



Lintel Tables Design Notes and Limitations

1. These tables apply to one and two family residential structures only that conform to the requirements of the 2006, 2009 or 2012 International Building Code and referenced design guides. All construction shall comply with the appropriate local building codes.
2. It is the responsibility of the parties involved, including the builder and subcontractors, to review the applicability of these tables and notes to the project specific conditions. Keystone Structural Solutions and NUDURA assume no responsibility with regard to the interpretation or misuse of the attached tables.
3. If the proposed construction does not meet the design or applicability parameters noted herein, a local design professional engineer shall be retained to prepare the design in accordance with applicable standards and design Codes.
4. The allowable uniformly distributed loads indicated within the lintel tables of this manual are unfactored. The actual uniformly distributed load for each lintel design case is to be calculated by multiplying the floor and / or roof loads by the tributary floor and / or roof width, and adding together all applicable loading for each lintel including concrete wall weight and all supported live and dead loads. The tributary width is determined by taking half of the overall floor and / or roof spans.
5. Lintels are designed for uniformly distributed gravity loads only. A local design professional engineer shall be retained to prepare the design of lintels to resist lateral loads or point loads, such as concentrated loads from girders, columns, beam reactions, or offset openings, in accordance with the Code.
6. Designs limit total deflection to $L/480$.



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7. Design assumes that the reinforcing steel will be deformed rebar, placed in accordance with standard industry practice and ACI placement requirements and shall be supplied at the following yield strength:
 - ASTM A615 Grade 60 ($f_y = 60$ ksi)
 - Grade 40 reinforcement may be substituted at 1.5 times the number of bars noted, or similarly $2/3$ the spacing listed for requirements specified 'on center'.

 8. Design assumes that the minimum 28 day compressive strength of concrete used in the installation shall be 3,000 psi. Actual design of the concrete mix is the responsibility of the ready mix supplier.

 9. Minimum lintel reinforcing shall consist of the following:
 - A #4 top bar located $1\frac{1}{2}$ " from the top of the lintel extended a minimum of 24" beyond the opening at each end.
 - Bottom bars equal to the quantity and diameter specified in the lintel tables, installed with a concrete cover of $1\frac{1}{2}$ " and extended a minimum of 24" beyond the opening at each end.
 - When required in the lintel tables, #3 's' or 'c' hook stirrups shall be installed around the top and bottom bars, in accordance with the dimensions and spacing indicated in the tables and drawings of this manual.

 10. Where there is less than 12" of concrete wall length between openings, the lintel shall be reinforced to span over both openings.

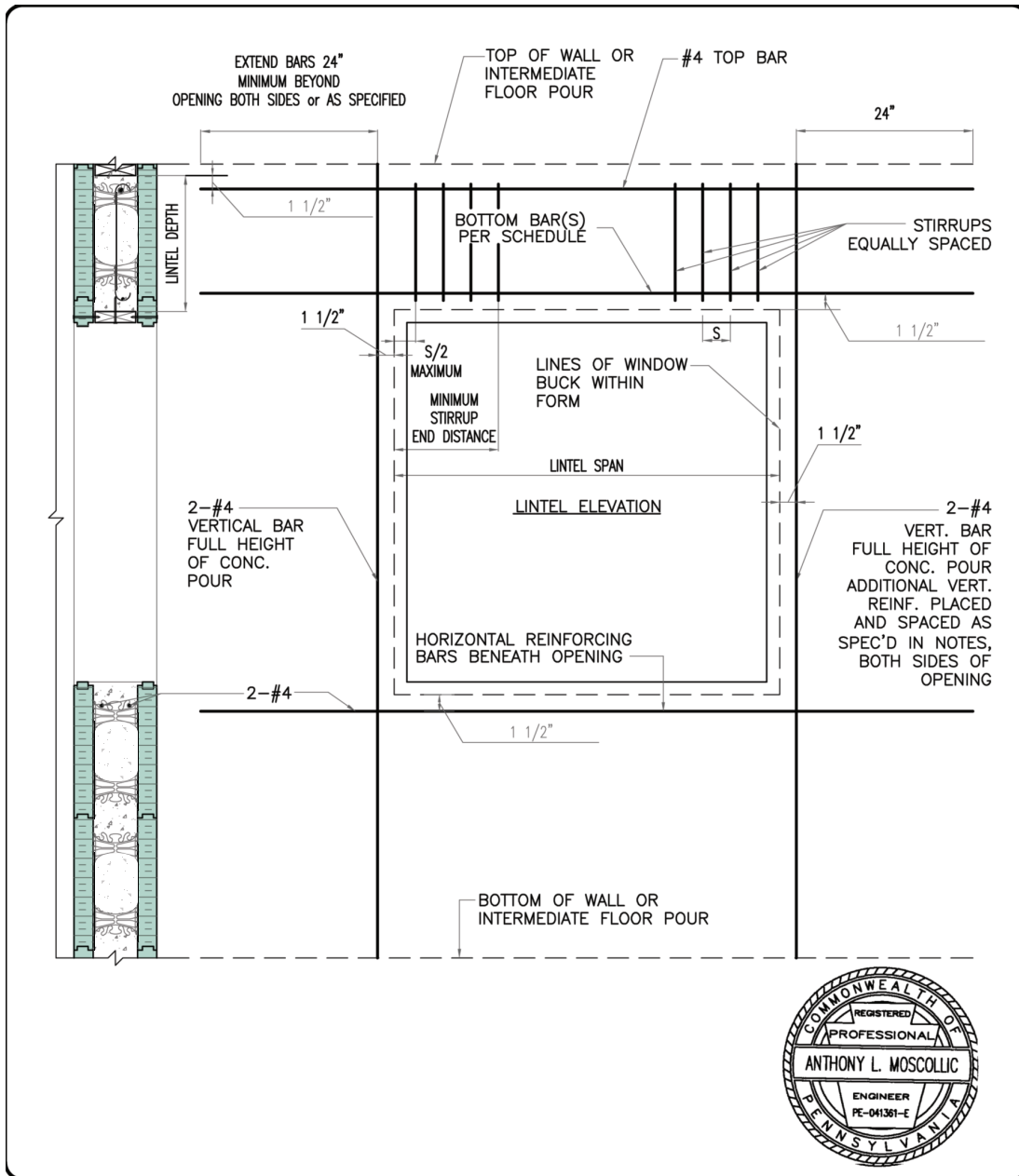
 11. Where there is less than 24" of concrete wall length between openings, and where either opening is greater than five feet in length, the lintel shall be reinforced to span over both openings.

 12. Construction joints shall not be installed within 24" on either side of any wall opening.



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13. Minimum bar lap length shall be 42 bar diameters.
14. Where bars within a lintel cannot achieve a minimum concrete side cover and spacing of $\frac{3}{4}$ " , the bars are required to be bundled. The following notes apply to all bundled bars:
- A maximum of two parallel reinforcing bars may be bundled together in contact with each other, and assumed to act as a single unit. Bundled bars shall be tied, wired, or otherwise fastened together to ensure that they remain in position.
 - Splices of individual bars within a bundle are not to overlap.
 - Lintels with bundled reinforcement are to have stirrups installed
15. Twenty foot span lintels shown in tables are for estimation purposes only. This span exceeds IRC limitations and therefore additional review is required by a local design professional.
16. Adequate bracing, shoring, and formwork are the responsibility of the contractor, including all means and methods of construction.
17. Top of lintels shall be laterally supported by building floor or roof systems, and diaphragms, by others.
18. Placement of concrete including adequate vibration is the responsibility of the contractor.
19. Refer to the design limitations and ICF wall requirements within this manual for additional concrete and reinforcement requirements, and limitations.

INSTALLATION MANUAL



LINTEL DIAGRAM	
REV. NO. 005 KS	DWG. NO. L-1 USA
REV. DATE: AUGUST 2012	
DRAWN BY: T. VAN CLIEAF	SCALE: "Not to Scale"

Opening Width	9" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1) #4	0	(1)#4	0	(1)#4	9	(1)#4	11	(1)#4	12	(1)#4	13	(1)#4	13	(1)#4	14	(1)#4	14
4'-0"	(1)#4	0	(1)#4	12	(1)#4	15	(1)#4	17	(1)#4	18	(1)#4	19	(1)#5	19	(1)#5	20	(1)#5	20
5'-0"	(1)#4	12	(1)#4	18	(1)#4	21	(1)#5	23	(1)#5	24	(1)#5	25	(1)#6	25	(1)#6	26	(1)#7	26
6'-0"	(1)#4	18	(1)#4	24	(1)#5	27	(1)#6	29	(1)#6	30	(1)#7	31	(1)#7	31	(1) #5& (1) #6	32	(1)#8	32
8'-0"	(1)#5	30	(1)#6	36	(1)#7	39	(1) #5& (1) #6	41										
10'-0"	(1)#6	42	(2)#5	48	(2)#7	51												
12'-0"	(1)#7	54																
14'-0"	(2)#7	66																
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 4"

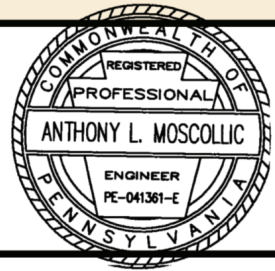
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone Structural Solutions
 Consulting Engineers
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**4" Thick
 9" Deep**
**Table No.
 L 4-9**

Opening Width	12" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	11	(1)#4	12	(1)#4	12	(1)#4	13
4'-0"	(1)#4	0	(1)#4	0	(1)#4	12	(1)#4	14	(1)#4	16	(1)#4	17	(1)#4	18	(1)#4	18	(1)#4	19
5'-0"	(1)#4	0	(1)#4	14	(1)#4	18	(1)#4	20	(1)#4	22	(1)#5	23	(1)#5	24	(1)#5	24	(1)#5	25
6'-0"	(1)#4	12	(1)#4	20	(1)#4	24	(1)#5	26	(1)#5	28	(1)#5	29	(1)#6	30	(1)#6	30		
8'-0"	(1)#4	24	(1)#5	32	(1)#5	36	(1)#6	38	(2)#5	40								
10'-0"	(1)#5	36	(1)#6	44	(2)#5	48												
12'-0"	(1)#6	48																
14'-0"																		
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.

2. Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



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4" Thick
 12" Deep

 Table No.
L 4-12

Opening Width	15" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	15	(1)#4	16	(1)#4	17	(1)#4	17
5'-0"	(1)#4	0	(1)#4	0	(1)#4	14	(1)#4	17	(1)#4	19	(1)#5	21	(1)#5	22	(1)#4	23	(1)#5	23
6'-0"	(1)#4	0	(1)#4	15	(1)#4	20	(1)#5	23	(1)#4	25	(1)#5	27	(1)#5	28	(1)#5	29	(1)#6	29
8'-0"	(1)#4	18	(1)#5	27	(1)#5	32	(1)#5	35	(1)#6	37	(1)#6	39	(2)#5	40	(2)#5	41	(2)#5	41
10'-0"	(1)#4	30	(1)#5	39	(1)#6	44	(2)#5	47	(2)#5	49	(1) #5& (1) #6	51						
12'-0"	(1)#5	42	(1)#6	51	(2)#5	56	(1) #5& (1) #6	59										
14'-0"	(1)#6	54																
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.

2. Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

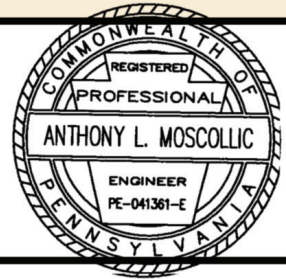
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 (2) #4's may be substituted for (1) #5



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4" Thick
15" Deep

Table No.
L 4-15

Opening Width	18" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
4'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
5'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	17	(1) #4	19	(1) #4	20	(1) #5	21	(1) #5	22
6'-0"	(1) #4	0	(1) #4	0	(1) #4	17	(1) #4	20"	(1) #5	23	(1) #5	25	(1) #5	26	(1) #5	27	(1) #5	28"
8'-0"	(1) #4	0	(1) #4	23	(1) #5	29	(1) #5	32"	(1) #5	35	(1) #6	37	(1) #6	38	(1) #6	39	(2)#5	40"
10'-0"	(1) #5	23	(1) #5	35	(1) #5	41	(1) #6	44"	(1) #6	47	(2)#5	49	(2)#5	50	(1) #5&(1) #6	51	(2)#6	52
12'-0"	(1) #5	35	(1) #5	47	(1) #6	53	(2)#5	56"	(1) #5&(1) #6	59	(2)#6	61	(2)#6	62				
14'-0"	(1) #5	47	(1) #4&(1) #5	59	(2)#5	65	(1) #5&(1) #6	68	(1) #6&(1) #7	71								
16'-0"	(1) #6	59	(2)#5	71	(2)#6	77												
18'-0"	(2)#5	71																
20'-0"	(2)#6	83																

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.

2. Stirrup Spacing = 8"

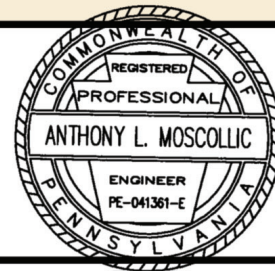
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
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 (2) #4's may be substituted for (1) #5



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4" Thick
18" Deep

Table No.
L 4-18

Opening Width	21" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
4'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
5'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	20"	(1) #4	21
6'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	21	(1) #4	23	(1) #5	24	(1) #5	26	(1) #5	27
8'-0"	(1) #4	0	(1) #4	0	(1) #4	25	(1) #4	30	(1) #5	33	(1) #5	35	(1) #5	36	(1) #6	38	(1) #6	39
10'-0"	(1) #4	0	(1) #5	31	(1) #5	37	(1) #5	42	(1) #6	45	(1) #6	47	(2)#5	48	(2)#5	50	(1) #5& (1) #6	51
12'-0"	(1) #4	30	(1) #5	43	(1) #6	49	(1) #6	54	(2)#5	57	(1) #5& (1) #6	59	(1) #5& (1) #6	60				
14'-0"	(1) #5	42	(1) #6	55	(2)#5	61	(1) #5& (1) #6	66	(1) #5& (1) #6	69								
16'-0"	(1) #5	54	(2)#5	67	(1) #5& (1) #6	73	(2)#6	78										
18'-0"	(1) #6	66	(1) #5& (1) #6	79														
20'-0"	(2)#5	78																

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.

2. Stirrup Spacing = 10"

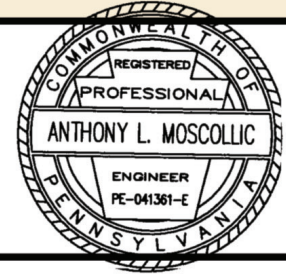
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



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4" Thick
21" Deep

Table No.
L 4-21

Opening Width	24" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	23	(1)#5	24	(1)#5	25
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	27	(1)#5	30	(1)#5	33	(1)#5	35	(1)#5	36	(1)#6	37
10'-0"	(1)#4	0	(1)#4	26	(1)#5	34	(1)#5	39	(1)#5	42	(1)#6	45	(1)#6	47	(2)#5	48	(2)#5	49
12'-0"	(1)#5	0	(1)#5	38	(1)#5	46	(1)#6	51	(2)#5	54	(2)#5	57	(2)#5	59	(1) #5& (1) #6	60	(2)#6	61
14'-0"	(1)#5	36	(1)#5	50	(1)#6	58	(2)#5	63	(1) #5& (1) #6	66	(2)#6	69	(2)#6	71				
16'-0"	(1)#5	48	(1)#6	62	(2)#5	70	(1) #5& (1) #6	75	(2)#6	78	(1) #6& (1) #7	81	(2)#7	83				
18'-0"	(1)#6	60	(2)#5	74	(1) #5& (1) #6	82	(2)#6	87										
20'-0"	(1)#6	72	(2)#6	86	(2)#6	94												

NOTES:

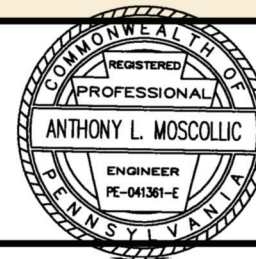
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 12"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



4" Thick
24" Deep

Table No.
L 4-24

Opening Width	9" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	9	(1)#4	10	(1)#4	11	(1)#4	12	(1)#4	13
4'-0"	(1)#4	0	(1)#4	0	(1)#4	11	(1)#4	13	(1)#4	15	(1)#4	16	(1)#5	17	(1)#5	18	(1)#4	19
5'-0"	(1)#4	0	(1)#4	12	(1)#4	17	(1)#5	19	(1)#5	21	(1)#5	22	(1)#6	23	(1)#6	24	(1)#6	25
6'-0"	(1)#4	10	(1)#4	18	(1)#5	23	(1)#5	25	(1)#6	27	(1)#6	28	(2)#5	29	(2)#5	30		
8'-0"	(1)#5	22	(1)#6	30	(2)#5	35												
10'-0"	(1) #4 & (1) #5	34								51								
12'-0"																		
14'-0"																		
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 4"

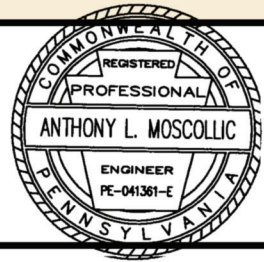
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Table Prepared by:

Keystone Structural Solutions
 Consulting Engineers
 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
 412.369.9020 www.kss-eng.com



**6" Thick
 9" Deep**

**Table No.
 L 6-9**

Opening Width	12" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	12	(1)#4	13	(1)#4	15	(1)#4	16	(1)#4	16
5'-0"	(1)#4	0	(1)#4	0	(1)#4	12	(1)#4	15	(1)#4	18	(1)#4	19	(1)#5	21	(1)#5	22	(1)#5	22
6'-0"	(1)#4	0	(1)#4	12	(1)#4	18	(1)#5	21	(1)#5	24	(1)#5	25	(1)#6	27	(1)#6	28	(1)#6	28
8'-0"	(1)#4	0	(1)#5	24	(1)#5	30	(1)#6	33	(2)#5	36	(2)#5	37	(1) #5& (1) #6	30	(1) #5& (1) #6	40		
10'-0"	(1)#5	25	(1)#6	36	(2)#5	42	(1) #5& (1) #6	45	(2)#6	48								
12'-0"	(1)#6	37	(1) #5& (1) #6	48														
14'-0"	(1) #5& (1) #6	49																
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

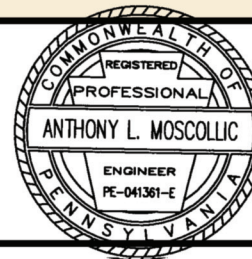
- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



6" Thick
12" Deep

Table No.
L 6-12

Opening Width	15" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	14
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	14	(1)#4	16	(1)#5	18	(1)#5	19	(1)#5	20
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	17	(1)#5	20	(1)#5	22	(1)#5	24	(1)#5	25	(1)#5	26
8'-0"	(1)#4	0	(1)#5	18	(1)#5	25	(1)#5	29	(1)#6	32	(1)#6	34	(1)#6	36	(2)#5	37	(2)#5	38
10'-0"	(1)#5	16	(1)#5	30	(1)#6	37	(1)#6	41	(2)#5	44	(1) #5& (1) #6	46	(1) #5& (1) #6	48	(2)#6	49	(1) #6& (1) #7	50
12'-0"	(1)#5	28	(1)#6	42	(2)#5	49	(1) #5& (1) #6	53	(2)#6	56	(1) #6& (1) #7	58						
14'-0"	(1)#6	40	(2)#5	54	(2)#6	61	(2)#7	65										
16'-0"	(2)#5	52	(1) #6& (1) #7	66														
18'-0"	(2)#6	64																
20'-0"																		

NOTES:

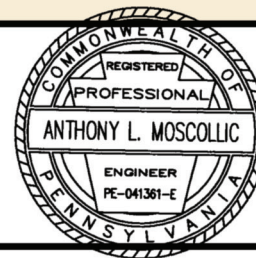
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



6" Thick
 15" Deep
 Table No.
L 6-15

Opening Width	18" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	17	(1)#5	18
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	19	(1)#5	21	(1)#5	23	(1)#6	24
8'-0"	(1)#4	0	(1)#4	0	(1)#5	20	(1)#6	25	(1)#6	29	(1)#6	31	(1)#6	33	(1)#6	35	(2)#5	36
10'-0"	(1)#5	0	(1)#5	23	(1)#6	32	(1)#6	37	(1)#6	41	(2)#5	43	(2)#5	45	(1) #5& (1) #6	47	(2)#6	48
12'-0"	(1)#5	0	(1)#6	35	(1)#6	44	(1)#7	49	(1) #5& (1) #6	53	(2)#6	55	(2)#6	57	(2)#7	59		
14'-0"	(1)#6	32	(1)#6	47	(2)#5	56	(1)#8	61	(1) #6& (1) #7	65	(2)#7	67						
16'-0"	(1)#6	44	(2)#5	59	(2)#6	68	(2)#7	73										
18'-0"	(2)#5	56	(2)#6	71														
20'-0"	(1) #5& (1) #6	68																

NOTES:

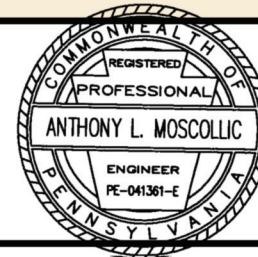
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 8"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



6" Thick
 18" Deep

Table No.
L 6-18

Opening Width	21" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	21	(1)#5	22
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	21	(1)#5	25	(1)#6	28	(1)#6	31	(1)#6	33	(1)#6	34
10'-0"	(1)#4	0	(1)#5	0	(1)#5	27	(1)#6	33	(1)#6	37	(1)#6	40	(1)#7	43	(2)#5	45	(2)#5	46
12'-0"	(1)#5	0	(1)#6	30	(1)#6	39	(1)#6	45	(2)#5	49	(2)#5	52	(1) #5 & (1) #6	55	(2)#6	57	(3)#5	58
14'-0"	(1)#5	0	(1)#6	42	(2)#5	51	(2)#5	57	(1) #5 & (1) #6	61	(2)#6	64	(1) #6 & (1) #7	67				
16'-0"	(1)#6	36	(2)#5	54	(1) #5 & (1) #6	63	(2)#6	69	(2)#7	73	(2)#7	76						
18'-0"	(1)#6	48	(1) #5 & (1) #6	66														
20'-0"	(2)#5	60																

NOTES:

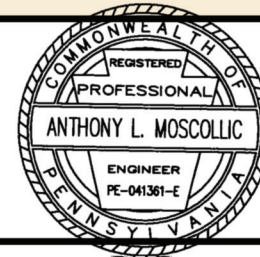
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 10"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



6" Thick
21" Deep

Table No.
L 6-21

Opening Width	24" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	26	(1)#5	28	(1)#6	30	(1)#6	32
10'-0"	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	29	(1)#6	34	(1)#7	38	(1)#6	40	(2)#5	42	(2)#5	44
12'-0"	(1)#4	0	(1)#5	0	(1)#6	35	(1)#6	41	(1) #4& (1) #5	46	(1)#7	50	(2)#5	52	(1) #5& (1) #6	54	(2)#6	56
14'-0"	(1)#5	0	(1)#6	36	(1)#6	47	(2)#5	53	(2)#5	58	(1)#8	62	(1) #5& (1) #6	64	(1) #6& (1) #7	66	(2)#7	68
16'-0"	(1)#6	28	(1)#6	48	(2)#5	59	(1) #5& (1) #6	65	(2)#6	70	(2)#7	74	(1) #6& (1) #7	76				
18'-0"	(1)#6	40	(2)#5	60	(1) #5& (1) #6	71	(3)#5	77										
20'-0"	(2)#5	52	(2)#5	72	(3)#5	83												

NOTES:

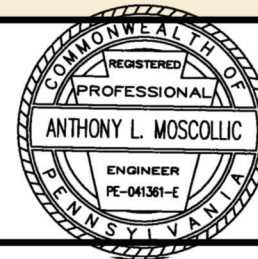
- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 12"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



6" Thick
24" Deep

Table No.
L 6-24

Opening Width	9" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	8	(1)#4	9	(1)#4	10	(1)#4	11
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	10	(1)#4	12	(1)#4	14	(1)#5	15	(1)#5	16	(1)#5	17
-0"	(1)#4	0	(1)#4	0	(1)#4	12	(1)#5	16	(1)#5	18	(1)#5	20	(1)#6	21	(1)#6	22	(1)#6	23
6'-0"	(1)#4	0	(1)#4	13	(1)#5	18	(1)#5	22	(1)#6	24	(1)#6	26	(2)#5	27	(2)#5	28	(1) #5& (1) #6	29
8'-0"	(1)#5	15	(1)#6	25	(1)#6	30	(1) #5& (1) #6	34										
10'-0"	(1)#6	27																
12'-0"																		
14'-0"																		
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

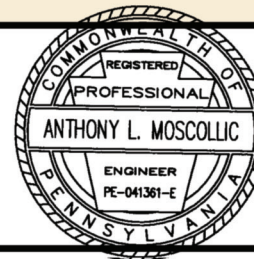
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 4"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



8" Thick
 9" Deep
 Table No.
L 8-9

Opening Width	12" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	12	(1)#5	13	(1)#5	14
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	14	(1)#5	16	(1)#5	18	(1)#5	19	(1)#5	20
6'-0"	(1)#4	0	(1)#4	0	(1)#5	12	(1)#5	16	(1)#5	20	(1)#5	22	(1)#6	24	(1)#6	25	(1)#6	26
8'-0"	(1)#4	0	(1)#5	17	(1)#5	24	(1)#6	28	(1)#6	32	(2)#5	34	(2)#5	36	(1) #5& (1) #6	37	(2) #6	38
10'-0"	(1)#5	0	(1)#6	29	(2)#5	36	(2)#5	40	(2) #6	44	(1) #6& (1) #7	46						
12'-0"	(1)#6	27	(2)#5	41	(1) #6& (1) #7	48	(1)#9	52	(2)#7	56								
14'-0"	(2)#5	39																
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.

2. Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone
Structural Solutions
Consulting Engineers
8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
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8" Thick
12" Deep

Table No.
L 8-12

Opening Width	15" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	14	(1)#5	16	(1)#5	17
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	15	(1)#5	18	(1)#6	20	(1)#6	22	(1)#6	23
8'-0"	(1)#4	0	(1)#5	0	(1)#5	18	(1)#5	23	(1)#6	27	(1)#6	30	(2)#5	32	(2)#5	34	(2)#5	35
10'-0"	(1)#5	0	(1)#6	21	(1)#6	30	(1)#6	35	(2)#5	39	(2)#5	42	(1) #5& (1) #6	44	(2)#6	46	(3)#5	47
12'-0"	(1)#6	16	(1)#6	33	(2)#5	42	(1) #5& (1) #6	47	(2)#6	51	(1) #6& (1) #7	54	(2)#7	56				
14'-0"	(1)#6	28	(2)#5	45	(2)#6	54												
16'-0"	(2)#5	40	(1) #6& (1) #7	57														
18'-0"	(1) #6& (1) #7	52																
20'-0"																		

NOTES:

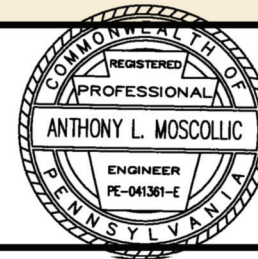
- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



8" Thick
 15" Deep
 Table No.
L 8-15

Opening Width	18" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	17	(1)#5	19	(1)#6	20
8'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	23	(1)#6	26	(1)#6	29	(1)#6	31	(2)#5	32
10'-0"	(1)#4	0	(1)#5	0	(1)#6	23	(1)#6	30	(1)#6	35	(2)#5	38	(2)#5	41	(1) #5& (1) #6	43	(1) #5& (1) #6	44
12'-0"	(1)#5	0	(1)#6	25	(1)#6	35	(2)#5	42	(1) #5& (1) #6	47	(1) #5& (1) #6	50	(2)#6	53	(1) #6& (1) #7	55	(2)#7	56
14'-0"	(1)#6	0	1) #4& (1) #5	37	(2)#5	47	(1) #5& (1) #6	54	(1) #6& (1) #7	59	(1) #6& (1) #7	62	(2)#7	65				
16'-0"	(1)#6	30	(2)#5	49	(2)#6	59												
18'-0"	(2)#5	42	(2)#6	61														
20'-0"	(1) #5& (1) #6	54																

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 8"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

 Consulting Engineers
 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
 412.369.9020 www.kss-eng.com



8" Thick
 18" Deep
 Table No.
L 8-18

Opening Width	21" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	22	(1)#6	25	(2)#5	28	(2)#5	30
10'-0"	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	25	(2)#5	31	(2)#5	34	(2)#5	37	(2)#5	40	(2)#5	42
12'-0"	(1)#5	0	(1)#6	0	(2)#5	30	(2)#5	37	(2)#5	43	(2)#5	46	(1) #5& (1) #6	49	(2)#6	52	(2)#6	54
14'-0"	(1)#5	0	(2)#5	29	(2)#5	42	(2)#5	49	(1) #5& (1) #6	55	(2)#6	58	(1) #6& (1) #7	61	(2)#7	64	(3)#6	66
16'-0"	(1)#6	20	(2)#5	41	(1) #5& (1) #6	54	(2)#6	61	(1) #6& (1) #7	67	(2)#7	70						78
18'-0"	(2)#5	32	(1) #5& (1) #6	53	(2)#6	66	(2)#7	73										
20'-0"	(2)#5	44	(2)#6	65														

NOTES:

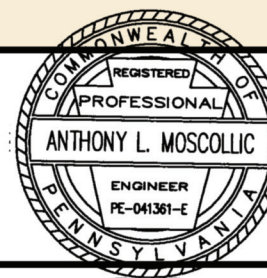
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 10"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:



8" Thick
 21" Deep
 Table No.
L 8-21

Opening Width	24" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#6	0	(1)#6	25	(1)#6	27
10'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#6	0	(1)#6	26	(2)#5	31	(2)#5	34	(2)#5	37	(2)#5	39
12'-0"	(1)#4	0	(1)#5	0	(1)#6	0	(2)#5	32	(1) #4&(1) #5	38	(2)#5	43	(2)#5	46	(1) #5&(1) #6	49	(1) #5&(1) #6	51
14'-0"	(1)#5	0	(1)#6	0	(2)#5	36	(2)#5	44	(1) #5&(1) #6	50	(1) #5&(1) #6	55	(2)#6	58	(3)#5	61	(1) #4&(2) #6	63
16'-0"	(1)#6	0	(1) #4&(1) #5	0	(2)#5	48	(1) #5&(1) #6	56	(2)#6	62	(1) #4&(2) #6	67	(3)#6	70	(3)#6	73		
18'-0"	(1)#6	0	(2)#5	46	(1) #5&(1) #6	60	(3)#5	68	(2)#7	74	(3)#6	79						
20'-0"	(2)#5	35	(1) #5&(1) #6	58	(3)#5	72	(3)#6	80										

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 12"

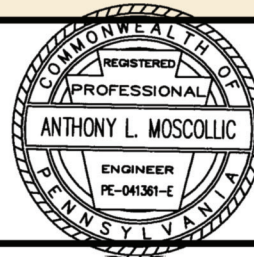
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone Structural Solutions
 Consulting Engineers
 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
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**8" Thick
 24" Deep**
**Table No.
 L 8-24**

Opening Width	9" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	8	(1)#4	9
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	9	(1)#5	11	(1)#5	13	(1)#5	14	(1)#5	15
5'-0"	(1)#4	0	(1)#4	0	(1)#5	8	(1)#5	12	(1)#5	15	(1)#5	17	(1)#6	19	(1)#6	20	(1)#6	21
6'-0"	(1)#4	0	(1)#5	0	(1)#5	14	(1)#5	18	(1)#6	21	(1)#6	23	(2)#5	25	(2)#5	26	(2)#5	27
8'-0"	(1)#5	0	(1)#6	20	(1)#6	26	(2)#5	30	(2)#6	33								
10'-0"	(1)#6	19	(2)#5	32														
12'-0"																		
14'-0"																		
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 4"

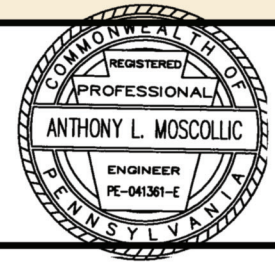
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone Structural Solutions
 Consulting Engineers
 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
 412.369.9020 www.kss-eng.com



**10" Thick
 9" Deep**
**Table No.
 L 10-9**

Opening Width	12" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	12
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	12	(1)#5	15	(1)#6	16	(1)#6	18
6'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	12	(1)#6	16	(1)#6	18	(1)#6	21	(1)#6	22	(1)#6	24
8'-0"	(1)#4	0	(1)#5	0	(1)#6	18	(1)#6	24	(1)#6	28	(1)#7	30	(2)#5	33	(1) #5& (1) #6	34	(2)#6	36
10'-0"	(1)#5	0	(1)#6	22	(2)#5	30	(2)#5	36	(1) #5& (1) #6	40	(2)#6	42	(3)#6	45				
12'-0"	(1)#6	18	(2)#5	34	(1) #5& (1) #6	42	(3)#6	48										
14'-0"	(2)#5	30	(3)#6															
16'-0"																		
18'-0"																		
20'-0"																		

NOTES:

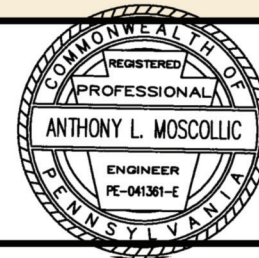
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 6"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:
Keystone
 Structural Solutions
 Consulting Engineers
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10" Thick
 12" Deep
 Table No.
L 10-12

Opening Width	15" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	14
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	14	(1)#5	16	(1)#6	18	(1)#6	20
8'-0"	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	18	(1)#6	22	(1)#6	26	(1)#6	28	(2)#5	30	(2)#5	32
10'-0"	(1)#5	0	(1)#6	0	(1)#6	23	(1) #4& (1) #5	30	(2)#5	34	(2)#5	38	1#5+1#6	40	(2)#6	42	(3)#5	44
12'-0"	(1)#6	0	(1)#6	24	(2)#5	35	(1) #5& (1) #6	42	(2)#6	46	(3)#5	50	(3)#6	52				
14'-0"	(1)#6	0	(2)#5	36	(1) #5& (1) #6	47	(3)#6	54										
16'-0"	(2)#5	29	(3)#5	48														
18'-0"	(1) #5& (1) #6	41																
20'-0"																		

NOTES:

- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 6"

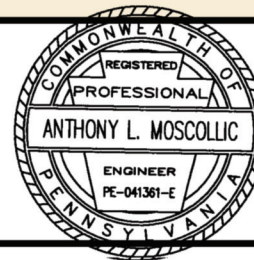
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone
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10" Thick
 15" Deep
 Table No.
L 10-15

Opening Width	18" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#6	18	(1)#6	21	(1)#6	24	(1)#6	27
10'-0"	(1)#4	0	(1)#5	0	(1)#6	0	(2)#5	23	(2)#5	29	(2)#5	30	(2)#5	33	(1) #5&(1) #6	36	(1) #5&(1) #6	39
12'-0"	(1)#5	0	(1)#6	0	(2)#5	27	(2)#5	35	(1) #5&(1) #6	41	(1) #5&(1) #6	42	(2)#6	46	(1) #4&(2) #6	48	(1) #4&(2) #6	50
14'-0"	(1)#6	0	(2)#5	27	(2)#5	39	(1) #5&(1) #6	47	(3)#5	53	(1) #4&(2) #6	56	(3)#6	58				
16'-0"	(2)#5	0	(2)#5	39	(2)#6	51	(1) #4&(2) #6	59	(3)#6	65								
18'-0"	(2)#5	29	(2)#6	51	(3)#6	63												
20'-0"	(1) #5&(1) #6	41																

NOTES:

- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 8"

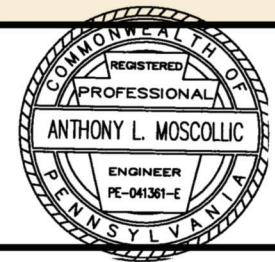
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



Table Prepared by:

Keystone Structural Solutions
 Consulting Engineers
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10" Thick
 18" Deep
 Table No.
L 10-18

Opening Width	21" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#6	24	(1)#6	24
10'-0"	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	0	(1)#6	24	(1)#6	29	(1) #4&(1) #5	32	(1) #5&(1) #6	36	(2)#5	36
12'-0"	(1)#5	0	(1)#6	0	(1)#6	0	(2)#5	30	(1) #5&(1) #6	36	(1) #5&(1) #6	41	(1) #5&(1) #6	44	(2)#6	48	(3)#5	48
14'-0"	(1)#5	0	(2)#5	0	(2)#5	32	(1) #5&(1) #6	42	(1) #5&(1) #6	48	(2)#6	53	(1) #4&(2) #6	56	(3)#6	60	(3)#6	60
16'-0"	(1)#6	0	(2)#5	30	(1) #5&(1) #6	44	(2)#6	54	(1) #4&(2) #6	60	(1) #5&(2) #6	65	(3)#6	68				
18'-0"	(2)#5	0	(1) #5&(1) #6	42	(2)#6	56	(1) #4&(2) #6	66	(3)#6	72								
20'-0"	(2)#5	30	(2)#6	54	(1) #4&(2) #6	68												

NOTES:

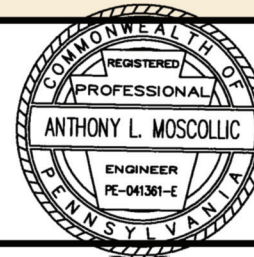
1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 10"

All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



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10" Thick
 21" Deep
 Table No.
L 10-21

Opening Width	24" Lintel Depth																	
	Uniformly Distributed Load																	
	500 lb/ft		750 lb/ft		1000 lb/ft		1250 lb/ft		1500 lb/ft		1750 lb/ft		2000 lb/ft		2250 lb/ft		2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
4'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0
6'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0
8'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#5	0	(1)#6	0	(1)#6	0
10'-0"	(1)#4	0	(1)#5	0	(1)#5	0	(1)#6	0	(1)#6	0	(1)#6	0	(1)#6	24	(2)#5	28	(2)#5	32
12'-0"	(1)#4	0	(1)#6	0	(1)#6	0	(1)#6	0	(1) #4& (1) #5	24	(2)#5	32	(2)#5	36	(1) #5& (1) #6	40	(1) #5& (1) #6	42
14'-0"	(1)#5	0	(2)#5	0	(1)#6	0	(2)#5	28	(1) #5& (1) #6	36	(1) #5& (1) #6	42	(2)#6	48	(1) #4& (2) #6	52	(1) #4& (2) #6	54
16'-0"	(1)#6	0	(2)#5	0	(2)#5	28	(1) #5& (1) #6	40	(2)#6	50	(1) #4& (2) #6	56	(3)#6	60	(3)#6	64	(4)#6	68
18'-0"	(1)#6	0	(2)#5	24	(1) #5& (1) #6	40	(3)#5	52	(1) #4& (2) #6	62	(3)#6	66	(4)#6	72	(4)#6	76		
20'-0"	(2)#5	0	(1) #5& (1) #6	36	(1) #4& (2) #6	56	(3)#6	64	(4)#6	72								

NOTES:

1. This table to be used in conjunction with the general notes and details located at the beginning of this section.
2. Stirrup Spacing = 12"

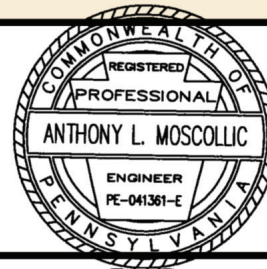
All Stirrup End Distance measurements above are listed in inches

The following substitutions are permitted:
 (1) #4 + (1) #5 may be substituted for (1) #6
 (2) #4's may be substituted for (1) #5



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10" Thick
 24" Deep
 Table No.
L 10-24