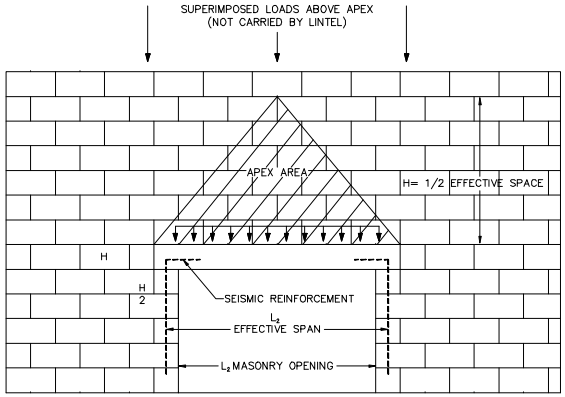
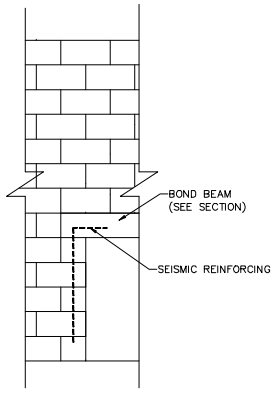


ELEVATION VIEW



ELEVATION VIEW

PARKER BLOCK CO.INC.

Not Just Block!

30234 Millsboro Highway
Millsboro, DE 19966
Phone: 302-934-9237

8X8 LINTELS 3,500 psi PRECAST BOND BEAM LINTELS

1. Reinforcement rods (A_s)	Top	(2) #3											(2) #3														(2) #3			
	Bottom	(1) #3											(2) #4														(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_s (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_s (inches)		24	28	32	34	36	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 Balanced condition	(lbs.–ft.)	11594	8542	7402	6506	5914	4182	3212	2898	2476	2126	2012	1632	2330	2176	1960	1762	1694	1458	1288	1226	1130	1042	1014	900	784	736	690	612		
Dead Load	(lbs.–ft.)	8282	6102	5288	4648	4224	2988	2294	2070	1766	1518	1438	1166	1664	1554	1400	1258	1210	1042	920	876	808	744	724	642	560	526	492	438		
Live Load	(lbs.–ft.)	6820	5024	4354	3828	3578	2460	1890	1704	1454	1250	1184	960	1370	1280	1152	1036	996	858	758	722	664	612	596	530	462	432	406	360		
6. Maximum bending moment capacity M_n	(lbs.–ft.)	5796	5796	5796	5796	5796	5796	5796	5796	5796	5796	5796	5796	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800	9800		

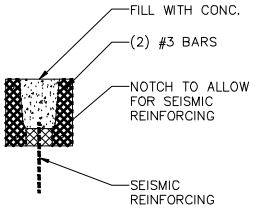
Design Data
f'_c=3,500psi (minimum)
f_y=60,000psi (per ASTM-A615)
Average weight per lineal foot of beam - 56 lbs
Seismic Capability
Design formulas as per ACI 318-95
M_n= Moment governed by ultimate strength = 0.9 (A_s) (f) (d-a/2)
V_n= Shear governed by ultimate strength
M_n= 1/8 W, $(L_s)^2$
V_n= 1/2 W, L_2
max = Maximum allowable deflection = L_s/360 ≤0.3"
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.

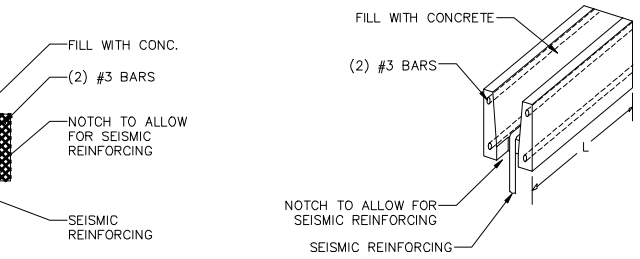
As a minimum, the lintels carry the apex area above the span. An example of the uniform equivalent apex load calculation follows.

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 4"X8" Lintel with effective span of 48"
Apex Load = (.33) (W) (L) = .33 (35 psf/2) (48"/12) = 23#/FT
Capacity of 4X8 lintel with effective span of 48"
(from load table for live loads) = 852 #/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.



SECTION @ BOND BEAM



PERSPECTIVE VIEW