

EXTERIOR FOUNDATION TABLE FRAME WALL BRICK VENEER

Load Bearing Value of Soil (psf)		2000									
Footing Width (in)			16	20	24	28	32	36	40	44	48
Wall Supporting	Footing Thickness (in)	Wall PLF to Footing	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)
Roof and Ceiling	8	1500	6514	10236	13958	17681	21403	25125	28847	32569	36292
	10	1500	6903	10847	14792	18736	22681	26625	30569	34514	38458
	12	1500	7292	11458	15625	19792	23958	28125	32292	36458	40625
	14	1500	7681	12069	16458	20847	25236	29625	34014	38403	42792
	16	1500	8069	12681	17292	21903	26514	31125	35736	40347	44958
	18	1500	8458	13292	18125	22958	27792	32625	37458	42292	47125
Roof, Ceiling and One Center Bearing Floor	8	1950	4001	7724	11446	15168	18890	22613	26335	30057	33779
	10	1950	4240	8185	12129	16074	20018	23963	27907	31851	35796
	12	1950	4479	8646	12813	16979	21146	25313	29479	33646	37813
	14	1950	4718	9107	13496	17885	22274	26663	31051	35440	39829
	16	1950	4957	9568	14179	18790	23401	28013	32624	37235	41846
	18	1950	5196	10029	14863	19696	24529	29363	34196	39029	43863
Roof, Ceiling and One Floor Clear Span	8	2400	1489	5211	8933	12656	16378	20100	23822	27544	31267
	10	2400	1578	5522	9467	13411	17356	21300	25244	29189	33133
	12	2400	1667	5833	10000	14167	18333	22500	26667	30833	35000
	14	2400	1756	6144	10533	14922	19311	23700	28089	32478	36867
	16	2400	1844	6456	11067	15678	20289	24900	29511	34122	38733
	18	2400	1933	6767	11600	16433	21267	26100	30933	35767	40600
Roof, Ceiling, and Two Center Bearing Floor	8	2850	-1024	2699	6421	10143	13865	17588	21310	25032	28754
	10	2850	-1085	2860	6804	10749	14693	18638	22582	26526	30471
	12	2850	-1146	3021	7188	11354	15521	19688	23854	28021	32188
	14	2850	-1207	3182	7571	11960	16349	20738	25126	29515	33904
	16	2850	-1268	3343	7954	12565	17176	21788	26399	31010	35621
	18	2850	-1329	3504	8338	13171	18004	22838	27671	32504	37338
Roof, Ceiling, and Two Clear Span Floor	8	3660	-5546	-1824	1898	5621	9343	13065	16787	20509	24232
	10	3660	-5877	-1933	2012	5956	9901	13845	17789	21734	25678
	12	3660	-6208	-2042	2125	6292	10458	14625	18792	22958	27125
	14	3660	-6539	-2151	2238	6627	11016	15405	19794	24183	28572
	16	3660	-6871	-2259	2352	6963	11574	16185	20796	25407	30018
	18	3660	-7202	-2368	2465	7298	12132	16965	21798	26632	31465
Roof, Ceiling, and Three Center Bearing Floor	8	3750	-6049	-2326	1396	5118	8840	12563	16285	20007	23729
	10	3750	-6410	-2465	1479	5424	9368	13313	17257	21201	25146
	12	3750	-6771	-2604	1563	5729	9896	14063	18229	22396	26563
	14	3750	-7132	-2743	1646	6035	10424	14813	19201	23590	27979
	16	3750	-7493	-2882	1729	6340	10951	15563	20174	24785	29396
	18	3750	-7854	-3021	1813	6646	11479	16313	21146	25979	30813
Roof, Ceiling, and Three Clear Span Floor	8	4920	-12581	-8859	-5137	-1414	2308	6030	9752	13474	17197
	10	4920	-13332	-9388	-5443	-1499	2446	6390	10334	14279	18223
	12	4920	-14083	-9917	-5750	-1583	2583	6750	10917	15083	19250
	14	4920	-14834	-10446	-6057	-1668	2721	7110	11499	15888	20277
	16	4920	-15586	-10974	-6363	-1752	2859	7470	12081	16692	21303
	18	4920	-16337	-11503	-6670	-1837	2997	7830	12663	17497	22330
	20	4920	-17088	-12032	-6977	-1921	3134	8190	13246	18301	23357

"= Overstressed

"= Footing not wide enough for brick & block

"= Footing : width / depth ratio too large

NOTES:

1. Foundation sizes are based on hollow CMU 24" tall capped with 4" of solid masonry for 1 (one) story and 8" of solid masonry for 2 (two) and 2-1/2 story houses. Mortar shall be Type S.
2. Footing sizes are based on attached psf allowable soil bearing.
3. Centers of foundation wall shall bear in the middle 1/3 of the footings.
4. Pier sizes given are minimum for height/thickness.
5. Green and Red shaded areas not applicable.
6. 16" wide footing not applicable to 8" block and brick wall (see purple).

ASSUMPTIONS:

1. FIRST FLOOR 50# PSF (40 PSF LIVE, 10 PSF DEAD)
2. SECOND FLOOR 40# PSF (30 PSF LIVE, 10 PSF DEAD)
3. Third Floor \ ATTIC FLOOR 40 PSF (30PSF LIVE, 10 PSF DEAD)
4. ROOF 40 PSF (20 PSF LIVE, 20 PSF DEAD)
5. Wall weight based on 10' height @ 10psf
6. Foundation based on 24" height 8" CMU @ 80 psf
7. Brick load based on 40 psf

EXTERIOR FOUNDATION TABLE FRAME WALL BRICK VENEER

Load Bearing Value of Soil (psf)		3000									
Footing Width (in)			16	20	24	28	32	36	40	44	48
Wall Supporting	Footing Thickness (in)	Wall PLF to Footing	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)
Roof and Ceiling	8	1500	13958	19542	25125	30708	36292	41875	47458	53042	58625
	10	1500	14792	20708	26625	32542	38458	44375	50292	56208	62125
	12	1500	15625	21875	28125	34375	40625	46875	53125	59375	65625
	14	1500	16458	23042	29625	36208	42792	49375	55958	62542	69125
	16	1500	17292	24208	31125	38042	44958	51875	58792	65708	72625
	18	1500	18125	25375	32625	39875	47125	54375	61625	68875	76125
	20	1500	18958	26542	34125	41708	49292	56875	64458	72042	79625
Roof, Ceiling and One Center Bearing Floor	8	1950	11446	17029	22613	28196	33779	39363	44946	50529	56113
	10	1950	12129	18046	23963	29879	35796	41713	47629	53546	59463
	12	1950	12813	19063	25313	31563	37813	44063	50313	56563	62813
	14	1950	13496	20079	26663	33246	39829	46413	52996	59579	66163
	16	1950	14179	21096	28013	34929	41846	48763	55679	62596	69513
	18	1950	14863	22113	29363	36613	43863	51113	58363	65613	72863
	20	1950	15546	23129	30713	38296	45879	53463	61046	68629	76213
Roof, Ceiling and One Floor Clear Span	8	2400	8933	14517	20100	25683	31267	36850	42433	48017	53600
	10	2400	9467	15383	21300	27217	33133	39050	44967	50883	56800
	12	2400	10000	16250	22500	28750	35000	41250	47500	53750	60000
	14	2400	10533	17117	23700	30283	36867	43450	50033	56617	63200
	16	2400	11067	17983	24900	31817	38733	45650	52567	59483	66400
	18	2400	11600	18850	26100	33350	40600	47850	55100	62350	69600
	20	2400	12133	19717	27300	34883	42467	50050	57633	65217	72800
Roof, Ceiling, and Two Center Bearing Floor	8	2850	6421	12004	17588	23171	28754	34338	39921	45504	51088
	10	2850	6804	12721	18638	24554	30471	36388	42304	48221	54138
	12	2850	7188	13438	19688	25938	32188	38438	44688	50938	57188
	14	2850	7571	14154	20738	27321	33904	40488	47071	53654	60238
	16	2850	7954	14871	21788	28704	35621	42538	49454	56371	63288
	18	2850	8338	15588	22838	30088	37338	44588	51838	59088	66338
	20	2850	8721	16304	23888	31471	39054	46638	54221	61804	69388
Roof, Ceiling, and Two Clear Span Floor	8	3660	1898	7482	13065	18648	24232	29815	35398	40982	46565
	10	3660	2012	7928	13845	19762	25678	31595	37512	43428	49345
	12	3660	2125	8375	14625	20875	27125	33375	39625	45875	52125
	14	3660	2238	8822	15405	21988	28572	35155	41738	48322	54905
	16	3660	2352	9268	16185	23102	30018	36935	43852	50768	57685
	18	3660	2465	9715	16965	24215	31465	38715	45965	53215	60465
	20	3660	2578	10162	17745	25328	32912	40495	48078	55662	63245
Roof, Ceiling, and Three Center Bearing Floor	8	3750	1396	6979	12563	18146	23729	29313	34896	40479	46063
	10	3750	1479	7396	13313	19229	25146	31063	36979	42896	48813
	12	3750	1563	7813	14063	20313	26563	32813	39063	45313	51563
	14	3750	1646	8229	14813	21396	27979	34563	41146	47729	54313
	16	3750	1729	8646	15563	22479	29396	36313	43229	50146	57063
	18	3750	1813	9063	16313	23563	30813	38063	45313	52563	59813
	20	3750	1896	9479	17063	24646	32229	39813	47396	54979	62563
Roof, Ceiling, and Three Clear Span Floor	8	4920	-5137	447	6030	11613	17197	22780	28363	33947	39530
	10	4920	-5443	473	6390	12307	18223	24140	30057	35973	41890
	12	4920	-5750	500	6750	13000	19250	25500	31750	38000	44250
	14	4920	-6057	527	7110	13693	20277	26860	33443	40027	46610
	16	4920	-6363	553	7470	14387	21303	28220	35137	42053	48970
	18	4920	-6670	580	7830	15080	22330	29580	36830	44080	51330
	20	4920	-6977	607	8190	15773	23357	30940	38523	46107	53690

"= Overstressed

"= Footing not wide enough for brick & block

"= Footing : width / depth ratio too large

NOTES:

1. Foundation sizes are based on hollow CMU 24" tall capped with 4" of solid masonry for 1 (one) story and 8" of solid masonry for 2 (two) and 2-1/2 story houses. Mortar shall be Type S.
2. Footing sizes are based on attached psf allowable soil bearing.
3. Centers of foundation wall shall bear in the middle 1/3 of the footings.
4. Pier sizes given are minimum for height/thickness.
5. Green and Red shaded areas not applicable.
6. 16" wide footing not applicable to 8" block and brick wall (see purple).

ASSUMPTIONS:

1. FIRST FLOOR 50# PSF (40 PSF LIVE, 10 PSF DEAD)
2. SECOND FLOOR 40# PSF (30 PSF LIVE, 10 PSF DEAD)
3. Third Floor \ ATTIC FLOOR 40 PSF (30PSF LIVE, 10 PSF DEAD)
4. ROOF 40 PSF (20 PSF LIVE, 20 PSF DEAD)
5. Wall weight based on 10' height @ 10psf
6. Foundation based on 24" height 8" CMU @ 80 psf
7. Brick load based on 40 psf

EXTERIOR FOUNDATION TABLE FRAME WALL BRICK VENEER

Load Bearing Value of Soil (psf)		4000									
Footing Width (in)			16	20	24	28	32	36	40	44	48
Wall Supporting	Footing Thickness (in)	Wall PLF to Footing	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)
Roof and Ceiling	8	1500	21403	28847	36292	43736	51181	58625	66069	73514	80958
	10	1500	22681	30569	38458	46347	54236	62125	70014	77903	85792
	12	1500	23958	32292	40625	48958	57292	65625	73958	82292	90625
	14	1500	25236	34014	42792	51569	60347	69125	77903	86681	95458
	16	1500	26514	35736	44958	54181	63403	72625	81847	91069	100292
	18	1500	27792	37458	47125	56792	66458	76125	85792	95458	105125
	20	1500	29069	39181	49292	59403	69514	79625	89736	99847	109958
Roof, Ceiling and One Center Bearing Floor	8	1950	18890	26335	33779	41224	48668	56113	63557	71001	78446
	10	1950	20018	27907	35796	43685	51574	59463	67351	75240	83129
	12	1950	21146	29479	37813	46146	54479	62813	71146	79479	87813
	14	1950	22274	31051	39829	48607	57385	66163	74940	83718	92496
	16	1950	23401	32624	41846	51068	60290	69513	78735	87957	97179
	18	1950	24529	34196	43863	53529	63196	72863	82529	92196	101863
	20	1950	25657	35768	45879	55990	66101	76213	86324	96435	106546
Roof, Ceiling and One Floor Clear Span	8	2400	16378	23822	31267	38711	46156	53600	61044	68489	75933
	10	2400	17356	25244	33133	41022	48911	56800	64689	72578	80467
	12	2400	18333	26667	35000	43333	51667	60000	68333	76667	85000
	14	2400	19311	28089	36867	45644	54422	63200	71978	80756	89533
	16	2400	20289	29511	38733	47956	57178	66400	75622	84844	94067
	18	2400	21267	30933	40600	50267	59933	69600	79267	88933	98600
	20	2400	22244	32356	42467	52578	62689	72800	82911	93022	103133
Roof, Ceiling, and Two Center Bearing Floor	8	2850	13865	21310	28754	36199	43643	51088	58532	65976	73421
	10	2850	14693	22582	30471	38360	46249	54138	62026	69915	77804
	12	2850	15521	23854	32188	40521	48854	57188	65521	73854	82188
	14	2850	16349	25126	33904	42682	51460	60238	69015	77793	86571
	16	2850	17176	26399	35621	44843	54065	63288	72510	81732	90954
	18	2850	18004	27671	37338	47004	56671	66338	76004	85671	95338
	20	2850	18832	28943	39054	49165	59276	69388	79499	89610	99721
Roof, Ceiling, and Two Clear Span Floor	8	3660	9343	16787	24232	31676	39121	46565	54009	61454	68898
	10	3660	9901	17789	25678	33567	41456	49345	57234	65123	73012
	12	3660	10458	18792	27125	35458	43792	52125	60458	68792	77125
	14	3660	11016	19794	28572	37349	46127	54905	63683	72461	81238
	16	3660	11574	20796	30018	39241	48463	57685	66907	76129	85352
	18	3660	12132	21798	31465	41132	50798	60465	70132	79798	89465
	20	3660	12689	22801	32912	43023	53134	63245	73356	83467	93578
Roof, Ceiling, and Three Center Bearing Floor	8	3750	8840	16285	23729	31174	38618	46063	53507	60951	68396
	10	3750	9368	17257	25146	33035	40924	48813	56701	64590	72479
	12	3750	9896	18229	26563	34896	43229	51563	59896	68229	76563
	14	3750	10424	19201	27979	36757	45535	54313	63090	71868	80646
	16	3750	10951	20174	29396	38618	47840	57063	66285	75507	84729
	18	3750	11479	21146	30813	40479	50146	59813	69479	79146	88813
	20	3750	12007	22118	32229	42340	52451	62563	72674	82785	92896
Roof, Ceiling, and Three Clear Span Floor	8	4920	2308	9752	17197	24641	32086	39530	46974	54419	61863
	10	4920	2446	10334	18223	26112	34001	41890	49779	57668	65557
	12	4920	2583	10917	19250	27583	35917	44250	52583	60917	69250
	14	4920	2721	11499	20277	29054	37832	46610	55388	64166	72943
	16	4920	2859	12081	21303	30526	39748	48970	58192	67414	76637
	18	4920	2997	12663	22330	31997	41663	51330	60997	70663	80330
	20	4920	3134	13246	23357	33468	43579	53690	63801	73912	84023

- "= Overstressed
- "= Footing not wide enough for brick & block
- "= Footing : width / depth ratio too large

NOTES:

1. Foundation sizes are based on hollow CMU 24" tall capped with 4" of solid masonry for 1 (one) story and 8" of solid masonry for 2 (two) and 2-1/2 story houses. Mortar shall be Type S.
2. Footing sizes are based on attached psf allowable soil bearing.
3. Centers of foundation wall shall bear in the middle 1/3 of the footings.
4. Pier sizes given are minimum for height/thickness.
5. Green and Red shaded areas not applicable.
6. 16" wide footing not applicable to 8" block and brick wall (see purple).

ASSUMPTIONS:

1. FIRST FLOOR 50# PSF (40 PSF LIVE, 10 PSF DEAD)
2. SECOND FLOOR 40# PSF (30 PSF LIVE, 10 PSF DEAD)
3. Third Floor \ ATTIC FLOOR 40 PSF (30PSF LIVE, 10 PSF DEAD)
4. ROOF 40 PSF (20 PSF LIVE, 20 PSF DEAD)
5. Wall weight based on 10' height @ 10psf
6. Foundation based on 24" height 8" CMU @ 80 psf
7. Brick load based on 40 psf

EXTERIOR FOUNDATION TABLE FRAME WALL BRICK VENEER

Load Bearing Value of Soil (psf)		5000									
Footing Width (in)			16	20	24	28	32	36	40	44	48
Wall Supporting	Footing Thickness (in)	Wall PLF to Footing	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)	Maximum Column Load (lbs)
Roof and Ceiling	8	1500	28847	38153	47458	56764	66069	75375	84681	93986	103292
	10	1500	30569	40431	50292	60153	70014	79875	89736	99597	109458
	12	1500	32292	42708	53125	63542	73958	84375	94792	105208	115625
	14	1500	34014	44986	55958	66931	77903	88875	99847	110819	121792
	16	1500	35736	47264	58792	70319	81847	93375	104903	116431	127958
	18	1500	37458	49542	61625	73708	85792	97875	109958	122042	134125
	20	1500	39181	51819	64458	77097	89736	102375	115014	127653	140292
Roof, Ceiling and One Center Bearing Floor	8	1950	26335	35640	44946	54251	63557	72863	82168	91474	100779
	10	1950	27907	37768	47629	57490	67351	77213	87074	96935	106796
	12	1950	29479	39896	50313	60729	71146	81563	91979	102396	112813
	14	1950	31051	42024	52996	63968	74940	85913	96885	107857	118829
	16	1950	32624	44151	55679	67207	78735	90263	101790	113318	124846
	18	1950	34196	46279	58363	70446	82529	94613	106696	118779	130863
	20	1950	35768	48407	61046	73685	86324	98963	111601	124240	136879
Roof, Ceiling and One Floor Clear Span	8	2400	23822	33128	42433	51739	61044	70350	79656	88961	98267
	10	2400	25244	35106	44967	54828	64689	74550	84411	94272	104133
	12	2400	26667	37083	47500	57917	68333	78750	89167	99583	110000
	14	2400	28089	39061	50033	61006	71978	82950	93922	104894	115867
	16	2400	29511	41039	52567	64094	75622	87150	98678	110206	121733
	18	2400	30933	43017	55100	67183	79267	91350	103433	115517	127600
	20	2400	32356	44994	57633	70272	82911	95550	108189	120828	133467
Roof, Ceiling, and Two Center Bearing Floor	8	2850	21310	30615	39921	49226	58532	67838	77143	86449	95754
	10	2850	22582	32443	42304	52165	62026	71888	81749	91610	101471
	12	2850	23854	34271	44688	55104	65521	75938	86354	96771	107188
	14	2850	25126	36099	47071	58043	69015	79988	90960	101932	112904
	16	2850	26399	37926	49454	60982	72510	84038	95565	107093	118621
	18	2850	27671	39754	51838	63921	76004	88088	100171	112254	124338
	20	2850	28943	41582	54221	66860	79499	92138	104776	117415	130054
Roof, Ceiling, and Two Clear Span Floor	8	3660	16787	26093	35398	44704	54009	63315	72621	81926	91232
	10	3660	17789	27651	37512	47373	57234	67095	76956	86817	96678
	12	3660	18792	29208	39625	50042	60458	70875	81292	91708	102125
	14	3660	19794	30766	41738	52711	63683	74655	85627	96599	107572
	16	3660	20796	32324	43852	55379	66907	78435	89963	101491	113018
	18	3660	21798	33882	45965	58048	70132	82215	94298	106382	118465
	20	3660	22801	35439	48078	60717	73356	85995	98634	111273	123912
Roof, Ceiling, and Three Center Bearing Floor	8	3750	16285	25590	34896	44201	53507	62813	72118	81424	90729
	10	3750	17257	27118	36979	46840	56701	66563	76424	86285	96146
	12	3750	18229	28646	39063	49479	59896	70313	80729	91146	101563
	14	3750	19201	30174	41146	52118	63090	74063	85035	96007	106979
	16	3750	20174	31701	43229	54757	66285	77813	89340	100868	112396
	18	3750	21146	33229	45313	57396	69479	81563	93646	105729	117813
	20	3750	22118	34757	47396	60035	72674	85313	97951	110590	123229
Roof, Ceiling, and Three Clear Span Floor	8	4920	9752	19058	28363	37669	46974	56280	65586	74891	84197
	10	4920	10334	20196	30057	39918	49779	59640	69501	79362	89223
	12	4920	10917	21333	31750	42167	52583	63000	73417	83833	94250
	14	4920	11499	22471	33443	44416	55388	66360	77332	88304	99277
	16	4920	12081	23609	35137	46664	58192	69720	81248	92776	104303
	18	4920	12663	24747	36830	48913	60997	73080	85163	97247	109330
	20	4920	13246	25884	38523	51162	63801	76440	89079	101718	114357

- "= Overstressed
- "= Footing not wide enough for brick & block
- "= Footing : width / depth ratio too large

NOTES:

1. Foundation sizes are based on hollow CMU 24" tall capped with 4" of solid masonry for 1 (one) story and 8" of solid masonry for 2 (two) and 2-1/2 story houses. Mortar shall be Type S.
2. Footing sizes are based on attached psf allowable soil bearing.
3. Centers of foundation wall shall bear in the middle 1/3 of the footings.
4. Pier sizes given are minimum for height/thickness.
5. Green and Red shaded areas not applicable.
6. 16" wide footing not applicable to 8" block and brick wall (see purple).

ASSUMPTIONS:

1. FIRST FLOOR 50# PSF (40 PSF LIVE, 10 PSF DEAD)
2. SECOND FLOOR 40# PSF (30 PSF LIVE, 10 PSF DEAD)
3. Third Floor \ ATTIC FLOOR 40 PSF (30PSF LIVE, 10 PSF DEAD)
4. ROOF 40 PSF (20 PSF LIVE, 20 PSF DEAD)
5. Wall weight based on 10' height @ 10psf
6. Foundation based on 24" height 8" CMU @ 80 psf
7. Brick load based on 40 psf