"
		15' < 22'	D4.5	6"/8"
		22' - 40'	E3	8"
SIZE: 6'-0"				
≥ 1.17' < 26'	A12	≥ 1.17' < 9'	C3.5	6"/8"
		9' < 15'	D4.5	6"/8"
		15' < 26'	E3	8"
	Inside Outside		Inside Outside	
26' - 40'	A12 A12	26' - 40'	D7 D7	8"
SIZE: 7'-0"				
≥ 1.17' < 25'	A12	≥ 1.17' < 7'	B10	8"
25' - 40'	B10	7' < 10'	B5.5	8"
		10' < 20'	C6.5	8"
		20' < 30'	D7	8"
		30' - 40'	E5	8"
SIZE: 8'-0"				
≥ 1.17' < 20'	A12	≥ 1.17' < 6'	B5.5	8"
20' - 40'	C6.5	6' < 13'	C6.5	8"
		13' < 22'	D7	8"
		22' < 31'	E5	8"
		31' - 40'	F5	8"
SIZE: 9'-0"				
≥ 1.17' < 12'	A12	≥ 1.17' < 8'	C6.5	8"
12' < 28'	C6.5	8' < 15'	D7	8"
28' - 40'	D7	15' < 23'	E5	8"
		23' - 40'	F5	8"
SIZE: 10'-0"				
≥ 1.17' < 10'	B10	≥ 1.17' < 10'	D7	8"
10' < 21'	C6.5	10' < 17'	E5	8"
21' < 26'	D7	17' < 26'	F5	8"
26' - 40'	C6.5	26' - 40'	F5	10"
SIZE: 12'-0"				
≥ 1.17' < 10'	B10	≥ 1.17' < 10'	D7	10"
10' < 21'	C6.5	10' < 17'	E5	10"
21' - 40'	D7	17' < 26'	F5	10"
		26' - 40'	G5	10"
SIZE: 20'-0"				
≥ 1.17' < 10'	C6.5	≥ 1.17' < 10'	E5	10"
10' < 17'	D7	10' < 17'	F	