APPENDIX C
LINTEL DESIGN AIDS

C-1. This appendix contains tables that can be used in the design of concrete masonry lintels.

Table C-1. 6" CMU lintel 8" deep—1 bar Type S mortar

b = 5.62 in
d = 4.62 in

f'm = 1,350 psi
Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	2.00	0.0077	44	834	1,581	954
1-#5	0.31	2.33	0.0119	59	944	2,383	
1-#6	0.44	2.60	0.0169	71	1,030	3,302	
1-#7	0.60	2.85	0.0231	84	1,102	4,411	
1-#8	0.79	3.06	0.0304	95	1,162	5,686	

Table C-2. 6" CMU lintel 16" deep—1 bar Type S mortar

b = 5.62 in
d = 12.62 in

f'm = 1,350 psi
Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	3.69	0.0028	437	4,433	4,555	2,606
1-#5	0.31	4.41	0.0044	610	5,182	6,913	
1-#6	0.44	5.05	0.0062	783	5,817	9,625	
1-#7	0.60	5.66	0.0085	965	6,398	12,903	
1-#8	0.79	6.22	0.0111	1,146	6,911	16,665	

Table C-3. 6" CMU lintel 24" deep—1 bar Type S mortar

b = 5.62 in
d = 20.62 in

f'm = 1,350 psi
Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	4.90	0.0017	1,282	9,808	7,594	4,258
1-#5	0.31	5.91	0.0027	1,828	11,606	11,564	
1-#6	0.44	6.81	0.0038	2,394	13,176	16,147	
1-#7	0.60	7.70	0.0052	3,010	14,654	21,699	
1-#8	0.79	8.54	0.0068	3,643	15,996	28,081	

Table C-4. 6" CMU lintel 32" deep—1 bar Type S mortar

b = 5.62 in
d = 28.62 in

f'm = 1,350 psi
Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	5.89	0.0012	2,602	16,557	10,662	5,910
1-#5	0.31	7.14	0.0019	3,754	19,731	16,270	
1-#6	0.44	8.27	0.0027	4,974	22,546	22,759	
1-#7	0.60	9.40	0.0037	6,325	25,240	30,636	
1-#8	0.79	10.47	0.0049	7,741	27,725	39,706	

Table C-5. 6" CMU lintel 40" deep—1 bar Type S mortar

b = 5.62 in
d = 36.62 in

f'm = 1,350 psi
Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	6.76	0.0010	4,409	24,471	13,747	7,562
1-#5	0.31	8.21	0.0015	6,412	29,300	21,009	
1-#6	0.44	9.54	0.0021	8,558	33,627	29,426	
1-#7	0.60	10.88	0.0029	10,966	37,813	39,660	
1-#8	0.79	12.16	0.0038	13,522	41,715	51,458	

Table C-6. 6" CMU lintel 48" deep—1 bar Type S mortar

b = 5.62 in f'm = 1,350 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	7.53	0.0008	6,710	33,415	16,844	9,214
1-#5	0.31	9.17	0.0012	9,813	40,147	25,770	
1-#6	0.44	10.68	0.0018	13,170	46,225	36,132	
1-#7	0.60	12.20	0.0024	16,971	52,149	48,744	
1-#8	0.79	13.67	0.0032	21,041	57,716	63,299	

Table C-7. 8" CMU lintel 8" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	2.29	0.0114	77	1,263	3,085	1,293
2-#5	0.62	2.63	0.0176	99	1,408	4,640	
2-#6	0.88	2.91	0.0250	118	1,518	6,423	
2-#7	1.20	3.15	0.0341	135	1,607	8,567	
2-#8	1.58	3.36	0.0449	150	1,679	11,064	

Table C-8. 8" CMU lintel 16" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	4.33	0.0042	797	6,908	8,943	3,533
2-#5	0.62	5.12	0.0064	1,090	7,984	13,532	
2-#6	0.88	5.81	0.0092	1,375	8,871	18,802	
2-#7	1.20	6.46	0.0125	1,663	9,657	25,122	
2-#8	1.58	7.05	0.0164	1,943	10,341	32,457	

Table C-9. 8" CMU lintel 24" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	5.78	0.0025	2,383	15,448	14,954	5,773
2-#5	0.62	6.92	0.0039	3,341	18,107	22,708	
2-#6	0.88	7.93	0.0056	4,311	20,376	31,637	
2-#7	1.20	8.90	0.0076	5,331	22,455	42,365	
2-#8	1.58	9.81	0.0101	6,364	24,322	54,824	

Table C-10. 8" CMU lintel 32" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	6.99	0.0018	4,888	26,239	21,033	8,013
2-#5	0.62	8.41	0.0028	6,951	31,008	32,014	
2-#6	0.88	9.69	0.0040	9,085	35,155	44,686	
2-#7	1.20	10.94	0.0055	11,383	39,028	59,938	
2-#8	1.58	12.12	0.0072	13,762	42,572	77,670	

Table C-11. 8" CMU lintel 40" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	8.03	0.0014	8,339	38,942	27,155	10,253
2-#5	0.62	9.70	0.0022	11,970	46,273	41,399	
2-#6	0.88	11.22	0.0032	15,784	52,729	57,866	
2-#7	1.20	12.72	0.0043	19,952	58,835	77,714	
2-#8	1.58	14.15	0.0057	24,333	64,493	100,816	

Table C-12. 8" CMU lintel 48" deep—2 bars Type S mortar

b = 7.62 in f'm = 1,350 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	8.97	0.0012	12,754	53,336	33,305	12,493
2-#5	0.62	10.86	0.0018	18,433	63,632	50,839	
2-#6	0.88	12.60	0.0026	24,463	72,784	71,137	
2-#7	1.20	14.32	0.0035	31,125	81,517	95,633	
2-#8	1.58	15.97	0.0046	38,205	89,685	124,173	

Table C-13. 10" CMU lintel 8" deep—2 bar Type S mortar

b = 9.62 in f'm = 1,350 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	2.12	0.0090	84	1,494	3,132	1,633
2-#5	0.62	2.45	0.0140	110	1,681	4,716	
2-#6	0.88	2.73	0.0198	133	1,826	6,531	
2-#7	1.20	2.97	0.0270	154	1,946	8,710	
2-#8	1.58	3.18	0.0356	173	2,044	11,246	

Table C-14. 10" CMU lintel 16" deep—2 bar Type S mortar

b = 9.62 in f'm = 1,350 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	3.94	0.0033	844	8,032	9,046	4,461
2-#5	0.62	4.69	0.0051	1,168	9,348	13,712	
2-#6	0.88	5.35	0.0072	1,490	10,452	19,075	
2-#7	1.20	5.97	0.0099	1,822	11,447	25,512	
2-#8	1.58	6.55	0.0130	2,152	12,325	32,984	

Table C-15. 10" CMU lintel 24" deep—2 bar Type S mortar

b = 9.62 in f'm = 1,350 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	5.24	0.0020	2,494	17,843	15,098	7,288
2-#5	0.62	6.30	0.0031	3,533	21,038	22,966	
2-#6	0.88	7.25	0.0044	4,601	23,802	32,038	
2-#7	1.20	8.17	0.0060	5,744	26,370	42,953	
2-#8	1.58	9.04	0.0080	6,920	28,708	55,637	

Table C-16. 10" CMU lintel 32" deep—2 bar *Type S mortar*

b = 9.62 in f'm = 1,350 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	6.31	0.0015	5,082	30,192	21,213	10,116
2-#5	0.62	7.62	0.0023	7,292	35,865	32,337	
2-#6	0.88	8.82	0.0032	9,611	40,859	45,196	
2-#7	1.20	9.99	0.0044	12,144	45,578	60,695	
2-#8	1.58	11.11	0.0057	14,804	49,948	78,732	

Table C-17. 10" CMU lintel 40" deep—2 bar *Type S mortar*

b = 9.62 in f'm = 1,350 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	7.24	0.0011	8,634	44,695	27,364	12,944
2-#5	0.62	8.78	0.0018	12,493	53,359	41,780	
2-#6	0.88	10.19	0.0025	16,598	61,073	58,472	
2-#7	1.20	11.58	0.0034	21,142	68,445	78,621	
2-#8	1.58	12.93	0.0045	25,980	75,352	102,100	

Table C-18. 10" CMU lintel 48" deep—2 bar *Type S mortar*

b = 9.62 in f'm = 1,350 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	8.08	0.0009	13,164	61,101	33,542	15,771
2-#5	0.62	9.82	0.0014	19,166	73,214	51,271	
2-#6	0.88	11.42	0.0021	25,612	84,086	71,830	
2-#7	1.20	13.01	0.0028	32,818	94,562	96,676	
2-#8	1.58	14.56	0.0037	40,567	104,458	125,659	

Table C-19. 12" CMU lintel 8" deep—2 bars *Type S mortar*

b = 11.62 in f'm = 1,350 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	1.98	0.0075	90	1,706	3,169	1,972
2-#5	0.62	2.30	0.0115	119	1,934	4,776	
2-#6	0.88	2.58	0.0164	145	2,112	6,619	
2-#7	1.20	2.82	0.0224	170	2,263	8,829	
2-#8	1.58	3.04	0.0294	194	2,388	11,398	

Table C-20. 12" CMU lintel 16" deep—2 bar *Type S mortar*

b = 11.62 in f'm = 1,350 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	3.64	0.0027	880	9,054	9,124	5,388
2-#5	0.62	4.35	0.0042	1,230	10,593	13,849	
2-#6	0.88	4.98	0.0060	1,582	11,901	19,287	
2-#7	1.20	5.59	0.0082	1,951	13,094	25,819	
2-#8	1.58	6.15	0.0108	2,322	14,160	33,403	

Table C-21. 12" CMU lintel 24" deep—2 bar Type S mortar

b = 11.62 in f'm = 1,350 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	4.83	0.0017	2,579	20,013	15,207	8,804
2-#5	0.62	5.82	0.0026	3,681	23,701	23,162	|
2-#6	0.88	6.72	0.0037	4,828	26,925	32,346	|
2-#7	1.20	7.60	0.0050	6,070	29,950	43,408	|
2-#8	1.58	8.44	0.0066	7,364	32,732	56,273	|

Table C-22. 12" CMU lintel 32" deep—2 bar Type S mortar

b = 11.62 in f'm = 1,350 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	5.81	0.0012	5,230	33,768	21,347	12,219
2-#5	0.62	7.03	0.0019	7,554	40,270	32,581	|
2-#6	0.88	8.16	0.0026	10,018	46,042	45,584	|
2-#7	1.20	9.27	0.0036	12,737	51,546	61,275	|
2-#8	1.58	10.34	0.0048	15,624	56,688	79,553	|

Table C-23. 12" CMU lintel 40" deep—2 bar Type S mortar

b = 11.62 in f'm = 1,350 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	6.66	0.0009	8,857	49,894	27,521	15,635
2-#5	0.62	8.09	0.0015	12,892	59,776	42,066	|
2-#6	0.88	9.41	0.0021	17,223	68,643	58,931	|
2-#7	1.20	10.72	0.0028	22,064	77,183	79,312	|
2-#8	1.58	11.99	0.0037	27,266	85,248	103,085	|

Table C-24. 12" CMU lintel 48" deep—2 bar Type S mortar

b = 11.62 in f'm = 1,350 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	7.42	0.0008	13,473	68,114	33,718	19,050
2-#5	0.62	9.03	0.0012	19,722	81,882	51,596	|
2-#6	0.88	10.53	0.0017	26,491	94,328	72,353	|
2-#7	1.20	12.03	0.0023	34,122	106,405	97,468	|
2-#8	1.58	13.49	0.0030	42,400	117,898	126,794	|

Table C-25. 6" CMU lintel 8" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	2.22	0.0077	54	673	1,551	821
1-#5	0.31	2.56	0.0119	70	754	2,334	|
1-#6	0.44	2.84	0.0169	83	815	3,232	|
1-#7	0.60	3.09	0.0231	96	865	4,317	|
1-#8	0.79	3.29	0.0304	107	905	5,566	|

Table C-26. 6" CMU lintel 16" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	4.18	0.0028	550	3,659	4,491	2,243
1-#5	0.31	4.95	0.0044	756	4,241	6,801	
1-#6	0.44	5.63	0.0062	958	4,723	9,453	
1-#7	0.60	6.27	0.0085	1,165	5,156	12,656	
1-#8	0.79	6.86	0.0111	1,365	5,530	16,329	

Table C-27. 6" CMU lintel 24" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	5.57	0.0017	1,637	8,162	7,505	3,665
1-#5	0.31	6.68	0.0027	2,305	9,589	11,404	
1-#6	0.44	7.67	0.0038	2,985	10,813	15,896	
1-#7	0.60	8.63	0.0052	3,710	11,947	21,329	
1-#8	0.79	9.52	0.0068	4,439	12,959	27,568	

Table C-28. 6" CMU lintel 32" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	6.72	0.0012	3,350	13,843	10,552	5,086
1-#5	0.31	8.10	0.0019	4,781	16,392	16,070	
1-#6	0.44	9.35	0.0027	6,269	18,619	22,442	
1-#7	0.60	10.58	0.0037	7,891	20,720	30,163	
1-#8	0.79	11.73	0.0049	9,559	22,630	39,040	

Table C-29. 6" CMU lintel 40" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	7.72	0.0010	5,706	20,524	13,618	6,508
1-#5	0.31	9.34	0.0015	8,217	24,432	20,774	
1-#6	0.44	10.82	0.0021	10,867	27,889	29,051	
1-#7	0.60	12.29	0.0029	13,795	31,190	39,095	
1-#8	0.79	13.68	0.0038	16,852	34,227	50,656	

Table C-30. 6" CMU lintel 48" deep—1 bar Type N mortar

b = 5.62 in f'm = 1,000 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
1-#4	0.20	8.62	0.0008	8,717	28,089	16,699	7,930
1-#5	0.31	10.45	0.0012	12,634	33,569	25,504	
1-#6	0.44	12.14	0.0018	16,813	38,458	35,703	
1-#7	0.60	13.82	0.0024	21,479	43,167	48,096	
1-#8	0.79	15.43	0.0032	26,403	47,539	62,374	

Table C-31. 8" CMU lintel 8" deep—2 bars Type N mortar

b = 7.62 in f'm = 1,000 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	2.53	0.0114	92	1,010	3,023	1,113
2-#5	0.62	2.87	0.0176	115	1,113	4,542	
2-#6	0.88	3.14	0.0250	135	1,189	6,287	
2-#7	1.20	3.37	0.0341	152	1,248	8,389	
2-#8	1.58	3.56	0.0449	166	1,294	10,845	

Table C-32. 8" CMU lintel 16" deep—2 bar Type N mortar

b = 7.62 in f'm = 1,000 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	4.86	0.0042	990	5,658	8,800	3,041
2-#5	0.62	5.71	0.0064	1,331	6,476	13,289	
2-#6	0.88	6.44	0.0092	1,653	7,135	18,435	
2-#7	1.20	7.10	0.0125	1,969	7,705	24,608	
2-#8	1.58	7.70	0.0164	2,269	8,189	31,773	

Table C-33. 8" CMU lintel 24" deep—2 bar Type N mortar

b = 7.62 in f'm = 1,000 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	6.55	0.0025	3,010	12,774	14,750	4,969
2-#5	0.62	7.78	0.0039	4,160	14,848	22,352	
2-#6	0.88	8.87	0.0056	5,296	16,583	31,087	
2-#7	1.20	9.90	0.0076	6,464	18,142	41,571	
2-#8	1.58	10.84	0.0101	7,618	19,515	53,738	

Table C-34. 8" CMU lintel 32" deep—2 bar Type N mortar

b = 7.62 in f'm = 1,000 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	7.94	0.0018	6,232	21,815	20,780	6,896
2-#5	0.62	9.50	0.0028	8,751	25,589	31,562	
2-#6	0.88	10.90	0.0040	11,303	28,815	43,979	
2-#7	1.20	12.23	0.0055	13,995	31,776	58,901	
2-#8	1.58	13.49	0.0072	16,724	34,439	76,230	

Table C-35. 8" CMU lintel 40" deep—2 bar Type N mortar

b = 7.62 in f'm = 1,000 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	9.15	0.0014	10,699	32,495	26,857	8,824
2-#5	0.62	11.00	0.0022	15,183	38,352	40,864	
2-#6	0.88	12.67	0.0032	19,804	43,431	57,020	
2-#7	1.20	14.28	0.0043	24,764	48,160	76,461	
2-#8	1.58	15.82	0.0057	29,880	52,475	99,059	

Table C–36. 8″ CMU lintel 48″ deep—2 bar Type N mortar

b = 7.62 in f′m = 1,000 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft–lb	Mrs ft–lb	V lb
2–#4	0.40	10.23	0.0012	16,438	44,626	32,967	10,752
2–#5	0.62	12.34	0.0018	23,508	52,909	50,227	
2–#6	0.88	14.26	0.0026	30,888	60,167	70,165	
2–#7	1.20	16.13	0.0035	38,906	66,996	94,183	
2–#8	1.58	17.92	0.0046	47,281	73,293	122,124	

Table C–37. 10″ CMU lintel 8″ deep—2 bar Type N mortar

b = 9.62 in f′m = 1,000 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft–lb	Mrs ft–lb	V lb
2–#4	0.40	2.34	0.0090	101	1,202	3,071	1,405
2–#5	0.62	2.69	0.0140	129	1,337	4,618	
2–#6	0.88	2.96	0.0198	153	1,438	6,392	
2–#7	1.20	3.20	0.0270	175	1,520	8,526	
2–#8	1.58	3.40	0.0356	194	1,585	11,014	

Table C–38. 10″ CMU lintel 16″ deep—2 bar Type N mortar

b = 9.62 in f′m = 1,000 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft–lb	Mrs ft–lb	V lb
2–#4	0.40	4.44	0.0033	1,057	6,610	8,912	3,839
2–#5	0.62	5.25	0.0051	1,441	7,624	13,479	
2–#6	0.88	5.95	0.0072	1,811	8,455	18,721	
2–#7	1.20	6.60	0.0099	2,183	9,188	25,008	
2–#8	1.58	7.19	0.0130	2,543	9,822	32,304	

Table C–39. 10″ CMU lintel 24″ deep—2 bar Type N mortar

b = 9.62 in f′m = 1,000 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft–lb	Mrs ft–lb	V lb
2–#4	0.40	5.95	0.0020	3,172	14,812	14,910	6,273
2–#5	0.62	7.11	0.0031	4,434	17,331	22,631	
2–#6	0.88	8.14	0.0044	5,704	19,471	31,517	
2–#7	1.20	9.12	0.0060	7,035	21,424	42,191	
2–#8	1.58	10.04	0.0080	8,374	23,170	54,584	

Table C–40. 10″ CMU lintel 32″ deep—2 bar Type N mortar

b = 9.62 in f′m = 1,000 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft–lb	Mrs ft–lb	V lb
2–#4	0.40	7.19	0.0015	6,519	25,189	20,979	8,707
2–#5	0.62	8.64	0.0023	9,246	29,720	31,917	
2–#6	0.88	9.95	0.0032	12,054	33,645	44,533	
2–#7	1.20	11.22	0.0044	15,065	37,298	59,712	
2–#8	1.58	12.42	0.0057	18,169	40,628	77,355	

Table C-41. 10" CMU lintel 40" deep—2 bar Type N mortar

b = 9.62 in f'm = 1,000 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	8.27	0.0011	11,137	37,413	27,091	11,140
2-#5	0.62	9.98	0.0018	15,948	44,391	41,284	|
2-#6	0.88	11.54	0.0025	20,980	50,518	57,683	|
2-#7	1.20	13.06	0.0034	26,460	56,292	77,443	|
2-#8	1.58	14.51	0.0045	32,195	61,626	100,433	|

Table C-42. 10" CMU lintel 48" deep—2 bar Type N mortar

b = 9.62 in f'm = 1,000 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	9.24	0.0009	17,050	51,271	33,233	13,574
2-#5	0.62	11.18	0.0014	24,587	61,087	50,708	|
2-#6	0.88	12.96	0.0021	32,560	69,786	70,928	|
2-#7	1.20	14.71	0.0028	41,339	78,062	95,320	|
2-#8	1.58	16.40	0.0037	50,634	85,779	123,728	|

Table C-43. 12" CMU lintel 8" deep—2 bars Type N mortar

b = 11.62 in f'm = 1,000 psi
d = 4.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	2.20	0.0075	109	1,379	3,110	1,698
2-#5	0.62	2.54	0.0115	141	1,546	4,680	|
2-#6	0.88	2.82	0.0164	170	1,673	6,479	|
2-#7	1.20	3.06	0.0224	196	1,777	8,641	|
2-#8	1.58	3.27	0.0294	219	1,862	11,158	|

Table C-44. 12" CMU lintel 16" deep—2 bar Type N mortar

b = 11.62 in f'm = 1,000 psi
d = 12.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	4.12	0.0027	1,109	7,478	8,997	4,637
2-#5	0.62	4.89	0.0042	1,527	8,674	13,627	|
2-#6	0.88	5.57	0.0060	1,938	9,670	18,946	|
2-#7	1.20	6.20	0.0082	2,357	10,561	25,327	|
2-#8	1.58	6.78	0.0108	2,770	11,341	32,733	|

Table C-45. 12" CMU lintel 24" deep—2 bar Type N mortar

b = 11.62 in f'm = 1,000 psi
d = 20.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	5.50	0.0017	3,296	16,663	15,031	7,577
2-#5	0.62	6.59	0.0026	4,648	19,593	22,845	|
2-#6	0.88	7.57	0.0037	6,026	22,111	31,850	|
2-#7	1.20	8.51	0.0050	7,491	24,436	42,676	|
2-#8	1.58	9.40	0.0066	8,985	26,539	55,253	|

Table C-46. 12" CMU lintel 32" deep--2 bar *Type N mortar*

b = 11.62 in f'm = 1,000 psi
d = 28.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	6.63	0.0012	6,738	28,245	21,129	10,517
2-#5	0.62	7.99	0.0019	9,628	33,472	32,186	|
2-#6	0.88	9.23	0.0026	12,641	38,046	44,957	|
2-#7	1.20	10.44	0.0036	15,909	42,345	60,339	|
2-#8	1.58	11.59	0.0048	19,319	46,305	78,232	|

Table C-47. 12" CMU lintel 40" deep--2 bar *Type N mortar*

b = 11.62 in f'm = 1,000 psi
d = 36.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	7.61	0.0009	11,469	41,862	27,267	13,456
2-#5	0.62	9.21	0.0015	16,534	49,869	41,602	|
2-#6	0.88	10.68	0.0021	21,890	56,961	58,188	|
2-#7	1.20	12.12	0.0028	27,785	63,705	78,196	|
2-#8	1.58	13.50	0.0037	34,022	69,992	101,497	|

Table C-48. 12" CMU lintel 48" deep--2 bar *Type N mortar*

b = 11.62 in f'm = 1,000 psi
d = 44.62 in Fs = 24,000 psi

Reinf	As in2	kd in	p	Icr in4	Mrm ft-lb	Mrs ft-lb	V lb
2-#4	0.40	8.49	0.0008	17,513	57,279	33,431	16,396
2-#5	0.62	10.31	0.0012	25,410	68,495	51,069	|
2-#6	0.88	11.97	0.0017	33,848	78,518	71,506	|
2-#7	1.20	13.63	0.0023	43,229	88,131	96,188	|
2-#8	1.58	15.23	0.0030	53,261	97,171	124,962	|