



Amvic Building System

Lintel Tables

Prepared by

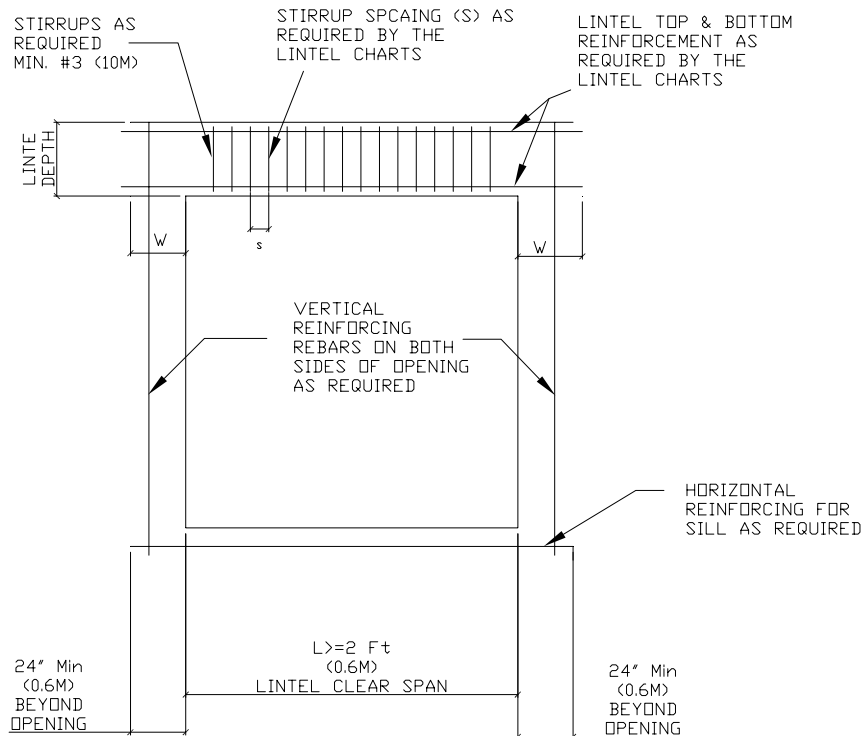
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Lintels

Introduction

Lintels are considered as beams that span over window or door openings. Lintels require special reinforcing details to meet the local code requirements. The following diagram illustrates typical wall opening details;



As can be seen from the diagram above the lintel top and bottom reinforcement must extend the proper development length beyond the face of the opening and is indicated as (W) on the figure. The minimum development length depends on many factors. As a rule of thumb the minimum development length should be not less than 40 times the bar diameter and the minimum required should not be less than 24 inches in order to use the Amvic lintel charts. Table A0 gives the minimum (W) for the different reinforcing bars used in the charts.

If the wall opening is near the end of wall length and there is not enough space left for proper development length then the lintel reinforcing bars should be bent around the corner at 90 degrees into the adjacent perpendicular wall.

Table A0 – Minimum Development Length (W) For Lintel Top & Bottom Reinforcing Bars

Rebar Designation	Development Length (W)
Canadian	
10M	609 mm (24 in)
15M	640 mm (25 in)
20M	780 mm (30.7 in)
25M	1008 mm (39.7 in)
30M	1196 mm (47 in)
United States	
#3	24 in
#4	24 in
#5	25 in
#6	30 in
#8	40 in
#9	45 in

Table A2 – Limitations for United States Lintel Charts

Item	Description	Limit
General	Number of stories	2 above grade
	Maximum Storey Height	12 feet
	Maximum Floor Clear Span	40 feet
	Maximum Roof Clear Span	42 feet
Dead Loads *	Floor	15 psf
	Partitions	10 psf
	Roof	15 psf
	Concrete Density	150 pcf
Live Loads *	Main Floor	40 psf
	Second Floor	30 psf
	Attic	20 psf
	Ground Snow Load	30 psf
		50 psf
Material Properties	Concrete F'C	3000 psi
	Steel Fy	60,000 psi

* All loads given in table A1 & A2 are service loads i.e. not factored

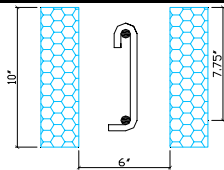
Other Structural Assumptions:

Several assumptions were made for the lintel charts as listed below:

- 1- Concrete compressive strength at 28 days $F'_c = 20 \text{ Mpa}$ (3000 psi)
- 2- Steel reinforcing bars yield strength $F_y = 400 \text{ Mpa}$ (60 ksi)
- 3- Lintels are considered as single span beams with fixed ends due to the fact that the walls and lintels are monolithically cast.
- 4- All loads on the lintels are assumed as uniformly distributed loads. No concentrated loads from girders or trusses were considered.
- 5- Maximum reinforcing bar size used is 30M for Canada or #9 for the US.
- 6- Maximum number of bars for top or bottom of lintels is 2. No bundled bars were considered.
- 7- When the chart identifies a single reinforcing re-bar (e.g. 1-15M or 1-#5) for top or bottom, a single C-stirrup should be used as per the charts. If however double reinforcing bars for either top or bottom of lintel is identified (e.g. 2-15M or 2-#5) then a double C-stirrup MUST be used.
- 8- Never exchange a double reinforcing bars configuration for a single larger size bar (e.g. don't use 1-15M or 1-#5 instead of 2-10M or 2-#4 respectively)
- 9- The Canadian lintel charts are based on CSA A23.3
- 10- The US lintel charts are based on ACI 318

Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet								
			3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1784.3	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"	
	50 psf	2080.4	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"			
	70 psf	2376.5	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"				
(15 feet)	30 psf	2360.2	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"				
	50 psf	2779.6	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"					
	70 psf	3199.1	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"						
(20 feet)	30 psf	3037.4	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"					
	50 psf	3580.3	1#4 top 1-#4 bot. #3 @ 3.75"	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"						
	70 psf	4123.1	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
(25 feet)	30 psf	3699.4	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"						
	50 psf	4357.4	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
	70 psf	5015.3	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
(30 feet)	30 psf	4602.4	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
	50 psf	5424.9	1#4 top 1-#4 bot. #3 @ 3.75"								
	70 psf	6247.3	1#4 top 1-#4 bot. #3 @ 3.75"								
(35 feet)	30 psf	5069.2	1#4 top 1-#4 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
	50 psf	5982.2	1#4 top 1-#4 bot. #3 @ 3.75"								
	70 psf	6895.1	1-#5 top 1-#5 bot. #3 @ 3.75"								
(40 feet)	30 psf	5746.5	1#4 top 1-#4 bot. #3 @ 3.75"								
	50 psf	6782.8	1-#5 top 1-#5 bot. #3 @ 3.75"								
	70 psf	7819.1									



Lintel Width = 6"
 Lintel Depth = 10"
 Effective Depth = 7.75"
 F'c @ 28 days = 3,000 psi
 Fy = 60,000 psi

Legend
 1-#4 top = top rebar
 1-#4 bot. = bottom rebar
 #3 @ 3.75" = use #3 stirrup @ 3.75" O/C

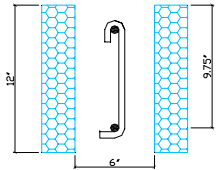
* check applicability limits table A2 in appendix A to use this chart

ILL 6x10
P. 1/1



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1800.2	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"
	50 psf	2096.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	
	70 psf	2392.4	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"		
(15 feet)	30 psf	2376.1	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"		
	50 psf	2795.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"			
	70 psf	3215.0	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"				
(20 feet)	30 psf	3053.4	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"				
	50 psf	3596.2	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"					
	70 psf	4139.0	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"						
(25 feet)	30 psf	3715.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"					
	50 psf	4373.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"						
	70 psf	5031.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"						
(30 feet)	30 psf	4618.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"							
	50 psf	5440.8	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								
	70 psf	6263.3	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								
(35 feet)	30 psf	5085.1	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"							
	50 psf	5998.1	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								
	70 psf	6911.1	1-#5 top 1-#5 bot. #3 @ 4.5"									
(40 feet)	30 psf	5762.4	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								
	50 psf	6798.7	1-#5 top 1-#5 bot. #3 @ 4.5"									
	70 psf	7835.1	1-#5 top 1-#5 bot. #3 @ 4.5"									



Lintel Width = 6"
 Lintel Depth = 12"
 Effective Depth = 9.75"
 F'c @ 28 days = 3,000 psi
 Fy = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 4.5" = use two #3 stirrups @ 4.5" O/C

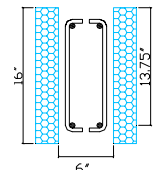
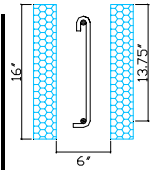
* check applicability limits table A2 in appendix A to use this chart

ILL 6x12
P. 1/1



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1832.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	50 psf	2128.1	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	70 psf	2424.2	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
(15 feet)	30 psf	2407.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	50 psf	2827.4	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"
	70 psf	3246.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"
(20 feet)	30 psf	3085.2	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"
	50 psf	3628.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"
	70 psf	4170.9	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"
(25 feet)	30 psf	3747.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"
	50 psf	4405.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"
	70 psf	5063.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"
(30 feet)	30 psf	4650.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"
	50 psf	5472.6	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"
	70 psf	6295.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"
(35 feet)	30 psf	5117.0	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"
	50 psf	6029.9	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"
	70 psf	6942.9	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"	2-#3 @ 5.5"
(40 feet)	30 psf	5794.2	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"
	50 psf	6830.6	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	1-#6+1-#5 top 1-#6+1-#5 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"	2-#3 @ 5.5"
	70 psf	7866.9	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. #3 @ 6.5"	2-#3 @ 5.5"	2-#3 @ 5.5"	2-#3 @ 5.5"



Lintel Width = 6"
 Lintel Depth = 16"
 Effective Depth = 13.75"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 6.5" = use two #3 stirrups @ 6.5" O/C

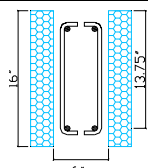
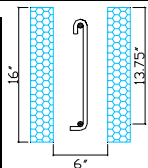
* check applicability limits table A2 in appendix A to use this chart

ILL 6x16
P. 1/2



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1832.0	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"				
	50 psf	2128.1	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 2-#5 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"						
	70 psf	2424.2	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"							
(15 feet)	30 psf	2407.9	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"							
	50 psf	2827.4	1-#8 top 1-#8 bot. #3 @ 5.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"								
	70 psf	3246.9	2-#6 top 2-#6 bot. 2-#3 @ 5.5"									
(20 feet)	30 psf	3085.2	1-#8 top 1-#8 bot. #3 @ 5.5"	2-#6 top 2-#6 bot. 2-#3 @ 5.5"								
	50 psf	3628.0	2-#6 top 2-#6 bot. 2-#3 @ 5.5"									
	70 psf	4170.9										
(25 feet)	30 psf	3747.1										
	50 psf	4405.1										
	70 psf	5063.1										
(30 feet)	30 psf	4650.1										
	50 psf	5472.6										
	70 psf	6295.1										
(35 feet)	30 psf	5117.0										
	50 psf	6029.9										
	70 psf	6942.9										
(40 feet)	30 psf	5794.2										
	50 psf	6830.6										
	70 psf	7866.9										



Lintel Width = 6"
 Lintel Depth = 16"
 Effective Depth = 13.75"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 6.5" = use two #3 stirrups @ 6.5" O/C

* check applicability limits table A2 in appendix A to use this chart

ILL 6x16
P. 2/2



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1863.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"
	50 psf	2160.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"
	70 psf	2456.1	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"
(15 feet)	30 psf	2439.8	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"
	50 psf	2859.2	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"
	70 psf	3278.7	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"
(20 feet)	30 psf	3117.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"
	50 psf	3659.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"
	70 psf	4202.7	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 7"
(25 feet)	30 psf	3779.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. #3 @ 8.5"
	50 psf	4436.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"
	70 psf	5094.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. 2-#3 @ 7"	2-#5 top 2-#5 bot. #3 @ 7"	1-#8 top 1-#8 bot. 2-#3 @ 7"
(30 feet)	30 psf	4682.0	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 7"
	50 psf	5504.5	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. 2-#3 @ 7"	2-#5 top 2-#5 bot. #3 @ 7"	1-#8 top 1-#8 bot. 2-#3 @ 7"
	70 psf	6326.9	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. 2-#3 @ 7"	2-#5 top 2-#5 bot. #3 @ 7"	1-#8 top 1-#8 bot. 2-#3 @ 7"	2-#6 top 1-#9 bot. #3 @ 7"
(35 feet)	30 psf	5148.8	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"
	50 psf	6061.8	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 7"	2-#5 top 2-#5 bot. 2-#3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"
	70 psf	6974.7	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. 2-#3 @ 7"	2-#5 top 2-#5 bot. #3 @ 7"	1-#8 top 1-#8 bot. 2-#3 @ 7"	
(40 feet)	30 psf	5826.1	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 7"	2-#5 top 2-#5 bot. 2-#3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"
	50 psf	6862.4	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 7"	2-#5 top 2-#5 bot. 2-#3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	
	70 psf	7898.7	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#5 top 1-#5 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 7"	2-#5 top 2-#5 bot. 2-#3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#8+1-#5 top 2-#3 @ 7"	



Lintel Width = 6"
 Lintel Depth = 20"
 Effective Depth = 17.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

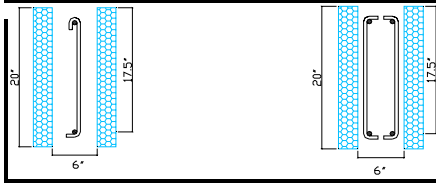
Legend
 1-#6 top = top rebar
 1-#6 bot. = bottom rebar
 2-#3 @ 7" = use two #3 stirrups @ 7" O/C

* check applicability limits table A2 in appendix A to use this chart

ILL 6x20
P. 1/2

Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1863.9	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 7"	
	50 psf	2160.0	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 7"		
	70 psf	2456.1	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"			
(15 feet)	30 psf	2439.8	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"			
	50 psf	2859.2	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"					
	70 psf	3278.7	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"						
(20 feet)	30 psf	3117.0	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 7"	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"					
	50 psf	3659.9	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"							
	70 psf	4202.7	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"								
(25 feet)	30 psf	3779.0	1-#8 top 1-#8 bot. #3 @ 7"	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"							
	50 psf	4436.9	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"								
	70 psf	5094.9	1-#9 top 1-#9 bot. #3 @ 7"									
(30 feet)	30 psf	4682.0	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#9 bot. #3 @ 7"								
	50 psf	5504.5	1-#9 top 1-#9 bot. #3 @ 7"									
	70 psf	6326.9										
(35 feet)	30 psf	5148.8	1-#9 top 1-#9 bot. #3 @ 7"									
	50 psf	6061.8										
	70 psf	6974.7										
(40 feet)	30 psf	5826.1										
	50 psf	6862.4										
	70 psf	7898.7										



Lintel Width = 6"
 Lintel Depth = 20"
 Effective Depth = 17.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#6 top = top rebar
 1-#6 bot. = bottom rebar
 2-#3 @ 7" = use two #3 stirrups @ 7" O/C

* check applicability limits table A2 in appendix A to use this chart

ILL 6x20
P. 2/2

Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet								
			12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1895.7	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"
	50 psf	2191.8	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"
	70 psf	2487.9	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#9 top 1-#9 bot. #3 @ 8.5"
(15 feet)	30 psf	2471.6	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#9 top 1-#9 bot. #3 @ 8.5"
	50 psf	2891.0	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"
	70 psf	3310.5	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"
(20 feet)	30 psf	3148.8	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"
	50 psf	3691.7	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	
	70 psf	4234.5	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"			
(25 feet)	30 psf	3810.8	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"		
	50 psf	4468.8	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"			
	70 psf	5126.7	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"					
(30 feet)	30 psf	4713.8	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"				
	50 psf	5536.3	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"					
	70 psf	6358.7	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"						
(35 feet)	30 psf	5180.6	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"					
	50 psf	6093.6	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"						
	70 psf	7006.5	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"							
(40 feet)	30 psf	5857.9	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"					
	50 psf	6894.2	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"							
	70 psf	7930.5	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"							

Lintel Width = 6"
 Lintel Depth = 24"
 Effective Depth = 21.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

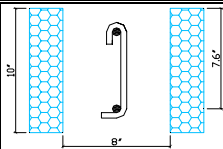
Legend
 1-#9 top = top rebar
 1-#9 bot. = bottom rebar
 2-#3 @ 10.5" = use 2-#3 stirrups @ 10.5" O/C

ILL 6x24
P. 2/2

* check applicability limits table A2 in appendix A to use this chart

Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet									
			3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft	12 ft

(10 feet)	30 psf	1873.7	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"	1-#8 top 1-#8 bot. #3 @ 3.75"	2-#6 top 2-#6 bot. 2-#3 @ 3.75"
	50 psf	2189.5	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"	1-#8 top 1-#8 bot. #3 @ 3.75"	2-#6 top 2-#6 bot. 2-#3 @ 3.75"	
	70 psf	2505.3	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"	1-#8 top 1-#8 bot. #3 @ 3.75"		
(15 feet)	30 psf	2476.8	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"	1-#8 top 1-#8 bot. #3 @ 3.75"		
	50 psf	2924.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"				
	70 psf	3371.7	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"					
(20 feet)	30 psf	3186.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"	2-#5 top 2-#5 bot. 2-#3 @ 3.75"				
	50 psf	3765.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"						
	70 psf	4344.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"						
(25 feet)	30 psf	3879.5	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"						
	50 psf	4581.4	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"							
	70 psf	5283.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"							
(30 feet)	30 psf	4825.4	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"							
	50 psf	5702.7	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
	70 psf	6580.0	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
(35 feet)	30 psf	5314.4	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"							
	50 psf	6288.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
	70 psf	7262.0	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
(40 feet)	30 psf	6023.7	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
	50 psf	7129.2	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#5 top 1-#5 bot. #3 @ 3.75"								
	70 psf	8234.6	1-#5 top 1-#5 bot. #3 @ 3.75"	1-#6 top 1-#6 bot. #3 @ 3.75"								



Lintel Width = 8"
 Lintel Depth = 10"
 Effective Depth = 7.6"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 3.75" = use two #3 stirrups @ 3.75" O/C

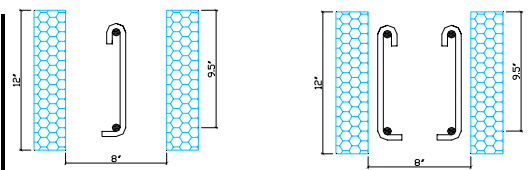
* check applicability limits table A2 in appendix A to use this chart

ILL 8x10
P. 1/1



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1894.0	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	
	50 psf	2209.9	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	
	70 psf	2525.7	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	1-#8 top 1-#8 bot. #3 @ 4.5"
(15 feet)	30 psf	2497.2	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	1-#8 top 1-#8 bot. #3 @ 4.5"
	50 psf	2944.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. #3 @ 4.5"	1-#8 top 1-#8 bot. #3 @ 4.5"	
	70 psf	3392.0	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. #3 @ 4.5"		
(20 feet)	30 psf	3206.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. #3 @ 4.5"		
	50 psf	3785.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. #3 @ 4.5"			
	70 psf	4364.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"				
(25 feet)	30 psf	3899.9	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"	2-#5 top 2-#5 bot. 2-#3 @ 4.5"			
	50 psf	4601.8	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#6 bot. #3 @ 4.5"	1-#6 top 2-#5 bot. 2-#3 @ 4.5"				
	70 psf	5303.6	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"					
(30 feet)	30 psf	4845.8	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#6 bot. #3 @ 4.5"					
	50 psf	5723.1	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"							
	70 psf	6600.4	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"							
(35 feet)	30 psf	5334.7	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#5 bot. #3 @ 4.5"						
	50 psf	6308.5	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#5 bot. #3 @ 4.5"							
	70 psf	7282.4	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#5 bot. #3 @ 4.5"							
(40 feet)	30 psf	6044.1	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#6 top 1-#5 bot. #3 @ 4.5"							
	50 psf	7149.5	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								
	70 psf	8255.0	1-#5 top 1-#5 bot. #3 @ 4.5"	1-#5 top 1-#5 bot. #3 @ 4.5"								



Lintel Width = 8"
 Lintel Depth = 12"
 Effective Depth = 9.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 4.5" = use two #3 stirrups @ 4.5" O/C

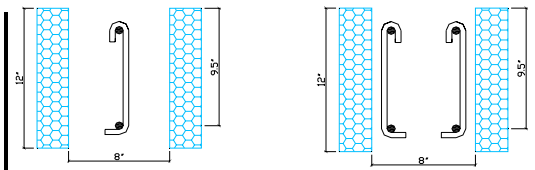
* check applicability limits table A2 in appendix A to use this chart

ILL 8x12
 P. 1/2



Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet								
			12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1894.0	2-#5 top 2-#5 bot. 2-#3 @ 4.5"	1-#8 top 1-#8 bot. #3 @ 4.5"	2-#6 top 2-#6 bot. 2-#3 @ 4.5"	1-#9 top 1-#9 bot. #3 @ 4.5"						
	50 psf	2209.9	1-#8 top 1-#8 bot. #3 @ 4.5"	2-#6 top 2-#6 bot. 2-#3 @ 4.5"								
	70 psf	2525.7	2-#6 top 2-#6 bot. 2-#3 @ 4.5"									
(15 feet)	30 psf	2497.2	2-#6 top 2-#6 bot. 2-#3 @ 4.5"									
	50 psf	2944.6										
	70 psf	3392.0										
(20 feet)	30 psf	3206.6										
	50 psf	3785.6										
	70 psf	4364.6										
(25 feet)	30 psf	3899.9										
	50 psf	4601.8										
	70 psf	5303.6										
(30 feet)	30 psf	4845.8										
	50 psf	5723.1										
	70 psf	6600.4										
(35 feet)	30 psf	5334.7										
	50 psf	6308.5										
	70 psf	7282.4										
(40 feet)	30 psf	6044.1										
	50 psf	7149.5										
	70 psf	8255.0										



Lintel Width = 8"
 Lintel Depth = 12"
 Effective Depth = 9.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

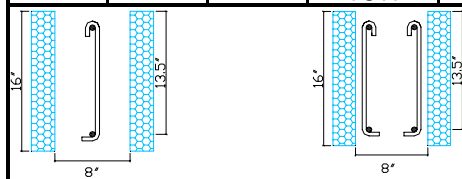
Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 4.5" = use two #3 stirrups @ 4.5" O/C

* check applicability limits table A2 in appendix A to use this chart

ILL 8x12
P. 2/2

Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet								
			3 ft	4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft

(10 feet)	30 psf	1934.8	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	50 psf	2250.6	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	70 psf	2566.5	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
(15 feet)	30 psf	2537.9	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"
	50 psf	2985.4	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"
	70 psf	3432.8	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"
(20 feet)	30 psf	3247.3	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"
	50 psf	3826.3	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"
	70 psf	4405.4	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	
(25 feet)	30 psf	3940.7	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"
	50 psf	4642.5	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"		
	70 psf	5344.4	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"			
(30 feet)	30 psf	4886.5	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"		
	50 psf	5763.8	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"			
	70 psf	6641.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"					
(35 feet)	30 psf	5375.5	1-#5 top 1-#5 bot. no stirrups	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"				
	50 psf	6349.3	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"						
	70 psf	7323.1	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"						
(40 feet)	30 psf	6084.9	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"					
	50 psf	7190.3	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"						
	70 psf	8295.7	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#5 top 1-#5 bot. #3 @ 6.5"	1-#6 top 1-#6 bot. #3 @ 6.5"						



Lintel Width = 8"
 Lintel Depth = 16"
 Effective Depth = 13.5"
 F'c @ 28 days = 3,000 psi
 Fy = 60,000 psi

Legend

1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 6.5" = use two #3 stirrups @ 6.5" O/C

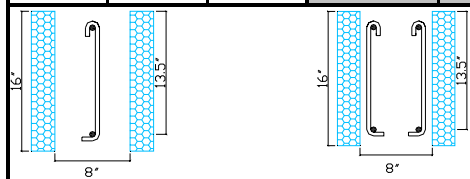
* check applicability limits table A2 and appendix A to use this chart

ILL 8x16
P. 1/2



Floor Clear Span feet	Ground snow load psf	Total Factored Uniform Load lbs/ft	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof Lintel Span - Feet								
			12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1934.8	1-#6 top 1-#6 bot. #3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	1#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 6.5"	2-#8 top 2-#8 bot. 2-#3 @ 6.5"	2-#8 top 2-#8 bot. 2-#3 @ 6.5"
	50 psf	2250.6	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	1#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 6.5"	2-#8 top 2-#8 bot. 2-#3 @ 6.5"	2-#8 top 2-#8 bot. 2-#3 @ 6.5"	
	70 psf	2566.5	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	1#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 6.5"				
(15 feet)	30 psf	2537.9	2-#5 top 2-#5 bot. 2-#3 @ 6.5"	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	1#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 6.5"				
	50 psf	2985.4	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"	1-#9 top 1-#9 bot. #3 @ 6.5"						
	70 psf	3432.8	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"							
(20 feet)	30 psf	3247.3	1-#8 top 1-#8 bot. #3 @ 6.5"	2-#6 top 2-#6 bot. 2-#3 @ 6.5"							
	50 psf	3826.3									
	70 psf	4405.4									
(25 feet)	30 psf	3940.7									
	50 psf	4642.5									
	70 psf	5344.4									
(30 feet)	30 psf	4886.5									
	50 psf	5763.8									
	70 psf	6641.1									
(35 feet)	30 psf	5375.5									
	50 psf	6349.3									
	70 psf	7323.1									
(40 feet)	30 psf	6084.9									
	50 psf	7190.3									
	70 psf	8295.7									



Lintel Width = 8"
 Lintel Depth = 16"
 Effective Depth = 13.5"
 F'c @ 28 days = 3,000 psi
 Fy = 60,000 psi

Legend
 1-#5 top = top rebar
 1-#5 bot. = bottom rebar
 2-#3 @ 6.5" = use two #3 stirrups @ 6.5" O/C

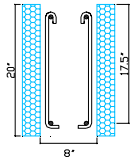
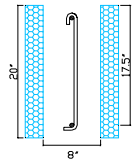
* check applicability limits table A2 in appendix A to use this chart

**ILL 8x16
 P. 2/2**



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

(10 feet)	30 psf	1975.6	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	
	50 psf	2291.4	1-#6 top 1-#6 bot. #3 @ 8.5"	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	
	70 psf	2607.2	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"
(15 feet)	30 psf	2578.7	1-#6 top 1-#6 bot. #3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"
	50 psf	3026.1	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"
	70 psf	3473.5	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"
(20 feet)	30 psf	3288.1	2-#5 top 2-#5 bot. 2-#3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"
	50 psf	3867.1	1-#8 top 1-#8 bot. #3 @ 8.5"	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#8+1-#6 top 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"	
	70 psf	4446.1	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"		
(25 feet)	30 psf	3981.4	1-#8 top 1-#8 bot. #3 @ 8.5"	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	1-#8+1-#6 top 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"
	50 psf	4683.3	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#9 bot. #3 @ 7"	1-#8+1-#6 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#6 top 2-#3 @ 7"	1-#9+1-#6 top 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"	
	70 psf	5385.1	2-#6 top 2-#6 bot. 2-#3 @ 7"	1-#9 top 1-#8+1-#6 bot. 2-#3 @ 7"	1-#8+1-#6 top 2-#8 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#9 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"				
(30 feet)	30 psf	4927.3	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#9 top 1-#8+1-#5 bot. 2-#3 @ 7"	1-#8+1-#5 top 1-#8+1-#6 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#6 top 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"		
	50 psf	5804.6	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 7"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"				
	70 psf	6681.9	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"						
(35 feet)	30 psf	5416.2	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 7"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"				
	50 psf	6390.1	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"						
	70 psf	7363.9	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"							
(40 feet)	30 psf	6125.6	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 7"	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"						
	50 psf	7231.0	2-#8 top 2-#8 bot. 2-#3 @ 7"	1-#9+1-#8 top 2-#8 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"							
	70 psf	8336.5	2-#9 top 2-#9 bot. 2-#3 @ 7"	2-#9 top 2-#9 bot. 2-#3 @ 7"								



Lintel Width = 8"
 Lintel Depth = 20"
 Effective Depth = 17.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#6 top = top rebar
 1-#6 bot. = bottom rebar
 2-#3 @ 8.5" = use two #3 stirrups @ 8.5" O/C

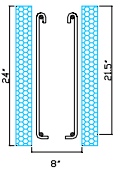
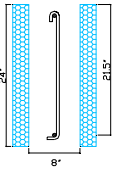
check applicability limits table A2 in appendix A to use this chart

ILL 8x20
P. 2/2



Floor Clear Span	Ground snow load	Total Factored Uniform Load	Minimum Reinforcement for Lintels in Load Bearing Walls Carrying Second Storey Wood Frame + Light Frame Roof								
			Lintel Span - Feet								
feet	psf	lbs/ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft

Floor Clear Span	Ground snow load	Total Factored Uniform Load	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft	
(10 feet)	30 psf	2016.3	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	
	50 psf	2332.1	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	
	70 psf	2648.0	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"
(15 feet)	30 psf	2619.4	1-#6 top 1-#6 bot. #3 @ 10.5"	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"
	50 psf	3066.9	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#9 top 1-#9 bot. #3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"
	70 psf	3514.3	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#9 top 1-#9 bot. #3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"
(20 feet)	30 psf	3328.8	1-#6 top 1-#6 bot. #3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"
	50 psf	3907.8	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#9 top 1-#9 bot. #3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 10.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"
	70 psf	4486.9	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"
(25 feet)	30 psf	4022.2	2-#5 top 2-#5 bot. 2-#3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 10.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"
	50 psf	4724.0	1-#8 top 1-#8 bot. #3 @ 10.5"	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 10.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"
	70 psf	5425.9	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"
(30 feet)	30 psf	4968.0	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"
	50 psf	5845.3	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"			
	70 psf	6722.7	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"				
(35 feet)	30 psf	5457.0	1-#8 top 1-#8 bot. #3 @ 10.5"	2-#6 top 2-#6 bot. 2-#3 @ 10.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"			
	50 psf	6430.8	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"				
	70 psf	7404.6	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"					
(40 feet)	30 psf	6166.4	2-#6 top 2-#6 bot. 2-#3 @ 8.5"	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"				
	50 psf	7271.8	1-#8+1-#5 top 1-#8+1-#5 bot. 2-#3 @ 8.5"	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"					
	70 psf	8377.2	1-#8+1-#6 top 1-#8+1-#6 bot. 2-#3 @ 8.5"	2-#8 top 2-#8 bot. 2-#3 @ 8.5"	1-#9+1-#8 top 1-#9+1-#8 bot. 2-#3 @ 8.5"	2-#9 top 2-#9 bot. 2-#3 @ 8.5"						



Lintel Width = 8"
 Lintel Depth = 24"
 Effective Depth = 21.5"
 F_c @ 28 days = 3,000 psi
 F_y = 60,000 psi

Legend
 1-#6 top = top rebar
 1-#6 bot. = bottom rebar
 2-#3 @ 8.5" = use two #3 stirrups @ 8.5" O/C

* check applicability limits table A2 in appendix A to use this chart

ILL 8x24
P. 2/2

