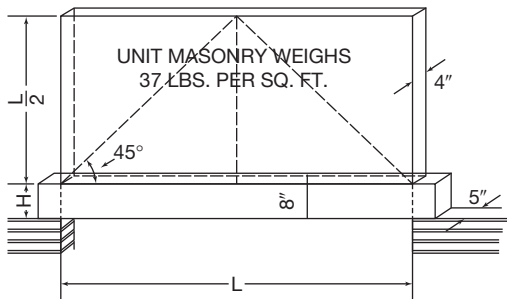


beams and lintels of indiana limestone

This table has been revised in an effort to make it a bit more user-friendly. The information and data used are identical to that contained in the previous (20th Edition) Handbook, but the unit-load method of presentation is different. We hope you find the new format to your liking.

Allowable Superimposed Uniform Load (W) in Pounds per Lineal Foot, per Inch of Lintel Width.

(L) SPAN FEET	(H) HEIGHT OF BEAM OR LINTEL—INCHES															(L) SPAN FEET
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	
1	36.9	151.6	344.0	614.2	962.2	1,388.0	1,786.0	1,784.0	1,782.0	1,780.0	1,778.0	1,776.0	1,774.0	1,772.0	1,770.0	1
2	7.7	34.9	81.5	147.6	233.1	338.0	462.4	606.2	769.5	880.0	878.0	876.0	874.0	872.0	870.0	2
3	2.3	13.3	32.9	61.1	98.0	143.6	197.7	260.5	332.0	412.1	500.8	576.0	574.0	572.0	570.0	3
4	0.4	5.7	15.9	30.9	50.8	75.5	105.1	139.6	178.9	223.1	272.1	326.0	384.8	422.0	420.0	4
5	—	2.2	8.0	16.9	28.9	44.0	62.2	83.6	108.0	135.6	166.2	200.0	236.9	276.9	320.0	5
6	—	0.3	3.7	9.3	17.0	26.9	38.9	53.1	69.5	88.0	108.7	131.6	156.6	183.7	213.1	6
7	—	—	1.1	4.7	9.8	16.6	24.9	34.8	46.3	59.4	74.0	90.3	108.1	127.6	148.6	7
8	—	—	—	1.7	5.2	9.9	15.8	22.9	31.2	40.8	51.5	63.5	76.7	91.1	106.7	8
9	—	—	—	—	2.0	5.3	9.5	14.7	20.9	28.0	36.1	45.1	55.1	66.1	78.0	9
10	—	—	—	—	—	2.0	5.1	8.9	13.5	18.9	25.1	32.0	39.7	48.2	57.5	10
11	—	—	—	—	—	—	1.7	4.6	8.0	12.1	16.9	22.3	28.3	35.0	42.3	11
12	—	—	—	—	—	—	—	1.3	3.9	7.0	10.7	14.9	19.6	24.9	30.8	12
13	—	—	—	—	—	—	—	—	0.6	3.0	5.8	9.1	12.9	17.1	21.8	13
14	—	—	—	—	—	—	—	—	—	—	2.0	4.6	7.5	10.9	14.6	14
15	—	—	—	—	—	—	—	—	—	—	—	0.9	3.2	5.9	8.9	15
16	—	—	—	—	—	—	—	—	—	—	—	—	—	1.8	4.2	16
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	17
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20



The Beam & Lintel Table is based on a rectangular loading pattern as shown. The actual loading by unit masonry when mortar sets approximates a triangle as shown by the dotted lines. Therefore, the table is conservative.

The weight of the lintel is calculated into this table and formula. The designer need make no further allowance for the weight of the stone.

General Equation

$$W = 9.7222 \times (H/L)^2 - H,$$

where H = height in inches and L = span in feet

Example

$$L = 6'-0''$$

$$H = 8''$$

$$\text{Lintel width} = 5''$$

$$W \text{ (from table)} = 9.3 \text{ pounds per lineal foot (per inch of width).}$$

$$\text{Allowable superimposed uniform load} = 9.3 \times 5'' \text{ width} = 46.5 \text{ pounds per lineal foot.}$$

$$\text{Total superimposed load} = 46.5 \times 6 \text{ feet long} = 279 \text{ pounds.}$$

The allowable loads shown are based on a modulus of rupture of 700 and a safety factor of 8 to 1. Much Indiana Limestone production exceeds this minimum. Capacities for such stone should be based on an appropriate engineering analysis, not on the values shown on the table.

The values shown above the dotted line are governed by shear stress based on 4" bearing on each end of the beam.

The values in the table are based on vertical gravity loads only and do not account for wind, seismic or other loads. The compression surface must be laterally supported when required to avoid lateral buckling.