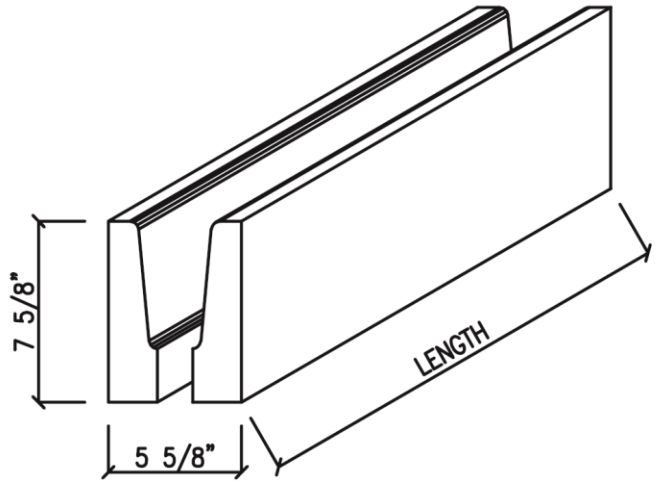
Oneonta Block Company
6459 State Highway 23, Oneonta, NY 13820
607-432-6641
Fax 607-433-6284

‘U’ Lintels

6” x 8”

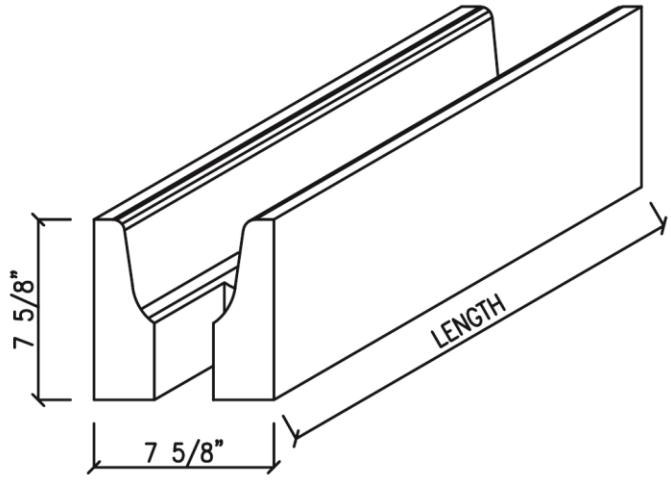
2 - #3 BAR in TOP
2 - #5 BAR in BOTTOM



LUB56	56”	159 Lbs.
LUB72	72”	204 Lbs.
LUB96	96”	272 Lbs.

8” x 8”

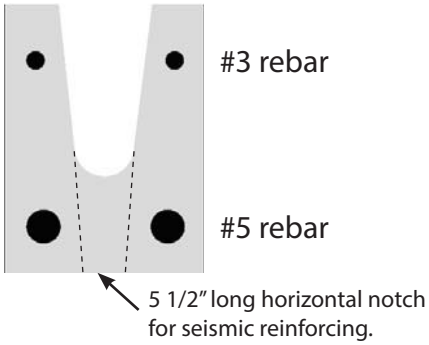
2 - #3 BAR in TOP
2 - #5 BAR in BOTTOM



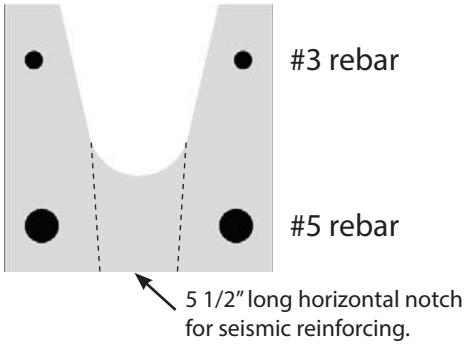
LU56	56”	182 Lbs.
LU72	72”	234 Lbs.
LU96	96”	312 Lbs.

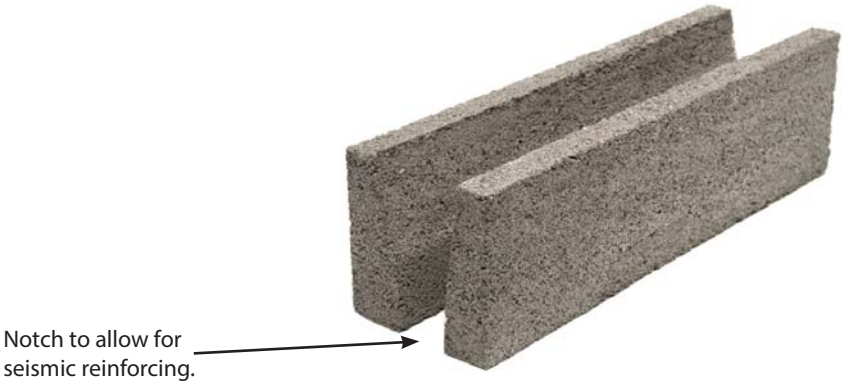
U-LINTEL SIZING OVERVIEW

6" x 8" U-LINTELS



8" x 8" U-LINTELS





U-lintels are available in lengths from 36" to 144".
All four widths are stocked in these lengths: 48, 56, 72, 88, 96, 144
All other lengths available by special request.
#3 and #5 rebar placed as shown. Special rebar schedules available upon request.

Rebar is grade 60 steel ASTM 615
5,000 PSI concrete mix design
Minimum fire rating is 1 1/2 hours

Rebar placement:
Clearance from bottom: 1 1/2"
Clearance from top: 1 1/2"

YORK BUILDING PRODUCTS
A STEWART COMPANY

U- LINTELS - 6" x 8"

900 North Hartley Street, York, PA 17404 | 717.792.4700 | www.yorkbuilding.com

6x8 "U" LINTELS	5,000 psi PRECAST BOND BEAM LINTELS									Self Weight 34#/ft																	
1. Reinforcement rods (A_1)	Top	(2) #3								(2) #3														(2) #3			
	Bottom	(2) #5																									
2. Nominal lintel length (inches)		32	40	48	54	56	60	64	66	72	78	80	84	88	90	96	102	104	108	112	114	120	128	132	136	144	
3. Masonry opening L_1 (inches)		16	24	32	38	40	44	48	50	58	62	64	68	72	74	80	86	88	92	96	98	104	112	116	120	128	
4. Effective span L_2 (inches)		24	32	40	46	48	52	56	58	64	70	72	76	80	82	88	94	96	100	104	106	112	120	124	128	136	
5. Maximum allowable load Unfactored	(lbs/ft.)	2217	1663	1330	1157	1108	1023	950	917	831	760	739	700	665	650	605	566	554	532	511	502	475	443	429	416	391	
Dead Load	(lbs/ft.)	1583	1187	950	826	791	730	679	655	593	544	528	500	475	464	432	404	395	380	365	358	339	316	306	297	279	
Live Load	(lbs/ft.)	1304	978	782	680	651	601	559	539	489	447	428	411	385	382	356	334	325	313	300	295	279	260	252	245	230	
6. Maximum bending moment capacity M_1	(ft.-lbs.)	5896	5896	5896	5896	5896	5896	5896	5896	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	15632	15632	15632	15632	

Design Data

f_x = 5,000 psi (minimum)
f_y = 60,000 psi (per ASTM-A615)
Average weight per lineal foot of beam - 50 lbs (Grouted Solid)
Seismic Capability
Design formulas as per ACI 318-12
M_n= Moment governed by ultimate strength = 0.9 $(A_2)(f_2)(d-a/2)$
V_n= Shear governed by ultimate strength
M_n= 1/8 W_n $(L_2)^2$
V_n= 1/2 $W_n L_2$
max = Maximum allowable deflection = $L_2/360 \leq 0.3$" (9ft Lintel)
UL Fire Ratings 1-1/2 hour

Typical Section:

Width (W) = 5-5/8"
Height (H) = 7.625"
Eff. Depth (d) = H-1-1/2" 1/2" bar dia.

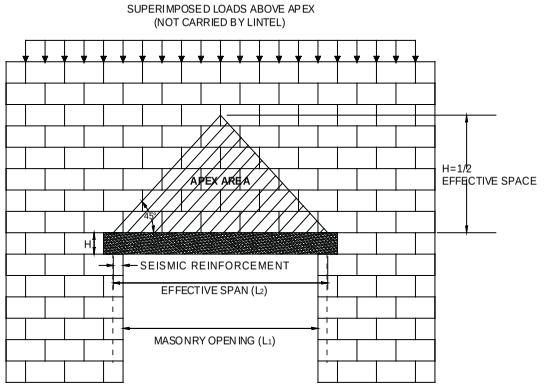
As a minimum, the lintels carry the apex area above the span. An example of the uniform equivalent apex load calculation follows.

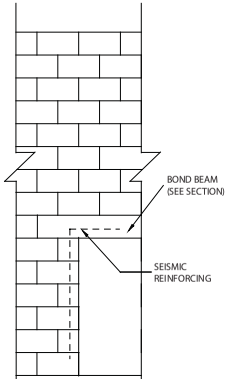
Hollow masonry block weights for determining uniform equivalent apex load on lintel:
6" block weight = 30 psf (Hollow)
12" block weight = 50 psf (Hollow)

Equivalent load of apex area = .33 WL
Effective span "L" of lintel (centerline of bearing to centerline of bearing).
Weight of masonry block "W" PSF

EXAMPLE

Equivalent apex load for 6"X8" Lintel with effective span of 48"
Apex Load = (.33) (W) (L) = .33 (35psf/2) (48"/12) = 20#FT
Capacity of 6X8 lintel with effective span of 48"
(from load table for live loads) = 2916#/FT
Therefore, the lintel has significant excess capacity, if superimposed load is located within apex area, then refer to the load tables to ensure sufficient capacity.





U- LINTELS - 8" x 8"

900 North Hartley Street, York, PA 17404 | 717.792.4700 | www.yorkbuilding.com

8x8 "U" LINTELS		5,000 psi PRECAST BOND BEAM LINTELS										Self Weight 39#/ft																			
1. Reinforcement rods (A_1)	Top	(2) #3											(2) #3																(2) #3			
	Bottom	(2) #5																														
2. Nominal lintel length (inches)		32	36	40	42	44	48	54	56	60	64	66	72	78	80	84	88	90	96	102	104	108	112	114	120	128	132	136	144		
3. Masonry opening L_1 (inches)		16	20	24	26	28	32	38	40	44	48	50	58	62	64	68	72	74	80	86	88	92	96	98	104	112	116	120	128		
4. Effective span L_2 (inches)		24	28	32	34	36	40	48	48	52	56	58	64	70	72	76	80	82	88	94	96	100	104	106	112	120	124	128	136		
5. Maximum allowable load Unfactored	(lbs/ft.)	2957	2534	2217	2087	1971	1744	1544	1478	1367	1267	1223	1109	1014	985	934	887	865	806	755	739	710	682	669	634	591	572	554	522		
Dead Load	(lbs/ft.)	2112	1810	1583	1490	1408	1245	1102	1055	976	905	874	792	724	703	667	634	618	576	539	528	507	487	478	453	422	408	396	373		
Live Load	(lbs/ft.)	1739	1490	1304	1227	1159	1024	908	869	804	745	719	652	596	579	549	522	509	474	444	435	417	401	393	373	347	336	326	307		
6. Maximum bending moment capacity M_1	(ft.-lbs.)	5896	5896	5896	5896	5896	5896	5896	5896	5896	5896	5896	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	10434	15632	15632	15632	15632		

Design Data

f_x = 5,000 psi (minimum)
f_y = 60,000 psi (per ASTM-A615)
Average weight per lineal foot of beam - 65 lbs (Grouted Solid)
Seismic Capability
Design formulas as per ACI 318-12
M_n= Moment governed by ultimate strength = 0.9 $(A_2)(f_2)(d-a/2)$
V_n= Shear governed by ultimate strength
M_n= 1/8 W_n $(L_2)^2$
V_n= 1/2 $W_n L_2$
max = Maximum allowable deflection = $L_2/360 \leq 0.3$" (9ft Lintel)
UL Fire Ratings 1-1/2 hour

Typical Section:

Width (W) = 7-5/8"
Height (H) = 7.625"
Eff. Depth (d) = H-1-1/2" 1/2" bar dia.

As a minimum, the lintels carry the apex area above the span. An example of the uniform equivalent apex load calculation follows.

Hollow masonry block weights for determining uniform equivalent apex load on lintel:
8" block weight = 35 psf (Hollow)
12" block weight = 50 psf (Hollow)

Equivalent load of apex area = .33 WL
Effective span "L" of lintel (centerline of bearing to centerline of bearing).
Weight of masonry block "W" PSF

EXAMPLE

Equivalent apex load for 8"X8" Lintel with effective span of 48"
Apex Load = (.33) (W) (L) = .33 (35psf) (48"/12) = 46#FT
Capacity of 8X8 lintel with effective span of 48"
(from load table for live loads) = 2988#/FT
Therefore, the lintel has significant excess capacity, if superimposed load is located within apex area, then refer to the load tables to ensure sufficient capacity.