

HIGHER POWER HYDRAULIC DOORS
UNFACTORED DOOR JAMB REACTIONS - 170 mph - ASCE 7-16

Weight (psf)	Door Height	Wind Vel. A (mph)	Wind Load A (psf) (psf)	Wind Vel. B (mph)	Wind Load B (psf)	Wind Vel. C (mph)	Wind Load C (psf) Downward	Wind Load C (psf) Uplift
10.0	$h \leq 24$ ft	170	60.4	50	7.2	50	3.2	-5.9
	24 ft < $h \leq 32$ ft		64.1		7.6		3.4	-6.2

Wind Vel. A = Code Basic Wind Speed

Wind Vel. B = Maximum Wind Speed while Opening Door

Wind Vel. C = Maximum Wind Speed while Door Open

Base Reaction = Reaction of Jamb Column into Floor Slab

Top Reaction = Reaction of Jamb Column to Building Column/Frame Beam

METHODOLOGY

Reactions calculated based on ASCE 7-16.

Wind forces based on Component & Cladding loads, using the door area as the effective wind area.

Wind speed when door is open or opening is limited to 50 mph.

Velocity pressure is calculated per ASCE 7-16, EQN. 26.10-1.

No net uplift exists in jamb columns as door self-weight offsets wind uplift forces.

ASSUMPTIONS

Building meets the conditions of ASCE 7-16, Section 31.1.2.

Building is considered Risk Category II.

For doors $\leq 24'$ in height, assumed mean roof height = 30'.

For doors $24' < h \leq 32'$, assumed mean roof height = 40'.

Building is considered enclosed when the door is closed, and partially enclosed when the door is open or opening.

Wind Exposure = "C".

Notes:

(+) Base Vertical Reaction = Down

(+) Top Vertical Reaction = Up

Horizontal Reactions Are Either Towards Or Away From Door

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
30	10	5121	1980	3939	0
30	12	6040	2376	4832	0
30	14	6955	2772	5728	0
30	16	7869	3168	6626	0
30	18	8781	3564	7526	0
30	20	9691	3960	8427	0
30	22	10601	4356	9329	0
30	24	11511	4752	10232	0
30	26	13180	5224	11817	0
30	28	14144	5626	12775	0
30	30	15108	6028	13734	0
30	32	16071	6429	14694	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
32	10	5462	2112	4201	0
32	12	6442	2534	5154	0
32	14	7419	2957	6110	0
32	16	8393	3379	7068	0
32	18	9366	3801	8028	0
32	20	10338	4224	8989	0
32	22	11308	4646	9951	0
32	24	12278	5068	10914	0
32	26	14059	5572	12604	0
32	28	15087	6001	13627	0
32	30	16115	6429	14650	0
32	32	17143	6858	15673	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
34	10	5803	2244	4464	0
34	12	6845	2693	5476	0
34	14	7883	3141	6492	0
34	16	8918	3590	7510	0
34	18	9951	4039	8530	0
34	20	10984	4488	9551	0
34	22	12015	4936	10573	0
34	24	13046	5385	11596	0
34	26	14937	5920	13392	0
34	28	16030	6376	14479	0
34	30	17122	6831	15566	0
34	32	18214	7287	16653	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
36	10	6145	2376	4727	0
36	12	7248	2851	5798	0
36	14	8346	3326	6873	0
36	16	9442	3801	7952	0
36	18	10537	4276	9032	0
36	20	11630	4752	10113	0
36	22	12722	5227	11195	0
36	24	13813	5702	12278	0
36	26	15816	6269	14180	0
36	28	16973	6751	15330	0
36	30	18129	7233	16481	0
36	32	19286	7715	17632	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
38	10	6486	2508	4989	0
38	12	7650	3009	6120	0
38	14	8810	3511	7255	0
38	16	9967	4012	8393	0
38	18	11122	4514	9533	0
38	20	12276	5016	10675	0
38	22	13428	5517	11817	0
38	24	14580	6019	12960	0
38	26	16695	6617	14968	0
38	28	17916	7126	16182	0
38	30	19137	7635	17397	0
38	32	20357	8144	18612	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
40	10	6827	2640	5252	0
40	12	8053	3168	6442	0
40	14	9274	3696	7637	0
40	16	10492	4224	8835	0
40	18	11708	4752	10035	0
40	20	12922	5279	11236	0
40	22	14135	5807	12439	0
40	24	15348	6335	13642	0
40	26	17573	6965	15755	0
40	28	18859	7501	17034	0
40	30	20144	8037	18313	0
40	32	21428	8573	19592	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
42	10	7169	2772	5514	0
42	12	8455	3326	6764	0
42	14	9737	3880	8019	0
42	16	11016	4435	9277	0
42	18	12293	4989	10537	0
42	20	13568	5543	11798	0
42	22	14842	6098	13061	0
42	24	16115	6652	14325	0
42	26	18452	7313	16543	0
42	28	19802	7876	17885	0
42	30	21151	8439	19228	0
42	32	22500	9001	20571	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
44	10	7510	2904	5777	0
44	12	8858	3484	7086	0
44	14	10201	4065	8401	0
44	16	11541	4646	9719	0
44	18	12878	5227	11039	0
44	20	14214	5807	12360	0
44	22	15549	6388	13683	0
44	24	16882	6969	15007	0
44	26	19331	7662	17331	0
44	28	20745	8251	18737	0
44	30	22158	8840	20144	0
44	32	23571	9430	21551	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
46	10	7851	3036	6040	0
46	12	9261	3643	7409	0
46	14	10665	4250	8783	0
46	16	12065	4857	10160	0
46	18	13464	5464	11540	0
46	20	14860	6071	12922	0
46	22	16256	6679	14305	0
46	24	17650	7286	15689	0
46	26	20209	8010	18119	0
46	28	21688	8626	19589	0
46	30	23165	9242	21059	0
46	32	24643	9858	22530	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
48	10	8193	3168	6302	0
48	12	9663	3801	7731	0
48	14	11128	4435	9165	0
48	16	12590	5068	10602	0
48	18	14049	5702	12042	0
48	20	15506	6335	13484	0
48	22	16962	6969	14927	0
48	24	18417	7602	16371	0
48	26	21088	8358	18907	0
48	28	22631	9001	20440	0
48	30	24173	9644	21975	0
48	32	25714	10287	23510	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
50	10	8534	3300	6565	0
50	12	10066	3960	8053	0
50	14	11592	4620	9546	0
50	16	13115	5279	11044	0
50	18	14634	5939	12544	0
50	20	16152	6599	14046	0
50	22	17669	7259	15549	0
50	24	19185	7919	17053	0
50	26	21967	8706	19694	0
50	28	23573	9376	21292	0
50	30	25180	10046	22891	0
50	32	26785	10716	24490	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
52	10	8876	3432	6827	0
52	12	10469	4118	8375	0
52	14	12056	4804	9928	0
52	16	13639	5491	11486	0
52	18	15220	6177	13046	0
52	20	16799	6863	14607	0
52	22	18376	7550	16171	0
52	24	19952	8236	17735	0
52	26	22845	9055	20482	0
52	28	24516	9751	22144	0
52	30	26187	10448	23806	0
52	32	27857	11144	25469	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
54	10	9217	3564	7090	0
54	12	10871	4276	8697	0
54	14	12520	4989	10310	0
54	16	14164	5702	11927	0
54	18	15805	6415	13547	0
54	20	17445	7127	15169	0
54	22	19083	7840	16793	0
54	24	20719	8553	18417	0
54	26	23724	9403	21270	0
54	28	25459	10126	22996	0
54	30	27194	10850	24722	0
54	32	28928	11573	26449	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
56	10	9558	3696	7353	0
56	12	11274	4435	9019	0
56	14	12983	5174	10692	0
56	16	14688	5913	12369	0
56	18	16391	6652	14049	0
56	20	18091	7391	15731	0
56	22	19789	8130	17415	0
56	24	21487	8870	19099	0
56	26	24603	9751	22058	0
56	28	26402	10501	23847	0
56	30	28201	11251	25638	0
56	32	30000	12002	27428	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
58	10	9900	3828	7615	0
58	12	11677	4593	9341	0
58	14	13447	5359	11074	0
58	16	15213	6124	12811	0
58	18	16976	6890	14551	0
58	20	18737	7655	16293	0
58	22	20496	8421	18037	0
58	24	22254	9186	19781	0
58	26	25481	10099	22845	0
58	28	27345	10876	24699	0
58	30	29208	11653	26553	0
58	32	31071	12430	28408	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
60	10	10241	3960	7878	0
60	12	12079	4752	9663	0
60	14	13911	5543	11456	0
60	16	15737	6335	13253	0
60	18	17561	7127	15053	0
60	20	19383	7919	16855	0
60	22	21203	8711	18659	0
60	24	23022	9503	20464	0
60	26	26360	10448	23633	0
60	28	28288	11251	25551	0
60	30	30216	12055	27469	0
60	32	32143	12859	29387	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
62	10	10582	4092	8140	0
62	12	12482	4910	9985	0
62	14	14374	5728	11838	0
62	16	16262	6547	13694	0
62	18	18147	7365	15554	0
62	20	20029	8183	17417	0
62	22	21910	9002	19280	0
62	24	23789	9820	21146	0
62	26	27239	10796	24421	0
62	28	29231	11626	26402	0
62	30	31223	12457	28384	0
62	32	33214	13287	30367	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
64	10	10924	4224	8403	0
64	12	12885	5068	10308	0
64	14	14838	5913	12219	0
64	16	16787	6758	14136	0
64	18	18732	7602	16056	0
64	20	20675	8447	17978	0
64	22	22616	9292	19902	0
64	24	24556	10137	21828	0
64	26	28117	11144	25209	0
64	28	30174	12002	27254	0
64	30	32230	12859	29300	0
64	32	34285	13716	31347	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
66	10	11265	4356	8666	0
66	12	13287	5227	10630	0
66	14	15302	6098	12601	0
66	16	17311	6969	14578	0
66	18	19317	7840	16558	0
66	20	21321	8711	18540	0
66	22	23323	9582	20524	0
66	24	25324	10453	22510	0
66	26	28996	11493	25996	0
66	28	31117	12377	28106	0
66	30	33237	13261	30216	0
66	32	35357	14145	32326	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
68	10	11607	4488	8928	0
68	12	13690	5385	10952	0
68	14	15765	6283	12983	0
68	16	17836	7180	15020	0
68	18	19903	8078	17060	0
68	20	21967	8975	19102	0
68	22	24030	9873	21146	0
68	24	26091	10770	23192	0
68	26	29875	11841	26784	0
68	28	32060	12752	28957	0
68	30	34244	13662	31131	0
68	32	36428	14573	33306	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
70	10	11948	4620	9191	0
70	12	14092	5543	11274	0
70	14	16229	6467	13365	0
70	16	18360	7391	15461	0
70	18	20488	8315	17561	0
70	20	22613	9239	19664	0
70	22	24737	10163	21768	0
70	24	26859	11087	23874	0
70	26	30753	12189	27572	0
70	28	33003	13127	29809	0
70	30	35252	14064	32047	0
70	32	37500	15002	34285	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
72	10	12289	4752	9453	0
72	12	14495	5702	11596	0
72	14	16693	6652	13747	0
72	16	18885	7602	15903	0
72	18	21074	8553	18063	0
72	20	23260	9503	20226	0
72	22	25443	10453	22390	0
72	24	27626	11404	24556	0
72	26	31632	12537	28360	0
72	28	33946	13502	30661	0
72	30	36259	14466	32963	0
72	32	38571	15431	35265	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
74	10	12631	4884	9716	0
74	12	14898	5860	11918	0
74	14	17156	6837	14129	0
74	16	19410	7814	16345	0
74	18	21659	8790	18565	0
74	20	23906	9767	20787	0
74	22	26150	10744	23012	0
74	24	28393	11720	25238	0
74	26	30753	12886	29148	0
74	28	33003	13877	31512	0
74	30	35252	14868	33878	0
74	32	37500	15859	36245	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
76	10	12972	5016	9978	0
76	12	15300	6019	12240	0
76	14	17620	7022	14511	0
76	16	19934	8025	16787	0
76	18	22244	9028	19067	0
76	20	24552	10031	21349	0
76	22	26857	11034	23634	0
76	24	29161	12037	25921	0
76	26	33389	13234	29935	0
76	28	35832	14252	32364	0
76	30	38273	15270	34794	0
76	32	40714	16288	37224	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
78	10	13313	5148	10241	0
78	12	15703	6177	12562	0
78	14	18084	7207	14893	0
78	16	20459	8236	17228	0
78	18	22830	9266	19568	0
78	20	25198	10295	21911	0
78	22	27564	11325	24256	0
78	24	29928	12354	26603	0
78	26	34268	13582	30723	0
78	28	36775	14627	33216	0
78	30	39280	15672	35709	0
78	32	41785	16716	38204	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
80	10	13655	5279	10504	0
80	12	16106	6335	12885	0
80	14	18547	7391	15274	0
80	16	20983	8447	17670	0
80	18	23415	9503	20070	0
80	20	25844	10559	22473	0
80	22	28271	11615	24878	0
80	24	30695	12671	27285	0
80	26	35147	13930	31511	0
80	28	37718	15002	34067	0
80	30	40288	16073	36625	0
80	32	42857	17145	39183	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
82	10	13996	5411	10766	0
82	12	16508	6494	13207	0
82	14	19011	7576	15656	0
82	16	21508	8658	18112	0
82	18	24000	9741	20572	0
82	20	26490	10823	23035	0
82	22	28977	11905	25500	0
82	24	31463	12988	27967	0
82	26	36025	14279	32299	0
82	28	38661	15377	34919	0
82	30	41295	16475	37541	0
82	32	43928	17574	40163	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
84	10	14338	5543	11029	0
84	12	16911	6652	13529	0
84	14	19475	7761	16038	0
84	16	22032	8870	18554	0
84	18	24586	9978	21074	0
84	20	27136	11087	23597	0
84	22	29684	12196	26122	0
84	24	32230	13304	28649	0
84	26	36904	14627	33086	0
84	28	39603	15752	35771	0
84	30	42302	16877	38456	0
84	32	45000	18002	41142	0

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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
86	10	14679	5675	11291	0
86	12	17314	6811	13851	0
86	14	19939	7946	16420	0
86	16	22557	9081	18995	0
86	18	25171	10216	21575	0
86	20	27782	11351	24158	0
86	22	30391	12486	26744	0
86	24	32998	13621	29331	0
86	26	37783	14975	33874	0
86	28	40546	16127	36623	0
86	30	43309	17279	39372	0
86	32	46071	18431	42122	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
88	10	15020	5807	11554	0
88	12	17716	6969	14173	0
88	14	20402	8130	16802	0
88	16	23082	9292	19437	0
88	18	25757	10453	22077	0
88	20	28428	11615	24720	0
88	22	31098	12776	27366	0
88	24	33765	13938	30013	0
88	26	38661	15323	34662	0
88	28	41489	16502	37474	0
88	30	44316	17681	40288	0
88	32	47142	18860	43102	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
90	10	15362	5939	11817	0
90	12	18119	7127	14495	0
90	14	20866	8315	17184	0
90	16	23606	9503	19879	0
90	18	26342	10691	22579	0
90	20	29074	11879	25282	0
90	22	31804	13067	27988	0
90	24	34532	14255	30695	0
90	26	39540	15672	35450	0
90	28	42432	16877	38326	0
90	30	45323	18083	41203	0
90	32	48214	19288	44081	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
92	10	15703	6071	12079	0
92	12	18521	7286	14817	0
92	14	21330	8500	17566	0
92	16	24131	9714	20321	0
92	18	26927	10929	23081	0
92	20	29720	12143	25844	0
92	22	32511	13357	28610	0
92	24	35300	14571	31378	0
92	26	40419	16020	36237	0
92	28	43375	17252	39178	0
92	30	46331	18484	42119	0
92	32	49285	19717	45061	0

HIGHER POWER HYDRAULIC DOORS
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Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
94	10	16044	6203	12342	0
94	12	18924	7444	15139	0
94	14	21793	8685	17947	0
94	16	24655	9925	20762	0
94	18	27513	11166	23582	0
94	20	30367	12407	26406	0
94	22	33218	13647	29232	0
94	24	36067	14888	32060	0
94	26	41297	16368	37025	0
94	28	44318	17627	40029	0
94	30	47338	18886	43034	0
94	32	50357	20145	46040	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
96	10	16386	6335	12604	0
96	12	19327	7602	15461	0
96	14	22257	8870	18329	0
96	16	25180	10137	21204	0
96	18	28098	11404	24084	0
96	20	31013	12671	26968	0
96	22	33925	13938	29854	0
96	24	36835	15205	32742	0
96	26	42176	16716	37813	0
96	28	45261	18002	40881	0
96	30	48345	19288	43950	0
96	32	51428	20574	47020	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
98	10	16727	6467	12867	0
98	12	19729	7761	15784	0
98	14	22721	9054	18711	0
98	16	25705	10348	21646	0
98	18	28684	11641	24586	0
98	20	31659	12935	27529	0
98	22	34631	14228	30476	0
98	24	37602	15522	33424	0
98	26	43055	17065	38601	0
98	28	46204	18377	41733	0
98	30	49352	19690	44866	0
98	32	52500	21003	48000	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
100	10	17068	6599	13130	0
100	12	20132	7919	16106	0
100	14	23184	9239	19093	0
100	16	26229	10559	22088	0
100	18	29269	11879	25088	0
100	20	32305	13199	28091	0
100	22	35338	14519	31098	0
100	24	38369	15838	34106	0
100	26	43933	17413	39389	0
100	28	47147	18752	42584	0
100	30	50359	20092	45781	0
100	32	53571	21431	48979	0

HIGHER POWER HYDRAULIC DOORS
UNFACTORED DOOR JAMB REACTIONS - 170 mph - ASCE 7-16

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
105	10	17922	6929	13786	0
105	12	21139	8315	16911	0
105	14	24344	9701	20048	0
105	16	27541	11087	23192	0
105	18	30732	12473	26342	0
105	20	33920	13859	29496	0
105	22	37105	15245	32652	0
105	24	40288	16630	35811	0
105	26	46130	18284	41358	0
105	28	49504	19690	44714	0
105	30	52877	21096	48070	0
105	32	56250	22503	51428	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
110	10	18775	7259	14443	0
110	12	22145	8711	17716	0
110	14	25503	10163	21002	0
110	16	28852	11615	24296	0
110	18	32196	13067	27596	0
110	20	35535	14519	30900	0
110	22	38872	15970	34207	0
110	24	42206	17422	37517	0
110	26	48327	19154	43327	0
110	28	51862	20628	46843	0
110	30	55395	22101	50359	0
110	32	58928	23574	53877	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
115	10	19629	7589	15099	0
115	12	23152	9107	18521	0
115	14	26662	10625	21957	0
115	16	30164	12143	25401	0
115	18	33659	13661	28851	0
115	20	37151	15179	32305	0
115	22	40639	16696	35762	0
115	24	44125	18214	39222	0
115	26	50523	20025	45297	0
115	28	54219	21565	48972	0
115	30	57913	23106	52648	0
115	32	61607	24646	56326	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
120	10	20482	7919	15756	0
120	12	24158	9503	19327	0
120	14	27821	11087	22912	0
120	16	31475	12671	26505	0
120	18	35123	14255	30105	0
120	20	38766	15838	33709	0
120	22	42406	17422	37317	0
120	24	46043	19006	40927	0
120	26	52720	20896	47266	0
120	28	56576	22503	51101	0
120	30	60431	24110	54938	0
120	32	64285	25718	58775	0

HIGHER POWER HYDRAULIC DOORS
UNFACTORED DOOR JAMB REACTIONS - 170 mph - ASCE 7-16

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
125	10	21336	8249	16412	0
125	12	25165	9899	20132	0
125	14	28980	11549	23866	0
125	16	32786	13199	27610	0
125	18	36586	14849	31360	0
125	20	40381	16498	35114	0
125	22	44173	18148	38872	0
125	24	47962	19798	42633	0
125	26	54917	21766	49236	0
125	28	58934	23440	53230	0
125	30	62949	25115	57227	0
125	32	66964	26789	61224	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
130	10	22189	8579	17068	0
130	12	26172	10295	20937	0
130	14	30140	12011	24821	0
130	16	34098	13727	28714	0
130	18	38050	15443	32614	0
130	20	41996	17158	36519	0
130	22	45940	18874	40427	0
130	24	49880	20590	44338	0
130	26	57113	22637	51205	0
130	28	61291	24378	55360	0
130	30	65467	26119	59516	0
130	32	69642	27861	63673	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
135	10	23042	8909	17725	0
135	12	27178	10691	21743	0
135	14	31299	12473	25775	0
135	16	35409	14255	29818	0
135	18	39513	16036	33868	0
135	20	43612	17818	37923	0
135	22	47706	19600	41982	0
135	24	51799	21382	46043	0
135	26	59310	23507	53175	0
135	28	63648	25316	57489	0
135	30	67985	27124	61805	0
135	32	72321	28932	66122	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
140	10	23896	9239	18381	0
140	12	28185	11087	22548	0
140	14	32458	12935	26730	0
140	16	36721	14783	30923	0
140	18	40976	16630	35123	0
140	20	45227	18478	39328	0
140	22	49473	20326	43537	0
140	24	53717	22174	47748	0
140	26	61507	24378	55144	0
140	28	66006	26253	59618	0
140	30	70503	28129	64094	0
140	32	74999	30004	68571	0

HIGHER POWER HYDRAULIC DOORS
UNFACTORED DOOR JAMB REACTIONS - 170 mph - ASCE 7-16

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
145	10	24749	9569	19038	0
145	12	29191	11483	23353	0
145	14	33617	13397	27685	0
145	16	38032	15311	32027	0
145	18	42440	17224	36377	0
145	20	46842	19138	40732	0
145	22	51240	21052	45091	0
145	24	55635	22966	49454	0
145	26	63703	25249	57113	0
145	28	68363	27191	61747	0
145	30	73021	29133	66383	0
145	32	77678	31075	71020	0

Door Size		Base Reaction (#)		Top Reaction (#)	
Width (ft)	Height (ft)	Horiz. (#) *	Vert. (#)	Horiz. (#) *	Vert. (#)
150	10	25603	9899	19694	0
150	12	30198	11879	24158	0
150	14	34776	13859	28639	0
150	16	39344	15838	33132	0
150	18	43903	17818	37631	0
150	20	48457	19798	42137	0
150	22	53007	21778	46646	0
150	24	57554	23758	51159	0
150	26	65900	26119	59083	0
150	28	70720	28129	63877	0
150	30	75539	30138	68672	0
150	32	80356	32147	73469	0