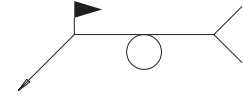


2.4 DGB-36 & DGBF-36

Arc Spot/Seam Welds to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



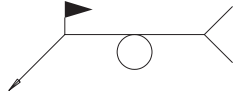
Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/4	16 ga	4"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	+0R
		6"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		3.6	-0.2R	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R
		8"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		4	-0.3R	4.1	-0.3R	4.2	-0.3R	4.2	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R
	12"	q_a	q_f	2206	3641	2137	3526	2087	3444	2050	3382	2021	3335	1998	3297	1980	3266	1763	2821	1482	2371	
		F		4.7	-0.6R	4.9	-0.5R	5	-0.5R	5.1	-0.5R	5.2	-0.4R	5.2	-0.4R	5.3	-0.4R	5.3	-0.4R	5.4	-0.3R	
	18"	q_a	q_f	1968	3641	1935	3193	1709	2821	1722	2842	1732	2857	1588	2620	1610	2657	1628	2686	1482	2371	
		F		5.5	-0.9R	5.8	-0.9R	6	-0.8R	6.2	-0.8R	6.4	-0.8R	6.5	-0.7R	6.6	-0.7R	6.7	-0.7R	6.7	-0.6R	
	24"	q_a	q_f	1664	2746	1691	2791	1473	2430	1523	2513	1369	2259	1422	2346	1304	2151	1355	2235	1259	2078	
		F		6.1	-1.2R	6.6	-1.2R	6.9	-1.2R	7.1	-1.1R	7.4	-1.1R	7.5	-1.1R	7.7	-1R	7.8	-1R	7.9	-1R	
	18 ga	4"	q_a	q_f	1900	3136	1900	3136	1900	3136	1900	3136	1900	3136	1900	3062	1550	2481	1281	2050	1077	1723
			F		4.2	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R
		6"	q_a	q_f	1900	3136	1900	3136	1900	3136	1900	3136	1900	3136	1900	3062	1550	2481	1281	2050	1077	1723
			F		4.9	-0.4R	5	-0.4R	5	-0.3R	5.1	-0.3R	5.1	-0.3R	5.2	-0.2R	5.2	-0.2R	5.2	-0.2R	5.3	-0.2R
		8"	q_a	q_f	1863	3074	1864	3075	1788	2950	1800	2970	1746	2881	1761	2906	1550	2481	1281	2050	1077	1723
			F		5.4	-0.6R	5.6	-0.5R	5.7	-0.5R	5.8	-0.5R	5.9	-0.4R	5.9	-0.4R	6	-0.4R	6	-0.4R	6.1	-0.3R
	12"	q_a	q_f	1597	2635	1531	2527	1485	2450	1450	2392	1423	2347	1401	2312	1384	2283	1281	2050	1077	1723	
		F		6.3	-0.9R	6.6	-0.9R	6.8	-0.9R	7	-0.8R	7.1	-0.8R	7.3	-0.7R	7.4	-0.7R	7.4	-0.7R	7.5	-0.6R	
	18"	q_a	q_f	1419	2635	1380	2277	1206	1990	1207	1992	1208	1993	1100	1815	1112	1834	1121	1850	1044	1723	
		F		7.3	-1.4R	7.8	-1.4R	8.1	-1.4R	8.5	-1.4R	8.7	-1.3R	8.9	-1.3R	9.1	-1.2R	9.3	-1.2R	9.4	-1.2R	
	24"	q_a	q_f	1203	1985	1205	1988	1041	1717	1066	1760	953	1573	984	1624	899	1483	930	1534	861	1421	
		F		8	-1.7R	8.6	-1.8R	9.2	-1.9R	9.6	-1.9R	10	-1.8R	10.3	-1.8R	10.6	-1.8R	10.8	-1.8R	11	-1.7R	
20 ga	4"	q_a	q_f	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1025	1640	847	1355	712	1139	
		F		6.1	-0.5R	6.2	-0.4R	6.3	-0.4R	6.4	-0.4R	6.5	-0.3R	6.5	-0.3R	6.5	-0.3R	6.6	-0.3R	6.6	-0.2R	
	6"	q_a	q_f	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1025	1640	847	1355	712	1139	
		F		7	-0.8R	7.3	-0.7R	7.5	-0.7R	7.6	-0.7R	7.7	-0.6R	7.8	-0.6R	7.9	-0.5R	7.9	-0.5R	8	-0.5R	
	8"	q_a	q_f	1082	1785	1081	1784	1035	1708	1042	1719	1009	1665	1018	1679	993	1638	847	1355	712	1139	
		F		7.8	-1.1R	8.1	-1.1R	8.4	-1R	8.6	-1R	8.8	-0.9R	8.9	-0.9R	9	-0.8R	9.1	-0.8R	9.2	-0.8R	
12"	q_a	q_f	925	1527	885	1460	857	1413	835	1378	819	1351	806	1329	795	1312	786	1297	712	1139		
	F		8.9	-1.6R	9.5	-1.7R	9.9	-1.6R	10.3	-1.6R	10.6	-1.6R	10.9	-1.5R	11.1	-1.5R	11.3	-1.4R	11.5	-1.4R		
18"	q_a	q_f	821	1527	797	1315	695	1147	695	1146	694	1145	631	1042	638	1052	643	1060	598	987		
	F		10	-2.2R	10.9	-2.4R	11.6	-2.4R	12.2	-2.5R	12.8	-2.5R	13.2	-2.5R	13.6	-2.4R	13.9	-2.4R	14.2	-2.4R		
24"	q_a	q_f	697	1151	696	1149	600	990	614	1013	548	904	565	932	515	850	533	879	493	814		
	F		10.8	-2.7R	11.9	-2.9R	12.9	-3.1R	13.7	-3.2R	14.4	-3.2R	15	-3.3R	15.5	-3.3R	16	-3.3R	16.5	-3.3R		
22 ga	4"	q_a	q_f	805	1329	805	1329	805	1329	805	1329	805	1329	805	1329	779	1247	644	1031	541	866	
		F		7.7	-0.7R	7.9	-0.7R	8.1	-0.6R	8.2	-0.6R	8.3	-0.5R	8.4	-0.5R	8.5	-0.5R	8.5	-0.5R	8.6	-0.4R	
	6"	q_a	q_f	805	1329	805	1329	805	1329	805	1329	805	1329	803	1324	779	1247	644	1031	541	866	
		F		8.8	-1.2R	9.2	-1.1R	9.5	-1.1R	9.8	-1R	9.9	-1R	10.1	-1R	10.2	-0.9R	10.3	-0.9R	10.4	-0.8R	
	8"	q_a	q_f	767	1266	766	1264	732	1209	737	1216	713	1177	719	1186	701	1157	644	1031	541	866	
		F		9.7	-1.6R	10.3	-1.6R	10.7	-1.6R	11	-1.5R	11.3	-1.5R	11.6	-1.4R	11.8	-1.4R	11.9	-1.3R	12.1	-1.3R	
12"	q_a	q_f	655	1081	626	1032	605	997	589	972	577	952	567	936	559	923	553	912	541	866		
	F		11	-2.2R	11.8	-2.3R	12.5	-2.4R	13.1	-2.4R	13.6	-2.4R	14	-2.3R	14.3	-2.3R	14.6	-2.2R	14.9	-2.2R		
18"	q_a	q_f	582	1081	563	929	490	809	489	807	489	806	444	733	448	739	451	744	420	692		
	F		12.2	-2.9R	13.4	-3.2R	14.4	-3.3R	15.3	-3.4R	16	-3.5R	16.7	-3.6R	17.3	-3.6R	17.8	-3.6R	18.3	-3.5R		
24"	q_a	q_f	494	815	492	812	424	699	433	714	386	637	397	655	362	598	374	617	346	571		
	F		12.9	-3.4R	14.4	-3.8R	15.7	-4.1R	16.8	-4.3R	17.8	-4.4R	18.7	-4.6R	19.5	-4.7R	20.2	-4.7R	20.9	-4.7R		

B-36 36/4 Support Attachment: 0.5" Effective Dia. Arc Spot Weld Side Seam Attachment: DeltaGrip

DGB-36 & DGBF-36 2.4

Arc Spot/Seam Welds to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

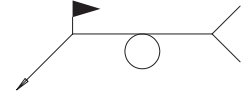
Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	4518	7454	4471	7378	4439	7325	4354	6967	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F		3.2-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R	
		6"	q_a	q_f	3890	6418	3808	6283	3751	6189	3709	6120	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F		3.6-0.4R		3.7-0.3R		3.7-0.3R		3.7-0.3R		3.8-0.2R		3.8-0.2R		3.8-0.2R		3.8-0.2R		3.8-0.2R	
		8"	q_a	q_f	3413	5631	3417	5638	3229	5329	3260	5379	3132	5167	2634	4215	2134	3414	1763	2821	1482	2371
			F		4-0.5R		4.1-0.5R		4.2-0.5R		4.2-0.4R		4.2-0.4R		4.3-0.3R		4.3-0.3R		4.3-0.3R		4.3-0.3R	
	12"	q_a	q_f	2786	4596	2645	4365	2548	4205	2477	4087	2423	3998	2380	3927	2134	3414	1763	2821	1482	2371	
		F		4.6-0.9R		4.8-0.8R		5-0.8R		5.1-0.8R		5.1-0.7R		5.2-0.7R		5.3-0.7R		5.3-0.6R		5.3-0.6R		
	18"	q_a	q_f	2408	4596	2333	3850	1997	3295	2000	3300	2002	3304	1804	2976	1826	3013	1763	2821	1482	2371	
		F		5.4-1.3R		5.7-1.3R		5.9-1.3R		6.1-1.3R		6.3-1.2R		6.4-1.2R		6.5-1.2R		6.6-1.1R		6.7-1.1R		
	24"	q_a	q_f	1986	3277	1993	3288	1693	2793	1741	2872	1540	2542	1596	2633	1447	2388	1501	2477	1384	2284	
		F		5.9-1.7R		6.4-1.8R		6.7-1.8R		7-1.8R		7.2-1.8R		7.4-1.7R		7.6-1.7R		7.7-1.7R		7.8-1.6R		
	18 ga	4"	q_a	q_f	3306	5455	3256	5373	3222	5316	3164	5062	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.2-0.4R		4.3-0.3R		4.3-0.3R		4.3-0.3R		4.4-0.2R		4.4-0.2R		4.4-0.2R		4.4-0.2R		4.4-0.2R	
		6"	q_a	q_f	2785	4596	2706	4465	2651	4374	2610	4307	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.8-0.6R		4.9-0.6R		5-0.6R		5.1-0.5R		5.1-0.5R		5.2-0.4R		5.2-0.4R		5.2-0.4R		5.2-0.4R	
		8"	q_a	q_f	2420	3994	2405	3969	2253	3718	2267	3740	2165	3572	1914	3062	1550	2481	1281	2050	1077	1723
			F		5.3-0.9R		5.5-0.9R		5.6-0.8R		5.7-0.8R		5.8-0.7R		5.9-0.7R		5.9-0.7R		6-0.6R		6-0.6R	
	12"	q_a	q_f	1969	3249	1849	3051	1766	2914	1706	2814	1660	2738	1623	2678	1550	2481	1281	2050	1077	1723	
		F		6.1-1.4R		6.5-1.4R		6.7-1.4R		6.9-1.3R		7-1.3R		7.2-1.2R		7.3-1.2R		7.4-1.1R		7.4-1.1R		
	18"	q_a	q_f	1710	3249	1635	2697	1391	2296	1381	2279	1373	2266	1233	2035	1242	2049	1249	2050	1077	1723	
		F		7-2R		7.5-2R		7.9-2.1R		8.3-2.1R		8.5-2.1R		8.8-2R		9-2R		9.1-2R		9.3-1.9R		
	24"	q_a	q_f	1427	2355	1406	2319	1190	1963	1208	1994	1063	1754	1094	1805	981	1619	1016	1676	931	1536	
		F		7.6-2.4R		8.3-2.6R		8.8-2.7R		9.3-2.7R		9.7-2.8R		10-2.8R		10.3-2.8R		10.6-2.7R		10.8-2.7R		
20 ga	4"	q_a	q_f	1918	3164	1887	3113	1865	3077	1849	3050	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F		6.1-0.8R		6.2-0.7R		6.3-0.7R		6.4-0.6R		6.4-0.6R		6.5-0.5R		6.5-0.5R		6.6-0.5R		6.6-0.4R		
	6"	q_a	q_f	1609	2655	1560	2574	1526	2519	1502	2478	1482	2446	1265	2024	1025	1640	847	1355	712	1139	
		F		6.9-1.2R		7.2-1.2R		7.4-1.1R		7.5-1.1R		7.6-1R		7.7-1R		7.8-0.9R		7.9-0.9R		7.9-0.9R		
	8"	q_a	q_f	1396	2303	1385	2285	1295	2136	1301	2147	1241	2048	1252	2024	1025	1640	847	1355	712	1139	
		F		7.6-1.6R		8-1.6R		8.3-1.6R		8.5-1.6R		8.7-1.5R		8.8-1.5R		9-1.4R		9.1-1.4R		9.2-1.3R		
12"	q_a	q_f	1136	1874	1064	1756	1014	1674	978	1614	950	1568	929	1532	911	1503	847	1355	712	1139		
	F		8.6-2.3R		9.2-2.4R		9.7-2.5R		10.1-2.5R		10.4-2.4R		10.7-2.4R		10.9-2.4R		11.1-2.3R		11.3-2.3R			
18"	q_a	q_f	987	1874	941	1553	800	1321	793	1308	787	1299	706	1165	710	1172	714	1178	658	1086		
	F		9.6-3R		10.5-3.3R		11.2-3.5R		11.8-3.6R		12.3-3.6R		12.8-3.7R		13.2-3.7R		13.6-3.7R		13.9-3.7R			
24"	q_a	q_f	827	1364	811	1338	686	1132	695	1146	606	1000	622	1027	560	924	580	957	531	877		
	F		10.2-3.5R		11.3-3.9R		12.2-4.2R		13-4.4R		13.8-4.6R		14.4-4.7R		15-4.8R		15.5-4.9R		15.9-4.9R			
22 ga	4"	q_a	q_f	1359	2242	1335	2204	1319	2176	1307	2157	1218	1948	962	1539	779	1247	644	1031	541	866	
		F		7.6-1.2R		7.9-1.1R		8-1.1R		8.2-1R		8.3-0.9R		8.4-0.9R		8.4-0.8R		8.5-0.8R		8.5-0.8R		
	6"	q_a	q_f	1136	1875	1101	1816	1076	1775	1057	1744	1043	1721	962	1539	779	1247	644	1031	541	866	
		F		8.7-1.8R		9.1-1.8R		9.4-1.7R		9.6-1.7R		9.8-1.6R		10-1.6R		10.1-1.5R		10.2-1.5R		10.3-1.4R		
	8"	q_a	q_f	985	1625	976	1610	911	1503	915	1509	872	1438	879	1450	779	1247	644	1031	541	866	
		F		9.4-2.3R		10-2.3R		10.5-2.4R		10.8-2.4R		11.1-2.3R		11.4-2.3R		11.6-2.2R		11.8-2.2R		11.9-2.1R		
12"	q_a	q_f	802	1323	750	1237	713	1177	687	1134	667	1101	651	1075	638	1054	628	1031	541	866		
	F		10.5-3R		11.4-3.3R		12.1-3.4R		12.7-3.5R		13.2-3.5R		13.6-3.6R		14-3.5R		14.3-3.5R		14.6-3.5R			
18"	q_a	q_f	698	1323	664	1095	564	930	558	920	553	912	496	818	498	822	500	825	461	761		
	F		11.5-3.8R		12.7-4.2R		13.7-4.6R		14.6-4.8R		15.4-5R		16.1-5.1R		16.7-5.2R		17.2-5.3R		17.7-5.3R			
24"	q_a	q_f	586	966	573	945	482	795	487	804	424	699	436	720	393	648	406	670	372	614		
	F		12.1-4.3R		13.5-4.9R		14.8-5.4R		15.9-5.8R		16.9-6.1R		17.8-6.3R		18.6-6.5R		19.4-6.7R		20-6.8R			

2.10 B-36

Arc Spot/Seam Welds to Supports with Button Punch Side Seam Attachments



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q _a) (plf), Factored Shear (q _f) (plf), and Flexibility Factor (F) (10 ⁻⁶ in/lbs)																		
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"	
36/4	16 ga	4"	q _a q _f	920	1518	748	1234	633	1044	551	909	489	807	441	728	403	665	372	614	347	572
			F	7.4 -1.9R		8.2 -2R		8.8 -2.1R		9.4 -2.1R		9.8 -2.2R		10.2 -2.2R		10.6 -2.2R		10.9 -2.1R		11.2 -2.1R	
		6"	q _a q _f	887	1463	714	1179	600	989	518	854	456	752	408	673	370	610	339	559	313	517
			F	8.2 -2.3R		9.2 -2.6R		10.1 -2.8R		10.9 -3R		11.6 -3.1R		12.2 -3.1R		12.8 -3.2R		13.3 -3.2R		13.7 -3.3R	
		8"	q _a q _f	870	1435	701	1157	583	962	503	830	439	725	393	649	353	583	323	534	297	490
			F	8.7 -2.6R		9.9 -3R		11 -3.3R		11.9 -3.6R		12.8 -3.8R		13.6 -3.9R		14.3 -4R		15 -4.1R		15.6 -4.2R	
	12"	q _a q _f	853	1408	681	1124	566	934	484	799	423	697	375	618	337	555	305	504	280	462	
		F	9.3 -3R		10.7 -3.5R		12 -4R		13.3 -4.4R		14.4 -4.7R		15.4 -5R		16.4 -5.2R		17.3 -5.4R		18.2 -5.6R		
	18"	q _a q _f	845	1408	674	1113	555	916	475	783	414	684	364	600	327	539	296	489	269	444	
		F	9.7 -3.3R		11.3 -3.9R		12.9 -4.5R		14.3 -5R		15.7 -5.5R		17 -6R		18.2 -6.3R		19.4 -6.7R		20.5 -7R		
	24"	q _a q _f	837	1380	668	1102	550	907	470	775	406	670	360	594	320	528	290	479	263	435	
		F	9.9 -3.5R		11.7 -4.2R		13.4 -4.8R		15 -5.5R		16.5 -6R		17.9 -6.6R		19.3 -7.1R		20.7 -7.5R		22 -7.9R		
36/4	18 ga	4"	q _a q _f	740	1221	605	998	514	849	450	743	402	663	364	601	334	551	311	514	294	485
			F	8.6 -2.1R		9.4 -2.3R		10.1 -2.3R		10.7 -2.4R		11.3 -2.4R		11.7 -2.4R		12.1 -2.4R		12.4 -2.4R		12.7 -2.4R	
		6"	q _a q _f	706	1166	571	943	481	794	417	688	368	608	331	546	301	496	278	459	260	430
			F	9.5 -2.6R		10.6 -2.9R		11.6 -3.1R		12.5 -3.3R		13.2 -3.4R		13.9 -3.5R		14.5 -3.6R		15.1 -3.6R		15.6 -3.6R	
		8"	q _a q _f	690	1138	558	921	464	766	402	664	352	580	316	522	284	469	263	434	244	402
			F	10 -3R		11.4 -3.4R		12.6 -3.7R		13.6 -4R		14.6 -4.2R		15.5 -4.4R		16.3 -4.5R		17 -4.6R		17.7 -4.7R	
	12"	q _a q _f	673	1111	538	888	448	739	383	633	335	553	298	491	268	441	245	404	227	375	
		F	10.6 -3.4R		12.3 -3.9R		13.7 -4.4R		15.1 -4.9R		16.4 -5.2R		17.5 -5.6R		18.6 -5.8R		19.7 -6.1R		20.6 -6.3R		
	18"	q _a q _f	665	1111	531	877	437	721	374	617	327	539	286	473	258	425	236	389	216	356	
		F	11.1 -3.7R		13 -4.4R		14.7 -5.1R		16.3 -5.6R		17.8 -6.2R		19.3 -6.7R		20.7 -7.1R		22 -7.5R		23.2 -7.9R		
	24"	q _a q _f	656	1083	525	866	431	711	369	609	318	525	283	467	251	414	229	379	210	347	
		F	11.4 -3.9R		13.3 -4.7R		15.2 -5.4R		17 -6.1R		18.7 -6.7R		20.3 -7.3R		21.9 -7.9R		23.4 -8.4R		24.9 -8.9R		
36/4	20 ga	4"	q _a q _f	473	781	394	651	341	563	303	500	275	453	253	417	237	391	225	371	214	354
			F	10.4 -2.4R		11.4 -2.6R		12.2 -2.7R		12.9 -2.8R		13.5 -2.8R		14 -2.8R		14.4 -2.8R		14.8 -2.8R		15.2 -2.7R	
		6"	q _a q _f	441	727	361	596	308	508	270	445	241	398	219	362	204	336	191	316	181	299
			F	11.4 -3R		12.7 -3.4R		13.8 -3.6R		14.8 -3.8R		15.7 -4R		16.5 -4.1R		17.2 -4.1R		17.9 -4.2R		18.5 -4.2R	
		8"	q _a q _f	424	700	348	574	291	481	256	422	225	371	204	337	187	309	176	291	164	271
			F	12 -3.4R		13.6 -3.9R		14.9 -4.3R		16.2 -4.6R		17.3 -4.8R		18.3 -5R		19.3 -5.2R		20.1 -5.3R		20.9 -5.4R	
	12"	q _a q _f	408	672	328	541	275	453	237	390	208	343	186	307	170	281	158	261	148	244	
		F	12.7 -3.9R		14.6 -4.6R		16.3 -5.1R		17.9 -5.6R		19.3 -6R		20.7 -6.4R		22 -6.7R		23.1 -7R		24.2 -7.3R		
	18"	q _a q _f	399	672	321	530	263	435	227	375	200	330	175	288	160	265	149	246	136	225	
		F	13.3 -4.3R		15.4 -5.1R		17.4 -5.8R		19.3 -6.5R		21 -7.1R		22.7 -7.7R		24.3 -8.2R		25.8 -8.7R		27.3 -9.1R		
	24"	q _a q _f	391	645	314	519	258	426	222	367	191	316	171	282	154	254	143	236	131	216	
		F	13.6 -4.5R		15.9 -5.4R		18 -6.2R		20.1 -7R		22 -7.8R		23.9 -8.5R		25.7 -9.1R		27.5 -9.7R		29.2 -10.2R		
36/4	22 ga	4"	q _a q _f	364	600	310	511	272	448	244	403	224	369	209	346	198	328	190	313	182	300
			F	11.7 -2.7R		12.8 -2.8R		13.7 -3R		14.5 -3R		15.1 -3.1R		15.7 -3.1R		16.2 -3.1R		16.6 -3R		17 -3R	
		6"	q _a q _f	334	551	276	456	238	393	211	348	191	314	176	291	165	273	156	258	149	245
			F	12.8 -3.3R		14.3 -3.7R		15.5 -4R		16.6 -4.2R		17.6 -4.3R		18.5 -4.5R		19.3 -4.5R		20 -4.6R		20.6 -4.6R	
		8"	q _a q _f	317	523	263	434	222	366	197	325	174	287	161	266	148	245	141	233	132	218
			F	13.5 -3.7R		15.2 -4.3R		16.7 -4.7R		18.1 -5R		19.3 -5.3R		20.4 -5.5R		21.5 -5.7R		22.4 -5.8R		23.3 -5.9R	
	12"	q _a q _f	300	496	243	401	205	338	178	293	157	259	143	236	132	218	123	203	113	190	
		F	14.3 -4.3R		16.4 -5R		18.2 -5.6R		20 -6.2R		21.6 -6.6R		23 -7R		24.4 -7.4R		25.7 -7.7R		26.9 -8R		
	18"	q _a q _f	292	496	236	390	194	320	168	277	149	246	132	217	122	201	114	188	104	172	
		F	14.9 -4.7R		17.2 -5.6R		19.4 -6.4R		21.5 -7.1R		23.4 -7.8R		25.3 -8.4R		27 -9R		28.7 -9.5R		30.3 -9.9R		
	24"	q _a q _f	284	468	230	379	188	311	163	270	141	232	128	211	115	190	108	178	99	163	
		F	15.3 -4.9R		17.7 -5.9R		20.1 -6.8R		22.4 -7.7R		24.5 -8.5R		26.6 -9.3R		28.6 -10R		30.5 -10.6R		32.3 -11.2R		

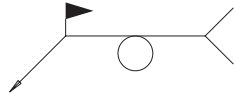
B-36 36/4

Support Attachment: 0.5" Effective Dia. Arc Spot Weld

Side Seam Attachment: Button Punch

**Arc Spot/Seam Welds to Supports with
Button Punch Side Seam Attachments**

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

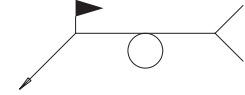
Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7	16 ga	4"	q_a	q_f	1279	2110	1035	1707	872	1439	756	1247	669	1103	601	991	547	902	502	829	466	769
			F		6.2	-1.6R	6.8	-1.7R	7.4	-1.9R	7.9	-2R	8.4	-2R	8.8	-2.1R	9.2	-2.1R	9.5	-2.2R	9.8	-2.2R
		6"	q_a	q_f	1245	2055	1001	1652	839	1384	722	1192	635	1048	568	936	513	847	469	774	433	714
			F		6.6	-1.8R	7.4	-2.1R	8.2	-2.3R	8.9	-2.5R	9.5	-2.7R	10.1	-2.8R	10.6	-2.9R	11.1	-3R	11.6	-3.1R
		8"	q_a	q_f	1229	2027	988	1630	822	1356	708	1168	619	1021	553	912	497	820	454	749	416	687
			F		6.9	-2R	7.8	-2.3R	8.7	-2.6R	9.5	-2.9R	10.2	-3.1R	10.9	-3.3R	11.6	-3.5R	12.2	-3.6R	12.8	-3.7R
	12"	q_a	q_f	1212	2000	968	1597	805	1329	689	1137	602	993	534	881	480	792	436	719	400	659	
		F		7.1	-2.2R	8.2	-2.6R	9.2	-3R	10.2	-3.3R	11.1	-3.7R	12	-4R	12.8	-4.2R	13.6	-4.5R	14.3	-4.7R	
	18"	q_a	q_f	1204	2000	961	1586	794	1310	680	1121	594	980	523	863	470	776	427	704	388	641	
		F		7.3	-2.3R	8.5	-2.8R	9.7	-3.3R	10.8	-3.7R	11.8	-4.1R	12.8	-4.5R	13.8	-4.9R	14.7	-5.2R	15.6	-5.5R	
	24"	q_a	q_f	1195	1972	955	1575	789	1301	675	1113	585	966	519	857	463	765	420	694	383	632	
		F		7.5	-2.4R	8.7	-2.9R	9.9	-3.4R	11.1	-3.9R	12.2	-4.4R	13.3	-4.8R	14.4	-5.2R	15.4	-5.6R	16.4	-6R	
	18 ga	4"	q_a	q_f	1021	1685	830	1369	702	1159	611	1008	543	895	489	807	447	737	414	683	388	639
			F		7.2	-1.7R	7.9	-1.9R	8.6	-2.1R	9.2	-2.2R	9.7	-2.3R	10.1	-2.3R	10.5	-2.4R	10.9	-2.4R	11.2	-2.4R
		6"	q_a	q_f	988	1630	797	1314	669	1104	578	953	509	840	456	752	413	682	380	628	354	584
			F		7.7	-2.1R	8.6	-2.4R	9.4	-2.6R	10.2	-2.8R	10.9	-3R	11.6	-3.1R	12.2	-3.3R	12.7	-3.4R	13.2	-3.4R
		8"	q_a	q_f	971	1603	783	1292	652	1076	563	930	493	813	441	728	397	655	365	603	338	557
			F		7.9	-2.2R	9	-2.6R	10	-2.9R	10.9	-3.2R	11.7	-3.5R	12.5	-3.7R	13.2	-3.9R	13.9	-4R	14.6	-4.2R
	12"	q_a	q_f	955	1575	763	1259	636	1049	544	898	476	785	423	697	380	627	347	573	321	529	
		F		8.3	-2.5R	9.5	-2.9R	10.6	-3.4R	11.7	-3.7R	12.7	-4.1R	13.7	-4.4R	14.6	-4.7R	15.5	-5R	16.3	-5.2R	
	18"	q_a	q_f	946	1575	757	1248	624	1030	535	882	468	772	412	679	370	611	338	558	310	511	
		F		8.5	-2.6R	9.8	-3.2R	11.1	-3.7R	12.3	-4.2R	13.5	-4.6R	14.6	-5R	15.7	-5.4R	16.8	-5.8R	17.8	-6.2R	
	24"	q_a	q_f	938	1548	750	1237	619	1021	530	875	459	758	408	673	363	600	332	548	304	502	
		F		8.6	-2.7R	10	-3.3R	11.3	-3.9R	12.7	-4.4R	13.9	-4.9R	15.2	-5.4R	16.3	-5.9R	17.5	-6.3R	18.6	-6.7R	
20 ga	4"	q_a	q_f	640	1057	527	870	452	746	398	657	358	590	326	539	304	501	285	470	270	445	
		F		8.7	-2R	9.6	-2.2R	10.4	-2.4R	11	-2.5R	11.6	-2.6R	12.1	-2.7R	12.6	-2.8R	13	-2.8R	13.4	-2.8R	
	6"	q_a	q_f	607	1002	494	815	419	691	365	602	325	535	293	484	270	446	252	415	236	390	
		F		9.3	-2.4R	10.4	-2.7R	11.4	-3R	12.3	-3.3R	13.1	-3.5R	13.8	-3.6R	14.5	-3.8R	15.1	-3.9R	15.7	-4R	
	8"	q_a	q_f	590	974	481	793	402	663	351	578	308	508	278	459	254	418	237	390	220	362	
		F		9.6	-2.6R	10.8	-3R	12	-3.4R	13	-3.7R	14	-4R	14.9	-4.3R	15.7	-4.5R	16.5	-4.7R	17.3	-4.8R	
12"	q_a	q_f	574	947	461	760	385	636	332	547	291	480	260	429	237	391	218	360	203	335		
	F		10	-2.8R	11.4	-3.4R	12.7	-3.9R	13.9	-4.3R	15.1	-4.7R	16.2	-5.1R	17.3	-5.4R	18.3	-5.7R	19.3	-6R		
18"	q_a	q_f	565	947	454	749	374	617	322	531	283	467	249	410	227	374	209	345	192	317		
	F		10.3	-3R	11.8	-3.6R	13.3	-4.2R	14.7	-4.8R	16	-5.3R	17.3	-5.8R	18.6	-6.3R	19.8	-6.7R	21	-7.1R		
24"	q_a	q_f	557	919	447	738	369	608	317	523	275	453	245	404	220	363	203	335	186	307		
	F		10.4	-3.1R	12	-3.8R	13.6	-4.4R	15.1	-5.1R	16.5	-5.7R	17.9	-6.2R	19.3	-6.8R	20.7	-7.3R	22	-7.7R		
22 ga	4"	q_a	q_f	486	803	405	669	351	579	312	516	283	468	262	433	246	406	233	384	222	366	
		F		9.9	-2.2R	10.9	-2.5R	11.7	-2.6R	12.4	-2.8R	13.1	-2.9R	13.7	-3R	14.2	-3R	14.7	-3.1R	15.1	-3.1R	
	6"	q_a	q_f	453	748	372	614	318	524	279	461	250	413	229	378	213	351	200	329	189	311	
		F		10.5	-2.6R	11.7	-3R	12.8	-3.3R	13.8	-3.6R	14.7	-3.8R	15.5	-4R	16.2	-4.1R	16.9	-4.2R	17.6	-4.3R	
	8"	q_a	q_f	436	720	359	592	301	497	265	437	233	385	214	354	196	324	184	304	172	284	
		F		10.9	-2.8R	12.2	-3.3R	13.5	-3.7R	14.6	-4.1R	15.7	-4.4R	16.7	-4.7R	17.6	-4.9R	18.5	-5.1R	19.3	-5.3R	
12"	q_a	q_f	420	693	339	559	284	469	246	406	217	358	196	323	180	296	166	274	155	256		
	F		11.3	-3.1R	12.8	-3.7R	14.3	-4.2R	15.6	-4.7R	16.9	-5.2R	18.2	-5.6R	19.3	-6R	20.4	-6.3R	21.5	-6.6R		
18"	q_a	q_f	411	693	332	548	273	451	236	390	208	344	185	305	170	280	157	259	144	238		
	F		11.6	-3.3R	13.3	-4R	14.9	-4.6R	16.4	-5.3R	17.9	-5.8R	19.4	-6.4R	20.7	-6.9R	22.1	-7.3R	23.3	-7.8R		
24"	q_a	q_f	403	665	325	537	268	442	232	382	200	330	181	299	163	269	151	249	139	229		
	F		11.8	-3.4R	13.5	-4.2R	15.2	-4.9R	16.9	-5.6R	18.5	-6.2R	20	-6.8R	21.5	-7.4R	23	-8R	24.4	-8.5R		

2.10 B-36

Arc Spot/Seam Welds to Supports with Top Seam Welded Side Seam Attachment

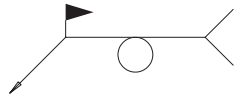


Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/4	16 ga	4"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R	
		6"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R	
		8"	q_a	q_f	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2421	3994	2134	3414	1763	2821	1482	2371
			F		3 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 +0R		3 +0R		3 +0R		3 +0R	
	12"	q_a	q_f	2318	3825	2258	3725	2214	3654	2182	3601	2157	3560	2137	3527	2121	3414	1763	2821	1482	2371	
		F		3.4 -0.2R		3.4 -0.1R		3.4 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R
	18"	q_a	q_f	2077	3825	2055	3391	1829	3019	1849	3051	1864	3075	1718	2835	1744	2878	1763	2821	1482	2371	
		F		3.9 -0.3R		4 -0.3R		4 -0.2R		4.1 -0.2R		4.1 -0.2R		4.1 -0.2R		4.2 -0.2R		4.2 -0.2R		4.2 -0.2R		4.2 -0.1R
	24"	q_a	q_f	1758	2901	1801	2972	1578	2604	1640	2705	1480	2442	1542	2544	1419	2341	1476	2436	1377	2271	
		F		4.4 -0.4R		4.5 -0.4R		4.6 -0.4R		4.6 -0.3R		4.7 -0.3R		4.7 -0.3R		4.8 -0.3R		4.8 -0.3R		4.8 -0.3R		4.8 -0.2R
36/4	18 ga	4"	q_a	q_f	1900	3136	1900	3136	1900	3136	1900	3136	1900	3136	1900	3062	1550	2481	1281	2050	1077	1723
			F		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R	
		6"	q_a	q_f	1900	3136	1900	3136	1900	3136	1900	3136	1900	3136	1900	3062	1550	2481	1281	2050	1077	1723
			F		3.4 -0.1R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R	
		8"	q_a	q_f	1900	3136	1900	3136	1900	3136	1900	3136	1900	3136	1900	3062	1550	2481	1281	2050	1077	1723
			F		3.6 -0.1R		3.6 -0.1R		3.7 -0.1R		3.7 -0.1R		3.7 -0.1R		3.7 +0R		3.7 +0R		3.7 +0R		3.7 +0R	
	12"	q_a	q_f	1783	2942	1733	2859	1697	2799	1670	2755	1649	2721	1632	2693	1550	2481	1281	2050	1077	1723	
		F		4.1 -0.2R		4.1 -0.2R		4.1 -0.1R		4.2 -0.1R		4.2 -0.1R		4.2 -0.1R		4.2 -0.1R		4.2 -0.1R		4.2 -0.1R		4.2 -0.1R
	18"	q_a	q_f	1594	2942	1574	2596	1396	2304	1409	2325	1419	2342	1305	2154	1325	2186	1281	2050	1077	1723	
		F		4.6 -0.3R		4.7 -0.3R		4.8 -0.3R		4.8 -0.2R		4.9 -0.2R		4.9 -0.2R		4.9 -0.2R		4.9 -0.2R		4.9 -0.2R		5 -0.2R
	24"	q_a	q_f	1348	2225	1377	2273	1203	1986	1248	2059	1124	1855	1170	1931	1075	1774	1118	1845	1041	1718	
		F		5.2 -0.5R		5.3 -0.4R		5.4 -0.4R		5.5 -0.4R		5.5 -0.3R		5.6 -0.3R		5.6 -0.3R		5.6 -0.3R		5.6 -0.3R		5.7 -0.3R
36/4	20 ga	4"	q_a	q_f	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1025	1640	847	1355	712	1139
			F		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R	
		6"	q_a	q_f	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1025	1640	847	1355	712	1139
			F		4.4 -0.1R		4.4 -0.1R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R	
		8"	q_a	q_f	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1121	1850	1025	1640	847	1355	712	1139
			F		4.6 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 +0R		4.7 +0R		4.7 +0R	
	12"	q_a	q_f	1108	1829	1083	1787	1065	1758	1052	1736	1042	1719	1033	1705	1025	1640	847	1355	712	1139	
		F		5.1 -0.2R		5.2 -0.2R		5.2 -0.2R		5.3 -0.1R		5.3 -0.1R		5.3 -0.1R		5.3 -0.1R		5.3 -0.1R		5.3 -0.1R		5.3 -0.1R
	18"	q_a	q_f	997	1829	990	1634	887	1463	898	1481	906	1495	838	1383	852	1406	847	1355	712	1139	
		F		5.8 -0.4R		5.9 -0.3R		6 -0.3R		6 -0.3R		6.1 -0.3R		6.1 -0.2R		6.1 -0.2R		6.1 -0.2R		6.2 -0.2R		6.2 -0.2R
	24"	q_a	q_f	846	1395	871	1436	766	1264	798	1317	723	1193	754	1244	696	1148	725	1196	677	1117	
		F		6.4 -0.6R		6.6 -0.5R		6.7 -0.5R		6.8 -0.4R		6.8 -0.4R		6.9 -0.4R		6.9 -0.3R		7 -0.3R		7 -0.3R		7 -0.3R
36/4	22 ga	4"	q_a	q_f	805	1329	805	1329	805	1329	805	1329	805	1329	805	1329	779	1247	644	1031	541	866
			F		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R	
		6"	q_a	q_f	805	1329	805	1329	805	1329	805	1329	805	1329	805	1329	779	1247	644	1031	541	866
			F		5.1 -0.1R		5.2 -0.1R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R	
		8"	q_a	q_f	805	1329	805	1329	805	1329	805	1329	805	1329	805	1329	779	1247	644	1031	541	866
			F		5.4 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 +0R		5.5 +0R	
	12"	q_a	q_f	805	1329	804	1326	792	1307	784	1293	777	1282	772	1273	767	1247	644	1031	541	866	
		F		6 -0.2R		6 -0.2R		6.1 -0.2R		6.1 -0.2R		6.1 -0.1R		6.2 -0.1R		6.2 -0.1R		6.2 -0.1R		6.2 -0.1R		6.2 -0.1R
	18"	q_a	q_f	741	1329	738	1217	664	1096	674	1112	681	1123	632	1043	643	1060	644	1031	541	866	
		F		6.7 -0.4R		6.8 -0.4R		6.9 -0.3R		7 -0.3R		7 -0.3R		7.1 -0.3R		7.1 -0.2R		7.1 -0.2R		7.1 -0.2R		7.1 -0.2R
	24"	q_a	q_f	630	1039	651	1074	576	950	601	991	546	901	570	941	528	871	550	907	515	849	
		F		7.4 -0.6R		7.6 -0.6R		7.7 -0.5R		7.8 -0.5R		7.8 -0.4R		7.9 -0.4R		8 -0.4R		8 -0.4R		8 -0.4R		8 -0.3R

**Arc Spot/Seam Welds to Supports with
Top Seam Welded Side Seam Attachment**
Diaphragm Shear in pounds per linear foot (plf)



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																		
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"	
36/7	16 ga	4"	q_a q_f	4726	7798	4685	7730	4656	7682	4354	6967	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	2.5 +0R		2.5 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R		2.6 +0R	
		6"	q_a q_f	4163	6869	4085	6741	4030	6650	3990	6583	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	2.7 -0.1R		2.8 -0.1R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R		2.8 +0R	
		8"	q_a q_f	3712	6125	3713	6127	3528	5821	3557	5868	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	2.9 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 -0.1R		3 +0R		3 +0R	
		12"	q_a q_f	3089	5097	2941	4853	2838	4683	2762	4558	2704	4461	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.3 -0.2R		3.3 -0.2R		3.4 -0.2R		3.4 -0.1R		3.4 -0.1R		3.4 -0.1R		3.5 -0.1R		3.5 -0.1R		3.5 -0.1R	
		18"	q_a q_f	2699	5097	2616	4316	2255	3721	2256	3723	2257	3724	2041	3367	2063	3405	1763	2821	1482	2371
			F	3.7 -0.3R		3.8 -0.3R		3.9 -0.3R		4 -0.3R		4 -0.3R		4 -0.2R		4.1 -0.2R		4.1 -0.2R		4.1 -0.2R	
		24"	q_a q_f	2251	3715	2254	3718	1925	3177	1975	3259	1754	2893	1813	2991	1648	2719	1707	2816	1482	2371
			F	4.1 -0.5R		4.2 -0.5R		4.4 -0.4R		4.4 -0.4R		4.5 -0.4R		4.6 -0.4R		4.6 -0.3R		4.7 -0.3R		4.7 -0.3R	
	18 ga	4"	q_a q_f	3656	6032	3620	5973	3595	5931	3164	5062	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R		3.1 +0R	
		6"	q_a q_f	3201	5281	3135	5173	3089	5097	3055	5040	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	3.3 -0.1R		3.4 -0.1R		3.4 -0.1R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R	
		8"	q_a q_f	2844	4693	2841	4687	2692	4443	2712	4475	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	3.6 -0.1R		3.6 -0.1R		3.6 -0.1R		3.6 -0.1R		3.6 -0.1R		3.7 -0.1R		3.7 -0.1R		3.7 -0.1R		3.7 -0.1R	
		12"	q_a q_f	2362	3897	2243	3700	2159	3562	2097	3461	2050	3383	1914	3062	1550	2481	1281	2050	1077	1723
			F	4 -0.2R		4 -0.2R		4.1 -0.2R		4.1 -0.2R		4.1 -0.1R		4.1 -0.1R		4.1 -0.1R		4.2 -0.1R		4.2 -0.1R	
		18"	q_a q_f	2064	3897	1994	3291	1716	2831	1713	2826	1710	2822	1545	2549	1550	2481	1281	2050	1077	1723
			F	4.4 -0.4R		4.6 -0.3R		4.6 -0.3R		4.7 -0.3R		4.7 -0.3R		4.8 -0.3R		4.8 -0.2R		4.8 -0.2R		4.9 -0.2R	
		24"	q_a q_f	1726	2849	1720	2838	1467	2421	1501	2476	1331	2196	1373	2266	1247	2058	1281	2050	1077	1723
			F	4.9 -0.5R		5 -0.5R		5.1 -0.5R		5.2 -0.5R		5.3 -0.4R		5.4 -0.4R		5.4 -0.4R		5.5 -0.4R		5.5 -0.3R	
20 ga	4"	q_a q_f	2238	3693	2222	3667	2211	3648	2092	3347	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		
	6"	q_a q_f	1991	3286	1960	3233	1937	3196	1921	3169	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	4.3 -0.1R		4.3 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R		4.4 +0R		
	8"	q_a q_f	1786	2947	1791	2955	1709	2819	1724	2844	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	4.6 -0.1R		4.6 -0.1R		4.6 -0.1R		4.6 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		4.7 -0.1R		
	12"	q_a q_f	1493	2463	1428	2357	1383	2282	1350	2227	1324	2185	1265	2024	1025	1640	847	1355	712	1139	
		F	5 -0.2R		5.1 -0.2R		5.1 -0.2R		5.2 -0.2R		5.2 -0.2R		5.2 -0.2R		5.2 -0.1R		5.3 -0.1R		5.3 -0.1R		
	18"	q_a q_f	1304	2463	1271	2097	1100	1814	1104	1822	1107	1827	1003	1655	1016	1640	847	1355	712	1139	
		F	5.6 -0.4R		5.7 -0.4R		5.8 -0.4R		5.9 -0.3R		5.9 -0.3R		6 -0.3R		6 -0.3R		6.1 -0.3R		6.1 -0.3R		
	24"	q_a q_f	1084	1789	1094	1804	937	1545	965	1593	859	1417	891	1469	810	1337	842	1355	712	1139	
		F	6.1 -0.6R		6.3 -0.6R		6.4 -0.6R		6.5 -0.5R		6.6 -0.5R		6.7 -0.5R		6.7 -0.4R		6.8 -0.4R		6.8 -0.4R		
22 ga	4"	q_a q_f	1611	2658	1611	2658	1611	2658	1590	2545	1218	1948	962	1539	779	1247	644	1031	541	866	
		F	4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		
	6"	q_a q_f	1473	2430	1453	2397	1438	2373	1428	2356	1218	1948	962	1539	779	1247	644	1031	541	866	
		F	5.1 -0.1R		5.1 -0.1R		5.1 -0.1R		5.1 -0.1R		5.2 -0.1R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		
	8"	q_a q_f	1329	2193	1335	2202	1278	2109	1291	2129	1218	1948	962	1539	779	1247	644	1031	541	866	
		F	5.4 -0.1R		5.4 -0.1R		5.4 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		5.5 -0.1R		
	12"	q_a q_f	1117	1842	1073	1770	1042	1720	1020	1683	1003	1654	962	1539	779	1247	644	1031	541	866	
		F	5.9 -0.3R		5.9 -0.2R		6 -0.2R		6 -0.2R		6.1 -0.2R		6.1 -0.2R		6.1 -0.2R		6.1 -0.1R		6.1 -0.1R		
	18"	q_a q_f	976	1842	956	1577	830	1370	836	1380	840	1387	763	1259	774	1247	644	1031	541	866	
		F	6.5 -0.5R		6.6 -0.4R		6.7 -0.4R		6.8 -0.4R		6.9 -0.4R		6.9 -0.3R		7 -0.3R		7 -0.3R		7 -0.3R		
	24"	q_a q_f	809	1336	822	1356	706	1165	731	1206	651	1074	677	1118	617	1018	642	1031	541	866	
		F	7 -0.7R		7.2 -0.6R		7.4 -0.6R		7.5 -0.6R		7.6 -0.5R		7.7 -0.5R		7.7 -0.5R		7.8 -0.5R		7.8 -0.4R		

DGB-36 & DGBF-36 2.5

No. 12 Self-Drilling Screws to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)


B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371		
			F		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R			
		6"	q_a	q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371		
			F		3.9 +0R		3.9 +0R		3.9 +0R		3.9 +0R		3.9 +0R		3.9 +0R		3.9 +0R		3.9 +0R			
		8"	q_a	q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371		
			F		4.6 +0R		4.6 +0R		4.6 +0R		4.6 +0R		4.6 +0R		4.6 +0R		4.6 +0R		4.6 +0R			
	12"	q_a	q_f	1876	3020	1859	2993	1847	2974	1839	2960	1832	2950	1827	2941	1823	2935	1763	2821	1482	2371	
		F		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		5.8 +0R		
	18"	q_a	q_f	1704	3020	1721	2771	1575	2536	1611	2593	1636	2633	1538	2476	1568	2524	1591	2562	1482	2371	
		F		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		7.7 +0R		
	24"	q_a	q_f	1434	2308	1522	2451	1363	2194	1443	2323	1325	2134	1395	2246	1302	2096	1363	2194	1286	2070	
		F		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		9.5 +0R		
	18 ga	4"	q_a	q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1550	2481	1281	2050	1077	1723
			F		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R	
		6"	q_a	q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1550	2481	1281	2050	1077	1723
			F		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R		5.5 +0R	
		8"	q_a	q_f	1573	2533	1576	2537	1557	2507	1571	2529	1548	2493	1561	2513	1543	2481	1281	2050	1077	1723
			F		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R		6.5 +0R	
	12"	q_a	q_f	1394	2245	1375	2214	1362	2192	1352	2177	1344	2164	1338	2155	1333	2147	1281	2050	1077	1723	
		F		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		8.4 +0R		
	18"	q_a	q_f	1244	2245	1253	2017	1127	1815	1153	1856	1172	1886	1089	1753	1112	1790	1130	1820	1069	1721	
		F		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		
	24"	q_a	q_f	1028	1654	1089	1753	961	1546	1018	1639	925	1489	976	1571	903	1453	948	1526	888	1429	
		F		14.2 -0.1R		14.2 -0.1R		14.2 +0R		14.2 +0R		14.2 +0R		14.2 +0R		14.2 +0R		14.2 +0R		14.2 +0R		
20 ga	4"	q_a	q_f	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1025	1640	847	1355	712	1139	
		F		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		6.9 +0R		
	6"	q_a	q_f	1182	1903	1175	1891	1170	1883	1166	1877	1163	1873	1161	1869	1025	1640	847	1355	712	1139	
		F		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		8.6 +0R		
	8"	q_a	q_f	1091	1756	1102	1774	1070	1723	1082	1742	1059	1705	1070	1723	1025	1640	847	1355	712	1139	
		F		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		10.3 +0R		
12"	q_a	q_f	935	1505	914	1472	900	1448	889	1431	881	1418	874	1407	869	1399	847	1355	712	1139		
	F		13.8 -0.1R		13.8 -0.1R		13.8 -0.1R		13.8 +0R		13.8 +0R		13.8 +0R		13.8 +0R		13.8 +0R		13.8 +0R			
18"	q_a	q_f	819	1505	819	1318	722	1162	737	1186	748	1204	686	1104	701	1128	712	1147	667	1074		
	F		18.9 -0.2R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R		18.9 -0.1R			
24"	q_a	q_f	667	1075	701	1128	608	979	643	1035	577	929	608	979	558	898	586	943	545	877		
	F		24 -0.3R		24 -0.2R		24 -0.2R		24 -0.2R		24.1 -0.2R		24.1 -0.1R		24.1 -0.1R		24.1 -0.1R		24.1 -0.1R			
22 ga	4"	q_a	q_f	986	1587	986	1587	986	1587	986	1587	986	1587	962	1539	779	1247	644	1031	541	866	
		F		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		9.1 +0R		
	6"	q_a	q_f	938	1510	930	1497	924	1487	919	1480	916	1475	913	1471	779	1247	644	1031	541	866	
		F		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		11.6 +0R		
	8"	q_a	q_f	852	1372	861	1385	830	1336	840	1352	818	1317	827	1332	779	1247	644	1031	541	866	
		F		14 -0.1R		14 -0.1R		14.1 -0.1R		14.1 +0R		14.1 +0R		14.1 +0R		14.1 +0R		14.1 +0R		14.1 +0R		
12"	q_a	q_f	717	1154	696	1121	681	1097	671	1080	663	1067	656	1056	651	1048	644	1031	541	866		
	F		19 -0.2R		19 -0.2R		19 -0.1R		19 -0.1R		19 -0.1R		19 -0.1R		19 -0.1R		19 -0.1R		19 -0.1R			
18"	q_a	q_f	623	1154	618	995	540	869	549	884	556	895	506	815	517	832	525	845	489	788		
	F		26.3 -0.4R		26.3 -0.3R		26.4 -0.3R		26.4 -0.2R		26.4 -0.2R		26.4 -0.2R		26.4 -0.2R		26.4 -0.2R		26.4 -0.1R			
24"	q_a	q_f	507	816	527	848	454	730	477	767	426	685	447	720	409	658	428	690	397	639		
	F		33.6 -0.7R		33.7 -0.6R		33.7 -0.5R		33.7 -0.4R		33.8 -0.4R		33.8 -0.3R		33.8 -0.3R		33.8 -0.3R		33.8 -0.3R			

2.5 DGB-36 & DGBF-36

No. 12 Self-Drilling Screws to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																		
			Span →	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"									
36/9	16 ga	4"	q_a q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371		
			F	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R		
		6"	q_a q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371
			F	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R	
		8"	q_a q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371
			F	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	4.6 +0R	
	12"	q_a q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371	
		F	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R	5.8 +0R		
	18"	q_a q_f	1971	3174	1971	3174	1873	3015	1899	3057	1918	3088	1786	2875	1814	2921	1763	2821	1482	2371	
		F	7.6 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R	7.7 +0R		
	24"	q_a q_f	1776	2859	1835	2954	1628	2621	1698	2734	1547	2491	1614	2599	1496	2408	1558	2508	1461	2352	
		F	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R	9.5 +0R		
	18 ga	4"	q_a q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1550	2481	1281	2050	1077	1723
			F	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	
		6"	q_a q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1550	2481	1281	2050	1077	1723
			F	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	5.5 +0R	
		8"	q_a q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1550	2481	1281	2050	1077	1723
			F	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	6.5 +0R	
	12"	q_a q_f	1576	2537	1576	2537	1576	2537	1576	2537	1576	2537	1565	2520	1550	2481	1281	2050	1077	1723	
		F	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R	8.4 +0R		
	18"	q_a q_f	1526	2537	1509	2429	1344	2163	1357	2185	1367	2200	1260	2028	1279	2059	1281	2050	1077	1723	
		F	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R		
	24"	q_a q_f	1295	2086	1325	2133	1161	1869	1204	1939	1087	1751	1132	1822	1041	1677	1083	1743	1010	1626	
		F	14.2 -0.1R	14.2 -0.1R	14.2 -0.1R	14.2 -0.1R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R	14.2 +0R		
20 ga	4"	q_a q_f	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1025	1640	847	1355	712	1139	
		F	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R	6.9 +0R		
	6"	q_a q_f	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1025	1640	847	1355	712	1139	
		F	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R	8.6 +0R		
	8"	q_a q_f	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1183	1905	1025	1640	847	1355	712	1139	
		F	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R	10.3 +0R		
12"	q_a q_f	1147	1847	1102	1774	1070	1722	1046	1684	1027	1654	1012	1630	1000	1610	847	1355	712	1139		
	F	13.7 -0.1R	13.7 -0.1R	13.7 -0.1R	13.7 -0.1R	13.7 +0R	13.7 +0R	13.7 +0R	13.7 +0R	13.7 +0R	13.7 +0R	13.8 +0R	13.8 +0R	13.8 +0R	13.8 +0R	13.8 +0R	13.8 +0R	13.8 +0R			
18"	q_a q_f	1021	1847	995	1603	873	1405	874	1407	875	1409	798	1285	807	1299	814	1311	712	1139		
	F	18.8 -0.2R	18.8 -0.2R	18.8 -0.1R	18.8 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R			
24"	q_a q_f	868	1397	871	1402	754	1214	773	1245	692	1114	715	1151	653	1052	676	1089	627	1010		
	F	23.8 -0.3R	23.9 -0.3R	23.9 -0.2R	23.9 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.2R	24 -0.1R	24 -0.1R	24 -0.1R	24 -0.1R	24 -0.1R			
22 ga	4"	q_a q_f	986	1587	986	1587	986	1587	986	1587	986	1587	962	1539	779	1247	644	1031	541	866	
		F	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R	9.1 +0R		
	6"	q_a q_f	986	1587	986	1587	986	1587	986	1587	986	1587	962	1539	779	1247	644	1031	541	866	
		F	11.5 -0.1R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R	11.6 +0R		
	8"	q_a q_f	986	1587	986	1587	986	1587	986	1587	959	1544	962	1539	779	1247	644	1031	541	866	
		F	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R		
12"	q_a q_f	888	1429	845	1360	814	1311	791	1274	773	1245	759	1223	748	1204	644	1031	541	866		
	F	18.8 -0.2R	18.9 -0.2R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	18.9 -0.1R	19 -0.1R	19 -0.1R	19 -0.1R	19 -0.1R	19 -0.1R	19 -0.1R	19 -0.1R			
18"	q_a q_f	790	1429	761	1226	662	1066	658	1060	656	1055	595	958	599	965	603	970	541	866		
	F	26 -0.5R	26.1 -0.4R	26.2 -0.3R	26.2 -0.3R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R	26.3 -0.2R			
24"	q_a q_f	674	1086	667	1074	574	924	583	939	520	837	533	859	486	782	500	806	463	745		
	F	33.1 -0.8R	33.3 -0.6R	33.4 -0.5R	33.5 -0.5R	33.5 -0.5R	33.5 -0.5R	33.5 -0.4R	33.5 -0.4R	33.6 -0.4R	33.6 -0.4R	33.6 -0.4R	33.6 -0.4R	33.6 -0.3R	33.7 -0.3R	33.7 -0.3R	33.7 -0.3R	33.7 -0.3R			

DGB-36 & DGBF-36 2.6

Hilti X-HSN-24 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																						
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"					
			q_a q_f																						
36/4	16 ga	4"	q_a q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047		
			F	3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.3 -0.1R		3.3 +0R		3.3 +0R					
		6"	q_a q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047
			F	3.6 -0.2R		3.7 -0.2R		3.7 -0.2R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R	
		8"	q_a q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047
			F	4.1 -0.3R		4.1 -0.3R		4.2 -0.3R		4.2 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.4 -0.2R		4.4 -0.2R		4.4 -0.2R		4.4 -0.2R	
	12"	q_a q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	
		F	4.8 -0.5R		4.9 -0.5R		5.1 -0.5R		5.1 -0.4R		5.2 -0.4R		5.3 -0.4R		5.3 -0.4R		5.4 -0.3R		5.4 -0.3R		5.4 -0.3R		5.4 -0.3R		
	18"	q_a q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	
		F	5.6 -0.9R		5.9 -0.9R		6.1 -0.8R		6.3 -0.8R		6.4 -0.7R		6.6 -0.7R		6.6 -0.7R		6.7 -0.6R		6.8 -0.6R		6.8 -0.6R		6.8 -0.6R		
	24"	q_a q_f	1253	2018	1271	2047	1204	1939	1256	2022	1177	1895	1223	1970	1160	1867	1201	1934	1148	1848	1148	1848	1148	1848	
		F	6.3 -1.2R		6.7 -1.2R		7 -1.2R		7.3 -1.1R		7.5 -1.1R		7.7 -1.1R		7.8 -1R		7.9 -1R		8 -0.9R		8 -0.9R		8 -0.9R		
	18 ga	4"	q_a q_f	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657
			F	4.2 -0.2R		4.3 -0.2R		4.3 -0.2R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R	
		6"	q_a q_f	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657
			F	4.9 -0.4R		5 -0.3R		5.1 -0.3R		5.1 -0.3R		5.2 -0.3R		5.2 -0.2R		5.2 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.2R	
		8"	q_a q_f	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657
			F	5.5 -0.6R		5.6 -0.5R		5.7 -0.5R		5.8 -0.4R		5.9 -0.4R		6 -0.4R		6 -0.4R		6 -0.3R		6.1 -0.3R		6.1 -0.3R		6.1 -0.3R	
	12"	q_a q_f	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	
		F	6.4 -0.9R		6.7 -0.9R		6.9 -0.8R		7.1 -0.8R		7.2 -0.8R		7.3 -0.7R		7.4 -0.7R		7.5 -0.6R		7.6 -0.6R		7.6 -0.6R		7.6 -0.6R		
	18"	q_a q_f	1029	1657	1029	1657	995	1602	1011	1628	1023	1647	967	1557	982	1582	994	1601	952	1533	952	1533	952	1533	
		F	7.4 -1.4R		7.9 -1.4R		8.3 -1.4R		8.6 -1.3R		8.9 -1.3R		9.1 -1.3R		9.3 -1.2R		9.4 -1.2R		9.5 -1.1R		9.5 -1.1R		9.5 -1.1R		
	24"	q_a q_f	931	1499	971	1563	879	1415	919	1480	850	1369	887	1429	832	1340	866	1394	820	1320	820	1320	820	1320	
		F	8.2 -1.8R		8.9 -1.8R		9.4 -1.9R		9.9 -1.9R		10.2 -1.8R		10.5 -1.8R		10.8 -1.8R		11 -1.7R		11.2 -1.7R		11.2 -1.7R		11.2 -1.7R		
20 ga	4"	q_a q_f	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	712	1139	712	1139	712	1139	
		F	6.2 -0.4R		6.3 -0.4R		6.4 -0.4R		6.4 -0.3R		6.5 -0.3R		6.5 -0.3R		6.6 -0.3R		6.6 -0.2R		6.6 -0.2R		6.6 -0.2R		6.6 -0.2R		
	6"	q_a q_f	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	712	1139	712	1139	712	1139	
		F	7.1 -0.8R		7.4 -0.7R		7.5 -0.7R		7.7 -0.6R		7.8 -0.6R		7.8 -0.5R		7.9 -0.5R		8 -0.5R		8 -0.5R		8 -0.5R		8 -0.5R		
	8"	q_a q_f	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	783	1260	712	1139	712	1139	712	1139	
		F	7.9 -1.1R		8.3 -1R		8.5 -1R		8.7 -0.9R		8.9 -0.9R		9 -0.9R		9.1 -0.8R		9.2 -0.8R		9.3 -0.7R		9.3 -0.7R		9.3 -0.7R		
12"	q_a q_f	783	1260	783	1260	783	1260	780	1256	774	1247	770	1239	766	1233	763	1228	712	1139	712	1139	712	1139		
	F	9.1 -1.6R		9.7 -1.7R		10.2 -1.6R		10.5 -1.6R		10.8 -1.5R		11.1 -1.5R		11.3 -1.4R		11.5 -1.4R		11.6 -1.3R		11.6 -1.3R		11.6 -1.3R			
18"	q_a q_f	737	1260	735	1183	665	1071	675	1087	682	1098	635	1023	646	1040	654	1054	620	998	620	998	620	998		
	F	10.4 -2.3R		11.2 -2.4R		12 -2.5R		12.6 -2.5R		13.1 -2.5R		13.5 -2.4R		13.9 -2.4R		14.2 -2.4R		14.5 -2.3R		14.5 -2.3R		14.5 -2.3R			
24"	q_a q_f	628	1011	651	1048	578	930	603	972	550	886	575	925	533	858	555	894	521	838	521	838	521	838		
	F	11.2 -2.8R		12.3 -3R		13.3 -3.1R		14.1 -3.2R		14.8 -3.3R		15.4 -3.3R		16 -3.3R		16.4 -3.3R		16.9 -3.3R		16.9 -3.3R		16.9 -3.3R			
22 ga	4"	q_a q_f	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	644	1031	541	866	541	866	541	866	
		F	7.8 -0.7R		8 -0.7R		8.2 -0.6R		8.3 -0.6R		8.4 -0.5R		8.4 -0.5R		8.5 -0.5R		8.6 -0.4R		8.6 -0.4R		8.6 -0.4R		8.6 -0.4R		
	6"	q_a q_f	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	644	1031	541	866	541	866	541	866	
		F	9 -1.2R		9.4 -1.1R		9.6 -1.1R		9.9 -1R		10 -1R		10.2 -0.9R		10.3 -0.9R		10.4 -0.8R		10.5 -0.8R		10.5 -0.8R		10.5 -0.8R		
	8"	q_a q_f	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	656	1056	644	1031	541	866	541	866	541	866	
		F	9.9 -1.6R		10.5 -1.6R		10.9 -1.5R		11.2 -1.5R		11.5 -1.4R		11.7 -1.4R		11.9 -1.3R		12.1 -1.3R		12.2 -1.2R		12.2 -1.2R		12.2 -1.2R		
12"	q_a q_f	640	1030	624	1005	613	987	605	974	599	964	594	956	590	949	586	944	541	866	541	866	541	866		
	F	11.3 -2.3R		12.1 -2.4R		12.8 -2.4R		13.4 -2.4R		13.9 -2.3R		14.3 -2.3R		14.6 -2.3R		14.9 -2.2R		15.2 -2.1R		15.2 -2.1R		15.2 -2.1R			
18"	q_a q_f	574	1030	570	917	509	819	515	829	519	836	480	772	487	784	493	794	464	747	464	747	464	747		
	F	12.6 -3R		13.8 -3.2R		14.9 -3.4R		15.7 -3.5R		16.5 -3.5R		17.2 -3.6R		17.7 -3.6R		18.3 -3.5R		18.7 -3.5R		18.7 -3.5R		18.7 -3.5R			
24"	q_a q_f	487	783	500	805	439	707	457	736	413	666	431	694	397	639	414	666	386	621	386	621	386	621		
	F	13.5 -3.5R		15 -3.9R		16.3 -4.2R		17.4 -4.4R		18.4 -4.5R		19.3 -4.6R		20.1 -4.7R		20.8 -4.7R		21.5 -4.8R		21.5 -4.8R		21.5 -4.8R			

2.6 DGB-36 & DGBF-36

Hilti X-HSN-24 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/7/4	16 ga	4"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2134	3414	1763	2821	1482	2371	
			F		3.2	-0.2R	3.2	-0.2R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3
		6"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2134	3414	1763	2821	1482	2371	
			F		3.6	-0.4R	3.7	-0.3R	3.7	-0.3R	3.7	-0.3R	3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.8
		8"	q_a	q_f	2520	4057	2542	4093	2492	4012	2515	4049	2477	3988	2497	4021	2134	3414	1763	2821	1482	2371	
			F		4	-0.5R	4.1	-0.5R	4.2	-0.4R	4.2	-0.4R	4.3	-0.4R	4.3	-0.4R	4.3	-0.3R	4.3	-0.3R	4.4	-0.3R	4.4
	12"	q_a	q_f	2225	3583	2193	3531	2170	3494	2154	3467	2141	3447	2131	3430	2122	3414	1763	2821	1482	2371		
		F		4.7	-0.9R	4.9	-0.8R	5	-0.8R	5.1	-0.7R	5.2	-0.7R	5.2	-0.7R	5.3	-0.6R	5.3	-0.6R	5.4	-0.6R	5.4	-0.6R
	18"	q_a	q_f	1981	3583	1994	3210	1790	2881	1830	2947	1860	2995	1726	2779	1763	2838	1763	2821	1482	2371		
		F		5.5	-1.3R	5.8	-1.3R	6	-1.3R	6.2	-1.3R	6.4	-1.2R	6.5	-1.2R	6.6	-1.1R	6.7	-1.1R	6.7	-1.1R	6.7	-1.1R
	24"	q_a	q_f	1633	2629	1729	2784	1522	2451	1614	2598	1464	2357	1545	2487	1427	2298	1499	2413	1403	2258		
		F		6.1	-1.7R	6.5	-1.8R	6.9	-1.8R	7.1	-1.8R	7.3	-1.7R	7.5	-1.7R	7.7	-1.7R	7.8	-1.6R	7.9	-1.6R	7.9	-1.6R
	18 ga	4"	q_a	q_f	2058	3314	2058	3314	2058	3314	2058	3314	2058	3314	1914	3062	1550	2481	1281	2050	1077	1723	
			F		4.2	-0.4R	4.3	-0.3R	4.3	-0.3R	4.4	-0.3R	4.4	-0.2R	4.4	-0.2R	4.4	-0.2R	4.4	-0.2R	4.4	-0.2R	4.4
		6"	q_a	q_f	2058	3314	2053	3305	2044	3291	2038	3282	2033	3274	1914	3062	1550	2481	1281	2050	1077	1723	
			F		4.9	-0.6R	5	-0.6R	5.1	-0.5R	5.1	-0.5R	5.2	-0.5R	5.2	-0.4R	5.2	-0.4R	5.2	-0.4R	5.3	-0.4R	5.3
		8"	q_a	q_f	1908	3072	1928	3105	1874	3017	1895	3050	1855	2987	1874	3018	1550	2481	1281	2050	1077	1723	
			F		5.4	-0.9R	5.6	-0.8R	5.7	-0.8R	5.8	-0.8R	5.9	-0.7R	5.9	-0.7R	6	-0.6R	6	-0.6R	6.1	-0.6R	6.1
	12"	q_a	q_f	1639	2639	1604	2582	1579	2542	1561	2513	1547	2491	1536	2473	1527	2458	1281	2050	1077	1723		
		F		6.3	-1.4R	6.6	-1.4R	6.8	-1.3R	7	-1.3R	7.1	-1.2R	7.3	-1.2R	7.4	-1.2R	7.4	-1.1R	7.5	-1.1R	7.5	-1.1R
	18"	q_a	q_f	1437	2639	1438	2315	1270	2044	1296	2087	1315	2118	1208	1945	1234	1986	1254	2020	1077	1723		
		F		7.2	-2R	7.7	-2.1R	8.1	-2.1R	8.4	-2.1R	8.7	-2.1R	8.9	-2R	9.1	-2R	9.3	-1.9R	9.4	-1.9R	9.4	-1.9R
	24"	q_a	q_f	1172	1887	1232	1983	1070	1723	1131	1821	1016	1636	1072	1725	983	1583	1032	1662	961	1547		
		F		7.9	-2.5R	8.5	-2.6R	9.1	-2.7R	9.5	-2.8R	9.9	-2.8R	10.3	-2.8R	10.6	-2.8R	10.8	-2.7R	11	-2.7R	11	-2.7R
20 ga	4"	q_a	q_f	1565	2520	1565	2520	1565	2520	1565	2520	1565	2520	1265	2024	1025	1640	847	1355	712	1139		
		F		6.1	-0.7R	6.3	-0.7R	6.3	-0.6R	6.4	-0.6R	6.5	-0.5R	6.5	-0.5R	6.6	-0.5R	6.6	-0.4R	6.6	-0.4R	6.6	-0.4R
	6"	q_a	q_f	1446	2328	1430	2303	1419	2285	1411	2272	1405	2262	1265	2024	1025	1640	847	1355	712	1139		
		F		7	-1.2R	7.3	-1.2R	7.5	-1.1R	7.6	-1.1R	7.7	-1R	7.8	-1R	7.9	-0.9R	7.9	-0.9R	8	-0.8R	8	-0.8R
	8"	q_a	q_f	1303	2098	1315	2117	1263	2033	1278	2057	1241	1998	1256	2022	1025	1640	847	1355	712	1139		
		F		7.7	-1.6R	8.1	-1.6R	8.4	-1.6R	8.6	-1.5R	8.8	-1.5R	8.9	-1.4R	9.1	-1.4R	9.2	-1.3R	9.2	-1.3R	9.2	-1.3R
12"	q_a	q_f	1087	1750	1051	1692	1026	1652	1008	1622	994	1600	983	1582	974	1567	847	1355	712	1139			
	F		8.8	-2.3R	9.4	-2.4R	9.9	-2.5R	10.3	-2.5R	10.6	-2.4R	10.9	-2.4R	11.1	-2.3R	11.3	-2.3R	11.5	-2.2R	11.5	-2.2R	
18"	q_a	q_f	941	1750	931	1499	808	1302	820	1321	829	1335	753	1213	768	1236	779	1254	712	1139			
	F		9.9	-3.1R	10.8	-3.4R	11.5	-3.5R	12.1	-3.6R	12.7	-3.7R	13.1	-3.7R	13.5	-3.7R	13.9	-3.7R	14.2	-3.6R	14.2	-3.6R	
24"	q_a	q_f	766	1234	792	1275	680	1094	712	1146	634	1021	665	1071	606	976	634	1021	587	945			
	F		10.6	-3.6R	11.7	-4R	12.7	-4.3R	13.5	-4.5R	14.2	-4.7R	14.8	-4.8R	15.4	-4.9R	15.9	-4.9R	16.4	-4.9R	16.4	-4.9R	
22 ga	4"	q_a	q_f	1290	2076	1281	2062	1274	2052	1270	2044	1218	1948	962	1539	779	1247	644	1031	541	866		
		F		7.7	-1.1R	7.9	-1.1R	8.1	-1R	8.2	-1R	8.3	-0.9R	8.4	-0.9R	8.5	-0.8R	8.5	-0.8R	8.6	-0.7R	8.6	-0.7R
	6"	q_a	q_f	1135	1827	1117	1799	1105	1779	1096	1765	1089	1754	962	1539	779	1247	644	1031	541	866		
		F		8.8	-1.8R	9.2	-1.8R	9.5	-1.7R	9.7	-1.7R	9.9	-1.6R	10.1	-1.5R	10.2	-1.5R	10.3	-1.4R	10.4	-1.4R	10.4	-1.4R
	8"	q_a	q_f	1008	1622	1014	1632	966	1555	977	1572	943	1519	955	1537	779	1247	644	1031	541	866		
		F		9.6	-2.3R	10.2	-2.4R	10.7	-2.4R	11	-2.3R	11.3	-2.3R	11.5	-2.2R	11.8	-2.2R	11.9	-2.1R	12.1	-2.1R	12.1	-2.1R
12"	q_a	q_f	829	1335	795	1280	771	1242	754	1213	740	1192	730	1175	721	1161	644	1031	541	866			
	F		10.8	-3.1R	11.7	-3.3R	12.4	-3.5R	13	-3.5R	13.5	-3.6R	13.9	-3.5R	14.3	-3.5R	14.6	-3.5R	14.9	-3.4R	14.9	-3.4R	
18"	q_a	q_f	716	1335	702	1129	604	973	610	981	613	988	555	893	564	907	571	919	529	852			
	F		11.9	-4R	13.2	-4.4R	14.2	-4.7R	15.1	-4.9R	15.9	-5.1R	16.5	-5.2R	17.1	-5.3R	17.7	-5.3R	18.2	-5.3R	18.2	-5.3R	
24"	q_a	q_f	586	943	597	961	510	820	529	852	470	756	490	788	445	717	464	747	429	690			
	F		12.7	-4.5R	14.1	-5.1R	15.4	-5.6R	16.5	-6R	17.5	-6.3R	18.4	-6.5R	19.3	-6.7R	20	-6.8R	20.7	-6.9R	20.7	-6.9R	

B-36 36/7/4

Support Attachment: Hilti X-HSN 24 PAF

Side Seam Attachment: DeltaGrip

DGB-36 & DGBF-36 2.6

Hilti X-HSN-24 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/9	16 ga	4"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2134	3414	1763	2821	1482	2371		
			F	3 -0.2R		3.1 -0.1R		3.1 -0.1R		3.1 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		
		6"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2134	3414	1763	2821	1482	2371
			F	3.4 -0.3R		3.5 -0.3R		3.5 -0.2R		3.6 -0.2R		3.6 -0.2R		3.6 -0.2R		3.7 -0.2R		3.7 -0.2R		3.7 -0.2R		3.7 -0.2R		
		8"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2542	4093	2134	3414	1763	2821	1482	2371
			F	3.7 -0.4R		3.8 -0.4R		3.9 -0.4R		4 -0.3R		4 -0.3R		4.1 -0.3R		4.1 -0.3R		4.1 -0.3R		4.1 -0.3R		4.2 -0.3R		
	12"	q_a	q_f	2542	4093	2542	4093	2542	4093	2542	4093	2514	4047	2489	4007	2134	3414	1763	2821	1482	2371			
		F	4.1 -0.6R		4.3 -0.6R		4.4 -0.6R		4.6 -0.6R		4.7 -0.6R		4.8 -0.5R		4.9 -0.5R		4.9 -0.5R		5 -0.5R					
	18"	q_a	q_f	2433	4093	2402	3867	2135	3437	2155	3469	2169	3492	1997	3216	2026	3262	1763	2821	1482	2371			
		F	4.5 -0.8R		4.8 -0.9R		5.1 -0.9R		5.3 -0.9R		5.5 -0.9R		5.6 -0.9R		5.8 -0.9R		5.9 -0.9R		6 -0.8R					
	24"	q_a	q_f	2064	3324	2107	3393	1844	2969	1911	3077	1724	2775	1793	2886	1648	2654	1714	2759	1482	2371			
		F	4.8 -1R		5.2 -1.1R		5.5 -1.1R		5.8 -1.2R		6.1 -1.2R		6.3 -1.2R		6.5 -1.2R		6.7 -1.2R		6.8 -1.2R					
	18 ga	4"	q_a	q_f	2058	3314	2058	3314	2058	3314	2058	3314	2058	3314	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4 -0.3R		4.1 -0.3R		4.1 -0.3R		4.2 -0.2R		4.2 -0.2R		4.2 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R				
		6"	q_a	q_f	2058	3314	2058	3314	2058	3314	2058	3314	2058	3314	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.4 -0.5R		4.6 -0.5R		4.7 -0.4R		4.8 -0.4R		4.8 -0.4R		4.9 -0.4R		5 -0.4R		5 -0.3R		5 -0.3R				
		8"	q_a	q_f	2058	3314	2058	3314	2058	3314	2058	3314	2058	3314	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.7 -0.6R		5 -0.6R		5.1 -0.6R		5.3 -0.6R		5.4 -0.6R		5.5 -0.6R		5.6 -0.5R		5.7 -0.5R						
	12"	q_a	q_f	2010	3236	1933	3112	1878	3023	1837	2957	1805	2906	1780	2865	1550	2481	1281	2050	1077	1723			
		F	5.2 -0.9R		5.6 -0.9R		5.8 -0.9R		6 -0.9R		6.2 -0.9R		6.4 -0.9R		6.5 -0.9R		6.7 -0.9R		6.8 -0.9R					
	18"	q_a	q_f	1790	3236	1747	2812	1532	2467	1536	2473	1538	2477	1405	2261	1420	2287	1281	2050	1077	1723			
		F	5.7 -1.1R		6.1 -1.2R		6.5 -1.3R		6.9 -1.3R		7.2 -1.4R		7.4 -1.4R		7.7 -1.4R		7.9 -1.4R		8.1 -1.4R					
	24"	q_a	q_f	1521	2448	1528	2460	1324	2131	1359	2188	1217	1959	1258	2025	1150	1852	1191	1917	1077	1723			
		F	6 -1.3R		6.5 -1.5R		7 -1.6R		7.5 -1.7R		7.9 -1.7R		8.2 -1.8R		8.5 -1.8R		8.8 -1.8R		9.1 -1.9R					
20 ga	4"	q_a	q_f	1565	2520	1565	2520	1565	2520	1565	2520	1565	2520	1265	2024	1025	1640	847	1355	712	1139			
		F	5.6 -0.5R		5.8 -0.5R		5.9 -0.5R		6 -0.5R		6.1 -0.5R		6.2 -0.4R		6.2 -0.4R		6.3 -0.4R		6.3 -0.4R					
	6"	q_a	q_f	1565	2520	1565	2520	1565	2520	1565	2520	1565	2520	1265	2024	1025	1640	847	1355	712	1139			
		F	6.1 -0.8R		6.4 -0.8R		6.7 -0.8R		6.8 -0.8R		7 -0.8R		7.1 -0.8R		7.2 -0.8R		7.3 -0.7R		7.4 -0.7R					
	8"	q_a	q_f	1565	2520	1565	2520	1502	2417	1507	2426	1451	2336	1265	2024	1025	1640	847	1355	712	1139			
		F	6.5 -1R		6.9 -1.1R		7.2 -1.1R		7.5 -1.1R		7.7 -1.1R		7.9 -1.1R		8.1 -1.1R		8.2 -1.1R		8.4 -1R					
12"	q_a	q_f	1355	2182	1282	2065	1231	1982	1192	1919	1162	1872	1139	1833	1025	1640	847	1355	712	1139				
	F	7 -1.3R		7.6 -1.4R		8.1 -1.5R		8.5 -1.6R		8.8 -1.6R		9.1 -1.6R		9.4 -1.6R		9.6 -1.7R		9.9 -1.6R						
18"	q_a	q_f	1206	2182	1156	1861	1001	1612	991	1596	984	1584	891	1435	896	1442	847	1355	712	1139				
	F	7.5 -1.6R		8.2 -1.8R		8.8 -2R		9.4 -2.1R		9.9 -2.2R		10.4 -2.3R		10.8 -2.3R		11.1 -2.4R		11.5 -2.4R						
24"	q_a	q_f	1034	1665	1014	1633	870	1401	879	1416	782	1260	800	1288	728	1172	747	1203	691	1112				
	F	7.8 -1.8R		8.6 -2R		9.3 -2.3R		10 -2.5R		10.6 -2.6R		11.2 -2.8R		11.7 -2.9R		12.2 -3R		12.7 -3R						
22 ga	4"	q_a	q_f	1312	2112	1312	2112	1312	2112	1312	2112	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	6.9 -0.8R		7.2 -0.8R		7.4 -0.8R		7.5 -0.8R		7.7 -0.7R		7.8 -0.7R		7.9 -0.7R		8 -0.7R		8.1 -0.6R					
	6"	q_a	q_f	1312	2112	1312	2112	1312	2112	1294	2083	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	7.5 -1.1R		7.9 -1.2R		8.3 -1.2R		8.5 -1.2R		8.8 -1.2R		9 -1.2R		9.2 -1.2R		9.3 -1.1R		9.5 -1.1R					
	8"	q_a	q_f	1240	1996	1222	1968	1150	1851	1149	1850	1100	1771	962	1539	779	1247	644	1031	541	866			
		F	7.9 -1.3R		8.4 -1.4R		8.9 -1.5R		9.3 -1.6R		9.6 -1.6R		9.9 -1.6R		10.2 -1.6R		10.4 -1.6R		10.6 -1.6R					
12"	q_a	q_f	1052	1693	984	1584	936	1507	901	1450	873	1406	852	1371	779	1247	644	1031	541	866				
	F	8.4 -1.6R		9.1 -1.8R		9.8 -2R		10.3 -2.1R		10.8 -2.2R		11.3 -2.3R		11.7 -2.3R		12 -2.3R		12.4 -2.4R						
18"	q_a	q_f	939	1693	888	1430	764	1231	750	1208	740	1191	668	1075	667	1074	644	1031	541	866				
	F	8.9 -1.9R		9.7 -2.2R		10.6 -2.5R		11.3 -2.7R		12 -2.9R		12.6 -3R		13.2 -3.1R		13.7 -3.2R		14.2 -3.3R						
24"	q_a	q_f	812	1308	784	1262	670	1078	669	1077	591	951	601	968	542	873	557	896	510	822				
	F	9.1 -2.1R		10.1 -2.5R		11 -2.8R		11.9 -3.1R		12.7 -3.3R		13.4 -3.5R		14.1 -3.7R		14.8 -3.9R		15.4 -4R						

2.6 DGB-36 & DGBF-36

Hilti X-ENP-19 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q _a) (plf), Factored Shear (q _f) (plf), and Flexibility Factor (F) (10 ⁻⁶ in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/4	16 ga	4"	q _a q _f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204		
			F	3.1	-0.1R	3.1	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R		
		6"	q _a q _f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204
			F	3.5	-0.3R	3.6	-0.2R	3.6	-0.2R	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.7	-0.1R	3.8	-0.1R	3.8	-0.1R
		8"	q _a q _f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204
			F	3.8	-0.4R	3.9	-0.4R	4.0	-0.3R	4.1	-0.3R	4.1	-0.3R	4.2	-0.3R	4.2	-0.3R	4.2	-0.2R	4.3	-0.2R	4.3	-0.2R
	12"	q _a q _f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	
		F	4.4	-0.6R	4.5	-0.6R	4.7	-0.6R	4.8	-0.5R	4.9	-0.5R	5.0	-0.5R	5.1	-0.5R	5.1	-0.4R	5.2	-0.4R	5.2	-0.4R	
	18"	q _a q _f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1361	2191	
		F	4.9	-0.9R	5.2	-0.9R	5.5	-0.9R	5.7	-0.9R	5.9	-0.9R	6.0	-0.8R	6.1	-0.8R	6.2	-0.8R	6.2	-0.8R	6.3	-0.8R	
	24"	q _a q _f	1315	2117	1369	2204	1257	2024	1313	2114	1225	1973	1275	2053	1205	1940	1250	2012	1191	1918	1191	1918	
		F	5.3	-1.1R	5.8	-1.1R	6.1	-1.2R	6.4	-1.2R	6.6	-1.2R	6.8	-1.2R	7.0	-1.2R	7.2	-1.1R	7.3	-1.1R	7.3	-1.1R	
	18 ga	4"	q _a q _f	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1077	1723	1077	1723
			F	4.1	-0.3R	4.2	-0.2R	4.2	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R
		6"	q _a q _f	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1077	1723
			F	4.6	-0.4R	4.8	-0.4R	4.9	-0.4R	4.9	-0.4R	5.0	-0.3R	5.0	-0.3R	5.1	-0.3R	5.1	-0.3R	5.1	-0.3R	5.1	-0.3R
		8"	q _a q _f	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1077	1723
			F	5.0	-0.6R	5.2	-0.6R	5.4	-0.6R	5.5	-0.5R	5.6	-0.5R	5.7	-0.5R	5.7	-0.5R	5.8	-0.5R	5.9	-0.4R	5.9	-0.4R
	12"	q _a q _f	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1077	1723	
		F	5.7	-0.9R	6.0	-0.9R	6.3	-0.9R	6.5	-0.9R	6.6	-0.9R	6.8	-0.9R	6.9	-0.8R	7.0	-0.8R	7.1	-0.8R	7.1	-0.8R	
	18"	q _a q _f	1108	1784	1108	1784	1040	1674	1057	1701	1069	1721	1007	1621	1023	1648	1036	1668	990	1593	990	1593	
		F	6.3	-1.3R	6.8	-1.3R	7.2	-1.4R	7.6	-1.4R	7.8	-1.4R	8.1	-1.4R	8.3	-1.4R	8.5	-1.4R	8.7	-1.3R	8.7	-1.3R	
	24"	q _a q _f	974	1568	1015	1634	914	1472	956	1540	881	1419	920	1481	860	1385	896	1442	846	1362	846	1362	
		F	6.7	-1.5R	7.4	-1.6R	7.9	-1.7R	8.4	-1.8R	8.8	-1.8R	9.1	-1.9R	9.4	-1.9R	9.7	-1.9R	9.9	-1.9R	9.9	-1.9R	
20 ga	4"	q _a q _f	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1355	712	1139	712	1139	
		F	5.8	-0.5R	6.0	-0.5R	6.1	-0.5R	6.2	-0.4R	6.3	-0.4R	6.3	-0.4R	6.4	-0.4R	6.4	-0.3R	6.5	-0.3R	6.5	-0.3R	
	6"	q _a q _f	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1355	712	1139	712	1139	
		F	6.5	-0.8R	6.8	-0.8R	7.0	-0.8R	7.2	-0.8R	7.3	-0.7R	7.4	-0.7R	7.5	-0.7R	7.6	-0.6R	7.7	-0.6R	7.7	-0.6R	
	8"	q _a q _f	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1357	843	1355	712	1139	712	1139	
		F	7.1	-1.1R	7.4	-1.1R	7.7	-1.1R	8.0	-1.1R	8.2	-1.1R	8.4	-1R	8.5	-1R	8.7	-1R	8.8	-0.9R	8.8	-0.9R	
12"	q _a q _f	843	1357	837	1348	825	1329	816	1314	809	1303	803	1294	799	1286	795	1280	712	1139	712	1139		
	F	7.8	-1.5R	8.4	-1.6R	8.8	-1.6R	9.3	-1.6R	9.6	-1.7R	9.9	-1.6R	10.2	-1.6R	10.4	-1.6R	10.6	-1.6R	10.6	-1.6R		
18"	q _a q _f	772	1357	768	1237	691	1113	701	1129	708	1140	657	1058	668	1076	677	1090	639	1029	639	1029		
	F	8.5	-1.9R	9.3	-2.1R	10.0	-2.2R	10.6	-2.3R	11.1	-2.4R	11.5	-2.4R	12.0	-2.5R	12.3	-2.5R	12.7	-2.5R	12.7	-2.5R		
24"	q _a q _f	656	1056	678	1091	599	964	625	1006	568	914	593	954	548	883	571	920	535	861	535	861		
	F	8.9	-2.1R	9.9	-2.4R	10.7	-2.6R	11.5	-2.8R	12.1	-3R	12.7	-3.1R	13.3	-3.1R	13.8	-3.2R	14.3	-3.2R	14.3	-3.2R		
22 ga	4"	q _a q _f	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	644	1031	541	866	541	866	
		F	7.3	-0.8R	7.5	-0.8R	7.7	-0.7R	7.9	-0.7R	8.0	-0.7R	8.1	-0.6R	8.2	-0.6R	8.2	-0.6R	8.3	-0.6R	8.3	-0.6R	
	6"	q _a q _f	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	644	1031	541	866	541	866	
		F	8.1	-1.2R	8.5	-1.2R	8.8	-1.2R	9.1	-1.2R	9.3	-1.1R	9.5	-1.1R	9.6	-1.1R	9.8	-1R	9.9	-1R	9.9	-1R	
	8"	q _a q _f	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	706	1137	644	1031	541	866	541	866	
		F	8.6	-1.5R	9.2	-1.5R	9.7	-1.6R	10.1	-1.6R	10.4	-1.6R	10.6	-1.6R	10.9	-1.5R	11.1	-1.5R	11.3	-1.5R	11.3	-1.5R	
12"	q _a q _f	671	1080	653	1051	640	1030	630	1015	623	1003	617	993	612	985	608	979	541	866	541	866		
	F	9.4	-1.9R	10.2	-2.1R	10.9	-2.2R	11.5	-2.3R	12.0	-2.3R	12.4	-2.4R	12.8	-2.4R	13.2	-2.4R	13.5	-2.4R	13.5	-2.4R		
18"	q _a q _f	601	1080	594	956	528	850	533	859	537	865	495	797	502	809	508	819	477	768	477	768		
	F	10.1	-2.3R	11.1	-2.6R	12.0	-2.9R	12.9	-3.1R	13.6	-3.2R	14.3	-3.3R	14.9	-3.4R	15.4	-3.5R	15.9	-3.5R	15.9	-3.5R		
24"	q _a q _f	508	818	520	837	455	733	473	761	426	686	444	715	408	657	425	684	396	637	396	637		
	F	10.5	-2.6R	11.7	-3R	12.8	-3.3R	13.8	-3.6R	14.7	-3.8R	15.5	-4R	16.3	-4.2R	17.0	-4.3R	17.6	-4.4R	17.6	-4.4R		

B-36 36/4

Support Attachment: Hilti X-ENP-19 PAF

Side Seam Attachment: DeltaGrip

DGB-36 & DGBF-36 2.6

Hilti X-ENP-19 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2634	4215	2134	3414	1763	2821	1482	2371
			F		3.1-0.2R		3.1-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.1R		3.2-0.1R	
		6"	q_a	q_f	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2634	4215	2134	3414	1763	2821	1482	2371
			F		3.5-0.4R		3.5-0.4R		3.6-0.4R		3.6-0.3R		3.7-0.3R		3.7-0.3R		3.7-0.3R		3.7-0.3R		3.7-0.3R	
		8"	q_a	q_f	2662	4286	2689	4329	2628	4231	2654	4272	2609	4201	2632	4215	2134	3414	1763	2821	1482	2371
			F		3.8-0.6R		3.9-0.6R		4-0.5R		4.1-0.5R		4.1-0.5R		4.1-0.5R		4.2-0.4R		4.2-0.4R		4.2-0.4R	
	12"	q_a	q_f	2331	3752	2292	3690	2265	3646	2245	3614	2230	3590	2218	3570	2134	3414	1763	2821	1482	2371	
		F		4.3-0.9R		4.5-0.9R		4.6-0.9R		4.7-0.9R		4.9-0.8R		4.9-0.8R		5-0.8R		5.1-0.8R		5.1-0.8R		5.1-0.7R
	18"	q_a	q_f	2063	3752	2074	3339	1851	2981	1893	3048	1923	3096	1779	2864	1817	2925	1763	2821	1482	2371	
		F		4.8-1.2R		5.1-1.3R		5.3-1.3R		5.6-1.3R		5.7-1.3R		5.9-1.3R		6-1.3R		6.1-1.3R		6.1-1.3R		6.2-1.3R
	24"	q_a	q_f	1694	2727	1791	2883	1570	2527	1663	2677	1503	2421	1587	2554	1463	2355	1536	2473	1435	2310	
		F		5.1-1.5R		5.5-1.6R		5.9-1.7R		6.2-1.7R		6.4-1.8R		6.7-1.8R		6.9-1.8R		7-1.8R		7.2-1.8R		7.2-1.8R
	18 ga	4"	q_a	q_f	2216	3568	2216	3568	2216	3568	2216	3568	2216	3568	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.1-0.4R		4.1-0.4R		4.2-0.4R		4.2-0.3R		4.3-0.3R		4.3-0.3R		4.3-0.3R		4.3-0.3R		4.3-0.3R	
		6"	q_a	q_f	2184	3516	2169	3492	2159	3475	2151	3463	2145	3454	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.6-0.7R		4.7-0.7R		4.8-0.6R		4.9-0.6R		5-0.6R		5-0.6R		5.1-0.5R		5.1-0.5R		5.1-0.5R	
		8"	q_a	q_f	2006	3229	2027	3263	1964	3162	1987	3198	1942	3126	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.9-0.9R		5.1-0.9R		5.3-0.9R		5.4-0.9R		5.5-0.9R		5.6-0.8R		5.7-0.8R		5.8-0.8R		5.8-0.8R	
	12"	q_a	q_f	1709	2752	1668	2685	1639	2639	1618	2605	1601	2578	1589	2558	1550	2481	1281	2050	1077	1723	
		F		5.5-1.3R		5.8-1.4R		6.1-1.4R		6.3-1.4R		6.5-1.4R		6.7-1.4R		6.8-1.3R		6.9-1.3R		6.9-1.3R		7-1.3R
	18"	q_a	q_f	1492	2752	1490	2398	1309	2108	1335	2150	1354	2180	1240	1996	1266	2038	1281	2050	1077	1723	
		F		6.1-1.7R		6.5-1.8R		7-1.9R		7.3-2R		7.6-2.1R		7.9-2.1R		8.1-2.1R		8.3-2.1R		8.5-2.1R		8.5-2.1R
	24"	q_a	q_f	1215	1957	1273	2049	1102	1774	1163	1872	1042	1678	1098	1768	1005	1619	1055	1699	980	1578	
		F		6.4-2R		7-2.2R		7.5-2.4R		8-2.5R		8.4-2.6R		8.8-2.7R		9.1-2.7R		9.4-2.7R		9.6-2.8R		9.6-2.8R
20 ga	4"	q_a	q_f	1685	2714	1685	2714	1685	2714	1683	2710	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F		5.7-0.8R		5.9-0.8R		6.1-0.8R		6.2-0.7R		6.2-0.7R		6.3-0.7R		6.3-0.6R		6.4-0.6R		6.4-0.6R		6.4-0.6R
	6"	q_a	q_f	1520	2447	1501	2416	1487	2395	1478	2379	1470	2367	1265	2024	1025	1640	847	1355	712	1139	
		F		6.4-1.2R		6.7-1.2R		6.9-1.2R		7.1-1.2R		7.2-1.2R		7.4-1.1R		7.5-1.1R		7.5-1.1R		7.5-1.1R		7.6-1R
	8"	q_a	q_f	1361	2192	1372	2209	1314	2115	1329	2140	1288	2074	1265	2024	1025	1640	847	1355	712	1139	
		F		6.8-1.5R		7.2-1.6R		7.6-1.6R		7.8-1.6R		8.1-1.6R		8.2-1.6R		8.4-1.6R		8.5-1.6R		8.7-1.5R		8.7-1.5R
12"	q_a	q_f	1129	1817	1088	1751	1059	1706	1039	1672	1023	1646	1010	1626	1000	1610	847	1355	712	1139		
	F		7.5-2R		8.1-2.2R		8.5-2.3R		9-2.4R		9.3-2.4R		9.6-2.4R		9.9-2.5R		10.1-2.5R		10.4-2.5R		10.4-2.5R	
18"	q_a	q_f	976	1817	962	1548	833	1340	843	1357	850	1369	771	1242	785	1264	796	1282	712	1139		
	F		8-2.4R		8.8-2.7R		9.5-3R		10.1-3.2R		10.6-3.3R		11.1-3.4R		11.5-3.5R		11.9-3.6R		12.3-3.6R		12.3-3.6R	
24"	q_a	q_f	796	1281	818	1317	700	1128	731	1177	650	1047	681	1096	620	998	648	1043	599	964		
	F		8.4-2.7R		9.3-3.1R		10.1-3.4R		10.8-3.7R		11.5-4R		12.1-4.2R		12.7-4.3R		13.2-4.5R		13.6-4.6R		13.6-4.6R	
22 ga	4"	q_a	q_f	1362	2192	1351	2175	1343	2162	1337	2153	1218	1948	962	1539	779	1247	644	1031	541	866	
		F		7.1-1.2R		7.4-1.2R		7.6-1.2R		7.8-1.1R		7.9-1.1R		8-1.1R		8.1-1R		8.2-1R		8.3-1R		8.3-1R
	6"	q_a	q_f	1188	1912	1167	1879	1152	1855	1142	1838	1133	1825	962	1539	779	1247	644	1031	541	866	
		F		7.8-1.7R		8.3-1.7R		8.6-1.8R		8.9-1.8R		9.1-1.8R		9.3-1.7R		9.5-1.7R		9.7-1.7R		9.8-1.7R		9.8-1.7R
	8"	q_a	q_f	1049	1689	1054	1697	1001	1611	1011	1628	975	1570	962	1539	779	1247	644	1031	541	866	
		F		8.3-2R		8.9-2.2R		9.4-2.3R		9.8-2.3R		10.1-2.4R		10.4-2.4R		10.7-2.4R		10.9-2.3R		11.1-2.3R		11.1-2.3R
12"	q_a	q_f	860	1385	822	1323	795	1280	775	1248	760	1224	748	1205	739	1189	644	1031	541	866		
	F		9-2.5R		9.8-2.8R		10.4-3R		11-3.2R		11.5-3.3R		12-3.4R		12.4-3.5R		12.8-3.5R		13.1-3.5R		13.1-3.5R	
18"	q_a	q_f	743	1385	725	1167	622	1002	626	1008	629	1013	568	914	576	927	583	938	540	866		
	F		9.5-2.9R		10.5-3.4R		11.4-3.8R		12.2-4.1R		12.9-4.3R		13.6-4.5R		14.2-4.7R		14.7-4.8R		15.2-5R		15.2-5R	
24"	q_a	q_f	609	981	617	994	526	847	544	876	482	776	502	807	455	733	474	763	437	704		
	F		9.9-3.2R		11-3.8R		12-4.2R		13-4.6R		13.8-5R		14.6-5.3R		15.4-5.6R		16.1-5.8R		16.7-6R		16.7-6R	

2.6 DGB-36 & DGBF-36

Hilti X-ENP-19 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q _a) (plf), Factored Shear (q _r) (plf), and Flexibility Factor (F) (10 ⁻⁶ in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/9	16 ga	4"	q _a q _r	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2634	4215	2134	3414	1763	2821	1482	2371		
			F	2.9 -0.2R		3 -0.2R		3 -0.2R		3.1 -0.2R		3.1 -0.2R		3.1 -0.1R		3.1 -0.1R		3.1 -0.1R		3.1 -0.1R			
		6"	q _a q _r	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.2 -0.3R		3.3 -0.3R		3.3 -0.3R		3.4 -0.3R		3.4 -0.3R		3.5 -0.3R		3.5 -0.2R		3.6 -0.2R		3.6 -0.2R		3.6 -0.2R	
		8"	q _a q _r	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2738	4408	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.3 -0.4R		3.5 -0.4R		3.6 -0.4R		3.7 -0.4R		3.8 -0.4R		3.8 -0.4R		3.9 -0.4R		3.9 -0.4R		3.9 -0.4R		4 -0.3R	
	12"	q _a q _r	2738	4408	2738	4408	2694	4338	2647	4262	2611	4204	2582	4157	2134	3414	1763	2821	1482	2371			
		F	3.6 -0.5R		3.8 -0.6R		4 -0.6R		4.1 -0.6R		4.2 -0.6R		4.4 -0.6R		4.4 -0.6R		4.5 -0.6R		4.6 -0.6R		4.6 -0.6R		
	18"	q _a q _r	2544	4408	2503	4029	2215	3566	2231	3592	2243	3611	2059	3316	2088	3361	1763	2821	1482	2371			
		F	3.8 -0.7R		4.1 -0.7R		4.4 -0.8R		4.6 -0.8R		4.8 -0.9R		4.9 -0.9R		5.1 -0.9R		5.2 -0.9R		5.3 -0.9R		5.3 -0.9R		
	24"	q _a q _r	2158	3474	2192	3530	1912	3078	1976	3182	1778	2863	1846	2972	1694	2728	1760	2821	1482	2371			
		F	4 -0.7R		4.3 -0.9R		4.6 -0.9R		4.9 -1R		5.1 -1R		5.3 -1.1R		5.5 -1.1R		5.7 -1.1R		5.9 -1.2R		5.9 -1.2R		
	18 ga	4"	q _a q _r	2216	3568	2216	3568	2216	3568	2216	3568	2216	3568	1914	3062	1550	2481	1281	2050	1077	1723		
			F	3.8 -0.3R		3.9 -0.3R		3.9 -0.3R		4 -0.3R		4.1 -0.3R		4.1 -0.3R		4.1 -0.3R		4.2 -0.2R		4.2 -0.2R		4.2 -0.2R	
		6"	q _a q _r	2216	3568	2216	3568	2216	3568	2216	3568	2216	3568	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4 -0.5R		4.2 -0.5R		4.3 -0.5R		4.4 -0.5R		4.5 -0.5R		4.6 -0.4R		4.7 -0.4R		4.7 -0.4R		4.8 -0.4R		4.8 -0.4R	
		8"	q _a q _r	2216	3568	2216	3568	2216	3568	2216	3568	2216	3568	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.2 -0.6R		4.5 -0.6R		4.6 -0.6R		4.8 -0.6R		4.9 -0.6R		5 -0.6R		5.1 -0.6R		5.2 -0.6R		5.3 -0.6R		5.3 -0.6R	
	12"	q _a q _r	2102	3384	2014	3242	1951	3141	1904	3065	1868	3007	1839	2960	1550	2481	1281	2050	1077	1723			
		F	4.5 -0.7R		4.8 -0.8R		5.1 -0.8R		5.3 -0.9R		5.5 -0.9R		5.7 -0.9R		5.8 -0.9R		6 -0.9R		6.1 -0.9R		6.1 -0.9R		
	18"	q _a q _r	1871	3384	1817	2926	1589	2558	1588	2557	1588	2556	1446	2328	1460	2351	1281	2050	1077	1723			
		F	4.7 -0.9R		5.1 -1R		5.5 -1.1R		5.8 -1.1R		6.1 -1.2R		6.3 -1.3R		6.5 -1.3R		6.8 -1.3R		6.9 -1.4R		6.9 -1.4R		
	24"	q _a q _r	1591	2562	1590	2560	1374	2212	1405	2262	1256	2022	1295	2085	1183	1904	1222	1968	1077	1723			
		F	4.9 -0.9R		5.3 -1.1R		5.7 -1.2R		6.1 -1.3R		6.4 -1.4R		6.7 -1.5R		7 -1.6R		7.3 -1.6R		7.5 -1.7R		7.5 -1.7R		
20 ga	4"	q _a q _r	1685	2714	1685	2714	1685	2714	1685	2714	1601	2562	1265	2024	1025	1640	847	1355	712	1139			
		F	5.1 -0.5R		5.3 -0.5R		5.5 -0.6R		5.6 -0.5R		5.7 -0.5R		5.8 -0.5R		5.9 -0.5R		6 -0.5R		6 -0.5R		6 -0.5R		
	6"	q _a q _r	1685	2714	1685	2714	1685	2714	1685	2714	1601	2562	1265	2024	1025	1640	847	1355	712	1139			
		F	5.5 -0.7R		5.8 -0.8R		6 -0.8R		6.2 -0.8R		6.4 -0.8R		6.5 -0.8R		6.7 -0.8R		6.8 -0.8R		6.9 -0.8R		6.9 -0.8R		
	8"	q _a q _r	1667	2684	1651	2658	1562	2515	1565	2520	1504	2421	1265	2024	1025	1640	847	1355	712	1139			
		F	5.7 -0.8R		6 -0.9R		6.3 -1R		6.6 -1R		6.8 -1.1R		7 -1.1R		7.2 -1.1R		7.4 -1.1R		7.5 -1.1R		7.5 -1.1R		
12"	q _a q _r	1416	2280	1334	2148	1276	2055	1233	1985	1200	1931	1173	1889	1025	1640	847	1355	712	1139				
	F	5.9 -1R		6.4 -1.1R		6.8 -1.2R		7.2 -1.3R		7.5 -1.4R		7.8 -1.5R		8.1 -1.5R		8.3 -1.6R		8.5 -1.6R		8.5 -1.6R			
18"	q _a q _r	1261	2280	1203	1937	1039	1673	1026	1651	1015	1635	918	1478	921	1482	847	1355	712	1139				
	F	6.1 -1.1R		6.7 -1.3R		7.2 -1.5R		7.6 -1.6R		8.1 -1.8R		8.5 -1.9R		8.8 -2R		9.2 -2.1R		9.5 -2.1R		9.5 -2.1R			
24"	q _a q _r	1085	1747	1058	1703	906	1458	911	1467	810	1304	825	1328	750	1208	768	1237	709	1139				
	F	6.3 -1.2R		6.9 -1.4R		7.4 -1.6R		7.9 -1.8R		8.4 -2R		8.9 -2.1R		9.3 -2.3R		9.7 -2.4R		10.1 -2.5R		10.1 -2.5R			
22 ga	4"	q _a q _r	1412	2274	1412	2274	1412	2274	1412	2274	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	6.2 -0.7R		6.5 -0.8R		6.7 -0.8R		6.9 -0.8R		7.1 -0.8R		7.3 -0.8R		7.4 -0.8R		7.5 -0.8R		7.6 -0.8R		7.6 -0.8R		
	6"	q _a q _r	1412	2274	1404	2260	1370	2206	1345	2166	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	6.6 -0.9R		7 -1R		7.3 -1.1R		7.6 -1.1R		7.8 -1.1R		8.1 -1.2R		8.3 -1.2R		8.4 -1.2R		8.6 -1.2R		8.6 -1.2R		
	8"	q _a q _r	1296	2087	1273	2050	1194	1922	1191	1917	1137	1831	962	1539	779	1247	644	1031	541	866			
		F	6.8 -1R		7.2 -1.2R		7.6 -1.3R		8 -1.4R		8.3 -1.4R		8.6 -1.5R		8.9 -1.5R		9.1 -1.5R		9.4 -1.6R		9.4 -1.6R		
12"	q _a q _r	1099	1770	1024	1649	971	1563	931	1499	901	1450	877	1412	779	1247	644	1031	541	866				
	F	7 -1.2R		7.6 -1.4R		8.1 -1.6R		8.6 -1.7R		9 -1.8R		9.4 -1.9R		9.8 -2R		10.1 -2.1R		10.4 -2.1R		10.4 -2.1R			
18"	q _a q _r	983	1770	925	1490	795	1279	777	1251	764	1230	689	1109	687	1105	644	1031	541	866				
	F	7.2 -1.3R		7.9 -1.6R		8.5 -1.8R		9 -2R		9.6 -2.2R		10.1 -2.3R		10.6 -2.5R		11 -2.6R		11.4 -2.7R		11.4 -2.7R			
24"	q _a q _r	854	1375	819	1318	698	1124	694	1118	609	980	618	996	557	896	570	918	523	841				
	F	7.3 -1.4R		8 -1.7R		8.7 -1.9R		9.3 -2.2R		9.9 -2.4R		10.5 -2.6R		11 -2.8R		11.6 -2.9R		12.1 -3.1R		12.1 -3.1R			

B-36 36/9

Support Attachment: Hilti X-ENP-19 PAF

Side Seam Attachment: DeltaGrip

DGB-36 & DGBF-36 2.7

Pneutek SDK61 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027		
			F		3.3 -0.1R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R	
		6"	q_a	q_f	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027
			F		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 +0R		3.9 +0R		3.9 +0R	
		8"	q_a	q_f	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027
			F		4.3 -0.2R		4.4 -0.2R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R	
		12"	q_a	q_f	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027
			F		5.3 -0.4R		5.4 -0.3R		5.5 -0.3R		5.5 -0.2R		5.5 -0.2R		5.6 -0.2R		5.6 -0.2R		5.6 -0.2R		5.6 -0.2R		5.6 -0.2R	
		18"	q_a	q_f	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027	1259	2027
			F		6.6 -0.7R		6.8 -0.6R		6.9 -0.5R		7 -0.5R		7.1 -0.5R		7.1 -0.4R		7.2 -0.4R		7.2 -0.4R		7.2 -0.4R		7.3 -0.3R	
		24"	q_a	q_f	1245	2005	1259	2027	1197	1928	1248	2010	1171	1885	1217	1959	1154	1858	1195	1924	1142	1839		
			F		7.8 -1R		8 -0.9R		8.3 -0.9R		8.4 -0.8R		8.5 -0.7R		8.6 -0.7R		8.7 -0.6R		8.8 -0.6R		8.8 -0.6R		8.8 -0.6R	
	18 ga	4"	q_a	q_f	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664
			F		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 +0R		4.5 +0R		4.5 +0R		4.5 +0R	
		6"	q_a	q_f	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664
			F		5.2 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.1R		5.4 -0.1R		5.4 -0.1R		5.4 -0.1R		5.4 -0.1R		5.4 -0.1R		5.4 -0.1R	
		8"	q_a	q_f	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664
			F		6 -0.4R		6.1 -0.3R		6.1 -0.3R		6.2 -0.2R		6.2 -0.2R		6.2 -0.2R		6.3 -0.2R		6.3 -0.2R		6.3 -0.2R		6.3 -0.2R	
		12"	q_a	q_f	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664	1034	1664
			F		7.4 -0.7R		7.6 -0.6R		7.7 -0.5R		7.8 -0.5R		7.9 -0.4R		7.9 -0.4R		8 -0.4R		8 -0.4R		8 -0.4R		8 -0.3R	
		18"	q_a	q_f	1034	1664	1034	1664	998	1606	1014	1633	1026	1651	970	1561	985	1586	997	1605	955	1537		
			F		9.2 -1.2R		9.5 -1.1R		9.8 -1R		10 -1R		10.1 -0.9R		10.2 -0.8R		10.3 -0.8R		10.4 -0.7R		10.5 -0.7R			
		24"	q_a	q_f	933	1503	973	1567	881	1419	922	1484	852	1372	889	1432	834	1343	868	1397	822	1323		
			F		10.7 -1.8R		11.2 -1.7R		11.6 -1.6R		11.9 -1.5R		12.2 -1.4R		12.4 -1.3R		12.5 -1.2R		12.7 -1.2R		12.8 -1.1R			
	20 ga	4"	q_a	q_f	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	712	1139		
			F		6.6 -0.3R		6.6 -0.2R		6.7 -0.2R		6.7 -0.2R		6.7 -0.2R		6.7 -0.1R		6.8 -0.1R		6.8 -0.1R		6.8 -0.1R		6.8 -0.1R	
		6"	q_a	q_f	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	712	1139		
			F		7.9 -0.5R		8 -0.5R		8.1 -0.4R		8.2 -0.4R		8.2 -0.3R		8.3 -0.3R		8.3 -0.3R		8.3 -0.3R		8.3 -0.3R		8.4 -0.2R	
		8"	q_a	q_f	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	797	1283	712	1139		
			F		9.1 -0.8R		9.3 -0.7R		9.5 -0.7R		9.6 -0.6R		9.7 -0.5R		9.7 -0.5R		9.8 -0.5R		9.8 -0.4R		9.9 -0.4R			
		12"	q_a	q_f	797	1283	797	1283	797	1283	789	1270	783	1260	778	1252	774	1246	771	1241	712	1139		
			F		11.2 -1.5R		11.6 -1.3R		11.9 -1.2R		12.1 -1.1R		12.3 -1.1R		12.5 -1R		12.6 -0.9R		12.7 -0.9R		12.8 -0.8R			
		18"	q_a	q_f	745	1283	743	1196	671	1081	681	1097	688	1108	641	1032	651	1049	660	1063	625	1005		
			F		13.7 -2.4R		14.5 -2.3R		15.1 -2.2R		15.5 -2.1R		15.9 -2R		16.2 -1.9R		16.4 -1.8R		16.6 -1.7R		16.8 -1.6R			
		24"	q_a	q_f	635	1022	657	1058	583	938	609	980	554	893	579	932	536	864	559	900	524	844		
			F		15.7 -3.3R		16.9 -3.3R		17.7 -3.2R		18.4 -3.1R		18.9 -2.9R		19.4 -2.8R		19.8 -2.7R		20.1 -2.6R		20.4 -2.5R			
22 ga	4"	q_a	q_f	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	644	1031	541	866			
		F		8.5 -0.5R		8.6 -0.4R		8.7 -0.4R		8.7 -0.3R		8.8 -0.3R		8.8 -0.3R		8.8 -0.2R		8.9 -0.2R		8.9 -0.2R		8.9 -0.2R		8.9 -0.2R
	6"	q_a	q_f	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	644	1031	541	866			
		F		10.3 -0.9R		10.5 -0.8R		10.7 -0.7R		10.8 -0.6R		10.9 -0.6R		10.9 -0.5R		11 -0.5R		11.1 -0.5R		11.1 -0.4R				
	8"	q_a	q_f	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	672	1082	644	1031	541	866			
		F		11.8 -1.3R		12.2 -1.2R		12.5 -1.1R		12.7 -1R		12.8 -0.9R		13 -0.9R		13.1 -0.8R		13.1 -0.8R		13.2 -0.7R				
	12"	q_a	q_f	650	1047	634	1020	622	1002	614	988	607	977	601	968	597	961	593	955	541	866			
		F		14.5 -2.3R		15.2 -2.1R		15.7 -2R		16.1 -1.9R		16.4 -1.8R		16.6 -1.7R		16.8 -1.6R		17 -1.5R		17.2 -1.4R				
	18"	q_a	q_f	583	1047	578	930	515	829	521	839	525	846	485	780	492	793	498	802	469	754			
		F		17.5 -3.6R		18.7 -3.5R		19.6 -3.4R		20.4 -3.3R		21 -3.2R		21.4 -3R		21.8 -2.9R		22.2 -2.8R		22.5 -2.7R				
	24"	q_a	q_f	494	795	507	816	444	716	462	744	418	672	435	701	401	645	417	672	389	627			
		F		19.8 -4.7R		21.5 -4.8R		22.8 -4.7R		23.9 -4.7R		24.8 -4.6R		25.5 -4.4R		26.2 -4.3R		26.7 -4.2R		27.2 -4R				

DGB-36 & DGBF-36 2.7

Pneutek SDK61 Fasteners to Supports with
DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/9	16 ga	4"	q_a	q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371		
			F		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.3 -0.1R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R	
		6"	q_a	q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371
			F		3.7 -0.2R		3.7 -0.2R		3.7 -0.2R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R	
		8"	q_a	q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371
			F		4.1 -0.3R		4.2 -0.3R		4.2 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.4 -0.2R		4.4 -0.1R	
		12"	q_a	q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2501	4026	2476	3987	2134	3414	1763	2821	1482	2371
			F		4.8 -0.5R		5 -0.5R		5.1 -0.5R		5.2 -0.4R		5.2 -0.4R		5.2 -0.4R		5.3 -0.4R		5.3 -0.3R		5.4 -0.3R		5.4 -0.3R	
		18"	q_a	q_f	2419	4054	2389	3846	2125	3421	2145	3453	2160	3477	1989	3203	2018	3250	1763	2821	1482	2371		
			F		5.7 -0.9R		6 -0.8R		6.2 -0.8R		6.4 -0.8R		6.5 -0.7R		6.6 -0.7R		6.7 -0.6R		6.8 -0.6R		6.8 -0.6R		6.8 -0.6R	
		24"	q_a	q_f	2053	3305	2096	3375	1836	2955	1903	3064	1717	2764	1786	2875	1643	2644	1708	2749	1482	2371		
			F		6.4 -1.2R		6.8 -1.2R		7.1 -1.2R		7.4 -1.1R		7.6 -1.1R		7.8 -1R		7.9 -1R		8 -1R		8.1 -0.9R		8.1 -0.9R	
	18 ga	4"	q_a	q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.3 -0.2R		4.3 -0.2R		4.3 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R	
		6"	q_a	q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723
			F		4.9 -0.4R		5 -0.3R		5.1 -0.3R		5.2 -0.3R		5.2 -0.2R		5.2 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.2R	
		8"	q_a	q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723
			F		5.5 -0.5R		5.7 -0.5R		5.8 -0.5R		5.9 -0.4R		5.9 -0.4R		6 -0.4R		6 -0.3R		6.1 -0.3R		6.1 -0.3R		6.1 -0.3R	
		12"	q_a	q_f	2016	3245	1938	3120	1882	3031	1841	2964	1809	2912	1783	2871	1550	2481	1281	2050	1077	1723		
			F		6.5 -0.9R		6.8 -0.9R		7 -0.8R		7.1 -0.8R		7.3 -0.7R		7.4 -0.7R		7.5 -0.7R		7.5 -0.6R		7.6 -0.6R		7.6 -0.6R	
		18"	q_a	q_f	1795	3245	1751	2819	1536	2473	1539	2478	1541	2482	1407	2265	1423	2291	1281	2050	1077	1723		
			F		7.6 -1.4R		8.1 -1.4R		8.4 -1.4R		8.7 -1.3R		9 -1.3R		9.2 -1.2R		9.4 -1.2R		9.5 -1.1R		9.6 -1.1R		9.6 -1.1R	
		24"	q_a	q_f	1525	2455	1531	2466	1327	2136	1362	2192	1219	1963	1260	2028	1152	1855	1193	1920	1077	1723		
			F		8.4 -1.8R		9.1 -1.9R		9.6 -1.9R		10 -1.8R		10.4 -1.8R		10.7 -1.8R		11.1 -1.7R		11.2 -1.7R		11.4 -1.6R		11.4 -1.6R	
	20 ga	4"	q_a	q_f	1594	2566	1594	2566	1594	2566	1594	2566	1594	2566	1594	2562	1265	2024	1025	1640	847	1355	712	1139
			F		6.2 -0.4R		6.3 -0.4R		6.4 -0.4R		6.5 -0.3R		6.5 -0.3R		6.6 -0.3R		6.6 -0.3R		6.6 -0.2R		6.6 -0.2R		6.6 -0.2R	
		6"	q_a	q_f	1594	2566	1594	2566	1594	2566	1594	2566	1594	2566	1594	2562	1265	2024	1025	1640	847	1355	712	1139
			F		7.2 -0.8R		7.4 -0.7R		7.6 -0.7R		7.7 -0.6R		7.8 -0.6R		7.9 -0.5R		8 -0.5R		8 -0.5R		8.1 -0.4R		8.1 -0.4R	
		8"	q_a	q_f	1594	2566	1594	2566	1516	2441	1521	2449	1464	2357	1265	2024	1025	1640	847	1355	712	1139		
			F		8 -1.1R		8.4 -1R		8.6 -1R		8.8 -0.9R		9 -0.9R		9.1 -0.8R		9.2 -0.8R		9.3 -0.7R		9.4 -0.7R		9.4 -0.7R	
12"		q_a	q_f	1370	2206	1295	2085	1242	1999	1202	1935	1171	1886	1147	1847	1025	1640	847	1355	712	1139			
		F		9.3 -1.6R		9.9 -1.6R		10.3 -1.6R		10.7 -1.6R		10.9 -1.5R		11.2 -1.5R		11.4 -1.4R		11.6 -1.4R		11.7 -1.3R		11.7 -1.3R		
18"		q_a	q_f	1219	2206	1167	1879	1010	1626	1000	1609	992	1597	898	1446	902	1452	847	1355	712	1139			
		F		10.6 -2.3R		11.5 -2.4R		12.2 -2.5R		12.8 -2.5R		13.3 -2.5R		13.7 -2.4R		14.1 -2.4R		14.4 -2.3R		14.7 -2.3R		14.7 -2.3R		
24"		q_a	q_f	1046	1684	1025	1650	879	1415	887	1428	789	1270	806	1297	733	1180	752	1211	695	1119			
		F		11.5 -2.8R		12.7 -3R		13.6 -3.2R		14.4 -3.3R		15.1 -3.3R		15.7 -3.3R		16.3 -3.3R		16.7 -3.3R		17.2 -3.2R		17.2 -3.2R		
22 ga	4"	q_a	q_f	1344	2165	1344	2165	1344	2165	1344	2165	1218	1948	962	1539	779	1247	644	1031	541	866			
		F		7.9 -0.7R		8.1 -0.6R		8.2 -0.6R		8.3 -0.5R		8.4 -0.5R		8.5 -0.5R		8.5 -0.4R		8.6 -0.4R		8.6 -0.4R				
	6"	q_a	q_f	1344	2165	1344	2165	1334	2148	1311	2111	1218	1948	962	1539	779	1247	644	1031	541	866			
		F		9.1 -1.2R		9.5 -1.1R		9.7 -1.1R		10 -1R		10.1 -0.9R		10.3 -0.9R		10.4 -0.8R		10.5 -0.8R		10.6 -0.8R				
	8"	q_a	q_f	1258	2026	1239	1995	1164	1875	1163	1873	1113	1791	962	1539	779	1247	644	1031	541	866			
		F		10.1 -1.6R		10.6 -1.6R		11 -1.5R		11.3 -1.5R		11.6 -1.4R		11.8 -1.3R		12 -1.3R		12.2 -1.2R		12.3 -1.2R				
	12"	q_a	q_f	1067	1718	997	1605	948	1526	911	1466	882	1421	860	1384	779	1247	644	1031	541	866			
		F		11.5 -2.3R		12.4 -2.4R		13 -2.4R		13.6 -2.4R		14.1 -2.3R		14.5 -2.3R		14.8 -2.2R		15.1 -2.2R		15.3 -2.1R				
	18"	q_a	q_f	953	1718	900	1450	774	1247	759	1222	748	1204	674	1086	674	1084	644	1031	541	866			
		F		12.9 -3.1R		14.2 -3.3R		15.2 -3.4R		16.1 -3.5R		16.8 -3.6R		17.5 -3.6R		18.1 -3.6R		18.6 -3.5R		19 -3.5R				
	24"	q_a	q_f	826	1330	795	1280	679	1093	677	1090	597	960	607	978	547	880	561	903	514	828			
		F		13.9 -3.6R		15.4 -4R		16.7 -4.3R		17.9 -4.5R		18.9 -4.6R		19.8 -4.7R		20.6 -4.7R		21.3 -4.8R		22 -4.8R				

DGB-36 & DGBF-36 2.7

Pneutek SDK61 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK®



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
			q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	q_a q_f	
36/9	16 ga	4"	q_a q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371		
			F	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.3	-0.1R	3.3	+0R	3.3	+0R	3.3	+0R		
		6"	q_a q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371
			F	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R
		8"	q_a q_f	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2518	4054	2134	3414	1763	2821	1482	2371
			F	4.1	-0.3R	4.2	-0.3R	4.2	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.4	-0.2R	4.4	-0.1R
	12"	q_a q_f	2518	4054	2518	4054	2518	4054	2518	4054	2501	4026	2476	3987	2134	3414	1763	2821	1482	2371			
		F	4.8	-0.5R	5	-0.5R	5.1	-0.5R	5.2	-0.4R	5.2	-0.4R	5.3	-0.4R	5.3	-0.3R	5.4	-0.3R	5.4	-0.3R			
	18"	q_a q_f	2419	4054	2389	3846	2125	3421	2145	3453	2160	3477	1989	3203	2018	3250	1763	2821	1482	2371			
		F	5.7	-0.9R	6	-0.8R	6.2	-0.8R	6.4	-0.8R	6.5	-0.7R	6.6	-0.7R	6.7	-0.6R	6.8	-0.6R	6.8	-0.6R			
	24"	q_a q_f	2053	3305	2096	3375	1836	2955	1903	3064	1717	2764	1786	2875	1643	2644	1708	2749	1482	2371			
		F	6.4	-1.2R	6.8	-1.2R	7.1	-1.2R	7.4	-1.1R	7.6	-1.1R	7.8	-1R	7.9	-1R	8	-1R	8.1	-0.9R			
	18 ga	4"	q_a q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.3	-0.2R	4.3	-0.2R	4.3	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R		
		6"	q_a q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.9	-0.4R	5	-0.3R	5.1	-0.3R	5.2	-0.3R	5.2	-0.2R	5.2	-0.2R	5.3	-0.2R	5.3	-0.2R	5.3	-0.2R		
		8"	q_a q_f	2068	3329	2068	3329	2068	3329	2068	3329	2068	3329	1914	3062	1550	2481	1281	2050	1077	1723		
			F	5.5	-0.5R	5.7	-0.5R	5.8	-0.5R	5.9	-0.4R	5.9	-0.4R	6	-0.4R	6	-0.3R	6.1	-0.3R	6.1	-0.3R		
	12"	q_a q_f	2016	3245	1938	3120	1882	3031	1841	2964	1809	2912	1783	2871	1550	2481	1281	2050	1077	1723			
		F	6.5	-0.9R	6.8	-0.9R	7	-0.8R	7.1	-0.8R	7.3	-0.7R	7.4	-0.7R	7.5	-0.7R	7.5	-0.6R	7.6	-0.6R			
	18"	q_a q_f	1795	3245	1751	2819	1536	2473	1539	2478	1541	2482	1407	2265	1423	2291	1281	2050	1077	1723			
		F	7.6	-1.4R	8.1	-1.4R	8.4	-1.4R	8.7	-1.3R	9	-1.3R	9.2	-1.2R	9.4	-1.2R	9.5	-1.1R	9.6	-1.1R			
	24"	q_a q_f	1525	2455	1531	2466	1327	2136	1362	2192	1219	1963	1260	2028	1152	1855	1193	1920	1077	1723			
		F	8.4	-1.8R	9.1	-1.9R	9.6	-1.9R	10	-1.8R	10.4	-1.8R	10.7	-1.8R	11	-1.7R	11.2	-1.7R	11.4	-1.6R			
20 ga	4"	q_a q_f	1594	2566	1594	2566	1594	2566	1594	2566	1594	2566	1594	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	6.2	-0.4R	6.3	-0.4R	6.4	-0.4R	6.5	-0.3R	6.5	-0.3R	6.6	-0.3R	6.6	-0.3R	6.6	-0.2R	6.6	-0.2R			
	6"	q_a q_f	1594	2566	1594	2566	1594	2566	1594	2566	1594	2566	1594	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	7.2	-0.8R	7.4	-0.7R	7.6	-0.7R	7.7	-0.6R	7.8	-0.6R	7.9	-0.5R	8	-0.5R	8	-0.5R	8.1	-0.4R			
	8"	q_a q_f	1594	2566	1594	2566	1516	2441	1521	2449	1464	2357	1265	2024	1025	1640	847	1355	712	1139			
		F	8	-1.1R	8.4	-1R	8.6	-1R	8.8	-0.9R	9	-0.9R	9.1	-0.8R	9.2	-0.8R	9.3	-0.7R	9.4	-0.7R			
12"	q_a q_f	1370	2206	1295	2085	1242	1999	1202	1935	1171	1886	1147	1847	1025	1640	847	1355	712	1139				
	F	9.3	-1.6R	9.9	-1.6R	10.3	-1.6R	10.7	-1.6R	10.9	-1.5R	11.2	-1.5R	11.4	-1.4R	11.6	-1.4R	11.7	-1.3R				
18"	q_a q_f	1219	2206	1167	1879	1010	1626	1000	1609	992	1597	898	1446	902	1452	847	1355	712	1139				
	F	10.6	-2.3R	11.5	-2.4R	12.2	-2.5R	12.8	-2.5R	13.3	-2.5R	13.7	-2.4R	14.1	-2.4R	14.4	-2.3R	14.7	-2.3R				
24"	q_a q_f	1046	1684	1025	1650	879	1415	887	1428	789	1270	806	1297	733	1180	752	1211	695	1119				
	F	11.5	-2.8R	12.7	-3R	13.6	-3.2R	14.4	-3.3R	15.1	-3.3R	15.7	-3.3R	16.3	-3.3R	16.7	-3.3R	17.2	-3.2R				
22 ga	4"	q_a q_f	1344	2165	1344	2165	1344	2165	1344	2165	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	7.9	-0.7R	8.1	-0.6R	8.2	-0.6R	8.3	-0.5R	8.4	-0.5R	8.5	-0.5R	8.5	-0.4R	8.6	-0.4R	8.6	-0.4R			
	6"	q_a q_f	1344	2165	1344	2165	1334	2148	1311	2111	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	9.1	-1.2R	9.5	-1.1R	9.7	-1.1R	10	-1R	10.1	-0.9R	10.3	-0.9R	10.4	-0.8R	10.5	-0.8R	10.6	-0.8R			
	8"	q_a q_f	1258	2026	1239	1995	1164	1875	1163	1873	1113	1791	962	1539	779	1247	644	1031	541	866			
		F	10.1	-1.6R	10.6	-1.6R	11	-1.5R	11.3	-1.5R	11.6	-1.4R	11.8	-1.3R	12	-1.3R	12.2	-1.2R	12.3	-1.2R			
12"	q_a q_f	1067	1718	997	1605	948	1526	911	1466	882	1421	860	1384	779	1247	644	1031	541	866				
	F	11.5	-2.3R	12.4	-2.4R	13	-2.4R	13.6	-2.4R	14.1	-2.3R	14.5	-2.3R	14.8	-2.2R	15.1	-2.2R	15.3	-2.1R				
18"	q_a q_f	953	1718	900	1450	774	1247	759	1222	748	1204	674	1086	674	1084	644	1031	541	866				
	F	12.9	-3.1R	14.2	-3.3R	15.2	-3.4R	16.1	-3.5R	16.8	-3.6R	17.5	-3.6R	18.1	-3.6R	18.6	-3.5R	19	-3.5R				
24"	q_a q_f	826	1330	795	1280	679	1093	677	1090	597	960	607	978	547	880	561	903	514	828				
	F	13.9	-3.6R	15.4	-4R	16.7	-4.3R	17.9	-4.5R	18.9	-4.6R	19.8	-4.7R	20.6	-4.7R	21.3	-4.8R	22	-4.8R				

2.7 DGB-36 & DGBF-36

Pneutek SDK63 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959		
			F		3.3	-0.1R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R	3.3	+0R
		6"	q_a	q_f	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959
			F		3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	+0R	3.9	+0R	3.9	+0R
		8"	q_a	q_f	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959
			F		4.3	-0.2R	4.4	-0.2R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R
		12"	q_a	q_f	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959
			F		5.3	-0.4R	5.4	-0.3R	5.5	-0.3R	5.5	-0.2R	5.5	-0.2R	5.6	-0.2R	5.6	-0.2R	5.6	-0.2R	5.6	-0.2R	5.6	-0.2R
		18"	q_a	q_f	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959	1217	1959
			F		6.6	-0.7R	6.8	-0.6R	6.9	-0.5R	7	-0.5R	7.1	-0.5R	7.1	-0.4R	7.2	-0.4R	7.2	-0.4R	7.2	-0.4R	7.3	-0.3R
		24"	q_a	q_f	1217	1959	1217	1959	1173	1889	1217	1959	1149	1849	1193	1920	1133	1824	1172	1887	1122	1807		
			F		7.8	-1R	8	-0.9R	8.3	-0.9R	8.4	-0.8R	8.5	-0.7R	8.6	-0.7R	8.7	-0.6R	8.8	-0.6R	8.8	-0.6R	8.8	-0.6R
	18 ga	4"	q_a	q_f	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684
			F		4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	+0R	4.5	+0R	4.5	+0R	4.5	+0R	4.5	+0R
		6"	q_a	q_f	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684
			F		5.2	-0.2R	5.3	-0.2R	5.3	-0.2R	5.3	-0.1R	5.4	-0.1R	5.4	-0.1R	5.4	-0.1R	5.4	-0.1R	5.4	-0.1R	5.4	-0.1R
		8"	q_a	q_f	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684
			F		6	-0.4R	6.1	-0.3R	6.1	-0.3R	6.2	-0.2R	6.2	-0.2R	6.2	-0.2R	6.3	-0.2R	6.3	-0.2R	6.3	-0.2R	6.3	-0.2R
		12"	q_a	q_f	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684	1046	1684
			F		7.4	-0.7R	7.6	-0.6R	7.7	-0.5R	7.8	-0.5R	7.9	-0.4R	7.9	-0.4R	8	-0.4R	8	-0.4R	8	-0.3R	8	-0.3R
		18"	q_a	q_f	1046	1684	1046	1684	1005	1618	1021	1644	1033	1663	976	1571	992	1596	1004	1616	961	1547		
			F		9.2	-1.2R	9.5	-1.1R	9.8	-1R	10	-1R	10.1	-0.9R	10.2	-0.8R	10.3	-0.8R	10.4	-0.7R	10.5	-0.7R	10.5	-0.7R
		24"	q_a	q_f	940	1514	980	1579	887	1428	928	1493	857	1380	895	1440	839	1350	872	1404	826	1330		
			F		10.7	-1.8R	11.2	-1.7R	11.6	-1.6R	11.9	-1.5R	12.2	-1.4R	12.4	-1.3R	12.5	-1.2R	12.7	-1.2R	12.8	-1.1R	12.8	-1.1R
	20 ga	4"	q_a	q_f	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	847	1355	712	1139		
			F		6.6	-0.3R	6.6	-0.2R	6.7	-0.2R	6.7	-0.2R	6.7	-0.2R	6.7	-0.1R	6.8	-0.1R	6.8	-0.1R	6.8	-0.1R	6.8	-0.1R
		6"	q_a	q_f	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	847	1355	712	1139		
			F		7.9	-0.5R	8	-0.5R	8.1	-0.4R	8.2	-0.4R	8.2	-0.3R	8.3	-0.3R	8.3	-0.3R	8.3	-0.3R	8.4	-0.2R	8.4	-0.2R
		8"	q_a	q_f	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	856	1377	847	1355	712	1139		
			F		9.1	-0.8R	9.3	-0.7R	9.5	-0.7R	9.6	-0.6R	9.7	-0.5R	9.7	-0.5R	9.8	-0.5R	9.8	-0.4R	9.9	-0.4R	9.9	-0.4R
		12"	q_a	q_f	856	1377	846	1361	833	1341	823	1326	816	1314	810	1305	806	1297	802	1291	712	1139		
			F		11.2	-1.5R	11.6	-1.3R	11.9	-1.2R	12.1	-1.1R	12.3	-1.1R	12.5	-1R	12.6	-0.9R	12.7	-0.9R	12.8	-0.8R	12.8	-0.8R
		18"	q_a	q_f	779	1377	775	1248	697	1122	706	1137	713	1149	662	1066	673	1083	681	1097	643	1036		
			F		13.7	-2.4R	14.5	-2.3R	15.1	-2.2R	15.5	-2.1R	15.9	-2R	16.2	-1.9R	16.4	-1.8R	16.6	-1.7R	16.8	-1.6R	16.8	-1.6R
		24"	q_a	q_f	662	1065	683	1100	603	971	629	1013	571	920	596	960	551	888	574	925	538	866		
			F		15.7	-3.3R	16.9	-3.3R	17.7	-3.2R	18.4	-3.1R	18.9	-2.9R	19.4	-2.8R	19.8	-2.7R	20.1	-2.6R	20.4	-2.5R	20.4	-2.5R
	22 ga	4"	q_a	q_f	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	644	1031	541	866		
			F		8.5	-0.5R	8.6	-0.4R	8.7	-0.4R	8.7	-0.3R	8.8	-0.3R	8.8	-0.3R	8.8	-0.2R	8.9	-0.2R	8.9	-0.2R	8.9	-0.2R
		6"	q_a	q_f	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	644	1031	541	866		
			F		10.3	-0.9R	10.5	-0.8R	10.7	-0.7R	10.8	-0.6R	10.9	-0.6R	10.9	-0.5R	11	-0.5R	11.1	-0.5R	11.1	-0.4R	11.1	-0.4R
		8"	q_a	q_f	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	748	1204	644	1031	541	866		
			F		11.8	-1.3R	12.2	-1.2R	12.5	-1.1R	12.7	-1R	12.8	-0.9R	13	-0.9R	13.1	-0.8R	13.1	-0.8R	13.2	-0.7R	13.2	-0.7R
		12"	q_a	q_f	696	1120	675	1087	661	1064	650	1046	642	1033	635	1022	629	1013	625	1006	541	866		
			F		14.5	-2.3R	15.2	-2.1R	15.7	-2R	16.1	-1.9R	16.4	-1.8R	16.6	-1.7R	16.8	-1.6R	17	-1.5R	17.2	-1.4R	17.2	-1.4R
		18"	q_a	q_f	622	1120	613	987	543	874	548	882	551	888	507	816	514	828	520	837	487	785		
			F		17.5	-3.6R	18.7	-3.5R	19.6	-3.4R	20.4	-3.3R	21	-3.2R	21.4	-3R	21.8	-2.9R	22.2	-2.8R	22.5	-2.7R	22.5	-2.7R
		24"	q_a	q_f	526	846	536	863	468	753	485	781	437	703	454	731	417	671	433	698	403	650		
			F		19.8	-4.7R	21.5	-4.8R	22.8	-4.7R	23.9	-4.7R	24.8	-4.6R	25.5	-4.4R	26.2	-4.3R	26.7	-4.2R	27.2	-4R	27.2	-4R

DGB-36 & DGBF-36 2.7

Pneutek SDK63 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/7/4	16 ga	4"	q_a	q_f	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371		
			F		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 +0R		3.3 +0R		3.3 +0R		3.3 +0R	
		6"	q_a	q_f	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371
			F		3.8 -0.2R		3.8 -0.2R		3.8 -0.2R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R	
		8"	q_a	q_f	2434	3919	2434	3919	2413	3885	2434	3919	2400	3864	2419	3895	2134	3414	1763	2821	1482	2371		
			F		4.3 -0.3R		4.4 -0.3R		4.4 -0.3R		4.4 -0.2R		4.4 -0.2R		4.4 -0.2R		4.5 -0.2R		4.5 -0.2R		4.5 -0.2R		4.5 -0.1R	
		12"	q_a	q_f	2164	3484	2135	3437	2115	3405	2100	3380	2088	3362	2079	3347	2072	3335	1763	2821	1482	2371		
			F		5.3 -0.6R		5.4 -0.6R		5.4 -0.5R		5.5 -0.5R		5.5 -0.4R		5.6 -0.4R		5.6 -0.4R		5.6 -0.4R		5.6 -0.3R		5.6 -0.3R	
		18"	q_a	q_f	1933	3484	1947	3134	1753	2822	1793	2887	1822	2934	1695	2729	1731	2786	1759	2821	1482	2371		
			F		6.5 -1.2R		6.7 -1.1R		6.9 -1R		7 -0.9R		7.1 -0.8R		7.1 -0.8R		7.2 -0.7R		7.2 -0.7R		7.2 -0.7R		7.3 -0.6R	
		24"	q_a	q_f	1598	2573	1694	2727	1495	2407	1585	2552	1440	2319	1520	2447	1406	2264	1476	2377	1383	2227		
			F		7.6 -1.7R		7.9 -1.6R		8.2 -1.5R		8.3 -1.4R		8.5 -1.3R		8.6 -1.2R		8.7 -1.1R		8.7 -1.1R		8.7 -1.1R		8.8 -1R	
	18 ga	4"	q_a	q_f	2092	3368	2092	3368	2092	3368	2092	3368	2092	3368	1914	3062	1550	2481	1281	2050	1077	1723		
			F		4.4 -0.2R		4.4 -0.2R		4.4 -0.2R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R		4.5 -0.1R	
		6"	q_a	q_f	2091	3366	2078	3346	2069	3332	2063	3321	2058	3313	1914	3062	1550	2481	1281	2050	1077	1723		
			F		5.2 -0.4R		5.3 -0.4R		5.3 -0.3R		5.3 -0.3R		5.4 -0.2R		5.4 -0.2R		5.4 -0.2R		5.4 -0.2R		5.4 -0.2R		5.4 -0.2R	
		8"	q_a	q_f	1930	3107	1950	3139	1894	3049	1915	3083	1875	3018	1894	3049	1550	2481	1281	2050	1077	1723		
			F		6 -0.6R		6.1 -0.6R		6.1 -0.5R		6.2 -0.5R		6.2 -0.4R		6.2 -0.4R		6.3 -0.3R		6.3 -0.3R		6.3 -0.3R		6.3 -0.3R	
		12"	q_a	q_f	1655	2664	1618	2605	1592	2564	1574	2533	1559	2510	1548	2492	1538	2477	1281	2050	1077	1723		
			F		7.3 -1.2R		7.5 -1.1R		7.7 -1R		7.8 -0.9R		7.8 -0.8R		7.9 -0.8R		7.9 -0.7R		8 -0.7R		8 -0.7R		8 -0.6R	
		18"	q_a	q_f	1449	2664	1449	2333	1278	2058	1305	2100	1324	2132	1215	1956	1241	1998	1262	2031	1077	1723		
			F		9 -2R		9.4 -1.9R		9.7 -1.8R		9.9 -1.6R		10.1 -1.5R		10.2 -1.5R		10.3 -1.4R		10.4 -1.3R		10.4 -1.3R		10.5 -1.2R	
		24"	q_a	q_f	1182	1902	1241	1997	1077	1734	1138	1832	1022	1646	1077	1735	988	1591	1037	1670	965	1554		
			F		10.4 -2.8R		11 -2.7R		11.5 -2.6R		11.8 -2.5R		12.1 -2.3R		12.3 -2.2R		12.4 -2.1R		12.6 -2R		12.7 -1.9R		12.7 -1.9R	
	20 ga	4"	q_a	q_f	1711	2755	1711	2755	1707	2748	1702	2741	1601	2562	1265	2024	1025	1640	847	1355	712	1139		
			F		6.5 -0.5R		6.6 -0.4R		6.7 -0.4R		6.7 -0.3R		6.7 -0.3R		6.7 -0.3R		6.7 -0.2R		6.8 -0.2R		6.8 -0.2R		6.8 -0.2R	
		6"	q_a	q_f	1535	2471	1515	2439	1501	2417	1491	2401	1483	2388	1265	2024	1025	1640	847	1355	712	1139		
			F		7.8 -0.9R		8 -0.8R		8.1 -0.7R		8.2 -0.7R		8.2 -0.6R		8.3 -0.6R		8.3 -0.5R		8.3 -0.5R		8.3 -0.5R		8.3 -0.4R	
		8"	q_a	q_f	1373	2211	1384	2228	1324	2132	1340	2157	1298	2090	1265	2024	1025	1640	847	1355	712	1139		
			F		9 -1.4R		9.2 -1.3R		9.4 -1.2R		9.5 -1.1R		9.6 -1R		9.7 -0.9R		9.8 -0.8R		9.8 -0.8R		9.8 -0.8R		9.9 -0.7R	
		12"	q_a	q_f	1137	1831	1095	1764	1066	1717	1045	1682	1028	1656	1016	1635	1005	1618	847	1355	712	1139		
			F		11 -2.4R		11.5 -2.2R		11.8 -2.1R		12 -2R		12.2 -1.8R		12.4 -1.7R		12.5 -1.6R		12.6 -1.6R		12.7 -1.5R		12.7 -1.5R	
		18"	q_a	q_f	983	1831	968	1559	837	1348	847	1364	855	1376	775	1248	789	1270	800	1287	712	1139		
			F		13.4 -3.7R		14.2 -3.6R		14.8 -3.5R		15.3 -3.4R		15.7 -3.3R		16 -3.1R		16.2 -3R		16.5 -2.9R		16.6 -2.8R		16.6 -2.8R	
		24"	q_a	q_f	802	1291	823	1326	705	1135	735	1184	654	1053	684	1101	623	1002	650	1047	601	968		
			F		15.2 -4.8R		16.4 -4.9R		17.3 -4.9R		18 -4.8R		18.6 -4.7R		19.1 -4.6R		19.5 -4.5R		19.8 -4.3R		20.1 -4.2R		20.1 -4.2R	
22 ga	4"	q_a	q_f	1419	2284	1406	2263	1397	2249	1390	2238	1218	1948	962	1539	779	1247	644	1031	541	866			
		F		8.4 -0.8R		8.6 -0.7R		8.7 -0.7R		8.7 -0.6R		8.8 -0.5R		8.8 -0.5R		8.8 -0.4R		8.9 -0.4R		8.9 -0.4R		8.9 -0.4R		
	6"	q_a	q_f	1229	1979	1205	1941	1189	1914	1177	1895	1167	1880	962	1539	779	1247	644	1031	541	866			
		F		10.2 -1.5R		10.4 -1.4R		10.6 -1.2R		10.7 -1.1R		10.8 -1.1R		10.9 -1R		11 -0.9R		11 -0.8R		11.1 -0.8R		11.1 -0.8R		
	8"	q_a	q_f	1082	1742	1085	1747	1028	1655	1038	1671	999	1608	962	1539	779	1247	644	1031	541	866			
		F		11.7 -2.2R		12.1 -2.1R		12.4 -1.9R		12.6 -1.8R		12.8 -1.7R		12.9 -1.6R		13 -1.5R		13.1 -1.4R		13.2 -1.3R		13.2 -1.3R		
	12"	q_a	q_f	885	1424	843	1356	813	1309	792	1275	775	1249	763	1228	752	1211	644	1031	541	866			
		F		14.1 -3.5R		14.9 -3.4R		15.4 -3.3R		15.9 -3.2R		16.2 -3R		16.5 -2.9R		16.7 -2.7R		16.9 -2.6R		17.1 -2.5R		17.1 -2.5R		
	18"	q_a	q_f	764	1424	743	1196	637	1026	639	1029	641	1032	578	931	586	943	592	953	541	866			
		F		16.9 -5.2R		18.2 -5.3R		19.1 -5.3R		19.9 -5.2R		20.6 -5.1R		21.1 -5R		21.5 -4.8R		21.9 -4.7R		22.2 -4.5R		22.2 -4.5R		
	24"	q_a	q_f	629	1012	634	1020	539	868	556	895	492	793	511	823	464	747	482	776	444	716			
		F		18.9 -6.6R		20.7 -6.9R		22.1 -7.1R		23.2 -7.1R		24.1 -7.1R		24.9 -7R		25.6 -6.9R		26.2 -6.7R		26.7 -6.6R		26.7 -6.6R		

2.7 DGB-36 & DGBF-36

Pneutek SDK63 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																		
			Span →	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"									
36/9	16 ga	4"	q_a	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371		
			q_f	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.2	-0.1R	3.3	+0R	3.3	+0R	3.3	+0R
		6"	q_a	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371
			q_f	3.7	-0.2R	3.7	-0.2R	3.7	-0.2R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R	3.8	-0.1R
		8"	q_a	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371
			q_f	4.1	-0.3R	4.2	-0.3R	4.2	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.3	-0.2R	4.4	-0.2R	4.4	-0.1R
	12"	q_a	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2434	3919	2134	3414	1763	2821	1482	2371	
		q_f	4.8	-0.5R	5	-0.5R	5.1	-0.5R	5.2	-0.4R	5.2	-0.4R	5.3	-0.4R	5.3	-0.3R	5.4	-0.3R	5.4	-0.3R	
	18"	q_a	2370	3919	2344	3773	2089	3363	2110	3398	2126	3423	1961	3157	1990	3204	1763	2821	1482	2371	
		q_f	5.7	-0.9R	6	-0.8R	6.2	-0.8R	6.4	-0.8R	6.5	-0.7R	6.6	-0.7R	6.7	-0.6R	6.8	-0.6R	6.8	-0.6R	
	24"	q_a	2012	3239	2059	3314	1805	2907	1874	3017	1693	2725	1762	2836	1622	2611	1687	2716	1482	2371	
		q_f	6.4	-1.2R	6.8	-1.2R	7.1	-1.2R	7.4	-1.1R	7.6	-1.1R	7.8	-1R	7.9	-1R	8	-1R	8.1	-0.9R	
	18 ga	4"	q_a	2092	3368	2092	3368	2092	3368	2092	3368	2092	3368	1914	3062	1550	2481	1281	2050	1077	1723
			q_f	4.3	-0.2R	4.3	-0.2R	4.3	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R	4.4	-0.1R
		6"	q_a	2092	3368	2092	3368	2092	3368	2092	3368	2092	3368	1914	3062	1550	2481	1281	2050	1077	1723
			q_f	4.9	-0.4R	5	-0.3R	5.1	-0.3R	5.2	-0.3R	5.2	-0.2R	5.2	-0.2R	5.3	-0.2R	5.3	-0.2R	5.3	-0.2R
		8"	q_a	2092	3368	2092	3368	2092	3368	2092	3368	2092	3368	1914	3062	1550	2481	1281	2050	1077	1723
			q_f	5.5	-0.5R	5.7	-0.5R	5.8	-0.5R	5.9	-0.4R	5.9	-0.4R	6	-0.4R	6	-0.3R	6.1	-0.3R	6.1	-0.3R
	12"	q_a	2030	3268	1950	3140	1894	3049	1851	2981	1819	2928	1793	2886	1550	2481	1281	2050	1077	1723	
		q_f	6.5	-0.9R	6.8	-0.9R	7	-0.8R	7.1	-0.8R	7.3	-0.7R	7.4	-0.7R	7.5	-0.7R	7.5	-0.6R	7.6	-0.6R	
	18"	q_a	1808	3268	1762	2837	1545	2487	1547	2491	1549	2494	1414	2276	1429	2301	1281	2050	1077	1723	
		q_f	7.6	-1.4R	8.1	-1.4R	8.4	-1.4R	8.7	-1.3R	9	-1.3R	9.2	-1.2R	9.4	-1.2R	9.5	-1.1R	9.6	-1.1R	
	24"	q_a	1536	2473	1541	2481	1334	2148	1369	2204	1225	1973	1266	2038	1157	1863	1197	1928	1077	1723	
		q_f	8.4	-1.8R	9.1	-1.9R	9.6	-1.9R	10	-1.8R	10.4	-1.8R	10.7	-1.8R	11	-1.7R	11.2	-1.7R	11.4	-1.6R	
	20 ga	4"	q_a	1711	2755	1711	2755	1711	2755	1711	2755	1601	2562	1265	2024	1025	1640	847	1355	712	1139
			q_f	6.2	-0.4R	6.3	-0.4R	6.4	-0.4R	6.5	-0.3R	6.5	-0.3R	6.6	-0.3R	6.6	-0.3R	6.6	-0.2R	6.6	-0.2R
		6"	q_a	1711	2755	1711	2755	1711	2755	1711	2755	1601	2562	1265	2024	1025	1640	847	1355	712	1139
			q_f	7.2	-0.8R	7.4	-0.7R	7.6	-0.7R	7.7	-0.6R	7.8	-0.6R	7.9	-0.5R	8	-0.5R	8	-0.5R	8.1	-0.4R
		8"	q_a	1682	2709	1665	2681	1574	2535	1577	2539	1515	2439	1265	2024	1025	1640	847	1355	712	1139
			q_f	8	-1.1R	8.4	-1R	8.6	-1R	8.8	-0.9R	9	-0.9R	9.1	-0.8R	9.2	-0.8R	9.3	-0.7R	9.4	-0.7R
	12"	q_a	1429	2300	1345	2165	1286	2070	1241	1999	1207	1944	1180	1900	1025	1640	847	1355	712	1139	
		q_f	9.3	-1.6R	9.9	-1.6R	10.3	-1.6R	10.7	-1.6R	10.9	-1.5R	11.2	-1.5R	11.4	-1.4R	11.6	-1.4R	11.7	-1.3R	
	18"	q_a	1273	2300	1213	1952	1047	1685	1033	1663	1022	1645	924	1487	926	1491	847	1355	712	1139	
		q_f	10.6	-2.3R	11.5	-2.4R	12.2	-2.5R	12.8	-2.5R	13.3	-2.5R	13.7	-2.4R	14.1	-2.4R	14.4	-2.3R	14.7	-2.3R	
	24"	q_a	1096	1764	1067	1717	913	1470	918	1478	815	1313	830	1337	755	1215	773	1244	712	1139	
		q_f	11.5	-2.8R	12.7	-3R	13.6	-3.2R	14.4	-3.3R	15.1	-3.3R	15.7	-3.3R	16.3	-3.3R	16.7	-3.3R	17.2	-3.2R	
22 ga	4"	q_a	1496	2408	1496	2408	1496	2408	1496	2408	1218	1948	962	1539	779	1247	644	1031	541	866	
		q_f	7.9	-0.7R	8.1	-0.6R	8.2	-0.6R	8.3	-0.5R	8.4	-0.5R	8.5	-0.5R	8.5	-0.4R	8.6	-0.4R	8.6	-0.4R	
	6"	q_a	1496	2408	1451	2336	1413	2276	1385	2231	1218	1948	962	1539	779	1247	644	1031	541	866	
		q_f	9.1	-1.2R	9.5	-1.1R	9.7	-1.1R	10	-1R	10.1	-0.9R	10.3	-0.9R	10.4	-0.8R	10.5	-0.8R	10.6	-0.8R	
	8"	q_a	1341	2159	1313	2115	1228	1977	1223	1970	1166	1877	962	1539	779	1247	644	1031	541	866	
		q_f	10.1	-1.6R	10.6	-1.6R	11	-1.5R	11.3	-1.5R	11.6	-1.4R	11.8	-1.3R	12	-1.3R	12.2	-1.2R	12.3	-1.2R	
12"	q_a	1138	1832	1056	1700	999	1608	956	1539	923	1486	897	1444	779	1247	644	1031	541	866		
	q_f	11.5	-2.3R	12.4	-2.4R	13	-2.4R	13.6	-2.4R	14.1	-2.3R	14.5	-2.3R	14.8	-2.2R	15.1	-2.2R	15.3	-2.1R		
18"	q_a	1019	1832	956	1538	819	1319	799	1286	784	1262	706	1136	702	1131	644	1031	541	866		
	q_f	12.9	-3.1R	14.2	-3.3R	15.2	-3.4R	16.1	-3.5R	16.8	-3.6R	17.5	-3.6R	18.1	-3.6R	18.6	-3.5R	19	-3.5R		
24"	q_a	889	1431	847	1364	722	1162	715	1151	624	1005	632	1017	569	915	581	935	533	857		
	q_f	13.9	-3.6R	15.4	-4R	16.7	-4.3R	17.9	-4.5R	18.9	-4.6R	19.8	-4.7R	20.6	-4.7R	21.3	-4.8R	22	-4.8R		

DGB-36 & DGBF-36 2.7

Pneutek K64 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/4	16 ga	4"	q_a	q_f	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1482	2371		
			F	3.3 -0.1R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R						
		6"	q_a	q_f	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1482	2371
			F	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 +0R	3.9 +0R						
		8"	q_a	q_f	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1482	2371
			F	4.3 -0.2R	4.4 -0.2R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R						
		12"	q_a	q_f	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1595	2568	1482	2371
			F	5.3 -0.4R	5.4 -0.3R	5.5 -0.3R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R						
		18"	q_a	q_f	1595	2568	1595	2568	1548	2493	1573	2533	1591	2562	1506	2424	1529	2462	1548	2492	1482	2371
			F	6.6 -0.7R	6.8 -0.6R	6.9 -0.5R	7 -0.5R	7.1 -0.5R	7.1 -0.4R	7.2 -0.4R	7.2 -0.4R	7.2 -0.4R	7.2 -0.4R	7.3 -0.3R	7.3 -0.3R	7.3 -0.3R						
		24"	q_a	q_f	1448	2331	1511	2432	1369	2204	1431	2305	1325	2133	1382	2225	1297	2088	1349	2171	1278	2058
			F	7.8 -1R	8 -0.9R	8.3 -0.9R	8.4 -0.8R	8.5 -0.7R	8.6 -0.7R	8.7 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R						
	18 ga	4"	q_a	q_f	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1281	2050	1077	1723
			F	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R							
		6"	q_a	q_f	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1281	2050	1077	1723
			F	5.2 -0.2R	5.3 -0.2R	5.3 -0.2R	5.3 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R							
		8"	q_a	q_f	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1281	2050	1077	1723
			F	6 -0.4R	6.1 -0.3R	6.1 -0.3R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R							
		12"	q_a	q_f	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1302	2096	1281	2050	1077	1723
			F	7.4 -0.7R	7.6 -0.6R	7.7 -0.5R	7.8 -0.5R	7.9 -0.4R	7.9 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R							
		18"	q_a	q_f	1254	2096	1253	2018	1139	1834	1157	1862	1170	1883	1093	1760	1111	1789	1126	1812	1068	1720
			F	9.2 -1.2R	9.5 -1.1R	9.8 -1R	10 -1R	10.1 -0.9R	10.2 -0.8R	10.3 -0.8R	10.4 -0.7R	10.5 -0.7R	10.5 -0.7R	10.5 -0.7R	10.5 -0.7R							
		24"	q_a	q_f	1073	1727	1114	1793	992	1598	1038	1670	948	1527	991	1595	921	1482	959	1545	902	1452
			F	10.7 -1.8R	11.2 -1.7R	11.6 -1.6R	11.9 -1.5R	12.2 -1.4R	12.4 -1.3R	12.5 -1.2R	12.7 -1.2R	12.8 -1.1R	12.8 -1.1R	12.8 -1.1R	12.8 -1.1R							
	20 ga	4"	q_a	q_f	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	847	1355	712	1139
			F	6.6 -0.3R	6.6 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R								
		6"	q_a	q_f	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	847	1355	712	1139
			F	7.9 -0.5R	8 -0.5R	8.1 -0.4R	8.2 -0.4R	8.2 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.4 -0.2R							
		8"	q_a	q_f	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	959	1544	847	1355	712	1139
			F	9.1 -0.8R	9.3 -0.7R	9.5 -0.7R	9.6 -0.6R	9.7 -0.5R	9.7 -0.5R	9.8 -0.5R	9.8 -0.4R	9.9 -0.4R	9.9 -0.4R	9.9 -0.4R	9.9 -0.4R							
12"		q_a	q_f	931	1498	908	1462	891	1435	879	1416	870	1400	862	1388	856	1378	847	1355	712	1139	
		F	11.2 -1.5R	11.6 -1.3R	11.9 -1.2R	12.1 -1.1R	12.3 -1.1R	12.5 -1R	12.6 -0.9R	12.7 -0.9R	12.8 -0.8R	12.8 -0.8R	12.8 -0.8R	12.8 -0.8R								
18"		q_a	q_f	835	1498	828	1333	739	1189	747	1203	754	1213	696	1120	707	1138	715	1152	673	1083	
		F	13.7 -2.4R	14.5 -2.3R	15.1 -2.2R	15.5 -2.1R	15.9 -2R	16.2 -1.9R	16.4 -1.8R	16.6 -1.7R	16.8 -1.6R	16.8 -1.6R	16.8 -1.6R	16.8 -1.6R								
24"		q_a	q_f	707	1139	726	1169	638	1026	663	1068	599	965	625	1006	576	927	599	965	559	900	
		F	15.7 -3.3R	16.9 -3.3R	17.7 -3.2R	18.4 -3.1R	18.9 -2.9R	19.4 -2.8R	19.8 -2.7R	20.1 -2.6R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R								
22 ga	4"	q_a	q_f	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	644	1031	541	866	
		F	8.5 -0.5R	8.6 -0.4R	8.7 -0.4R	8.7 -0.3R	8.8 -0.3R	8.8 -0.3R	8.8 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R								
	6"	q_a	q_f	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	644	1031	541	866	
		F	10.3 -0.9R	10.5 -0.8R	10.7 -0.7R	10.8 -0.6R	10.9 -0.6R	10.9 -0.5R	11 -0.5R	11.1 -0.5R	11.1 -0.4R	11.1 -0.4R	11.1 -0.4R	11.1 -0.4R								
	8"	q_a	q_f	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	751	1208	644	1031	541	866	
		F	11.8 -1.3R	12.2 -1.2R	12.5 -1.1R	12.7 -1R	12.8 -0.9R	13 -0.9R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R								
	12"	q_a	q_f	697	1123	677	1090	662	1066	651	1048	643	1035	636	1024	630	1015	626	1008	541	866	
		F	14.5 -2.3R	15.2 -2.1R	15.7 -2R	16.1 -1.9R	16.4 -1.8R	16.6 -1.7R	16.8 -1.6R	17 -1.5R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R								
	18"	q_a	q_f	623	1123	614	989	544	876	549	883	552	889	507	817	515	829	521	838	488	786	
		F	17.5 -3.6R	18.7 -3.5R	19.6 -3.4R	20.4 -3.3R	21 -3.2R	21.4 -3R	21.8 -2.9R	22.2 -2.8R	22.5 -2.7R	22.5 -2.7R	22.5 -2.7R	22.5 -2.7R								
	24"	q_a	q_f	527	848	537	865	469	755	486	782	437	704	455	732	417	672	434	699	404	650	
		F	19.8 -4.7R	21.5 -4.8R	22.8 -4.7R	23.9 -4.7R	24.8 -4.6R	25.5 -4.4R	26.2 -4.3R	26.7 -4.2R	27.2 -4R	27.2 -4R	27.2 -4R	27.2 -4R								

B-36 36/4

Support Attachment: Pneutek K64 PAF

Side Seam Attachment: DeltaGrip

2.7 DGB-36 & DGBF-36

Pneutek K64 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/7/4	16 ga	4"	q_a	q_f	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	2634	4215	2134	3414	1763	2821	1482	2371	
			F		3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	+0R	3.3	+0R	3.3	+0R	3.3
		6"	q_a	q_f	3190	5136	3189	5135	3177	5114	3167	5099	3160	5088	2634	4215	2134	3414	1763	2821	1482	2371	
			F		3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9	-0.1R	3.9
		8"	q_a	q_f	2967	4777	2998	4827	2915	4692	2946	4744	2886	4647	2634	4215	2134	3414	1763	2821	1482	2371	
			F		4.3	-0.3R	4.4	-0.3R	4.4	-0.3R	4.4	-0.2R	4.4	-0.2R	4.4	-0.2R	4.5	-0.2R	4.5	-0.2R	4.5	-0.2R	4.5
		12"	q_a	q_f	2552	4108	2497	4021	2459	3960	2431	3915	2410	3880	2393	3853	2134	3414	1763	2821	1482	2371	
			F		5.3	-0.6R	5.4	-0.6R	5.4	-0.5R	5.5	-0.5R	5.5	-0.4R	5.6	-0.4R	5.6	-0.4R	5.6	-0.3R	5.6	-0.3R	5.6
		18"	q_a	q_f	2238	4108	2240	3606	1979	3186	2020	3253	2051	3302	1884	3033	1924	3098	1763	2821	1482	2371	
			F		6.5	-1.2R	6.7	-1.1R	6.9	-1R	7	-0.9R	7.1	-0.8R	7.1	-0.8R	7.2	-0.7R	7.2	-0.7R	7.2	-0.7R	7.3
		24"	q_a	q_f	1826	2940	1919	3090	1669	2687	1764	2840	1586	2553	1672	2692	1534	2470	1611	2594	1482	2371	
			F		7.6	-1.7R	7.9	-1.6R	8.2	-1.5R	8.3	-1.4R	8.5	-1.3R	8.6	-1.2R	8.7	-1.1R	8.7	-1.1R	8.7	-1.1R	8.8
	18 ga	4"	q_a	q_f	2604	4192	2604	4192	2604	4192	2604	4192	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723	
			F		4.4	-0.2R	4.4	-0.2R	4.4	-0.2R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5	-0.1R	4.5
		6"	q_a	q_f	2454	3951	2430	3913	2414	3887	2402	3867	2393	3852	1914	3062	1550	2481	1281	2050	1077	1723	
			F		5.2	-0.4R	5.3	-0.4R	5.3	-0.3R	5.3	-0.3R	5.4	-0.2R	5.4	-0.2R	5.4	-0.2R	5.4	-0.2R	5.4	-0.2R	5.4
		8"	q_a	q_f	2223	3579	2244	3613	2161	3480	2187	3521	2128	3426	1914	3062	1550	2481	1281	2050	1077	1723	
			F		6	-0.6R	6.1	-0.6R	6.1	-0.5R	6.2	-0.5R	6.2	-0.4R	6.2	-0.4R	6.3	-0.3R	6.3	-0.3R	6.3	-0.3R	6.3
		12"	q_a	q_f	1864	3002	1808	2910	1768	2847	1739	2800	1717	2764	1699	2736	1550	2481	1281	2050	1077	1723	
			F		7.3	-1.2R	7.5	-1.1R	7.7	-1R	7.8	-0.9R	7.8	-0.8R	7.9	-0.8R	7.9	-0.7R	8	-0.7R	8	-0.6R	8
		18"	q_a	q_f	1617	3002	1604	2583	1398	2250	1420	2287	1437	2314	1308	2107	1334	2148	1281	2050	1077	1723	
			F		9	-2R	9.4	-1.9R	9.7	-1.8R	9.9	-1.6R	10.1	-1.5R	10.2	-1.5R	10.3	-1.4R	10.4	-1.3R	10.5	-1.2R	10.5
		24"	q_a	q_f	1316	2119	1365	2198	1175	1891	1233	1985	1100	1772	1156	1861	1055	1698	1105	1779	1024	1648	
			F		10.4	-2.8R	11	-2.7R	11.5	-2.6R	11.8	-2.5R	12.1	-2.3R	12.3	-2.2R	12.4	-2.1R	12.6	-2R	12.7	-1.9R	12.7
	20 ga	4"	q_a	q_f	1879	3025	1865	3003	1856	2988	1849	2977	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
			F		6.5	-0.5R	6.6	-0.4R	6.7	-0.4R	6.7	-0.3R	6.7	-0.3R	6.7	-0.3R	6.7	-0.2R	6.8	-0.2R	6.8	-0.2R	6.8
		6"	q_a	q_f	1651	2657	1624	2615	1606	2586	1593	2564	1583	2548	1265	2024	1025	1640	847	1355	712	1139	
			F		7.8	-0.9R	8	-0.8R	8.1	-0.7R	8.2	-0.7R	8.2	-0.6R	8.3	-0.6R	8.3	-0.5R	8.3	-0.5R	8.3	-0.4R	8.3
		8"	q_a	q_f	1464	2357	1472	2371	1402	2257	1418	2282	1369	2204	1265	2024	1025	1640	847	1355	712	1139	
			F		9	-1.4R	9.2	-1.3R	9.4	-1.2R	9.5	-1.1R	9.6	-1R	9.7	-0.9R	9.8	-0.8R	9.8	-0.8R	9.8	-0.7R	9.9
		12"	q_a	q_f	1204	1938	1153	1857	1118	1800	1092	1759	1073	1727	1057	1702	1025	1640	847	1355	712	1139	
			F		11	-2.4R	11.5	-2.2R	11.8	-2.1R	12	-2R	12.2	-1.8R	12.4	-1.7R	12.5	-1.6R	12.6	-1.6R	12.7	-1.5R	12.7
		18"	q_a	q_f	1040	1938	1018	1638	876	1411	883	1422	889	1431	803	1293	816	1314	826	1330	712	1139	
			F		13.4	-3.7R	14.2	-3.6R	14.8	-3.5R	15.3	-3.4R	15.7	-3.3R	16	-3.1R	16.2	-3R	16.5	-2.9R	16.6	-2.8R	16.6
		24"	q_a	q_f	851	1370	866	1395	739	1190	767	1235	680	1095	709	1142	644	1038	672	1081	620	999	
			F		15.2	-4.8R	16.4	-4.9R	17.3	-4.9R	18	-4.8R	18.6	-4.7R	19.1	-4.6R	19.5	-4.5R	19.8	-4.3R	20.1	-4.2R	20.1
22 ga	4"	q_a	q_f	1422	2290	1409	2269	1400	2254	1393	2243	1218	1948	962	1539	779	1247	644	1031	541	866		
		F		8.4	-0.8R	8.6	-0.7R	8.7	-0.7R	8.7	-0.6R	8.8	-0.5R	8.8	-0.5R	8.8	-0.4R	8.9	-0.4R	8.9	-0.4R	8.9	-0.4R
	6"	q_a	q_f	1232	1983	1208	1945	1191	1918	1179	1898	1170	1883	962	1539	779	1247	644	1031	541	866		
		F		10.2	-1.5R	10.4	-1.4R	10.6	-1.2R	10.7	-1.1R	10.8	-1.1R	10.9	-1R	11	-0.9R	11	-0.8R	11.1	-0.8R	11.1	-0.8R
	8"	q_a	q_f	1084	1745	1087	1750	1029	1657	1040	1674	1000	1611	962	1539	779	1247	644	1031	541	866		
		F		11.7	-2.2R	12.1	-2.1R	12.4	-1.9R	12.6	-1.8R	12.8	-1.7R	12.9	-1.6R	13	-1.5R	13.1	-1.4R	13.2	-1.3R	13.2	-1.3R
	12"	q_a	q_f	886	1427	844	1359	814	1311	793	1277	776	1250	763	1229	753	1212	644	1031	541	866		
		F		14.1	-3.5R	14.9	-3.4R	15.4	-3.3R	15.9	-3.2R	16.2	-3R	16.5	-2.9R	16.7	-2.7R	16.9	-2.6R	17.1	-2.5R	17.1	-2.5R
	18"	q_a	q_f	766	1427	744	1198	638	1027	640	1031	642	1034	579	932	587	944	593	954	541	866		
		F		16.9	-5.2R	18.2	-5.3R	19.1	-5.3R	19.9	-5.2R	20.6	-5.1R	21.1	-5R	21.5	-4.8R	21.9	-4.7R	22.2	-4.5R	22.2	-4.5R
	24"	q_a	q_f	630	1014	635	1022	540	869	557	896	493	794	512	824	464	747	482	777	445	716		
		F		18.9	-6.6R	20.7	-6.9R	22.1	-7.1R	23.2	-7.1R	24.1	-7.1R	24.9	-7R	25.6	-6.9R	26.2	-6.7R	26.7	-6.6R	26.7	-6.6R

B-36 36/7/4

Support Attachment: Pneutek K64 PAF

Side Seam Attachment: DeltaGrip

DGB-36 & DGBF-36 2.7

Pneutek K64 Fasteners to Supports with DeltaGrip® Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



PNEUTEK



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
				q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	q_a	q_f	
36/9	16 ga	4"	q_a	q_f	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	2634	4215	2134	3414	1763	2821	1482	2371		
			F	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.2 -0.1R	3.3 -0.1R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	
		6"	q_a	q_f	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.7 -0.2R	3.7 -0.2R	3.7 -0.2R	3.7 -0.2R	3.7 -0.2R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.8 -0.1R
		8"	q_a	q_f	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	3190	5136	2634	4215	2134	3414	1763	2821	1482	2371
			F	4.1 -0.3R	4.2 -0.3R	4.2 -0.3R	4.2 -0.2R	4.2 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.3 -0.2R	4.4 -0.2R	4.4 -0.2R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R
	12"	q_a	q_f	3127	5035	3009	4844	2924	4708	2861	4606	2812	4528	2634	4215	2134	3414	1763	2821	1482	2371			
		F	4.8 -0.5R	5 -0.5R	5.1 -0.5R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	5.2 -0.4R	
	18"	q_a	q_f	2786	5035	2720	4379	2387	3843	2393	3853	2398	3860	2190	3526	2134	3414	1763	2821	1482	2371			
		F	5.7 -0.9R	6 -0.8R	6.2 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	6.4 -0.8R	
	24"	q_a	q_f	2366	3809	2379	3830	2062	3319	2117	3409	1897	3054	1961	3157	1794	2888	1763	2821	1482	2371			
		F	6.4 -1.2R	6.8 -1.2R	7.1 -1.2R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	7.4 -1.1R	
	18 ga	4"	q_a	q_f	2604	4192	2604	4192	2604	4192	2604	4192	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.3 -0.2R	4.3 -0.2R	4.3 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R		
		6"	q_a	q_f	2604	4192	2604	4192	2604	4192	2604	4192	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723		
			F	4.9 -0.4R	5 -0.3R	5.1 -0.3R	5.2 -0.3R	5.2 -0.3R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	5.2 -0.2R	
		8"	q_a	q_f	2604	4192	2604	4192	2572	4140	2583	4158	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723		
			F	5.5 -0.5R	5.7 -0.5R	5.8 -0.5R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	5.9 -0.4R	
	12"	q_a	q_f	2314	3726	2198	3538	2115	3405	2053	3306	2005	3229	1914	3062	1550	2481	1281	2050	1077	1723			
		F	6.5 -0.9R	6.8 -0.9R	7 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R	7.1 -0.8R		
	18"	q_a	q_f	2058	3726	1981	3189	1719	2768	1708	2749	1699	2735	1541	2481	1550	2481	1281	2050	1077	1723			
		F	7.6 -1.4R	8.1 -1.4R	8.4 -1.4R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R	8.7 -1.3R		
	24"	q_a	q_f	1760	2834	1736	2795	1492	2403	1513	2436	1348	2170	1381	2224	1258	2026	1281	2050	1077	1723			
		F	8.4 -1.8R	9.1 -1.9R	9.6 -1.9R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R	10 -1.8R		
20 ga	4"	q_a	q_f	1918	3088	1918	3088	1918	3088	1918	3088	1601	2562	1265	2024	1025	1640	847	1355	712	1139			
		F	6.2 -0.4R	6.3 -0.4R	6.4 -0.4R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R	6.5 -0.3R			
	6"	q_a	q_f	1918	3088	1918	3088	1912	3078	1880	3026	1601	2562	1265	2024	1025	1640	847	1355	712	1139			
		F	7.2 -0.8R	7.4 -0.7R	7.6 -0.7R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R	7.7 -0.6R			
	8"	q_a	q_f	1803	2902	1776	2859	1670	2688	1668	2686	1596	2562	1265	2024	1025	1640	847	1355	712	1139			
		F	8 -1.1R	8.4 -1R	8.6 -1R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R	8.8 -0.9R			
12"	q_a	q_f	1529	2462	1429	2301	1359	2188	1307	2104	1267	2039	1235	1988	1025	1640	847	1355	712	1139				
	F	9.3 -1.6R	9.9 -1.6R	10.3 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R	10.7 -1.6R				
18"	q_a	q_f	1365	2462	1291	2078	1110	1787	1089	1753	1073	1728	968	1559	967	1557	847	1355	712	1139				
	F	10.6 -2.3R	11.5 -2.4R	12.2 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R	12.8 -2.5R				
24"	q_a	q_f	1182	1904	1139	1834	973	1567	971	1563	860	1385	872	1404	785	1264	806	1298	712	1139				
	F	11.5 -2.8R	12.7 -3R	13.6 -3.2R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R	14.4 -3.3R				
22 ga	4"	q_a	q_f	1501	2417	1501	2417	1501	2417	1501	2417	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	7.9 -0.7R	8.1 -0.6R	8.2 -0.6R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R	8.3 -0.5R			
	6"	q_a	q_f	1501	2417	1454	2341	1416	2280	1388	2235	1218	1948	962	1539	779	1247	644	1031	541	866			
		F	9.1 -1.2R	9.5 -1.1R	9.7 -1.1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R			
	8"	q_a	q_f	1344	2164	1316	2119	1230	1981	1225	1973	1168	1880	962	1539	779	1247	644	1031	541	866			
		F	10.1 -1.6R	10.6 -1.6R	11 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R	11.3 -1.5R			
12"	q_a	q_f	1140	1836	1058	1704	1000	1610	957	1541	924	1488	898	1446	779	1247	644	1031	541	866				
	F	11.5 -2.3R	12.4 -2.4R	13 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R	13.6 -2.4R				
18"	q_a	q_f	1021	1836	957	1542	821	1322																

2.7 DGB-36 & DGBF-36

Pneutek K66 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1763	2821	1482	2371		
			F			3.3 -0.1R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	3.3 +0R	
		6"	q_a	q_f	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1763	2821	1482	2371
			F			3.8 -0.1R	3.8 -0.1R	3.8 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 -0.1R	3.9 +0R	3.9 +0R	3.9 +0R	3.9 +0R
		8"	q_a	q_f	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1763	2821	1482	2371
			F			4.3 -0.2R	4.4 -0.2R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R
		12"	q_a	q_f	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1772	2853	1763	2821	1482	2371
			F			5.3 -0.4R	5.4 -0.3R	5.5 -0.3R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.5 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R	5.6 -0.2R
		18"	q_a	q_f	1772	2853	1772	2853	1648	2653	1675	2696	1694	2727	1594	2567	1620	2608	1641	2641	1482	2371		
			F			6.6 -0.7R	6.8 -0.6R	6.9 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7 -0.5R	7.1 -0.4R	7.1 -0.4R	7.2 -0.4R	7.2 -0.4R	7.2 -0.4R	7.2 -0.4R	7.3 -0.3R	7.3 -0.3R
		24"	q_a	q_f	1544	2486	1609	2590	1447	2329	1514	2437	1393	2243	1455	2342	1359	2189	1415	2278	1336	2151		
			F			7.8 -1R	8 -0.9R	8.3 -0.9R	8.4 -0.8R	8.4 -0.8R	8.4 -0.8R	8.4 -0.8R	8.4 -0.8R	8.4 -0.8R	8.4 -0.8R	8.5 -0.7R	8.6 -0.7R	8.7 -0.6R	8.7 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R	8.8 -0.6R
	18 ga	4"	q_a	q_f	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1281	2050	1077	1723
			F			4.4 -0.1R	4.4 -0.1R	4.4 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 -0.1R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R	4.5 +0R
		6"	q_a	q_f	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1281	2050	1077	1723
			F			5.2 -0.2R	5.3 -0.2R	5.3 -0.2R	5.3 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R	5.4 -0.1R
		8"	q_a	q_f	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1362	2192	1281	2050	1077	1723
			F			6 -0.4R	6.1 -0.3R	6.1 -0.3R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.2 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R	6.3 -0.2R
		12"	q_a	q_f	1362	2192	1362	2192	1362	2192	1362	2192	1357	2185	1349	2172	1343	2162	1281	2050	1077	1723		
			F			7.4 -0.7R	7.6 -0.6R	7.7 -0.5R	7.8 -0.5R	7.8 -0.5R	7.8 -0.5R	7.8 -0.5R	7.9 -0.4R	7.9 -0.4R	7.9 -0.4R	7.9 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.4R	8 -0.3R
		18"	q_a	q_f	1291	2192	1288	2074	1167	1879	1185	1907	1198	1928	1117	1798	1135	1828	1150	1852	1077	1723		
			F			9.2 -1.2R	9.5 -1.1R	9.8 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10 -1R	10.1 -0.9R	10.2 -0.8R	10.3 -0.8R	10.3 -0.8R	10.4 -0.7R	10.4 -0.7R	10.4 -0.7R	10.5 -0.7R	10.5 -0.7R	10.5 -0.7R
		24"	q_a	q_f	1101	1773	1142	1838	1015	1634	1060	1707	967	1557	1010	1627	937	1509	977	1573	917	1476		
			F			10.7 -1.8R	11.2 -1.7R	11.6 -1.6R	11.9 -1.5R	12.2 -1.4R	12.2 -1.4R	12.2 -1.4R	12.2 -1.4R	12.2 -1.4R	12.4 -1.3R	12.5 -1.2R	12.5 -1.2R	12.7 -1.2R	12.7 -1.2R	12.7 -1.2R	12.8 -1.1R	12.8 -1.1R	12.8 -1.1R	12.8 -1.1R
20 ga	4"	q_a	q_f	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	847	1355	712	1139	
		F			6.6 -0.3R	6.6 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.2R	6.7 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	6.8 -0.1R	
	6"	q_a	q_f	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	847	1355	712	1139	
		F			7.9 -0.5R	8 -0.5R	8.1 -0.4R	8.2 -0.4R	8.2 -0.4R	8.2 -0.4R	8.2 -0.3R	8.2 -0.3R	8.2 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.3 -0.3R	8.4 -0.2R	8.4 -0.2R	
	8"	q_a	q_f	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	982	1581	847	1355	712	1139	
		F			9.1 -0.8R	9.3 -0.7R	9.5 -0.7R	9.6 -0.6R	9.6 -0.6R	9.6 -0.6R	9.7 -0.5R	9.7 -0.5R	9.7 -0.5R	9.7 -0.5R	9.8 -0.5R	9.8 -0.5R	9.8 -0.5R	9.8 -0.5R	9.8 -0.5R	9.8 -0.5R	9.8 -0.5R	9.9 -0.4R	9.9 -0.4R	
	12"	q_a	q_f	945	1521	921	1483	904	1455	891	1434	881	1418	873	1405	866	1395	847	1355	712	1139			
		F			11.2 -1.5R	11.6 -1.3R	11.9 -1.2R	12.1 -1.1R	12.1 -1.1R	12.1 -1.1R	12.3 -1.1R	12.3 -1.1R	12.3 -1.1R	12.5 -1R	12.5 -1R	12.6 -0.9R	12.6 -0.9R	12.7 -0.9R	12.7 -0.9R	12.8 -0.8R	12.8 -0.8R	12.8 -0.8R	12.8 -0.8R	
	18"	q_a	q_f	847	1521	839	1350	747	1203	756	1217	762	1226	703	1131	713	1149	722	1163	679	1093			
		F			13.7 -2.4R	14.5 -2.3R	15.1 -2.2R	15.5 -2.1R	15.5 -2.1R	15.5 -2.1R	15.9 -2R	15.9 -2R	16.2 -1.9R	16.2 -1.9R	16.4 -1.8R	16.4 -1.8R	16.6 -1.7R	16.6 -1.7R	16.6 -1.7R	16.8 -1.6R	16.8 -1.6R	16.8 -1.6R	16.8 -1.6R	
	24"	q_a	q_f	717	1155	735	1184	645	1038	670	1079	605	975	631	1015	581	935	604	973	564	907			
		F			15.7 -3.3R	16.9 -3.3R	17.7 -3.2R	18.4 -3.1R	18.4 -3.1R	18.9 -2.9R	18.9 -2.9R	19.4 -2.8R	19.4 -2.8R	19.8 -2.7R	19.8 -2.7R	20.1 -2.6R	20.1 -2.6R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R	20.4 -2.5R	
22 ga	4"	q_a	q_f	801	1289	801	1289	801	1289	801	1289	801	1289	801	1289	779	1247	644	1031	541	866			
		F			8.5 -0.5R	8.6 -0.4R	8.7 -0.4R	8.7 -0.3R	8.7 -0.3R	8.8 -0.3R	8.8 -0.3R	8.8 -0.3R	8.8 -0.3R	8.8 -0.2R	8.8 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	8.9 -0.2R	
	6"	q_a	q_f	801	1289	801	1289	801	1289	801	1289	801	1289	801	1289	779	1247	644	1031	541	866			
		F			10.3 -0.9R	10.5 -0.8R	10.7 -0.7R	10.8 -0.6R	10.8 -0.6R	10.9 -0.6R	10.9 -0.6R	10.9 -0.5R	10.9 -0.5R	11 -0.5R	11 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	11.1 -0.5R	
	8"	q_a	q_f	801	1289	801	1289	801	1289	801	1289	797	1284	801	1289	779	1247	644	1031	541	866			
		F			11.8 -1.3R	12.2 -1.2R	12.5 -1.1R	12.7 -1R	12.7 -1R	12.8 -0.9R	12.8 -0.9R	13 -0.9R	13 -0.9R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.1 -0.8R	13.2 -0.7R	13.2 -0.7R	13.2 -0.7R	13.2 -0.7R	
	12"	q_a	q_f	726	1168	702	1131	686	1104	673	1084	664	1068	656	1056	650	1046	644	1031	541	866			
		F			14.5 -2.3R	15.2 -2.1R	15.7 -2R	16.1 -1.9R	16.1 -1.9R	16.4 -1.8R	16.4 -1.8R	16.6 -1.7R	16.6 -1.7R	16.8 -1.6R	16.8 -1.6R	17 -1.5R	17 -1.5R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R	17.2 -1.4R	
	18"	q_a	q_f	647	1168	636	1024	561	904	565	910	568	915	521	838	528	850	534	859	499	804			
		F			17.5 -3.6R	18.7 -3.5R	19.6 -3.4R	20.4 -																

2.7 DGB-36 & DGBF-36

Pneutek K66 Fasteners to Supports with DeltaGrip® Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																		
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"	
36/9	16 ga	4"	q_a q_f	3544	5706	3544	5706	3544	5706	3544	5706	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.2 -0.1R		3.3 -0.1R		3.3 +0R		3.3 +0R		3.3 +0R	
		6"	q_a q_f	3544	5706	3544	5706	3544	5706	3544	5706	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	3.7 -0.2R		3.7 -0.2R		3.7 -0.2R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R		3.8 -0.1R	
		8"	q_a q_f	3544	5706	3544	5706	3544	5706	3544	5706	3334	5334	2634	4215	2134	3414	1763	2821	1482	2371
			F	4.1 -0.3R		4.2 -0.3R		4.2 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.3 -0.2R		4.4 -0.2R		4.4 -0.1R	
	12"	q_a q_f	3333	5365	3189	5134	3087	4970	3010	4847	2951	4752	2634	4215	2134	3414	1763	2821	1482	2371	
		F	4.8 -0.5R		5 -0.5R		5.1 -0.5R		5.2 -0.4R		5.2 -0.4R		5.3 -0.4R		5.3 -0.3R		5.4 -0.3R		5.4 -0.3R		
	18"	q_a q_f	2965	5365	2877	4632	2513	4046	2510	4041	2507	4037	2283	3675	2134	3414	1763	2821	1482	2371	
		F	5.7 -0.9R		6 -0.8R		6.2 -0.8R		6.4 -0.8R		6.5 -0.7R		6.6 -0.7R		6.7 -0.6R		6.8 -0.6R		6.8 -0.6R		
	24"	q_a q_f	2524	4063	2517	4053	2173	3499	2221	3575	1984	3194	2044	3291	1866	3004	1763	2821	1482	2371	
		F	6.4 -1.2R		6.8 -1.2R		7.1 -1.2R		7.4 -1.1R		7.6 -1.1R		7.8 -1R		7.9 -1R		8 -1R		8.1 -0.9R		
	18 ga	4"	q_a q_f	2723	4384	2723	4384	2723	4384	2723	4384	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	4.3 -0.2R		4.3 -0.2R		4.3 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R		4.4 -0.1R	
		6"	q_a q_f	2723	4384	2723	4384	2723	4384	2723	4384	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	4.9 -0.4R		5 -0.3R		5.1 -0.3R		5.2 -0.3R		5.2 -0.2R		5.2 -0.2R		5.3 -0.2R		5.3 -0.2R		5.3 -0.2R	
		8"	q_a q_f	2723	4384	2723	4384	2635	4243	2645	4258	2422	3876	1914	3062	1550	2481	1281	2050	1077	1723
			F	5.5 -0.5R		5.7 -0.5R		5.8 -0.5R		5.9 -0.4R		5.9 -0.4R		6 -0.4R		6 -0.3R		6.1 -0.3R		6.1 -0.3R	
	12"	q_a q_f	2376	3826	2251	3624	2162	3481	2096	3374	2044	3292	1914	3062	1550	2481	1281	2050	1077	1723	
		F	6.5 -0.9R		6.8 -0.9R		7 -0.8R		7.1 -0.8R		7.3 -0.7R		7.4 -0.7R		7.5 -0.7R		7.5 -0.6R		7.6 -0.6R		
	18"	q_a q_f	2114	3826	2029	3266	1758	2830	1743	2806	1731	2787	1569	2525	1550	2481	1281	2050	1077	1723	
		F	7.6 -1.4R		8.1 -1.4R		8.4 -1.4R		8.7 -1.3R		9 -1.3R		9.2 -1.2R		9.4 -1.2R		9.5 -1.1R		9.6 -1.1R		
	24"	q_a q_f	1811	2916	1779	2865	1528	2460	1545	2488	1375	2214	1407	2265	1281	2062	1281	2050	1077	1723	
		F	8.4 -1.8R		9.1 -1.9R		9.6 -1.9R		10 -1.8R		10.4 -1.8R		10.7 -1.8R		11 -1.7R		11.2 -1.7R		11.4 -1.6R		
20 ga	4"	q_a q_f	1964	3161	1964	3161	1964	3161	1964	3161	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	6.2 -0.4R		6.3 -0.4R		6.4 -0.4R		6.5 -0.3R		6.5 -0.3R		6.6 -0.3R		6.6 -0.3R		6.6 -0.2R		6.6 -0.2R		
	6"	q_a q_f	1964	3161	1964	3161	1937	3118	1903	3064	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	7.2 -0.8R		7.4 -0.7R		7.6 -0.7R		7.7 -0.6R		7.8 -0.6R		7.9 -0.5R		8 -0.5R		8 -0.5R		8.1 -0.4R		
	8"	q_a q_f	1828	2943	1799	2896	1690	2720	1687	2716	1601	2562	1265	2024	1025	1640	847	1355	712	1139	
		F	8 -1.1R		8.4 -1R		8.6 -1R		8.8 -0.9R		9 -0.9R		9.1 -0.8R		9.2 -0.8R		9.3 -0.7R		9.4 -0.7R		
12"	q_a q_f	1551	2496	1448	2331	1375	2213	1321	2126	1279	2059	1246	2006	1025	1640	847	1355	712	1139		
	F	9.3 -1.6R		9.9 -1.6R		10.3 -1.6R		10.7 -1.6R		10.9 -1.5R		11.2 -1.5R		11.4 -1.4R		11.6 -1.4R		11.7 -1.3R			
18"	q_a q_f	1385	2496	1307	2105	1124	1809	1101	1773	1084	1745	978	1574	976	1571	847	1355	712	1139		
	F	10.6 -2.3R		11.5 -2.4R		12.2 -2.5R		12.8 -2.5R		13.3 -2.5R		13.7 -2.4R		14.1 -2.4R		14.4 -2.3R		14.7 -2.3R			
24"	q_a q_f	1201	1934	1155	1860	986	1588	982	1582	869	1399	880	1417	792	1275	812	1308	712	1139		
	F	11.5 -2.8R		12.7 -3R		13.6 -3.2R		14.4 -3.3R		15.1 -3.3R		15.7 -3.3R		16.3 -3.3R		16.7 -3.3R		17.2 -3.2R			
22 ga	4"	q_a q_f	1601	2578	1601	2578	1601	2578	1590	2545	1218	1948	962	1539	779	1247	644	1031	541	866	
		F	7.9 -0.7R		8.1 -0.6R		8.2 -0.6R		8.3 -0.5R		8.4 -0.5R		8.5 -0.5R		8.5 -0.4R		8.6 -0.4R		8.6 -0.4R		
	6"	q_a q_f	1567	2523	1508	2427	1465	2359	1433	2307	1218	1948	962	1539	779	1247	644	1031	541	866	
		F	9.1 -1.2R		9.5 -1.1R		9.7 -1.1R		10 -1R		10.1 -0.9R		10.3 -0.9R		10.4 -0.8R		10.5 -0.8R		10.6 -0.8R		
	8"	q_a q_f	1396	2248	1363	2194	1270	2045	1262	2032	1201	1933	962	1539	779	1247	644	1031	541	866	
		F	10.1 -1.6R		10.6 -1.6R		11 -1.5R		11.3 -1.5R		11.6 -1.4R		11.8 -1.3R		12 -1.3R		12.2 -1.2R		12.3 -1.2R		
12"	q_a q_f	1186	1909	1096	1764	1033	1663	986	1587	950	1529	921	1483	779	1247	644	1031	541	866		
	F	11.5 -2.3R		12.4 -2.4R		13 -2.4R		13.6 -2.4R		14.1 -2.3R		14.5 -2.3R		14.8 -2.2R		15.1 -2.2R		15.3 -2.1R			
18"	q_a q_f	1064	1909	993	1599	850	1369	826	1330	808	1301	727	1170	722	1162	644	1031	541	866		
	F	12.9 -3.1R		14.2 -3.3R		15.2 -3.4R		16.1 -3.5R		16.8 -3.6R		17.5 -3.6R		18.1 -3.6R		18.6 -3.5R		19 -3.5R			
24"	q_a q_f	932	1500	883	1422	752	1210	740	1192	643	1035	649	1044	584	940	595	958	541	866		
	F	13.9 -3.6R		15.4 -4R		16.7 -4.3R		17.9 -4.5R		18.9 -4.6R		19.8 -4.7R		20.6 -4.7R		21.3 -4.8R		22 -4.8R			

2.8 BN-36

No. 12 Screws to Supports with No. 10 Screws Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587		
			F		3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	
		6"	q_a	q_f	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		8"	q_a	q_f	984	1585	986	1587	948	1526	955	1537	928	1494	936	1507	915	1473	923	1486	906	1459	906	1459
			F		4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R
	12"	q_a	q_f	847	1363	814	1311	791	1273	774	1245	760	1224	749	1207	741	1193	734	1181	727	1171	727	1171	
		F		6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	
	18"	q_a	q_f	753	1363	734	1183	644	1036	645	1039	647	1041	590	950	597	961	602	970	562	904	562	904	
		F		8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	
	24"	q_a	q_f	637	1026	641	1032	555	893	570	918	510	821	528	850	482	777	500	804	463	746	463	746	
		F		10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	
	18 ga	4"	q_a	q_f	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	
		6"	q_a	q_f	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	786	1265	783	1261	783	1261
			F		4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R
		8"	q_a	q_f	757	1218	756	1217	723	1165	728	1172	705	1135	711	1145	693	1116	699	1126	685	1103	685	1103
			F		5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R
	12"	q_a	q_f	647	1041	618	996	598	963	583	939	571	920	562	905	554	893	548	883	543	874	543	874	
		F		7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	
	18"	q_a	q_f	574	1041	557	897	485	781	485	780	484	780	440	709	444	716	448	721	417	671	417	671	
		F		9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	
	24"	q_a	q_f	488	785	486	783	419	675	428	690	382	616	394	634	359	579	371	598	344	553	344	553	
		F		11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	
20 ga	4"	q_a	q_f	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953	
		F		5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R		
	6"	q_a	q_f	592	953	585	942	576	928	570	918	565	909	561	903	558	898	555	893	553	890	553	890	
		F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	
	8"	q_a	q_f	539	868	536	864	510	821	512	825	494	795	497	801	484	779	488	785	477	767	477	767	
		F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	
12"	q_a	q_f	458	737	434	699	418	672	405	652	396	637	388	625	382	615	377	606	372	599	372	599		
	F		8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R		
18"	q_a	q_f	407	737	391	629	339	545	336	541	334	538	303	488	305	491	306	493	284	458	284	458		
	F		11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R		
24"	q_a	q_f	347	559	342	551	294	473	298	479	265	426	271	437	247	398	254	409	235	378	235	378		
	F		14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R		
22 ga	4"	q_a	q_f	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	
		F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R		
	6"	q_a	q_f	482	777	471	758	463	745	457	735	452	728	448	722	445	717	443	713	440	709	440	709	
		F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	
	8"	q_a	q_f	433	698	430	692	407	655	408	657	392	631	395	636	383	617	386	622	377	606	377	606	
		F		8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	
12"	q_a	q_f	367	591	346	558	332	534	321	517	312	503	306	492	300	483	296	476	292	470	292	470		
	F		9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R		
18"	q_a	q_f	326	591	312	502	269	434	266	429	264	425	239	384	240	386	240	387	223	359	223	359		
	F		12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R		
24"	q_a	q_f	280	450	273	440	234	377	236	380	210	337	214	345	194	312	200	322	184	296	184	296		
	F		15.6 -0.1R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R		

BN-36 36/4

Support Attachment: #12 SD HWH Screw

Side Seam Attachment: #10 SD HWH Screw

No. 12 Screws to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	1749	2816	1725	2777	1708	2751	1696	2731	1687	2716	1679	2704	1673	2694	1668	2686	1482	2371
			F		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R	
		6"	q_a	q_f	1481	2385	1442	2322	1415	2279	1395	2246	1380	2222	1368	2202	1358	2186	1350	2173	1343	2162
			F		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R	
		8"	q_a	q_f	1290	2077	1285	2069	1207	1943	1215	1956	1162	1871	1174	1890	1135	1827	1147	1847	1116	1796
			F		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R	
		12"	q_a	q_f	1050	1691	989	1592	947	1524	916	1475	892	1437	874	1407	859	1383	847	1363	836	1346
			F		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R	
		18"	q_a	q_f	910	1691	873	1406	744	1199	741	1193	738	1188	663	1068	669	1077	673	1084	622	1001
			F		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R	
		24"	q_a	q_f	757	1219	750	1207	635	1022	647	1042	572	920	588	947	531	855	550	885	503	810
			F		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R	
	18 ga	4"	q_a	q_f	1341	2159	1319	2123	1303	2098	1292	2080	1283	2066	1276	2054	1270	2045	1266	2038	1077	1723
			F		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R	
		6"	q_a	q_f	1124	1809	1089	1754	1065	1715	1048	1687	1034	1665	1023	1648	1015	1634	1007	1622	1001	1612
			F		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R	
		8"	q_a	q_f	975	1569	966	1556	903	1454	907	1461	865	1393	873	1405	841	1355	850	1369	826	1329
			F		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R	
		12"	q_a	q_f	793	1277	742	1195	707	1139	682	1098	662	1066	647	1042	635	1022	624	1005	616	991
			F		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R	
		18"	q_a	q_f	690	1277	657	1058	558	899	553	890	549	883	492	793	495	797	497	800	458	738
			F		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R	
		24"	q_a	q_f	578	931	566	912	479	771	485	780	425	684	436	702	391	629	404	650	370	596
			F		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R	
20 ga	4"	q_a	q_f	950	1530	930	1498	916	1475	906	1459	898	1446	892	1436	887	1428	847	1355	712	1139	
		F		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R
	6"	q_a	q_f	787	1267	758	1221	738	1188	723	1165	712	1146	703	1132	696	1120	690	1111	685	1102	
		F		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R
	8"	q_a	q_f	681	1096	670	1079	623	1002	623	1003	592	953	596	959	573	922	578	930	560	902	
		F		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R
	12"	q_a	q_f	555	894	515	830	488	785	468	753	453	729	441	709	431	694	423	681	416	670	
		F		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R
	18"	q_a	q_f	485	894	458	737	388	624	381	614	376	606	335	539	336	541	338	544	310	498	
		F		11.3 +0R		11.3 +0R		11.3 +0R		11.4 +0R		11.4 +0R		11.4 +0R		11.4 +0R		11.4 +0R		11.4 +0R		11.4 +0R
	24"	q_a	q_f	411	661	397	639	332	535	333	537	290	467	296	476	266	428	274	441	251	404	
		F		14 -0.1R		14 -0.1R		14 -0.1R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R
22 ga	4"	q_a	q_f	761	1225	742	1195	729	1174	720	1159	713	1148	707	1138	702	1131	644	1031	541	866	
		F		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R
	6"	q_a	q_f	626	1008	601	967	583	938	570	917	560	901	552	889	546	878	540	870	536	863	
		F		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R
	8"	q_a	q_f	541	871	530	854	491	790	490	789	464	747	466	751	448	721	451	726	437	703	
		F		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R
	12"	q_a	q_f	442	712	408	658	385	620	368	593	355	572	345	555	337	542	330	531	324	522	
		F		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R
	18"	q_a	q_f	388	712	364	586	308	495	300	483	295	474	262	421	262	422	263	423	241	388	
		F		12.8 -0.1R		12.8 -0.1R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R
	24"	q_a	q_f	331	533	317	511	263	424	262	422	228	367	232	373	209	336	214	344	196	316	
		F		15.6 -0.1R		15.7 -0.1R		15.7 -0.1R		15.7 -0.1R		15.7 -0.1R		15.7 -0.1R		15.7 -0.1R		15.7 +0R		15.7 +0R		15.7 +0R

2.8 BN-36

No. 12 Screws to Supports with No. 10 Screws Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/7	16 ga	4"	q_a	q_f	1768	2847	1742	2804	1723	2774	1709	2751	1698	2734	1690	2720	1683	2709	1677	2700	1482	2371	
			F	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R
		6"	q_a	q_f	1513	2436	1470	2366	1439	2316	1416	2280	1398	2251	1384	2229	1373	2211	1364	2196	1356	2183	
			F	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		8"	q_a	q_f	1331	2142	1318	2122	1236	1990	1240	1997	1185	1908	1194	1923	1154	1857	1164	1874	1132	1822	
			F	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R
	12"	q_a	q_f	1100	1772	1031	1660	983	1583	948	1526	921	1483	899	1448	882	1420	868	1397	856	1378		
		F	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R
	18"	q_a	q_f	966	1772	919	1480	785	1264	776	1249	769	1238	692	1113	694	1118	697	1121	643	1036		
		F	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R
	24"	q_a	q_f	818	1317	798	1285	678	1091	684	1101	605	973	618	994	560	901	574	925	527	849		
		F	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R
36/7	18 ga	4"	q_a	q_f	1359	2188	1334	2148	1317	2120	1304	2099	1294	2083	1286	2070	1279	2059	1274	2050	1077	1723	
			F	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		6"	q_a	q_f	1152	1855	1113	1792	1086	1748	1066	1716	1050	1691	1038	1671	1028	1655	1020	1642	1013	1631	
			F	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R
		8"	q_a	q_f	1010	1625	995	1601	928	1495	929	1496	885	1425	890	1433	858	1381	865	1392	839	1351	
			F	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R
	12"	q_a	q_f	835	1345	778	1252	738	1188	708	1140	686	1104	668	1076	654	1053	642	1033	632	1018		
		F	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R
	18"	q_a	q_f	735	1345	695	1118	592	953	582	936	574	924	515	830	516	830	516	831	476	766		
		F	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R
	24"	q_a	q_f	627	1010	606	976	514	827	514	828	454	731	462	743	414	667	425	684	390	627		
		F	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R
36/7	20 ga	4"	q_a	q_f	967	1556	944	1520	928	1495	917	1476	908	1462	901	1450	895	1441	847	1355	712	1139	
			F	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R
		6"	q_a	q_f	811	1306	778	1253	755	1216	739	1189	726	1168	715	1152	707	1138	700	1127	694	1118	
			F	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R
		8"	q_a	q_f	709	1141	693	1116	643	1035	641	1032	608	979	610	982	586	943	590	950	571	919	
			F	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R
	12"	q_a	q_f	588	947	543	874	511	824	489	786	471	758	457	736	446	718	437	703	429	691		
		F	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R
	18"	q_a	q_f	521	947	487	784	413	666	403	649	396	637	354	570	353	569	352	567	324	522		
		F	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R
	24"	q_a	q_f	448	722	428	688	362	582	358	577	312	502	315	507	283	456	290	466	265	427		
		F	13.9 -0.1R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R
36/7	22 ga	4"	q_a	q_f	776	1249	755	1216	741	1192	730	1175	722	1162	715	1151	710	1142	644	1031	541	866	
			F	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R
		6"	q_a	q_f	647	1042	618	996	598	963	583	939	572	921	563	906	555	894	549	884	541	866	
			F	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R
		8"	q_a	q_f	566	911	550	886	508	818	505	813	478	769	479	771	459	739	461	743	446	718	
			F	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R
	12"	q_a	q_f	471	758	432	696	405	652	386	621	371	597	359	578	349	563	342	550	335	539		
		F	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R
	18"	q_a	q_f	418	758	388	625	329	530	320	515	313	503	278	447	277	446	276	444	253	407		
		F	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R
	24"	q_a	q_f	363	584	343	552	287	463	283	455	246	396	248	399	223	359	227	366	208	335		
		F	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R

No. 12 Screws to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/9	16 ga	4"	q_a	q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1965	3164	1950	3139	1763	2821	1482	2371		
			F	3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		
		6"	q_a	q_f	1827	2942	1745	2810	1687	2716	1643	2645	1609	2591	1583	2548	1561	2513	1542	2483	1482	2371	1482	2371
			F	4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R
		8"	q_a	q_f	1625	2617	1574	2534	1458	2347	1442	2322	1366	2199	1364	2196	1309	2107	1312	2112	1269	2043	1269	2043
			F	4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R
	12"	q_a	q_f	1385	2230	1269	2043	1188	1912	1128	1816	1081	1741	1045	1682	1015	1634	991	1595	970	1562	970	1562	
		F	6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R	
	18"	q_a	q_f	1249	2230	1154	1858	985	1586	950	1530	924	1488	830	1336	820	1321	811	1306	742	1194	742	1194	
		F	8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R	
	24"	q_a	q_f	1103	1776	1033	1663	877	1413	857	1380	750	1208	747	1203	669	1077	674	1085	616	991	616	991	
		F	10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R	
18 ga	4"	q_a	q_f	1576	2537	1576	2537	1550	2496	1523	2453	1502	2419	1486	2392	1472	2370	1281	2050	1077	1723	1077	1723	
		F	4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R	
	6"	q_a	q_f	1396	2247	1325	2133	1275	2052	1237	1992	1208	1945	1185	1908	1166	1877	1150	1852	1077	1723	1077	1723	
		F	4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R	
	8"	q_a	q_f	1242	1999	1194	1922	1100	1771	1084	1745	1023	1647	1019	1640	975	1570	976	1571	942	1517	942	1517	
		F	5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R	
12"	q_a	q_f	1062	1710	967	1556	900	1448	850	1369	812	1307	782	1259	758	1220	738	1187	721	1160	721	1160		
	F	7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		
18"	q_a	q_f	962	1710	882	1420	751	1210	721	1160	697	1122	618	996	608	978	600	966	550	886	550	886		
	F	9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		
24"	q_a	q_f	856	1378	794	1278	672	1082	649	1045	564	909	558	899	500	804	502	808	460	741	460	741		
	F	11.7 -0.1R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		
20 ga	4"	q_a	q_f	1164	1875	1121	1804	1090	1754	1066	1717	1048	1688	1034	1665	1022	1640	847	1355	712	1139	712	1139	
		F	5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R	
	6"	q_a	q_f	989	1592	931	1499	890	1433	859	1383	836	1345	817	1315	802	1291	789	1270	712	1139	712	1139	
		F	6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R	
	8"	q_a	q_f	881	1418	839	1351	768	1237	753	1212	707	1139	702	1130	669	1077	668	1075	643	1036	643	1036	
		F	7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R	
12"	q_a	q_f	758	1221	684	1101	632	1018	594	956	564	909	541	871	522	841	507	816	494	795	494	795		
	F	8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		
18"	q_a	q_f	691	1221	628	1010	533	858	503	811	481	775	425	684	417	672	411	662	377	607	377	607		
	F	11.3 -0.1R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		
24"	q_a	q_f	621	1000	569	916	474	764	453	730	393	633	386	621	347	559	347	559	318	513	318	513		
	F	13.9 -0.1R		13.9 -0.1R		13.9 -0.1R		14 -0.1R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		
22 ga	4"	q_a	q_f	935	1506	896	1443	868	1398	847	1364	831	1338	818	1318	779	1247	644	1031	541	866	541	866	
		F	6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R	
	6"	q_a	q_f	793	1277	743	1196	707	1139	681	1096	660	1063	644	1036	631	1015	620	998	541	866	541	866	
		F	7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R	
	8"	q_a	q_f	708	1140	670	1079	611	984	597	960	559	900	553	890	526	848	524	844	504	812	504	812	
		F	8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R	
12"	q_a	q_f	612	986	549	885	505	814	473	761	446	719	426	685	410	660	397	639	386	622	386	622		
	F	9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		
18"	q_a	q_f	561	986	506	814	425	684	399	642	380	611	337	542	330	531	324	522	297	478	297	478		
	F	12.7 -0.1R		12.8 -0.1R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		
24"	q_a	q_f	506	815	461	742	380	612	361	581	313	503	307	494	276	445	275	443	252	406	252	406		
	F	15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.7 -0.1R		15.7 +0R		15.7 +0R		15.7 +0R		

2.8 BN-36

No. 12 Self-Drilling Screws to Supports with No. 12 Screws Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587		
			F		3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R		
		6"	q_a	q_f	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587	986	1587
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	
		8"	q_a	q_f	986	1587	986	1587	972	1565	979	1576	953	1535	962	1548	942	1516	950	1529	934	1503	934	1503
			F		4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R
		12"	q_a	q_f	869	1398	838	1349	816	1313	799	1287	787	1266	777	1250	768	1237	761	1226	756	1217	756	1217
			F		6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R
		18"	q_a	q_f	773	1398	757	1219	665	1071	669	1076	671	1080	613	988	621	1000	628	1010	586	943	586	943
			F		8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R
		24"	q_a	q_f	654	1053	661	1064	573	923	591	951	530	853	549	884	502	809	521	839	484	779	484	779
			F		10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R
	18 ga	4"	q_a	q_f	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	
		6"	q_a	q_f	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268	788	1268
			F		4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R
		8"	q_a	q_f	774	1246	775	1247	743	1197	748	1205	726	1169	732	1179	715	1152	722	1162	708	1140	708	1140
			F		5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R
		12"	q_a	q_f	664	1069	637	1025	618	994	603	971	592	953	583	939	576	927	570	918	565	909	565	909
			F		7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R
		18"	q_a	q_f	590	1069	574	924	502	808	502	809	503	809	458	737	463	745	467	752	435	700	435	700
			F		9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R
		24"	q_a	q_f	500	805	501	807	433	697	444	714	397	639	410	659	374	602	387	623	359	578	359	578
			F		11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R
	20 ga	4"	q_a	q_f	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953	592	953
			F		5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R
		6"	q_a	q_f	592	953	592	953	591	951	585	941	580	934	576	928	573	923	571	919	569	916	569	916
			F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R
		8"	q_a	q_f	552	889	551	886	525	845	528	850	510	821	514	827	500	805	505	812	494	795	494	795
			F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R
12"		q_a	q_f	470	757	448	721	432	695	420	676	410	661	403	649	397	639	392	631	388	624	388	624	
		F		8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	
18"		q_a	q_f	417	757	403	649	350	563	348	561	347	559	315	507	318	511	319	514	297	478	297	478	
		F		11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	
24"		q_a	q_f	355	572	352	567	303	488	308	496	275	442	282	454	257	414	265	426	245	394	245	394	
		F		14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	
22 ga	4"	q_a	q_f	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	493	793	
		F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	
	6"	q_a	q_f	493	793	482	777	475	765	469	756	465	749	462	743	459	738	456	735	454	731	454	731	
		F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	
	8"	q_a	q_f	444	715	442	711	419	675	421	678	406	653	409	658	397	639	400	644	391	629	391	629	
		F		8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	
	12"	q_a	q_f	377	607	357	575	343	552	332	535	324	522	318	512	313	503	308	496	305	490	305	490	
		F		9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	
	18"	q_a	q_f	335	607	321	517	278	448	276	444	274	441	248	400	250	402	251	404	232	374	232	374	
		F		12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	
	24"	q_a	q_f	286	461	281	453	241	389	244	393	217	350	222	358	202	326	208	335	192	310	192	310	
		F		15.6 -0.1R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	

No. 12 Self-Drilling Screws to Supports with No. 12 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	1788	2879	1767	2844	1751	2820	1740	2802	1732	2788	1725	2777	1720	2768	1715	2761	1482	2371
			F	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R
		6"	q_a	q_f	1525	2455	1488	2396	1463	2355	1444	2325	1430	2302	1418	2283	1409	2269	1401	2256	1395	2246
			F	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		8"	q_a	q_f	1332	2144	1330	2141	1252	2016	1262	2032	1209	1947	1222	1968	1183	1905	1196	1926	1165	1876
			F	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R
	12"	q_a	q_f	1085	1747	1025	1651	984	1585	954	1536	931	1499	913	1470	899	1447	886	1427	876	1411	
		F	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R
	18"	q_a	q_f	939	1747	905	1457	773	1244	771	1241	770	1239	692	1115	699	1126	705	1135	651	1048	
		F	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R
	24"	q_a	q_f	778	1253	775	1247	657	1058	672	1082	594	957	613	988	556	895	575	926	528	850	
		F	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R
	18 ga	4"	q_a	q_f	1374	2212	1354	2179	1339	2156	1329	2139	1321	2126	1314	2116	1309	2108	1281	2050	1077	1723
			F	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		6"	q_a	q_f	1158	1865	1126	1812	1103	1776	1086	1749	1073	1728	1063	1712	1055	1699	1048	1688	1043	1679
			F	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R
		8"	q_a	q_f	1007	1621	1001	1611	938	1510	944	1519	901	1451	910	1465	879	1414	888	1430	863	1390
			F	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R
	12"	q_a	q_f	819	1319	770	1239	735	1184	710	1143	691	1113	676	1088	664	1069	654	1053	645	1039	
		F	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R
	18"	q_a	q_f	711	1319	680	1095	579	932	575	926	572	921	514	827	517	833	520	838	480	773	
		F	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R
	24"	q_a	q_f	593	955	585	941	495	797	503	810	443	712	456	734	409	658	423	681	388	625	
		F	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R
20 ga	4"	q_a	q_f	976	1571	958	1542	945	1521	935	1506	928	1494	922	1484	917	1477	847	1355	712	1139	
		F	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	
	6"	q_a	q_f	812	1308	785	1264	766	1233	751	1210	741	1192	732	1179	725	1168	719	1158	712	1139	
		F	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R
	8"	q_a	q_f	703	1132	695	1118	647	1042	649	1045	617	994	622	1001	599	964	605	973	586	944	
		F	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R
12"	q_a	q_f	573	922	534	859	507	816	487	784	472	760	460	741	451	726	443	713	436	703		
	F	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	
18"	q_a	q_f	499	922	473	762	402	646	396	638	392	631	350	564	352	567	353	569	325	523		
	F	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	
24"	q_a	q_f	421	678	409	659	344	554	347	558	302	486	308	497	278	447	286	461	263	423		
	F	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	14 -0.1R	
22 ga	4"	q_a	q_f	782	1260	765	1232	753	1213	744	1198	738	1188	732	1179	728	1172	644	1031	541	866	
		F	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	
	6"	q_a	q_f	647	1041	622	1002	605	974	593	954	583	939	575	926	569	916	564	908	541	866	
		F	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R
	8"	q_a	q_f	559	900	550	885	510	821	510	821	484	779	487	784	468	754	472	760	457	736	
		F	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R
12"	q_a	q_f	456	735	423	681	400	644	383	617	370	596	360	580	352	567	345	556	340	547		
	F	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	
18"	q_a	q_f	399	735	376	605	318	513	313	503	308	496	273	440	275	442	275	444	253	407		
	F	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	12.8 -0.1R	
24"	q_a	q_f	339	545	327	526	272	438	272	438	237	381	242	389	217	350	224	360	205	330		
	F	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	

2.8 BN-36

No. 12 Self-Drilling Screws to Supports with No. 12 Screws Side Seam Attachment



Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/7	16 ga	4"	q_a	q_f	1806	2908	1782	2868	1764	2841	1752	2820	1742	2805	1734	2792	1728	2782	1723	2774	1482	2371		
			F		3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	3.4 +0R	
		6"	q_a	q_f	1555	2503	1514	2437	1485	2391	1463	2356	1447	2330	1434	2309	1423	2292	1415	2277	1407	2265	1407	2265
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		8"	q_a	q_f	1371	2207	1361	2191	1280	2061	1286	2071	1232	1983	1242	2000	1201	1934	1213	1952	1181	1952	1181	1901
			F		4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R	4.8 +0R
	12"	q_a	q_f	1134	1826	1067	1717	1020	1642	985	1586	959	1544	938	1510	921	1483	907	1461	896	1442	896	1442	
		F		6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	6.2 +0R	
	18"	q_a	q_f	994	1826	950	1529	813	1309	806	1297	800	1288	720	1160	724	1166	728	1172	673	1083	673	1083	
		F		8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	8.2 +0R	
	24"	q_a	q_f	838	1349	823	1325	700	1126	709	1141	627	1009	642	1034	582	938	599	965	552	889	552	889	
		F		10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	10.2 +0R	
	18 ga	4"	q_a	q_f	1391	2239	1368	2202	1352	2176	1340	2157	1330	2142	1323	2130	1317	2121	1281	2050	1077	1723	1077	1723
			F		4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R	4.1 +0R
		6"	q_a	q_f	1185	1908	1148	1849	1123	1807	1104	1777	1089	1753	1077	1734	1068	1719	1060	1707	1053	1696	1053	1696
			F		4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R	4.9 +0R
		8"	q_a	q_f	1040	1675	1028	1655	962	1549	964	1553	920	1482	927	1492	894	1440	902	1452	876	1411	876	1411
			F		5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R	5.6 +0R
	12"	q_a	q_f	860	1385	804	1294	765	1231	736	1185	714	1150	697	1122	683	1099	671	1080	661	1065	661	1065	
		F		7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	7.2 +0R	
	18"	q_a	q_f	756	1385	717	1154	612	985	603	971	597	961	536	864	538	866	539	868	497	801	497	801	
		F		9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	9.4 +0R	
	24"	q_a	q_f	642	1034	624	1005	529	852	532	857	471	758	480	772	432	696	444	716	407	656	407	656	
		F		11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	11.7 +0R	
20 ga	4"	q_a	q_f	991	1596	970	1562	956	1539	945	1521	937	1508	930	1497	925	1489	847	1355	712	1139	712	1139	
		F		5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	5.2 +0R	
	6"	q_a	q_f	835	1344	804	1294	782	1259	766	1233	754	1213	744	1198	736	1185	729	1174	712	1139	712	1139	
		F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	
	8"	q_a	q_f	731	1176	717	1154	667	1074	666	1072	633	1019	636	1024	612	985	616	992	597	961	597	961	
		F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	
12"	q_a	q_f	605	974	561	903	530	853	507	817	490	789	477	767	466	750	456	735	449	723	449	723		
	F		8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R	8.7 +0R		
18"	q_a	q_f	534	974	502	808	427	687	418	673	411	662	369	594	368	593	368	592	339	546	339	546		
	F		11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.3 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R	11.4 +0R		
24"	q_a	q_f	458	738	440	708	372	599	371	597	324	521	328	528	295	475	302	487	277	446	277	446		
	F		13.9 -0.1R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R	14 +0R		
22 ga	4"	q_a	q_f	796	1282	777	1251	764	1229	754	1213	746	1201	740	1191	735	1183	644	1031	541	866	541	866	
		F		6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	6.1 +0R	
	6"	q_a	q_f	667	1074	639	1029	620	998	606	975	595	957	586	943	579	932	573	922	541	866	541	866	
		F		7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	7 +0R	
	8"	q_a	q_f	583	938	569	916	527	849	525	845	498	801	499	804	479	771	482	776	467	751	467	751	
		F		8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	8 +0R	
12"	q_a	q_f	484	779	446	718	420	676	400	645	386	621	374	602	365	587	357	575	350	564	350	564		
	F		9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R	9.9 +0R		
18"	q_a	q_f	429	779	400	644	340	547	331	533	324	522	290	466	289	465	288	464	265	426	265	426		
	F		12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R	12.8 +0R		
24"	q_a	q_f	370	596	352	567	296	477	293	472	255	410	258	415	232	374	237	381	217	350	217	350		
	F		15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.6 -0.1R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R	15.7 +0R		

BN-36 36/7

Support Attachment: #

No. 12 Self-Drilling Screws to Supports with No. 12 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/9	16 ga	4"	q_a	q_f	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1971	3174	1763	2821	1482	2371		
			F	3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		3.4 +0R		
		6"	q_a	q_f	1875	3018	1797	2892	1741	2803	1699	2736	1667	2684	1642	2643	1621	2609	1603	2581	1482	2371
			F	4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R
		8"	q_a	q_f	1668	2686	1622	2611	1506	2425	1494	2405	1418	2282	1417	2282	1362	2193	1367	2201	1324	2131
			F	4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R		4.8 +0R
	12"	q_a	q_f	1419	2285	1306	2102	1226	1974	1167	1879	1121	1806	1086	1748	1056	1701	1032	1662	1012	1629	
		F	6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R		6.2 +0R	
	18"	q_a	q_f	1277	2285	1185	1908	1013	1631	981	1579	956	1539	859	1384	851	1371	845	1360	775	1248	
		F	8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R		8.2 +0R	
	24"	q_a	q_f	1123	1808	1058	1703	899	1448	882	1420	775	1248	775	1248	694	1117	701	1129	641	1032	
		F	10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R		10.2 +0R	
18 ga	4"	q_a	q_f	1576	2537	1576	2537	1576	2537	1570	2527	1550	2496	1534	2471	1522	2450	1281	2050	1077	1723	
		F	4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R		4.1 +0R	
	6"	q_a	q_f	1433	2306	1365	2197	1316	2119	1280	2061	1253	2017	1230	1981	1212	1952	1197	1928	1077	1723	
		F	4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R		4.9 +0R	
	8"	q_a	q_f	1274	2051	1230	1981	1137	1830	1123	1808	1062	1710	1059	1705	1015	1634	1017	1637	983	1582	
		F	5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R		5.6 +0R	
12"	q_a	q_f	1087	1751	993	1600	928	1493	879	1415	842	1355	812	1307	788	1269	768	1237	751	1210		
	F	7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		7.2 +0R		
18"	q_a	q_f	983	1751	905	1457	772	1242	742	1195	720	1160	642	1034	633	1019	626	1008	574	924		
	F	9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		9.4 +0R		
24"	q_a	q_f	870	1401	812	1307	689	1109	670	1078	582	937	578	931	517	833	521	840	478	770		
	F	11.7 -0.1R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		11.7 +0R		
20 ga	4"	q_a	q_f	1183	1905	1152	1855	1123	1808	1101	1773	1084	1745	1071	1724	1025	1640	847	1355	712	1139	
		F	5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R		5.2 +0R	
	6"	q_a	q_f	1015	1634	959	1544	919	1480	890	1433	867	1396	849	1367	834	1343	822	1323	712	1139	
		F	6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R	
	8"	q_a	q_f	903	1455	864	1392	794	1278	780	1255	734	1182	729	1174	697	1122	696	1121	671	1081	
		F	7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R	
12"	q_a	q_f	775	1248	702	1131	651	1048	613	987	584	940	561	904	543	874	527	849	514	828		
	F	8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		8.7 +0R		
18"	q_a	q_f	705	1248	643	1035	547	880	520	837	499	803	440	709	434	698	428	690	393	632		
	F	11.3 -0.1R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		11.3 +0R		
24"	q_a	q_f	630	1015	581	935	486	783	467	751	405	652	399	642	359	577	360	580	330	532		
	F	13.9 -0.1R		13.9 -0.1R		13.9 -0.1R		14 -0.1R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		14 +0R		
22 ga	4"	q_a	q_f	959	1545	922	1485	896	1442	876	1410	861	1385	848	1366	779	1247	644	1031	541	866	
		F	6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R		6.1 +0R	
	6"	q_a	q_f	814	1311	765	1232	731	1177	705	1135	685	1103	669	1078	656	1057	644	1031	541	866	
		F	7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R		7 +0R	
	8"	q_a	q_f	726	1169	690	1111	631	1016	618	994	580	934	575	925	548	882	547	880	526	847	
		F	8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R		8 +0R	
12"	q_a	q_f	626	1007	563	907	520	837	488	786	463	746	443	714	428	689	415	668	404	650		
	F	9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		9.9 +0R		
18"	q_a	q_f	571	1007	518	833	437	703	412	663	393	632	348	561	342	551	337	542	309	497		
	F	12.7 -0.1R		12.8 -0.1R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		12.8 +0R		
24"	q_a	q_f	514	827	470	756	389	626	371	597	322	518	317	510	285	459	285	459	261	421		
	F	15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.6 -0.1R		15.7 -0.1R		15.7 +0R		15.7 +0R		15.7 +0R		

2.9 BN-36

Hilti X-HSN-24 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047	1271	2047		
			F		3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.4	-0.1R	3.4	-0.1R	3.4	-0.1R	3.4	-0.1R	3.4	-0.1R
		6"	q_a	q_f	1271	2047	1257	2024	1239	1994	1225	1972	1214	1954	1205	1940	1198	1929	1192	1920	1187	1912	1187	1912
			F		3.8	-0.2R	3.8	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R
		8"	q_a	q_f	1158	1865	1153	1856	1096	1764	1101	1772	1061	1709	1069	1721	1039	1673	1048	1687	1024	1649	1024	1649
			F		4.2	-0.4R	4.3	-0.3R	4.4	-0.3R	4.4	-0.3R	4.5	-0.2R	4.5	-0.2R	4.5	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R
	12"	q_a	q_f	984	1584	933	1503	898	1445	871	1402	850	1369	834	1342	820	1321	809	1303	800	1288	800	1288	
		F		5	-0.6R	5.1	-0.6R	5.3	-0.5R	5.4	-0.5R	5.5	-0.5R	5.5	-0.4R	5.6	-0.4R	5.6	-0.4R	5.7	-0.4R	5.7	-0.4R	
	18"	q_a	q_f	874	1584	840	1352	728	1172	723	1163	719	1157	651	1048	655	1055	659	1060	611	984	611	984	
		F		5.8	-1R	6.2	-1R	6.4	-0.9R	6.6	-0.9R	6.8	-0.8R	6.9	-0.8R	7	-0.8R	7.1	-0.7R	7.2	-0.7R	7.2	-0.7R	
	24"	q_a	q_f	746	1201	735	1183	631	1016	640	1030	569	917	583	939	531	855	546	880	505	813	505	813	
		F		6.5	-1.3R	7	-1.3R	7.3	-1.3R	7.6	-1.3R	7.9	-1.2R	8.1	-1.2R	8.2	-1.2R	8.4	-1.1R	8.5	-1.1R	8.5	-1.1R	
	18 ga	4"	q_a	q_f	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657	1029	1657
			F		3.9	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R
		6"	q_a	q_f	996	1603	971	1563	953	1535	940	1513	930	1497	922	1484	915	1473	909	1464	905	1457	905	1457
			F		4.5	-0.3R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R	4.7	-0.2R	4.7	-0.2R	4.7	-0.1R	4.7	-0.1R	4.7	-0.1R	4.7	-0.1R
		8"	q_a	q_f	893	1438	885	1425	836	1347	838	1350	805	1296	810	1304	785	1264	791	1274	772	1242	772	1242
			F		5	-0.4R	5.1	-0.4R	5.2	-0.3R	5.2	-0.3R	5.3	-0.3R	5.3	-0.3R	5.3	-0.2R	5.4	-0.2R	5.4	-0.2R	5.4	-0.2R
	12"	q_a	q_f	756	1218	712	1147	681	1097	658	1059	640	1031	626	1008	614	989	605	974	597	961	597	961	
		F		5.8	-0.7R	6	-0.6R	6.2	-0.6R	6.3	-0.6R	6.4	-0.5R	6.5	-0.5R	6.5	-0.5R	6.6	-0.4R	6.6	-0.4R	6.6	-0.4R	
	18"	q_a	q_f	673	1218	641	1032	553	891	546	879	541	871	489	787	490	789	491	791	455	733	455	733	
		F		6.8	-1.1R	7.2	-1.1R	7.4	-1R	7.7	-1R	7.8	-0.9R	8	-0.9R	8.1	-0.9R	8.2	-0.8R	8.3	-0.8R	8.3	-0.8R	
	24"	q_a	q_f	577	929	563	906	482	775	485	780	430	693	439	706	397	639	409	658	375	604	375	604	
		F		7.6	-1.4R	8.1	-1.5R	8.5	-1.4R	8.8	-1.4R	9.1	-1.4R	9.3	-1.3R	9.5	-1.3R	9.6	-1.2R	9.8	-1.2R	9.8	-1.2R	
20 ga	4"	q_a	q_f	783	1260	783	1260	783	1260	783	1260	783	1260	781	1258	778	1252	775	1247	712	1139	712	1139	
		F		5	-0.2R	5	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	
	6"	q_a	q_f	715	1151	693	1115	677	1090	665	1071	656	1056	648	1044	642	1034	637	1026	633	1019	633	1019	
		F		5.6	-0.3R	5.7	-0.3R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R	5.9	-0.2R	5.9	-0.2R	5.9	-0.2R	5.9	-0.1R	5.9	-0.1R	
	8"	q_a	q_f	638	1027	628	1011	589	948	588	947	562	905	564	909	545	878	549	883	533	859	533	859	
		F		6.2	-0.5R	6.3	-0.4R	6.4	-0.4R	6.5	-0.3R	6.5	-0.3R	6.6	-0.3R	6.6	-0.3R	6.7	-0.3R	6.7	-0.2R	6.7	-0.2R	
12"	q_a	q_f	539	869	503	810	478	769	459	739	444	715	433	697	423	682	416	669	409	659	409	659		
	F		7.2	-0.8R	7.4	-0.7R	7.6	-0.7R	7.7	-0.6R	7.8	-0.6R	7.9	-0.6R	8	-0.5R	8.1	-0.5R	8.1	-0.5R	8.1	-0.5R		
18"	q_a	q_f	481	869	454	731	390	628	382	615	376	605	339	546	338	545	338	544	312	503	312	503		
	F		8.3	-1.3R	8.7	-1.2R	9.1	-1.2R	9.3	-1.1R	9.5	-1.1R	9.7	-1R	9.8	-1R	9.9	-0.9R	10	-0.9R	10	-0.9R		
24"	q_a	q_f	417	671	401	645	342	550	340	548	298	480	302	486	272	437	279	449	256	412	256	412		
	F		9.2	-1.7R	9.8	-1.7R	10.2	-1.7R	10.6	-1.6R	10.9	-1.6R	11.2	-1.5R	11.4	-1.5R	11.6	-1.4R	11.7	-1.4R	11.7	-1.4R		
22 ga	4"	q_a	q_f	656	1056	655	1055	646	1040	639	1029	634	1020	629	1013	626	1007	623	1003	541	866	541	866	
		F		5.8	-0.2R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	6	-0.1R	6	-0.1R	6	-0.1R	6	-0.1R	6	-0.1R	
	6"	q_a	q_f	577	929	557	896	542	872	531	855	522	841	516	830	510	821	506	814	502	808	502	808	
		F		6.5	-0.3R	6.6	-0.3R	6.7	-0.3R	6.7	-0.2R	6.8	-0.2R	6.8	-0.2R	6.8	-0.2R	6.8	-0.2R	6.9	-0.2R	6.9	-0.2R	
	8"	q_a	q_f	514	827	503	810	470	756	468	753	446	717	447	719	430	693	433	697	420	676	420	676	
		F		7.2	-0.5R	7.3	-0.5R	7.4	-0.4R	7.5	-0.4R	7.5	-0.3R	7.6	-0.3R	7.6	-0.3R	7.7	-0.3R	7.7	-0.3R	7.7	-0.3R	
12"	q_a	q_f	435	700	403	649	381	613	364	587	352	566	342	550	334	537	327	526	321	517	321	517		
	F		8.2	-0.9R	8.5	-0.8R	8.7	-0.8R	8.8	-0.7R	8.9	-0.7R	9	-0.6R	9.1	-0.6R	9.2	-0.5R	9.2	-0.5R	9.2	-0.5R		
18"	q_a	q_f	389	700	364	586	312	502	304	490	298	480	267	431	267	430	266	428	245	395	245	395		
	F		9.5	-1.4R	9.9	-1.4R	10.3	-1.3R	10.6	-1.2R	10.8	-1.2R	11	-1.1R	11.1	-1.1R	11.2	-1R	11.4	-1R	11.4	-1R		
24"	q_a	q_f	338	545	323	519	273	440	270	435	235	378	238	383	214	344	219	352	201	323	201	323		
	F		10.4	-1.8R	11.1	-1.8R	11.6	-1.8R	12	-1.8R	12.3	-1.7R	12.6	-1.7R	12.8	-1.6R	13.1	-1.6R	13.2	-1.5R	13.2	-1.5R		

Hilti X-HSN-24 Fasteners to Supports with No. 10 Screws Side Seam Attachment Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	2042	3288	1999	3219	1969	3171	1947	3135	1931	3108	1917	3087	1906	3069	1763	2821	1482	2371
			F		3.3-0.2R		3.3-0.2R		3.3-0.2R		3.3-0.2R		3.3-0.1R		3.4-0.1R		3.4-0.1R		3.4-0.1R		3.4-0.1R	
		6"	q_a	q_f	1692	2724	1630	2624	1586	2554	1555	2503	1530	2464	1511	2433	1495	2408	1483	2387	1472	2370
			F		3.7-0.4R		3.8-0.4R		3.9-0.3R		3.9-0.3R		3.9-0.3R		3.9-0.3R		4-0.2R		4-0.2R		4-0.2R	
		8"	q_a	q_f	1463	2355	1440	2319	1338	2154	1339	2156	1272	2048	1281	2062	1231	1982	1242	2000	1204	1938
			F		4.2-0.6R		4.3-0.5R		4.4-0.5R		4.4-0.5R		4.5-0.4R		4.5-0.4R		4.5-0.4R		4.5-0.4R		4.5-0.4R	
	12"	q_a	q_f	1193	1921	1107	1783	1048	1688	1005	1619	973	1566	947	1525	926	1491	909	1464	895	1441	
		F		4.9-1R		5.1-0.9R		5.2-0.9R		5.3-0.8R		5.4-0.8R		5.5-0.8R		5.6-0.7R		5.6-0.7R		5.6-0.7R		5.6-0.7R
	18"	q_a	q_f	1043	1921	983	1583	834	1342	819	1319	809	1302	725	1167	725	1168	726	1169	665	1071	
		F		5.7-1.4R		6-1.5R		6.3-1.4R		6.5-1.4R		6.7-1.4R		6.8-1.3R		6.9-1.3R		7-1.2R		7.1-1.2R		7.1-1.2R
	24"	q_a	q_f	883	1421	853	1374	720	1160	722	1163	630	1014	641	1033	575	926	590	949	539	868	
		F		6.3-1.8R		6.8-1.9R		7.1-1.9R		7.4-1.9R		7.7-1.9R		7.9-1.9R		8.1-1.9R		8.2-1.8R		8.4-1.8R		8.4-1.8R
	18 ga	4"	q_a	q_f	1565	2520	1526	2456	1498	2412	1478	2379	1462	2354	1450	2334	1440	2318	1281	2050	1077	1723
			F		3.9-0.2R		4-0.2R		4-0.2R		4-0.2R		4-0.2R		4-0.1R		4-0.1R		4-0.1R		4-0.1R	
		6"	q_a	q_f	1287	2071	1232	1983	1194	1922	1166	1878	1145	1843	1128	1816	1115	1794	1103	1776	1077	1723
			F		4.5-0.4R		4.5-0.4R		4.6-0.4R		4.6-0.3R		4.7-0.3R		4.7-0.3R		4.7-0.3R		4.7-0.2R		4.7-0.2R	
		8"	q_a	q_f	1111	1789	1087	1750	1004	1617	1002	1613	948	1527	953	1534	914	1471	920	1482	890	1433
			F		4.9-0.7R		5.1-0.6R		5.1-0.6R		5.2-0.5R		5.3-0.5R		5.3-0.5R		5.3-0.4R		5.4-0.4R		5.4-0.4R	
	12"	q_a	q_f	910	1465	838	1350	789	1271	753	1213	726	1169	705	1135	688	1107	673	1084	661	1065	
		F		5.7-1.1R		6-1R		6.1-1R		6.2-0.9R		6.3-0.9R		6.4-0.9R		6.5-0.8R		6.5-0.8R		6.6-0.7R		6.6-0.7R
	18"	q_a	q_f	799	1465	747	1203	632	1018	617	994	606	976	537	865	536	863	535	862	491	790	
		F		6.6-1.6R		7-1.6R		7.3-1.6R		7.5-1.6R		7.7-1.5R		7.9-1.5R		8-1.4R		8.1-1.4R		8.2-1.3R		8.2-1.3R
	24"	q_a	q_f	683	1100	653	1051	546	878	542	873	472	760	477	769	428	689	437	704	401	645	
		F		7.3-2.1R		7.8-2.1R		8.2-2.2R		8.6-2.2R		8.9-2.2R		9.1-2.1R		9.3-2.1R		9.5-2R		9.6-2R		9.6-2R
20 ga	4"	q_a	q_f	1107	1782	1072	1726	1048	1687	1030	1659	1017	1637	1006	1619	997	1605	847	1355	712	1139	
		F		5-0.3R		5-0.2R		5.1-0.2R		5.1-0.2R		5.1-0.2R		5.1-0.2R		5.1-0.1R		5.1-0.1R		5.1-0.1R		5.1-0.1R
	6"	q_a	q_f	904	1455	859	1382	827	1332	804	1295	787	1267	773	1245	762	1227	753	1212	712	1139	
		F		5.6-0.5R		5.7-0.5R		5.8-0.4R		5.8-0.4R		5.8-0.4R		5.9-0.3R		5.9-0.3R		5.9-0.3R		5.9-0.3R		5.9-0.3R
	8"	q_a	q_f	781	1258	757	1219	695	1120	690	1111	650	1047	651	1048	623	1003	626	1008	604	972	
		F		6.2-0.8R		6.3-0.7R		6.4-0.7R		6.5-0.6R		6.5-0.6R		6.6-0.5R		6.6-0.5R		6.6-0.5R		6.7-0.4R		6.7-0.4R
12"	q_a	q_f	644	1037	588	947	549	885	521	840	500	805	484	778	470	757	459	739	450	724		
	F		7.1-1.2R		7.3-1.2R		7.5-1.1R		7.7-1.1R		7.8-1R		7.9-1R		7.9-0.9R		8-0.9R		8.1-0.8R		8.1-0.8R	
18"	q_a	q_f	570	1037	527	849	442	711	426	686	415	668	367	591	365	588	364	586	334	537		
	F		8.1-1.9R		8.6-1.9R		8.9-1.9R		9.2-1.8R		9.4-1.8R		9.6-1.7R		9.7-1.7R		9.8-1.6R		9.9-1.6R		9.9-1.6R	
24"	q_a	q_f	493	794	463	745	383	617	376	605	327	526	328	528	295	475	300	483	275	443		
	F		8.9-2.4R		9.5-2.5R		10-2.5R		10.4-2.5R		10.7-2.5R		11-2.4R		11.2-2.4R		11.4-2.3R		11.6-2.3R		11.6-2.3R	
22 ga	4"	q_a	q_f	885	1424	853	1374	831	1339	815	1313	803	1293	793	1277	779	1247	644	1031	541	866	
		F		5.8-0.3R		5.9-0.3R		5.9-0.2R		5.9-0.2R		5.9-0.2R		6-0.2R		6-0.2R		6-0.2R		6-0.1R		6-0.1R
	6"	q_a	q_f	721	1160	681	1096	654	1052	634	1020	618	995	606	976	596	960	588	947	541	866	
		F		6.5-0.6R		6.6-0.5R		6.7-0.5R		6.7-0.4R		6.8-0.4R		6.8-0.4R		6.8-0.3R		6.8-0.3R		6.8-0.3R		6.8-0.3R
	8"	q_a	q_f	624	1004	601	968	550	885	543	875	511	823	510	822	487	784	489	787	471	759	
		F		7.1-0.8R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.5-0.6R		7.6-0.6R		7.6-0.5R		7.6-0.5R		7.7-0.5R		7.7-0.5R
12"	q_a	q_f	517	832	469	755	436	703	413	664	393	632	378	609	367	591	358	576	351	564		
	F		8.1-1.4R		8.4-1.3R		8.6-1.3R		8.8-1.2R		8.9-1.1R		9-1.1R		9.1-1R		9.1-1R		9.2-0.9R		9.2-0.9R	
18"	q_a	q_f	460	832	422	680	350	564	336	541	326	524	289	465	287	462	285	459	261	421		
	F		9.3-2R		9.7-2.1R		10.1-2R		10.4-2R		10.6-1.9R		10.8-1.9R		11-1.8R		11.1-1.8R		11.3-1.7R		11.3-1.7R	
24"	q_a	q_f	400	644	370	596	306	492	298	480	259	417	259	417	233	376	236	381	217	349		
	F		10.1-2.6R		10.8-2.7R		11.3-2.8R		11.7-2.7R		12.1-2.7R		12.4-2.7R		12.6-2.6R		12.9-2.6R		13.1-2.5R		13.1-2.5R	

2.9 BN-36

Hilti X-HSN-24 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																				
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"			
36/7	16 ga	4"	q_a	q_f	2077	3344	2029	3267	1995	3212	1970	3172	1951	3141	1936	3116	1923	3096	1763	2821	1482	2371	
			F		3.2	-0.2R	3.2	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3
		6"	q_a	q_f	1743	2806	1673	2693	1624	2614	1587	2556	1560	2511	1537	2475	1520	2446	1505	2423	1482	2371	
			F		3.6	-0.3R	3.7	-0.3R	3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9
		8"	q_a	q_f	1523	2453	1490	2399	1382	2225	1377	2217	1306	2103	1311	2111	1259	2028	1268	2041	1227	1976	
			F		4	-0.4R	4.1	-0.4R	4.2	-0.4R	4.3	-0.3R	4.3	-0.3R	4.4	-0.3R	4.4	-0.3R	4.4	-0.3R	4.4	-0.3R	4.5
		12"	q_a	q_f	1264	2035	1167	1878	1099	1770	1050	1690	1012	1630	982	1582	958	1543	939	1511	922	1484	
			F		4.6	-0.7R	4.8	-0.6R	5	-0.6R	5.1	-0.6R	5.2	-0.6R	5.3	-0.5R	5.4	-0.5R	5.4	-0.5R	5.4	-0.5R	5.5
		18"	q_a	q_f	1119	2035	1046	1684	889	1431	867	1396	850	1369	763	1228	760	1223	757	1219	697	1122	
			F		5.2	-1R	5.6	-1R	5.8	-1R	6.1	-1R	6.2	-0.9R	6.4	-0.9R	6.5	-0.9R	6.7	-0.9R	6.8	-0.8R	
		24"	q_a	q_f	964	1551	919	1479	777	1251	771	1241	677	1090	683	1100	613	987	624	1005	571	919	
			F		5.7	-1.2R	6.1	-1.3R	6.5	-1.3R	6.8	-1.3R	7.1	-1.3R	7.3	-1.3R	7.5	-1.3R	7.7	-1.3R	7.8	-1.2R	
	18 ga	4"	q_a	q_f	1598	2572	1553	2501	1522	2450	1499	2413	1481	2384	1467	2361	1455	2343	1281	2050	1077	1723	
			F		3.9	-0.2R	3.9	-0.2R	3.9	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	
		6"	q_a	q_f	1331	2144	1270	2044	1227	1975	1195	1924	1171	1885	1151	1853	1136	1828	1123	1807	1077	1723	
			F		4.3	-0.3R	4.4	-0.3R	4.5	-0.3R	4.5	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R	4.7	-0.2R	
		8"	q_a	q_f	1163	1873	1129	1818	1042	1678	1034	1665	978	1574	979	1575	938	1510	942	1517	910	1466	
			F		4.7	-0.5R	4.9	-0.4R	5	-0.4R	5.1	-0.4R	5.1	-0.4R	5.2	-0.3R	5.2	-0.3R	5.2	-0.3R	5.3	-0.3R	
		12"	q_a	q_f	969	1560	888	1429	832	1339	790	1272	759	1222	734	1182	714	1150	698	1123	684	1101	
			F		5.4	-0.7R	5.6	-0.7R	5.8	-0.7R	6	-0.7R	6.1	-0.6R	6.2	-0.6R	6.3	-0.6R	6.3	-0.5R	6.4	-0.5R	
		18"	q_a	q_f	862	1560	799	1286	677	1091	656	1057	641	1031	571	920	566	912	563	907	516	831	
			F		6.1	-1.1R	6.5	-1.1R	6.8	-1.1R	7.1	-1.1R	7.3	-1.1R	7.4	-1R	7.6	-1R	7.7	-1R	7.8	-0.9R	
		24"	q_a	q_f	749	1207	706	1137	596	960	586	943	510	821	511	823	458	738	465	748	426	686	
			F		6.6	-1.3R	7.1	-1.4R	7.6	-1.4R	7.9	-1.5R	8.2	-1.5R	8.5	-1.4R	8.7	-1.4R	8.9	-1.4R	9.1	-1.4R	
20 ga	4"	q_a	q_f	1136	1828	1096	1765	1069	1721	1049	1688	1033	1663	1021	1643	1011	1627	847	1355	712	1139		
		F		4.9	-0.2R	5	-0.2R	5	-0.1R	5	-0.1R	5	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R		
	6"	q_a	q_f	941	1515	890	1433	854	1376	828	1333	808	1301	792	1275	779	1254	769	1237	712	1139		
		F		5.5	-0.4R	5.6	-0.3R	5.6	-0.3R	5.7	-0.3R	5.7	-0.3R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R		
	8"	q_a	q_f	823	1325	792	1275	726	1168	716	1153	674	1085	672	1082	642	1033	643	1036	620	998		
		F		5.9	-0.5R	6.1	-0.5R	6.2	-0.5R	6.3	-0.4R	6.4	-0.4R	6.4	-0.4R	6.5	-0.4R	6.5	-0.3R	6.5	-0.3R		
	12"	q_a	q_f	691	1112	627	1009	583	938	550	886	526	847	506	815	491	790	478	770	467	752		
		F		6.7	-0.8R	7	-0.8R	7.2	-0.8R	7.3	-0.8R	7.5	-0.7R	7.6	-0.7R	7.7	-0.7R	7.8	-0.6R	7.8	-0.6R		
	18"	q_a	q_f	619	1112	567	914	480	773	459	740	444	715	393	632	388	625	385	620	353	568		
		F		7.5	-1.2R	8	-1.3R	8.3	-1.3R	8.6	-1.2R	8.8	-1.2R	9	-1.2R	9.2	-1.2R	9.4	-1.1R	9.5	-1.1R		
	24"	q_a	q_f	544	876	506	815	422	679	409	659	356	573	354	569	318	512	321	517	294	474		
		F		8.1	-1.5R	8.7	-1.6R	9.2	-1.7R	9.6	-1.7R	9.9	-1.7R	10.2	-1.7R	10.5	-1.6R	10.7	-1.6R	10.9	-1.6R		
22 ga	4"	q_a	q_f	911	1466	875	1409	850	1369	832	1339	818	1317	807	1299	779	1247	644	1031	541	866		
		F		5.7	-0.2R	5.8	-0.2R	5.8	-0.2R	5.9	-0.2R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R		
	6"	q_a	q_f	753	1213	708	1141	677	1090	654	1053	637	1025	623	1003	612	985	602	970	541	866		
		F		6.3	-0.4R	6.5	-0.4R	6.5	-0.3R	6.6	-0.3R	6.6	-0.3R	6.7	-0.3R	6.7	-0.2R	6.7	-0.2R	6.8	-0.2R		
	8"	q_a	q_f	660	1063	631	1016	576	927	566	911	531	855	528	851	504	811	504	811	485	781		
		F		6.9	-0.6R	7	-0.5R	7.2	-0.5R	7.3	-0.5R	7.3	-0.4R	7.4	-0.4R	7.5	-0.4R	7.5	-0.4R	7.5	-0.3R		
	12"	q_a	q_f	557	897	502	809	465	748	437	704	416	670	400	644	387	622	376	605	367	590		
		F		7.7	-0.9R	8	-0.9R	8.2	-0.9R	8.4	-0.8R	8.6	-0.8R	8.7	-0.8R	8.8	-0.7R	8.9	-0.7R	8.9	-0.7R		
	18"	q_a	q_f	502	897	457	735	383	616	364	586	350	564	311	500	306	493	303	487	278	447		
		F		8.6	-1.4R	9.1	-1.4R	9.5	-1.4R	9.8	-1.4R	10	-1.3R	10.3	-1.3R	10.5	-1.3R	10.6	-1.2R	10.8	-1.2R		
	24"	q_a	q_f	444	715	409	659	338	545	326	525	283	456	281	452	253	407	254	409	233	375		
		F		9.2	-1.7R	9.9	-1.8R	10.4	-1.8R	10.9	-1.8R	11.2	-1.8R	11.6	-1.8R	11.8	-1.8R	12.1	-1.8R	12.3	-1.7R		

Hilti X-HSN-24 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
			q_a	q_f																		
36/9	16 ga	4"	q_a	q_f	2502	4028	2408	3878	2342	3770	2292	3690	2253	3627	2222	3578	2134	3414	1763	2821	1482	2371
			F		3.1-0.2R		3.2-0.2R		3.2-0.2R		3.2-0.1R		3.3-0.1R		3.3-0.1R		3.3-0.1R		3.3-0.1R		3.3-0.1R	
		6"	q_a	q_f	2125	3421	2000	3221	1912	3079	1847	2973	1796	2892	1756	2827	1723	2774	1696	2730	1482	2371
			F		3.5-0.3R		3.6-0.3R		3.6-0.3R		3.7-0.3R		3.7-0.2R		3.8-0.2R		3.8-0.2R		3.8-0.2R		3.8-0.2R	
		8"	q_a	q_f	1893	3048	1804	2904	1651	2659	1618	2605	1520	2448	1508	2428	1438	2316	1436	2311	1383	2226
			F		3.7-0.4R		3.9-0.4R		4-0.4R		4.1-0.4R		4.2-0.4R		4.2-0.4R		4.3-0.3R		4.3-0.3R		4.3-0.3R	
	12"	q_a	q_f	1629	2623	1470	2367	1358	2187	1276	2054	1213	1953	1163	1873	1123	1808	1089	1754	1061	1709	
		F		4.2-0.6R		4.4-0.7R		4.6-0.7R		4.7-0.6R		4.9-0.6R		5-0.6R		5.1-0.6R		5.1-0.6R		5.2-0.6R		5.2-0.6R
	18"	q_a	q_f	1486	2623	1349	2171	1146	1845	1090	1756	1047	1686	926	1491	905	1456	887	1428	811	1305	
		F		4.6-0.9R		4.9-0.9R		5.2-1R		5.5-1R		5.7-1R		5.8-1R		6-1R		6.1-1R		6.3-0.9R		6.3-0.9R
	24"	q_a	q_f	1334	2148	1222	1968	1032	1662	987	1588	858	1381	842	1355	753	1213	750	1207	684	1102	
		F		4.9-1R		5.3-1.1R		5.7-1.2R		6-1.2R		6.3-1.3R		6.5-1.3R		6.7-1.3R		6.9-1.3R		7.1-1.3R		7.1-1.3R
	18 ga	4"	q_a	q_f	1928	3104	1844	2969	1784	2873	1740	2801	1705	2745	1678	2701	1550	2481	1281	2050	1077	1723
			F		3.8-0.2R		3.8-0.2R		3.9-0.2R		3.9-0.2R		3.9-0.1R		3.9-0.1R		3.9-0.1R		4-0.1R		4-0.1R	
		6"	q_a	q_f	1635	2633	1528	2460	1452	2338	1396	2247	1353	2178	1318	2122	1290	2077	1267	2040	1077	1723
			F		4.1-0.4R		4.3-0.3R		4.3-0.3R		4.4-0.3R		4.4-0.3R		4.5-0.3R		4.5-0.2R		4.6-0.2R		4.6-0.2R	
		8"	q_a	q_f	1460	2351	1380	2221	1256	2023	1224	1971	1146	1845	1132	1823	1077	1735	1072	1726	1030	1659
			F		4.5-0.5R		4.6-0.5R		4.7-0.5R		4.8-0.4R		4.9-0.4R		5-0.4R		5-0.4R		5.1-0.4R		5.1-0.3R	
	12"	q_a	q_f	1265	2037	1133	1824	1040	1675	972	1565	920	1481	878	1413	840	1352	811	1306	789	1270	
		F		4.9-0.7R		5.2-0.7R		5.4-0.7R		5.6-0.7R		5.7-0.7R		5.8-0.7R		5.9-0.7R		6-0.6R		6.1-0.6R		
	18"	q_a	q_f	1160	2037	1044	1681	886	1426	831	1337	790	1271	697	1123	678	1091	664	1068	608	979	
		F		5.4-1R		5.8-1R		6.1-1.1R		6.4-1.1R		6.6-1.1R		6.8-1.1R		7-1.1R		7.1-1.1R		7.3-1.1R		
	24"	q_a	q_f	1050	1691	953	1534	795	1281	753	1213	654	1053	637	1026	570	917	565	910	518	834	
		F		5.7-1.1R		6.2-1.3R		6.6-1.3R		7-1.4R		7.3-1.4R		7.6-1.4R		7.8-1.5R		8-1.5R		8.2-1.5R		
20 ga	4"	q_a	q_f	1377	2216	1305	2102	1255	2020	1217	1960	1188	1913	1165	1876	1025	1640	847	1355	712	1139	
		F		4.8-0.2R		4.9-0.2R		4.9-0.2R		4.9-0.2R		5-0.2R		5-0.2R		5-0.1R		5-0.1R		5-0.1R		
	6"	q_a	q_f	1169	1882	1082	1742	1020	1643	975	1570	940	1513	912	1469	890	1432	847	1355	712	1139	
		F		5.2-0.4R		5.4-0.4R		5.5-0.4R		5.5-0.3R		5.6-0.3R		5.6-0.3R		5.7-0.3R		5.7-0.3R		5.7-0.3R		
	8"	q_a	q_f	1048	1688	980	1577	886	1427	857	1380	799	1286	785	1265	745	1199	738	1189	708	1139	
		F		5.6-0.6R		5.8-0.5R		5.9-0.5R		6-0.5R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R		6.4-0.4R		
12"	q_a	q_f	917	1476	813	1309	741	1193	685	1103	639	1029	604	972	578	931	558	898	540	870		
	F		6.2-0.8R		6.5-0.8R		6.7-0.8R		6.9-0.8R		7-0.8R		7.2-0.8R		7.3-0.8R		7.4-0.7R		7.5-0.7R			
18"	q_a	q_f	847	1476	754	1214	629	1013	585	941	551	888	486	783	473	761	462	743	423	681		
	F		6.7-1.1R		7.1-1.2R		7.5-1.2R		7.8-1.3R		8.1-1.3R		8.3-1.3R		8.5-1.3R		8.7-1.2R		8.8-1.2R			
24"	q_a	q_f	774	1246	692	1114	571	919	534	861	463	746	447	720	402	647	398	640	364	587		
	F		7.1-1.3R		7.6-1.5R		8.1-1.5R		8.5-1.6R		8.9-1.6R		9.2-1.7R		9.5-1.7R		9.7-1.7R		9.9-1.7R			
22 ga	4"	q_a	q_f	1109	1785	1045	1683	1001	1611	967	1557	941	1516	921	1483	779	1247	644	1031	541	866	
		F		5.6-0.3R		5.7-0.2R		5.7-0.2R		5.8-0.2R		5.8-0.2R		5.8-0.2R		5.9-0.2R		5.9-0.2R		5.9-0.1R		
	6"	q_a	q_f	943	1518	867	1397	814	1311	775	1248	745	1199	721	1161	701	1129	644	1031	541	866	
		F		6.1-0.4R		6.2-0.4R		6.3-0.4R		6.4-0.4R		6.5-0.4R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.3R		
	8"	q_a	q_f	849	1366	788	1268	710	1143	683	1100	635	1022	622	1002	589	948	582	937	541	866	
		F		6.5-0.6R		6.7-0.6R		6.9-0.6R		7-0.6R		7.1-0.5R		7.2-0.5R		7.2-0.5R		7.3-0.5R		7.3-0.4R		
12"	q_a	q_f	747	1202	659	1060	596	959	544	876	506	814	478	770	457	736	440	708	425	685		
	F		7.1-0.9R		7.4-0.9R		7.7-0.9R		7.9-0.9R		8.1-0.9R		8.2-0.9R		8.4-0.8R		8.5-0.8R		8.6-0.8R			
18"	q_a	q_f	693	1202	613	988	506	815	468	753	439	706	389	626	377	607	367	591	336	541		
	F		7.7-1.2R		8.2-1.3R		8.6-1.4R		8.9-1.4R		9.2-1.4R		9.5-1.4R		9.7-1.4R		9.9-1.4R		10.1-1.3R			
24"	q_a	q_f	637	1025	560	902	462	743	429	691	372	599	359	578	323	520	318	512	292	470		
	F		8.1-1.5R		8.7-1.6R		9.2-1.7R		9.7-1.8R		10.1-1.8R		10.4-1.8R		10.7-1.8R		11-1.8R		11.3-1.8R			

2.9 BN-36

Hilti X-ENP-19 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^{-6} in/lbs)																					
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"				
36/4	16 ga	4"	q_a	q_f	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204	1369	2204		
			F		3.2	-0.2R	3.2	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R	3.3	-0.1R
		6"	q_a	q_f	1348	2171	1317	2121	1295	2085	1279	2058	1266	2038	1255	2021	1247	2008	1240	1997	1234	1987	1234	1987
			F		3.6	-0.3R	3.7	-0.3R	3.7	-0.2R	3.8	-0.2R	3.8	-0.2R	3.8	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.2R	3.9	-0.2R
		8"	q_a	q_f	1212	1952	1203	1937	1140	1835	1144	1841	1100	1771	1108	1783	1075	1730	1083	1744	1057	1702	1057	1702
			F		3.9	-0.4R	4.1	-0.4R	4.2	-0.4R	4.2	-0.4R	4.3	-0.3R	4.3	-0.3R	4.4	-0.3R	4.4	-0.3R	4.4	-0.3R	4.4	-0.3R
	12"	q_a	q_f	1028	1655	971	1563	930	1498	900	1449	877	1412	859	1382	844	1358	831	1338	821	1321	821	1321	
		F		4.5	-0.7R	4.7	-0.6R	4.9	-0.6R	5	-0.6R	5.1	-0.6R	5.2	-0.6R	5.3	-0.5R	5.3	-0.5R	5.4	-0.5R	5.4	-0.5R	
	18"	q_a	q_f	913	1655	874	1406	755	1215	747	1203	741	1193	670	1079	673	1084	676	1088	626	1008	626	1008	
		F		5.1	-0.9R	5.4	-1R	5.7	-1R	5.9	-1R	6.1	-1R	6.3	-0.9R	6.4	-0.9R	6.5	-0.9R	6.6	-0.9R	6.6	-0.9R	
	24"	q_a	q_f	782	1259	766	1233	656	1056	662	1066	589	948	601	968	547	880	561	904	518	834	518	834	
		F		5.5	-1.2R	5.9	-1.2R	6.3	-1.3R	6.6	-1.3R	6.9	-1.3R	7.1	-1.3R	7.3	-1.3R	7.5	-1.3R	7.7	-1.3R	7.7	-1.3R	
	18 ga	4"	q_a	q_f	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1108	1784	1077	1723	1077	1723
			F		3.8	-0.2R	3.9	-0.2R	3.9	-0.1R	3.9	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R	4	-0.1R
		6"	q_a	q_f	1044	1681	1015	1634	994	1601	979	1576	967	1557	957	1541	949	1529	943	1518	937	1509	937	1509
			F		4.3	-0.3R	4.4	-0.3R	4.5	-0.3R	4.5	-0.3R	4.5	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R	4.6	-0.2R
		8"	q_a	q_f	934	1504	922	1485	869	1399	869	1399	833	1341	837	1348	810	1304	816	1314	795	1279	795	1279
			F		4.7	-0.5R	4.8	-0.4R	4.9	-0.4R	5	-0.4R	5.1	-0.4R	5.1	-0.3R	5.2	-0.3R	5.2	-0.3R	5.2	-0.3R	5.2	-0.3R
	12"	q_a	q_f	790	1272	741	1193	706	1136	680	1095	660	1063	644	1037	631	1017	621	999	612	985	612	985	
		F		5.3	-0.7R	5.5	-0.7R	5.7	-0.7R	5.9	-0.7R	6	-0.7R	6.1	-0.6R	6.2	-0.6R	6.3	-0.6R	6.3	-0.6R	6.3	-0.6R	
	18"	q_a	q_f	703	1272	667	1074	574	925	565	910	558	898	504	811	504	811	504	812	467	751	467	751	
		F		5.9	-1R	6.3	-1.1R	6.6	-1.1R	6.9	-1.1R	7.1	-1.1R	7.3	-1.1R	7.4	-1R	7.6	-1R	7.7	-1R	7.7	-1R	
	24"	q_a	q_f	606	976	587	945	502	807	502	809	446	718	453	729	407	655	418	673	383	617	383	617	
		F		6.4	-1.3R	6.9	-1.4R	7.3	-1.4R	7.7	-1.5R	8	-1.5R	8.2	-1.5R	8.5	-1.4R	8.7	-1.4R	8.9	-1.4R	8.9	-1.4R	
20 ga	4"	q_a	q_f	843	1357	843	1357	837	1348	829	1334	822	1323	817	1315	812	1308	809	1302	712	1139	712	1139	
		F		4.9	-0.2R	4.9	-0.2R	5	-0.2R	5	-0.2R	5	-0.1R	5	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	5.1	-0.1R	
	6"	q_a	q_f	749	1205	723	1163	704	1134	690	1112	680	1094	671	1081	664	1070	659	1060	654	1053	654	1053	
		F		5.4	-0.4R	5.5	-0.3R	5.6	-0.3R	5.7	-0.3R	5.7	-0.3R	5.7	-0.3R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R	
	8"	q_a	q_f	666	1073	653	1052	611	983	609	980	580	934	582	937	561	904	565	909	548	882	548	882	
		F		5.9	-0.5R	6	-0.5R	6.1	-0.5R	6.2	-0.5R	6.3	-0.4R	6.4	-0.4R	6.4	-0.4R	6.5	-0.4R	6.5	-0.3R	6.5	-0.3R	
12"	q_a	q_f	564	908	524	843	495	797	474	764	458	738	445	717	435	700	426	687	419	675	419	675		
	F		6.6	-0.8R	6.8	-0.8R	7.1	-0.8R	7.2	-0.8R	7.4	-0.8R	7.5	-0.7R	7.6	-0.7R	7.7	-0.7R	7.7	-0.6R	7.8	-0.6R		
18"	q_a	q_f	504	908	473	761	405	652	396	637	388	625	349	562	348	561	347	559	320	516	320	516		
	F		7.3	-1.2R	7.8	-1.3R	8.1	-1.3R	8.4	-1.3R	8.7	-1.2R	8.9	-1.2R	9.1	-1.2R	9.2	-1.2R	9.3	-1.1R	9.3	-1.1R		
24"	q_a	q_f	438	705	419	674	356	574	353	569	307	495	310	499	279	449	286	460	262	422	262	422		
	F		7.8	-1.5R	8.4	-1.6R	8.9	-1.6R	9.3	-1.7R	9.7	-1.7R	10	-1.7R	10.2	-1.7R	10.5	-1.6R	10.7	-1.6R	10.7	-1.6R		
22 ga	4"	q_a	q_f	702	1130	687	1106	676	1088	667	1075	661	1064	656	1056	652	1049	644	1031	541	866	541	866	
		F		5.7	-0.2R	5.8	-0.2R	5.8	-0.2R	5.8	-0.2R	5.9	-0.2R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	5.9	-0.1R	
	6"	q_a	q_f	604	972	580	934	563	907	551	886	541	871	533	858	527	848	522	840	517	833	517	833	
		F		6.3	-0.4R	6.4	-0.4R	6.5	-0.3R	6.6	-0.3R	6.6	-0.3R	6.7	-0.3R	6.7	-0.3R	6.7	-0.2R	6.7	-0.2R	6.7	-0.2R	
	8"	q_a	q_f	536	863	523	842	487	784	484	779	460	740	460	741	443	713	445	716	431	694	431	694	
		F		6.8	-0.6R	7	-0.6R	7.1	-0.5R	7.2	-0.5R	7.3	-0.5R	7.4	-0.4R	7.4	-0.4R	7.5	-0.4R	7.5	-0.4R	7.5	-0.4R	
12"	q_a	q_f	454	731	419	675	395	636	377	607	363	584	352	566	343	552	335	540	329	530	329	530		
	F		7.5	-0.9R	7.9	-0.9R	8.1	-0.9R	8.3	-0.9R	8.4	-0.8R	8.6	-0.8R	8.7	-0.8R	8.8	-0.7R	8.9	-0.7R	8.9	-0.7R		
18"	q_a	q_f	407	731	380	611	325	523	315	508	308	496	274	442	274	441	273	440	250	403	250	403		
	F		8.4	-1.3R	8.9	-1.4R	9.3	-1.4R	9.6	-1.4R	9.9	-1.4R	10.1	-1.3R	10.3	-1.3R	10.5	-1.3R	10.6	-1.2R	10.6	-1.2R		
24"	q_a	q_f	356	574	337	543	284	458	279	450	242	390	245	394	220	354	224	361	206	331	206	331		
	F		8.9	-1.6R	9.6	-1.7R	10.1	-1.8R	10.6	-1.8R	11	-1.8R	11.3	-1.8R	11.6	-1.8R	11.8	-1.8R	12.1	-1.8R	12.1	-1.8R		

Hilti X-ENP-19 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/7/4	16 ga	4"	q_a	q_f	2130	3429	2080	3349	2045	3292	2019	3251	1999	3219	1984	3194	1971	3174	1763	2821	1482	2371
			F	3.2 -0.3R	3.2 -0.3R	3.2 -0.2R	3.3 -0.2R	3.3 -0.2R	3.3 -0.2R	3.3 -0.2R	3.3 -0.2R	3.3 -0.2R	3.3 -0.1R									
		6"	q_a	q_f	1756	2827	1685	2713	1636	2635	1600	2577	1573	2533	1551	2498	1534	2469	1519	2446	1482	2371
			F	3.6 -0.5R	3.6 -0.4R	3.7 -0.4R	3.8 -0.4R	3.8 -0.4R	3.8 -0.3R	3.9 -0.3R	3.9 -0.3R	3.9 -0.3R										
		8"	q_a	q_f	1517	2442	1488	2395	1378	2218	1376	2216	1304	2100	1312	2112	1259	2027	1269	2044	1229	1978
			F	3.9 -0.6R	4 -0.6R	4.1 -0.6R	4.2 -0.6R	4.3 -0.6R	4.3 -0.5R	4.4 -0.5R	4.4 -0.5R											
	12"	q_a	q_f	1240	1996	1146	1844	1081	1740	1034	1665	998	1607	970	1562	947	1525	929	1495	913	1470	
		F	4.4 -1R	4.6 -1R	4.8 -1R	4.9 -1R	5 -0.9R	5.1 -0.9R	5.2 -0.9R	5.3 -0.9R	5.4 -0.8R											
	18"	q_a	q_f	1087	1996	1020	1642	863	1390	845	1361	832	1339	743	1196	742	1194	741	1193	678	1091	
		F	4.9 -1.3R	5.2 -1.4R	5.5 -1.4R	5.8 -1.5R	6 -1.5R	6.1 -1.5R	6.3 -1.4R	6.4 -1.4R	6.5 -1.4R											
	24"	q_a	q_f	925	1490	888	1430	747	1203	745	1200	649	1045	658	1060	590	950	603	971	552	888	
		F	5.2 -1.6R	5.7 -1.7R	6.1 -1.8R	6.4 -1.9R	6.7 -1.9R	6.9 -1.9R	7.1 -1.9R	7.3 -1.9R	7.5 -1.9R											
	18 ga	4"	q_a	q_f	1629	2623	1584	2550	1552	2498	1528	2460	1510	2431	1496	2408	1484	2390	1281	2050	1077	1723
			F	3.8 -0.3R	3.9 -0.3R	3.9 -0.3R	3.9 -0.2R	4 -0.2R	4 -0.2R	4 -0.2R	4 -0.2R											
		6"	q_a	q_f	1334	2148	1273	2049	1230	1981	1199	1931	1175	1892	1157	1862	1141	1838	1129	1817	1077	1723
			F	4.3 -0.5R	4.4 -0.5R	4.4 -0.5R	4.5 -0.4R	4.5 -0.4R	4.6 -0.4R	4.6 -0.4R	4.6 -0.3R	4.6 -0.3R										
		8"	q_a	q_f	1152	1855	1123	1807	1034	1665	1029	1657	972	1565	975	1570	934	1504	940	1513	908	1462
			F	4.6 -0.7R	4.8 -0.7R	4.9 -0.7R	5 -0.7R	5 -0.6R	5.1 -0.6R	5.1 -0.6R	5.2 -0.5R	5.2 -0.5R										
	12"	q_a	q_f	946	1524	868	1398	815	1311	775	1248	746	1201	722	1163	704	1133	688	1108	675	1087	
		F	5.2 -1.1R	5.4 -1.1R	5.6 -1.1R	5.8 -1.1R	5.9 -1R	6 -1R	6.1 -1R	6.2 -1R	6.3 -0.9R											
	18"	q_a	q_f	835	1524	776	1249	656	1056	637	1026	623	1002	551	887	548	882	546	880	501	806	
		F	5.7 -1.5R	6.1 -1.5R	6.4 -1.6R	6.7 -1.6R	6.9 -1.6R	7.1 -1.6R	7.3 -1.6R	7.5 -1.6R	7.6 -1.6R											
	24"	q_a	q_f	717	1155	681	1096	567	912	560	902	487	785	491	790	440	708	448	721	411	661	
		F	6.1 -1.7R	6.6 -1.9R	7 -2R	7.4 -2.1R	7.7 -2.1R	8 -2.2R	8.2 -2.2R	8.5 -2.2R	8.7 -2.2R											
20 ga	4"	q_a	q_f	1150	1852	1110	1788	1083	1743	1063	1711	1047	1686	1035	1666	1025	1640	847	1355	712	1139	
		F	4.9 -0.4R	4.9 -0.3R	5 -0.3R	5 -0.3R	5 -0.3R	5 -0.2R	5.1 -0.2R	5.1 -0.2R												
	6"	q_a	q_f	937	1509	887	1428	852	1372	826	1331	807	1299	792	1275	779	1255	769	1238	712	1139	
		F	5.4 -0.6R	5.5 -0.6R	5.6 -0.5R	5.6 -0.5R	5.7 -0.5R	5.7 -0.4R	5.8 -0.4R	5.8 -0.4R												
	8"	q_a	q_f	811	1306	782	1260	716	1154	709	1141	667	1074	666	1073	637	1025	639	1029	616	992	
		F	5.8 -0.8R	6 -0.8R	6.1 -0.8R	6.2 -0.8R	6.3 -0.7R	6.3 -0.7R	6.4 -0.7R	6.4 -0.6R	6.5 -0.6R											
12"	q_a	q_f	671	1081	610	982	568	915	538	866	514	828	494	796	480	773	468	754	459	738		
	F	6.4 -1.2R	6.7 -1.3R	6.9 -1.3R	7.1 -1.2R	7.3 -1.2R	7.4 -1.2R	7.5 -1.1R	7.6 -1.1R	7.7 -1.1R												
18"	q_a	q_f	597	1081	549	883	458	737	440	708	427	687	377	607	374	603	372	599	341	549		
	F	7.1 -1.7R	7.5 -1.8R	7.9 -1.8R	8.2 -1.9R	8.5 -1.9R	8.7 -1.9R	8.9 -1.9R	9.1 -1.8R	9.2 -1.8R												
24"	q_a	q_f	519	836	482	777	399	642	390	627	339	545	338	544	304	489	308	496	283	455		
	F	7.5 -2R	8.1 -2.2R	8.6 -2.3R	9 -2.4R	9.4 -2.5R	9.7 -2.5R	10 -2.5R	10.2 -2.5R	10.4 -2.5R												
22 ga	4"	q_a	q_f	918	1479	883	1421	858	1381	840	1352	826	1330	815	1312	779	1247	644	1031	541	866	
		F	5.7 -0.4R	5.8 -0.4R	5.8 -0.3R	5.8 -0.3R	5.9 -0.3R	5.9 -0.3R	5.9 -0.2R	5.9 -0.2R												
	6"	q_a	q_f	747	1203	703	1132	673	1084	651	1048	634	1021	621	999	610	982	601	967	541	866	
		F	6.2 -0.7R	6.4 -0.6R	6.5 -0.6R	6.5 -0.6R	6.6 -0.5R	6.6 -0.5R	6.7 -0.5R	6.7 -0.4R	6.7 -0.4R											
	8"	q_a	q_f	648	1043	621	1000	567	913	559	899	524	844	523	841	498	802	499	804	481	774	
		F	6.7 -0.9R	6.9 -0.9R	7 -0.9R	7.1 -0.8R	7.2 -0.8R	7.3 -0.8R	7.4 -0.7R	7.4 -0.7R												
12"	q_a	q_f	540	869	487	785	452	727	424	683	402	648	387	623	375	603	365	588	357	575		
	F	7.4 -1.3R	7.7 -1.4R	8 -1.4R	8.2 -1.4R	8.3 -1.3R	8.5 -1.3R	8.6 -1.3R	8.7 -1.2R	8.8 -1.2R												
18"	q_a	q_f	482	869	440	708	364	586	347	559	335	540	298	479	295	474	292	470	268	431		
	F	8.1 -1.8R	8.6 -2R	9 -2R	9.4 -2.1R	9.6 -2.1R	9.9 -2.1R	10.1 -2R	10.3 -2R	10.4 -2R												
24"	q_a	q_f	420	677	386	622	319	514	309	498	268	432	268	431	241	388	243	392	223	359		
	F	8.6 -2.2R	9.2 -2.4R	9.8 -2.5R	10.2 -2.6R	10.6 -2.7R	11 -2.7R	11.3 -2.8R	11.6 -2.8R	11.8 -2.7R												

2.9 BN-36

Hilti X-ENP-19 Fasteners to Supports with No. 10 Screws Side Seam Attachment

Diaphragm Shear in pounds per linear foot (plf)



Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q _a) (plf), Factored Shear (q _f) (plf), and Flexibility Factor (F) (10 ⁻⁶ in/lbs)																		
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"	
36/7	16 ga	4"	q _a q _f	2171	3495	2115	3405	2075	3341	2046	3294	2023	3257	2005	3229	1991	3205	1763	2821	1482	2371
			F	3.1 -0.2R		3.1 -0.2R		3.2 -0.2R		3.2 -0.2R		3.2 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R		3.3 -0.1R	
		6"	q _a q _f	1813	2920	1734	2792	1679	2703	1638	2637	1606	2586	1581	2546	1561	2513	1544	2486	1482	2371
			F	3.4 -0.3R		3.5 -0.3R		3.6 -0.3R		3.6 -0.3R		3.7 -0.3R		3.7 -0.2R		3.8 -0.2R		3.8 -0.2R		3.8 -0.2R	
		8"	q _a q _f	1584	2551	1543	2484	1427	2297	1418	2284	1343	2162	1345	2166	1291	2078	1298	2089	1255	2021
			F	3.7 -0.4R		3.8 -0.4R		3.9 -0.4R		4 -0.4R		4.1 -0.4R		4.2 -0.4R		4.2 -0.4R		4.3 -0.3R		4.3 -0.3R	
	12"	q _a q _f	1318	2121	1211	1949	1137	1830	1083	1743	1041	1676	1009	1624	982	1582	961	1547	943	1518	
		F	4.1 -0.6R		4.3 -0.6R		4.5 -0.7R		4.6 -0.6R		4.8 -0.6R		4.9 -0.6R		5 -0.6R		5 -0.6R		5.1 -0.6R		
	18"	q _a q _f	1170	2121	1088	1752	923	1486	897	1444	877	1412	786	1265	781	1258	777	1251	712	1146	
		F	4.4 -0.8R		4.8 -0.9R		5 -0.9R		5.3 -1R		5.5 -1R		5.7 -1R		5.8 -1R		6 -1R		6.1 -1R		
	24"	q _a q _f	1013	1631	959	1545	811	1305	800	1288	700	1127	704	1133	631	1016	640	1031	585	942	
		F	4.7 -1R		5.1 -1.1R		5.4 -1.2R		5.8 -1.2R		6 -1.2R		6.3 -1.3R		6.5 -1.3R		6.7 -1.3R		6.9 -1.3R		
	18 ga	4"	q _a q _f	1667	2684	1615	2601	1579	2543	1552	2499	1532	2466	1515	2440	1502	2418	1281	2050	1077	1723
			F	3.7 -0.2R		3.8 -0.2R		3.8 -0.2R		3.9 -0.2R		3.9 -0.2R		3.9 -0.1R		3.9 -0.1R		3.9 -0.1R		4 -0.1R	
		6"	q _a q _f	1385	2230	1316	2118	1267	2040	1231	1983	1204	1939	1182	1904	1165	1875	1150	1852	1077	1723
			F	4.1 -0.4R		4.2 -0.3R		4.3 -0.3R		4.4 -0.3R		4.4 -0.3R		4.5 -0.3R		4.5 -0.3R		4.5 -0.2R		4.5 -0.2R	
		8"	q _a q _f	1210	1948	1170	1884	1076	1732	1065	1715	1005	1617	1004	1616	960	1546	964	1552	930	1498
			F	4.4 -0.5R		4.5 -0.5R		4.7 -0.5R		4.8 -0.5R		4.9 -0.4R		4.9 -0.4R		5 -0.4R		5 -0.4R		5.1 -0.4R	
	12"	q _a q _f	1012	1629	922	1485	861	1386	816	1314	782	1258	755	1215	733	1180	715	1151	700	1127	
		F	4.8 -0.7R		5.1 -0.7R		5.3 -0.7R		5.5 -0.7R		5.6 -0.7R		5.7 -0.7R		5.8 -0.7R		5.9 -0.7R		6 -0.7R		
	18"	q _a q _f	903	1629	832	1340	705	1135	680	1095	662	1066	588	946	581	935	576	928	528	850	
		F	5.2 -0.9R		5.6 -1R		5.9 -1R		6.2 -1.1R		6.4 -1.1R		6.6 -1.1R		6.8 -1.1R		7 -1.1R		7.1 -1.1R		
	24"	q _a q _f	789	1271	739	1190	621	1001	607	977	528	851	527	849	473	761	478	769	438	705	
		F	5.5 -1.1R		6 -1.2R		6.4 -1.3R		6.7 -1.4R		7 -1.4R		7.3 -1.4R		7.6 -1.4R		7.8 -1.5R		8 -1.5R		
20 ga	4"	q _a q _f	1183	1904	1138	1832	1107	1782	1084	1744	1066	1716	1052	1693	1025	1640	847	1355	712	1139	
		F	4.8 -0.3R		4.8 -0.2R		4.9 -0.2R		4.9 -0.2R		5 -0.2R		5 -0.2R		5 -0.2R		5 -0.1R		5 -0.1R		
	6"	q _a q _f	979	1576	922	1484	882	1420	853	1373	830	1337	813	1309	798	1285	787	1266	712	1139	
		F	5.2 -0.4R		5.3 -0.4R		5.4 -0.4R		5.5 -0.4R		5.5 -0.3R		5.6 -0.3R		5.6 -0.3R		5.7 -0.3R		5.7 -0.3R		
	8"	q _a q _f	857	1380	820	1321	750	1207	738	1187	693	1115	689	1110	658	1059	658	1059	634	1020	
		F	5.5 -0.6R		5.7 -0.6R		5.9 -0.5R		6 -0.5R		6.1 -0.5R		6.1 -0.5R		6.2 -0.5R		6.3 -0.4R		6.3 -0.4R		
12"	q _a q _f	722	1163	652	1050	604	973	569	916	542	873	521	839	504	812	490	789	479	771		
	F	6 -0.8R		6.3 -0.8R		6.6 -0.8R		6.8 -0.8R		6.9 -0.8R		7.1 -0.8R		7.2 -0.8R		7.3 -0.8R		7.4 -0.8R			
18"	q _a q _f	650	1163	592	954	499	804	475	766	458	737	405	652	399	643	395	636	362	583		
	F	6.5 -1.1R		6.9 -1.2R		7.3 -1.2R		7.6 -1.2R		7.9 -1.3R		8.1 -1.3R		8.3 -1.3R		8.5 -1.3R		8.7 -1.2R			
24"	q _a q _f	574	925	530	854	441	709	425	685	370	595	366	589	329	530	331	533	303	489		
	F	6.8 -1.3R		7.3 -1.4R		7.8 -1.5R		8.2 -1.6R		8.6 -1.6R		8.9 -1.6R		9.2 -1.7R		9.4 -1.7R		9.7 -1.7R			
22 ga	4"	q _a q _f	948	1526	907	1461	879	1416	859	1382	843	1357	830	1336	779	1247	644	1031	541	866	
		F	5.6 -0.3R		5.7 -0.3R		5.7 -0.2R		5.8 -0.2R		5.8 -0.2R		5.8 -0.2R		5.8 -0.2R		5.9 -0.2R		5.9 -0.2R		
	6"	q _a q _f	784	1262	734	1182	699	1126	674	1085	654	1053	639	1029	626	1009	616	992	541	866	
		F	6 -0.5R		6.2 -0.4R		6.3 -0.4R		6.4 -0.4R		6.4 -0.4R		6.5 -0.4R		6.5 -0.3R		6.6 -0.3R		6.6 -0.3R		
	8"	q _a q _f	688	1108	654	1053	595	959	583	939	546	880	542	873	516	831	516	830	496	798	
		F	6.4 -0.6R		6.6 -0.6R		6.8 -0.6R		6.9 -0.6R		7 -0.6R		7.1 -0.5R		7.2 -0.5R		7.2 -0.5R		7.3 -0.5R		
12"	q _a q _f	583	939	524	843	483	777	453	729	428	690	410	660	396	637	384	618	374	603		
	F	6.9 -0.9R		7.3 -0.9R		7.5 -0.9R		7.8 -0.9R		7.9 -0.9R		8.1 -0.9R		8.2 -0.9R		8.3 -0.8R		8.4 -0.8R			
18"	q _a q _f	527	939	477	768	399	642	377	608	362	582	321	516	315	508	311	501	285	459		
	F	7.5 -1.2R		8 -1.3R		8.4 -1.3R		8.7 -1.4R		9 -1.4R		9.2 -1.4R		9.5 -1.4R		9.7 -1.4R		9.8 -1.4R			
24"	q _a q _f	469	756	428	689	354	570	339	546	295	474	291	469	262	422	262	423	241	387		
	F	7.8 -1.4R		8.4 -1.5R		8.9 -1.6R		9.4 -1.7R		9.8 -1.8R		10.1 -1.8R		10.4 -1.8R		10.7 -1.8R		10.9 -1.8R			

Hilti X-ENP-19 Fasteners to Supports with No. 10 Screws Side Seam Attachment Diaphragm Shear in pounds per linear foot (plf)



HILTI



B PANELS

Support Fastener Pattern	Gage	Seam Attach. Spacing	Allowable Shear (q_a) (plf), Factored Shear (q_f) (plf), and Flexibility Factor (F) (10^6 in/lbs)																			
			Span →	4' - 0"		5' - 0"		6' - 0"		7' - 0"		8' - 0"		9' - 0"		10' - 0"		11' - 0"		12' - 0"		
36/9	16 ga	4"	q_a	q_f	2617	4213	2510	4041	2433	3917	2376	3826	2332	3754	2297	3698	2134	3414	1763	2821	1482	2371
			F	3 -0.2R	3 -0.2R	3.1 -0.2R	3.1 -0.2R	3.2 -0.2R	3.2 -0.2R	3.2 -0.2R	3.2 -0.2R	3.2 -0.1R	3.2 -0.1R									
		6"	q_a	q_f	2220	3575	2081	3351	1983	3192	1909	3074	1853	2983	1808	2911	1772	2852	1741	2803	1482	2371
			F	3.2 -0.3R	3.3 -0.3R	3.4 -0.3R	3.5 -0.3R	3.5 -0.3R	3.6 -0.3R	3.6 -0.3R	3.7 -0.3R	3.7 -0.3R										
		8"	q_a	q_f	1981	3189	1878	3023	1714	2759	1673	2694	1569	2526	1553	2500	1479	2381	1474	2373	1417	2282
			F	3.4 -0.4R	3.6 -0.4R	3.7 -0.4R	3.8 -0.4R	3.9 -0.4R	3.9 -0.4R	4.0 -0.4R	4.1 -0.4R	4.1 -0.4R										
	12"	q_a	q_f	1711	2755	1537	2475	1415	2278	1325	2133	1256	2023	1202	1935	1158	1864	1119	1802	1086	1749	
		F	3.6 -0.6R	3.9 -0.6R	4.1 -0.6R	4.2 -0.6R	4.4 -0.6R	4.5 -0.7R	4.6 -0.7R	4.7 -0.6R	4.8 -0.6R											
	18"	q_a	q_f	1566	2755	1414	2277	1200	1932	1137	1831	1084	1745	958	1543	933	1503	913	1470	834	1343	
		F	3.9 -0.7R	4.2 -0.8R	4.4 -0.8R	4.7 -0.9R	4.9 -0.9R	5.1 -0.9R	5.2 -1R	5.4 -1R	5.5 -1R											
	24"	q_a	q_f	1413	2274	1287	2071	1082	1743	1029	1657	895	1440	874	1407	782	1259	775	1249	708	1140	
		F	4 -0.8R	4.4 -0.9R	4.7 -1R	5 -1.1R	5.2 -1.1R	5.5 -1.2R	5.7 -1.2R	5.9 -1.2R	6 -1.3R											
	18 ga	4"	q_a	q_f	2015	3244	1920	3091	1852	2981	1801	2900	1762	2837	1731	2787	1550	2481	1281	2050	1077	1723
			F	3.6 -0.2R	3.7 -0.2R	3.7 -0.2R	3.8 -0.2R	3.8 -0.2R	3.8 -0.2R	3.9 -0.2R	3.9 -0.2R											
		6"	q_a	q_f	1709	2752	1590	2560	1506	2424	1443	2324	1395	2246	1357	2185	1326	2135	1281	2050	1077	1723
			F	3.9 -0.4R	4 -0.4R	4.1 -0.4R	4.2 -0.3R	4.2 -0.3R	4.3 -0.3R	4.3 -0.3R	4.4 -0.3R	4.4 -0.3R										
		8"	q_a	q_f	1529	2462	1438	2315	1305	2101	1267	2040	1184	1906	1167	1879	1108	1785	1101	1773	1057	1702
			F	4.1 -0.5R	4.2 -0.5R	4.4 -0.5R	4.5 -0.5R	4.6 -0.5R	4.7 -0.5R	4.7 -0.5R	4.8 -0.4R	4.9 -0.4R										
	12"	q_a	q_f	1331	2143	1186	1910	1085	1748	1011	1628	954	1536	904	1455	863	1390	832	1339	808	1300	
		F	4.4 -0.6R	4.6 -0.7R	4.8 -0.7R	5 -0.7R	5.1 -0.7R	5.3 -0.7R	5.4 -0.7R	5.5 -0.7R	5.6 -0.7R											
	18"	q_a	q_f	1224	2143	1097	1766	926	1491	865	1392	819	1319	723	1165	701	1128	684	1102	627	1010	
		F	4.6 -0.8R	4.9 -0.9R	5.2 -0.9R	5.5 -1R	5.7 -1R	5.9 -1R	6.1 -1.1R	6.3 -1.1R	6.4 -1.1R											
	24"	q_a	q_f	1114	1793	1004	1617	836	1346	788	1268	684	1101	663	1068	593	954	586	944	537	865	
		F	4.8 -0.9R	5.2 -1R	5.5 -1.1R	5.8 -1.2R	6.1 -1.2R	6.4 -1.3R	6.6 -1.3R	6.8 -1.4R	7 -1.4R											
20 ga	4"	q_a	q_f	1438	2316	1358	2187	1301	2095	1259	2027	1226	1974	1200	1933	1025	1640	847	1355	712	1139	
		F	4.6 -0.3R	4.7 -0.3R	4.8 -0.3R	4.8 -0.2R	4.8 -0.2R	4.9 -0.2R	4.9 -0.2R	4.9 -0.2R	5 -0.2R											
	6"	q_a	q_f	1223	1969	1127	1814	1059	1705	1009	1624	970	1562	939	1513	915	1473	847	1355	712	1139	
		F	4.9 -0.4R	5.1 -0.4R	5.2 -0.4R	5.3 -0.4R	5.4 -0.4R	5.4 -0.4R	5.5 -0.4R	5.5 -0.3R	5.5 -0.3R											
	8"	q_a	q_f	1100	1770	1022	1646	922	1484	889	1431	826	1331	810	1305	767	1235	759	1222	712	1139	
		F	5.2 -0.5R	5.4 -0.6R	5.5 -0.6R	5.7 -0.6R	5.8 -0.6R	5.9 -0.5R	5.9 -0.5R	6 -0.5R	6 -0.5R											
12"	q_a	q_f	966	1555	853	1374	775	1248	711	1145	661	1065	623	1003	595	959	573	923	555	893		
	F	5.5 -0.7R	5.8 -0.8R	6 -0.8R	6.2 -0.8R	6.4 -0.8R	6.6 -0.8R	6.7 -0.8R	6.8 -0.8R	6.9 -0.8R												
18"	q_a	q_f	895	1555	794	1278	660	1062	610	983	573	923	506	814	490	789	477	769	438	705		
	F	5.8 -0.9R	6.2 -1R	6.5 -1.1R	6.8 -1.1R	7.1 -1.2R	7.3 -1.2R	7.5 -1.2R	7.7 -1.2R	7.9 -1.3R												
24"	q_a	q_f	822	1323	729	1173	601	968	560	902	485	782	467	751	420	675	413	666	379	610		
	F	5.9 -1R	6.4 -1.1R	6.8 -1.3R	7.2 -1.4R	7.5 -1.4R	7.8 -1.5R	8.1 -1.5R	8.3 -1.6R	8.6 -1.6R												
22 ga	4"	q_a	q_f	1158	1865	1088	1751	1037	1670	1000	1610	971	1564	948	1527	779	1247	644	1031	541	866	
		F	5.4 -0.3R	5.5 -0.3R	5.6 -0.3R	5.6 -0.3R	5.7 -0.2R	5.7 -0.2R	5.7 -0.2R	5.8 -0.2R	5.8 -0.2R											
	6"	q_a	q_f	987	1590	904	1456	846	1361	802	1292	769	1238	743	1196	721	1162	644	1031	541	866	
		F	5.8 -0.5R	5.9 -0.5R	6 -0.5R	6.1 -0.4R	6.2 -0.4R	6.3 -0.4R	6.3 -0.4R	6.4 -0.4R	6.4 -0.4R											
	8"	q_a	q_f	891	1435	823	1325	739	1190	709	1141	658	1059	643	1034	605	975	599	964	541	866	
		F	6 -0.6R	6.2 -0.6R	6.4 -0.6R	6.6 -0.6R	6.7 -0.6R	6.8 -0.6R	6.9 -0.6R	6.9 -0.6R	7 -0.6R											
12"	q_a	q_f	788	1268	692	1114	621	999	565	910	524	844	494	796	472	759	453	729	438	705		
	F	6.4 -0.8R	6.7 -0.8R	7 -0.9R	7.2 -0.9R	7.4 -0.9R	7.5 -0.9R	7.7 -0.9R	7.8 -0.9R	7.9 -0.9R												
18"	q_a	q_f	733	1268	645	1038	532	856	489	787	457	736	405	652	391	630	380	612	348	561		
	F	6.7 -1R	7.1 -1.1R	7.5 -1.2R	7.8 -1.2R	8.1 -1.3R	8.4 -1.3R	8.6 -1.4R	8.8 -1.4R	9 -1.4R												
24"	q_a	q_f	677	1090	591	952	487	784	451	726	390	628	375	604	338	544	331	534	304	489		
	F	6.9 -1.1R	7.4 -1.3R	7.8 -1.4R	8.2 -1.5R	8.6 -1.6R	8.9 -1.6R	9.2 -1.7R	9.5 -1.7R	9.8 -1.8R												