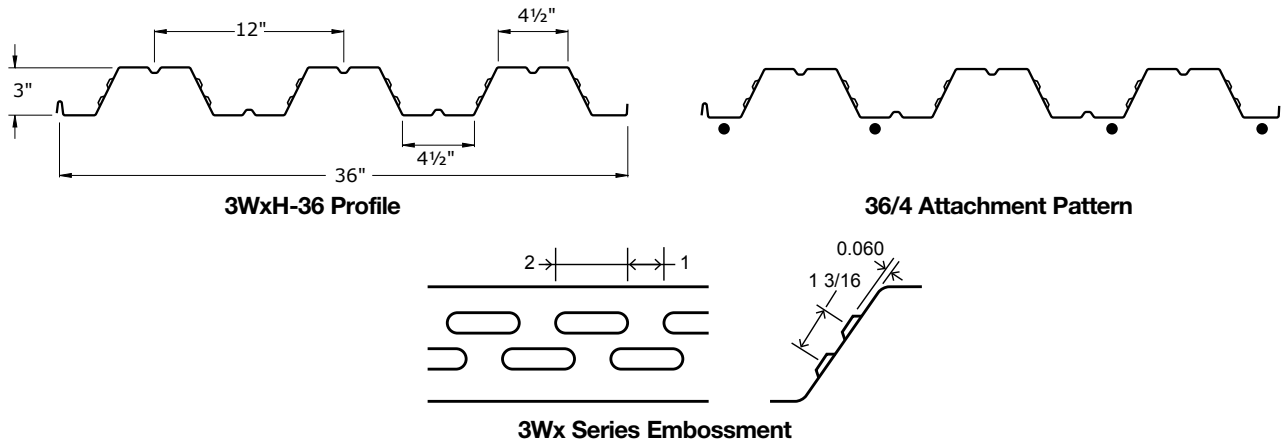


2.1 3WxH-36



Panel Properties

Gage	Weight psf	Base Metal Thickness in	Yield Strength ksi	Tensile Strength ksi	Gross Section Properties				
					Area in ² /ft	Moment of Inertia in ⁴ /ft	Distance to N.A. from Bottom in	Section Modulus in ³ /ft	Radius of Gyration in
22	1.70	0.0290	50	65	0.504	0.770	1.48	0.497	1.236
21	1.92	0.0330	50	65	0.556	0.850	1.48	0.548	1.236
20	2.09	0.0359	50	65	0.605	0.927	1.48	0.595	1.236
19	2.43	0.0420	50	65	0.708	1.083	1.48	0.695	1.236
18	2.76	0.0478	50	65	0.806	1.233	1.49	0.789	1.236
16	3.43	0.0598	50	65	1.008	1.540	1.49	0.984	1.236

Gage	Effective Section Modulus at F_y					Effective Moment of Inertia for Deflection			
	Compression	Bending				Moment of Inertia	Moment of Inertia	Uniform Load Only	
	Area in ² /ft	Section Modulus in ³ /ft	Distance to N.A. from Bottom in	Section Modulus in ³ /ft	Distance to N.A. from Bottom in			$I_d = (2I_e + I_g)/3$	
						I_e^+ in ⁴ /ft	I_e^- in ⁴ /ft	I^+ in ⁴ /ft	I^- in ⁴ /ft
22	0.309	0.392	1.33	0.404	1.63	0.727	0.720	0.741	0.737
21	0.362	0.452	1.36	0.465	1.61	0.823	0.813	0.832	0.826
20	0.414	0.510	1.39	0.524	1.59	0.910	0.900	0.916	0.909
19	0.532	0.636	1.43	0.654	1.55	1.083	1.073	1.083	1.077
18	0.651	0.761	1.46	0.781	1.52	1.233	1.230	1.233	1.231
16	0.887	0.984	1.49	0.982	1.50	1.540	1.540	1.540	1.540

Reactions at Supports (plf) Based on Web Crippling

Gage	Condition	Bearing Length of Webs							
		Allowable (R_n/Ω)				Factored (ΦR_n)			
		1"	2"	4"	6"	1"	2"	4"	6"
22	End	296	368	471	550	452	564	721	842
	Interior	522	630	783	900	776	937	1164	1338
21	End	379	470	598	697	580	719	915	1066
	Interior	667	801	990	1135	993	1191	1472	1688
20	End	424	524	666	775	649	802	1020	1186
	Interior	746	893	1101	1261	1110	1329	1638	1876
19	End	600	737	930	1078	918	1127	1423	1650
	Interior	1054	1252	1532	1747	1568	1863	2280	2599
18	End	743	908	1141	1320	1137	1389	1746	2020
	Interior	1305	1542	1878	2136	1941	2294	2794	3178
16	End	1143	1383	1723	1983	1749	2116	2636	3034
	Interior	2008	2350	2834	3206	2986	3495	4216	4768

Web Crippling Constraints

$h=3.2"$

$r=0.125"$

$\theta=63.5^\circ$

2.4 3WxH-36 Composite Deck

5" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.080yd³/100ft²



Maximum Unshored Span (in)

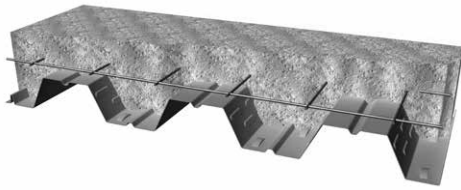
Gage	Single	Double	Triple
22	10' - 1"	11' - 0"	11' - 4"
21	11' - 0"	11' - 9"	12' - 2"
20	11' - 9"	12' - 6"	12' - 11"

Gage	Single	Double	Triple
19	12' - 3"	13' - 10"	14' - 4"
18	12' - 7"	15' - 2"	14' - 9"
16	13' - 3"	16' - 7"	15' - 7"

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
22	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	337	295	260	230	204	182	163	146	132	119	107	97	88	80	72
	LRFD, φW	451	394	345	304	270	240	214	191	171	154	138	124	112	101	90
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2367	2342	2319	2309	2291	2274	2258	2244	2231	2227	2216	2205	2196	2187	2178
	PAF Base Steel ≥ .25"	2178	2163	2151	2150	2139	2129	2120	2112	2105	2106	2099	2093	2087	2082	2077
	PAF Base Steel ≥ 0.125"	2163	2150	2138	2137	2127	2118	2110	2102	2095	2096	2090	2084	2079	2074	2069
	#12 Screw Base Steel ≥ .0385"	2149	2137	2125	2126	2116	2107	2100	2092	2086	2088	2082	2076	2071	2066	2062
	Concrete + Deck = 44.0 psf				I _{cr} = 39.2 in ⁴ /ft			M _{no} /Ω = 31.6 kip-in/ft			V _n /Ω = 3.30 kip/ft					
(I _{cr} +I _u)/2 = 73.2 in ⁴ /ft				I _u = 107.1 in ⁴ /ft			φM _{no} = 48.4 kip-in/ft			φV _n = 4.76 kip/ft						

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
21	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	372	325	287	254	226	202	181	163	147	133	120	109	99	90	82
	LRFD, φW	498	435	382	337	299	266	238	213	192	172	155	140	127	114	103
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2430	2401	2375	2365	2343	2324	2306	2289	2274	2271	2258	2246	2234	2224	2214
	PAF Base Steel ≥ .25"	2213	2196	2181	2182	2169	2158	2147	2138	2129	2132	2124	2117	2110	2104	2098
	PAF Base Steel ≥ 0.125"	2196	2180	2166	2168	2156	2145	2135	2126	2118	2121	2113	2107	2100	2094	2089
	#12 Screw Base Steel ≥ .0385"	2181	2166	2153	2155	2144	2134	2124	2116	2108	2111	2104	2098	2092	2086	2081
	Concrete + Deck = 44.3 psf				I _{cr} = 42.3 in ⁴ /ft			M _{no} /Ω = 34.6 kip-in/ft			V _n /Ω = 3.82 kip/ft					
(I _{cr} +I _u)/2 = 75.4 in ⁴ /ft				I _u = 108.6 in ⁴ /ft			φM _{no} = 52.9 kip-in/ft			φV _n = 5.66 kip/ft						

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
20	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	404	354	312	277	246	220	198	178	161	146	132	120	109	100	91
	LRFD, φW	541	473	416	368	327	292	261	234	211	190	172	155	141	128	116
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2477	2445	2416	2407	2383	2361	2341	2323	2307	2304	2289	2276	2263	2252	2241
	PAF Base Steel ≥ .25"	2239	2220	2204	2206	2192	2179	2168	2157	2147	2151	2142	2134	2127	2120	2114
	PAF Base Steel ≥ 0.125"	2220	2203	2188	2190	2177	2165	2154	2144	2135	2139	2131	2124	2117	2110	2104
	#12 Screw Base Steel ≥ .0385"	2205	2189	2174	2177	2165	2153	2143	2134	2125	2130	2122	2115	2108	2102	2096
	Concrete + Deck = 44.4 psf				I _{cr} = 45.1 in ⁴ /ft			M _{no} /Ω = 37.3 kip-in/ft			V _n /Ω = 3.82 kip/ft					
(I _{cr} +I _u)/2 = 77.5 in ⁴ /ft				I _u = 110.0 in ⁴ /ft			φM _{no} = 57.1 kip-in/ft			φV _n = 5.73 kip/ft						



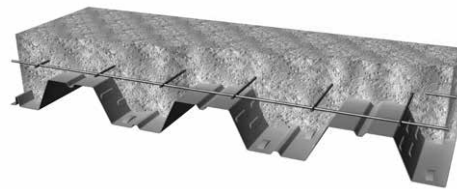
GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
19	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	469	412	364	323	288	258	232	210	190	172	157	143	131	119	109
	LRFD, φW	630	552	487	431	384	343	308	277	250	226	205	186	170	154	141
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2579	2540	2506	2497	2468	2442	2418	2397	2377	2376	2358	2342	2327	2313	2300
	PAF Base Steel ≥ .25"	2295	2273	2254	2258	2241	2226	2212	2200	2188	2194	2184	2174	2165	2156	2149
	PAF Base Steel ≥ 0.125"	2274	2253	2235	2241	2225	2210	2197	2185	2174	2181	2171	2161	2153	2145	2137
	#12 Screw Base Steel ≥ .0385"	2258	2238	2220	2227	2212	2198	2185	2174	2163	2170	2161	2152	2144	2136	2129
	Concrete + Deck = 44.8 psf (I _{cr} +I _u)/2 = 81.7 in ⁴ /ft					I _{cr} = 50.6 in ⁴ /ft I _u = 112.8 in ⁴ /ft					M _{no} /Ω = 42.9 kip-in/ft φM _{no} = 65.7 kip-in/ft				V _n /Ω = 3.82 kip/ft φ V _n = 5.73 kip/ft	
18	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	527	463	409	364	325	292	263	238	216	196	179	162	145	131	118
	LRFD, φW	709	622	549	487	434	389	349	315	285	258	235	214	195	178	163
	L/360	-	-	-	-	-	-	-	-	-	-	-	162	145	131	118
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2679	2634	2594	2587	2554	2523	2496	2470	2447	2448	2427	2408	2391	2374	2359
	PAF Base Steel ≥ .25"	2352	2326	2303	2312	2292	2274	2258	2243	2229	2238	2226	2214	2204	2194	2184
	PAF Base Steel ≥ 0.125"	2328	2304	2282	2292	2273	2256	2240	2226	2213	2223	2211	2200	2190	2181	2172
	#12 Screw Base Steel ≥ .0385"	2311	2288	2267	2278	2259	2243	2228	2215	2202	2212	2201	2190	2181	2171	2163
	Concrete + Deck = 45.0 psf (I _{cr} +I _u)/2 = 85.4 in ⁴ /ft					I _{cr} = 55.4 in ⁴ /ft I _u = 115.4 in ⁴ /ft					M _{no} /Ω = 47.9 kip-in/ft φM _{no} = 73.2 kip-in/ft				V _n /Ω = 3.82 kip/ft φ V _n = 5.73 kip/ft	
16	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	649	571	505	450	403	362	326	285	251	222	197	176	158	142	129
	LRFD, φW	874	768	679	604	540	484	436	395	358	326	297	271	248	228	209
	L/360	-	-	-	-	-	-	326	285	251	222	197	176	158	142	129
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2898	2840	2788	2786	2742	2702	2666	2633	2602	2609	2581	2556	2533	2511	2491
	PAF Base Steel ≥ .25"	2477	2443	2413	2431	2405	2381	2359	2339	2321	2339	2322	2307	2292	2279	2266
	PAF Base Steel ≥ 0.125"	2431	2400	2372	2393	2368	2346	2326	2308	2291	2310	2294	2279	2266	2253	2242
	#12 Screw Base Steel ≥ .0385"	2431	2400	2373	2393	2369	2346	2326	2308	2291	2310	2294	2280	2266	2254	2242
	Concrete + Deck = 45.7 psf (I _{cr} +I _u)/2 = 92.8 in ⁴ /ft					I _{cr} = 64.9 in ⁴ /ft I _u = 120.7 in ⁴ /ft					M _{no} /Ω = 58.3 kip-in/ft φM _{no} = 89.2 kip-in/ft				V _n /Ω = 3.82 kip/ft φ V _n = 5.73 kip/ft	
All Gages	LRFD - Diaphragm Shear, φS_n (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A _s = 0.028 in ² /ft			A _s = 0.058 in ² /ft			A _s = 0.080 in ² /ft			A _s = 0.120 in ² /ft			A _s = 0.180 in ² /ft		
	12 in o.c.	3200			4550			5540			7340			10040		
	24 in o.c.	3200			4550			5540			7340			7750		
36 in o.c.	3200			4550			5170			5170			5170			

2.4 3WxH-36 Composite Deck

5½" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.23yd³/100ft²



Maximum Unshored Span (in)

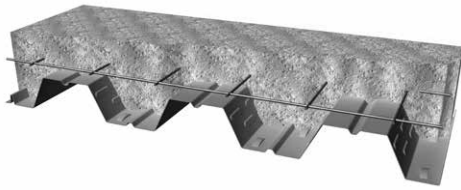
Gage	Single	Double	Triple
22	9' - 8"	10' - 6"	10' - 10"
21	10' - 6"	11' - 3"	11' - 8"
20	11' - 3"	11' - 11"	12' - 4"

Gage	Single	Double	Triple
19	11' - 10"	13' - 4"	13' - 9"
18	12' - 3"	14' - 6"	14' - 4"
16	12' - 11"	16' - 1"	15' - 1"

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
22	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	394	345	304	269	239	213	191	171	154	139	126	114	103	94	85
	LRFD, φW	527	460	404	356	316	281	250	224	201	180	162	146	132	119	107
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2858	2832	2809	2800	2781	2764	2749	2734	2721	2718	2706	2696	2686	2677	2669
	PAF Base Steel ≥ .25"	2668	2654	2641	2640	2629	2620	2611	2603	2595	2596	2590	2584	2578	2573	2568
	PAF Base Steel ≥ 0.125"	2653	2640	2628	2628	2618	2608	2600	2592	2585	2587	2581	2575	2569	2564	2560
	#12 Screw Base Steel ≥ .0385"	2640	2627	2616	2616	2607	2598	2590	2583	2576	2578	2572	2567	2562	2557	2552
	Concrete + Deck = 50.1 psf (I _{cr} +I _u)/2 = 96 in⁴/ft					I _{cr} = 50.5 in⁴/ft I _u = 141.4 in⁴/ft					M _{no} /Ω = 36.8 kip-in/ft φM _{no} = 56.4 kip-in/ft			V _n /Ω = 3.57 kip/ft φV _n = 5.16 kip/ft		

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
21	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	434	380	335	297	264	236	212	191	172	156	141	128	116	106	96
	LRFD, φW	581	508	447	395	350	312	279	250	225	202	183	165	149	135	122
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2921	2891	2865	2855	2834	2814	2796	2780	2765	2761	2748	2736	2725	2714	2704
	PAF Base Steel ≥ .25"	2703	2686	2672	2672	2659	2648	2638	2628	2620	2622	2614	2607	2600	2594	2588
	PAF Base Steel ≥ 0.125"	2686	2671	2657	2658	2646	2635	2625	2617	2608	2611	2604	2597	2591	2585	2579
	#12 Screw Base Steel ≥ .0385"	2672	2657	2644	2646	2634	2624	2615	2606	2599	2602	2595	2588	2582	2577	2571
	Concrete + Deck = 50.4 psf (I _{cr} +I _u)/2 = 98.8 in⁴/ft					I _{cr} = 54.4 in⁴/ft I _u = 143.2 in⁴/ft					M _{no} /Ω = 40.3 kip-in/ft φM _{no} = 61.6 kip-in/ft			V _n /Ω = 4.23 kip/ft φV _n = 6.05 kip/ft		

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
20	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	472	413	365	323	288	258	232	209	189	171	155	141	129	117	107
	LRFD, φW	632	553	487	431	383	342	306	275	247	223	202	183	166	150	137
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	2968	2935	2906	2897	2873	2851	2832	2813	2797	2794	2780	2766	2754	2742	2731
	PAF Base Steel ≥ .25"	2729	2711	2694	2696	2682	2669	2658	2647	2638	2641	2633	2625	2617	2610	2604
	PAF Base Steel ≥ 0.125"	2711	2694	2678	2681	2668	2656	2645	2635	2626	2630	2622	2614	2607	2600	2594
	#12 Screw Base Steel ≥ .0385"	2696	2679	2665	2668	2655	2644	2634	2624	2616	2620	2612	2605	2598	2592	2586
	Concrete + Deck = 50.4 psf (I _{cr} +I _u)/2 = 102 in⁴/ft					I _{cr} = 58.1 in⁴/ft I _u = 145.0 in⁴/ft					M _{no} /Ω = 43.5 kip-in/ft φM _{no} = 66.5 kip-in/ft			V _n /Ω = 4.35 kip/ft φV _n = 6.52 kip/ft		



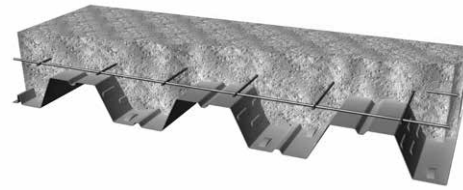
GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
19	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	548	481	425	378	337	302	272	246	222	202	184	168	153	140	129
	LRFD, φW	736	645	569	505	449	402	361	325	293	266	241	219	199	182	166
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3069	3030	2996	2988	2959	2933	2909	2887	2867	2866	2849	2832	2817	2803	2790
	PAF Base Steel ≥ .25"	2786	2764	2744	2749	2732	2717	2703	2690	2678	2685	2674	2664	2655	2647	2639
	PAF Base Steel ≥ 0.125"	2765	2744	2725	2731	2715	2701	2687	2675	2664	2671	2661	2652	2643	2635	2628
	#12 Screw Base Steel ≥ .0385"	2748	2729	2711	2717	2702	2688	2676	2664	2654	2661	2651	2642	2634	2626	2619
	Concrete + Deck = 50.9 psf (I _{cr} +I _u)/2 = 107 in ⁴ /ft					I _{cr} = 65.2 in ⁴ /ft I _u = 148.5 in ⁴ /ft					M _{no} /Ω = 50.0 kip-in/ft φM _{no} = 76.6 kip-in/ft			V _n /Ω = 4.35 kip/ft φ V _n = 6.52 kip/ft		
18	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	616	541	479	426	381	342	308	278	253	230	210	192	175	161	148
	LRFD, φW	829	727	642	570	508	455	410	369	334	303	276	251	229	210	192
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3169	3125	3085	3078	3044	3014	2986	2961	2938	2938	2918	2899	2881	2865	2849
	PAF Base Steel ≥ .25"	2842	2816	2794	2802	2782	2764	2748	2733	2719	2729	2716	2705	2694	2684	2675
	PAF Base Steel ≥ 0.125"	2818	2794	2772	2782	2763	2746	2731	2716	2703	2713	2702	2691	2680	2671	2662
	#12 Screw Base Steel ≥ .0385"	2802	2778	2758	2768	2750	2733	2719	2705	2692	2703	2691	2681	2671	2662	2653
	Concrete + Deck = 51.1 psf (I _{cr} +I _u)/2 = 112 in ⁴ /ft					I _{cr} = 71.4 in ⁴ /ft I _u = 151.7 in ⁴ /ft					M _{no} /Ω = 55.9 kip-in/ft φM _{no} = 85.5 kip-in/ft			V _n /Ω = 4.35 kip/ft φ V _n = 6.52 kip/ft		
16	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	758	667	591	526	471	424	383	347	315	288	257	230	206	186	168
	LRFD, φW	1022	898	794	707	632	567	511	463	420	382	348	319	292	268	246
	L/360	-	-	-	-	-	-	-	-	-	-	257	230	206	186	168
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3389	3330	3278	3277	3232	3193	3156	3123	3093	3099	3072	3047	3023	3002	2981
	PAF Base Steel ≥ .25"	2967	2933	2903	2922	2895	2871	2850	2830	2812	2829	2813	2797	2783	2769	2757
	PAF Base Steel ≥ 0.125"	2921	2890	2863	2883	2859	2837	2816	2798	2781	2800	2784	2770	2756	2744	2732
	#12 Screw Base Steel ≥ .0385"	2922	2891	2863	2884	2859	2837	2817	2798	2781	2800	2785	2770	2757	2744	2732
	Concrete + Deck = 51.8 psf (I _{cr} +I _u)/2 = 121 in ⁴ /ft					I _{cr} = 83.7 in ⁴ /ft I _u = 158.3 in ⁴ /ft					M _{no} /Ω = 68.0 kip-in/ft φM _{no} = 104.1 kip-in/ft			V _n /Ω = 4.35 kip/ft φ V _n = 6.52 kip/ft		
All Gages	LRFD - Diaphragm Shear, φS_n (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width															
	¾" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A _s = 0.028 in ² /ft			A _s = 0.058 in ² /ft			A _s = 0.080 in ² /ft			A _s = 0.120 in ² /ft			A _s = 0.180 in ² /ft		
	12 in o.c.	3700			5050			6040			7840			10040		
	24 in o.c.	3700			5050			6040			7750			7750		
36 in o.c.	3700			5050			5170			5170			5170			

2.4 3WxH-36 Composite Deck

6" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.389yd³/100ft²



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	9' - 3"	10' - 1"	10' - 5"
21	10' - 1"	10' - 10"	11' - 2"
20	10' - 10"	11' - 6"	11' - 10"

Gage	Single	Double	Triple
19	11' - 7"	12' - 9"	13' - 3"
18	11' - 11"	13' - 11"	14' - 0"
16	12' - 7"	15' - 7"	14' - 9"

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
22	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	454	397	350	310	275	246	220	198	178	161	146	132	120	109	99
	LRFD, φW	607	530	466	411	364	324	289	259	232	209	188	170	153	138	125
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3348	3323	3300	3290	3271	3254	3239	3225	3212	3208	3197	3186	3177	3168	3159
	PAF Base Steel ≥ .25"	3159	3144	3132	3131	3120	3110	3101	3093	3086	3087	3080	3074	3068	3063	3058
	PAF Base Steel ≥ 0.125"	3144	3130	3118	3118	3108	3099	3090	3083	3076	3077	3071	3065	3060	3055	3050
	#12 Screw Base Steel ≥ .0385"	3130	3117	3106	3107	3097	3088	3080	3073	3067	3069	3063	3057	3052	3047	3043
	Concrete + Deck = 56.1 psf (I _{cr} +I _u)/2 = 123 in ⁴ /ft					I _{cr} = 63.6 in ⁴ /ft I _u = 182.5 in ⁴ /ft			M _{no} /Ω = 42.3 kip-in/ft φM _{no} = 64.8 kip-in/ft			V _n /Ω = 3.85 kip/ft φV _n = 5.57 kip/ft				

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
21	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	500	438	386	342	305	273	245	220	199	180	163	148	135	123	112
	LRFD, φW	670	586	515	455	404	360	322	289	260	234	212	191	173	157	142
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3411	3382	3356	3346	3324	3304	3286	3270	3255	3252	3239	3226	3215	3205	3195
	PAF Base Steel ≥ .25"	3193	3177	3162	3162	3150	3138	3128	3119	3110	3112	3105	3097	3091	3085	3079
	PAF Base Steel ≥ 0.125"	3177	3161	3147	3148	3136	3126	3116	3107	3099	3102	3094	3088	3081	3075	3070
	#12 Screw Base Steel ≥ .0385"	3162	3147	3134	3136	3125	3114	3105	3097	3089	3092	3085	3079	3073	3067	3062
	Concrete + Deck = 56.4 psf (I _{cr} +I _u)/2 = 127 in ⁴ /ft					I _{cr} = 68.6 in ⁴ /ft I _u = 184.7 in ⁴ /ft			M _{no} /Ω = 46.3 kip-in/ft φM _{no} = 70.8 kip-in/ft			V _n /Ω = 4.50 kip/ft φV _n = 6.47 kip/ft				

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
20	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	543	476	420	373	332	298	267	241	218	198	179	163	149	136	124
	LRFD, φW	729	638	561	497	442	395	353	318	286	258	234	212	192	175	159
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld ½" Effective Dia	3458	3426	3397	3387	3363	3342	3322	3304	3287	3285	3270	3257	3244	3233	3222
	PAF Base Steel ≥ .25"	3219	3201	3185	3186	3172	3160	3148	3138	3128	3132	3123	3115	3108	3101	3094
	PAF Base Steel ≥ 0.125"	3201	3184	3169	3171	3158	3146	3135	3125	3116	3120	3112	3104	3097	3091	3085
	#12 Screw Base Steel ≥ .0385"	3186	3170	3155	3158	3146	3134	3124	3115	3106	3110	3103	3095	3089	3082	3077
	Concrete + Deck = 56.5 psf (I _{cr} +I _u)/2 = 130 in ⁴ /ft					I _{cr} = 73.2 in ⁴ /ft I _u = 186.9 in ⁴ /ft			M _{no} /Ω = 50.0 kip-in/ft φM _{no} = 76.5 kip-in/ft			V _n /Ω = 4.90 kip/ft φV _n = 7.27 kip/ft				



GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
19	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	632	555	490	436	389	349	314	284	257	234	213	194	178	163	149
	LRFD, φW	849	744	656	582	519	464	417	376	339	307	279	254	231	211	193
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3560	3521	3486	3478	3449	3423	3399	3378	3358	3357	3339	3323	3308	3294	3281
	PAF Base Steel ≥ .25"	3276	3254	3234	3239	3222	3207	3193	3180	3169	3175	3165	3155	3146	3137	3129
	PAF Base Steel ≥ 0.125"	3255	3234	3216	3221	3205	3191	3178	3166	3155	3162	3152	3142	3134	3126	3118
	#12 Screw Base Steel ≥ .0385"	3239	3219	3201	3208	3193	3179	3166	3155	3144	3151	3142	3133	3124	3117	3110
	Concrete + Deck = 56.9 psf (I _{cr} +I _u)/2 = 137 in ⁴ /ft					I _{cr} = 82.3 in ⁴ /ft I _u = 191.2 in ⁴ /ft				M _{no} /Ω = 57.6 kip-in/ft φM _{no} = 88.1 kip-in/ft				V _n /Ω = 4.90 kip/ft φ V _n = 7.35 kip/ft		
18	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	711	625	552	491	439	395	356	322	292	266	242	222	203	187	171
	LRFD, φW	956	839	741	658	587	526	473	427	387	351	320	291	266	243	223
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3660	3615	3575	3568	3534	3504	3476	3451	3428	3429	3408	3389	3372	3355	3340
	PAF Base Steel ≥ .25"	3333	3307	3284	3292	3273	3255	3238	3223	3210	3219	3207	3195	3185	3175	3165
	PAF Base Steel ≥ 0.125"	3309	3284	3263	3272	3254	3237	3221	3207	3194	3204	3192	3181	3171	3161	3153
	#12 Screw Base Steel ≥ .0385"	3292	3269	3248	3258	3240	3224	3209	3195	3183	3193	3182	3171	3161	3152	3144
	Concrete + Deck = 57.1 psf (I _{cr} +I _u)/2 = 143 in ⁴ /ft					I _{cr} = 90.2 in ⁴ /ft I _u = 195.2 in ⁴ /ft				M _{no} /Ω = 64.3 kip-in/ft φM _{no} = 98.4 kip-in/ft				V _n /Ω = 4.90 kip/ft φ V _n = 7.35 kip/ft		
16	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	875	770	682	608	544	490	442	401	365	333	304	279	256	236	214
	LRFD, φW	1179	1037	917	816	730	656	591	535	486	442	404	369	338	311	286
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	214
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3879	3820	3768	3767	3723	3683	3647	3613	3583	3589	3562	3537	3514	3492	3472
	PAF Base Steel ≥ .25"	3458	3424	3394	3412	3386	3362	3340	3320	3302	3320	3303	3287	3273	3260	3247
	PAF Base Steel ≥ 0.125"	3412	3381	3353	3374	3349	3327	3307	3288	3272	3290	3275	3260	3247	3234	3223
	#12 Screw Base Steel ≥ .0385"	3412	3381	3354	3374	3350	3327	3307	3289	3272	3291	3275	3261	3247	3235	3223
	Concrete + Deck = 57.8 psf (I _{cr} +I _u)/2 = 155 in ⁴ /ft					I _{cr} = 105.8 in ⁴ /ft I _u = 203.3 in ⁴ /ft				M _{no} /Ω = 78.4 kip-in/ft φM _{no} = 119.9 kip-in/ft				V _n /Ω = 4.90 kip/ft φ V _n = 7.35 kip/ft		
All Gages	LRFD - Diaphragm Shear, φS_n (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A _s = 0.028 in ² /ft			A _s = 0.058 in ² /ft			A _s = 0.080 in ² /ft			A _s = 0.120 in ² /ft			A _s = 0.180 in ² /ft		
	12 in o.c.	4190			5540			6530			8330			11030		
	24 in o.c.	4190			5540			6530			7750			7750		
36 in o.c.	4190			5170			5170			5170			5170			

2.4 3WxH-36 Composite Deck

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.543yd³/100ft²

1 Hour Fire Rating



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	8' - 11"	9' - 9"	10' - 1"
21	9' - 8"	10' - 5"	10' - 9"
20	10' - 5"	11' - 1"	11' - 5"

Gage	Single	Double	Triple
19	11' - 3"	12' - 4"	12' - 9"
18	11' - 8"	13' - 5"	13' - 8"
16	12' - 3"	15' - 0"	14' - 5"

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
22	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	516	452	398	352	313	280	251	226	203	184	166	151	137	125	113
	LRFD, φW	691	603	530	468	415	370	330	296	265	239	215	194	175	158	143
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3839	3813	3790	3781	3762	3745	3729	3715	3702	3698	3687	3677	3667	3658	3649
	PAF Base Steel ≥ .25"	3649	3635	3622	3621	3610	3600	3592	3583	3576	3577	3571	3564	3559	3553	3548
	PAF Base Steel ≥ 0.125"	3634	3621	3609	3609	3598	3589	3581	3573	3566	3568	3561	3556	3550	3545	3541
	#12 Screw Base Steel ≥ .0385"	3621	3608	3597	3597	3587	3579	3571	3564	3557	3559	3553	3548	3542	3538	3533
	Concrete + Deck = 62.2 psf				I _{cr} = 78.7 in ⁴ /ft			M _{no} /Ω = 48.0 kip-in/ft			V _n /Ω = 4.14 kip/ft					
(I _{cr} +I _u)/2 = 155 in ⁴ /ft				I _u = 231.1 in ⁴ /ft			φM _{no} = 73.5 kip-in/ft			φV _n = 6.01 kip/ft						

GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
21	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	569	498	439	390	347	310	279	251	227	205	186	169	154	140	128
	LRFD, φW	762	666	586	519	461	411	368	330	297	268	242	219	198	180	163
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3902	3872	3846	3836	3815	3795	3777	3761	3746	3742	3729	3717	3706	3695	3685
	PAF Base Steel ≥ .25"	3684	3667	3652	3653	3640	3629	3619	3609	3600	3603	3595	3588	3581	3575	3569
	PAF Base Steel ≥ 0.125"	3667	3651	3638	3639	3627	3616	3606	3597	3589	3592	3585	3578	3572	3566	3560
	#12 Screw Base Steel ≥ .0385"	3652	3638	3624	3626	3615	3605	3596	3587	3579	3583	3576	3569	3563	3558	3552
	Concrete + Deck = 62.4 psf				I _{cr} = 84.9 in ⁴ /ft			M _{no} /Ω = 52.5 kip-in/ft			V _n /Ω = 4.80 kip/ft					
(I _{cr} +I _u)/2 = 159 in ⁴ /ft				I _u = 233.8 in ⁴ /ft			φM _{no} = 80.3 kip-in/ft			φV _n = 6.91 kip/ft						

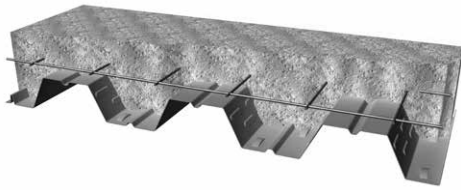
GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
20	ASD & LRFD - Superimposed Load, W (psf)															
	ASD, W/Ω	618	542	478	424	378	339	305	275	249	225	205	187	170	155	142
	LRFD, φW	829	726	639	566	504	450	403	362	327	295	267	242	220	200	182
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3949	3916	3887	3878	3854	3832	3812	3794	3778	3775	3760	3747	3735	3723	3712
	PAF Base Steel ≥ .25"	3710	3691	3675	3677	3663	3650	3639	3628	3619	3622	3614	3606	3598	3591	3585
	PAF Base Steel ≥ 0.125"	3692	3674	3659	3662	3648	3636	3626	3616	3607	3611	3602	3595	3588	3581	3575
	#12 Screw Base Steel ≥ .0385"	3676	3660	3645	3649	3636	3625	3614	3605	3596	3601	3593	3586	3579	3573	3567
	Concrete + Deck = 62.5 psf				I _{cr} = 90.6 in ⁴ /ft			M _{no} /Ω = 56.7 kip-in/ft			V _n /Ω = 5.38 kip/ft					
(I _{cr} +I _u)/2 = 163 in ⁴ /ft				I _u = 236.4 in ⁴ /ft			φM _{no} = 86.8 kip-in/ft			φV _n = 7.71 kip/ft						

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.543yd³/100ft²

1 Hour Fire Rating



GA	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
ASD & LRFD - Superimposed Load, W (psf)																
	ASD, W/Ω	719	631	558	496	443	397	358	323	293	267	243	222	203	186	171
	LRFD, φW	966	847	748	663	591	529	475	429	387	351	319	290	265	242	221
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern																
19	Arc Spot Weld 1/2" Effective Dia	4050	4011	3977	3968	3940	3913	3890	3868	3848	3847	3829	3813	3798	3784	3771
	PAF Base Steel ≥ .25"	3767	3744	3725	3730	3713	3697	3684	3671	3659	3666	3655	3645	3636	3628	3620
	PAF Base Steel ≥ 0.125"	3745	3725	3706	3712	3696	3681	3668	3656	3645	3652	3642	3633	3624	3616	3609
	#12 Screw Base Steel ≥ .0385"	3729	3709	3692	3698	3683	3669	3656	3645	3634	3642	3632	3623	3615	3607	3600
Concrete + Deck = 63.0 psf							I _{cr} = 101.9 in ⁴ /ft		M _{no} /Ω = 65.4 kip-in/ft		V _n /Ω = 5.49 kip/ft					
(I _{cr} +I _u)/2 = 172 in ⁴ /ft							I _u = 241.7 in ⁴ /ft		φM _{no} = 100.0 kip-in/ft		φ V _n = 8.23 kip/ft					

	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
ASD & LRFD - Superimposed Load, W (psf)																
	ASD, W/Ω	809	711	629	560	501	450	406	367	333	303	277	253	232	213	196
	LRFD, φW	1089	956	845	750	670	600	540	488	442	401	365	333	305	279	256
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern																
18	Arc Spot Weld 1/2" Effective Dia	4150	4105	4065	4059	4025	3994	3967	3942	3918	3919	3899	3880	3862	3846	3830
	PAF Base Steel ≥ .25"	3823	3797	3774	3783	3763	3745	3729	3714	3700	3710	3697	3686	3675	3665	3656
	PAF Base Steel ≥ 0.125"	3799	3775	3753	3763	3744	3727	3711	3697	3684	3694	3682	3672	3661	3652	3643
	#12 Screw Base Steel ≥ .0385"	3783	3759	3739	3749	3731	3714	3699	3686	3673	3684	3672	3662	3652	3643	3634
Concrete + Deck = 63.2 psf							I _{cr} = 111.7 in ⁴ /ft		M _{no} /Ω = 73.1 kip-in/ft		V _n /Ω = 5.49 kip/ft					
(I _{cr} +I _u)/2 = 179 in ⁴ /ft							I _u = 246.6 in ⁴ /ft		φM _{no} = 111.8 kip-in/ft		φ V _n = 8.23 kip/ft					

	Vertical Load Span (in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
ASD & LRFD - Superimposed Load, W (psf)																
	ASD, W/Ω	997	878	778	693	621	559	505	458	417	380	348	319	293	270	249
	LRFD, φW	1345	1182	1046	931	833	748	675	611	555	505	462	422	387	356	328
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LRFD - Diaphragm Shear, φS_n (plf / ft) 36/4 Attachment Pattern																
16	Arc Spot Weld 1/2" Effective Dia	4369	4311	4259	4257	4213	4173	4137	4104	4073	4080	4053	4028	4004	3983	3962
	PAF Base Steel ≥ .25"	3948	3914	3884	3903	3876	3852	3831	3811	3793	3810	3793	3778	3763	3750	3738
	PAF Base Steel ≥ 0.125"	3902	3871	3844	3864	3840	3817	3797	3779	3762	3781	3765	3751	3737	3725	3713
	#12 Screw Base Steel ≥ .0385"	3903	3872	3844	3864	3840	3818	3798	3779	3762	3781	3766	3751	3738	3725	3713
Concrete + Deck = 63.9 psf							I _{cr} = 131.2 in ⁴ /ft		M _{no} /Ω = 89.2 kip-in/ft		V _n /Ω = 5.49 kip/ft					
(I _{cr} +I _u)/2 = 194 in ⁴ /ft							I _u = 256.4 in ⁴ /ft		φM _{no} = 136.4 kip-in/ft		φ V _n = 8.23 kip/ft					

All Gages	LRFD - Diaphragm Shear, φS _n (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width															
		6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
	3/4" Welded Shear Studs	A _s = 0.028 in ² /ft			A _s = 0.058 in ² /ft			A _s = 0.080 in ² /ft			A _s = 0.120 in ² /ft			A _s = 0.180 in ² /ft		
	12 in o.c.	n/a			6030			7020			8820			11520		
	24 in o.c.	n/a			6030			7020			7750			7750		
36 in o.c.	n/a			5170			5170			5170			5170			