

טבלאות משקופים



הערות תכנון והגבלוֹת לטבלאות משקופים

1. טבלאות אלו חלות על מבני מגורים חד או דו משפחתיים בלבד העומדים בקוד הבניה הבינלאומי מהשנים 2009, 2012 ומודרניים במדריכי תכנון. על כל בנייה לעמוד בחוקי הבניה האזרחיים המתאימים. עבור טבלאות לרבי קומות יש לפנות למפץ המקומי באזורה.
2. על אחוריותם של כל הצדדים המעורבים, בהם הבנאי וקבלני המשנה, לבדוק את יישימות טבלאות ואת העורות אלו לתנאים המפורטים בפרויקט. אקו בילד סיסטם בע"מ-NUDURA אין אחריות על פרשנות או שימוש לא נכון של הטבלאות המצורפות.
3. אם הבניה המוצעת אינה עומדת בפרמטרי התכנון או הישימות שמצוינו במסמך זה, יש להעסיק מתכנן מקצועי מקומי על מנת להכין תכנון בהתאם לסטנדרטים וקודי התכנון הישנים.
4. עומסים מפוזרים באחדות מותרת המציגים בטבלאות המשקופים במדדיך זה אינם נלקחים בחשבון. על עומס מפוזר באופן אחד להיות מחושב עבור כל מקרה תכנון משקוף על ידי הכפלת עומס רצפה ו/או הגבעום הנתרמן ע"י המשקוף לרוחב רצפה ו/או גג, והוספה כל העומסים הרלוונטיים עבור כל משקוף כולל משקל קיר בטון וכל העומסים ה'ח'ים' או 'מתים'. הרוחב הנתרמן נקבע על ידי מדידת מחצית גודל הרצפה ו/או הגג הכלולים.
5. משקופים מתוכננים לפחות בצורה אחת עומסי כבידה בלבד. יש להעסיק מתכנן מקצועי שיתכנן את המשקופים כך שיוכלו לעמוד בעומס רוחביים או נקודתיים, למשל עומסים מרוכזים כמו קורות תמייה, עומדים, תגבות קורות, או מיקומי פתחים, בהתאם לקוד.
6. תכנונים הינם בעלי הגבלת סטיה כוללת של 480/ג.



7. התכון במדריך זה מניח שברזל החיזוק מעוות, וימוקם בהתאם לכלי התעשייתית ודרישות מיקומיים ACI הסטנדרטיים ויספק כמאיץ ההנדסי הבא:

- ASTM A615 Grade 60 ($f_y = 60$ ksi)
- ניתן החליף חיזוק Grade 40 על ידי הכפלת מספר המוטות המצוין ב-5.5, או על ידי $2/3$ מהריווח המופיע בדרישות המפורטות 'על המרכז'.

8. על התכון להניח שחזק הדחיסה המינימלי למשך 28 ימים של הבטון ההתקינה יהיה $3,000$ psi. תכון טערובת הבטון בפועל הינו באחריותו של ספק טערובת הבטון המוכנה.

9. חזק משקוף מינימלי יכולול את הפרטים הבאים:

- מוט #4 # לעילן הממוקם $\frac{1}{4}$ מהחלק העליון של המשקוף ומתמשך לאורך מינימלי של 24 מעבר לפתח בכל קצה.
- מוטות תחתונים יהיו שווים לכמות ולΚוטר המוצינים בטבלאות המשקופים, יותקנו עם CISI בטון שהימן $\frac{1}{2}$, המתמשך באורך מינימלי של 24 מעבר לפתח בכל קצה.
- כאשר ישנה דרישת בטבלאות המשקופים, יותקנו חישוקי ווים #3 ' $'$ או ' $'c'$ סביב המוטות העליונים והתחתונים, בהתאם לממדים והריווח המוצינים בטבלאות ובאיורים של מדריך זה.

10. אם אורך קיר בטון בין שני פתחים קטן מ- 30 ס"מ, יש לחזק את המשקוף כך שיכסה מעל שני הפתחים.

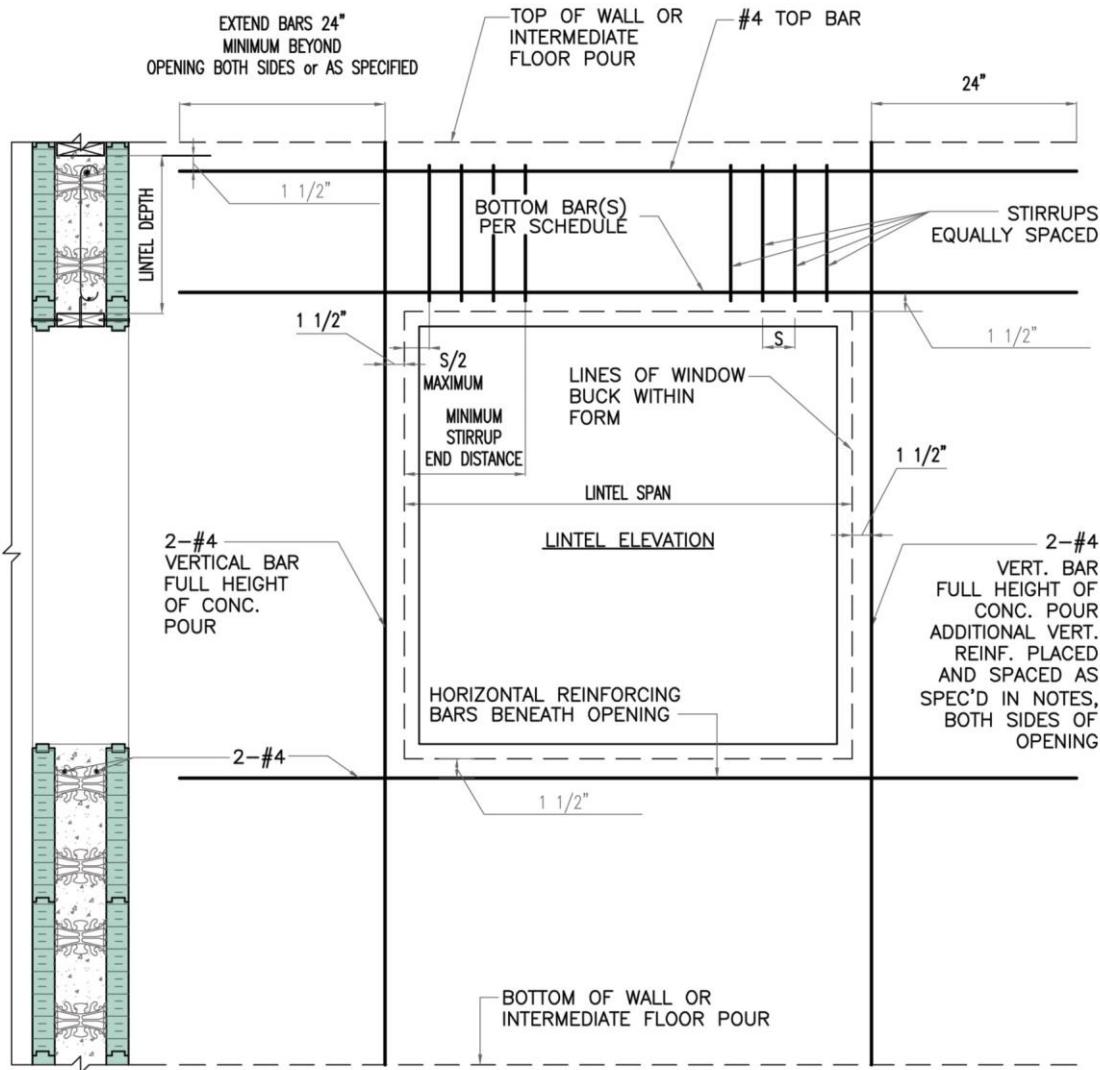
11. אם אורך קיר בטון בין שני פתחים קטן מ- 60 ס"מ, וכל אחד מהפתחים ארוך מ- 1.5 מטר, יש לחזק את המשקוף שיכסה מעל שני הפתחים.

12. אין להתקין מחברי בנייה בתווך 60 ס"מ משני צדדיו של כל פתח.

טבלאות משקופים



-
13. אורך חיפוי מוטות מינימלי יעמוד על קוטר כפול 40-60 מוטות.
14. אם המוטות בתוך המשקוף אינם יכולים להגיע לכיסוי צד בטון וריווח "4% מינימליים, יש לאגד את המוטות. העורות הבאות חלות על כל המוטות המאוגדים:
- ניתן לקבץ לכל היותר שני מוטות חזוק מקבילים בגע אחד עם השני, והנחה היא שהם יפעלו כיחידה אחת. מוטות מאוגדים יהיו קשורים, מחוותים או לחילופין מהודקים כדי להבטיח שיישארו במקומם
 - אין לאפשר חיפוי של מוטות בודדים השזירים באגד.
 - יש להתקין חישוקים עבור משקופים בהם יש חיזוקים מאוגדים.
15. משקופים באורך 6 מטר המוצגים בטבלאות הינם להערכת בלבד. אורך זה עולה על מגבלותIRC ולכן יש לקבל סקירה נוספת ממתקן מקצועי מקומי.
16. חיזוקים, גישורים ומסגרות הולמים נמצאים באחריות הקובלן, כמו כן כל האמצעים ושיטות הבנייה.
17. על החלק העליון של המשקופים להתמך בצורה רוחבית על ידי מערכות רצפת או גג הבנייה, ועל ידי דיאפרגמות, על ידי מערכות תמיכה אחרות.
18. על הקובלן לבצע רטט בתדר גובה במהלך הנחת כל הבטון.
19. יש לעיין במגבילות התכנון ודרישות קירות ה ICF במדריך זה עבור דרישות והגבילות חיזוקי בטון נוספות.



NUDURA[®]
INTEGRATED BUILDING TECHNOLOGY

Building Value.

LINTEL DIAGRAM

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

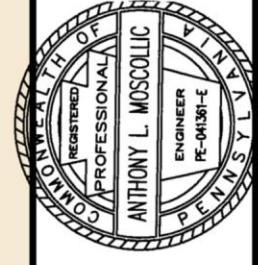
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	
3'-0"	(1) #4	0	(1) #4	0	(1) #4	9	(1) #4	11	(1) #4	13
4'-0"	(1) #4	0	(1) #4	12	(1) #4	15	(1) #4	17	(1) #4	19
5'-0"	(1) #4	12	(1) #4	18	(1) #4	21	(1) #5	23	(1) #5	25
6'-0"	(1) #4	18	(1) #4	24	(1) #5	27	(1) #6	29	(1) #7	31
8'-0"	(1) #5	30	(1) #6	36	(1) #7	39	(1) #5&(1) #6	41	(1) #9	42
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:

- 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

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



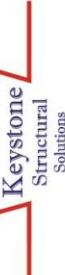
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	
3'-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	12	(1) #4	14	(1) #4	16
5'-0"	(1) #4	0	(1) #4	14	(1) #4	18	(1) #4	20	(1) #4	22
6'-0"	(1) #4	12	(1) #4	20	(1) #4	24	(1) #5	26	(1) #5	28
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:

- 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 Structural Solutions	Anthony L. Moscolic P.E. #041381-E Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.ks-seng.com	4" Thick
		12" Deep
Table No. L 4-12		

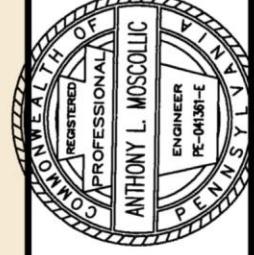
Opening Width	15" Lintel Depth									
	Uniformly Distributed Load					2500 lb/ft				
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.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

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

 Keystone Structural Solutions <small>Consulting Engineers, PE-041361-E 412.369.9020 www.kss-eng.com</small>	 Anthony L. Moscolic <small>Engineer PE-041361-E Pennsylvania</small>	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
(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4
3'-0"										
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
6'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
8'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
10'-0"	(1) #5	23	(1) #5	29	(1) #5	32"	(1) #5	35	(1) #6	37
12'-0"	(1) #5	35	(1) #5	41	(1) #6	44"	(1) #6	47	(2) #5	49
14'-0"	(1) #5	47	(1) #6	53	(2) #5	56"	(1) #5& (1) #6	59	(2) #6	61
16'-0"	(1) #6	59	(2) #5	65	(1) #5& (1) #6	68	(1) #6& (1) #7	71		
18'-0"	(2) #5	71	(2) #6	77						
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:
(1) #4 + (1) #5 may be substituted for (1) #6
(2) #4's may be substituted for (1) #5

Keystone Structural Solutions 8150 Petro Highway, Suite 302, Pittsburgh PA, 15237 412.269.9020 www.kses-eng.com	4" Thick 18" Deep Table No. L 4-18
---	--

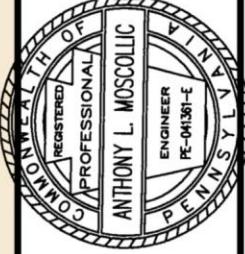
Opening Width	21" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.
3'-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
5'-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
8'-0"	(1) #4	0	(1) #4	25	(1) #4	30	(1) #5	33	(1) #5	36
10'-0"	(1) #4	0	(1) #5	31	(1) #5	37	(1) #6	45	(1) #6	48
12'-0"	(1) #4	30	(1) #5	43	(1) #6	49	(1) #6	54	(1) #6	59
14'-0"	(1) #5	42	(1) #6	55	(2) #5	61	(1) #5& (1) #6	57	(1) #5& (1) #6	60
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:

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

 Keystone Structural Solutions <small>Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com</small>	 4" Thick 21" Deep Table No. L 4-21
---	--

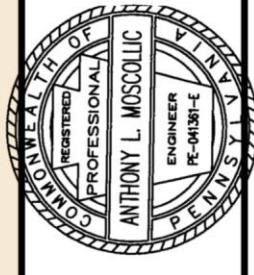
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	2500 lb/ft
3'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
4'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
5'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
6'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
8'-0"	(1) #4	0	(1) #4	0	(1) #5	27	(1) #5	30	(1) #5	33
10'-0"	(1) #4	0	(1) #4	26	(1) #5	34	(1) #5	39	(1) #6	45
12'-0"	(1) #5	0	(1) #5	38	(1) #5	46	(1) #6	51	(2) #5	54
14'-0"	(1) #5	36	(1) #5	50	(1) #6	58	(2) #5	63	(1) #5& (1) #6	66
16'-0"	(1) #5	48	(1) #6	62	(2) #5	70	(1) #5& (1) #6	75	(2) #6	78
18'-0"	(1) #6	60	(2) #5	74	(1) #5& (1) #6	82	(2) #6	87	(1) #7	81
20'-0"	(1) #6	72	(2) #6	86	(2) #6	94				

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

 Keystone Structural Solutions	 ANTHONY L. MOSCOLIC	 COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER PE-041361-E	Table Prepared by:
			Table No.
			L 4-24

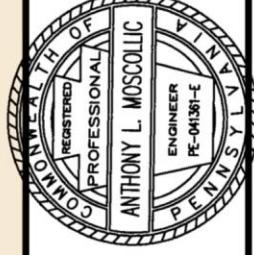
Opening Width	9" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel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

 Keystone Structural Solutions <small>Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.ass-eng.com</small>	 Table No. L 6-9
---	---





12" Lintel Depth

Uniformly Distributed Load

NOTE

- 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



NUDURA[®]
INTEGRATED BUILDING TECHNOLOGY
Building Value.

Table Prepared by:
Keystone

Structural Solutions
Consulting Engineers
18150 Perry Highway, Suite 302, Pittsburgh PA, 15237
412-369-9020 www.kss-eng.com

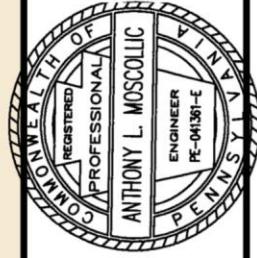


Table No.
L 6-12

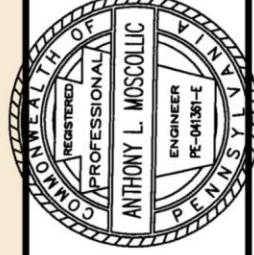
Opening Width	15" Lintel Depth									
	Uniformly Distributed Load									
500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	2500 lb/ft	
Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.
3'-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
5'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	14	(1) #5	18
6'-0"	(1) #4	0	(1) #4	0	(1) #4	17	(1) #5	20	(1) #5	24
8'-0"	(1) #4	0	(1) #5	18	(1) #5	25	(1) #5	29	(1) #6	34
10'-0"	(1) #5	16	(1) #5	30	(1) #6	37	(1) #6	41	(1) #5 & (1) #6	46
12'-0"	(1) #5	28	(1) #6	42	(2) #5	49	(1) #5 & (1) #6	53	(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:

- 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 Structural Solutions	6" Thick 15" Deep	Table No. L 6-15
		
Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412-369-9020 www.kss-eg.com		

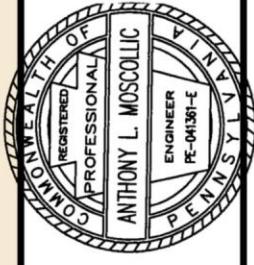
Opening Width	18" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf.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

- 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 <small>Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com</small>	 Table No. L 6-18
---	--

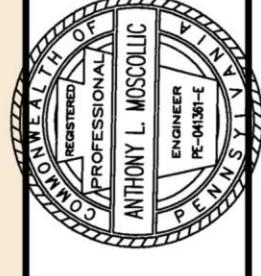
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.
3'-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
5'-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
8'-0"	(1) #4	0	(1) #4	0	(1) #5	21	(1) #5	25	(1) #6	31
10'-0"	(1) #4	0	(1) #5	0	(1) #5	27	(1) #6	33	(1) #6	40
12'-0"	(1) #5	0	(1) #6	30	(1) #6	39	(1) #6	45	(2) #5	52
14'-0"	(1) #5	0	(1) #6	42	(2) #5	51	(2) #5	49	(1) #5 & (1) #6	55
16'-0"	(1) #6	36	(2) #5	54	(1) #5 & (1) #6	63	(2) #6	69	(1) #6 & (1) #7	67
18'-0"	(1) #6	48	(1) #5 & (1) #6	66			(2) #7	73	(2) #7	76
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: Keystone Structural Solutions Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com	 6" Thick 21" Deep Table No. L 6-21
--	--

24" Lintel Depth

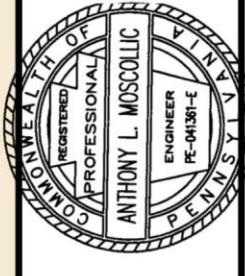
Opening width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-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
5'-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
8'-0"	(1) #4	0	(1) #4	0	(1) #5	0	(1) #5	0	(1) #5	0
10'-0"	(1) #4	0	(1) #5	0	(1) #6	29	(1) #6	34	(1) #7	38
12'-0"	(1) #4	0	(1) #5	0	(1) #6	35	(1) #6	41	(1) #7	50
14'-0"	(1) #5	0	(1) #6	36	(1) #6	47	(2) #5	53	(1) #8	62
16'-0"	(1) #6	28	(1) #6	48	(2) #5	59	(1) #5 & (1) #6	65	(1) #6 & (1) #7	76
18'-0"	(1) #6	40	(2) #5	60	(1) #5 & (1) #6	71	(3) #5	77	(2) #7	84
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: Keystone Structural Solutions Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com	 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	Stirrup End Dist.	Bottom Rein. Steel	
	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	
3'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	9	(1) #4	10
4'-0"	(1) #4	0	(1) #4	0	(1) #4	10	(1) #4	12	(1) #4	14	(1) #5	16
-0"	(1) #4	0	(1) #4	0	(1) #4	12	(1) #5	16	(1) #5	20	(1) #6	22
6'-0"	(1) #4	0	(1) #4	13	(1) #5	18	(1) #5	22	(1) #6	24	(1) #6	28
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:

- 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

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

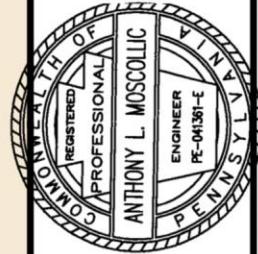


Table Prepared by:
Keystone
 Structural Solutions
 Consulting Engineers
 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237
 412.369.9020 www.kss-eng.com

NUDURA
 INTEGRATED BUILDING TECHNOLOGY
Building Value.

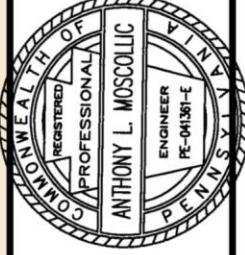
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	
3'-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
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	14	(1)#5	14
6'-0"	(1)#4	0	(1)#4	0	(1)#5	12	(1)#5	16	(1)#5	19
8'-0"	(1)#4	0	(1)#5	17	(1)#5	24	(1)#6	28	(2)#5	34
10'-0"	(1)#5	0	(1)#6	29	(2)#5	36	(2)#5	40	(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:

- 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

 NUDURA® INTEGRATED BUILDING TECHNOLOGY <i>Building Value.</i>	 Keystone Structural Solutions <small>Consulting Engineers 412.359.9020 www.ksse-eng.com</small>	8" Thick 12" Deep	Table No. L 8-12
			

Opening Width	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 Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	
3'-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
5'-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) #5	15	(1) #5	18
8'-0"	(1) #4	0	(1) #5	0	(1) #5	18	(1) #5	23	(1) #6	27
10'-0"	(1) #5	0	(1) #6	21	(1) #6	30	(1) #6	35	(1) #6	39
12'-0"	(1) #6	16	(1) #6	33	(2) #5	42	(2) #5	47	(2) #5	51
14'-0"	(1) #6	28	(2) #5	45	(2) #6	54	(2) #6	51	(1) #6 & (1) #7	54
16'-0"	(2) #5	40	(1) #6 & (1) #7	57			(2) #7	51	(1) #7	56
18'-0"	(1) #6 & (1) #7	52								
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".

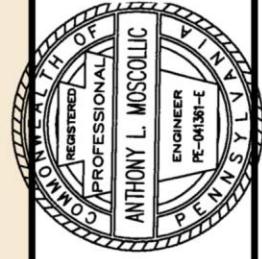
All Stirrup End Distance measurements
above are listed in inches

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 L
Structural Solutions

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



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

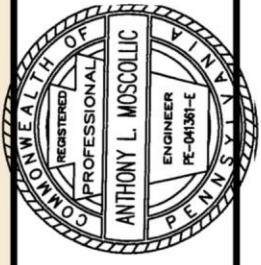
Opening width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	Stirrup End Dist.
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel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

 <p>Keystone Solutions Structural Solutions Consulting Engineers 8150 Perry Highway, Suite 502, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com</p>	<p>Table Prepared by:</p>	<p>8" Thick 18" Deep</p>	<p>Table No. L 8-18</p>
		 <p>PENNSYLVANIA COMMONWEALTH OF REGISTERED PROFESSIONAL ENGINEERS ANTHONY L. MOSCOLIC PE-041361-E</p>	

Opening Width	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.
3'-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
5'-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
8'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0	(1)#5	0
10'-0"	(1)#4	0	(1)#5	0	(1)#6	25	(2)#5	31	(2)#5	37
12'-0"	(1)#5	0	(1)#6	0	(2)#5	30	(2)#5	37	(2)#5	43
14'-0"	(1)#5	0	(2)#5	29	(2)#5	42	(2)#5	49	(1)#5&(1)#6	54
16'-0"	(1)#6	20	(2)#5	41	(1)#5&(1)#6	54	(2)#6	55	(1)#6&(1)#7	66
18'-0"	(2)#5	32	(1)#5&(1)#6	53	(2)#6	66	(1)#6&(1)#7	67	(2)#7	70
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

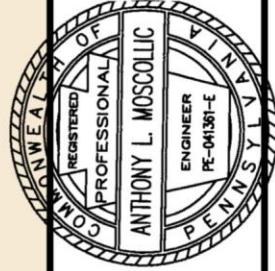


Table Prepared by:
Keystone Structural Solutions
Consulting Engineers
8150 Perry Highway, Suite 303, Pittsburgh PA, 15237
412.369.9020 www.kss-eng.com

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

Opening Width	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.
3'-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
5'-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
8'-0"	(1) #4	0	(1) #4	0	(1) #5	0	(1) #5	0	(1) #6	0
10'-0"	(1) #4	0	(1) #5	0	(1) #6	0	(1) #6	0	(1) #6	0
12'-0"	(1) #4	0	(1) #5	0	(2) #5	32	(1) #4& (1) #5	38	(2) #5	43
14'-0"	(1) #5	0	(1) #6	0	(2) #5	36	(2) #5	44	(2) #5	46
16'-0"	(1) #6	0	(1) #4& (1) #5	0	(2) #5	48	(1) #5& (1) #6	56	(2) #6	55
18'-0"	(1) #6	0	(2) #5	46	(1) #5& (1) #6	60	(3) #5	68	(2) #6	67
20'-0"	(2) #5	35	(1) #5& (1) #6	58	(3) #5	72	(2) #7	74	(3) #6	79

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

 <p>NUDURA INTEGRATED BUILDING TECHNOLOGY <i>Building Value.</i></p>	<p>Table Prepared by:  Structural Solutions Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com </p>	<p>8" Thick 24" Deep</p>
		<p>L 8-24</p>

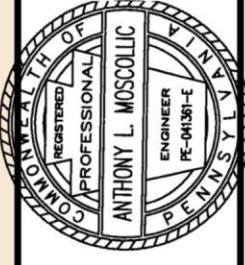
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	2500 lb/ft
3'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
4'-0"	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0	(1) #4	0
5'-0"	(1) #4	0	(1) #4	0	(1) #5	8	(1) #5	12	(1) #5	15
6'-0"	(1) #4	0	(1) #5	0	(1) #5	14	(1) #6	18	(1) #6	21
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:

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 <small>Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com</small>	 10" Thick 9" Deep Table No. L 10-9
--	---

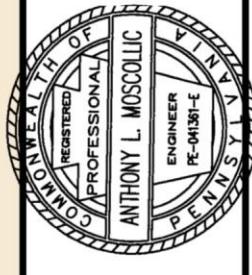
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-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
5'-0"	(1)#4	0	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	0
6'-0"	(1)#4	0	(1)#4	0	(1)#5	0	(1)#5	12	(1)#5	15
8'-0"	(1)#4	0	(1)#5	0	(1)#6	12	(1)#6	16	(1)#6	18
10'-0"	(1)#5	0	(1)#6	22	(2)#5	30	(1)#7	36	(1)#6	42
12'-0"	(1)#6	18	(2)#5	30	(2)#5	36	(1)#5&(1)#6	40	(2)#6	45
14'-0"	(2)#5	30	(3)#6		(3)#6	48				
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 <small>Consulting Engineers 412.369.9020 www.ks-seng.com</small>		Table No.
		L 10-12

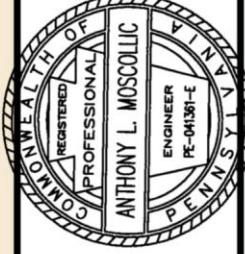
Opening Width	15" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-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
5'-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) #5	0	(1) #5	0
8'-0"	(1) #4	0	(1) #5	0	(1) #6	18	(1) #6	22	(1) #6	26
10'-0"	(1) #5	0	(1) #6	0	(1) #6	23	(1) #4	30	(2) #5	34
12'-0"	(1) #6	0	(1) #6	24	(2) #5	35	(1) #5	42	(2) #6	46
14'-0"	(1) #6	0	(2) #5	36	(1) #5	47	(3) #6	54	(1) #5+1#6	38
16'-0"	(2) #5	29	(3) #5	48					(2) #5	50
18'-0"	(1) #5	41							(3) #6	52
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 412.369.9020 www.kss-engine.com	10" Thick 15" Deep	Table No. L 10-15
			



טבלאות משקופים L10-L18

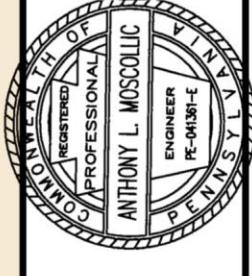
Opening width	18" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	2500 lb/ft
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.
3'-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
5'-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) #5	0	(1) #5	0
8'-0"	(1) #4	0	(1) #5	0	(1) #5	0	(1) #6	18	(1) #6	24
10'-0"	(1) #4	0	(1) #5	0	(2) #5	23	(2) #5	29	(2) #5	30
12'-0"	(1) #5	0	(2) #5	27	(2) #5	35	(1) #5&(1) #6	42	(2) #6	46
14'-0"	(1) #6	0	(2) #5	27	(2) #5	39	(1) #5&(1) #6	53	(3) #6	58
16'-0"	(2) #5	0	(2) #5	39	(1) #4&(2) #6	51	(1) #4&(2) #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 8150 Perry Highway, Suite 302, Pittsburgh, PA, 15237 412.361.9020 www.kseng.com	 10" Thick 18" Deep Table No. L 10-18
---	--

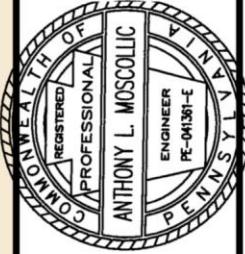
Opening Width	21" Lintel Depth									
	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	2500 lb/ft
	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.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

NOTES:

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

 Keystone Structural Solutions <small>Consulting Engineers 8150 Perry Highway, Suite 302, Pittsburgh PA, 15237 412.369.9020 www.ks-soln.com</small>	 10" Thick 21" Deep Table No. L 10-21
--	--

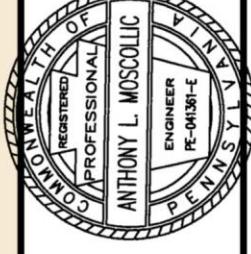
Opening Width	Uniformly Distributed Load									
	500 lb/ft	750 lb/ft	1000 lb/ft	1250 lb/ft	1500 lb/ft	1750 lb/ft	2000 lb/ft	2250 lb/ft	2500 lb/ft	
	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom Rein. Steel	Stirrup End Dist.	Bottom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

NOTES:

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

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

All Stirrup End Distance measurements
above are listed in inches

 Keystone Z Structural Solutions Consulting Engineers 8150 Perry Highway Suite 302, Pittsburgh PA, 15237 412.369.9020 www.kss-eng.com	 Table No. L 10-24
---	---

