Benefits...

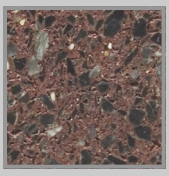
- √ Available in lengths up to 88"
- √ Load-bearing, includes rebar
- √ Four designer colors available
- √ Contrast with brick, architectural CMU, or other masonry material
- √ Use in place of:
  - 4x8x16 CMU & steel angle
  - brick soldiers & steel angle
  - cast stone lintels

Architectural Concrete Lintels In Ground Face or Weathered Face

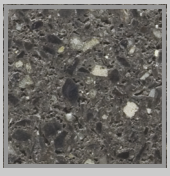
Available Colors:

N0714
New Holland White

N0706
Cream



N1062
Hershey Red



N1063
Charcoal

A New Option. After many years of use, architects and designers have been in search of an alternative to cast stone or brick soldier coursing as an option to finish openings in their projects.

Enter Structural Architectural Concrete Lintels. Produced with internal rebar, our architectural concrete lintels are load-bearing units, providing the stability to finish your project .

And with four colors, two finishes, and a variety of length options, our new lintel collection can meet most project needs.

To learn more, please contact our architectural representative at 800.543.3860 today.

New Holland CONCRETE
Architectural Products

4" x 8" Lintels — Technical Design Information

Design Data:
f'_c = 3,000 psi (minimum)
F_y = 60,000 psi (per **ASTM-A615)**
Average weight per lineal foot of beam - *28* lbs.

Design formulas as per ACI 318-95:
M_n = Moment governed by ultimate strength = 0.9 (A_s) (f_y) (d-a/2)
V_n = Shear governed by ultimate strength ≤ 1/2 Ø $(2\sqrt{f'_c}b_w d)$
M_n = 1/8 W_n $(L_2)^2$
V_n = 1/2 W_n L_2
max = Maximum allowable deflection = $L_2/360 \leq 0.3$"
UL Fire Ratings= 1 1/2 hour

Typical Section:
Width (W) = 3.625 inches
Height (H) = 7.625 inches
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" X 8" Lintel with effective span of 48"
Apex Load = **(.33)** (W) (L) = .33 (35 psf/2) (48" /12) = **23#/FT**
Capacity of 4 X 8 lintel with effective span of 48"
(from toad 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.

1. Reinforcement Rods (A_s)	Top	Not Required							1#3					1#3				
	Bottom	1#3							1#3					1#4				
2. Nom. lintel length	(inches)	32	36	40	42	44	48	54	58	60	64	66	72	78	80	84	88	
3. Masonry Opening L_1	(inches)	16	20	24	26	28	32	38	40	44	48	50	56	62	64	68	72	
4. Effective Span L_2	(inches)	24	28	32	34	36	40	46	48	52	56	58	64	70	72	76	80	
5. Maximum allowable load**	(lbs./ft.)	5797	4271	3701	3253	2957	2091	1606	1449	1236	1063	1006	816	1165	1088	980	881	
Dead Load	(lbs./ft.)	4141	3051	2644	2324	2112	1494	1147	1035	883	759	719	583	832	777	700	629	
Live Load	(lbs./ft.)	3410	2512	2177	1914	1739	1230	945	852	727	625	592	480	685	640	576	518	
6. Maximum bending moment capacity, M_n***	(lbs./ft.)	2898	2898	2898	2898	2898	2898	2898	2898	2898	2898	2898	2898	4900	4900	4900	4900	

** Maximum allowable superimposed W_n uniformly distributed load covered by bending (lbs./ft.) *** For special loading conditions compare actual moment to Mr