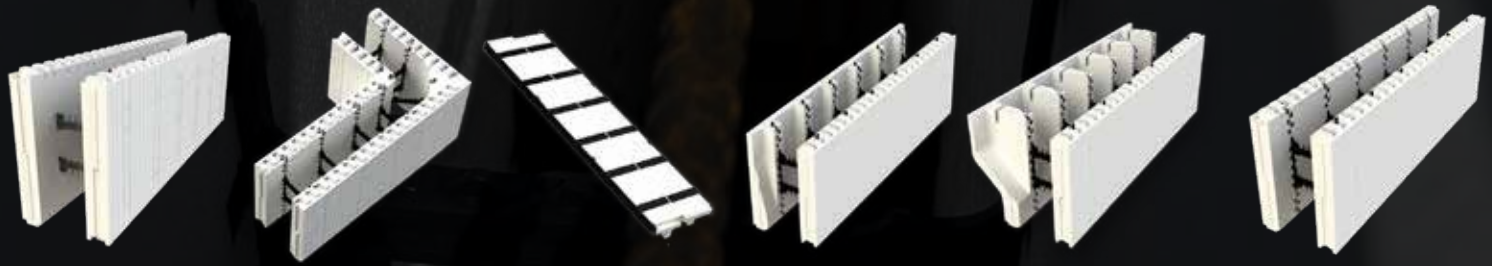
ELEMENTICF®
LOGIX BRANDS

PRESCRIPTIVE ENGINEERING

WITH 60 KSI REINFORCING (USA)



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INTRODUCTION

Element walls are intended to be used both above and below grade, and can carry large vertical as well as lateral loads. They are particularly effective for residential, commercial and industrial buildings; providing excellent insulation as well as thermal mass and structural strength. They can be easily adapted to accommodate concrete floors and other “non-standard” building systems.

Construction must be in conformance with the Element Design Manual, including assembly of formwork, bracing, accurate rebar positioning, concrete mix design & placement, and details for interconnection with the other building components.

STRUCTURAL DESIGN AND PERFORMANCE

The Element Building System can be used for an infinite variety of building situations with proper engineering. This report, with its load tables and diagrams, is intended to assist with the structural design of buildings using the Element system for the basement only, or continuing to two stories above-grade and/or roof. Where unusual conditions are encountered, it is recommended that the user consult a designer who can evaluate the loadings to the various components and who can appreciate the limitations of “prescriptive” design under unusual conditions. Connection details have generally been excluded from this report because of the great variety of floor and roof systems that can be used with the Element wall system. The designer should refer to the Element Design Manual and the literature for the various proprietary products that are available for connections, which are an important part of the total design.

REINFORCEMENT TABLES

Above- and below-grade walls, lintel and shear wall reinforcement tables are provided in this report. The tables were developed using the applicable sections of Chapter 16 of the International Building Code 2018, Sections 404 and 611 of the International Residential Code 2012, and ACI 318 Building Code Requirements for Structural Concrete.

Table 1 makes use of plain concrete foundation walls adapted from the IRC 2018, Table 404.1.2(8), for Element used below-grade. For walls that fall outside the scope of Table 1, Tables 2A, 2B, 2C and 2D are provided, which cover wall reinforcement for larger walls and larger loading conditions.

Tables 3A and 3B provides reinforcement tables for Element walls used above-grade.

LIMITATIONS

Building limitations used to develop above- and below-grade tables include:

Building perimeter = 80 ft max x 40 ft max
Roof clear span = 40 ft max
Floor clear span = 32 ft max
Number of stories above grade = 2 max
Number of stories below grade = 1

Tables 4A to 4E and Tables 5A to 5E provide lintel tables for factored uniform and concentrated loading conditions, respectively.

More specific design assumptions and limitations are located with the corresponding reinforcement tables.

NOTES FOR TABLE 1 - BELOW-GRADE TABLE ADAPTED FROM IRC 2018

Table 1 was developed adapting Table 404.1.2(8), Minimum Vertical Reinforcement For 6-, 8-, 10-Inch And 12-Inch Nominal Flat Basement Walls, of IRC 2018. Table 1 allows the use of foundation walls without reinforcement (in lieu of Tables 2A to 2D) provided the walls meet the following criteria:

1. Minimum 28 day compressive strength of concrete = 2500 psi
2. Concrete foundation walls with corbels (i.e., brick ledge), brackets or other projections built into the wall for support of masonry veneer or other purposes are not within the scope of the tables in this section
3. Where vertical rebar is not required (NR), provide minimum horizontal rebar as follows (Table 404.1.2(1)):
4. Maximum unsupported height of basement wall is LESS than or equal to 8 ft - One No. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near mid-height of the wall story
5. Maximum unsupported height of basement wall is GREATER than 8 ft - One No. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near third points in the wall story
6. Walls are not subject to hydrostatic pressure from ground water
7. Walls must be laterally supported at top and bottom of wall before backfilling
8. Interpolation is not permitted
9. Maximum 60 feet in plan dimensions, floors not more than 32 feet or roofs not more than 40 feet in clear span. Buildings shall not exceed 2 stories above-grade with each story not more than 10 feet high. Maximum ground snow load of 70 psf, and located in Seismic Design Categories A, B or C. For Seismic Design Categories D0, D1, or D2 see Items 7 to 9.
10. In Seismic Design Category D0, D1, and D2, concrete foundation walls supporting above grade concrete or Element walls shall comply with above and below-grade tables in this manual, ACI 318, ACI 332 or PCA 100
11. In Seismic Design Category D0, D1, and D2, where Table 1 permits plain concrete, and supporting light-frame walls shall comply with the following:
12. Wall height shall not exceed 8 feet
13. Unbalanced backfill height shall not exceed 4 feet
14. Minimum thickness for plain concrete foundation walls shall be 7.5 inches except that 6 inches is permitted where the maximum wall height is 4 feet, 6 inches
15. Minimum reinforcement shall consist of one #4 horizontal bar within the top 12 inches of the wall
16. Backfill shall not be placed against the wall until the wall has sufficient strength and has been anchored to the floor above, or has been sufficiently braced to prevent damage by the back fill.
17. For walls that fall outside the scope Table 1 see “Notes for Tables 2A to 2D - Element Below-grade Tables.”

TABLE 1 - ELEMENT BELOW-GRADE WALLS MINIMUM VERTICAL REINF - IRC2018

NOTE: Logix Brands recommends builders, owners and/or designers using these tables confirm that on-site building conditions are w/in the scope of the tables being used.

Maxium Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	6" ELEMENT			8" ELEMENT			10" ELEMENT			12" ELEMENT		
		Design Lateral Soil Load (psf per foot of depth)			Design Lateral Soil Load (psf per foot of depth)			Design Lateral Soil Load (psf per foot of depth)			Design Lateral Soil Load (psf per foot of depth)		
		30	45	60	30	45	60	30	45	60	30	45	60
5	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	6	NR	RR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	6	NR	RR	RR	NR	NR	RR	NR	NR	NR	NR	NR	NR
	7	RR	RR	RR	NR	RR	RR	NR	NR	NR	NR	NR	NR
8	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	RR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	6	RR	RR	RR	NR	NR	RR	NR	NR	NR	NR	NR	NR
	7	RR	RR	RR	NR	RR	RR	NR	NR	RR	NR	NR	NR
	8	RR	RR	RR	RR	RR	RR	NR	RR	RR	NR	NR	NR
9	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	RR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	6	RR	RR	RR	NR	NR	RR	NR	NR	NR	NR	NR	NR
	7	RR	RR	RR	NR	RR	RR	NR	NR	RR	NR	NR	NR
	8	RR	RR	RR	RR	RR	RR	NR	RR	RR	NR	NR	RR
	9	RR	RR	RR	RR	RR	RR	NR	RR	RR	NR	NR	RR
10	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	RR	RR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	6	RR	RR	RR	NR	NR	RR	NR	NR	NR	NR	NR	NR
	7	RR	RR	RR	NR	RR	RR	NR	NR	RR	NR	NR	NR
	8	RR	RR	RR	RR	RR	RR	NR	RR	RR	NR	NR	RR
	9	RR	RR	RR	RR	RR	RR	RR	RR	RR	NR	RR	RR
	10	RR	RR	RR	RR	RR	RR	RR	RR	RR	NR	RR	RR

NOTES:

1. "NR" denotes plain concrete or no reinforcement required, except 6" Element will requires #4@32" on center for Grade 40 Steel Bars and #4@48" on center for Grade 60 Steel Bars.
2. "RR" denotes reinforcement required. Refer to Tables 2A to 2D for LOGIX Below-grade tables for required reinforcement.
3. Table 1 values are based on concrete with a minimum specified compressive strength of 2,500 psi
4. Bar Spacing Shall not exceed 48 inches on center and shall not be less than one-half the nominal wall thickness.
5. Table 1 shall be read in conjunction with " Notes for Table R404.1.2(1) to Table R404.1.2(9) - Below-grade Table Adapted from IRC 2018".

NOTES FOR TABLES 2A TO 2D - ELEMENT BELOW-GRADE TABLES

Tables 2A to 2D are recommended for use when larger walls and/or loading conditions fall outside the scope of Table 1.

Tables 2A to 2D shall be used in conjunction with corresponding Figures 2A to 2D, the notes listed below, and the building limitations noted in the “Reinforcement Tables” section, which form the basis of these tables.

1. Vertical rebar spacing shown in the tables provide simple placement between ICF ties.
2. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi
3. Deflection criteria = L/240
4. Snow load = 70 psf
5. Assumed eccentricity = 3” (to account for loads on Element Brick Ledge).
6. The basement walls must be supported at the top and bottom of the wall.
7. For light vehicles parked or travelling near the wall use reinforcement corresponding to 1 feet higher backfill.
8. Where spaces have been left blank, the corresponding bar size is presumed to be less economical and/or practical than that shown. Consult a local licensed engineer to determine proper design.
9. For walls with over 50% of height exposed to wind, also check rebar requirements for above-grade walls.
10. Except as noted for seismic design, horizontal rebar shall be #4 at 32 inches on center. At least one rebar shall be placed at the bottom course and top course.
11. In Seismic Design Categories D0, D1, and D2, the reinforcing steel shall meet the requirements of ASTM A 706 for low-alloy steel with a minimum yield strength of 60 ksi.
12. For townhouses in Seismic Category C, the minimum vertical reinforcement shall be one #5 at 24 inches on center or one #4 bar at 16 inches on center, and the minimum horizontal reinforcement shall be one #4 bar at 16 inches on center.
13. For all buildings in Seismic Design Categories D0, D1 and D2, the minimum vertical reinforcement shall be one #5 at 18 inches on center or one #4 bar at 12 inches on center, and the minimum horizontal reinforcement shall be one #5 bar at 16 inches on center.
14. Horizontal reinforcement shall be continuous around building corners using corner bars or by bending the bars. The minimum lap splice shall be 24 inches. For townhouses in Seismic Design Categories D0, D1, and D2, each end of all horizontal reinforcement shall terminate with a standard hook or lap splice.
15. Carefully consider floor/wall connection details for lateral loads, especially with higher backfills, walkout basements, and active seismic areas.
16. Soil density is often referred to as “equivalent fluid density” or design fluid pressure.

NOTES FOR TABLES 2A to 2D - ELEMENT BELOW-GRADE TABLES Cont'd

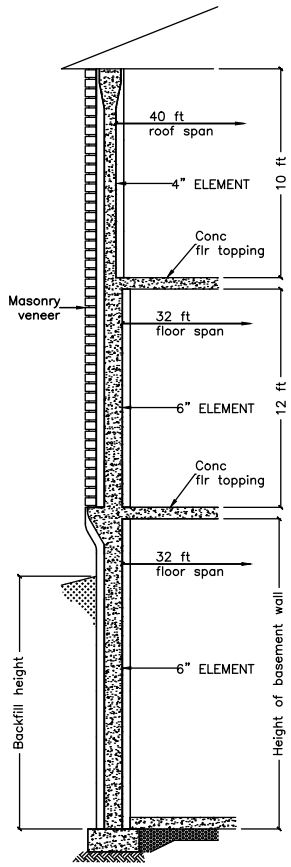

Fig 2A
Assumed typical flooring, wall & roof for Table 2A. Height & thickness of above-grade walls, floor & roof spans, including materials (i.e., wood frame, concrete, and cladding) can vary provided the total factored load on basement wall does not exceed 6.7 kips/ft.

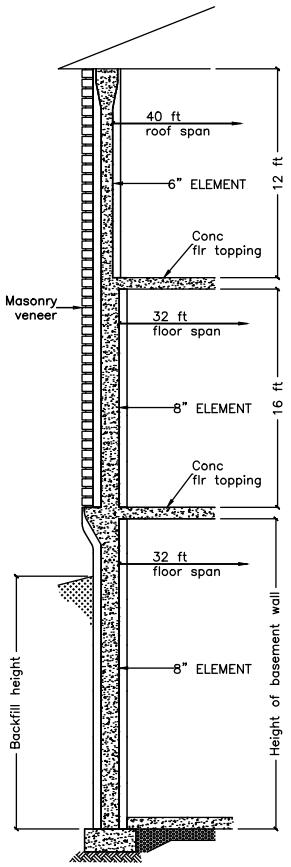

Fig 2B
Assumed typical flooring, wall & roof for Table 2B. Height & thickness of above-grade walls, floor & roof spans, including materials (i.e., wood frame, concrete, and cladding) can vary provided the total factored load on basement wall does not exceed 8 kips/ft.

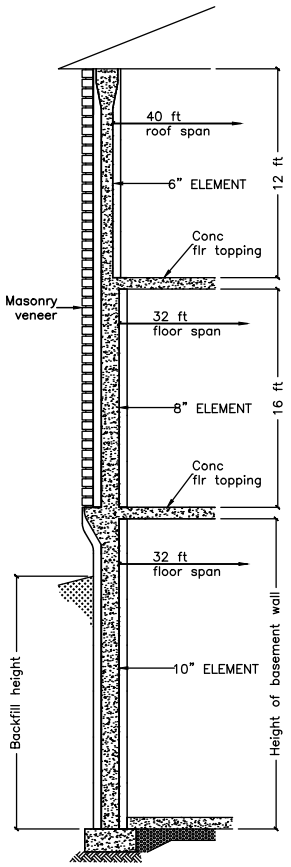

Fig 2C
Assumed typical flooring, wall & roof for Table 2C. Height & thickness of above-grade walls, floor & roof spans, including materials (i.e., wood frame, concrete, and cladding) can vary provided the total factored load on basement wall does not exceed 8 kips/ft.

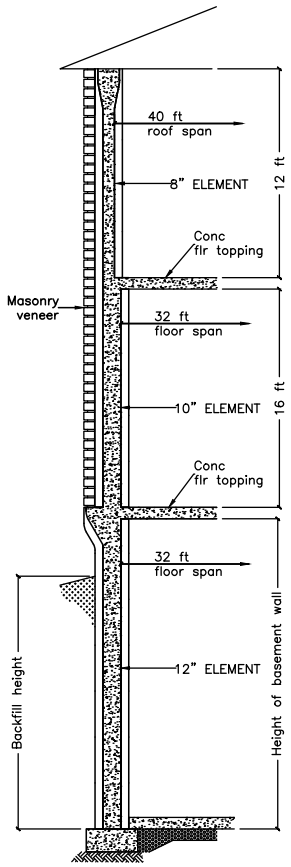

Fig 2D
Assumed typical flooring, wall & roof for Table 2D. Height & thickness of above-grade walls, floor & roof spans, including materials (i.e., wood frame, concrete, and cladding) can vary provided the total factored load on basement wall does not exceed 9 kips/ft.

TABLE 2A - Element 6" BELOW-GRADE WALL MINIMUM VERTICAL REINFORCEMENT

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

Maximum Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	Bar Spacing, in																			
		Maximum Equivalent Density 30pcf					Maximum Equivalent Density 45pcf					Maximum Equivalent Density 60pcf					Maximum Equivalent Density 75pcf				
8	4	16	32	40	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	5	48	48	48	48	48	48	48	48	48	48	32	48	48	48	48	32	48	48	48	48
	6	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	7	32	48	48	48	48	24	40	48	48	48	16	32	40	48	48	16	24	32	48	48
	8	24	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
9	4	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	5	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	48	48	48	48
	6	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	7	32	48	48	48	48	24	40	48	48	48	16	24	40	48	48	16	24	32	48	48
	8	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	48
	9	16	32	48	48	48	16	24	32	48	48	8	16	24	32	48	8	8	16	24	32
10	4	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	5	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	6	40	48	48	48	48	32	48	48	48	48	24	32	48	48	48	16	32	40	48	48
	7	32	48	48	48	48	24	32	48	48	48	16	24	40	48	48	8	16	32	40	48
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	10	16	24	40	48	48	12	16	24	32	40	8	8	16	24	32	6	8	16	16	24
11	4	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	5	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	6	40	48	48	48	48	24	48	48	48	48	16	32	48	48	48	16	24	40	48	48
	7	24	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
	8	24	32	48	48	48	16	24	32	48	48	8	16	24	40	48	8	16	16	32	40
	9	16	24	40	48	48	12	16	24	40	48	8	16	16	24	40	8	8	16	24	32
	10	16	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	11	12	16	24	40	48	8	12	16	24	32	6	8	8	16	24	-	8	8	16	16
12	4	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	5	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	6	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	7	24	40	48	48	48	16	32	40	48	48	16	24	32	48	48	8	16	24	40	48
	8	16	32	48	48	48	16	24	32	48	48	8	16	24	32	48	8	8	16	24	40
	9	16	24	40	48	48	12	16	24	32	48	8	8	16	24	32	8	8	16	16	24
	10	8	24	32	40	48	8	16	16	24	40	8	8	16	16	24	6	8	8	16	24
	11	12	16	24	32	48	8	12	16	24	32	6	8	8	16	24	-	8	8	8	16
	12	8	16	24	32	40	6	8	8	16	24	-	8	8	16	16	-	6	8	8	16
Rebar Size Options		#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8

NOTES:
1. Reinforcement to be placed on interior face of concrete wall. Effective depth of vertical rebar (exterior face of concrete to center of vertical rebar) = 4.375"
2. Table 2A shall be read in conjunction with Fig 2A, and "NOTES FOR TABLES 2A TO 2D - ELEMENT BELOW-GRADE TABLES."
3. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.

TABLE 2B - Element 8" BELOW-GRADE WALL MINIMUM VERTICAL REINFORCEMENT

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

Maximum Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	Bar Spacing, in																			
		Maximum Equivalent Density 30pcf					Maximum Equivalent Density 45pcf					Maximum Equivalent Density 60pcf					Maximum Equivalent Density 75pcf				
8	4-5	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
	6	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	48	48	48	48
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9	4-5	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48
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	12	8	16	24	32	48	8	8	16	24	32	6	8	8	16	24	-	8	8	8	16
	13	8	16	16	32	40	6	8	8	16	24	-	8	8	16	16	-	6	8	8	16
	14	8	8	16	24	32	6	8	8	16	24	-	6	8	8	16	-	6	8	8	8
16	4	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	5	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48
	6	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	7	32	48	48	48	48	24	32	48	48	48	16	24	40	48	48	16	24	32	48	48
	8	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	40
	9	16	32	40	48	48	8	16	32	40	48	8	16	24	32	40	8	8	16	24	32
	10	16	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	11	8	16	24	40	48	8	8	16	24	32	6	8	8	16	24	-	8	8	16	16
	12	8	16	24	32	40	6	8	16	16	24	6	8	8	16	16	-	6	8	8	16
	13	8	8	16	24	32	6	8	8	16	24	-	6	8	8	16	-	6	8	8	8
	14	8	8	16	24	32	-	8	8	16	16	-	6	8	8	8	-	-	6	8	8
	15	6	8	8	16	24	-	6	8	8	16	-	-	8	8	8	-	-	6	8	8
Rebar Size Options		#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8

NOTES:

1. Reinforcement to be placed on interior face of concrete wall. Effective depth of vertical rebar (exterior face of concrete to center of vertical rebar) = 6"
2. Table 2A shall be read in conjunction with Fig 2B, and "NOTES FOR TABLES 2A TO 2D - ELEMENT BELOW-GRADE TABLES."
3. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.
4. Where cells show "-" engineering is required.

TABLE 2C - Element 10" BELOW-GRADE WALL MINIMUM VERTICAL REINFORCEMENT

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

		Bar Spacing, in																			
Maximum Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	Maximum Equivalent Density 30pcf					Maximum Equivalent Density 45pcf					Maximum Equivalent Density 60pcf					Maximum Equivalent Density 75pcf				
8	4-8	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
9	4-7	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	8	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	40	48	48
	9	32	48	48	48	48	24	40	48	48	48	16	32	40	48	48	16	24	32	48	48
10	4-7	48	48	48	48	48	32	48	48	48	48	24	48	48	48	48	24	32	48	48	48
	8	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	9	32	48	48	48	48	24	32	48	48	48	16	24	40	48	48	8	24	32	40	48
	10	24	40	48	48	48	16	24	40	48	48	8	24	32	40	48	8	16	24	32	48
11	4-7	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	24	32	48	48	48
	8	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	9	32	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	32	40	48
	10	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	40
	11	16	32	48	48	48	8	24	32	40	48	8	16	24	32	40	8	8	16	24	32
12	4-6	48	48	48	48	48	48	48	48	48	48	32	48	48	48	48	32	48	48	48	48
	7	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	8	32	48	48	48	48	24	40	48	48	48	16	32	40	48	48	16	24	32	48	48
	9	24	40	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
	10	24	32	48	48	48	16	24	32	48	48	8	16	24	40	48	8	16	24	32	40
	11	16	32	40	48	48	8	16	32	40	48	8	16	24	32	40	8	8	16	24	32
	12	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	6	8	16	16	24
14	4-6	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	7	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	8	32	48	48	48	48	24	32	48	48	48	16	24	40	48	48	8	24	32	48	48
	9	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	48
	10	16	32	48	48	48	8	24	32	40	48	8	16	24	32	40	8	8	16	24	32
	11	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	8	8	16	16	24
	12	8	24	32	40	48	8	16	16	32	40	8	8	16	24	24	6	8	8	16	24
	13	8	16	24	40	48	8	8	16	24	32	6	8	8	16	24	-	8	8	16	16
	14	8	16	24	32	40	8	8	16	16	24	6	8	8	16	16	-	6	8	8	16
16	4-6	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	7	40	48	48	48	48	24	48	48	48	48	24	32	48	48	48	16	24	40	48	48
	8	32	48	48	48	48	16	32	48	48	48	16	24	40	48	48	8	16	32	40	48
	9	24	40	48	48	48	16	24	40	48	48	8	16	24	40	48	8	16	24	32	40
	10	16	32	40	48	48	8	16	32	40	48	8	16	24	32	40	8	8	16	24	32
	11	16	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	12	8	16	24	40	48	8	8	16	24	32	6	8	16	16	24	6	8	8	16	16
	13	8	16	24	32	40	8	8	16	24	24	6	8	8	16	16	-	6	8	8	16
	14	8	8	16	24	40	6	8	8	16	24	-	8	8	8	16	-	6	8	8	16
	15	8	8	16	24	32	6	8	8	16	16	-	6	8	8	16	-	-	8	8	8
	16	8	8	16	16	24	-	8	8	8	16	-	6	8	8	8	-	-	6	8	8

TABLE 2C - ELEMENT 10" BELOW-GRADE WALL MINIMUM VERTICAL REINFORCEMENT

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

		Bar Spacing, in																			
Maximum Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	Maximum Equivalent Density 30pcf					Maximum Equivalent Density 45pcf					Maximum Equivalent Density 60pcf					Maximum Equivalent Density 75pcf				
18	4-6	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	7	40	48	48	48	48	24	48	48	48	48	16	32	48	48	48	16	24	40	48	48
	8	32	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
	9	24	32	48	48	48	16	24	32	48	48	8	16	24	40	48	8	16	16	32	40
	10	16	24	40	48	48	8	16	24	40	48	8	8	16	24	40	8	8	16	24	32
	11	8	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	12	8	16	24	32	48	8	8	16	24	32	6	8	8	16	24	-	8	8	16	16
	13	8	16	24	32	40	6	8	16	16	24	-	8	8	16	16	-	6	8	8	16
	14	8	8	16	24	32	6	8	8	16	24	-	6	8	8	16	-	6	8	8	8
	15	8	8	16	24	24	-	8	8	16	16	-	6	8	8	8	-	-	6	8	8
	16	6	8	8	16	24	-	6	8	8	16	-	-	8	8	8	-	-	6	8	8
	17	6	8	8	16	24	-	6	8	8	16	-	-	6	8	8	-	-	-	6	8
	18	-	8	8	16	16	-	6	8	8	8	-	-	6	8	8	-	-	-	6	8
20	4-6	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48	24	40	48	48	48
	7	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	8	24	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
	9	16	32	48	48	48	16	24	32	48	48	8	16	24	32	48	8	8	16	24	40
	10	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	8	8	16	16	24
	11	8	16	32	40	48	8	8	16	24	40	8	8	16	16	24	6	8	8	16	24
	12	8	16	24	32	48	8	8	16	24	32	6	8	8	16	24	-	8	8	8	16
	13	8	8	16	24	40	6	8	8	16	24	-	8	8	8	16	-	6	8	8	16
	14	8	8	16	24	32	6	8	8	16	16	-	6	8	8	16	-	-	8	8	8
	15	6	8	16	16	24	-	8	8	8	16	-	6	8	8	8	-	-	6	8	8
	16	6	8	8	16	24	-	6	8	8	16	-	-	6	8	8	-	-	-	6	8
	17	6	8	8	16	16	-	6	8	8	8	-	-	6	8	8	-	-	-	6	8
	18	-	8	8	8	16	-	-	6	8	8	-	-	-	6	8	-	-	-	6	6
	19	-	6	8	8	16	-	-	6	8	8	-	-	-	6	8	-	-	-	-	6
	20	-	6	8	8	8	-	-	6	8	8	-	-	-	6	6	-	-	-	-	6
Rebar Size Options		#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8

NOTES:
1. Reinforcement to be placed on interior face of concrete wall. Effective depth of vertical rebar (exterior face of concrete to center of vertical rebar) = 8"
2. Table 2A shall be read in conjunction with Fig 2C, and "NOTES FOR TABLES 2A TO 2D - ELEMENT BELOW-GRADE TABLES."
3. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.
4. Where cells show "-" engineering is required.

TABLE 2D - ELEMENT 12" BELOW-GRADE WALL MINIMUM VERTICAL REINFORCEMENT

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

		Bar Spacing, in																			
Maximum Height of Basement Wall, ft	Maximum Unbalanced Backfill Height, ft	Maximum Equivalent Density 30pcf					Maximum Equivalent Density 45pcf					Maximum Equivalent Density 60pcf					Maximum Equivalent Density 75pcf				
14	4-6	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48
	7	48	48	48	48	48	40	48	48	48	48	24	48	48	48	48	24	40	48	48	48
	8	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	9	32	48	48	48	48	16	32	48	48	48	16	24	40	48	48	8	16	32	40	48
	10	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	40
	11	16	32	48	48	48	8	16	32	40	48	8	16	24	32	40	8	8	16	24	32
	12	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	8	8	16	16	24
	13	16	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	14	8	16	24	40	48	8	8	16	24	32	6	8	8	16	24	6	8	8	16	16
16	4-6	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48
	7	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	24	32	48	48	48
	8	40	48	48	48	48	24	40	48	48	48	16	32	48	48	48	16	24	40	48	48
	9	24	48	48	48	48	16	32	48	48	48	16	24	32	48	48	8	16	24	40	48
	10	24	32	48	48	48	16	24	32	48	48	8	16	24	40	48	8	16	16	32	40
	11	16	24	40	48	48	8	16	24	40	48	8	16	16	32	40	8	8	16	24	32
	12	16	24	32	48	48	8	16	24	32	40	8	8	16	24	32	6	8	8	16	24
	13	8	16	32	40	48	8	8	16	24	32	6	8	16	16	24	6	8	8	16	16
	14	8	16	24	32	48	8	8	16	24	32	6	8	8	16	24	-	8	8	8	16
	15	8	16	24	32	40	6	8	16	16	24	-	8	8	16	16	-	6	8	8	16
	16	8	8	16	24	32	6	8	8	16	24	-	6	8	8	16	-	6	8	8	8
18	4-6	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48
	7	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	8	32	48	48	48	48	24	40	48	48	48	16	32	40	48	48	16	24	32	48	48
	9	24	40	48	48	48	16	32	40	48	48	8	24	32	48	48	8	16	24	32	48
	10	16	32	48	48	48	16	24	32	48	48	8	16	24	32	48	8	8	16	24	32
	11	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	8	8	16	24	24
	12	8	24	32	40	48	8	16	16	32	40	8	8	16	24	24	6	8	8	16	24
	13	8	16	24	40	48	8	8	16	24	32	6	8	8	16	24	-	8	8	16	16
	14	8	16	24	32	40	6	8	16	16	24	6	8	8	16	16	-	6	8	8	16
	15	8	8	16	24	32	6	8	8	16	24	-	8	8	8	16	-	6	8	8	8
	16	8	8	16	24	32	6	8	8	16	16	-	6	8	8	16	-	-	6	8	8
	17	6	8	16	16	24	-	8	8	8	16	-	6	8	8	8	-	-	6	8	8
	18	6	8	8	16	24	-	6	8	8	16	-	-	6	8	8	-	-	6	8	8
20	4-6	48	48	48	48	48	48	48	48	48	48	40	48	48	48	48	32	48	48	48	48
	7	48	48	48	48	48	32	48	48	48	48	24	40	48	48	48	16	32	48	48	48
	8	32	48	48	48	48	24	40	48	48	48	16	24	40	48	48	16	24	32	48	48
	9	24	40	48	48	48	16	24	40	48	48	8	16	32	40	48	8	16	24	32	48
	10	16	32	48	48	48	8	24	32	40	48	8	16	24	32	40	8	8	16	24	32
	11	16	24	40	48	48	8	16	24	32	48	8	8	16	24	32	6	8	16	16	24
	12	8	16	32	40	48	8	8	16	24	32	8	8	16	16	24	6	8	8	16	16
	13	8	16	24	32	48	8	8	16	24	32	6	8	8	16	24	-	8	8	8	16
	14	8	16	16	24	40	6	8	8	16	24	-	8	8	8	16	-	6	8	8	16
	15	8	8	16	24	32	6	8	8	16	16	-	6	8	8	16	-	-	8	8	8
	16	8	8	16	16	24	-	8	8	8	16	-	6	8	8	8	-	-	6	8	8
	17	6	8	8	16	24	-	6	8	8	16	-	-	6	8	8	-	-	6	8	8
	18	6	8	8	16	24	-	6	8	8	8	-	-	6	8	8	-	-	-	6	8
	19	-	8	8	16	16	-	6	8	8	8	-	-	6	8	8	-	-	-	6	8
	20	-	8	8	8	16	-	-	6	8	8	-	-	-	6	8	-	-	-	6	6
Rebar Size Options		#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8	#4	#5	#6	#7	#8

NOTES:
1. Reinforcement to be placed on interior face of concrete wall. Effective depth of vertical rebar (exterior face of concrete to center of vertical rebar) = 10"
2. Provide additional mat of rebar near exterior face of concrete surface: Horiz bars #4@32" o/c; Vert bars #4 to match vertical rebar spacing.
3. Table 2A shall be read in conjunction with Fig 2D, and "NOTES FOR TABLES 2A TO 2D - ELEMENT BELOW-GRADE TABLES."
4. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.
5. Where cells show "-" engineering is required.

ABOVE-GRADE WALL REINFORCEMENT

NOTES FOR ABOVE-GRADE WALL TABLES - TABLES 3A & 3B

Table 3A covers reinforcement for Element above-grade walls with wind speeds up to 150 mph. For larger wind speeds see Table 3B, which covers wind speeds up to 300 mph.

Element above-grade tables cover three different construction types:

- One storey Element supporting wood roof frame (Fig. 3A)
- One storey Element supporting 2nd storey wood frame plus wood roof frame (Fig. 3B)
- Two storey Element supporting wood roof frame (Fig. 3C)

For two story buildings, the height of the second story wall is equal to the height of the first story provided the height of the first storey wall is not more than 12 feet high.

For first story walls greater than 12 feet high, the second story wall height is a maximum of 12 feet.

With the exception of 4" Element, the second story concrete wall thickness is one size less than the concrete core thickness used for the first storey wall.

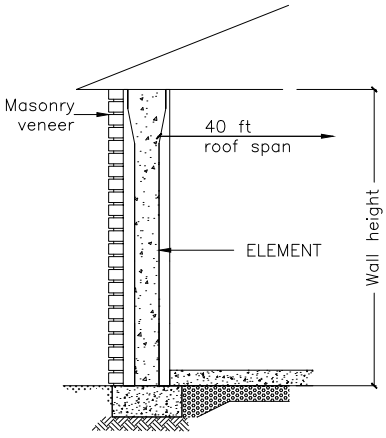

Fig 3A
Assumed typical flooring, wall & roof section for Tables 3A and 3B, Element Supporting Roof Only.

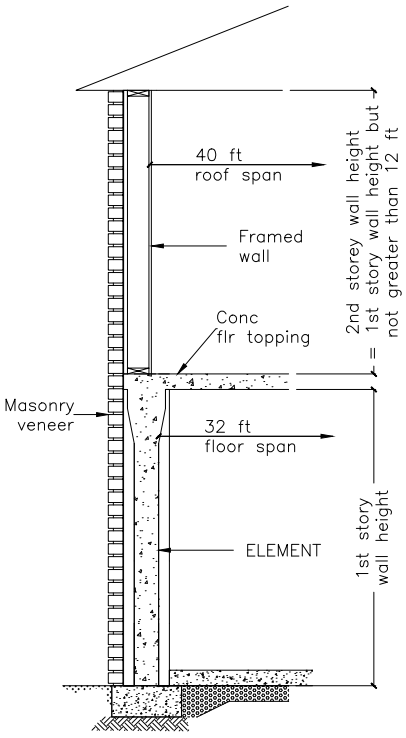

Fig 3B
Assumed typical flooring, wall & roof section for Tables 3A and 3B, Element Supporting 2nd Story Wood Frame & Roof Structure.

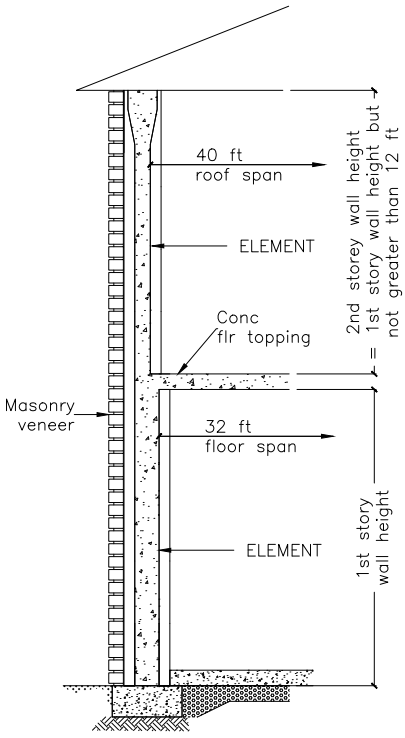

Fig 3C
Assumed typical flooring, wall & roof section for Tables 3A and 3B, Element Supporting 2nd Story Element & Roof Structure.

NOTES FOR ABOVE-GRADE WALL TABLES - Tables 3A & 3B Cont'd

The above-grade tables shall be used in conjunction with the notes listed below, the building limitations noted in the "Reinforcement Tables" section, and Figures 3A to 3B, which form the basis of this table.

1. Vertical rebar spacing shown in the tables provide simple placement between ICF ties.
2. Steel yield strength = 60 ksi for Table 3A and 3B, respectively. 28 day concrete compressive strength = 3 ksi
3. Deflection criteria = L/240
4. Snow load = 70 psf
5. Assumed eccentricity = 1".
6. The walls must be supported at the top and bottom of the wall.
7. Where spaces have been left blank, the corresponding bar size is presumed to be less economical and/or practical than that shown. Consult a local licensed engineer to determine proper design.
8. Except as noted for seismic considerations, vertical rebar shall be placed in middle of wall, and minimum horizontal rebar shall be:
   - 4" & 6" Element = #4 @ 32" on center
   - 8" & 10" Element = #4 @ 16" on center

   Provide additional mat of rebar for 12" Element
   - Horizontal rebar = #4 @ 32" on center (double mat)
   - Vertical rebar = to match vertical bar spacing in Tables 3A or 3B, whichever applies.

   Provide at least one #4 bar (two for 12" Element) to be placed at the bottom course and top course.
9. In Seismic Design Categories D0, D1, and D2, the reinforcing steel shall meet the requirements of ASTM A 706 for low-alloy steel with a minimum yield strength of 60 ksi.
10. For townhouses in Seismic Category C, the minimum vertical reinforcement shall be one #5 at 24 inches on center or one #4 bar at 16 inches on center, and the minimum horizontal reinforcement shall be one #4 bar at 16 inches on center.
11. For all buildings in Seismic Design Categories D0, D1 and D2, the minimum vertical reinforcement shall be one #5 at 18 inches on center or one #4 bar at 12 inches on center, and the minimum horizontal reinforcement shall be one #5 bar at 16 inches on center.
12. Horizontal reinforcement shall be continuous around building corners using corner bars or by bending the bars. The minimum lap splice shall be 24 inches. For townhouses in Seismic Design Categories D0, D1, and D2, each end of all horizontal reinforcement shall terminate with a standard hook or lap splice.
13. For openings provide one #4 horizontal bar within 12 inches from the bottom of the opening to extend minimum 24 inches beyond opening. In locations with wind speeds greater than or equal to 110 mph or in Seismic Design Categories A and B, provide one #4 bar for the full height of the wall story within 12 inches each side of the opening. In locations with wind speeds greater than 110 mph, townhouses in Seismic Design Categories D0, D1, and D2, provide two #4 bars or one #5 bar for full height of the wall story within 12 inches of each side of the opening.

14. Where design wind pressure exceeds 40 psf or for townhouses in Seismic Design Category C, and all buildings in Seismic Design Categories D0, D1 and D2, the vertical wall reinforcement in the top-most ICF story shall terminate with a 90-degree standard hook in accordance with IRC 2018, Section R611.7.1.5. The free end of the hook shall be within 4 inches of the top of the wall and shall be oriented parallel to the horizontal steel in the top of the wall.
15. Carefully consider floor/wall connection details for lateral loads, especially with higher backfills, walkout basements, and active seismic areas.
16. Use Table R611.3(1) to determine wind loads in Table 3A.
    Table R611.3(1) is based on ultimate design wind speeds, V_{ult}. Where documents are based only on nominal design wind speeds, V_{asd}, use Table R301.2.1.3 to convert nominal design wind speeds to ultimate design wind speeds, V_{ult}, before using Table R611.3(1).
17. For larger wind speeds greater than 150 mph see Table 3B.

TABLE R301.2.1.3
WIND SPEED CONVERSIONS[a]

V_{ult}	110	115	120	130	140	150	160	170	180	190	200
V_{asd}	85	89	93	101	108	116	124	132	139	147	155

For SI: 1 mile per hour = 0.447 m/s.
a. Linear interpolation is permitted.

TABLE R611.3(1)
DESIGN WIND PRESSURE FOR USE WITH TABLES R611.3(2), R611.4(1), AND R611.5 FOR ABOVE GRADE WALLS[a]

WIND SPEED (mph)[e]	DESIGN WIND PRESSURE (psf)					
	Enclosed[b]			Partially Enclosed[b]		
	Exposure[c]			Exposure[c]		
	B	C	D	B	C	D
85	18	24	29	23	31	37
90	20	27	32	25	35	41
100	24	34	39	31	43	51
110	29	41	48	38	52	61
120	35	48	57	45	62	73
130	41	56	66	53	73	85[d]
140	47	65	77	61	84[d]	99[d]
150	54	75	88[d]	70	96[d]	114[d]

For SI: 1 pound per square foot = 0.0479 kPa; 1 mile per hour = 0.447 m/s; 1 foot = 304.8 mm; 1 square foot = 0.0929 m^2.
a. This table is based on ASCE 7-98 components and cladding wind pressures using a mean roof height of 35 ft and a tributary area of 10 ft^2.
b. Buildings in wind-borne debris regions as defined in Section R202 shall be considered as "Partially Enclosed" unless glazed openings are protected in accordance with Section R301.2.1.2, in which case the building shall be considered as "Enclosed." All other buildings shall be classified as "Enclosed."
c. Exposure Categories shall be determined in accordance with Section R301.2.1.4.
d. For wind pressures greater than 80 psf, design is required in accordance with ACI 318 and approved manufacturer guidelines.
e. Interpolation is permitted between wind speeds.

TABLE 3A - ELEMENT ABOVE-GRADE WALL MINIMUM VERTICAL REINFORCEMENT (WIND SPEEDS UP TO 150 MPH)

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

GROUND FLOOR LOGIX SUPPORTING ROOF ONLY

Height of Basement Wall, ft	4" Element						6" Element						8" Element						10" Element						12" Element					
	Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)					
	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114
8	48	40	24	16	12	12	48	48	32	24	24	16	48	48	48	32	24	24	48	48	48	42	40	24	48	48	48	48	48	32
9	48	32	16	12	12	8	48	48	24	16	16	12	48	48	40	24	24	16	48	48	48	32	24	24	48	48	48	42	32	24
10	48	24	12	8	8	6	48	32	16	16	8	8	48	48	24	16	16	12	48	48	32	24	24	16	48	48	48	32	24	16
12	32	16	8	6	-	-	48	24	12	8	8	6	48	24	16	12	12	8	48	40	24	16	16	12	48	48	32	16	16	16
14	24	8	6	-	-	-	32	16	8	8	6	-	48	16	12	8	8	6	48	24	16	12	12	8	48	32	16	16	12	8
16	16	8	-	-	-	-	24	12	8	6	-	-	32	16	8	8	6	-	42	16	12	8	8	6	48	24	16	12	8	8
18	12	6	-	-	-	-	16	8	6	-	-	-	24	12	8	6	-	-	24	16	8	8	6	-	42	16	12	8	8	6
20	-	-	-	-	-	-	16	8	-	-	-	-	16	8	6	-	-	-	24	12	8	6	-	-	32	12	8	8	6	-

GROUND FLOOR LOGIX SUPPORTING 2nd STORY WOOD FRAME AND ROOF STRUCTURE

Height of Basement Wall, ft	4" Element						6" Element						8" Element						10" Element						12" Element					
	Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)					
	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114
8	48	42	24	16	16	12	48	48	32	24	24	16	48	48	48	32	32	24	48	48	48	48	42	32	48	48	48	48	48	40
9	48	32	16	12	12	8	48	48	24	16	16	12	48	48	42	24	24	16	48	48	48	32	32	24	48	48	48	42	40	24
10	48	24	16	8	8	6	48	32	16	16	12	8	48	48	24	16	16	16	48	48	40	24	24	16	48	48	48	32	24	24
12	40	16	8	-	-	-	48	24	12	8	8	8	48	32	16	12	12	8	48	42	24	16	16	12	48	48	32	24	16	16
14	24	8	-	-	-	-	32	16	8	8	6	-	48	24	12	8	8	-	48	24	16	12	12	8	48	32	16	16	12	8
16	-	-	-	-	-	-	24	12	8	6	-	-	32	16	8	8	-	-	48	16	12	8	8	-	48	24	16	12	8	8
18	-	-	-	-	-	-	16	8	-	-	-	-	24	12	8	6	-	-	32	16	8	8	-	-	42	16	12	8	8	-
20	-	-	-	-	-	-	-	-	-	-	-	-	16	8	-	-	-	-	24	12	8	6	-	-	32	16	8	8	-	-

GROUND FLOOR LOGIX SUPPORTING 2nd STORY LOGIX AND ROOF STRUCTURE

Height of Basement Wall, ft	4" Element						6" Element						8" Element						10" Element						12" Element					
	Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)						Unfactored Wind Load (psf)					
	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114	20	40	60	80	90	114
8	48	40	24	16	16	12	48	48	40	24	24	16	48	48	48	32	24	24	48	48	48	48	42	32	48	48	48	48	48	32
9	48	24	16	12	12	8	48	48	24	16	16	12	48	48	40	24	24	16	48	48	48	32	32	24	48	48	48	42	32	24
10	48	24	12	8	8	6	48	32	24	16	12	8	48	48	24	16	16	12	48	48	32	24	24	16	48	48	42	32	24	24
12	32	12	8	-	-	-	48	24	12	8	8	6	48	24	16	12	12	8	48	40	24	16	16	12	48	48	32	16	16	16
14	24	8	-	-	-	-	32	16	8	8	6	-	48	16	12	8	8	-	48	24	16	12	12	8	48	32	16	16	12	8
16	-	-	-	-	-	-	24	12	8	-	-	-	32	16	8	8	6	-	42	16	12	8	8	6	48	24	16	12	8	8
18	-	-	-	-	-	-	16	8	6	-	-	-	24	12	8	6	-	-	32	16	8	8	6	-	42	16	12	8	8	6
20	-	-	-	-	-	-	16	8	-	-	-	-	16	8	6	-	-	-	24	12	8	6	-	-	32	16	8	8	6	-

NOTES:

1. Table 3A shall be read in conjunction with the notes listed under "NOTES FOR ABOVE-GRADE WALL TABLES."
2. Vertical bar spacing is for #4 rebar. #5 rebar can be substituted provided the spacing is multiplied by 1.5. Spacing shall be no more than 48 inches on center.
3. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.
4. Where cells show "-" engineering is required.

TABLE 3B - ELEMENT ABOVE-GRADE WALL MINIMUM VERTICAL REINFORCEMENT (WIND SPEEDS GREATER THAN 150 MPH)

TE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being us

GROUND FLOOR LOGIX SUPPORTING ROOF ONLY																				
Height of Basement Wall, ft	4" Element				6" Element				8" Element				10" Element				12" Element			
	Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)			
	200	250	275	300	200	250	275	300	200	250	275	300	200	250	275	300	200	250	275	300
8	12	8	6	-	16	12	8	8	24	16	12	8	32	16	16	12	42	24	16	16
9	8	6	-	-	16	8	8	6	16	12	8	8	24	16	12	8	32	16	16	12
10	8	-	-	-	12	8	6	-	16	8	8	6	16	12	8	8	24	16	12	8
12	-	-	-	-	8	-	-	-	8	6	6	-	12	8	6	6	16	8	8	6
14	-	-	-	-	6	-	-	-	8	-	-	-	8	6	-	-	12	8	6	-
16	-	-	-	-	-	-	-	-	6	-	-	-	8	-	-	-	8	6	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	6	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-

GROUND FLOOR LOGIX SUPPORTING 2nd STORY LOGIX (OR 2nd STORY WOOD FRAME) & ROOF ONLY																				
Height of Basement Wall, ft	4" Element				6" Element				8" Element				10" Element				12" Element			
	Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)				Unfactored Wind Load (psf)			
	200	250	275	300	200	250	275	300	200	250	275	300	200	250	275	300	200	250	275	300
8	12	8	6	-	16	12	8	8	24	16	12	12	32	16	16	12	42	24	16	16
9	8	6	-	-	16	8	8	6	16	12	8	8	24	16	12	12	32	16	16	12
10	8	-	-	-	12	8	6	-	16	8	8	6	16	12	8	8	24	16	12	8
12	-	-	-	-	8	-	-	-	12	6	6	-	12	8	6	6	16	8	8	6
14	-	-	-	-	6	-	-	-	8	-	-	-	8	6	-	-	12	8	6	-
16	-	-	-	-	-	-	-	-	6	-	-	-	8	-	-	-	8	6	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	6	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-

NOTES:

1. Table 3B shall be read in conjunction with the notes listed under "NOTES FOR ABOVE-GRADE WALL TABLES."
2. Vertical bar spacing is for #4 rebar. #5 rebar can be substituted provided the spacing is multiplied by 1.5. Spacing shall be no more than 48 inches on center.
3. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.
4. Where cells show "-" engineering is required.

LINTEL REINFORCEMENT

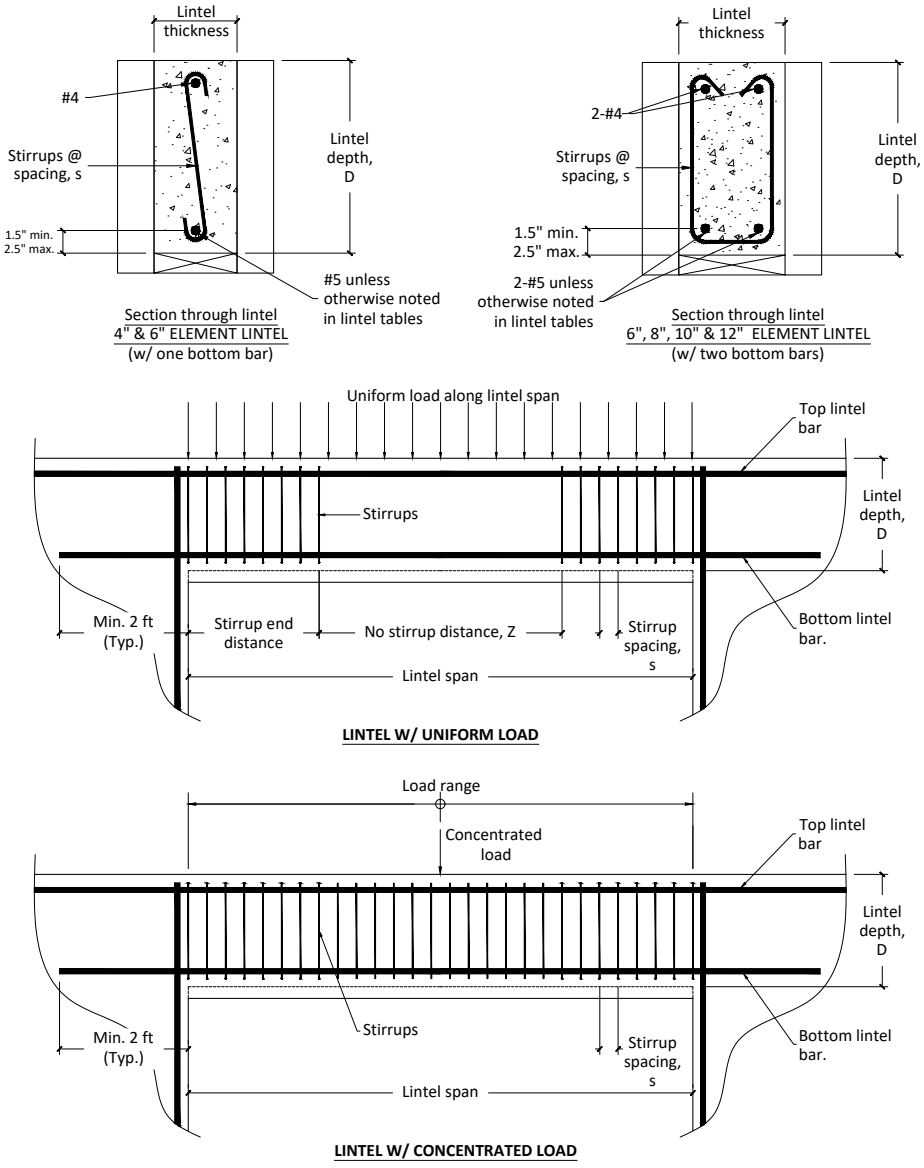

Fig 4
Lintel reinforcement

The lintel tables cover a wide range of uniform and concentrated load conditions, and span lengths. The depth of the lintels range from 8 inch to 30 inches. Uniform and concentrated loading are considered to be concentric and centered on the lintel. Uniform loads act along the entire lintel span, such as from roof trusses at 2 ft spacing. Concentrated load lintel tables consider only a single concentrated load acting anywhere along the lintel span. In addition, the lintel tables do not consider uniform and concentrated loads to act simultaneously on the lintel.

The following notes are common to both uniform and concentrated load lintel tables:

1. 28 day concrete compressive strength = 3 ksi. Steel yield strength = 60 ksi.
2. Stirrups are D9.5 wire or #3 bars, bent as shown, and conforming to ACI 318.
3. Shaded areas of the lintel tables require reinforcement, except for length Z.
4. Dimension D is to the concrete surface, not counting bucks or top plate.
5. Bottom steel must extend a min. 2 ft beyond opening, and no splices are permitted.
6. Deflection is limited to L/360, not considering long term effects. Long term deflection could be twice the short term depending on the nature of the load.
7. Seismic and wind loads are not considered.
8. Shear planes are not interrupted by embedded joists.
9. Top of lintel is assumed to be laterally restrained.

These tables should only be used if the above conditions are met. For other conditions, consult a structural engineer.

TABLE 4A - ELEMENT 4" LINTEL REINFORCEMENT WITH UNIFORM LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5					1 - #6	-
6				-	-	-
7		-	-	-	-	-
8		-	-	-	-	-
9	-	-	-	-	-	-
10	-	-	-	-	-	-
12	-	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	28	14	9	7	5	4

s=4", D=10"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6					1 - #6	-
7				-	-	-
8			-	-	-	-
9		-	-	-	-	-
10		-	-	-	-	-
12	-	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	38	19	12	9	7	6

s=5", D=12"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7					1 - #6	1 - #6
8				1 - #6	-	-
9			1 - #6	-	-	-
10			-	-	-	-
12		-	-	-	-	-
14	1 - #6	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	48	24	16	12	9	8

s=7", D=16"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						1 - #6
9					1 - #6	-
10				1 - #6	-	-
12			1 - #6	-	-	-
14		1 - #6	-	-	-	-
16		-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	67	33	22	16	13	11

s=9", D=20"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						1 - #6
10					1 - #6	1 - #6
12			1 - #6	1 - #6	-	-
14			1 - #6	-	-	-
16		1 - #6	-	-	-	-
18		-	-	-	-	-
20	1 - #6	-	-	-	-	-
No Stirrup Distance, Z (in)	87	43	29	21	17	14

s=11", D=24"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						1 - #6
12				1 - #6	1 - #6	-
14			1 - #6	-	-	-
16		1 - #6	-	-	-	-
18		1 - #6	-	-	-	-
20		-	-	-	-	-
No Stirrup Distance, Z (in)		53	35	26	21	17

s=14", D=30"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12					1 - #6	1 - #6
14				1 - #6	-	-
16			1 - #6	-	-	-
18		1 - #6	-	-	-	-
20		1 - #6	-	-	-	-
No Stirrup Distance, Z (in)		68	45	34	27	22

Notes:

1. Where not shown otherwise, bottom steel is 1-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrups. For stirrup information refer to Figure 4.
5. Factored Uniform Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load).
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 4B - ELEMENT 6” LINTEL REINFORCEMENT WITH UNIFORM LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						1 - #6
6				1 - #6	1 - #6	-
7			-	-	-	-
8		1 - #6	-	-	-	-
9		-	-	-	-	-
10	-	-	-	-	-	-
12	-	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	**44**	**22**	**14**	**11**	**8**	**7**

s=4", D=10"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						1 - #6
7				1 - #6	1 - #6	2 - #5
8			1 - #6	2 - #5	2 - #5	-
9			2 - #5	-	-	-
10		2 - #5	-	-	-	-
12	1 - #6	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)	**59**	**29**	**19**	**14**	**11**	**9**

s=5", D=12"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7					1 - #6	1 - #6
8				1 - #6	1 - #6	2 - #5
9			1 - #6	1 - #6	2 - #5	1 - #8
10			2 - #5	1 - #8	-	-
12		2 - #5	-	-	-	-
14	1 - #6	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		**37**	**25**	**18**	**15**	**12**

s=7", D=16"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						1 - #6
9					1 - #6	2 - #5
10				1 - #6	2 - #5	2 - #5
12			1 - #6	2 - #5	2 - #6	2 - #6
14		1 - #6	2 - #5	2 - #6	2 - #7	-
16		2 - #6	2 - #7	-	-	-
18	1 - #6	2 - #7	-	-	-	-
20	2 - #6	-	-	-	-	-
No Stirrup Distance, Z (in)	**105**	**52**	**35**	**26**	**21**	**17**

s=9", D=20"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						1 - #6
10					1 - #6	1 - #6
12			1 - #6	1 - #6	2 - #5	2 - #6
14			2 - #5	2 - #5	2 - #6	2 - #7
16		1 - #6	2 - #5	2 - #6	2 - #7	2 - #8
18		2 - #5	2 - #6	2 - #7	2 - #8	-
20	1 - #6	2 - #6	2 - #7	-	-	-
No Stirrup Distance, Z (in)		**68**	**45**	**34**	**27**	**22**

s=11", D=24"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						1 - #6
12				1 - #6	1 - #6	2 - #5
14			1 - #6	2 - #5	2 - #5	2 - #6
16		1 - #6	2 - #5	2 - #6	2 - #6	2 - #7
18		1 - #6	2 - #5	2 - #6	2 - #7	2 - #8
20	1 - #6	2 - #5	2 - #6	2 - #7	2 - #8	2 - #8
No Stirrup Distance, Z (in)		**83**	**55**	**41**	**33**	**27**

s=14", D=30"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12					1 - #6	1 - #6
14				1 - #6	2 - #5	2 - #5
16			1 - #6	2 - #5	2 - #5	2 - #6
18		1 - #6	2 - #5	2 - #6	2 - #6	2 - #7
20		1 - #6	2 - #5	2 - #6	2 - #7	2 - #7
No Stirrup Distance, Z (in)			**71**	**53**	**42**	**35**

Notes:

1. Where not shown otherwise, bottom steel is 1-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrups. For stirrup information refer to Figure 4.
5. Factored Uniform Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load).
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at
8. www.Elementicf.com.

TABLE 4C - ELEMENT 8” LINTEL REINFORCEMENT WITH UNIFORM LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7				-	-	-
8				-	-	-
9		-	-	-	-	-
10		-	-	-	-	-
12	-	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		28	18	14	11	9

s=4", D=10"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						-
9				-	-	-
10			-	-	-	-
12		-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		38	25	19	15	12

s=5", D=12"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						2 - #6
10					2 - #6	-
12			2 - #6	-	-	-
14		2 - #6	-	-	-	-
16	2 - #6	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		48	32	24	19	16

s=7", D=16"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12					2 - #6	2 - #6
14				2 - #6	-	-
16			-	-	-	-
18		-	-	-	-	-
20	2 - #6	-	-	-	-	-
No Stirrup Distance, Z (in)		67	45	33	27	22

s=9", D=20"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						2 - #6
14					2 - #6	2 - #6
16				2 - #6	-	-
18		`	2 - #6	-	-	-
20		2 - #6	-	-	-	-
No Stirrup Distance, Z (in)		87	58	43	34	29

s=11", D=24"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						2 - #6
16				2 - #6	2 - #6	-
18			2 - #6	2 - #6	-	-
20			2 - #6	-	-	-
No Stirrup Distance, Z (in)			71	53	42	35

s=14", D=30"

Opening	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						
16						2 - #6
18				2 - #6	2 - #6	-
20			2 - #6	2 - #6	-	-
No Stirrup Distance, Z (in)			91	68	54	45

Notes:

1. Where not shown otherwise, bottom steel is 2-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrups. For stirrup information refer to Figure 4.
5. Factored Uniform Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load).
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 4D - ELEMENT 10” LINTEL REINFORCEMENT WITH UNIFORM LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7					-	-
8				-	-	-
9			-	-	-	-
10		-	-	-	-	-
12	-	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		35	23	17	14	11

s=4", D=10"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						2 - #6
9				2 - #6	2 - #6	-
10			2 - #6	-	-	-
12		-	-	-	-	-
14	2 - #6	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		47	31	23	19	15

s=5", D=12"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						2 - #6
10					2 - #6	2 - #7
12			2 - #6	2 - #7	-	-
14		2 - #6	-	-	-	-
16	2 - #6	-	-	-	-	-
18	2 - #7	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		60	40	30	24	20

s=7", D=16"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12					2 - #6	2 - #6
14				2 - #6	2 - #7	2 - #7
16			2 - #7	2 - #8	-	-
18		2 - #7	2 - #8	-	-	-
20		2 - #8	-	-	-	-
No Stirrup Distance, Z (in)		84	56	42	33	28

s=9", D=20"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						2 - #6
14					2 - #6	2 - #6
16				2 - #6	2 - #7	2 - #7
18			2 - #6	2 - #7	2 - #8	-
20		2 - #6	2 - #7	2 - #8	-	-
No Stirrup Distance, Z (in)			72	54	43	36

s=11", D=24"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						2 - #6
16				2 - #6	2 - #6	2 - #7
18			2 - #6	2 - #6	2 - #7	2 - #8
20			2 - #6	2 - #7	2 - #8	2 - #8
No Stirrup Distance, Z (in)			89	67	53	44

s=14", D=30"

Opening, ft	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						
16					2 - #6	2 - #6
18				2 - #6	2 - #6	2 - #7
20			2 - #6	2 - #6	2 -#7	2 - #7
No Stirrup Distance, Z (in)				85	68	56

Notes:

1. Where not shown otherwise, bottom steel is 2-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrups. For stirrup information refer to Figure 4.
5. Factored Uniform Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load).
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 4E - ELEMENT 12” LINTEL REINFORCEMENT WITH UNIFORM LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7					2 - #6	-
8				2 - #6	-	-
9			-	-	-	-
10		-	-	-	-	-
12	2 - #6	-	-	-	-	-
14	-	-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		42	28	21	17	14

s=4", D=10"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						2 - #6
9					2 - #6	2 - #7
10			2 - #6	2 - #7	-	-
12		2 - #6	-	-	-	-
14		-	-	-	-	-
16	-	-	-	-	-	-
18	-	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)			38	28	22	19

s=5", D=12"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						2 - #6
10					2 - #6	2 - #7
12			2 - #6	2 - #7	2 - #8	-
14		2 - #6	2 - #8	-	-	-
16		-	-	-	-	-
18	2 - #7	-	-	-	-	-
20	-	-	-	-	-	-
No Stirrup Distance, Z (in)		72	48	36	28	24

s=7", D=16"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12					2 - #6	2 - #6
14				2 - #6	2 - #7	2 - #7
16			2 - #7	2 - #8	-	-
18		2 - #6	2 - #8	-	-	-
20		2 - #8	-	-	-	-
No Stirrup Distance, Z (in)		101	67	50	40	33

s=9", D=20"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						2 - #6
14					2 - #6	2 - #7
16			2 - #6	2 - #6	2 - #7	2 - #7
18			2 - #6	2 - #7	2 - #8	-
20		2 - #6	2 - #7	2 - #8	-	-
No Stirrup Distance, Z (in)			87	65	52	43

s=11", D=24"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						2 - #6
16				2 - #6	2 - #6	2 - #7
18			2 - #6	2 - #6	2 - #7	2 - #8
20		2 - #6	2 - #6	2 - #7	2 - #8	2 - #8
No Stirrup Distance, Z (in)				80	64	53

s=14", D=30"

Opening, ft	Factored Uniform Load, lb/ft					
	400	800	1200	1600	2000	2400
3						
4						
5						
6						
7						
8						
9						
10						
12						
14						
16					2 - #6	2 - #6
18				2 - #6	2 - #6	2 - #7
20			2 - #6	2 - #6	2 - #7	2 - #8
No Stirrup Distance, Z (in)					82	68

Notes:

1. Where not shown otherwise, bottom steel is 2-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrups. For stirrup information refer to Figure 4.
5. Factored Uniform Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load).
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 5A - ELEMENT 4” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																-	-
4													-	-	-	-	-
5											-	-	-	-	-	-	-
6									-	-	-	-	-	-	-	-	-
7						-	-	-	-	-	-	-	-	-	-	-	-
8					-	-	-	-	-	-	-	-	-	-	-	-	-
9				-	-	-	-	-	-	-	-	-	-	-	-	-	-
10				-	-	-	-	-	-	-	-	-	-	-	-	-	-
12			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=4", D=10"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	-
5															-	-	-
6													-	-	-	-	-
7											-	-	-	-	-	-	-
8									-	-	-	-	-	-	-	-	-
9								-	-	-	-	-	-	-	-	-	-
10					-		-	-	-	-	-	-	-	-	-	-	-
12					-	-	-	-	-	-	-	-	-	-	-	-	-
14				-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=5", D=12"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	1 - #6
6																1 - #6	1 - #6
7														1 - #6	1 - #6	1 - #6	-
8												1 - #6	1 - #6	1 - #6	-	-	-
9											1 - #6	1 - #6	1 - #6	-	-	-	-
10									1 - #6	1 - #6	-	-	-	-	-	-	-
12						1 - #6	1 - #6	-	-	-	-	-	-	-	-	-	-
14					1 - #6	-	-	-	-	-	-	-	-	-	-	-	-
16			1 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		1 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=7", D=16"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																1 - #6	
12																1 - #6	1 - #6
14													1 - #6	1 - #6	1 - #6	-	-
16												1 - #6	1 - #6	1 - #6	-	-	-
18										1 - #6	1 - #6	-	-	-	-	-	-
20										-	-	-	-	-	-	-	-

TABLE 5A - ELEMENT 4" LINTEL REINFORCEMENT WITH CONCENTRATED LOAD Cont'd

D=20"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	1 - #6
10																1 - #6	1 - #6
12														1 - #6	1 - #6	1 - #6	1 - #6
14												1 - #6	1 - #6	1 - #6	1 - #6	-	-
16										1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	-	-	-
18								1 - #6	1 - #6	1 - #6	1 - #6	-	-	-	-	-	-
20							1 - #6	1 - #6	1 - #6	-	-	-	-	-	-	-	-

D=24"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
12																1 - #6	1 - #6
14														1 - #6	1 - #6	1 - #6	1 - #6
16												1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	-
18										1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	-	-	-
20								1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	-	-	-	-

D=30"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
12																	
14																	1 - #6
16															1 - #6	1 - #6	1 - #6
18													1 - #6	1 - #6	1 - #6	1 - #6	2 - #5
20											1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	-	-

Notes:

1. Where not shown otherwise, bottom steel is 1-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrup. For stirrup information refer to Figure 4.
5. Factored Point Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load)
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 5B - ELEMENT 6” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4															1 - #6	1 - #6	-
5												1 - #6	1 - #6	1 - #6	-	-	-
6										1 - #6	1 - #6	1 - #6	-	-	-	-	-
7								-	-	-	-	-	-	-	-	-	-
8							1 - #6	-	-	-	-	-	-	-	-	-	-
9						-	-	-	-	-	-	-	-	-	-	-	-
10					-	-	-	-	-	-	-	-	-	-	-	-	-
12				-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=4", D=10"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																1 - #6	1 - #6
6													1 - #6	1 - #6	1 - #6	1 - #6	2 - #5
7												1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	-
8										1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	-	-
9									1 - #6	1 - #6	1 - #6	2 - #5	-	-	-	-	-
10								1 - #6	1 - #6	-	-	-	-	-	-	-	-
12						1 - #6	-	-	-	-	-	-	-	-	-	-	-
14					-	-	-	-	-	-	-	-	-	-	-	-	-
16			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=5", D=12"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																1 - #6	1 - #6
7															1 - #6	1 - #6	2 - #5
8													1 - #6	1 - #6	2 - #5	2 - #5	2 - #5
9											1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	-
10										1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	-	-	-
12							1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	-	-	-	-	-	-
14						1 - #6	1 - #6	1 - #6	-	-	-	-	-	-	-	-	-
16					1 - #6	-	-	-	-	-	-	-	-	-	-	-	-
18				-	-	-	-	-	-	-	-	-	-	-	-	-	-
20			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

s=7", D=16"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																1 - #6	1 - #6
9															1 - #6	1 - #6	1 - #6
10													1 - #6	1 - #6	1 - #6	1 - #6	2 - #5
12											1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5
14								1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #6	2 - #6
16							1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	-	-	-
18						1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	-	-	-	-	-
20					1 - #6	1 - #6	2 - #5	2 - #6	2 - #6	-	-	-	-	-	-	-	-

TABLE 5B - ELEMENT 6” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD Cont’d

s=9", D=20"																	
	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
4	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
5	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
7	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
8	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
9	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
10	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6
12	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5
14	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5
16	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #6
18	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #6	2 - #6
20	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	1 - #6	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #6	2 - #6	2 - #6	-

s=11", D=24"																	
	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-7	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
8	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
9	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
10	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
12	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
14	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
16	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
18	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
20	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #6	2 - #6

s=14", D=30"																	
	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-9	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
10	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
12	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
14	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
16	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
18	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5
20	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5	2 - #5

Notes:

1. Where not shown otherwise, bottom steel is 1-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain “-” the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrup. For stirrup information refer to Figure 4.
5. Factored Point Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load)
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 5C - ELEMENT 8” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																-	-
7											-	-	-	-	-	-	-
8										-	-	-	-	-	-	-	-
9							-	-	-	-	-	-	-	-	-	-	-
10						-	-	-	-	-	-	-	-	-	-	-	-
12				-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=10"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																-	-
9														-	-	-	-
10										-	-	-	-	-	-	-	-
12							-	-	-	-	-	-	-	-	-	-	-
14						-	-	-	-	-	-	-	-	-	-	-	-
16				-	-	-	-	-	-	-	-	-	-	-	-	-	-
18			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=12"

Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	2 - #6
12												2 - #6	2 - #6	2 - #6	-	-	-
14									2 - #6	2 - #6	2 - #6	-	-	-	-	-	-
16						2 - #6	2 - #6	-	-	-	-	-	-	-	-	-	-
18					2 - #6	-	-	-	-	-	-	-	-	-	-	-	-
20				2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5C - ELEMENT 8” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD Cont’d

D=16"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
12																	
14																2 - #6	2 - #6
16													2 - #6	2 - #6	2 - #6	2 - #7	2 - #7
18											2 - #6	2 - #6	2 - #7	2 - #7	2 - #7	-	-
20								2 - #6	2 - #6	2 - #6	2 - #7	2 - #7	2 - #7	-	-	-	-

D=20"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-11																	
12																	
14																	
16																	2 - #6
18															2 - #6	2 - #6	2 - #7
20													2 - #6	2 - #6	2 - #6	2 - #6	2 - #8

D=24"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-13																	
14																	
16																	
18																	2 - #6
20															2 - #6	2 - #6	2 - #6

D=30"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-17																	
18																	
20																	

Notes:

1. Where not shown otherwise, bottom steel is 1-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain “-” the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrup. For stirrup information refer to Figure 4.
5. Factored Point Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load)
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 5D - ELEMENT 10” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

s=3", D=8"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																-	-
7												-	-	-	-	-	-
8											-	-	-	-	-	-	-
9								-	-	-	-	-	-	-	-	-	-
10						-	-	-	-	-	-	-	-	-	-	-	-
12				-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=10"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																2 - #6	2 - #6
9															2 - #6	2 - #6	-
10											2 - #6	2 - #6	2 - #6	-	-	-	-
12								2 - #6	2 - #6	-	-	-	-	-	-	-	-
14						2 - #6	-	-	-	-	-	-	-	-	-	-	-
16				2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-
18			2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=12"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																2 - #6	2 - #6
12													2 - #6	2 - #6	2 - #6	2 - #7	2 - #7
14										2 - #6	2 - #6	2 - #7	2 - #7	2 - #7	-	-	-
16							2 - #6	2 - #7	2 - #7	-	-	-	-	-	-	-	-
18					2 - #6	2 - #7	2 - #7	-	-	-	-	-	-	-	-	-	-
20				2 - #6	2 - #7	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5D - ELEMENT 10” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD Cont’d

D=16"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-8																	
9																	
10																	
12																	
14																2 - #6	2 - #6
16														2 - #6	2 - #6	2 - #7	2 - #7
18											2 - #6	2 - #6	2 - #6	2 - #7	2 - #7	2 - #8	2 - #8
20									2 - #6	2 - #6	2 - #7	2 - #7	2 - #7	2 - #8	2 - #8	-	-

D=20"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-11																	
12																	
14																	
16																2 - #6	2 - #6
18														2 - #6	2 - #6	2 - #6	2 - #6
20											2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6

D=24"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-13	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
14	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
16	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
18	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
20	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6

D=30"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-15	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
16	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
18	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
20	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6

Notes:

1. Where not shown otherwise, bottom steel is 2-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain “-” the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrup. For stirrup information refer to Figure 4.
5. Factored Point Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load)
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

TABLE 5E - ELEMENT 12” LINTEL REINFORCEMENT WITH CONCENTRATED LOAD

NOTE: Logix Bands recommends builders, owners and /or designers using these tables confirm that on-site building conditions are within the scope of the tables being used.

D=8"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																2 - #6	2 - #6
7													2 - #6	2 - #6	-	-	-
8												2 - #6	2 - #6	2 - #6	-	-	-
9									2 - #6	-	-	-	-	-	-	-	-
10							2 - #6	-	-	-	-	-	-	-	-	-	-
12					2 - #6	-	-	-	-	-	-	-	-	-	-	-	-
14				-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=10"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																2 - #6	2 - #6
9															2 - #6	2 - #6	2 - #7
10												2 - #6	2 - #6	2 - #6	2 - #7	-	-
12									2 - #6	2 - #6	2 - #7	2 - #7	-	-	-	-	-
14							2 - #6	2 - #7	2 - #7	-	-	-	-	-	-	-	-
16				2 - #6	2 - #7	-	-	-	-	-	-	-	-	-	-	-	-
18			2 - #6			-	-	-	-	-	-	-	-	-	-	-	-
20		2 - #6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D=12"																	
Opening,	Factored Point Load, lb																
ft	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	2 - #6
12															2 - #6	2 - #7	2 - #7
14											2 - #6	2 - #6	2 - #7	2 - #7	2 - #8	2 - #8	-
16							2 -#6	2 - #6	2 - #7	2 - #8	2 - #8	2 - #8	-	-	-	-	-
18						2 - #6	2 -#7	2 - #8	2 - #8	-	-	-	-	-	-	-	-
20				2 - #6	2 - #7	2 - #8	2 -#8	-	-	-	-	-	-	-	-	-	-

TABLE 5E - ELEMENT 12" LINTEL REINFORCEMENT WITH CONCENTRATED LOAD Cont'd

D=16"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	
3-8																	
9																	
10																	
12																	
14																2 - #6	2 - #6
16															2 - #6	2 - #6	2 - #7
18												2 - #6	2 - #6	2 - #6	2 - #7	2 - #8	2 - #8
20										2 - #6	2 - #6	2 - #7	2 - #7	2 - #7	2 - #8	-	-

D=20"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-11	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
12	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
14	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
16	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
18	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6
20	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #6	2 - #8	2 - #8

D=24"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-13	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
14	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
16	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
18	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
20	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7

D=30"																	
Opening, ft	Factored Point Load, lb																
	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	8000	9000	10000
3-15	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
16	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
18	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7
20	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7	2 - #7

Notes:

1. Where not shown otherwise, bottom steel is 2-#5
2. Table is to be read in conjunction w/ Figure 4.
3. Where spaces contain "-" the bar is presumed to be less economical and/or practical. Alternatively, consult with a local engineer to determine if a practical bar size is possible based on local load conditions.
4. Blank regions require no stirrups. Shaded regions require stirrup. For stirrup information refer to Figure 4.
5. Factored Point Load includes 1.2, and 1.6 for dead and live load, respectively. For example, (1.2*dead load)+(1.6*live load)
6. Table values are based on concrete with a minimum specified compressive strength of 3 ksi and 60 ksi reinforcing steel.
7. Based on 60 ksi reinforcing steel. Lintels tables for 40 ksi reinforcing steel are available for download at www.Elementicf.com.

SHEAR WALLS

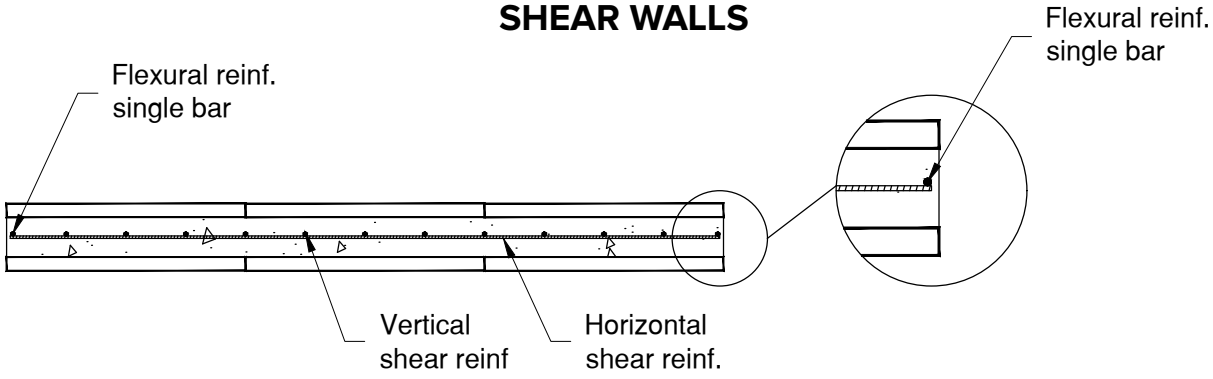

FIGURE 6: PLAN VIEW
ELEMENT SHEAR WALL - SINGLE BAR FLEXURAL REINF.
(Applies to 4, 6, 8 & 10" ELEMENT)

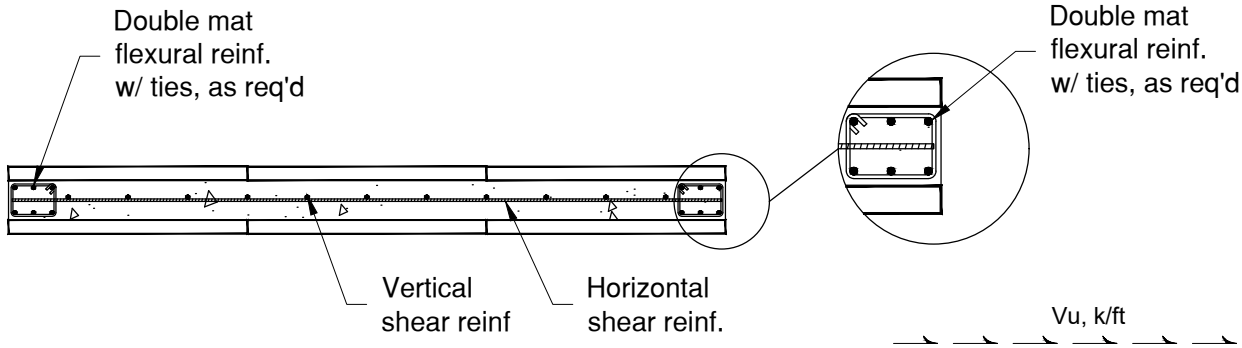

FIGURE 7: PLAN VIEW
ELEMENT SHEAR WALL - DOUBLE MAT FLEXURAL REINF.
(Applies to 4, 6, 8 & 10" ELEMENT)

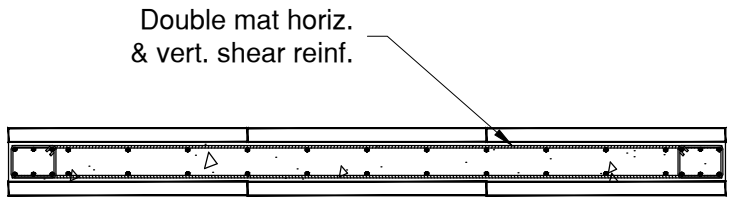

FIGURE 8: PLAN VIEW
ELEMENT SHEAR WALL - DOUBLE MAT FLEXURAL & SHEAR REINF.
(Applies to 12" ELEMENT)

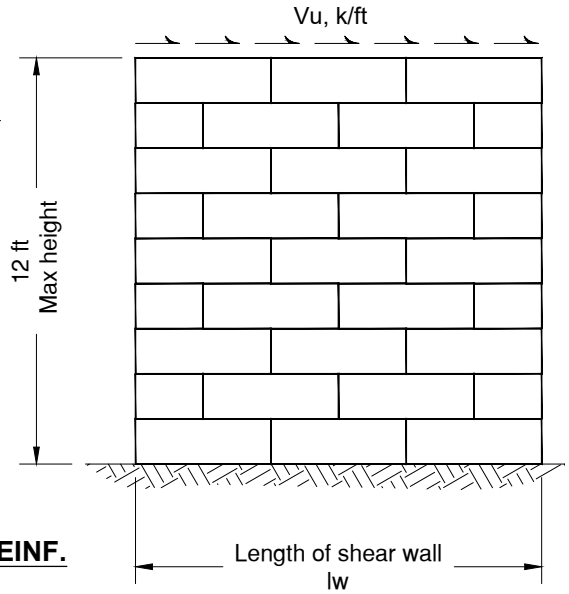

FIGURE 5: ELEVATION

NOTES:
1. Shear wall Figures 6 to 8 to be used in conjunction with Tables 6A and 6B.
2. Provide double mat of reinforcement for 12" Element wall. See Figure 8.
3. Fully develop flexural reinforcement into the footing.
4. Min. 28 day concrete compressive strength = 3 ksi. Steel yield strength = 60 ksi.
5. Clear spacing between flexural reinforcement bars = 3in

These tables should only be used if the above conditions are met. For other conditions, consult a structural engineer.

TABLE 6A - SHEAR WALL: HORIZONTAL & VERTICAL SHEAR REINFORCEMENT

4" ELEMENT SHEAR WALL REINFORCEMENT SPACING, in

SHEAR REINFORCEMENT (applies to horizontal & vertical reinforcement)

		SHEAR FORCE, Vu, kpf															
		0.5		1		1.5		2		2.5		3		3.5		4	
Bar Size	Wall Length,	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
#4, #5, or #6	18	12	12	12	12	4	4	4	4	4	4	4	4	4	4	4	4
	4	12	12	12	12	8	8	8	8	8	8	8	8	8	8	8	8
	>4	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

6" ELEMENT SHEAR WALL REINFORCEMENT SPACING, in

SHEAR REINFORCEMENT (applies to horizontal & vertical reinforcement)

		SHEAR FORCE, Vu, kpf															
		1		2		3		4		5		6		7		8	
Bar Size	Wall Length,	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
#4, #5, or #6	2	16	16	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	16	16	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	6	16	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	>6	16	16	16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16

8" ELEMENT SHEAR WALL REINFORCEMENT SPACING, in

SHEAR REINFORCEMENT (applies to horizontal & vertical reinforcement)

		SHEAR FORCE, Vu, kpf															
		1.5		2.5		5		6		7		8		9		10	
Bar Size	Wall Length,	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
#4, #5, or #6	2	12, 12, 16	4, 16, 16	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	12, 12, 16	8, 16, 16	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	6	12, 12, 16	12, 16, 16	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12
	>6	12, 12, 16	16	12, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16

10" ELEMENT SHEAR WALL REINFORCEMENT SPACING, in

SHEAR REINFORCEMENT (applies to horizontal & vertical reinforcement)

		SHEAR FORCE, Vu, kpf															
		1.5		2.5		5		6		7		8		9		10	
Bar Size	Wall Length,	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
#4, #5, or #6	2	8, 12, 16	16	8, 12, 4	16, 16, 4	4	4	4	4	4	4	4	4	4	4	4	4
	4	8, 12, 16	16	8, 12, 8	16, 16, 8	8	8	8	8	8	8	8	8	8	8	8	8
	6	8, 12, 16	16	8, 12, 12	16, 16, 12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12	8, 12, 12	12
	>6	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16	8, 12, 16	16

12" ELEMENT SHEAR WALL REINFORCEMENT SPACING, in

SHEAR REINFORCEMENT (applies to horizontal & vertical reinforcement)

		SHEAR FORCE, Vu, kpf															
		1.5		2.5		5		6		7		8		9		10	
Bar Size	Wall Length,	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
#4, #5, or #6	2	16	4, 16, 16	16	4, 16, 16	4	4	4	4	4	4	4	4	4	4	4	4
	4	16	8, 16, 16	16	8, 16, 16	8	8	8	8	8	8	8	8	8	8	8	8
	6	16	12, 16, 16	16	12, 16, 16	12	12	12	12	12	12	12	12	12	12	12	12
	>6	16	16	16	16	16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16	12, 16, 16	16

NOTES:

1. Table 6A to be read in conjunction with Shear Wall Figures 6 to 8.
2. Steel yield strength = 60 ksi, 28 day concrete compressive strength = 3 ksi.

TABLE 6B - SHEAR WALL: FLEXURAL REINFORCEMENT

4" ELEMENT - FLEXURAL REINFORCEMENT

Wall Length, lw, ft	SHEAR FORCE, Vu, kpf							
	0.5	1	1.5	2	2.5	3	3.5	4
18	18 - #10, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	2 - #6	-	-	-
4	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #6
6	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #4, 4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #6
8	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #4, 4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #6
10	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #4, 4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #6
15	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #4, 4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #5 or 4 - #6
20	1 - #4, 1 - #5 or 1 - #6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #4, 4 - #5 or 2 - #6	4 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #5 or 4 - #6

6" ELEMENT - FLEXURAL REINFORCEMENT

Wall Length, lw, ft	SHEAR FORCE, Vu, kpf							
	1	2	3	4	5	6	7	8
2	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	4 - #5 or 4 - #6	4 - #6	-	-	-	-
4	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	6 - #5 or 4 - #6	6 - #5 or 4 - #6	8 - #5 or 6 - #6	6 - #6	8 - #6
6	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	6 - #4, 6 - #5 or 4 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	10 - #5 or 6 - #6	10 - #5 or 8 - #6
8	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	6 - #4, 6 - #5 or 4 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 8 - #5 or 6 - #6	10 - #5 or 8 - #6
10	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	6 - #4, 4 - #5 or 4 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 8 - #5 or 6 - #6	10 - #5 or 6 - #6
15	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	10 - #4, 6 - #5 or 4 - #6	10 - #4, 8 - #5 or 6 - #6	12 - #4, 8 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #6
20	2 - #4, 1 - #5 or 1 - #6	4 - #4, 2 - #5 or 2 - #6	6 - #4, 4 - #5 or 2 - #6	6 - #4, 4 - #5 or 4 - #6	10 - #4, 6 - #5 or 4 - #6	10 - #4, 8 - #5 or 6 - #6	12 - #4, 8 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #6

8" to 12" ELEMENT - FLEXURAL REINFORCEMENT

Wall Length, lw, ft	SHEAR FORCE, Vu, kpf							
	1.5	2.5	5	6	7	8	9	10
2	4 - #4, 2 - #5 or 1 - #6	4 - #5 or 2 - #6	4 - #7	4 - #7	-	-	-	-
4	4 - #4, 2 - #5 or 1 - #6	6 - #4, 4 - #5 or 2 - #6	6 - #5 or 4 - #6	6 - #6	6 - #6	4 - #8	6 - #7	6 - #8
6	4 - #4, 2 - #5 or 1 - #6	4 - #4, 4 - #5 or 2 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 8 - #5 or 6 - #6	10 - #5 or 6 - #7	6 - #7	6 - #7
8	4 - #4, 2 - #5 or 1 - #6	4 - #4, 4 - #5 or 2 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 8 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #6	18 - #4, 12 - #5 or 6 - #7	12 - #5 or 6 - #7
10	4 - #4, 2 - #5 or 1 - #6	4 - #4, 4 - #5 or 2 - #6	10 - #4, 6 - #5 or 4 - #6	12 - #4, 8 - #5 or 6 - #6	12 - #4, 8 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #6	18 - #4, 10 - #5 or 6 - #7	20 - #4, 12 - #5 or 6 - #7
15	4 - #4, 2 - #5 or 1 - #6	4 - #4, 4 - #5 or 2 - #6	10 - #4, 6 - #5 or 4 - #6	10 - #4, 8 - #5 or 6 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 10 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #7	18 - #4, 12 - #5 or 6 - #7
20	4 - #4, 2 - #5 or 1 - #6	4 - #4, 4 - #5 or 2 - #6	8 - #4, 6 - #5 or 4 - #6	10 - #4, 8 - #5 or 6 - #6	12 - #4, 8 - #5 or 6 - #6	14 - #4, 10 - #5 or 6 - #6	16 - #4, 10 - #5 or 6 - #7	18 - #4, 12 - #5 or 6 - #7

NOTES:

1. Table 6B to be used in conjunction with Shear Wall Figures 6 to 8.
2. Where spaces contain "-" consult with a local licensed engineer.
3. Where more than one bar is shown use double mat for flexural reinforcement. See Figure 7 (or Figure 8 for 12" Element).

TABLE 6.2 - SOIL CLASSIFICATION

NOTE: Logix Brands recommend builders, owners and/or designers using these tables confirm that on-site loading conditions are within the scope of the tables being used.

Load Bearing Soil Classifications[1]

MINIMUM LOAD BEARING VALUE[2], psf	**SOIL DESCRIPTION**
2000 psf	Clay, sandy clay, silty clay, and clayey silt
3000 psf	Sand, silty sand, clayey sand, silty gravel, and clayey gravel
4000 psf	Sandy gravel and medium stiff clay
> 4000 psf	Stiff clay, gravel, sand, sedimentary rock, and crystalline bedrock.

1. User must verify that the values in this table agree with local codes and practices.
2. Tabulated values are the presumed strength of the soil, undisturbed (the maximum design load bearing value for the basement or foundation wall footing).

Equivalent Fluid Density Soil Classification[1, 2]

MAXIMUM EQUIVALENT FLUID DENSITY, pcf	**USC[2] CLASSIFICATION**	**SOIL DESCRIPTION**
30 pcf	GW, GP, SW, SP	Well-drained cohesionless soils such as clean (few or no fines) sand and gravels.
45 pcf	GM, GC, SM, SM-SC, ML	Well-drained cohesionless soils such as sand and gravels containing silt or clay.
60 pcf	SC, MH, CL, CH, ML-CL	Well-drained inorganic silts or clays that are broken up into smaller pieces.

1. User must verify that the values in this table agree with local codes and practices.
2. USC - Uniform soil classification

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TABLE 6.3 - FOOTING WIDTHS

NOTE: Logix Brands recommend builders, owners and/or designers using these tables confirm that on-site loading conditions are within the scope of the tables being used.

Minimum Width of Concrete Footing for Element Walls

Maximum Number of Storeys	MINIMUM LOAD BEARING VALUE OF SOIL					
	1500 psf	2000 psf*	2500 psf*	3000 psf*	3500 psf*	4000 psf*
6" Element Wall Thickness						
One Storey	19"	15"	12"	10"	9"	8"
Two Storey	25"	20"	16"	13"	12"	10"
8" Element Wall Thickness						
One Storey	23	18"	14"	12"	10"	8"
Two Storey	30	24"	19"	16"	14"	12"
10" Element Wall Thickness						
One Storey	25	20"	16"	13"	11"	10"
Two Storey	35	27"	22"	18"	15"	14"

- Minimum 28 day concrete compressive strength = 3000 psi (20 MPa)
- Table does not consider sesimic. Footing design must also consider local design loads and building practices.
- Footings shall be minimum 8” thick, and shall have a width that allows for a nominal 2 inch projection from either face of the concrete in the wall to the edge of the footing.
- Table values are based on 40 ft building width (floor and roof clear span).
- Applicable for storey heights not greater than 9’-4”.
- Basement wall shall not be considered as a storey in determining footing widths.
- Applicable also for 8 inch thick or 10 inch thick Element foundation wall supporting 4 inch Element storeys.
- Applicable also for 10 inch thick or 10 inch thick Element foundation wall supporting 6 inch Element storeys.

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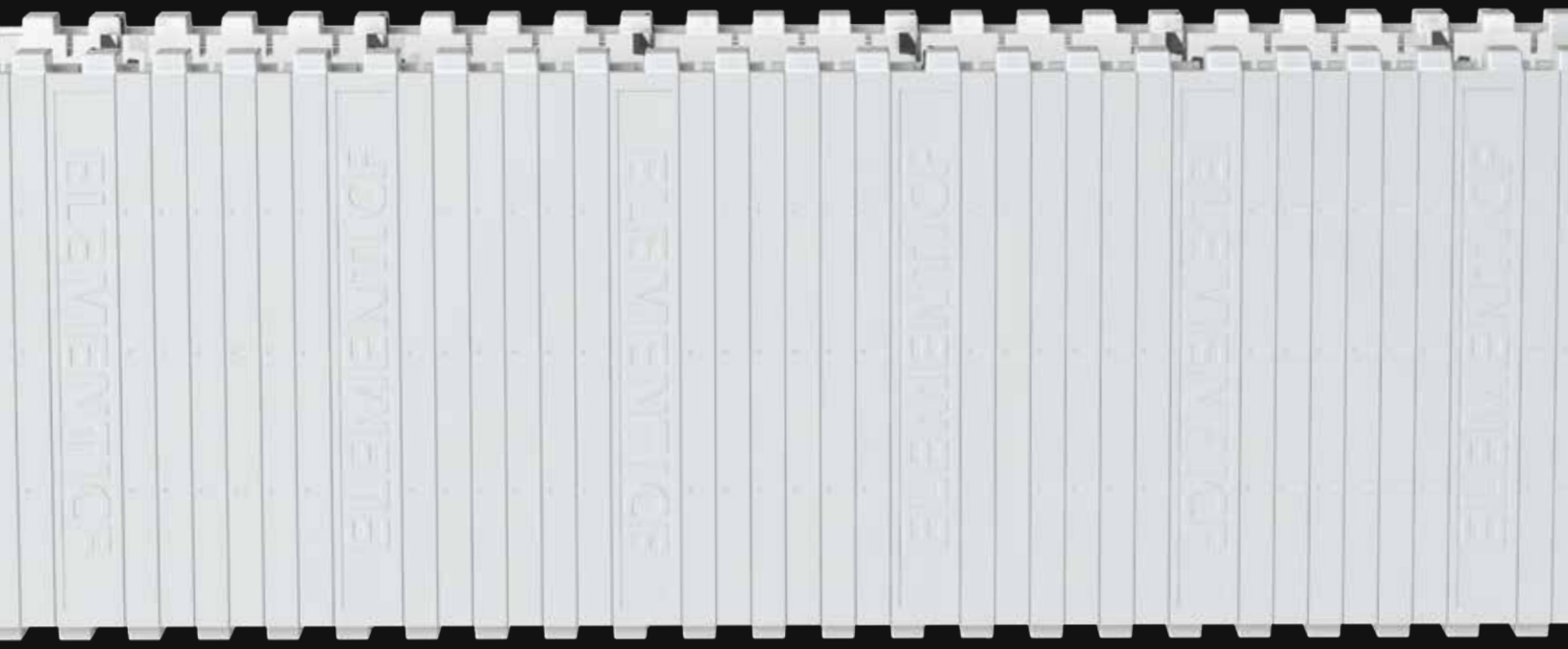

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