



Engineering Certification for Appendix E

The lintel reinforcing tables in Appendix E for use in Canada have been reviewed and certified on October 30, 2015 by Tacoma Engineers for use in the Province of Ontario. These tables have also been reviewed for conformance to the following Codes and Regulations:

- 2014 Alberta Building Code
- 2012 British Columbia Building Code
- 2011 Manitoba Building Code
- 2014 Nova Scotia Building Code
- 2010 National Building Code as amended by The Uniform Building and Accessibility Standards Regulations in Saskatchewan

The following additional requirements apply to locations where  $S_d(0.2) \geq 0.67$

- Provide a minimum of three stirrups at the ends of all lintels at the spacing indicated in the lintel tables.





## Design Limitations and Tables for Lintels



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### Design Limitations

1. These tables apply to residential buildings ONLY that conform to the requirements of the appropriate building codes or design guides that are currently recognized within the official Canadian product evaluation reports produced for NUDURA Corporation. It is assumed that construction will comply with the appropriate, local building codes, which may include:

- Part 9 of the National Building Code of Canada – 2010
- Part 9 of applicable provincial building codes, issued based on the above requirement

NOTE: If the proposed construction does not meet the design or applicability parameters noted herein, a local design professional shall be retained to prepare the design in accordance with applicable standards.

2. The following maximum UNFACTORED loads were assumed in the design of the lintels featured in this appendix:

- A) Roof Snow Load (Live) = 4.0 kPa (84 psf)
- B) Occupancy Load (Live) = 1.9 kPa (40 psf)
- C) Roof and Floor Load (Dead) = 0.7 kPa (15 psf)
- D) Concrete Density (Dead) = 23.6 kN/m<sup>3</sup> (150 lb/ft<sup>3</sup>)
- E) Brick Density (Dead) = 20.0 kN/m<sup>3</sup> (128 lb/ft<sup>3</sup>)

3. The uniformly distributed loads indicated within the tables of this appendix are UNFACTORED and are also assumed in the design of the lintels in conjunction with the unfactored loads stated in Note 2.



4. The uniformly distributed load is calculated by multiplying the floor loads, live (LL) and dead (DL), by the tributary floor and/or roof width. The tributary floor/roof width (TW) is determined by adding half the span of each rafter/joist bearing on the concrete lintel. For example, a lintel supporting floor joists spanning 3.05m (10'-0") on one end only, the uniformly distributed load (UDL) is calculated as follows:

Metric:

$$\text{UDL} = \text{TW} (\text{LL} + \text{DL}) = 3.05\text{m}/2 (1.9 \text{ kPa} + 0.7 \text{ kPa}) = 3.965 \text{ kN/m}$$

Imperial:

$$\text{UDL} = \text{TW} (\text{LL} + \text{DL}) = 10\text{ft}/2 (40 \text{ psf} + 15 \text{ psf}) = 275 \text{ lbs/ft}$$

5. Design deflection for the lintel tables within this appendix is limited to L/360.
6. Design is limited to 1 floor below grade and a maximum of 2 storeys above grade.
7. Maximum floor clear span = 7.32 m (24 ft).
8. Maximum roof clear span = 12.2 m (40 ft).
9. Lintels are designed for uniformly distributed gravity line loads only. A local design professional shall be retained to prepare the design of lintels to resist lateral loads or point loads, such as concentrated loads created by girder trusses, columns and beams, in accordance with applicable standards.
10. Minimum lintel reinforcement shall consist of the following:
  - One 10M top bar located 38 mm (1½") from top of lintel that extends a minimum of 610mm (24") past each side of the wall opening.
  - Bottom bars are to be supplied per quantity and diameter indicated within the lintel tables of this appendix, installed with a concrete cover of 38 mm (1½") and shall extend a minimum of 610 mm (24") past each side of the wall opening.



- When required, minimum 10M hook stirrups shall be installed around top and bottom bars, per the dimensions and required spacing as indicated in the Tables and Drawings, located at the end of this section.

11. Lintel steel specifications in Note 10 assumes that horizontal 10M continuous wall reinforcing is being maintained either side of the wall opening at 457 mm (18") o.c.

12. Where there is less than 305 mm (12") of wall between openings, the lintel shall be reinforced to span over both openings.

13. Where there is less than 610 mm (24") of wall between openings, and where either opening is greater than 1.53 m (5'-0") in length, the lintel shall be reinforced to span over both openings.

14. Construction joints shall not be installed within 610 mm (24") on either side of any wall opening.

15. Minimum bar lap length shall be as follows:

- A) 457 mm (18") for 10M bars
- B) 660 mm (26") for 15M bars
- C) 762 mm (30") for 20M bars

16. Where bars within a lintel cannot achieve a minimum concrete side cover and spacing of 38 mm (1½"), the bars are required to be bundled. The following notes apply to all bundled bars:

- A) A maximum of 4 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.



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B) Individual bars within a given bundle of bars may terminate within the span of a lintel (or flexural member). However, the bars shall terminate at different points that occur at least 40 bar diameters apart from each other.

C) In any given bundle of bars that is loaded in tension or compression, the splice length and development length of bars within the bundle, shall be that for the individual bar, AND increased by 10% for a 2-bar bundle, 20% for a 3-bar bundle, and 33% for a 4-bar bundle. Again, as noted in sub-note (B) above, individual bar splices within a bundle shall not overlap.

17. Concrete work shall conform to the latest editions of the following standards for materials and workmanship:

- CAN/CSA-A23.1 /A23.2 /A23.3

18. Reinforcing Steel shall be deformed rebar, placed in accordance with the manuals of standard practice Canada and shall be supplied at the following minimum yield strength:

- CAN: Grade 400 (400 MPa)

19. The minimum 28 day compressive strength of concrete shall be 20 MPa (3000 psi).

20. The design and construction of all work on site shall conform to the latest editions of the applicable building codes for the region where installation is taking place, including local applicable code regulations and bylaws as well as all applicable health and safety regulations.

21. The contractor shall make adequate provision for construction loads and temporary bracing to keep structure plumb and in true alignment at all phases of construction.

22. Top of lintels shall be laterally supported by building roof and floor systems, designed by others.

23. The contractor shall employ high frequency vibration to place all concrete.



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24. The contractor shall take adequate measures to protect concrete from exposure to freezing temperatures and precipitation for at least seven days after concrete placement.

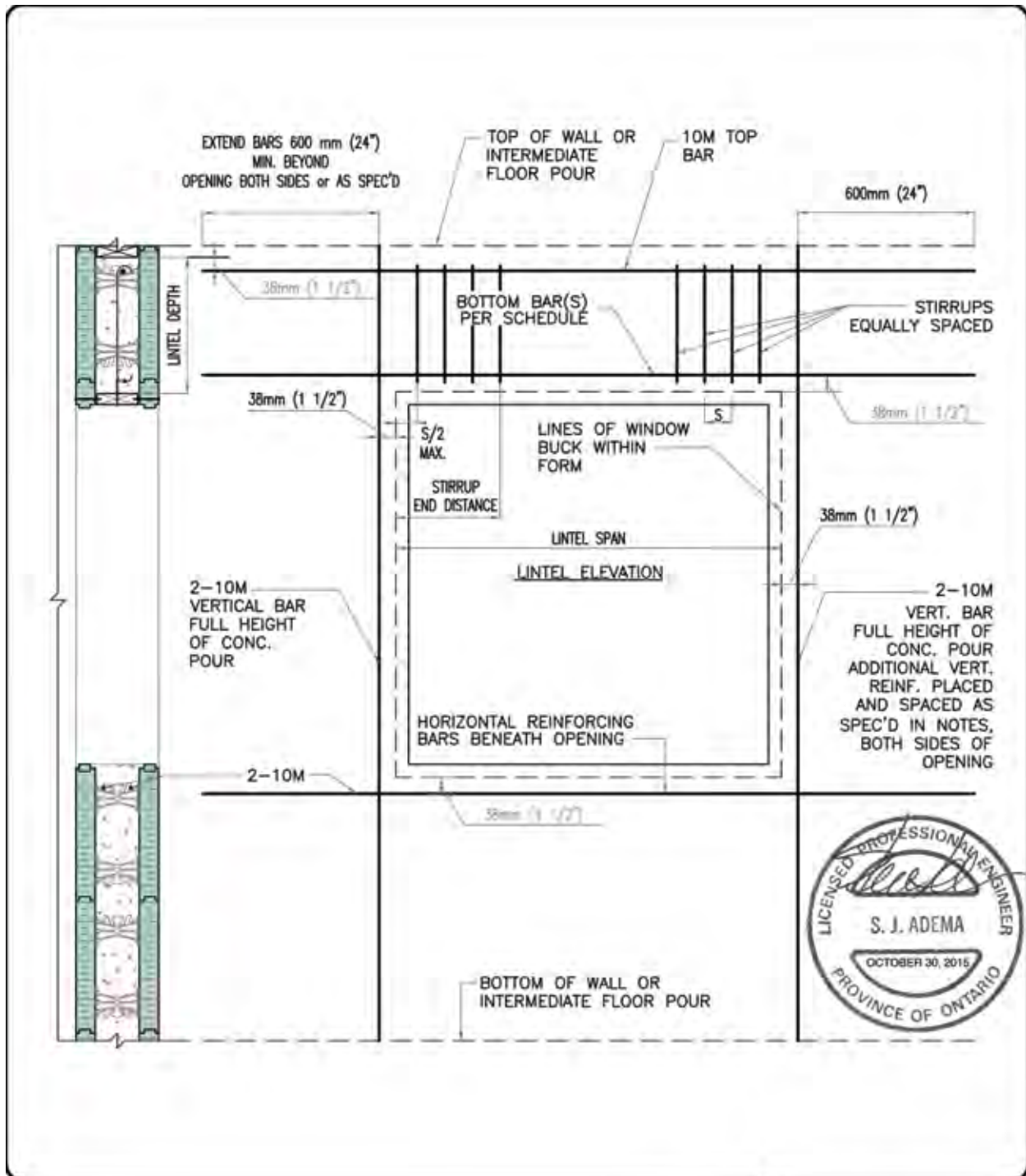
25. It is optimal to use a maximum of 9.5 mm (3/8") diameter pea gravel or 9.5 mm (3/8") diameter crushed aggregate.

For 100 mm (4") and 150 mm (6") thick concrete walls it is permitted to use up to 12.7 mm (1/2") diameter crushed aggregate, and for 200 mm (8") and 250 mm (10") thick concrete walls a maximum 19.1 mm (3/4") diameter crushed aggregate.

Extra care is needed when vibrating during concrete placement for the purpose of ensuring a homogeneous aggregate distribution, without segregation. Larger diameter crushed aggregate can cause air pockets and honeycombing and a generally poor concrete mix with inadequate vibration.



# LINTEL TABLES L-1



LINTEL DIAGRAM

REV. NO. 005 KS	DWG NO. L-1 CAN
REV. DATE: SEPT 2015	
DRAWN BY: T. VAN CLIEAF	SCALE: "Not to Scale"



Opening Width	225mm (9") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.	
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	204 (8")	1-10M	204 (8")	1-10M	204 (8")	1-10M	204 (8")	1-10M	306 (12")	1-15M	306 (12")
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	204 (8")	1-10M	204 (8")	1-15M	408 (16")	1-15M	408 (16")	1-15M	408 (16")	1-15M	408 (16")	1-15M	510 (20")
1500mm (5'-0")	1-10M	0	1-10M	306 (12")	1-10M	306 (12")	1-15M	408 (16")	1-15M	510 (20")	1-15M	510 (20")	1-15M	510 (20")	1-15M	510 (20")	1-15M	510 (20")
1800mm (6'-0")	1-15M	204 (8")	1-15M	408 (16")	1-20M	510 (20")	1-20M	510 (20")	1-20M	612 (24")	1-20M	612 (24")	1-20M	612 (24")	1-20M	612 (24")	1-20M	612 (24")
2400mm (8'-0")	1-20M	510 (20")	1-20M															
3000mm (10'-0")																		
3600mm (12'-0")																		
4200mm (14'-0")																		
4800mm (16'-0")																		
5400mm (18'-0")																		
6000mm (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 = 102mm (4")

All Stirrup End Distance measurements above are listed in mm (in)

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M



Table Prepared by:  
 100mm (4") Thick  
 225mm (9") Deep  
 Table No. L 4-9M

Opening Width	300mm (12") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	304	1-10M	304	1-10M	304	1-10M	304	1-10M	304	1-10M	456	1-10M	456
1200mm (4'-0")	1-10M	0	1-10M	304	1-10M	456	1-10M	456	1-10M	456	1-10M	456	1-10M	456	1-10M	608	1-15M	608
1500mm (5'-0")	1-10M	304	1-10M	456	1-10M	608	1-10M	608	1-10M	608	1-15M	608	1-15M	608	1-15M	760	1-20M	760
1800mm (6'-0")	1-10M	456	1-10M	608	1-15M	608	1-15M	760	1-15M	760	1-20M	760	1-20M	760	1-20M	912	2-15M	912
2400mm (8'-0")	1-15M	760	1-15M	912	1-20M	1064	1-20M	1064	1-20M	1064	2-15M	1064	2-15M	1064	2-15M	1216	2-15M	1216
3000mm (10'-0")	1-20M	1064	2-15M	1216														
3600mm (12'-0")	2-15M	1368																
4200mm (14'-0")																		
4800mm (16'-0")																		
5400mm (18'-0")																		
6000mm (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 = 152mm (6")

All Stirrup End Distance measurements above are listed in mm (in)

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

INTEGRATED BUILDING TECHNOLOGY

Table Prepared by:

100mm (4") Thick  
 300mm (12") Deep  
 Table No. **L4-12M**

Opening Width	375mm (15") Lintel Depth																		
	Uniformly Distributed Load																		
	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.	
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	406 (16")
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	609 (24")
1500mm (5'-0")	1-10M	0	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	609 (24")
1800mm (6'-0")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	1-10M	406 (16")	609 (24")
2400mm (8'-0")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	1-10M	609 (24")	609 (24")
3000mm (10'-0")	1-15M	1015 (40")	1-20M	1218 (48")	1-15M	1015 (40")	1-20M	1218 (48")	1-15M	1015 (40")	1-20M	1218 (48")	1-15M	1015 (40")	1-20M	1218 (48")	1-15M	1015 (40")	812 (32")
3600mm (12'-0")	1-20M	1218 (48")	1-15M	1421 (56")	1-20M	1421 (56")	1-15M	1624 (64")	1-20M	1624 (64")	1-15M	1421 (56")	1-20M	1624 (64")	1-20M	1624 (64")	1-15M	1421 (56")	812 (32")
4200mm (14'-0")	2-15M	1624 (64")																	812 (32")
4800mm (16'-0")																			
5400mm (18'-0")																			
6000mm (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 = 203mm (8")

All Stirrup End Distance measurements above are listed in mm (in)

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M



Table Prepared by:  
**TACOMA**  
 ENGINEERS  
 100mm (4") Thick  
 375mm (15") Deep  
 Table No. **L 4-15M**



Opening Width	450mm (18") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
2400mm (8'-0")	1-10M	508 (20")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")
3000mm (10'-0")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")
3600mm (12'-0")	1-15M	1270 (50")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")
4200mm (14'-0")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")	1-20M	1524 (60")
4800mm (16'-0")	1-15M	1778 (70")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")	2-20M	2032 (80")
5400mm (18'-0")	1-15M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")
6000mm (20'-0")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")	1-20M	2032 (80")



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

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 = 254mm (10")

INTEGRATED BUILDING TECHNOLOGY  
Building Value

Table Prepared by:

ENGINEERS

100mm (4") Thick  
 450mm (18") Deep  
 Table No. **L 4-18M**

Opening Width	525mm (21") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
2400mm (8'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
3000mm (10'-0")	1-15M	660 (26")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")	1-15M	990 (39")
3600mm (12'-0")	1-15M	990 (39")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")
4200mm (14'-0")	1-20M	1320 (52")	1-15M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")	1-20M	1650 (65")
4800mm (16'-0")	1-20M	1650 (65")	1-15M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")	1-20M	1980 (78")
5400mm (18'-0")	2-15M	1980 (78")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")	2-20M	2310 (91")
6000mm (20'-0")	1-15M	2310 (91")	1-15M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")	1-20M	2640 (104")



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

- NOTES:
- This table to be used in conjunction with the general notes and details located at the beginning of this section.
  - Stirrup Spacing = 330mm (13")

Table Prepared by:

# TACOMA

ENGINEERS

100mm (4") Thick  
 525mm (21") Deep  
 Table No. **L 4-21M**



# LINTEL TABLES L4-24

Opening Width	600mm (24") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
2400mm (8'-0")	1-10M	0	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")
3000mm (10'-0")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")	1-15M	760 (30")
3600mm (12'-0")	1-15M	1140 (45")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")
4200mm (14'-0")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")
4800mm (16'-0")	1-20M	1520 (60")	1-15M	1140 (45")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")	1-20M	1520 (60")	1-15M	1140 (45")
5400mm (18'-0")	1-15M	1900 (75")	1-15M	1900 (75")	1-20M	2280 (90")	1-15M	1900 (75")	1-20M	2280 (90")	1-15M	1900 (75")	1-20M	2280 (90")	1-15M	1900 (75")	1-20M	2280 (90")
6000mm (20'-0")	1-15M	2280 (90")	1-20M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")

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 = 380mm (15")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M



100mm (4") Thick  
 600mm (24") Deep  
 Table No. **L 4-24M**



**225mm (9") Lintel Depth**  
Uniformly Distributed Load

Opening Width	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	204 (8")	1-10M	204 (8")	1-10M	204 (8")
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	204 (8")	1-15M	204 (8")	1-15M	204 (8")	1-15M	1-15M	1-15M	408 (16")	1-15M	408 (16")
1500mm (5'-0")	1-10M	0	1-10M	0	1-15M	204 (8")	1-15M	306 (12")	1-15M	408 (16")	1-20M	408 (16")	1-20M	1-20M	1-20M	510 (20")	2-15M	510 (20")
1800mm (6'-0")	1-15M	0	1-15M	204 (8")	1-15M	306 (12")	1-20M	510 (20")	1-20M	510 (20")	2-15M	612 (24")						
2400mm (8'-0")	1-15M	204 (8")	1-20M	510 (20")	2-15M	612 (24")												
3000mm (10'-0")	2-15M	510 (20")																
3600mm (12'-0")																		
4200mm (14'-0")																		
4800mm (16'-0")																		
5400mm (18'-0")																		
6000mm (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 = 102mm (4")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

Table Prepared by:

**TACOMA**  
ENGINEERS

150mm (6")  
Thick  
225mm (9")  
Deep  
Table No.  
**L 6-9M**

Opening Width	300mm (12") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	304	1-10M	304	1-10M	304
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	304	1-10M	12"	1-10M	304	1-10M	12"	1-10M	456	1-10M	456	1-15M	456
1500mm (5'-0")	1-10M	0	1-10M	304	1-10M	456	1-10M	18"	1-15M	456	1-10M	18"	1-15M	608	1-15M	608	1-15M	608
1800mm (6'-0")	1-10M	304	1-10M	456	1-10M	608	1-15M	24"	1-15M	608	1-15M	30"	1-20M	760	1-20M	760	2-15M	760
2400mm (8'-0")	1-15M	608	1-15M	760	1-15M	912	1-20M	36"	1-20M	912	1-20M	42"	1-20M	1064	1-15M	1064	1-20M	1064
3000mm (10'-0")	1-20M	912	1-20M	1064	1-20M	1216	1-20M	48"	2-15M	1216	1-20M	48"	2-20M	1216	1-20M	1216		
3600mm (12'-0")	2-15M	1216	1-15M	1368	1-20M	1520												
4200mm (14'-0")	1-15M	1520	1-20M															
4800mm (16'-0")	1-20M																	
5400mm (18'-0")																		
6000mm (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 = 152mm (6")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

INTEGRATED BUILDING TECHNOLOGY  
Building Value

Table Prepared by:

ENGINEERS

150mm (6")  
Thick

300mm (12")  
Deep

Table No.  
**L 6-12M**



Opening Width	375mm (15") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.	
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	406 (16")
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	609 (24")	1-15M	609 (24")	1-15M	609 (24")	1-15M	609 (24")
1800mm (6'-0")	1-10M	0	1-15M	406 (16")	1-15M	406 (16")	1-15M	609 (24")	1-15M	609 (24")	1-15M	609 (24")	1-15M	812 (32")	1-15M	812 (32")	1-20M	812 (32")
2400mm (8'-0")	1-15M	406 (16")	1-15M	609 (24")	1-15M	609 (24")	1-15M	609 (24")	1-20M	1015 (40")	1-20M	1015 (40")	1-15M	1015 (40")	2-15M	1015 (40")	1-15M	1015 (40")
3000mm (10'-0")	1-15M	609 (24")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1218 (48")	1-15M	1218 (48")	1-15M	1218 (48")	1-20M	1421 (56")	1-10M	1421 (56")	1-20M	1421 (56")
3600mm (12'-0")	1-20M	1015 (40")	1-20M	1218 (48")	1-15M	1421 (56")	1-15M	1421 (56")	1-10M	1624 (64")	1-10M	1624 (64")						
4200mm (14'-0")	2-15M	1218 (48")	1-15M	1624 (64")	1-10M	1624 (64")	1-20M											
4800mm (16'-0")	1-15M	1624 (64")	1-20M	1827 (72")	1-10M	1827 (72")	2-20M											
5400mm (18'-0")	1-10M	1827 (72")	2-20M															
6000mm (20'-0")	2-20M																	



**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 = 203mm (8")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M



Table Prepared by:

150mm (6") Thick  
 375mm (15") Deep  
 Table No. L 6-15M

Opening Width	450mm (18") Lintel Depth																
	Uniformly Distributed Load																
	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.
900mm (3'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")
1800mm (6'-0")	0	1-10M	0	1-15M	0	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")	1-15M	508 (20")
2400mm (8'-0")	0	1-15M	508 (20")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-15M	762 (30")	1-20M	1016 (40")	1-20M	1016 (40")	1-20M	1016 (40")
3000mm (10'-0")	508 (20")	1-15M	762 (30")	1-20M	1016 (40")	1-20M	1016 (40")	1-20M	1016 (40")	1-20M	1016 (40")	1-20M	1270 (50")	1-15M	1270 (50")	1-15M	1270 (50")
3600mm (12'-0")	762 (30")	1-15M	1016 (40")	1-20M	1270 (50")	1-20M	1270 (50")	1-15M	1524 (60")	1-15M	1524 (60")	1-15M	1524 (60")	1-15M	1524 (60")	1-15M	1524 (60")
4200mm (14'-0")	1270 (50")	1-20M	1524 (60")	1-15M	1524 (60")	1-20M	1778 (70")	1-15M	1778 (70")	1-15M	1778 (70")	1-15M	1778 (70")	1-15M	1778 (70")	1-15M	1778 (70")
4800mm (16'-0")	1524 (60")	1-15M	1778 (70")	1-10M	1778 (70")	1-20M	2032 (80")	1-10M	2032 (80")	1-10M	2032 (80")	1-10M	2032 (80")	1-10M	2032 (80")	1-10M	2032 (80")
5400mm (18'-0")	1778 (70")	1-10M	2032 (80")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")
6000mm (20'-0")	2032 (80")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")	1-10M	2286 (90")



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

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 = 254mm (10")

Table Prepared by:

ENGINEERS

150mm (6")  
Thick  
450mm (18")  
Deep  
Table No.  
**L 6-18M**

Opening Width		525mm (21") Lintel Depth																	
		Uniformly Distributed Load																	
		7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.
900mm (3'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	660 (26")	1-15M	660 (26")
1800mm (6'-0")		1-10M	0	1-10M	0	1-10M	0	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")
2400mm (8'-0")		1-10M	0	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-20M	990 (39")	1-20M	990 (39")
3000mm (10'-0")		1-15M	0	1-15M	660 (26")	1-15M	660 (26")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")
3600mm (12'-0")		1-15M	660 (26")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")	1-20M	990 (39")
4200mm (14'-0")		1-20M	990 (39")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")
4800mm (16'-0")		1-20M	990 (39")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")	1-15M	660 (26")
5400mm (18'-0")		2-15M	1650 (65")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")	2-20M	1980 (78")
6000mm (20'-0")		1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (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 = 330mm (13")


  
 S. J. ADEMAN  
 LICENSED PROFESSIONAL ENGINEER

Table Prepared by:




Building Value

All Stirrup End Distance measurements above are listed in mm (in)

150mm (6") Thick  
525mm (21") Deep  
Table No. L6-21M

Opening Width	600mm (24") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0
2400mm (8'-0")	1-10M	0	1-15M	0	1-15M	0	760 (30")	760 (30")	1-15M	760 (30")	760 (30")	760 (30")	1-15M	760 (30")	760 (30")	760 (30")	1-15M	760 (30")
3000mm (10'-0")	1-15M	0	1-15M	760 (30")	1-15M	760 (30")	1-15M	1140 (45")	1-20M	1140 (45")	1-20M	1140 (45")	1-20M	1140 (45")	1-20M	1140 (45")	2-15M	1140 (45")
3600mm (12'-0")	1-15M	0	1-15M	760 (30")	1-20M	1140 (45")	1-20M	1520 (60")	2-15M	1520 (60")	2-15M	1520 (60")	1-15M	1520 (60")	1-20M	1520 (60")	2-20M	1520 (60")
4200mm (14'-0")	1-15M	760 (30")	1-20M	1140 (45")	2-15M	1520 (60")	2-15M	1900 (75")	1-15M	1900 (75")	2-20M	1900 (75")	1-10M	1900 (75")	1-15M	1900 (75")	2-20M	1900 (75")
4800mm (16'-0")	1-20M	1140 (45")	2-15M	1520 (60")	1-15M	1900 (75")	2-20M	2280 (90")	1-10M	2280 (90")	3-20M	2280 (90")	1-10M	2280 (90")	2-20M	2280 (90")	2-20M	2280 (90")
5400mm (18'-0")	2-15M	1520 (60")	1-15M	1900 (75")	2-20M	2280 (90")	2-20M	2880 (105")	1-10M	2880 (105")	3-20M	2880 (105")	1-10M	2880 (105")	2-20M	2880 (105")	2-20M	2880 (105")
6000mm (20'-0")	1-15M	1900 (75")	2-20M	2280 (90")	2-20M	2880 (105")	2-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M

**PROFESSIONAL ENGINEER**  
S. J. ADEMA

The following specifications are permitted:  
1-10M + 1-15M may be substituted for 2-20M  
2-10M may be substituted for 1-15M

**All Stirrup End Distance measurements above are listed in mm (in)**

**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 = 380mm (15")

150mm (6") Thick  
600mm (24") Deep  
Table No. **L6-24M**

Table Prepared by:  
**TACOMA**  
ENGINEERS

**MUDURA**  
INTEGRATED BUILDING TECHNOLOGY  
*Building Value*

Opening Width		225mm (9") Lintel Depth																		
		Uniformly Distributed Load																		
		7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.	
900mm (3'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	0
1200mm (4'-0")		1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	306 (12")
1500mm (5'-0")		1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	408 (16")
1800mm (6'-0")		1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	612 (24")
2400mm (8'-0")		1-15M	0	1-20M	306 (12")	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	204 (8")
3000mm (10'-0")		2-15M	204 (8")	1-15M	612 (24")	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	204 (8")
3600mm (12'-0")		2-15M	510 (20")	1-15M	612 (24")	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	408 (16")
4200mm (14'-0")																				510 (20")
4800mm (16'-0")																				510 (20")
5400mm (18'-0")																				510 (20")
6000mm (20'-0")																				510 (20")



**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 = 102mm (4")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

**MUDURA**  
INTEGRATED BUILDING TECHNOLOGY  
*Building Value*

Table Prepared by:

**TACOMA**  
ENGINEERS

200mm (8")  
Thick  
225mm (9")  
Deep  
Table No.  
**L 8-9M**

Opening Width	300mm (12") Lintel Depth																
	Uniformly Distributed Load																
	7.0 kN/m (480 lb/ft)		10.5 kN/m (715 lb/ft)		14.0 kN/m (955 lb/ft)		17.5 kN/m (1195 lb/ft)		21.0 kN/m (1435 lb/ft)		24.5 kN/m (1675 lb/ft)		28.0 kN/m (1915 lb/ft)		31.5 kN/m (2155 lb/ft)		35.0 kN/m (2395 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.
900mm (3'-0")	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10M	304 (12")
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	1-10M	304 (12")
1500mm (5'-0")	1-10M	0	1-10M	0	1-15M	304 (12")	456 (18")	1-15M	304 (12")	456 (18")	1-15M	304 (12")	456 (18")	1-15M	304 (12")	1-15M	456 (18")
1800mm (6'-0")	1-10M	0	1-15M	304 (12")	456 (18")	1-15M	456 (18")	1-15M	456 (18")	1-15M	456 (18")	1-15M	456 (18")	1-15M	456 (18")	1-15M	608 (24")
2400mm (8'-0")	1-15M	304 (12")	1-15M	608 (24")	1-20M	760 (30")	1-20M	760 (30")	1-20M	760 (30")	1-20M	760 (30")	1-20M	760 (30")	1-20M	1-20M	760 (30")
3000mm (10'-0")	1-20M	608 (24")	1-20M	912 (36")	2-15M	1064 (42")	2-15M	1064 (42")	2-15M	1064 (42")	2-15M	1064 (42")	2-15M	1064 (42")	2-20M	2-20M	1064 (42")
3600mm (12'-0")	2-15M	912 (36")	1-15M	1216 (48")	2-20M	1368 (54")	2-20M	1368 (54")	2-20M	1368 (54")	2-20M	1368 (54")	2-20M	1368 (54")	2-20M	2-20M	1064 (42")
4200mm (14'-0")	1-15M	1216 (48")	1-10M	1520 (60")													1064 (42")
4800mm (16'-0")	1-20M	1520 (60")	2-20M														1064 (42")
5400mm (18'-0")	2-20M																1064 (42")
6000mm (20'-0")																	1064 (42")



**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 = 152mm (6")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

Table Prepared by:

200mm (8") Thick  
 300mm (12") Deep  
 Table No.  
**L 8-12M**

Opening Width	375mm (15") Lintel Depth																					
	Uniformly Distributed Load																					
	7.0 KN/m (480 lb/ft)	10.5 KN/m (715 lb/ft)	14.0 KN/m (955 lb/ft)	17.5 KN/m (1195 lb/ft)	21.0 KN/m (1435 lb/ft)	24.5 KN/m (1675 lb/ft)	28.0 KN/m (1915 lb/ft)	31.5 KN/m (2155 lb/ft)	35.0 KN/m (2395 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.					
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")
1800mm (6'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")	1-15M	406 (16")
2400mm (8'-0")	1-15M	0	1-15M	406 (16")	1-15M	609 (24")	1-15M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")
3000mm (10'-0")	1-15M	406 (16")	1-20M	609 (24")	1-20M	812 (32")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")	1-20M	1015 (40")
3600mm (12'-0")	1-20M	812 (32")	1-20M	1218 (48")	1-20M	1421 (56")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")	1-20M	1624 (64")
4200mm (14'-0")	2-15M	1015 (40")	1-15M	1421 (56")	1-15M	1624 (64")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")	1-15M	1827 (72")
4800mm (16'-0")	1-15M	1421 (56")	1-10M	1624 (64")	1-10M	1827 (72")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")	1-10M	2030 (80")
5400mm (18'-0")	1-10M	1624 (64")	1-10M	1827 (72")	1-10M	2030 (80")	1-10M		1-10M		1-10M		1-10M		1-10M		1-10M		1-10M		1-10M	
6000mm (20'-0")	2-20M	2030 (80")	2-20M		2-20M		2-20M		2-20M		2-20M		2-20M		2-20M		2-20M		2-20M		2-20M	



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

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 = 203mm (8")

Table Prepared by:  
**TACOMA**  
 ENGINEERS  
 200mm (8") Thick  
 375mm (15") Deep  
 Table No. **L 8-15M**



Opening Width		450mm (18") Lintel Depth																											
		Uniformly Distributed Load																											
		7.0 KN/m (480 lb/ft)			10.5 KN/m (715 lb/ft)			14.0 KN/m (955 lb/ft)			17.5 KN/m (1195 lb/ft)			21.0 KN/m (1435 lb/ft)			24.5 KN/m (1675 lb/ft)			28.0 KN/m (1915 lb/ft)			31.5 KN/m (2155 lb/ft)			35.0 KN/m (2395 lb/ft)			
		Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	Bottom Reinf. Steel	Stirrup End Dist.	Stirrup End Dist.	
900mm (3'-0")		1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	0
1200mm (4'-0")		1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	0
1500mm (5'-0")		1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	1-10M	0	0	0
1800mm (6'-0")		1-10M	0	0	1-10M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	0
2400mm (8'-0")		1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	0
3000mm (10'-0")		1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	1-15M	0	0	0
3600mm (12'-0")		1-15M	508 (20")	508 (20")	1-20M	762 (30")	762 (30")	1-15M	508 (20")	508 (20")	1-20M	1016 (40")	1016 (40")	1-15M	508 (20")	508 (20")	1-15M	508 (20")	508 (20")	1-15M	508 (20")	508 (20")	1-15M	508 (20")	508 (20")	1-15M	508 (20")	508 (20")	508 (20")
4200mm (14'-0")		1-20M	762 (30")	762 (30")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-20M	1270 (50")	1270 (50")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1016 (40")
4800mm (16'-0")		1-15M	508 (20")	508 (20")	1-20M	762 (30")	762 (30")	1-15M	762 (30")	762 (30")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1016 (40")
5400mm (18'-0")		1-15M	508 (20")	508 (20")	1-20M	762 (30")	762 (30")	1-15M	762 (30")	762 (30")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1-15M	1016 (40")	1016 (40")	1016 (40")
6000mm (20'-0")		1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1-10M	1778 (70")	1778 (70")	1778 (70")



The following submittals are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

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 = 254mm (10")

200mm (8") Thick  
 450mm (18") Deep  
 Table No. L 8-18M

Table Prepared by:

INTEGRATED BUILDING TECHNOLOGY  
 Building Value



Opening Width	525mm (21") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	660 (26")	660 (26")	1-15M	660 (26")	1-15M	660 (26")
2400mm (8'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-20M	660 (26")	660 (26")	660 (26")	660 (26")	660 (26")	1-20M	660 (26")	1-20M	990 (39")
3000mm (10'-0")	1-15M	0	1-15M	0	1-20M	660 (26")	1-20M	990 (39")	1-20M	990 (39")	990 (39")	990 (39")	990 (39")	990 (39")	2-15M	990 (39")	2-15M	1320 (52")
3600mm (12'-0")	1-15M	0	1-20M	660 (26")	1-20M	990 (39")	2-15M	990 (39")	1-15M	1320 (52")	1-20M	1320 (52")	1-20M	1320 (52")	2-20M	1320 (52")	2-20M	1650 (65")
4200mm (14'-0")	1-20M	660 (26")	2-15M	990 (39")	1-15M	1320 (52")	1-20M	1320 (52")	1-15M	1650 (65")	1-10M	1650 (65")	1-10M	1650 (65")	3-20M	1650 (65")	3-20M	1980 (78")
4800mm (16'-0")	2-15M	990 (39")	1-15M	1320 (52")	2-20M	1650 (65")	2-20M	1650 (65")	2-20M	1980 (78")	1-15M	1980 (78")	1-15M	1980 (78")				
5400mm (18'-0")	2-15M	1320 (52")	2-20M	1650 (65")	1-10M	1980 (78")	3-20M	1980 (78")	3-20M									
6000mm (20'-0")	1-15M	1650 (65")	1-10M	1980 (78")	3-20M	2310 (91")	3-20M	2310 (91")										



**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 = 330mm (13")

**All Stirrup End Distance measurements above are listed in mm (in)**

Table Prepared by:  
**TACOMA ENGINEERS**  
 200mm (8") Thick  
 525mm (21") Deep  
 Table No. **L8-21M**



# LINTEL TABLES L8-24

Opening Width	600mm (24") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0
2400mm (8'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-20M	760 (30")	1-20M	760 (30")	1-20M	760 (30")	1-20M	760 (30")
3000mm (10'-0")	1-15M	0	1-15M	0	1-20M	0	1-20M	760 (30")	1-20M	760 (30")	1-20M	1140 (45")	1-20M	1140 (45")	1-20M	1140 (45")	2-15M	1140 (45")
3600mm (12'-0")	1-20M	0	1-20M	760 (30")	1-20M	760 (30")	1-20M	1140 (45")	1-20M	1140 (45")	1-20M	1520 (60")	1-20M	1520 (60")	1-15M	1520 (60")	2-20M	1520 (60")
4200mm (14'-0")	1-20M	0	1-20M	1140 (45")	1-20M	1140 (45")	1-15M	1520 (60")	1-15M	1520 (60")	1-15M	1900 (75")	1-10M	1900 (75")	1-10M	1900 (75")	1-15M	1900 (75")
4800mm (16'-0")	1-20M	760 (30")	2-15M	1520 (60")	1-15M	1520 (60")	1-15M	1900 (75")	1-10M	1900 (75")	1-10M	2280 (90")	3-20M	2280 (90")	1-10M	1900 (75")	1-10M	1900 (75")
5400mm (18'-0")	2-15M	1140 (45")	1-15M	1520 (60")	1-20M	1900 (75")	1-10M	1900 (75")	1-10M	2280 (90")	1-10M	2280 (90")	3-20M	2280 (90")	3-20M	2280 (90")	3-20M	2280 (90")
6000mm (20'-0")	1-15M	1520 (60")	2-20M	1900 (75")	1-15M	1900 (75")	1-15M	2280 (90")	1-15M	2280 (90")	1-15M	2280 (90")	3-20M	2280 (90")	3-20M	2280 (90")	3-20M	2280 (90")

**NOTES:**

- This table to be used in conjunction with the general notes and details located at the beginning of this section.
- Stirrup Spacing = 380mm (15")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following stirrup end distance measurements apply to the table above:  
 1-10M = 1-15M may be substituted for 1-10M  
 2-10M may be substituted for 2-15M





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INTEGRATED BUILDING TECHNOLOGY  
*Building Value*

Table Prepared by:



**TACOMA**  
ENGINEERS

200mm (8")  
Thick  
600mm (24")  
Deep  
Table No.  
**L 8-24M**

Opening Width	225mm (9") Lintel Depth												35.0 kN/m (2395 lb/ft)					
	Uniformly Distributed Load																	
	7.0 kN/m (480 lb/ft)	10.5 kN/m (715 lb/ft)	14.0 kN/m (955 lb/ft)	17.5 kN/m (1195 lb/ft)	21.0 kN/m (1435 lb/ft)	24.5 kN/m (1675 lb/ft)	28.0 kN/m (1915 lb/ft)	31.5 kN/m (2155 lb/ft)	35.0 kN/m (2395 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.			
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	204 (8")	204 (8")
1200mm (4'-0")	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	204 (8")	204 (8")
1500mm (5'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	306 (12")	306 (12")
1800mm (6'-0")	1-15M	0	1-15M	0	1-15M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	306 (12")	306 (12")
2400mm (8'-0")	1-15M	0	1-20M	0	1-15M	0	1-15M	408 (16")	1-15M	408 (16")	2-20M	612 (24")	1-10M	612 (24")	1-10M	612 (24")	204 (8")	204 (8")
3000mm (10'-0")	1-15M	0	1-15M	306 (12")	1-10M	612 (24")	1-10M	612 (24")	1-10M	612 (24")	1-10M	612 (24")	1-10M	612 (24")	1-10M	612 (24")	306 (12")	306 (12")
3600mm (12'-0")	1-15M	204 (8")	1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		306 (12")	306 (12")
4200mm (14'-0")	1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		306 (12")	306 (12")
4800mm (16'-0")	1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		306 (12")	306 (12")
5400mm (18'-0")	1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		306 (12")	306 (12")
6000mm (20'-0")	1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		1-20M		306 (12")	306 (12")



**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 = 102mm (4")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M



Table Prepared by:  
**250mm (10") Thick**  
**225mm (9") Deep**  
 Table No. **L 10-9M**

# LINTEL TABLES L10-12

Opening Width	300mm (12") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	304 (12")	1-15M	304 (12")
1500mm (5'-0")	1-10M	0	1-10M	0	1-15M	0	1-15M	304 (12")	1-15M	304 (12")	1-15M	456 (18")	1-15M	456 (18")	1-15M	456 (18")	1-15M	456 (18")
1800mm (6'-0")	1-15M	0	1-15M	0	1-15M	304 (12")	1-15M	456 (18")	1-15M	456 (18")	1-20M	608 (24")	1-20M	608 (24")	1-20M	608 (24")	1-20M	608 (24")
2400mm (8'-0")	1-15M	0	1-15M	456 (18")	1-20M	608 (24")	1-20M	608 (24")	1-20M	760 (30")	1-20M	912 (36")	1-15M	912 (36")	1-15M	912 (36")	1-20M	912 (36")
3000mm (10'-0")	1-20M	456 (18")	1-20M	760 (30")	2-15M	912 (36")	2-15M	912 (36")	2-20M	1064 (42")	2-20M	1216 (48")	2-20M	1216 (48")	2-20M	1216 (48")	2-20M	1216 (48")
3600mm (12'-0")	2-15M	760 (30")	1-15M	1064 (42")	2-20M	1216 (48")	2-20M	1368 (54")	3-20M	1520 (60")	3-20M	1520 (60")	3-20M	1520 (60")	3-20M	1520 (60")	3-20M	1520 (60")
4200mm (14'-0")	1-15M	1064 (42")	1-10M	1368 (54")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")
4800mm (16'-0")	1-10M	1368 (54")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")
5400mm (18'-0")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")
6000mm (20'-0")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (60")	1-10M	1520 (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 = 452mm (6")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

Table Prepared by:

ENGINEERS

250mm (10") Thick  
 300mm (12") Deep  
 Table No. **L 10-12M**

Opening Width	375mm (15") Lintel Depth																	
	Uniformly Distributed Load																	
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	406 (16")	406 (16")	1-15M	406 (16")	1-15M	406 (16")
1800mm (6'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	406 (16")	609 (24")	609 (24")	1-15M	609 (24")	1-15M	609 (24")	1-20M	609 (24")
2400mm (8'-0")	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-20M	609 (24")	812 (32")	812 (32")	1-20M	812 (32")	2-15M	812 (32")	1-15M	1015 (40")
3000mm (10'-0")	1-15M	0	1-20M	609 (24")	1-20M	812 (32")	1-20M	812 (32")	1-20M	812 (32")	1-15M	1015 (40")	1-15M	1015 (40")	2-20M	1218 (48")	1-10M	1218 (48")
3600mm (12'-0")	1-20M	406 (16")	2-15M	812 (32")	1-15M	1015 (40")	1-20M	1015 (40")	1-20M	1218 (48")	1-10M	1218 (48")	1-10M	1218 (48")	3-20M	1421 (56")	1-10M	1421 (56")
4200mm (14'-0")	2-15M	812 (32")	1-15M	1015 (40")	2-20M	1421 (56")	2-20M	1421 (56")	2-20M	1624 (64")	3-20M	1624 (64")	3-20M	1624 (64")				
4800mm (16'-0")	1-15M	1015 (40")	1-10M	1421 (56")	3-20M	1624 (64")												
5400mm (18'-0")	1-10M	1421 (56")	2-20M	1827 (72")														
6000mm (20'-0")	2-20M																	



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

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 = 203mm (8")



Table Prepared by:  
 250mm (10") Thick  
 375mm (15") Deep  
 Table No. L 10-15M

Opening Width	450mm (18") Lintel Depth																
	Uniformly Distributed Load																
	7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0
1500mm (5'-0")	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	508 (20")
1800mm (6'-0")	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	508 (20")	1-20M	508 (20")
2400mm (8'-0")	0	1-15M	0	1-15M	0	1-15M	0	1-15M	508 (20")	1-20M	762 (30")	1-20M	762 (30")	1-20M	762 (30")	2-15M	762 (30")
3000mm (10'-0")	0	1-15M	0	1-20M	508 (20")	2-15M	1016 (40")	2-15M	762 (30")	2-15M	1016 (40")	2-15M	1016 (40")	1-15M	1016 (40")	2-20M	1016 (40")
3600mm (12'-0")	0	1-20M	762 (30")	2-15M	1016 (40")	2-15M	1270 (50")	2-15M	1016 (40")	1-15M	1270 (50")	2-20M	1270 (50")	1-15M	1524 (60")	1-15M	1524 (60")
4200mm (14'-0")	508 (20")	1-20M	1016 (40")	1-15M	1270 (50")	1-15M	1270 (50")	2-20M	1270 (50")	1-10M	1524 (60")	1-15M	1524 (60")	3-20M	1778 (70")	1-15M	1778 (70")
4800mm (16'-0")	762 (30")	2-15M	1270 (50")	1-10M	1524 (60")	1-10M	1524 (60")	2-20M	1778 (70")	1-10M	1778 (70")	2-20M	1778 (70")				
5400mm (18'-0")	1270 (50")	2-15M	1524 (60")	1-10M	1778 (70")	1-10M	1778 (70")	3-20M	1778 (70")								
6000mm (20'-0")	1524 (60")	2-20M	1778 (70")														

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 = 254mm (10")

**All Stirrup End Distance measurements above are listed in mm (in)**

The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

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Table Prepared by:

**TACOMA**  
ENGINEERS

**250mm (10") Thick**  
**450mm (18") Deep**  
 Table No.  
**L 10-18M**

Opening Width		525mm (21") Lintel Depth																	
		Uniformly Distributed Load																	
		7.0 KN/m (480 lb/ft)		10.5 KN/m (715 lb/ft)		14.0 KN/m (955 lb/ft)		17.5 KN/m (1195 lb/ft)		21.0 KN/m (1435 lb/ft)		24.5 KN/m (1675 lb/ft)		28.0 KN/m (1915 lb/ft)		31.5 KN/m (2155 lb/ft)		35.0 KN/m (2395 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.
900mm (3'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0
1800mm (6'-0")		1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0
2400mm (8'-0")		1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-20M	0	1-20M	660 (26")	1-20M	660 (26")	1-20M	660 (26")
3000mm (10'-0")		1-15M	0	1-20M	0	1-20M	0	1-20M	0	660 (26")	660 (26")	1-20M	660 (26")	660 (26")	990 (39")	1-20M	990 (39")	1-15M	990 (39")
3600mm (12'-0")		1-20M	0	1-20M	0	1-20M	660 (26")	1-20M	660 (26")	990 (39")	990 (39")	1-20M	990 (39")	1-20M	1320 (52")	2-20M	1320 (52")	1-20M	1320 (52")
4200mm (14'-0")		1-20M	0	2-15M	660 (26")	2-15M	660 (26")	2-15M	660 (26")	1320 (52")	1320 (52")	1-15M	1320 (52")	1-15M	1650 (65")	1-15M	1650 (65")	1-10M	1650 (65")
4800mm (16'-0")		2-15M	660 (26")	1-15M	990 (39")	2-20M	990 (39")	2-20M	990 (39")	1320 (52")	1320 (52")	1-10M	1650 (65")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")
5400mm (18'-0")		1-15M	990 (39")	1-20M	1320 (52")	1-10M	1650 (65")	1-10M	1650 (65")	2-20M	2-20M	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")	1-10M	1980 (78")
6000mm (20'-0")		2-20M	1320 (52")	1-10M	1650 (65")	2-20M	1980 (78")	2-20M	1980 (78")	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M	3-20M



The following substitutions are permitted:  
 1-10M + 1-15M may be substituted for 1-20M  
 2-10M may be substituted for 1-15M

All Stirrup End Distance measurements above are listed in mm (in)

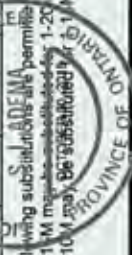
NOTES:  
 1. This table to be used in conjunction with the general notes and details located at the beginning of this section.  
 2. Stirrup Spacing = 330mm (13")

Table Prepared by:  
**TACOMA**  
 ENGINEERS  
 Table No. **L10-21M**



# LINTEL TABLES L10-24

Opening Width	600mm (24") Lintel Depth																			
	Uniformly Distributed Load																			
	7.0 KN/m (480 lb/ft)	10.5 KN/m (715 lb/ft)	14.0 KN/m (955 lb/ft)	17.5 KN/m (1195 lb/ft)	21.0 KN/m (1435 lb/ft)	24.5 KN/m (1675 lb/ft)	28.0 KN/m (1915 lb/ft)	31.5 KN/m (2155 lb/ft)	35.0 KN/m (2395 lb/ft)											
900mm (3'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1200mm (4'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0
1500mm (5'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0
1800mm (6'-0")	1-10M	0	1-10M	0	1-10M	0	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0
2400mm (8'-0")	1-10M	0	1-15M	0	1-15M	0	1-15M	0	1-15M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
3000mm (10'-0")	1-15M	0	1-15M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
3600mm (12'-0")	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
4200mm (14'-0")	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
4800mm (16'-0")	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
5400mm (18'-0")	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0
6000mm (20'-0")	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0	1-20M	0



The following substitutions are permitted:  
 1-10M + 1-1M max. spacing of 1-20M  
 2-10M max. Be substituted for 1-1M

All Stirrup End Distance measurements above are listed in mm (in)

- 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 = 380mm (15")

250mm (10") Thick  
 600mm (24") Deep  
 Table No. L10-24M

Table Prepared by:  
**TACOMA**  
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